Size
44 ... 64

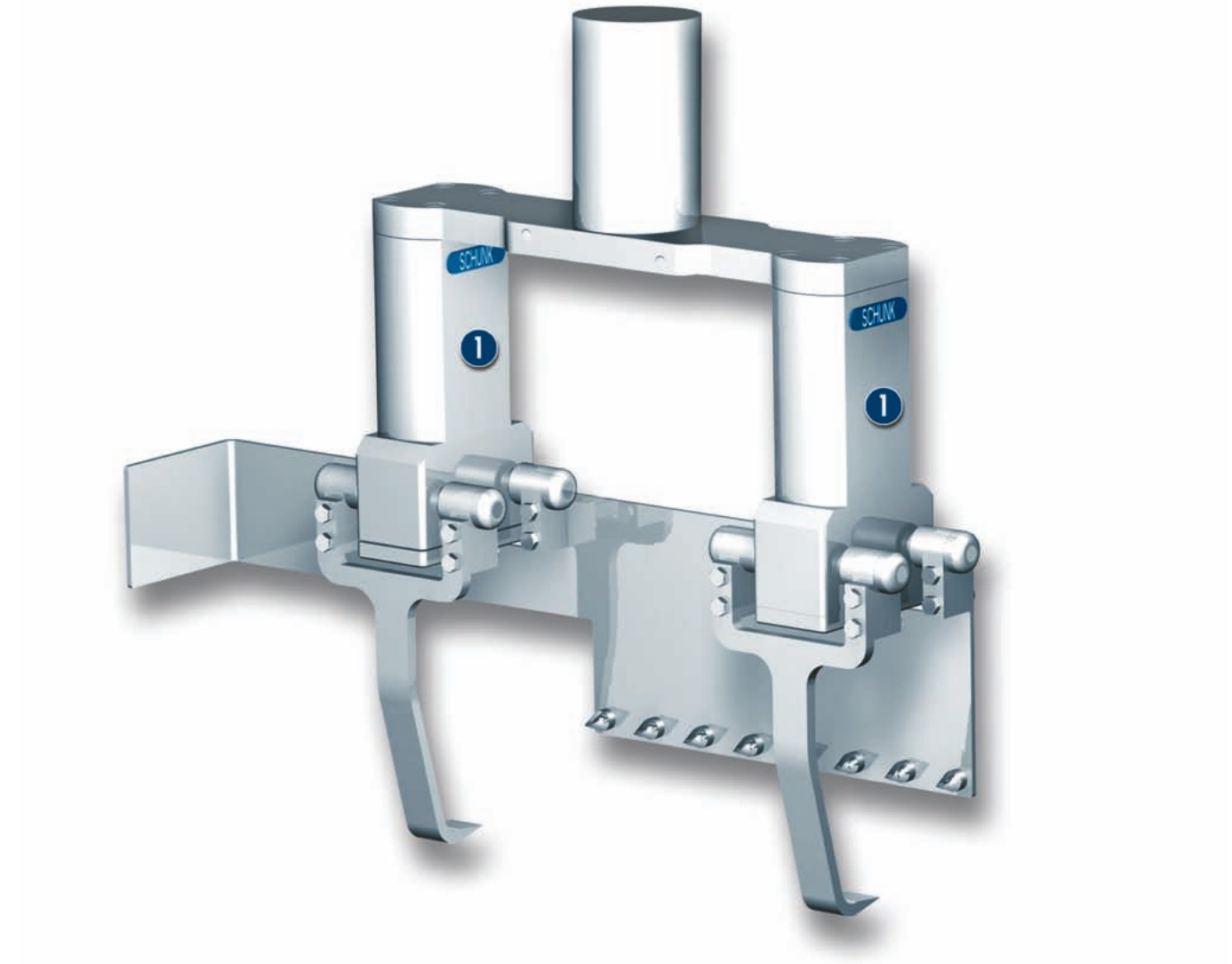
Weight
0.95 kg .. 3.3 kg
2.09 lbs .. 7.28 lbs

Gripping moment
8.2 Nm .. 31.5 Nm
6.0 lbf ft .. 23 lbf ft

Opening angle per finger
10° .. 90° can be preset

Workpiece weight
0.9 kg .. 2.2 kg
1.98 lbs .. 4.85 lbs

Application example



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

1 **LMG 64 Food Gripper**

Food Gripper

Gripper in easy-to-clean design for handling food.

