

Catalogue 1 STAUFF Clamps

### Germany

Walter Stauffenberg GmbH & Co. KG Im Ehrenfeld 4 58791 Werdohl

### www.stauff.com

STAUFF products and services are globally available through wholly-owned subsidiaries and a tight network of authorised distributors and representatives in all major industrial regions of the world.

You can find detailed contact information on the last two pages of this product catalogue or at www.stauff.com/contact.

Please note: Unless otherwise stated, all data and figures in this product catalogue are approximate values and are only valid as references, which are not binding (also in respect to any third parties' rights of protection) and thus do not release the customer / user from checking and testing the suitability of the products for the foreseen purposes. Therefore, data and figures can only be used in a limited sense for construction purposes.

The application of the products is beyond the control possibilities of the manufacturer and, therefore, is exclusively subject to the responsibility of the customer / user.

In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by the manufacturer and used by the customer / user. As a matter of course, the manufacturer guarantees the perfect quality of all products in accordance with the General Terms and Conditions of Business and Sale.

Subject to modifications due to the ongoing development and improvement of the products.

With the publication of this product catalogue, previous editions are no longer valid.

C



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Catalogue 1 **STAUFF Clamps** 

- Block Clamps
- Special Clamps
- Light Series Clamps
- Saddle Clamps
- U-Bolt Clamps
- Metal Clamps
- Construction Series



Catalogue 2 **STAUFF Connect** 

- Tube Connectors
- Assembly Tools and Devices



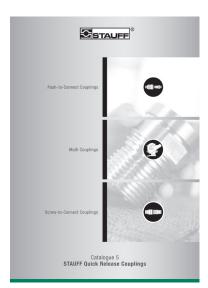
Catalogue 3 **STAUFF Flanges** 

- SAE Flanges
- Gear Pump Flanges



Catalogue 4 **STAUFF Hose Connectors** 

- Hose Connectors
- High-Pressure Hose Connectors



Catalogue 5 **STAUFF Quick Release Couplings** 

- Push-to-Connect Couplings
- Multi Couplings
- Screw-to-Connect Couplings



Catalogue 6 **STAUFF Valves** 

- Two-Way Ball Valves
- Multi-Way Ball Valves
- Flow Control and Check Valves
- Gauge Isolator Valves





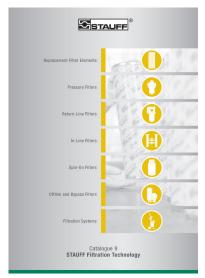
Catalogue 7 **STAUFF Test** 

- Test Couplings
- Test Adaptors
- Test Hoses and Connectors



Catalogue 8 **STAUFF Diagtronics** 

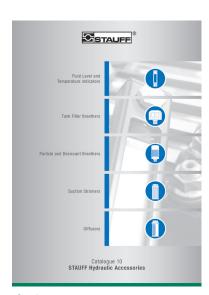
- Pressure Gauges
- Hydraulic Testers
- Oil Analysis Equipment



Catalogue 9

### **STAUFF Filtration Technology**

- Replacement Filter Elements
- Pressure Filters
- Return-Line Filters
- In-Line Filters
- Spin-On Filters
- Offline and Bypass Filters
- Filtration Systems



Catalogue 10

### **STAUFF Hydraulic Accessories**

- Fluid Level and Temperature Indicators
- Tank Filler Breathers
- Giant and Desiccant Air Breathers
- Suction Strainers
- Diffusors



For more than 50 years, the companies of STAUFF Group have been developing, manufacturing and distributing pipework equipment and hydraulic components for mechanical and plant engineering and for service and industrial maintenance.

In addition to mobile and industrial hydraulic machinery, typical applications also include commercial and special purpose vehicles, rail transportation and energy technology. Likewise, STAUFF products are used in marine, oil and gas applications and in the process, food and chemical industries.

The overall range currently includes about 50000 standard products as well as numerous special and system solutions according to customer's specifications or based on our in-house development.

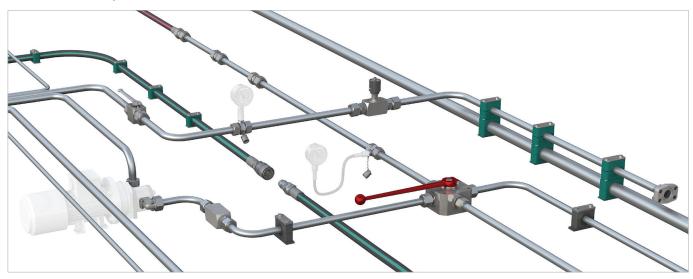
All STAUFF products undergo relevant testing in accordance with international regulations and are governed by the high standards of the in-house quality management system. Furthermore, many items have received certifications and approvals from various international institutes, organisations and authorities who have independently confirmed the quality and performance of the products.

Wholly-owned manufacturing, sales and service facilities in 18 countries and a tight global network of authorised distribution partners ensure high presence and service paired with a maximum of availability.



Quality Management – ISO 9001:2015 Environmental Management – ISO 14001:2015 Safety Management – ISO 45001:2018 Energy Management – ISO 50001:2018

### **STAUFF LINE** Components



With the seven dedicated STAUFF Line product groups

- STAUFF Clamps
- STAUFF Connect
- STAUFF Flanges
- STAUFF Hose Connectors
- STAUFF Quick Release Couplings
- STAUFF Valves
- STAUFF Test

6

from own, in-house development and manufacturing, the companies of the STAUFF Group provide a comprehensive range of components for fastening and connecting pipes, tubes and hoses for mobile and industrial hydraulic applications and many other industries.

The portfolio is completed by components for shutting-off, regulating, throttling and measuring fluid media.

In order to perfectly match each other, STAUFF Line products are designed and offered on a high, uniform level of quality. A large proportion of the range made from steel comes as standard with the premium STAUFF Zinc/Nickel surface coating, which is also optionally available for many of the other components.

This coating offers the most reliable surface protection far beyond the previous market standards – even after transport, handling and assembly of the components – and meets all current legal requirements.

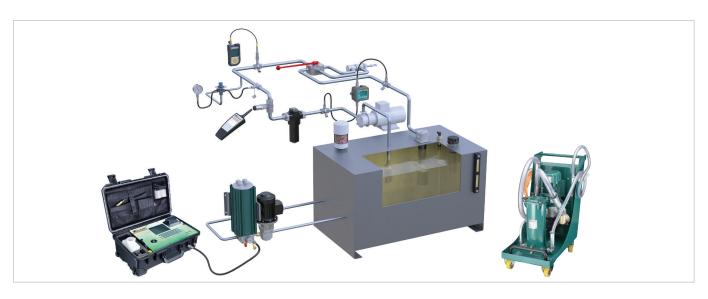
If desired, Original Equipment Manufacturers can be supported with value-added services, from **technical consultation** to **pre-assembly**, **assembly and kitting** as well as **logistics services**:

- Support with the selection of suitable standard components and ordering options; provision of customised solutions according to customer's specifications or based on our in-house development from prototyping to large scale production
- Analysis and optimization of existing and design and developments of new systems aimed at increasing the efficiency and performance of machines and equipment and creating value for customers by reducing the total cost
- Pre-assembly, assembly and kitting of individual components to customer-specific system modules
- Individually coordinated procurement solutions
   (e.g. web shop and electronic data interchange) and
   supply models (e.g. from warehousing of customised
   components to Kanban logistics and just-in-time delivery
   of pre-fabricated system modules to the assembly lines of
   the customers) aimed at optimising material flows



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Aligned with the needs of the market, the product groups

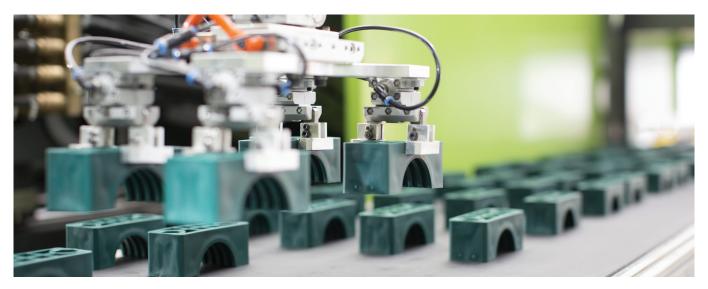
- STAUFF Test
- STAUFF Diagtronics
- STAUFF Filtration Technology
- STAUFF Hydraulic Accessories

include a comprehensive range of analogue and digital measuring equipment and devices, filtration systems and replacement filter elements as well as accessories for the construction of tanks, reservoirs, power packs and gear boxes in mobile and industrial hydraulics.

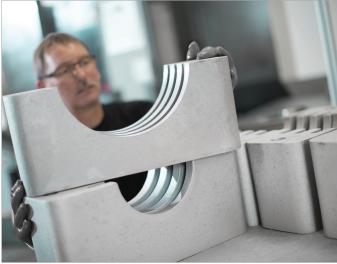
The offer is completed by relevant value-added services:

- Support with the selection of suitable components and ordering options; provision of customised solutions according to customer's specifications or based on our in-house development – from prototyping to large scale production
- Analysis of existing hydraulic circuits aimed at filtration systems, tank components and monitoring devices that perfectly match to the specific requirements, and developing integrated concepts to increase the efficiency and performance of machines and equipment
- Individually coordinated **procurement solutions** and **supply models**









### **STAUFF Clamps**

For more than 50 years, STAUFF Clamps symbolise quick and easy as well as secure installation of pipes, tubes, hoses, cables and other flexible and rigid components with outside diameters up to 1016 mm / 40.00 inch.

Their vibration and noise reducing features are appreciated as being an important contribution to environmental protection and occupational health and safety.

The processing of fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94) is only one of the many particular strengths of STAUFF.

STAUFF guarantees prompt service, even for customised solutions according to customer's specifications or based on our in-house development.

For selected types and series, independent certificates and approvals can be provided:

- American Bureau of Shipping
- Bureau Veritas
- Department of the Navy, New York
- Germanischer Lloyd
- Lloyd's Register of Shipping
- Registro Italiano Navale
- Technischer Überwachungsverein
- United States Coast Guard

For the finishing of the range of pipe, tube, hose and cable clamps as well as metal hardware in carbon steel, STAUFF relies on the STAUFF Zinc/Nickel surface coating which has proven successful for many years. It provides reliable surface protection – even after transport, handling and assembly - and meets all current legal requirements.

Versions in stainless steel V2A and V4A are generally available from stock. Alternative materials and surfaces are available on request.

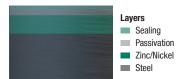








### **STAUFF Zinc/Nickel Coating**



With at least 1200 hours resistance against red rust, the STAUFF Zinc/Nickel surface coating offers excellent surface protection – even after transport, handling and assembly. This was confirmed by testing in the salt-spray chamber according to DIN EN ISO 9227.

Users across all industries and applications benefit from sophisticated technology, which has been developed for and used by the very demanding automotive industry for many years now and that is already the proven standard for a large proportion of STAUFF components since 2007.

- At least 1200 hours resistance to red rust / base metal corrosion under practical conditions in the salt-spray chamber according to DIN EN ISO 9227
- White rust occurs only by way of a slight grey haze
- Surpassing the requirements of the corrosion protection class K5 as defined by the VDMA, the German Engineering Association (360 hours resistance to white rust / 720 hours resistance to red rust)
- Free of hexavalent chrome Cr(VI)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- REACH compliant according to 1907/2006/EC (Registration, Evaluation, Authorisation and Restriction of Chemicals)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)

- Appealing colour scheme with a bright semi-gloss surface finish – comparable to Stainless Steel
- Significantly reduced tendency to corrosion by contact with other metals (such as Aluminium and Stainless Steel)
- Improved abrasion resistance due to the ductility / plastic deformability of the coating
- Little to no risk of triggering allergies nickel release is down to only a fraction of the statutory limits relating to objects which come into direct and prolonged contact with the skin (independent results of the reference test method according DIN EN 1811 are available on request)
- Good paint adhesion properties
- Resistance against all commonly used hydraulic media





### www.stauff.com/catalogues

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\* may require a suitable app



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www.stauff.com/1/en/#10



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### www.stauff.com

With the STAUFF Digital Platform available at www.stauff.com, commercial customers and users of STAUFF products can not only inform themselves in all detail about the 50000 components typically available from stock, but also directly purchase these online without complex registration.

General information about the companies of STAUFF Group, latest business and product news as well as complete global contact details also be available.

### Main Functionalities of the STAUFF Digital Platform:



### Around the clock

Check stock availability and pricing for STAUFF products in real time



### Cross references

Search by article designations of other manufacturers / suppliers



### Live chat

Get directly in touch with the STAUFF customer service and sales team



### CAD database

Download 3D models and 2D drawings for STAUFF products

### Advantages as a Registered User of the STAUFF Digital Platform:



### Purchase STAUFF products

Taking customer-specific pricing and delivery conditions into account



### Ordering w/o searching

Quick ordering by entering article number, quantity and requested delivery date



### File upload

Direct upload of orders with multiple positions in CSV or Excel file format



### Notepad function

Create project lists to save interesting products for later

### www.stauff.com/cad

Immediate access to and free download of 3D models and 2D drawings for a growing number of STAUFF products

### www.filterinterchange.com

Online database for the quick and easy identification and interchange of almost all common brands and types of replacement filter elements

Follow STAUFF and keep yourself updated:



### Linkedin

www.linkedin.com/company/stauff



### Youtube

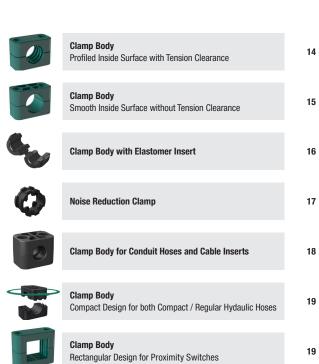
www.youtube.com/stauffgroup



### **STAUFF Newsletters**

Automatic e-mail notifications about latest news from STAUFF www.stauff.com/newsletter





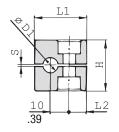


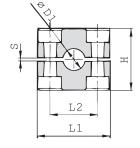
000	Weld Plate SP	20	or the er	Cover Plate DP	26
- 3 9	Elongated Weld Plate SPV	20	1	Hexagon Head Bolt for use with Cover Plate DP  AS	26
0 000	Twin Weld Plate DSP	21		Safety Washer (DIN 93)	27
0 30	Group Weld Plate	21		Safety Washer (DIN 463)	27
ŭ û	Angled Weld Plate WSP	22	1	Socket Cap Screw IS	28
0 0	Bridge Weld Plate	22	1	Slotted Head Screw	28
	Clamp Body for Multi-Group Weld Plates	23	1	Hexagon Head Bolt for use with Insert ES / EP  AS	28
00000	Multi-Group Weld Plate  RAP-MGR	23		Insert ES / EP	28
	Hexagon Rail Nut	24		Safety Locking Plate SIG	29
	Mounting Rail TS	24	1	Stacking Bolt AF	29
	Channel Rail Adaptor CRA	25		Clamp Assemblies	30

### Clamp Body - Profiled Design

### **Profiled Inside Surface with Tension Clearance**







**STAUFF Group 1** 

**STAUFF Group 1A to 8** 

### **Ordering Codes**

Clamp		•		6-*PP		
Clamp I	Body, S	TAUF	Group	1A	^1^0(	SA-*PP

One clamp body is consisting of two clamp halves.

* STAUFF Group	1
* Exact outside diameter Ø D1 (mm)	06
* Material code (see below)	PP

### **Standard Materials**



### Polypropylene Colour: Green





Polypropylene

Colour: Black Material code: PP-BK



### Polyamide

Colour: Black Material code: PA



### Thermoplastic Elastomer (87 Shore-A)

Colour: Black Material code: SA



### Aluminium

Colour: Self-Colour

Material code: AL (STAUFF Group 1A to 6)

See pages 154 / 155 for material properties and technical

### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

### **Product Features**

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

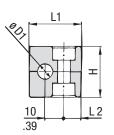
Group		Outside	Diameter	Nominal	Bore	Ordering Codes	Dimens	sions			
出		Pipe / Tu	ibe		Copper Tube	(2 Clamp Halves)	S) (mm/in)				
STAUFF	NIO	Ø D1		Pipe	ASTM B88						
S	D	(mm)	(in)	(in)	(in)	( <b>**</b> = Material)	L1	L2	Н	S min.	Width
		6	4.14			106-**					
		6,4	1/4			106.4-**					
1	0	8	5/16		111	108-**	28	9,5	27	0,4	30
		9,5	3/8	4.0	1/4	109.5-**	1.10	.37	1.06	.02	1.18
		10 12		1/8		110-**					
		6				112- <b>**</b> 106A- <b>**</b>					
		6,4	1/4			106.4A-**					
		8	5/16			108A-**	37	20	27	0,4	30
1A	1	9,5	3/8		1/4	109.5A-**	1.46	.79	1.06	.02	1.18
		10	0/0	1/8	17-7	110A-**	1.10	.,,	1.00	.02	1.10
		12		170		112A-**					
		12,7	1/2		3/8	212.7-**					
		13,5	., =	1/4		213.5-**					
		14				214-**					
2	2	15				215-**	42	26	33	0,6	30
		16	5/8		1/2	216-**	1.65	1.02	1.30	.02	1.18
		17,2		3/8		217.2-**					
		18				218-**					
		19	3/4			319-**					
	3	20				320-**					
3		21,3		1/2		321.3-**	50	33	36	0,6	30
3		22	7/8		3/4	322-**	1.97	1.30	1.42	.02	1.18
		25				325-**					
		25,4	1			325.4- <b>**</b>					
		26,9		3/4		426.9-**					
		28				428- <b>**</b>	59	40	42	0,6	30
4	4	28,6			1	428.6- <b>**</b>	2.32	1.57	1.65	.02	1.18
		30				430-**					
		32	1 1 1 1			432-**					
		32	1-1/4	4		532-**					
		33,7		1	1 1/4	533.7-**					
-	E	35	1-1/2		1-1/4	535-**	71	52	58	0,8	30
5	5	38 40	1-1/2			538- <b>**</b> 540- <b>**</b>	2.80	2.05	2.28	.03	1.18
		41,3			1-1/2	540- <b>**</b> 541.3- <b>**</b>					
		41,3		1-1/4	1-1/2	542- <b>**</b>					
		44,5	1-3/4	1 1/4		644.5-**					
		48,3	1 0/4	1-1/2		648.3-**	86	66	66	0,8	30
6	6	50,8	2	7 172		650.8-**	3.39	2.60	2.60	.03	1.18
		54	_		2	654-**					
		57,2	2-1/4			757.2-**					
		60,3		2		760.3-**					
_	7	63,5	2-1/2			763.5- <b>**</b>	121	94	93	0,8	30
7	7	70	2-3/4			770-**	4.76	3.70	3.66	.03	1.18
		73		2-1/2 (AN	SI B 36-10)	773-**					
		76,1	3	-	EN 10220)	776.1-**					
		88,9		3	,	888.9-**	147	120	118	0,8	30
8	8	102	4	3-1/2		8102L-**	5.79	4.72	4.65	.03	1.18
		102	7	U-1/2		0102L-44					

Additional outside diameters are available upon request. Please contact STAUFF for further information.

Dimensional drawings: All dimensions in mm (in).







### **STAUFF Group 1**

### L2 L1

**STAUFF Group 1A to 8** 



**Smooth Inside Surface without Tension Clearance** 

Clamp Body • Type H

### **Ordering Codes**

Clamp Body \*1\*06-\*PP-H
Clamp Body, STAUFF Group 1A \*1\*06A-\*PP-H

One clamp body is consisting of two clamp halves.

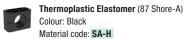
1
06
PP-H

### **Standard Materials**









See pages 154 / 155 for material properties and technical information.

### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

### **Product Features**

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of hoses and cables
- $\, \blacksquare \,$  Chamfered edges avoid damaging of the hoses and cables
- Available for all commonly used hose and cable outside diameters
- Excellent weathering resistance, even under extreme conditions

Group	Group Outside Diameter		Ordering Codes	Dimensions					
±		Hose		(2 Clamp Halves)	(mm/in)				
STAUFF	NIO	Ø D1							
20		(mm)	(in)	(**-H = Material)	L1	L2	Н	Width	
		6		106- <b>**</b> -H					
		6,4	1/4	106.4- <b>**</b> -H					
	0	8	5/16	108- <b>**</b> -H	28	9,5	26	30	
		9,5	3/8	109.5- <b>**</b> -H	1.10	.37	1.02	1.18	
		10		110- <b>**</b> -H					
		12		112- <b>**</b> -H					
		6		106A-**-H					
		6,4	1/4	106.4A- <b>**</b> -H					
Α	1	8	5/16	108A-**-H	37	20	26	30	
		9,5	3/8	109.5A- <b>**</b> -H	1.46	.79	1.02	1.18	
		10		110A-**-H					
		12	110	112A-**-H					
		12,7	1/2	212.7- <b>**</b> -H					
		13,5		213.5-**-H					
		14		214-**-H	42	26	32	30	
<u> </u>	2	15	5.6	215- <b>**</b> -H	1.65	1.02	1.26	1.18	
		16	5/8	216-**-H			1		
		17,2		217.2-**-H					
		18	0.17	218-**-H					
<b>3</b> 3		19	3/4	319- <b>**</b> -H					
		20		320- <b>**</b> -H					
	3	21,3	7.6	321.3- <b>**</b> -H	50	33	35,5	30	
		22	7/8	322- <b>**</b> -H	1.97	1.30	1.40	1.18	
		25		325- <b>**</b> -H					
		25,4	1	325.4-**-H					
		26,9		426.9- <b>**</b> -H	50	40	44.5		
ļ	4	28		428- <b>**</b> -H	59	40	41,5	30	
		30		430- <b>**</b> -H	2.32	1.57	1.63	1.18	
		32	4.4/4	432- <b>**</b> -H					
		32	1-1/4	532- <b>**</b> -H					
		33,7		533.7- <b>**</b> -H	7.	56	56.5	0.5	
5	5	35	4.4/0	535- <b>**</b> -H	71	52	56,5	30	
		38	1-1/2	538- <b>**</b> -H	2.80	2.05	2.22	1.18	
		40		540- <b>**</b> -H					
		42	4.074	542- <b>**</b> -H					
		44,5	1-3/4	644.5- <b>**</b> -H	00	00	04.5	00	
6	6	48,3	0	648.3-**-H	86	66	64,5	30	
		50,8	2	650.8-**-H	3.39	2.60	2.54	1.18	
		54	0.4/4	654- <b>**</b> -H					
		57,2	2-1/4	757.2- <b>**</b> -H					
		60,3	0.1/0	760.3- <b>**</b> -H	404	0.4	00	00	
,	7	63,5	2-1/2	763.5- <b>**</b> -H	121	94	92	30	
		70	2-3/4	770- <b>**</b> -H	4.76	3.70	3.62	1.18	
		73	0	773- <b>**</b> -H					
		76,1	3	776.1- <b>**</b> -H					
,	0	88,9		888.9- <b>**</b> -H	147	120	116	30	
В	8	102	4	8102L-**-H	5.79	4.72	4.57	1.18	

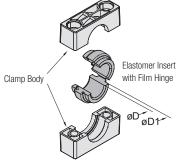
Additional outside diameters are available upon request. Please contact STAUFF for further information.

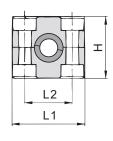
### www.stauff.com/1/en/#15



### **Clamp Body with Elastomer Insert Type RI**







Ordering Codes	
Clamp Assembly *4*06-*PP-	-R
One assembly is consisting of one clamp body and one ins	ert.
* STAUFF Group  * Exact outside diameter Ø D (mm)  * Material code (see below)	4 06 P-R
Clamp Body *4-*PP-	-R
One clamp body is consisting of two clamp halves.	
* STAUFF Group * Material code (see below)	4 P-R
Elastomer Insert *RI-*06-*4/4	IS
. (	RI 06 /4S /5S



Polypropylene Colour: Black Material code: PP-R



**Polyamide** Colour: Black Material code: PA-R



Elastomer Insert Thermoplastic Elastomer (73 Shore-A) Colour: Black

See pages 154 / 155 for material properties and technical information.

### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

### **Product Features**

- Proven, tested and trusted product in various markets
- Either for the extra vibration/noise reducing installation of pipes and tubes or the extra gentle installation of hoses and cables
- Available for all commonly used outside diameters
- Excellent weathering resistance, even under extreme conditions

Group Outside Diameter		Ordering Codes	(**R = Clamp E	Body Material)	Dimensions						
ᄠ	Pipe / Tube / Hose		Clamp Assembly   Clamp Body   Insert * (Clamp Body +		(mm/in)						
STAUFF	DIN	(mm)	(in)	Insert)	(2 Clamp Halves)		Ø D1	L1	L2	Н	Width
		6		406- <b>**</b> -R		RI-06-4/4S					
		8	5/16	408- <b>**</b> -R		RI-08-4/4S					
		10		410- <b>**</b> -R		RI-10-4/4S					
		12		412- <b>**</b> -R		RI-12-4/4S			40	41,2	
4		12,7	1/2	412.7- <b>**</b> -R		RI-12.7-4/4S					
	4	14		414- <b>**</b> -R	4-**-R	RI-14-4/4S	.98	2.32			30 1.18
		15		415- <b>**</b> -R		RI-15-4/4S					
		16	5/8	416- <b>**</b> -R		RI-16-4/4S					
		17,2		417.2- <b>**</b> -R		RI-17.2-4/4S					
		18		418- <b>**</b> -R		RI-18-4/4S					
		19	3/4	419- <b>**</b> -R		RI-19-4/4S					
		20		620- <b>**</b> -R		RI-20-6/5S					
		21,3		621.3- <b>**</b> -R		RI-21.3-6/5S					
		22	7/8	622 <b>-**</b> -R		RI-22-6/5S					
6	0	25		625- <b>**</b> -R	0.44.0	RI-25-6/5S	38	86	66	64,5	30
ь	6	26,9		626.9- <b>**</b> -R	6- <b>**</b> -R	RI-26.9-6/5S	1.50	3.39	2.60	2.54	1.18
		28		628- <b>**</b> -R		RI-28-6/5S					
		30		630- <b>**</b> -R		RI-30-6/5S					
		32	1-1/4	632- <b>**</b> -R		RI-32-6/5S					

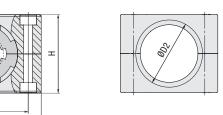
\* Elastomer Inserts for Standard Series clamp bodies, STAUFF Group 4 also fit into Heavy Series clamp bodies, STAUFF Group 4S. Elastomer Inserts for Standard Series clamp bodies, STAUFF Group 6 also fit into Heavy Series clamp bodies, STAUFF Group 5S.

Additional outside diameters are available upon request. Please contact STAUFF for further information.



L2 L1

### Noise Reduction Clamp Type NRC







STAUFF Group		Outside Pipe / Tu Ø D1	Diameter be	Ordering Codes Clamp Assembly (Clamp Body +	Clamp Body	NRC Insert	Dimensions (mm/in)					
ST/	N O	(mm)	(in)	NRC Insert)	(2 Clamp Halves)	(2 Insert Halves)	ØD2	ØD3	L1	L2	Н	Width
		6		206-PP-NRC		RI-NRC-6-2						
		8	5/16	208-PP-NRC		RI-NRC-8-2						
2	2	10		210-PP-NRC	2-PP-NRC	RI-NRC-10-2	.98	26 1.02	42 1.65	26 1.02	32 1.26	30
		12		212-PP-NRC		RI-NRC-12-2	.30	1.02	1.00	1.02	1.20	1.10
		12,7	1/2	212.7-PP-NRC		RI-NRC-12.7-2						
		14		314-PP-NRC		RI-NRC-14-3						
3	3	15		315-PP-NRC	3-PP-NRC	RI-NRC-15-3	28	29	50 1.97	1.30	35,5	30
		16	5/8	316-PP-NRC	RI-NRC-16	RI-NRC-16-3						
4	4	18		418-PP-NRC	4-PP-NRC	RI-NRC-18-4	34	35	59	40	41,5	30
4 4	4	20		420-PP-NRC		RI-NRC-20-4	1.34	1.38	2.32	1.57	1.63	1.18
		21,3		521.3-PP-NRC		RI-NRC-21.3-5		50 1.97	71 2.80	52 2.05	56,5 2.22	30 1.18
		22	7/8	522-PP-NRC		RI-NRC-22-5						
		25		525-PP-NRC	5-PP-NRC	RI-NRC-25-5						
5	5	26,9		526.9-PP-NRC		RI-NRC-26.9-5						
		28		528-PP-NRC		RI-NRC-28-5						
		30		530-PP-NRC		RI-NRC-30-5						
		32	1-1/4	532-PP-NRC		RI-NRC-32-5						
		33,7		633.7-PP-NRC		RI-NRC-33.7-6						
		35		635-PP-NRC		RI-NRC-35-6						
6 6	6	38	1-1/2	638-PP-NRC	6-PP-NRC	RI-NRC-38-6		61 2.40	86 3.39	66 2.60	64,5 2.54	
		40		640-PP-NRC		RI-NRC-40-6		2.40	3.39	2.00	2.01	1.10
		42		642-PP-NRC		RI-NRC-42-6						

Additional outside diameters are available upon request. Please contact STAUFF for further information.

### **Product Features**

- Designed for the noise and vibration reducing installation of pipes and tubes
- $\blacksquare$  Suitable for the most common outside diameters from 6 to 42 mm and from  $\,\,1\!\!/_{\!2}$  inch respectively
- Working principle based on a specially shaped, two-part elastomer insert, which mechanically
  absorbs vibration in the pipe or tube and as a result reduces noises arising to a minimum
- Elastomer insert is in particular distinguished by how little of its surface is in contact
  with the pipe or tube as well as with the clamp body
- Light tension of the elastomer insert in mounted condition provides the necessary clamping force
- Tongue-groove contour of the elastomer insert and the clamp body (which is reversed and thus diverges
  from standard DIN 3015 clamps with elastomer insert) enables the system to be used for the maximum
  range of outside diameters per clamp size, which contributes to flexibility, versatility and optimisation
  of the required installation space

### **Ordering Codes**

### Clamp Assembly \*2\*12-\*PP-NRC

One assembly is consisting of one clamp body and one insert.

\* STAUFF Group

\* Exact outside diameter Ø D1 (mm)

2

\* Exact outside diameter Ø D1 (mm) 12
\* Material code (see below) PP-NRC

### NRC Clamp Body \*2-\*PP-NRC

One NRC clamp body is consisting of two clamp halves.

\* STAUFF Group

\* Material code (see below)

PP-NRC

### NRC Elastomer Insert \*RI-NRC-\*12-\*2

One NRC elastomer insert is consisting of two insert halves.

### **Standard Materials**



Polypropylene Colour: Black Material code: PP-NRC



Elastomer Insert Thermoplastic Elastomer (73 Shore-A) Colour: Black

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

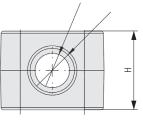
See pages 156 / 157 for material properties and technical information.

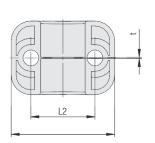
### **E**STAUFF ®

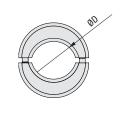
### Clamp Body for Conduit Hoses and Cable Inserts

**Type CHC** 









### **Ordering Codes**

### **Clamp Assembly**

### \*3\*17-\*10/14-\*PA-CHC\*SA-VO

One assembly is consisting of one clamp body and one insert. (consisting of two halves).

* STAUFF Group	3
* Nominal Size of the Conduit Hose	17
* Diameter Range Cable ØD (mm)	10/14
* Material code clamp body (see below)	PA-CHC
* Material code insert (see below)	SA-VO

### **CHC Clamp Body**

### \*3\*17-\*PA-CHC

One CHC Clamp Body is consisting of two clamp halves.

* STAUFF Group	3
* Nominal Size of the Conduit Hose	17
* Material code clamp hody (see helow)	PA-CHO

### **CHC Elastomer Insert**

### \*RI-CHC-\*10/14\*3\*SA-V0

One CHC Elastomer Insert is consisting of two insert halves.

* CHC Elastomer insert	RI-CHC
* Diameter Range Cable ØD (mm)	10/14
* STAUFF Group	3
* Material code insert (see below)	SA-VO

	Gro	oup	Nominal	ØD (mm/in)	Ordering Codes (*	= Material)		Dimensions							
	뜐		Size	Cable	Clamp Assembly	Clamp Body	CHC-Insert	(mm/ii	1)						
1	STAUFF	NIO	Conduit		(Clamp Body +										
	လ		Hose		Insert)	(2 Halves)	(2 Halves)	ØD1	ØD2	t	L1	L2	Н	Width	
			10	6 8		210-*		13	11	0,5	42	26	32	30	
	2	2	10	.2431		210-4		.51	.43	.02	1.65	1.02	1.26	1.18	
	-	-	12	8 10		212-*		16	13,5	0,5	42	26	32	30	
			12	.3139		212- <b>ক</b>		.63	.53	.02	1.65	1.02	1.26	1.18	
				7 10	317-7/10-*-*	317-*	RI-CHC-7/10-3-*								
	3	3	17	.2839	317-1/10- <b>ক-ক</b>	317-4	MI-0110-1/10-3-4	21,5	18	0,7	50	33	35,5	30	
	J	3	17	10 14	317-10/14-*-*	217 44	RI-CHC-10/14-3-*	.85	.71	.03	1.97	1.30	1.40	1.18	
				.3955	317-10/14-ক-ক	317-*	NI-UПU-10/14-3-本								
ľ				14 18	400 44/40 4 4	400 4	DI 0110 44/40 4 4								
		,	00	.5571	423-14/18-*-*	423- <b>*</b>	RI-CHC-14/18-4-*	29	24,5	0,7	59	40	41,5	30	
	4	4	23	18 20				1.14	.96	.03	2.32	1.57	1.63		
				.7179		423 <b>-*</b>									
ı				20 26,9				35	30,5	1,0	71	52	56,5	30	
			29	.79 1.06		529- <b>*</b>		1.38	1.20	.04	2.80	2.05	2.22	1.18	
	5	5		26,9 33,7				43	38,5	1.0	71	52	56,5	-	
			36	1.06 1.33		536-*		1.69	1.52		2.80	2.05	2.22		
ŀ				33,7 42				55	49,5	-	86	66	64,5		
	6	6	48	1.33 1.65		648- <b>*</b>			1.95	,		2.60	-		

Additional outside diameters are available upon request. Please contact STAUFF for further information.

### **Product Features**

- Design of the inside surface of the clamp body prevents corrugated conduit hoses from sliding
- Elastomer Insert for the safe and damage-free installation of single cables as an option
- Chamfered edges avoid damaging of the conduit hoses
- · Available for all commonly used nominal sizes
- Excellent weathering resistance, even under extreme conditions

### **Materials**



### Polyamide Colour: Black Material code: PA-CHC



### fire-proof clamp body material made of Polyamide

Colour: Black

Material code: PA-VO-CHC-BK



Elastomer Insert



Thermoplastic Elastomer (73 Shore-A)

Colour: Black Material code: SA



Elastomer Insert

fire-proof clamp body material made of Thermoplastic Elastomer (86 Shore-A) Colour: White

Material code: **SA-VO** 

See pages 154 - 157 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

### Recommended Bolt Lengths (Socket Cap Screw IS)

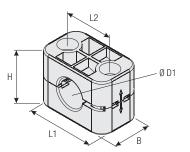
for use without Cover Plate DP, assembly with Weld Plate SP, Hexagon Rail Nut SM and Channel Rail Adaptor CRA.

Group STAUFF	DIN	Metric ISO thread	Unified coarse (UNC) thread
2	2	M6 x 25	1/4–20 UNC x 1
3	3	M6 x 30	1/4–20 UNC x 1-1/8
4	4	M6 x 35	1/4–20 UNC x 1-3/8
5	5	M6 x 50	1/4–20 UNC x 2
6	6	M6 x 60	1/4–20 UNC x 2-1/2

See page 30 for further information on ordering.









(in)

.75

.87

1.00

**Outside Diameter** 

Regular Hose

Ø D1

(mm)

19

22,2

25.4

## 11

For Use with Compact Hose (Upper Clamp Half rotated by 180°)

35,5

1.30 1.40

Regular Hose Compact Hose B

34

1.34

Dimensions (mm/in)

L2

50 33

1.97



Clamp Body • Compact Design

**Type CC** 

3

### **Ordering Codes**

**Clamp Body** \*3\*19-\*PP-H-CC-BK

One clamp body is consisting of two clamp halves.

\* STAUFF Group

30

1.18

- \* Outside diameter Ø D1 (mm) of regular hose 19
- \* Material code (see below) PP-H-CC-BK

Additional outside diameters are available upon request. Please contact STAUFF for further information.

**Outside Diameter** 

(in)

.69

.81

93

**Compact Hose** 

Ø D2

(mm)

17.4

20,6

23.7

### **Product Features**

Group

3

NIC

3

- Only one clamp body required for two different hose diameters (compact hose + regular hose)
- Rotate upper clamp half by 180° and use clamp body to fasten compact hoses instead of regular hoses
- · Available for three different combinations of outside hose diamaters
- Outer dimensions according to DIN 3015, Part 1
- Effective cost reduction due to lower inventories

### **Special Materials**

**Ordering Codes** 

(2 Clamp Halves)

319-\*\*-\*-CC-BK

322.2-\*\*-\*-CC-BK

325.4-\*\*-\*-CC-BK

(\*\*-\* = Material) L1

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

### **Standard Materials**



Polypropylene Colour: Black Material code: PP-H-CC-BK

See pages 154 / 155 for material properties and technical information.

### **Ordering Codes**

One clamp body is consisting of two clamp halves.

### **Clamp Body**

540-40-PP-VK

Rectangular design with a square of 40 mm x 40 mm / 1.57 in x 1.57 in

### **Clamp Body**

540-36-PP-VK

Rectangular design with a square of 40 mm x 36 mm / 1.57 in x 1.42 in

Please replace PP by PA to order a clamp body made of Polyamide instead of Polypropylene.

### **Product Features**

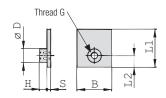
- Outer dimensions of clamp body according to Standard Series, STAUFF Group 5
- For proximity switches according to DIN EN 60947-5-2 or similar, rectangular construction, with a square of 40 mm x 40 mm / 1.57 in x 1.57 in or 40 mm x 36 mm / 1.57 in x 1.42 in
- For proximity switches according to DIN EN 60947-5-2 or similar, round construction, please use Standard Series clamp body, STAUFF Group 4, with the diameter required (e.g. 430-PP)
- Use with Hexagon Rail Nut SM and Mounting Rail TS to provide axial and horizontal position adjustment by loosening the bolts

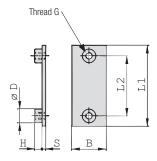
### Clamp Body • Rectangular Design Type VK



### **Single Weld Plate Type SP**







STAUFF Group 1

STAUFF Group 1A to 8

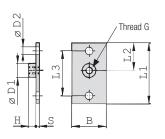
rdering Co	odes	
eld Plate	*SP-*1-*M-*	W2
Single Weld Plate	е	SP
STAUFF Group		1
Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5
	Aluminium EN AW-6060 (Dimension S: 5 mm / .20 in)	W85
	eld Plate	Single Weld Plate  STAUFF Group  Thread code Metric ISO thread Unified coarse (UNC) thread  Material code Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated  Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) Aluminium EN AW-6060

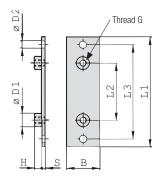
Group		Dimensions (m	m/in)		Ordering Codes				
STAUFF	DIN	Thread G	L1	L2	В	S	Н	ØD	(Standard Options)
1	0	M6	31,5	10	30	3	6,5	12	SP-1-M-W2
'	U	1/4-20 UNC	1.24	0.39	1.18	.12	.26	.47	SP-1-U-W2
1A	1	M6	36	20	30	3	6,5	12	SP-1A-M-W2
IA	1	1/4-20 UNC	1.42	0.79	1.18	.12	.26	.47	SP-1A-U-W2
2	2	M6	42	26	30	3	6,5	12	SP-2-M-W2
2		1/4-20 UNC	1.65	1.02	1.18	.12	.26	.47	SP-2-U-W2
3	3	M6	50	33	30	3	6,5	12	SP-3-M-W2
3	3	1/4-20 UNC	1.97	1.30	1.18	.12	.26	.47	SP-3-U-W2
4	4	M6	60	40	30	3	6,5	12	SP-4-M-W2
4		1/4-20 UNC	2.36	1.57	1.18	.12	.26	.47	SP-4-U-W2
5	5	M6	71	52	30	3	6,5	12	SP-5-M-W2
5	5	1/4-20 UNC	2.80	2.05	1.18	.12	.26	.47	SP-5-U-W2
c	6	M6	88	66	30	3	6,5	12	SP-6-M-W2
6	b	1/4-20 UNC	3.46	2.60	1.18	.12	.26	.47	SP-6-U-W2
7	7	M6	122	94	30	5	6,5	12	SP-7-M-W2
1	7	1/4-20 UNC	4.80	3.70	1.18	.20	.26	.47	SP-7-U-W2
0	0	M6	148	120	30	5	6,5	12	SP-8-M-W2
8	8	1/4-20 UNC	5.83	4.72	1.18	.20	.26	.47	SP-8-U-W2

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### **Elongated Weld Plate Type SPV**







STAUFF Group 1

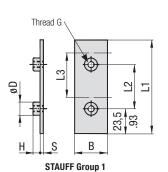
STAUFF Group 1A to 8

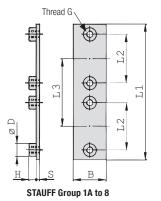
Ordering C	odes	
Weld Plate	*SPV-*1-*M-*	W2
* Elongated Weld	Plate	SPV
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group		Dimensions (mn	Dimensions (mm/in)										
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD1	ØD2	(Standard Options)		
1	0	M6	58	24,5	44	30	3	6,5	12	6,5	SPV-1-M-W2		
1	U	1/4-20 UNC	2.28	.96	1.73	1.18	.12	.26	.47	.26	SPV-1-U-W2		
1A	1	M6	64	20	50	30	3	6,5	12	6,5	SPV-1A-M-W2		
IA	1	1/4-20 UNC	2.52	.79	1.97	1.18	.12	.26	.47	.26	SPV-1A-U-W2		
2	2	M6	70	26	56	30	3	6,5	12	6,5	SPV-2-M-W2		
2	2	1/4-20 UNC	2.76	1.02	2.20	1.18	.12	.26	.47	.26	SPV-2-U-W2		
3	3	M6	78	33	64	30	3	6,5	12	6,5	SPV-3-M-W2		
3	3	1/4-20 UNC	3.07	1.30	2.52	1.18	.12	.26	.47	.26	SPV-3-U-W2		
4	4	M6	87	40	73	30	3	6,5	12	6,5	SPV-4-M-W2		
4	4	1/4-20 UNC	3.43	1.57	2.87	1.18	.12	.26	.47	.26	SPV-4-U-W2		
_	5	M6	100	52	86	30	3	6,5	12	6,5	SPV-5-M-W2		
5	5	1/4-20 UNC	3.94	2.05	3.39	1.18	.12	.26	.47	.26	SPV-5-U-W2		
•		M6	115	66	100	30	3	6,5	12	6,5	SPV-6-M-W2		
6	6	1/4-20 UNC	4.53	2.60	3.94	1.18	.12	.26	.47	.26	SPV-6-U-W2		
-	7	M6	150	94	136	30	5	6,5	12	6,5	SPV-7-M-W2		
7	7	1/4-20 UNC	5.91	3.70	5.35	1.18	.20	.26	.47	.26	SPV-7-U-W2		
		M6	178	120	162	30	5	6,5	12	6,5	SPV-8-M-W2		
8	8	1/4-20 UNC	7.01	4.72	6.38	1.18	.20	.26	.47	.26	SPV-8-U-W2		

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.







### Twin Weld Plate for 2 Clamp Bodies Type DSP

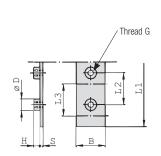


Group		Dimensions (mr	<sup>n</sup> /in)							Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD	(Standard Options)
	0	M6	87	40	40	30	3	6.5	12	DSP-1-40-M-W2
	U	1/4-20 UNC	3.43	1.57	1.57	1.18	.12	.26	.47	DSP-1-40-U-W2
٨	1	M6	77	20	37	30	3	6.5	12	DSP-1A-37-M-W2
A	1	1/4-20 UNC	3.03	.79	1.46	1.18	.12	.26	.47	DSP-1A-37-U-W2
	2	M6	86	26	44	30	3	6.5	12	DSP-2-44-M-W2
	2	1/4-20 UNC	3.39	1.02	1.73	1.18	.12	.26	.47	DSP-2-44-U-W2
	3	M6	102	33	52	30	3	6.5	12	DSP-3-52-M-W2
	3	1/4-20 UNC	4.02	1.30	2.05	1.18	.12	.26	.47	DSP-3-52-U-W2
	4	M6	120	40	60	30	3	6.5	12	DSP-4-60-M-W2
	4	1/4-20 UNC	4.72	1.57	2.36	1.18	.12	.26	.47	DSP-4-60-U-W2
	5	M6	145	52	75	30	3	6.5	12	DSP-5-75-M-W2
5	5	1/4-20 UNC	5.71	2.05	2.95	1.18	.12	.26	.47	DSP-5-75-U-W2
	0	M6	178	66	90	30	3	6.5	12	DSP-6-90-M-W2
6	6	1/4-20 UNC	7.01	2.60	3.54	1.18	.12	.26	.47	DSP-6-90-U-W2

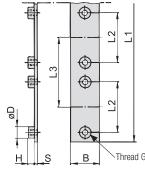
All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### **Ordering Codes** \*DSP-\*1-\*40-\*M-\*W2 **Weld Plate** \* Twin Weld Plate for 2 Clamp Bodies DSP \* STAUFF Group 1 \* Pipe center spacing L3 (mm) 40 \* Thread code Metric ISO thread Unified coarse (UNC) thread Carbon Steel, phosphated W2 \* Material code Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)







STAUFF Group 1A to 8

<b>\Phi</b>	L2 L1	Group Weld Plate for 5 or 10 Clamp Bodies
<b>\Phi</b>		Type RAP
<b>\Pi</b>	4	
	- Z	
<b>O</b>		00 00
В	Threa	d G

Group		Dimensions (mm/	/in <b>)</b>							Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3	В	S	Н	ØD	(Standard Options)
1	0	M6	314	31	31	30	4	6,5	12	RAP-1-31-10-M-W1
'	U	1/4-20 UNC	12.36	1.22	1.22	1.18	.16	.26	.47	RAP-1-31-10-U-W1
1A	1	M6	373	20	37	30	4	6,5	12	RAP-1A-37-10-M-W1
IA		1/4-20 UNC	14.69	.79	1.46	1.18	.16	.26	.47	RAP-1A-37-10-U-W1
2	2	M6	442	26	44	30	4	6,5	12	RAP-2-44-10-M-W1
	2	1/4-20 UNC	17.40	1.02	1.73	1.18	.16	.26	.47	RAP-2-44-10-U-W1
3	3	M6	521	33	52	30	4	6,5	12	RAP-3-52-10-M-W1
3		1/4-20 UNC	20.51	1.30	2.05	1.18	.16	.26	.47	RAP-3-52-10-U-W1
4	4	M6	300	40	60	30	4	6,5	12	RAP-4-60-5-M-W1
4	4	1/4-20 UNC	11.81	1.57	2.36	1.18	.16	.26	.47	RAP-4-60-5-U-W1
5	5	M6	378	52	75	30	4	6,5	12	RAP-5-75-5-M-W1
3	5	1/4-20 UNC	14.88	2.05	2.95	1.18	.16	.26	.47	RAP-5-75-5-U-W1
6	6	M6	450	66	90	30	4	6,5	12	RAP-6-90-5-M-W1
0	6	1/4-20 UNC	17.72	2.60	3.54	1.18	.16	.26	.47	RAP-6-90-5-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

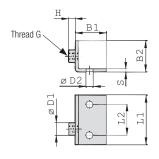
Ordering Codes									
Weld Plate	*RAP-*1-*31-*10-*M-*	W1							
* Group Weld Plate	for 5 or 10 Clamp Bodies	RAP							
* STAUFF Group		1							
* Pipe center spac	ing L3 (mm)	31							
* Number of clamp	os	10							
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U							
* Material code	Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated	W2 W3							
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5							

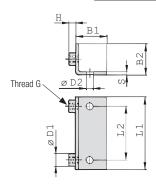
Dimensional drawings: All dimensions in mm (in).



### **Angled Weld Plate Type WSP**







STAUFF Group 1

STAUFF Group 1A to 6

### **Ordering Codes**

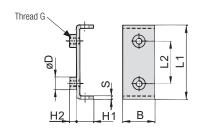
Weld Plate	*WSP-*1-*M-*	W1
* Angled Weld Pla	te	WSP
* STAUFF Group		1
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A	W4
	1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group		Dimensions ("	m/in)								Ordering Codes
STAUFF	DIN	Thread G	L1	L2	B1	B2	S	Н	ØD1	ØD2	(Standard Options)
1	0	M6	30	14	30	30	3	6,5	12	6,5	WSP-1-M-W1
'	U	1/4-20 UNC	1.18	.55	1.18	1.18	.12	.26	.47	.26	WSP-1-U-W1
4.0	<b>1A</b> 1	M6	36	20	30	30	3	6,5	12	6,5	WSP-1A-M-W1
IA		1/4-20 UNC	1.26	.79	1.18	1.18	.12	.26	.47	.26	WSP-1A-U-W1
<b>2</b> 2	2	M6	42	26	30	30	3	6,5	12	6,5	WSP-2-M-W1
	2	1/4-20 UNC	1.65	1.02	1.18	1.18	.12	.26	.47	.26	WSP-2-U-W1
3	3	M6	50	33	30	30	3	6,5	12	6,5	WSP-3-M-W1
3		1/4-20 UNC	1.97	1.30	1.18	1.18	.12	.26	.47	.26	WSP-3-U-W1
4	4	M6	60	40	30	30	3	6,5	12	6,5	WSP-4-M-W1
4	4	1/4-20 UNC	2.36	1.57	1.18	1.18	.12	.26	.47	.26	WSP-4-U-W1
5	5	M6	70	52	30	30	3	6,5	12	6,5	WSP-5-M-W1
5	0	1/4-20 UNC	2.76	2.05	1.18	1.18	.12	.26	.47	.26	WSP-5-U-W1
c	6	M6	88	66	30	30	3	6,5	12	6,5	WSP-6-M-W1
6		1/4-20 UNC	3.46	2.60	1.18	1.18	.12	.26	.47	.26	WSP-6-U-W1

 $All\ threaded\ parts\ are\ available\ with\ Metric\ ISO\ thread\ or\ unified\ coarse\ (UNC)\ thread\ according\ to\ dimension\ table.$ Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### **Bridge Weld Plate Type BSP**





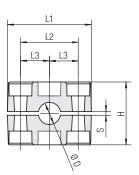
### **Ordering Codes**

A-*M-*W1
DOD
BSP
1A
read U
ed W2 el-plated W3
04 / 303) <b>W4</b>
16 / 316 Ti) <b>W5</b>

Group		Dimensions (mm	/in)							Ordering Codes
STAUFF	DIN	Thread G	L1	L2	В	S	H1	H2	ØD	(Standard Options)
1.0	1	M6	48	20	30	3	13	6,5	12	BSP-1A-M-W1
1A	1	1/4-20 UNC	1.89	.79	1.18	.12	.52	.26	.47	BSP-1A-U-W1
2	2	M6	54	26	30	3	13	6,5	12	BSP-2-M-W1
2	2	1/4-20 UNC	2.13	1.02	1.18	.12	.52	.26	.47	BSP-2-U-W1
3	3	M6	62	33	30	3	13	6,5	12	BSP-3-M-W1
3		1/4-20 UNC	2.44	1.30	1.18	.12	.52	.26	.47	BSP-3-U-W1
4	4	M6	71	40	30	3	13	6,5	12	BSP-4-M-W1
4	4	1/4-20 UNC	2.80	1.57	1.18	.12	.52	.26	.47	BSP-4-U-W1
5	5	M6	85	52	30	3	13	6,5	12	BSP-5-M-W1
5	3	1/4-20 UNC	3.35	2.05	1.18	.12	.52	.26	.47	BSP-5-U-W1
c	6	M6	98	66	30	3	13	6,5	12	BSP-6-M-W1
6	U	1/4-20 UNC	3.86	2.60	1.18	.12	.52	.26	.47	BSP-6-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 





### STAUFF Group 5

Group		Outside Diameter Pipe / Tube Ø D		Nominal Bore Copper Tube Pipe ASTM B88		Ordering Codes (2 Clamp Halves)	Dimensions (mm/ <sub>in</sub> )					
STAUFF	DIN	(mm)	(in)	(in)	(in)	(** = Material)	L1	L2	L3	Н	S min.	Width
		20				520-**-MGR						
		21,3		1/2		521.3-**-MGR						
		22			3/4	522-**-MGR						
		23				523-**-MGR						
		25				525-**-MGR						
		26,9		3/4		526.9- <b>**</b> -MGR						
5	5	28				528-**-MGR	71	52	26	58	0,8	30
3	3	30				530- <b>**</b> -MGR	2.80	2.05	1.02	2.28	.03	1.18
		32	1-1/4			532-**-MGR						
		33,7		1		533.7- <b>**</b> -MGR						
		35			1-1/4	535- <b>**</b> -MGR						
		38	1-1/2			538- <b>**</b> -MGR						
		40				540-**-MGR						
		42		1-1/4		542-**-MGR						

Additional outside diameters are available upon request. Please contact STAUFF for further information.

### Clamp Body for Multi-Group Weld Plate Type MGR



Ordering Codes
Clamp Body *5*20-*PP-MGR
One clamp body is consisting of two clamp halves.
* STAUFF Group 5
* Exact outside diameter Ø D1 (mm) 20
* Material code (see below) PP-MGR

### **Standard Materials**



Polypropylene Colour: Green Material code: PP-MGR



Thread G

RAP-MGR-25-700-U-W1

Polyamide Colour: Black Material code: PA-MGR

See pages 154 / 155 for properties and technical information.

Multi-Group Weld Plates (type RAP-MGR) are designed to be used in combination with Standard Series clamp bodies, STAUFF Group 2 (regular types, see pages 14 ff.) covering a diamater range from 8 mm / .31 in to 18 mm / .71 in, as well as Standard Series clamp bodies, STAUFF Group 5 (type MGR, see above) covering a diamater range from 20 mm / .79 in to 42 mm / 1.65 in. Thus, all Standard Series metal parts (bolts, cover plates) of these groups can be used.



Multi-Group Weld Plate RAP-MGR-25-312-M-W

Multi-Group Weld Plate RAP-MGR-25-312-M-W1												
Number of	Dimensions (	<sup>nm</sup> /in)					Ordering Codes					
Weld Nuts	Thread G	L3	L4	В	S	Н	ØD	(Standard Options)				
6	M6	26	156	30	4	6,5	12	RAP-MGR-25-156-M-W1				
0	1/4-20 UNC	1.02	6.14	1.18	.16	.26	.47	RAP-MGR-25-156-U-W1				
9	M6	26	234	30	4	6,5	12	RAP-MGR-25-234-M-W1				
9	1/4-20 UNC	1.02	9.21	1.18	.16	.26	.47	RAP-MGR-25-234-U-W1				
10	M6	26	312	30	4	6,5	12	RAP-MGR-25-312-M-W1				
12	1/4-20 UNC	1.02	12.28	1.18	.16	.26	.47	RAP-MGR-25-312-U-W1				
45	M6	26	390	30	4	6,5	12	RAP-MGR-25-390-M-W1				
15	1/4-20 UNC	1.02	15.35	1.18	.16	.26	.47	RAP-MGR-25-390-U-W1				
00	M6	26	520	30	4	6,5	12	RAP-MGR-25-520-M-W1				
20	1/4-20 UNC	1.02	20.47	1.18	.16	.26	.47	RAP-MGR-25-520-U-W1				
	MG	26	700	20	1	6.5	10	DAD MCD 25 700 M W4				

Cover a diamater range from 8 mm (.31 in) to 42 mm (1.65 in) with only one Group Weld Plate!

27.55

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### Multi-Group Weld Plate for Clamp Body Sizes 2 and 5 (Type MGR) Type RAP-MGR



**Ordering Codes** 

Weld Plate	*RAP-MGR-*25-*156-*N	/I-*W1						
* Multi Group Weld Plate RAP-								
* Suitable for STAUFF Group 2 and 5 (only type MGR)								
* Length L4 (mm)	156 (with 6 weld nuts)	156						
	234 (with 9 weld nuts)	234						
	312 (with 12 weld nuts)	312						
	390 (with 15 weld nuts)	390						

\* Thread code Metric ISO thread M Unified coarse (UNC) thread U

\* Material code Carbon Steel, uncoated W1

520 (with 20 weld nuts)

Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)



27

1/4-20 UNC

520

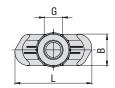
### STAUFF®

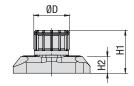
### **Hexagon Rail Nut**

(for Use with Mounting Rail TS)

### **Type SM**







# Ordering Codes Hexagon Rail Nut \*SM-\*1-8/1D-\*M-\*W3 \* Hexagon Rail Nut \*SM-\*1-8/1D-\*M-\*W3 \* Hexagon Rail Nut SM \* STAUFF Group 1 to 8 (DIN Group 0 to 8) 1-8/1D \* Thread code Metric ISO thread Murified coarse (UNC) thread Unified coarse (UNC) thread U \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group		Dimensions (mn	<sup>1</sup> /in)					Ordering Codes
STAUFF	DIN	Thread G	L	В	H1	H2	ØD	(Standard Options)
1	0							
1A	1							
2	2							
3	3							
4	4	M6	25,5	10,4	14,2	5,5	12	SM-1-8/1D-M-W3
_	7	1/4-20 UNC	1.00	.41	.56	.22	.47	SM-1-8/1D-U-W3
5	5							
6	6							
7	7							
8	8							

Hexagon Rail Nuts, type SM-1-8/1D are also suitable for Twin Series, STAUFF Group 1D.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

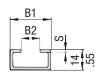
### **Mounting Rail**

(for Use with Hexagon Rail Nut SM)

### Type TS









Mounting Rail TS-11

Mounting Rail TS-14

Mounting Rail TS-30

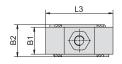
Ordering Codes								
Mounting Ra	il *TS-*11-*1M-*	W1						
* Mounting Rail		TS						
* Height of rail	11 mm / .43 in 14 mm / .55 in 30 mm / 1.18 in	11 14 30						
* Length of rail	1 m / 3.28 ft 2 m / 6.56 ft	1M 2M						
	Alternative lengths available upon rec Contact STAUFF for further informa							
* Material code	Carbon Steel, uncoated Carbon Steel, hot-dip galvanised	W1 W98						
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5						

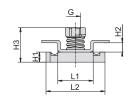
Group Dimensions (mm					Ordering Codes (Standard C			
STAUFF	DIN	B1	B2	S	Length of Rail: 1 m / 3.28ft	Length of Rail: 2m / 6.56ft		
1	0							
1A	1				Height 11 mm / .43 in TS-11-1M-W1	Height 11 mm / .43 in TS-11-2M-W1		
2	2							
3	3		11 .43			Height 14 mm / .55 in TS-14-2M-W1		
4	4	28 1.10		.08	Height 14 mm / .55 in TS-14-1M-W1			
5	5							
6	6					Height 30 mm / 1.18 in TS-30-2M-W1		
7	7				Height 30 mm / 1.18 in TS-30-1M-W1			
8	8							

Mounting Rails, type TS-11/14/30 are suitable for all Standard Series and Twin Series group sizes. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



### Channel Rail Adaptor (for Use with Various Channel Rails) Type CRA







Group		Dimensions (mm	/in)								Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3	B1	B2	H1	H2	Н3	(Standard Options)
1	0										
1A	1										
2	2										
3	3										
4	4	M6	21	35	40	16	19	6	5,5	20,5	CRA-1-8/1D-M-W3
		1/4-20 UNC	.83	1.38	1.57	.63	.75	.24	.22	.81	CRA-1-8/1D-U-W3
5	5										
6	6										
7	7										
8	8										

Ordering Codes					
Adaptor	*CRA-*1-8/1D-*M	-*W3			
* Channel Rail Ad	aptor	CRA			
* STAUFF Group	1 to 8 (DIN Group 0 to 8)	1-8/1D			
*Thread code	Metric ISO thread Unified coarse (UNC) thread	M U			
* Material code	Carbon Steel, zinc/nickel-plated	W3			
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	Ti) <b>W5</b>			

The Channel Rail Adaptor, type CRA 1-8/1D is also suitable for Twin Series, STAUFF Group 1D.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

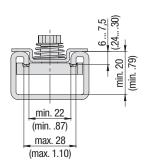


### **Compatibility with Channel Rails**

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various channel rails, including the following types:

HALFEN	HILTI	UNISTRUT®	STAUFF (Cushion Clamp Series)
HM 41/41	MQ-21, MQ-41, MQ-52, MQ-72	P1000, P1000T, P1000V, P1000VT, P1001	SCS-048-1-PL, SCS-048-1-GR
HZA 41/22	MQ-21U, MQ-41U, MQ-72U	P2000, P2000T	SCS-120-1-PL, SCS-120-1-GR
HZM 41/41	MQ-21D, MQ-41D, MQ-52-72D	P3003, P3003T, P3300V, P3300VT, P3301	See page 149 for technical information.
HZM 41/22		P4000, P4000T	
HL 41/41, HL 41/B2		P5000, P5000T, P5001, P5500, P5500T, P5501	

To check the compatibility with additional types of channel rail, please compare the dimensions with the following drawing before use.



