



Hand in hand for tomorrow



Product data sheet

Manual change system SHS

Flexible. Compact. Intuitive.

Manual change system SHS

Manual tool change system with integrated air feed-through, locking monitoring, and optional electric feed-through.

Field of application

Excellently suitable for use in the flexible production of products with a comprehensive range of variants in which reliable manual changes are required.

Advantages – Your benefits

Series with six unit sizes for optimal size selection and a broad application range

Integrated pneumatic feed-through for a safe power supply of the handling modules and tools

The locking lever is opened sideways this allows the changer to be easily operated even in confined spaces

Optional locking and presence monitoring thus increased process reliability

Wide range of signal, pneumatic, fluid and communication modules for universal energy transmission possibilities

ISO mounting pattern for easy assembly to most types of robots without needing additional adapter plates



Sizes
Quantity: 6



Handling weight
9 .. 58 kg



Moment load Mx
22.5 .. 478 Nm

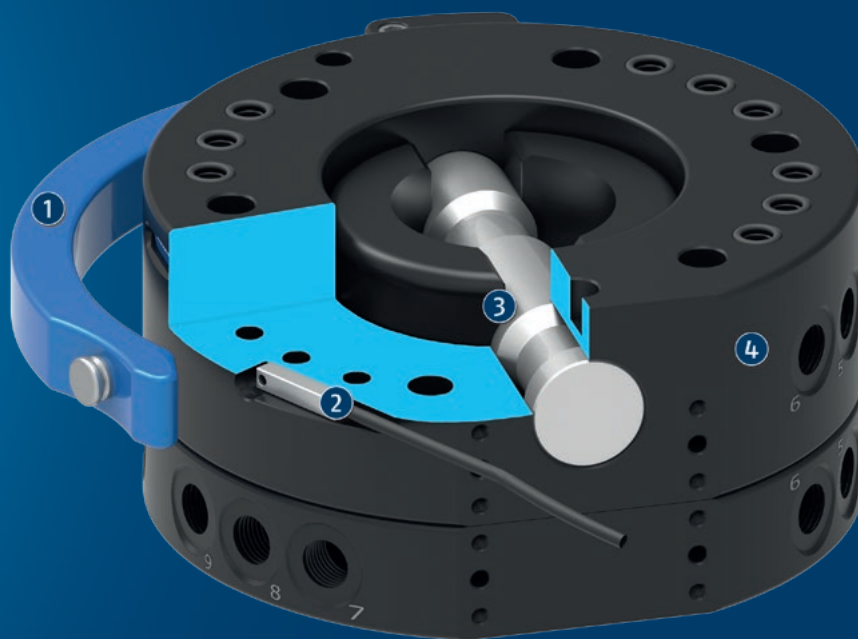


Moment load Mz
15 .. 465 Nm

Functional description

The manual change system (SHS) consists of a manual change head (SHK) and a manual change adapter (SHA). The manual change head (SHK) is form-fit locked with the manual change adapter (SHA), and due to the patented

locking it is free from play. A pin is pushed forward or backward via a locking lever for locking or unlocking. An integrated pneumatic feed-through supplies the tool with energy.



① **Locking lever**
for manual actuation

② **Lock sensing**
optional, for process-reliable monitoring of the locking condition

③ **Locking pin**
made of corrosion-free steel for easy and secure locking

④ **Air feed-through**
without interfering contours due to the integration into the housing. Also suitable for vacuum.

General notes about the series

Actuation: Manual via locking lever

Operating principle: by turning the locking lever, the head and adapter are locked and unlocked.

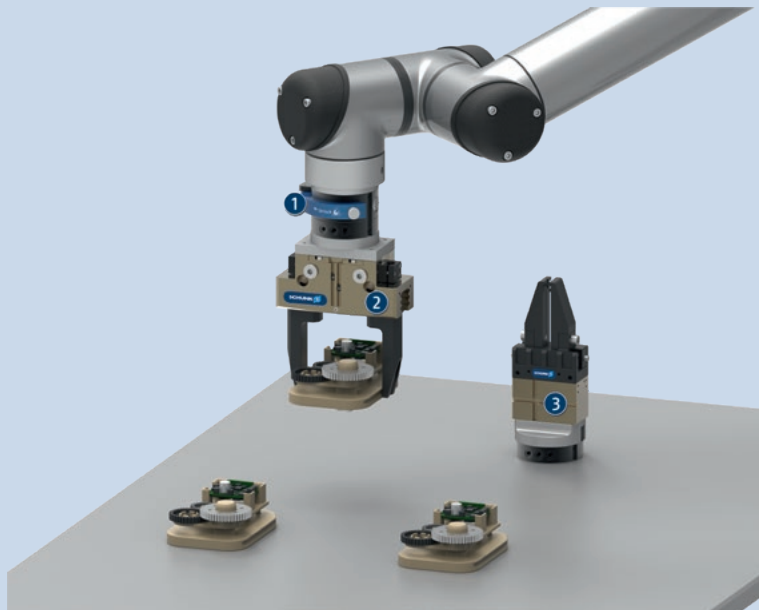
Media transmission: Optional via electrical modules and/or fluid modules. Pneumatic feed-through already integrated.

Housing: The housing consists of high-strength, hard-coated aluminum alloy. The functional components are made of hardened steel.

Warranty: 24 months

Harsh environmental conditions: Please note that use under harsh environmental conditions (e.g. in the coolant area, cast and grinding dust) can considerably reduce the service life of the units, and we will not take over any warranty. However, in many cases we can find a solution. Please contact us for assistance.

Handling weight: is the weight of the total load attached to the flange. When designing, the permissible forces and moments have to be paid attention to. Please note that exceeding the recommended handling weight will shorten the lifespan.



Application example

Handling tool with manual tool change system for gripping of middle and small parts.

- ① Manual change system SHS
- ② 2-finger parallel gripper PGN-plus-P with customized gripper fingers
- ③ 2-finger parallel gripper MPG-plus with customized gripper fingers

SCHUNK offers more ...

The following components make the product even more productive – the suitable addition for the highest functionality, flexibility, reliability, and controlled production.



Rotary feed-through



Compensation unit



Anti-collision and overload protection sensor



Universal gripper



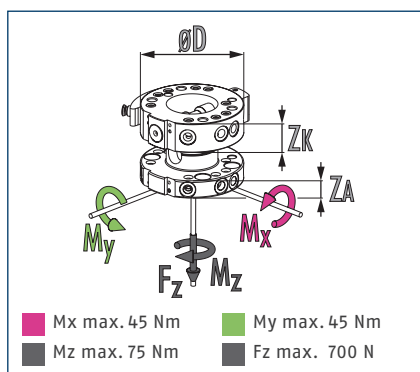
Inductive proximity switch



Optional modules COS

① For more information on these products can be found on the following product pages or at [schunk.com](https://www.schunk.com).

Dimensions and maximum loads



① This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

Technical data

Description		SHK-040-000-000	SHA-040-000-000
		Manual change head	Manual change adapter
ID		0310400	0310401
Recommended handling weight	[kg]	9	9
Lock sensing		optionally via attachment kit	
Repeat accuracy	[mm]	0.02	0.02
Weight	[kg]	0.14	0.075
Max. distance when locking	[mm]	1	1
Number of pneumatic feed-throughs		4	4
Feed-throughs for radial use		2	4
Pitch circle diameter	[mm]	40	40
Connection flange according to		ISO 9409-1-40-4-M6	
Min./max. ambient temperature	[°C]	5/60	5/60
Dimensions Ø D x Z*	[mm]	50 x 24	50 x 15
Screw connection diagram		S5/S7 via adapter plate	S5/S7 via adapter plate
max. static tensile force Fz	[N]	700	700
Max. dynamic moment Mx/My	[Nm]	22.5	22.5
Max. dynamic moment Mz	[Nm]	15	15

* *Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

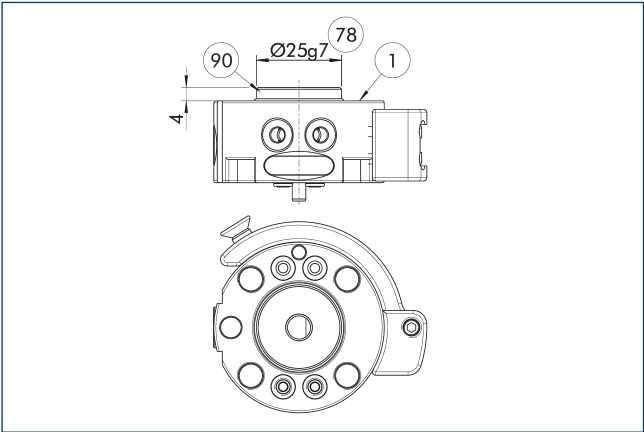
[illegible]

① Robot-side connection	③③ DIN ISO-9409 bolt circle
② Tool-side connection	⑦③ Fit for centering pins
①⑨ Mounting surface for options	⑦⑧ Fit for centering
②⑤ Pneumatic feed-throughs	

[illegible]

The changing system has pneumatic feed-throughs. They can be used hose-free via the adapter plate (axial) or with a hose (radial). Some of the feed-throughs can be used axially.

Centering disc for SHK

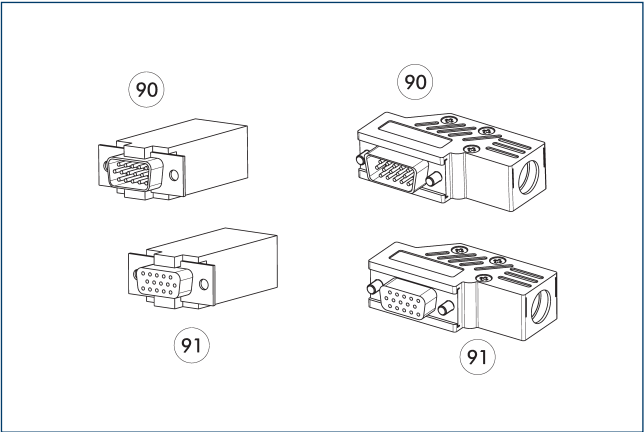


- 1 Robot-side connection
- 90 Centring disc
- 78 Fit for centering

Description	ID	
Centering disc		
ZB-CMS-040-K CENTERING COLLAR	1574471	

① Serves as a fitting collar for centering on mechanical interfaces, e. g. on the robot.

