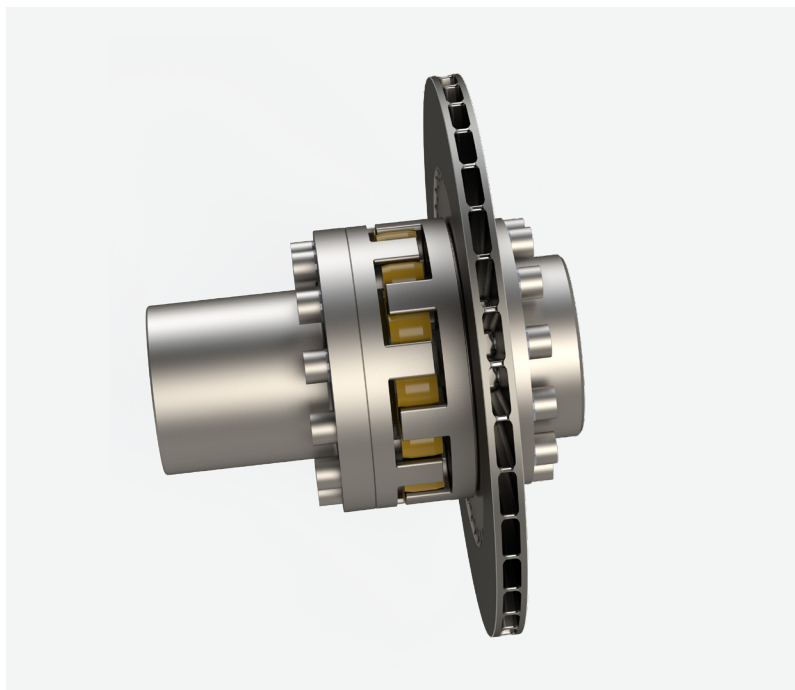


Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML



SUMMARY

1 - PRESENTATION	3
1-1 Designation	3
1-2 Description.	3
1-3 Construction.	3
2 - FLEXIBLE COUPLING INSTALLATION	4
2-1 Mounting.	5
2-2 Coupling alignment.	6
3 - OPERATION	7
4 - USE CONDITIONS.	7
5 - MAINTENANCE	8
6 - REPLACING THE RUBBER ELEMENT.	8
7 - SPARE PARTS.	8

If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02	01/09/20	1/8
	SVKL and SDKL	Leaflet N° T10152-01		
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03		
			M10152-01-B	

Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML

NOTES AND SYMBOLS

According to EC regulations, we use, facing some paragraphs, symbols defining hazards and informing the user about the consequences of not following the instructions of this installation and maintenance leaflet.

DANGER!

This symbol concerns people's safety. It points out situations which could lead to death or serious injuries.



ATTENTION!

This symbol concerns the use of the equipment. It points out situations which could lead to damage or destroy the equipment.



NOTE!

This symbol concerns information which can ease the installation and the use of the equipment.



If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02	01/09/20	2/8
	SVKL and SDKL	Leaflet N° T10152-01		
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03		
			M10152-01-B	

Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML

1 - PRESENTATION

1-1 Designation

SDK : coupling with rubber element D

SVK : coupling with rubber element V

SVKL & SDKL : couplings with long hub (2) - see the relevant *Technical data* leaflet.

SVKL-M & SDKL-ML : couplings with long hubs (2 and 7) - see the relevant *Technical data* leaflet.

1-2 Description

The couplings **SVK..** and **SDK..** are cams couplings with brake discs (6) (ventilated discs thickness 30, solid disc is optional). They are flexible and shock-proof.

They balance angular, radial and axial shaft misalignment within tolerances.

The torque is transmitted through an exchangeable rubber element (4).

Rubber elements are made with elastomer.

The hardness of the rubber element :

- V is 93 shore A ± 3 shore

- D is 60 shore D ± 3 shore.

They damp out shocks and torsionnal vibrations. They are oil-proof and can be used at temperatures ranging between -30°C and +80°C.

If no electrical connection exists otherwise, the rubber elements make an electrical insulation between the coupled machines And therefore, they prevent undesirable static charging, among other things.

