

► PNEUMATIC		
•	Series GZ1000	368
	Series MGW800	376
	Series GG1000	394
	Series GPW5000	404

# 2-JAW ANGULAR GRIPPERS SERIES GZ1000

# ► PRODUCT ADVANTAGES



# "The top of the line"

# Unique quality meets functionality

This is one of the best angular grippers on the market, enabling you to make your application more cost-effective and functional

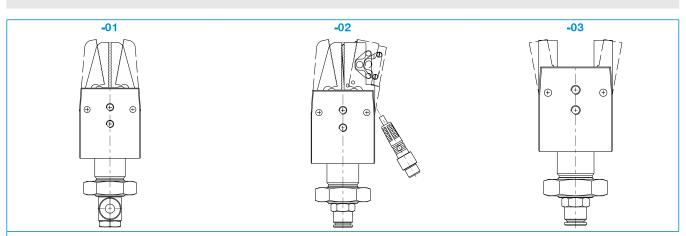
# Variable attachment

Decide for yourself whether you want use screws, locknuts or a toolkit clamping system for fastening

# Sensing with process reliability

Unlike many other established products on the market, you can even differentiate between "Component present" and "Component not present"

# **VERSIONS**



# HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GZ1030		
Saw tooth jaw without query		-01	
Saw tooth jaw with query		-02	
Version for attaching customer-specific gripper fingers		-03	



# **BENEFITS IN DETAIL**



- (1) Gripper jaw
  - available in different versions
- 2 Position sensing
  - via inductive proximity switch
- 3 Return spring
  - to open the gripper jaws
- 4 Mounting and positioning
  - via thread / through-hole
- (5) Drive
  - single-acting pneumatic cylinder
- 6 Housing
  - hard coated surface for increased durability
- 7 Mounting and positioning
  - via fit, thread and lock nut
- 8 Energy supply

# > SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	8° - 10°
Gripping force	62 N - 315 N
Weight	0,015 kg - 0,125 kg
AP class	1



10 million maintenance-free cycles (max.)



Inductive sensor

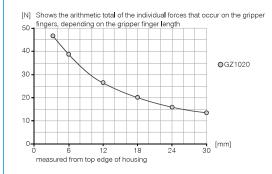


**I**P30

# **PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1	
My [Nm]	0.6	
Fa [N]	60	

# **► INCLUDED IN DELIVERY**



Locking nut

C093610009

# ► RECOMMENDED ACCESSORIES



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

KAG500



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector customizable Straight -Connector M8

S8-G-3

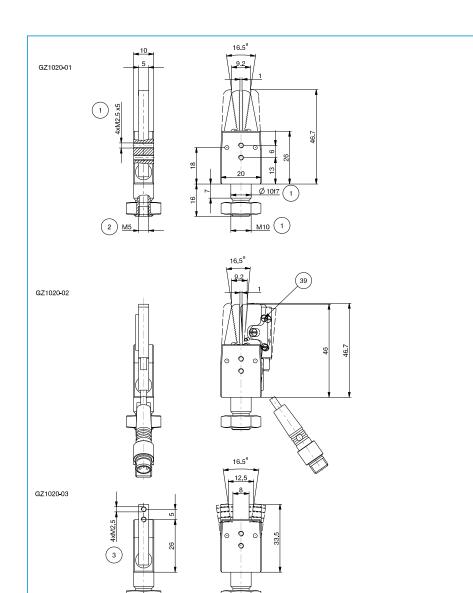


customizable Straight Connector M12

S12-G-3

	Technical Data*		
Order no.	GZ1020-01	GZ1020-02	GZ1020-03
Stroke per jaw [°]	8	8	8
Gripping force in closing [N]	62	62	62
Closing moment [Nm]	0.5	0.5	0.5
Closing time [s]	0.01	0.01	0.01
Opening time [s]	0.02	0.02	0.02
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	0.25	0.25	0.25
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.017	0.03	0.015

<sup>\*</sup>All data measured at 6 bar

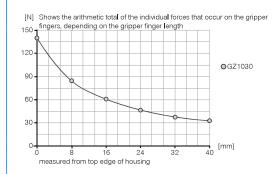


- Gripper attachment
   Energy supply
   Fixing for gripper finger
   Gripping jaw with integrated sensing

# **PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.5
My [Nm]	1
Fa [N]	110

# **► INCLUDED IN DELIVERY**



Locking nut

C093614159

# ► RECOMMENDED ACCESSORIES



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

KAG500



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector customizable Straight -Connector M8

S8-G-3

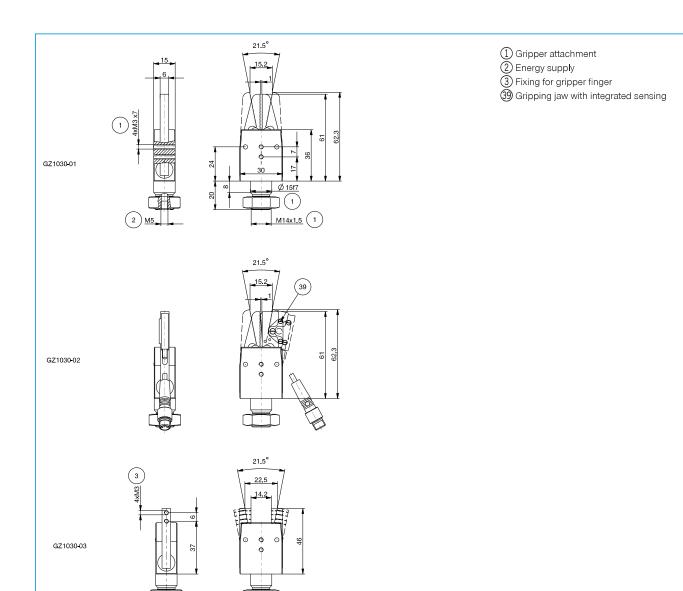


customizable Straight Connector M12

S12-G-3

	Technical Data*		
Order no.	GZ1030-01	GZ1030-02	GZ1030-03
Stroke per jaw [°]	11	11	11
Gripping force in closing [N]	130	130	130
Closing moment [Nm]	1.6	1.6	1.6
Closing time [s]	0.02	0.02	0.02
Opening time [s]	0.03	0.03	0.03
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm³]	0.9	0.9	0.9
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.05	0.063	0.046

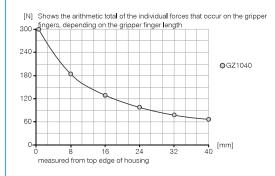
<sup>\*</sup>All data measured at 6 bar



# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.5
My [Nm]	2
Fa [N]	200

# **► INCLUDED IN DELIVERY**



Locking nut

C093620159

# ► RECOMMENDED ACCESSORIES



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

KAG500



Straight Fittings - Quick Connect Style

GV1-8X6



Plug-in connector customizable Straight -Connector M8

S8-G-3

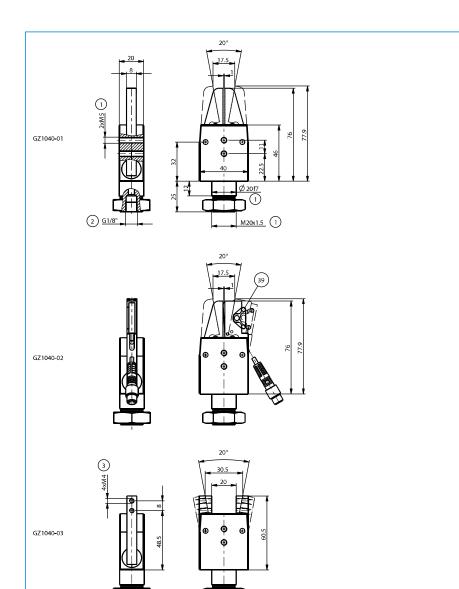


Plug-in connector customizable Straight -Connector M12

S12-G-3

	Technical Data*		
Order no.	GZ1040-01	GZ1040-02	GZ1040-03
Stroke per jaw [°]	10	10	10
Gripping force in closing [N]	315	315	315
Closing moment [Nm]	4.4	4.4	4.4
Closing time [s]	0.02	0.02	0.02
Opening time [s]	0.04	0.04	0.04
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+80	+80	+80
Air volume per cycle [cm <sup>3</sup> ]	2	2	2
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.11	0.125	0.105

<sup>\*</sup>All data measured at 6 bar



- Gripper attachment
   Energy supply
   Fixing for gripper finger
   Gripping jaw with integrated sensing

# 2-JAW ANGULAR GRIPPERS SERIES MGW800

# **▶ PRODUCT ADVANTAGES**



# "The economical"

Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

High moment load

The optimally designed angular gear box provides the highest durability for your application

Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

# ► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

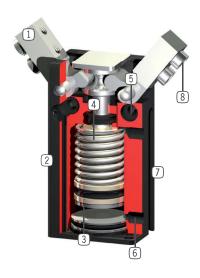
# HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	MGW803N		
For external gripping, self-locking, spring closing		С	



# **BENEFITS IN DETAIL**



### 1 Gripper jaw

- individual gripper finger mounting

# 2 Robust, lightweight housing

- Hard-coated aluminum alloy

# 3 Position sensing

- permanent magnet for direct monitoring of piston movement

# 4 Integrated gripping force safety device

- spring integrated into cylinder as energy storage (from size 803 upwards)

# **5** Mounting and positioning

- mounting possible from several sides for versatile positioning

### 6 Energy supply

- possible from several sides

#### (7) Sensing slot

- mounting and positioning of magnetic field sensors

### 8 Removable centering sleeves

- quick and economical positioning of the gripper fingers

# SERIES CHARACTERISTICS



Number of installation sizes	8
Stroke per jaw	37,5°
Gripping force	5 N - 325 N
Weight	0,01 kg - 0,45 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



IP30

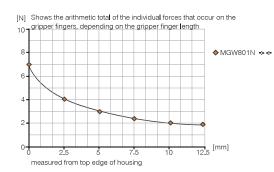


Magnetic field sensor

# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.2
My [Nm]	0.2
Fa [N]	37

# INCLUDED IN DELIVERY



Centering Disc

DST80100

# ► RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

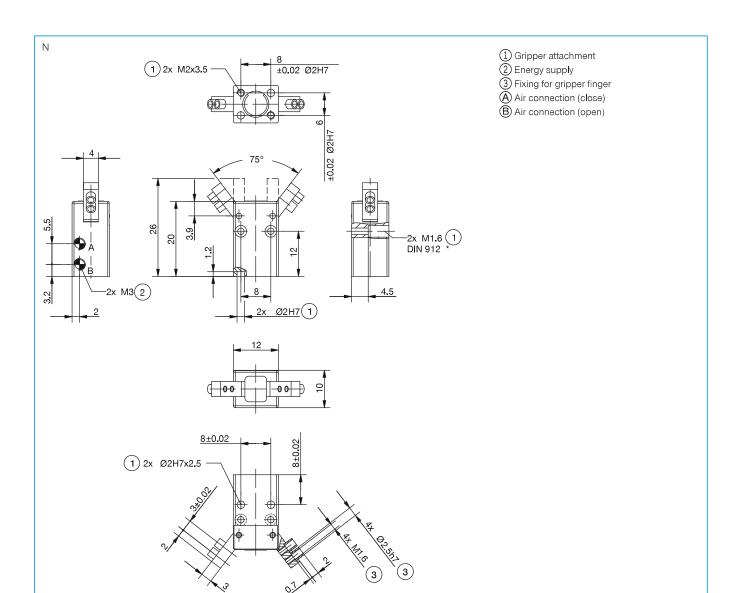
WVM3



Quick Exhaust Valve

	► Technical Data*
Order no.	MGW801N
Stroke per jaw [°]	37.5
Gripping moment in closing [Nm]	0.025
Gripping moment in opening [Nm]	0.03
Gripping moment secured by spring min. [Nm]	
Gripping force in closing [N]	5
Gripping force in opening [N]	7.5
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/-[mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.14
Weight [kg]	0.01