Area 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 wide range 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

BG-PRÜFZERT
NG 05103
Hygiene geprüft
hygiene tested

General information on the series

Working principle
Positively driven crank system

Housing and base jaw material
Polished stainless steel

Actuation
Pneumatic, with filtered compressed air (10 µm): Dry or lubricated: Required quality class of compressed air according to DIN ISO 8573-1: Quality class 4

Temperature range
-25 °C to +90 °C

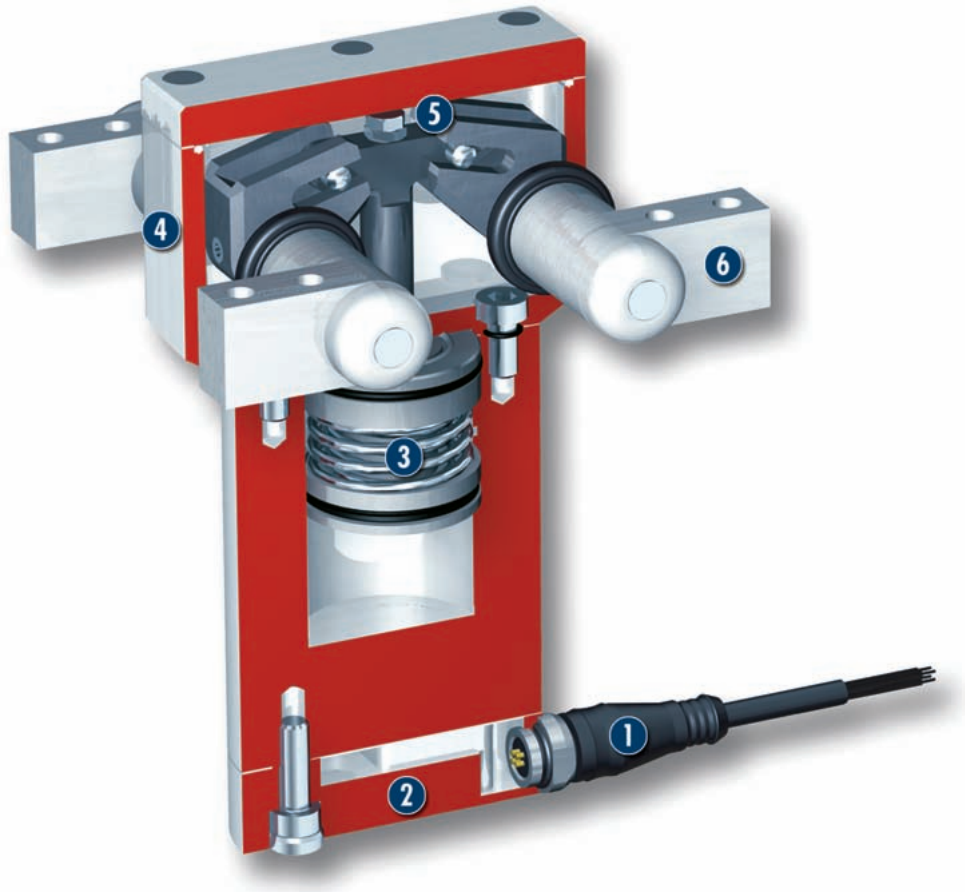
Operating pressure range
4.5 to 6.5 bar

Scope of delivery
O-rings for direct connection, centering sleeves, flat seal for gripper/adapter interface, assembly and operating manual with manufacturer’s declaration

Gripping force safety device
via integrated spring

Warranty
24 months

Sectional diagram



1 Sensor monitoring (optional)
cable strain relief for sensor monitoring with magnetic sensors

2 Air connection
direct connection for hose-free supply of compressed air

3 Gripping force safety device
integrated springs for maintenance of gripping force

4 Polished stainless steel housing
for complete cleaning and corrosion resistance

5 Kinematics
crank system for centric gripping, also for large opening and closing movements

6 Base fingers
for the connection of workpiece-specific gripper fingers

Function description

The round piston is moved up or down by means of compressed air. The two pins of the crank system are moved at the same time relative to the groove in the top jaws. At the moment of gripping, both pins achieve the greatest leverage.

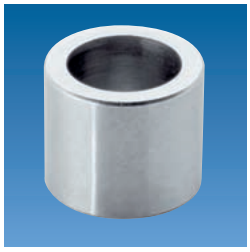
Options and special information

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

Accessories

Accessories from SCHUNK – the suitable complement for the highest level of functionality, reliability and controlled production of all automation components.

Centering sleeves



Fittings

W/WK/KV/GK sensor cables

V sensor distributors

SDV-P pressure maintenance valves

ⓘ 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 can find more detailed information on our accessory range in the "Accessories" catalog section.

General information on the series

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

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.

