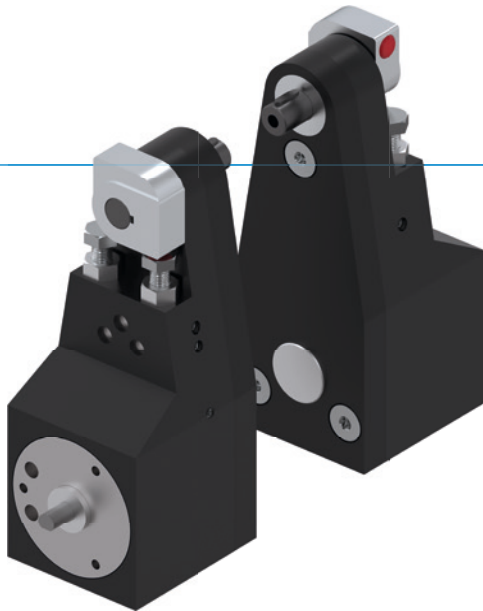


SWIVEL JAWS

SERIES SB

▶ PRODUCT ADVANTAGES



“The economical”

▶ Concentration on the essentials

The most cost-effective type of swivelling reduces your production costs

▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you










▶ Flexible swivel angle

90° or 180°; you decide which using the provided limit stops. This allows you to be flexible while only needing to maintain one product in your system

▶ SERIES CHARACTERISTICS

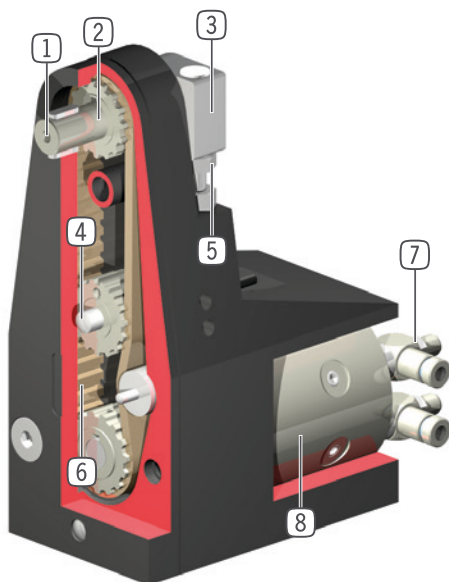
Installation size

SBXX

| | |
|---|---|
|  10 million maintenance-free cycles (max.) | ● |
|  IP54 | ● |
|  Inductive sensor | ● |
|  Shaft extension | ● |
|  Elastomer end position damping | ● |
|  End positions adjustable +/- 3° | ● |
|  Positionability - 2 positions | ● |
|  Rotation angle 90° | ● |
|  Rotation angle 180° | ● |



► BENEFITS IN DETAIL



- ① **Drive shaft**
 - as hexagonal or round shaft with feather key, depending on design
 - quick and cost effective positioning of application-specific workpiece intakes
- ② **Two way bearing drive shaft**
 - high forces and moments capacity
- ③ **Stop**
 - swivel angle of 90 and 180°
 - stable, with Fibroflex stop surface
- ④ **Position sensing**
 - inquiry of end positions 0° and 90° (or 180°) via inductive proximity switch
 - integrated in housing, therefore no additional interference contour
- ⑤ **End position**
 - +/- 3° adjustable end position
- ⑥ **Force transfer**
 - stable toothed belt with steel reinforcement
 - quiet, reliable, durable
- ⑦ **Energy supply**
 - possible from several sides
- ⑧ **Drive**
 - double-acting rotor cylinder

► TECHNICAL DATA

| Installation size | Swivel angle | Torque | Weight (pair) | IP class |
|-------------------|--------------|--------|---------------|----------|
| | [°] | [Nm] | [kg] | |
| SB32 | 90 - 180 | 0.1 | 0.3 | IP54 |
| SB40 | 90 - 180 | 0.3 | 0.7 | IP54 |
| SB54 | 90 - 180 | 1.6 | 2.2 | IP54 |

► FURTHER INFORMATION IS AVAILABLE ONLINE

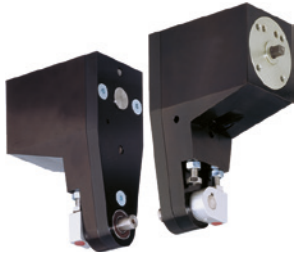


All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

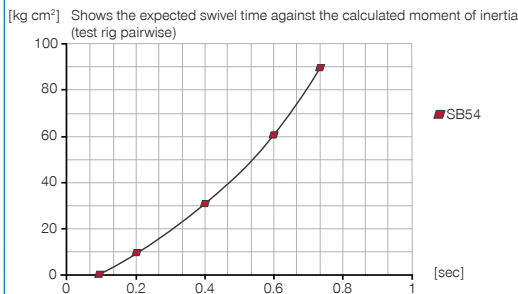
SWIVEL JAWS

INSTALLATION SIZE SB54

▶ PRODUCT SPECIFICATIONS

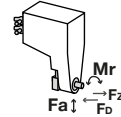


▶ Moment of inertia



▶ Forces and moments

Indicates the static load on the bearing.