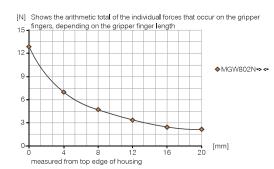
<sup>\*</sup>All data measured at 6 bar



# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.3
My [Nm]	0.3
Fa [N]	60

# INCLUDED IN DELIVERY



Centering Disc

DST80200

# ► RECOMMENDED ACCESSORIES



Style Connection GVM3



Style Connection

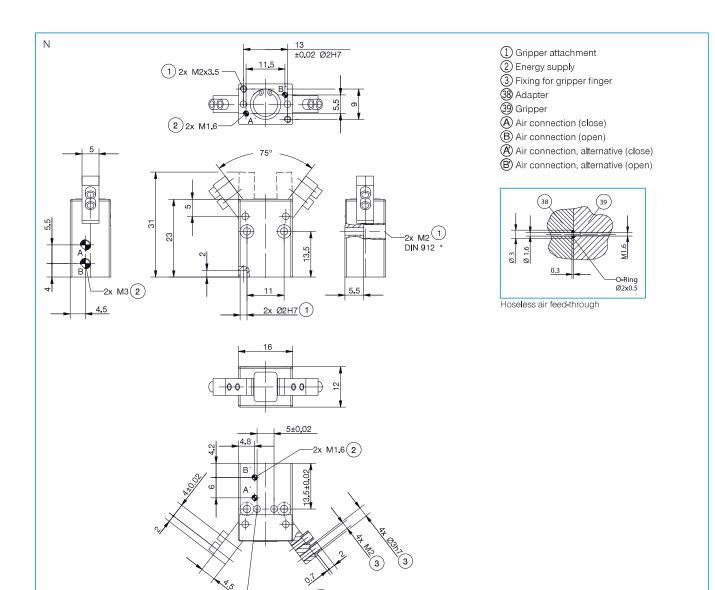
Angled Fittings - Barb WVM3



Quick Exhaust Valve

	► Technical Data*
Order no.	MGW802N
Stroke per jaw [°]	37.5
Gripping moment in closing [Nm]	0.045
Gripping moment in opening [Nm]	0.05
Gripping moment secured by spring min. [Nm]	
Gripping force in closing [N]	9
Gripping force in opening [N]	10
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.22
Weight [kg]	0.015

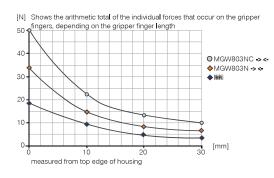
<sup>\*</sup>All data measured at 6 bar



# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



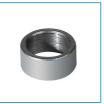
#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	90

# **► INCLUDED IN DELIVERY**



Centering Disc

DST80320

# ► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -Connector M8

MFS204SKHC



Straight Fittings - Barb Style Connection

**GVM3** 



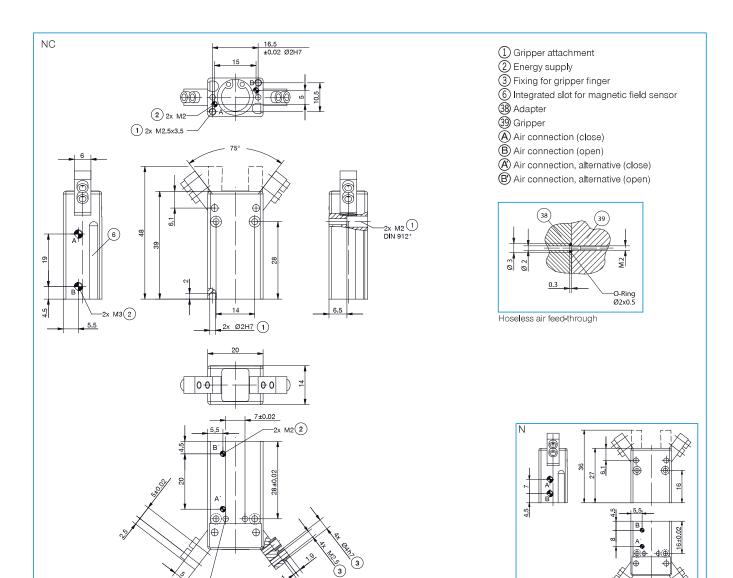
Angled Fittings - Barb Style Connection **WVM3** 



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGW803N	MGW803NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.2	0.3
Gripping moment in opening [Nm]	0.23	
Gripping moment secured by spring min. [Nm]		0.1
Gripping force in closing [N]	33	49
Gripping force in opening [N]	38	
Closing time [s]	0.01	0.01
Opening time [s]	0.01	0.02
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.64	1
Weight [kg]	0.025	0.04

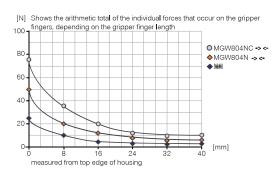
<sup>\*</sup>All data measured at 6 bar



# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.5
My [Nm]	0.5
Fa [N]	150

# INCLUDED IN DELIVERY



Centering Disc

DST40400

# ► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

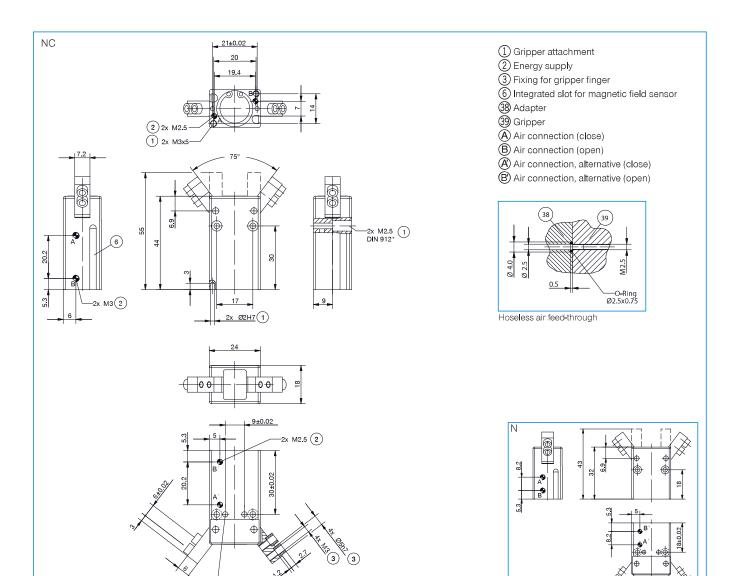
WVM3



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGW804N	MGW804NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.35	0.5
Gripping moment in opening [Nm]	0.41	
Gripping moment secured by spring min. [Nm]		
Gripping force in closing [N]	51	72
Gripping force in opening [N]	59	
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.03
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm <sup>3</sup> ]	1.4	2
Weight [kg]	0.05	0.08

<sup>\*</sup>All data measured at 6 bar



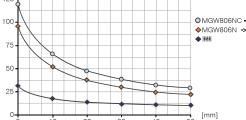
# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram

measured from top edge of housing

[N] Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length OMGW806NC → <-100 ♦MGW806N -><-



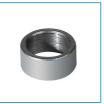
#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.7
My [Nm]	0.7
Fa [N]	260

# INCLUDED IN DELIVERY



Centering Disc

DST40600

# ► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



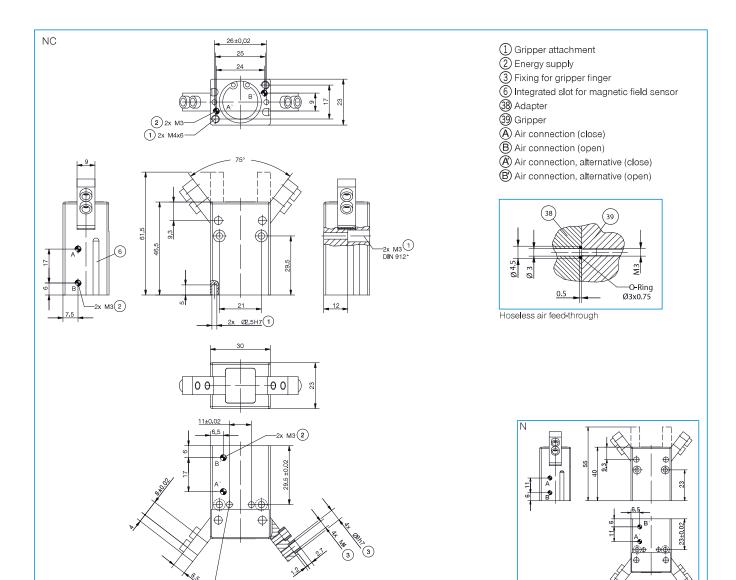
Angled Fittings - Barb Style Connection WVM3



Quick Exhaust Valve

	Technical Data*	
Order no.	MGW806N	MGW806NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.85	1.1
Gripping moment in opening [Nm]	1.02	
Gripping moment secured by spring min. [Nm]		0.25
Gripping force in closing [N]	91	118
Gripping force in opening [N]	110	
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm <sup>3</sup> ]	2.4	3.4
Weight [kg]	0.1	0.12

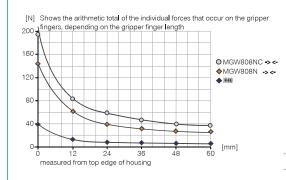
\*All data measured at 6 bar



# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



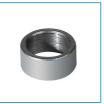
### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.3
My [Nm]	1.3
Fa [N]	430

