



Sizes

44 ... 64



Weight

0.95 kg ... 3.3 kg



Gripping moment

8.2 Nm ... 31.5 Nm



Angle per jaw

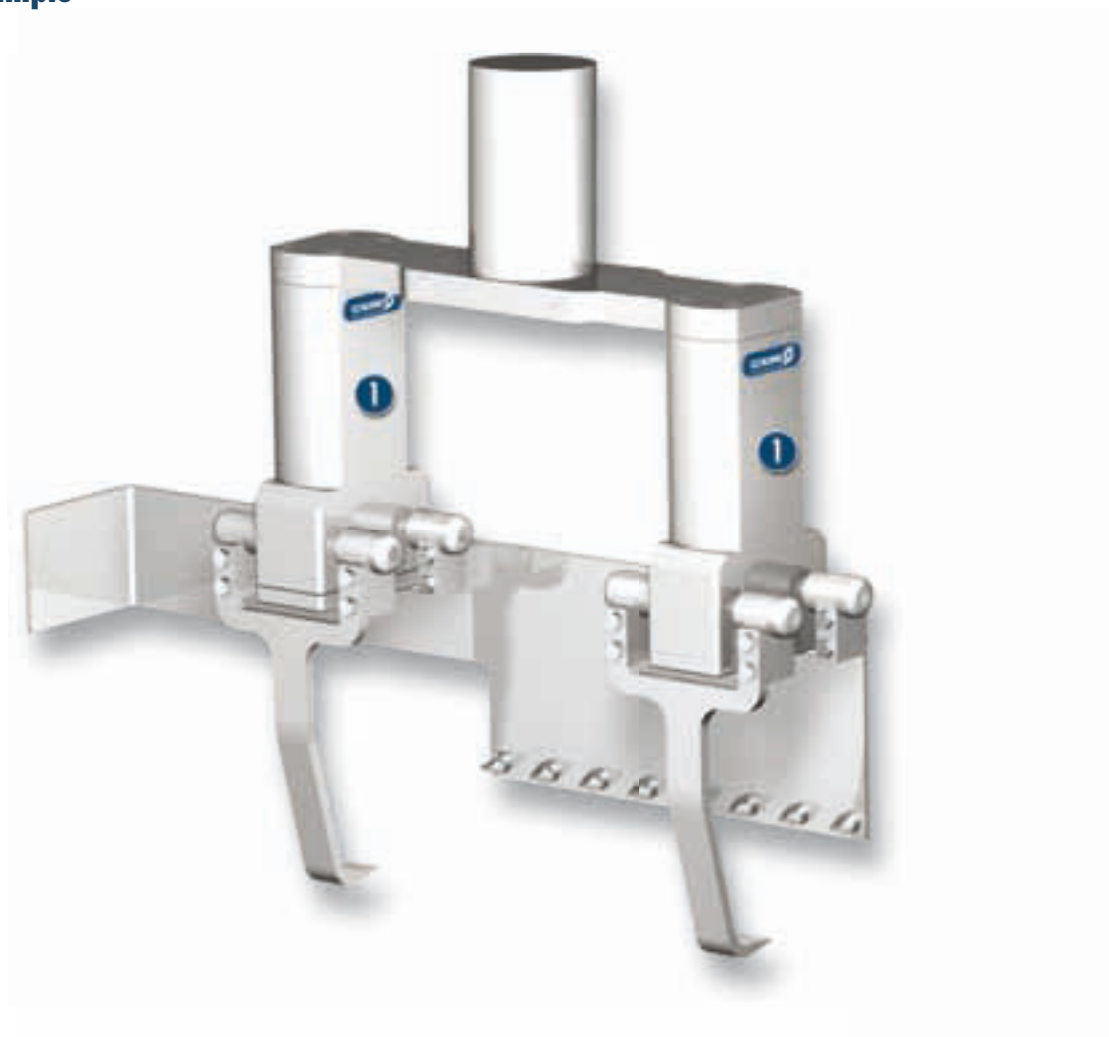
90°



Workpiece weight

0.9 kg ... 2.2 kg

Application example



Double gripper unit for handling lines of cutlets and large pieces of meat



Food gripper LMG

Food Gripper

Gripper in easy-to-clean design for handling food

Field of application

For gripping food and other substances requiring extreme hygiene in conformity with DIN EN 1672-2 "Hygienic Design"