Cable connector

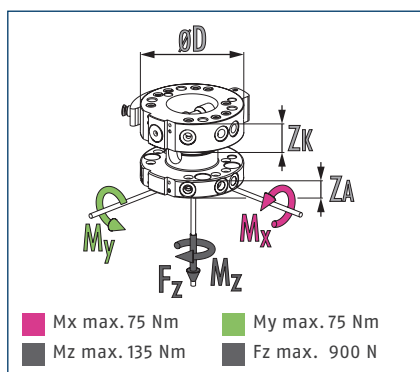


- 90 D-sub connecting plug
- 91 D-sub connector

Description	ID	
Angled cable connector, robot-side		
KAS-A15-K-90	0301301	
Angled cable connector, tool-side		
KAS-A15-A-90	0301302	
Straight cable connector, robot-side		
KAS-A15-K-0	0301264	
Straight cable connector, tool-side		
KAS-A15-A-0	0301265	

① Detailed information and further cable connectors can be found at [schunk.com](https://www.schunk.com)

Dimensions and maximum loads



① This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

Technical data

Description		SHK-050-000-000	SHA-050-000-000
		Manual change head	Manual change adapter
ID		0310410	0310411
Recommended handling weight	[kg]	11	11
Lock sensing		optionally via attachment kit	
Repeat accuracy	[mm]	0.02	0.02
Weight	[kg]	0.25	0.1
Max. distance when locking	[mm]	1	1
Number of pneumatic feed-throughs		6	6
Feed-throughs for radial use		3	6
Pitch circle diameter	[mm]	50	50
Connection flange according to		ISO 9409-1-50-4-M6	
Min./max. ambient temperature	[°C]	5/60	5/60
Dimensions Ø D x Z*	[mm]	63 x 26.5	63 x 16
Screw connection diagram		S5/S7 via adapter plate	S5/S7 via adapter plate
max. static tensile force Fz	[N]	900	900
Max. dynamic moment Mx/My	[Nm]	35	35
Max. dynamic moment Mz	[Nm]	27	27

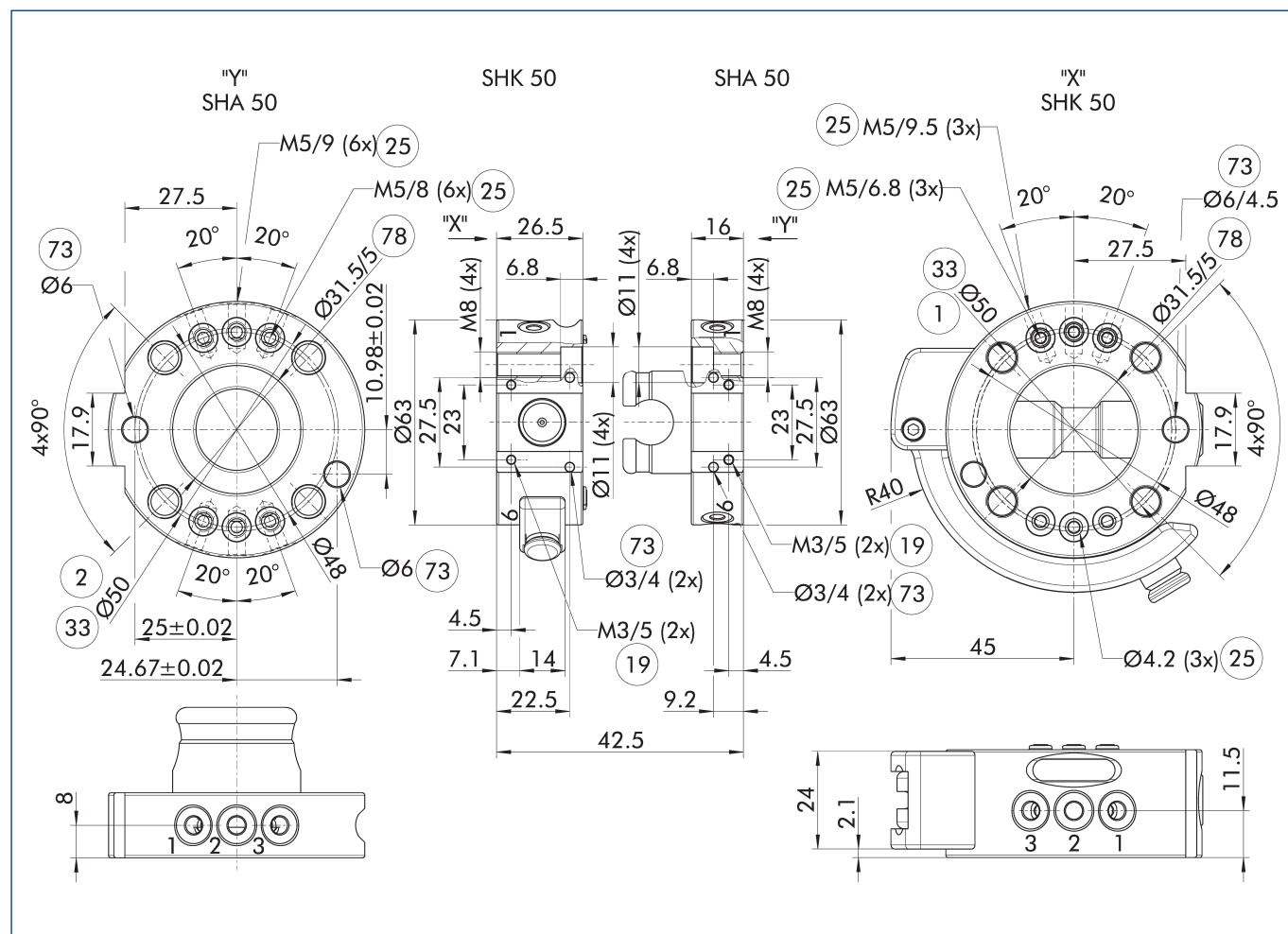
* *Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

Technical data for Universal Robots, Techman Robot, OMRON and Doosan Robotics

Description		EOA-UR3510-SHK-050-E08-000	EOA-UR3510-SHA-050-E08-000	EOA-TM51214-SHK-050-E08-000	EOA-TM51214-SHA-050-E08-000	EOA-DRM-SHK-050-E08-000	EOA-DRM-SHA-050-E08-000
		Manual change head	Manual change adapter	Manual change head	Manual change adapter	Manual change head	Manual change adapter
ID		1334788	1334789	1399638	1399639	1399576	1399581
Recommended handling weight	[kg]	11	11	11	11	11	11
Lock sensing		optionally via attachment kit		optionally via attachment kit		optionally via attachment kit	
Repeat accuracy	[mm]	0.02	0.02	0.02	0.02	0.02	0.02
Weight	[kg]	0.35	0.14	0.5	0.14	0.35	0.14
Max. distance when locking	[mm]	1	1	1	1	1	1
Number of pneumatic feed-throughs		6	6	6	6	6	6
Feed-throughs for radial use		3	6	3	6	3	6
Pitch circle diameter	[mm]	50	50	50	50	50	50
Connection flange according to		ISO 9409-1-50-4-M6	ISO 9409-1-50-4-M6	ISO 9409-1-50-4-M6	ISO 9409-1-50-4-M6	ISO 9409-1-50-4-M6	ISO 9409-1-50-4-M6
Min./max. ambient temperature	[°C]	5/60	5/60	5/60	5/60	5/60	5/60
Dimensions Ø D x Z*	[mm]	63 x 26.5	63 x 16	63 x 26.5	63 x 16	63 x 26.5	63 x 16
Screw connection diagram		S5/S7 via adapter plate	S5/S7 via adapter plate	S5/S7 via adapter plate	S5/S7 via adapter plate	S5/S7 via adapter plate	S5/S7 via adapter plate
max. static tensile force Fz	[N]	900	900	900	900	900	900
Max. dynamic moment Mx/My	[Nm]	35	35	35	35	35	35
Max. dynamic moment Mz	[Nm]	27	27	27	27	27	27
Media feed-through							
Transmission type		Signal	Signal	Signal	Signal	Signal	Signal
Number of pin contacts		8	8	8	8	8	8
Nominal current	[A]	1.5	1.5	1.5	1.5	1.5	1.5
Nominal voltage	[V DC]	-/30	-/30	-/30	-/30	-/30	-/30
Electrical connection		M8 socket, 8-pin	M8 connector, 8-pin	M8 socket, 8-pin	M8 connector, 8-pin	M8 socket, 8-pin	M8 connector, 8-pin
Electrical connection outlet		tangential (right)	tangential (left)	tangential (right)	tangential (left)	tangential (right)	tangential (left)

* *Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

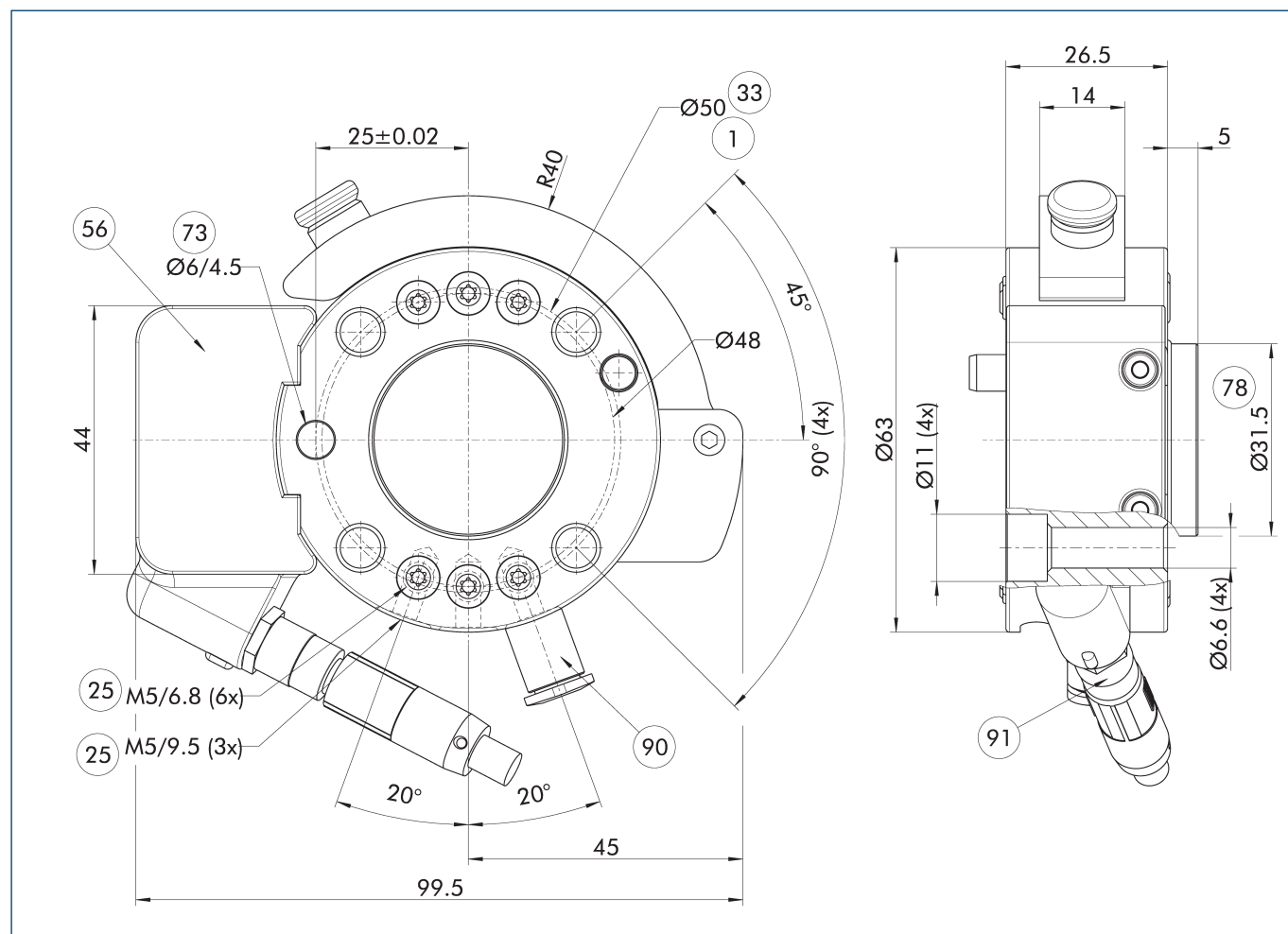
Main view



The main view shows the unit in its basic version.