# INCLUDED IN DELIVERY



Centering Disc

DST40600

# ► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Barb Style Connection

GVM3



Angled Fittings - Barb Style Connection

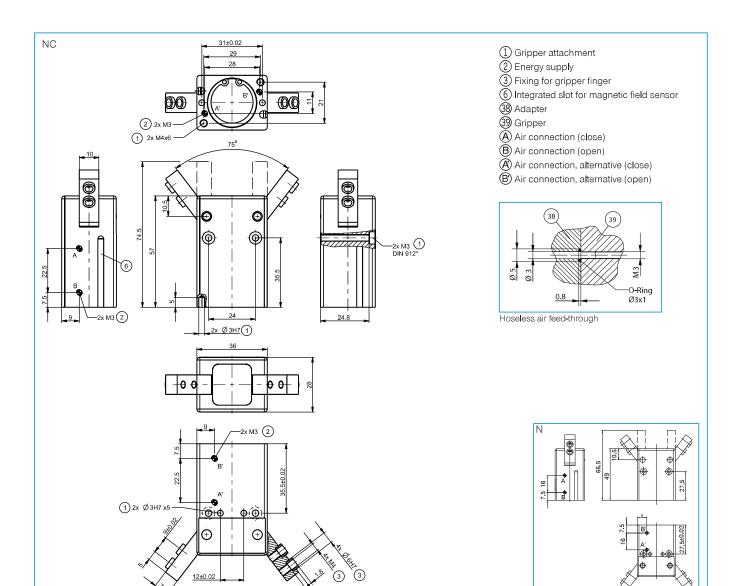
WVM3



Quick Exhaust Valve

	► Technical Data*	
Order no.	MGW808N	MGW808NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	1.55	2
Gripping moment in opening [Nm]	1.76	
Gripping moment secured by spring min. [Nm]		0.45
Gripping force in closing [N]	148	190
Gripping force in opening [N]	168	
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	8.1	10.5
Weight [kg]	0.18	0.19

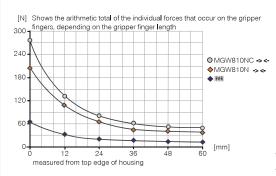
<sup>\*</sup>All data measured at 6 bar



# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.6
My [Nm]	1.6
Fa [N]	500

# INCLUDED IN DELIVERY



Centering Disc

**DST**07540

# ► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style



Quick Exhaust Valve

DEV04

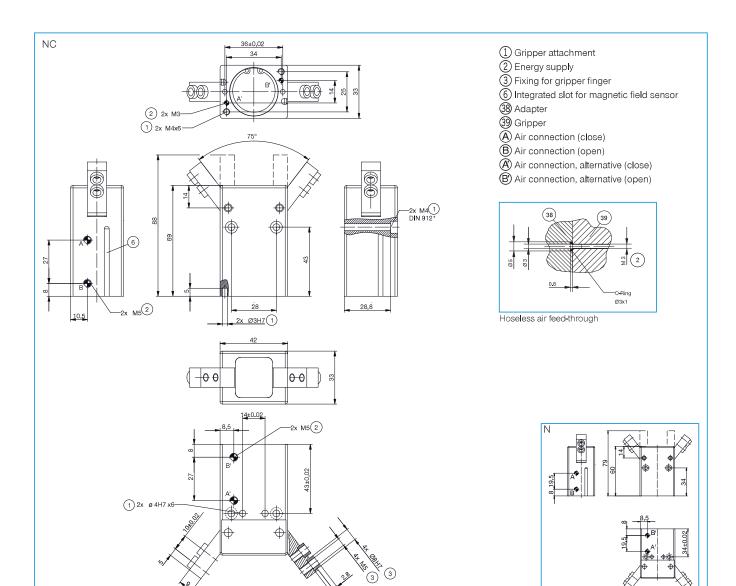


Pressure Safety Valve

DSV1-8

	Technical Data*	
Order no.	MGW810N	MGW810NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	2.9	3.8
Gripping moment in opening [Nm]	3.3	
Gripping moment secured by spring min. [Nm]		0.9
Gripping force in closing [N]	205	270
Gripping force in opening [N]	235	
Closing time [s]	0.03	0.03
Opening time [s]	0.03	0.06
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	14.1	18.4
Weight [kg]	0.28	0.31

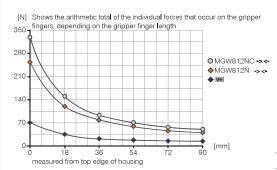
\*All data measured at 6 bar



# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.3
My [Nm]	2.3
Fa [N]	720

# INCLUDED IN DELIVERY



Centering Disc

**DST**07540

# ► RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



Straight Fittings - Quick Connect Style

GVM5



Angled Fittings - Quick Connect Style



Quick Exhaust Valve

DEV04

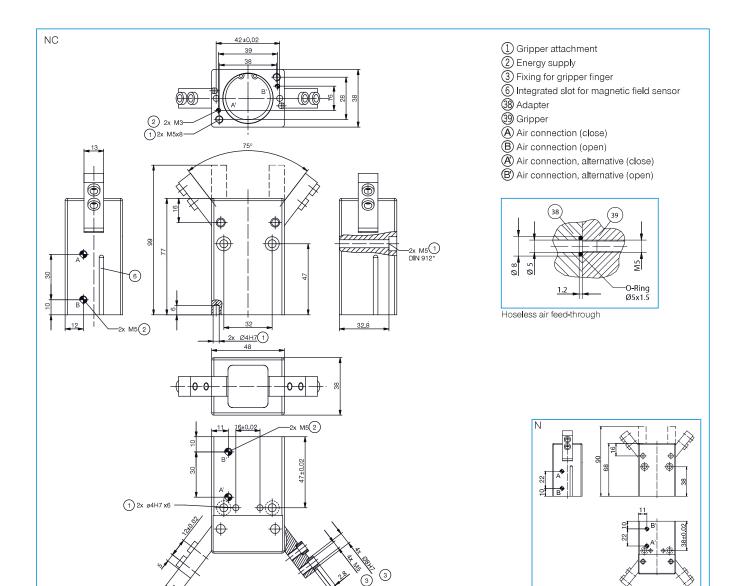


Pressure Safety Valve

DSV1-8

	► Technical Data*	
Order no.	MGW812N	MGW812NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	4.1	5.2
Gripping moment in opening [Nm]	4.55	
Gripping moment secured by spring min. [Nm]		1.1
Gripping force in closing [N]	255	325
Gripping force in opening [N]	285	
Closing time [s]	0.03	0.03
Opening time [s]	0.03	0.06
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	22.1	27.6
Weight [kg]	0.4	0.45

<sup>\*</sup>All data measured at 6 bar



# 2-JAW ANGULAR GRIPPERS SERIES GG1000

# ► PRODUCT ADVANTAGES



# "The strong"

# ► High gripping force

Using the high gripping force, you can safely handle even the heaviest workpieces

### High moment load

The generously scaled angular gear box provides the highest possible durability for your application

# Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

# ▶ THE BEST PRODUCT FOR YOUR APPLICATION



#### Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

# HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GG1065		NC	
Gripper jaws with mounting possibility on the side		F		



# **BENEFITS IN DETAIL**



- 1 Cam-switch and mounting block
  - for position sensing
- 2 Robust, lightweight housing
  - Hard-coated aluminum alloy
- 3 Sensing slot
  - groove for positioning of the magnetic field sensor
- 4 Permanent magnet
  - sensing of the piston setting position via magnetic field sensors
- (5) Positively driven lever mechanism
  - synchronized the movement of the gripper jaws
- (6) Integrated gripping force safety device
  - spring integrated into cylinder as energy storage
- 7 Drive
  - double-acting pneumatic cylinder
- 8 Removable centering sleeves
  - quick and economical positioning of the gripper fingers

# SERIES CHARACTERISTICS



Number of installation sizes	4
Stroke per jaw	20°
Gripping force	2910 N - 29110 N
Weight	1,3 kg - 13 kg
AP class	3



10 million maintenance-free cycles (max.)



Spring closing C





Inductive sensor



Purged air

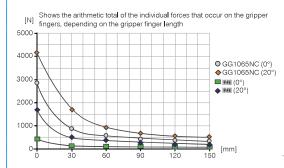


IP40

# **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
My [Nm]	20
Fa [N]	330

# **► INCLUDED IN DELIVERY**



Centering Disc

DST40800

# **▶** RECOMMENDED ACCESSORIES



Stroke adjustment screw

HES0009



Mounting block

KB8-43



Alternate proximity bracket

KHA1065-8



Inductive proximity switch - Connector M8



Magnetic field sensor Angled Cable 0,3 m -

NJ8-E2S





Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



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

KAG500



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

KAW500



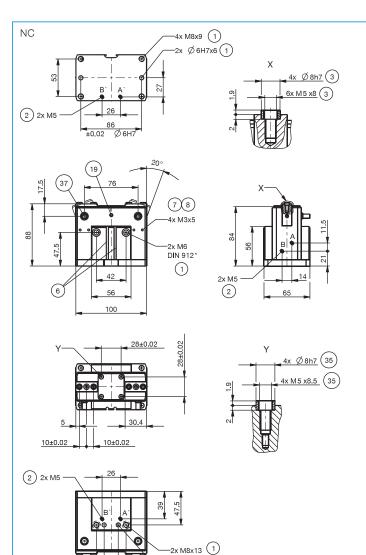
Straight Fittings - Quick Connect Style

GVM:

	► Technical Data*	
Order no.	GG1065NC	GG1065FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	39	39
Gripping moment secured by spring min. [Nm]	6.5	6.5
Gripping force in closing max. (at 0°) [N]**	2910	2910
Gripping force in closing max. (at 20°) [N] * *	4160	4160
Gripping force secured by spring (at 0°) [N]	490	490
Gripping force secured by spring (at 20°) [N]	1745	1745
Closing time [s]	0.04	0.04
Opening time [s]	0.07	0.07
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	68	68
Weight [kg]	1.3	1.4
*All data measured at 6 bar		
**Measured from top edge of jaws		

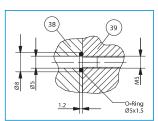
*All data measured at	6	at 6 ba	ır
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20±0.02

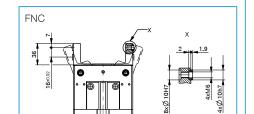


-2x ∅6H7x8 (1)

- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- Tixing for mounting block
- 8 Fixing clamping bracket (KHA)
- (19) Air purge connection option
- 35 Mounting posibillity for stroke adjustment screwe
- Mounting posibillity for cam switch
- 38 Adapter
- Gripper
- A Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



Hoseless air feed-through

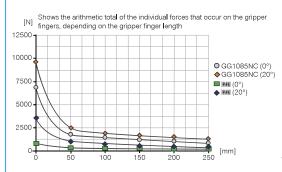


<sup>\* \*</sup> Measured from top edge of jaws

# **▶ PRODUCT SPECIFICATIONS**



#### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	40
My [Nm]	50
Fa [N]	600

