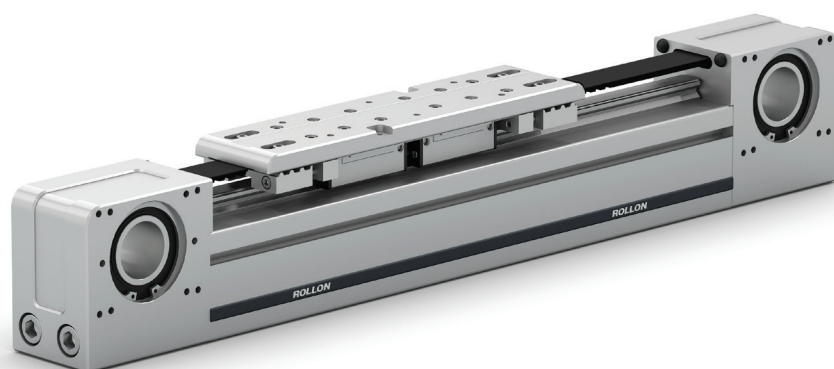


ROLLON[®]
BY TIMKEN

E-SMART

Data sheet - rev. 1.0



ACTUATORS AND SYSTEMS

myRollon

MyRollon is **your digital working platform** for linear guides, telescopic slides, actuators and actuator systems.

With myRollon, it is possible to determine the best linear motion solution according to our application specifications.

SCAN ME!



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► ORDERING KEY

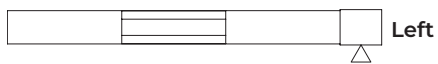
■ E-SMART

L	10	2R	02000	2R	Number of blocks - 1R = 1 block [SP1], 2R = 2 blocks [SP2], 3R = 3 blocks [SP3], 4R = 4 blocks [SP4]	Total length of the unit [mm]	Drive head - see pg. 14	Size - see from pg. 6 to pg. 13	Series
	03 = 30								
	05 = 50								
	08 = 80								
	10 = 100								
14 = 144									

Ordering example: **L052R020003R**

In order to create identification codes for Actuator Line, you can visit: <http://configureactuator.rollon.com>

Left / right orientation



► FEATURES AND ADVANTAGES



Fig.1

The E-SMART linear actuators are designed to combine performance, strength and versatility.

E-SMART features a self-supporting structure with a profile of extruded and anodized aluminium. Several sizes are available ranging from a width of 30 to 144 mm.

The carriage is made of machined anodized aluminium and is guided and supported by a recirculating ball guide system featuring one or more blocks.

The thrust force is transmitted by a steel reinforced, polyurethane belt with AT pitch, which helps ensuring high load transmission characteristics, compact size, low noise and smooth alternating motion.

E-SMART features two symmetrical heads designed to allow the highest freedom while sizing the application and mounting the gearbox. Therefore, it is possible to assemble the gearbox on both heads, on the right or left side, by means of a standard assembly kit. This feature is also useful when the unit is assembled to be part of a multi-axis system.

Preferred areas of application

These units are designed to suit a wide range of uses in different technological sectors, particularly in environments that maintain a good level of cleanliness. They offer a good balance between performance, application versatility and cost efficiency. In addition, these actuators are ideal as parallel axes in a gantry system.

Performance characteristics

- Available sizes: 30, 50, 80, 100, 144
- Max. operating speed.: 4 m/s
- Max. acceleration: 50 m/s²
- Repeatability: up to ±0.05 mm
- Profile material: Aluminium
- Drive: Toothed belt AT pitch
- Guide: Recirculating ball bearings

Standard accessories

- Shaft
- Synchronization kit
- Fixing system
- Sensors
- Gearbox assembly kit

MAIN ADVANTAGES

High dynamics

High dynamics, thanks to excellent acceleration and speed.

Compactness

The compact design and available strokes help to ensure a coordinated and precise movement.

High load capacity

Highly engineered combination of recirculating ball guides and aluminum profile, extruded with elaborate geometries, allows for high stiffness and load capacity.

Versatility

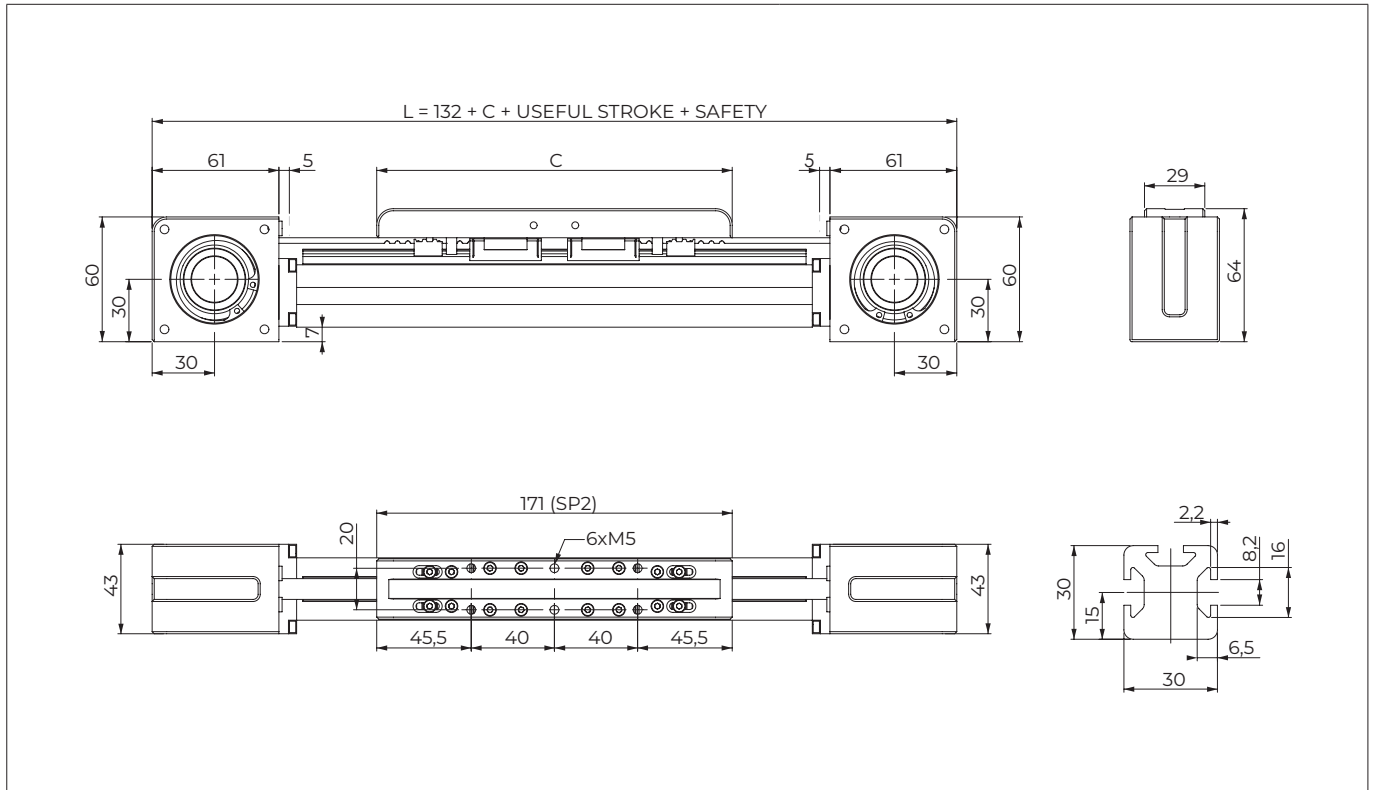
The driving head allows for assembly of the gearbox on either side of it.

Low maintenance

The system helps ensure long maintenance intervals and consequently long life.

COMPONENTS AND DIMENSIONS

E-SMART 30 SP2



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.2

Technical data	SP2
Max. useful stroke length [mm]	3700
Max. positioning repeatability [mm] ¹⁾	± 0.05
Max. speed [m/s]	4.0
Max. acceleration [m/s ²]	50
Carriage weight [kg]	0.27
Zero travel weight [kg]	1.88
Weight for 100 mm useful stroke [kg]	0.35
Rail size [mm]	12 mini

*1) Positioning repeatability is dependent on the type of transmission used.

