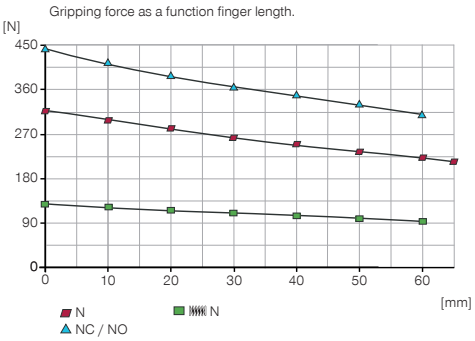
3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5003

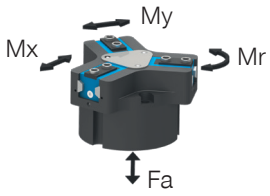
▶ PRODUCT SPECIFICATIONS

▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	7
Mx [Nm]	14
My [Nm]	13
Fa [N]	550

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5003N	GPD5003NC	GPD5003NO
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	310	440	
Gripping force in opening [N]	335		465
Gripping force secured by spring min. [N]		130	130
Closing time [s]	0.015	0.01	0.02
Opening time [s]	0.015	0.02	0.01
Weight per jaw max. [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repeatability +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	10 ... +90
Air volume per cycle [cm³]	4.2	9.5	9.5
Protection to IEC 60529	IP64	IP64	IP64
Weight [kg]	0.14	0.18	0.18

▶ Technical Data - Protector Version

Order no.	GPD5003NP	GPD5003NCP	GPD5003NOP
Protection to IEC 60529	IP67**	IP67**	IP67**
Weight [kg]	0.18	0.22	0.22

▶ Technical Data - High Temperature Version

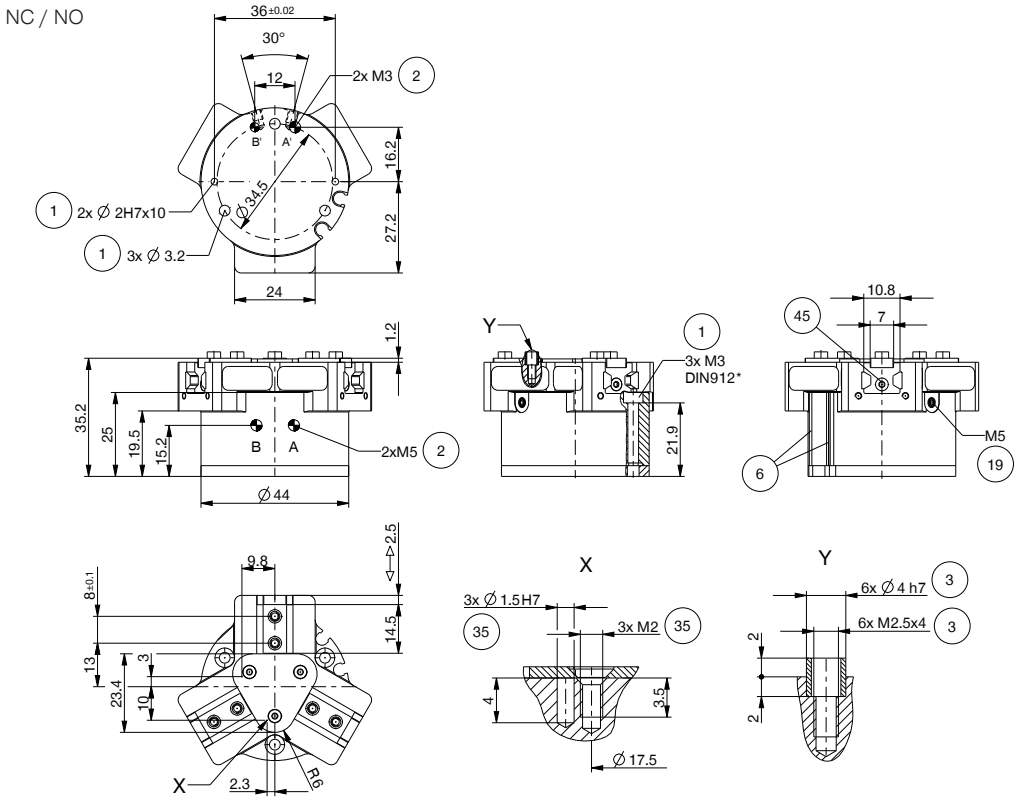
Order no.	GPD5003NT	GPD5003NCT	GPD5003NOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