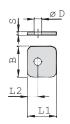
Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

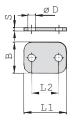
Dimensional drawings: All dimensions in mm (in).



### **Cover Plate Type DP**







STAUFF Group 1

STAUFF Group 1A to 8

Ordering C	odes	
Cover Plate	*DP-*1-*	W3
* Cover Plate		DP
* STAUFF Group		1
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5
	Aluminium EN AW-6060	W85

Group		Dimensions (	<sup>mm</sup> /in)				Ordering Codes
STAUFF	DIN	L1	L2	В	S	ØD	(Standard Options)
1	1 0	28	9,5	30	3	7	DP-1-W3
'	U	1.10	.37	1.18	.12	.28	DF-1-W3
1A	1	34	20	30	3	7	DP-1A-W3
IA	1	1.34	.79	1.18	.12	.28	Dr-IA-WS
2	2	40,5	26	30	3	7	DP-2-W3
2		1.59	1.02	1.18	.12	.28	DF-2-W3
3	3	48	33	30	3	7	DP-3-W3
3	3	1.89	1.30	1.18	.12	.28	DL-9-M9
4	4	57	40	30	3	7	DP-4-W3
4	4 4	2.24	1.57	1.18	.12	.28	DF-4-W3
5	5	70	52	30	3	7	DP-5-W3
5	J	2.76	2.05	1.18	.12	.28	DF-3-W3
6	6	86	66	30	3	7	DP-6-W3
U	U	3.39	2.60	1.18	.12	.28	DL-0-M9
7	7	118	94	30	5	7	DP-7-W3
1	1	4.65	3.70	1.18	.20	.28	טר-ו-אס
8	8	144	120	30	5	7	DP-8-W3
0	0	5.67	4.72	1.18	.20	.28	DL-0-M9

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### **Hexagon Head Bolt**

**Ordering Codes** 

(for Use with Cover Plate DP)

### **Type AS**





 $\textbf{Hexagon Head Bolt AS} \ (\text{according to DIN } 931 \ / \ 933 \ \text{or ANSI} \ / \ \text{ASME B18.2.1.})$ Dimensions applicable only when used with Cover Plate DP

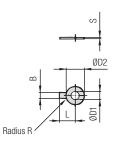
Hexagon Head	d Bolt *AS-*M6x30-*V	<b>V</b> 3
* Type of bolt	Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)	AS
* Thread type and	size acc. to dimension table M6	x30
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5

Group		Dimensions (mm/in)	Ordering Codes
STAUFF	DIN	Thread G x L	(Standard Options)
1	0	M6 x 30	AS-M6x30-W3
1	U	1/4–20 UNC x 1-1/4	AS-1/4-20UNCx1-1/4-W3
1A	4	M6 x 30 AS-	
IA	1	1/4–20 UNC x 1-1/4	AS-1/4-20UNCx1-1/4-W3
2	2	M6 x 35	AS-M6x35-W3
2	2	1/4–20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3
0	3	M6 x 40	AS-M6x40-W3
3	3	1/4–20 UNC x 1-1/2	AS-1/4-20UNCx1-1/2-W3
	4	M6 x 45	AS-M6x45-W3
4	4	1/4–20 UNC x 1-7/8	AS-1/4-20UNCx1-7/8-W3
5	_	M6 x 60	AS-M6x60-W3
Э	5	1/4–20 UNC x 2-3/8	AS-1/4-20UNCx2-3/8-W3
		M6 x 70	AS-M6x70-W3
6	6	1/4–20 UNC x 2-3/4	AS-1/4-20UNCx2-3/4-W3
-	7	M6 x 100	AS-M6x100-W3
7	7	1/4–20 UNC x 4	AS-1/4-20UNCx4-W3
0	0	M6 x 125	AS-M6x125-W3
8	8	1/4–20 UNC x 4-7/8	AS-1/4-20UNCx4-7/8-W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.







### Safety Washer SI

(Bend longer tab down towards the side of the clamp body and one side up towards one of the flats of the hexagon head bolt)

Group Dimensions (mm)			s (mm/in)			Ordering Codes		
STAUFF	DIN	ØD1	В	ØD2	L	R	S	(Standard Options)
1 to 8	0 to 8	6,4	7	19	18	4	0,5	SI-6.4-DIN93-W3
1 10 6	0 10 6	.25	.28	.75	.71	.16	.02	51-6.4-DIN93-W3

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Safety Washers, type SI are suitable for all Standard Series group sizes.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### **Safety Washer** (for Use with Hexagon Head Bolt AS) Type SI (DIN 93)



### **Ordering Codes**

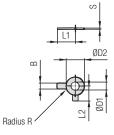
**Safety Washer** \*SI-\*6.4-\*DIN93-\*W3

\* Type of washer Safety washer with 1 tab SI-6.4-DIN93 (according to DIN 93)

\* Material code Carbon Steel, zinc/nickel-plated

Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)



### Safety Washer SI

(Bend longer tab down towards the side of the clamp body and shorter tab up towards one of the flats of the hexagon head bolt)

1	Group		Dimensions (mm/in)							Ordering Codes	
1	STAUFF	DIN	ØD1	В	ØD2	L1	L2	R	S	(Standard Options)	
	1 to 8	0 to 8	6,4	7 .28	12 .47	.71	9 .35	.16	0,5	SI-6.4-DIN463-W3	

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Safety Washers, type SI are suitable for all Standard Series group sizes.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

**Safety Washer** (for Use with Hexagon Head Bolt AS) Type SI (DIN 463)



### **Ordering Codes**

**Safety Washer** \*SI-\*6.4-\*DIN463-\*W3

\* Type of washer Safety washer with 2 tabs SI-6.4-DIN463

(according to DIN 463)

\* Material code Carbon Steel, zinc/nickel-plated W3

Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)



### **Socket Cap Screw Slotted Head Screw Type IS Type LI**









**Socket Cap Screw IS** 

(according to ISO 4762 or ANSI / ASME B18.3)

Slotted Head Screw LI

(according to ISO 1207 or ANSI / ASME B18.6.3) Dimensions applicable only when used without Cover Plate DP Dimensions applicable only when used without Cover Plate DP

Ordering Godes	
Socket Cap Screw	*IS-*M6x30-*W3
<b>Slotted Head Screw</b>	*LI-*M6x30-*W3

* Type of bolt	Socket Cap Screw (according to ISO 4762 or ANSI / ASME B18.3) Slotted Head Screw (according to ISO 1207 or ANSI / ASME B18.6.3)	IS LI
Please note:	Socket cap screws IS and slotted hea screws LI have to be used in conjunc	

	with washers US, which are av	<i>r</i> ailable
	separately.	
* Thread type and	size acc. to dimension table	M6x30

modu typo um	3 0120 4001 to 411101101011 44010	
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A	W4
	1.4301 / 1.4305 (AISI 304 / 303)	VV4
	Stainless Steel V4A	

1.4301 / 1.4305 (AISI 304 / 303)	W4
Stainless Steel V4A	WE
1 4401 / 1 4571 (AISI 316 / 316 Ti)	W5

Group		Dimensions (mm/in)	Ordering Codes (Standard	Options)
STAUFF	DIN	Thread G x L	Socket Cap Screws	Slotted Head Screws
1	0	M6 x 20	IS-M6x20-W3	LI-M6x20-W3
'	U	1/4-20 UNC x 3/4	IS-1/4-20UNCx3/4-W3	LI-1/4-20UNCx3/4-W3
1A	1	M6 x 20	IS-M6x20-W3	LI-M6x20-W3
IA		1/4-20 UNC x 3/4	IS-1/4-20UNCx3/4-W3	LI-1/4-20UNCx3/4-W3
2	2	M6 x 25	IS-M6x25-W3	LI-M6x25-W3
2	2	1/4-20 UNC x 1	IS-1/4-20UNCx1-W3	LI-1/4-20UNCx1-W3
3	3	M6 x 30	IS-M6x30-W3	LI-M6x30-W3
3	3	1/4-20 UNC x 1-1/8	IS-1/4-20UNCx1-1/8-W3	LI-1/4-20UNCx1-1/8-W3
4	4	M6 x 35	IS-M6x35-W3	LI-M6x35-W3
4	4	1/4-20 UNC x 1-3/8	IS-1/4-20UNCx1-3/8-W3	LI-1/4-20UNCx1-3/8-W3
5	5	M6 x 50	IS-M6x50-W3	LI-M6x50-W3
5	0	1/4-20 UNC x 2	IS-1/4-20UNCx2-W3	LI-1/4-20UNCx2-W3
6	6	M6 x 60	IS-M6x60-W3	LI-M6x60-W3
О	0	1/4-20 UNC x 2-1/2	IS-1/4-20UNCx2-1/2-W3	LI-1/4-20UNCx2-1/2-W3
7	7	M6 x 90	IS-M6x90-W3	ON DECLIFET ONLY
1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1/4-20 UNC x 3-3/8	IS-1/4-20UNCx3-3/8-W3	ON REQUEST ONLY
8	8	M6 x 110	IS-M6x110-W3	ON DECLIFET ONLY
0	0	1/4-20 UNC x 4-3/8	IS-1/4-20UNCx4-3/8-W3	ON REQUEST ONLY

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

### **Hexagon Head Bolt Type AS**









**Hexagon Head Bolt AS** 

(according to DIN  $93\overset{\text{-}}{31}$  / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Inserts  $\ensuremath{\mathsf{EP}}\xspace$  /  $\ensuremath{\mathsf{ES}}\xspace$ 

	D	2	_	
				H
_	D	1		

Insert EP (Polypropylene) Insert ES-W3 (Steel, zinc/nickel-plated) Insert ES-W5 (Stainless Steel V4A)

Group			Dimensions (mm/in)				Ordering Codes	
ST	AUFF	DIN	D1	D2	H ES	H EP	(Standard	d Options)
1 t	0 8	0 to 8	11,8	6,5	7,8	8,6	ES-W3	EP

### **Ordering Codes**

### \*AS-\*M6x27-\*W3 **Hexagon Head Bolt**

(a	exagon Head Bolt according to DIN 931 / 933 r ANSI / ASME B18.2.1.)	AS
* Thread type and size	ze acc. to dimension table	M6x27
* Material code C	arbon Steel, zinc/nickel-plated	W3
	tainless Steel V2A .4301 / 1.4305 (AISI 304 / 303)	W4
_	tainless Steel V4A .4401 / 1.4571 (AISI 316 / 316 7	Γi) <b>W5</b>

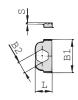
Group		Dimensions (mm/in)	Ordering Codes
STAUFF	DIN	Thread G x L	(Standard Options)
1	0	M6 x 27	AS-M6x27-W3
'	U	1/4-20 UNC x 1-1/8	AS-1/4-20UNCx1-1/8-W3
1Α	1	M6 x 27	AS-M6x27-W3
IA	'	1/4-20 UNC x 1-1/8	AS-1/4-20UNCx1-1/8-W3
2	2	M6 x 32	AS-M6x32-W3
2	_	1/4-20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3
3	3	M6 x 35	AS-M6x35-W3
3	3	1/4-20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3
4	4	M6 x 42	AS-M6x42-W3
4	4	1/4-20 UNC x 1-5/8	AS-1/4-20UNCx1-5/8-W3
5	5	M6 x 57	AS-M6x57-W3
5	5	1/4-20 UNC x 2-3/8	AS-1/4-20UNC-2-3/8-W3
6	6	M6 x 65	AS-M6x65-W3
O	O	1/4-20 UNC x 2-3/4	AS-1/4-20UNCx2-3/4-W3
7	7	M6 x 95	AS-M6x95-W3
1	1	1/4-20 UNC x 4	AS-1/4-20UNCx4-W3
8	8	M6 x 118	AS-M6x118-W3
0	0	1/4-20 UNC x 4-3/4	AS-1/4-20UNCx4-3/4-W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.





### Safety Locking Plate (for Use with Stacking Bolt AF) Type SIG







STAUFF Group 1

STAUFF Group 1A to 8

Group		Dimensions (	mm/in)	Ordering Codes		
STAUFF	DIN	L	B1	B2	S	(Standard Options)
1	0	16	32	11,2	1	SIG-1-W3
1 0	0	.63	1.26	.44	.04	31d-1-W3
1A	1	33	28	11,2	1	SIG-1A-W3
IA		1.30	1.10	.44	.04	Sid-IA-WS
2	2	39	28	11,2	1	SIG-2-W3
2		1.54	1.10	.44	.04	31u-2-w3
3	3	47	28	11,2	1	SIG-3-W3
3	3	1.85	1.10	.44	.04	310-3-W3
4	4	56	28	11,2	1	SIG-4-W3
4	4	2.20	1.10	.44	.04	31u-4-W3
5	5	69	28	11,2	1	SIG-5-W3
3	3	2.72	1.10	.44	.04	310-3-W3
6	6	85	28	11,2	1	SIG-6-W3
U	U	3.35	1.10	.44	.04	Siu-o-ws
7	7	117	28	11,2	1	SIG-7-W3
1	1	4.61	1.10	.44	.04	314-7-W3
0	8	143	28	11,2	1	CIC O WO
8	0	5.63	1.10	.44	.04	SIG-8-W3

Ordering Codes						
Safety Locking Plate *SIG-*1-*						
* Safety Locking I	Plate	SIG				
* STAUFF Group		1				
* Material code	Carbon Steel, zinc/nickel-plated	W3				
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4				
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5				

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

## Thread G Hex

### Stacking Bolt (for Use with Safety Locking Plate SIG) Type AF



Group		Dimensions (n	<sup>nm</sup> /in)		Ordering Codes		
STAUFF	DIN	Thread G	L1	L2	L3 min.	Hex	(Standard Options)
1	0	M6	34	20	12	11	AF-1/1A/1D-M-W3
'	U	1/4-20 UNC	1.34	.79	.47	.43	AF-1/1A/1D-U-W3
1A	1	M6	34	20	12	11	AF-1/1A/1D-M-W3
IA	1	1/4-20 UNC	1.34	.79	.47	.43	AF-1/1A/1D-U-W3
2	2	M6	40	25	12	11	AF-2-M-W3
2		1/4-20 UNC	1.57	.98	.47	.43	AF-2-U-W3
3	3	M6	44	30	12	11	AF-3-M-W3
3	3	1/4-20 UNC	1.73	1.18	.47	.43	AF-3-U-W3
4	4	M6	49	35	12	11	AF-4-M-W3
4	4	1/4-20 UNC	1.93	1.38	.47	.43	AF-4-U-W3
5	5	M6	64	50	12	11	AF-5-M-W3
5	3	1/4-20 UNC	2.52	1.97	.47	.43	AF-5-U-W3
6	6	M6	74	60	12	11	AF-6-M-W3
O	O	1/4-20 UNC	2.91	2.36	.47	.43	AF-6-U-W3
7	7	M6	99	85	12	11	AF-7-M-W3
′	1	1/4-20 UNC	3.90	3.35	.47	.43	AF-7-U-W3
8	8	M6	124	110	12	11	AF-8-M-W3
0	0	1/4-20 UNC	4.88	4.33	.47	.43	AF-8-U-W3

Ordering Co	Ordering Codes							
Stacking Bolt	*AF-*1/1A/1D-*M-*\	N3						
* Type of bolt	Stacking Bolt (according to STAUFF Standard)	AF						
* STAUFF Group		1						
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U						
* Material code	Carbon Steel, zinc/nickel-plated	W3						
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4						
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5						

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.







### **1** Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position 1 of the order code for your clamp assembly.



Without Installation Equipment Code: none

### **Installation on Weld Plate**

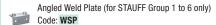
Single Weld Plate Code: SP



Code: SPV

Twin Weld Plate (for STAUFF Group 1 to 6 only) Code: DSP

Group Weld Plate (for STAUFF Group 1 to 6 only) Code: RAP



Bridge Weld Plate (for STAUFF Group 1A to 6 only) Code: BSP

### **Installation on Mounting / Channel Rail**



Hexagon Rail Nut Code: SM



### **2** Group Size & Diameter

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group	Outside	Availahi	lity of Cla	mn				
Group			Availability of Clamp Body Materials & Designs					
STAUFF	Diameter P / T / H	Profiled	aleriais &	Designs				
(DIN)	(mm)	Design	Type H	Type RI	Code			
(DIII)	6	-		O	106			
		•	•	0				
_	6,4	•	•	0	106.4			
<b>1</b> (0)		•	•		108			
(0)	9,5	•	•	0	109.5			
	10	•	•	0	110			
	12	•	•	0	112			
	6	•	•	0	106A			
	6,4	•	•	0	106.4A			
1A	8	•	•	0	108A			
(1)	9,5	•	•	0	109.5A			
	10	•	•	0	110A			
	12	•	•	0	112A			
	12,7	•	•	0	212.7			
	13,5	•	•	0	213.5			
	14	•	•	0	214			
<b>2</b> (2)	15	•	•	0	215			
(2)	16	•	•	0	216			
	17,2	•	•	0	217.2			
	18	•	•	0	218			
	19	•	•	0	319			
	20	•	•	0	320			
3	21,3	•	•	0	321.3			
(3)	22	•	•	0	322			
	25	•	•	0	325			
	25,4	•	•	0	325.4			
	6	0	0	•	406			
	8	0	0	•	408			
	10	0	0	•	410			
	12	0	0	•	412			
	12,7	0	0	•	412.7			
	14	0	0	•	414			
	15	0	0	•	415			
4	16	0	0	•	416			
(4)	17,2	0	0	•	417.2			
	18	0	0	•	418			
	19	0	0	•	419			
	26,9	•	•	0	426.9			
	28	•	•	0	428			
	28,6	•	0	0	428.6			
	30	•	•	0	430			
	32	•	•	0	432			
				1				

Group STAUFF	Outside Diameter P/T/H		Availability of Clamp Body Materials & Designs Profiled					
(DIN)	(mm)	Design	Туре Н	Type RI	Code			
, ,	32	•	•	0	532			
	33,7	•	•	0	533.7			
_	35	•	•	0	535			
<b>5</b> (5)	38	•	•	0	538			
(3)	40	•	•	0	540			
	41,3	•	0	0	541.3			
	42	•	•	0	542			
	20	0	0	•	620			
	21,3	0	0	•	621.3			
	22	0	0	•	622			
	25	0	0	•	625			
	26,9	0	0	•	626.9			
6	28	0	0	•	628			
(6)	30	0	0	•	630			
	32	0	0	•	632			
	44,5	•	•	0	644.5			
	48,3	•	•	0	648.3			
	50,8	•	•	0	650.8			
	54	•	•	0	654			
	57,2	•	•	0	757.2			
	60,3	•	•	0	760.3			
<b>7</b> (7)	63,5	•	•	0	763.5			
	70	•	•	0	770			
	73	•	•	0	773			
	76,1	•	•	0	776.1			
8	88,9	•	•	0	888.9			
(8)	102	•	•	0	8102L			

Standard Option



Please see pages 32 and 33 with detailed order examples for some of the most popular Standard Series clamp assemblies.

### **3 Clamp Body Design & Material**

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

### **Profiled Design**



Polypropylene Code: **PP** 



Polypropylene (Colour: Black) Code: **PP-BK** 



Polyamide Code: PA



Thermoplastic Elastomer (87 Shore-A)
Code: SA



Aluminium

Code: AL (for STAUFF Group 1A to 6 only)

### Type H (Smooth)



Polypropylene Code: **PP-H** 



Polypropylene (Colour: Black) Code: **PP-H-BK** 



Polyamide Code: **PA-H** 



Thermoplastic Elastomer (87 Shore-A)

Code: SA-H

### Type RI (with Elastomer Insert)



Polypropylene

Code: PP-R (for STAUFF Group 4 and 6 only)



Polyamide

Code: PA-R (for STAUFF Group 4 and 6 only)

See pages 154 / 155 for material properties and technical information.

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

### (4) Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. bolts, screws, cover plates etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

### **Installation with Cover Plate and Bolts**

Cover Plate DP with Hexagon Head Bolts AS

Code: DP-AS

Cover Plate DP with Socket Cap Screws IS\* Code: **DP-IS** 

### **Installation with Locking Plate and Bolts**

Safety Locking Plate SIG with Stacking Bolts AF Code: SIG-AF

### **Installation with Inserts and Bolts**

Inserts EP (Plastic) with Hexagon Head Bolts AS Code: **EP-AS** 

Inserts ES (Steel) with Hexagon Head Bolts AS Code: **ES-AS** 

### **Installation with Bolts only**

Socket Cap Screws IS (Washers US included) Code:  ${f IS}$ 

Slotted Head Screws LI (Washers US included) Code: LI (for STAUFF Group 1 to 6 only)

\* Special lengths of Socket Cap Screws IS required.
 For exact lengths, please see details of Hexagon Head Bolt, type AS

### **5** Thread Type

Please select the required thread type and add the corresponding Code to position (5) of the order code for your clamp assembly.

Metric ISO thread

Code: M

Unified coarse (UNC) thread

Code: U

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

### **6 Material & Surface Finishing**

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position ③ of the order code for your clamp assembly.

Metal parts made of Carbon Steel, zinc/nickel-plated

Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)

W5

Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

W10

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### (7) Assembling & Kitting

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

**Components supplied separately** 

Code: **none** (standard option)

Components assembled
Code: A (special option)

Components packed in kits Code: **K** (special option)





### 2x Hexagon Head Bolt

Surface: W3 Thread: Metric

### 1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

### 1x Single Weld Plate

Surface: W2 Thread: Metric



### 2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

### 1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12.7 mm / .50 in

Material: Polypropylene Profiled inside surface with tension clearance

### 1x Single Weld Plate

Surface: W2 Thread: Metric



### 2x Slotted Head Screw

with Washer Surface: W3 Thread: Metric

### 1x Clamp Body (two halves)

STAUFF Group 2 (DIN 2) 0.D. 12.7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

### 1x Single Weld Plate

Surface: W2 Thread: Metric

### **Order Code**

### SP-212.7-PP-DP-AS-M-W10

W10 is the standard option for this type of installation.

### **Order Code**

### SP-212.7-PP-IS-M-W10

W10 is the standard option for this type of installation.

### **Order Code**

### SP-212.7-PP-LI-M-W10

 $\boldsymbol{W10}$  is the standard option for this type of installation. Available up to STAUFF Group 6 (DIN Group 6) only.



### 2x Hexagon Head Bolt

Surface: W3 Thread: Metric

### 1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

### 1x Elongated Weld Plate

Surface: W2 Thread: Metric

### 2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0 D 12 7 mm / 50 in Material: Polypropylene Profiled inside surface with tension clearance

### 1x Elongated Weld Plate

Surface: W2 Thread: Metric



### 2x Slotted Head Screw

with Washer Surface: W3 Thread: Metric

### 1x Clamp Body (two halves) STAUFF Group 2 (DIN 2)

0 D 12 7 mm / 50 in Material: Polypropylene Profiled inside surface with tension clearance

### 1x Elongated Weld Plate

Surface: W2 Thread: Metric



### SPV-212.7-PP-DP-AS-M-W10

W10 is the standard option for this type of installation.

### **Order Code**

### SPV-212.7-PP-IS-M-W10

W10 is the standard option for this type of installation.

### **Order Code**

### SPV-212.7-PP-LI-M-W10

W10 is the standard option for this type of installation. Available up to STAUFF Group 6 (DIN Group 6) only.



### 2x Hexagon Head Bolt Surface: W3

Thread: Metric

### 1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

### 2x Hexagon Rail Nut

Surface: W3 Thread: Metric

### 2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

### 1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0 D 12 7 mm / 50 in Material: Polypropylene Profiled inside surface

with tension clearance

2x Hexagon Rail Nut



### 1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0 D 12 7 mm / 50 in Material: Polypropylene

2x Slotted Head Screw

with Washer

Surface: W3

Thread: Metric

Profiled inside surface with tension clearance

### 2x Hexagon Rail Nut Surface: W3

Thread: Metric

### Order Code (Mounting Rail TS not included.)

### SM-212.7-PP-DP-AS-M-W3

W3 is the standard option for this type of installation.

### Order Code (Mounting Rail TS not included.)

SM-212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

### Order Code (Mounting Rail TS not included.)

### SM-212.7-PP-LI-M-W3

W3 is the standard option for this type of installation. Available up to STAUFF Group 6 (DIN Group 6) only.





### 2x Hexagon Head Bolt

Surface: W3 Thread: Metric

### 1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) O.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance



### 2x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance



### 2x Slotted Head Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) Tube-0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

### **Order Code**

### 212.7-PP-DP-AS-M-W3

 $\mbox{\bf W3}$  is the standard option for this type of installation.

### **Order Code**

### 212.7-PP-IS-M-W3

W3 is the standard option for this type of installation.

### **Order Code**

### 212.7-PP-LI-M-W3

W3 is the standard option for this type of installation.

### 2x Stacking Bolt

Surface: W3 Thread: Metric

### 1x Safety Locking Plate Surface: W3

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance



### 1x Socket Cap Screw

with Washer Surface: W3 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 1 (DIN 0) 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance Thread: Metric

### 1x Single Weld Plate

Surface: W2 Thread: Metric

### Thread codes

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Metric ISO thread Unified coarse (UNC) thread

### M U

### **Material codes**

The below listed material codes describe the materials and surface finishings of metal parts that are most relevant for Standard Series clamp assemblies. Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Metal parts made of Carbon Steel, zinc/nickel-plated

Metal parts made of Stainless Steel V2A
1.4301 / 1.4305 (AISI 304 / 303)

Metal parts made of Stainless Steel V4A
1.4401 / 1.4571 (AISI 316 / 316 Ti)

W5

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

clamp assemblies only include one single bolt / screw.

### W10

W3

**Technical Notes** 

\* Because of their design, STAUFF Group 1 (DIN Group 0)

### **Order Code**

### 212.7-PP-SIG-AF-M-W3

 $\boldsymbol{W3}$  is the standard option for this type of installation.

### CD 106 DI

### SP-106-PP-IS-M-W10

Order Code\*

 $\boldsymbol{W10}$  is the standard option for this type of installation.

### 2x Hexagon Head Bolt Surface: W3

Thread: Metric

### 2x Insert

Material: Plastic

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

### 1x Single Weld Plate

Surface: W2 Thread: Metric

### 2x Hexagon Head Bolt

Surface: W3 Thread: Metric

### 2x Insert

Material: Plastic

1x Clamp Body (two halves) STAUFF Group 2 (DIN 2) 0.D. 12,7 mm / .50 in Material: Polypropylene Profiled inside surface with tension clearance

### 1x Elongated Weld Plate

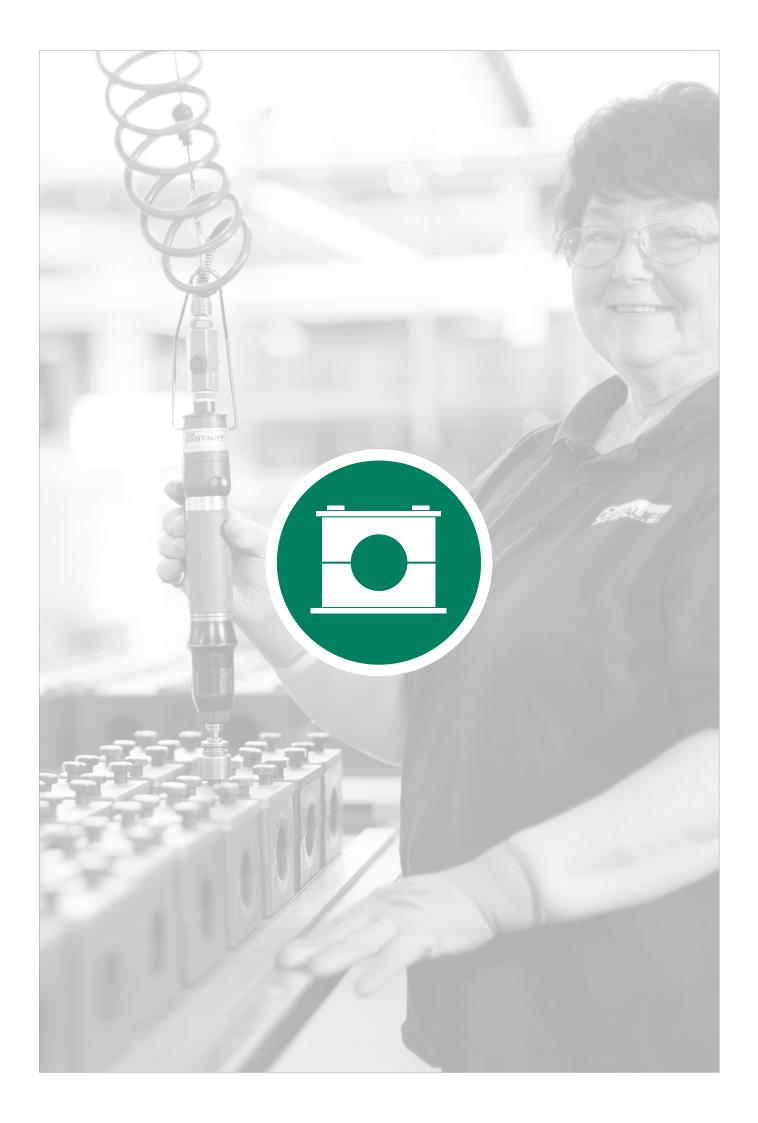
Surface: W2 Thread: Metric

### Order Code Order Code

### SP-212.7-PP-EP-AS-M-W10 SPV-212.7-PP-EP-AS-M-W10

W10 is the standard option for this type of installation.

W10 is the standard option for this type of installation.







Clamp Body

Profiled Inside Surface with Tension Clearance



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**Weld Plate for Single Clamps** 

SPAL





Clamp Body

Smooth Inside Surface without Tension Clearance



**Weld Plate for Double Clamps** 

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42

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45

45

46

46

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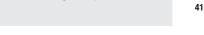


**Clamp Body with Elastomer Insert** 



**Elongated Weld Plate for Single Clamps** 

SPAL-DUEB





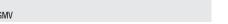
**Elongated Weld Plate for Double Clamps** 

SPAS-DUEB



**Mounting Rail Nut** 

GMV





**Mounting Rail** 

**Channel Rail Adaptor** 

STSV





CRA **Cover Plate for Single Clamps** 













Safety Washer (DIN 463)







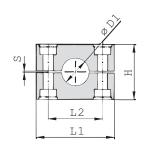
**Clamp Assemblies** 

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### Clamp Body - Profiled Design

### **Profiled Inside Surface with Tension Clearance**





### **Ordering Codes**

\*3\*006-\*PP **Clamp Body** 

One clamp body is consisting of two clamp halves.

* 1st part of STAUFF Group	3
* Exact outside diameter Ø D1 (mm)	006
* Material code (see below)	PP

### **Standard Materials**



Polypropylene Colour: Green Material code: PP



Polypropylene Colour: Black Material code: PP-BK



Polyamide Colour: Black Material code: PA



Thermoplastic Elastomer (87 Shore-A)

Colour: Black Material code: SA



Aluminium Colour: Self-Colour Material code: AL

See pages 154 / 155 for material properties and technical information.

### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

### **Product Features**

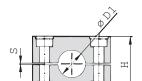
- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Environmental protection due to vibration/noise reducing design • Excellent weathering resistance, even under extreme conditions

See page 37 for STAUFF Group 7S to 12S (DIN Group 5 to 10).

Available for all commonly used pipe and tube outside diameters Additional outside diameters are available upon request. Please contact STAUFF for further information.

Group		Outside Diameter					Dimensions (mm/in)					
STAUFF		Pipe / Tu	ıbe	D'	Copper Tube			1.4				
IAI	NIO	Ø D1	(:)	Pipe	ASTM B88	Halves)	L1	L1			C:	14/:-141-
S		(mm)	(in)	(in)	(in)	(** = Material)	PP/PA/SA	AL	L2	Н	S min.	wiath
3\$	1	6	1/4			3006-**	55		33	32	0,6	30,5
		6,4 8	5/16			3006.4-**		56				
			3/8		1/4	3008- <b>**</b> 3009.5- <b>**</b>						
		9,5	3/0	1 /0	1/4							
		10 12		1/8		3010- <b>**</b> 3012- <b>**</b>						
		12,7	1/2		3/8	3012-** 3012.7-**						
		13,5	1/2	1/4	3/0	3012.7-**	2.16	2.20	1.30	1.26	.02	1.20
		14		1/4		3013.5-**	2.10	2.20	1.00	1.20	.02	1.20
		15				3014- <b>**</b>						
		16	5/8		1/2	3016-**						
		17,2	3/0	3/8	1/2	3017.2-**						
		18		3/0		3018-**						
		20				3020-**						
48		19	3/4			4019-**						
		20	0/1			4020-**						
		21,3		1/2		4021.3-**						
	2	22	7/8	1/2	3/4	4022-**						
		25	170		0/ 1	4025-**	70	70	45	48	0,6	30,5
		25,4	1			4025.4-**	2.76	2.76	1.77	1.89	.02	1.20
		26,9		3/4		4026.9-**						
		28		0/ 1		4028-**						
		30				4030-**						
5S	3	30				5030-**						
		32	1-1/4			5032-**						
		33,7		1		5033.7-**						
		35			1-1/4	5035-**	85	85	60	60	0,6	30.5
		38	1-1/2			5038-**	3.35	3.35	2.36	2.36	.02	1.20
		40				5040- <b>**</b>						
		41,3			1-1/2	5041.3-**						
		42		1-1/4		5042-**						
6S	4	38	1-1/2			6038-**	115	120	90	89	2	45
		42		1-1/4		6042- <b>**</b>						
		44,5	1-3/4			6044.5-**						
		48,3		1-1/2		6048.3- <b>**</b>						
		50,8	2			6050.8-**						
		54			2	6054- <b>**</b>						
		55				6055-**	4.53	4.72	3.54	3.50	.08	1.77
		57				6057-**	7.00	4.72	3.04	3.30	.00	1.77
		57,2	2-1/4			6057.2-**						
		60,3		2		6060.3-**						
		63,5	2-1/2			6063.5-**						
		65				6065-**						
		70	2-3/4			6070- <b>**</b>						





L2

#### Clamp Body • Profiled Design

**Profiled Inside Surface with Tension Clearance** 



Group			Diameter		Ordering Codes	Dimens	sions (mm	'/in)			
STAUFF		Pipe / Tu	ıbe	Bore	(2 Clamp						
Ι	NO	Ø D1			Halves)	L1	L1				
S	_	(mm)	(in)	Pipe (in)	( <b>**</b> = Material)	PP/PA	AL	L2	Н	S min.	Width
		60,3			7060.3-**						
		65			7065- <b>**</b>						
		70	2-3/4		7070- <b>**</b>						
		73		2-1/2 (ANSI B 36-10)	7073-**	154	152	122	120	2	60
7S	5	75			7075-**	6.06	5.98	4.80	4.72	.08	2.36
		76,1	3	2-1/2 (DIN EN 10220)	7076.1-**	0.00	0.00	4.00	7.72	.00	2.00
		80			7080-**						
		82,5			7082.5-**						
		88,9	3-1/2	3	7088.9-**						
		88,9	3-1/2	3	8088.9-**						
		100			8100-**						
		102	4	3-1/2	8102-**	000	000	100	100		00
8S	6	108			8108-**	206 8.11	208 8.19	168 6.61	168 6.61	.08	80 3.15
		114	4-1/2	4	8114-**	0.11	0.19	0.01	0.01	.00	3.13
		127	5		8127-**						
		133			8133-**						
		127	5		9127-**						
		133			9133-**						
		140		5	9140-**	054	055	005	000		
9S	7	152	6		9152-**	251	255	205	200	.12	91 3.58
		159			9159-**	9.88	10.04	8.07	7.87	.12	3.58
		165			9165-**						
		168		6	9168-**						
		168		6	10168-**						
		177,8			10177.8-**						
400	0	193,7			10193.7-**	336	326	265	270	3	120
10S	8	203	8		10203-**	13.22	12.83	10.43	10.63	.12	4.72
		216			10216-**						
		219		8	10219-**						
		219		8	11219-**						
11S	9	273		10	11273-**	470	470	395	410	8	162
		324		12	11324-**	18.50	18.50	15.55	16.14	.31	6.38
		356		14	12356-**	630	630	534	530	20	182
128	10	406		16	12406-**	24.80	24.80	21.02	20.87	.79	7.16

#### See page 36 for STAUFF Group 3S to 6S (DIN Group 1 to 4).

Additional outside diameters are available upon request. Please contact STAUFF for further information.

#### **Ordering Codes**

#### **Clamp Body**

\*7\*060.3-\*PP

One clamp body is consisting of two clamp halves.

 \* 1st part of STAUFF Group
 7

 \* Exact outside diameter Ø D1 (mm)
 060.3

 \* Material code (see below)
 PP

#### **Standard Materials**



Polypropylene Colour: Green

Material code: PP



Polypropylene Colour: Black Material code: PP-BK



Polyamide Colour: Black Material code: PA



**Aluminium**Colour: Self-Colour
Material code: **AL** 

See pages  $154 \, / \, 155$  for material properties and technical information.

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

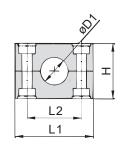
#### **Product Features**

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of rigid pipes and tubes
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

#### Clamp Body • Type H

#### **Smooth Inside Surface without Tension Clearance**





#### **Ordering Codes**

**Clamp Body** \*3\*006-\*PP-H

One clamp body is consisting of two clamp halves.

* 1st part of STAUFF Group	3
* Exact outside diameter Ø D1 (mm)	006
* Material code (see below)	PP-H

#### **Standard Materials**



Polypropylene Colour: Green Material code: PP-H



Polypropylene Colour: Green Material code: PP-H-BK



Polyamide Colour: Black Material code: PA-H



Thermoplastic Elastomer (87 Shore-A) Colour: Black

Material code: SA-H

See pages 154 / 155 for material properties and technical information.

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

#### **Product Features**

- Proven, tested and trusted product in various markets
- Recommended for the safe installation of hoses and cables
- Chamfered edges avoid damaging of the hose or cable
- Available for all commonly used hose and cable outside diameters
- Excellent weathering resistance, even under extreme conditions

STAUFF Group		Outside Diamo	eter	Ordering Codes (2 Clamp Halves)	Dimens (mm/in)	ions		
ST/	DIN	(mm)	(in)	(**-H = Material)	L1	L2	Н	Width
		6		3006-**-H				
		6,4	1/4	3006.4-**-H				
		8	5/16	3008-**-H				
		9,5	3/8	3009.5-**-H				
		10		3010-**-H				
		12		3012-**-H		20	20.5	20.5
3S	1	12,7	1/2	3012.7-**-H	55 2.16	1.30	30,5	30,5 1.20
		13,5		3013.5-**-H	2.10	1.50	1.20	1.20
		14		3014- <b>**</b> -H				
		15		3015- <b>**</b> -H				
		16	5/8	3016-**-H				
		17,2		3017.2-**-H				
		18		3018- <b>**</b> -H				
		19	3/4	4019- <b>**</b> -H				
		20		4020-**-H				
		21,3		4021.3-**-H				
		22	7/8	4022-**-H	70	45	46,5	30,5
4S	<b>IS</b> 2	25		4025- <b>**</b> -H	2.76	1.77	1.83	1.20
		25,4	1	4025.4-**-H				
		26,9		4026.9- <b>**</b> -H				
		28		4028-**-H				
		30		4030- <b>**</b> -H				
		30		5030- <b>**</b> -H				
		32	1-1/4	5032- <b>**</b> -H				
		33,7		5033.7- <b>**</b> -H				
5S	3	35		5035- <b>**</b> -H	85	60	58	30,5
33	3	38	1-1/2	5038- <b>**</b> -H	3.35	2.36	2.28	1.20
		40		5040- <b>**</b> -H				
		41,3		5041.3- <b>**</b> -H				
		42		5042- <b>**</b> -H				
		38	1-1/2	6038- <b>**</b> -H				
		42		6042- <b>**</b> -H				
		44,5	1-3/4	6044.5- <b>**</b> -H				
		48,3		6048.3- <b>**</b> -H				
		50,8	2	6050.8- <b>**</b> -H	115	90	87	45
6S	4	55		6055- <b>**</b> -H	4.53	3.54	3.43	1.77
33	7	57		6057- <b>**</b> -H				
		57,2	2-1/4	6057.2-**-H				
		60,3		6060.3-**-H				
		63,5	2-1/2	6063.5-**-H				
		65		6065- <b>**</b> -H				
		70	2-3/4	6070- <b>**</b> -H				

Additional outside diameters are available upon request. Please contact STAUFF for further information.

www.stauff.com/1/en/#38

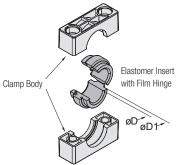
**Type RI** 

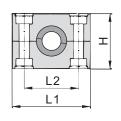
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98

108







## **Clamp Body with Elastomer Insert**



Group		Outside	Diameter	Ordering Codes	(**R = Clamp I	Body Material		nsions			
壯		Pipe / T	ube / Hose	Clamp Assembly	Clamp Body	Insert *	(mm/in)				
STAUFF	z	Ø D		(Clamp Body +							
SI	DIN	(mm	(in	Insert	(2 Clamp Halves		Ø D1	L1	L2	Н	Width
		6		4006-**-R		RI-06-4/4S					
		8	5/16	4008-**-R		RI-08-4/4S					
		10		4010-**-R		RI-10-4/4S					
		12		4012-**-R		RI-12-4/4S					
		12,7	1/2	4012.7-**-R		RI-12.7-4/4S	0.5	70	45	40.5	00.5
4S	2	14		4014-**-R	4S-**-R	RI-14-4/4S	25	70	45	46,5	30,5
		15		4015- <b>**</b> -R		RI-15-4/4S	.98	2.76	1.77	4.83	1.20
		16	5/8	4016-**-R		RI-16-4/4S					
		17,2		4017.2-**-R		RI-17.2-4/4S					
		18		4018- <b>**</b> -R		RI-18-4/4S					
		19	3/4	4019- <b>**</b> -R		RI-19-4/4S					
		20	0, 1	5020- <b>**</b> -R		RI-20-6/5S					
		21,3		5021.3- <b>**</b> -R		RI-21.3-6/5S					
		22	7/8	5022- <b>**</b> -R		RI-22-6/5S					
		25	170	5025- <b>**</b> -R		RI-25-6/5S	38	85	60	58	30,5
5S	3	26,9		5026.9- <b>**</b> -R	5S- <b>**</b> -R	RI-26.9-6/5S	1.50	3.35	2.36	2.28	1.20
		28		5028- <b>**</b> -R		RI-28-6/5S	1.00	0.00	2.00	2.20	1.20
		30		5030-**-R		RI-30-6/5S					
		32	1-1/4	5030-**-R		RI-32-6/5S					
		32	1-1/4	6032-**-R		RI-32-6S					
		33,7	1-1/4	6033.7-**-R		RI-33.7-6S					
		35		6035-**-R		RI-35-6S					
		38,7		6038.7-**-R		RI-38.7-6S					
00	4	40		6040- <b>**</b> -R	CC strate D	RI-40-6S	64	115	90	87	45
6S	4	42		6042- <b>**</b> -R	6S- <b>**</b> -R	RI-42-6S	2.52	4.53	3.54	3.43	1.77
		45,5		6045.5- <b>**</b> -R		RI-45.5-6S					
		48	0	6048- <b>**</b> -R		RI-48-6S					
		51	2	6051- <b>**</b> -R		RI-51-6S					
		53,4		6053.4- <b>**</b> -R		RI-53.4-6S					
		56,4		6056.4- <b>**</b> -R		RI-56.4-6S					
		55		7055- <b>**</b> -R		RI-55-7S					
		57	2-1/4	7057- <b>**</b> -R		RI-57-7S					
		60		7060- <b>**</b> -R		RI-60-7S					
7S	5	63,5	2-1/2	7063.5- <b>**</b> -R	7S-**-R	RI-63.5-7S	88	154	122	120	60
	-	65		7065- <b>**</b> -R		RI-65-7S	3.56	6.06	4.80	4.72	2.36
		70	2-3/4	7070- <b>**</b> -R		RI-70-7S					
		72		7072- <b>**</b> -R		RI-72-7S					
		76	3	7076- <b>**</b> -R		RI-76-7S					
		80		8080- <b>**</b> -R		RI-80-8S	114	208	168	168	80
8S	6	88,9	3-1/2	8088.9- <b>**</b> -R	8S-**-R	RI-88.9-8S	4.49	8.11	6.61	6.61	3.15
		102		8102- <b>**</b> -R		RI-102-8S	7.73	0.11	5.01	5.01	5.10
		114		9114- <b>**</b> -R		RI-114-9S	150	251	205	200	91
9S	7	133	5-1/4	9133- <b>**</b> -R	9S-**-R	RI-133-9S	5.91	9.88	8.07	7.87	3.58
		140		9140- <b>**</b> -R		RI-140-9S	0.91	3.00	0.07	1.01	0.00
		150		10150- <b>**</b> -R		RI-150-10S					
100	0	165		10165-**-R	100 state D	RI-165-10S	200	336	265	270	120
10S	8	168		10168-**-R	10S- <b>**</b> -R	RI-168-10S	7.87	13.22	10.43	10.63	4.72
		172		10172-**-R		RI-172-10S	1				

<sup>\*</sup> Elastomer Inserts for Heavy Series clamp bodies, STAUFF Group 4S also fit into Standard Series clamp bodies, STAUFF Group 4. Elastomer Inserts for Heavy Series clamp bodies, STAUFF Group 5S also fit into Standard Series clamp bodies, STAUFF Group 6.

Additional outside diameters are available upon request. Please contact STAUFF for further information.

Ordering Codes	
Clamp Assembly	*4*006-*PP-R
One assembly is consisting of one clan	np body and one insert.
* 1st part of STAUFF Group  * Exact outside diameter Ø D (mm)  * Material code (see below)	4 006 PP-R
Clamp Body	*4S-*PP-R
One clamp body is consisting of two	clamp halves.
* STAUFF Group * Material code (see below)	4S PP-R
Elastomer Insert	*RI-*06-*4/4S
* Elastomer Insert  * Exact outside diameter Ø D (mm)  * STAUFF Group  4S (Heavy) and 6  5S (Heavy)  6S (Heavy)	6 (Standard) 6/5S 6S
7S (Heavy)	7\$

8S (Heavy)

9S (Heavy)

10S (Heavy)

#### **Standard Materials**







Elastomer Insert 4S to 6S: Thermoplastic Elastomer (73 Shore-A)

Colour: Black

See pages 154 / 155 for material properties and technical information.

7S to 10S: **EPDM** (70 Shore-A)

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

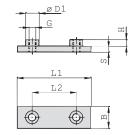
#### **Product Features**

- Proven, tested and trusted product in various markets
- Either for the extra vibration/noise reducing installation of pipes and tubes or the extra gentle installation of hoses and cables
- Available for all commonly used outside diameters
- Excellent weathering resistance, even under extreme conditions

#### **E**STAUFF ®

#### Weld Plate for Single Clamps Type SPAL





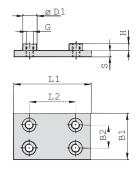
#### **Ordering Codes** \*SPAL-\*3S-\*M-\*W2 **Weld Plate** \* Weld Plate for Single Clamps SPAL \* STAUFF Group 3S \* Thread code Metric ISO thread Unified coarse (UNC) thread \* Material code Carbon Steel, uncoated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) **W5**

Group		Dimens	ions (mm/in)						Ordering Codes
STAUFF	DIN	L1	L2	В	S	Н	Thread G	ØD1	(Standard Options)
3S	1	74	33	30	8	8	M10	18	SPAL-3S-M-W2
33	'	2.91	1.30	1.18	.31	.31	3/8-16 UNC	.71	SPAL-3S-U-W2
4S	2	86	45	30	8	8	M10	18	SPAL-4S-M-W2
43		3.39	1.77	1.18	.31	.31	3/8-16 UNC	.71	SPAL-4S-U-W2
5S	3	100	60	30	8	8	M10	18	SPAL-5S-M-W2
33	3	3.94	2.36	1.18	.31	.31	3/8-16 UNC	.71	SPAL-5S-U-W2
6S	4	140	90	45	10	8	M12	20	SPAL-6S-M-W2
03	4	5.51	3.54	1.77	.39	.31	7/16-14 UNC	.78	SPAL-6S-U-W2
7S	5	180	122	60	10	12	M16	24	SPAL-7S-M-W2
75	5	7.09	4.80	2.36	.39	.47	5/8-11 UNC	.94	SPAL-7S-U-W2
o.c	6	226	168	80	15	18	M20	30	SPAL-8S-M-W1
8S	О	8.90	6.61	3.15	.59	.71	3/4-10 UNC	1.18	SPAL-8S-U-W1
98	7	270	205	90	15	21	M24	35	SPAL-9S-M-W1
95	1	10.63	8.07	3.54	.59	.83	7/8-9 UNC	1.38	SPAL-9S-U-W1
100	0	340	265	120	25	21	M30	45	SPAL-10S-M-W1
10S	8	13.39	10.43	4.72	.98	.83	1-1/8-7 UNC	1.77	SPAL-10S-U-W1
110	9	520	395	160	30	38	M30	50	SPAL-11S-M-W1
11S	9	20.47	15.55	6.30	1.18	1.50	1-1/4-7 UNC	1.97	SPAL-11S-U-W1
100	10	680	534	180	30	38	M30	50	SPAL-12S-M-W1
12S	10	27.16	21.02	7.09	1.18	1.50	1-1/4-7 UNC	1.97	SPAL-12S-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### Weld Plate for Double Clamps Type SPAS





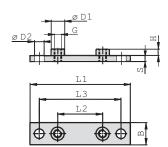
Ordering G	oaes	
Weld Plate	*SPAS-*3S-*M-*	W2
* Weld Plate for D	ouble Clamps	SPAS
* STAUFF Group		3S
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W1 W2 W3 W4

Group		Dimens	ions (mm/	in)						Ordering Codes
STAUFF	DIN	L1	L2	B1	B2	S	Н	Thread G	ØD1	(Standard Options)
3S	1	74	33	60	30,5	8	8	M10	18	SPAS-3S-M-W2
33	1	2.91	1.30	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS-3S-U-W2
4S	2	86	45	60	30,5	8	8	M10	18	SPAS-4S-M-W2
45	2	3.39	1.77	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS-4S-U-W2
5S	3	100	60	60	30,5	8	8	M10	18	SPAS-5S-M-W2
ວວ	3	3.94	2.36	2.36	1.20	.31	.31	3/8-16 UNC	.71	SPAS-5S-U-W2
cc	4	140	90	90	46	10	8	M12	20	SPAS-6S-M-W2
6S	4	5.51	3.54	3.54	1.81	.39	.31	7/16-14 UNC	.78	SPAS-6S-U-W2
70	_	180	122	120	61	10	12	M16	24	SPAS-7S-M-W2
7S	5	7.09	4.80	4.72	2.40	.39	.47	5/8-11 UNC	.94	SPAS-7S-U-W2
00	6	226	168	160	81	15	18	M20	30	SPAS-8S-M-W1
8S	б	8.90	6.61	6.61	3.19	.59	.71	3/4-10 UNC	1.18	SPAS-8S-U-W1
00	7	270	205	180	91	15	21	M24	35	SPAS-9S-M-W1
9S	7	10.63	8.07	7.09	3.58	.59	.83	7/8-9 UNC	1.38	SPAS-9S-U-W1
100	0	340	265	240	121	25	21	M30	45	SPAS-10S-M-W1
10S	8	13.39	10.43	9.45	4.78	.98	.83	1-1/8-7 UNC	1.77	SPAS-10S-U-W1
440	0	520	395	324	166	30	38	M30	50	SPAS-11S-M-W1
<b>11S</b> 9	20.47	15.55	12.76	6.54	1.18	1.50	1-1/4-7 UNC	1.97	SPAS-11S-U-W1	
100	680	534	364	186	30	38	M30	50	SPAS-12S-M-W1	
12S	10	27.16	21.02	14.33	7.32	1.18	1.50	1-1/4-7 UNC	1.97	SPAS-12S-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.







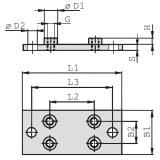
#### **Elongated Weld Plate for Single Clamps Type SPAL-DUEB**



Group		Dimen	sions (m	m/in)							Ordering Codes
STAUFF	DIN	L1	L2	L3	В	S	Н	Thread G	ØD1	ØD2	(Standard Options)
3S	1	113	33	85	30	8	8	M10	18	13	SPAL-DUEB-3S-M-W2
33		4.45	1.30	3.35	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL-DUEB-3S-U-W2
4S	2	125	45	97	30	8	8	M10	18	13	SPAL-DUEB-4S-M-W2
45	2	4.92	1.77	3.82	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL-DUEB-4S-U-W2
5S	3	140	60	112	30	8	8	M10	18	13	SPAL-DUEB-5S-M-W2
55	3	5.51	2.36	4.41	1.18	.31	.31	3/8-16 UNC	.71	.51	SPAL-DUEB-5S-U-W2
6S	4	187	90	155	45	10	8	M12	20	16	SPAL-DUEB-6S-M-W2
05	4	7.36	3.54	6.10	1.77	.39	.31	7/16-14 UNC	.78	.62	SPAL-DUEB-6S-U-W2
7S	5	238	122	198	60	10	12	M16	24	21	SPAL-DUEB-7S-M-W2
15	5	9.37	4.80	7.80	2.36	.39	.47	5/8-11 UNC	.94	.83	SPAL-DUEB-7S-U-W2
8S	6	309	168	259	80	15	18	M20	30	26	SPAL-DUEB-8S-M-W1
03	0	12.17	6.61	10.20	3.15	.59	.71	3/4-10 UNC	1.18	1.02	SPAL-DUEB-8S-U-W1
9S	7	370	205	310	90	15	21	M24	35	31	SPAL-DUEB-9S-M-W1
95	/	14.57	8.07	12.20	3.54	.59	.83	7/8-9 UNC	1.38	1.22	SPAL-DUEB-9S-U-W1
10S	8	460	265	400	120	25	21	M30	45	31	SPAL-DUEB-10S-M-W1
105	0	18.11	10.43	15.75	4.72	.98	.83	1-1/8-7 UNC	1.77	1.22	SPAL-DUEB-10S-U-W1
110	9	590	395	530	160	30	38	M30	50	31	SPAL-DUEB-11S-M-W1
11S	9	23.23	15.55	20.87	6.30	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAL-DUEB-11S-U-W1
100	10	750	534	690	180	30	38	M30	50	31	SPAL-DUEB-12S-M-W1
12S	10	29.53	21.02	27.17	7.09	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAL-DUEB-12S-U-W1

#### **Ordering Codes** Weld Plate \*SPAL-DUEB-\*3S-\*M-\*W2 \* Elongated Weld Plate for Single Clamps SPAL-DUEB \* STAUFF Group 3\$ \* Thread code Metric ISO thread M Unified coarse (UNC) thread U \* Material code Carbon Steel, uncoated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A W5 1.4401 / 1.4571 (AISI 316 / 316 Ti)

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.