Tab.1

Driving belt and pulley data	SP2
Belt type	10 AT 5
Belt width [mm]	10
Belt length [mm]	2 x L - 100
Belt weight [kg/m]	0.03
Pulley type	Z 24
Pulley pitch diameter [mm]	38.20
Carriage displacement per pulley turn [mm]	120
Starting torque [Nm]	0.15
Moment of inertia of pulleys [kg·mm ²]	58

Tab.2

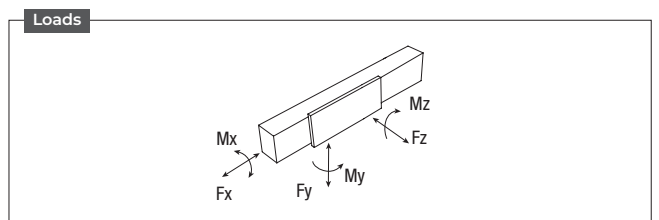
Load capacity	SP2
Fx static [N]	385
Fx dynamic [N]	242
Fy static [N]	7060
Fy dynamic [N]	6350
Fz static [N]	7060
Mx static [Nm]	46.2
My static [Nm]	166
Mz static [Nm]	166

Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

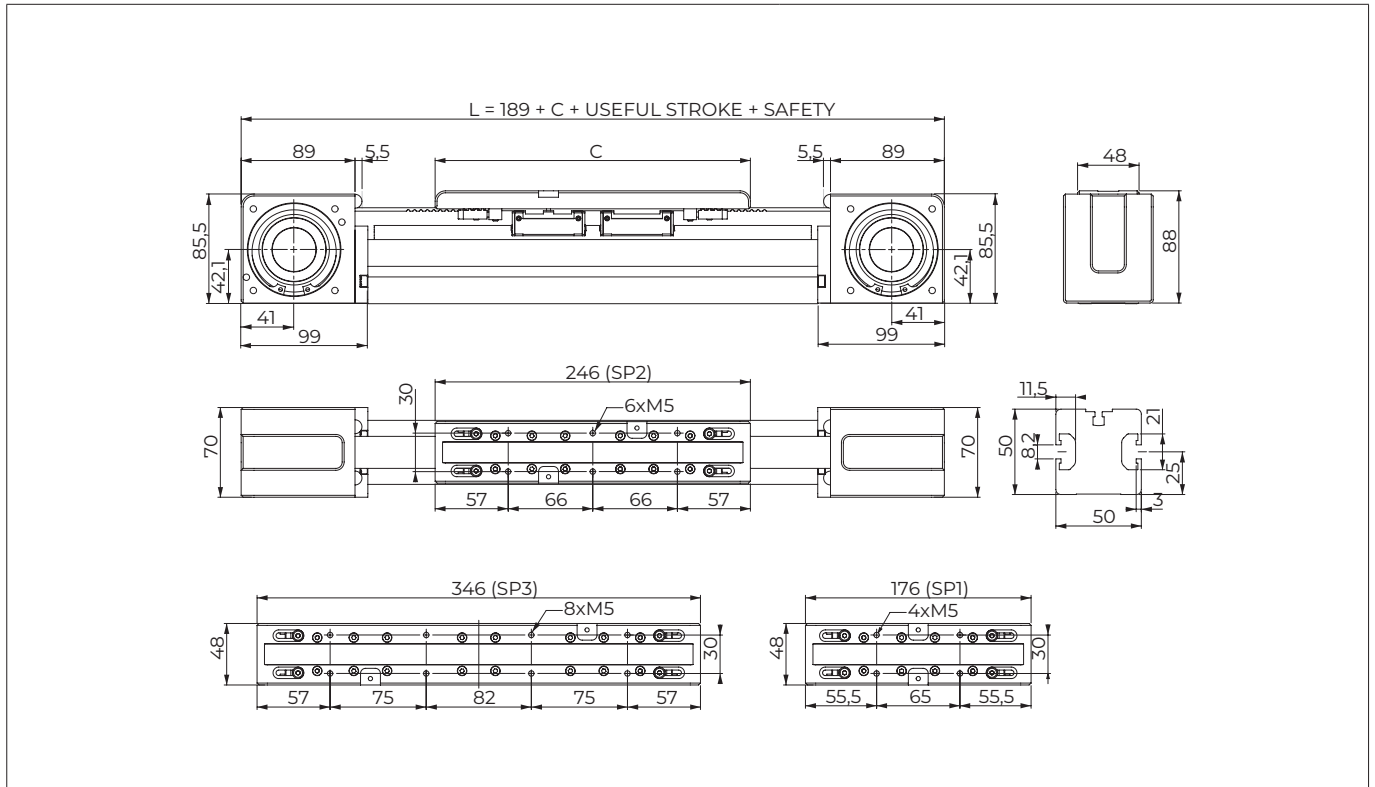
Tab.3

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	0.003
Iy [10 ⁷ mm ⁴]	0.003
Ip [10 ⁷ mm ⁴]	0.006

Tab.4



■ E-SMART 50 SP1 - SP2 - SP3



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.3

Technical data	SP1	SP2	SP3
Max. useful stroke length [mm] ¹⁾	6145	6075	5975
Max. positioning repeatability [mm] ²⁾	± 0.05	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0	4.0
Max. acceleration [m/s ²]	50	50	50
Carriage weight [kg]	0.62	1.00	1.50
Zero travel weight [kg]	5.04	5.68	6.47
Weight for 100 mm useful stroke [kg]	0.37	0.37	0.37
Rail size [mm]	15	15	15

*1) It is possible to obtain longer stroke by means of special Rollon joints.
 *2) Positioning repeatability is dependent on the type of transmission used.

Tab.5

Driving belt and pulley data	SP1	SP2	SP3
Belt type	25 AT 5	25 AT 5	25 AT 5
Belt width [mm]	25	25	25
Belt length [mm]	2 x L - 60	2 x L - 125	2 x L - 225
Belt weight [kg/m]	0.08	0.08	0.08
Pulley type	Z 40	Z 40	Z 40
Pulley pitch diameter [mm]	63.66	63.66	63.66
Carriage displacement per pulley turn [mm]	200	200	200
Starting torque [Nm]	0.35	0.45	0.55
Moment of inertia of pulleys [kg·mm ²]	891	891	891

Tab.6

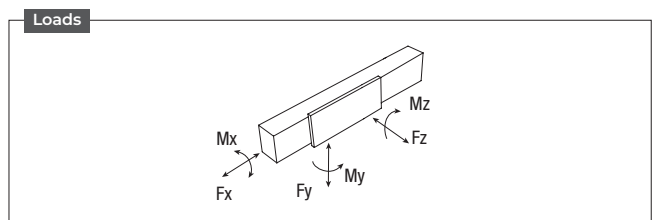
Load capacity	SP1	SP2	SP3
Fx static [N]	1050	1050	1050
Fx dynamic [N]	750	750	750
Fy static [N]	12700	25400	38100
Fy dynamic [N]	9860	19720	29580
Fz static [N]	12700	25400	38100
Mx static [Nm]	120	240	360
My static [Nm]	87	712	2146
Mz static [Nm]	87	712	2146

Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

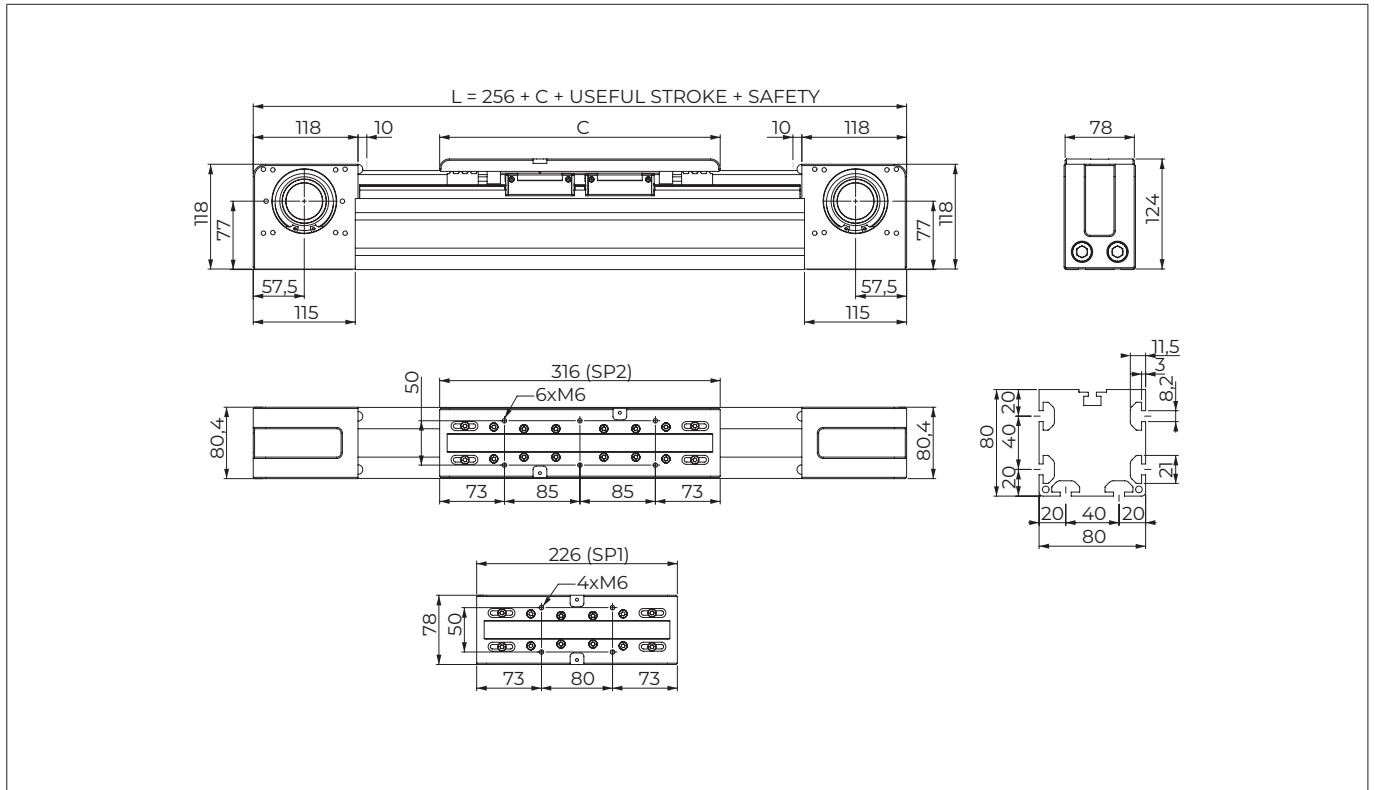
Tab.7

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	0.020
Iy [10 ⁷ mm ⁴]	0.021
Ip [10 ⁷ mm ⁴]	0.041

Tab.8



■ E-SMART 80 SP1 - SP2



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.4

Technical data	SP1	SP2
Max. useful stroke length [mm] ¹⁾	6060	5970
Max. positioning repeatability [mm] ²⁾	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Carriage weight [kg]	1.52	2.31
Zero travel weight [kg]	10.17	11.71
Weight for 100 mm useful stroke [kg]	0.87	0.87
Rail size [mm]	20	20

*1) It is possible to obtain longer stroke by means of special Rollon joints.
*2) Positioning repeatability is dependent on the type of transmission used.

Tab.9

Driving belt and pulley data	SP1	SP2
Belt type	32 AT 10	32 AT 10
Belt width [mm]	32	32
Belt length [mm]	2 x L - 135	2 x L - 225
Belt weight [kg/m]	0.19	0.19
Pulley type	Z 21	Z 21
Pulley pitch diameter [mm]	66.84	66.84
Carriage displacement per pulley turn [mm]	210	210
Starting torque [Nm]	1.0	1.3
Moment of inertia of pulleys [kg·mm ²]	939	939

Tab.10

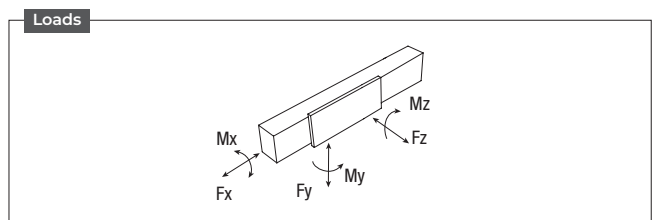
Load capacity	SP1	SP2
Fx static [N]	2523	2523
Fx dynamic [N]	1672	1672
Fy static [N]	29800	59600
Fy dynamic [N]	23400	46800
Fz static [N]	29800	59600
Mx static [Nm]	380	760
My static [Nm]	260	2178
Mz static [Nm]	260	2178

Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

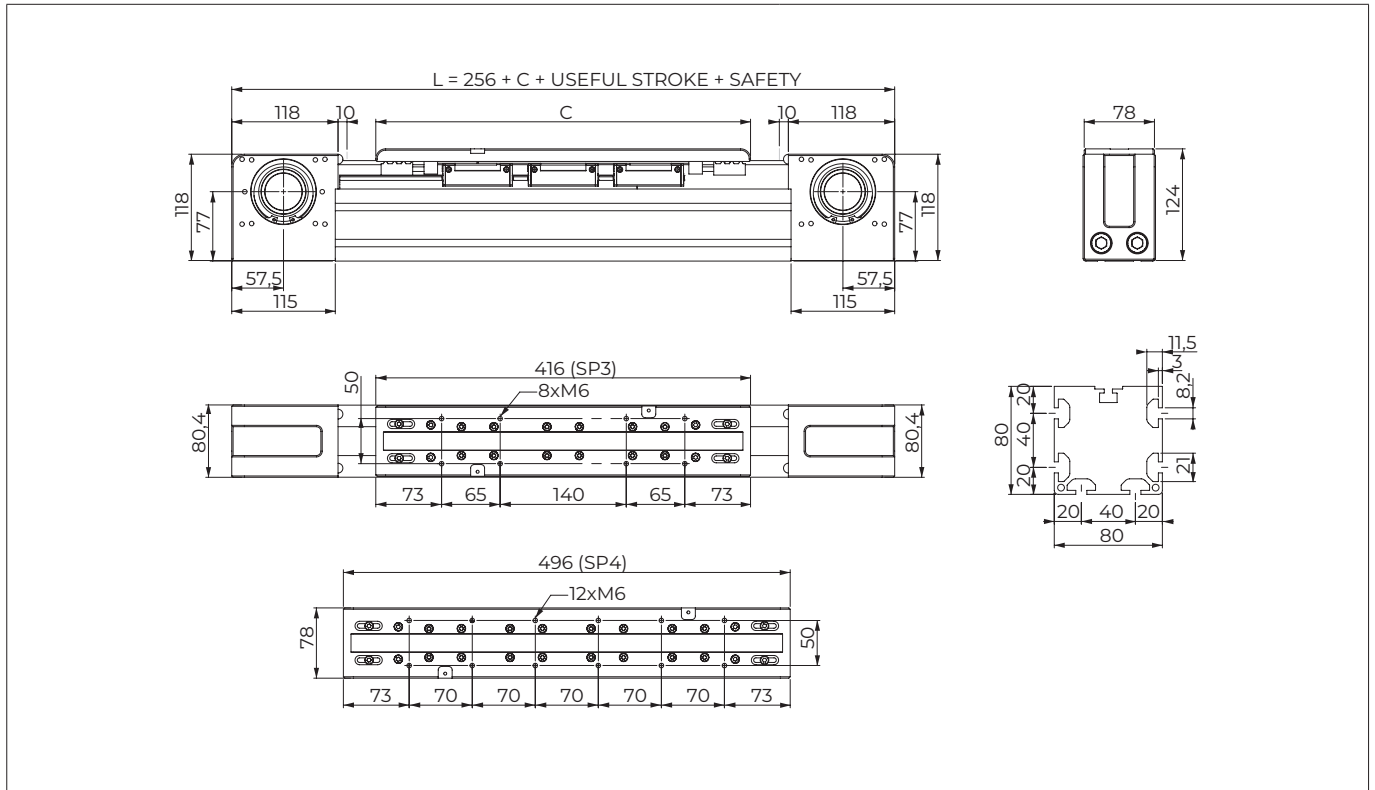
Tab.11

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	0.143
Iy [10 ⁷ mm ⁴]	0.137
Ip [10 ⁷ mm ⁴]	0.280

Tab.12



■ E-SMART 80 SP3 - SP4



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.5

Technical data	SP3	SP4
Max. useful stroke length [mm] ¹⁾	5870	5970
Max. positioning repeatability [mm] ²⁾	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Carriage weight [kg]	3.13	3.89
Zero travel weight [kg]	13.39	14.80
Weight for 100 mm useful stroke [kg]	0.87	0.87
Rail size [mm]	20	20

*1) It is possible to obtain longer stroke by means of special Rollon joints.
*2) Positioning repeatability is dependent on the type of transmission used.

