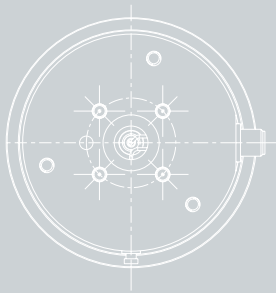
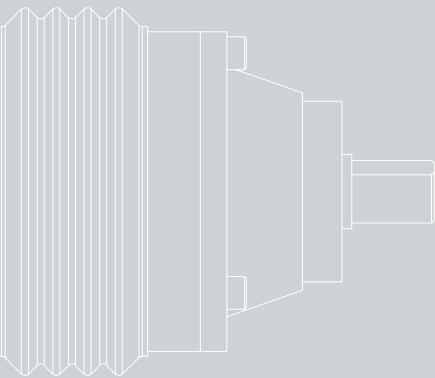




TBi KS1 Safety-off mechanism



4 axis deflection

High precision automatic reset

Different spring forces available

Technical data

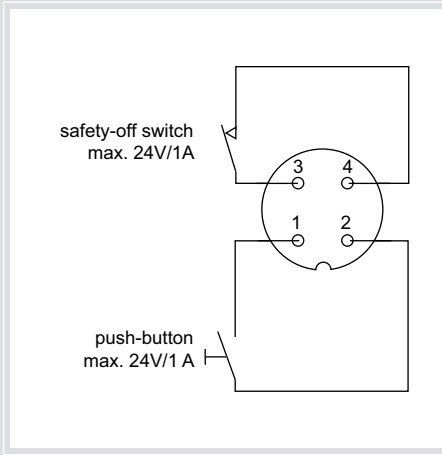
Safety-off mechanism TBi KS1 (-S)

Function	fully mechanical, spring supported
Release force axial	KS1: 960 N KS1-S: 550 N
Release torque on transverse axis (Mx/My)	KS1: 32.2 Nm KS1-S: 18.2 Nm
Repeatability	lateral ± 0.05 mm (KS1-S: 0.1 mm), at 300 mm distance to the flange
Features	- 1 push-button for individual use (wire run-in) - insulation flange integrated
Options	- Mounting flange with bolts and keyway - adapter flanges for any robot
Weight	approx. 1.96 kg

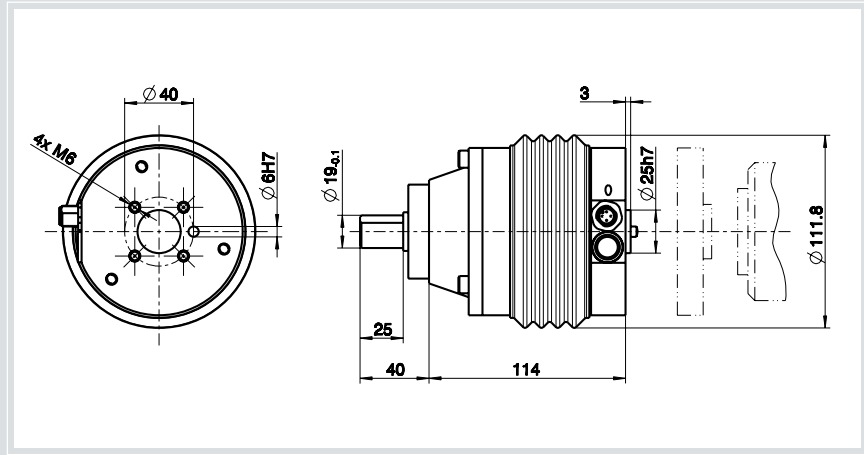
Ordering information

TBi KS1 w/o mounting flange (std.)	536P101001
TBi KS1-S w/o mounting flange	536P101004
Mounting flange cpl.	536P102540
Plug, 4-poles	375P002323

Electrical connection



Dimensions



The TBi KS1 may be used in connection with TBi robot welding torches (MIG/MAG, TIG, Plasma) or other tools up to a weight of approx. 2-3 kg. The operating limits are given by the tool weight, the tool's center of gravity in relation to the mounting flange and the maximum acceleration of the robot. Very light weight tools, e.g. TIG torches, may be mounted on the TBi KS1-S. This version has a reduced release force.

Applications

The TBi safety-off mechanism has been developed to reliably protect the robot and the torch system in case of a collision. It is outstanding in regard to its large elastic deflection combined with very good repeatability and it reaches excellent results in comparative tests. In order to be able to quickly continue production without set up or adjustment tasks after a collision, we generally recommend using this device.

Simplified assembly by internal electrical connector



Compatibility with robots

The supplied insulation flange will directly fit many popular robots. The list is not complete and just meant for your convenience. Please tell us the exact model of your robot, so we can check compatibility for you.

We are also able to supply intermediate flanges for other robots. Ask us about it!

Product	Model
ABB	IRB 1400, IRB 1500, IRB 2000, IRB 2165, IRB 2400L and others
Fanuc	ARC Mate 100 iB, ARC Mate 120 iB, Arc Mate 120 iL, M16 iB/20, M16 iB/10L and others
Kawasaki	FA 06L, FA 06N, FA 10N, FC06L, FC 06N, FC 10C, FC 10N, FS 06L, FS 06N, FS 10C, FS 10N, FS 10X and others
Kuka	KR 6, KR 16 L6ARC and others
Motoman	SK6, SK16, UP6, UP20, UP20-6, UP50 and others
OTC	AX83 and others