øD1

STAUFF Group 3S to 9S

STAUFF Group 10S to 12S

Group		Dimer	ısions (	( <sup>mm</sup> /in)								Ordering Codes
STAUFF	DIN	L1	L2	L3	B1	B2	S	Н	Thread G	ØD1	ØD2	(Standard Options)
3S	4	113	33	85	60	30,5	8	8	M10	18	13	SPAS-DUEB-3S-M-W2
33		4.45	1.30	3.35	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS-DUEB-3S-U-W2
4S	2	125	45	97	60	30,5	8	8	M10	18	13	SPAS-DUEB-4S-M-W2
45	2	4.92	1.77	3.82	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS-DUEB-4S-U-W2
5S	3	140	60	112	60	30,5	8	8	M10	18	13	SPAS-DUEB-5S-M-W2
33	3	5.51	2.36	4.41	2.36	1.20	.31	.31	3/8-16 UNC	.71	.51	SPAS-DUEB-5S-U-W2
6S	4	187	90	155	90	46	10	8	M12	20	16	SPAS-DUEB-6S-M-W2
03	4	7.36	3.54	6.10	3.54	1.81	.39	.31	7/16-14 UNC	.78	.62	SPAS-DUEB-6S-U-W2
7S	5	238	122	198	120	61	10	12	M16	24	21	SPAS-DUEB-7S-M-W2
13	J	9.37	4.80	7.80	4.72	2.40	.39	.47	5/8-11 UNC	.94	.83	SPAS-DUEB-7S-U-W2
8S	6	309	168	259	160	81	15	18	M20	30	26	SPAS-DUEB-8S-M-W1
03	U	12.17	6.61	10.20	6.61	3.19	.59	.71	3/4-10 UNC	1.18	1.02	SPAS-DUEB-8S-U-W1
98	7	370	205	310	180	91	15	21	M24	35	31	SPAS-DUEB-9S-M-W1
90	′	14.57	8.07	12.20	7.09	3.58	.59	.83	7/8–9 UNC	1.38	1.22	SPAS-DUEB-9S-U-W1
10S	8	460	265	400	240	121	25	21	M30	45	31	SPAS-DUEB-10S-M-W1
103	0	18.11	10.43	15.75	9.45	4.78	.98	.83	1-1/8-7 UNC	1.77	1.22	SPAS-DUEB-10S-U-W1
11S	9	590	395	530	324	166	30	38	M30	50	31	SPAS-DUEB-11S-M-W1
113	3	23.23	15.55	20.87	12.76	6.54	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAS-DUEB-11S-U-W1
12S	10	750	534	690	364	186	30	38	M30	50	31	SPAS-DUEB-12S-M-W1
123	10	29.53	21.02	27.17	14.33	7.32	1.18	1.50	1-1/4-7 UNC	1.97	1.22	SPAS-DUEB-12S-U-W1

#### All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Elongated Weld Plate for Double Clamps Type SPAS-DUEB**





#### **Ordering Codes** Weld Plate \*SPAS-DUEB-\*3S-\*M-\*W2

* Elongated Weld	Plate for Double Clamps	SPAS-DUEB
* STAUFF Group		38
* Thread code	Metric ISO thread Unified coarse (UNC) thread	M i U
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-pl	W1 W2 lated W3

Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A

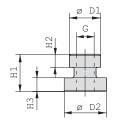
1.4401 / 1.4571 (AISI 316 / 316 Ti)



W4

#### **Mounting Rail Nut** (for Use with Mounting Rail STSV) **Type GMV**







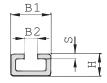
#### **Ordering Codes Mounting Rail Nut** \*GMV-\*3-5S\*M-\*W3 \* Mounting Rail Nut GMV \* STAUFF Group 3S to 5S (DIN Group 1 to 3) 3-5S 6S (DIN Group 4) 6S \* Thread code Metric ISO thread M U Unified coarse (UNC) thread \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group		Dimension	S (mm/in)					Ordering Codes
STAUFF	DIN	ØD1	ØD2	H1	H2	H3	Thread G	(Standard Options)
3\$	1							
4S	2	17,8	24	21	7,6	7,4	M10	GMV-3-5S-M-W3
45	2	.70	.94	.83	.30	.29	3/8-16 UNC	GMV-3-5S-U-W3
5\$	3							
6S	4	19,8	24	23	8,8	8,8	M12	GMV-6S-M-W3
00	4	.78	.94	.91	.35	.35	7/16-14 UNC	GMV-6S-U-W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $\label{thm:linear_equal} \textbf{Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.}$ 

#### **Mounting Rail** (for Use with Mounting Rail Nut GMV) **Type STSV**





Ordering Codes							
Mounting Rai	*STSV-*1M-*W1						
* Mounting Rail	STSV						
* Length of rail	1 m / 3.28 ft 1M 2 m / 6.56 ft 2M						
	Alternative lengths available upon request. Contact STAUFF for further information.						
* Material code	Carbon Steel, uncoated W1 Carbon Steel, zinc-plated, W32						
	blue-chromated Stainless Steel V4A						
	1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>						

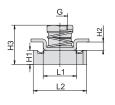
Group STAUFF	DIN	Dimension B1	s ( <sup>mm</sup> / <sub>in</sub> ) B2	Н	S	Ordering Codes (Standard Options)  Length of Rail: 1 m / 3.28ft   Length of Rail: 2 m / 6.56ft		
3\$	1							
48	2	40	13	22	5	0.707 414 114	OTOV ON WA	
5\$	3	1.57	.51	.86	.19	STSV -1M-W1 STSV -2M-W1		
6S	4							

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



#### Channel Rail Adaptor (for Use with Various Channel Rails) Type CRA







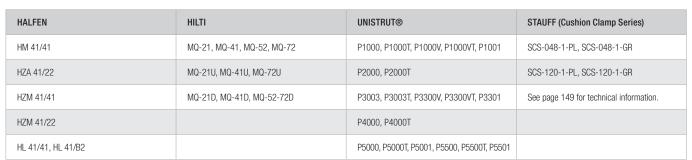
Group		Dimensions (mm/in) Orderin					Ordering Codes				
STAUFF	DIN	Thread G	L1	L2	L3	B1	B2	H1	H2	Н3	(Standard Options)
3S	1										
48	2	M10	22	35	38	22	20,5	9,2	5,5	27,5	CRA-3-5S-M-W3
40		3/8-16 UNC	.87	1.38	1.50	.87	.81	.36	.22	1.08	CRA-3-5S-U-W3
5S	3										
00	4	M12	21,5	35	45	25	19	9,2	5	27,5	CRA-6S-M-W3
6S	4	7/16-14 UNC	.85	1.38	1.77	.98	.75	.36	.20	1.08	CRA-6S-U-W3

**Ordering Codes** \*CRA-\*3-5S-\*M-\*W3 **Adaptor** \* Channel Rail Adaptor CRA \* STAUFF Group 3S to 5S (DIN Group 1 to 3) 3-5S 6S (DIN Group 4) **6S** \* Thread code Metric ISO thread M U Unified coarse (UNC) thread Carbon Steel, zinc/nickel-plated W3 \* Material code Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

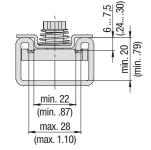
All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Compatibility with Channel Rails**

The STAUFF Channel Rail Adaptor, type CRA is suitable for various channel rails, including the following types:



Contact STAUFF to check compatibility with additional types of channel rails.



Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

#### Recommended Bolt Lengths when using the Channel Rail Adaptor, Type CRA

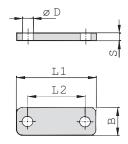
Group		Hexagon Head Bolts AS (used with Cover	r Plates DPAL or DPAS)	Socket Cap Screws IS (used without Cover Plates DPAL or DPAS)		
STAUFF	DIN	Metric ISO thread	Unified coarse (UNC) thread	Metric ISO thread	Unified coarse (UNC) thread	
3S	1	M10 x 40	3/8-16 UNC x 1-1/2	M10 x 25	3/8–16 UNC x 1	
<b>4S</b> 2 M10 x 55		M10 x 55	3/8-16 UNC x 2-1/4	M10 x 40	3/8–16 UNC x 1-1/2	
5S	5S 3 M10 x 65 3/8-		3/8-16 UNC x 2-3/4	M10 x 50	3/8–16 UNC x 2	
6S	4	M12 x100	7/16–14 UNC x 3-3/4	M12 x 75	7/16–14 UNC x 3	

Clamp assemblies including Channel Rail Adaptors, type CRA are supplied with the recommended bolt lengths by default. See page 48 for further information on ordering.



#### **Cover Plate for Single Clamps Type DPAL**





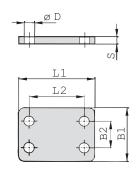
#### **Ordering Codes** \*DPAL-\*3S-\*W2 **Cover Plate** \* Cover Plate for Single Clamps DPAL \* STAUFF Group 3\$ \* Material code W1 Carbon Steel, uncoated Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) Aluminium EN AW-6060 (for group sizes 3S to 5S only)

Group		Dimensions (n	nm/in)		Ordering Codes		
STAUFF	DIN	L1	L2	В	S	ØD	(Standard Options)
3S	1	55	33	30	8	11	DPAL-3S-W2
33	1	2.16	1.30	1.18	.31	.43	DFAL-33-WZ
4S	2	70	45	30	8	11	DPAL-4S-W2
43	2	2.76	1.77	1.18	.31	.43	DFAL-45-WZ
5S	3	85	60	30	8	11	DPAL-5S-W2
33	3	3.35	2.36	1.18	.31	.43	DFAL-33-WZ
6S	4	115	90	45	10	14	DPAL-6S-W2
03	4	4.53	3.54	1.77	.39	.55	DFAL-03-WZ
7S	5	152	122	60	10	19	DPAL-7S-W2
15	3	5.98	4.80	2.36	.39	.75	DPAL-75-W2
8S	6	206	168	80	15	22	DDAL OC W4
00	O	8.11	6.61	3.15	.59	.87	DPAL-8S-W1
9S	7	251	205	90	15	26	DPAL-9S-W1
95	1	9.88	8.07	3.54	.59	1.02	DPAL-95-W1
10S	8	320	265	120	25	35	DPAL-10S-W1
105	0	12.60	10.43	4.72	.98	1.38	DLAT-109-M I
110	9	470	395	160	30	35	DPAL-11S-W1
118	9	18.50	15.55	6.30	1.18	1.38	DLAT-119-MI
100	10	630	534	180	30	35	DDAL 40C W4
12S	10	24.80	21.02	7.09	1.18	1.38	DPAL-12S-W1

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Cover Plate for Double Clamps Type DPAS**





Ordering Codes								
Cover Plate	*DPAS-*3S-*	W2						
* Cover Plate for	Double Clamps D	PAS						
* STAUFF Group		3\$						
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated	W1 W2						
	Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W3 W4						
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5						

Group Dimensions (mm/in)						Ordering Codes		
STAUFF	DIN	L1	L2	B1	B2	S	ØD	(Standard Options)
3S	1	55	33	60	30,5	8	11	DPAS-3S-W2
33	'	2.16	1.30	2.36	1.20	.31	.43	DFA3-33-W2
4S	2	70	45	60	30,5	8	11	DPAS-4S-W2
45	2	2.76	1.77	2.36	1.20	.31	.43	DPA5-45-W2
5S	3	83	60	60	30,5	8	11	DPAS-5S-W2
55	3	3.27	2.36	2.36	1.20	.31	.43	DPA5-55-W2
6S	4	115	90	90	46	10	14	DPAS-6S-W2
05	6 4	4.53	3.54	3.54	1.81	.39	.55	DPA5-05-W2
7S	<b>5</b> 5	152	122	120	61	10	19	DPAS-7S-W2
15		5.98	4.80	4.72	2.40	.39	.75	DPA5-75-W2
8S	6	206	168	160	81	15	22	DPAS-8S-W1
03	0	8.11	6.61	6.61	3.19	.59	.87	DFA3-03-W1
9S	7	251	205	180	91	15	26	DPAS-9S-W1
95	1	9.88	8.07	7.09	3.58	.59	1.02	DPA5-95-W1
10S	8	320	265	240	121	25	35	DPAS-10S-W1
103	0	12.60	10.43	9.45	4.78	.98	1.38	DFA3-103-W1
11S	9	470	395	321	166	30	35	DPAS-11S-W1
110	9	18.50	15.55	12.64	6.54	1.18	1.38	DLW2-112-M1
100	10	630	534	361	186	30	35	DPAS-12S-W1
12S	10	24.80	21.02	14.21	7.32	1.18	1.38	DL49-159-M I

 $Alternative\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.\ Contact\ STAUFF\ for\ further\ information.$ 

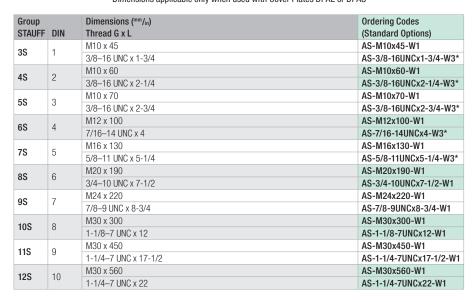


#### Hexagon Head Bolt Type AS



#### **Hexagon Head Bolt AS**

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Cover Plates DPAL or DPAS





#### **Ordering Codes**

#### Hexagon Head Bolt \*AS-\*M10x70-\*W1

3		
* Type of bolt	Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)	AS
* Thread type and	size acc. to dimension table M10	)x70
* Material code	Carbon Steel, uncoated Carbon Steel, zinc/nickel-plated	W1 W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1,4401 / 1,4571 (AISI 316 / 316 Ti)	W5

 Standard finishing option for Heavy Series group sizes 3S to 7S in North America is W3 (Carbon Steel, zinc/nickel-plated).

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### Socket Cap Screw Type IS



#### Socket Cap Screw IS

(according to ISO 4762 or ANSI / ASME B18.3)
Dimensions applicable only when used without Cover Plates

Group STAUFF	DIN	Dimensions (mm/ $_{ln}$ ) Thread G x L	Ordering Codes (Standard Options)
3S	4	M10 x 30	IS-M10x30-W1
33	ı	3/8-16 UNC x 1	IS-3/8-16UNCx1-W3*
40	0	M10 x 40	IS-M10x40-W1
4S	2	3/8-16 UNC x 1-3/4	IS-3/8-16UNCx1-3/4-W3*
	0	M10 x 50	IS-M10x50-W1
5S	3	3/8-16 UNC x 2	IS-3/8-16UNCx2-W3*
00	4	M12 x 80	ISM12x80-W1
6S	4	7/16–14 UNC x 3-1/4	IS-7/16-14UNCx3-1/4-W3*

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

\* Standard finishing option in North America is W3 (Carbon Steel, zinc/nickel-plated).



#### **Ordering Codes**

#### Socket Cap Screw \*IS-\*M10x50-\*W1

* Type of Bolt	Socket Cap Screw	
	(according to ISO 4762	IS
	or ANSI / ASME B18.3)	
* Thread type and	size acc. to dimension table	M10x50
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, zinc/nickel-plated	W3

Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)



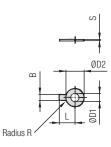
#### **E**STAUFF ®

#### **Safety Washer**

(for Use with Hexagon Head Bolt AS)

#### Type SI (DIN 93)





#### Safety Washer SI

(Bend longer tab down towards the side of the clamp body and one side up towards one of the flats of the hexagon head bolt)

# Ordering Codes Safety Washer \*SI-\*10.5-\*DIN93-\*W3 \* Safety Washer SI-\*10.5-\*DIN93-\*W3 \* Exact inner diameter ØD1 (mm) 10.5 \* Type of washer Safety washer with 1 tab (according to DIN 93) \* Material code Carbon Steel, zinc/nickel-plated W3 Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

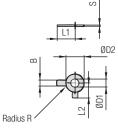
Group		Dimensi	ons (mm/in)	Ordering Codes				
STAUFF	DIN	ØD1	В	ØD2	L	R	S	(Standard Options)
3S	1	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
33	1	.41	.39	1.02	.87	.16	.03	31-10.3-W3
4S	2	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
45	2	.41	.39	1.02	.87	.16	.03	21-10.3-W3
5S	3	10,5	10	26	22	4	0,75	SI-10.5-DIN93-W3
33	3	.41	.39	1.02	.87	.16	.03	31-10.5-DIN95-W3
6S	4	13	12	30	28	6	1	SI-13-DIN93-W3
05	4	.51	.47	1.18	1.10	.24	.04	21-13-DIM32-M3
7S	<b>S</b> 5	17	15	36	32	6	1	SI-17-DIN93-W3
75		.67	.59	1.42	1.26	.24	.04	21-17-DIN93-W3
00	_	21	18	42	36	6	1	CL O4 DINOS WS
8S	6	.83	.71	1.65	1.42	.24	.04	SI-21-DIN93-W3
00	7	25	20	50	42	6	1	CL OF DINOS WO
9S	7	.98	.79	1.97	1.65	.24	.04	SI-25-DIN93-W3
100	0	31	26	63	52	10	1,6	CL O4 DINOS WS
10S	8	1.22	1.02	2.48	2.05	.39	.06	SI-31-DIN93-W3
440		31	26	63	52	10	1,6	OL O4 DINOS WS
11S	9	1.22	1.02	2.48	2.05	.39	.06	SI-31-DIN93-W3
400	10	31	26	63	52	10	1,6	OL O4 DINOS WS
12S	10	1.22	1.02	2.48	2.05	.39	.06	SI-31-DIN93-W3

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

### **Safety Washer** (for Use with Hexagon Head Bolt AS)

#### **Type SI (DIN 463)**





#### Safety Washer SI

(Bend longer tab down towards the side of the clamp body and shorter tab up towards one of the flats of the hexagon head bolt)

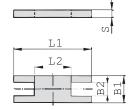
Ordering Code	es
Safety Washer	*SI-*10.5-*DIN463-*W3
* Safety Washer	SI
* Exact inner diameter	ØD1 (mm) <b>10.5</b>
	ety washer with 2 tabs cording to DIN 463) DIN 463
* Material code Car	rbon Steel, zinc/nickel-plated <b>W3</b>
	inless Steel V4A 401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>

Group		Dimensi	ons (mm/in)						Ordering Codes
STAUFF	DIN	ØD1	В	ØD2	L1	L2	R	S	(Standard Options)
3S	1	10,5	10	21	22	13	4	0,75	SI-10.5-DIN463-W3
33	'	.41	.39	.83	.87	.51	.16	.03	31-10.5-DIN403-W3
4S	2	10,5	10	21	22	13	4	1	SI-10.5-DIN463-W3
43	2	.41	.39	.83	.87	.51	.16	.04	31-10.5-DIN463-W3
5S	3	10,5	10	21	22	13	4	1	SI-10.5-DIN463-W3
33	3	.41	.39	.83	.87	.51	.16	.04	31-10.5-DIN463-W3
6S	4	13	12	24	28	15	6	1	SI-13-DIN463-W3
03	4	.51	.47	.94	1.10	.59	.24	.04	31-13-DIN403-W3
7S	5	17	15	30	32	18	6	1	SI-17-DIN463-W3
13	3	.67	.59	1.18	1.26	.71	.24	.04	31-17-DIN403-W3
8S	6	21	18	37	36	21	6	1	SI-21-DIN463-W3
03	O	.83	.71	1.46	1.42	.83	.24	.04	31-21-DIN403-W3
98	7	25	20	44	42	25	6	1	SI-25-DIN463-W3
93	1	.98	.79	1.73	1.65	.98	.24	.04	31-23-DIN403-W3
10S	8	31	26	56	52	32	10	1,6	SI-31-DIN463-W3
103	0	1.22	1.02	2.20	2.05	1.26	.39	.06	31-31-DIN403-W3
11S	9	31	26	56	52	32	10	1,6	SI-31-DIN463-W3
113	J	1.22	1.02	2.20	2.05	1.26	.39	.06	31-31-011403-W3
12S	10	31	26	56	52	32	10	1,6	SI-31-DIN463-W3
123	10	1.22	1.02	2.20	2.05	1.26	.39	.06	31-31-DHV403-W3

Safety Washers, type SI are used as locking devices to prevent Hexagon Head Bolts, type AS from loosening. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



#### Safety Locking Plate (for Use with Stacking Bolt AF) Type SIP





Group		Dimensions (	<sup>mm</sup> /in)				Ordering Codes
STAUFF	DIN	L1	L2	B1	B2	S	(Standard Options)
3S	1	57	13	30	15,2	8	SIP-3S-W2
33	1	2.24	.51	1.18	.60	.31	31F-33-WZ
4S	2	70	26	30	15,2	8	SIP-4S-W2
43	2	2.76	1.02	1.18	.60	.31	31F-43-WZ
5S	3	85	40	30	15,2	8	SIP-5S-W2
33	3	3.35	1.57	1.18	.60	.31	31F-33-WZ
6S	4	116	68	45	17,2	10	SIP-6S-W2
03	4	4.57	2.68	1.77	.68	.39	31F-03-WZ
7S	5	153	96	60	22	10	SIP-7S-W2
13	3	6.02	3.78	2.36	.87	.39	31F-73-WZ
8S	6	206	130	80	28	15	SIP-8S-W1
03	O	8.11	5.12	3.15	1.10	.59	31F-03-W I
9S	7	251	166	90	31	15	SIP-9S-W1
95	/	9.88	6.54	3.54	1.22	.59	317-93-W I
100	8	317	205	120	49	25	CID 10 C W1
10S	0	12.48	8.07	4.72	1.93	.98	SIP-10-S-W1

Ordering Codes Safety Locking Plate *SIP-*3S-*W2							
* Safety Locking	Plate	SIP					
* STAUFF Group		3S					
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W1 W2 W3 W4					

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

# L1 MS MS

#### Stacking Bolt (for Use with Safety Locking Plate SIP) Type AF

\*AF-\*3S-\*M-\*W2

AF

**3S** 

M

U

W1

W2

W3

W4

W5



Metric ISO thread

Unified coarse (UNC) thread

Carbon Steel, uncoated

Group		Dimensions	(mm/in)				Ordering Codes
STAUFF	DIN	L1	L2	L3 min.	Hex	Thread G	(Standard Options)
3S	1	49	25	15	15	M10	AF-3S-M-W2
33		1.93	.98	.59	.59	3/8-16 UNC	AF-3S-U-W3*
4S	0	65	40	15	15	M10	AF-4S-M-W2
45	2	2.56	1.57	.59	.59	3/8-16 UNC	AF-4S-U-W3*
5S	3	77	51	15	15	M10	AF-5S-M-W2
<b>55</b> 3	3	3.03	2.01	.59	.59	3/8-16 UNC	AF-5S-U-W3*
00	4	110	82	18	17	M12	AF-6S-M-W2
6S		4.33	3.23	.71	.67	7/16-14 UNC	AF-6S-U-W3*
7S	5	144	110	24	22	M16	AF-7S-M-W2
15	5	5.67	4.33	.94	.87	5/8-11 UNC	AF-7S-U-W3*
8S	6	200	150	30	27	M20	AF-8S-M-W2
65	О	7.87	5.91	1.18	1.06	3/4-10 UNC	AF-8S-U-W1*
O.C.	7	240	180	50	30	M24	AF-9S-M-W2
98	7	9.45	7.09	1.97	1.18	7/8-9 UNC	AF-9S-U-W1*
10S	8	331	256	62	46	M30	AF-10S-M-W2
105	0	13.03	10.08	2.44	1.81	1-1/8-7 UNC	AF-10S-U-W1*

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

<sup>\*</sup> Standard finishing option for Heavy Series group sizes 3S to 7S in North America is W3 (Carbon Steel, zinc/nickel-plated). Standard finishing option for Heavy Series group sizes 8S to 10S in North America is W1 (Carbon Steel, uncoated).



Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated
Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

**Ordering Codes** 

\* Stacking Bolt

\* STAUFF Group

\* Thread code

\* Material code





#### 1) Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position  $\ensuremath{\textcircled{1}}$  of the order code for your clamp assembly.



**Without Installation Equipment** 

Code: none

#### **Installation on Weld Plate**



**Weld Plate for Single Clamps** Code: SPAL



**Weld Plate for Double Clamps** Code: SPAS



**Elongated Weld Plate for Single Clamps** 





**Elongated Weld Plate for Double Clamps** 

Code: SPAS-DUEB

#### **Installation on Mounting / Channel Rail**

**Mounting Rail Nut** 



Code: GMV (for STAUFF Group 3S to 6S only)



**Channel Rail Adaptor** 

Code: CRA (for STAUFF Group 3S to 6S only)

#### (2) **Group Size & Diameter**

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group	Outside Diameter	Availabi Body Ma			
STAUFF (DIN)	P/T/H (mm)	Profiled Design	Type H	Type RI	Code
(=)	6	•	•	0	3006
	6,4	•	•	0	3006.4
	8	•	•	0	3008
	9,5	•	•	0	3009.5
	10	•	•	0	3010
	12	•	•	0	3012
3S	12,7	•	•	0	3012.7
(1)	13,5	•	•	0	3013.5
	14	•	•	0	3014
	15	•	•	0	3015
	16	•	•	0	3016
	17,2	•	•	0	3017.2
	18	•	•	0	3018
	20	•	0	0	3020

#### (2) Group Size & Diameter CONTINUATION

Group Outside Availability of Clamp

Group	Outside	Availabi				
	Diameter		dy Materials & Designs filed			
STAUFF	P/T/H	Profiled				
(DIN)	(mm)	Design	Type H	Type RI	Code	
	6	0	0	•	4006	
	8	0	0	•	4008	
	10	0	0	•	4010	
	12	0	0	•	4012	
	12,7	0	0	•	4012.7	
	14	0	0	•	4014	
	15	0	0	•	4015	
	16	0	0	•	4016	
40	17,2	0	0	•	4017.2	
4S (2)	18	0	0	•	4018	
(2)	19	•	•	•	4019	
	20	•	•	0	4020	
	21,3	•	•	0	4021.3	
	22	•	•	0	4022	
	25	•	•	0	4025	
	25,4	•	•	0	4025.4	
	26,9	•	•	0	4026.9	
	28	•	•	0	4028	
	30	•	•	0	4030	
	20	0	0	•	5020	
	21,3	0	0	•	5021.3	
	22	0	0	•	5022	
	25	0	0	•	5025	
	26,9	0	0	•	5026.9	
	28	0	0	•	5028	
5S	30	•	•	•	5030	
(3)	32	•	•	•	5032	
(0)	33,7	•	•	0	5033.7	
	35	•	•	0	5035	
	38	•	•	0	5038	
	40			0	5040	
	41,3			0	5041.3	
	42		•			
		•		0	5042	
	32	0	0	•	6032	
	33,7		0	•	6033.7	
	35	0	0	•	6035	
	38	•	•	0	6038	
	38,7	0	0	•	6038.7	
	40	0	0	•	6040	
6S	42	•	•	•	6042	
(4)	44,5	•	•	0	6044.5	
, ,	45,5	0	0	•	6045.5	
	48	0	0	•	6048	
	48,3	•	•	0	6048.3	
	50,8	•	•	0	6050.8	
	51	0	0	•	6051	
	53,4	0	0	•	6053.4	
	54	•	0	0	6054	

#### (2) Group Size & Diameter CONTINUATION

Group	Outside Diameter	Body Ma	lity of Cla aterials &	•	
STAUFF	P/T/H	Profiled	T II	T DI	
(DIN)	(mm)	Design	Type H	Type RI	Code
	55	•	•	0	605
	56,4	0	0	•	6056
	57	•	•	0	6057
6S (4)	57,2	•	•	0	605
(4)	60,3	•	•	0	6060
	63,5	•	•	0	6063
	65	•	•	0	606
	70 55	0	0	0	6070
	57	0	0	•	705
	60	0	0	•	706
		•	0	0	706
	60,3	0	0	•	706
	63,5 65	•	0	•	706
	70	•	0	•	7070
7S	72	0	0		7072
(5)	73	•	0	0	7073
	75		0	0	7075
	76	0	0	•	7076
	76,1	•	0	0	7070
	80	•	0	0	708
	82,5	•	0	0	708
	88,9	•	0	0	7088
	80	0	0	•	808
	88,9	•	0	•	808
	100	•	0	0	8100
8S	102	•	0	•	8102
(6)	108	•	0	0	8108
` ,	114	•	0	0	8114
	127	•	0	0	8127
	133	•	0	0	8133
	114	0	0	•	9114
	127	•	0	0	9127
	133	•	0	•	9133
98	140	•	0	•	9140
(7)	152	•	0	0	9152
	159	•	0	0	9159
	165	•	0	0	9165
	168	•	0	0	9168
	150	0	0	•	1015
	165	0	0	•	1016
	168	•	0	•	1016
100	172	0	0	•	1017
10S (8)	177,8	•	0	0	1017
(0)	193,7	•	0	0	1019
	203	•	0	0	1020
	216	•	0	0	102
	219	•	0	0	1021
11S	219	•	0	0	1121
(9)	273	•	0	0	1127
(0)	324	•	0	0	1132
12S	356	•	0	0	1235
(10)	406	•	0	0	1240

Standard Option



Please see pages 50 and 51 with detailed order examples for some of the most popular Heavy Series clamp assemblies.

#### (3) Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

#### **Profiled Design**











#### Type H (Smooth)





Polyamide Code: PA-H (for STAUFF Group 3S to 6S only)

Thermoplastic Elastomer (87 Shore-A)
Code: SA-H (for STAUFF Group 3S to 6S only)

#### Type RI (with Elastomer Insert)



Polyamide
Code: PA-R (for STAUFF Group 4S to 10S only)

See pages 154 / 155 for material properties and technical information.

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

#### (4) Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. bolts, screws, cover plates etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

#### **Installation with Cover Plate and Bolts**

Cover Plate for Single Clamps DPAL with Hexagon Head Bolts AS Code: DPAL-AS

Cover Plate for Double Clamps DPAS with Hexagon Head Bolts AS Code: DPAS-AS

Cover Plate for Single Clamps DPAL with Socket Cap Screws IS\*

Code: DPAL-IS (for STAUFF Group 3S to 6S only)

#### **Installation with Locking Plate and Bolts**

Safety Locking Plate SIP with Stacking Bolts AF Code: SIP-AF

#### **Installation with Bolts only**

Socket Cap Screws IS Code: IS

Special lengths of Socket Cap Screws IS required.
 For exact lengths, please see details of Hexagon Head Bolt, type AS

(for use with Cover Plates DPAL or DPAS) on page 45.

#### **5** Thread Type

Please select the required thread type and add the corresponding Code to position (5) of the order code for your clamp assembly.

Metric ISO thread Code: M

Unified coarse (UNC) thread

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

#### (6) Material & Surface Finishing

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position (a) of the order code for your clamp assembly.

Metal parts made of Carbon Steel, uncoate	d <b>W1</b>
Metal parts made of Carbon Steel, phospha	ited W2
Metal parts made of Carbon Steel, zinc/nickel	-plated W3
Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5
Weld Plate made of Carbon Steel, phosphated	; Other

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated W12

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated;
Cover Plate made of Carbon Steel, phosphated;

W13

Bolts made of Carbon Steel, uncoated

Weld Plate / Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated;
Cover Plate made of Carbon Steel, phosphated;

W16

Bolts made of Carbon Steel, zinc/nickel-plated

Safety Locking Plate made of Carbon Steel, phosphated; Stacking Bolts made of Carbon Steel, zinc/nickel-plated W17

Safety Locking Plate made of Carbon Steel, uncoated; Stacking Bolts made of Carbon Steel, phosphated

ng Boits made of Cardon Steel, phosphated

Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information

#### Assembling & Kitting

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

Components supplied separately
Code: none (standard option)

Components assembled Code: A (special option)

Components packed in kits
Code: K (special option)

W15

W18

W19





#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

#### 1x Clamp Body (two halves) STAUFF Group 3S (DIN 1)

0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Weld Plate for Single Clamps

Surface: W2 Thread: Metric



#### 4x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Double Clamps

Surface: W2

#### 2x Clamp Body (four halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Weld Plate for Double Clamps

Surface: W2 Thread: Metric

#### **Order Code**

#### SPAL-3006-PP-DPAL-AS-M-W12

W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

#### 1x Clamp Body (two halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Elongated Weld Plate for Single Clamps

Surface: W2 Thread: Metric



W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.

SPAS-3006-PP-DPAS-AS-M-W12

4x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Double Clamps

Surface: W2

2x Clamp Body (four halves) STAUFF Group 3S (DIN 1)

0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Elongated Weld Plate for Double Clamps

Surface: W2 Thread: Metric

#### **Order Code**

#### SPAL-DUEB-3006-PP-DPAL-AS-M-W12

W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.

#### **Order Code**

**Order Code** 

#### SPAS-DUEB-3006-PP-DPAS-AS-M-W12

W12 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



#### 2x Socket Cap Screw

Surface: W1 Thread: Metric

#### 1x Clamp Body (two halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Weld Plate for Single Clamps

Surface: W2 Thread: Metric



#### 2x Socket Cap Screw

Surface: W1 Thread: Metric

#### 1x Clamp Body (two halves)

STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 1x Elongated Weld Plate for Single Clamps

Surface: W2 Thread: Metric

#### **Order Code**

#### **SPAL-3006-PP-IS-M-W12**

W12 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.

#### **Order Code**

#### SPAL-DUEB-3006-PP-IS-M-W12

W12 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.





#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

1x Clamp Body (two halves) STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in

#### 2x Mounting Rail Nut

Surface: W3 Thread: Metric





#### 2x Socket Cap Screw

Surface: W1 Thread: Metric

1x Clamp Body (two halves) STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### 2x Mounting Rail Nut

Surface: W3 Thread: Metric

#### Order Code (Mounting Rail STSV not included.)

#### GMV-3006-PP-DPAL-AS-M-W13

W13 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.



#### 2x Hexagon Head Bolt

Surface: W1 Thread: Metric

#### 1x Cover Plate for Single Clamps

Surface: W2

1x Clamp Body (two halves) STAUFF Group 3S (DIN 1) 0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### **Thread codes**

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Order Code (Mounting Rail STSV not included.)

W13 is the standard option for this type of installation. Available up to STAUFF Group 6S (DIN Group 4) only.

GMV-3006-PP-IS-M-W13

Metric ISO thread Unified coarse (UNC) thread

#### M

#### **Material codes**

The below listed material codes describe the materials and surface finishings of metal parts that are most relevant for Heavy Series clamp assemblies. Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Metal parts made of Carbon Steel, uncoated  Metal parts made of Carbon Steel, phosphated  Metal parts made of Carbon Steel, zinc/nickel-plated	W1 W2 W3
Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AISI 304 / 303) Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W4 W5
Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated	W10
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	W12
Mounting Rails Nut made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	W13
Weld Plate and Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W15
Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W16
Safety Locking Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated	W17
Safety Locking Plate made of Carbon Steel, uncoated; Bolts made of Carbon Steel, phosphated	W18
Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated	W19

#### **Order Code**

#### 3006-PP-DPAL-AS-M-W19

W19 (STAUFF Group 3S to 7S) and W1 (STAUFF Group 8S to 12S) are the standard options for this type of installation.



#### 2x Stacking Bolt

Surface: W2 Thread: Metric

#### 1x Safety Locking Plate

Surface: W2

1x Clamp Body (two halves) STAUFF Group 3S (DIN 1)

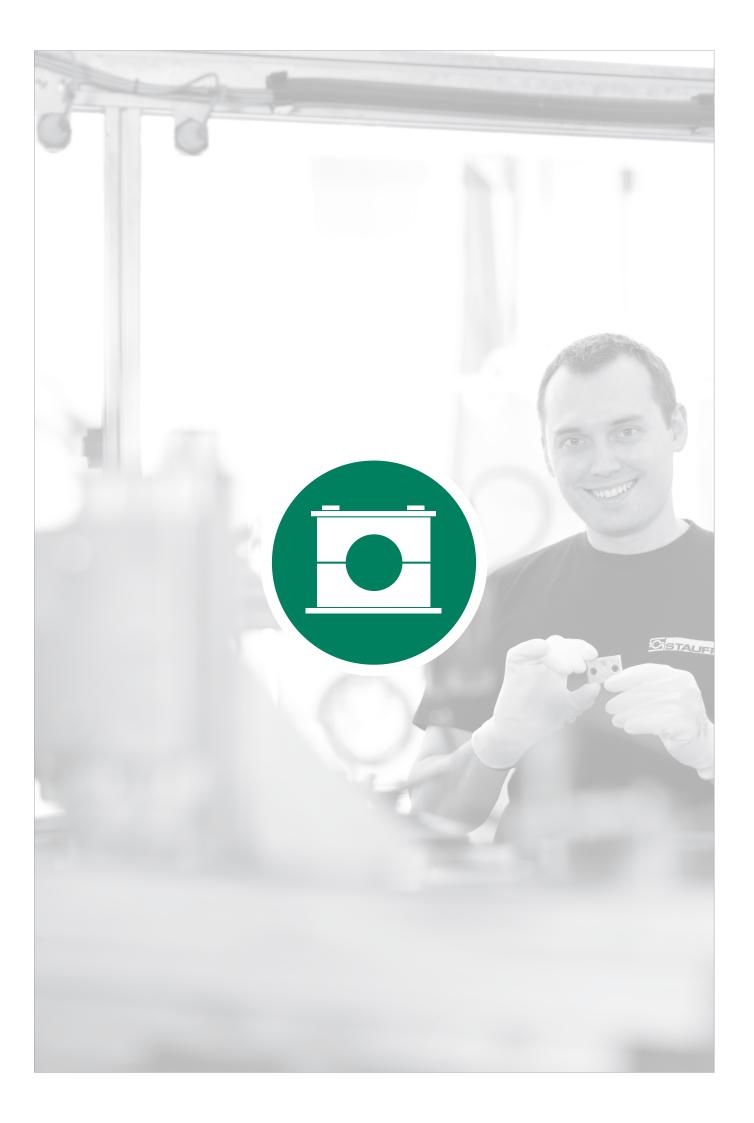
0.D. 6 mm / .24 in Material: Polypropylene

Profiled inside surface with tension clearance

#### **Order Code**

#### 3006-PP-SIP-AF-M-W2

W2 (STAUFF Group 3S to 7S) and W18 (STAUFF Group 8S to 10S) are the standard options for this type of installation. Available up to STAUFF Group 10S (DIN Group 8) only.







Clamp Body

Profiled Inside Surface with Tension Clearance



Single Weld Plate SP

55

55



Clamp Body

Smooth Inside Surface without Tension Clearance

54

**Group Weld Plate** 

RAP

**Hexagon Rail Nut** 

SM

56

56

58

58

59

60

60

62

**Mounting Rail** 

TS

**Channel Rail Adaptor** 

CRA

**Cover Plate** 

GD

**Hexagon Head Bolt** 

AS

**Socket Cap Screw** 

IS

Safety Locking Plate

Safety Locking Plate

SIV

Stacking Bolt

AF

**Clamp Assemblies** 

#### STAUFF

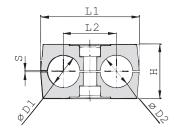
#### Clamp Body • Profiled Design

#### Clamp Body • Type H

Profiled Inside Surface with Tension Clearance Smooth Inside Surface w/o Tension Clearance







#### **Ordering Codes**

#### **Clamp Body**

\*1\*06/06\*-PP

One clamp body is consisting of two clamp halves.

- \* 1st Part of STAUFF Group
- \* Exact outside diameters Ø D1 / Ø D2 (mm)
- \* Material code (see below)

06/06

#### **Designs & Standard Materials**



#### Polypropylene • Profiled Design

Profiled inside surface with tension clearance Colour: Green

Material code: PP



#### Polypropylene • Profiled Design

Profiled inside surface with tension clearance Colour: Black

Material code: PP-BK



#### Polypropylene • Type H

Smooth inside surface without tension clearance

Colour: Green

Material code: PP-H



#### Polypropylene • Type H

Smooth inside surface without tension clearance

Colour: Black

Material code: PP-H-BK



#### Polyamide • Profiled Design

Profiled inside surface with tension clearance

Colour: Black

Material code: PA



#### Polyamide • Type H

Smooth inside surface without tension clearance

Colour: Black

Material code: PA-H

See pages 154 / 155 for properties and technical information.

#### **Special Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

#### **Product Features**

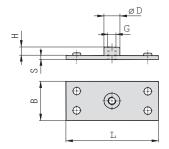
- Proven, tested and trusted product in various markets
- Profiled design recommended for the safe installation of rigid pipes and tubes; type H recommended for the safe installation of bases and cables
- Available for all commonly used pipe and tube outside diameters
- Environmental protection due to vibration/noise reducing design
- Excellent weathering resistance, even under extreme conditions

Group			Diameter be / Hose	Nomin	al Bore Copper Tube	Ordering Codes (2 Clamp Halves)	Dime	nsions	G (mm/in)			
STAUFF	N	Ø D1 / Ø	D2	Pipe	ASTM B88	, ,			Profile	d Design	ТуреН	
S	ā	(mm)	(in)	(in)	(in)	( <b>**</b> - <b>*</b> = Material)	L1	L2	Н	S min.	Н	Width
		6				106/06-**-*						
		6,4	1/4			106.4/06.4-**-*						
1D	1	8	5/16			108/08-**-*	36	20	27	0,6	26,5	30
10	'	9,5	3/8		1/4	109.5/09.5-**-*	1.42	.79	1.06	.02	1.04	1.18
		10		1/8		110/10-**-*						
		12				112/12-**-*						
		12,7	1/2		3/8	212.7/12.7-**-*						
		13,5		1/4		213.5/13.5-**-*						
		14				214/14-**-*						
2D	2	15				215/15-**-*	53 2.09	29	1.06	.03	26 1.02	30
		16	5/8		1/2	216/16-**-*						
		17,2		3/8		217.2/17.2-**-*						
		18				218/18-**-*						
		19	3/4			319/19-**-*						
		20				320/20-**-*						
3D	3	21,3		1/2		321.3/21.3-**-*	67	36	37	0,7	36,5	30
JD		22	7/8		3/4	322/22-**-*	2.64	1.42	2 1.46	.03	1.44	1.18
		25				325/25-**-*						
		25,4	1			325.4/25.4-**-*						
		26,9		3/4		426.9/26.9-**-*						
4D	4	28				428/28-**-*	80 3.15	45 1.77	40 1.57	.03	38 1.46	30
		30				430/30-**-*						
		32	1-1/4			532/32-**-*						
		33,7		1		533.7/33.7-**-*						
5D	5	35			1-1/4	535/35-**-*	106	56	53	0,7	52	30
JU	3	38	1-1/2			538/38-**-*	4.17	2.20	2.09	.03	2.04	1.18
		40				540/40-**-*						
		42		1-1/4		542/42-**-*						

Additional outside diameters and combinations of different outside diameters are available upon request. Please contact STAUFF for further information.



#### Single Weld Plate Type SP

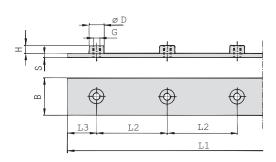




Group		Dimension	S ( <sup>mm</sup> /in)	Ordering Codes				
STAUFF	DIN	L	В	S	Н	ØD	Thread G	(Standard Options)
1D	1	37	30	3	6,5	12	M6	SP-1D-M-W2
טו	1	1.46	1.18	.12	.26	.47	1/4-20 UNC	SP-1D-U-W2
an.	2	55	30	5	6	14	M8	SP-2D-M-W2
2D	2	2.17	1.18	.20	.24	.55	5/16-18 UNC	SP-2D-U-W2
3D	3	70	30	5	6	14	M8	SP-3D-M-W2
טט	3	2.76	1.18	.20	.24	.55	5/16-18 UNC	SP-3D-U-W2
4D	4	85	30	5	6	14	M8	SP-4D-M-W2
40	4	3.35	1.18	.20	.24	.55	5/16-18 UNC	SP-4D-U-W2
ED.	5	110	30	5	6	14	M8	SP-5D-M-W2
5D	J	4.33	1.18	.20	.24	.55	5/16-18 UNC	SP-5D-U-W2

Ordering	Codes
Weld Plate	*SP-*1D-*M-*W2
* Single Weld	Plate SP
* STAUFF Gro	up <b>1D</b>
* Thread code	Metric ISO thread M Unified coarse (UNC) thread U
* Material cod	de Carbon Steel, phosphated <b>W2</b> Carbon Steel, zinc/nickel-plated <b>W3</b>
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) <b>W4</b>
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



# Group Weld Plate for 5 Clamp Bodies Type RAP

Group		Dimens	ions (mm	/in)						Ordering Codes
STAUFF	DIN	L1	L2	L3	В	S	Н	ØD	Thread G	(Standard Options)
1D	1	196	40	18	30	3	6,5	12	M6	RAP-1D-40-5-M-W1
וט	'	7.72	1.57	.71	1.18	.12	.26	.47	1/4-20 UNC	RAP-1D-40-5-U-W1
2D	2	288	58	28	30	5	6	14	M8	RAP-2D-58-5-M-W1
20	2	11.34	2.28	1.10	1.18	.20	.24	.55	5/16-18 UNC	RAP-2D-58-5-U-W1
3D	3	358	72	35	30	5	6	14	M8	RAP-3D-72-5-M-W1
ЗU	3	14.09	2.83	1.37	1.18	.20	.24	.55	5/16-18 UNC	RAP-3D-72-5-U-W1
40	4	444	90	42	30	5	6	14	M8	RAP-4D-90-5-M-W1
4D	4	17.48	3.54	1.65	1.18	.20	.24	.55	5/16-18 UNC	RAP-4D-90-5-U-W1
5D	5	558	112	55	30	5	6	14	M8	RAP-5D-112-5-M-W1
טט	J	21.97	4.41	2.16	1.18	.20	.24	.55	5/16-18 UNC	RAP-5D-112-5-U-W1

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Ordering Co	odes *RAP-*1D-*40-*5-*M-*	W1
* Group Weld Plate	e	RAP
* STAUFF Group		1D
OTAOTT Group		יו
* Pipe Center Spa	cing L2 (mm)	40
* Number of Clam	ps	5
* Thread code	Metric ISO thread	M
	Unified coarse (UNC) thread	U
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, phosphated	W2
	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A	
	1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A	
	1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5
	1.4401 / 1.407 1 (AISI 310 / 310 II)	

#### **Hexagon Rail Nut**

(for Use with Mounting Rail TS)

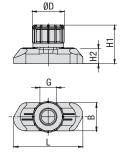
#### **Type SM**



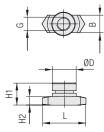


STAUFF Group 1D

STAUFF Group 2D to 5D



STAUFF Group 1D



STAUFF Group 2D to 5D

#### **Ordering Codes**

#### agon Rail Nut \*SM-\*1-8/1D-\*M-\*W3

Hexagon Rail No	nt "21/1-"1-9/1D-"1/1-"	NS
* Hexagon Rail Nut		SM
	(	3/1D 2-5D
	Metric ISO thread Unified coarse (UNC) thread	M U
* Material code (	Carbon Steel, zinc/nickel-plated	W3
`	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group	)	Dimensions (m	<sup>m</sup> /in)					Ordering Codes
STAU	FF DIN	Thread G	L	В	H1	H2	ØD	(Standard Options)
1D	1	M6	25,5	10,4	14,2	5,5	12	SM-1-8/1D-M-W3
טו		1/4-20 UNC	1.00	.41	.56	.22	.47	SM-1-8/1D-U-W3
2D	2						5 14 .20 .55	
3D	3	M8	25,5	10,4	13	5		SM-2-5D-M-W3
4D	4	5/16–18 UNC	5/16–18 UNC 1.00	.41	.51	.20		SM-2-5D-U-W3
5D	5							

The Hexagon Rail Nut, type SM-1-8/1D is also suitable for Standard Series, STAUFF Group 1 to 8.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Mounting Rail**

(for Use with Hexagon Rail Nut SM)

#### **Type TS**









**Mounting Rail TS-11** 

**Mounting Rail TS-14** 

**Mounting Rail TS-30** 

des
*TS-*11-*1M-*W1
TS
11 mm / .43 in     11       14 mm / .55 in     14       30 mm / 1.18 in     30
1 m / 3.28 ft 1M 2 m / 6.56 ft 2M
Alternative lengths available upon request. Contact STAUFF for further information.
Carbon Steel, uncoated W1 Carbon Steel, hot-dip galvanised W98
Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)  W5

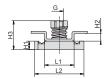
Group		Dimensions (ma	<sup>m</sup> /in)		Ordering Codes (Standard Options)			
STAUFF	DIN	B1	B2	S	Length of Rail: 1 m / 3.28ft	Length of Rail: 2m / 6.56ft		
1D	1				Height 11 mm / .43 in	Height 11 mm / .43 in TS-11-2M-W1		
2D	2							
					Height 14 mm / .55 in TS-14-1M-W1	Height 14 mm / .55 in TS-14-2M-W1		
3D	3	28	11	.08				
		1.10	.43	.00	13-14-1101-001	13-14-2IVI-W I		
4D	4				Height 20 mm / 1 10 in	Height 20 mm / 1 10 in		
5D	5				Height 30 mm / 1.18 in TS-30-1M-W1	Height 30 mm / 1.18 in TS-30-2M-W1		

Mounting Rails, type TS-11/14/30 are suitable for all Twin Series and Standard Series group sizes.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

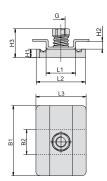
Dimensional drawings: All dimensions in mm (in).







STAUFF Group 1D



STAUFF Group 2-3D / 4-5D

#### Channel Rail Adaptor (for Use with Various Channel Rails) Type CRA



Group STAUFF	DIN	Dimensions (mm Thread G	¹/in) L1	L2	L3	B1	B2	H1	H2	НЗ	Ordering Codes (Standard Options)	Ordering C	odes
1D	4	M6	21	35	40	16	19	6	5,5	20,5	CRA-1-8/1D-M-W3		+0DA +4 0/4D +M +W0
עו		1/4-20 UNC	.83	1.38	1.57	.63	.75	.24	.22	.81	CRA-1-8/1D-U-W3	Adaptor	*CRA-*1-8/1D-*M-*W3
	_											* Channel Rail Ad	aptor CRA
2D	2	M8	21	35	38	53	19	9	5,5	23,5	CRA-2-3D-M-W3	* STAUFF Group	1D (DIN Group 1) 1-8/1D
3D	3	5/16–18 UNC	.83	1.38	1.50	2.09	.75	.35	.22	.93	CRA-2-3D-U-W3		2D to 3D (DIN Group 2 to 3) 2-3D 4D to 5D (DIN Group 4 to 5) 4-5D
												* Thread code	Metric ISO thread M
4D	4												Unified coarse (UNC) thread <b>U</b>
	·	M8	21	35	38	80	19	9	5,5	23,5	CRA-4-5D-M-W3	* Material code	Carbon Steel, zinc/nickel-plated W3
5D	5	5/16–18 UNC	.83	1.38	1.50	3.15	.75	.3	.22	.93	CRA-4-5D-U-W3		Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>

The Channel Rail Adaptor, type CRA 1-8/1D is also suitable for Standard Series, STAUFF Group 1 to 8.

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

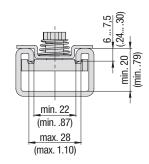


#### **Compatibility with Channel Rails**

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various channel rails, including the following types:

HALFEN	HILTI	UNISTRUT®	STAUFF (Cushion Clamp Series)
HM 41/41	MQ-21, MQ-41, MQ-52, MQ-72	P1000, P1000T, P1000V, P1000VT, P1001	SCS-048-1-PL, SCS-048-1-GR
HZA 41/22	MQ-21U, MQ-41U, MQ-72U	P2000, P2000T	SCS-120-1-PL, SCS-120-1-GR
HZM 41/41	MQ-21D, MQ-41D, MQ-52-72D	P3003, P3003T, P3300V, P3300VT, P3301	See page 149 for technical information.
HZM 41/22		P4000, P4000T	
HL 41/41, HL 41/B2		P5000, P5000T, P5001, P5500, P5500T, P5501	

Contact STAUFF to check compatibility with additional types of channel rails.

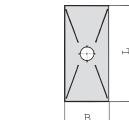


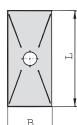
Basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA

Dimensional drawings: All dimensions in mm (in).



#### **Cover Plate Type GD**







#### Ordering Codes

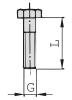
Orucing of	oues .	
Cover Plate	*GD-*1D-*\	N3
* Cover Plate		GD
* STAUFF Group		1D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A	W4
	1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

Group		Dimensions (	mm/in)	Ordering Codes			
STAUFF	DIN	L	В	Н	S	ØD	(Standard Options)
1D	1	34	30	7	3	7	GD-1D-W3
טו	<b> </b>	1.34	1.18	.28	.12	.28	dD-ID-W3
2D	2	52	30	7	3	9	GD-2D-W3
20	2	2.05	1.18	.28	.12	.35	dD-2D-W3
3D	3	65	30	7	3	9	GD-3D-W3
טט	3	2.56	1.18	.28	.12	.35	GD-3D-W3
4D	4	79	30	7	3	9	GD-4D-W3
40	4	3.11	1.18	.28	.12	.35	dD-4D-W3
5D	5	102	30	7	3	9	GD-5D-W3
บบ	5	4.02	1.18	.28	.12	.35	นม-อม-พงอ

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Hexagon Head Bolt Type AS**





**Hexagon Head Bolt AS** (according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Cover Plate GD

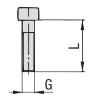
#### **Ordering Codes Hexagon Head Bolt** \*AS-\*M8x35-\*W3 \* Type of bolt Hexagon Head Bolt (according to DIN 931 / 933 AS or ANSI / ASME B18.2.1.) \* Thread type and size acc. to dimension table \* Material code Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Group STAUFF	DIN	Dimensions ( $^{\text{mm}}/_{\text{in}}$ ) Thread G x L	Ordering Codes (Standard Options)		
1D	4	M6 x 35	AS-M6x35-W3		
ID	1	1/4–20 UNC x 1-3/8	AS-1/4-20UNCx1-3/8-W3		
2D	2	M8 x 35	AS-M8x35-W3		
20	2	5/16–18 UNC x 1-3/8	AS-5/16-18UNCx1-3/8-W3		
3D	0	M8 x 45	AS-M8x45-W3		
טט	3	5/16–18 UNC x 1-3/4	AS-5/16-18UNCx1-3/4-W3		
40		4	4	M8 x 50	AS-M8x50-W3
4D	4	5/16–18 UNC x 2	AS-5/16-18UNCx2-W3		
- FD	_	M8 x 60	AS-M8x60-W3		
5D	5	5/16–18 UNC x 2-1/2	AS-5/16-18UNCx2-1/2-W3		

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



### Socket Cap Screw Type IS



#### Socket Cap Screw IS (according to ISO 4762 or ANSI / ASME B18.3)

Dimensions applicable only when used with Cover Plate GD



Group STAUFF DIN		Dimensions (mm/ <sub>in</sub> ) Thread G x L	Ordering Codes (Standard Options)
1D	1	M6 x 35	IS-M6x35-W3
טו		1/4–20 UNC x 1-3/8	IS-1/4-20UNCx1-3/8-W3
2D	2	M8 x 35	IS-M8x35-W3
2υ	2	5/16–18 UNC x 1-3/8	IS-5/16-18UNCx1-3/8-W3
3D	0	M8 x 45	IS-M8x45-W3
งบ	3	5/16–18 UNC x 1-3/4	IS-5/16-18UNCx1-3/4-W3
40	4	M8 x 50	IS-M8x50-W3
4D	4	5/16–18 UNC x 2	IS-5/16-18UNCx2-W3
- D	_	M8 x 60	IS-M8x60-W3
5D	5	5/16–18 UNC x 2-1/2	IS-5/16-18UNCx2-1/2-W3

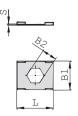
Ordering C	odes	
Socket Cap S	crew *IS-*M8x35-*\	N3
* Type of bolt	Socket Cap Screw (according to ISO 4762 or ANSI / ASME B18.3)	IS
* Thread type and	d size acc. to dimension table M8	35 ax
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Safety Locking Plate**

Type SI (for Use with Stacking Bolt AF)





#### Safety Locking Plate SI

(Prevents Stacking Bolt from Loosening)

Ordering C	odes	
Safety Lockin	ng Plate *SI-*1D-*V	<b>V</b> 3
* Safety Locking I	Plate	SI
* STAUFF Group	1D (DIN Group 1) 2D to 5D (DIN Group 2 to 5) <b>2</b> -	1D -5D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)	W4
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

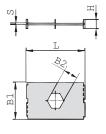
Group STAUFF	DIN	Dimensions (****/in)		S	Ordering Codes (Standard Options)	
4D	4	27	22	11,2	0,5	SI-1D-W3
1D	1	1.06	.86	.44	.02	21-1D-W3
2D	2					
3D	3	27	22	12,2	0,5	CLO ED WO
4D	4	1.06	.86	.48	.02	SI-2-5D-W3
5D	5					

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Safety Locking Plate**

Type SIV (for Use with Stacking Bolt AF)





#### Safety Locking Plate SIV

(Prevents Stacking Bolt from Loosening and Upper Clamp from Turning)

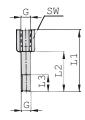
Ordering C	odes	
Safety Lockin	ng Plate *SIV-*1D-	*W3
* Safety Locking F	Plate	SIV
* STAUFF Group	1D (DIN Group 1) 2D to 3D (DIN Group 2 to 3)	1D 2-3D
* Material code	Carbon Steel, zinc/nickel-plated	W3
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 T	<b>W5</b>

Group		Dimensions ("	<sup>im</sup> /in)				Ordering Codes
STAUFF	DIN	L	B1	B2	S	Н	(Standard Options)
1D	1	27	28	11,1	1	7	SIV-1D-W3
וט		1.06	1.10	.44	.04	.27	SIV-ID-WS
2D	2	45	28	12,1	1	7	SIV-2-3D-W3
3D	3	1.77	1.10	.48	.04	.27	51V-2-3U-W3

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.



#### **Stacking Bolt** (for Use with Safety Locking Plates SI / SIV) Type AF





Group		Dimensions (m	<sup>m</sup> /in)				Ordering Codes
STAUFF	DIN	Thread G	L1	L2	L3 min.	Hex	(Standard Options)
1D	1	M6	34	20	12	11	AF-1/1A/1D-M-W3
טו	I	1/4-20 UNC	1.33	.78	.47	.43	AF-1/1A/1D-U-W3
2D	2	M8	33	20	12	12	AF-2D-M-W3
2υ	2	5/16-18 UNC	1.30	.78	.47	.47	AF-2D-U-W3
an.		M8	44	29	12	12	AF-3D-M-W3
3D	3	5/16-18 UNC	1.73	1.14	.47	.47	AF-3D-U-W3
4D	4	M8	49	34	12	12	AF-4D-M-W3
4D	4	5/16-18 UNC	1.92	1.33	.47	.47	AF-4D-U-W3
ED.	5	M8	61	46	12	12	AF-5D-M-W3
5D	5	5/16-18 UNC	2.40	1.81	.47	.47	AF-5D-U-W3

Ordering Co	odes *AF-*1/1A/1D-*M-*W3	3
* Stacking Bolt	A	F
* STAUFF Group	11	D
* Thread code		VI U
* Material code	Carbon Steel, zinc/nickel-plated W	3
	Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) W Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) W	•

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.





Please see page 63 with detailed order examples for some of the most popular Twin Series clamp assemblies.

#### 1 Type of Installation

Please select the type of installation (e.g. weld plates, rail nuts, etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.



Without Installation Equipment

Code: none

#### **Installation on Weld Plate**



Single Weld Plate Code: SP



Group Weld Plate

Code: RAP

#### **Installation on Mounting / Channel Rail**



**Mounting Rail Nut** 



Channel Rail Adaptor

Code: CRA

#### **2** Group Size & Diameters

Please select the required group size and diameter and add the corresponding Code to position ② of the order code for your clamp assembly.

Group	Outside	Availability o	f Clamp	
	Diameter	<b>Body Material</b>	s & Designs	
STAUFF	P/T/H	Profiled	Туре	
(DIN)	(mm)	Design	Н	Code
	6	•	•	106/06
	6,4	•	•	106.4/06.4
1D	8	•	•	108/08
(1)	9,5	•	•	109.5/09.5
	10	•	•	110/10
	12	•	•	112/12
	12,7	•	•	212.7/12.7
	13,5	•	•	213.5/13.5
o.D.	14	•	•	214/14
<b>2D</b> (2)	15	•	•	215/15
	16	•	•	216/16
	17,2	•	•	217.2/17.2
	18	•	•	218/18
	19	•	•	319/19
	20	•	•	320/20
3D	21,3	•	•	321.3/21.3
(3)	22	•	•	322/22
	25	•	•	325/25
	25,4	•	•	325.4/25.4
40	26,9	•	•	426.9/26.9
4D	28	•	•	428/28
(4)	30	•	•	430/30
	32	•	•	532/32
	33,7	•	•	533.7/33.7
5D	35	•	•	535/35
(5)	38	•	•	538/38
	40	•	•	540/40
	42	•	•	542/42

#### **3 Clamp Body Design & Material**

Please select the design and material of your clamp body and add the corresponding Code to position ③ of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in ②.

#### **Profiled Design**



Polypropylene

Code: **PP** 

C

Polypropylene (Colour: Black)
Code: PP-BK



#### Type H (Smooth)



Polypropylene Code: PP-H



Polypropylene (Colour: Black) Code: PP-H-BK





See pages 154 / 155 for material properties and technical information.

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards.

#### **4** Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. Bolts, Cover Plates, etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

#### **Installation with Cover Plate and Bolt**

Cover Plate GD with Hexagon Head Bolt AS Code: GD-AS

Cover Plate GD with Socket Cap Screw IS Code: GD-IS

#### **Installation with Locking Plate and Bolt**

Safety Locking Plate SI with Stacking Bolt AF Code: SI-AF

Safety Locking Plate SIV with Stacking Bolt AF

Code: SIV-AF (for STAUFF Group 1D to 3D only)

#### (5) Thread Type

Please select the required thread type and add the corresponding Code to position (5) of the order code for your clamp assembly.

Metric ISO thread

Code: M

Unified coarse (UNC) thread

Code: U

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

#### **6 Material & Surface Finishing**

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position **(S)** of the order code for your clamp assembly.

Metal parts made of Carbon Steel, zinc/nickel-plated

Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)

Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

r W10

W4

W5

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information

#### 7 Assembling & Kitting

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

Components supplied separately

Code: none (standard option)

Components assembled Code: A (special option)

Components packed in kits Code: K (special option)

Standard Option







#### 1x Hexagon Head Bolt

Surface: W3 Thread: Metric

#### 1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 1D (DIN 1) both 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Weld Plate

Surface: W2 Thread: Metric



#### 1x Hexagon Head Bolt

Surface: W3 Thread: Metric

#### 1x Cover Plate

Surface: W3

1x Clamp Body (two halves) STAUFF Group 1D (DIN 1) both 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### **Order Code**

#### SP-106/06-PP-GD-AS-M-W10

W10 is the standard option for this type of installation.



#### 1x Stacking Bolt

Surface: W3 Thread: Metric

#### 1x Safety Locking Plate (Type SI)

Surface: W3 Thread: Metric

#### 1x Clamp Body (two halves)

STAUFF Group 1D (DIN 1) both 0.D.  $6\,\text{mm}$  / .24 in Material: Polypropylene Profiled inside surface with tension clearance



**Order Code** 

W3 is the standard option for this type of installation.

106/06-PP-GD-AS-M-W3



#### 1x Stacking Bolt

Surface: W3 Thread: Metric

#### 1x Safety Locking Plate (Type SIV)

Surface: W3 Thread: Metric

#### 1x Clamp Body (two halves)

STAUFF Group 1D (DIN 1) both 0.D. 6 mm / .24 in Material: Polypropylene Profiled inside surface with tension clearance

#### **Order Code**

#### 106/06-PP-SI-AF-M-W3

W3 is the standard option for this type of installation.