Tab.13

Driving belt and pulley data	SP3	SP4
Belt type	32 AT 10	32 AT 10
Belt width [mm]	32	32
Belt length [mm]	2 x L - 325	2 x L - 405
Belt weight [kg/m]	0.19	0.19
Pulley type	Z 21	Z 21
Pulley pitch diameter [mm]	66.84	66.84
Carriage displacement per pulley turn [mm]	210	210
Starting torque [Nm]	1.4	1.5
Moment of inertia of pulleys [kg·mm ²]	939	939

Tab.14

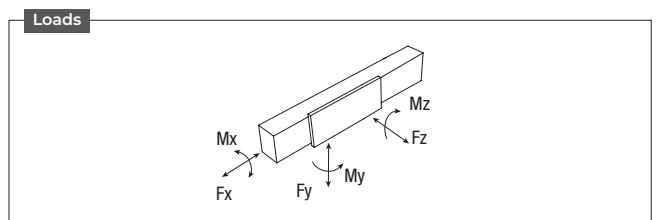
Load capacity	SP3	SP4
Fx static [N]	2523	2523
Fx dynamic [N]	1672	1672
Fy static [N]	89400	119200
Fy dynamic [N]	70200	93600
Fz static [N]	89400	119200
Mx static [Nm]	1140	1520
My static [Nm]	5662	8046
Mz static [Nm]	5662	8046

Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

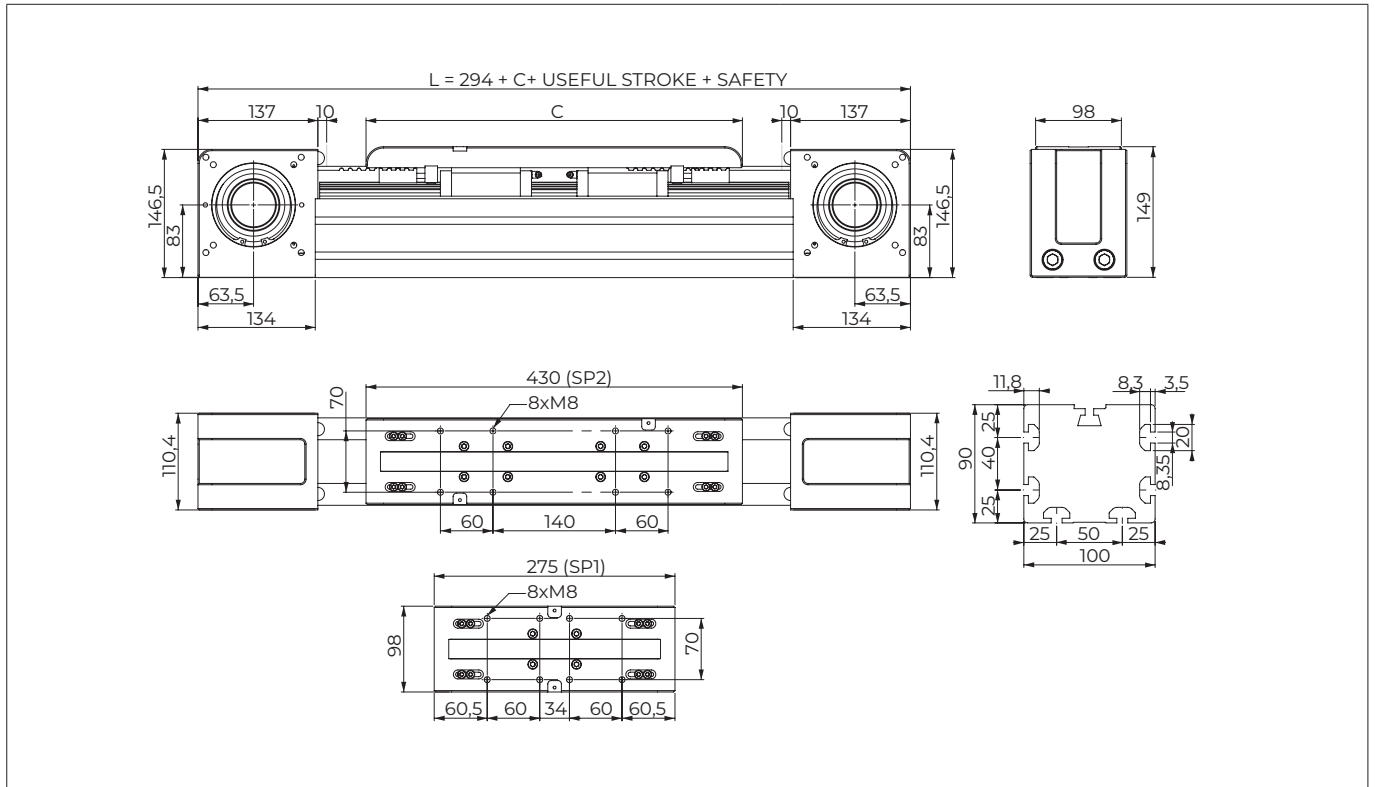
Tab.15

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	0.143
Iy [10 ⁷ mm ⁴]	0.137
Ip [10 ⁷ mm ⁴]	0.280

Tab.16



■ E-SMART 100 SP1 - SP2



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.6

Technical data	SP1	SP2
Max. useful stroke length [mm] ¹⁾	6025	5870
Max. positioning repeatability [mm] ²⁾	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Carriage weight [kg]	3.22	5.19
Zero travel weight [kg]	19.40	23.17
Weight for 100 mm useful stroke [kg]	1.19	1.19
Rail size [mm]	25	25

*1) It is possible to obtain longer stroke by means of special Rollon joints.
*2) Positioning repeatability is dependent on the type of transmission used.

Tab.17

Driving belt and pulley data	SP1	SP2
Belt type	50 AT 10	50 AT 10
Belt width [mm]	50	50
Belt length [mm]	2 x L - 120	2 x L - 275
Belt weight [kg/m]	0.29	0.29
Pulley type	Z 27	Z 27
Pulley pitch diameter [mm]	85.94	85.94
Carriage displacement per pulley turn [mm]	270	270
Starting torque [Nm]	2.1	2.4
Moment of inertia of pulleys [kg·mm ²]	4035	4035

Tab.18

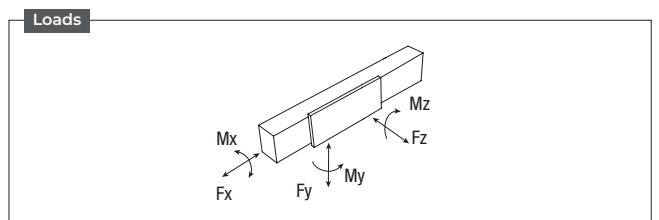
Load capacity	SP1	SP2
Fx static [N]	4980	4980
Fx dynamic [N]	3390	3390
Fy static [N]	52500	105000
Fy dynamic [N]	37300	74600
Fz static [N]	52500	105000
Mx static [Nm]	750	1500
My static [Nm]	740	8190
Mz static [Nm]	740	8190

Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

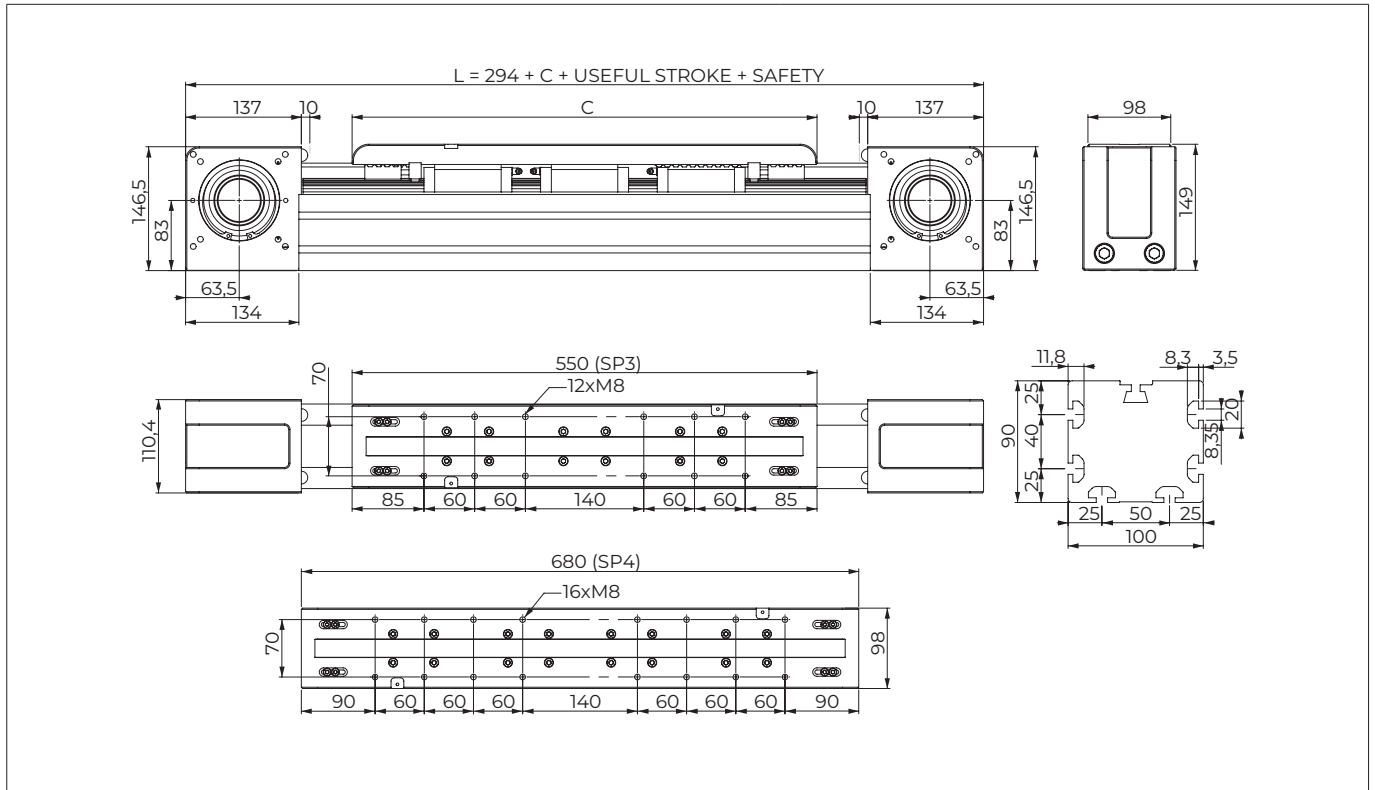
Tab.19

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	0.248
Iy [10 ⁷ mm ⁴]	0.317
Ip [10 ⁷ mm ⁴]	0.565

Tab.20



■ E-SMART 100 SP3 - SP4



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.7

Technical data	SP3	SP4
Max. useful stroke length [mm] ¹⁾	5750	5620
Max. positioning repeatability [mm] ²⁾	± 0.05	± 0.05
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Carriage weight [kg]	6.94	8.76
Zero travel weight [kg]	26.27	29.57
Weight for 100 mm useful stroke [kg]	1.19	1.19
Rail size [mm]	25	25

Tab.21

*1) It is possible to obtain longer stroke by means of special Rollon joints.
 *2) Positioning repeatability is dependent on the type of transmission used.

Driving belt and pulley data	SP3	SP4
Belt type	50 AT10	50 AT10
Belt width [mm]	50	50
Belt length [mm]	2 x L - 395	2 x L - 526
Belt weight [kg/m]	0.29	0.29
Pulley type	Z 27	Z 27
Pulley pitch diameter [mm]	85.94	85.94
Carriage displacement per pulley turn [mm]	270	270
Starting torque [Nm]	2.6	2.8
Moment of inertia of pulleys [kg·mm ²]	4035	4035

Tab.22

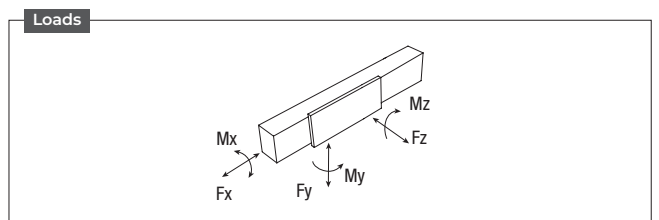
Load capacity	SP3	SP4
Fx static [N]	4980	4980
Fx dynamic [N]	3390	3390
Fy static [N]	157500	210000
Fy dynamic [N]	111900	149200
Fz static [N]	157500	210000
Mx static [Nm]	2250	3000
My static [Nm]	14490	21315
Mz static [Nm]	14490	21315

Tab.23

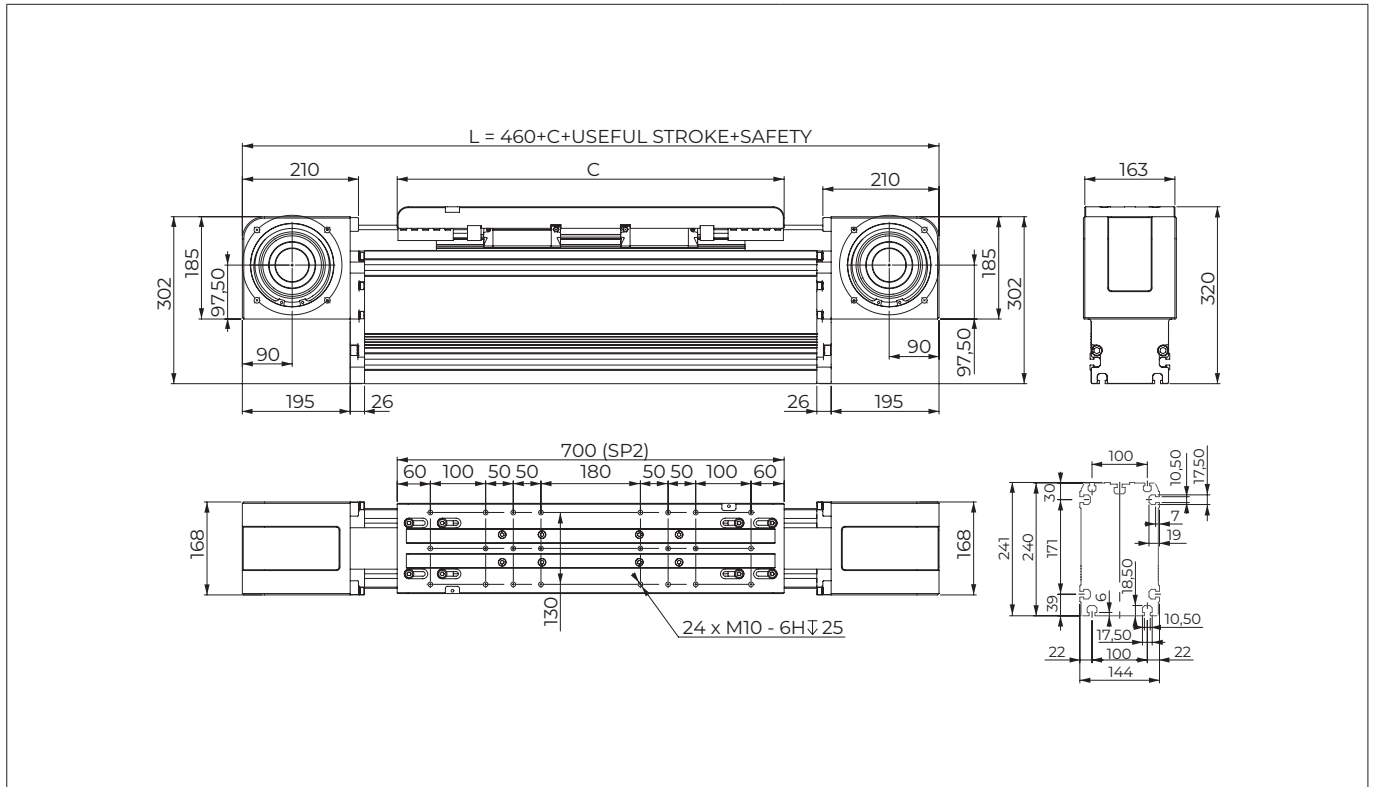
Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	0.248
Iy [10 ⁷ mm ⁴]	0.317
Ip [10 ⁷ mm ⁴]	0.565

Tab.24



■ E-SMART 144 - SP2



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.8

Technical data	SP2
Max.useful stroke length [mm]	11200
Max. positioning repeatability [mm] ¹⁾	± 0.1
Max. speed [m/s]	4.0
Max. acceleration [m/s ²]	50
Carriage weight [kg]	16.70
Zero travel weight [kg]	83.53
Weight for 100 mm useful stroke [kg]	3.48
Rail size [mm]	35

*1) Positioning repeatability is dependent on the type of transmission used.

