

GSW-M

Special Grippers | Magnetic Gripper with Shaft Interface

Cost effective. Productive. Compliant.

GSW-M Magnetic Gripper

Vacuum gripper for spindle interfaces is ideal for handling flat components.

Field of Application

Unit for automatic loading and unloading of machining centers by their own axis, which provides a compressed air and coolant supply via the tool mounting.

Advantages – Your benefit

Low-price module for flexible automation in your machine

Fast, automated gripper changeover from the gripper to the storage rack

Fully automated workpiece changeover without robot- or gantry system

Universally suited for many different workpieces

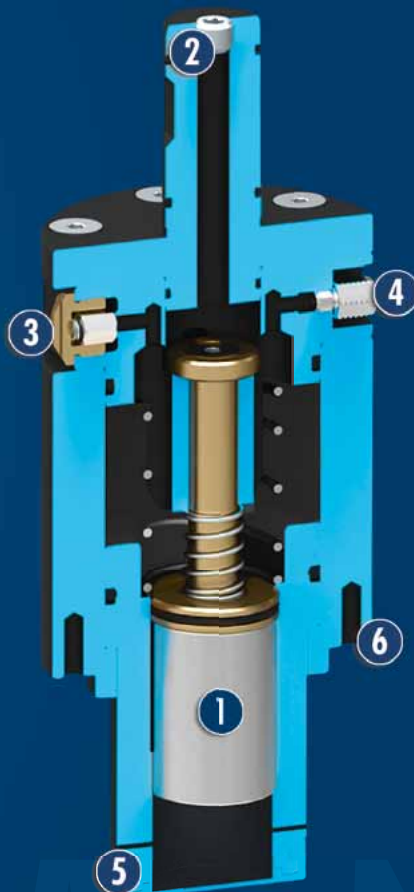


 Sizes Quantity: 1	 Weight 1 kg	 Holding force 70 N	 Workpiece weight 3.5 kg
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Functional Description

The gripper can be used in any machine which provides compressed air or lubricating coolants supply via the toolholder taper.

During the gripping operation the gripper continuously supplies coolant or compressed air by the outlet port.



- ① **Permanent magnet**
for holding of magnetic materials
- ② **Introduction of medium**
via spindle interface
- ③ **Overpressure valve**
for a large pressure range
- ④ **Drain valve**
for coolant operation
- ⑤ **Part ejector in the center sleeve**
for a controlled set down of the workpiece
- ⑥ **Thread**
for customized attachments / supports

CAD data, operating manuals and other current product documents are available at www.schunk.com

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General Notes about the Series

Operating principle: Permanent magnet

Housing material: Aluminum

Spindle interface material: Aluminum alloy

Actuation: hydraulically with machine coolant (filtered, max. particle size of 30 µm) or pneumatically with filtered compressed air in accordance with DIN ISO 8573-1: 7 4 4.

Warranty: 24 months (details, general terms and conditions and operating manuals can be downloaded at www.schunk.com)

Scope of delivery: Assembly and operating manual



Application example

Handling of gears in a milling center

① GSW-V Vacuum Gripper

② GSW-M Magnetic Gripper

③ Gripper with shaft diameter GSW-B and PGN-plus

④ Gripper with shaft diameter GSW-B and PZN-plus

⑤ RGG Cleaning Unit

⑥ RSS Radio Sensor System

SCHUNK offers more ...

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



Cleaning Unit



Vacuum Gripper



Toolholder

① Further information regarding the products can be found on the following product pages or at www.schunk.com. Please contact us for further information: SCHUNK technical hotline +49-7133-103-2696

Options and special Information

Please note that applications under extreme conditions (e.g. coolant, casting or abrasive dust) will reduce the service lifetime of this product considerably.

Further shaft diameters on request.

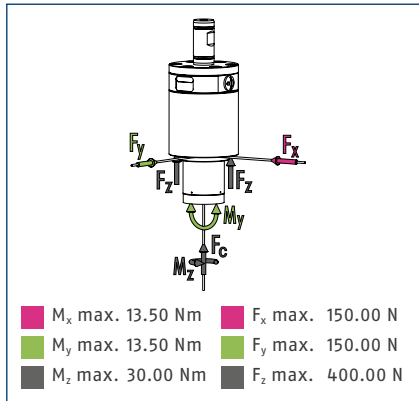
Please note that the product is not suitable for heat shrinking toolholders.

Precondition: If the spindles do not rotate, then machines have to provide compressed air or coolant.