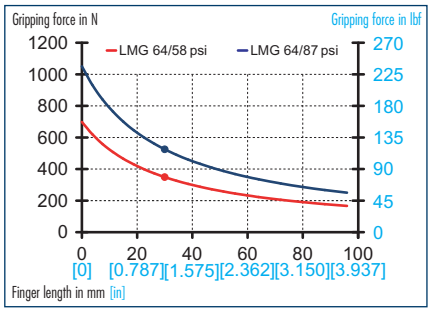
Version A (with monitoring)
Gripper status monitoring in version A is not an option, but a version by its own. The sensors are integrated in the gripper. Sensors can only be replaced by SCHUNK.

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

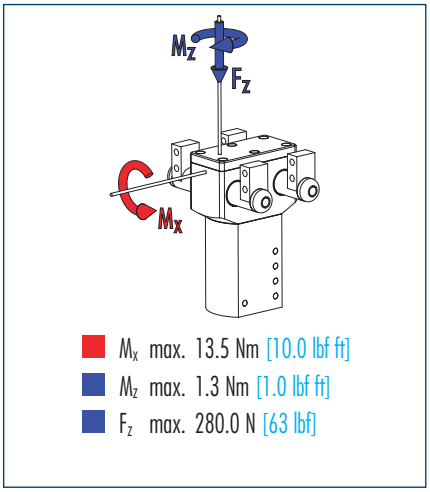
Closing and opening times
Closing and opening times are purely the times that the base jaws or fingers are in motion. Valve switching times, hose filling times or PLC reaction times are not included in the above times and must be taken into consideration when determining cycle times.