Tab.25

Driving belt and pulley data	SP2
Belt type	75 AT 20
Belt width [mm]	75
Belt length [mm]	2 x L - 350
Belt weight [kg/m]	0.72
Pulley type	Z 22
Pulley pitch diameter [mm]	140.06
Carriage displacement per pulley turn [mm]	440
Starting torque [Nm]	4.8
Moment of inertia of pulleys [kg·mm ²]	43005

Tab.26

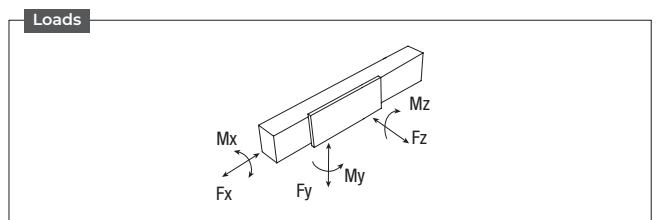
Load capacity	SP2
Fx static [N]	11025
Fx dynamic [N]	8025
Fy static [N]	232000
Fy dynamic [N]	133400
Fz static [N]	232000
Mx static [Nm]	5000
My static [Nm]	28768
Mz static [Nm]	28768

Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

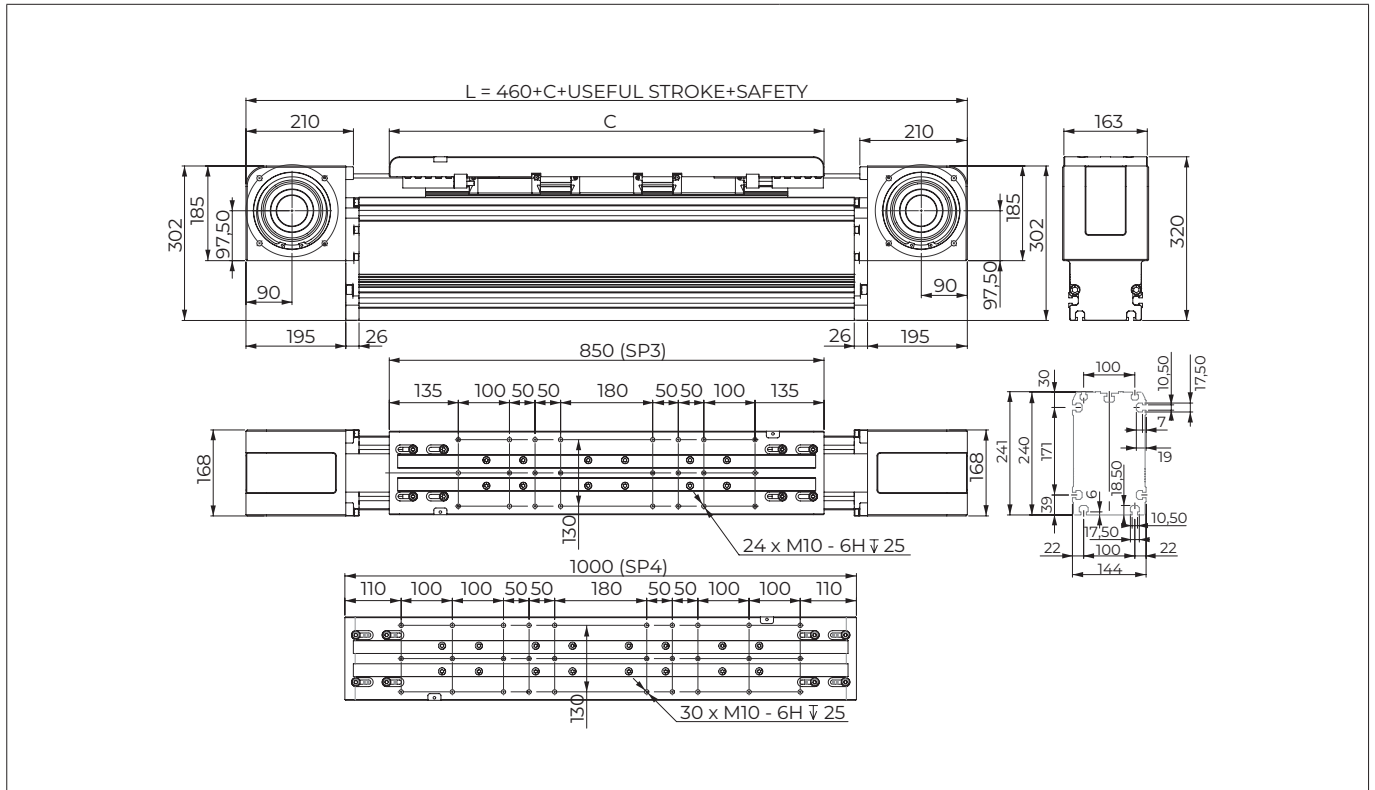
Tab.27

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	6.82
Iy [10 ⁷ mm ⁴]	2.55
Ip [10 ⁷ mm ⁴]	9.37

Tab.28



■ E-SMART 144 SP3 - SP4



The length of the safety stroke is provided on request according to the customer's specific requirements.

Fig.9

Technical data	SP3	SP4
Max. useful stroke length [mm]	11050	10900
Max. positioning repeatability [mm] ¹⁾	± 0.1	± 0.1
Max. speed [m/s]	4.0	4.0
Max. acceleration [m/s ²]	50	50
Carriage weight [kg]	20.80	25.00
Zero travel weight [kg]	91.62	101.94
Weight for 100 mm useful stroke [kg]	3.48	3.48
Rail size [mm]	35	35

¹⁾ Positioning repeatability is dependent on the type of transmission used.

Tab.29

Driving belt and pulley data	SP3	SP4
Belt type	75 AT 20	75 AT 20
Belt width [mm]	75	75
Belt length [mm]	2 x L - 500	2 x L - 650
Belt weight [kg/m]	0.72	0.72
Pulley type	Z 22	Z 22
Pulley pitch diameter [mm]	140.06	140.06
Carriage displacement per pulley turn [mm]	440	440
Starting torque [Nm]	5.2	5.6
Moment of inertia of pulleys [kg·mm ²]	43005	43005

Tab.30

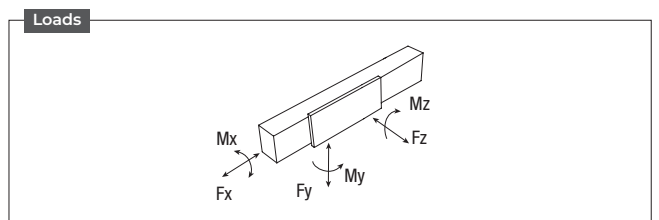
Load capacity	SP3	SP4
Fx static [N]	11025	11025
Fx dynamic [N]	8025	8025
Fy static [N]	348000	464000
Fy dynamic [N]	200100	266800
Fz static [N]	348000	464000
Mx static [Nm]	7500	10000
My static [Nm]	46168	63684
Mz static [Nm]	46168	63684

Fx in the table represents the maximum capacity of the toothed belt. For the application, the limit of transmittable torque of the shrink disk must be considered too (see pg. 15).

Tab.31

Moments of inertia of the aluminum body	
Ix [10 ⁷ mm ⁴]	6.82
Iy [10 ⁷ mm ⁴]	2.55
Ip [10 ⁷ mm ⁴]	9.37

Tab.32



▶ ACCESSORIES

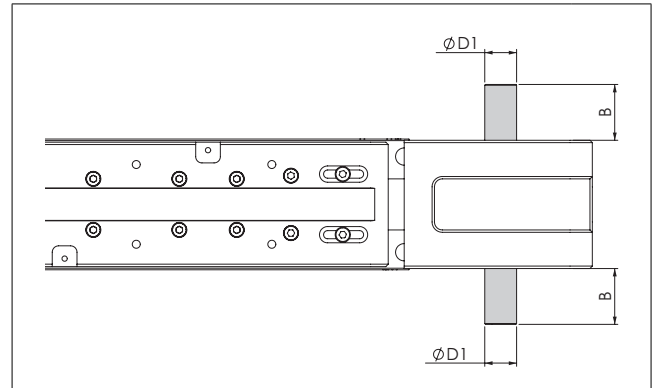
■ AS type simple shafts

Type	Shaft type	B [mm]	D1 [mm]	AS assembly kit code
E-SMART 30	AS 12	25	12h7	G000348
E-SMART 50	AS 15	35	15h7	G000851
E-SMART 80	AS 20	36.5	20h7	G000828
E-SMART 100	AS 25	50	25h7	G000649
E-SMART 144*	AS 32	50	32h7	G004773

*The shaft for E-SMART 144 features a key 10x8 L=45 mm.

Tab.33

This head configuration is obtained by utilizing an assembly kit delivered as a separate accessory item. Shaft can be installed on the left or right side of the drive head as decided by the customer.



Position of the simple shaft can be to the right or to the left of the drive head.