GSW-M 20

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Forces and moments

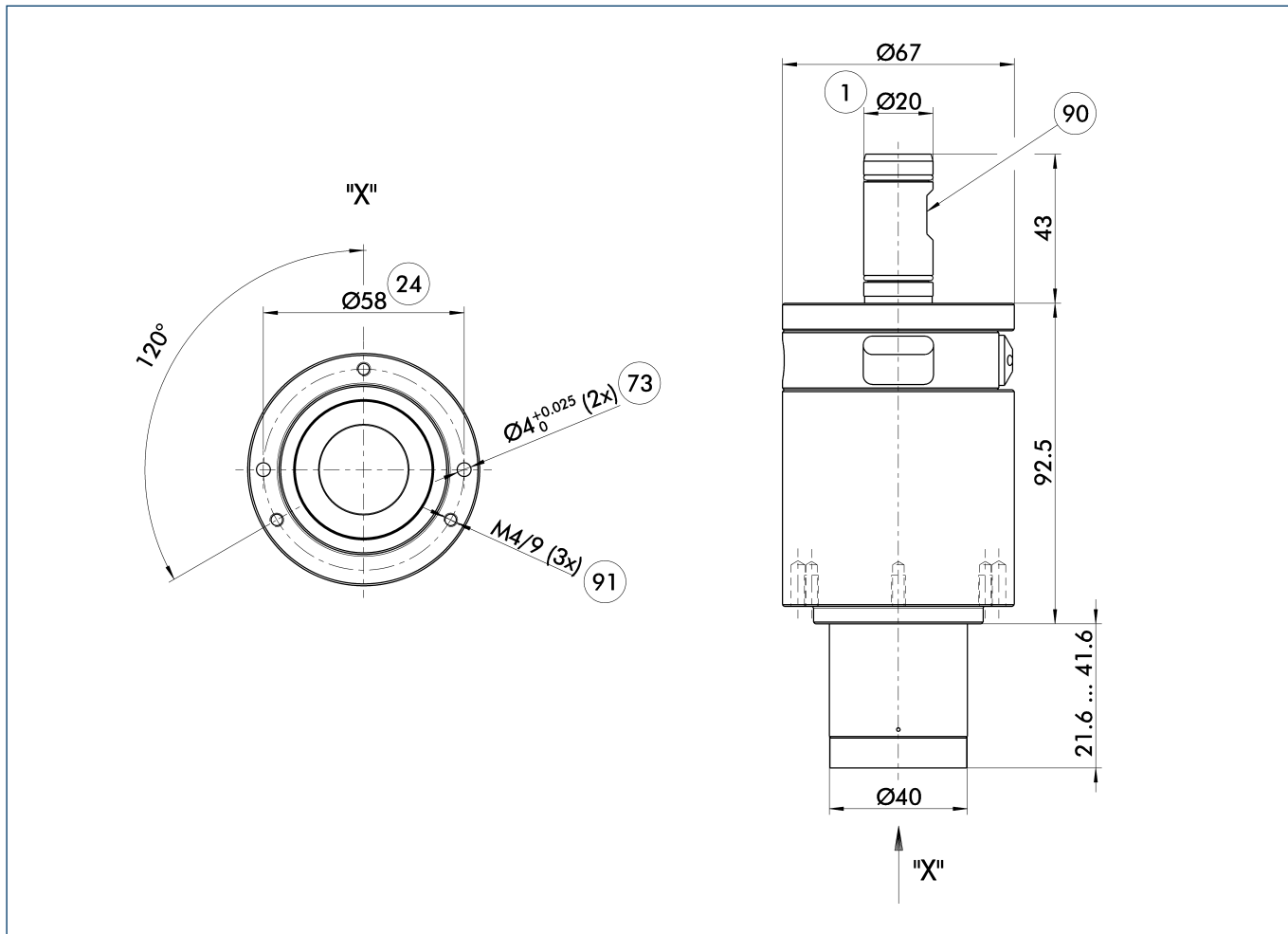


① The indicated moments and forces are statical values, apply for each base jaw and should not appear simultaneously. If the max. permitted finger weight is exceeded, it is impreative to throttle the air supply so that the jaw movement occurs without any hitting or bouncing. Service life may be reduced.

Technical data

Description		GSW-M 20
ID		0308355
General technical data		
Weight	[kg]	1
Holding force	[N]	70
Recommended workpiece weight	[kg]	3.5
Max. admissible speed	[1/min]	0
Nominal operating pressure compressed air	[bar]	6
min. / max. compressed air operating pressure	[bar]	2/8
Nominal operating pressure coolant	[bar]	40
min. / max. coolant operating pressure	[bar]	10/50
IP class		44
min. / max. ambient temperature	[°C]	5/90
Broach spring force F_c	[N]	80.00

Main view



The drawing shows the unit in standard design, without considering any dimensions of the options described below.

- ① Gripper connection
- ②4 Bolt circle
- ⑦3 Fit for centering pins
- ⑨0 Weldon clamping surface
- ⑨1 Thread for pressure piece