#### **Order Code**

#### 106/06-PP-SIV-AF-M-W3

W3 is the standard option for this type of installation. This type of installation is available up to STAUFF Group 3D only.



#### 1x Hexagon Head Bolt

Surface: W3 Thread: Metric

#### 1x Cover Plate

Surface: W3

#### 1x Clamp Body (two halves) STAUFF Group 1D (DIN 1) both 0.D. 6 mm / .24 in

Material: Polypropylene Profiled inside surface with tension clearance

#### 1x Hexagon Rail Nut

Surface: W3 Thread: Metric

Order Code (Mounting Rail TS not included.)

#### SM-106/06-PP-GD-AS-M-W3

W3 is the standard option for this type of installation.

#### **Thread Codes**

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

Metric ISO thread Unified coarse (UNC) thread

#### М

#### **Material Codes**

The below listed material codes describe the materials and surface finishings of metal parts that are most relevant for Twin Series clamp assemblies. Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Metal parts made of Carbon Steel, zinc/nickel-plated

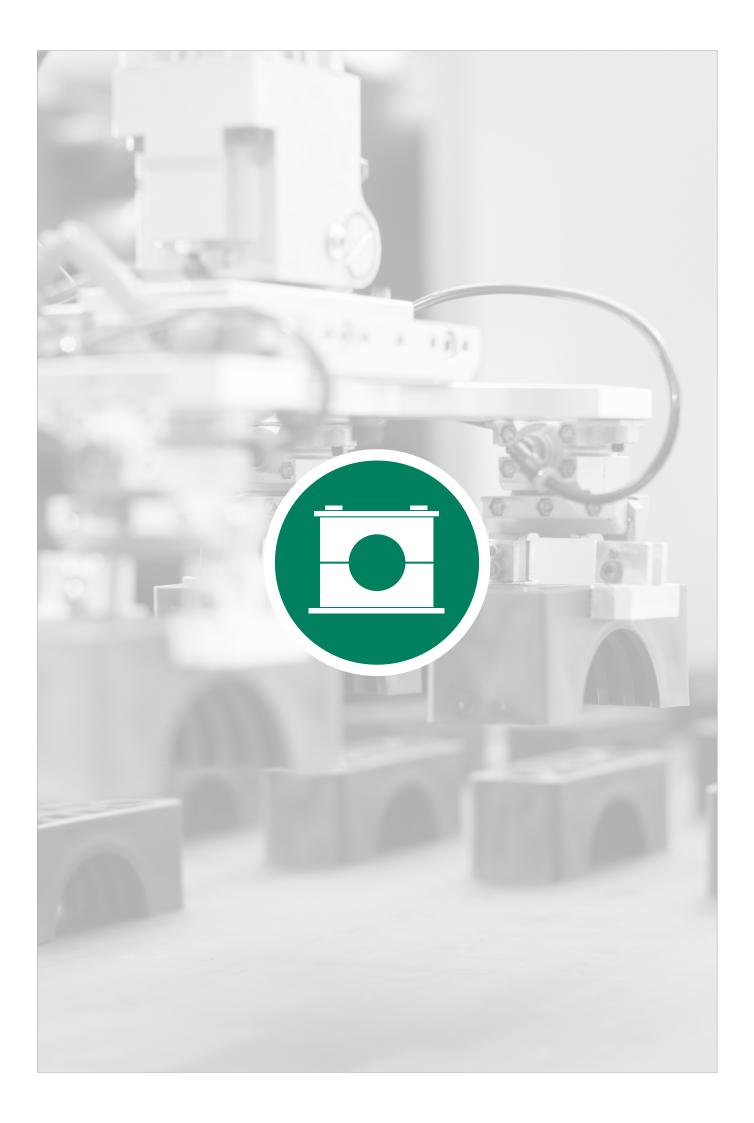
W3

Metal parts made of Stainless Steel V2A: 1.4301 / 1.4305 (AISI 304 / 303) Metal parts made of Stainless Steel V4A: 1.4401 / 1.4571 (AISI 316 / 316 Ti) W4 W5

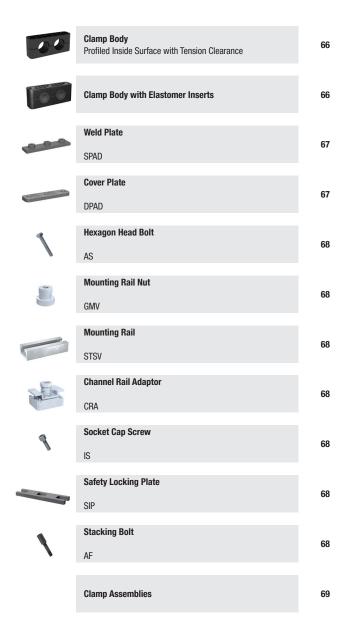
Weld Plate made of Carbon Steel, phosphated

Other metal parts made of Carbon Steel, zinc/nickel-plated

W10



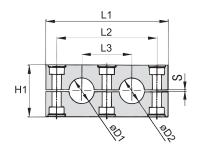




#### **Clamp Body • Profiled Design**

#### **Profiled Inside Surface with Tension Clearance**





Outside Diameter Nominal Bore

Group

Group

**Outside Diameter** 

Pipe / Tube / Hose

#### **Ordering Codes**

#### \*4\*012.7/12.7-\*PP **Clamp Body**

One clamp body is consisting of two clamp halves.

- \* 1st part of STAUFF Group
- \* Exact outside diameters Ø D1 / Ø D2 (mm) 012.7/12.7
- \* Material code (see below)

	Pipe / Tul Ø D1 / Ø l		Pipe	Copper Tube ASTM B88	(2 Clamp Halves)						
STAUFF	(mm)	(in)	(in)	(in)	( <b>**</b> = Material)	L1	L2	L3	H1	S	Width
	12,7	1/2		3/8	4012.7/12.7-**						
	19	3/4			4019/19-**		90			1.2	30
	20				4020/20-**	115		45	48		
4S-D	D 21,3 1/2	1/2		4021.3/21.3-**	4.53	3.54	1.77	1.89	.05	1.18	
	22	22 3/4 <b>4022/2</b> 2	4022/22-**	4.00	0.04	1.77	1.03	.00	1.10		
	25,4	1			4025.4/25.4- <b>**</b>						
	26,9		3/4		4026.9/26.9-**						
	32	1-1/4			5032/32-**						
5S-D	33,7		1		5033.7/33.7-**	145	120	60	60	2,0	30
33-D	38	1-1/2			5038/38-**	5.71	4.72	2.36	2.36	.08	1.18
	42		1-1/4		5042/42-**						

**Ordering Codes** 

Dimensions (mm/in)

#### **Standard Materials**



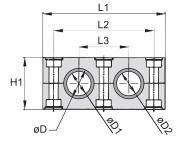


See pages 154 / 155 for material properties and technical information.

Additional outside diameters and Clamp Bodies, type H (smooth inside surface without tension clearance) are available upon request. Please contact STAUFF for further information.

#### **Clamp Body with Elastomer Inserts Type RI**





For use with Elastomer Inserts of the Heavy Series, STAUFF Group 4S and 5S (see page 39 for details)

(mm/in)

**Ordering Codes** 

(Clamp Assembly)

#### **Ordering Codes**

#### **Clamp Assembly** \*4\*006/06-\*PP-R

One assembly is consisting of one clamp body and two inserts.

- \* 1st part of STAUFF Group \* Exact outside diameters Ø D1 / Ø D2 (mm) 006/06
- \* Material code (see below) PP-R

#### **Standard Materials**



Polyamide Colour: Black Material code: PA-R



Flastomer Inserts Thermoplastic Elastomer (73 Shore-A)

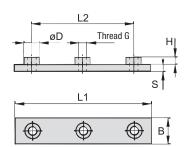
Colour: Black

	שטווטש בט עווטש								
STAUFF	(mm)	(in)	(**R = Material)	Ø D	L1	L2	L3	H1	Width
	6		4006/06-**-R						
	8	5/16	4008/08-**-R						
	10		4010/10- <b>**</b> -R						
	12		4012/12- <b>**</b> -R						
	12,7	1/2	4012.7/12.7- <b>**</b> -R	25	115	90	45	48	30
4S-D	14		4014/14- <b>**</b> -R	.98	4.53	3.54	1.77	1.89	1.18
	15		4015/15- <b>**</b> -R	.30	4.55	3.34	1.77	1.03	1.10
	16	5/8	4016/16- <b>**</b> -R						
	17,2		4017.2/17.2- <b>**</b> -R						
	18		4018/18- <b>**</b> -R						
	19	3/4	4019/19- <b>**</b> -R						
	20		5020/20- <b>**</b> -R						
	21,3		5021.3/21.3- <b>**</b> -R						
	22	7/8	5022/22- <b>**</b> -R						
5S-D	25		5025/25- <b>**</b> -R	38	145	120	60	60	30
33-D	26,9		5026.9/26.9- <b>**</b> -R	1.50	5.71	4.72	2.36	2.36	1.18
	28		5028/28- <b>**</b> -R						
	30		5030/30- <b>**</b> -R						
	32	1-1/4	5032/32-**-R						

See pages 154 / 155 for properties and technical information. Additional outside diameters are available upon request. Please contact STAUFF for further information.







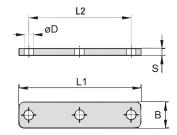




Group	Dimensio		Ordering Codes					
STAUFF	L1	L2	В	S	Н	Thread G	ØD	(Standard Options)
4S-D	130	90	30	8	8,5	M10	18	SPAD-4S-M-W1
45-D	5.12	3.54	1.18	.31	.33	3/8-16 UNC	.71	SPAD-4S-U-W2*
5S-D	160	120	30	8	8,5	M10	18	SPAD-5S-M-W1
ขจ-ม	6.30	4.72	1.18	.31	.33	3/8-16 UNC	.71	SPAD-5S-U-W2*

All threaded parts are available with Metric ISO thread or unified Coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

#### **Ordering Codes** \*SPAD-\*4S-\*M-\*W1 **Weld Plate** \* Weld Plate SPAD \* STAUFF Group **4S** 4S-D 5S-D **5S** \* Thread code Metric ISO thread M U Unified coarse (UNC) thread \* Material code Carbon Steel, uncoated W1 Carbon Steel, phosphated W2 Carbon Steel, zinc/nickel-plated W3 Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)



# Type DPAD

**Cover Plate** 

Group	Dimension	IS (mm/in)	Ordering Codes			
STAUFF	L1	L2	В	S	ØD	(Standard Options)
40	115	90	30	8	11	DPAD-4S-W1*
4S	4.53	3.54	1.18	.31	.43	DPAU-45-W1"
F.C.	145	120	30	8	11	DDAD EC W4*
5S	5.71	4.72	1.18	.31	.43	DPAD-5S-W1*

All threaded parts are available with Metric ISO thread or unified Coarse (UNC) thread according to dimension table. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

Ordering Codes					
Cover Plate *DPAD-*4S-*\					
* Cover Plate	0	PAD			
* STAUFF Group	4S-D 5S-D	4S 5S			
* Material code	Carbon Steel, uncoated Carbon Steel, phosphated Carbon Steel, zinc/nickel-plated Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W1 W2 W3 W4			

<sup>\*</sup> Standard finishing option in North America is W2 (Carbon Steel, phosphated).

 $<sup>^{\</sup>star}\,$  Standard finishing option in North America is W3 (Carbon Steel, phosphated).

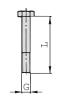


AS-M10x70-W1

AS-3/8-16UNCx2-3/4-W3\*

#### **Hexagon Head Bolt Type AS**





**Hexagon Head Bolt AS** 

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.) Dimensions applicable only when used with Cover Plate DPAD

Ordering Codes		DIN	Dimensions ( $^{mm}/_{in}$ ) Thread G x L	Ordering Codes (Standard Options)
	48	2	M10 x 60	AS-M10x60-W1
Hexagon Head Bolt *AS-*M10x70-*W1	43		3/8–16 UNC x 2-1/4	AS-3/8-16UNCx2-1/4-W3*

5S

M10 x 70

3/8-16 UNC x 2-3/4

All threaded parts are available with Metric ISO thread orunified coarse (UNC) thread according to dimension table.  $\label{thm:linear_problem} \textbf{Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.}$ 

If required, use Safety Washers, type SI as locking devices to prevent Hexagon Head Bolts, type AS from loosening. See page 46 for details.

\* Standard finishing option in North America is W3 (Carbon Steel, zinc/nickel-plated).

\* Type of bolt Hexagon Head Bolt (according to DIN 931 / 933 AS or ANSI / ASME B18.2.1.)

\* Thread type and size acc. to dimension table M10x70

\* Material code Carbon Steel, uncoated W1 Carbon Steel, zinc/nickel-plated W3

> Stainless Steel V2A W4 1.4301 / 1.4305 (AISI 304 / 303) Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

#### **Further Metal Hardware**

For Use with the Heavy Twin Series



#### **Mounting Rail Nut Type GMV**

Heavy Series, STAUFF Group 4S and 5S (See page 42 for details)



#### **Mounting Rail Type STSV**

**Heavy Series** (See page 42 for details)



#### **Channel Rail Adaptor Type CRA**

Heavy Series, STAUFF Group 4S and 5S (See page 43 for details)



#### **Socket Cap Screw** Type IS

Heavy Series, STAUFF Group 4S and 5S (See page 45 for details)



#### **Safety Locking Plate Type SIPD**

Heavy Twin Series, STAUFF Group 4S-D and 5S-D (Contact STAUFF for details)



#### **Stacking Bolt** Type AF

Heavy Series, STAUFF Group 4S and 5S (See page 47 for details)



W5

W17

W18

W19





#### **1** Type of Installation

Please select the type of installation (e.g. Weld Plates, Rail Nuts etc.) and add the corresponding Code to position ① of the order code for your clamp assembly.



Without Installation Equipment

Code: none

#### **Installation on Weld Plate**



**Single Weld Plate** Code: SPAD

#### **Installation on Mounting / Channel Rail**



**Mounting Rail Nut** Code: GMV



Channel Rail Adaptor Code: CRA

#### 2 Group Size & Diameters

Please select the required group size and diameter and add the corresponding Code to position 2 of the crder code for your clamp assembly.

Group	Outside	de Availability of Clamp		
	Diameter P / T / H	Body Materia Profiled	als & Designs	
STAUFF	(mm)	Design	Type RI	Code
	6	0	•	4006/06
	8	0	•	4008/08
	10	0	•	4010/10
	12	0	•	4012/12
	12,7	•	•	4012.7/12.7
	14	0	•	4014/14
	15	0	•	4015/15
4S-D	16	0	•	4016/16
45-D	17,2	0	•	4017.2/17.2
	18	0	•	4018/18
	19	•	•	4019/19
	20	•	0	4020/20
	21,3	•	0	4021.3/21.3
	22	•	0	4022/22
	25,4	•	0	4025.4/25.4
	26,9	•	0	4026.9/26.9
	20	0	•	5020/20
	21,3	0	•	5021.3/21.3
	22	0	•	5022/22
	25	0	•	5025/25
	26,9	0	•	5026.9/26.9
5S-D	28	0	•	5028/28
	30	0	•	5030/30
	32	•	•	5032/32
	33,7	•	0	5033.7/33.7
	38	•	0	5038/38
	42	•	0	5042/42

Standard Option

#### 3 Clamp Body Design & Material

Please select the design and material of your clamp body and add the corresponding Code to position 3 of the order code for your clamp assembly.

Please check the availability of the selected clamp body design and material according to the matrix table in 2.

#### **Profiled Design**





#### Type RI (with Elastomer Insert)





Clamp Bodies, Type H (smooth Inside surface without tension clearance) are available upon request. Please contact STAUFF for further information.

#### 4 Mounting & Fitting Combination

Please select the mounting and fitting combination (e.g. Bolts, Cover Plates etc.) and add the corresponding Code to position ④ of the order code for your clamp assembly.

#### **Installation with Cover Plate and Bolts**

Cover Plate DPAD with Hexagon Head Bolt AS Code: DPAD-AS

#### Installation with Locking Plate and Bolts

Safety Locking Plate SIPD with Stacking Bolt AF Code: SIPD-AF

#### **5** Thread Type

Please select the required thread type and add the corresponding Code to position 5 of the order code for your clamp assembly.

Metric ISO thread Code: M

Unified coarse (UNC) thread Code: U

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.

#### **6 Material & Surface Finishing**

Please select the required material & surface finishing of the metal parts and add the corresponding Code to position 6 of the order code for your clamp assembly.

Metal parts made of Carbon Steel, uncoated W1

Metal parts made of Carbon Steel, phosphated W2

Metal parts made of Carbon Steel, zinc/nickel-plated W3

Metal parts made of Stainless Steel V2A 1.4301 / 1.4305 (AISI 304 / 303)

Metal parts made of Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated

Weld Plate and Cover Plate made of Carbon Steel, W12 phosphated; Bolts made of Carbon Steel, uncoated

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated; Cover Plate made of Carbon Steel, phosphated: W13 Bolts made of Carbon Steel, uncoated

Weld Plate / Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated

Mounting Rail Nuts made of Carbon Steel, zinc/nickel-plated: Cover Plate made of Carbon Steel, phosphated; W16 Bolts made of Carbon Steel, zinc/nickel-plated

Safety Locking Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, zinc/nickel-plated

Safety Locking Plate made of Carbon Steel, uncoated; Bolts made of Carbon Steel, phosphated

Cover Plate made of Carbon Steel, phosphated; Bolts made of Carbon Steel, uncoated

Individual combinations of alternative materials and surface finishings are available upon request. Contact STAUFF for further information

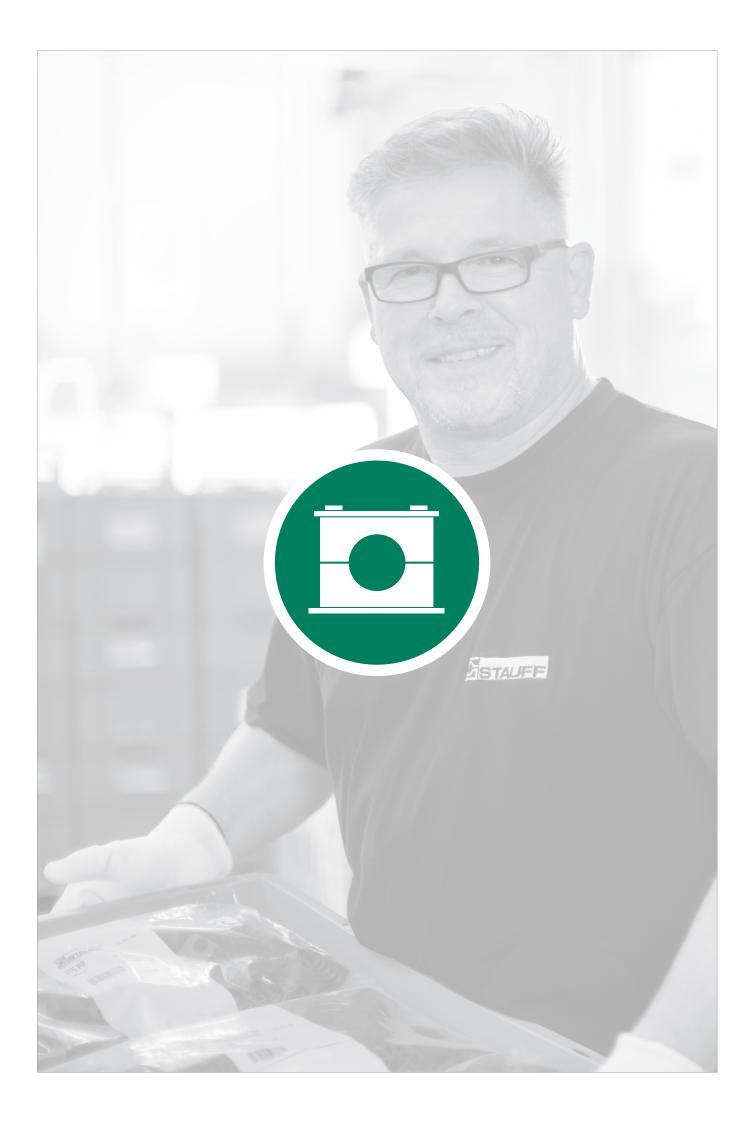
#### **7 Assembling & Kitting**

If required, please select an additional assembling and kitting option and add the corresponding Code to the last position of the order code for your clamp assembly.

**Components Supplied Separately** Code: none (Standard Option)

**Components Assembled** Code: A (Special Option)

**Components Packed in Kits** Code: K (Special Option)





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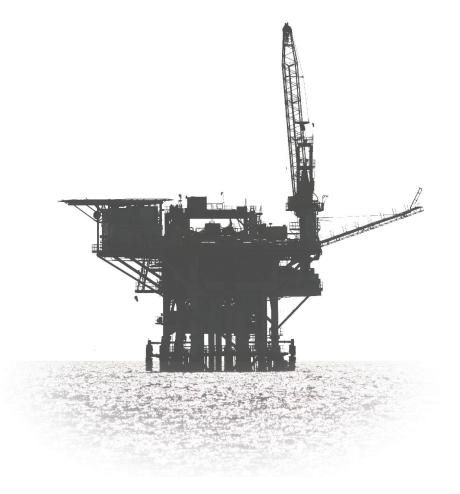
#### **STAUFF ACT Anti-Corrosion Technology**



Crevice corrosion formed under a regular plastic clamp



Crevice corrosion formed under a regular plastic clamp



#### **Stainless Steel Pipework**

Stainless steel pipework on oil and gas platform and processing plants (that are located offshore and up to 50 km inland) is used over a wide range of temperature, flow and pressure conditions, e.g. for process instrumentation and sensing, as well as for chemical inhibition, hydraulic or utility lines.

The typical tubing material selected for these particular applications is AISI 316 stainless steel, although in more recent times other tube materials have been utilized to try and counteract the offshore corrosion issue.

In all major offshore oil and gas regions - including the Gulf of Mexico, the North Sea, the Gulf of Guinea and the China Sea corrosion of AISI 316 stainless steel pipework can be observed, and has been a researched and well documented problem as well as a costly and time consuming issue with regard to maintenance processes for many years.

#### **Pitting Corrosion**

One of the most prevalent forms of localised corrosion is pitting corrosion: Under certain specific conditions - particularly involving chlorides (such as sodium chloride in seawater) and exacerbated by elevated temperatures - small pits can form in a stainless steel surface.

Dependent upon both the environment and the stainless steel itself, these pits may continue to grow and eventually lead to perforation of tubing walls and leaks, while the majority of the surface may still be totally unaffected.

Pitting corrosion is often quite easy to recognise: small individual pits and - in later stages - sometimes deeper and connected pits can be observed by visual inspection with the unaided eye.

#### **Crevice Corrosion**

Another dominant type is crevice corrosion, which is a lot more difficult to observe: It usually tends to occur in shielded areas such as crevices, formed under gaskets, washers, fastener heads, insulating material, surface deposits, disbonded coatings, threads and lap joints.

Pipe clamps made of plastic in particular have also been prone to inducing crevice corrosion in the past, because the plastic deforms around the tubing and creates even tighter crevices.

Crevice corrosion is always initiated by changes in the local chemistry within the shielded area, usually associated with a stagnant solution on the micro-environmental level:

- Trapped seawater becomes stagnant
- Depletion of inhibitor and oxygen
- A shift to acid conditions
- Build-up of aggressive ion species (such as sodium chloride in seawater)
- Accelerated corrosion process

Crevice corrosion can have serious and adverse consequences eventually leading to perforation of tubing walls and the escape of highly flammable and hazardous fluids and chemicals

#### **Material Selection**

Hence, the selection of proper materials and the use of robust design and safe construction practices are mandatory, even if crevices are sometimes difficult or even impossible to avoid in tubing installations when using regular types of tubing supports and clamps.

This is where STAUFF ACT Clamps come into play ...

#### **Corrosion Facts**

Corrosion in general is a naturally occurring phenomenon commonly defined as the deterioration of a substance (usually a metal) or its properties because of a reaction with its environment. Like other natural hazards, corrosion can cause not only expensive but also dangerous damage to almost everything from automobiles, home appliances and drinking water systems to pipelines, bridges and public buildings.

Figures provided by the U.S. National Climatic Data Center underline that major weather related disasters the U.S. incurred total losses of averaging USD 17 billion annually (1980 - 2001). According to U.S. corrosion studies, the estimated direct cost of metallic corrosion in general was USD 276 billion on an annual basis in 1998. This represented 3.1% of the U.S. Gross Domestic Product.

Direct corrosion costs associated with the domestic oil and gas production activities in the U.S. were determined to be about USD 1,4 billion annually, with USD 0,6 billion attributed to surface piping and facility costs, USD 0,5 billion to downhole tubing, and USD 0,3 billion to capital expenditures related to corrosion.

The U.S. refineries represent approximately 23% of the world's petroleum production in 1996 supplying more than 18 million barrels of refined petroleum products per day, with a total corrosion related direct cost of USD 3,7 billion. Maintenance expenses make up USD 1,8 billion of this total, vessel expenses are USD 1,4 billion and fouling costs are approximately USD 0,5 billion annually.

Source of Information: Report No. FHWA-RD-01-156, September 2001 Corrosion Costs and Preventive Strategies in the United States Report by CC Technologies Laboratories, Inc. to Federal Highway ation Office of Infrastructure Research and Development



#### **Main Features**

Efficient Prevention of Crevice Corrosion under Pipe Clamps on Stainless Steel Pipework Middle- and Long-Term Cost Savings due to Extended Service and Maintenance Intervals

#### Construction based on STAUFF Clamps

- Design based on Original STAUFF Clamps according to DIN 3015, Parts 1 and 3 (Standard Series and Twin Series), the tried and tested industry standard for several decades
- Covering the most commonly used metric and imperial pipe diameters from 6 mm to 42 mm (from 1/4 inch to 1 1/2 inch)
- · Alternative configurations and pipe diameters on request
- Installation time reduction (compared to alternative designs)

#### **Independent Testing and Approval**

- Subject to stringent testing at the STAUFF in-house laboratories located in Werdohl (Germany)
- Salt spray tests according to ASTM B117 applied in controlled laboratory environments
- Long-term field tested on a rig in the Dutch sector of the North Sea
- Tests results independently assessed by Centre for Corrosion Technolog at Sheffield Hallam University
- · Fully detailed, independent test reports available on request

#### **Innovative Design and Materials**

- Material and design in compliance with section 7.3 (Tubing Installation) of the Norwegian offshore standard Norsok Z-010 (Revision 3, published in October 2000), API RP 552 and NACE SP 0108-2008 (section 13)
- O Clamp body made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94
- 2 Integrated ACE anti-corrosion elastomer strips avoid the accumulation of seawater between clamp body and pipe
- 3 Drainage channels aid the dispersal of seawater (self-draining)







- 4) ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling (delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport)
- High UV stability of the clamp body material; resistant against seawater, rain and oil
- Suitable for continuous exposure to temperatures from -25 °C to +80 °C (from -13 °F to +176 °F)
- To be used in sub-sea and top-side environments;
   alleviating the requirement for two different products



Salt-spray testing of ACT Mounting Hardware (above of the picture) compared to contaminated hardware made of Stainless Steel V4A (below of the picture)

#### Design

STAUFF ACT Clamps are an innovatively designed solution for the installation of instrumentation pipework where anti-corrosion properties are of paramount importance (e.g. in the fields of offshore oil and gas exploration and processing).

The design – based on the tried and tested STAUFF Clamps according to DIN 3015 – offers installation time reduction and long term cost savings due to extended service intervals.

The STAUFF ACT clamp body design is available for the Standard Series (DIN 3015, Part 1) and the Twin Series (DIN 3015, Part 3) to cover the most commonly used metric and imperial pipe diameters from 6 mm to 42 mm (1/4 inch to 1 1/2 inch).

#### **Development**

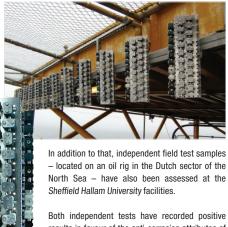
Throughout their development, STAUFF ACT Clamps have been subject to stringent testing at the STAUFF in-house laboratories located in Werdohl, Germany.

In order to ensure credibility of the product, the development process has also involved independent testing.



To achieve this, the services of the Centre for Corrosion Technology at Sheffield Hallam University's Materials and Engineering Research Institute have been utilized, applying advanced techniques with equipment such as high resolution surface metrology and form measurement systems.

In a controlled laboratory environment, continous hot salt spray tests according to ASTM B117 have been applied for periods of 2000 hours to various clamp configurations holding AISI 316 stainless steel tubing.



results in favour of the anti-corrosion attributes of the STAUFF ACT Clamp. Fully detailed test reports are available upon request.

### Conformity

Using flame-retardant PP-V0 plastic material for the clamp body and ACE anti-corrosion elastomer material for the rubber strips, STAUFF ACT Clamps have been constructed in compliance with section 7.3 (Tubing Installation) of the Norwegian offshore standard Norsok Z-010 (Revision 3, published in October 2000). They also comply with Norsok I-001 (Revision 4, published in January 2010), API RP 552 and NACE SP 0108-2008 (section 13).

#### **The Norsok Organisation**



Norsok is a Norwegian industry initiative to add value, reduce cost and lead time and remove unnecessary activities in offshore field developments and operations.

The Norsok standards are developed by the Norwegian petroleum industry and are jointly issued by the Norwegian Oil Industry Association (OLF) and the Federation of Norwegian Engineering Industries (TBL). They are administered by the Norwegian Technology Standards Institution (NTS).

The purpose of the Norsok industry standards is to replace the individual oil company specifications for use in existing and future petroleum industry developments, subject to the individual company's review and application.

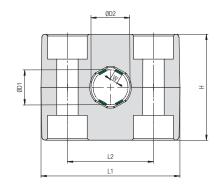
## Standard Series according to DIN 3015, Part 1

### **ACT Clamp Body**





Integrated Rubber Strips made of Anti-Corrosion Elastomer (ACE)



### **Ordering Codes**

\*2-\*12.7-\*ACT \*1-\*06.4A-\*ACT Clamp Body, STAUFF Group 1A

One clamp body consists of two identical clamp halves, each with two integrated rubber strips.

\* STAUFF Group 2 \* Exact outside diameter Ø D1 (mm) 12.7

\* Material code ACT

		Elastomer (		Ordering Code	Dookoging Unit	Dimon	oiono (	mm / \			
Group S	ıze	Outside [ Ø D1	Jiameter	Ordering Code	Packaging Unit	Dimer	isions (	''''/in)			
STAUFF	DIN	(mm)	(in)	(2 Clamp Halves)	(in pieces / bag)	ØD2	W	L1	L2	Н	Width
		3,2	1/8	103.2A-ACT	25	6,2	1,1	-			
						.24	.04				
		6		106A-ACT	25	.35	.06	-			
		6,4	1/4	106.4A-ACT	25	9,4	1,5				
		0, .	., .	10011117101		.37	.06	0.7	00	00	20
1A	1	8		108A-ACT	25	11,0	1,8	37 1.46	.79	26 1.06	30 1.18
		0.5	3/8	109.5A-ACT	25	12,5	2,2				
		9,5	3/0	109.5A-AC1	25	.49	.09				
		10		110A-ACT	25	.51	2,3				
						15	2,8				
		12		112A-ACT	25	.59	.11				
		12,7	1/2	212.7-ACT	25	15,7	3,5				
		,				.62 17	.14	-			
		14		214-ACT	25	.67	.14	-			
		14,3	9/16	214.3-ACT	25	17,3	3,5				
2	2	14,5	3/10	214.3-401	25	.68	.14	42	26	32	30
		15		215-ACT	25	.71	3,5	1.65	1.02	1.30	1.18
						19	3,5				
		16	5/8	216-ACT	25	.74	.14				
		18		218-ACT	25	21	3,5				
						.83	.14				
		19	3/4	319-ACT	25	.87	3,5				
		20		320-ACT	25	23	3,5				
		20		320-AG1	20	.91	.14				
3	3	21,3		321.3-ACT	25	24,3	3,5	1.97	1.30	35,5 1.42	30 1.18
						28	3,5	1.37	1.50	1.42	1.10
		25		325-ACT	25	1.10	.14				
		25,4	1	325.4-ACT	25	28,4	3,5				
		· ·				1.12 31,1	6,0				
		26,9		426.9-ACT	25	1.22	.24	-			
4	4	28		428-ACT	25	32,2	6,0	59	40	42	30
4	4	20		420-A01	25	1.27	.24	2.32	1.57	1,65	1.18
		30		430-ACT	25	34,2 1.35	6,0	-			
		00	4.47		0.5	36,2	7				
		32	1 1/4	532-ACT	25	1.43	.28				
		35		535-ACT	25	39,2	7	<u>.</u> .			
5	5					1.54	.28	71 2.80	52 2.05	58 2.28	30 1.18
		38	1 1/2	538-ACT	25	1.66	.31	2.00	2.00	2.20	1.10
		42		542-ACT	25	46,2	8				
		74		0-12-NU1	20	1.82	.31				

Additional sizes and outside diameters are available upon request. Please contact STAUFF for further information.







### **ACT Mounting Hardware** Installation on Single Weld Plates

Required components (for use with single weld plate):

- 2 ACT Hexagon Head Bolts AS...W55
- 1 ACT Cover Plate DP...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the ACT Weld Plate is suitable for the expected loads.

## Waterial Code W55

## **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. <u>Details: www.stauff.com/act/assembly</u>

## ACT Hexagon Head Bolt Type AS ... W55 (according to DIN 931 / 933)



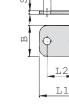


Dimensions applicable only when used with Cover Plate DP and Weld Plate SP

STAINLESS STEEL				
Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1A	1	M6 x 30 M6 x 1.18	AS-M6x30-W55	25
2	2	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
3	3	M6 x 40 M6 x 1.57	AS-M6x40-W55	25
4	4	M6 x 45 M6 x 1.77	AS-M6x45-W55	25
5	5	M6 x 60 M6 x 2.36	AS-M6x60-W55	25

# **ACT Cover Plate Type DP ... W55**



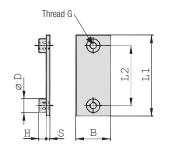


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Group		Dimen	sions ( <sup>m</sup>	ım/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DF-3-W33	20
4	4	57	40	30	3	7	DP-4-W55	25
4	4	2.24	1.57	1.18	.12	.28	DF-4-W55	20
E	E	70	52	30	3	7	DP-5-W55	05
5	5	2.76	2.05	1.18	.12	.28	DP-0-W00	25

# **ACT Single Weld Plate Type SP ... W55**





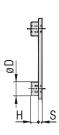
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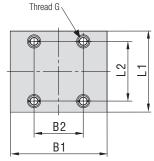
Group		Dime	ensior	ıs ( <sup>mm</sup>	/in)				Ordering Code	Packaging Unit
STAUFF	DIN	G	L1	L2	В	S	Н	ØD		(in pieces / bag)
1A	1	M6	36	20	30	3	6,5	12	SP-1A-M-W55	25
IA	1	IVIO	1.42	0.79	1.18	.12	.26	.47	3F-IA-IVI-W33	20
2	2	M6	42	26	30	3	6,5	12	SP-2-M-W55	25
2	2	IVIO	1.65	1.02	1.18	.12	.26	.47	3F-2-IVI-W33	20
3	3	M6	50	33	30	3	6,5	12	SP-3-M-W55	25
3	3	IVIO	1.97	1.30	1.18	.12	.26	.47	35-3-101-0033	20
4	4	M6	60	40	30	3	6,5	12	SP-4-M-W55	25
4	4	IVIO	2.36	1.57	1.18	.12	.26	.47	3F-4-IVI-VV33	20
5	5	M6	71	52	30	3	6,5	12	SP-5-M-W55	25
Ü	J	IVIO	2.80	2.05	1.18	.12	.26	.47	3F-3-WI-W33	20



Alternative types of weld plates are available upon request. Please contact STAUFF for further information.

## ACT Double Weld Plate Type SPD ... W55





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frei
INOX STAINLESS STEEL

Group		Dim	ensio	ns (m	n/in)					Ordering Code	Packaging Unit
STAUFF	DIN	G	L1	L2	B1	B2	S	Н	ØD		(in pieces / bag)
1A	1	M6	36	20	60	30,5		6,5	12	SPD-1A-M-W55	25
IA	1	IVIO	1.42	0.79	2.36	1.20	.12	.26	.47	3FD-IA-IVI-W33	20
2	2	M6	42	26	60	30,5	3	6,5	12	SPD-2-M-W55	25
2	2	IVIO	1.65	1.02	2.36	1.20	.12	.26	.47	3FD-2-IVI-W33	20
3	3	M6	50	33	60	30,5	3	6,5	12	SPD-3-M-W55	25
3	J	IVIO	1.97	1.30	2.36	1.20	.12	.26	.47	3FD-3-IVI-W33	20





### **ACT Mounting Hardware** Multi-Level Installation (with Weld Plate)

Required components for each level:

- 2 ACT Stacking Bolt AF...W55
- 1 ACT Safety Locking Plate SIG...ACT-W55
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer is secured by a cover plate and hexagon head bolts. The lower layer has to be mounted to a weld plate (with a recommended maximum of two levels in total).



### **ACT Mounting Hardware** Material Properties and Handling Instructions

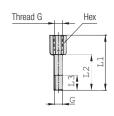
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

## **ACT Stacking Bolt Type AF ... W55**





## **ACT Safety Locking Plate** Type SIG ... ACT-W55







Group		Dimens	sions ( <sup>mm</sup> ,	/in <b>)</b>		Ordering Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1A	1	33	28	11,2	2	SIG-1A-ACT-W55	25
IA	'	1.30	1.10	.44	.08	SIG-TA-ACT-W33	20
2	2	39	28	11,2	2	SIG-2-ACT-W55	25
		1.54	1.10	.44	.08	310-2-AC1-W33	20
3	3	47	28	11,2	2	SIG-3-ACT-W55	25
3	3	1.85	1.10	.44	.08	310-3-A01-W33	20
4	4	56	28	11,2	2	SIG-4-ACT-W55	25
4	4	2.20	1.10	.44	.08	310-4-A01-W33	20
5	5	69	28	11,2	2	SIG-5-ACT-W55	25
J	J	2.72	1.10	.44	.08	310-3-A01-W33	20

Group		Dime	nsions (	<sup>mm</sup> /in)			Ordering Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1A	1	M6	34	20	12	11	AF-1/1A/1D-M-W55	25
IA	1	IVIO	1.34	.79	.47	.43	AF-1/1A/1D-W-W33	20
2	2	M6	40	26	12	11	AF-2-M-W55	25
_		IVIO	1.57	1.24	.47	.43	AI -Z-IVI-VVJJ	20
3	3	M6	44	30	12	11	AF-3-M-W55	25
3	3	IVIO	1.73	1.18	.47	.43	AF-3-IVI-W33	20
4	4	M6	49	35	12	11	AF-4-M-W55	25
4	4	IVIO	1.93	1.38	.47	.43	AF-4-IVI-VV33	20
5	5	M6	64	50	12	11	AF-5-M-W55	25
5	5	IVIO	2.52	1.97	.47	.43	AF-3-IVI-VV33	20





### **ACT Mounting Hardware** Installation with Channel Rail Adaptors

#### **Required components:**

- 2 ACT Hexagon Head Bolts AS...W55
- 1 ACT Cover Plate DP W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Channel Rail Adaptors CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

### **ACT Mounting Hardware** Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

## **ACT Hexagon Head Bolt** Type AS ... W55 (according to DIN 931 / 933)



Group STAUFF DIN

2

3

4

5

1A

3

M6 x 1.77 M6 x 60

M6 x 2.36

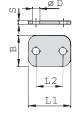


Dimensions applicable only when used with Cover Plate DP and Weld Plate SP

Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
M6 x 30 M6 x 1.18	AS-M6x30-W55	25
M6 x 35 M6 x 1.38	AS-M6x35-W55	25
M6 x 40 M6 x 1.57	AS-M6x40-W55	25
M6 x 45	AS-M6x45-W55	25

## **ACT Cover Plate Type DP ... W55**



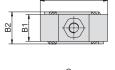


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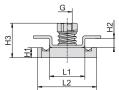
Group		Dimen	sions ( <sup>m</sup>	m/in)			Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DF-3-W33	20
4	4	57	40	30	3	7	DP-4-W55	25
4	4	2.24	1.57	1.18	.12	.28	DF-4-W55	20
5	5	70	52	30	3	7	DP-5-W55	25
5	Э	2.76	2.05	1.18	.12	.28	มห-อ-พออ	20

## **ACT Channel Rail Adaptor Type CRA ... W55**



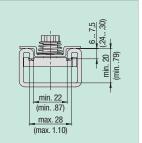


AS-M6x60-W55



### **Suitability Chart for ACT Channel Rail Adaptors** in the Standard Series

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.). The drawing describes the basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA.



In case of doubt, please do not hesitate to contact STAUFF prior to field application.

Group		Dimensions	( <sup>mm</sup> /in)		Ordering Code	Packaging Unit						
STAUFF	DIN	G	L1	L2	L3	B1	B2	H1	H2	H3		(in pieces / bag)
1A	1											
2	2											
3	3	M6	21	35	40	16	19	6	5,5	20,5	CRA-1-8/1D-M-W55	25
			.83	1.38	1.57	.63	.75	.24	.22	.81		
4	4											
5	5											

## STAUFF ®



### **ACT Mounting Hardware** Installation in Field Trays / Cable Ladders

#### Required components:

- 2 ACT Self-Locking Nuts MUS-HKS ... W55
- 1 ACT Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Hammerhead Bolts HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

## Waterial Code W55

## **ACT Mounting Hardware**Material Properties and Handling Instructions

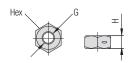
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

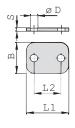






**ACT Cover Plate** 

**Type DP ... W55** 





For use with ACT Hammerhead Bolts HKS ... W55

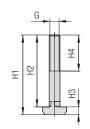
Group		Dimensions	s (mm/in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1A	1					
2	2					
3	3	M6	5	10	MUS-HKS-M6-W55	25
4	4		.20	.39		
5	5					

## Rost

Group		Dimen	sions ( <sup>m</sup>		Ordering Code	Packaging Unit		
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	1	1.34	.79	1.18	.12	.28	DF-IA-W33	20
2	2	40,5	26	30	3	7	DP-2-W55	25
	2	1.59	1.02	1.18	.12	.28	DF-2-W33	20
3	3	48	33	30	3	7	DP-3-W55	25
J	3	1.89	1.30	1.18	.12	.28	DF-3-W33	23
4	4	57	40	30	3	7	DP-4-W55	25
4	4	2.24	1.57	1.18	.12	.28	DF-4-W55	20
5	5	70	52	30	3	7	DP-5-W55	25
Ü	Ü	2.76	2.05	1.18	.12	.28	DL-9-M33	20

## ACT Hammerhead Bolt Type HKS ... W55



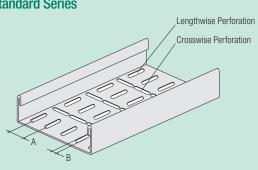




For use with Self-Locking ACT Nuts MUS-HKS  $\dots$  W55

Group		Dim	ensior	1 <b>s (</b> mm/i	n)				Ordering Code	Packaging Unit
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
1A	1	M6	44,3	40	4,3	20	6,1	13,3	HKS-M6x40-W55	25
IA	1	IVIO	1.74	1.57	.17	.79	.24	.52	nka-waxu-wax	20
2	2	M6	49,3	45	4,3	20	6,1	13,3	HKS-M6x45-W55	25
2	2	IVIO	1.94	1.77	.17	.79	.24	.52	HK3-W6X45-W55	20
3	3	M6	54,3	50	4,3	20	6,1	13,3	HKS-M6x50-W55	25
3	J	IVIO	2.14	1.97	.17	.79	.24	.52	TIKS-WOX30-W33	23
4	4	M6	59,3	55	4,3	20	6,1	13,3	HKS-M6x55-W55	25
4	4	IVIO	2.33	2.17	.17	.79	.24	.52	HK3-WGX55-W55	20
5	5	M6	74,3	70	4,3	20	6,1	13,3	UVC MCV70 WEE	25
3	J	IVIO	2.93	2.76	.17	.79	.24	.52	HKS-M6x70-W55	20

### Suitability Chart for ACT Hammerhead Bolts in the Standard Series



ACT Hammerhead Bolts are suitable for field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations that meet the following requirements:

- Dimension A: Equal to the bolt center spacing of the clamp assembly
- Dimension B: 6,2 mm ... 7,0 mm / .24 in ... .28 in (Min ... Max)

In case of doubt, please do not hesitate to contact STAUFF prior to field application.

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# **ACT Mounting Hardware**Multi-Level Installation (with Stacking & Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 2 ACT Self-Locking Nuts MUS-HKS ... W55
- 1 ACT Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Safety Locking Plate SIG...ACT-W55
- 2 ACT Stacking Bolts AF-HKSK...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Hammerhead Bolts HKSK ... W55

## Waterial Code W55

## **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

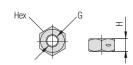
ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps.

<u>Details: www.stauff.com/act/assembly</u>

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

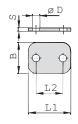






**ACT Cover Plate** 

**Type DP ... W55** 





For use with ACT Stacking Bolts AF-HKS ... W55

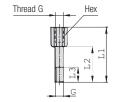
Group		Dimensions	(mm/in)		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1A	1					
2	2	M6	5 .20	10 .39	MUS-HKS-M6-W55	25
3	3					

## Rost

Group							Ordering Code	Packaging Unit
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DF-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
3	3	1.89	1.30	1.18	.12	.28	DF-3-W33	20

## ACT Stacking Bolt Type AF-HKSK ... W55





For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group		Dime	nsions (	mm/in)			Ordering Code	<b>Packaging Unit</b>
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1A	1	M6	44	30	12	11	AF-HKSK-1A-M-W55	25
IA	'	IVIO	1.73	1.18	.47	.43	AF-HKSK-IA-IWI-WSS	20
2	2	M6	54	40	12	11	AF-HKSK-2-M-W55	25
2		IVIO	2.13	1.57	.47	.43	AI -IIKOK-Z-WI-WJJ	20
3	3	M6	54	40	12	11	AF-HKSK-3-M-W55	25
3	3	IVIO	2.13	1.57	.47	.43	AF-IIKSK-3-IVI-W33	20

## ACT Safety Locking Plate Type SIG ... ACT-W55





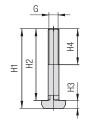


Group		Dimens	sions (mm	/in)		Ordering Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1A	4	33	28	11,2	2	SIG-1A-ACT-W55	25
IA	ļ !	1.30	1.10	.44	.08	SIG-TA-ACT-W33	20
2	2	39	28	11,2	2	SIG-2-ACT-W55	25
	2	1.54	1.10	.44	.08	31G-2-AG1-W33	20
3	3	47	28	11,2	2	SIG-3-ACT-W55	25
٥	٥	1.85	1.10	.44	.08	31U-3-AU1-W33	20

## ACT Hammerhead Bolt Type HKSK ... W55









Group		Dim	ensio	1s ( <sup>mm</sup> /	in)				Ordering Code	Packaging Unit
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
1A	1	M6	29,3	25	4,3	20	6,1	13,3	HKSK-M6x25-W55	25
IA	'	IVIO	1.15	.98	.17	.79	.24	.52	HK3K-W0X25-W55	20
2	2	M6	36,3	32	4,3	20	6,1	13,3	HKSK-M6x32-W55	25
2	2	IVIO	1.43	1.26	.17	.79	.24	.52	HK3K-W0X3Z-W33	20
3	3	M6	39,3	35	4,3	20	6,1	13,3	HKSK-M6x35-W55	25
٥	J	IVIO	1.55	1.38	.17	.79	.24	.52	ULOV-INIDX33-M33	20





### **ACT Mounting Hardware** Multi-Level Installation in Field Trays /

Cable Ladders (with Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 2 ACT Self-Locking Nuts MUS-HKS ... W55
- 1 ACT Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 ACT Hammerhead Bolts HKSV ... W55

## **ACT Mounting Hardware**

Material Properties and Handling Instructions

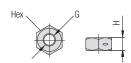
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

## **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

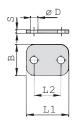






**ACT Cover Plate** 

**Type DP ... W55** 





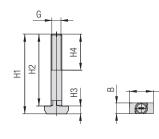
For use with ACT Hammerhead Bolts HKS ... W55

Group	Group Dimensions (mm/in)				Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1A	1					
2	2	M6	5 .20	10 .39	MUS-HKS-M6-W55	25
3	3					

Group		Dimen	sions (		Ordering Code	Packaging Unit		
STAUFF	DIN	L1	L2	В	S	ØD		(in pieces / bag)
1A	1	34	20	30	3	7	DP-1A-W55	25
IA	'	1.34	.79	1.18	.12	.28	DF-IA-W55	20
2	2	40,5	26	30	3	7	DP-2-W55	25
2	2	1.59	1.02	1.18	.12	.28	DP-2-W55	20
3	3	48	33	30	3	7	DP-3-W55	25
٥	3	1.89	1.30	1.18	.12	.28	DL-9-M33	20

### **ACT Hammerhead Bolt** Type HKSV ... W55

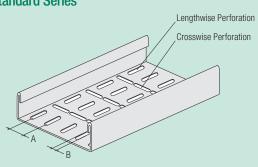




For use with Self-Locking ACT Nuts MUS-HKS ... W55

Group		Dim	ensions	s (mm/in	)		Ordering Code	Packaging Unit			
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)	
1 /	4	MG	68,3	64	4,3	20	6,1	13,3	HKSV-M6x64-W55	0.E	
1A	1	M6	2.69	2.52	.17	.79	.24	.52	UV2A-MOXOH-M22	20	
0	0	MC	80,3	76	4,3	20	6,1	13,3	HIVOV MO-70 WEE	٥٢	
2	2	M6	3.16	2.99	.17	.79	.24	.52	HKSV-M6x76-W55	20	
3	3	M6	87,3	83	4,3	20	6,1	13,3	HIVOV MO-OO WEE	0.5	
3	3	IVIO	3.44	3.27	.17	.79	.24	.52	HKSV-M6x83-W55	20	

### **Suitability Chart for ACT Hammerhead Bolts** in the Standard Series



ACT Hammerhead Bolts are suitable for field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations that meet the following requirements:

- Dimension A: Equal to the bolt center spacing of the clamp assembly
- Dimension B: 6,2 mm ... 7,0 mm / .24 in ... .28 in (Min ... Max)

In case of doubt, please do not hesitate to contact STAUFF prior to field application.





#### Installation on Weld Plate

Required components:

- 2 Hexagon Head Bolts AS...W55
- 1 Cover Plate DP...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the weld plate is suitable for the expected loads.



#### Multi-Level Installation (with Weld Plate)

Required components (for each level) for a maximum of two levels in total:

- 2 Stacking Bolt AF...W55
- 1 Safety Locking Plate SIG...ACT-W55
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer has to be secured by a cover plate and hexagon head bolts. The lower level has to be mounted to a weld plate.

#### **Order Code**

#### SP-110a-ACT-DP-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

#### **Installation with Channel Rail Adaptors**

Required components:

- 2 Hexagon Head Bolts AS...W55
- 1 Cover Plate DP...W55
- 1 Clamp Body (2 Clamp Halves)
- 2 Channel Rail Adaptors CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

#### **Order Code**

#### 110a-ACT-SIG-AF-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

#### Installation in Field Trays / Cable Ladders

Required components:

- 2 Self-Locking Nuts MUS-HKS ... W55
- 1 Cover Plate DP ... W55
- 1 Clamp Body (2 Clamp Halves)
- 2 Hammerhead Bolts HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.



# **Order Code**

#### CRA-110a-ACT-DP-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

### **Order Code**

#### HKS-110a-ACT-DP-MUS-M-W55

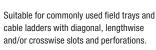
W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### **Multi-Level Installation** in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 2 Self-Locking Nuts MUS-HKS ... W55
- 1 Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Safety Locking Plate SIG...ACT-W55
- 2 Stacking Bolts AF-HKSK...W55
- 1 ACT Clamp Body (2 Clamp Halves) 2 Hammerhead Bolts HKSK ... W55



#### **Order Codes**

Upper Level: HKSK-212.7-ACT-DP-MUS-M-W55 Lower Level: 212.7-ACT-SIG-AF-HKSK-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### **Multi-Level Installation** in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 2 Self-Locking Nuts MUS-HKS ... W55
- 1 Cover Plate DP ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Clamp Body (2 Clamp Halves)
- 2 Hammerhead Bolts HKSV ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

#### **Order Codes**

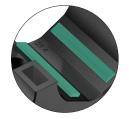
Upper Level: 212.7-ACT (Clamp Body only) Lower Level: HKSV-212.7-ACT-DP-MUS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

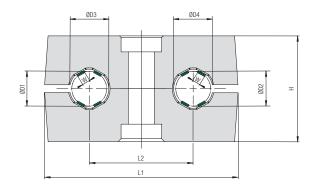
## **E**STAUFF ®

## Twin Series according to DIN 3015, Part 3 **ACT Clamp Body**





Integrated Rubber Strips made of Anti-Corrosion Elastomer (ACE)



## **Ordering Codes**

### **Clamp Body**

\*2\*12.7/12.7-\*ACT

One clamp body consists of two identical clamp halves, each with four integrated rubber strips.

- \* 1st Part of STAUFF Group
- \* Exact outside diameters Ø D1 / Ø D2 (mm)

12.7/12.7

\* Material code

ACT

Group S	Size			Ordering Code	Packaging Unit	Dimer	nsions (	(mm/in)			
STAUFF	DIN	ØD1/ØD (mm)	2 (in)	(2 Clamp Halves)	(in pieces / bag)	ØD3/ ØD4	W	L1	L2	Н	Width
		6 <b>106/06-ACT</b>		106/06-ACT	25	9 .35	1,4	-			
		6,4	1/4	106.4/06.4-ACT	25	9,4	1,5				
1D	1	9,5	3/8	109.5/09.5-ACT	25	12,5 .49	2,2	36 1.42	20 .79	26,6	30 1.18
		10		110/10-ACT	25	13 .51	2,3				
	12 112		112/12-ACT	25	15 .59	2,8					
00		12,7	1/2	212.7/12.7-ACT	25	15,7	3,5	53	29	26,6	30
2D	2	14		214/14-ACT	25	17 .67	3,5	2.09	1.14	1.05	1.18
		18		318/18-ACT	25	.83	3,5				
		19	3/4	319/19-ACT	25	.87	3,5				
3D	3	20		320/20-ACT	25	23 .91	3,5	67 2.64	36 1.42	36,6	30 1.18
		21,3		321.3/21.3-ACT	25	24,3	3,5 .14				
		25,4	1	325.4/25.4-ACT	25	28,4	3,5				

Additional outside diameters and combinations of different outside diameters are available upon request. Please contact STAUFF for further information.







### **ACT Mounting Hardware** Installation on Single Weld Plates

#### **Required components:**

- 1 ACT Hexagon Head Bolt AS...W55
- 1 ACT Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the ACT Weld Plate is suitable for the expected loads.

## Waterial Code W55

## **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. <u>Details: www.stauff.com/act/assembly</u>

## ACT Hexagon Head Bolt Type AS ... W55 (according to DIN 931 / 933)



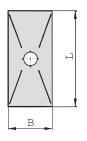


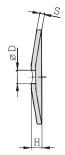
Dimensions applicable only when used with Cover Plate GD and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1D	1	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
2D	2	M8 x 35 M8 x 1.38	AS-M8x35-W55	25
3D	3	M8 x 45 M8 x 1.77	AS-M8x45-W55	25

# **ACT Cover Plate Type GD ... W55**





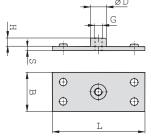


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-	_	_	_

Group		Dimen	sions ( <sup>m</sup>	m/in)		Ordering Code	Packaging Unit		
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)	
1D	1	34	30	7	3	7	GD-1D-W55	25	
טו	1	1.34	1.18	.28	.12	.28	GD-1D-W55	20	
2D	2	52	30	7	3	9	GD-2D-W55	25	
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20	
2D	2	65	30	7	3	9	GD-3D-W55	O.E.	
3D	3	2.56	1.18	.28	.12	.35	GD-3D-W33	25	

### ACT Single Weld Plate Type SP ... W55







	Dime	nsions	(mm/in)				Ordering Code	Packaging Unit	
DIN	G	L	В	S	Н	ØD		(in pieces / bag)	
1	M6	37	30	3	6,5	12	CD 1D M WEE	25	
I	IVIO	1.46	1.18	.12	.26	.47	91-10-M-M33	25	
0	MR	55	30	5	6	14	CD OD M WEE	O.F.	
2	IVIO	2.17	1.18	.20	.24	.55	5P-2D-IVI-W55	25	
2	MR	70	30	5	6	14	CD 2D M WEE	25	
3	IVIO	2.76	1.18	.20	.24	.55	3F-3D-IVI-W33	20	
	<b>DIN</b> 1 2 3	DIN         G           1         M6           2         M8	DIN         G         L           1         M6         37 / 1.46           2         M8         55 / 2.17           3         M8         70	DIN         G         L         B           1         M6         37         30           1.46         1.18         30           2         M8         55         30           2.17         1.18           3         M8         70         30	1 M6 37 30 3 1.46 1.18 .12 2 M8 55 30 5 2.17 1.18 .20 3 M8 70 30 5	DIN         G         L         B         S         H           1         M6         37         30         3         6,5           1,46         1.18         .12         .26           2         M8         55         30         5         6           2,17         1.18         .20         .24           3         M8         70         30         5         6	DIN         G         L         B         S         H         ØD           1         M6         37         30         3         6,5         12           1.46         1.18         .12         .26         .47           2         M8         55         30         5         6         14           2.17         1.18         .20         .24         .55           3         M8         70         30         5         6         14	DIN         G         L         B         S         H         ØD           1         M6         37         30         3         6,5         12           1.46         1.18         .12         .26         .47           2         M8         55         30         5         6         14           2.17         1.18         .20         .24         .55         SP-2D-M-W55           3         M8         70         30         5         6         14         SP-3D-M-W55	



Packaging Unit (in pieces / bag)

25

25

25



### **ACT Mounting Hardware** Multi-Level Installation (with Weld Plate)

Required components for each level:

- 1 ACT Stacking Bolt AF...W55
- 1 ACT Safety Locking Plate SIV...ACT
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer is secured by a cover plate and hexagon head bolts. The lower layer has to be mounted to a weld plate (with a recommended maximum of two levels in total).