- | | |
|---------------------------------|-----------------------------|
| ① Robot-side connection | ③③ DIN ISO-9409 bolt circle |
| ② Tool-side connection | ⑦③ Fit for centering pins |
| ①⑨ Mounting surface for options | ⑦⑧ Fit for centering |
| ②⑤ Pneumatic feed-throughs | |

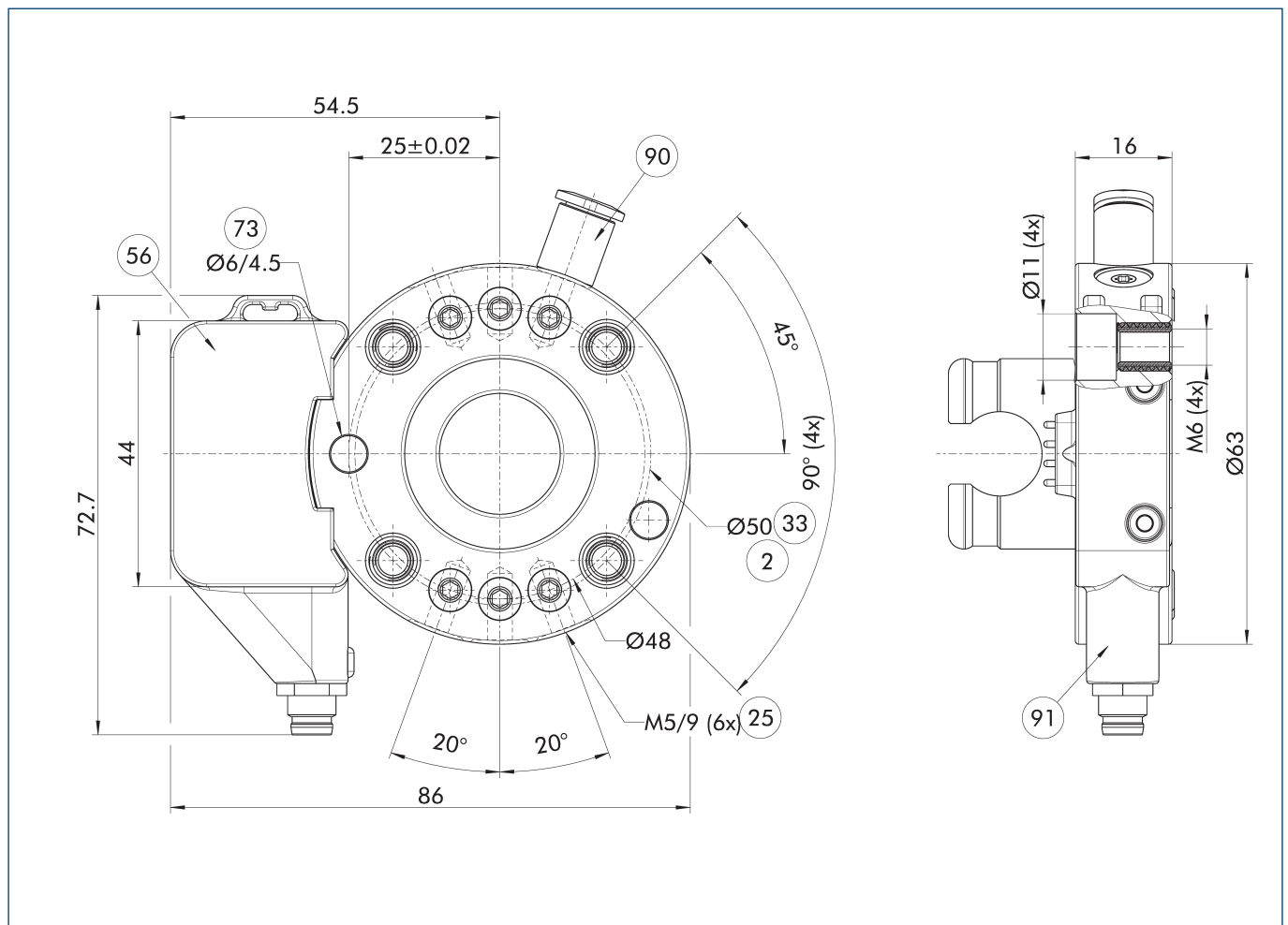
Main view E0A-UR3510-SHK-050



- ① Robot-side connection
- ② Pneumatic feed-throughs
- ③ DIN ISO-9409 bolt circle
- ⑤ Included in the scope of delivery

- ⑦ Fit for centering pins
- ⑧ Fit for centering
- ⑨ Air connection
- ⑩ Electrical connection

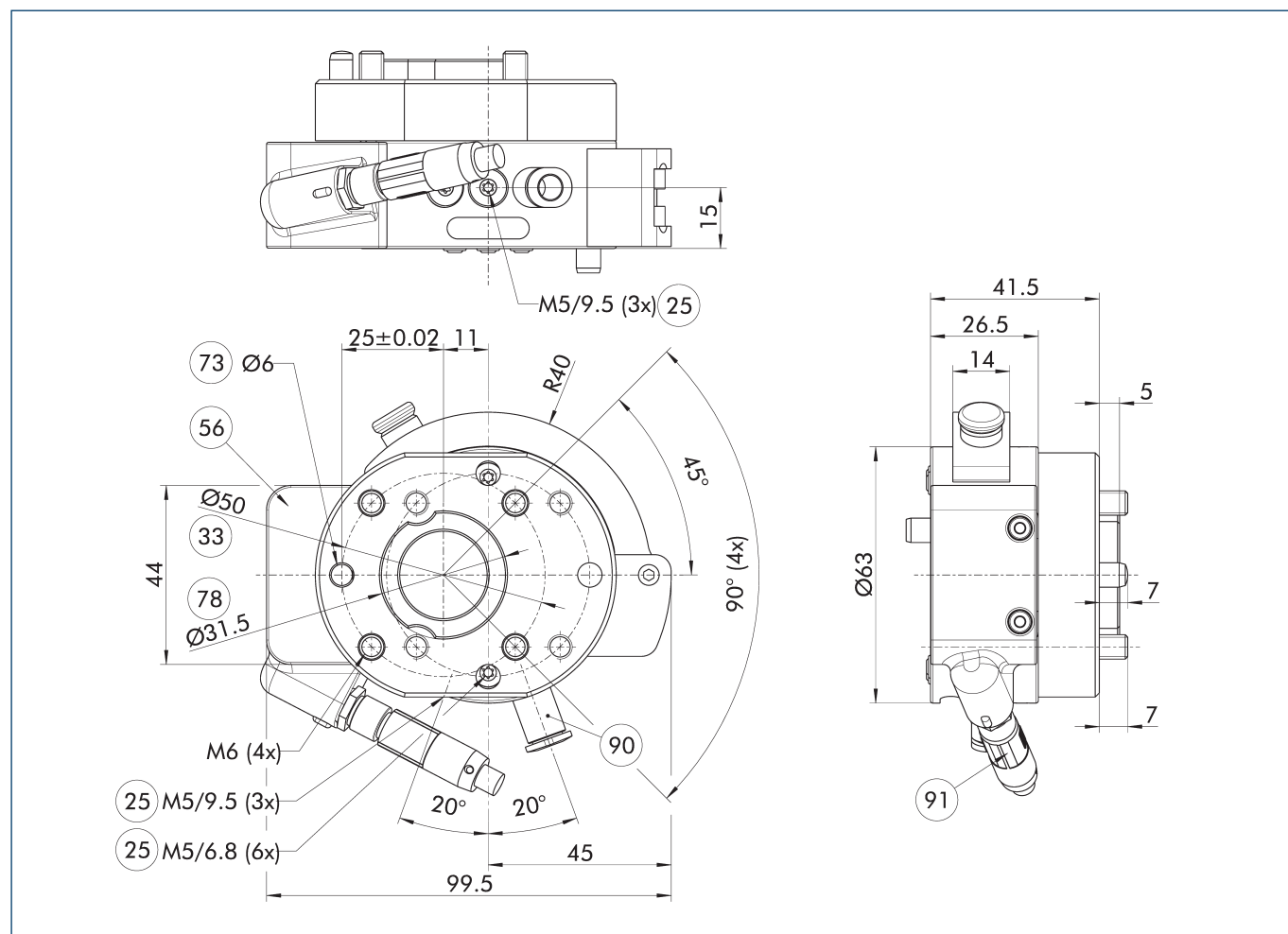
Main view E0A-UR3510-SHA-050



- ② Tool-side connection
- ②⑤ Pneumatic feed-throughs
- ③③ DIN ISO-9409 bolt circle
- ⑤⑥ Included in the scope of delivery

