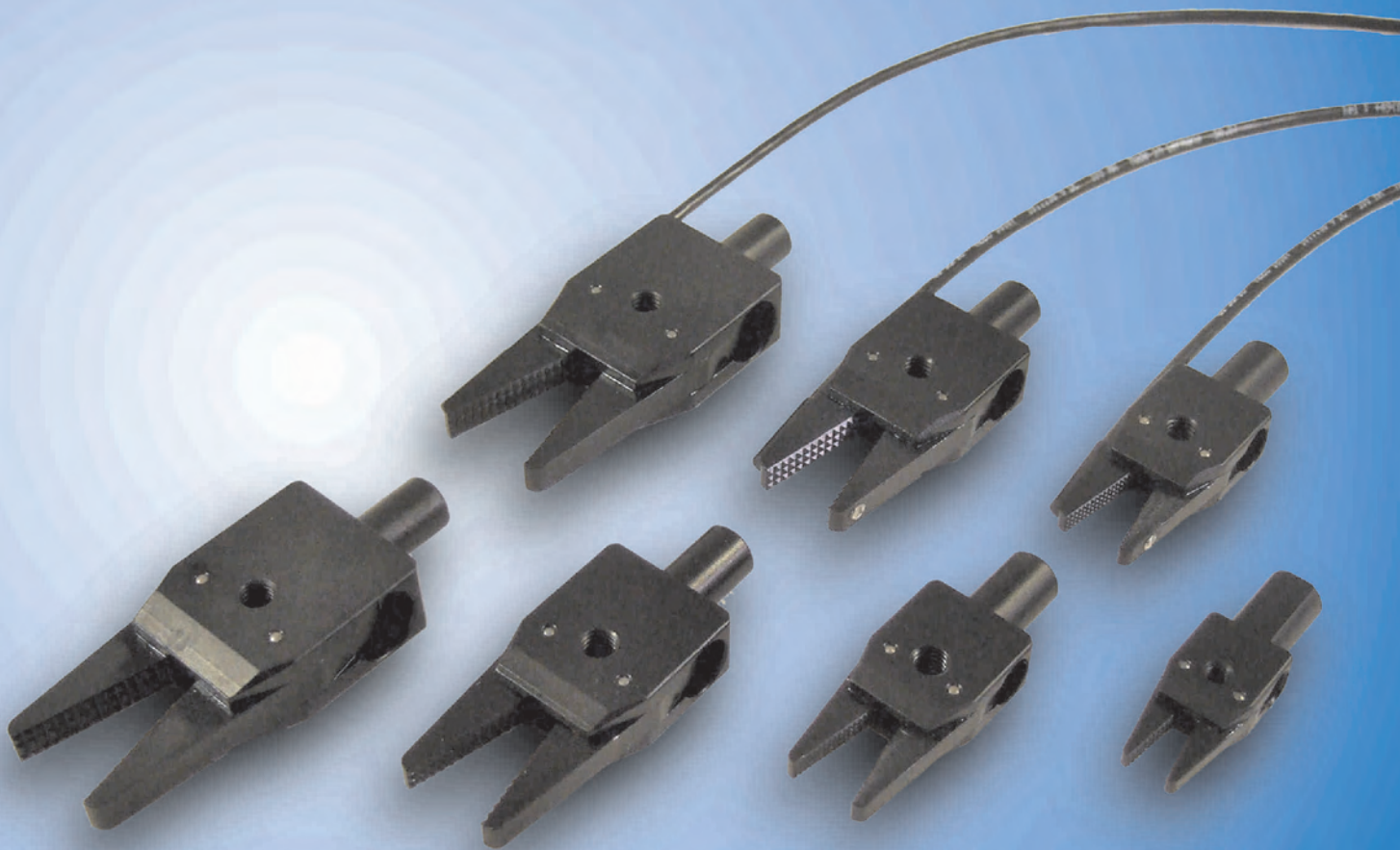




# MF System Grippers



Micro

Mini

Midi

Maxi



**MORALI**

# MF System Grippers



The absolutely smallest gripper on the market is the

## Micro

the smallest of its kind, weighing a mere 8 g!



Morali Produktionstechnik is probably one of the world's biggest manufacturers of vacuum cups. To supply the booming automation market, Morali has meanwhile included a system of grippers among its line of products. These were developed with the assistance of experts relying on over 15 years of practical experience.