Fig.10

■ Hollow shaft type AC - Standard supply

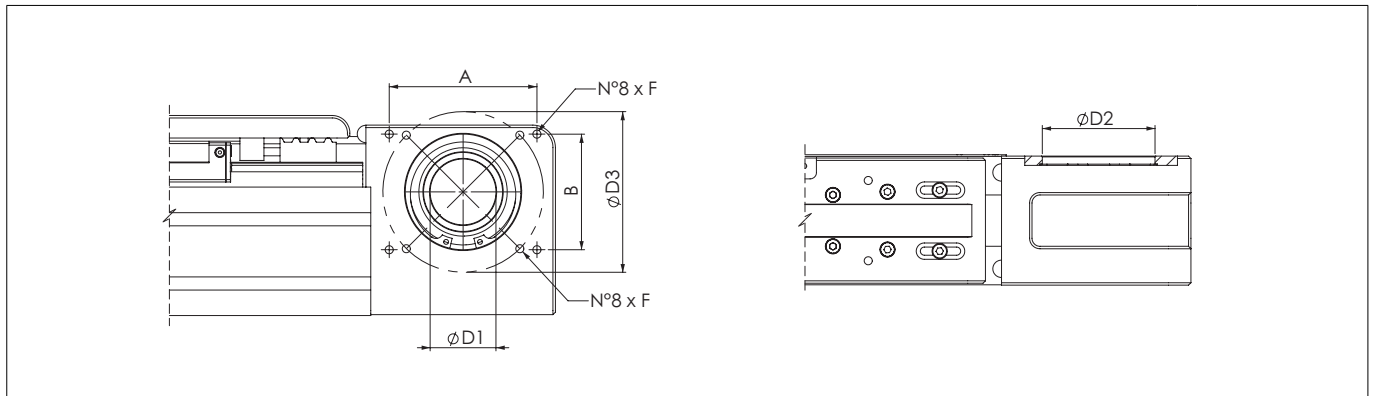


Fig.11

Type	Shaft type	D1 [mm]	D2 [mm]	D3 [mm]	F	A x B	Drive head code
E-SMART 30	AC 22	22H7	42	68	M5	-	2R
E-SMART 50	AC 34	34H7	72	90	M6	-	2R
E-SMART 80	AC 41	41H7	72	100	M6	92x72	2R
E-SMART 100	AC 50	50H7	95	130	M8	109x109	2R
E-SMART 144	AC 60	60H7	150	180	M12	-	2R

Tab.34

An (optional) connection flange is required to fit the standard reduction units selected by Rollon. For further information contact our offices.

■ Synchronization kit

When movement consisting of two linear units in parallel is essential, a synchronization kit must be used. This consists of original Rollon lamina type precision joints complete with tapered splines and hollow aluminum drive shafts.

Type	Moment of inertia [kg·mm ²]			Weight [kg]	
	C1 + C2 · (X-Y)			D1 + D2 · (X-Y)	
	C1 [kg·mm ²]	C2 [kg·mm]	Y [mm]	D1 [kg]	D2 [kg/mm]
GK12P	61	0.07	166	0.31	0.00056
GK15P	907	0.46	210	2.28	0.00148
GK20P	1015	0.46	250	2.48	0.00148
GK25P	5524	4.71	356	6.24	0.00510
GK32P	37008	11.03	367	15.44	0.00679

Tab.35

Type	Shaft type	D1 [mm]	D2 [mm]	D3 [mm]	Code	Formula for length calculation [mm]
E-SMART 30	AP 12	12	25	45	GK12P...1A	L = X - 51
E-SMART 50	AP 15	15	40	69.5	GK15P...1A	L = X - 79
E-SMART 80	AP 20	20	40	69.5	GK20P...1A	L = X - 97
E-SMART 100	AP 25	25	70	99	GK25P...1A	L = X - 145
E-SMART 144	AP 32	32	90	155	GK32P...1A	L = X - 197

Tab.36

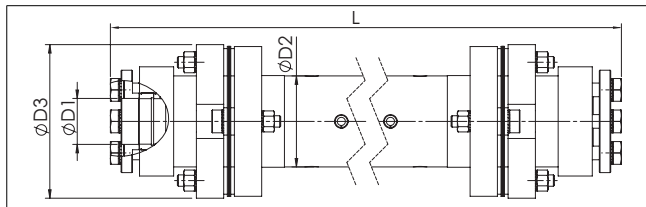


Fig.12

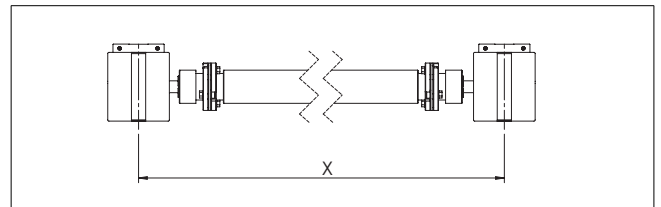


Fig.13

■ Fixing systems

To install the E-SMART System series units, we recommend use of one of the systems indicated below:

Type	A [mm]	B [mm]
E-SMART 30	42	-
E-SMART 50	62	-
E-SMART 80	92	40
E-SMART 100	120	50
E-SMART 144	180	100

Tab.37

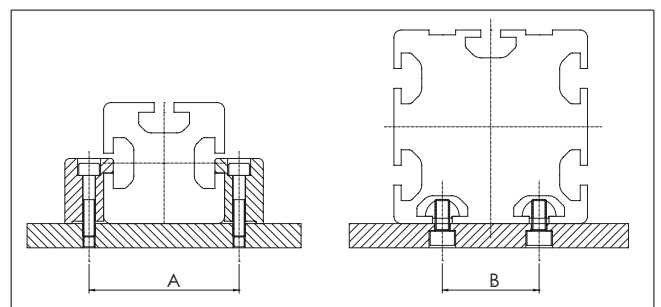


Fig.14

Fixing systems for 144 profile

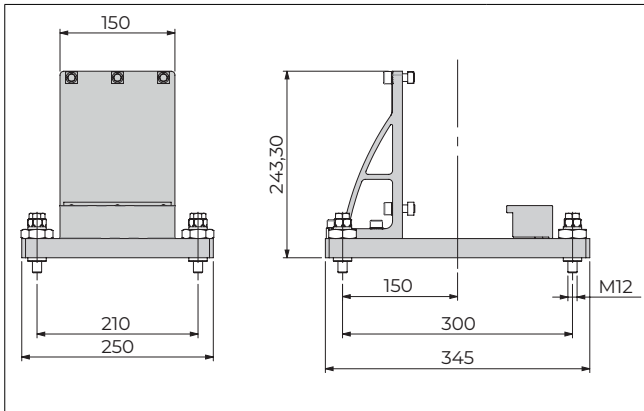


Fig.15

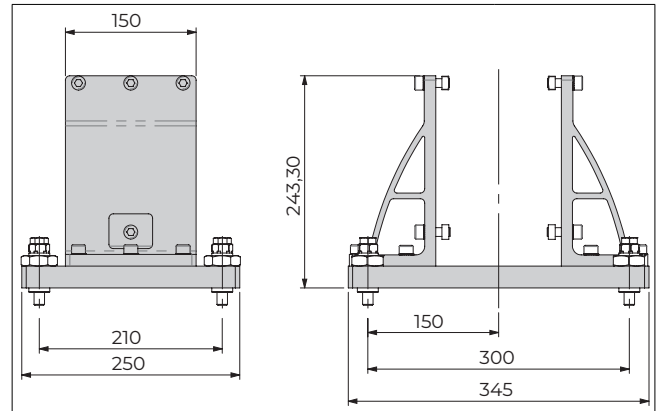


Fig.16

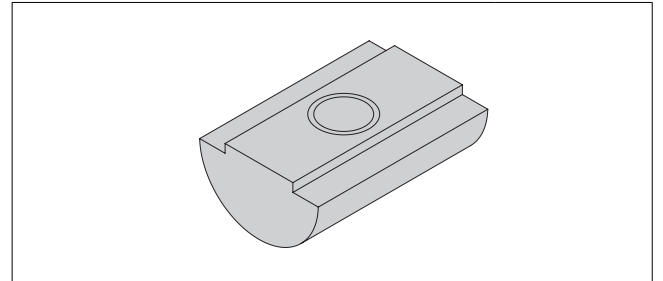
Type	Code	Height adjustment [mm]
E-SMART 144	G004673	8
	G004675	8

Tab.38

Threaded inserts

Type	Hole	Length [mm]	Code
E-SMART 30	M5	20	6000436
E-SMART 50	M6	20	6000437
E-SMART 80	M6	20	6000437
E-SMART 100	M6	20	6000437
E-SMART 144	M8	16	1000942
	M10	16	814.1015.81

Tab.39



Steel nuts to be used in the slots of the body.