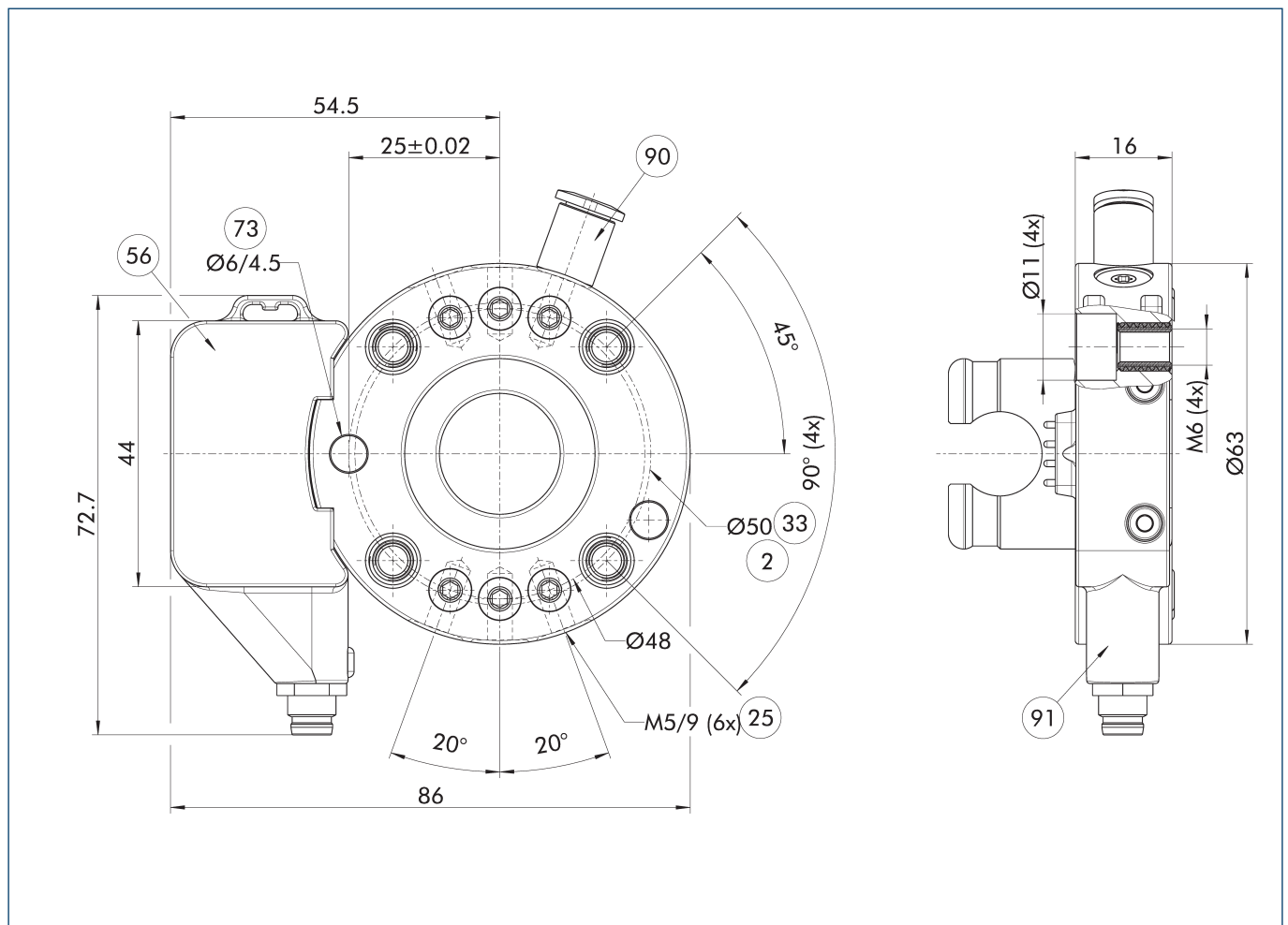
- ⑦③ Fit for centering pins
- ⑨⑦ Air connection
- ⑨① Electrical connection

Main view EOA-TM51214-SHK-050



- | | |
|---|----------------------------------|
| 1 Robot-side connection | 73 Fit for centering pins |
| 25 Pneumatic feed-throughs | 78 Fit for centering |
| 33 DIN ISO-9409 bolt circle | 90 Air connection |
| 56 Included in the scope of delivery | 91 Electrical connection |

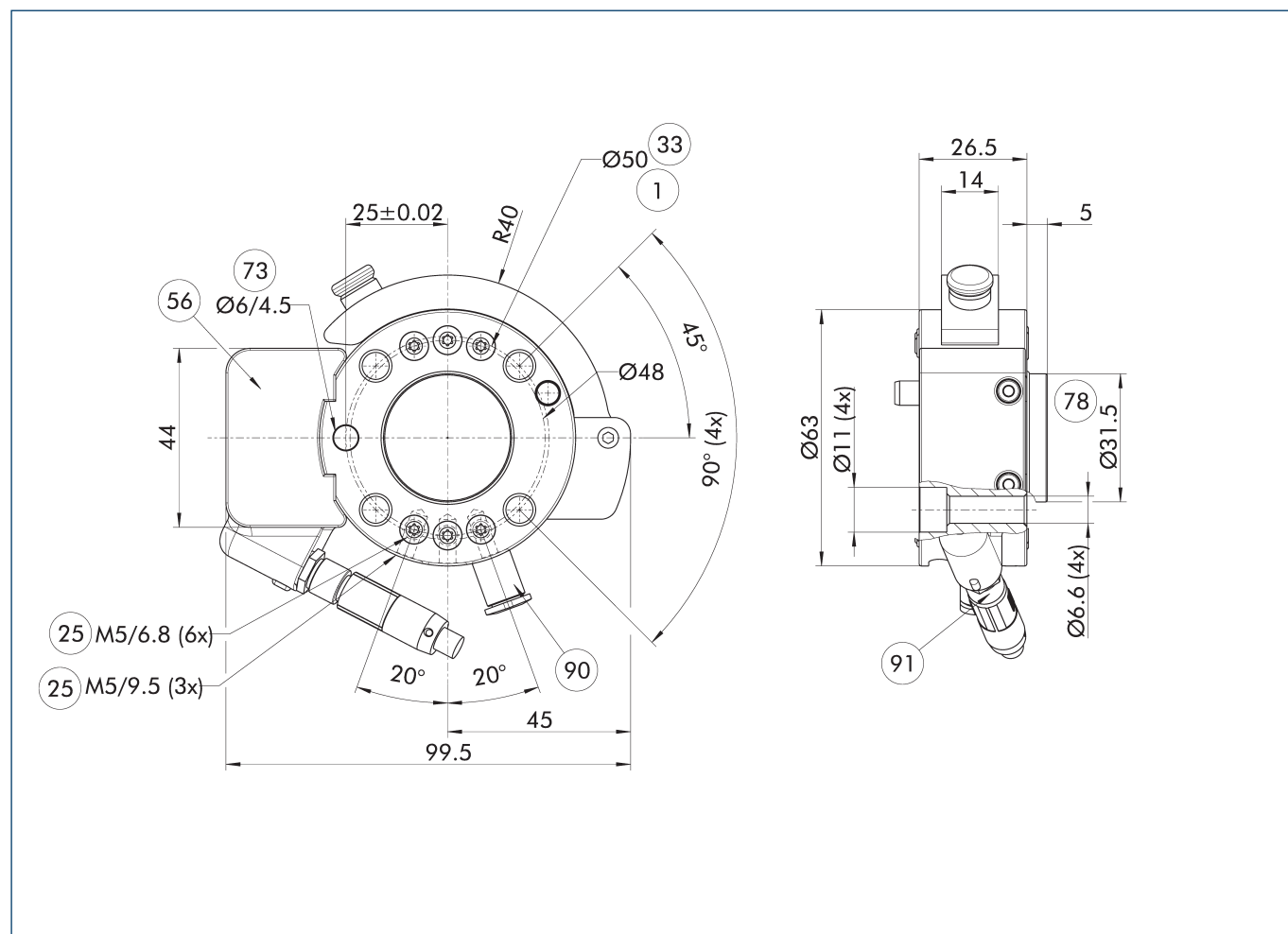
Main view E0A-TM51214-SHA-050



- ② Tool-side connection
- ②⑤ Pneumatic feed-throughs
- ③③ DIN ISO-9409 bolt circle
- ⑤⑥ Included in the scope of delivery

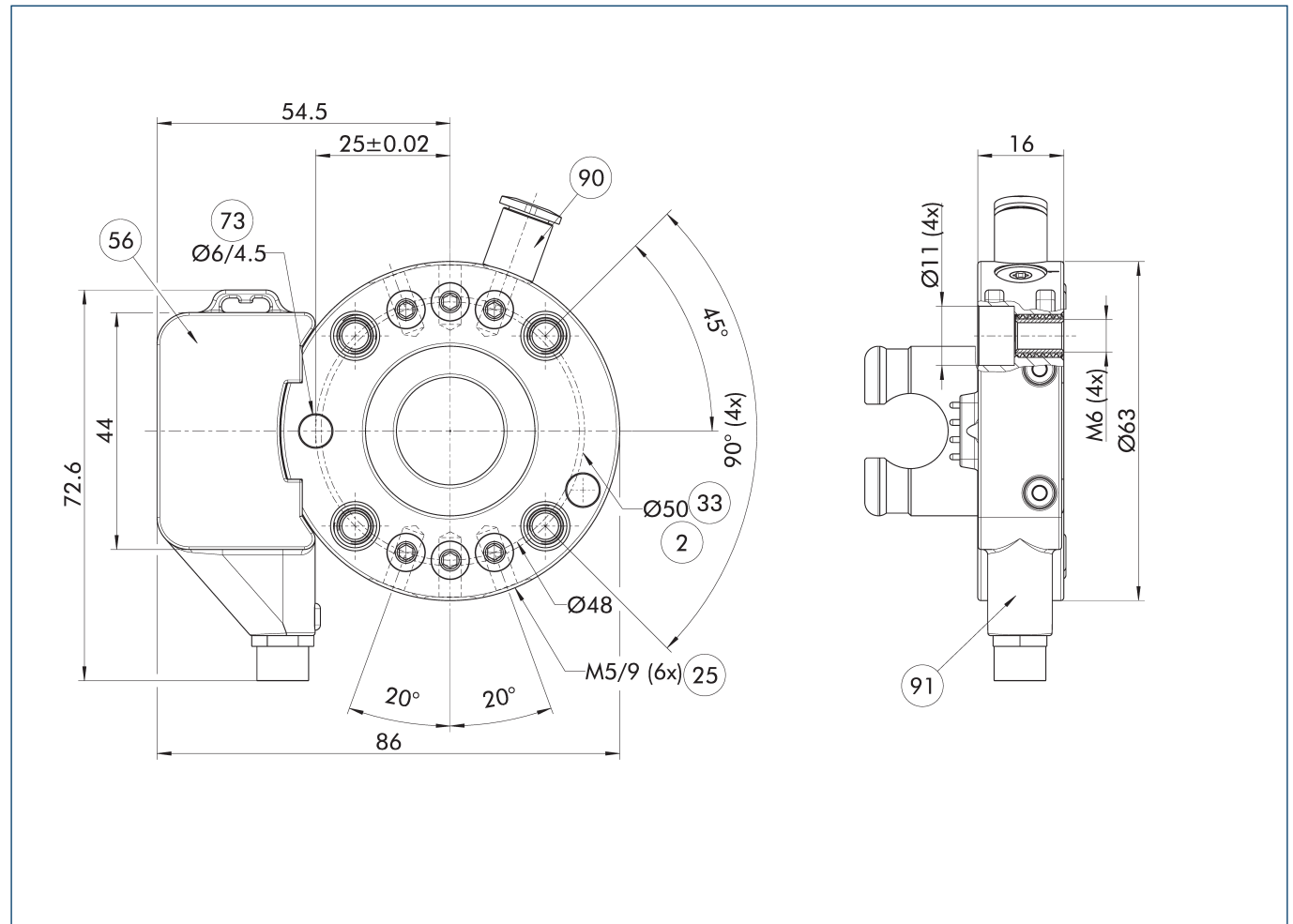
- ⑦③ Fit for centering pins
- ⑨⑦ Air connection
- ⑨① Electrical connection