Your advantages and benefits

Polished stainless steel housing

for complete cleaning and corrosion resistance

Opening angle adjustable from 20° to 180°

for a versatile field of applications

Air supply via hose-free direct connection

for the flexible supply of compressed air in all automation systems

Completely sealed mechanical parts (IP69K)

for use in extreme working conditions

Always with gripping force safety device

to prevent loss of food following a drop in air pressure



General note to the series

Principle of function

positively driven crank system

Housing material

Polished stainless steel

Base jaw material

Polished stainless steel

Warranty

24 months (details, general terms and conditions and operation manuals can be downloaded under www.schunk.com)

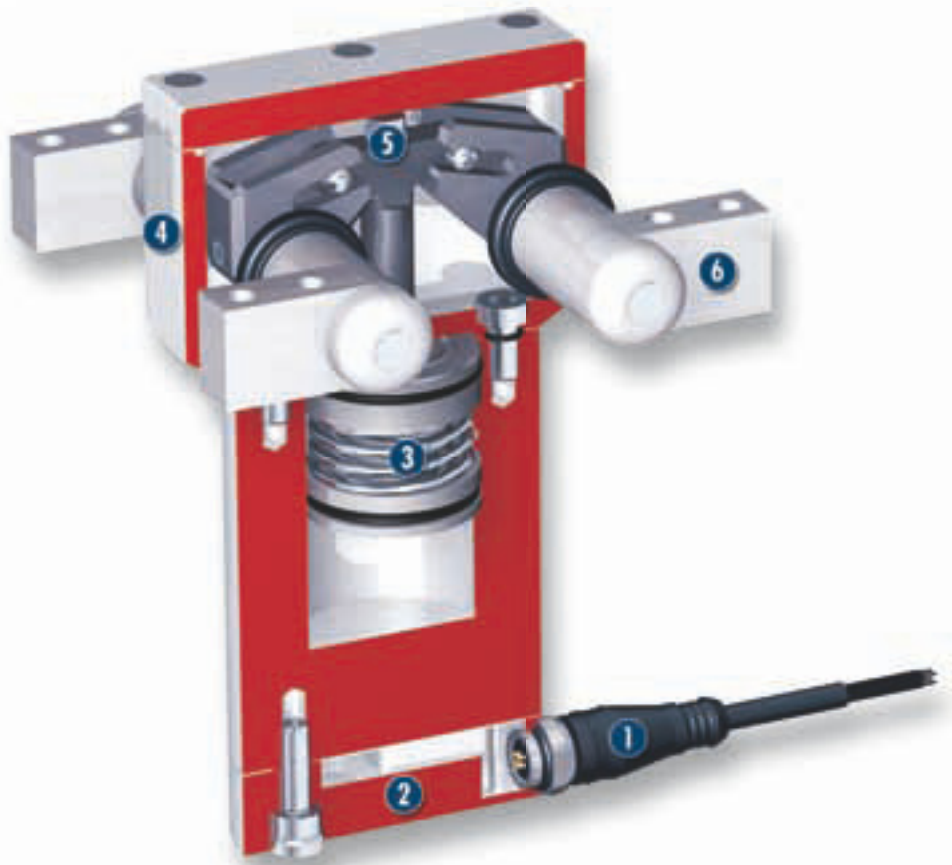
Scope of delivery

O-rings for direct connection, centering sleeves, flat seal for interface gripper/adaption, assembly and operating manual with declaration of incorporation