The new family of grippers has been designed not only for the plastics industry (e.g. gating grippers), but for all aspects of end-of-arm tooling. In keeping with their size, the four types of grippers are designated:

**Micro - Mini - Midi - Maxi**

## Benefits of our dedicated grippers

- Four sizes, logically stepped.
- Optional versions with magnetic-sensor interrogation.
- Standard clamping dia. of 10 mm, suitable for all common gripper systems.
- Additional mounting option on gripper body, optionally with clamp on 10 mm clamping dia.
- Uniform compressed-air coupling with M 5 female thread.
- Perfectly closing gripper jaws.
- Sensor interrogation from parts as small as 1.0 mm dia.
- Hard-Coat® for optimum wear protection.
- Extensive spare-parts kit for all gripper sizes.
- Extension cables for magnetic sensor 2,5 - 5 - 10 m long.

**Custom gripper jaws on request!**

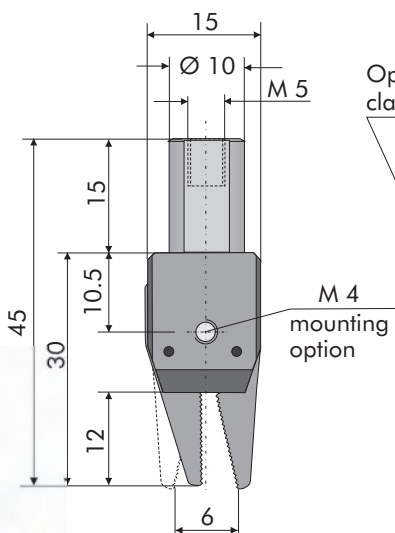
### MF3010

Compressed air:  
max. 6 bars

Working range:  
+5°C to +70°C

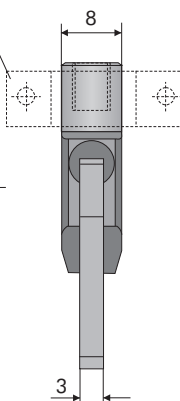
Holding force  
at jaw tip: 10 N

Weight: 8 g

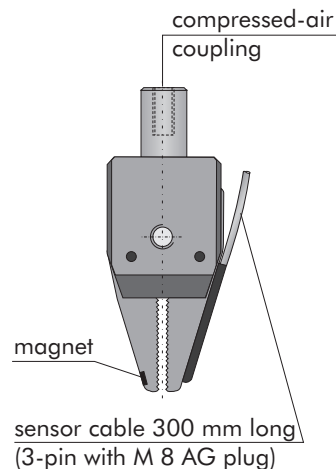


## Micro

Optional accessory:  
clamp MF30KS



### MF3010MS with sensor



## Spare-parts kit:

Item	Designation	Art. No.	Item	Designation	Art. NO.
1	2 Gripper jaws	MF30GB	4	1 Compression spring	MF30DF
2	1 Magnetic jaw	MF30MB	5	2 Pistons with gaskets	MF30KD
3	1 Sensor jaw with cable	MF30SB	6	2 Dowel pins	MF30PS

Note: Items 1-5 including pins

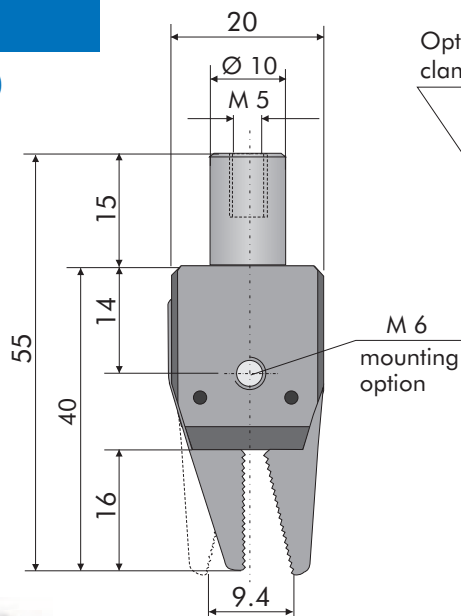
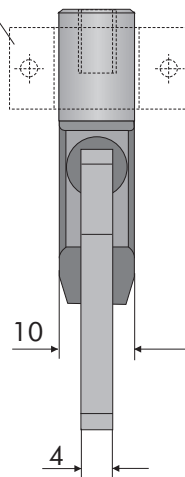
**MORALI**