Main view EOA-DRM-SHK-050



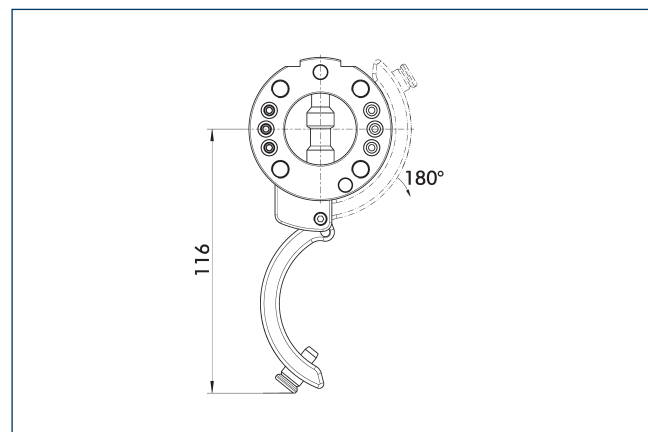
- | | |
|--------------------------------------|---------------------------|
| ① Robot-side connection | ⑦③ Fit for centering pins |
| ②⑤ Pneumatic feed-throughs | ⑦⑧ Fit for centering |
| ③③ DIN ISO-9409 bolt circle | ⑨⑩ Air connection |
| ⑤⑥ Included in the scope of delivery | ⑨① Electrical connection |

Main view EOA-DRM-SHA-050



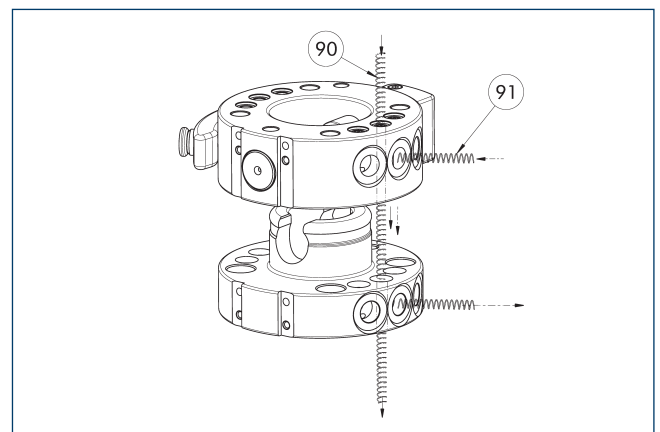
- | | |
|--------------------------------------|---------------------------|
| ② Tool-side connection | ⑦③ Fit for centering pins |
| ②⑤ Pneumatic feed-throughs | ⑨① Air connection |
| ③③ DIN ISO-9409 bolt circle | ⑨① Electrical connection |
| ⑤⑥ Included in the scope of delivery | |

Interference Contour when locking/unlocking



The drawing shows the interfering contour when locking and unlocking. The specified values may vary depending on the opening angle of the locking lever.

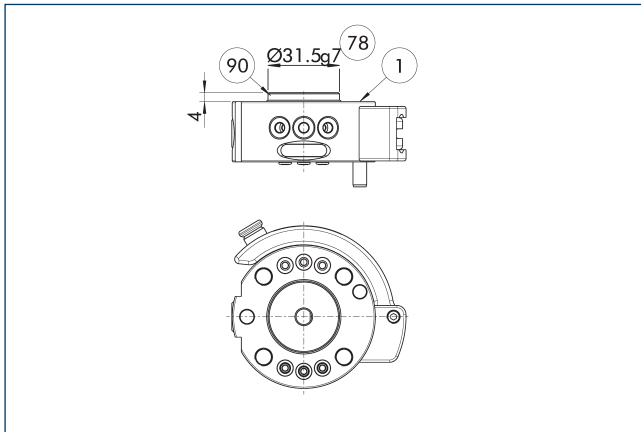
Pneumatic feed-through



- | | |
|-----------------------|------------------------|
| ⑨① Feed-through axial | ⑨① Feed-through radial |
|-----------------------|------------------------|

The changing system has pneumatic feed-throughs. They can be used hose-free via the adapter plate (axial) or with a hose (radial). Some of the feed-throughs can be used axially.

Centering disc for SHK

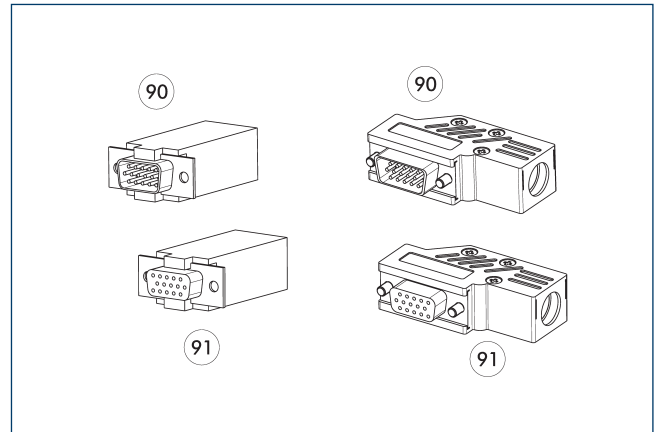


- ① Robot-side connection 90 Centring disc
 78 Fit for centering

Description	ID
Centering disc	
ZB-CMS-050-K CENTERING COLLAR	1574472

- ① Serves as a fitting collar for centering on mechanical interfaces, e. g. on the robot.

Cable connector

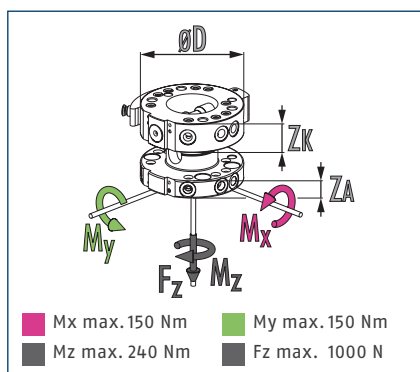


- 90 D-sub connecting plug 91 D-sub connector

Description	ID
Angled cable connector, robot-side	
KAS-A15-K-90	0301301
Angled cable connector, tool-side	
KAS-A15-A-90	0301302
Straight cable connector, robot-side	
KAS-A15-K-0	0301264
Straight cable connector, tool-side	
KAS-A15-A-0	0301265

- ① Detailed information and further cable connectors can be found at schunk.com

Dimensions and maximum loads



① This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

Technical data

Description		SHK-063-000-000	SHA-063-000-000
		Manual change head	Manual change adapter
ID		0310420	0310421
Recommended handling weight	[kg]	18	18
Lock sensing		optionally via attachment kit	
Repeat accuracy	[mm]	0.02	0.02
Weight	[kg]	0.41	0.2
Max. distance when locking	[mm]	1	1
Number of pneumatic feed-throughs		6	6
Feed-throughs for radial use		3	6
Pitch circle diameter	[mm]	63	63
Connection flange according to		ISO 9409-1-63-4-M6	
Min./max. ambient temperature	[°C]	5/60	5/60
Dimensions Ø D x Z*	[mm]	80 x 28.5	80 x 18
Screw connection diagram		K over adapter plate	K over adapter plate
max. static tensile force Fz	[N]	1000	1000
Max. dynamic moment Mx/My	[Nm]	75	75
Max. dynamic moment Mz	[Nm]	48	48

* *Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

Technical drawing of the SHK 63 and SHA 63 hydraulic cylinders, showing front, side, and detail views with dimensions and part numbers.

SHK 63 (Left):

- Front View: Dimensions include 25 (part number), M6/6.5 (6x), 22.5°, 37, 31.5±0.02, Ø40/5 (78), Ø60, 18, 4x90°, 33, Ø63, 22.5°, 22.5°, 14.2±0.02, Ø6 (2x) (73), 32±0.02, 2 (part number).
- Side View: Dimensions include 25 (part number), SHK 63, G1/8"/6 (6x), "X", 28.5, 6.8, Ø11 (4x), Ø80, 23, M8 (4x), 8, 3.5, 9.5, 14, Ø3/4 (2x), 46.5, 73, 14, 4.5, 0.

SHA 63 (Right):

- Front View: Dimensions include 25 (part number), SHK 63, M6/6 (3x), 22.5°, 22.5°, 37, Ø6/6 (73), 18, 4x90°, 78, Ø40/3, 33, Ø63 (1), R49.6, 19, M3/6.5 (2x), Ø3/4 (2x) (73), 52.5, Ø5 (3x) (25).
- Side View: Dimensions include 25 (part number), SHA 63, "Y", 18, 6.8, Ø11 (4x), Ø80, 23, M8 (4x), 6, 19, M3/6.5 (2x), Ø3/4 (2x) (73), 14, 4.5, 0.

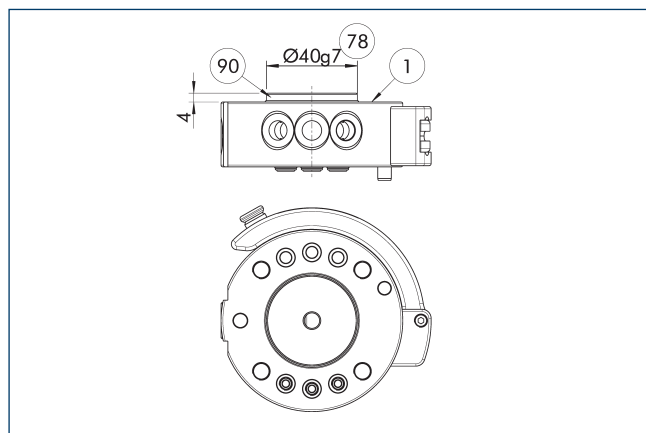
Detail Views (Bottom):

- Left Detail: Shows a cross-section of the cylinder head with dimensions 9 and 1, 2, 3.
- Right Detail: Shows a cross-section of the cylinder head with dimensions 26, 2, 12.5 and part numbers 3, 2, 1.

① Robot-side connection	③③ DIN ISO-9409 bolt circle
② Tool-side connection	⑦③ Fit for centering pins
①⑨ Mounting surface for options	⑦⑧ Fit for centering
②⑤ Pneumatic feed-throughs	

The changing system has pneumatic feed-throughs. They can be used hose-free via the adapter plate (axial) or with a hose (radial). Some of the feed-throughs can be used axially.

Centering disc for SHK

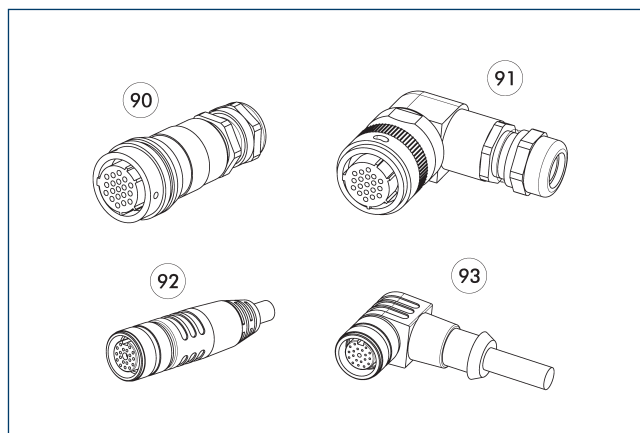


- ① Robot-side connection
 ⑦⑧ Centring disc
 ⑦⑧ Fit for centering

Description	ID
Centering disc	
ZB-CMS-063-K CENTERING COLLAR	1574473

- ① Serves as a fitting collar for centering on mechanical interfaces, e. g. on the robot.