# **► INCLUDED IN DELIVERY**



Centering Disc

DST41000

# ► RECOMMENDED ACCESSORIES



Stroke adjustment screw

**HES**0006



Mounting block

KB8-43



Alternate proximity bracket

KHA1085-8



Inductive proximity switch
- Connector M8



Magnetic field sensor Angled Cable 0,3 m -Connector M8

#### NJ8-E2S





Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



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

KAG500



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

KAW500

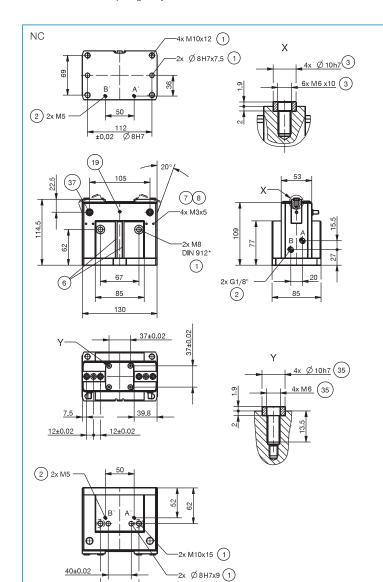


Straight Fittings - Quick Connect Style

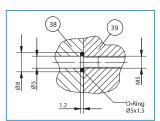
GV1-8X6

	► Technical Data*	
Order no.	GG1085NC	GG1085FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	120	120
Gripping moment secured by spring min. [Nm]	18	18
Gripping force in closing max. (at 0°) [N] * *	7120	7120
Gripping force in closing max. (at 20°) [N] * *	9670	9670
Gripping force secured by spring (at 0°) [N]	1040	1040
Gripping force secured by spring (at 20°) [N]	3600	3600
Closing time [s]	0.05	0.05
Opening time [s]	0.1	0.1
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	145	145
Weight [kg]	2.8	3.2
Weight [kg]	2.8	3.2

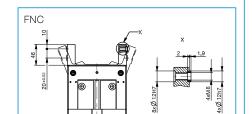
- \*All data measured at 6 bar
- \* \* Measured from top edge of jaws



- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- (19) Air purge connection option
- 35 Mounting posibillity for stroke adjustment screwe
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- Air connection, alternative (open)



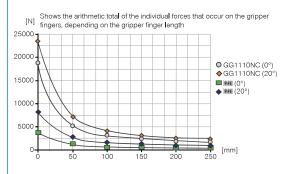
Hoseless air feed-through



# **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
My [Nm]	65
Fa [N]	1000

# **► INCLUDED IN DELIVERY**



Centering Disc

DST41600

# ► RECOMMENDED ACCESSORIES



Stroke adjustment screw

HES0007



Mounting block

KB8-43



Alternate proximity bracket

KHA1110-8



Inductive proximity switch
- Connector M8



Magnetic field sensor Angled Cable 0,3 m -

#### NJ8-E2S





Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



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

KAG500



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

KAW500

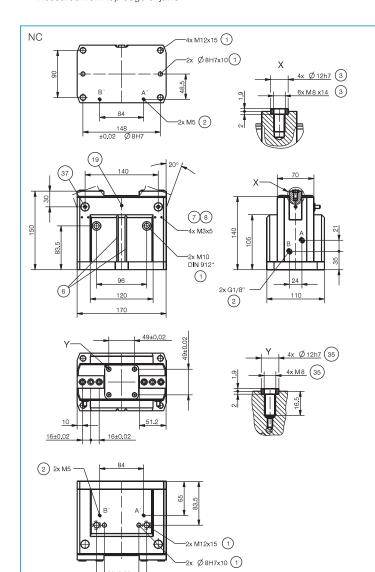


Straight Fittings - Quick Connect Style

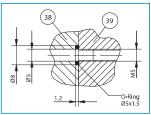
GV1-8X6

	Technical Data*	
Order no.	GG1110NC	GG1110FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	370	370
Gripping moment secured by spring min. [Nm]	75	75
Gripping force in closing max. (at 0°) [N]**	18665	18665
Gripping force in closing max. (at 20°) [N] * *	23240	23240
Gripping force secured by spring (at 0°) [N]	3760	3760
Gripping force secured by spring (at 20°) [N]	8340	8340
Closing time [s]	0.16	0.16
Opening time [s]	0.27	0.27
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	455	455
Weight [kg]	6.3	6.7

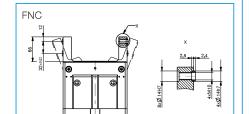
- \*All data measured at 6 bar
- \* \* Measured from top edge of jaws



- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- (19) Air purge connection option
- 35 Mounting posibillity for stroke adjustment screwe
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- Air connection, alternative (open)



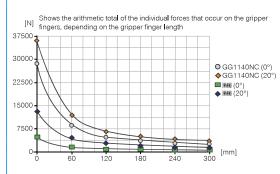
Hoseless air feed-through



# **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



#### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
My [Nm]	120
Fa [N]	1500

# **► INCLUDED IN DELIVERY**



Centering Disc

DST42000

# ► RECOMMENDED ACCESSORIES



Stroke adjustment screw

**HES**0008



Mounting block

KB8-43



Alternate proximity bracket

KHA1140-8



Inductive proximity switch
- Connector M8



Magnetic field sensor Angled Cable 0,3 m -Connector M8

NJ8-E2S





Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



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

KAG500



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

KAW500



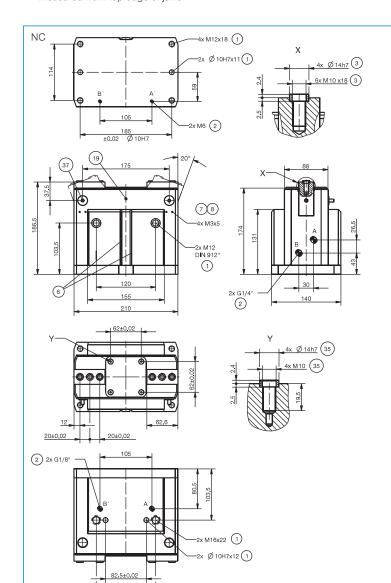
Straight Fittings - Quick Connect Style

GV1-4X8

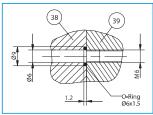
	► Technical Data*	
Order no.	GG1140NC	GG1140FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	725	725
Gripping moment secured by spring min. [Nm]	143	143
Gripping force in closing max. (at 0°) [N]**	29110	29110
Gripping force in closing max. (at 20°) [N] * *	36470	36470
Gripping force secured by spring (at 0°) [N]	5740	5740
Gripping force secured by spring (at 20°) [N]	13110	13110
Closing time [s]	0.25	0.25
Opening time [s]	0.5	0.5
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	760	760
Weight [kg]	12.4	13

<sup>\*</sup>All data measured at 6 bar

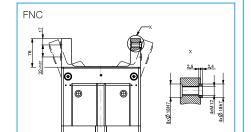
<sup>\* \*</sup> Measured from top edge of jaws



- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- (19) Air purge connection option
- 35 Mounting posibillity for stroke adjustment screwe
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- A Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- Air connection, alternative (open)

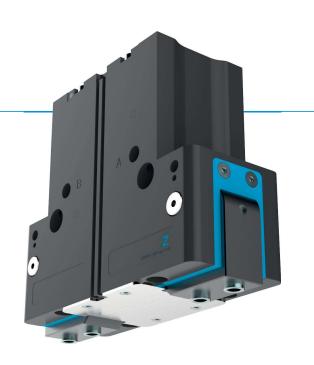


Hoseless air feed-through



### 2-JAW ANGULAR GRIPPERS SERIES GPW5000

### **▶ PRODUCT ADVANTAGES**



### "The Universal One"

### Highest performance with the smallest dimensions

Features a one-of-a-kind ratio of net mass to gripper finger length and gripping moment. The performance of your machine is increased as a result.

### Versatile applicability

Thanks to standard functionality such as IP64 and corrosion protection, you are able to use these grippers in almost any of your applications. Even the toughest environments are no problem.

### Robust and process-reliable

Thanks to a maintenance-free design up to 30 million cycles and the most solid force transmission possible, process assurance is maximized.

### ▶ THE BEST PRODUCT FOR YOUR APPLICATION



### Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

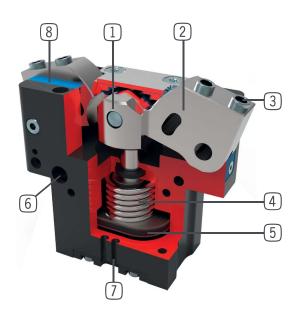
### HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GPW5013			-	-A
Basis version		N			
For external gripping, self-locking, spring closing			С		
Temperature-resistant version up to 130°C				20	



### **BENEFITS IN DETAIL**



### 1 Positively driven lever mechanism

- synchronized the movement of the gripper jaws

### 2 Gripper jaw

- Gripper fingers mounted using removable centring sleeves

### 3 Removable centering sleeves

- quick and economical positioning of the gripper fingers

### 4 Integrated gripping force safety device

- Spring built into cylinder chamber as an energy store

### (5) Drive

- Double-acting pneumatic rotor cylinder

### 6 Mounting and positioning

- Alternatively, on several sides for customized mounting

### (7) Sensing slot

- mounting and positioning of magnetic field sensors

### 8 Dual lip seal

- Prevents grease from being squeezed out, increasing service life

### > SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	+15° / -2°
Gripping force	1330 N - 14500 N
Weight	0,9 kg - 12,1 kg
AP class	5



30 million maintenance-free cycles (max.)



IP64



Temperature-resistant



Spring closing C





Inductive sensor



Magnetic field sensor



Purged air

## 2-JAW ANGULAR GRIPPERS INSTALLATION SIZE GPW5008

### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length

### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	65
My [Nm]	60
Fa [N]	1900

### ► TECHNICAL DATA

	Technical Data*
Order no.	GPW5008NC-00-A
Stroke per jaw [°]	+15/-2
Gripping moment in closing max. [Nm]	33
Gripping moment secured by spring min. [Nm]	7.5
Gripping force in closing max. (at 0°) [N]*	1450
Length of the gripper fingers max. [mm]	115
Permissible weight per jaw max [kg]	0.7
Closing time [s]	0.1
Opening time [s]	0.17
Repetition accuracy +/- [mm]	0.01
Operating pressure [bar]	4 8
Operating temperature [°C]	-10 +90
Air volume per cycle [cm³]	35
Protection to IEC 60529	IP64
Weight [kg]	0.9

### Order no.

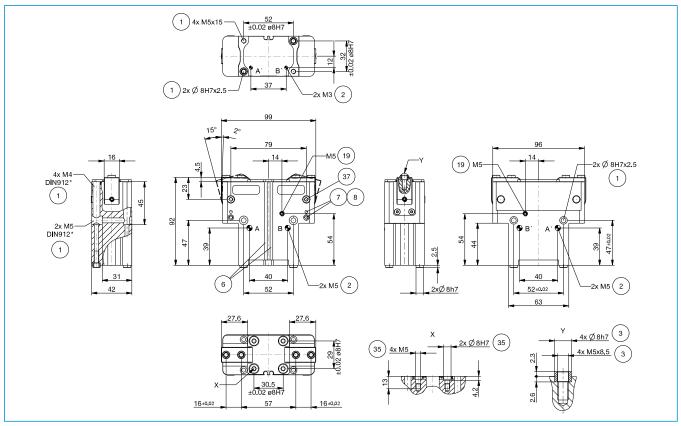
Operating temperature [°C]