Gripping force maintenance device

via integrated spring

Sectional diagram



- | | | |
|---|--|---|
| <p>1 Sensor monitoring (optional)
Cable feed-through for sensor monitoring with magnetic sensors</p> | <p>3 Gripping force maintenance device
integrated spring for gripping force maintenance</p> | <p>5 Kinematics
Slotted link gear for concentric gripping with large opening and closing movements</p> |
| <p>2 Energy connection
Direct connection for hosefree supply of compressed air</p> | <p>4 Polished stainless steel housing</p> | <p>6 Base jaws
for the connection of workpiece-specific gripper fingers</p> |

Functional description

The round piston is pressed up or down by compressed air. In the process, the two pins of the crank system move in unison and relative to the groove in the top jaws. In the gripping moment, these two pins reach the largest lever arm.

Options and special information

An extended temperature range up to 130 °C is available as a special version.

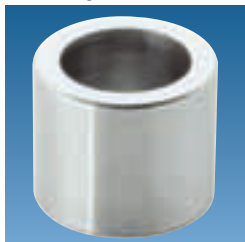
Version A (with monitoring)

Monitoring of the gripper status of version A is not an option, but an independent version. The sensors are integrated in the gripper. The sensors can be exchanged at SCHUNK only.

Accessories

Accessories from SCHUNK — the suitable supplement for maximum functionality, reliability and performance of all automation modules.

Centering sleeves



Fittings



Sensor cables



Sensor Distributor



Pressure maintenance valve



① For the exact size of the required accessories, availability of this size and the designation and ID, please refer to the additional views at the end of the size in question. You will find more detailed information on our accessory range in the "Accessories" catalog section.

General note to the series

Gripping moment

Gripping moment is the arithmetic total of gripping moments for each claw jaw.

Finger length

The finger length is measured from the upper edge of the gripper housing in the direction of the main axis.

Repeat accuracy

is defined as the spread of the limit position after 100 consecutive strokes.

Workpiece weight

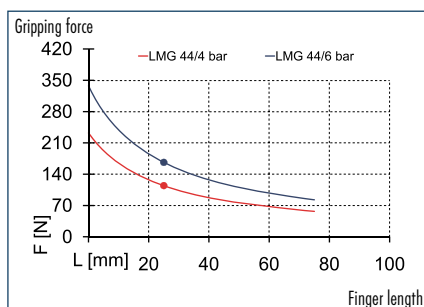
The recommended workpiece weight is calculated for a force-type connection with a coefficient of friction of 0.1 and a safety factor of 2 against slippage of the workpiece on acceleration due to gravity g . Considerably heavier workpiece weights are permitted with form-fit gripping.

Closing and opening times

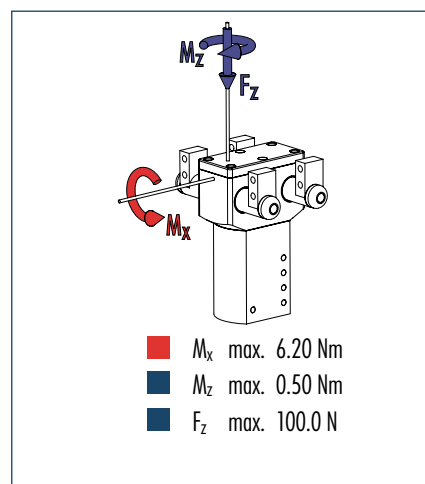
Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.