Cable plug/cable extension



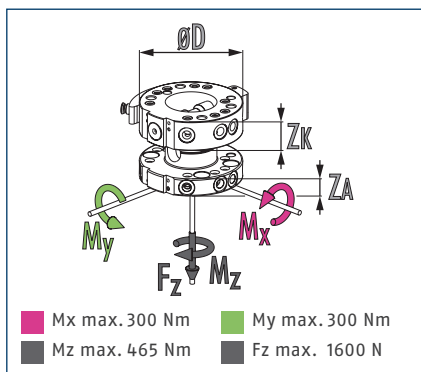
- ⑨⑩ Plug/socket straight
 ⑨① Connector/angled socket
 ⑨② Connector/straight socket with extension cable
 ⑨③ Connector/angled socket with extension cable

Other cable lengths on request.

Description	ID	Length [m]
Angled cable connector, robot-side		
KAS-19B-K-90-C	0301294	
Angled cable connector, tool-side		
KAS-19B-A-90-C	0301295	
Angled cable connector with cable, robot-side		
KA BW19B-L 19P-0300	0302179	3
KA BW19B-L 19P-0500	0302190	5
KA BW19F-L 19P-0500	0302172	5
KA BW19F-L 19P-1000	0302173	10
KA BW26B-L 26P-0300	0302185	3
KA BW26B-L 26P-0500	0302186	5
Angled cable connector with cable, tool-side		
KA SW19B-L 19P-0300	0302191	3
KA SW19F-L 19P-0300	0302175	3
KA SW26B-L 26P-0300	0302187	3
Straight cable connector, robot-side		
KAS-19B-K-0-C	0301283	
Straight cable connector, tool-side		
KAS-19B-A-0-C	0301284	
Straight cable connector with cable, robot-side		
KA BG19B-L 19P-0300	0302176	3
KA BG19B-L 19P-0500	0302177	5
KA BG19F-L 19P-0500	0302170	5
KA BG19F-L 19P-1000	0302171	10
KA BG26B-L 26P-0300	0302192	3
KA BG26B-L 26P-0500	0302193	5
Straight cable connector with cable, tool-side		
KA SG19B-L 19P-0300	0302178	3
KA SG19F-L 19P-0300	0302174	3
KA SG26B-L 26P-0300	0302184	3

- ① Detailed information and further cable connectors can be found at schunk.com

Dimensions and maximum loads



ⓘ This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

Technical data

Description		SHK-080-000-000	SHA-080-000-000
		Manual change head	Manual change adapter
ID		0310430	0310431
Recommended handling weight	[kg]	36	36
Lock sensing		optionally via attachment kit	
Repeat accuracy	[mm]	0.02	0.02
Weight	[kg]	0.74	0.35
Max. distance when locking	[mm]	1	1
Number of pneumatic feed-throughs		9	9
Feed-throughs for radial use		4	9
Pitch circle diameter	[mm]	80	80
Connection flange according to		ISO 9409-1-80-6-M8	
Min./max. ambient temperature	[°C]	5/60	5/60
Dimensions Ø D x Z*	[mm]	100 x 30	100 x 18
Screw connection diagram		K over adapter plate	K over adapter plate
max. static tensile force F_z	[N]	1600	1600
Max. dynamic moment M_x/M_y	[Nm]	115	115
Max. dynamic moment M_z	[Nm]	75	75

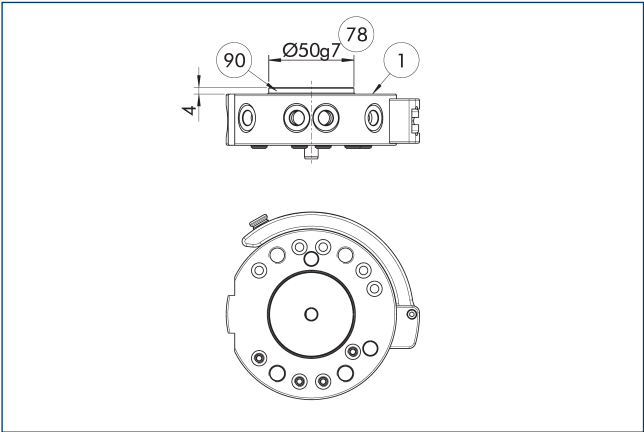
* *Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

① Robot-side connection	③③ DIN ISO-9409 bolt circle
② Tool-side connection	⑦③ Fit for centering pins
①⑨ Mounting surface for options	⑦⑧ Fit for centering
②⑤ Pneumatic feed-throughs	

[illegible]

The changing system has pneumatic feed-throughs. They can be used hose-free via the adapter plate (axial) or with a hose (radial). Some of the feed-throughs can be used axially.

Centering disc for SHK

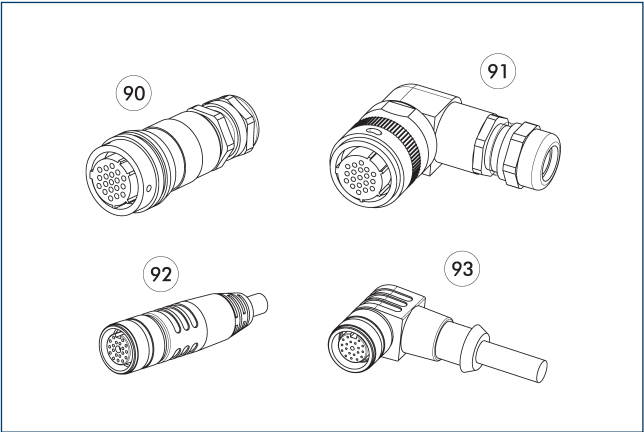


- ① Robot-side connection
- ⑨0 Centring disc
- ⑦8 Fit for centering

Description	ID	
Centering disc		
ZB-CMS-080-K CENTERING COLLAR	1574474	

① Serves as a fitting collar for centering on mechanical interfaces, e. g. on the robot.

Cable plug/cable extension



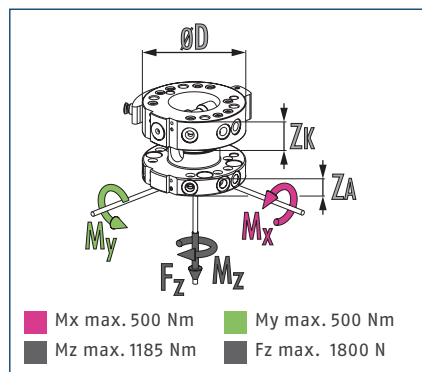
- ⑨0 Plug/socket straight
- ⑨1 Connector/angled socket
- ⑨2 Connector/straight socket with extension cable
- ⑨3 Connector/angled socket with extension cable

Other cable lengths on request.

Description	ID	Length [m]
Angled cable connector, robot-side		
KAS-19B-K-90-C	0301294	
Angled cable connector, tool-side		
KAS-19B-A-90-C	0301295	
Angled cable connector with cable, robot-side		
KA BW19F-L 19P-0500	0302172	5
KA BW19F-L 19P-1000	0302173	10
KA BW26B-L 26P-0300	0302185	3
KA BW26B-L 26P-0500	0302186	5
Angled cable connector with cable, tool-side		
KA SW19F-L 19P-0300	0302175	3
KA SW26B-L 26P-0300	0302187	3
Straight cable connector, robot-side		
KAS-19B-K-0-C	0301283	
Straight cable connector, tool-side		
KAS-19B-A-0-C	0301284	
Straight cable connector with cable, robot-side		
KA BG19F-L 19P-0500	0302170	5
KA BG19F-L 19P-1000	0302171	10
KA BG26B-L 26P-0300	0302192	3
KA BG26B-L 26P-0500	0302193	5
Straight cable connector with cable, tool-side		
KA SG19F-L 19P-0300	0302174	3
KA SG26B-L 26P-0300	0302184	3

① Detailed information and further cable connectors can be found at schunk.com

Dimensions and maximum loads



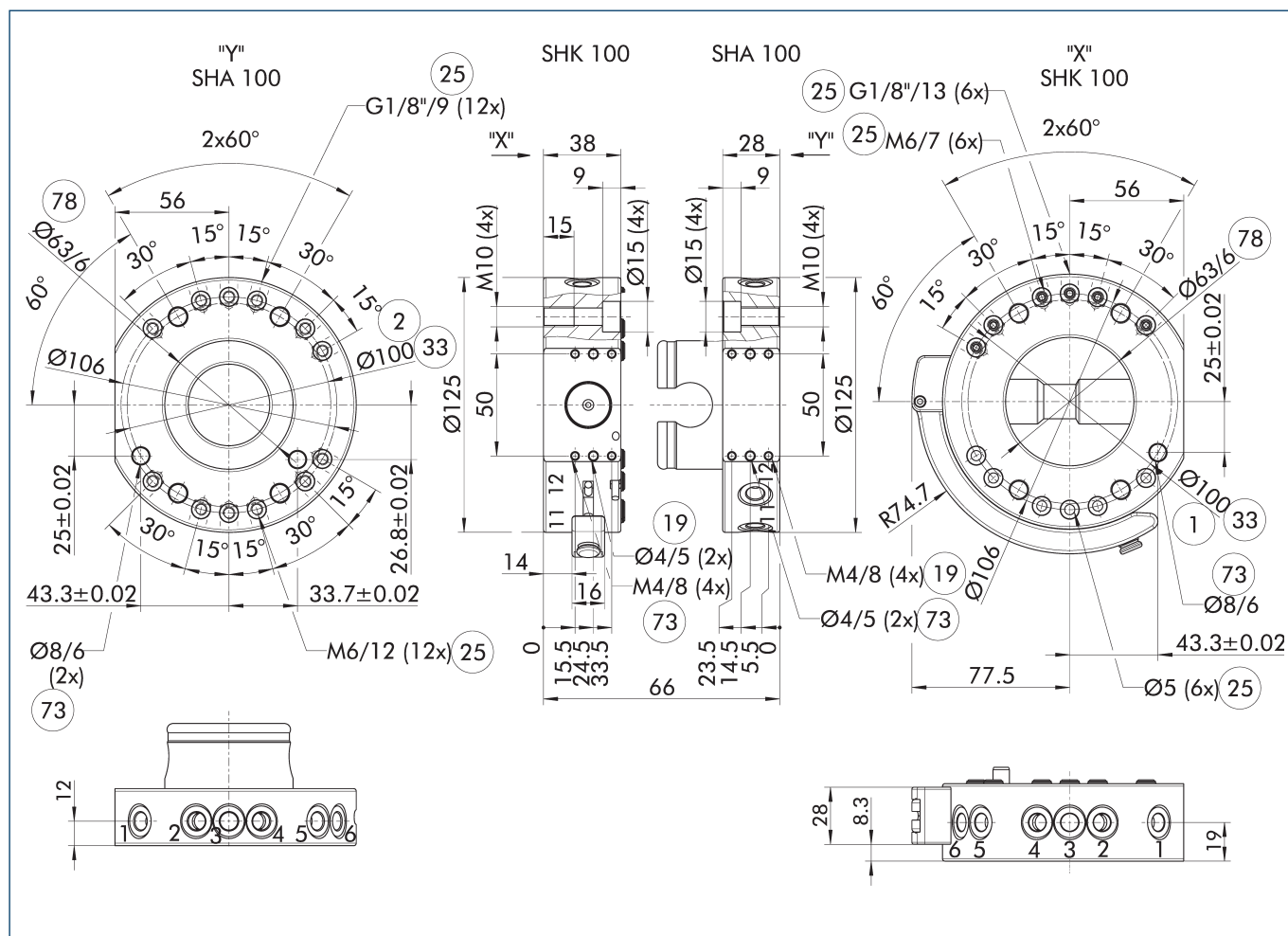
ⓘ This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