### **ACT Mounting Hardware** Material Properties and Handling Instructions

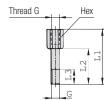
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ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

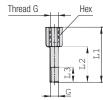
Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

## **ACT Stacking Bolt Type AF ... W55**

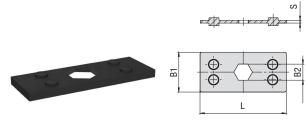








## **ACT Safety Locking Plate** Type SIV ... ACT



Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

	Packaging Unit	Group		Dimens	sions (mm	/in)		Order Code
	(in pieces / bag)	STAUFF	DIN	L	B1	B2	S	
V55	25	1D	1	34	30	11,2	2	SIV-1D-PP-V0-ACT
VOO	20	טו	1	1.39	1.18	.44	.08	SIV-ID-PP-VU-ACI
	25	2D	2	52	30	12,1	2	SIV-2D-PP-VO-ACT
	20	ZU	2	2.05	1.18	.48	.08	SIV-ZD-FF-VU-ACI
	25	3D	3	65	30	12,1	2	SIV-3D-PP-VO-ACT
	20	SD	3	2.56	1.18	.48	.08	SIV-SD-FF-VU-ACI

Group		Dimer	nsions (	<sup>mm</sup> /in)			Order Code	Packaging Unit	
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)	
1D	1	M6	34	20	12	11	AF-1/1A/1D-M-W55	25	
ID	ı	IVIO	1.33	.78	.47	.43	AF-1/1A/1D-W-W33	20	
2D	2	M8	33	20	11	12	AF-2D-M-W55	25	
20	2	IVIO	1.30	.78	.43	.47	AF-ZD-IVI-W33	20	
3D	3	M8	44	29	15	12	AF-3D-M-W55	25	
SD	3	IVIO	1.73	1.14	.59	.47	Ar-3D-IVI-W33	20	





### **ACT Mounting Hardware** Installation with Channel Rail Adaptors

#### **Required components:**

- 1 ACT Hexagon Head Bolt AS...W55
- 1 ACT Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Channel Rail Adaptor CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

## W55

## **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

## ACT Hexagon Head Bolt Type AS ... W55 (according to DIN 931 / 933)



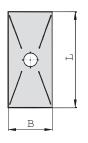


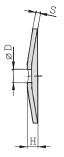
Dimensions applicable only when used with Cover Plate GD and Weld Plate SP

Group STAUFF	DIN	Dimensions (mm/in) Thread G x L	Ordering Code	Packaging Unit (in pieces / bag)
1D	1	M6 x 35 M6 x 1.38	AS-M6x35-W55	25
2D	2	M8 x 35 M8 x 1.38	AS-M8x35-W55	25
3D	3	M8 x 45 M8 x 1.77	AS-M8x45-W55	25

# **ACT Cover Plate Type GD ... W55**





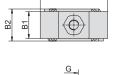


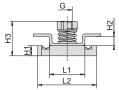
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Group		Dimen	sions ( <sup>m</sup>	m/in)		Ordering Code	Packaging Unit	
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	4	34	30	7	3	7	GD-1D-W55	25
טו	ı	1.34	1.18	.28	.12	.28	GD-1D-W55	20
2D	2	52	30	7	3	9	GD-2D-W55	25
2D	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
2D	2	65	30	7	3	9	GD-3D-W55	O.E.
3D	3	2.56	1.18	.28	.12	.35	GD-3D-W33	25

### Channel Rail Adaptor Type CRA ... W55

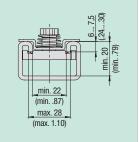






### Suitability Chart for ACT Channel Rail Adaptors in the Twin Series

The STAUFF Channel Rail Adaptor, type CRA, is suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.). The drawing describes the basic dimensional requirements for channel rails to be used with STAUFF Channel Rail Adaptors, type CRA.



In case of doubt, please do not hesitate to contact STAUFF prior to field application.

Group		Dimensions	S (mm/in)								Order Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3	B1	B2	H1	H2	Н3		(in pieces / bag)
4D	4	M6	21	35	40	16	19	6	5,5	20,5	CDA 1 0/1D M WEE	25
1D	1	IVIO	.83	1.38	1.57	.63	.75	.24	.22	.81	CRA-1-8/1D-M-W55	20
2D	2	M8	21	35	38	53	19	9	5,5	23,5	CRA-2-3D-M-W55	25
3D	3	IVIO	.83	1.38	1.50	2.09	.75	.35	.22	.93	GNA-2-3D-M-W55	20



### **ACT Mounting Hardware** Installation in Field Trays / Cable Ladders



#### **Required components:**

- 1 ACT Self-Locking Nut MUS-HKS ... W55
- 1 ACT Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Hammerhead Bolt HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

## **Material Code**

### **ACT Mounting Hardware** Material Properties and Handling Instructions

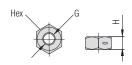
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

## **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

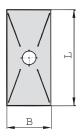


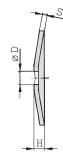




**ACT Cover Plate** 

**Type GD ... W55** 







For use with ACT Hammerhead Bolts HKS ... W55

For use with Self-Locking ACT Nuts MUS-HKS ... W55

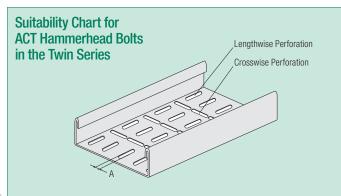
Group		Dimension	ıs ( <sup>mm</sup> / <sub>in</sub> )		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1D	1	M6	5	10	MUS-HKS-M6-W55	25
ID	1	IVIO	.20	.39	INIO2-UK2-INIO-M22	20
2D	2	M8	Mg 6,5 13 Mg 11/2 Mg 11/5		25	
3D	3	IVIO	.26	.51	MUS-HKS-M8-W55	20



Group		Dimen	sions ( <sup>m</sup>	m/in)		Ordering Code	Packaging Unit	
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	1	34	30	7	3	7	GD-1D-W55	25
טו	'	1.34	1.18	.28	.12	.28	GD-1D-W33	25
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
3D	3	65	30	7	3	9	GD-3D-W55	25
30	3	2.56	1.18	.28	.12	.35	GD-3D-W33	20

# **ACT Hammerhead Bolt Type HKS ... W55** 도

	STAINLESS STEEL										
	Group		Dim	ensior	is ( <sup>mm</sup> /i	n)		Ordering Code	<b>Packaging Unit</b>		
1	STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
	40		140	49,3	45	4,3	20	6,1	13,3		0.5
	1D	ı	M6	1.94	1.77	.17	.79	.24	.52	HKS-M6x45-W55	25
	2D	2	M8	49,3	45	4,3	20	6	13,3	HKS-M8x45-W55	25
	20	2	IVIO	1.94	1.77	.17	.79	.24	.52	HK3-W0X45-W55	20
	3D	3	M8	59,3	55	4,3	20	6	13,3	HKS-M8x55-W55	25
	SD	3	IVIO	2.33	2.17	.17	.79	.24	.52		25



ACT Hammerhead Bolts are suitable for field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations that meet the following requirements:

■ Dimension A: 6,2 mm ... 7,0 mm / .24 in ... .28 in (Min ... Max)

In case of doubt, please do not hesitate to contact STAUFF prior to field application.





# **ACT Mounting Hardware**Multi-Level Installation (with Stacking & Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 1 ACT Self-Locking Nut MUS-HKS ... W55
- 1 ACT Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Stacking Bolt AF-HKSK...W55
- 1 ACT Safety Locking Plate SIV...ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Hammerhead Bolt HKSK ... W55

## Waterial Code W55

## **ACT Mounting Hardware**Material Properties and Handling Instructions

ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

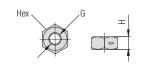
ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps.

<u>Details: www.stauff.com/act/assembly</u>

# All-Metal Self-Locking ACT Nut Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

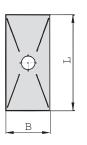






**ACT Cover Plate** 

**Type GD ... W55** 







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For use with ACT Stacking Bolts AF-HKS ... W55

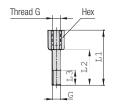
Group		Dimension	IS ( <sup>mm</sup> / <sub>in</sub> )		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1D	1	M6	5	10	MUS-HKS-M6-W55	25
ID	'	IVIO	.20	.39	INIO2-UK2-INIO-M22	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	INIOS-INIS-INIO-WOO	20

## Rost

Group Dimensions (mm/in)							Ordering Code	Packaging Unit
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	4	34	30	7	3	7	GD-1D-W55	O.E.
עו	1	1.34	1.18	.28	.12	.28	GD-1D-W55	25
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
20	2	65	30	7	3	9	GD-3D-W55	O.F.
3D	3	2.56	1.18	.28	.12	.35	นบ-งบ-พจจ	25

## ACT Stacking Bolt Type AF-HKSK ... W55

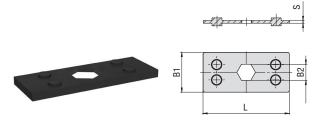




For use with Self-Locking ACT Nuts MUS-HKS ... W55

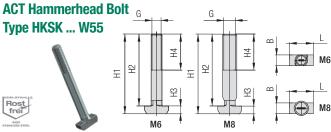
INOX STAINLESS STEEL						•		
Group		Dimen	sions ( <sup>m</sup>	m/in)			Order Code	Packaging Unit
STAUFF	DIN	G	L1	L2	L3 min.	Hex		(in pieces / bag)
1D	1	M6	49	35	12	11	AF-HKSK-1D-M-W55	25
וט	1	IVIO	1.93	1.38	.47	.43	AF-IIKSK-ID-WI-WSS	23
2D	2	M8	50	37	11	12	AF-HKSK-2D-M-W55	25
20	2	IVIO	1.97	1.47	.43	.47	AL-UKOK-SD-IM-MOO	20
3D	3	M8	61	46	15	12	AF-HKSK-3D-M-W55	25
טט	J	IVIO	2.40	1.81	.59	.47	AL-UV9V-3D-MI-M33	20

## ACT Safety Locking Plate Type SIV ... ACT



Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

Group		Dimens	ions (mm/	'in)		Order Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1D	1	34	30	11,2	2	SIV-1D-PP-V0-ACT	25
ID	1	1.39	1.18	.44	.08	SIV-ID-FF-VU-ACI	20
2D	2	52	30	12,1	2	SIV-2D-PP-V0-ACT	25
20	2	2.05	1.18	.48	.08	31V-2D-FF-VU-AG1	20
3D	0	65	30	12,1	2	SIV-3D-PP-V0-ACT	25
SD	3	2.56	1.18	.48	.08	31V-3D-FF-VU-ACT	20



Group		Dim	ension	is (mm/i	n)				Ordering Code	Packaging Unit
STAUFF	DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
1D	4	MC	29,3	25	4,3	20	6,1	13,3	HKSK-M6x25-W55	O.E.
טו	ı	M6	1.15	.98	.17	.79	.24	.52	UK9K-MOX29-M39	20
2D	2	M8	32,3	28	4,3	20	6	13,3	HKSK-M8x28-W55	O.E.
20	2	IVIO	1.27	1.10	.17	.79	.24	.52	UK9K-INIQX56-M33	20
3D	3	M8	42,3	38	4,3	20	6	13,3	HKSK-M8x38-W55	O.E.
JU	3	IVIO	1.67	1.50	.17	.79	.24	.52	UKSK-MOX30-M33	20





### **ACT Mounting Hardware** Multi-Level Installation in Field Trays / Cable Ladders (with Hammerhead Bolts)

Required components (for a recommended maximum of two levels in total):

- 1 ACT Self-Locking Nut MUS-HKS ... W55
- 1 ACT Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Safety Locking Plate SIV-ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 ACT Hammerhead Bolt HKSV ... W55

### **ACT Mounting Hardware** Material Properties and Handling Instructions

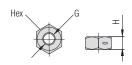
ACT Mounting Hardware is made of Stainless Steel V4A (Material Code: W55) with enhanced corrosion resistance by practically excluding metallic and non-metallic impurities during production, processing and handling.

ACT Mounting Hardware is always delivered in hermetically-sealed quality storage bags with 25 pieces each to avoid contamination during transport.

Always make sure that ACT Mounting Hardware is stored separately from carbon steel and any other metals, and that appropriate tools are used to assemble the clamps. Details: www.stauff.com/act/assembly

## **All-Metal Self-Locking ACT Nut** Type MUS-HKS ... W55 (similar to DIN 980 / Biloc)

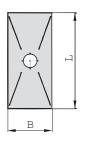


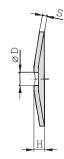




**ACT Cover Plate** 

**Type GD ... W55** 







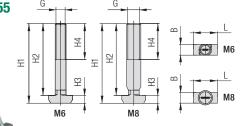
For use with ACT Hammerhead Bolts HKS ... W55

Group		Dimension	IS ( <sup>mm</sup> / <sub>in</sub> )		Ordering Code	Packaging Unit
STAUFF	DIN	Thread G	Н	Hex		(in pieces / bag)
1D	1	M6	5	10	MUS-HKS-M6-W55	25
IU	1	IVIO	.20	.39	INIO9-UK9-INIO-M33	20
2D	2	M8	6,5	13	MUS-HKS-M8-W55	25
3D	3	IVIO	.26	.51	CCM-QIM-CVII-CVIII	20

Group Dimensions (mm/in)							Ordering Code	Packaging Unit
STAUFF	DIN	L	В	Н	S	ØD		(in pieces / bag)
1D	1	34	30	7	3	7	GD-1D-W55	25
טו	ו ע		1.18	.28	.12	.28	GD-1D-W33	25
2D	2	52	30	7	3	9	GD-2D-W55	25
20	2	2.05	1.18	.28	.12	.35	GD-2D-W55	20
2D	2	65	30	7	3	9	CD 2D WEE	O.F.
3D 3	3	2.56	1.18	.28	.12	.35	GD-3D-W55	25

#### **ACT Hammerhead Bolt**



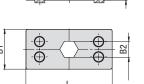


For use with Self-Locking ACT Nuts MUS-HKS ... W55

	Dim	ensior	is ( <sup>mm</sup> /i	n)				Ordering Code	Packaging Unit
DIN	G	H1	H2	Н3	H4 min	В	L		(in pcs. / bag)
4	MC	76,3	72	4,3	20	6,1	13,3	HIVOV MOVZO WEE	0E
ı	IVIO	3.00	2.83	.17	.79	.24	.52	HKSV-M6x72-W55	20
2	MO	77,3	73	4,3	20	6	13,3	UVCV MOV72 WEE	25
2	IVIO	3.04	2.87	.17	.79	.24	.52	HK3V-W0X73-W33	20
2	MO	97,3	93	4,3	20	6	13,3	HIVEV MOVOS WEE	0E
3	IVIO	3.83	3.66	.17	.79	.24	.52	UV2A-M9X83-M33	20
	<b>DIN</b> 1 2 3	DIN         G           1         M6           2         M8	$\begin{array}{c cccc} \textbf{DIN} & \textbf{G} & \textbf{H1} \\ 1 & M6 & \hline & 76,3 \\ 3.00 \\ 2 & M8 & \hline & 77,3 \\ 3.04 \\ 3 & M8 & \hline & 97,3 \\ \end{array}$	DIN         G         H1         H2           1         M6         76,3         72           3.00         2.83           2         M8         77,3         73           3.04         2.87           3         M8         97,3         93	1 M6 76,3 72 4,3 3.00 2.83 .17 2 M8 77,3 73 4,3 3.04 2.87 .17 3 M8 97,3 93 4,3	DIN         G         H1         H2         H3         H4 min           1         M6         76,3         72         4,3         20           3.00         2.83         .17         .79           2         M8         77,3         73         4,3         20           3.04         2.87         .17         .79           3         M8         97,3         93         4,3         20	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	DIN         G         H1         H2         H3         H4 min         B         L           1         M6         76,3         72         4,3         20         6,1         13,3           3.00         2.83         .17         .79         .24         .52           2         M8         77,3         73         4,3         20         6         13,3           3         .04         2.87         .17         .79         .24         .52           3         M8         97,3         93         4,3         20         6         13,3	DIN         G         H1         H2         H3         H4 min         B         L           1         M6         76,3         72         4,3         20         6,1         13,3           3.00         2.83         .17         .79         .24         .52           2         M8         77,3         73         4,3         20         6         13,3           3.04         2.87         .17         .79         .24         .52           3         M8         97,3         93         4,3         20         6         13,3           HKSV-M8x93-W55

## **ACT Safety Locking Plate** Type SIV ... ACT





Made of flame-retardant PP-V0 plastic material; tested and V0 classified according to UL 94

Group		Dimens	sions (mm	/in)		Order Code	Packaging Unit
STAUFF	DIN	L	B1	B2	S		(in pieces / bag)
1D	4	34	30	11,2	2	SIV-1D-PP-V0-ACT	25
טו		1.39	1.18	.44	.08	SIV-ID-PP-VU-ACI	25
2D	2	52	30	12,1	2	SIV-2D-PP-V0-ACT	25
20	2	2.05	1.18	.48	.08	51V-2D-PP-VU-AC1	20
2D	2	65	30	12,1	2	SIV-3D-PP-V0-ACT	25
3D	3	2.56	1.18	.48	.08	SIV-SD-PP-VU-ACI	20





#### Installation on Weld Plate

Required components:

- 1 Hexagon Head Bolt AS...W55
- 1 Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Single Weld Plate SP...W55

Before welding, always make sure that the designated position of the weld plate is suitable for the expected loads.



#### Multi-Level Installation (with Weld Plate)

Required components (for each level) for a maximum of two levels in total:

- 1 Stacking Bolt AF...W55
- 1 Safety Locking Plate SIG...W55
- 1 ACT Clamp Body (2 Clamp Halves)

The upper layer has to be secured by a cover plate and hexagon head bolts. The lower level has to be mounted to a weld plate.

#### **Order Code**

#### SP-110/10-ACT-GD-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### **Installation with Channel Rail Adaptors**

Required components:

- 1 Hexagon Head Bolt AS...W55
- 1 Cover Plate GD...W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Channel Rail Adaptor CRA...W55

Suitable for various brands and types of channel rails (including Halfen, Hilti, Unistrut® etc.).

**Order Code** 

### 110/10-ACT-SIV-ACT-AF-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



### Installation in Field Trays / Cable Ladders

Required components:

- 1 Self-Locking Nut MUS-HKS ... W55
- 1 Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Hammerhead Bolt HKS ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

### **Order Code**

#### CRA-110/10-ACT-GD-AS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### HKS-110/10-ACT-GD-MUS-M-W55

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.



#### **Multi-Level Installation** in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 1 Self-Locking Nut MUS-HKS ... W55
- 1 Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Stacking Bolt AF-HKSK...W55
- 1 Safety Locking Plate SIV...ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Hammerhead Bolt HKSK ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.



#### **Multi-Level Installation** in Field Trays / Cable Ladders

Required components (for a maximum of two levels in total):

- 1 Self-Locking Nut MUS-HKS ... W55
- 1 Cover Plate GD ... W55
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Safety Locking Plate SIV-ACT
- 1 ACT Clamp Body (2 Clamp Halves)
- 1 Hammerhead Bolt HKSV ... W55

Suitable for commonly used field trays and cable ladders with diagonal, lengthwise and/or crosswise slots and perforations.

#### **Order Codes**

Upper Level: HKSK-212.7/12.7-ACT-GD-MUS-M-W55 Lower Level: 212.7/12.7-ACT-SIV-ACT-AF-HKSK-M-W55

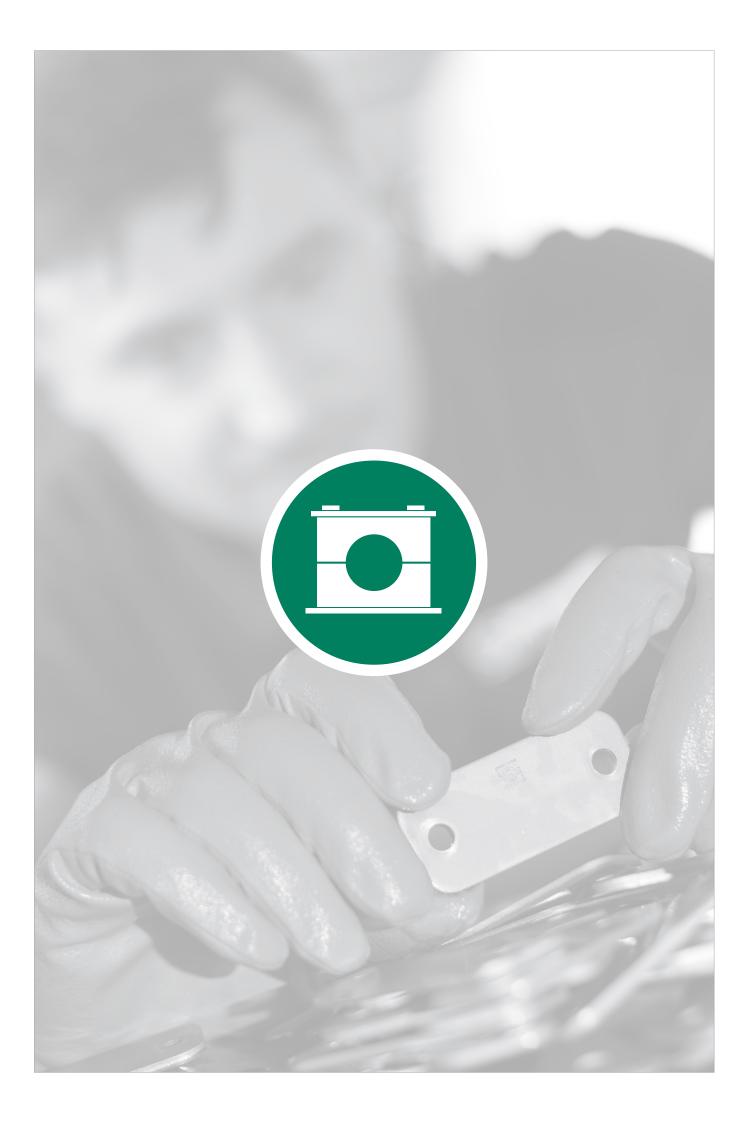
W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.

#### **Order Codes**

Upper Level: HKSV-212.7/12.7-ACT-GD-MUS-M-W55

Lower Level: 212.7/12.7-ACT-SIV-ACT

W55 is the recommended option for metal hardware to be used with STAUFF ACT Clamps.





	Introduction	92
	Weld Stud with Female Thread SWG-SF	92
	Distance Plate for DIN 3015 Clamps SWG-DIP	93
	Cable Tie Holder SWG-CTH-11-M6	93
	Cable Tie / Tension Belt Holder SWG-CTH-30-M6-1	93
	Cable Tie / Tension Belt Holder SWG-CTH-30-M6-2	93
	Starterkit SWG-W106-Starterkit	94
	Weld Inverter SWG-W106	94
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<b>D</b>	Distance Adaptor SWG-AGS	95
	Distance Tube DIT-SR6-SWG	95
	Stud Retainer SWG-SR6	95
	Ground Cable SWG-GC	95

### **STAUFF SWG Stud Welding System**

In many areas, stud welding is considered to be the most economic fastening method for components and is sometimes even the only technically feasible solution. Because the stud is joined with the substructure over the entire surface of the stud, a high strength of the ioint can be achieved.

STAUFF is now using this proven principle for the installation of pipe, tube, hose and cable clamps in the Standard Series (according to DIN 3015, part 1) as well as in the Twin Series (according to DIN 3015, part 3) with M6 mounting thread, where female threaded weld studs replace the regular weld plates; distance plates made from plastic provide the necessary spacing between the clamp bodies and the substructure.

If required, the system can also be adopted for alternative fastening methods, e.g. for clamping belts, cable ties or conduit hoses.

In addition to the individual components - weld studs, distance plates, clamp bodies and metal hardware required - STAUFF also provides the correspondingly designed assembly tools such as the weld inverter and the weld gun with distance tube, stud retainer and distance adaptor for DIN 3015 clamps. The lightweight and compact weld inverter works without high-voltage current.

Thanks to increased productivity and flexibility for the installation of clamps, the system offers considerable savings potentials for users with significant processing volumes, especially when working in horizontal or overhead position. The amount of rework on welding locations can be significantly decreased, and material distortion is reduced to a minimum through low thermal stress

The joint of the weld stud with the substructure impresses in particular with a high degree of strength and safety, which is at least at the same level as for regular weld plates.

- Developed and optimised to the functions of original STAUFF Clamps in the Standard Series (DIN 3015, Part 1)
- Versatile combination and adaptation options available (e.g. fastening elements for conduit hoses, clamping belts and cable ties)
- All installation options are fully covered by only one weld stud
- Significant time and cost savings by a quicker welding process and reduced rework on welding locations
- Material distortion reduced to a minimum through low thermal stress (particularly significant when handling thin metal sheets)
- High degree of safety and protection against corrosion due to a welded joint over the whole surface
- Lightweight and compact designed welding inverter
- By default no shielding gas or ceramic ferrule required
- Works without high-voltage current





- 1 Clamp body and standard mounting hardware according to DIN 3015-1/3 (Standard and Twin Series)
- 2 Distance plate
- 3 Weld studs with female threads
- 4 Base material and surface suitable for stud welding



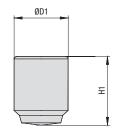
Reduction of the assembly time per clamp\*

> Assembly using the stud welding system 23%

\*For a typical assembly procedure in production environments.

### **Weld Stud with Female Thread Type SWG-SF**





### **Ordering Codes**

**Weld Stud** \*SWG-SF-\*M6x11x14-\*W124

\* Weld Stud with Female Thread

\* Thread code Metric ISO thread M6x11x14

Unified coarse

UNC1/4-20x11x14 (UNC) thread

\* Material code Steel 4.8 with galvanised

> copper coating C1E (DIN EN ISO 4042)

-	-		W1	24	

SWG-SF

Group		Dimensions (mm/in)			Order Codes	Packaging Units
STAUFF	DIN	Thread G	ØD1	H1	(Standard Options)	(in pcs. / per bag)
		M6	11	14	SWG-SF-M6x11x14-W124	100
18 08	IVIO	.43	.55	3WU-31 -WUX11X14-W124	100	
1 0	1 8 0 8	1/4-20 UNC	11	14	SWG-SF-UNC1/4-20x11x14-W124	100
	.43 .55	3Wu-3F-UNG1/4-2UX11X14-W124	100			

Alternative materials are available upon request. Please contact STAUFF for further information.

Maximum torque rating: 6 N·m / 4.43 ft·lb. Specific series can further limit the torque rating. The maximum loads in pipe direction listed on page 161 reduce accordingly. In case of doubt, please contact STAUFF in advance.

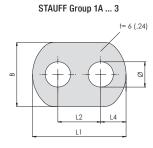


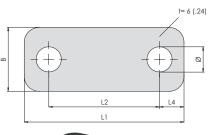


## Distance Plate for DIN 3015 Clamps Type SWG-DIP

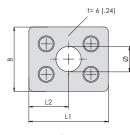
STAUFF Group 1

= 6 (.24)





STAUFF Group 4 ... 8



STAUFF Group 1D







Group		Pipe/Tube-Ø (mm/in)	Dimens	sions ( <sup>mm</sup>	¹/ <sub>in</sub> )			Order Codes	Packaging Units
STAUFF	DIN	Clamp Body	L1	L2*	L4	В	Ø	(Standard Options)	(in pcs. / per bag)
1	0	6 12	29	10,5	10,5	30	11,8	SWG-DIP-1-PP-BK	25
'	U	.2448	1.14	.41	.41	1.18	.46	SWU-DIF-I-FF-BK	23
1A	1	6 12	43,5	20	11,8	30	11,8	SWG-DIP-1A-PP-BK	25
IA	1	.2448	1.71	.79	.46	1.18	.46	SWU-DIF-IA-FF-DK	25
2	2	12,7 18	48,5	26	11,3	30	11,8	SWG-DIP-2-PP-BK	25
2		.5071	1.90	1.02	.44	1.18	.46	SWU-DIF-Z-FF-DK	25
3	3	19 25,4	56,5	33	11,8	30	11,8	SWG-DIP-3-PP-BK	25
3	3	.75 1.00	2.22	1.30	.46	1.18	.46	SWU-DIF-S-FF-DK	25
4	4	26,9 32	62	40	11	30	11,8	SWG-DIP-4-PP-BK	25
4	4	1.06 1.26	2.44	1.57	.43	1.18	.46	SWU-DIF-4-FF-DK	25
5	5	32 42	75	52	11,5	30	11,8	SWG-DIP-5-PP-BK	25
5	3	1.26 1.65	2.95	2.05	.45	1.18	.46	SWU-DIF-3-FF-DK	25
6	6	44,5 54	88	66	11	30	11,8	SWG-DIP-6-PP-BK	25
O	U	1.75 2.12	3.46	2.60	.43	1.18	.46	SWU-DIF-O-FF-DK	23
7	7	57,2 76,1	121	94	13,5	30	11,8	SWG-DIP-7-PP-BK	10
'	1	2.25 3.00	4.76	76 3.70 .53	.53	1.18	.46	SWU-DIF-7-FF-DK	10
8	8	88,9 102	147	120	13,5	30	11,8	SWG-DIP-8-PP-BK	10
U	U	3.50 4.00	5.78	4.72	.53	1.18	.46	SWU-DII -O-FF-DK	10
1D	1	6 12	37	18,5	-	30	11,8	SWG-DIP-1D-PP-BK	25
ID	1	.2448	1.45	.73	-	1.18	.46	SWU-DIF-ID-FF'-DK	23

Ordering Codes

Distance Plate \*SWG-DIP\*2\*PP-BK

\* Distance Plate SwG-DIP

\* STAUFF Group 2

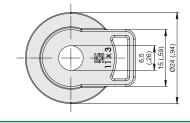
\* Material code Polypropylene (Colour: Black) PP-BK

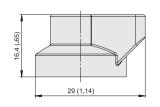
\*  $\pm 0,1(.003)$ 

Material: Polyamide (reinforced)

Suitable for hexagon socket button cap screws M6x12 (ISO 7380-1)

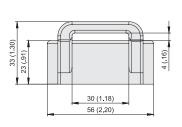
Standard packaging unit: 25 pcs.

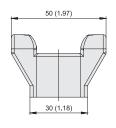


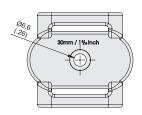


### Cable Tie Holder Type SWG-CTH-11-M6









Cable Tie / Tension Belt Holder Type SWG-CTH-30-M6-1



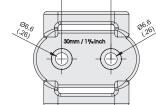
Material: Polyamide (reinforced)

Suitable for socket cap screws M6x12 (ISO 4762) or hexagon socket button cap screws M6x12 (ISO 7380-1)

Standard packaging unit: 25 pcs.

Dimensional drawings: All dimensions in mm (in).





26 (1.02)





### **Starterkit Type SWG-WI06-Starterkit**



#### Starterkit including:

- 1 Weld Inverter SWG-WI06
- 1 Weld Gun SWG-WG
- 1 Ground Cable SWG-GC
- 1 Distance Tube **DIT-SR6-SWG-WG30** (for STAUFF Groups 2 to 8)
- 5 Stud Retainer SWG-SR6
- 1 Toolkit (Box Spanner/Hex Wrench)
- Operating Manual (English / German)

#### **Required Accessories:**

- Distance Adaptor SWG-AGS-... for DIN 3015 Clamps
- Weld Stud SWG-SF
- Distance Tube DIT-SR6-SWG-WG25 (for STAUFF Group 1A, if required)

### **Weld Inverter Type SWG-WI06**



#### **Characteristics**

- Works without high-voltage current
- No heavy extension cords required
- Extremely powerful and robust
- Compact in design
- Lightweight with only 18 kg / 40 lbs
- Welding current: 100 ... 650 A (stepless control)
- Welding time: 5 ... 200 ms (stepless control)
- Connection Cable: 3 m / 9.84 ft

#### **Required Accessories**

- Weld Gun **SWG-WG** and Accessories
- Ground Cable SWG-GC

#### **Technical Data**

#### **Primary Power**

■ 100 V to 240 V, 1 phase, 50/60 Hz, 16 AT

#### **Primary Plug**

■ 16 A 2-pin grounded safety plug (plug type F CEE 7/4) IP Code

■ IP 44 (also permits operation outdoors)

#### **Ambient Temperature Limits**

- ±0 °C ... +40 °C / +32 °F ... +104 °F
- Dimensions (L x W x H)
- 474 x 337 x 351 mm / 18.66 x 13.27 x 13.82 in

## **Weld Gun - Arc Ignition Type SWG-WG**



#### **Characteristics**

- Compact in design
- Lightweight with only 0,8 kg / 1.8 lbs (without cable)
- Ergonomic handle
- Comfortable setup
- Connection Cable: 5 m / 16.40 ft

#### **Required Accessories**

- Distance Adaptor SWG-AGS-... for DIN 3015 Clamps
- Distance Tube **DIT-SR6-SWG-WG30** (for STAUFF Groups 2 to 8)
- Distance Tube DIT-SR6-SWG-WG25 (for STAUFF Group 1A)
- Stud Retainer SWG-SR6

#### **Technical Data**

- Adjustment range 3 mm / .11 in, lockable Workplace noise level
- Up to 90 dB (A) may occur during welding  $\textbf{Dimensions} \; (L\; x\; W\; x\; H)$
- 200 x 65 x 140 mm / 7.87 x 2.56 x 5.51 in (without cable, without distance tube)





## **Distance Adaptor Type SWG-AGS**

Group STAUFF	DIN	for use with	Ordering Codes
1	0	Distance Tube Type A	NO DISTANCE ADAPTOR REQUIRED
1A	1	Distance Tube Type A	SWG-AGS-1A
2	2	Distance Tube Type B	SWG-AGS-2
3	3	Distance Tube Type B	SWG-AGS-3
4	4	Distance Tube Type B	SWG-AGS-4
5	5	Distance Tube Type B	SWG-AGS-5
6	6	Distance Tube Type B	SWG-AGS-6
7	7	Distance Tube Type B	SWG-AGS-7
8	8	Distance Tube Type B	SWG-AGS-8
1D	1D	Distance Tube Type A	NO DISTANCE ADAPTOR REQUIRED



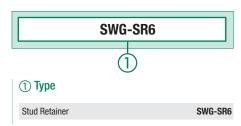
## **Distance Tube Type DIT-SR6-SWG**

Туре	for use with	Ordering Codes
A	Distance Adaptor SWG-AGS-1A	DIT-SR6-SWG-WG25
В	Distance Adaptor SWG-AGS-28	DIT-SR6-SWG-WG30



## **Stud Retainer Type SWG-SR6**

#### **Order Code**

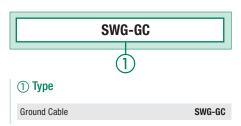


Standard packaging unit: 5 pcs.



## **Ground Cable Type SWG-GC**

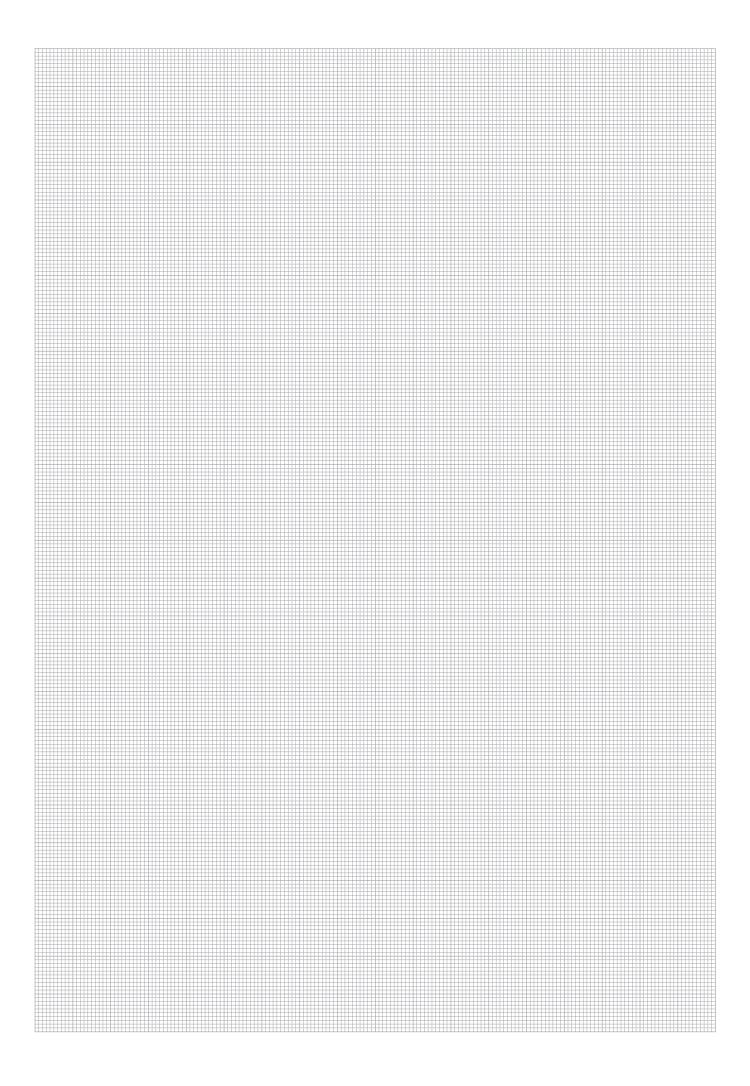
### **Order Code**



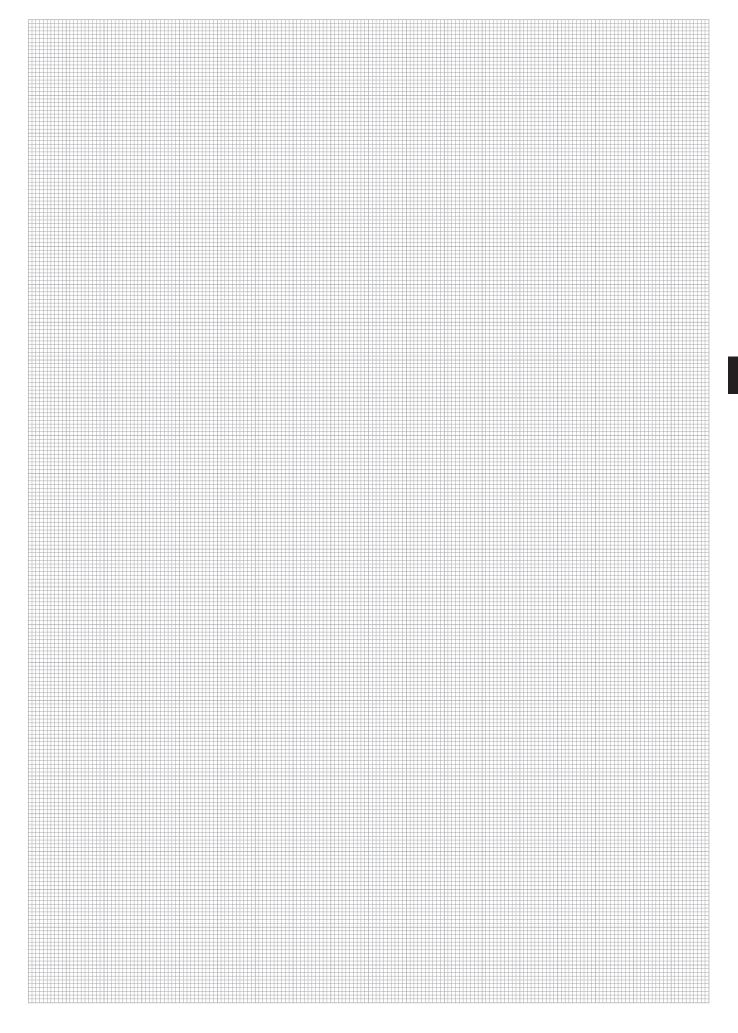
### Characteristics

- Cable length: 5 m / 16.40 ft
- Equipped with 2 vice grips 10"



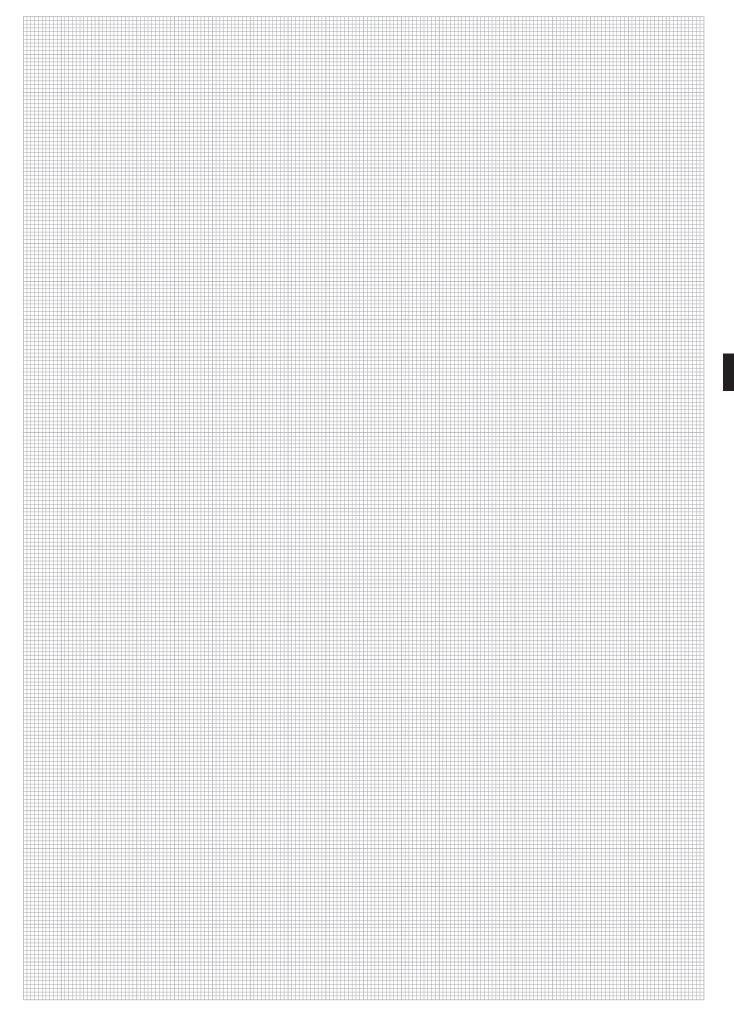




















10.5	Machined Versions	104
_		
10000	Injection Moulded Version	106
	Metal Versions and Accessories	107
	Enquiry Form for Custom-Designed Special Clamps	108

### **Machined Versions**

Custom-designed clamping systems for pipes, tubes, hoses, cables and other components according to customer's  $% \left( 1\right) =\left( 1\right) \left( 1\right) \left$ specifications or based on STAUFF developments, made of thermoplastics, metals and non-ferrous metals.















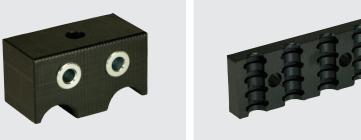








































## STAUFF

# **Injection Moulded Versions** (Flexi Clamps)

Custom-designed clamping systems for pipes, tubes, hoses, cables and other components according to customer's specifications or based on STAUFF developments, made of Polypropylene, Polyamide and other thermoplastics.



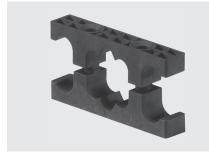
















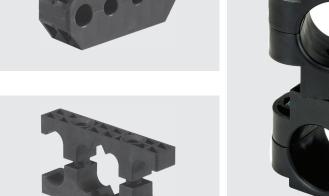






























## Metal Versions and Accessories

Metal versions of custom-designed clamping systems for pipes, tubes, hoses, cables and other components as well as accessories such as weld plates, cover plates, bolts as well as elastomer inserts.









## **Enquiry Form for Custom-Designed Special Clamps**

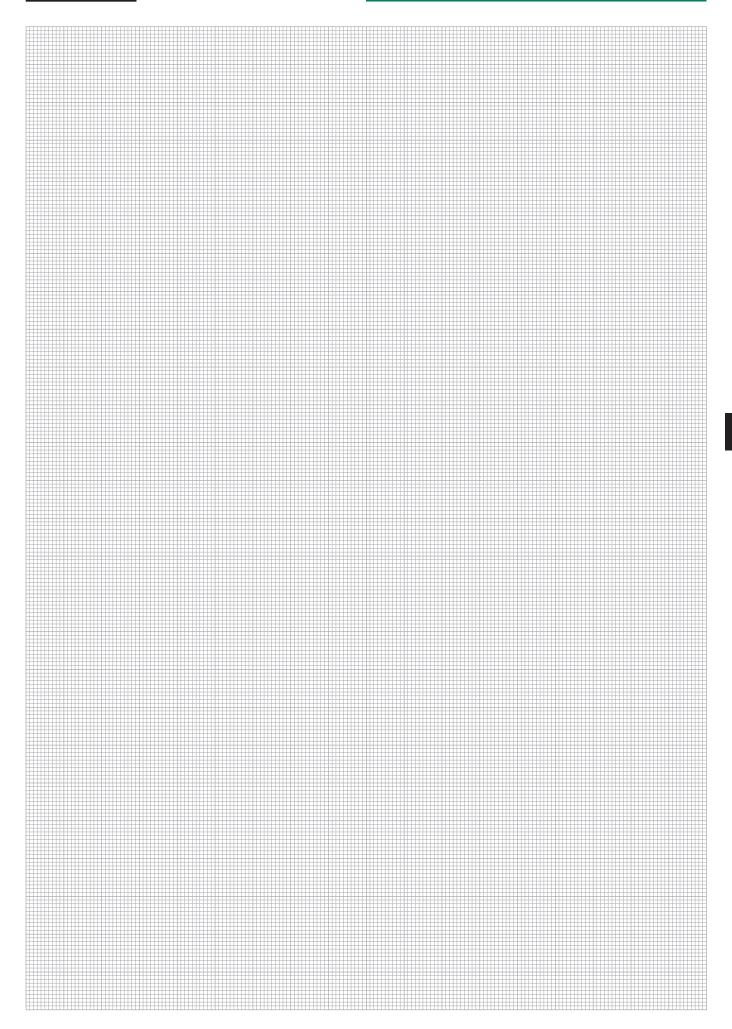
Please use the following form as a guideline when preparing an enquiry for a custom-designed special clamp. Scan or copy the page from the catalogue, print and complete it with  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right)$ 

as much information as possible, before sending it by email of fax to the closest STAUFF branch office. If possible, please also provide a sketch / drawing and let us know the quanti-

ties required, and if the enquiry is for a one-time or recurring demand. We look forward to hearing from you, and are always available for consultation, when required.

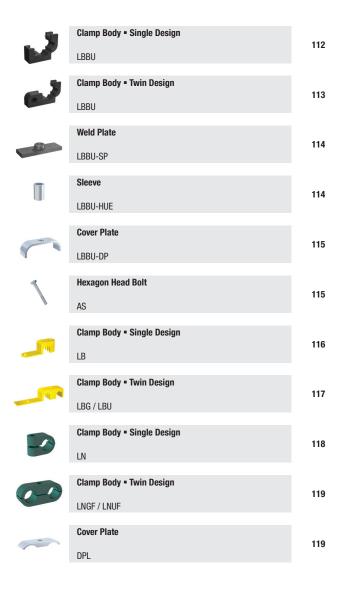
<b>Application Information</b>					
Area of use	□ Indoor		□ Outdo	or	
Ambient temperature	Lowest	_ 🗆 °C / 🗆 °F	Highest _	□ °C / □ °F	
Resistance against particular media	□ No		☐ Yes	☐ Mineral oils ☐ Other oils ☐ Benzine ☐ Weak acids ☐ Solvents ☐ Alcohols ☐ Seawater ☐ Other media	
Fire protection requirements	□ No		☐ Yes	☐ UL94 ☐ BS 6853 ☐ Other standard	
Material preference for the clamp body	y □ Polypropylene □ Aluminium □ Stainless Steel [	□ V2A □ V4A	☐ Polyamide ☐ Steel ☐ Other material		
Design Information					
Type of line	☐ Pipe / tube ( <u>fixed</u> installation) ☐ Hose ☐ Cable ☐ Other components		☐ Pipe / tube ( <u>sliding</u> installation) ☐ Conduit Hose ☐ Mix of different types of lines		
Maximum dimensions of clamp body	Length	widthx H	leight	🗆 mm / 🗆 inch	
Total number of lines					
Diameters per line	Line 1		Further comments		
Preferred centre distance of the lines			mm / 🗆 inch		
Preferred number of screw holes					
Information on Mounting Hardw	are				
Preferred type of bolts	☐ Hexagon head b☐ Socket cap crew☐ Socket cap crew☐	s (with cover plate)	☐ with n	netric threads	
Preferred type of installation	☐ Welding (using a☐ Direct screw-fas☐ Mounting rail (us		☐ Adhes	ng (using weld studs) sive bonded fastening	
Material preference for the hardware	☐ Steel		☐ Stainl	ess Steel 🗆 V2A 🗆 V4A	









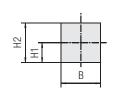


## STAUFF ®

#### Clamp Body • Single Design Type LBBU







Size 2 in slotted design

Size 1 and 3 with film hinge

#### **Ordering Codes**

Clamp Body	*LBBU-*1*0	06-*SA-*M8/U5/16
------------	------------	------------------

* Light Series LBBU	LBBU
* STAUFF Group	1
* Exact outside diameter Ø D1 (mm)	06
* Material code (see below)	SA
* Thread code (suitable for bolts M8 and U5/16)	M8/U5/16

#### **Standard Materials**



Thermoplastic Elastomer (87 Shore-A) Colour: Black Material code: **SA** 

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Product Features**

- Compact and light-weight design for applications in which space is limited
- Available in 3 different sizes and covering all standard metric and imperial diameters between 4 mm and 32 mm
- Vibration-damping and noise-reducing clamp body material with UV, ozone and weathering-resistant characteristics
- Embedded metal sleeve to ensure stability of the clamp assembly

Group	Pipe / Tube / Hose B		Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/ <sub>in</sub> )								
STAUFF	(mm)	(in)	(in)		Ø D2	Ø D3	L1	L2	L3	H1	H2	В	
	6			LBBU-106-SA-M8/U5/16									
	6,4	1/4		LBBU-106.4-SA-M8/U5/16									
	8	5/16		LBBU-108-SA-M8/U5/16									
1	9,5	3/8		LBBU-109.5-SA-M8/U5/16	12	14	34	15	9	10	20	20	
•	10		1/8	LBBU-110-SA-M8/U5/16	.47	.55	1.34	.59	.35	.39	.79	.79	
	11			LBBU-111-SA-M8/U5/16									
	12			LBBU-112-SA-M8/U5/16									
	12,7	1/2		LBBU-112.7-SA-M8/U5/16									
	10		1/8	LBBU-210-SA-M8/U5/16									
	11			LBBU-211-SA-M8/U5/16									
	12			LBBU-212-SA-M8/U5/16									
	12,7	1/2		LBBU-212.7-SA-M8/U5/16									
	13,5		1/4	LBBU-213.5-SA-M8/U5/16									
2	14			LBBU-214-SA-M8/U5/16	20	14	39	18	9	12	24	20	
2	15			LBBU-215-SA-M8/U5/16	.47	.55	1.54	.71	.35	.47	.94	.79	
	16	5/8		LBBU-216-SA-M8/U5/16									
	17,2		3/8	LBBU-217.2-SA-M8/U5/16									
	18			LBBU-218-SA-M8/U5/16									
	19	3/4		LBBU-219-SA-M8/U5/16									
	20			LBBU-220-SA-M8/U5/16									
	21,3			LBBU-321.3-SA-M8/U5/16									
	22	7/8		LBBU-322-SA-M8/U5/16									
	23			LBBU-323-SA-M8/U5/16									
3	25			LBBU-325-SA-M8/U5/16	12	14	57,5	23,5	15	20	40	30	
J	25,4	1		LBBU-325.4-SA-M8/U5/16	.47	.55	2.26	.93	.59	.79	1.57	1.18	
	28			LBBU-328-SA-M8/U5/16									
	30			LBBU-330-SA-M8/U5/16									
	32	1-1/4		LBBU-332-SA-M8/U5/16									

Additional outside diameters are available upon request. Please contact STAUFF for further information.



## Type of Mounting SP (with Weld Plate LBBU-SP)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU
- 1 Weld Plate LBBU-SP



#### Type of Mounting SM

(with Hexagon Rail Nut SM-2-5D)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU
- 1 Hexagon Rail Nut SM-2-5D (for use with Mounting Rail TS, see page 24 for details)



#### Type of Mounting PM

(for panel mounting without Weld Plate or Hexagon Rail Nut)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU

#### **Order Code**

#### LBBU-SP-322-SA-DP-AS-M8-W10

W10 (Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

## Order Code (Mounting Rail TS not included.) LBBU-SM-322-SA-DP-AS-M8-W3

W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation.

For UNC threads / bolts, please replace M8 by U5/16.

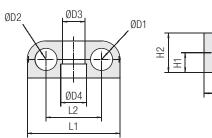
#### Order Code LBBU-PM-322-SA-DP-AS-M8-W3

**W3** (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

 $Alternative\ sizes\ (e.g.\ for\ bolts\ M6\ and\ 1/4-20\ UNC),\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.$ 



#### Clamp Body • Twin Design **Type LBBU**







Size 1 and 3 with film hinge

Size 2 in slotted design

		•		•									
Group	Outside Diameters Pipe / Tube / Hose Ø D1 / Ø D2		Nominal Bore Pipe	Ordering Codes (1 Clamp Body)		Dimensions (mm/in)							
STAUFF	(mm)	(in)	(in)		й пз	Ø D4	11	L2	H1	H2	В		
OTAGET	4	(111)	(111)	LBBU-104/04-SA-M8/U5/16	0 00	דעע		L2		112	D		
	6			LBBU-106/06-SA-M8/U5/16									
	6,4	1/4		LBBU-106.4/06.4-SA-M8/U5/16									
	8	5/16		LBBU-108/08-SA-M8/U5/16									
1D	9,5	3/8		LBBU-109.5/09.5-SA-M8/U5/16	12	14	50	30	10	20	20		
	10	0.0	1/8	LBBU-110/10-SA-M8/U5/16	.47	.55	1.97	1.18	.39	.79	.79		
	11			LBBU-111/11-SA-M8/U5/16									
	12			LBBU-112/12-SA-M8/U5/16									
	12,7	1/2		LBBU-112.7/12.7-SA-M8/U5/16									
	10		1/8	LBBU-210/10-SA-M8/U5/16									
	11			LBBU-211/11-SA-M8/U5/16									
	12			LBBU-212/12-SA-M8/U5/16									
	12,7	1/2		LBBU-212.7/12.7-SA-M8/U5/16									
	13,5		1/4	LBBU-213.5/13.5-SA-M8/U5/16									
o.D.	14			LBBU-214/14-SA-M8/U5/16	12	14	59	35	12	24	20		
2D	15			LBBU-215/15-SA-M8/U5/16	.47	.55	2.32	1.38	.47	.94	.79		
	16	5/8		LBBU-216/16-SA-M8/U5/16									
	17,2		3/8	LBBU-217.2/17.2-SA-M8/U5/16									
	18			LBBU-218/18-SA-M8/U5/16									
	19	3/4		LBBU-219/19-SA-M8/U5/16									
	20			LBBU-220/20-SA-M8/U5/16									
	21,3			LBBU-321.321.3-SA-M8/U5/16									
	22	7/8		LBBU-322/22-SA-M8/U5/16									
	23			LBBU-323/23-SA-M8/U5/16									
3D	25			LBBU-325/25-SA-M8/U5/16	12	14	86	47	20	40	30		
SU	25,4	1		LBBU-325.4/25.4-SA-M8/U5/16	.47	.55	3.39	1.85	.79	1.57	.79		
	28			LBBU-328/28-SA-M8/U5/16									
	30			LBBU-330/30-SA-M8/U5/16									
	32	1-1/4		LBBU-332/32-SA-M8/U5/16									

#### **Ordering Codes**

#### Clamp Body \*LBBU-\*1\*06/06-\*SA-\*M8/U5/16

* Light Series LBBU	LBBU
* 1st Part of STAUFF Group	1
* Exact outside diameters Ø D1 / Ø D2 (mm)	06/06
* Material code (see below)	SA
* Thread code (suitable for bolts M8 and U5/16)	M8/U5/16

#### **Standard Materials**



Thermoplastic Elastomer (87 Shore-A)

Colour: Black Material code: SA

See pages 154 / 155 for material properties and technical information

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Product Features**

- Compact and light-weight design for applications in which space is limited
- · Available in 3 different sizes and covering all standard metric and imperial diameters between 4 mm and 32 mm
- Vibration-damping and noise-reducing clamp body material with UV, ozone and weathering-resistant characteristics
- Embedded metal sleeve to ensure stability of the clamp assembly

Additional outside diameters and combinations of different outside diameters are available upon request. Please contact STAUFF for further information.



#### Type of Mounting SP

(with Weld Plate LBBU-SP)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS ■ 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU
- 1 Weld Plate LBBU-SP



#### Type of Mounting SM

(with Hexagon Rail Nut SM-2-5D)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE ■ 1 Clamp Body LBBU
- 1 Hexagon Rail Nut SM-2-5D
- (for use with Mounting Rail TS, see page 24 for details)



#### Type of Mounting PM

(for panel mounting without Weld Plate or Hexagon Rail Nut)

Clamp assembly consisting of:

- 1 Hexagon Head Bolt AS
- 1 Cover Plate LBBU-DP
- 1 Sleeve LBBU-HUE
- 1 Clamp Body LBBU

#### **Order Code**

#### LBBU-SP-322/22-SA-DP-AS-M8-W10

W10 (Weld Plate made of Carbon Steel, phosphated; Other metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

#### Order Code (Mounting Rail TS not included.) LBBU-SM-322/22-SA-DP-AS-M8-W3

W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

#### **Order Code**

#### LBBU-PM-322/22-SA-DP-AS-M8-W3

W3 (Metal parts made of Carbon Steel, zinc/nickel-plated) is the standard option for this type of installation. For UNC threads / bolts, please replace M8 by U5/16.

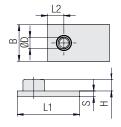
Alternative sizes (e.g. for bolts M6 and 1/4-20 UNC), materials and surface finishings are available upon request.