Technical Data - High Temperature Version

**GPW5008NC-20-A** -10 ... +130

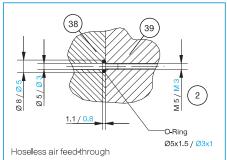
- \*All data measured at 6 bar
- \* \* Measured from top edge of housing

### **TECHNICAL DRAWINGS**

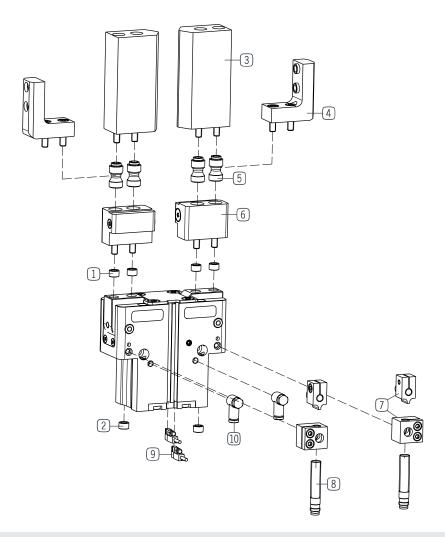


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- 8 Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment

- screw
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- (apen)
- A) Air connection, alternative (close)
- B Air connection, alternative (open)



## 2-JAW ANGULAR GRIPPERS INSTALLATION SIZE GPW5008



### **► INCLUDED IN DELIVERY**



Centering Disc

024231

### ► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel

**UB5008ST** 



LB5008



Changeable jaw, loosepart-set **WB5008L** 



Changeable jaw, fix-part

WB5008F





Attachment Kit for Inductive Proximity Switch



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8 MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8 MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-02

ANS0084



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



Angled Fittings - Quick Connect Style WVM5

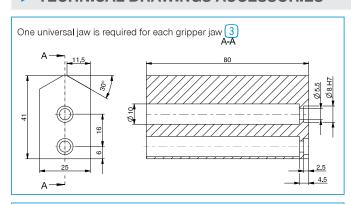


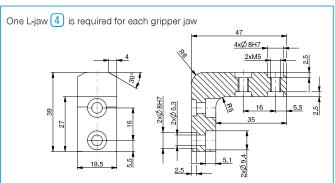
Pressure Safety Valve

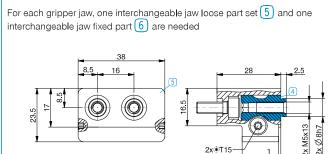
DSV1-8

### KAG500

### **▶ TECHNICAL DRAWINGS ACCESSORIES**





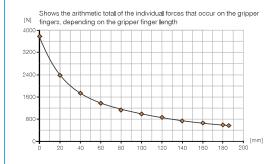


## **2-JAW ANGULAR GRIPPERS**INSTALLATION SIZE GPW5013

### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
My [Nm]	130
Fa [N]	3300

### ► TECHNICAL DATA

	► Technical Data*
Order no.	GPW5013NC-00-A
Stroke per jaw [°]	+15/-2
Gripping moment in closing max. [Nm]	130
Gripping moment secured by spring min. [Nm]	39.5
Gripping force in closing max. (at 0°) [N]	4200
Length of the gripper fingers max. [mm]	185
Permissible weight per jaw max [kg]	2.4
Closing time [s]	0.08
Opening time [s]	0.12
Repetition accuracy +/-[mm]	0.01
Operating pressure [bar]	48
Operating temperature [°C]	-10 +90
Air volume per cycle [cm³]	160
Protection to IEC 60529	IP64
Weight [kg]	3

### Order no.

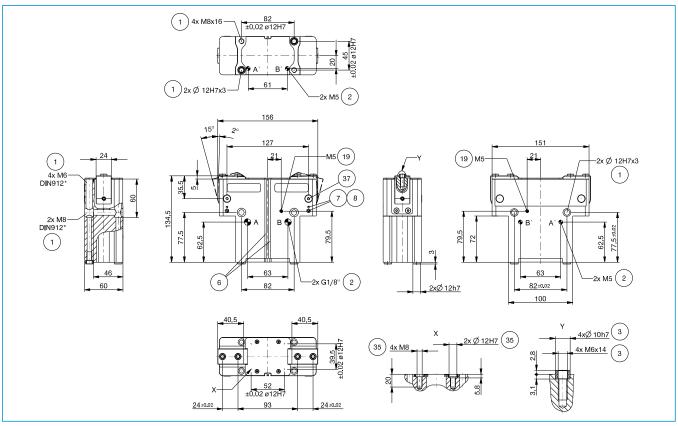
Operating temperature [°C]

► Technical Data - High Temperature Version GPW5013NC-20-A

-10 ... +130

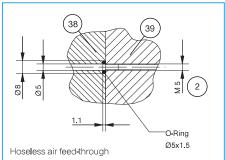
- \*All data measured at 6 bar
- \* \* Measured from top edge of housing

### **TECHNICAL DRAWINGS**

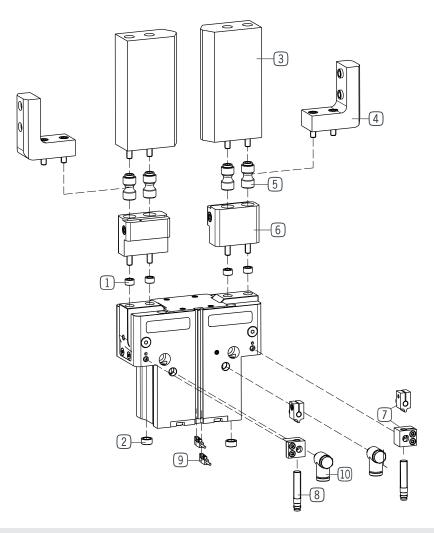


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- (8) Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment

- screw
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- A) Air connection, alternative (close)
- B Air connection, alternative (open)



## **2-JAW ANGULAR GRIPPERS**INSTALLATION SIZE GPW5013



### **► INCLUDED IN DELIVERY**



Centering Disc

Centering Disc

019280

018187

### ► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5013AL



Universal jaw steel

**UB5013ST** 



L-jaw LB5013



Changeable jaw, loosepart-set WB5013L



Changeable jaw, fix-part

WB5013F



Attachment Kit for Inductive Proximity Switch



Inductive proximity switch
- Connector M8



Magnetic field sensor Angled Cable 0,3 m - Connector M8 MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8 MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-02





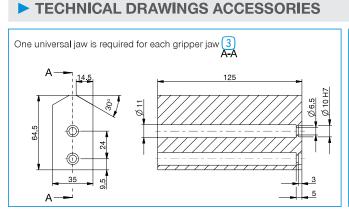


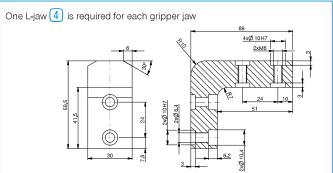
Angled Fittings - Quick Pressure Safety Valve

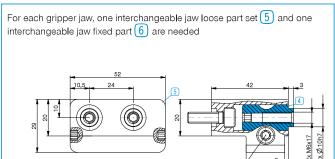
Plug-in connector Straight Cable 5m - Socket M8 (female) KAG500



### TECHNICAL DRAWINGS A







## **2-JAW ANGULAR GRIPPERS**INSTALLATION SIZE GPW5025

### **PRODUCT SPECIFICATIONS**



### Gripping force diagram

Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length

### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
My [Nm]	225
Fa [N]	7500

### ► TECHNICAL DATA

	► Technical Data*
Order no.	GPW5025NC-00-A
Stroke per jaw [°]	+15/-2
Gripping moment in closing max. [Nm]	620
Gripping moment secured by spring min. [Nm]	150
Gripping force in closing max. (at 0°) [N]	14500
Length of the gripper fingers max. [mm]	265
Permissible weight per jaw max [kg]	7
Closing time [s]	0.155
Opening time [s]	0.30
Repetition accuracy +/-[mm]	0.01
Operating pressure [bar]	4 8
Operating temperature [°C]	-10 +90
Air volume per cycle [cm³]	780
Protection to IEC 60529	IP64
Weight [kg]	12.1

### ► Technical Data - High Temperature Version

#### GPW5025NC-20-A

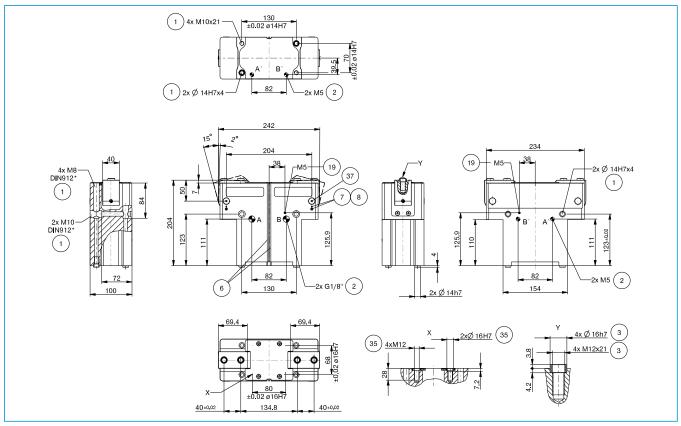
-10 ... +130

### Order no.

Operating temperature [°C]

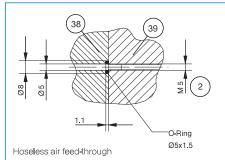
- \*All data measured at 6 bar
- \* \* Measured from top edge of housing

### **TECHNICAL DRAWINGS**

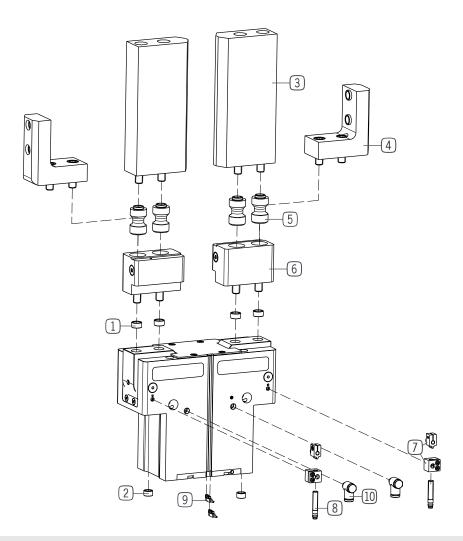


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Fixing for mounting block
- (8) Fixing clamping bracket (KHA)
- 19 Air purge connection option
- 35 Mounting posibillity for stroke adjustment

- screwe
- 3 Mounting posibillity for cam switch
- 38 Adapter
- 39 Gripper
- Air connection (close)
- (apen)
- A) Air connection, alternative (close)
- B Air connection, alternative (open)