Technical data

Description		SHK-100-000-000	SHA-100-000-000
		Manual change head	Manual change adapter
ID		0310440	0310441
Recommended handling weight	[kg]	43	43
Lock sensing		optional	
Repeat accuracy	[mm]	0.02	0.02
Weight	[kg]	1.3	0.55
Max. distance when locking	[mm]	1	1
Number of pneumatic feed-throughs		12	12
Feed-throughs for radial use		6	12
Pitch circle diameter	[mm]	100	100
Connection flange according to		ISO 9409-1-100-6-M8	
Min./max. ambient temperature	[°C]	5/60	5/60
Dimensions Ø D x Z*	[mm]	125 x 38	125 x 28
Screw connection diagram		J	J
max. static tensile force Fz	[N]	1800	1800
Max. dynamic moment Mx/My	[Nm]	230	230
Max. dynamic moment Mz	[Nm]	230	230

* *Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

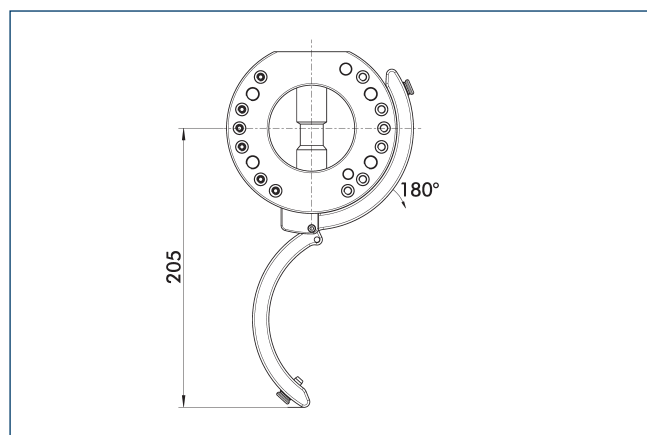
Main view



The main view shows the unit in its basic version.

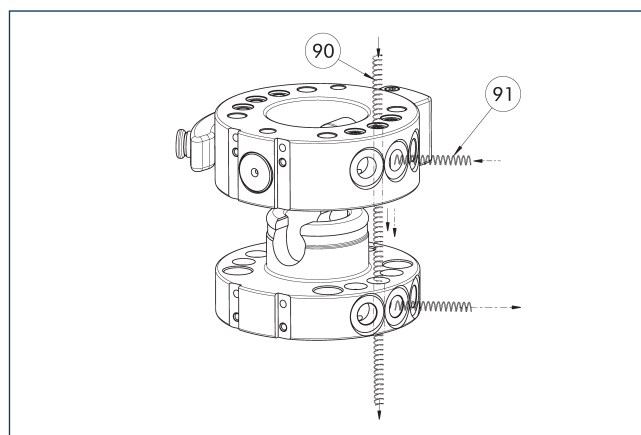
- | | |
|---------------------------------|-----------------------------|
| ① Robot-side connection | ③③ DIN ISO-9409 bolt circle |
| ② Tool-side connection | ⑦③ Fit for centering pins |
| ①⑨ Mounting surface for options | ⑦⑧ Fit for centering |
| ②⑤ Pneumatic feed-throughs | |

Interference Contour when locking/unlocking



The drawing shows the interfering contour when locking and unlocking. The specified values may vary depending on the opening angle of the locking lever.

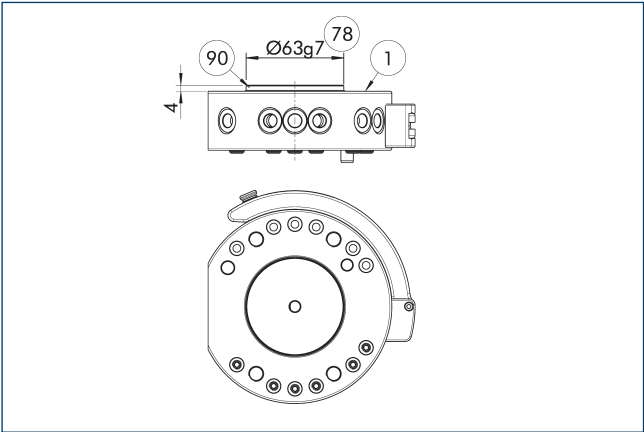
Pneumatic feed-through



- | | |
|-----------------------|------------------------|
| ⑨⑨ Feed-through axial | ⑨① Feed-through radial |
|-----------------------|------------------------|

The changing system has pneumatic feed-throughs. They can be used hose-free via the adapter plate (axial) or with a hose (radial). Some of the feed-throughs can be used axially.

Centering disc for SHK

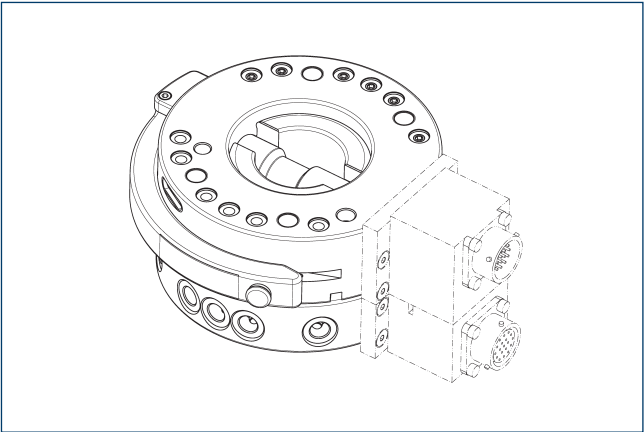


- ① Robot-side connection
- 78 Fit for centering

Description	ID
Centering disc	
ZB-CMS-100-K CENTERING COLLAR	1574475

- ① Serves as a fitting collar for centering on mechanical interfaces, e. g. on the robot.

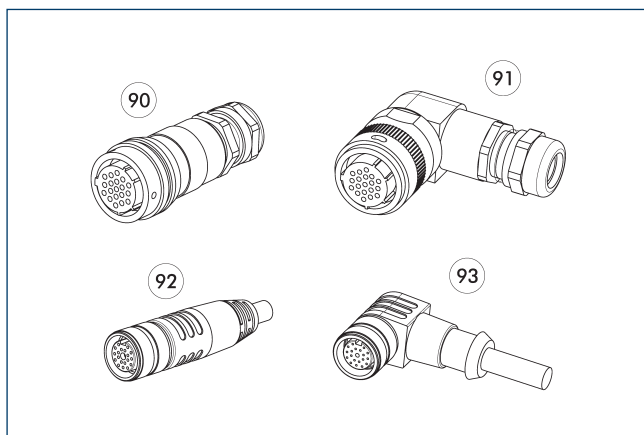
Electric feed-through module



Description	ID	No. Pins
Feed-through module for communication on the robot side		
SW0-RE5-K	9957444	
Feed-through module for communication on the tool side		
SW0-RE5-A	9957445	
Feed-through module for power on the robot side		
SW0-MT8-K	9937157	
Feed-through module for power on the tool side		
SW0-MT8-A	9937158	
Feed-through module for signal on the robot side		
SW0-G19-K	9940649	19
SW0-R19-K	9935815	19
SW0-R26-K	9935819	26
SW0-R32-K	9941387	32
SW0-RF19-K	9948654	19
Feed-through module for signal on the tool side		
SW0-G19-A	9940650	19
SW0-R19-A	9935816	19
SW0-R26-A	9935820	26
SW0-R32-A	9941388	32
SW0-RF19-A	9948657	19

- ① A change system with adapter plate or feed-through module are optionally available, and can be ordered as a complete assembly group. Please contact us for assistance.

Cable plug/cable extension



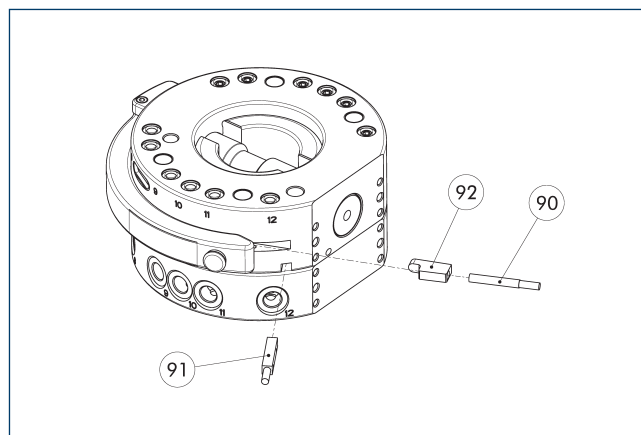
- 90 Plug/socket straight
 91 Connector/angled socket
 92 Connector/straight socket with extension cable
 93 Connector/angled socket with extension cable

Other cable lengths on request.