| | |
|---------|------|
| Fa [N] | 850 |
| Mr [Nm] | 15.3 |
| FD [N]* | 425 |
| FZ [N]* | 425 |

▶ INCLUDED IN DELIVERY

| | |
|--|---|
| | 2 [piece] Stop 90° GEH05501 |
| | 6 [piece] Sleeve For Proximity Switch DMS03210 |

| | |
|--|--|
| | 2 [piece] Stop 180° GEH05491 |
| | 6 [piece] Straight pin KUN05410 |

▶ RECOMMENDED ACCESSORIES

ENERGY SUPPLY

| | |
|--|--|
| | DSV1-8 Pressure safety valve |
|--|--|

| | |
|--|--|
| | DSV1-8E Pressure safety valve with quick exhaust |
|--|--|

SENSORS

| | |
|--|--|
| | NJ4-E2-01 Inductive proximity switch - Cable 5 m |
|--|--|

| | |
|--|---|
| | NJ4-E2SK-01 Inductive Proximity Switch Cable 0,3 m - Connector M8 |
|--|---|

CONNECTIONS / OTHER

| | |
|--|----------------------------|
| | SB54-1 Basic jaw |
|--|----------------------------|

| | |
|--|---------------------------------------|
| | SB54-2 Basic Jaw Rubberized |
|--|---------------------------------------|

| | |
|--|---|
| | KAG500 Plug-in connector Straight Cable 5m - Socket M8 (female) |
|--|---|

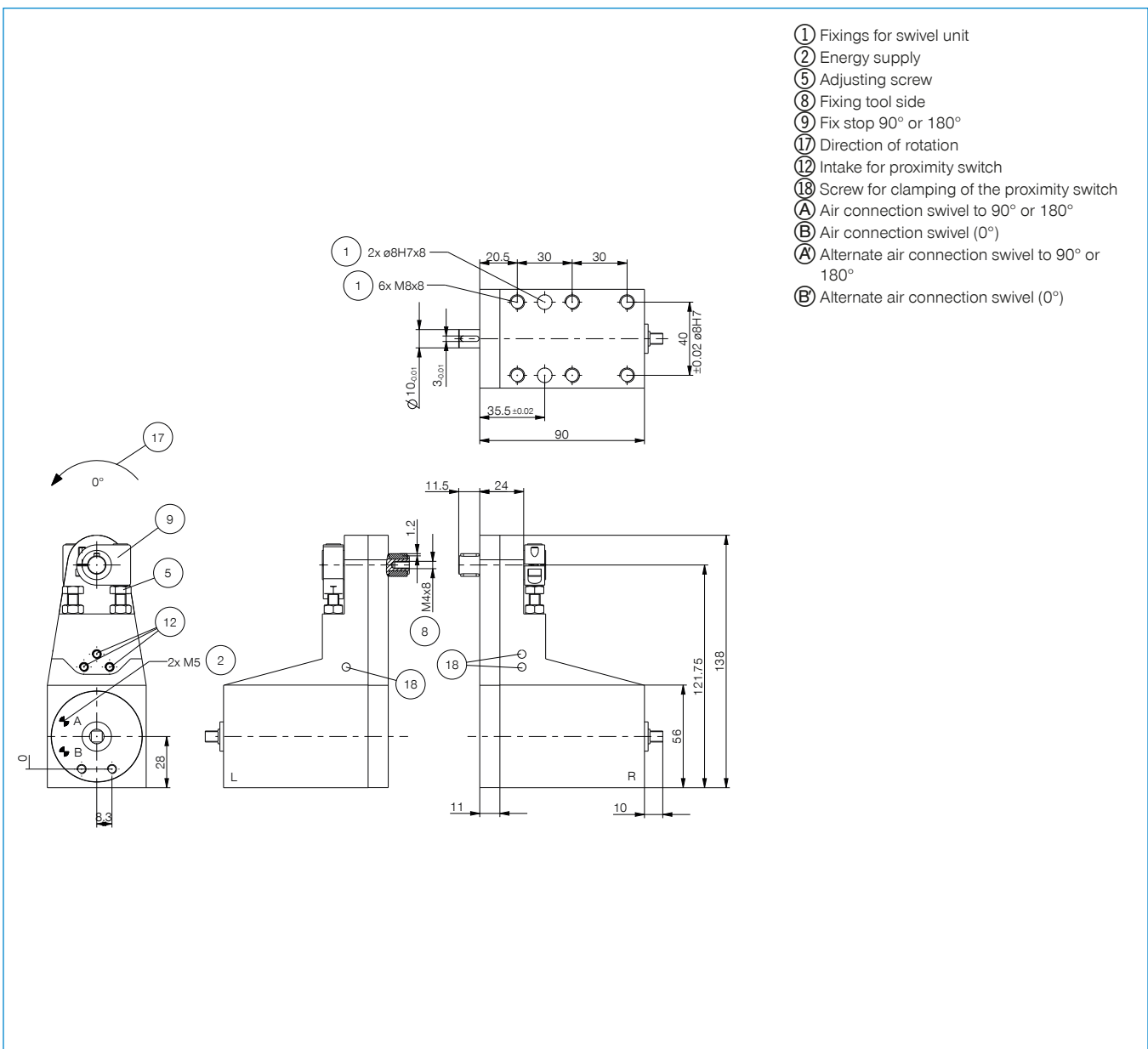
| | |
|--|---|
| | KAW500 Plug-in connector Angled Cable 5m - Socket M8 (female) |
|--|---|