## **2-JAW ANGULAR GRIPPERS**INSTALLATION SIZE GPW5025



### **► INCLUDED IN DELIVERY**





2

Centering Disc

030529

019387

### ► RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel

**UB5025ST** 



LB5025



Changeable jaw, loosepart-set WB5025L



Changeable jaw, fix-part

WB5025F





Attachment Kit for Inductive Proximity Switch



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m - Connector M8 MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8 MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-02

ANS0084



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



Angled Fittings - Quick Connect Style WV1-8X8

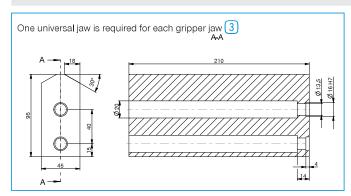


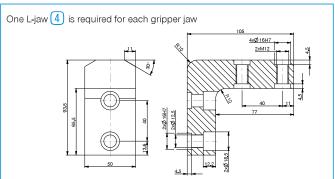
Pressure Safety Valve

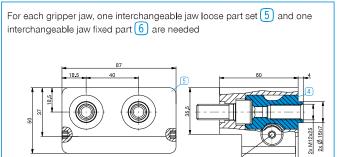
DSV1-8

### KAG500

### **▶ TECHNICAL DRAWINGS ACCESSORIES**







## **2-JAW RADIAL GRIPPER**THE SERIES AT A GLANCE



# Series GK 420 Series GG4000 434

### 2-JAW RADIAL GRIPPER SERIES GK

### **▶ PRODUCT ADVANTAGES**



### "The compact"

### Proven technology

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

### Best force/installation space ratio

Force transmission using the toggle lever enables high gripping force while optimally utilizing the installation space

### Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

### ▶ THE BEST PRODUCT FOR YOUR APPLICATION



### Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

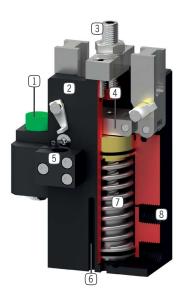
HOW TO ORDER
CORRECTLY

 The product order numbers are arranged according to this diagram:

Order no.	GK15N		-B	
External gripping, self locking mechanism at 0° opening are spring closing	ngle and	С		



### **BENEFITS IN DETAIL**



- 1 Buffer stop
  - absorption of kinetic energy for heavy and long gripper fingers
- 2 Robust, lightweight housing
  - Hard-coated aluminum alloy
- 3 Stroke adjustment screw
  - Infinitely adjustable opening stroke
- 4 Guided toggle lever mechanism
  - synchronized the movement of the gripper jaws
  - mechanically self-locking
- 5 Mounting block
  - mounting for inductive proximity switch
- 6 Sensing slot
  - mounting and positioning of magnetic field sensors
- 7 Integrated gripping force safety device
  - spring integrated into cylinder as energy storage
- 8 Energy supply
  - possible from several sides

### > SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	0° - 90°
Gripping force	70 N - 4250 N
Weight	0,1 kg - 4,1 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



Inductive sensor



IP20

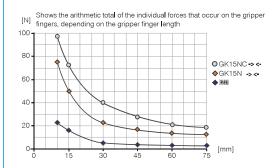


Magnetic field sensor

### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	75

### ► RECOMMENDED ACCESSORIES



Centering Disc



Mounting block

KB3



Buffer stop

PB15N



Inductive proximity switch
- Cable 5 m

NJ3-E2



Inductive Proximity
Switch Cable 0,3 m Connector M8

NJ3-E2SK





Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



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

KAG500



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

KAW500

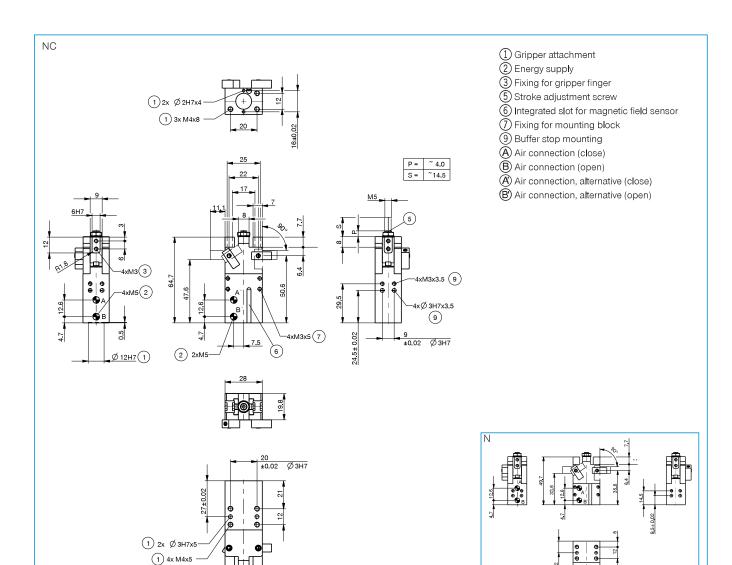


Straight Fittings - Quick Connect Style

GVM5

	► Technical Data*	
Order no.	GK15N-B	GK15NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	1.2	1.6
Gripping moment secured by spring min. [Nm]		0.4
Gripping force in closing [N] * *	70	100
Closing time [s]	0.1	0.2
Opening time [s]	0.1	0.2
Repetition accuracy +/- [mm]	0.06	0.06
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	2	2.4
Weight [kg]	0.1	0.12

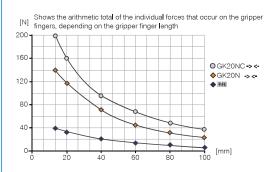
- \*All data measured at 6 bar
- \*\*Measured from top edge of housing



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
My [Nm]	1
Fa [N]	150

### **► INCLUDED IN DELIVERY**



Mounting block

KB8K

### ► RECOMMENDED ACCESSORIES



Centering Disc

ZE20H7X4



Buffer stop

PB20N



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



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

KAG500



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

KAW500



Straight Fittings - Quick Connect Style

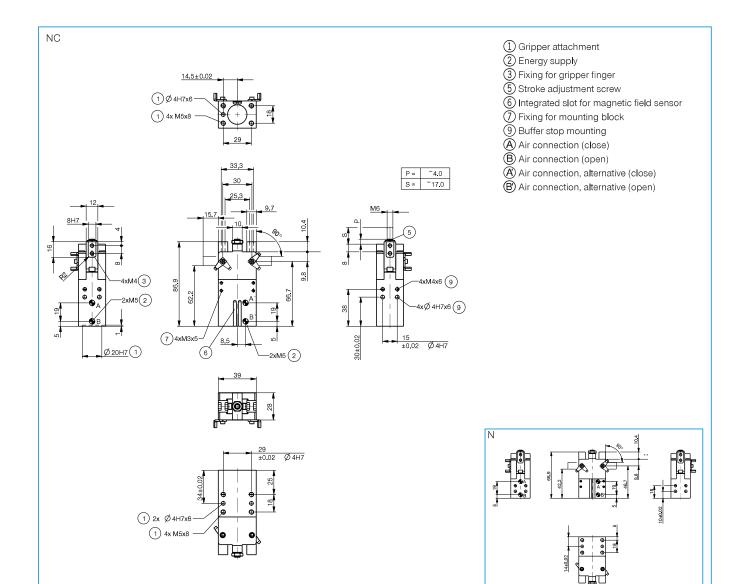
GVM5



Flow Control Valves - with Swivel joint

	Technical Data*	
Order no.	GK20N-B	GK20NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	3	4.2
Gripping moment secured by spring min. [Nm]		1.2
Gripping force in closing [N] * *	150	210
Closing time [s]	0.1	0.2
Opening time [s]	0.1	0.2
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	9	11
Weight [kg]	0.23	0.3

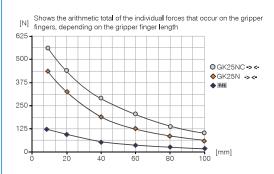
- \*All data measured at 6 bar
- \*\*Measured from top edge of housing



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.5
My [Nm]	4
Fa [N]	250

### INCLUDED IN DELIVERY



Mounting block

KB8K

### ► RECOMMENDED ACCESSORIES



Centering Disc

ZE20H7X4



Buffer stop

PB25N



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



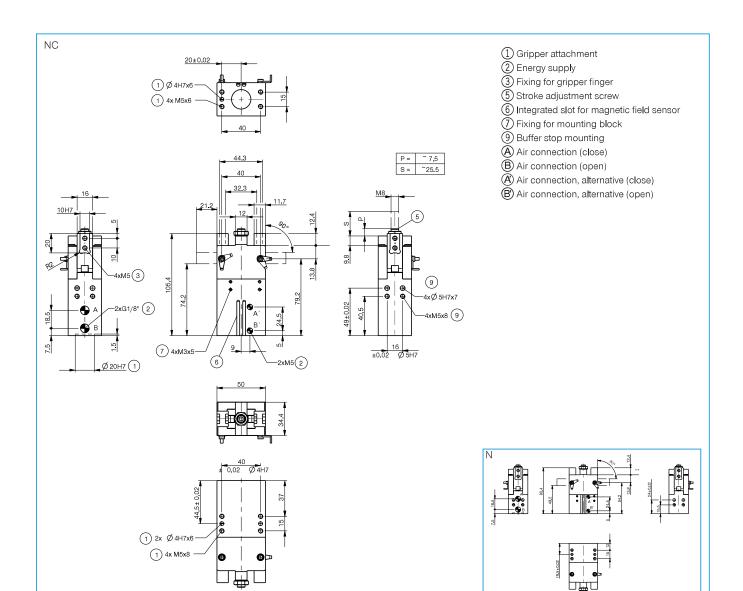
Straight Fittings - Quick Connect Style



Flow Control Valves - with Swivel joint

	► Technical Data*	
Order no.	GK25N-B	GK25NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	10.5	14.5
Gripping moment secured by spring min. [Nm]		4
Gripping force in closing [N] * *	440	610
Closing time [s]	0.15	0.25
Opening time [s]	0.15	0.25
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	18	21
Weight [kg]	0.42	0.58

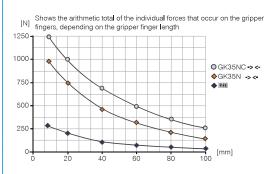
- \*All data measured at 6 bar
- \*\*Measured from top edge of housing