# MF System Grippers

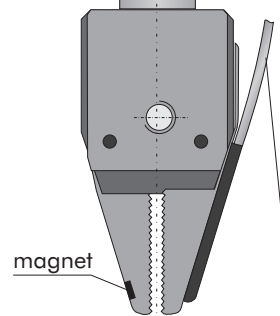
## MF.4010

Compressed air:  
max. 6 barsWorking range:  
+5°C to +70°CHolding force  
at jaw tip: 15 N

Weight: 14 g

Optional accessory:  
clamp MF.40KS

## MF.4010MS with sensor

compressed-air  
couplingsensor cable 300 mm long  
(3-pin with M 8 AG plug)

### Spare-parts kit:

Item	Designation	Art. No.
1	2 Gripper jaws	MF.40GB
2	1 Magnetic jaw	MF.40MB
3	1 Sensor jaw with cable	MF.40SB

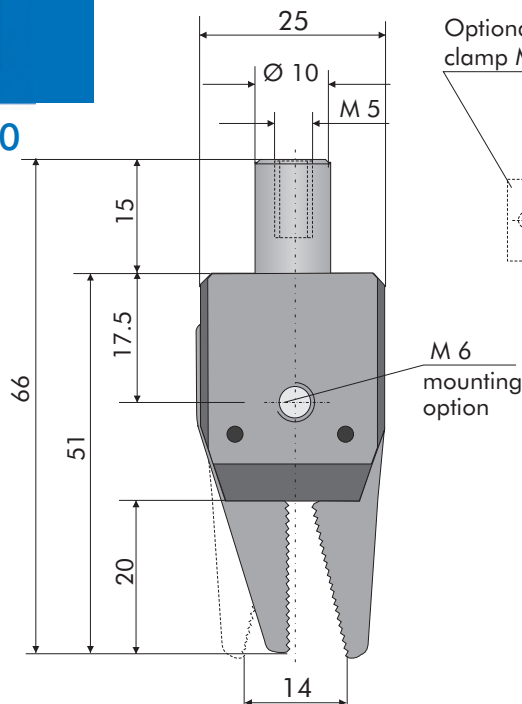
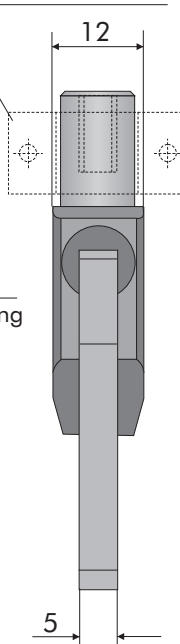
Item	Designation	Art. No.
4	1 Compression spring	MF.40DF
5	2 Pistons with gaskets	MF.40KD
6	2 Dowel pins	MF.40PS

Note: Items 1-5 including dowel pins

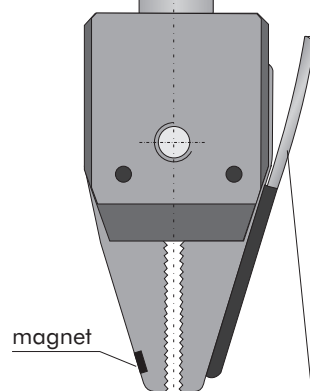
## MF.5010

Compressed air:  
max. 6 barsWorking range:  
+5°C to +70°CHolding force  
at jaw tip: 23 N

Weight: 23 g

Optional accessory:  
clamp MF.50KS

## MF.5010MS with sensor

Compressed-air  
couplingsensor cable 300 mm long  
(3-pin with M 8 AG plug)