Fig.17

Fixing brackets

Type	C [mm]	H [mm]	L [mm]	D [mm]	Code
E-SMART 30	16	17.5	50	M5	1001490
E-SMART 50	16	26.9	50	M5	1000097
E-SMART 80	16	20.7	50	M5	1000111
E-SMART 100	31	28.5	100	M10	1002377
E-SMART 144	52	43	150	M10	1020597

Tab.40

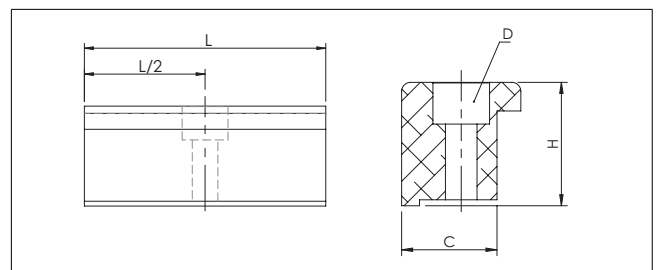


Fig.18

■ Sensors

Inductive proximity sensor holder is made of aluminum and features "T" nuts for fixing on the axis profile. The sensor dog is a steel plate mounted on the carriage and used for proximity operation. The inductive proximity sensor is not supplied by Rollon.

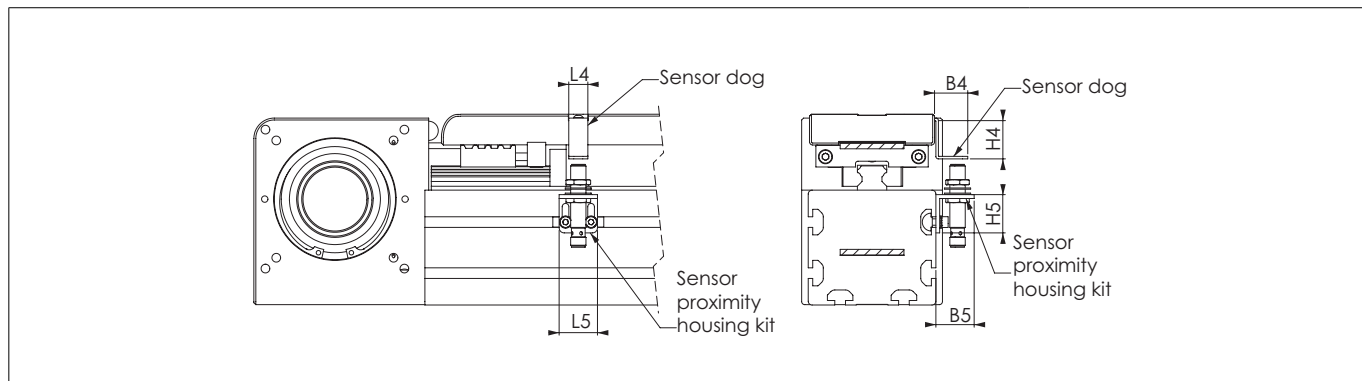
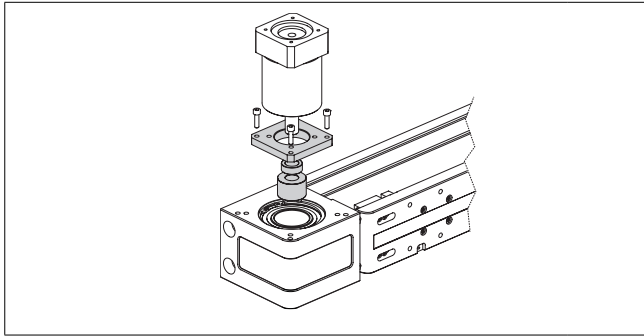


Fig.19

Type	B4 [mm]	B5 [mm]	L4 [mm]	L5 [mm]	H4 [mm]	H5 [mm]	Proximity diameter	Sensor dog code	Sensor proximity kit code
E-SMART 30	30	30	30	30	15	30	Ø 8	G000847	G000901
E-SMART 50	26	30	15	30	32	30	Ø 8	G000833	G000838
E-SMART 80	26	30	15	30	32	30	Ø 8	G000833	G000838
E-SMART 100	26	30	15	30	32	30	Ø 8	G000833	G000838
E-SMART 144	31	50	25	45	52	50	Ø 12	G004652	G004653

Tab.41

■ Adapter flange for gearbox assembly



Assembly kit includes: shrink disc; adapter plate; fixing hardware.

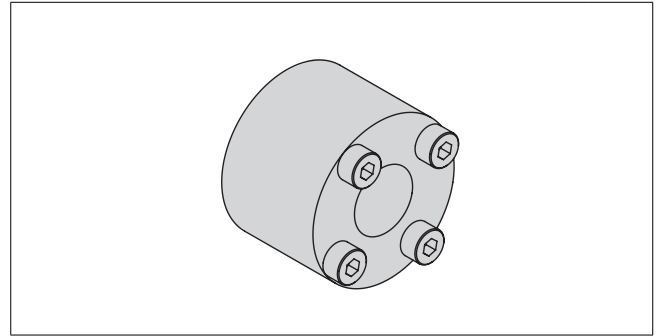
Fig.20

Type	Gearbox type (not included)	Kit Code
E-SMART 30	MP053	G000356
	LC050; NP005; PE2	G000357
	SW030	G000383
E-SMART 50	MP060; PLE60; CP015	G000852
	LC070; MPV00; NP015; PE3	G000853
	SW040	G000854
E-SMART 80	P3	G000824
	MP080	G000826
	LC090; MPV01; NP025; PE4	G000827
	MP105	G000830
	PE3; NP015; LC070	G001078
	SP075; PLN090	G000859
	SP060; PLN070	G000829
	SW040	G000866
	SW050	G000895
	CP025	G001643
E-SMART 100	MP130	G000482
	LC120; MPV02; NP035; PE5	G000483
	LC090; PE4; NP025	G000525
	MP105	G000527
	SW050	G000717
	CP025	G004733
	CP035	G001058
	SP075	G000526
	SP100	G000657
	E-SMART 144	MP105
MP130		G004677
LC120; LP120; PE5; NP035		G004679
SP100		G004680
NP045		G004681
CP035		G004751
CP045		G004745
SP140		G004738

For other gearbox type ask Rollon

Tab.42

■ Single shrink disc



Codes on the table below refer to a shrink disc ordered as single element.

Fig.21

Type	Hollow shaft [mm]	Shrink disc dxD [mm]	Transmittable torque* [Nm]	Shrink disc code
E-SMART 30	22	12x22	29	6000791
		14x34	64	6005737
E-SMART 50	34	16x34	73	6005738
		19x34	87	6005739
		19x41	150	6005734
E-SMART 80	41	22x41	174	6005735
		25x41	198	6005736
		22x50	286	6005730
E-SMART 100	50	25x50	324	6005731
		32x50	415	6005732
E-SMART 144	60	22x60	343	6005298
		25x60	389	6005299
		32x60	498	6005300
		40x60	623	6005301

* Transmittable torque in the table represents the maximum capacity of the shrink disc. For the application, the limit of F_r must be considered too.

Tab. 43

► USE AND MAINTENANCE

■ Lubrication

The recirculating ball guide system guarantees a long interval between maintenances: every 2000km or 1 year of use, based on the value reached first. If a longer service life is required or in case of high dynamic or high loaded applications please contact our offices for further verification.

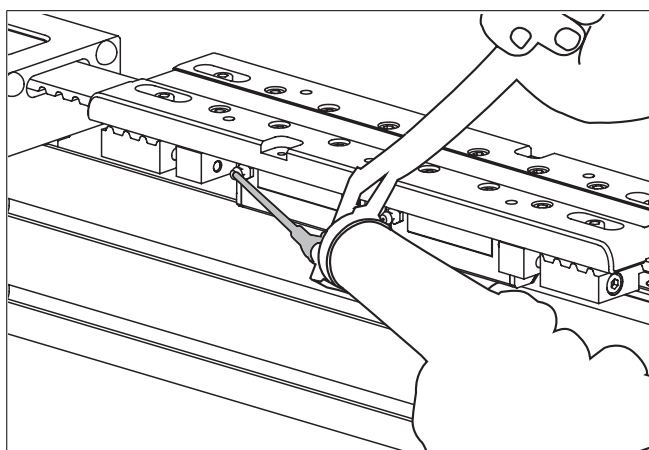


Fig. 22

- ▣ Insert the tip of the grease gun into the specific grease blocks.
- ▣ Type of lubricant: Lithium soap grease of class NLGI 2.
- ▣ For specially stressed applications or hostile environmental conditions, lubrication should be applied out more frequently.

Contact Rollon for further advice

Quantity of lubricant necessary for re-lubrication of each block:

Type	Quantity [cm ³]
E-SMART 30	0.5
E-SMART 50	0.7
E-SMART 80	1.4
E-SMART 100	2.4
E-SMART 144	4.8

Tab.44



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