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	12
My [Nm]	20
Fa [N]	400

### INCLUDED IN DELIVERY



Mounting block

KB8K

### ► RECOMMENDED ACCESSORIES



Centering Disc

ZE25H7X6



Buffer stop

PB35N



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



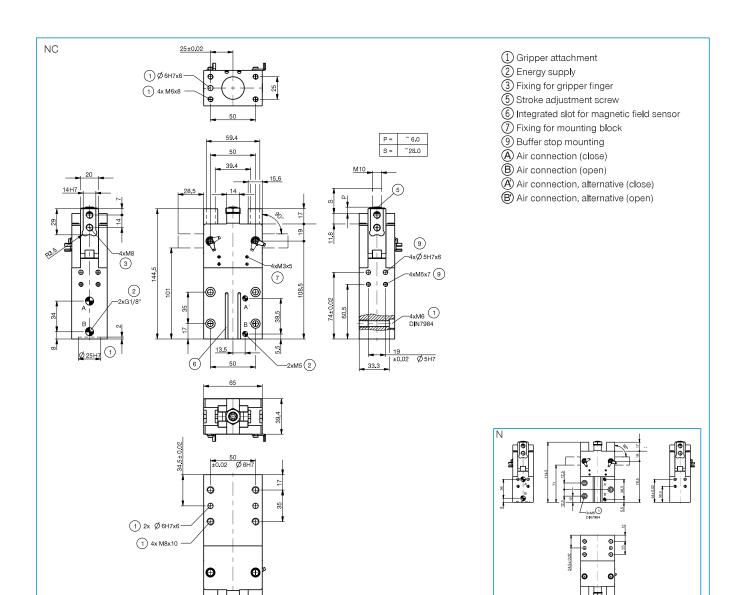
Straight Fittings - Quick Connect Style



Flow Control Valves - with Swivel joint

	► Technical Data*	
Order no.	GK35N-B	GK35NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	27.5	36.5
Gripping moment secured by spring min. [Nm]		9
Gripping force in closing [N] * *	950	1250
Closing time [s]	0.25	0.35
Opening time [s]	0.25	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	43	50
Weight [kg]	0.9	1.2

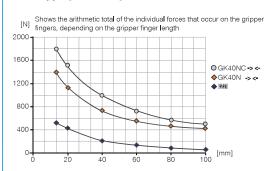
- \*All data measured at 6 bar
- \*\*Measured from top edge of housing



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	17
My [Nm]	30
Fa [N]	600

### INCLUDED IN DELIVERY



Mounting block

KB8K

### ► RECOMMENDED ACCESSORIES



Centering Disc

ZE30H7X4



Buffer stop

PB40N



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Straight Ca-ble 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

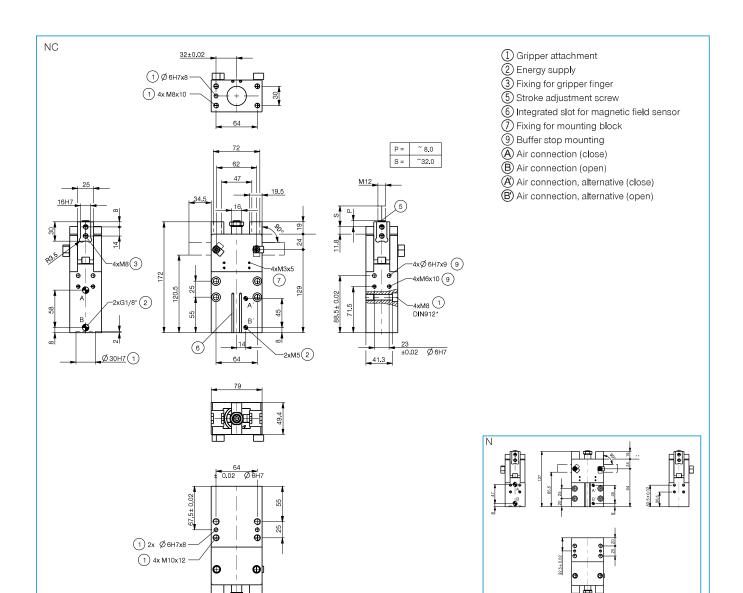


Flow Control Valves - with Swivel joint

	► Technical Data*	
Order no.	GK40N-B	GK40NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	47	62
Gripping moment secured by spring min. [Nm]		15
Gripping force in closing [N] * *	1400	1820
Closing time [s]	0.25	0.35
Opening time [s]	0.25	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	78	90
Weight [kg]	1.7	2,2

<sup>\*</sup>All data measured at 6 bar

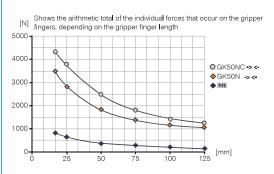
<sup>\*\*</sup>Measured from top edge of housing



### > PRODUCT SPECIFICATIONS



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	28
My [Nm]	40
Fa [N]	800

### **► INCLUDED IN DELIVERY**



Mounting block

KB8K

### ► RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



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

KAW500



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

KAG500



Straight Fittings - Quick Connect Style

GV1-8X6



Centering Disc

ZE30H7X6



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0.3 m - Connector M8

MFS204SKHC



Flow Control Valves - with Swivel joint

DRV1-8X6



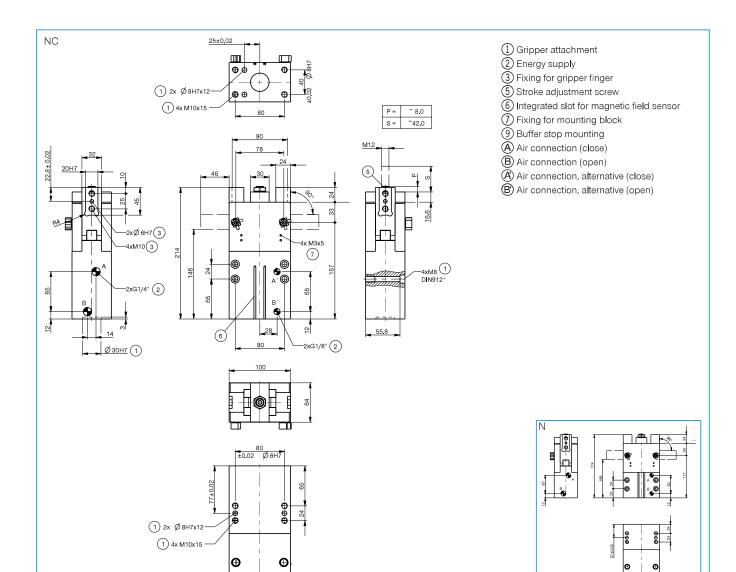
Plug-in connector customizable Straight - Connector M8

S8-G-3

	► Technical Data*	
Order no.	GK50N-B	GK50NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	150	183
Gripping moment secured by spring min. [Nm]		33
Gripping force in closing [N] * *	3500	4250
Closing time [s]	0.4	0.5
Opening time [s]	0.4	0.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	160	200
Weight [kg]	3.5	4.1

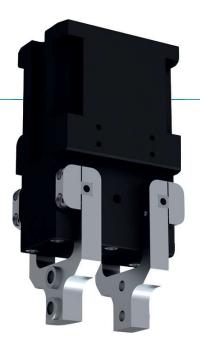
<sup>\*</sup>All data measured at 6 bar

<sup>\*\*</sup>Measured from top edge of housing



### 2-JAW RADIAL GRIPPER SERIES GG4000

### **▶ PRODUCT ADVANTAGES**



### "The sealed"

### Suitable for use under extreme conditions

The sealed rotation axis guarantees process reliability even under the harshest conditions

### Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

### Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free gripping cycles

### ► THE BEST PRODUCT FOR YOUR APPLICATION



### Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

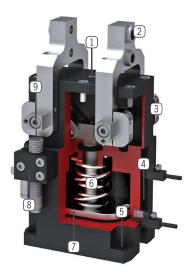
### HOW TO ORDER CORRECTLY

The product order numbers are arranged according to this diagram:

Order no.	GG4032		С	
Stroke per jaw 90°		N		
Stroke per jaw 20°		S		



### **BENEFITS IN DETAIL**



- (1) Stroke adjustment screw
  - Infinitely adjustable opening stroke
- 2 Removable centering sleeves
  - individual gripper finger mounting
- 3 Robust, lightweight housing
  - Hard-coated aluminum alloy
- 4 Sensing slot
  - mounting and positioning of magnetic field sensors
- (5) Mounting and positioning
  - mounting possible from several sides for versatile positioning
- 6 Integrated gripping force safety device
  - spring integrated into cylinder as energy storage
- 7 Position sensing
  - permanent magnet for direct monitoring of piston movement
- 8 Mounting block
  - mounting for inductive proximity switch
- 9 Sealed rotation point
  - for use under extreme conditions

### SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	0° <b>-</b> 90°
Gripping force	430 N - 4000 N
Weight	0,25 kg - 4,5 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor





IP64

Spring closing C



High-strength S



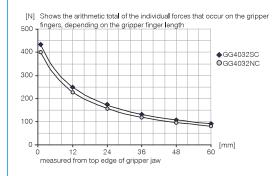
Magnetic field sensor



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8.5
My [Nm]	8.5
Fa [N]	180

### **► INCLUDED IN DELIVERY**



Centering Disc



Stroke adjustment screw

DST40600

HES0014

### ► RECOMMENDED ACCESSORIES



Mounting block

KB4-06



Inductive proximity switch - Cable 5 m

NJ4-E2-01



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8



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

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female) KAW500



Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8

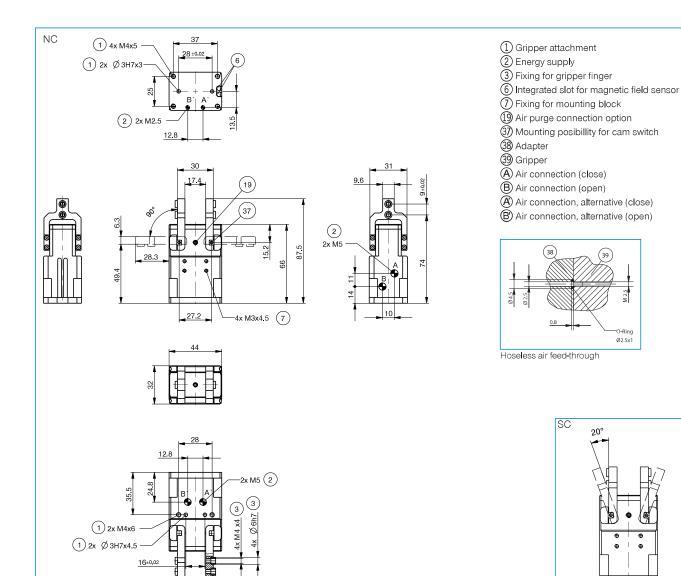


Plug-in connector customizable Straight - Connector M8

S8-G-3

	► Technical Data*	
Order no.	GG4032NC	GG4032SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	6.5	7
Gripping moment secured by spring min. [Nm]	1	1.5
Gripping force in closing [N]	430	460
Length of the gripper fingers max. [mm]	65	65
Permissible weight per jaw max [kg]	0.055	0.055
Closing time [s]	0.055	0.02
Opening time [s]	0.08	0.03
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	13	10
Weight [kg]	0.25	0.25