| | |
|--|---|
| | S8-G-3 Plug-in connector customizable Straight - Connector M8 |
|--|---|

| | |
|--|---|
| | S12-G-3 Plug-in connector customizable Straight - Connector M12 |
|--|---|

| Order no. | SB54-B |
|----------------------------------|----------|
| Swivel angle [°] | 90 / 180 |
| Torque per jaw [Nm] | 1.6 |
| Swivel angle regulable +/- [°] | 3 |
| Repetition accuracy +/- [°] | 0.5 |
| Operating pressure min. [bar] | 3 |
| Operating pressure max. [bar] | 7 |
| Nominal operating pressure [bar] | 6 |
| Operating temperature min. [°C] | 5 |
| Operating temperature max. [°C] | +80 |
| Air volume per cycle [cm³] | 16 |
| Protection to IEC 60529 | IP54 |
| Weight [kg] | 2.8 |
| FD [N]* | 425 |
| FZ [N]* | 425 |

*Observe the gripper force



- ① Fixings for swivel unit
- ② Energy supply
- ⑤ Adjusting screw
- ⑧ Fixing tool side
- ⑨ Fix stop 90° or 180°
- ⑰ Direction of rotation
- ⑫ Intake for proximity switch
- ⑱ Screw for clamping of the proximity switch
- Ⓐ Air connection swivel to 90° or 180°
- Ⓑ Air connection swivel (0°)
- Ⓐ Alternate air connection swivel to 90° or 180°
- Ⓑ Alternate air connection swivel (0°)