Gripping force, O.D. gripping



Finger load

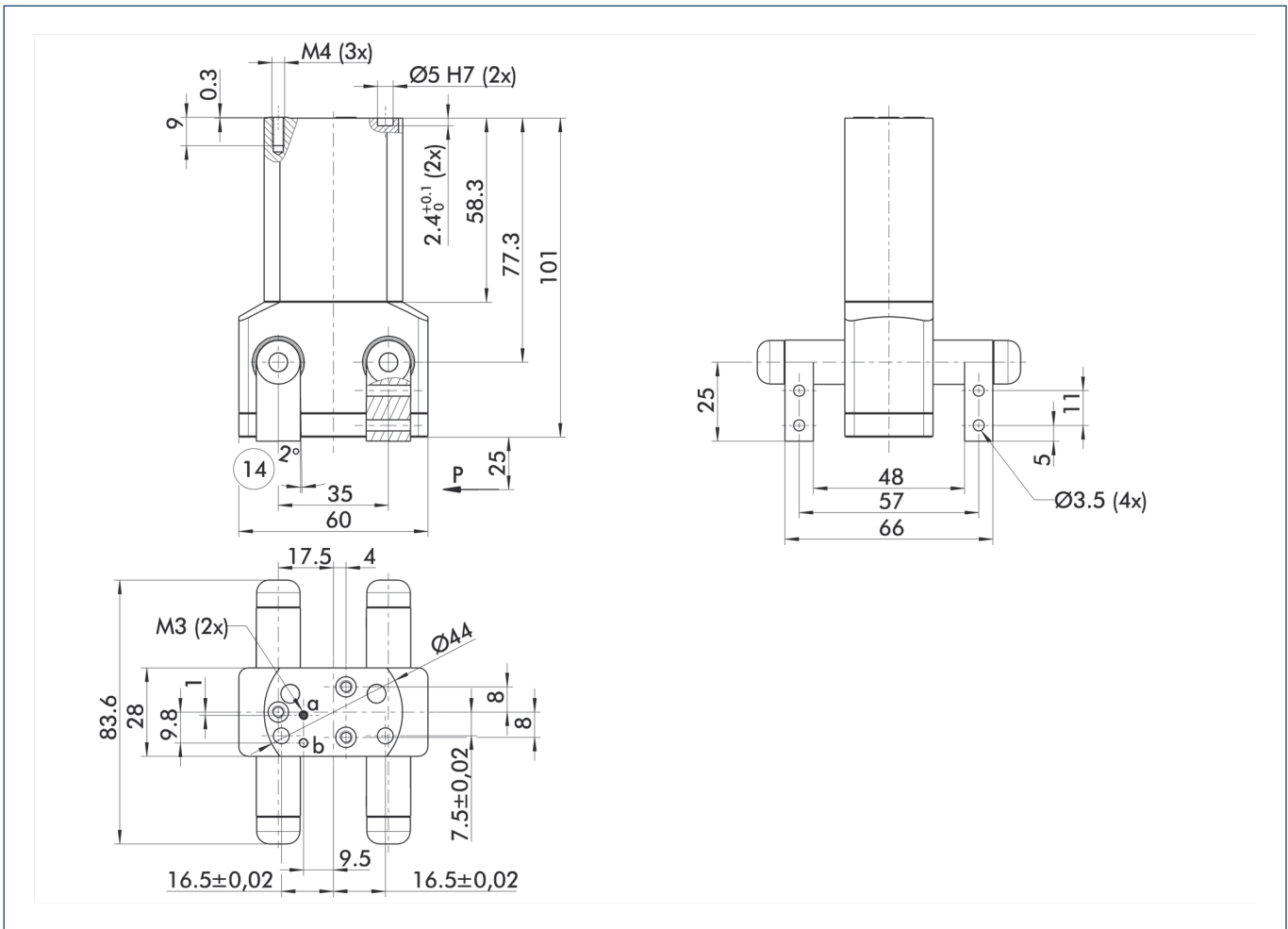


① The indicated moments and forces are static values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description	LMG 44	LMG 44-A
ID	0372002	0372003
Integrated monitoring	No	Yes
Opening angle per jaw [°]	90	90
Closed angle per jaw up to [°]	2	2
Closing moment [Nm]	8.2	8.2
Spring-actuated closing moment [Nm]	1.8	1.8
Weight [kg]	0.95	1.2
Recommended workpiece weight [kg]	0.9	0.9
Air consumption per double stroke [cm³]	16	16
Min./max. operating pressure [bar]	4/6.5	4/6.5
Nominal operating pressure [bar]	6	6
Closing/opening time [s]	0.4/0.5	0.4/0.5
Max. permitted finger length [mm]	50	50
Max. permitted weight per finger [kg]	0.09	0.09
IP class	69K	69K
Min./max. ambient temperature [°C]	-25/90	-25/90
Repeat accuracy [mm]	0.1	0.1