### Spare-parts kit:

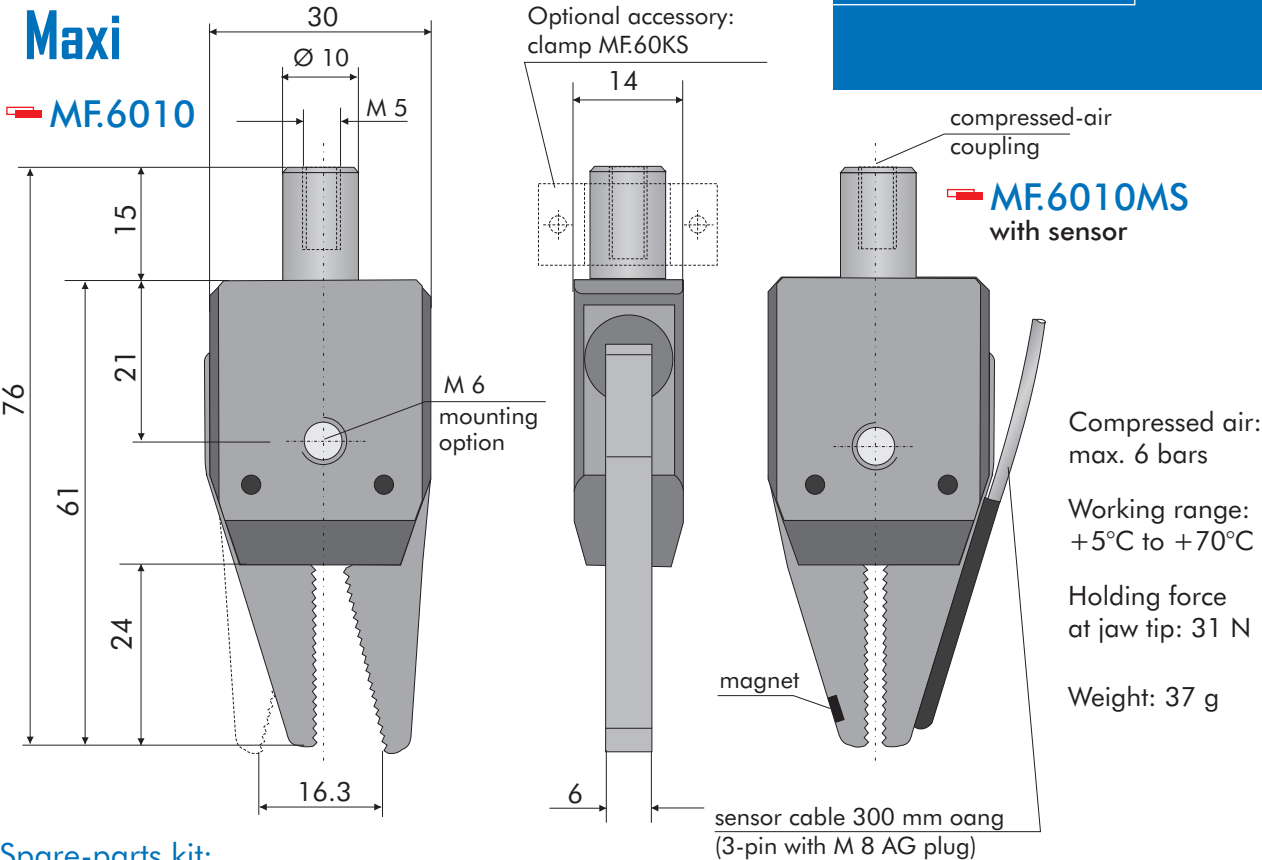
Item	Designation	Art. No.
1	2 Gripper jaws	MF.50GB
2	1 Magnetic jaw	MF.50MB
3	1 Sensor jaw with cable	MF.50SB

Item	Designation	Art. No.
4	1 Compression spring	MF.50DF
5	2 Pistons with gaskets	MF.50KD
6	2 Dowel pins	MF.50PS

Note: Items 1-5 including dowel pins

# MF System Grippers

MORALI



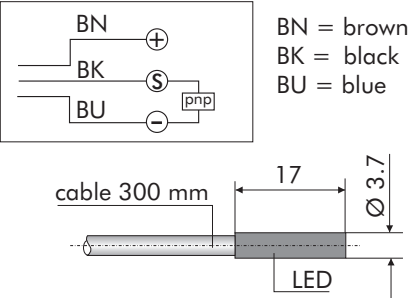
## Spare-parts kit:

Item	Designation	Art. No.
1	2 Gripper jaws	MF.60GB
2	1 Magnetic jaw	MF.60MB
3	1 Sensor jaw with cable	MF.60SB

Item	Designation	Art. No.
4	1 Compression spring	MF.60DF
5	2 Pistons with gaskets	MF.60KD
6	2 Dowel pins	MF.60PS