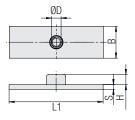




#### **Weld Plate Type LBBU-SP**







STAUFF Group 1 to 3

STAUFF Group 1D to 3D

Ordering C	odes	
Weld Plate	*LBBU-SP-*1D-*	M8-*W2
* Light Series LBI	BU	LBBU
* Weld Plate		-SP
* STAUFF Group		1D
* Thread code	Metric ISO thread: M8 UNC thread: 5/16–18 UNC	M8 U5/16
* Material code	Carbon Steel, phosphated	W2

Group	Dimensio	ons (mm/in)			Ordering Codes			
STAUFF	Ø D	L1	L2	Н	В	S	Thread G	(Standard Options)
1	14	34	9	10,3	20	5	M8	LBBU-SP-1-M8-W2
'	.55	1.34	.35	.41	.79	.20	5/16-18 UNC	LBBU-SP-1-U5/16-W2
2	14	39	9	10,3	20	5	M8	LBBU-SP-2-M8-W2
2	.55	1.54	.35	.41	.79	.20	5/16-18 UNC	LBBU-SP-2-U5/16-W2
3	14	57,5	15	10,3	30	5	M8	LBBU-SP-3-M8-W2
3	.55	2.26	.59	.41	1.18	.20	5/16-18 UNC	LBBU-SP-3-U5/16-W2
1D	14	50	\ /	10,3	20	5	M8	LBBU-SP-1D-M8-W2
ID	.55	1.97		.41	.79	.20	5/16-18 UNC	LBBU-SP-1D-U5/16-W2
2D	14	59		10,3	20	5	M8	LBBU-SP-2D-M8-W2
20	.55	2.32		.41	.79	.20	5/16-18 UNC	LBBU-SP-2D-U5/16-W2
3D	14	86		10,3	30	5	M8	LBBU-SP-3D-M8-W2
SD	.55	3.39	/	.41	1.18	.20	5/16–18 UNC	LBBU-SP-3D-U5/16-W2

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table.  $Alternative\ sizes\ (e.g.\ for\ bolts\ M6\ and\ 1/4-20\ UNC),\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.$ 

#### **Sleeve Type LBBU-HUE**





Dimensions applicable only when used with Weld Plate LBBU-SP (Type of Mounting SP)

Group	Dimer	nsions	(mm/in)	Ordering Codes
STAUFF	ØD1	ØD2	L	(Standard Options)
1	12	9	13,5	LBBU-HUE-1/1D-SP-
'	.47	.35	.53	M8/U5/16-W3
2	12	9	17,5	LBBU-HUE-2/2D-SP-
2	.47	.35	.69	M8/U5/16-W3
3	12	9	33,5	LBBU-HUE-3/3D-SP-
3	.47	.35	1.32	M8/U5/16-W3
1D	12	9	13,5	LBBU-HUE-1/1D-SP-
ID	.47	.35	.53	M8/U5/16-W3
2D	12	9	17,5	LBBU-HUE-2/2D-SP-
20	.47	.35	.69	M8/U5/16-W3
3D	12	9	33,5	LBBU-HUE-3/3D-SP-
3D	.47	.35	1.32	M8/U5/16-W3

Dimensions applicable only when used with Hexagon Rail Nut SM-2-5D (Type of Mounting SM)

Group	Dimer	nsions	(mm/in)	Ordering Codes
STAUFF	ØD1	ØD2	L	(Standard Options)
1	12	9	12,8	LBBU-HUE-1/1D-SM-
	.47	.35	.50	M8/U5/16-W3
2	12	9	16,8	LBBU-HUE-2/2D-SM
2	.47	.35	.66	M8/U5/16-W3
3	12	9	32,8	LBBU-HUE-3/3D-SM-
3	.47	.35	1.29	M8/U5/16-W3
1D	12	9	12,8	LBBU-HUE-1/1D-SM-
ID	.47	.35	.50	M8/U5/16-W3
2D	12	9	16,8	LBBU-HUE-2/2D-SM-
20	.47	.35	.66	M8/U5/16-W3
2D	12	9	32,8	LBBU-HUE-3/3D-SM-
3D	.47	.35	1.29	M8/U5/16-W3

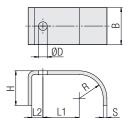
Dimensions applicable only when used for panel mounting without Weld Plate or Hexagon Rail Nut (Type of Mounting PM)

Group	Dime	nsions	(mm/in)	Ordering Codes
STAUFF	ØD1	ØD2	L	(Standard Options)
1	12	9	18,8	LBBU-HUE-1/1D-PM-
'	.47	.35	.74	M8/U5/16-W3
2	12	9	22,7	LBBU-HUE-2/2D-PM-
2	.47	.35	.89	M8/U5/16-W3
3	12	9	38,8	LBBU-HUE-3/3D-PM-
3	.47	.35	1.53	M8/U5/16-W3
1D	12	9	18,8	LBBU-HUE-1/1D-PM-
ID	.47	.35	.74	M8/U5/16-W3
2D	12	9	22,7	LBBU-HUE-2/2D-PM-
20	.47	.35	.89	M8/U5/16-W3
3D	12	9	38,8	LBBU-HUE-3/3D-PM-
SD	.47	.35	1.53	M8/U5/16-W3

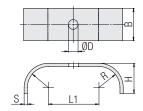
 $Alternative\ sizes\ (e.g.\ for\ bolts\ M6\ and\ 1/4-20\ UNC),\ materials\ and\ surface\ finishings\ are\ available\ upon\ request.$ 



## Cover Plate Type LBBU-DP







STAUFF Group 1D to 3D



Group	Dimension	ns ( <sup>mm</sup> / <sub>in</sub> )	Ordering Codes					
STAUFF	Ø D	L1	L2	R	Н	В	S	(Standard Options)
1	9	15	9	10	16	20	3	LBBU-DP-1-M8/U5/16-W3
'	.35	.59	.35	.39	.63	.79	.12	LDD0-DF-1-W6/03/10-W3
2	9	18	9	12	20	20	3	LBBU-DP-2-M8/U5/16-W3
2	.35	.71	.35	.47	.79	.79	.12	LDD0-DF-2-W0/03/10-W3
3	9	23,5	15	19,5	28	30	3	LBBU-DP-3-M8/U5/16-W3
3	.35	.93	.59	.77	1.10	1.18	.12	LBBU-DF-3-W6/U3/10-W3
1D	9	30		10	16	20	3	LBBU-DP-1D-M8/U5/16-W3
ID	.35	1.18		.39	.63	.79	.12	LBBU-DF-1D-W6/03/10-W3
2D	9	35		12	20	20	3	LBBU-DP-2D-M8/U5/16-W3
20	.35	1.38		.47	.79	.79	.12	LBBU-DF-2D-Wio/U3/10-W3
2D	9	47		19,5	28	20	3	LBBU-DP-3D-M8/U5/16-W3
3D	.35	1.85	/ \	.77	.63	.79	.12	LDDU-UF-3U-WI8/U3/10-W3

Ordering Codes

Cover Plate \*LBBU-DP-\*1D-\*M8/U5/16-\*W3

\* Light Series LBBU LBBU

\* Cover Plate -DP

\* STAUFF Group 1D

\* Thread code (suitable for bolts M8 and U5/16) M8/U5/16

\* Material code Carbon Steel, zinc/nickel-plated W3

Alternative sizes (e.g. for bolts M6 and 1/4–20 UNC), materials and surface finishings are available upon request.

#### Hexagon Head Bolt Type AS



### Hexagon Head Bolt AS

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.)

Dimensions applicable only when used with

Weld Plate LBBU-SP (**Type of Mounting SP**)
or Hexagon Rail Nut SM-2-5D (**Type of Mounting SM**)

Group	Dimensions (mm/in)	Ordering Codes
STAUFF	Thread G x L	(Standard Options)
1	M8 x 25	AS-M8x25-W3
1	5/16-18 UNC x 1	AS-U5/16-18x1-W3
2	M8 x 28	AS-M8x28-W3
2	5/16-18 UNC x 1-1/8	AS-U5/16-18x1-1/8-W3
3	M8 x 45	AS-M8x45-W3
3	5/16-18 UNC x 1-3/4	AS-U5/16-18x1-3/4-W3
1D	M8 x 25	AS-M8x25-W3
ID	5/16-18 UNC x 1	AS-U5/16-18x1-W3
2D	M8 x 28	AS-M8x28-W3
2D	5/16-18 UNC x 1-1/8	AS-U5/16-18x1-1/8-W3
3D	M8 x 45	AS-M8x45-W3
	5/16-18 UNC x 1-3/4	AS-U5/16-18x1-3/4-W3

#### **Hexagon Head Bolt AS**

(according to DIN 931 / 933 or ANSI / ASME B18.2.1.)

Dimensions applicable only when used for panel mounting without Weld Plate or Hexagon Rail Nut

(Type of Mounting PM)

Group STAUFF	Dimensions (mm/in) Thread G x L	Ordering Codes (Standard Options)
1	M8 x 30	AS-M8x30-W3
'	5/16-18 UNC x 1-1/4	AS-U5/16-18x1-1/4-W3
2	M8 x 35	AS-M8x35-W3
2	5/16-18 UNC x 1-3/8	AS-U5/16-18x1-3/8-W3
2	M8 x 50	AS-M8x50-W3
3	5/16-18 UNC x 2	AS-U5/16-18x2-W3
1D	M8 x 30	AS-M8x30-W3
Iυ	5/16-18 UNC x 1-1/4	AS-U5/16-18x1-1/4-W3
2D	M8 x 35	AS-M8x35-W3
ZU	5/16-18 UNC x 1-3/8	AS-U5/16-18x1-3/8-W3
an.	M8 x 50	AS-M8x50-W3
3D	5/16-18 UNC x 2	AS-U5/16-18x2-W3

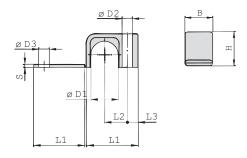
Ordering Co	odes	
Hexagon Head	d Bolt *AS-*M8x25-	*W3
* Type of bolt	Hexagon Head Bolt (according to DIN 931 / 933 or ANSI / ASME B18.2.1.)	AS
* Thread code	Thread dimension according to dimension table	M8x25
* Material code	Carbon Steel, zinc/nickel-plated	W3

All threaded parts are available with Metric ISO thread or unified coarse (UNC) thread according to dimension table. Alternative sizes (e.g. for bolts M6 and 1/4–20 UNC), materials and surface finishings are available upon request.



#### **Clamp Body • Single Design Type LB**





### **Ordering Codes**

Clamp Body	*LB-*1*03	.2-*PP
* Light Series:  * STAUFF Group  * Exact outside di  * Material code (s	Clamp Body / Single Design ameter Ø D1 (mm) see below)	LB 1 03.2 PP

#### **Standard Materials**



#### Polypropylene Colour: Black Material code: PP



#### Polyamide Colour: Yellow Material code: PA

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

• Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering

Group	Outside I Pipe / Tu Ø D1	Diameter be / Hose	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/in)							
STAUFF	(mm)	(in)	(in)	(** = Material)	L1	L2	L3	В	Н	S	Ø D2	Ø D3
	3,2	1/8		LB-103.2-**								
1	6			LB-106-**	22	9	6,5	12	10,5	2	6,8	7
'	6,4	1/4		LB-106.4-**	.87	.35	.26	.47	.41	.08	.27	.28
	8			LB-108-**								
	9,5	3/8		LB-209.5-**								
2	10		1/8	LB-210-**	27	11	7	16	15	2	6,8	7
2	11,1			LB-211.1-**	1.06	.43	.28	.63	.59	.08	.27	.28
	12			LB-212-**								
	12,7	1/2		LB-312.7-**								
	13,5		1/4	LB-313.5-**	34	15	7	20	22,5	2	6,8	7
	14			LB-314-**								
3	15			LB-315-**	1.34	.59	.28	.79	.89	.08	.27	.28
	16	5/8		LB-316-**	1.54	.00	.20	.13	.09	.00	.21	.20
	17,2		3/8	LB-317.2-**								
	18			LB-318-**								
	19	3/4		LB-419-**								
	20			LB-420-**								
4	21,3		1/2	LB-421.3-**	42	19	7	20	30	2	6,8	7
-	22			LB-422-**	1.65	.75	.28	.79	1.18	.08	.27	.28
	25			LB-425-**								
	25,4	1		LB-425.4-**								

Additional outside diameters are available upon request. Please contact STAUFF for further information.





# Ø D3 Ø D4 Ø D2 L1 L1 L1

#### Clamp Body • Twin Design Types LBG / LBU



Group		Diameters ube / Hose D2	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/ <sub>fin</sub> )						
STAUFF	(mm)	(in)	(in)	(** = Material)	L1	L2	В	Н	S	Ø D3	Ø D4
	3,2	1/8		LBG-103.2/03.2-**							
1	6			LBG-106/06-**	31	18	12	10,5	2	6,8	7
'	6,4	1/4		LBG-106.4/06.4-**	1.22	.71	.47	.41	.08	.27	.28
	8			LBG-108/08-**							
	9,5	3/8		LBG-209.5/09.5-**							
2	10		1/8	LBG-210/10-**	39	22	16	15	2	6,8	7
2	11,1			LBG-211.1/11.1-**	1.54	.87	.63	.59	.08	.27	.28
	12			LBG-212/12-**							
	12,7	1/2		LBG-312.7/12.7-**							
	13,5		1/4	LBG-313.5/13.5-**		30	20	22,5	2	6,8	7
	14			LBG-314/14-**	53						
3	15			LBG-315/15-**	2.09	1.18	.79	.89	.08	.27	.28
	16	5/8		LBG-316/16-**	2.03	1.10	.73	.09	.00	.21	.20
	17,2		3/8	LBG-317.2/17.2-**							
	18			LBG-318/18-**							
	19	3/4		LBG-419/19-**							
	20			LBG-420/20-**							
4	21,3		1/2	LBG-421.3/21.3-**	70	38	20	30	2	6,8	7
7	22			LBG-422/22-**	2.76	1.50	.79	1.18	.08	.27	.28
	25			LBG-425/25-**							
	25,4	1		LBG-425.4/25.4-**							

Additional outside diameters and combinations of different outside diameters (Clamp Body, Type LBU) are available upon request.

Please contact STAUFF for further information.

# Ordering Codes Clamp Body \*LBG-\*1\*03.2/03.2-\*PP \*Light Series: Clamp Body / Twin Design with identical diameters Clamp Body / Twin Design with different diameters \*STAUFF Group LBU \*Exact outside diameters Ø D1 / Ø D2 (mm) 99 \*Material code (see below) PP

#### **Standard Materials**





See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

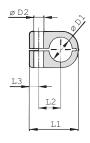
#### **Applications**

 Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering



#### **Clamp Body • Single Design Type LN**







### **Ordering Codes**

Clamp Body	*LN-*1*0	6-*PP
* Light Series:  * STAUFF Group  * Exact outside di  * Material code (s	Clamp Body / Single Design ameter Ø D1 (mm) see below)	LN 1 06 PP

#### **Standard Materials**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

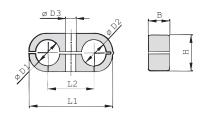
• Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering

Group		Diameter be / Hose	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimens (mm/in)	Dimensions (mm/ <sub>in</sub> )				
STAUFF	(mm)	(in)	(in)	( <b>**</b> = Material)	L1	L2	L3	В	Н	Ø D2
	6			LN-106-**	22	9	7	14,5	13,5	6,8
1	6,4	1/4		LN-106.4-**	.87	.35	.28	.57	.53	.27
	8			LN-108-**	.07	.00	.20	.01	.00	.21
	8			LN-208-**						
	9,5	3/8		LN-209.5-**	27	11	7	14,5	18,5	6,8
2	10		1/8	LN-210-**	1.06	.43	.28	.57	.59	.27
	12			LN-212-**	.40	.20	.01	.00	.21	
	12,7	1/2		LN-212.7-**						
	10		1/8	LN-310-**						
	12			LN-312-**						
	12,7	1/2		LN-312.7-**	33	15	7	14,5	23,5	6,8
3	13,5		1/4	LN-313.5-**	1.30	.59	.28	.57	.93	.27
	14			LN-314-**	1.50	.00	.20	.57	.33	.21
	15			LN-315-**						
	16	5/8		LN-316-**						
	14			LN-414-**						
	15			LN-415-**						
	16	5/8		LN-416-**						
	17,2		3/8	LN-417.2-**	40	19	7	14,5	30,5	6,8
4	18			LN-418-**	1.57	.75	.28	.57	1.20	.27
	19	3/4		LN-419-**	1.57	.13	.20	.07	1.20	.21
2	20			LN-420-**						
	21,3		1/2	LN-421.3-**						
	22			LN-422-**						





## Clamp Body • Twin Design Type LNGF / LNUF





Group		Diameters ube / Hose D2	Nominal Bore Pipe	Ordering Codes (1 Clamp Body)	Dimensions (mm/ <sub>in</sub> )				
STAUFF	(mm)	(in)	(in)	(** = Material)	L1	L2	В	Н	Ø D3
	6			LNGF-106/06-**	32	18	14,5	13,5	6,8
1	6,4	1/4		LNGF-106.4/06.4-**	1.26	.70	.57	.53	.27
	8			LNGF-108/08-**	1.20	.70	.57	.55	.21
	8			LNGF-208/08-**			145		
	9,5	3/8		LNGF-209.5/09.5-**	41	22		10 E	0.0
2	10		1/8	LNGF-210/10-**		.86	.57	18,5	6,8
	12			LNGF-212/12-**	1.01	.00	.57	.73	.21
	12,7	1/2		LNGF-212.7/12.7-**					
	10		1/8	LNGF-310/10-**					
	12			LNGF-312/12-**					
	12,7	1/2		LNGF-312.7/12.7-**	54	30	145	23.5	0.0
3	13,5		1/4	LNGF-313.5/13.5-**	2.13	1.18	.57	.93	6,8
	14			LNGF-314/14-**	2.10	1.10	.57	.93	.21
	15			LNGF-315/15-**					
	16	5/8		LNGF-316/16-**					
	14			LNGF-414/14-**					
	15			LNGF-415/15-**					
	16	5/8		LNGF-416/16-**					
	17,2		3/8	LNGF-417.2/17.2-**	70	38	14,5	30.5	6,8
4	18			LNGF-418/18-**	2.76	1.50	.57	1.20	.27
	19	3/4		LNGF-419/19-**	2.70	1.00	.57	1.20	.21
	20			LNGF-420/20-**					
-	21,3		1/2	LNGF-421.3/21.3-**					
	22			LNGF-422/22-**					

# Clamp Body \*LNGF-\*1\*06/06-\*PP \* Light Series: Clamp Body / Twin Design with identical diameters Clamp Body / Twin Design with different diameters \* STAUFF Group the Exact outside diameters Ø D1 / Ø D2 (mm) Material code (see below) PP

#### **Standard Materials**



Polyamide

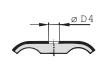


See pages 154/155 for material properties and technical information. Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

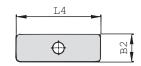
 Pneumatics, Instrumentation and Automotive Technology, Machine Tool Industry, Lubrication, Mechanical Engineering

## Cover Plate Type DPL



Additional outside diameters and combinations of different outside diameters (Clamp Body, type LNUF) are available upon request.

Please contact STAUFF for further information.

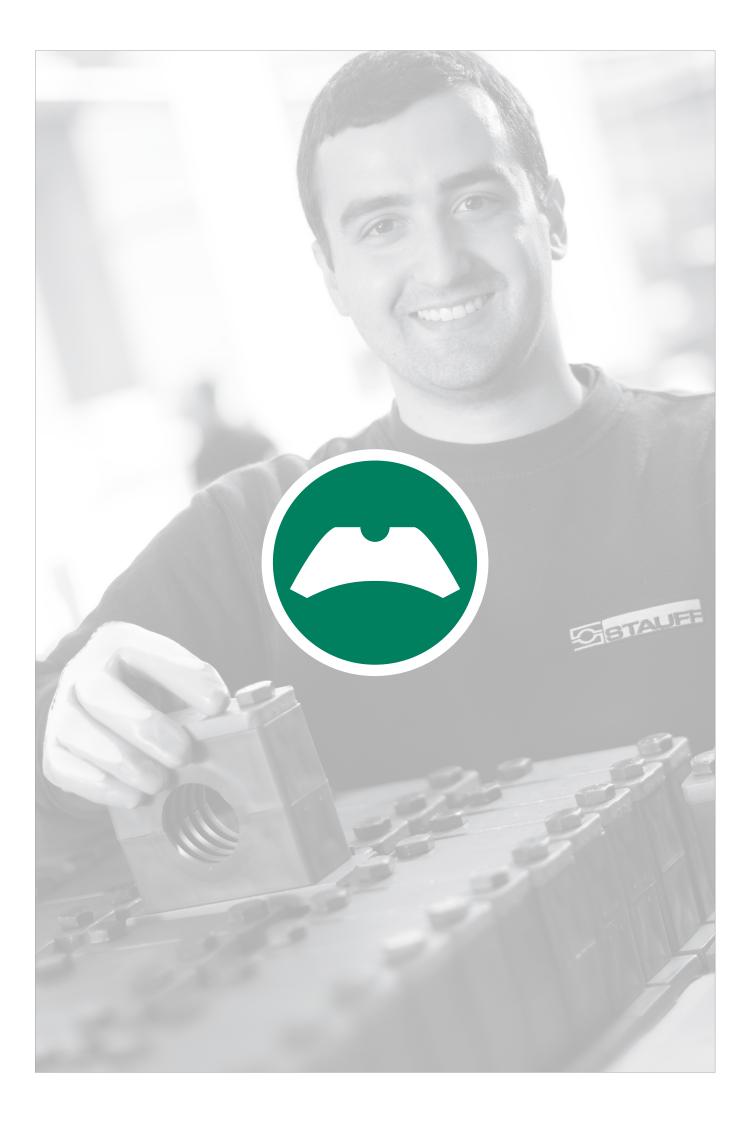




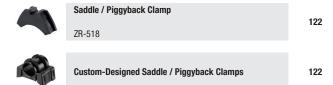
Group	Dimensions (mm/in)		Ordering Codes	
STAUFF	L4	B2	Ø D4	(Standard Options)
1	29,5	15,5	6,8	DPL-1-W3
1	1.16	.61	.27	DFL-1-W3
•	40	15,5	6,8	DPL-2-W3
2	1.57	.61	.27	DPL-2-W3
2	51	16	6,8	DDI 2 W2
3	2.01	.63	.27	DPL-3-W3
,	63,5	16	6,8	DDI 4 WO
4	2.50	.63	.27	DPL-4-W3

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information. Please note: The maximum tightening torque for bolts is 2,5 N·m (1.85 ft·lb).









#### **Saddle / Piggyback Clamps Type ZR**



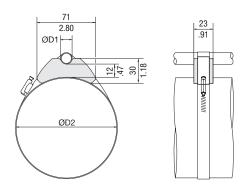
Order Code	
Saddle Clamp	ZR-518-SA73-BK

#### **Standard Material**



Thermoplastic Elastomer (73 Shore-A) Colour: Black

See pages 154 / 155 for properties and technical information.



Min/Max Outs Pipe / Tube	Min/Max Outside Diameters * Pipe / Tube				Tightening Strap Dimensions (Not Included in Scope of Delivery)			
Ø D1	(C.)	Ø D2		- J		Width	(2.)	
(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	
		50 70	1.96 2.76	196 254	7.71 10.00			
		60 80	2.36 3.15	225 284	8.86 11.18			
		70 90	2.76 3.54	254 314	10.00 12.36			
		80 105	3.15 4.13	284 359	11.18 14.13			
10 22	.3987	90 120	3.54 4.72	314 404	12.36 15.90	13	.51	
		105 140	4.13 5.51	359 464	14.13 18.27			
		125 160	4.92 6.30	419 525	16.50 20.66			
		145 180	5.71 7.09	479 586	18.86 23.07			
		165 200	6.50 7.87	540 647	21.26 25.47			

<sup>\*</sup> Ø D1 depending on Ø D2!

#### **Saddle / Piggyback Clamps**

Type ZR saddle clamps from STAUFF allow direct fixing and safe guiding of pipes, tubes and hoses on hydraulic cylinders and other round or oval structures, without causing damage to their strength or integrity as with screw-fixing or welding and without preparation or reworking of the surface coating. The simple system also allows a pipe, tube or hose with a small outer diameter to be installed on top of a significantly larger one.

The position can be adjusted at any time thanks to free axial and radial positioning of the clamps on the structure. This also makes the system suitable for retrofitting.

The standard version ZR-518 made of thermoplastic elastomer material covers diameters in a range from 50 to 200 mm / 1.96 to 7.87 in for the cylinder and from 10 to 22 mm / .39 to .87 inch for the attached tube or hose. The diameters to be covered are used to calculate the overall length of the required tightening straps or the dimensions of the steel strap or worm drive hose clamp, e.g. according to DIN 3017.

STAUFF meets deviating requirements with numerous other variants which were implemented in the past and can be manufactured again at any time.

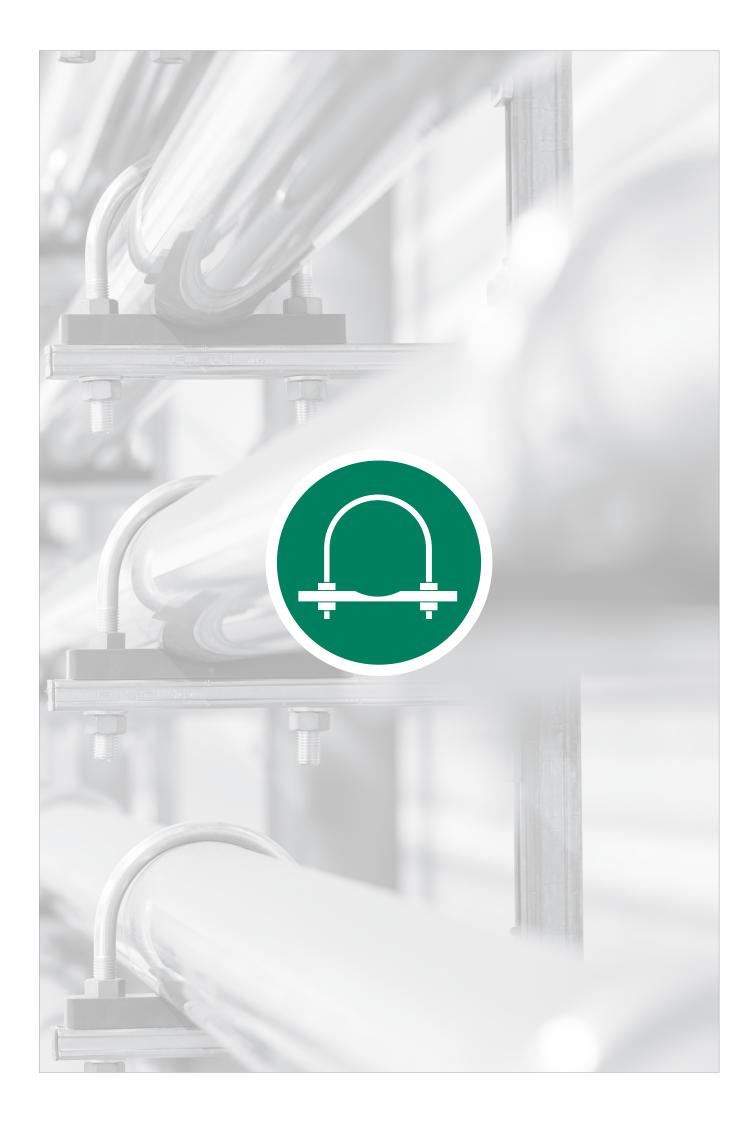
If required, customised clamps can be developed for specific requirements or manufactured based on drawings and models provided.

Please contact STAUFF for further information.



Dimensional drawings: All dimensions in mm (in).





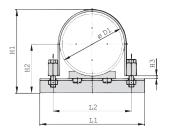


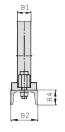


### Flat Steel U-Bolt with Plastic Pipe Saddle (Short) and U-Profile

#### Type FB+RUK (To be used as Fixed Point Clamps only)







Flat Steel U-Bolt (type FB) with Plastic Pipe Saddle (type RUK), U-Profile and Hexagon Head Bolts

#### **Ordering Codes**

#### **Clamp Assembly** \*FB+RUK-\*48.3-\*PP-\*W1

One clamp assembly is consisting of one Flat Steel U-Bolt (type FB), one Plastic Pipe Saddle (type RUK), one U-Profile (to DIN 1026) with two Nuts (to DIN EN ISO 4032) and two Hexagon Head Bolts (to DIN EN ISO 4014 / 4017).

* Clamp Assembl	FB+RUK	
* Exact outside di	48.3	
* Material of Pipe	Saddle (see below)	PP
* Material code	W1 W33	
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	Ti) <b>W5</b>
Please note:	nade of	
Please note:	All items are supplied assembl	ed.

#### **Standard Materials for Plastic Pipe Saddles**



#### Polypropylene Colour: Green

Material code: PP



#### **Polyamide** Colour: Black Material code: PA

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

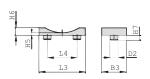
#### **Applications**

- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

			(Ly	pe nuk),	U-Profile a	ани пехау	UII NEAU D	OUILS			
Diameter Nominal		Diameter ube	Nominal Bore Pipe								
DN	(mm)	(in)	(in)	L1	L2	н Н1	H2	Н3	B1	(DIN 1026) B2 x H4	
		, ,	1	100	76	95	67	5	20 x 3	50 x 38	
40	48,3	1.93	1-1/2	3.94	2.99	3.74	2.64	.20	.78 x .12	1.97 x 1.50	
				115	85	103	71,5	5	20 x 3	50 x 38	
50	57	2.28		4.53	3.35	4.06	2.81	.20	.78 x .12	1.97 x 1.50	
65		0.44		115	88	106	73,2	5	20 x 3	50 x 38	
	60,3	2.41	2	4.53	3.46	4.17	2.88	.20	.78 x .12	1.97 x 1.50	
CE	70.1	2.04	0.1/0	132	104	122	81	5	20 x 3	50 x 38	
65	76,1	3.04	2-1/2	5.20	4.09	4.80	3.19	.20	.78 x .12	1.97 x 1.50	
80	00.0	2.56	3	160	121	146	97,5	8	40 x 4	80 x 45	
00	88,9	3.56	3	6.30	4.76	5.75	3.84	.31	1.57 x .16	3.15 x 1.77	
	108	4.32		170	140	165	107	8	40 x 4	80 x 45	
100	100	4.02		6.69	5.51	6.50	4.21	.31	1.57 x .16	3.15 x 1.77	
	114,3	4.57	4	180	147	171	110	8	40 x 4	80 x 45	
	114,3	14,3 4.57	4	7.09	5.79	6.73	4.33	.31	1.57 x .16	3.15 x 1.77	
	133	5.32		210	165	190	119,5	8	40 x 4	80 x 45	
125	133	0.02		8.27	6.50	7.48	4.70	.31	1.57 x .16	3.15 x 1.77	
123	139,7	5.59	5	210	172	197	123	8	40 x 4	80 x 45	
	135,1	39,7 5.59	J	8.27	6.77	7.76	4.84	.31	1.57 x .16	3.15 x 1.77	
	159	6.36		265	201	220	132,5	8	40 x 6	80 x 45	
150	133	0.30		1.43	7.91	8.66	5.22	.31	1.57 x .24	3.15 x 1.77	
130	168,3	6.73	6	275	211	230	137	8	40 x 6	80 x 45	
	100,3	0.73	U	1.83	8.31	9.06	5.39	.31	1.57 x .24	3.15 x 1.77	
175	193,7	7.75		305	236	255	150	8	40 x 6	80 x 45	
173	193,7	1.13		12.01	9.29	1.04	5.91	.31	1.57 x .24	3.15 x 1.77	
	216	8.64		320	258	277	161	8	40 x 6	80 x 45	
200	210	0.04		12.60	10.16	1.91	6.34	.31	1.57 x .24	3.15 x 1.77	
200	219,1	8.76	8	320	261	280	162,5	8	40 x 6	80 x 45	
	219,1	0.70	0	12.60	1.28	11.02	6.40	.31	1.57 x .24	3.15 x 1.77	
	267	10.68		380	324	328	186,5	8	40 x 8	80 x 45	
250	201	10.00		14.96	12.76	12.91	7.34	.31	1.57 x .31	3.15 x 1.77	
200	273	10.92	10	385	330	334	189,5	8	40 x 8	80 x 45	
	213	10.32	10	15.16	12.99	13.15	7.46	.31	1.57 x .31	3.15 x 1.77	
	318	12.72		440	375	382	212	8	40 x 8	80 x 45	
300	010	12.72		17.32	14.76	15.04	8.35	.31	1.57 x .31	3.15 x 1.77	
500	323,9	12.96	12	450	381	390	215	8	40 x 8	80 x 45	
	020,5	12.50	12	17.72	15.00	15.35	8.46	.31	1.57 x .31	3.15 x 1.77	
	355,6	14.22	14	480	417,5	421	235	12	60 x 8	100 x 50	
350	000,0	11.22	1.,	18.90	16.44	16.57	9.25	.47	2.36 x .31	3.94 x 1.97	
000	368	14.72		490	430	434	242	12	60 x 8	100 x 50	
	000	11.72		19.29	16.93	17.09	9.53	.47	2.36 x .31	3.94 x 1.97	
	406,4	16.26	16	550	468,5	472	261	12	60 x 8	100 x 50	
	,.	10.20	1.0	21.65	18.44	18.58	10.28	.47	2.36 x .31	3.94 x 1.97	
400	419	16.76		550	481	485	267,5	12	60 x 8	100 x 50	
				21.65	18.94	19.09	10.53	.47	2.36 x .31	3.94 x 1.97	
	457	18.28	18	585	519	523	286,5	12	60 x 8	100 x 50	
		. 5.20	1.0	23.03	20.43	20.59	11.28	.47	2.36 x .31	3.94 x 1.97	
	508	20.32	20	630	570	574	312	12	60 x 8	100 x 50	
500	000	20.02	20	24.80	22.44	22.60	12.28	.47	2.36 x .31	3.94 x 1.97	
000	521	20.84		640	583	587	319	12	60 x 8	100 x 50	
		20.01		25.20	22.96	23.11	12.56	.47	2.36 x .31	3.94 x 1.97	



## Flat Steel U-Bolt with Plastic Pipe Saddle (Short) and U-Profile (To be used as Fixed Point Clamps only) Type FB+RUK



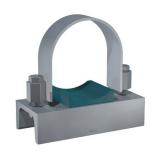


#### Plastic Pipe Saddle (type RUK)

(For size DN 40, dimension L4 is staggered by 90°)

Hexagon Head Bolt AS (according to DIN EN ISO 4014 / 4017)

Diameter	Outeido	Diameter	Nominal	Dimon	isions ( <sup>mi</sup>	n /:_\						
Nominal			Bore	Dillieli	ISIOIIS (***	"/in)					Hexagon Head Bolt	
· · · · · · · · · · · · · · · · · · ·	Ø D1		Pipe	Plastic	: Pipe Sa	addle (tv	ne RUK)				(DIN EN ISO 4014 / 4017)	
DN	(mm)	(in)	(in)	L3	L4	B3	D2	H5	Н6	H7	Thread G x L	
10	, ,	1 '		24	25	35	8	5	8	5		
40	48,3	1.93	1-1/2	.94	.98	1.38	.31	.20	.31	.20	M10 x 40	
		0.00		38	25	50	10	5	10	6	M10 40	
-0	57	2.28		1.50	.98	1.97	.39	.20	.39	.24	M10 x 40	
50	60.2	0.41	2	38	25	50	10	5	10	6	M10 v 40	
65 <b>7</b> 80 <b>8</b>	60,3	2.41	2	1.50	.98	1.97	.39	.20	.39	.24	M10 x 40	
65	76,1	3.04	2-1/2	38	25	50	10	5	10	6	M10 x 40	
00	70,1	3.04	2-1/2	1.50	.98	1.97	.39	.20	.39	.24	M 12 x 55	
80	88,9	3.56	3	75	40	70	15	8	17	10		
50	00,5	0.00	3	2.95	1.57	2.76	.59	.31	.67	.39		
	108	4.32		75	40	70	15	8	17	10	M 12 x 55	
100	100	7.02		2.95	1.57	2.76	.59	.31	.67	.39	111 12 X 00	
	114,3	4.57	4	75	40	70	15	8	17	10	M 12 x 55	
	,0	1.07	<u> </u>	2.95	1.57	2.76	.59	.31	.67	.39	12 7 00	
125	133	5.32		75	40	70	15	8	17	10	M 12 x 55	
		0.02		2.95	1.57	2.76	.59	.31	.67	.39		
125 139,7		5.59	5	75	40	70	15	8	17	10	M 12 x 55	
	,.			2.95	1.57	2.76	.59	.31	.67	.39		
150	159	6.36		140	90	75	25	8	26	10	M 16 x 75	
				5.51	3.54	2.95	.98	.31	1.02	.39		
	168,3	6.73	6	140	90	75	25	8	26	10	M 16 x 75	
	.00,0	0.70		5.51	3.54	2.95	.98	.31	1.02	.39		
175	193,7	7.75		140	90	75	25	8	26	10	M 16 x 75	
	,.	1		5.51	3.54	2.95	.98	.31	1.02	.39		
	216	8.64		140	90	75	25	8	26	10	M 16 x 75	
200				5.51	3.54	2.95	.98	.31	1.02	.39		
200	219,1	8.76	8	140	90	75	25	8	26	10	M 16 x 75	
				5.51	3.54	2.95	.98	.31	1.02	.39		
	267	10.68		140	90	75	25	8	26	10	M 20 x 80	
250				5.51	3.54	2.95	.98	.31	1.02	.39		
	273	10.92	10	140	90	75	25	8	26	10	M 20 x 80	
				5.51	3.54	2.95	.98	.31	1.02	.39		
	318	12.72		220	150	75	30	8	32	10	M 20 x 80	
300				8.66	5.91	2.95	1.18	.31	1.26	.39		
	323,9	12.96	12	220	150	75	30	8	32	10	M 20 x 80	
				8.66	5.91	2.95 75	1.18	.31	1.26	.39		
	355,6	14.22	14	8.66	5.91	2.95	1.18	.31	32 1.26	.39	M 24 x 100	
350				220	150	75	30	8	32	10		
	368	14.72		8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
				220	150	75	30	8	32	10		
	406,4	16.26	16	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
				220	150	75	30	8	32	10		
400	419	16.76		8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
				220	150	75	30	8	32	10		
	457	18.28	18	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
				220	150	75	30	8	32	10		
500	508	20.32	20	8.66	5.91	2.95	1.18	.31	1.26	.39	M 24 x 100	
				220	150	75	30	8	32	10		
	<b>521</b> 20.84										M 24 x 100	



## **Ordering Codes**

Flat Steel U-Bolt \*FB-\*A-48.3-\*W1

\* Flat Steel U-Bolt

\* Exact outside diameter Ø D1 (mm) A-48.3

\* Material code Carbon Steel, uncoated W1
Carbon Steel, zinc-plated, W32

blue-chromated
Stainless Steel V4A

1.4401 / 1.4571 (AISI 316 / 316 Ti)

FB

#### only Plastic Pipe Saddle \*RUK-\*48.3-\*PP

\* Plastic Pipe Saddle (Short) RUK

\* Exact outside diameter Ø D1 (mm) 48.3

\* Material of Pipe Saddle (see below) PP

Please note: All items are supplied assembled.

#### **Standard Materials for Plastic Pipe Saddles**



#### Polypropylene

Colour: Green Material code: **PP** 



Colour: Black Material code: **PA** 

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

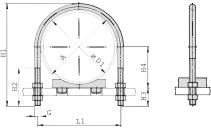
#### **Applications**

- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

## STAUFF®

## Round Steel U-Bolt with Plastic Pipe Saddle (Short) Type RB+RUK





Recommended Installation <DN25

Round Steel U-Bolt (type RB) with Plastic Pipe Saddle (type RUK)

Recommended Installation >DN25

#### **Ordering Codes**

#### Clamp Assembly \*RB+RUK-\*48.3-\*PP-\*W1

One clamp assembly is consisting of one Round Steel U-Bolt (type RB), one Plastic Pipe Saddle (type RUK) and four Nuts (to DIN EN ISO 4032).

* Clamp Assembly	RB+RUK	
* Exact outside dia	48.3	
* Material of Pipe S	Saddle (see below)	PP
	Carbon Steel, uncoated Carbon Steel, zinc-plated, blue-chromated	W1 W32
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 31	6 Ti) <b>W5</b>

Please note: All items are supplied non-assembled.

#### **Standard Materials for Plastic Pipe Saddles**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

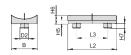
#### **Applications**

- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

										>DN25		
Diameter Nominal	Outside ( Pipe / Tu		Nominal Bore									
	Ø D1		Pipe		teel U-Bolt					<b>T</b>		
DN	(mm)	(in)	(in)	Α	<b>L1</b>	H1	<b>H2</b>	<b>H3</b>	H4	Thread G		
	25	.98		30	1.57	73,5 2.89	1.61	1.18	17,5 .69	M10		
20	26.0	1.06	3/4	1.18	40	73,5	41	30	18,5	M10		
	26,9	1.06	3/4		1.57	2.89	1.61	1.18	.73	IVITO		
	30	1.18		00	48	81	48	30	20	M10		
25				<b>38</b> 1.50	1.89	3.19 81	1.89	1.18	.79 22			
	33,7	1.33	1	1.00	1,89	3,19	1,89	1,18	.87	M10		
	38	1.50			56	89	48	30	24	M10		
32				<b>46</b> 1.81	2.20	3.50 89	1.89	1.18	.94 26,2			
	42,4	1.69	1-1/4	1.01	56 2.20	3.50	1.89	1.18	1.03	M10		
	44.5	1.70			62	100	55	35	27,2	M10		
40	44,5	1.76		52	2.44	3.94	2.17	1.38	1.07	M10		
.0	48,3	1.90	1-1/2	2.05	62 2.44	100 3.94	55 2.17	35 1.38	29	M10		
					76	118	63	39	33,5			
EO	57	2.28		64	2.99	4.65	2.48	1.54	1.32	M12		
50	60,3	2.41	2	2.52	76	118	63	39	35,2	M12		
	00,0	2.11	-	00	2.99	4.65	2.48	1.54	1.39	WII E		
65	76,1	3.04	2-1/2	<b>82</b> 3.23	94 3.70	135 5.31	77 3.03	39 1.54	1.69	M12		
00	00.0	0.50	0	94	106	152	82	41	52,5	1440		
80	88,9	3.56	3	3.70	4.17	5.98	3.23	1.61	2.07	M12		
	108	4.32		400	136	190	105	49	62	M16		
100				<b>120</b> 4.72	5.35 136	7.48 190	4.13	1.93	2.44 65			
	114,3	4.57	4	4.72	5.35	7.48	4.13	1.93	2.56	M16		
	133	5.32			164	217	105	49	74,5	M16		
125	133	0.02		148	6.46	8.54	4.13	1.93	2.93	IVITO		
125	139,7	5.59	5	5.83	164 6.46	217 8.54	105 4.13	1.93	78 3.07	M16		
					192	247	105	51	87,5			
150	159	6.36		176	7.56	9.72	4.13	2.01	3.44	M16		
150	168,3	6.73	6	6.93	192	247	105	51	92	M16		
	/ -			202	7.56 218	9.72 273	4.13 105	2.01	3.62 105			
175	193,7	7.75		7.96	8.58	10.75	4.13	2.01	4.13	M16		
	216	8.64			248	311	125	59	116	M20		
200	210	0.04		228	9.76	12.24	4.92	2.32	4.57	IVIZO		
	219,1	8.76	8	8.98	9.76	311 12.24	125 4.92	59 2.32	117,5 4.63	M20		
	007	40.00			303	364	125	59	141,5	1400		
250	267	10.68		282	11.93	14.33	4.92	2.32	5.57	M20		
200	273	10.92	10	11.10	302	364	125	59	144,5	M20		
					11.89 352	14.33 418	4.92 125	2.32	5.69 167			
000	318	12.72		332	13.86	16.46	4.92	2.44	6.57	M20		
300	323,9	12.96	12	13.07	352	418	125	62	170	M20		
	020,9	12.30	12		13.86	16.46	4.92	2.44	6.69	IVIZO		
	355,6	14.22	14	378	402 15.83	475 18.70	145 5.71	70 2.76	186 7.32	M24		
350	260	1470		14.88	402	475	145	70	192	MOA		
	368	14.72			15.83	18.70	5.71	2.76	7.56	M24		
	406,4	16.26	16	400	452	526	145	70	211	M24		
400	,			<b>428</b> 16.85	17.80 452	20.71 526	5.71 145	2.76 70	8.31 217,5			
	419	16.76		10.00	17.80	20.71	5.71	2.76	8.56	M24		
	508	20.32	20		554	627	145	70	262	M24		
500	300	20.02	20	530	21.81	24.69	5.71	2.76	10.31	m47		
	521	20.84		20.87	554 21.81	627 24.69	145 5.71	70 2.76	269 10.59	M24		
			1		21.01	2 1.00	5.7 1	2.70	10.00			



## Round Steel U-Bolt with Plastic Pipe Saddle (Short) Type RB+RUK







Plastic Pipe Saddle (type RUK) (For sizes DN 20 to DN 40)

Plastic Pipe Saddle (type RUK)
(From size DN 50 on)

		(Fo	or sizes DN	20 to DN 4	40) (From size DN 50 on)							
No.   Color		Pipe / Tu		Bore		, ,						
25									1	1	1	1
20	DN	(mm)	(in)	(in)	Α							
26.9		25	.98		20							
26.9   1.06   344   1.38   98   94   20   31   20   31   31   32   31   33   38   38   38   25   24   5   8   5   8   5   8   35   35   25   24   5   8   5   8   5   8   35   38   38	20									_		
25   33,7   1,33   1   1,50   35   25   24   5   8   5   8		26,9	1.06	3/4								
25		30	1 18									
33.7 1.33 1 1.50   35   25   24   5   8   5   8   6   4   4   1.38   .98   .94   .20   .31   .30   .31   .30   .35	25		1.10									
38		33,7	1.33	1	1.50							
32   36   1.50   46   1.38   98   94   20   31   20   31   20   31   42,4   1.69   1-1/4   1.81   35   25   24   5   8   5   8   5   8   1.38   98   94   20   31   20   31   20   31   31   32   32												
	00	38	1.50		46					_		
44,5	32	42.4	1.60	1 1//								
44.5		42,4	1.09	1-1/4					_			
140		44,5	1.76									
100	40	,-										
50         57         2.28         64         3.8         25         50         5         10         6         10           60,3         2.41         2         2.52         38         25         50         5         10         6         10           65         76.1         3.04         2-1/2         82         38         25         50         5         10         6         10           80         88,9         3.56         3         94         75         40         70         8         17         10         15           100         4.32         10         2.95         1.57         2.76         31         .67         .39         .59           114.3         4.57         4         4.72         75         40         70         8         17         10         15           125         133         5.32         148         2.95         1.57         2.76         .31         .67         .39         .59           125         139,7         5.59         5         5.83         75         40         70         8         17         10         15           126         1		48,3	1.90	1-1/2	2.00							
50         60,3         2.41         2         64         1.50         .98         1.97         20         .39         .24         .39           65         76,1         3.04         2-1/2         82         38         25         50         5         10         6         10           80         88,9         3.56         3         94         75         40         70         8         17         10         15           100         108         4.32         120         2.95         1.57         2.76         .31         .67         .39         .59           110         15         3.70         2.95         1.57         2.76         .31         .67         .39         .59           1100         4.32         120         2.95         1.57         2.76         .31         .67         .39         .59           1140         4.57         4         4.72         75         40         70         8         17         10         15           120         133         5.32         148         2.95         1.57         2.76         .31         .67         .39         .59           125			0.00									
60,3	50	٥/	2.28			1.50	.98	1.97	.20	.39	.24	.39
1.50	30	60.3	2.41	2	2.52							
88,9   3.56   3   94   75   40   70   8   17   10   15		,-		_	00							
80	65	76,1	3.04	2-1/2								
100				_								
100	80	88,9	3.56	3								
100  114,3  4.57  4  4.72  75  40  70  8  17  10  15  133  5.32  148  2.95  1.57  2.76  3.1  3.1  6.7  3.9  5.9  5.9  139,7  5.59  5  5  8.3  75  40  70  8  17  10  15  139,7  5.59  5  8.3  75  40  70  8  17  10  15  15  139,7  5.59  5  8.3  75  40  70  8  17  10  15  15  139,7  5.59  5  8.3  75  40  70  8  17  10  15  15  159  6.36  176  150  168,3  6.73  6  6.93  140  90  75  8  26  10  25  176  155,51  3.54  2.95  3.1  1.02  3.9  9.8  176  10  25  177  10  15  150  168,3  6.73  6  6.93  140  90  75  8  26  10  25  175  193,7  7.75  202  140  90  75  8  26  10  25  7.96  5.51  3.54  2.95  3.1  1.02  3.9  9.8  140  90  75  8  26  10  25  7.96  5.51  3.54  2.95  3.1  1.02  3.9  9.8  140  90  75  8  26  10  25  10  25  11  20  21  10  28  28  5.51  3.54  2.95  31  1.02  39  98  98  140  90  75  8  26  10  25  10  25  27  10.68  282  5.51  3.54  2.95  3.1  1.02  39  98  98  8.98  140  90  75  8  26  10  25  25  27  10.68  282  5.51  3.54  2.95  3.1  1.02  39  98  98  8.98  140  90  75  8  26  10  25  25  27  10.68  282  5.51  3.54  2.95  3.1  1.02  39  98  98  8.98  140  90  75  8  26  10  25  25  27  10.68  282  5.51  3.54  2.95  3.1  1.02  39  98  98  98  31  1.02  39  98  98  30  31  1.02  39  98  31  1.02  39  98  31  1.02  39  98  30  30  31  300  31  31  300  31  31		108	4 32									
114,3	100	100	7.02									
133		114,3	4.57	4	4.72							
125												
139,7	405	133	5.32		148							
159 6.36	125	120.7	5.50	5								
150   168,3   6.73   6   6.93   140   90   75   8   26   10   25		135,1	3.33	J								
168,3   6.73   6   6.93   140   90   75   8   26   10   25		159	6.36		170							
108,3   6.73   6     5.51   3.54   2.95   .31   1.02   .39   .98	150											
175		168,3	6.73	6	0.50							
216 8.64 228 5.51 3.54 2.95 3.1 1.02 3.9 98  219,1 8.76 8 8.98 140 90 75 8 26 10 25  219,1 8.76 8 8.98 140 90 75 8 26 10 25  250 282 5.51 3.54 2.95 3.1 1.02 3.9 98  267 10.68 282 5.51 3.54 2.95 3.1 1.02 3.9 98  273 10.92 10 11.10 140 90 75 8 26 10 25  250 5.51 3.54 2.95 3.1 1.02 3.9 98  318 12.72 320 150 75 8 26 10 25  320 150 75 8 32 10 30  323,9 12.96 12 13.07 220 150 75 8 32 10 30  355,6 14.22 14 38.66 5.91 2.95 3.1 1.26 3.9 1.18  368 14.72 14.88 220 150 75 8 32 10 30  368 14.72 14.88 220 150 75 8 32 10 30  369 14.72 14.88 220 150 75 8 32 10 30  360 14.72 16.85 220 150 75 8 32 10 30  360 16.86 5.91 2.95 3.1 1.26 3.9 1.18  406,4 16.26 16 428 8.66 5.91 2.95 3.1 1.26 3.9 1.18  407 16.76 16.85 220 150 75 8 32 10 30  308 32 10 30  309 398 398 398 3998 3998 3998 3998 3998	175	102.7	7.75		202							
210         8.64         228         5.51         3.54         2.95         .31         1.02         .39         .98           219,1         8.76         8         8.98         140         90         75         8         26         10         25           250         267         10.68         282         5.51         3.54         2.95         .31         1.02         .39         .98           273         10.92         10         11.10         140         90         75         8         26         10         25           5.51         3.54         2.95         .31         1.02         .39         .98           273         10.92         10         11.10         140         90         75         8         26         10         25           5.51         3.54         2.95         .31         1.02         .39         .98           300         318         12.72         332         8.66         5.91         2.95         .31         1.02         .39         .98           320         12.96         12         13.07         220         150         75         8         32         10	175	193,7	7.75		7.96							
219,1 8.76 8 8.98 140 90 75 8 26 10 25 5.51 3.54 2.95 3.1 1.02 3.9 .98 140 90 75 8 26 10 25 25 282 5.51 3.54 2.95 3.1 1.02 3.9 .98 26 10 25 26 273 10.92 10 11.10 140 90 75 8 26 10 25 25 25 273 10.92 10 11.10 140 90 75 8 26 10 25 25 25 20 150 75 8 32 10 30 30 30 30 30 30 30 30 30 30 30 30 30		216	8.64									
250 267 10.68 282 5.51 3.54 2.95 3.1 1.02 3.39 9.8  267 273 10.92 10 11.10 140 90 75 8 26 10 25  273 10.92 10 11.10 140 90 75 8 26 10 25  25  31 1.02 39 98  26 10 25  31 1.02 39 98  39 98  39 98  318 12.72 320 150 75 8 32 10 30 30 323,9 12.96 12 13.07 220 150 75 8 32 10 30 30 311 1.26 39 1.18 30 30 318 323,9 12.96 12 320 150 75 8 32 10 30 30 30 30 30 30 30 30 30 30 30 30 30	200											
250  267  10.68  282  5.51  3.54  2.95  3.1  1.02  3.39  .98  273  10.92  10  11.10  140  90  75  8  266  10  25  339  .98  273  10.92  10  11.10  140  90  75  8  26  10  25  339  .98  318  12.72  320  150  75  8  32  10  30  323,9  12.96  12  13.07  220  150  75  8  32  10  30  30  323,9  12.96  12  13.07  220  150  75  8  32  10  30  30  30  30  30  31  1.26  39  1.18  355,6  14.22  14  378  366  5.91  2.95  31  1.26  39  1.18  30  30  30  30  31  30  30  30  30  30		219,1	8.76	8	0.00							
250 273 10.92 10 11.10 140 90 75 8 26 10 25 5.51 3.54 2.95 31 1.02 39 98 318 12.72 320 150 75 8 32 10 30 323,9 12.96 12 13.07 220 150 75 8 32 10 30 30 323,9 12.96 12 13.07 220 150 75 8 32 10 30 30 30 355,6 14.22 14 378 8.66 5.91 2.95 31 1.26 39 1.18 30 355,6 14.22 14 378 8.66 5.91 2.95 31 1.26 39 1.18 30 30 30 30 30 30 30 30 30 30 30 30 30		267	10.69					75	8			
273         10.92         10         11.10         140         90         75         8         26         10         25           5.51         3.54         2.95         .31         1.02         .39         .98           318         12.72         32         8.66         5.91         2.95         .31         1.26         .39         1.18           323,9         12.96         12         13.07         220         150         75         8         32         10         30           355,6         14.22         14         38         8.66         5.91         2.95         .31         1.26         .39         1.18           368         14.72         14.88         220         150         75         8         32         10         30           368         14.72         14.88         220         150         75         8         32         10         30           406,4         16.26         16         428         8.66         5.91         2.95         .31         1.26         .39         1.18           400         419         16.76         428         8.66         5.91         2.95         .3	250	201	10.00									
318		273	10.92	10	11.10							
318												
323,9   12.96   12   13.07   220   150   75   8   32   10   30   30   30   30   30   30   30	000	318	12.72		332							
353,9   12.96   12   8.66   5.91   2.95   .31   1.26   .39   1.18    355,6   14.22   14   378   8.66   5.91   2.95   .31   1.26   .39   1.18    368   14.72   14.88   220   150   75   8   32   10   30    8.66   5.91   2.95   .31   1.26   .39   1.18    400   406,4   16.26   16   428   8.66   5.91   2.95   .31   1.26   .39   1.18    400   419   16.76   16.85   220   150   75   8   32   10   30    8.66   5.91   2.95   .31   1.26   .39   1.18    508   2.32   20   530   8.66   5.91   2.95   .31   1.26   .39   1.18    508   2.32   20   530   8.66   5.91   2.95   .31   1.26   .39   1.18    509   530   8.66   5.91   2.95   .31   1.26   .39   1.18    500   531   2.84   2.87   220   150   75   8   32   10   30    500   531   2.84   2.87   220   150   75   8   32   10   30    500   531   2.84   2.87   220   150   75   8   32   10   30    500   500   500   500   500   500   500   500   500    500   500   500   500   500   500   500   500    500   500   500   500   500   500   500   500    500   500   500   500   500   500   500    500   500   500   500   500   500    500   500   500   500   500   500    500   500   500   500   500    500   500   500   500   500    500   500   500   500   500    500   500   500   500   500    500   500   500   500   500    500   500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500   500    500   500   500    500   500   500   500    500   500	300	222.0	12.00	10				75	8			30
350 35,6 14.22 14 378 8.66 5.91 2.95 .31 1.26 .39 1.18 14.88 220 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 1.18 200 150 75 8 32 10 30 20 150 75 8 32 10 30 20 150 75 8 32 10 30 20 20 150 75 8 32 10 30 20 20 150 75 8 32 10 30 20 20 150 75 8 32 10 30 20 20 150 75 8 32 10 30 20 20 150 75 8 32 10 30 20 20 20 150 75 8 32 10 30 20 20 20 150 75 8 32 10 30 20 20 20 150 75 8 32 10 30 20 20 20 20 20 20 20 20 20 20 20 20 20		323,9	12.90	12								
350     368     14.72     14.88     220     150     75     8     32     10     30       406,4     16.26     16     220     150     75     8     32     10     30       419     16.76     428     8.66     5.91     2.95     .31     1.26     .39     1.18       500     16.85     220     150     75     8     32     10     30       8.66     5.91     2.95     .31     1.26     .39     1.18       508     2.32     20     8.66     5.91     2.95     .31     1.26     .39     1.18       500     2.32     20     8.66     5.91     2.95     .31     1.26     .39     1.18       500     2.32     20     8.66     5.91     2.95     .31     1.26     .39     1.18       500     2.87     220     150     75     8     32     10     30       500     30     30     30     30     30     30     30     30       500     30     30     30     30     30     30     30     30     30		355,6	14.22	14	070							
406,4     16.26     16     428     8.66     5.91     2.95     .31     1.26     .39     1.18       400     406,4     16.26     16     428     8.66     5.91     2.95     .31     1.26     .39     1.18       419     16.76     16.85     220     150     75     8     32     10     30       8.66     5.91     2.95     .31     1.26     .39     1.18       508     2.32     20     150     75     8     32     10     30       500     530     8.66     5.91     2.95     .31     1.26     .39     1.18       501     75     8     32     10     30       502     10     30     30       503     10     150     75     8     32     10     30       504     10     10     10     10     10     30     1.18       505     10     10     150     75     8     32     10     30       500     10     10     150     75     8     32     10     30	350	,-										
406,4     16.26     16     428     8.66     5.91     2.95     .31     1.26     .39     1.18       419     16.76     16.85     220     150     75     8     32     10     30       508     2.32     20     8.66     5.91     2.95     .31     1.26     .39     1.18       500     2.32     20     150     75     8     32     10     30       508     2.32     20     150     75     8     32     10     30       508     2.32     20     150     75     8     32     10     30       508     32     10     30     1.18       500     2.87     220     150     75     8     32     10     30		368	14.72		14.00						39	
400     406,4     16.26     16     428     8.66     5.91     2.95     .31     1.26     .39     1.18       419     16.76     16.85     220     150     75     8     32     10     30       8.66     5.91     2.95     .31     1.26     .39     1.18       508     2.32     20     20     150     75     8     32     10     30       500     530     8.66     5.91     2.95     .31     1.26     .39     1.18       501     2.87     220     150     75     8     32     10     30       502     30     30     30     30     30     30     30		400.4	16.00	16								
419     16.76     8.66     5.91     2.95     .31     1.26     .39     1.18       508     2.32     20     530     8.66     5.91     2.95     .31     1.26     .39     1.18       500     2.87     220     150     75     8     32     10     30       531     2.84     2.87     220     150     75     8     32     10     30       531     2.87     220     150     75     8     32     10     30	400	406,4	16.26	10		8.66	5.91	2.95	.31	1.26	.39	1.18
508     2.32     20     500     220     150     75     8     32     10     30       501     2.87     2.87     220     150     75     8     32     10     30       501     2.87     2.87     220     150     75     8     32     10     30       501     3.9     3.1     3.2     30     30     30	400	419	16.76		16.85							
500 2.32 20 530 8.66 5.91 2.95 .31 1.26 .39 1.18 2.91 2.92 150 75 8 32 10 30												
500 2.87 220 150 75 8 32 10 30		508	2.32	20	530							
	500		00:									
		521	2.84									



#### **Ordering Codes**

#### Round Steel U-Bolt \*RB-\*A-52-\*W1-\*COMPL

One Round Steel U-Bolt (type RB) includes four Nuts (to DIN EN ISO 4032).

\* Round Steel U-Bolt RB

\* Dimension A (mm) A-52

\* Material code Carbon Steel, uncoated W1
Carbon Steel, zinc-plated,
W32

Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)

only Plastic Pipe Saddle \*RUK-\*48.3-\*PP

\* Plastic Pipe Saddle (Short) RUK

\* Exact outside diameter Ø D1 (mm) 48.3

\* Material of Pipe Saddle (see below) PP

#### **Standard Materials for Plastic Pipe Saddles**



#### Polypropylene

Colour: Green Material code: **PP** 



#### Polyamide

Colour: Black Material code: **PA** 

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

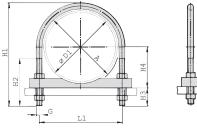
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube



## STAUFF®

## Round Steel U-Bolt with Plastic Pipe Saddle (Long) Type RB+RUL







Round Steel U-Bolt (type RB) with Plastic Pipe Saddle (type RUL)

Recommended Installation >DN50

#### **Ordering Codes**

#### Clamp Assembly \*RB+RUL-\*48.3-\*PP-\*W1

One clamp assembly is consisting of one Round Steel U-Bolt (type RB), one Plastic Pipe Saddle (type RUL) and four Nuts (to DIN EN ISO 4032).

* Clamp Assembly (as listed above) RB+RI								
* Exact outside diameter Ø D1 (mm) 48								
	* Material of Pipe Saddle (see below) PP							
	* Material code Carbon Steel, uncoated W1 Carbon Steel, zinc-plated, blue-chromated W32							
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>							
	Please note: All items are supplied non-assembled.							