Main view



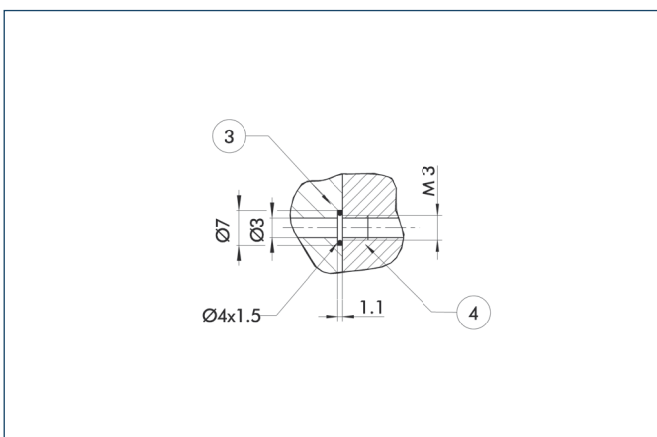
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

A, a Main/direct connection, gripper opening
B, b Main/direct connection, gripper closing

14 Clamping reserve per finger

① The SDV-P pressure maintenance valve can be used as a gripping force maintenance device (see "Accessories" catalog section).

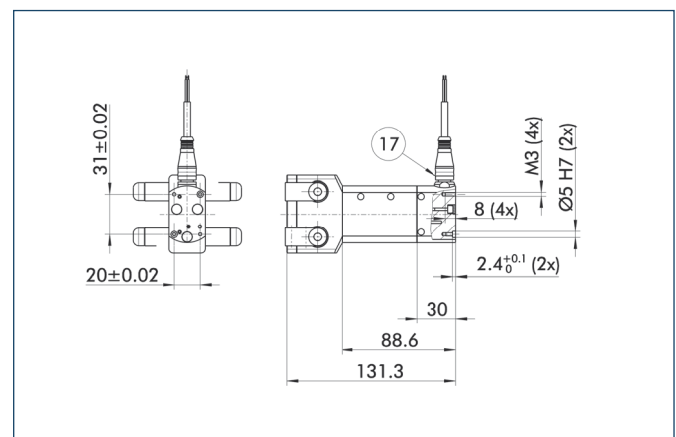
Hose-free direct connection



③ Adapter
④ Gripper

The direct connection is used for supplying compressed air without hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

Gripper with position monitoring

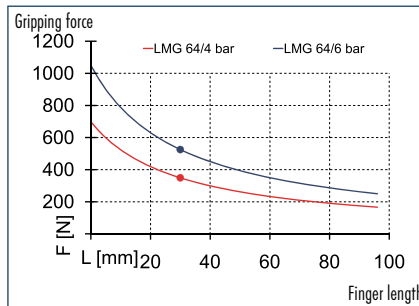


17 Cable outlet

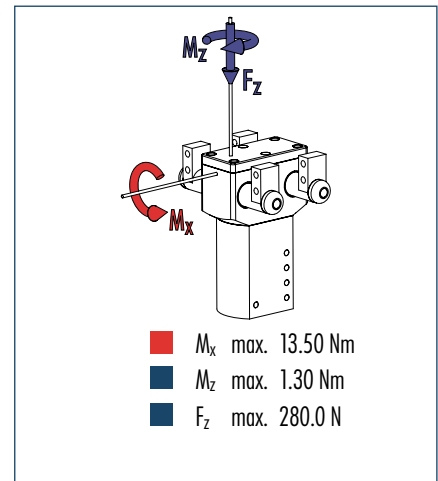
Gripper with position monitoring via magnetic sensors