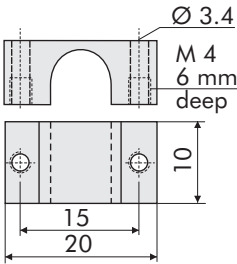
**Note:**  
Item 1 - 5 including dowel pins

## Wiring diagram: Cylindrical magnetic sensor



## Optional accessories: Clamps

Clamps for optional mounting (e.g. on aluminum profiles)



**Art. No:**  
MF.30KS  
MF.40KS  
MF.50KS  
MF.60KS



## Specifications for 20°C / 24 VDC

Operating voltage	10...30 V DC
Output	pnp, NO transistor
Current capacity	100 mA, non-short-circuit-proof, with polarity protection
Switching capacity	max. 3 W (30 V, 100 mA)
No-load current	≤ 11 mA
Under tension	≤ 2,0 V
Switching frequency	1000 Hz
Reproducibility	< 0,1 mm
Ambient temperature	-25...+70°C
Insulation-voltage resistance	500 V
Protection class	IP 67
Display	yellow LED for output signal
Body material	plastic
Connecting cable	PUR, resistant to welding sparks
Length of cable	300 mm, M 8 AG plug

**Optional accessories:**  
Extension cables M 8 IG  
2.5 m = MF.VK25  
5.0 m = MF.VK50  
10 m = MF.VK100





# Request for Information

Fax +49 (0)741-17 52 60-29

Company	Telephone
Name	Fax
Road	e-mail
ZIP Code/City	www.
Country	Industry:

We are interested in the products marked below and request

- ☐ Your telephone call
- ☐ Detailed documentation
- ☐ Your visit following appointment by telephone

☐ Flat vacuum cups



☐ Bellows vacuum cups



☐ Oval-/rectangular vacuum cups



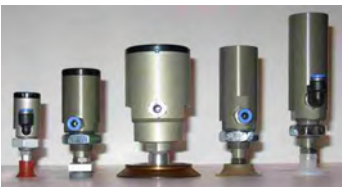
☐ Vacuum cup accessories



☐ Vacuum accessories

Vacuum generators  
Vacuum valves, filters,  
Special vacuum hoses  
Quick-release couplers

☐ Vacuum lifting cylinders



☐ Dedicated grippers



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# MORALI - Line of Products

We make vacuum cups, from mini-batches to large series, with consistently high quality, at reasonable prices.

MORALI GmbH not only has an extensive line of standard products but is also your competent partner for special solutions - worldwide.

We also make vacuum cups to customers' specifications, putting our extensive experience and technical expertise at your service.

## Vacuum-Cup Materials

NBR, natural rubber, silicone, polyurethane, FKM (Viton®), chloroprene rubber, HNBR, EPDM, vinyl, SBR; antistatic suction cups of silicone or NBR

## Additional Products

## Vacuum Cups - directly from the manufacturer

Based on over 15 years of practical experience in vacuum technology, we supply the following industries with our products:

- Automation/robotics
- Automotive
- CD/DVD
- Printing and paper
- Electronics
- Glass
- Wood/furniture
- Ceramics/porcelain
- Cosmetics
- Plastics
- Foodstuffs/beverages
- Medicine
- Dairy
- Solar
- Special-purpose machinery
- Stone working
- Packaging

### Flat Vacuum Cups

from Ø 1 to Ø 1000 mm and larger



### Bellows Vacuum Cups

from Ø 4 to Ø 400 mm and larger



### Oval-/Rectangular Vacuum Cups

from 4 x 2 to 400 x 1000 mm



### Vacuum-Cup Accessories

Fittings, rigid or spring-loaded cup levelers, flow valves, plunger valves



### Special-Purpose Vacuum Cups

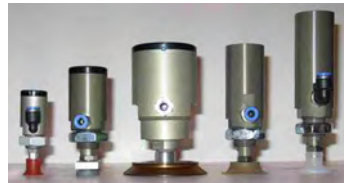
- **High-temperature cups** (up to +550°C) with felt coating from 25 to 350 mm dia.,
- **Detectable** vacuum cups for bakery industry
- **No marking** flat, bellows and oval suction cups from 8 mm dia. (on request).

### Vacuum Accessories

We also supply: Vacuum generators, vacuum valves, filter, special vacuum hoses, quick-release fittings

### Vacuum Lifting Cylinders

in five different sizes



### Dedicated Grippers

(with and without query)



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