#### **Standard Materials for Plastic Pipe Saddles**



Polypropylene Colour: Green Material code: PP



Polyamide Colour: Black Material code: PA

See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

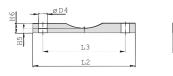
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

										>DN30
Diameter Nominal	Outside Pipe / Tu	Diameter ibe	Nominal Bore	Dimensi	ons ( <sup>mm</sup> /in)					
	Ø D1		Pipe			t (Type RB)				
DN	(mm)	(in)	(in)	Α	L1	H1	H2	H3	H4	Thread G
	25	.98		30	1.57	73,5 2.89	1.61	30 1.18	17,5 .69	M10
20	00.0	1.00	0/4	1.18	40	73,5	41	30	18.5	Mio
	26,9	1.06	3/4		1.57	2.89	1.61	1.18	.73	M10
	30	1.18			48	81	48	30	20	M10
25				<b>38</b> 1.50	1.89	3.19 81	1.89	1.18	.79 22	
	33,7	1.33	1	1.50	1.89	3.19	1.89	1.18	.87	M10
	38	1.50			56	89	48	30	24	M10
32	30	1.50		46	2.20	3.50	1.89	1.18	.94	IVITO
	42,4	1.69	1-1/4	1.81	56	89	48	30	26,2 1.03	M10
					2.20	3.50	1.89	1.18	27,2	
40	44,5	1.76		52	2.44	3.94	2.17	1.38	1.07	M10
40	48,3	1.90	1-1/2	2.05	62	100	55	35	29	M10
	10,0	1.00	1 1/2		2.44	3.94	2.17	1.38	1.14	WITO
	57	2.28		64	76 2.99	118 4.65	63 2.48	39 1.54	33,5 1.32	M12
50		0.44		2.52	76	118	63	39	35,2	1440
	60,3	2.41	2		2.99	4.65	2.48	1.54	1.39	M12
65	76,1	3.04	2-1/2	82	94	135	77	39	43	M12
	.,			3.23 <b>94</b>	3.70	5.31 152	3.03	1.54	1.69 54,5	
80	88,9	3.56	3	3.70	4.17	5.98	3.23	1.54	2.15	M12
	100	4.00		0.70	136	190	105	47	64	MAC
100	108	4.32		120	5.35	7.48	4.13	1.85	2.52	M16
100	114,3	4.57	4	4.72	136	190	105	47	67	M16
					5.35	7.48	4.13	1.85	2.64 76,5	
105	133	5.32		148	6.46	8.54	4.13	1.85	3.01	M16
125	139,7	5.59	5	5.83	164	217	105	47	80	M16
	135,1	5.55	J		6.46	8.54	4.13	1.85	3.15	IWITO
	159	6.36		176	192 7.56	9.72	105 4.13	1.85	91,5 3.60	M16
150			_	6.93	192	247	105	47	96	
	168,3	6.73	6		7.56	9.72	4.13	1.85	3.78	M16
175	193,7	7.75		202	218	273	105	47	109	M16
	,.			7.96	8.58	10.75 311	4.13 125	1.85 55	4.29	11112
	216	8.64		228	9.76	12.24	4.92	2.17	120 4.72	M20
200	010.1	0.70	0	8.98	248	311	125	55	121,5	M20
	219,1	8.76	8		9.76	12.24	4.92	2.17	4.78	IVIZU
	267	10.68		000	303	364	125	55	145,5	M20
250				<b>282</b> 11.10	11.93 302	14.33 364	4.92 125	2.17 55	5.73 148,5	
	273	10.92	10	11110	11.89	14.33	4.92	2.17	5.85	M20
	318	12.72			352	418	125	55	174	M20
300	010	12.72		332	13.86	16.46	4.92	2.17	6.85	IVIZO
	323,9	12.96	12	13.07	352 13.86	418 16.46	125 4.92	55 2.17	177 6.97	M20
		1100			402	475	145	63	193	1101
350	355,6	14.22	14	378	15.83	18.70	5.71	2.48	7.60	M24
330	368	14.72		14.88	402	475	145	63	199	M24
					15.83 452	18.70 526	5.71 145	2.48	7.83 218	
100	406,4	16.26	16	428	17.80	20.71	5.71	2.48	8.58	M24
400	419	16.76		16.85	452	526	145	63	224,5	M24
	419	16.76			17.80	20.71	5.71	2.48	8.84	IVIZ4
	508	20.32	20	E20	554	627	145	63	269	M24
500				<b>530</b> 20.87	21.81 554	24.69 627	5.71 145	2.48	10.59 276	
	521	20.84			21.81	24.69	5.71	2.48	10.87	M24

PP



## Round Steel U-Bolt with Plastic Pipe Saddle (Long) Type RB+RUL



#### Plastic Pipe Saddle (type RUL)

				Plas	tic Pipe Sac	ldle (type R	UL)			
Diameter Nominal	Pipe / Tu	Diameter ibe	Nominal Bore		ons (mm/in)	(T DIII.)				
DN	Ø D1	(in)	Pipe		Pipe Saddle		D	UF	Пе	Ø D4
DN	(mm)	(in)	(in)	Α	L2	L3	B	H5	H6	Ø D4
	25	.98		30	75 2.95	1.57	30 1.18	.20	.47	.43
20				1.18	75	40	30	5	12	11
	26,9	1.06	3/4	1.10	2.95	1.57	1.18	.20	.47	.43
		1.10			80	48	30	5	12	11
0.5	30	1.18		38	3.15	1.89	1.18	.20	.47	.43
25	22.7	1 22	1	1.50	80	48	30	5	12	11
	33,7	1.33			3.15	1.89	1.18	.20	.47	.43
	38	1.50			90	56	30	5	12	11
32		1.00		46	3.54	2.20	1.18	.20	.47	.43
	42,4	1.69	1-1/4	1.81	90	56	30	5	12	11
	,				3.54	2.20	1.18	.20	.47	.43
	44,5	1.76		52	95 3.74	62 2.44	35 1.38	.20	.59	.43
40				2.05	95	62	35	5	15	11
	48,3	1.90	1-1/2	2.00	3.74	2.44	1.38	.20	.59	.43
					110	76	35	5	15	14
-0	57	2.28		64	4.33	2.99	1.38	.20	.59	.55
50	60.0	0.44	2	2.52	110	76	35	5	15	14
	60,3	2.41	2		4.33	2.99	1.38	.20	.59	.55
35	76,1	3.04	2-1/2	82	135	94	35	5	15	14
00	70,1	3.04	2-1/2	3.23	5.31	3.70	1.38	.20	.59	.55
30	88,9	3.56	3	94	145	106	40	10	20	14
50	00,0	0.00	0	3.70	5.71	4.17	1.57	.39	.79	.55
	108	4.32			190	136	40	10	20	18
100				120	7.48	5.35	1.57	.39	.79	.71
	114,3	4.57	4	4.72	190	136	40	10	20	18
					7.48	5.35	1.57	.39	.79 20	.71 18
	133	5.32		148	8.66	6.46	1.57	.39	.79	.71
125				5.83	220	164	40	10	20	18
	139,7	5.59	5	0.00	8.66	6.46	1.57	.39	.79	.71
	150	0.00			250	192	50	12	25	18
150	159	6.36		176	9.84	7.56	1.97	.47	.98	.71
150	168,3	6.73	6	6.93	250	192	50	12	25	18
	100,3	0.73	U		9.84	7.56	1.97	.47	.98	.71
175	193,7	7.75		202	270	218	50	12	25	18
	,.	3		7.96	10.63	8.58	1.97	.47	.98	.71
	216	8.64		000	315	248	50	12	25	22
200				228	12.40	9.76	1.97	.47	.98	.87
	219,1	8.76	8	8.98	315 12.40	9.76	50 1.97	.47	.98	.87
					370	302	50	12	25	22
	267	10.68		282	14.57	11.89	1.97	.47	.98	.87
250				11.10	370	302	50	12	25	22
	273	10.92	10		14.57	11.89	1.97	.47	.98	.87
	010	10.70			420	352	60	15	30	22
200	318	12.72		332	16.54	13.86	2.36	.59	1.18	.87
300	323,9	12.96	12	13.07	420	352	60	15	30	22
	323,9	12.30	12		16.54	13.86	2.36	.59	1.18	.87
	355,6	14.22	14		480	402	60	15	30	26
350	300,0	1 1.22	1.,	378	18.90	15.83	2.36	.59	1.18	1.02
	368	14.72		14.88	480	402	60	15	30	26
					18.90	15.83	2.36	.59	1.18	1.02
	406,4	16.26	16	120	540	452	60	15	30	26
400				<b>428</b> 16.85	21.26 540	17.80 452	2.36	.59 15	1.18	1.02
	419	16.76		10.00	21.26	17.80	2.36	.59	1.18	1.02
					640	554	60	15	30	26
	508	20.32	20	530	25.20	21.81	2.36	.59	1.18	1.02
500				20.87	640	554	60	15	30	26
	521	20.84			25.20	21.81	2.36	.59	1.18	1.02



Ordering Codes
Round Steel U-Bolt*RB-*A-52-*W1-*COMPL
One Round Steel U-Bolt (type RB) inlcludes four Nuts (to DIN EN ISO 4032).
* Round Steel U-Bolt RB
* Dimension A (mm) A-52
* Material code Carbon Steel, uncoated W1 Carbon Steel, zinc-plated,
blue-chromated W32
Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>
only Plastic Pipe Saddle *RUL-*48.3-*PP
* Plastic Pipe Saddle (Long) RUL
* Exact outside diameter Ø D1 (mm) 48.3

#### **Standard Materials for Plastic Pipe Saddles**

# Polypropylene Colour: Green Material code: PP

\* Material of Pipe Saddle (see below)



See pages 154 / 155 for material properties and technical information.

Alternative materials are available upon request. Please contact STAUFF for further information.

#### **Applications**

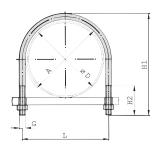
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube



## STAUFF ®

#### Round Steel U-Bolt (without Plastic Pipe Saddle) Type RBD (DIN 3570, Type A)





Round Steel U-Bolt (type RBD)

#### **Ordering Codes**

Clamp Assembly \*RBD-\*A-30-\*W1-\*COMPL

One clamp assembly is consisting of one Round Steel U-Bolt (type RBD according to DIN 3570, Type A) and two Nuts (to DIN EN ISO 4032).

* Clamp Assembl	y (as listed above)	RBD
* Dimension A (m	m)	A-30
* Material code	Carbon Steel, uncoated Carbon Steel, zinc-plated, blue-chromated	W1 W32
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 T	<b>W5</b>
Please note: All ite	ems are supplied non-assembled.	

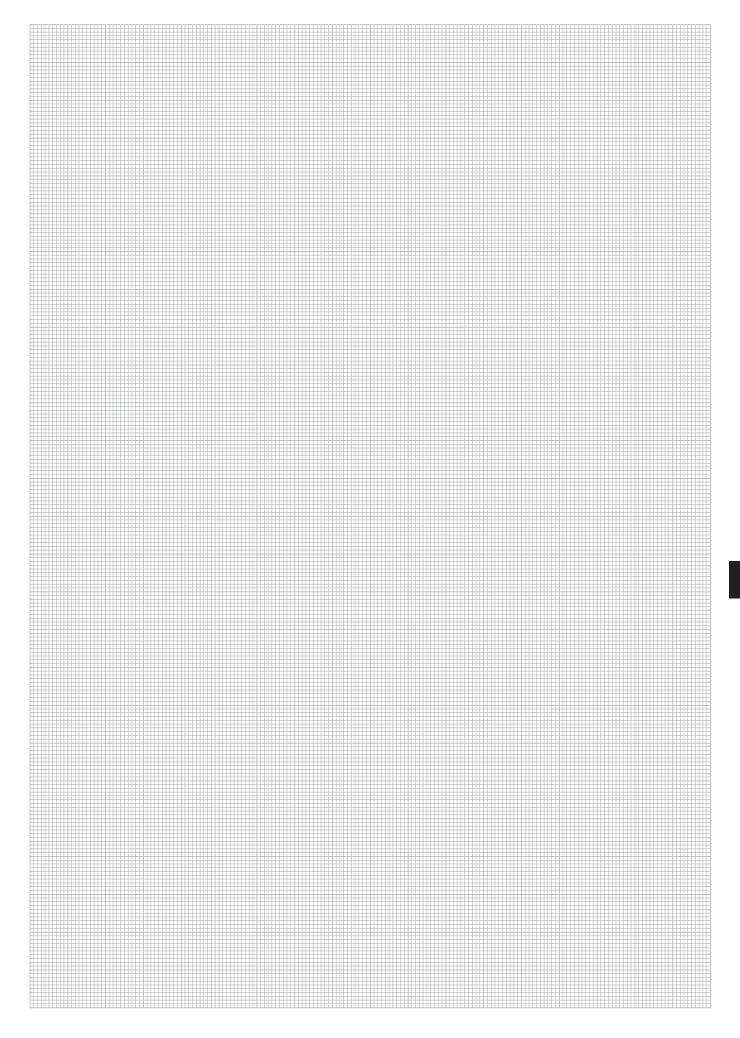
#### **Applications**

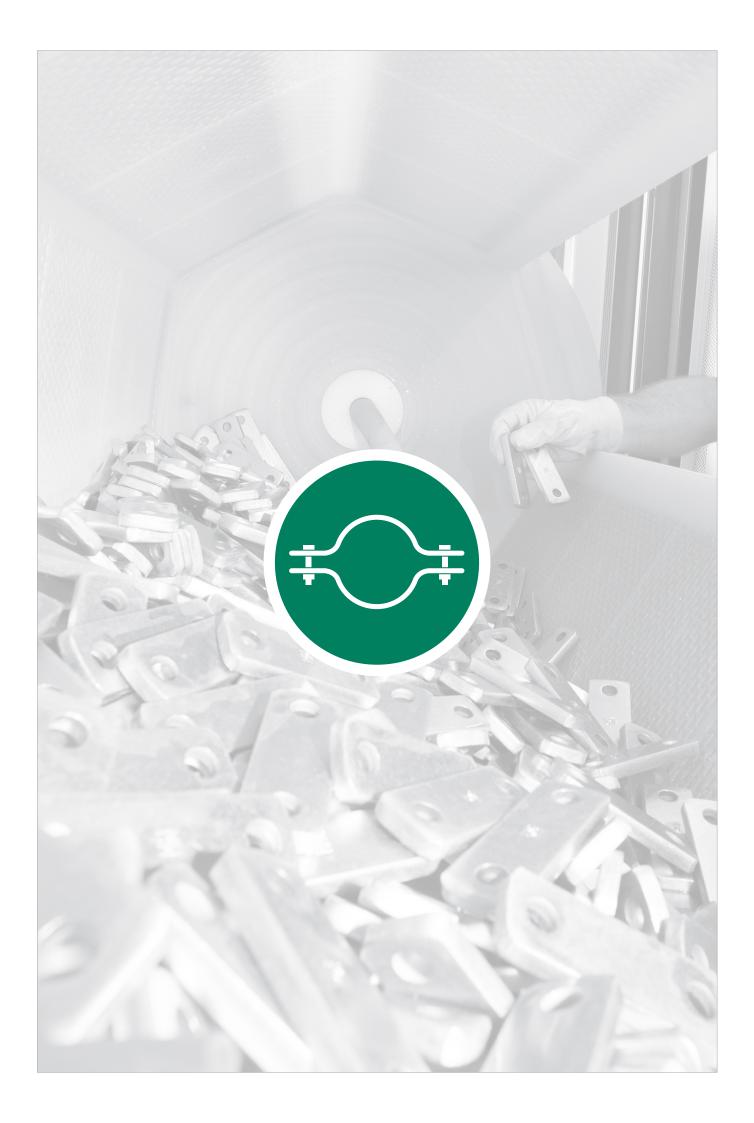
- Standing or hanging installation of pipes and tubes on beams, profiles and consoles
- Design with two threaded ends allows for ideal adaptation to suit the exact outer diameter of the pipe or tube

				Round Ste	el U-Bolt (type	кви)		
Diameter Nominal	Outside   Pipe / Tu		Nominal Bore	Dimensions ("	<sup>nm</sup> /in)			
Wollina	Ø D1	DC	Pipe	Round Steel U	I-Bolt (Type RBI	0)		
DN	(mm)	(in)	(in)	Α	L	H1	H2	Thread G
	25	.98			40	70	40	M10
20		.00		1 10	1.57	2.76	1.57	
	26,9	1.06	3/4	1.18	1.57	70 2.76	1.57	M10
	00	4.40			48	76	40	140
25	30	1.18		38	1.89	2.99	1.57	M10
23	33,7	1.33	1	1.50	48	76	40	M10
	,				1,89	2.99 86	1.57	-
32	38	1.50		46	56 2.20	3.39	1.97	M10
	40.4	1.00	1 1/4	1.81	56	86	50	M40
	42,4	1.69	1-1/4		2.20	3.39	1.97	M10
	44,5	1.76			62	92	50	M10
40				<b>52</b> 2.05	2.44 62	3.62 92	1.97 50	
	48,3	1.90	1-1/2	2.00	2.44	3.62	1.97	M10
	57	2.28			76	109	50	M12
50	31	2.20		64	2.99	4.29	1.97	IVITZ
	60,3	2.41	2	2.52	76	109	50	M12
				82	2.99 94	4.29 125	1.97	
65	76,1	3.04	2-1/2	3.23	3.70	4.92	1.97	M12
80	88,9	3.56	3	94	106	138	50	M12
00	00,9	3.30	3	3.70	4.17	5.43	1.97	IVITZ
	108	4.32		100	136	171	60	M16
100				<b>120</b> 4.72	5.35	6.73 171	2.36	
	114,3	4.57	4	1.72	5.35	6.73	2.36	M16
	133	5.32			164	191	60	M16
125	133	0.02		148	6.46	7.52	2.36	IVITO
120	139,7	5.59	5	5.83	164	191	60	M16
					6.46 192	7.52 217	2.36	
450	159	6.36		176	7.56	8.54	2.36	M16
150	168,3	6.73	6	6.93	192	217	60	M16
	100,5	0.73	U		7.56	8.54	2.36	IVITO
175	193,7	7.75		7.06	218	249	2.36	M16
				7.96	8.58 248	9.80	70	
000	216	8.64		228	9.76	11.14	2.76	M20
200	219,1	8.76	8	8.98	248	283	70	M20
	210,1	0.70	0		9.76	11.14	2.76	IVIZO
	267	10.68		282	303 11.93	334 13.15	70 2.76	M20
250	070	40.00	40	11.10	302	334	70	1400
	273	10.92	10		11.89	13.15	2.76	M20
	318	12.72			352	385	70	M20
300				332	13.86	15.16	2.76	
	323,9	12.96	12	13.07	352 13.86	385 15.16	70 2.76	M20
	055.0	14.00	4.4		402	435	70	MOA
350	355,6	14.22	14	378	15.83	17.13	2.76	M24
330	368	14.72		14.88	402	435	70	M24
		2			15.83	17.13	2.76	
	406,4	16.26	16	428	452 17.80	487 19.17	70 2.76	M24
400	410	10.70		16.85	452	487	70	1404
	419	16.76			17.80	19.17	2.76	M24
	508	20.32	20		554	589	70	M24
500				20.87	21.81	23.19	2.76	
	521	20.84		20.87	554 21.81	589 23.19	70 2.76	M24











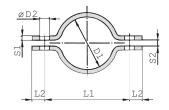
Metal Pipe Clamp with Tension Clearance Two-Bolt Design DIN 3567-A	136
Metal Pipe Clamp with Tension Clearance Three-Bolt Design (Extended to One Side) DIN 3567-B	137
Heavy Saddle with Tension Clearance Single-Bolt Design DIN 1592	138
Heavy Saddle with Tension Clearance Two-Bolt Design DIN 1593	139
Light Saddle with Tension Clearance Single-Bolt Design DIN 1596	140
Light Saddle with Tension Clearance Two-Bolt Design DIN 1597	141

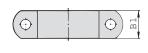


#### **Metal Pipe Clamp with Tension Clearance (DIN 3567-A)**

Two-Bolt Design







#### **Ordering Codes**

#### **Metal Pipe Clamp** \*DIN3567-A\*-20\*W1

One metal pipe clamp is consisting of two clamp halves. Hexagon head bolts and nuts are not included.

* Metal Pipe Clam	np to DIN 3567, type A	DIN3567-A
* STAUFF Group (	-20	
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, hot-dip galvan	nised W40
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 /	316 Ti) <b>W5</b>

#### Clamp Assembly \*DIN3567-A\*-20\*W1\*COMPL

One clamp assembly is consisting of two clamp halves, two hexagon head bolts and two hexagon head nuts.

* Metal Pipe Clamp	to DIN 3567, type A	DIN356	57-A
* STAUFF Group (Ø	D1)		-20
* Material code	Carbon Steel, uncoated		W1
	Carbon Steel, hot-dip galvan	ised	W40
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 /	316 Ti)	W5

\* Clamp assembly with bolts and nuts COMPL Please note: All items are supplied non-assembled.

#### **Applications**

• Installation of pipes, tubes and other construction elements on beams, profiles and consoles

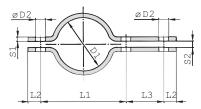
CTAULE	Normin	l Cine	Director	one /mm/ \	Annongin					
STAUFF Group	Nominal	Size	Dimensi	ons ( <sup>mm</sup> /in)					Accessories	
		Pipe							Hexagon Head Bolts	
Ø D1	(mm)	(in)	L1	L2	S1	S2	D2	B1	(Hexagon Head Nuts)	
20			57	15	5	7	11.5	30		
	15		2.24 59	.59 15	.20 5	.28	.45 11.5	1.18		
22			2.32	.59	.20	.28	.45	1.18		
25			62	15	5	7	11.5	30		
23	20		2.44	.59	.20	.28	.45	1.18		
27		3/4	66	15	5	7	11.5	30		
			2.60	.59 15	.20	.28	.45 11.5	1.18	M10 x 30	
30	0.5		2.68	.59	.20	.28	.45	1.18	(M10)	
34	25	1	72	15	5	7	11.5	30	3/8-16 UNC x 1-1/4	
34		'	2.83	.59	.20	.28	.45	1.18	(3/8–16 UNC)	
38			76	15	5	7	11.5	30		
	32		2.99 82	.59 15	.20 5	.28	.45 11.5	1.18		
43		1-1/4	3.23	.59	.20	.28	.45	1.18		
45			84	15	5	7	11.5	30		
40	40		3.31	.59	.20	.28	.45	1.18		
49	10	1-1/2	88	15	5	7	11.5	30		
			3.46	.59 18	.20	.28	.45 14	1.18		
57			4.09	.71	.24	.35	.55	1.57		
C4	50	0	108	18	6	9	14	40	M12 x 35	
61		2	4.25	.71	.24	.35	.55	1.57	(M12)	
77	65	2-1/2	122	18	6	9	14	40	7/16–14 UNC x 1-3/8	
			4.80	.71	.24	.35	.55	1.57	(7/16–14 UNC)	
89	80	3	136 5.35	.71	.24	.35	.55	40 1.57		
400			172	24	8	11	18	50		
108	100		6.77	.94	.31	.43	.71	1.97		
115	100	4	178	24	8	11	18	50		
			7.01	.94	.31	.43	.71	1.97		
133			196 7.72	.94	.31	.43	.71	50 1.97		
	125		204	24	8	11	18	50		
140			8.03	.94	.31	.43	.71	1.97	M16 x 45	
159			222	24	8	11	18	50	(M16)	
.00	150		8.74	.94	.31	.43	.71	1.97	5/8-11 UNC x 1-3/4	
169			9.13	.94	.31	.43	.71	50 1.97	(5/8–11 UNC)	
	475		258	24	8	11	18	50		
194	175		10.16	.94	.31	.43	.71	1.97		
216			280	24	8	11	18	50		
0	200		11.02	.94	.31	.43	.71	1.97		
220			284	24	8	11	18	1 07		
			342	30	8	14	23	1.97		
267	050		13.46	1.18	.31	.55	.91	2.36		
273	250		348	30	8	14	23	60		
-10			13.70	1.18	.31	.55	.91	2.36	M20 x 50	
318			392	30	8	14	23	60	(M20) 3/4–10 UNC x 2	
	300		15.43 398	1.18	.31	.55 14	.91 23	2.36	(3/4–10 UNC)	
324			15.67	1.18	.31	.55	.91	2.36	(5. 1. 1. 5.1.0)	
368	350		444	30	8	14	23	60		
300	330		17.48	1.18	.31	.55	.91	2.36		
407			498	36	10	18	27	70	M24 x 60	
	400		19.61 510	1.42	.39	.71 18	1.06	2.76		
419			10.08	1.42	.39	.71	1.06	2.76	(M24) 7/8–9 UNC 2-3/8	
E01	500		614	36	10	18	27	70	(7/8–9 UNC)	
521	500		24.17	1.42	.39	.71	1.06	2.76		





#### **Metal Pipe Clamp with Tension Clearance (DIN 3567-B)**

Three-Bolt Design (Extended to One Side)







STAUFF	Nomina	ıl Size	Dimens	ions ( <sup>mm</sup> /i	1)			Dimensions (mm/in)							
Group				,	,										
Ø D1	(mm)	Pipe (in)	L1	L2	L3	S1	S2	D2	B1	Hexagon Head Bolts (Hexagon Head Nuts					
	(*****)	()	57	15	46	5	7	11.5	30	(**************************************					
20	15		2.24	.59	1.81	.20	.28	.45	1.18						
22	15		59	15	46	5	7	11.5	30						
			2.32	.59	1.81	.20	.28	.45	1.18						
25			62 2.44	15	46	.20	.28	.45	1.18						
	20		66	.59 15	1.81	5	.28	11.5	30						
27		3/4	2.60	.59	1.81	.20	.28	.45	1.18						
20			68	15	46	5	7	11.5	30	M10 x 30					
30	25		2.68	.59	1.81	.20	.28	.45	1.18	(M10)					
34	20	1	72	15	46	5	7	11.5	30	3/8–16 UNC x 1-1/4					
		· ·	2.83	.59	1.81	.20	.28	.45	1.18	(3/8–16 UNC)					
38			76 2.99	.59	46 1.81	.20	.28	.45	30 1.18						
	32		82	15	46	5	7	11.5	30						
43		1-1/4	3.23	.59	1.81	.20	.28	.45	1.18						
45			84	15	46	5	7	11.5	30						
45	40		3.31	.59	1.81	.20	.28	.45	1.18						
49	40	1-1/2	88	15	46	5	7	11.5	30						
10		1 1/2	3.46	.59	1.81	.20	.28	.45	1.18						
57			104	18	54	6	9	14	40	_					
	50		4.09	.71	2.13	.24	.35	.55	1.57						
61		2	108 4.25	.71	54 2.13	.24	9 .35	.55	1.57	M12 x 35 (M12)					
			122	18	54	6	9	14	40	7/16–14 UNC x 1-3/8					
77	65	2-1/2	4.80	.71	2.13	.24	.35	.55	1.57	(7/16–14 UNC)					
			136	18	54	6	9	14	40						
89	80	3	5.35	.71	2.13	.24	.35	.55	1.57						
108			172	24	70	8	11	18	50						
100	100		6.77	.94	2.76	.31	.43	.71	1.97						
115	100	4	178	24	70	8	11	18	50						
			7.01	.94	2.76	.31	.43	.71	1.97						
133			196 7.72	.94	70 2.76	.31	.43	.71	1.97						
	125		204	24	70	8	11	18	50						
140			8.03	.94	2.76	.31	.43	.71	1.97	M16 x 45					
150			222	24	70	8	11	18	50	(M16)					
159	150		8.74	.94	2.76	.31	.43	.71	1.97	5/8-11 UNC x 1-3/4					
169	130		232	24	70	8	11	18	50	(5/8–11 UNC)					
103			9.13	.94	2.76	.31	.43	.71	1.97						
194	175		258	24	70	8	11	18	50						
			10.16	.94 24	2.76	.31	.43	.71 18	1.97						
216			11.02	.94	2.76	.31	.43	.71	1.97						
	200		284	24	70	8	11	18	50						
220			11.18	.94	2.76	.31	.43	.71	1.97						
267			342	30	86	8	14	23	60						
201	250		13.46	1.18	3.39	.31	.55	.91	2.36						
273	200		348	30	86	8	14	23	60						
_,,			13.70	1.18	3.39	.31	.55	.91	2.36	M20 x 50					
318			392	30	86	8	14	23	60	(M20)					
	300		15.43 398	1.18	3.39 86	.31	.55	.91	2.36	3/4–10 UNC x 2 (3/4–10 UNC)					
324			15.67	1.18	3.39	.31	.55	.91	2.36	(5/ 1 10 0110)					
			444	30	86	8	14	23	60						
368	350		17.48	1.18	3.39	.31	.55	.91	2.36						
407			498	36	104	10	18	27	70						
407	400		19.61	1.42	4.09	.39	.71	1.06	2.76	M24 x 60 (M24)					
419	400		510	36	104	10	18	27	70						
דוס			10.08	1.42	4.09	.39	.71	1.06	2.76	7/8–9 UNC 2-3/8					
521	500		614	36	104	10	18	27	70	(7/8–9 UNC)					
	000		24.17	1.42	4.09	.39	.71	1.06	2.76						

#### **Ordering Codes Metal Pipe Clamp** \*DIN3567-B\*-20\*W1 One metal pipe clamp is consisting of two clamp halves. Hexagon head bolts and nuts are not included. \* Metal Pipe Clamp to DIN 3567, type B DIN3567-B \* STAUFF Group (Ø D1) -20 \* Material code Carbon Steel, uncoated W1 Carbon Steel, hot-dip galvanised W40 Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) Clamp Assembly \*DIN3567-B\*-20\*W1\*COMPL One clamp assembly is consisting of two clamp halves, three hexagon head bolts and three hexagon head nuts. \* Metal Pipe Clamp to DIN 3567, type B DIN3567-B \* STAUFF Group (Ø D1) -20 \* Material code Carbon Steel, uncoated W1 Carbon Steel, hot-dip galvanised W40 Stainless Steel V4A W5 1.4401 / 1.4571 (AISI 316 / 316 Ti) \* Clamp assembly with bolts and nuts COMPL

#### **Applications**

 Installation of pipes, tubes and other construction elements on beams, profiles and consoles

Please note: All items are supplied non-assembled.

Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.

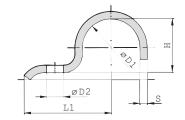


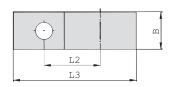


## **Heavy Saddle with Tension Clearance (DIN 1592)**

Single-Bolt Design







Ordering Codes								
Heavy Saddle *DIN1592-*7-*W								
* Heavy Saddle to	DIN 1592	DIN1592						
* STAUFF Group (	Ø D1)	7						
* Material code	Carbon Steel, uncoated	W1						
	Carbon Steel, zinc-plated and thick-film passivated	W66						
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 3	16 Ti) <b>W5</b>						

#### **Applications**

Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

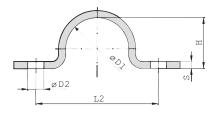
STAUFF Group	Diameter R	ange	Dimension	ns ( <sup>mm</sup> /in)					
Ø D1	(mm)	(in)	L1	L2	L3	Н	D2	В	S
7	5,5 7	.2228	22	14	27,5	5	6,6	16	2
'	5,5 1 .2220	.87	.55	1.08	.20	.26	.63	.08	
9	79	.2835	27	18	33,5	6	6,6	20	2
9	7 9	.2050	1.06	.71	1.32	.24	.26	.79	.08
13	9,5 13	.3951	40	25	49,5	9	11	25	3
10	3,0 10	.0001	1.57	.98	1.95	.35	.43	.98	.12
15,5	13 15,5	.5161	41	26	52	12	11	25	3
10,0	10 10,0	.0101	1.61	1.02	2.05	.47	.43	.98	.12
19	15,5 19	.6175	43	28	55,5	15	11	25	3
10	10,0 10	.01 0	1.69	1.10	2.19	.59	.43	.98	.12
23	20 23	.7991	51	35	67	19	14	30	5
	20 20		2.01	1.38	2.64	.75	.55	1.18	.20
26	23 26	.91 1.02	52	36	70	22	14	30	5
			2.05	1.42	2.76	.87	.55	1.18	.20
28,5	26 28,5	26 28,5   1.02 1.12	53	37	73	24	14	30	5
-,-	,.		2.09	1.46	2.87	.94	.55	1.18	.20
31	28,5 31	1.12 1.22	55	39	75,5	27	14	30	5
	,		2.17	1.54	2.97	1.06	.55	1.18	.20
36	33 36	1.30 1.42	57	41	81	32	14	40	5
			2.24 59	1.61	3.19	1.26	.55	1.57	.20
39	36 39	1.42 1.54	2.32	43	83,5	34	14	40	5
			68	1.69	3.29	1.34	.55	1.57	.20
43	39 43	1.54 1.69	2.68	1.89	94,5 3.72	38	.71	1.57	.20
			70	50	98	1.50	18	40	5
46	43 46	1.69 1.81	2.76	1.97	3.86	1.61	.71	1.57	.20
			73	53	105,5	44	18	40	8
49	46 49	1.81 1.93	2.87	2.09	4.15	1.73	.71	1.57	.31
			76	56	110	47	18	40	8
52 *	49 52	1.93 2.05	2.99	2.20	4.33	1.85	.71	1.57	.31
			78	58	115	52	18	40	8
58	53 58	2.09 2.28	3.07	2.28	4.53	2.05	.71	1.57	.31
			80	60	118,5	57	18	40	8
61	58 61	2.28 2.40	3.15	2.36	4.67	2.24	.71	1.57	.31

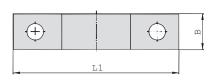
<sup>\*</sup> Similar to DIN 1592.





## Heavy Saddle with Tension Clearance (DIN 1593) Two-Bolt Design







STAUFF Group	Diameter Range		Dimensions (mm/in)							
Ø D1	(mm)	(in)	L1	L2	Н	D2	В	S		
7	5,5 7	.2228	44	28	5	6,6	16	2		
1	5,5 /	.2220	1.73	1.10	.20	.26	.63	.08		
9 79	.2835	48	32	6	6,6	20	2			
9	7 9	.2033	1.89	1.26	.24	.26	.79	.08		
13	9,5 13	.3951	52	36	9	6,6	20	2		
13	3,0 10	.5551	2.05	1.42	.35	.26	.79	.08		
15,5	13 15,5	.5161	56	40	12	6,6	20	2		
10,0	13 10,001	2.20	1.57	.47	.26	.79	.08			
19	15.5 19	.6175	60	44	15	6,6	20	2		
10	10,0 10	.0170	2.36	1.73	.59	.26	.79	.08		
23	20 23	.7991	82	56	19	11	25	3		
	20 20		3.23	2.20	.75	.43	.98	.12		
26	23 26	.91 1.02	84	58	22	11	25	3		
	20 20	.011.02	3.31	2.28	.87	.43	.98	.12		
28,5	26 28,5	1.02 1.12	90	64	24	11	25	3		
20,0	20 20,0	1.02 1.12	3.54	2.52	.94	.43	.98	.12		
31	28.5 31	1.12 1.22	90	64	27	11	25	3		
	20,0 01	1.12 1.22	3.54	2.52	1.06	.43	.98	.12		
36	33 36 1.30 1.42	106	80	32	11	30	5			
			4.17	3.15	1.26	.43	1.18	.20		
39	36 39 1.4	1.42 1.54	110	84	34	11	30	5		
			4.33	3.31	1.34	.43	1.18	.20		
43	39 43	1.54 1.69	120	88	38	14	30	5		
			4.72	3.46	1.50	.55	1.18	.20		
46	43 46	1.69 1.81	122	90	41	14	30	5		
			4.80	3.54	1.61	.55	1.18	.20		
49	46 49	1.81 1.93	122	90	44	14	30	5		
			4.80	3.54	1.73	.55	1.18	.20		
58	53 58	2.09 2.28	142	110	52	14	40	5		
			5.59	4.33	2.05	.55	1.57	.20		
61	58 61	2.28 2.40	142	110	57	14	40	5		
			5.59	4.33	2.24	.55	1.57	.20		
71	67 71	2.64 2.80	152	120	66	14	40	5		
			5.98 176	4.72	2.60	.55	1.57	.20		
77	73 77	2.87 3.03	6.93	136	72	18	40	5		
			184	5.35	2.83	.71	1.57	.20		
81	77 81	3.03 3.19	7.24	144	76 2.99	18	1.57	.20		
			198	5.67		.71				
91	88 91	3.39 3.58	7.80	158	85	18	40	8		
			214	6.22	3.35	.71	1.57	.31		
103	99 103	3.90 4.06	8.43	174	98	18	40	8		
			220	6.85	3.86	.71	1.57	.31		
109	105 109	4.13 4.29		180	104	18	40	8		
			8.66	7.09	4.09	.71	1.57	.31		
115	110 115	4.33 4.53	226	186	109	18	40	8		
			8.90	7.32	4.29	.71	1.57	.31		

Ordering C	odes
Heavy Saddle	*DIN1593-*7-*W66
* Heavy Saddle to	DIN 1593 <b>DIN1593</b>
* STAUFF Group (	Ø D1) 7
* Material code	Carbon Steel, uncoated W1
	Carbon Steel, zinc-plated and thick-film passivated W66
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti) <b>W5</b>

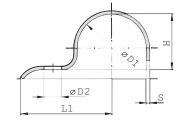
#### **Applications**

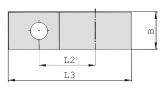
 Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

## **Light Saddle with Tension Clearance (DIN 1596)**

Single-Bolt Design







Ordering Co	odes	
Light Saddle	*DIN1596-*7-*\	<b>N66</b>
* Light Saddle to I	DIN 1596 DIN	1596
* STAUFF Group (	Ø D1)	7
* Material code	Carbon Steel, uncoated	W1
	Carbon Steel, zinc-plated and thick-film passivated	W66
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316 Ti)	W5

#### **Applications**

Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

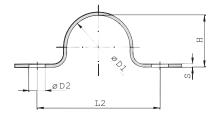
STAUFF Group	Diameter R	ange	Dimension	1s ( <sup>mm</sup> /in)				Dimensions (mm/in)								
Ø D1	(mm)	(in)	L1	L2	L3	Н	D2	В	S							
7	5,5 7	.2228	26	14	31,5	5	6,6	16	2							
1	5,5 7	.2220	1.02	.55	1.24	.20	.26	.63	.08							
9	7 9	.2835	28	16	34,5	6	6,6	16	2							
9	7 3	.2033	1.10	.63	1.36	.24	.26	.63	.08							
13	9,5 13	.3951	30	18	38,5	9	6,6	20	2							
13	3,0 10	.5551	1.18	.71	1.52	.35	.26	.79	.08							
15,5	13 15,5	.5161	32	20	41,75	12	6,6	20	2							
15,5	15 10,0	.5101	1.26	.79	1.64	.47	.26	.79	.08							
19	15,5 19	.6175	34	22	45,5	15	6,6	20	2							
19	10,0 19	.0173	1.34	.87	1.79	.59	.26	.79	.08							
23	20 23	.7991	43	28	57,5	19	9	25	3							
23	20 23	.7991	1.69	1.10	2.26	.75	.35	.98	.12							
26	23 26	.91 1.02	44	29	60	22	9	25	3							
20	23 20	.91 1.02	1.73	1.14	2.36	.87	.35	.98	.12							
28,5	1.02		47	32	64,25	24	9	25	3							
20,3	26 28,5	1.12	1.85	1.26	2.53	.94	.35	.98	.12							
31	28,5 31	1.12	47	32	65,5	27	9	25	3							
31	20,3 31	1.22	1.85	1.26	2.58	1.06	.35	.98	.12							
33 *	31 33	1.221.30	56	36	75,5	29	9	25	3							
33	31 33	1.221.30	2.20	1.42	2.97	1.14	.35	.98	.12							
36	33 36	1.30	57	40	78	32	11	30	3							
30	33 30	1.42	2.24	1.57	3.07	1.26	.43	1.18	.12							
39	36 39	1.42	59	42	81,5	34	11	30	3							
39	30 39	1.54	2.32	1.65	3.21	1.34	.43	1.18	.12							
43	39 43	1.54	61	44	85,5	38	11	30	3							
43	39 43	1.69	2.40	1.73	3.37	1.50	.43	1.18	.12							
46	43 46	1.69	62	45	88	41	11	30	3							
40	43 40	1.81	2.44	1.77	3.46	1.61	.43	1.18	.12							
49	46 49	1.81	67	48	95,5	44	14	40	4							
49	40 49	1.93	2.64	1.89	3.76	1.73	.55	1.57	.16							
52 *	49 52	1.93	72	53	102	47	14	40	4							
32	49 02	2.05	2.83	2.09	4.02	1.85	.55	1.57	.16							
E0	53 58	2.09	76	55	107	52	14	40	4							
58	JJ JJ	2.28	2.99	2.17	4.21	2.05	.55	1.57	.16							
C1	E0 61	2.28	77	58	111,5	56	14	40	4							
61	58 61	2.40	3.03	2.28	4.39	2.20	.55	1.57	.16							

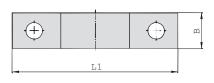
<sup>\*</sup> Similar to DIN 1596.





# **Light Saddle with Tension Clearance (DIN 1597)**Two-Bolt Design







STAUFF Group	Diameter R	lange	Dimensions (mm/in)							
Ø D1	(mm)	(in)	L1	L2	Н	D2	В	S		
7	5,5 7	.2228	44	28	5	5,5	16	1,5		
′	J,J 1	.2220	1.73	1.10	.20	.22	.63	.06		
9	7 9	.2835	48	32	6	5,5	16	1,5		
9	7 9		1.89	1.26	.24	.22	.63	.06		
13	0.5 10	),5 13 .3951	52	36	9	5,5	16	1,5		
13	9,5 13	.3931	2.05	1.42	.35	.22	.63	.06		
45.5	10 155	E4 04	56	40	12	5,5	16	1.5		
15,5	13 15,5	.5161	2.20	1.57	.47	.22	.63	.06		
10	155 10	04 75	60	44	15	5,5	16	1.5		
19	15,5 19	.6175	2.36	1.73	.59	.22	.63	.06		
00	00 00	70 01	76	56	19	6,6	20	2		
23	20 23	.7991	2.99	2.20	.75	.26	.79	.08		
	00 00	04 4 00	78	58	22	6,6	20	2		
26	23 26	.91 1.02	3.07	2.28	.87	.26	.79	.08		
	26 28,5	1.02	84	64	24	6,6	20	2		
28,5		1.12	3.31	2.52	.94	.26	.79	.08		
	28,5 31	1.12 1.22	84	64	27	6,6	20	2		
31			3.31	2.52	1.06	.26	.79	.08		
			92	72	29	6,6	20	2		
33 *	31 33	1.221.30	3.62	2.83	1.14	.26	.79	.08		
		1.30	104	80	32	9	25	3		
36	33 36	1.42	4.09	3.15	1.26	.35	.98	.12		
		1.42	108	84	34	9	25	3		
39	36 39	1.54	4.25	3.31	1.34	.35	.98	.12		
		1.54	112	88	38	9	25	3		
43	39 43	1.69	4.41	3.46	1.50	.35	.98	.12		
		1.69	114	90	41	9	25	3		
46	43 46	1.81	4.49	3.54	1.61	.35	.98	.12		
		1.81	118	90	44	11	30	3		
49	46 49	1.93	4.65	3.54	1.73	.43	1.18	.12		
		1.93	134	106	47	11	30	3		
52 *	49 52	2.05	5.28	4.17	1.85	.43	1.18	.12		
		2.09	138	110	52	11	30	3		
58	53 58	2.28	5.43	4.33	2.05	.43	1.18	.12		
		2.28	138	110	56	11	30	3		
61	58 61	2.40	5.43	4.33	2.20	.43	1.18	.12		

Ordering Co	des	
Light Saddle	*DIN1597-*7	-*W66
* Light Saddle to DII	N 1597 <b>D</b>	IN 1597
* STAUFF Group (Ø I	D1)	7
(	Carbon Steel, uncoated Carbon Steel, zinc-plated and thick-film passivated	W1 W66
	Stainless Steel V4A 1.4401 / 1.4571 (AISI 316 / 316	Ti) <b>W5</b>

#### **Applications**

• Installation of pipes, tubes, poles and other round components directly on the substrate (floor, wall or ceiling)

\* Similar to DIN 1597.



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145

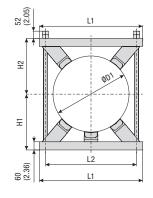


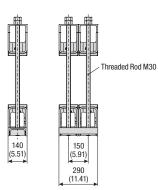


## **ESTAUFF**®

## Construction Series Types KS (Single Version) / DKS (Double Version)







Ordering Codes							
Construction Series *KS-*220-*PA-*W8							
* Version	Single version Double version	KS DKS					
* Exact outside diameter ØD1 (mm)							
* Material of Plastic Pads (see below)							
* Material Code	Steel, prime coated (grey, RAL 7035)	W8					
Please note: All ite	ems are supplied non-assembled.						

### **Standard Materials for Plastic Pads**



See pages 154 / 155 for material properties and technical information.

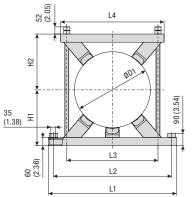
							No. of		
Group	Outside Diamet Diameter Range	e Standard Dia	ameters	ons (mm/in)	ns ( <sup>mm</sup> /in)				
STAUFF	(mm)	(in)	(mm)	(in)	L1	L2	H1	H2	Pads
	()		220	8.66					
		247	9.72	420	330	220	220		
1	1 220 275	8.66 10.85	267	10.51	16.54	12.99	8.66	8.66	4
		273	10.75						
		10.87 12.80	280	11.02					
			300	11.81	460	370	240	240	4
2 2	276 325		318	12.52	18.11	14.57	9.45	9.45	
			323,9	12.75	1				
		12.83 14.57	355,6	14.00	510	420	260	260	4
3	326 370				20.08	16.53	10.23	10.23	
			368	14.49	20.00	10.00	10.20	10.20	
		25 14.61 16.73	390	15.35	570	480	290	290	
4	371 425				22.44	18.89	11.42	11.42	4
			406,4	16.00	LL.III	10.00	111.12	111.12	
5 426 485		485 16.77 19.09	457,2	18.00	620	530	305	305	4
	426 485				24.41	20.87	12.01	12.01	
			470	18.50		20.0.	12.0.	12.01	
		50 19.13 21.65	490	19.29					4
			508	20.00	680	590	370	370	
6 486 5	486 550		521	20.51	26.77	23.23	14.57	14.57	
			546	21.50	20.77	20.20	11.07	11.07	
			040						
			558,8	22.00	760	670	410	410	
7 551 630	21.69 24.80			29.92	26.38	16.14	16.14	5	
			609,6	24.00	20.02	20.00	10.11	10.11	
		24.84 28.15	711	28.00	845	755	452	452	5
8	631 715				33.27	29.72	17.80	17.80	
					00.27	20.72	17.00	17.00	
					940	850	495	495	
9	716 800	28.19 31.50	762	30.00	37.00	33.46	19.49	19.49	5
					07.00	00.10	10.10	10.10	
					990	900	500	500	
10			813	32.00	38.97	35.43	19.69	19.69	5
					00.01	00.10	10.00	10.00	
					1200	1100	591,5	593	
11			1000	39.37	47.24	43.30	23.29	23.34	5
	/				11.27	10.00	20.20	20.07	
		<del></del>							
12			1016	40.00	1200	1100	602	602	5
					47.24	43.30	23.70	23.70	
					77.29	40.00	20.10	20.70	

Alternative outside diameters, materials and surface finishings are available upon request. Contact STAUFF for further information.

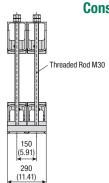
(m) APSUM















		I <del>&lt;</del>		<b>→</b>				(11. <del>4</del>	·/_			
Group	Outside Diamet Diameter Range	er ØD1 Pipe / Tub	e Standard Dia	ameters	Dimer	nsions (	mm/in)				No. of Plastic	
STAUFF	(mm)	(in)	(mm)	(in)	L1	L2	L3	L4	H1	H2	Pads	
SIAULI	(11111)	(111)	220	8.66	LI	LZ	LJ	L4	111	112	raus	
			247	9.72	580	490	330	420	220	220		
1	220 275	8.66 10.85	267	10.51		19.29				8.66	4	
			273	10.75	_ 22.00	13.23	12.00	10.04	0.00	0.00		
			280	11.02								
			300	11.81	620	E20	270	460	0.40	240		
2	276 325	10.87 12.80	318	12.52	24.41	530	370 14.57	460	240 9.45	240 9.45	4	
			323,9	12.75	24.41	20.07	14.37	10.11	3.40	3.40		
			323,9	12.70								
			355,6	14.00	070	-00	400	540	000	000		
3	326 370	12.83 14.57			670	580	420	510	260	260	4	
			368	14.49	26.38	22.83	16.53	20.08	10.23	10.23		
			390	15.35								
4	371 425	14.61 16.73			750	640	480	570	290	290	4	
			406,4	16.00	29.53	25.20	18.89	22.44	11.42	11.42		
				1 11								
			457,2	18.00								
5	426 485	16.77 19.09			800	730	530	620	305	305	4	
-			470	18.50	31.50	28.74	20.87	24.41	12.01	12.01		
			490	19.29								
6	486 550	19.13 21.65	508	20.00	860	790	590	680	370	370	4	
O	100 000	10.10 21.00	521	20.51	33.86	31.10	23.23	26.77	14.57	14.57		
			546	21.50								
			558,8	22.00								
7	551 630	21.69 24.80	000,0	22.00	940	870	670	760	410	410	5	
,	001 000	21.00 24.00	609,6	24.00	37.00	34.25	26.38	29.92	16.14	16.14	0	
			003,0	24.00								
8	631 715	24.84 28.15	711	28.00	1025	955	755	845	452	452	5	
U	001 710	24.04 20.13	/ 11	20.00	40.31	37.60	29.72	33.27	17.80	17.80	3	
9	716 800	28.19 31.50	762	30.00	1120			940	495	495	5	
9	710 000	20.19 31.30	702	30.00	44.09	41.33	33.46	37.00	19.49	19.49	3	
10			813	22.00	1170	1100	900	990	500	500	E	
10			013	32.00	46.06	43.30	35.43	38.97	19.69	19.69	5	
11			1000	20.27	1400	1300	1100	1200	591,5	593	_	
11			1000	39.37	55.12	51.18	43.30	47.24	23.29	23.34	5	
40			4040	40.00	1400	1300	1100	1200	602	602	_	
12			1016	40.00	55.12	51.18			23.70	23.70	5	
	V	V		1								

Ordering Codes									
Construction Series *KSV-*220-*PA-*W8									
* Version	Single version Double version	KSV DKSV							
* Exact outside di	ameter ØD1 (mm)	220							
* Material of Plast	* Material of Plastic Pads (see below) PA								
* Material Code Steel, prime coated (grey, RAL 7035) W									

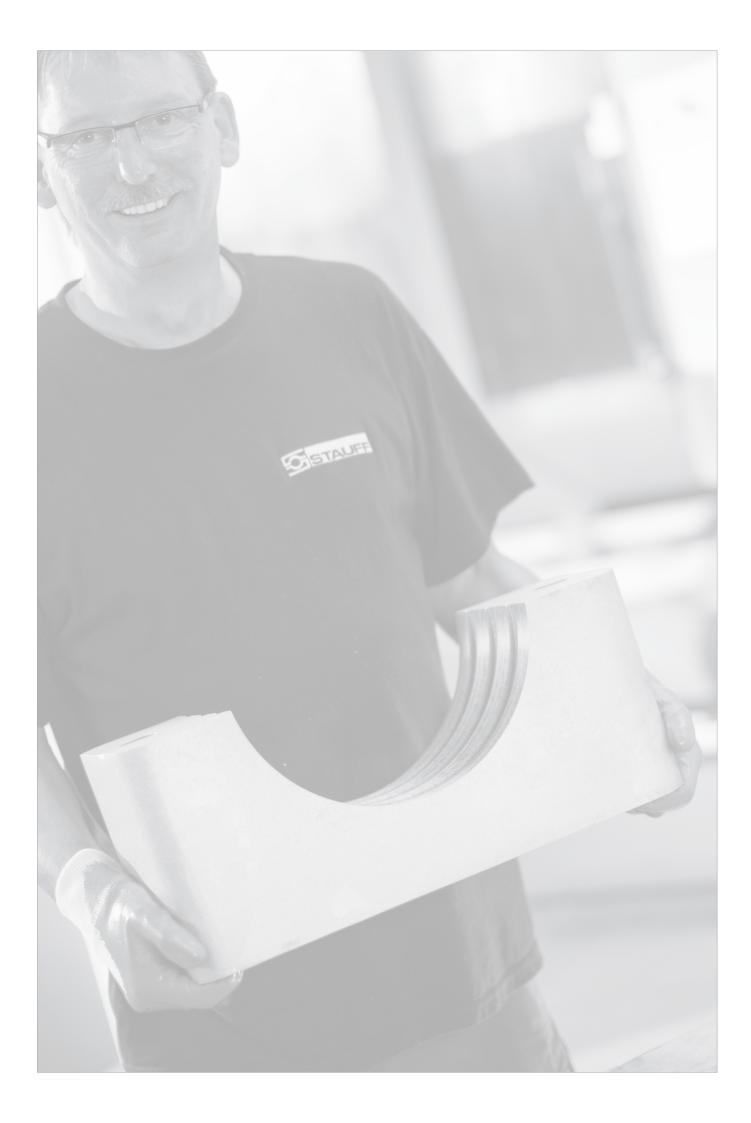
## **Standard Materials for Plastic Pads**

Please note: All items are supplied non-assembled.

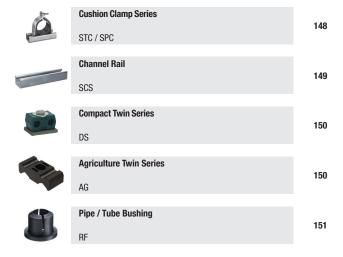


See pages 154 / 155 for material properties and technical information.

Alternative outside diameters, materials and surface finishings are available upon request. Contact STAUFF for further information.





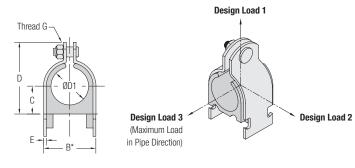




## Clamp Assembly • Types STC / SPC

(for Use with Channel Rail SCS)





	Diameter ube / Hose	Nominal Bore Pipe	Ordering Codes (1 Clamp Assembly)	Standard Packaging Units	Dimensio (mm/in)	ns				Design (kN/lbf)	Loads	
(mm)	(in)	(in)	(** = Material Code)	pcs.	B*	C	D	E	Thread G	1	2	3
6,4	1/4		STC-025-**-K	24 / box	15,7	5,6	28,2	2	1/4-20 UNC	1,78	0,22	0,22
0, 1	17 1		010 020 4-4- K	217 00%	.62	.22	1.11	.08	17 1 20 0110	400	50	50
8	3/8		STC-037-**-K	24 / box	19,1	7,1	31,5	2	1/4-20 UNC	1,78	0,22	0,22
					.75 22,1	.28 8,6	1.24 34,5	.08		400 1,78	0,22	0,22
12,7	1/2		STC-050-**-K	24 / box	.87	.34	1.36	.08	1/4-20 UNC	400	50	50
					23,1	9,1	35,8	2		1,78	0,22	0,22
13,5		1/4	SPC-025-**-K	24 / box	.91	.36	1.41	.08	1/4–20 UNC	400	50	50
10	F /O		CTO OCO state V	04 / have	25,4	10,4	38,1	2	1/4 00 UNO	1,78	0,22	0,22
16	5/8		STC-062-**-K	24 / box	1.00	.41	1.50	.08	1/4-20 UNC	400	50	50
17,2		3/8	SPC-037-**-K	24 / box	27,2	11,4	40,4	2	1/4-20 UNC	2,67	0,33	0,33
17,2		3/0	31 0-037- <b></b>	247 000	1.07	.45	1.59	.08	174-20 0110	600	75	75
19	3/4		STC-075-**-K	24 / box	33,8	13,5	45,2	2	1/4-20 UNC	2,67	0,33	0,33
-					1.33	.53	1.78	.08		600	75	75
21,3		1/2	SPC-050-**-K	24 / box	36,8 1.45	15,0 .59	48,5 1.91	.08	1/4-20 UNC	2,67	0,33 75	0,33 75
					36,8	14,7	48,5	2		2,67	0,33	0,33
22,2	7/8		STC-087-**-K	24 / box	1.45	.58	1.91	.08	1/4-20 UNC	600	75	75
					42,2	16,8	51,6	2,8		2,67	0,33	0,33
25,4	1		STC-100-**-K	12 / box	1.66	.66	2.03	.11	1/4-20 UNC	600	75	75
00.0		0/4	000 000 111	40 / 1-	45,5	18,3	54,9	2,8	4/4 00 UNO	2,67	0,33	0,33
26,9		3/4	SPC-075-**-K	12 / box	1.79	.72	2.16	.11	1/4–20 UNC	600	75	75
32	1-1/4		STC-125-**-K	12 / box	48,8	19,8	58,4	2,8	1/4-20 UNC	2,67	0,33	0,33
32	1-1/4		310-123-44-K	12 / 000	1.92	.78	2.30	.11	1/4-20 0110	600	75	75
33,7		1	SPC-100-**-K	12 / box	56,4	23,1	69,9	3	5/16–18 UNC	2,67	0,33	0,33
00,1			01 0 100 414 K	127 55%	2.22	.91	2.75	.12	0,10 10 0110	600	75	75
38	1-1/2		STC-150-**-K	12 / box	56,4	23,1	69,9	3	5/16–18 UNC	2,67	0,33	0,33
					2.22 62,7	.91 26,2	2.75 77,0	.12		600 3,56	75 0,56	75 0,56
42		1-1/4	SPC-125-**-K	12 / box	2.47	1.03	3.03	.12	5/16–18 UNC	800	125	125
					62,7	29,5	83,3	3		3,56	0,56	0,56
48,3		1-1/2	SPC-150-**-K	12 / box	2.47	1.16	3.28	.12	5/16–18 UNC	800	125	125
E0.0	2		STC-200-**-K	10 / hav	69,1	29,5	83,3	3	E/10 10 UNO	3,56	0,56	0,56
50,8	Z		516-200- <b>**</b> -K	12 / box	2.72	1.16	3.28	.12	5/16–18 UNC	800	125	125
60,3		2	SPC-200-**-K	1 / bag	69,1	35,8	96,0	3	5/16–18 UNC	3,56	0,56	0,56
00,0		-	01 0 200 4-4- K	17 bag	3.22	1.41	3.78	.12	0/10/10/0140	800	125	125
63,5	2-1/2		STC-250-**-K	1 / bag	88,1	38,9	102,4 4.03	.12	5/16–18 UNC	3,56	0,56	0,56
					3.47	1.53				800	125	
66,7	2-5/8		STC-262-**-K	1 / bag	88,1 3.47	38,9 1.53	102,4 4.03	.12	5/16–18 UNC	3,56 800	0,56 125	0,56 125
					94,5	42,2	108,5	3		3,56	0,56	0,56
73		2-1/2	SPC-250-**-K	1 / bag	3.72	1.66	4.27	.12	5/16–18 UNC	800	125	125
70.0	0		OTO 000 / 1 1/	1 / han	100,8	45,2	114,8	3	E/40 40 LP10	4,45	0,89	0,67
76,2	3		STC-300-**-K	1 / bag	3.97	1.78	4.52	.12	5/16–18 UNC	1 000	200	150
88,9		3	SPC-300-**-K	1 / bag	110,7	50,0	124,7	3	3/8-16 UNC	4,45	0,89	0,67
00,3		J	3F U-3UU-本本-N	i / bay	4.36	1.97	4.91	.12	3/0-10 UNC	1 000	200	150
102		3-1/2	SPC-350-**-K	1 / bag	126,2	57,9	140,5	3	3/8-16 UNC	4,45	0,89	0,67
			2. 0 000 PH N	, 223	4.97	2.28	5.53	.12	5.5 .0 0.10	1 000	200	150
114		4	SPC-400-**-K	1 / bag	138,9	64,3	153,2	3	3/8-16 UNC	4,45	0,89	0,67
					5.47	2.53	6.03	.12		1 000	200	150
140		5	SPC-500-**-K	1 / bag	164,3 6.47	77,0 3.03	178,6 7.03	3,6	3/8-16 UNC	4,45 1 000	0,89	0,67 150
					189,7	89,7	204,0	3,6		4,45	0,89	0,67
168		6	SPC-600-**-K	1 / bag	7.47	3.53	8.03	.14	3/8-16 UNC	1 000	200	150
					1 * * * *	2.30	2.30	1 * * *				

<sup>\*</sup> Minimum required for installation.

One clamp assembly is consisting of two carbon steel clamp halves (one with threaded stud), one thermoplastic cushion insert and one lock nut with Nylon insert. Channel rail not included. All threaded parts are only available with unified coarse (UNC) thread. Alternative materials and surface finishings are available upon request. Contact STAUFF for further information.