Gripping force, O.D. gripping



Finger load

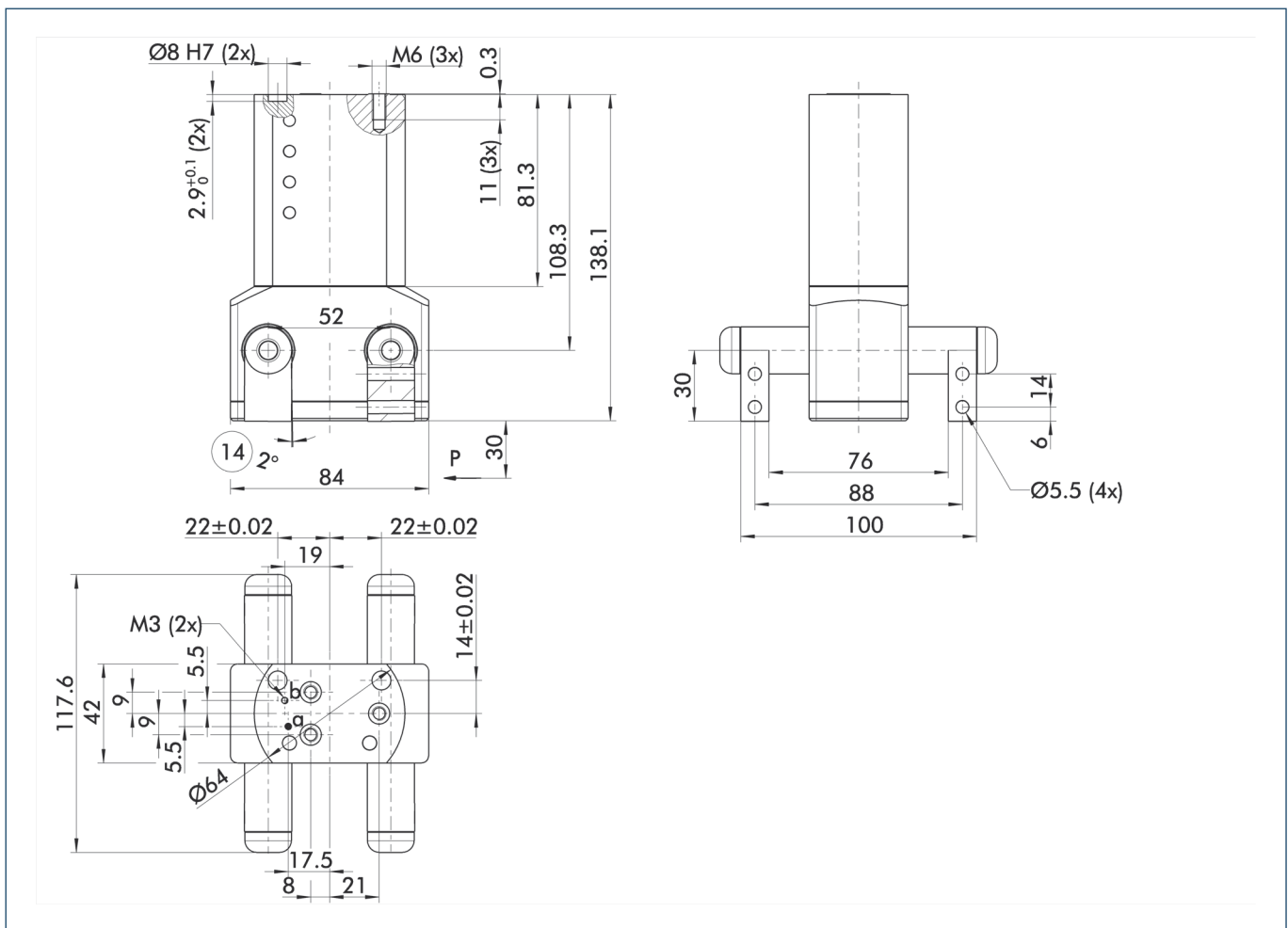


① The indicated moments and forces are static values, apply for each base jaw and should not appear simultaneously. If the maximum admissible finger weight is exceeded, throttling is necessary in order to ensure a smooth jaw motion without jerks or bounces. The life-time may reduce.

Technical data

Description	LMG 64	LMG 64-A
ID	0372006	0372007
Integrated monitoring	No	Yes
Opening angle per jaw [°]	90	90
Closed angle per jaw up to [°]	2	2
Closing moment [Nm]	31.5	31.5
Spring-actuated closing moment [Nm]	5.1	5.1
Weight [kg]	3	3.3
Recommended workpiece weight [kg]	2.2	2.2
Air consumption per double stroke [cm³]	57	57
Min./max. operating pressure [bar]	4/6.5	4/6.5
Nominal operating pressure [bar]	6	6