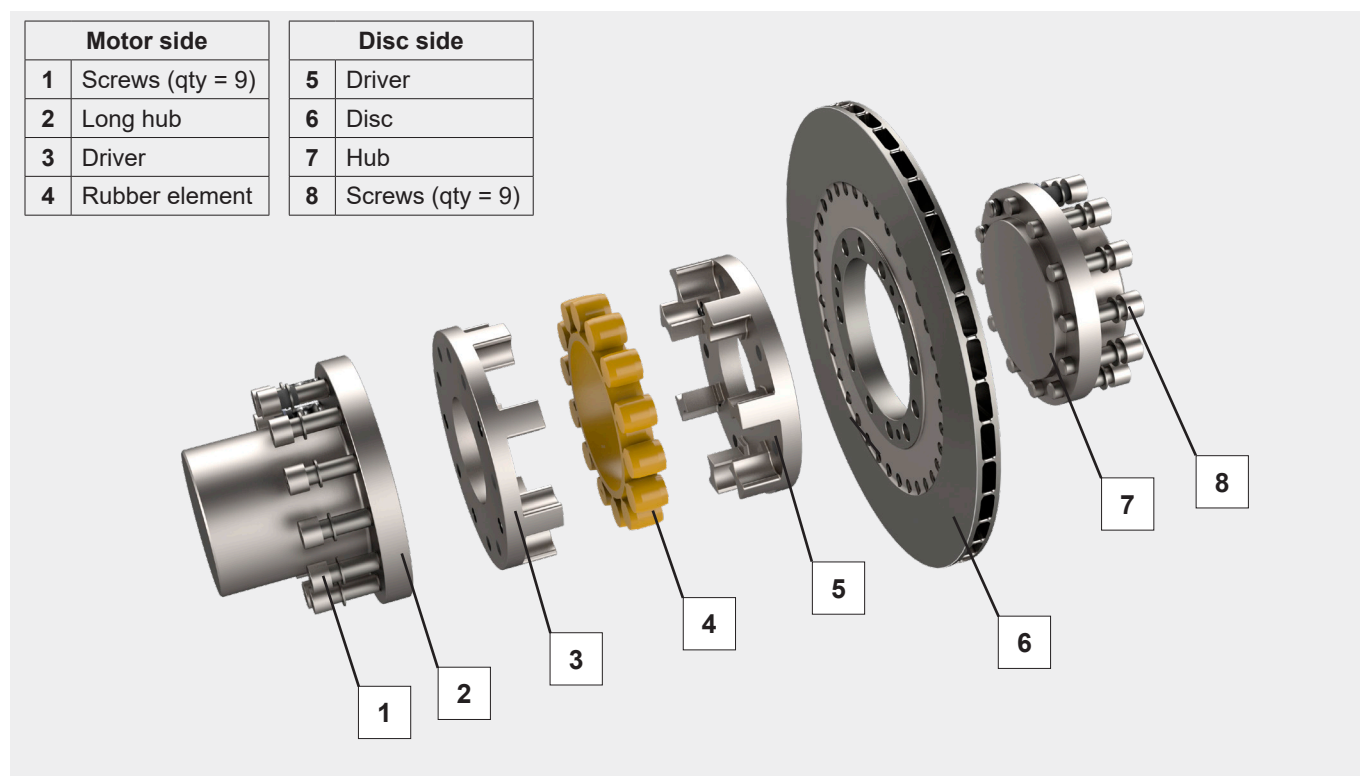
Each coupling part is made of two elements allowing the drivers (3+5) to be removed radially. This makes the rubber element replacement possible without moving the machines back.

The coupling can be used in the two directions of rotation.

1-3 Construction

see fig.1

Fig.1



If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02	01/09/20	3/8
	SVKL and SDKL	Leaflet N° T10152-01		
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03		
M10152-01-B				

Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML

2 - FLEXIBLE COUPLING INSTALLATION

ATTENTION !

The couplings **SVK..** and **SDK..** must be handled, mounted, dismantled, maintained only by qualified, trained and authorized staff. This staff must be informed about this present leaflet and must have received instructions about the accidents risks.



DANGER !

Before performing any work on the coupling, always switch off the motor !
Secure the motor against switching on unintentionally.



- > Be sure that the intended rotation speed and the torque as well as the operating temperature do not exceed the allowable values being in the "Technical data" relevant leaflet.
- > On the hubs, the maximum allowable bore diameters are according to the "Technical data" relevant leaflet
- > Standard tolerances for the bores are according to ISO H7 fit (DIN 7161, sheet 2).
- > Standard key groove according to ISO Js9 fit (DIN 6885, sheet 1).
- > Fixing screws if necessary.