LMG 64

Gripping force, O.D. gripping



Finger load

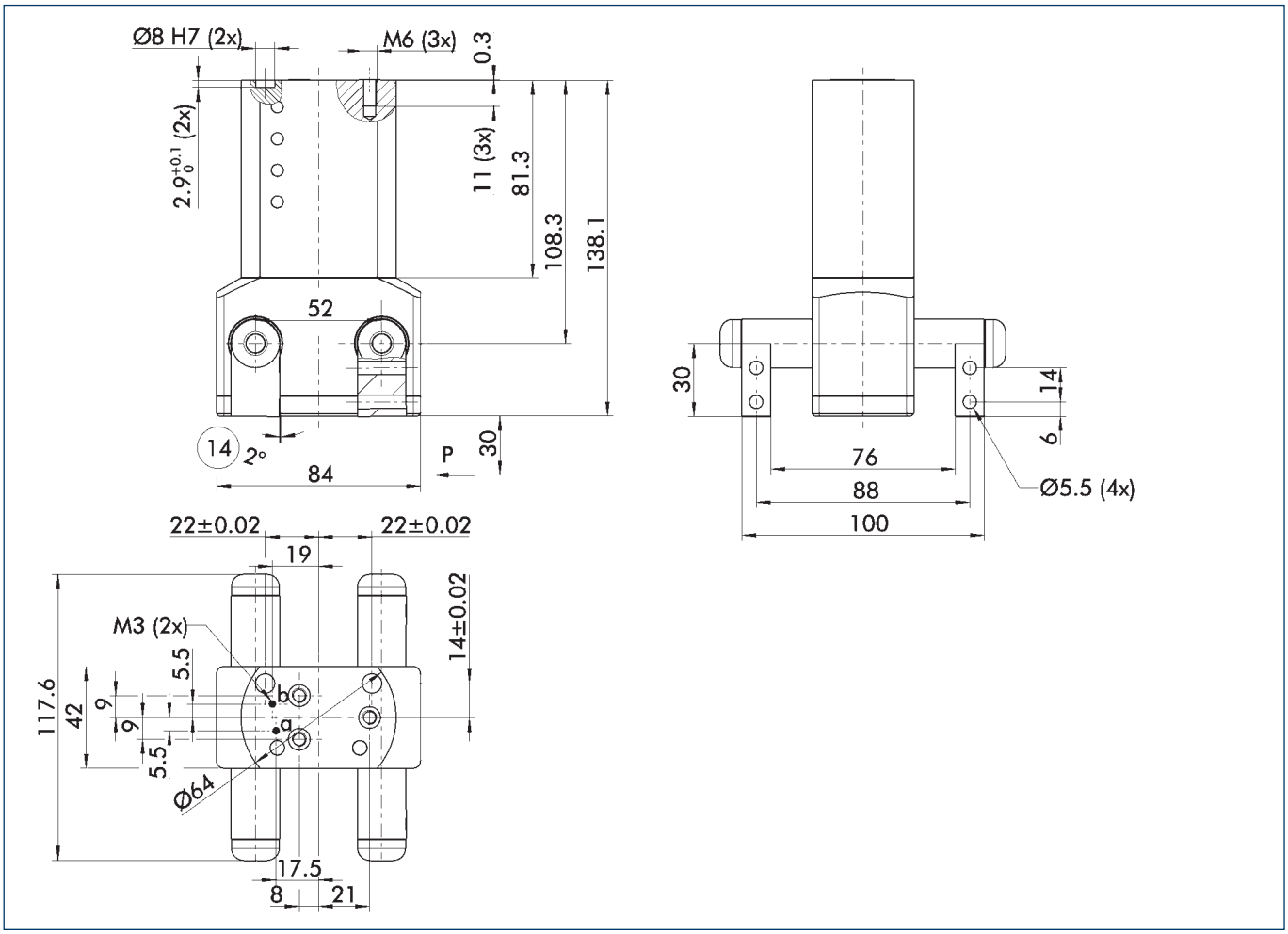


ⓘ Moments and forces apply per base jaw and may occur simultaneously. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing. Service life may be reduced.

Technical data

Description		LMG 64	LMG 64 A
	ID	0372006	0372007
Opening angle per jaw	°	90.0	90.0
Overtravel angle per jaw	°	2.0	2.0
Closing moment	Nm [lbf ft]	31.5 [23]	31.5 [23]
Closing moment ensured by spring	Nm [lbf ft]	5.1 [3.8]	5.1 [3.8]
Weight	kg [lbs]	3.0 [6.61]	3.3 [7.28]
Recommended workpiece weight	kg [lbs]	2.2 [4.85]	2.2 [4.85]
Air consumption per double stroke	cm^3 [in^3]	57.0 [3.48]	57.0 [3.48]
Nominal pressure	bar [psi]	6.0 [87]	6.0 [87]
Minimum pressure	bar [psi]	4.0 [58]	4.0 [58]
Maximum pressure	bar [psi]	6.5 [94]	6.5 [94]
Closing time	s	0.4	0.4
Opening time	s	0.5	0.5
Max. permitted finger length	mm [in]	80.0 [3.150]	80.0 [3.150]
Max. permitted weight per finger	kg [lbs]	0.26 [0.57]	0.26 [0.57]
IP rating		69K	69K
Min. ambient temperature	°C [°F]	-25.0 [-13]	-25.0 [-13]
Max. ambient temperature	°C [°F]	90.0 [194]	90.0 [194]
Repeat accuracy	mm [in]	0.1 [0.0039]	0.1 [0.0039]

Main views

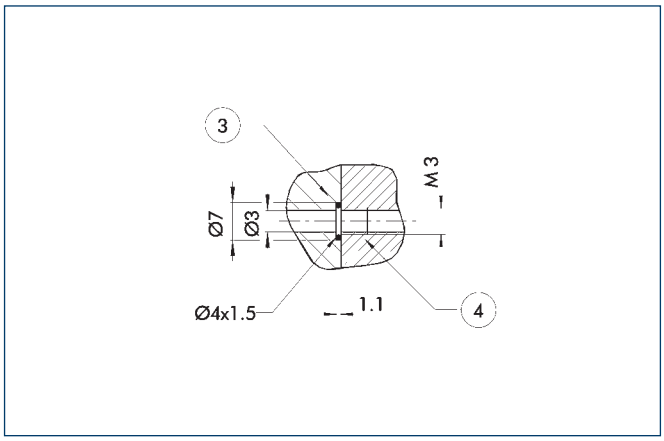


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

A,a Main/direct connection, gripper opening
B,b Main/direct connection, gripper closing
⑭ Clamping reserve per finger

ⓘ The SDV-P pressure maintenance valve can also be used (see "Accessories" catalog section) for I.D. or O.D. gripping as an alternative or in addition to the spring-loaded, mechanical gripping force safety device.

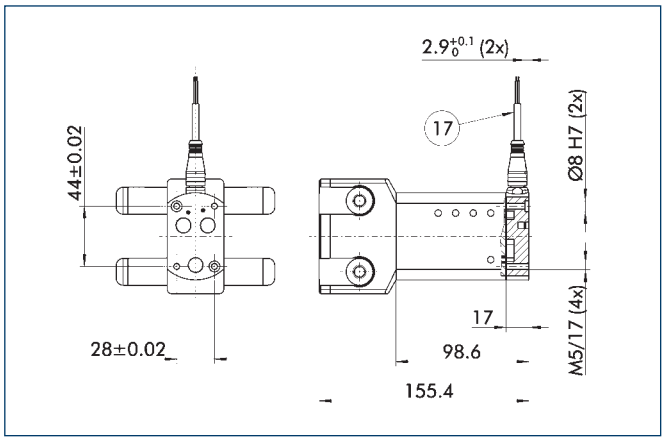
Hose-free direct connection



③ Adapter
④ Gripper

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

LMG 64 A (monitoring)



⑰ Cable outlet