Closing/opening time [s]	0.4/0.5	0.4/0.5
Max. permitted finger length [mm]	80	80
Max. permitted weight per finger [kg]	0.26	0.26
IP class	69K	69K
Min./max. ambient temperature [°C]	-25/90	-25/90
Repeat accuracy [mm]	0.1	0.1

Main view



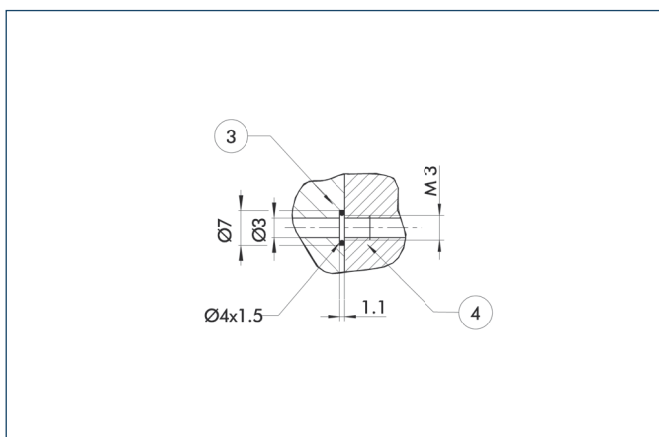
The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

A, a Main/direct connection, gripper opening
B, Main/direct connection, gripper closing

14 Clamping reserve per finger

① The SDV-P pressure maintenance valve can be used as a gripping force maintenance device (see "Accessories" catalog section).

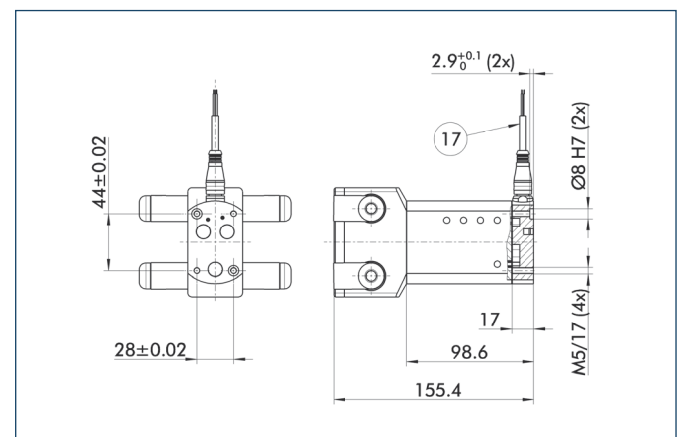
Hose-free direct connection



③ Adapter
④ Gripper

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Gripper with position monitoring



17 Cable outlet

Gripper with position monitoring via magnetic sensors