Description	ID	Length [m]
Angled cable connector, robot-side		
KAS-19B-K-90-C	0301294	
Angled cable connector, tool-side		
KAS-19B-A-90-C	0301295	
Angled cable connector with cable, robot-side		
KA BW19B-L 19P-0300	0302179	3
KA BW19B-L 19P-0500	0302190	5
KA BW19F-L 19P-0500	0302172	5
KA BW19F-L 19P-1000	0302173	10
Angled cable connector with cable, tool-side		
KA SW19B-L 19P-0300	0302191	3
KA SW19F-L 19P-0300	0302175	3
Straight cable connector, robot-side		
KAS-19B-K-0-C	0301283	
Straight cable connector, tool-side		
KAS-19B-A-0-C	0301284	
Straight cable connector with cable, robot-side		
KA BG19B-L 19P-0300	0302176	3
KA BG19B-L 19P-0500	0302177	5
KA BG19F-L 19P-0500	0302170	5
KA BG19F-L 19P-1000	0302171	10
Straight cable connector with cable, tool-side		
KA SG19B-L 19P-0300	0302178	3
KA SG19F-L 19P-0300	0302174	3

① Detailed information and further cable connectors can be found at schunk.com

Monitoring via inductive proximity switches

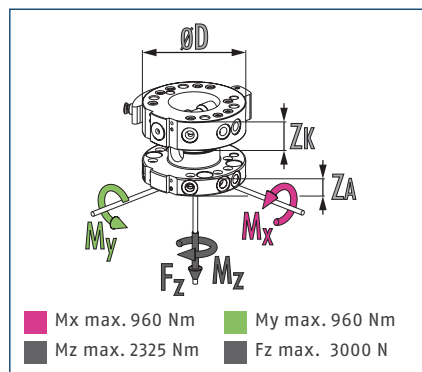


- 90 Locking sensor IN 40-S-...
 91 Workpiece presence sensor IN 5-S-...
 92 A sensor bracket is included in the scope of delivery

Description	ID	Often combined
Inductive proximity switch		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	
IN 5-S-M12	0301569	
IN 5-S-M8	0301469	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Clip for connector/socket		
CLI-M12	0301464	
CLI-M8	0301463	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
Sensor distributor		
V2-M12	0301776	●
V2-M8	0301775	●
V4-M8	0301746	
V8-M8	0301751	

① For more detailed information and other cable extensions, see catalog chapter "Accessories" or visit our website.

Dimensions and maximum loads



ⓘ This is the max. sum of all forces and moments which are permitted to act on the change system for ensuring proper functioning.

Technical data

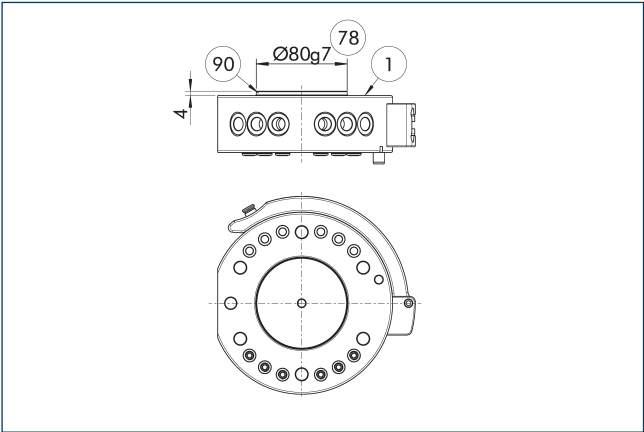
Description		SHK-125-000-000	SHA-125-000-000
		Manual change head	Manual change adapter
ID		0310450	0310451
Recommended handling weight	[kg]	58	58
Lock sensing		optional	
Repeat accuracy	[mm]	0.02	0.02
Weight	[kg]	2.8	1.2
Max. distance when locking	[mm]	1	1
Number of pneumatic feed-throughs		12	12
Feed-throughs for radial use		6	12
Pitch circle diameter	[mm]	125	125
Connection flange according to		ISO 9409-1-125-6-M10	
Min./max. ambient temperature	[°C]	5/60	5/60
Dimensions Ø D x Z*	[mm]	160 x 50	160 x 28
Screw connection diagram		J	J
max. static tensile force F_z	[N]	3000	3000
Max. dynamic moment M_x/M_y	[Nm]	478	478
Max. dynamic moment M_z	[Nm]	465	465

* *Please note that the heights of the change master (ZK) and change adapter (ZA) differ. The sum represents the total height of a coupled change system.

① Robot-side connection	③③ DIN ISO-9409 bolt circle
② Tool-side connection	⑦③ Fit for centering pins
①⑨ Mounting surface for options	⑦⑧ Fit for centering
②⑤ Pneumatic feed-throughs	

The changing system has pneumatic feed-throughs. They can be used hose-free via the adapter plate (axial) or with a hose (radial). Some of the feed-throughs can be used axially.

Centering disc for SHK



- 1

Robot-side connection
- 90

Centring disc
- 78

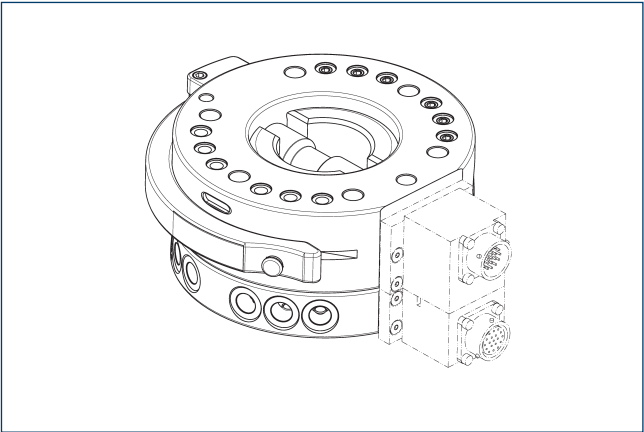
Fit for centering

Description	ID
Centering disc	
ZB-CMS-125-K CENTERING COLLAR	1574477

1

Serves as a fitting collar for centering on mechanical interfaces, e. g. on the robot.

Electric feed-through module

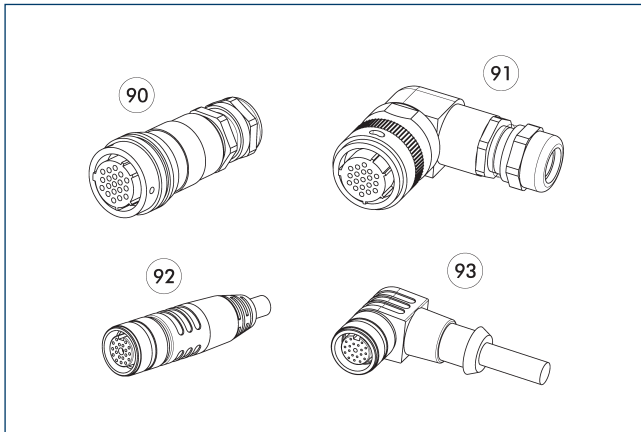


Description	ID	No. Pins
Feed-through module for communication on the robot side		
SW0-RE5-K	9957444	
Feed-through module for communication on the tool side		
SW0-RE5-A	9957445	
Feed-through module for power on the robot side		
SW0-MT8-K	9937157	
Feed-through module for power on the tool side		
SW0-MT8-A	9937158	
Feed-through module for signal on the robot side		
SW0-G19-K	9940649	19
SW0-R19-K	9935815	19
SW0-R26-K	9935819	26
SW0-R32-K	9941387	32
SW0-RF19-K	9948654	19
Feed-through module for signal on the tool side		
SW0-G19-A	9940650	19
SW0-R19-A	9935816	19
SW0-R26-A	9935820	26
SW0-R32-A	9941388	32
SW0-RF19-A	9948657	19

- 1

A change system with adapter plate or feed-through module are optionally available, and can be ordered as a complete assembly group. Please contact us for assistance.

Cable plug/cable extension



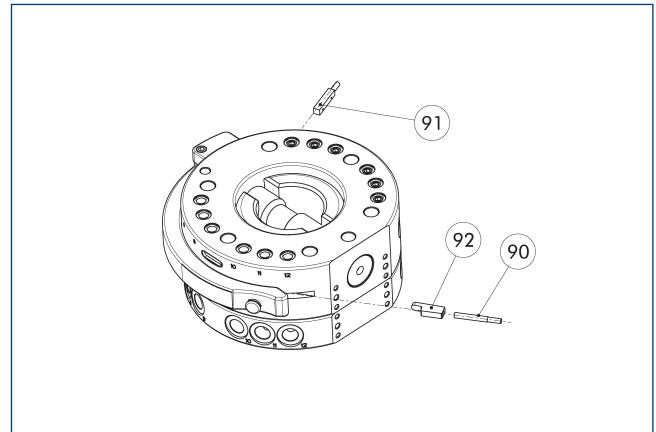
- 90 Plug/socket straight
 91 Connector/angled socket
 92 Connector/straight socket with extension cable
 93 Connector/angled socket with extension cable

Other cable lengths on request.

Description	ID	Length [m]
Angled cable connector, robot-side		
KAS-19B-K-90-C	0301294	
Angled cable connector, tool-side		
KAS-19B-A-90-C	0301295	
Angled cable connector with cable, robot-side		
KA BW19B-L 19P-0300	0302179	3
KA BW19B-L 19P-0500	0302190	5
KA BW19F-L 19P-0500	0302172	5
KA BW19F-L 19P-1000	0302173	10
Angled cable connector with cable, tool-side		
KA SW19B-L 19P-0300	0302191	3
KA SW19F-L 19P-0300	0302175	3
Straight cable connector, robot-side		
KAS-19B-K-0-C	0301283	
Straight cable connector, tool-side		
KAS-19B-A-0-C	0301284	
Straight cable connector with cable, robot-side		
KA BG19B-L 19P-0300	0302176	3
KA BG19B-L 19P-0500	0302177	5
KA BG19F-L 19P-0500	0302170	5
KA BG19F-L 19P-1000	0302171	10
Straight cable connector with cable, tool-side		
KA SG19B-L 19P-0300	0302178	3
KA SG19F-L 19P-0300	0302174	3

① Detailed information and further cable connectors can be found at schunk.com

Monitoring via inductive proximity switches



- 90 Locking sensor IN 40-S-...
 91 Workpiece presence sensor IN 5-S-...
 92 A sensor bracket is included in the scope of delivery

Description	ID	Often combined
Inductive proximity switch		
IN 40-S-M12	0301574	
IN 40-S-M8	0301474	
IN 5-S-M12	0301569	
IN 5-S-M8	0301469	
Connection cables		
KA BG08-L 3P-0300-PNP	0301622	●
KA BG08-L 3P-0500-PNP	0301623	
KA BG12-L 3P-0500-PNP	30016369	
KA BW08-L 3P-0300-PNP	0301594	
KA BW08-L 3P-0500-PNP	0301502	
KA BW12-L 3P-0300-PNP	0301503	
KA BW12-L 3P-0500-PNP	0301507	
Clip for connector/socket		
CLI-M12	0301464	
CLI-M8	0301463	
Cable extension		
KV BG12-SG12 3P-0030-PNP	0301999	
KV BG12-SG12 3P-0060-PNP	0301998	
KV BW08-SG08 3P-0030-PNP	0301495	
KV BW08-SG08 3P-0100-PNP	0301496	
KV BW08-SG08 3P-0200-PNP	0301497	●
KV BW12-SG12 3P-0030-PNP	0301595	
KV BW12-SG12 3P-0100-PNP	0301596	
KV BW12-SG12 3P-0200-PNP	0301597	
Sensor distributor		
V2-M12	0301776	●
V2-M8	0301775	●
V4-M8	0301746	
V8-M8	0301751	

① For more detailed information and other cable extensions, see catalog chapter "Accessories" or visit our website.



SCHUNK SE & Co. KG

Spanntechnik

Greiftechnik

Automatisierungstechnik

Bahnhofstr. 106 - 134

D-74348 Lauffen/Neckar

Tel. +49-7133-103-0

Fax +49-7133-103-2399

info@de.schunk.com

schunk.com

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