If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02	01/09/20	4/8
	SVKL and SDKL	Leaflet N° T10152-01		
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03		
				M10152-01-B

Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML

2-1 Mounting

- > Remove the rubber element (4)(A-fig.2)
- > Before installing, clean the holes of the hubs, the shaft ends and the discs.
- > For larger couplings, use suitable installation aids.
- > Fit the subassemblies hub-ring-driver (2+3) and hub-disc-driver (7+6+5) on the shaft ends (B-fig2), during this operation avoid shocks on the drivers cams (3 and 5).

NOTE !

For easy installation, the uniform warming of the hubs to between 80 and 120°C is completely safe.



DANGER !

Imperatively protect yourself with gloves from the very hot parts of the coupling.



- > Slide the hubs onto the shafts to achieve full engagement only.
- > The shafts end must be flush with the end of the hubs and not protrude into the drivers (fig.3). Protruding shaft ends prevent the free removal of the rubber element (4).

ATTENTION !

Put the hot hubs to cool before inserting the rubber element.



Fig.2

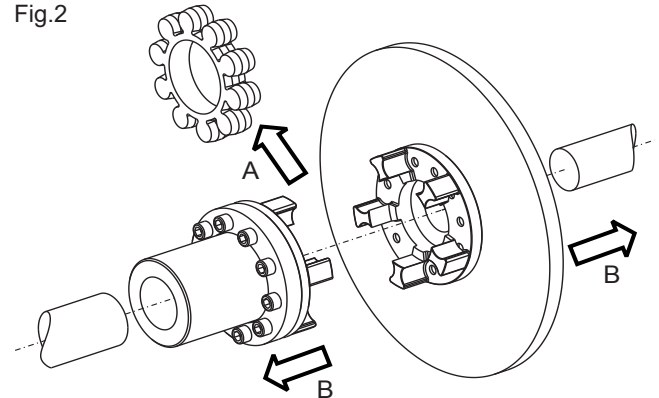


Fig.3

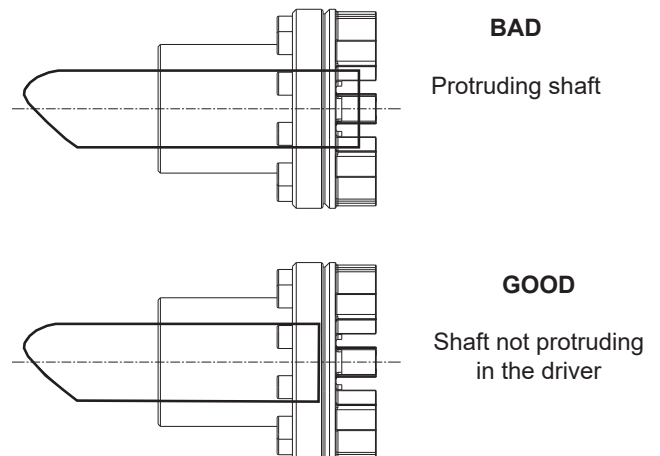
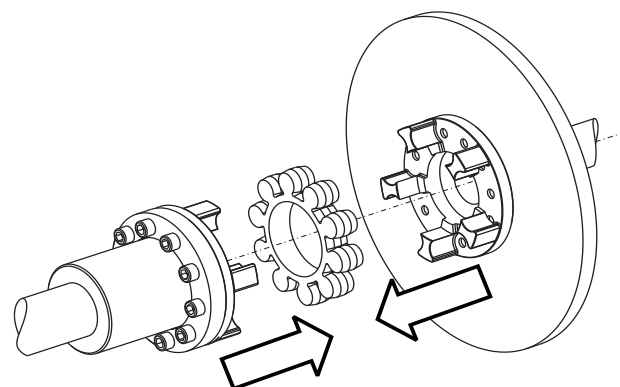


Fig.4



- > Fit the rubber element on one of the drivers (3 or 5).
 - > Join the shafts by mean of the both drivers (fig.4).
 - > Check the concentricity of the two coupling parts by following the instructions of § 3-2.
- In the order to increase the service life of the rubber element, the exact alignment of the shafts ends is necessary.

If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02	01/09/20	5/8
	SVKL and SDKL	Leaflet N° T10152-01		
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03		
M10152-01-B				

Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML

2-2 Coupling alignment

DANGER !

Before performing any work on the coupling, always switch off the motor !
 Secure the motor against switching on unintentionally.



Note :

The maximum allowable misalignment given on tables 1 to 3 are general standard values.

In special cases with increased demands on quiet running or higher rotation speed, alignment precision lower than 0,1 mm in the three displacement planes can be necessary.