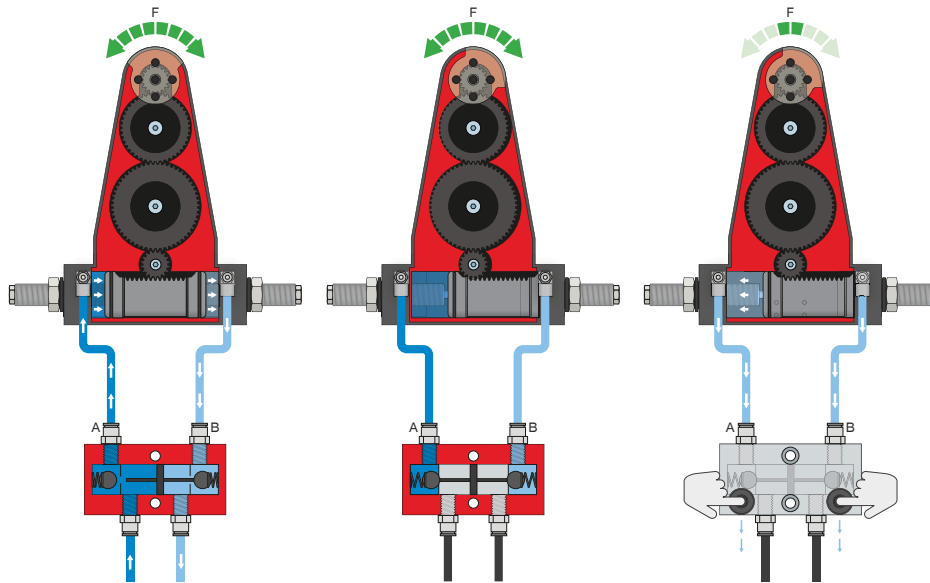


SWIVEL JAWS

SERIES SB FUNCTIONAL DESCRIPTION



ENERGY SUPPLY



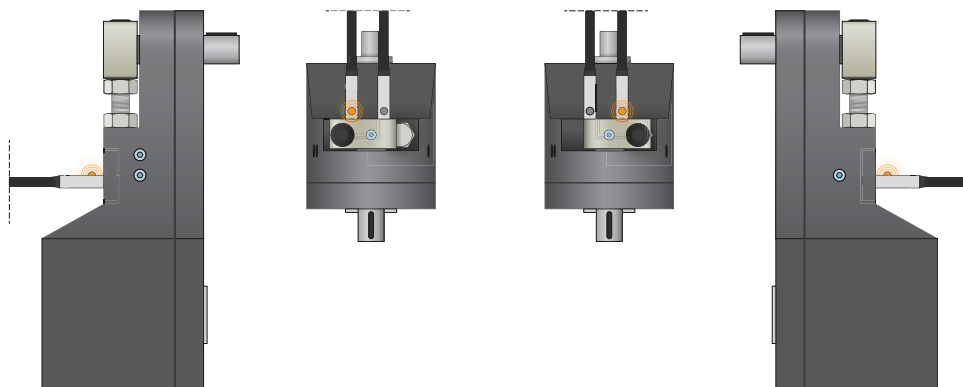
Pressure safety valve – DSV

Ensures safe retention of force and position if the system pressure drops

The integrated double check valve, which can be unlocked, retains the system pressure of the swivel jaw in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the swivel jaw's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled bleeding of the swivel jaw.



SENSORS

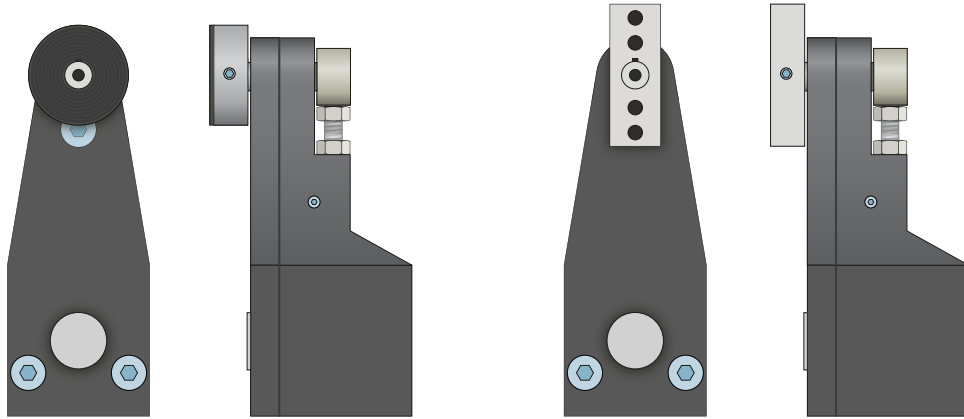


Inductive sensors – NJ

The sensor is inserted into the mounting block as far as it will go and secured. The sensors are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector, as well as with direct plug orientation.

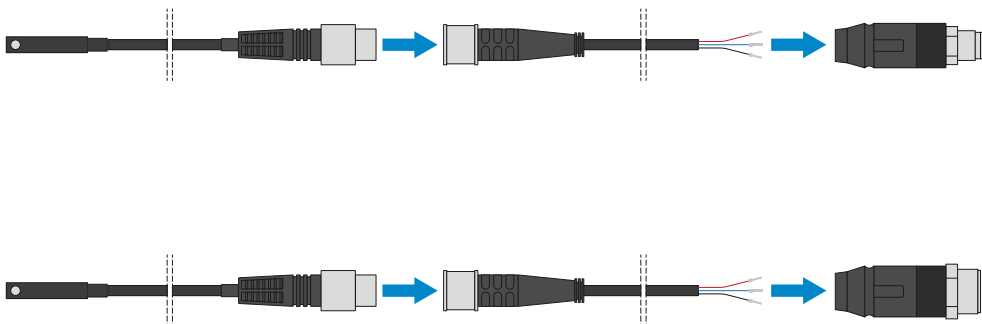


CONNECTIONS / OTHER



Base jaws

The base jaws enable fast and easy adaptation to the workpiece and/or the attachment of custom jaws.



Plug-in connectors

For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.