### **Standard Materials**



Cushion Insert **Thermoplastic Elastomer** (80 Shore-A) Colour: Black

The cushion material is compatible with most oils, chemicals and cleaning solvents and suitable for applications within a temperature range of -50 °C ... +125 °C (-58 °F ... +257 °F).

Alternative materials are available upon request. Please contact STAUFF for further information.

### **Product Features**

- Clamp assemblies designed to mount directly to 41,3 mm / 1-5/8 in wide strut channels, such as the STAUFF Channel Rail, type SCS
- Suitable for most Fluid Power applications ranging from mobile equipment to industrial machinery
- Reduced horizontal mounting space
- · Easy installation and retro fit capability
- Reduces shock and vibration while preventing galvanic corrosion

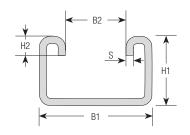
## Clamp Assembly • Types STC / SPC

(for Use with Channel Rail SCS)



Ordering C	odes	
Clamp Assem	bly *STC-*125-*	W4-*K
* Type of clamp	STC (Tube diameters) SPC (Pipe diameters)	STC SPC
* Pipe / Tube O.D	. (according to dimension table)	125
* Material code	Carbon Steel, zinc-plated, blue-chromated	W32
	Stainless Steel V2A 1.4301 (AISI 304)	W4
	Stainless Steel V4A 1.4401 (AISI 316)	W5
Assembling	Components packed in kits	K

## **Channel Rail • Type SCS**



Dimensions (mm/in)									
B1	B2	H1	H2	S					
41,3	22,2	25,4	7	2,7					
1.63 (1-5/8)	.88 (7/8)	1.00	.28	.11					

Alternative rail profiles, materials and surface finishings are available upon request. Contact STAUFF for further information.



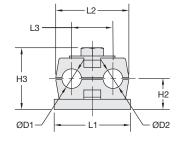
Ordering Codes									
Strut Channel	*SCS-*048-	*1-*PL							
* Strut Channel		SCS							
* Length of Rail	1,22 m / 4.00 ft / 48 in 3,05 m / 10.00 ft / 120 in	048 120							
* Height of Rail	25,4 mm / 1.00 in	1							
* Material code	Carbon Steel, uncoated Carbon Steel, green painted	PL GR							

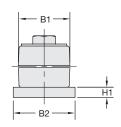
# **E**STAUFF ®

# **Compact Twin Series: Clamp Body Type DS**









## **Ordering Codes**

Clamp Body \*1-\*06/06-\*PP-\*DS

One clamp body is consisting of two clamp halves.

- \* STAUFF Group DS 1
- \* Exact outside diameters Ø D1 / Ø D2 (mm)
- \* Clamp Body Material (Polypropylene)
- \* Compact Twin Series

Outside Diameter Nominal Bore Ordering Codes Dimensions (mm/in) Group Pipe / Tube **Copper Tube** (2 Clamp Halves) Ø D1 / Ø D2 Pipe ASTM B88 STAUFF L1 L2 L3 H1 H2 H3 B1 (mm) (in) (in) (in) 106/06-PP-DS 106.4/06.4-PP-DS 6,4 37 35,5 20 15 30 25 30 DS 1 5/16 108/08-PP-DS 8 1.46 1.40 .79 .20 .59 1.18 .98 1.18 9,5 3/8 1/4 109.5/09.5-PP-DS 10 1/8 110/110-PP-DS

Additional outside diameters are available upon request. Please contact STAUFF for further information.

## **Compact Twin Series: Metal Hardware**



## **Weld Plate, Type SP-DS**

06/06

PP

DS

SP-DS-1-U-W2 Thread size: 1/4–20 UNC Carbon Steel, phosphated



### **Cover Plate, Type US-DS**

US-DS-1-W3

Carbon Steel, zinc/nickel-plated



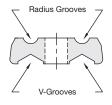
## **Hexagon Bolt, Type AS**

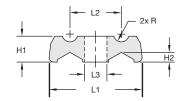
AS-1/4-20UNCx1-W3 Thread size: 1/4–20 UNC Carbon Steel, zinc/nickel-plated

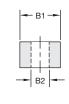
All threaded parts are only available with unified coarse (UNC) thread. Rail mount and stacking assemblies as well as alternative materials and surface finishings are available upon request.

# Agriculture Twin Series: Clamp Body Type AG









Group Min/Max Outside Diameters Pipe / Tube Radius Grooves V-Grooves			Ordering Codes (1 Clamp Body)	Dimens	ions ( <sup>mm</sup> / <sub>in</sub> )								
STAUFF	(mm)	(in)	(mm)	(in)		L1	L2	L3	H1	H2	B1	B2	R
2	3 10	.1239	4 15	.2659	215.8/09.6-PP-AG-BK-HV	57,5 2.26	31,7 1.25	14,0	16,0	7,1 .24	25,0 .98	11,0	4,8
3	4 25	.1698	7 20	.2879	324.8/19.5-PP-AG-BK-HV	62,0 2.48	34,5 1.36	14,0 .55	19,0 .75	7,1 .28	32,0 1.26	11,0	12,4 .49

### **Standard Material**



Polypropylene Colour: Black

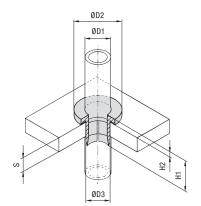
See pages 154 / 155 for properties and technical information.

### **Product Features**

- Flip the clamp body to choose between the radius grooved or the v-grooved design (suitable for a range of diameters)
- Use M10 or 3/8–16 UNC bolts or screws (preferably with washers) to fasten clamp bodies directly to the machine
- Clamp bodies can be stacked for multi-level assembly

Additional outside diameters are available upon request. Please contact STAUFF for further information.





#### Outside Diameter ØD1 Nominal Bore Wall Thickness **Mounting Bore Dimensions** ØD2 H2 ØD3 (mm) (in) (in) H1 4 ... 12 18 4 10 22 6 1/4 .16 ... .47 .16 71 87 39 20 22 4 ... 12 12 5/16 .16 ... .47 .47 .79 .16 .87 1/8 Pipe 22 22 14 10 3/8 1/4 Copper Tube (ASTM B88) .87 .16 .16 ... .47 .55 16 24 22 4 4 ... 12 12 1/2 3/8 Copper Tube (ASTM B88) .94 .87 .16 .16 ... .47 .63 26 22 4 ... 12 18 14 1/4 Pipe 1.02 .16 .16 ... .47 87 71 28 22 4 ... 12 20 15 1.10 .87 .16 ... .47 .79 .16 28 22 4 4 ... 12 20 16 1/2 Copper Tube (ASTM B88) 1.10 .87 .16 .16 ... .47 .79 22 30 22 4 ... 12 18 1.18 .87 .16 .16 ... .47 .87 32 22 24 20 3/4 1.26 .87 .16 ... .47 .16 26 34 22 4 4 ... 12 22 7/8 3/4 Copper Tube (ASTM B88) 1.34 .87 .16 .16 ... .47 1.02 38 22 4 ... 12 30 25 1 .16 ... .47 1.50 .16 .87 1.18 41 22 4 ... 12 33 28 1 Copper Tube (ASTM B88) .87 .16 ... .47 1.30 1.61 .16 43 22 4 4 ... 12 34 30 .16 ... .47 1.69 .87 .16 1.39 4 ... 12 40 35 1-1/4 Copper Tube (ASTM B88) 1.89 .87 .16 .16 ... .47 1.57 22 4 4 ... 12 43 1-1/2 38 2.01 .87 .16 .16 ... .47 1.70 47 1-1/4 Pipe 55 1-1/2 Copper Tube (ASTM B88) 2.17 55 22 4 4 ... 12 42

.87

.16

.16 ... .47

1.85

## Pipe / Tube Bushing • Type SRF



<b>Ordering Codes</b>	
Pipe / Tube Bushing	*SRF-*20-*PP

\* Pipe / Tube Bushing SRF \* Exact outside diameter Ø D1 (mm) 20 \* Material code (see below) PP

## **Standard Materials**



Polypropylene Colour: Natural colour Material code: PP

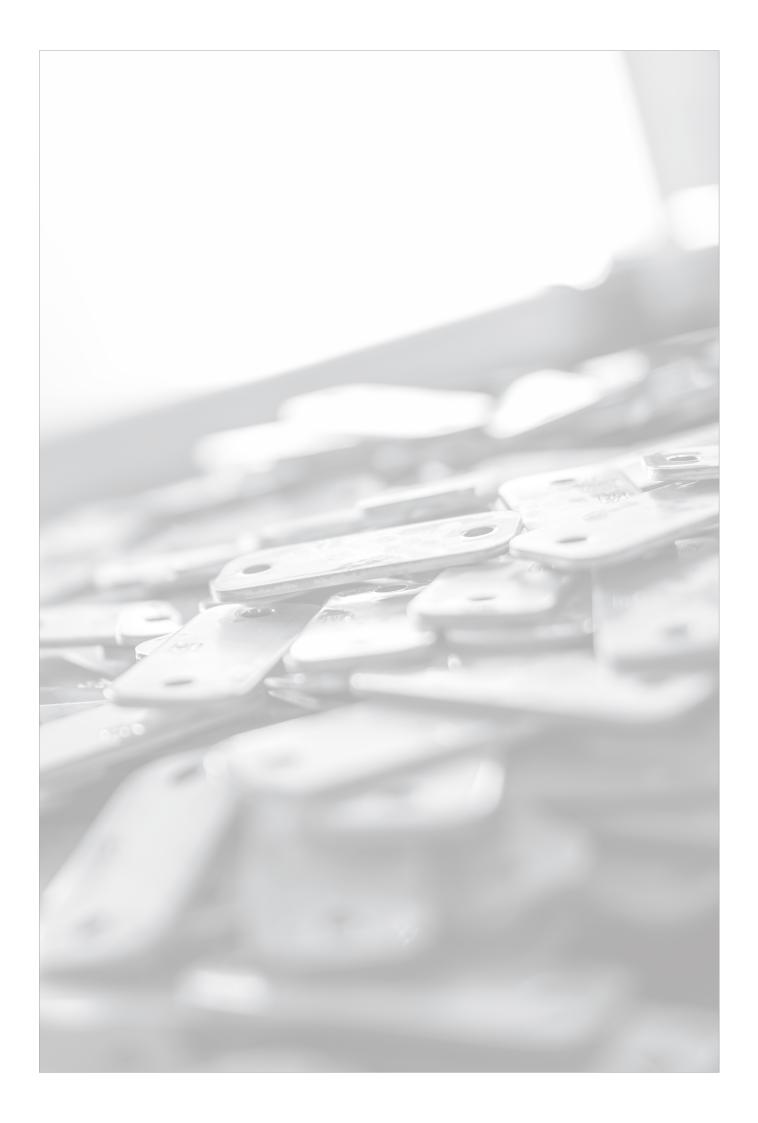


Thermoplastic Elastomer (87 Shore-A) Colour: Black Material code: SA

See pages 154 / 155 for material properties and technical

#### **Product Features**

- Designed to centre the pipe or tube in a through-hole (e.g. for return lines entering the hydraulic reservoir)
- Vibration and noise absorbing element
- Available for all commonly used Metric and imperial pipe and tube diameters from 6 ... 42 mm and 1/4 ... 1-1/2 in
- Easy plug-in installation





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## **Standard Clamp Body Materials**









Material Code	PP	PA	AL	SA	
Basic Material	Copolymeric Polypropylene	Polyamide	Aluminium AlSi12	Thermoplastic Elastomer	
Standard Colour	Green	Black	Natural	Black	

Mechanical Properties				
Tensile E-Module	1073 N/mm² (ISO 527)	> 1400 N/mm² (ISO 527)	> 65000 N/mm²	113 N/mm² at +23 °C / +73.4 °F (ASTM D412)
Notch Impact Strength	8 kJ/m² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)	> 15 kJ/m² at 23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)		
Low Temperature Notch Impact Strength	3 kJ/m² at -20 °C / -4.0 °F (acc. to Charpy / ISO 179 / 1eU)	> 3 kJ/m² at -30 °C / -22.0 °F (acc. to Charpy / ISO 179 / 1eU)		
Tensile Strength at Yield (Tensile Strength)	26 MPa (ISO 527-2)	> 55 MPa (ISO 527)	> 240 MPa (ISO EN 10002)	15,9 MPa (ASTM D412)
Ball Indentation Hardness (Brinell Hardness)	45,4 MPa (ISO 2039-1)	> 65 MPa (ISO 2039-1)	> 70 HBS	
Shore Hardness				87 A (ISO 868)  Alternative hardnesses are available upon request! Contact STAUFF for details.

Thermal Properties				
Temperature Resistance (Min Max)	-30 °C +90 °C / -22 °F +194 °F	-40 °C +120 °C / -40 °F +248 °F (Brief exposure up to +140 °C / +284 °F)	up to +300 °C / up to +572 °F	-40 °C +125 °C / -40 °F +257 °F

Chemical Properties				
Weak Acids	conditionally consistent	conditionally consistent	conditionally consistent	consistent
Solvents	conditionally consistent	conditionally consistent	conditionally consistent	conditionally consistent
Benzine	conditionally consistent	consistent	consistent	conditionally consistent
Mineral Oils	conditionally consistent	consistent	consistent	conditionally consistent
Other Oils	consistent	consistent	consistent	consistent
Alcohols	consistent	consistent	consistent	consistent
Seawater	consistent	consistent	consistent	consistent



## **Special Clamp Body Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.

The information for the Polyamide material PA have been determined in a conditioned state according to ISO 1110.

For Aluminium, the tensile strength (under reversed bending stress) and impact bending strength both rise constantly at decreasing temperatures whilst the value for breaking elongation decreases.





## **Standard Clamp Insert Materials**



STAUFF Group 4 and 6 (Standard Series) STAUFF Group 4S to 6S (Heavy Series)



STAUFF Group 7S to 10S (Heavy Series)

SA	EPDM	Material Code
Thermoplastic Elastomer	Ethylene Propylene Diene Monomer	Basic Material
Black	Black	Standard Colour

		Mechanical Properties
16 N/mm² at +23 °C / +73.4 °F (ASTM D412)		Tensile E-Module
		Notch Impact Strength
		Low Temperature Notch Impact Strength
8,3 MPa (ASTM D412)	9,0 MPa (DIN 53504)	Tensile Strength at Yield (Tensile Strength)
		Ball Indentation Hardness (Brinell Hardness)
73 A (ISO 868)	70 A (DIN 53505)	Shore Hardness

		Thermal Properties
-40 °C +125 °C/ -40 °F +257 °F	-50 °C +120 °C / -58 °F +248 °F	Temperature Resistance (Min Max)

		Chemical Properties
consistent	consistent	Weak Acids
conditionally consistent	consistent	Solvents
conditionally consistent	conditionally consistent	Benzine
conditionally consistent	conditionally consistent	Mineral Oils
consistent	conditionally consistent	Other Oils
consistent	consistent	Alcohols
consistent	consistent	Seawater



## **Special Clamp Insert Materials**

Please contact STAUFF for further details on fire-proof clamp body materials, tested and approved according to several international fire-protection standards (such as BS 6853, EN 45545-2, UL 94 and many more).

See pages 156 / 157 for material properties and technical information.





## **Special Clamp Body Materials (Selection)**

## **Preventive Fire Protection**









Material Code	PA-V0	PP-DA	PA-GF30-USR
Basic Material	Polyamide	Polypropylene	Polyamide
Standard Colour	Grey / Black	Weiss	Black

Mechanical Properties			
Tensile E-Module	1500 MPa (ISO 527-2)	1614 N/mm² (ISO 527) bei +23 °C / +73.4 °F: 50 mm/min	8274 MPa (ASTM D638)
Notch Impact Strength	35 kJ/m² at +23 °C / +73.4 °F (acc. to Charpy / ISO 179 / 1eU)	13 kJ/m² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179 / 1eA)	15 kJ/m² (ASTM D256)
Low Temperature Notch Impact Strength		1,5 kJ/m <sup>2</sup> at -25 °C / -13.0 °F (acc. to IZOD / ISO 179 / 1eA)	
Tensile Strength at Yield (Tensile Strength)	45 MPa (ISO 527-2)	12,4 MPa (ISO 527) at +23 °C / +73.4 °F: 50 mm/min	131 MPa (ASTM D638)
Ball Indentation Hardness (Brinell Hardness)	100 N/mm² (ISO 2039-1)		
Shore Hardness			

Thermal Properties			
Temperature Resistance (Min Max)	-30 °C +120 °C / -22 °F +248 °F	-25°C +90°C / -13°F +194°F	-30°C +120°C/-22°F +248°F

Features			
Approvals / Properties	Tested and approved acc. to UL94 <sup>1</sup> (material thickness: 3 mm)	Tested and approved acc. to UL94 ¹ (material thickness: 3 mm)	Tested and approved acc. to ASTM D638 (material thickness: 1,5 mm)
	Classification: V-0 (Vertical Burning Test)	■ Classification: V-0 (Vertical Burning Test)	■ Classification: V-0 (Vertical Burning Test)
	Tested and approved acc. to EN 45545-2 (material thickness: 3,5 mm)	Tested and approved acc. to Def Stan 07-247  - Assessment: category B	Tested and approved acc. to NFPA 130 (material thickness: 3 mm)
	Requirements set R22 / R23 / R24 / R26 Hazard level HL1 - HL3	Approved by the UK Ministry of Defence (MoD)	■ no burning dripping
	Tested and approved acc. to DIN 5510, Part 2 (material thickness: 3 mm)	Low Smoke Zero Halogen (LSZH)	Halogen Free Flame Retardant (HFFR)
	Combustibility classification: S4     Smoke development classification: SR2     Dripping classification: ST2		
	Tested and approved acc. to NF F 16-101 (material thickness: 3 mm)		
	Classification: I3 / F2		
	Low Smoke Zero Halogen (LSZH)		

<sup>&</sup>lt;sup>1</sup>Successful testing and approval according to UL94 (classification V-0) is equivalent to EN 45545-2 (requirements set R26; hazard level HL3). The information for PA-V0 has been determined in a conditioned state according to ISO 1110.





## **Special Clamp Body Materials (Selection)**

## **Preventive Fire Protection**







PP6853	PP-V0	SA-V0	Material Code
Polypropylene	Polypropylene	Thermoplastic Elastomer	Basic Material
White	Black	Natural	Standard Colour

			Mechanical Properties
1264 MPa (ICE 60811-1-1)		113 N/mm <sup>2</sup> at +23 °C / +73.4 °F (ASTM D412)	Tensile E-Module
17 kJ/m² at +23 °C / +73.4 °F (acc. to IZOD / ISO 179 / 1eA)	5 kJ/m² at +23 °C / +73.4 °F (acc. to ISO 180/A)		Notch Impact Strength
			Low Temperature Notch Impact Strength
25 MPa (ICE 60811-1-1)	24 MPa (ISO 527)	15,9 MPa (ASTM D412)	Tensile Strength at Yield (Tensile Strength)
			Ball Indentation Hardness (Brinell Hardness)
		86 A (ISO 868)	Shore Hardness

			Thermal Properties
-25°C +90°C / -13°F +194°F	-25°C +90°C / -13	3°F+194°F	Temperature Resistance (Min Max)

			Features
Tested and approved acc. to EN 45545-2 (material thickness: 3 mm) Requirements set R22 / R23 / R24 / R26 Hazard level HL1 - HL3	Tested and approved acc. to UL94 ¹ (material thickness: 3 mm)  Classification: V-0 (Vertical Burning Test)	Tested and approved acc. to UL94 ¹ (material thickness: 3 mm)  Classification: V-0 (Vertical Burning Test)	Approvals / Properties
Tested and approved acc. to BS 6853 (Code of practice for fire precautions in the design/construction of passenger carrying trains)  Assessment: category 1a			
Compliant to the requirements of London Underground / Metronet (standard 2-01001-002: Fire Safety Performance of Materials)			
Tested and approved acc. to DIN 5510, Part 2 (material thickness: 25 mm)  Combustibility classification: S4  Smoke development classification: SR2  Dripping classification: ST2			
Tested and approved acc. to Def Stan 07-247 ■ Assessment: category B			
Compliant to the requirements of JRMA (Japan Railway Rollingstock & Machinery Association) • Classification: extremely incombustible			
Low Smoke Zero Halogen (LSZH)			

<sup>&</sup>lt;sup>1</sup>Successful testing and approval according to UL94 (classification V-0) is equivalent to EN 45545-2 (requirements set R26; hazard level HL3).



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S=0

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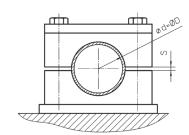
## **Standard Clamp Body Designs**



## **Profiled Design**

## **Profiled Inside Surface with Tension Clearance**

- Available in the Standard, Heavy, Twin and Heavy Twin Series
- · Recommended for the safe installation of rigid pipes or tubes
- · Available for all commonly used outside diameters and nominal sizes
- Vibration/noise reducing and impact absorbing effect towards the direction of the line provided by the grooves on the inside of the clamp bodies
- Clearance S between the clamp halves provides tension of the tube or pipe
- To be used as fixed point clamp preventing the line from sliding (see page 161 for Maximum Loads in Pipe Direction)

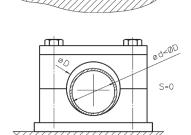




## Type H (Smooth)

## Smooth Inside Surface w/o Tension Clearance

- · Available in the Standard, Heavy and Twin Series
- Recommended for the safe installation of hoses or cables
- · Available for all commonly used outside diameters and nominal sizes
- · Smooth inside surface and chamfered edges avoid damaging of the hose or cable



• Choose the diameter ØD of the clamp body slightly larger (in accordance to your specific requirements) than the outside diameter  $\emptyset d$  of the pipe, tube, hose or cable in order to use it as a longitudinal guide allowing the line to slide



## Type RI (with Elastomer Insert)

- Available in the Standard, Heavy and Heavy Twin Series
- Recommended for the extra-gentle installation of pipes, tubes, hoses or cables
- Available for all commonly used outside diameters and nominal sizes
- Elastomer insert made of Thermoplastic Elastomer with a hardness of 73 Shore-A provides most effective reduction of vibration and noise caused by vibration



## Rectangular Design • Type VK

- Available in the Standard Series (STAUFF Group 5)
- · Recommended for the safe installation of proximity switches according to DIN EN 60947-5-2 or similar, rectangular construction, with a square of  $40\,\text{mm}\,x\,40\,\text{mm}\,(1.57\,\text{in}\,x\,1.57\,\text{in})$ or 40 mm x 36 mm (1.57 in x 1.42 in)



## **Materials and Surface Finishings of Metal Parts**

### **Materials**

Unless otherwise stated, all metal parts (e.g. weld plates, cover plates, bolts, rail nuts etc.) are made of **Carbon Steel** (surface finishing according to material code).

Besides that, all metal parts are also available **ex stock** in two different stainless steel qualities:

Rost

frei

#### Stainless Steel V2A

- 1.4301 / 1.4305 (AISI 304 / 303)
- Material code: W4

#### Stainless Steel V4A

- 1.4401 / 1.4571 (AISI 316 / 316 Ti)
- Material code: W5

#### **Aluminium**

- Aluminium EN AW-6060
- Material code: W85

Alternative materials (e.g. Aluminium) are available upon request. Contact STAUFF for further information.

## **Surface Finishings**

Unless otherwise stated, all metal parts made of Carbon Steel are available with the following standard surface finishings:

#### Carbon Steel, uncoated

Material code: W1

#### Carbon Steel, phosphated

- Fe/Znph r 10 according to DIN EN 12476
- Material code: W2

#### Carbon Steel, zinc/nickel-plated

- More than 1200 hours resistance against red rust / base metal corrosion in the salt spray test to DIN EN ISO 9227
- Free of hexavalent chromium Cr(VI)
- RoHS compliant according to 2002/95/EC (Restrictions of the Use of Hazardous Substances)
- ELV compliant according to 2000/53/EC (End of Life Vehicles Directive)
- Material code: W3

Alternative surface finishings are available upon request. Contact STAUFF for further information.



Original STAUFF Cover Plate with Zinc/Nickel-Coating: No signs of corrosion after <u>1200 hours</u> in the salt spray chamber!







Original STAUFF Cover Plates with alternative surface finishings widely-used by competitors in the market (from left to right):

- Galvanisation and blue-chromating after 96 hours
- Galvanisation and yellow-chromating after 192 hours
- Zinc-coating, thick-film passivation and sealing after <u>192 hours</u>

In all three cases, signs of white and red rust / base metal corrosion are quite clearly visible! Please do not hesitate to contact STAUFF and ask for a detailed report.

**Property Classes / Grades of Bolts and Screws** 

## **Thread Conversion Chart**

Metric ISO vs. Unified Coarse (UNC) Thread





**Socket Cap Screw** 



**Slotted Head Screw** 

STAUFF	DIN	Metric ISO	Unified Coarse
1 to 8	0 to 8	M6	1/4-20 UNC
Heavy Ser	ies (DIN 30	)15 Part 2)	

Unless otherwise stated, all threaded parts available with Metric ISO thread or unified coarse (UNC) thread.

Standard Series (DIN 3015, Part 1)

#### Heavy Series (DIN 3015, Part 2)

Group STAUFF	DIN	Thread Metric ISO	Unified Coarse
3S to 5S	1 to 3	M10	3/8-16 UNC
6S	4	M12	7/16-14 UNC
7S	5	M16	5/8-11 UNC
8S	6	M20	3/4-10 UNC
9S	7	M24	7/8-9 UNC
10S	8	M30	1-1/8-7 UNC
11S to 12S	9 to 10	M30	1-1/4-7 UNC

## Twin Series (DIN 3015, Part 3)

Group		Thread	
STAUFF	DIN	Metric ISO	Unified Coarse
1D	1	M6	1/4-20 UNC
2D to 5D	2 to 5	M8	5/16-18 UNC

Bolt / Screw Type	Material Code	Property Class / Grade	Unified Course Three-ded Balta / Courses
	W4 W6 W6	Metric ISO Threaded Bolts / Screws	Unified Coarse Threaded Bolts / Screws
	W1, W2, W3	8.8 (according to DIN EN ISO 898)	5 (according to SAE J429)
Hexagon Head Bolt Type AS	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)
	W1, W2, W3	8.8 (according to DIN EN ISO 898)	5 (according to SAE J429)
Socket Cap Screw Type IS	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)
	W1, W2, W3	4.8 (according to DIN EN ISO 898)	2 (according to SAE J429)
Slotted Head Screw Type LI	W4	A2-70 (according to DIN EN ISO 3506)	AISI 304 / B8 (according to ASTM A193)
	W5	A4-70 (according to DIN EN ISO 3506)	AISI 316 / B8M (according to ASTM A193)

Unless otherwise stated, the above mentioned property classes / grades apply as standards for bolts and screws supplied by STAUFF. The information indicate the minimum requirements; higher property classes are available upon request. Contact STAUFF for details.

## STAUFF

### **Basic Installation Instructions**



#### **Installation on Weld Plate**

Different types of weld plates are available for all STAUFF Clamps according to DIN 3015 as well as for most of the other series and many custom-designed special clamps.

- Place weld plates in their designated positions. Please make sure these positions are suitable for the expected loads
- Mark the positions of the weld plates to ensure best alignment
- Weld the weld plates into position. Elongated weld plates can also be mounted to their positions by using screws or balts
- Push bottom clamp half onto weld plate.
- Insert pipe, tube, hose, cable or any other type of line.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.

Unless otherwise stated, the bolt lengths indicated for clamps according to DIN 3015 refer to the installation on weld plages and mouting rails as well as multi-level (stacking) installation. For direct installation, different lengths may be required.



### **Installation on Mounting Rail**

STAUFF Mounting Rails are available in different heights.

STAUFF Rail Nuts are available for all STAUFF Clamps
according to DIN 3015 (Heavy Series up to STAUFF Group 6S
only) as well as for many custom-designed special clamps.

- Place mounting rails in their designated positions. Please make sure these bases are suitable for the expected loads.
- Mark the positions of the mounting rails to ensure best alignment.
- Weld the mounting rails into position. Mounting rails can also be mounted to their positions by using side-mounting brackets with screws or bolts.
- Insert rail nuts into mounting rail and turn until stop to lock (Standard and Twin Series) or slide in rail nut (Heavy Series).
- Push bottom clamp half onto rail nuts.
- Insert pipe, tube, hose, cable or any other type of line.
- Place second clamp half and cover plate (optional) on top and mount clamp assembly by using screws or bolts.

The exact positions of the clamp assemblies can still be adjusted before being firmly bolted.



### Multi-Level (Stacking) Installation

Stacking bolts permit the multi-level assembly of clamps of identical group sizes. Safety locking plates inserted between the levels prevent the stacking bolts from turning. The Twin Series also allows stacking of different group sizes (STAUFF Groups 2D to 5D).

- Push bottom clamp half onto weld plate or rail nuts.
- Insert pipe, tube, hose, cable or any other type of line.
- · Place second clamp half.
- Insert stacking bolts into the clamp assembly and tighten using the following tightening torques (or in a way that the clamp halves are in contact with the line over the entire internal contact surface):

 $\textbf{Standard Series} \quad 1 \; ... \; 2 \; N \cdot m \; / \; .75 \; ... \; 1.5 \; ft \cdot lb \; (hand-tightened)$ 

Heavy Series 5 N·m / 3.75 ft·lb

**Twin Series**  $1 \dots 2 \text{ N·m} / .75 \dots 1.5 \text{ ft·lb}$  (hand-tightened)

- Place safety locking plate on top of clamp assembly.
- Proceed with next levels. Top level to be assembled with cover plate and hexagon head bolts using the tightening torques as indivated on page 161.

STAUFF multi-level clamp assemblies can be mounted both to weld plates or to mounting rails (with rail nuts).

### **Recommended Distance between Clamps**



Please note: The recommended distances between clamps stated below are standard values and valid for static loads only.

Outside Diamete		Distance A	
(mm)	(in)	(m)	(ft)
6,0 12,7	.2350	1,00	3,28
12,7 22,0	.5086	1,20	3,94
22,0 32,0	.86 1.25	1,50	4,92
32,0 38,0	1.25 1.50	2,00	6,56
38,0 57,0	1.5 2.25	2,70	8,86
57,0 75,0	2.25 2.95	3,00	9,84
75,0 76,1	2.95 3.00	3,50	11,48
76,1 88,9	3.00 3.50	3,70	12,14
88,9 102,0	3.50 4.00	4,00	13,12
102,0 114,0	4.00 4.50	4,50	14,76

Outside Diameter (mm)	r (in)	Distance A (m)	(ft)
114,0 168,0	4.50 6.60	5,00	16,40
168,0 219,0	6.60 8.60	6,00	19,68
219,0 324,0	8.60 12.70	6,70	21,98
324,0 356,0	12.70 14.00	7,00	22,96
356,0 406,0	14.00 16.00	7,50	24,60
406,0 419,0	16.00 16.50	8,20	26,90
419,0 508,0	16.50 20.00	8,50	27,88
508,0 521,0	20.00 20.50	9,00	29,52
521,0 558,0	20.50 22.00	10,00	32,80
558,0 800,0	22.00 31.50	12,50	41,00

# Installation next to Pipe Bends, Connectors / Couplings and Valves



Please note the following information on the installation of STAUFF Clamps next to pipe bends, connectors / couplings and valves:

#### **Pipe Bends**

Pipe bends should be supported by STAUFF Clamps as close to the bends as possible. Furthermore, it is recommended to design these clamps as fixed point clamps.

### **Connections / Couplings**

The first clamp should be placed directly next to the connector / coupling. This protects the connector / coupling from vibrations.

#### Valves

If valves are incorporated in the pipelines, it is recommended that support is provided in front of and behind these valves.

Contact STAUFF for further information.





## **Tightening Torques and Maximum Loads In Pipe Direction**



All tightening torques and maximum loads in pipe direction refer to STAUFF Clamp Bodies (profiled inside surface with tension clearance) with Cover Plates, Weld Plates and Hexagon Head Bolts according to DIN EN ISO 4014/4017 (DIN 931/933).

The max. load in pipe direction (according to DIN 3015-10:1999) is an average value, determined by three tests at +23 °C / +73.4 °F with a steel pipe according to DIN EN 10220, St37 – rolled surface – taking static friction into consideration.

## Sliding starts when the shown values (F) are reached.

## **Standard Series** (DIN 3015-1:1999)

Group		Hexagon Head Bol	t	Polyprop	ylene (PP)			Polyamid	le (PA)			Aluminiu	m (AL)		
		DIN EN ISO 4014/4			Maximum Load				Maximun	ı Load			Maximur	n Load	
		Metric	Unified Coarse	Tightenin	· .	in Pipe Di		Tightenin	· .	in Pipe Di		Tightenin	· .		irection F
STAUFF DIN		ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)
1	0	M6	1/4-20 UNC	8	6	0,6	135	10	7	0,6	135	12	9	3,5	787
1A	1	M6	1/4-20 UNC	8	6	1,1	247	10	7	0,7	157	12	9	4,2	944
2	2	M6	1/4-20 UNC	8	6	1,3	292	10	7	0,8	180	12	9	4,3	967
3	3	M6	1/4-20 UNC	8	6	1,4	315	10	7	1,6	360	12	9	4,9	1101
4	4	M6	1/4-20 UNC	8	6	1,5	337	10	7	1,7	382	12	9	5,0	1124
5	5	M6	1/4-20 UNC	8	6	1,9	427	10	7	2,0	450	12	9	7,3	1641
6	6	M6	1/4-20 UNC	8	6	2,0	450	10	7	2,5	562	12	9	8,9	2000
7	7	M6	1/4-20 UNC	8	6	2,3	517	10	7	3,2	719				
8	8	M6	1/4-20 UNC	8	6	2,6	585	10	7	3,5	787				

## Heavy Series (DIN 3015-2:1999)

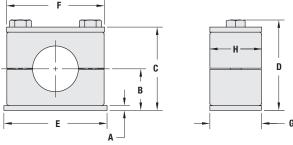
Group		Hexagon Head	Bolt	Polyproj	oylene (PP)			Polyami	de (PA)			Aluminiu	m (AL)		
		DIN EN ISO 401			Maximu	m Load Maximum			n Load	oad			m Load		
		Metric Unified Coarse			ng Torque		Direction F		ng Torque		irection F	Tightening Torque		in Pipe Direction F	
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)
3S	1	M10	3/8-16 UNC	12	9	1,6	360	20	15	4,2	944	30	22	12,1	2720
4S	2	M10	3/8-16 UNC	12	9	2,9	652	20	15	4,5	1044	30	22	15,1	3395
5S	3	M10	3/8-16 UNC	15	11	3,3	742	25	18	5,1	1146	35	26	15,5	3485
6S	4	M12	7/16–14 UNC	30	22	8,2	1843	40	30	9,3	2090	55	41	29,5	6609
7S	5	M16	5/8-11 UNC	45	33	11,0	2472	55	41	15,8	3551	120	86	34,9	7845
88	6	M20	3/4-10 UNC	80	59	14,0	3147	150	111	21,0	4720	220	162	50,0	11240
98	7	M24	7/8-9 UNC	110	81	28,0	6300	200	148	32,0	7193	250	184	70,6	15871
10S	8	M30	1-1/8-7 UNC	180	133	40,0	8992	350	258	48,0	10790	500	369	84,5	18996
11S	9	M30	1-1/4-7 UNC	200	148	119,0	26752	370	273	125,0	27650	500	369	181,5	40802
12S	10	M30	1-1/4-7 UNC	270	199	168,0	37767	450	332	180,0	40465	600	443	244,5	54965

## Twin Series (DIN 3015-2:1999)

Group		Hexagon Head Bol	t	Polypropylene	(PP)			Polyamide (PA							
			1017 (DIN 931/933)	Maximum Load						Maximum Load					
		Metric	Unified Coarse	Tightening Tor	que	in Pipe Direction F		Tightening Tor	que	in Pipe Direction	on F				
STAUFF	DIN	ISO Thread	(UNC) Thread	(N·m)	(ft·lb)	(kN)	(lbf)	(N·m)	(ft·lb)	(kN)	(lbf)				
1D	1	M6	1/4-20 UNC	5	4	0,9	202	5	4	0,9	202				
2D	2	M8	5/16-18 UNC	12	9	2,1	472	12	9	2,2	495				
3D	3	M8	5/16-18 UNC	12	9	1,9	427	12	9	2,0	450				
4D	4	M8	5/16-18 UNC	12	9	2,7	607	12	9	2,9	652				
5D	5	M8	5/16-18 UNC	8	6	1,7	382	8	6	2,5	562				

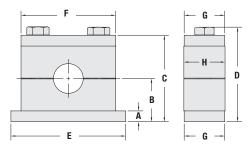
Only for the standard clamp body materials which are listed on page 154. In case of doubt, please contact STAUFF in advance.

## **Dimensions and Weights of Clamp Assemblies**



## Standard Series (DIN 3015, Part 1)

Group		Dimensio	ns (mm/in)										Weight per 100 Pcs.
			В		C		D						SP-**-PP-DP-AS
STAUFF	DIN	Α	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	E	F	G	H	(kg/lbs)
	0	3	16,5	16	33	32	37	36	31,5	28	30	30	6,20
	0	.12	.65	.63	1.30	1.26	1.46	1.42	1.24	1.10	1.18	1.18	13,64
A	1	3	16,5	16	33	32	37	36	36	34	30	30	8,10
А	1	.12	.65	.63	1.30	1.26	1.46	1.42	1.41	1.33	1.18	1.18	17.82
	2	3	19,5	19	39	38	43	42	42	40,5	30	30	9,40
!	2	.12	.77	0.75	1.54	1.50	1.69	1.65	1.65	1.59	1.18	1.18	20.68
	0	3	21	20,75	42	41,5	46	45,5	50	48	30	30	11,20
	3	.12	.83	.82	1.65	1.64	1.81	1.80	1.96	1.88	1.18	1.18	24.64
	4	3	24	23,75	48	47,5	52	51,5	60	57	30	30	13,70
	4	.12	.94	.94	1.89	1.87	2.05	2.03	2.36	2.24	1.18	1.18	30.14
;	5	3	32	31,25	64	62,5	68	66,5	71	70	30	30	17,10
,	5	.12	1.26	1.23	2.52	2.46	2.68	2.62	2.79	2.75	1.18	1.18	37.62
i	6	3	36	35,25	72	70,5	76	74,5	88	86	30	30	21,30
	O	.12	1.42	1.39	2.83	2.78	2.99	2.94	3.46	3.38	1.18	1.18	46.86
,	7	5	51,5	51	103	102	107	106	122	118	30	30	42,10
	1	.20	2.03	2.01	4.06	4.02	4.21	4.17	4.81	4.65	1.18	1.18	92.62
	8	5	64	63	128	126	132	130	148	144	30	30	44,00
3	0	.20	2.52	2.48	5.04	4.96	5.20	5.12	5.83	5.67	1.18	1.18	96.80

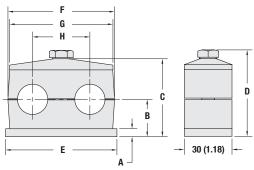


## **Heavy Series** (DIN 3015, Part 2)

Group		Dimension	ons (mm/in)											Weight per 1 Pc.
			В		С		D			F				SPAL-**-PP-DPAL-AS
STAUFF	DIN	Α	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	E	PP/PA/SA	AL	G	Н	(kg/lbs)
3S	1	8	24	23,25	48	46,5	54,4	52,9	74	55	56	30	30,5	0,32
33	ı	.31	.94	.92	1.89	1.83	2.14	2.09	2.91	2.16	2.20	1.18	1.20	.70
4S	2	8	32	31,25	64	62,5	70,4	68,9	86	70	70	30	30,5	0,40
43	2	.31	1.26	1.23	2.52	2.46	2.77	2.72	3.39	2.76	2.76	1.18	1.20	.88
5S	3	8	38	37	76	74	82,4	80,4	100	85	85	30	30,5	0,49
55	3	.31	1.50	1.46	2.99	2.91	3.24	3.17	3.94	3.35	3.35	1.18	1.20	1.08
6S	4	10	54,5	53,5	109	107	116,5	114,5	140	115	120	45	45	1,21
05	4	.39	2.15	2.11	4.29	4.21	4.59	4.51	5.51	4.53	4.72	1.77	1,77	2.66
7S	Е	10	70		140		150		180	154	152	60	60	2,30
15	5	.39	2.76		5.51		5.91		7.09	6.06	5.98	2.36	2,36	5.06
8S	6	15	99		198		210,5		226	206	208	80	80	5,56
00	O	.59	3.90		7.80		8.29		8.90	8.11	8.19	3.15	3.15	12.26
98	7	15	115		230		245		270	251	255	90	91	7,97
95	1	.59	4.53		9.06		9.65		10.63	9.88	10.04	3.54	3.58	17.58
100	0	25	160		320		338,7		340	336	326	120	120	22,16
10S	8	.98	6.30		12.60		13.33		13.39	13.22	12.83	4.72	4.72	48.75
110	0	30	235		470		488,7		520	470	470	160	162	54,11
11S	9	1.18	9.25		18.50		19.24		20.47	18.50	18.50	6.30	6.38	119.04
100	10	30	295		590		608,7		680	630	630	180	182	77,40
12S	10	1.18	11.61		23.23		23.96		26.77	24.80	24.80	7.09	7.16	170.28



## **Dimensions & Weights of Clamp Assemblies**



## Twin Series (DIN 3015, Part 3)

Group		Dimensions (mm/in)									Weight per 100 Pcs.		
			В		С		D						SP-**/**-PP-GD-AS
STAUFF	DIN	Α	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	Profiled Design	Type H (Smooth)	E	F	G	Н	(kg/lbs)
1D	4	3	16,5	16,25	37	36,5	41	40,5	37	36	34	20	7,60
ID		.12	.65	.64	1.46	1.44	1.61	1.59	1.46	1.42	1.34	.79	16.72
OD.		5	18,5	18,25	39	38,5	44	43,5	55	53	52	29	13,50
2D	2	.20	.73	.72	1.54	1.52	1.73	1.71	2.17	2.09	2.05	1.14	29.70
an.		5	23,5	23,25	49	48,5	54	53,5	70	67	65	36	17,70
3D	3	.20	.93	.92	1.93	1.91	2.13	2.11	2.76	2.64	2.56	1.42	38.94
4D	4	5	25	24	52	50	57	55	85	80	79	45	20,40
4υ	4	.20	.98	.94	2.05	1.97	2.24	2.17	3.35	3.15	3.11	1.77	44.88
5D	5	5	31,5	31	65	64	70	69	110	106	102	56	27,70
บบ	J	.20	1.24	1.22	2.56	2.52	2.76	2.72	4.33	4.17	4.02	2.20	60.94

## **Packaging Units (Selection)**

## Standard Series (DIN 3015, Part 1)

## Clamp Bodies (Polypropylene / Polyamide)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 6	0 - 6	25
7 + 8	7 + 8	10

## Heavy Series (DIN 3015, Part 2)

## Clamp Bodies (Polypropylene / Polyamide)

Group STAUFF DIN		Quantity per Bag	
STAUFF	DIN	(in Pcs.)	
3S - 6S	1 - 4	20	
7S	5	10	
8S - 12S	6 - 10	1	

## Twin Series (DIN 3015, Part 3)

## Clamp Bodies (Polypropylene / Polyamide)

Group		Quantity per Bag	
STAUFF	DIN	(in Pcs.)	
1D - 4D	1 - 4	25	
5D	5	10	

## Clamp Bodies (Aluminium)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 5	0 - 5	25
6	6	10

#### Clamp Bodies (Aluminium)

Group		Quantity per Bag
STAUFF	DIN	(in Pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

## Weld Plates (Type SP) Cover Plates (Type GD)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)		
1D - 4D	1 - 4	25		
5D	5	10		

## Weld Plates (Type SP) Cover Plates (Type DP)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 6	0 - 6	25
7 + 8	7 + 8	10

## Weld Plates (Type SPAL) Cover Plates (Type DPAL)

Group		Quantity per Bag
STAUFF	DIN	(in Pcs.)
3S - 6S	1 - 4	20
7S	5	10
8S - 12S	6 - 10	1

### Hexagon Rail Nut (Type SM) Channel Rail Adaptor (Type CRA)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)	
1D	1	50	
2D - 5D	2 - 5	25	

Contact STAUFF and ask for standard packaging units

for further components or special packaging options.

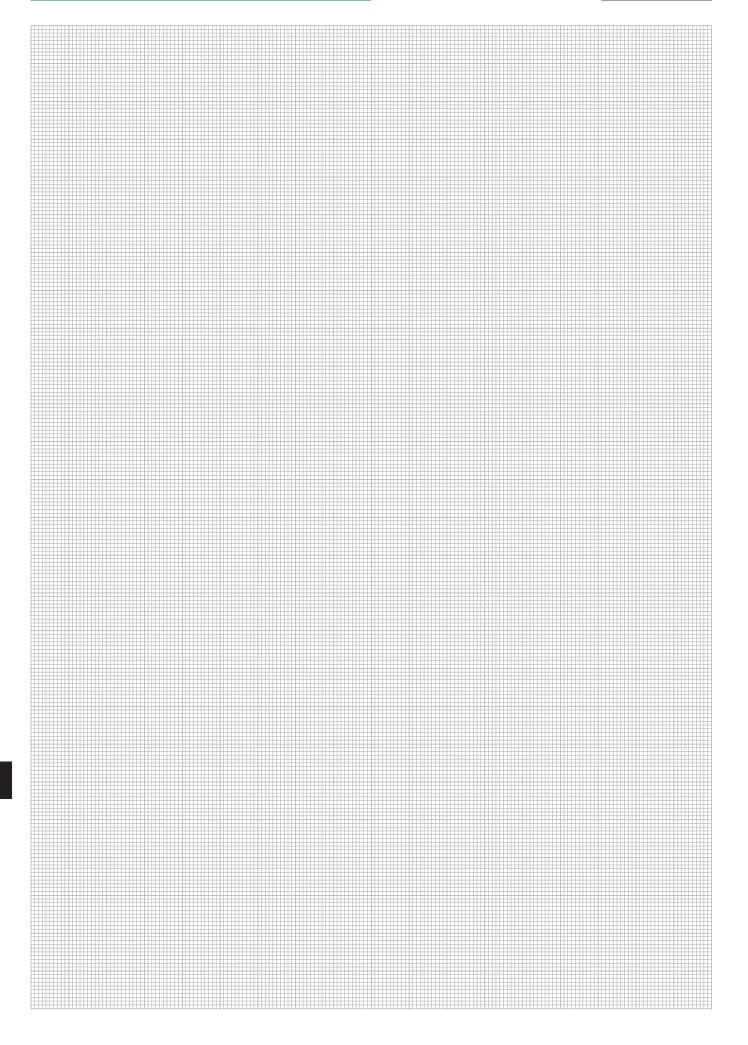
## Hexagon Rail Nut (Type SM) Channel Rail Adaptor (Type CRA)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
1 - 8	0 - 8	50

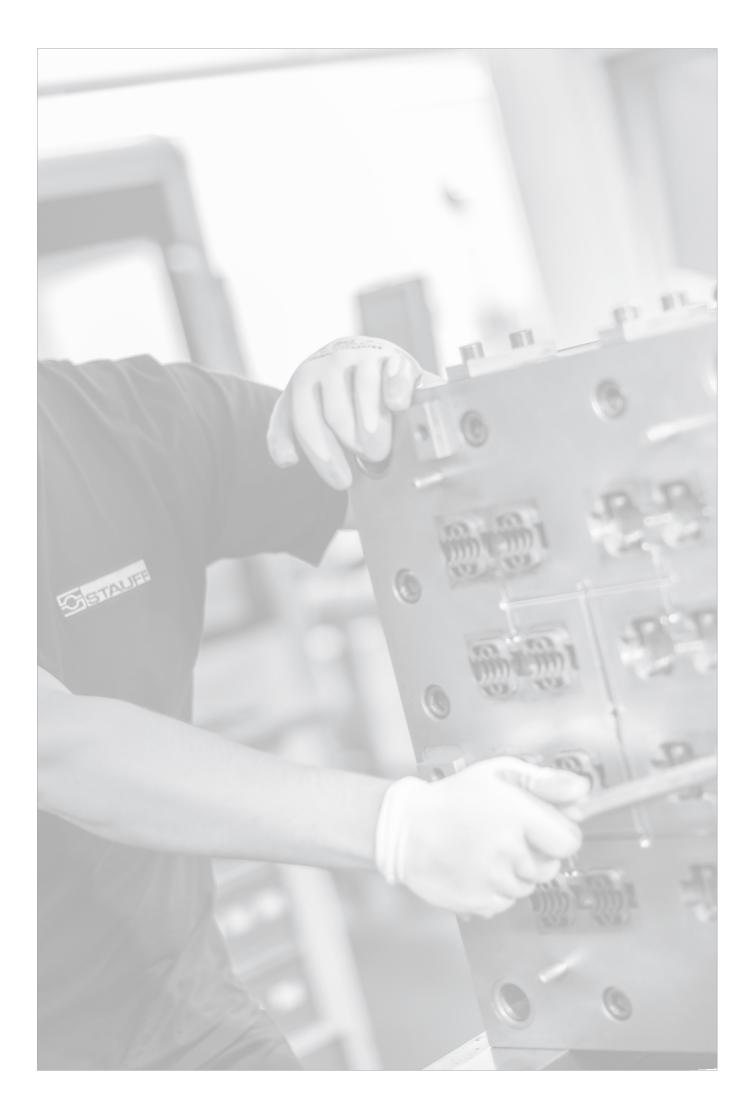
## Mounting Rail Nut (Type GMV) Channel Rail Adaptor (Type CRA)

Group STAUFF	DIN	Quantity per Bag (in Pcs.)
3S - 6S	1 - 4	40











**Product-Specific Abbreviations** 168 **Global Contact Directory** 170



## **Product-Specific Abbreviations**

Abbreviation	Product Category	Product Description	Page
ACT	STAUFF ACT Clamps: Anti-Corrosion Technology	Clamp Body - Standard Series	74
ACT	STAUFF ACT Clamps: Anti-Corrosion Technology	Clamp Body - Twin Series	82
AF	Standard Series according to DIN 3015, Part 1	Stacking Bolt	29
AF	Heavy Series according to DIN 3015, Part 2	Stacking Bolt	47
AF	Twin Series according to DIN 3015, Part 3	Stacking Bolt	61
AF	Heavy Twin Series	Stacking Bolt	68
AG	Other Types of Clamps	Agriculture Twin Series	150
AL	Technical Appendix	Standard Clamp Body Material	154
AS	Standard Series according to DIN 3015, Part 1	Hexagon Head Bolt	26
AS	Heavy Series according to DIN 3015, Part 2	Hexagon Head Bolt	45
AS	Twin Series according to DIN 3015, Part 3	Hexagon Head Bolt	59
AS	Heavy Twin Series	Hexagon Head Bolt	68
AS	Light Series	Hexagon Head Bolt	115
BSP	Standard Series according to DIN 3015, Part 1	Bridge Weld Plate	22
CC	Standard Series according to DIN 3015, Part 1	Clamp Body - Compact Design	19
CHC	Standard Series according to DIN 3015, Part 1	Clamp Body for Conduit Hoses	18
CRA	Standard Series according to DIN 3015, Part 1	Channel Rail Adaptor	25
CRA	Heavy Series according to DIN 3015, Part 2	Channel Rail Adaptor	43
CRA	Twin Series according to DIN 3015, Part 3	Channel Rail Adaptor	58
CRA	Heavy Twin Series	Channel Rail Adaptor	68
DIN1592	Metal DIN Clamps	Heavy Saddle with Tension Clearance - Single-Bolt Design	138
DIN1592 DIN1593	Metal DIN Clamps	Heavy Saddle with Tension Clearance - Two-Bolt Design	139
DIN 1595 DIN 1596	Metal DIN Clamps	Light Saddle with Tension Clearance - Single-Bolt Design	140
	·	Light Saddle with Tension Clearance - Single-Bolt Design  Light Saddle with Tension Clearance - Two-Bolt Design	
DIN1597	Metal DIN Clamps	· ·	141
DIN3567-A	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance  Metal Pipe Clamp with Tension Clearance (Futended to One Cide)	136
DIN3567-B	Metal DIN Clamps	Metal Pipe Clamp with Tension Clearance (Extended to One Side)	137
DIT-SR6-SWG	STAUFF SWG: Stud Welding System	Distance Tube	95
DKS	Construction Series	Construction Series Clamp	144
DKSV	Construction Series	Construction Series Clamp (for Anchor Bolt Fastening)	145
DP	Standard Series according to DIN 3015, Part 1	Cover Plate	26
DPAL	Heavy Series according to DIN 3015, Part 2	Cover Plate for Single Clamps	44
DPAS	Heavy Series according to DIN 3015, Part 2	Cover Plate for Double Clamps	44
DPAS	Heavy Twin Series	Cover Plate	67
DPL	Light Series	Cover Plate	119
DS	Other Types of Clamps	Compact Twin Series	150
DSP	Standard Series according to DIN 3015, Part 1	Twin Weld Plate	21
EP	Standard Series according to DIN 3015, Part 1	Insert	28
EPDM	Technical Appendix	Standard Clamp Insert Materials	155
ES	Standard Series according to DIN 3015, Part 1	Insert	28
FB	Flat Steel and Round Steel U-Bolt Clamps	Flat Steel U-Bolt	126
GD	Twin Series according to DIN 3015, Part 3	Cover Plate	58
GMV	Heavy Series according to DIN 3015, Part 2	Mounting Rail Nut	42
GMV	Heavy Twin Series	Mounting Rail Nut	68
IS	Standard Series according to DIN 3015, Part 1	Socket Cap Screw	28
IS	Heavy Series according to DIN 3015, Part 2	Socket Cap Screw	45
IS	Twin Series according to DIN 3015, Part 3	Socket Cap Screw	59
KS	Construction Series	Construction Series Clamp	144
KSV	Construction Series	Construction Series Clamp (for Anchor Bolt Fastening)	145
LBBU	Light Series	Clamp Body - Single Design	112
LBBU	Light Series	Clamp Body - Twin Design	113
LBBU-DP	Light Series	Cover Plate	115
LBBU-HUE	Light Series	Sleeve	114
LBBU-SP	Light Series	Weld Plate	114
LB	Light Series	Clamp Body - Single Design	116
LBG	Light Series	Clamp Body - Twin Design	117
LBU	Light Series	Clamp Body - Twin Design	117
LI	Standard Series according to DIN 3015, Part 1	Slotted Head Screw	28
LN	Light Series	Clamp Body - Single Design	118
LNGF	Light Series	Clamp Body - Twin Design	119
LNUF	Light Series	Clamp Body - Twin Design	119
LIVUI			





## **Product-Specific Abbreviations**

Abbreviation	Product Category	Product Description	Page
PA	Technical Appendix	Standard Clamp Body Material	154
PA-V0	Technical Appendix	Special Clamp Body Material	156
PP	Technical Appendix	Standard Clamp Body Material	154
PP6853	Technical Appendix	Special Clamp Body Material	156
PP-DA	Technical Appendix	Special Clamp Body Material	156
PP-V0	Technical Appendix	Special Clamp Body Material	156
RAP	Standard Series according to DIN 3015, Part 1	Group Weld Plate	21
RAP	Twin Series according to DIN 3015, Part 3	Group Weld Plate	55
RAP-MGR	Standard Series according to DIN 3015, Part 1	Multi-Group Weld Plate	23
RB	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt	128
RBD	Flat Steel and Round Steel U-Bolt Clamps	Round Steel U-Bolt (DIN 3570, Type A)	132
RF	Other Types of Clamps	Pipe / Tube Bushing	151
RI	Standard Series according to DIN 3015, Part 1	Elastomer Insert	16
RI	Heavy Series according to DIN 3015, Part 2	Elastomer Insert	39
RI	Heavy Twin Series	Clamp Body with Elastomer Inserts	66
RUK	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Short) for Flat Steel U-Bolts	126
RUK	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Short) for Round Steel U-Bolts	128
RUL	Flat Steel and Round Steel U-Bolt Clamps	Plastic Pipe Saddle (Long) for Round Steel U-Bolts	130
SA	Technical Appendix	Standard Clamp Body Material	154
SA	Technical Appendix	Standard Clamp Insert Materials	155
SA-V0	Technical Appendix	Special Clamp Body Material	156
SCS	Other Types of Clamps	Channel Rail	149
SI	Standard Series according to DIN 3015, Part 1	Safety Washer	27
SI	Heavy Series according to DIN 3015, Part 2	Safety Washer	46
SI	Twin Series according to DIN 3015, Part 3	Safety Locking Plate	60
SI	Heavy Twin Series	Socket Cap Screw	68
SIG	Standard Series according to DIN 3015, Part 1	Safety Locking Plate	29
SIP	Heavy Series according to DIN 3015, Part 2	Safety Locking Plate	47
SIP	Heavy Twin Series	Safety Locking Plate	68
SIV	Twin Series according to DIN 3015, Part 3	Safety Locking Plate	60
SM	Standard Series according to DIN 3015, Part 1	Hexagon Rail Nut	24
SM	Twin Series according to DIN 3015, Part 3	Hexagon Rail Nut	56
SM	Standard Series according to DIN 3015, Part 1	Hexagon Rail Nut	24
SM	Twin Series according to DIN 3015, Part 3	Hexagon Rail Nut	56
SP		Weld Plate	20
	Standard Series according to DIN 3015, Part 1		
SP	Twin Series according to DIN 3015, Part 3	Single Weld Plate	55
SPAD	Heavy Twin Series	Weld Plate	67
SPAL	Heavy Series according to DIN 3015, Part 2	Weld Plate for Single Clamps	40
SPAL-DUEB	Heavy Series according to DIN 3015, Part 2	Elongated Weld Plate for Single Clamps	41
SPAS-DUEB	Heavy Series according to DIN 3015, Part 2	Weld Plate for Double Clamps	40
SPAS-DUEB	Heavy Series according to DIN 3015, Part 2	Elongated Weld Plate for Double Clamps	41
SPC	Other Types of Clamps	Cushion Clamp	148
SPV	Standard Series according to DIN 3015, Part 1	Elongated Weld Plate	20
STC	Other Types of Clamps	Cushion Clamp	148
STSV	Heavy Series according to DIN 3015, Part 2	Mounting Rail	42
STSV	Heavy Twin Series	Mounting Rail	68
SWG-AGS	STAUFF SWG: Stud Welding System	Distance Adaptor	95
SWG-CTH-11-M6	STAUFF SWG: Stud Welding System	Cable Tie Holder	93
SWG-CTH-30-M6-1		Cable Tie / Tension Belt Holder	93
SWG-CTH-30-M6-2	Ů ,	Cable Tie / Tension Belt Holder	93
SWG-DIP	STAUFF SWG: Stud Welding System	Distance Plate for DIN 3015 Clamps	93
SWG-GC	STAUFF SWG: Stud Welding System	Ground Cable	95
SWG-SF	STAUFF SWG: Stud Welding System	Weld Stud with Female Thread	92
SWG-SR6	STAUFF SWG: Stud Welding System	Stud Retainer	95
	STAUFF SWG: Stud Welding System		
SWG-WG	0 3	Weld Inverter	94
SWG-WI06	STAUFF SWG: Stud Welding System	Weld Inverter	94
SWG-WI06-Starterkit	0 1	Starterkit	94
TS	Standard Series according to DIN 3015, Part 1	Mounting Rail	24
TS	Twin Series according to DIN 3015, Part 3	Mounting Rail	57
VK	Standard Series according to DIN 3015, Part 1	Clamp Body - Rectangular Design for Proximity Switches	19
WSP	Standard Series according to DIN 3015, Part 1	Angled Weld Plate	22
ZR	Saddle / Piggyback Clamps	Custom-Designed Saddle / Piggyback Clamps	122
ZR-518	Saddle / Piggyback Clamps	Saddle / Piggyback Clamp	122



## **Global Contact Directory**

STAUFF products and services are globally available through wholly-owned subsidiaries and a tight network of authorised distributors and representatives in all major industrial regions of the world.

Contact information on this page may be subject to changes and additions over time. Frequently updated and complete contact information can always be found at www.stauff.com.

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