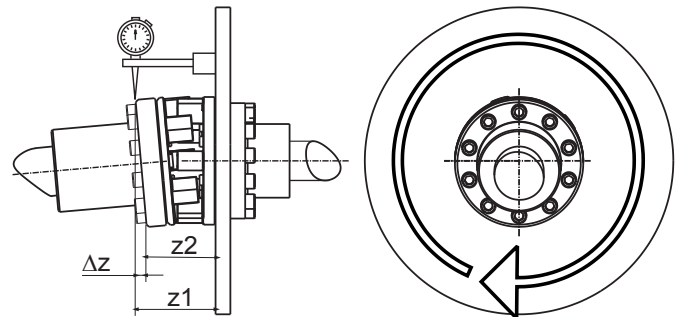
a) Angular alignment (fig.5)

- > Take measurements on a complete revolution (360°).
- > Determine the largest deviation z1 and the smallest deviation z2.
- > Calculate the angular misalignment : $\Delta z = z1 - z2$
- > When alining, comply with the maximum allowable misalignment Δz_{max} given in table 1.

Table 1

Coupling	125	145	170	200	230	260	300	400
Δz_{max} (mm)	1.1	1.3	1.5	1.7	2.0	2.3	2.6	3.5

Fig.5



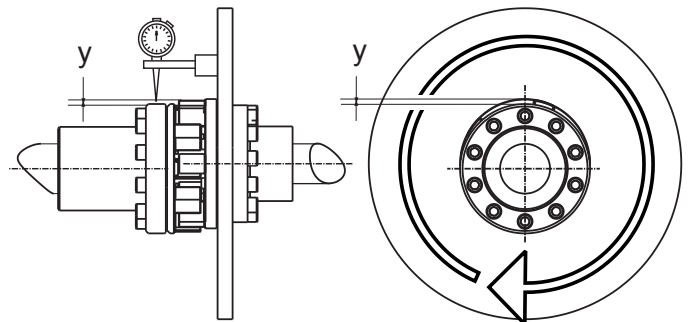
b) Radial alignment (fig.6)

- > Take measurements on a complete revolution (360°).
- > Determine the largest deviation y1 and the smallest deviation y2.
- > Calculate the radial misalignment $y = 0,5 \cdot (y1 - y2)$
- > When alining, comply with the maximum allowable misalignment y_{max} given in table 2.

Table 2

Coupling	125	145	170	200	230	260	300	400
y_{max} (mm) V	0,7	0,7	0,7	0,8	0,8	0,9	0,9	1,0
y_{max} (mm) D	0,7	0,7	0,7	0,8	0,8	0,9	0,9	1,0
Speed (rpm)	1250	1250	1000	850	750	600	600	500
y_{max} (mm) V	0.24	0.24	0.22	0.26	0.26	0.27	0.30	0.36
y_{max} (mm) D	0.24	0.24	0.22	0.26	0.26	0.27	0.30	0.36
Speed (rpm)	3600	3600	3200	2600	2300	2000	1800	1400

Fig.6



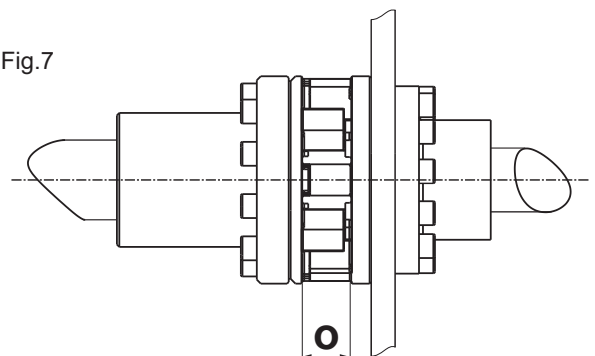
c) Axial alignment (fig.7)

- > Measure the drivers axial overlapping O (table 3).
- > When aligning comply with the allowable tolerance given in table 3.

Table 3

Coupling	125	145	170	200	230	260	300	400
O (mm)	37	43	45	52	54	64	70	76
Tolerance	+2	+2	+2	+2	+2	+2	+2	+2

Fig.7



If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02
	SVKL and SDKL	Leaflet N° T10152-01
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03

01/09/20

6/8

M10152-01-B

Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML

3 - OPERATION

Before putting the coupling into operation, check the tightening torque of the screws (1) and (8), class 10.9, greased with MoS2 under head and in threads : see values in table 4. Tightening tool dispersion = $\pm 10\%$.

Table 4

Coupling	125	145		170		200	230		260		
Disc	315	315	355	395	445	445	495	550	550	625	705
Tightening torque screw (1)	48	84		204		203	285		541		
Tightening torque screw (8)	48	84		133	204	203	285		285	398	541

DANGER !