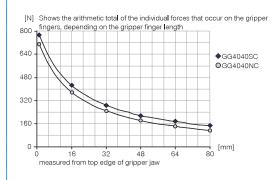
<sup>\*</sup>All data measured at 6 bar



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	19
My [Nm]	19
Fa [N]	180

### INCLUDED IN DELIVERY



Centering Disc



Stroke adjustment screw

DST40800

HES0015

### ► RECOMMENDED ACCESSORIES



Mounting block

KB8-48



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8



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

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female) KAW500



Connect Style





Pressure Safety Valve

DSV1-8

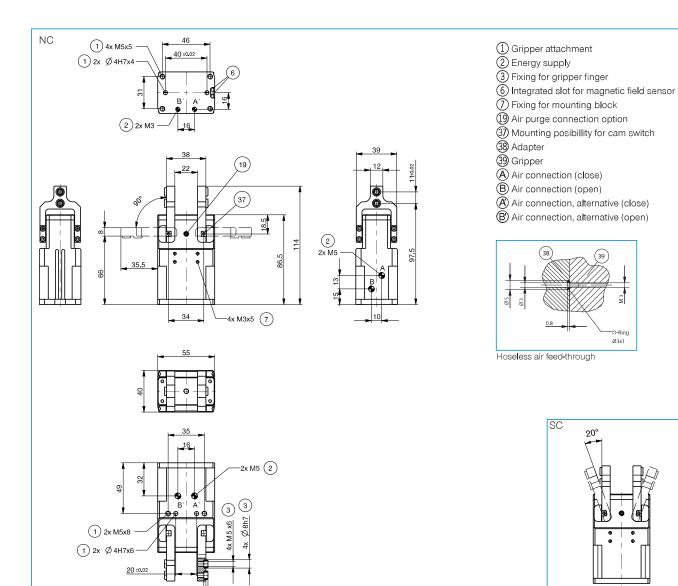


Plug-in connector customizable Straight - Connector M8

S8-G-3

Order no. Go Stroke per jaw [°] 90	GG4040NC	GG4040SC
Stroke per jaw [°] 90		
	0	20
Gripping moment in closing at 0° [Nm]	3	15
Gripping moment secured by spring min. [Nm] 6		8.5
Gripping force in closing [N] 70	700	800
Length of the gripper fingers max. [mm] 85	5	85
Permissible weight per jaw max [kg] 0.	1.12	0.12
Closing time [s]	1.060	0.02
Opening time [s] 0.	L11	0.06
Repetition accuracy +/-[mm] 0.0	.05	0.05
Operating pressure min. [bar] 4		4
Operating pressure max. [bar] 8		8
Operating temperature min. [°C] 5		5
Operating temperature max. [°C] +8	80	+80
Air volume per cycle [cm³] 24	4	18
Weight [kg] 0.	.5	0.5

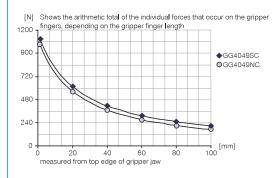
<sup>\*</sup>All data measured at 6 bar



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	22
My [Nm]	22
Fa [N]	475

### **► INCLUDED IN DELIVERY**



Centering Disc



Stroke adjustment screw

DST41000

HES0016

### ► RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8



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

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8

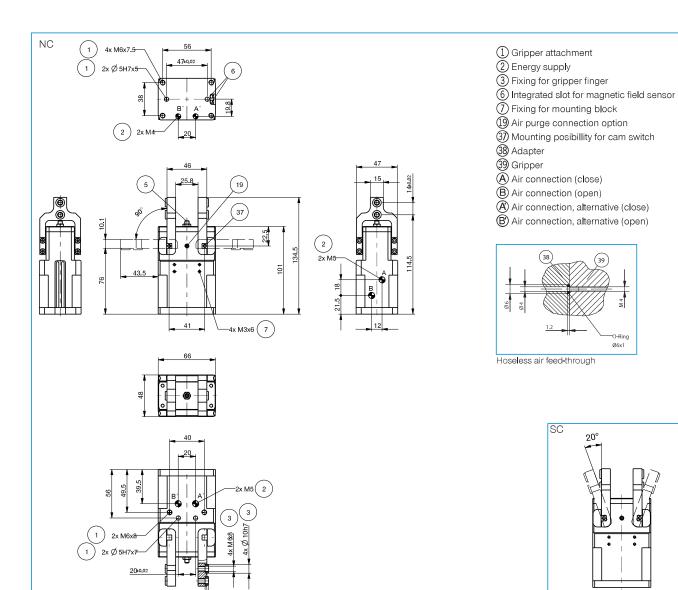


Plug-in connector customizable Straight - Connector M8

S8-G-3

	► Technical Data*	
Order no.	GG4049NC	GG4049SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	23	26
Gripping moment secured by spring min. [Nm]	4.2	7.2
Gripping force in closing [N]	1000	1150
Length of the gripper fingers max. [mm]	100	100
Permissible weight per jaw max [kg]	0.2	0.2
Closing time [s]	0.11	0.05
Opening time [s]	0.17	0.09
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	44	33
Weight [kg]	0.85	0.85

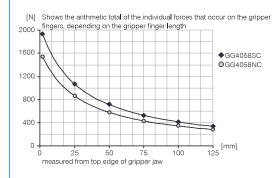
<sup>\*</sup>All data measured at 6 bar



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	33
My [Nm]	33
Fa [N]	720

### **► INCLUDED IN DELIVERY**



Centering Disc



Stroke adjustment screw

DST11500

HES0017

### ► RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8



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

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female) KAW500



Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8

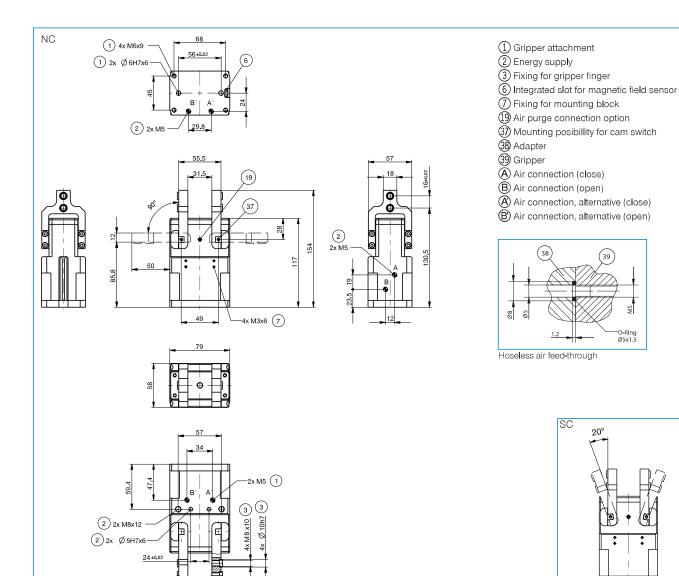


Plug-in connector customizable Straight - Connector M8

S8-G-3

	► Technical Data*	
Order no.	GG4058NC	GG4058SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	46	53.5
Gripping moment secured by spring min. [Nm]	5.7	14.5
Gripping force in closing [N]	1650	1900
Length of the gripper fingers max. [mm]	120	120
Permissible weight per jaw max [kg]	0.36	0.36
Closing time [s]	0.16	0.14
Opening time [s]	0.28	0.17
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm <sup>3</sup> ]	86	65
Weight [kg]	1.4	1.4

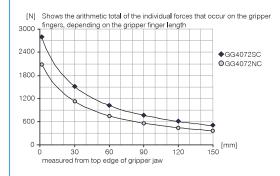
<sup>\*</sup>All data measured at 6 bar



### **▶ PRODUCT SPECIFICATIONS**



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	41
My [Nm]	41
Fa [N]	1100

### INCLUDED IN DELIVERY



Centering Disc



Stroke adjustment screw

DST42000

HES0018

### ► RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Inductive proximity switch

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8



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

KAG500



Plug-in connector Angled Ca-ble 5m - Socket M8 (female)

KAW500



Straight Fittings - Quick Connect Style

GV1-8X6



Pressure Safety Valve

DSV1-8

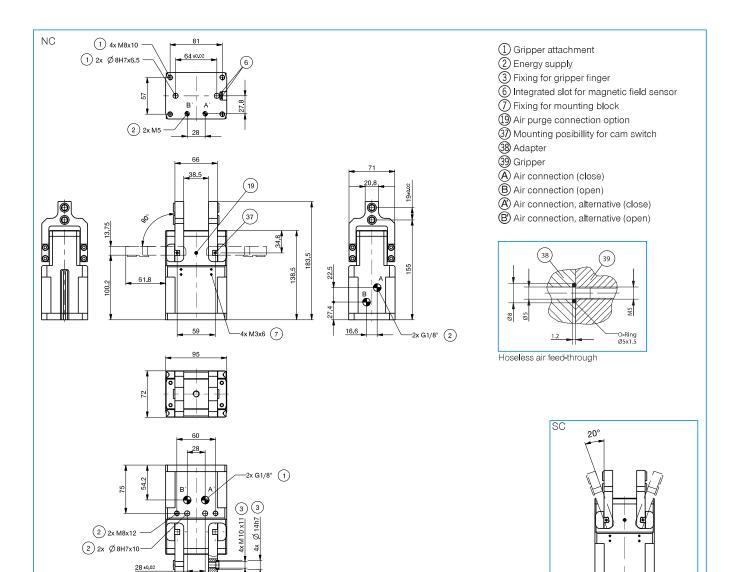


Plug-in connector customizable Straight - Connector M8

S8-G-3

	► Technical Data*	
Order no.	GG4072NC	GG4072SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	69	94
Gripping moment secured by spring min. [Nm]	10	21
Gripping force in closing [N]	1950	2700
Length of the gripper fingers max. [mm]	145	145
Permissible weight per jaw max [kg]	0.65	0.65
Closing time [s]	0.21	0.06
Opening time [s]	0.34	0.175
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	130	100
Weight [kg]	2.45	2.45

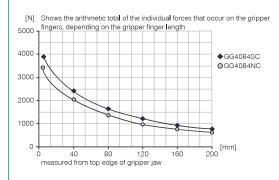
<sup>\*</sup>All data measured at 6 bar



### > PRODUCT SPECIFICATIONS



### Gripping force diagram



### Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
My [Nm]	60
Fa [N]	1800

### **► INCLUDED IN DELIVERY**



Centering Disc



Stroke adjustment screw

DST43000

HES0019

### **▶** RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Inductive proximity switch - Connector M8

NJ8-E2S



Magnetic field sensor Angled Cable 0,3 m -Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m -

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8



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

KAG500



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



Straight Fittings - Quick Connect Style

GV1-8X6



Pressure Safety Valve

DSV1-8



Plug-in connector customizable Straight - Connector M8

S8-G-3

	Technical Data*	
Order no.	GG4084NC	GG4084SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	135	156
Gripping moment secured by spring min. [Nm]	80	115
Gripping force in closing [N]	3500	4000
Length of the gripper fingers max. [mm]	175	175
Permissible weight per jaw max [kg]	1	1
Closing time [s]	0.27	0.11
Opening time [s]	0.48	0.250
Repetition accuracy +/-[mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm <sup>3</sup> ]	220	170
Weight [kg]	4.5	4.5
*All data measured at 6 bar		