Before putting the coupling **SDK..** and **SVK..** into operation, check that it is correctly mounted according to the instructions of ch.2.



ATTENTION !

After a long stopping (about 1h) in a temperature lower than -25°C the rubber element must be warmed to a temperature of about -10°C to 0°C. The starting up will be made as far as possible without overload (jolts).



4 - USE CONDITIONS

DANGER !

In operation, safety instructions and local measurements against accidents risks must be applied.



The flexible couplings **SDK..** and **SVK..** must be protected against acids and alkaline detergents. An immersed installation is impossible. The working temperature do not exceed +80°C or be lower than -25°C.

DANGER !

In their working area, the couplings must be equipped with a protection cover in conformity with the applicable preventive safety measure. It must allow a sufficient ventilation of the coupling (use perforated or latticed sheets).



If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02	01/09/20	7/8
	SVKL and SDKL	Leaflet N° T10152-01		
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03		
			M10152-01-B	

Disc brake

Installation and maintenance

Elastic disc couplings

series SDK, SVK, SDKL, SVKL, SDKL-ML, and SVKL-ML

5 - MAINTENANCE

- › The flexible couplings SDK .. and SVK .. require little maintenance in operation.
- › We recommend to check visually the rubber element (4) annually.
- › After a certain operating time, marks of wear due to the conditions and requirements of use can appear on the rubber element.
- › Most current are :
 - Hardening of the elastomer (surface porosity)
 - Breaking start
- › In case of wear marks (excessive brittleness or hardness of elastomer due to a too high temperature) or cracks, it is necessary to replace the rubber element (see ch.7)

Storage conditions

The rubber elements must be stored in a dry and ventilated place, at a minimum temperature of 20 to 25°C.
 By safety measure, the flector should not be used if the storage period is higher than 5 years.

6 - REPLACING THE RUBBER ELEMENT

DANGER!

Before performing any work on the coupling, always switch off the motor !
 Secure the motor against switching on unintentionally.



- › Unscrew the drivers (3+5).
- › Push back the drivers together (against the rubber element) out of the centerings of hub (2) and the disc (6).
- › Get out the drivers and the rubber element together (3+5+4) (fig.8).
- › Fit the new rubber element.


BIBUS®
 SUPPORTING YOUR SUCCESS

BIBUS SK, s.r.o
 Trnavská 31, SK-94 901 Nitra

Tel.: 037/ 7777 911 Email: sale@bibus.sk
 Fax.: 037/ 7777 999 http://www.bibus.sk

ATTENTION!

The contact surfaces of the drivers (3+5), the hub (2) and the disc (6) must be clean and free of oil and grease.

STOP

- › Put the drivers at their respective places.
- › Screw in the same way the screws without forcing.
- › Tighten the screws to the torque given in table 4.

DANGER!

Before putting into operation, install all protective devices.



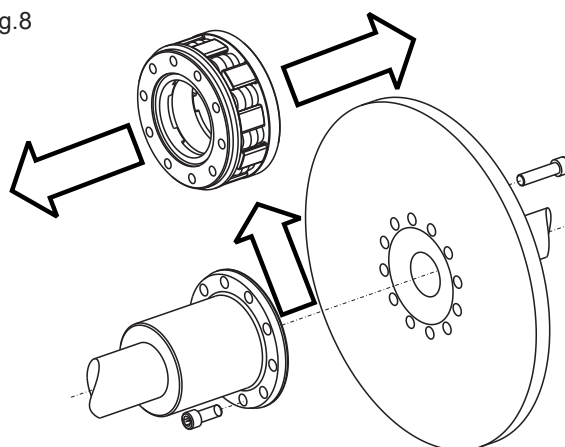
7 - SPARE PARTS

ATTENTION!

It is recommended to store the main spare parts to ensure an optimal guarantee and safety of operation. The wearing part is the rubber element. Only the use of original Stromag spare parts can guarantee our equipment's reliability. Using non original parts (not delivered by Stromag), can modified negatively the coupling characteristics and then compromises the safety.

STOP

Fig.8



If the instructions in this manual are not adhered to, the performance, correct operation and the safety of the equipment cannot be guaranteed.

Technical data	SVK and SDK	Leaflet N° T10152-02	01/09/20	8/8
	SVKL and SDKL	Leaflet N° T10152-01		
	SVKL, SVKL MLP and MLV	Leaflet N° T10152-03		
			M10152-01-B	