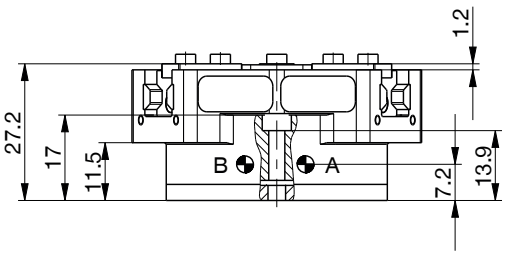
** with purged air

▶ TECHNICAL DRAWINGS

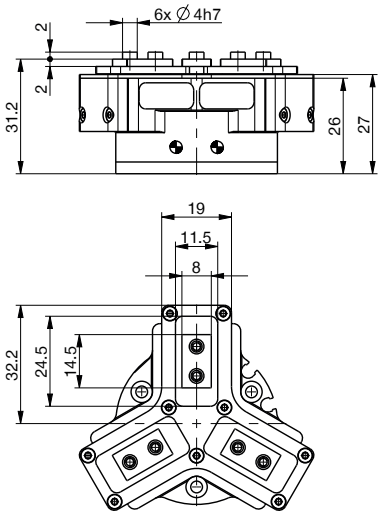
NC / NO



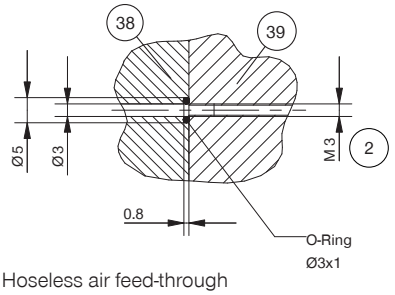
N



Protector version

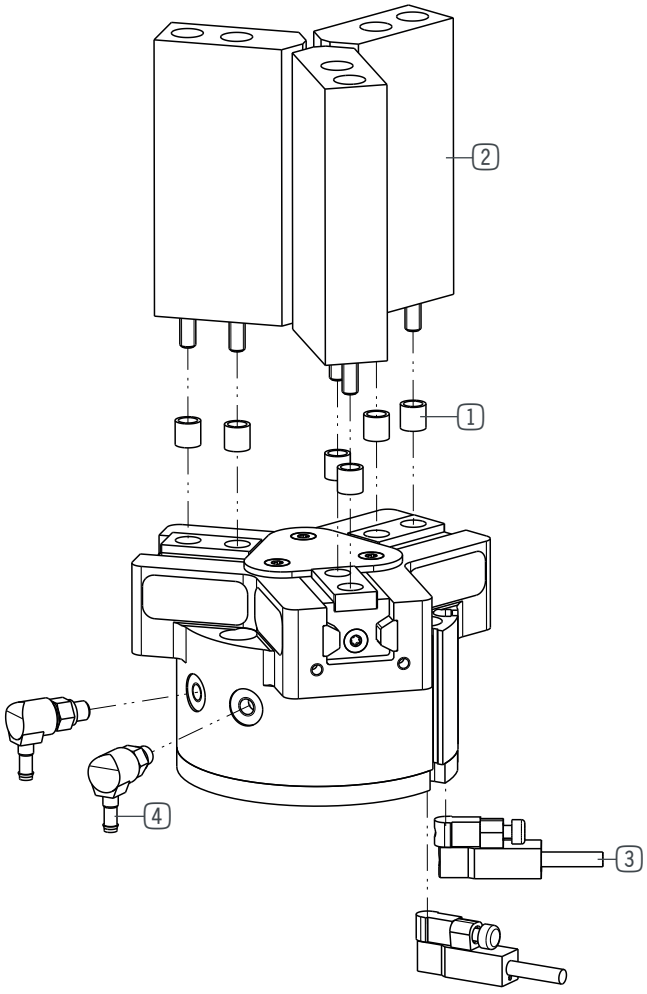


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5003



▶ INCLUDED IN DELIVERY

1

Centering Disc

DST06510

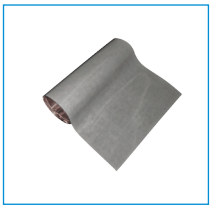
▶ RECOMMENDED ACCESSORIES

Universal jaw aluminium

UB5003AL

Universal jaw steel

UB5003ST



Rubber Coated Tape Smooth

KF50G

Rubber Coated Tape Knobbed

KF50N

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-01

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

KAW500

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

KAG500

Plug-in connector customizable Straight - Connector M8

S8-G-3

Plug-in connector customizable Straight - Connector M12

S12-G-3

Angled Fittings - Barb Style Connection

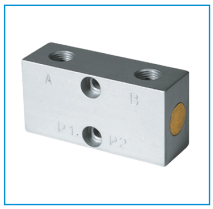
WVM3

Straight Fittings - Barb Style Connection

GVM3

Quick Exhaust Valve

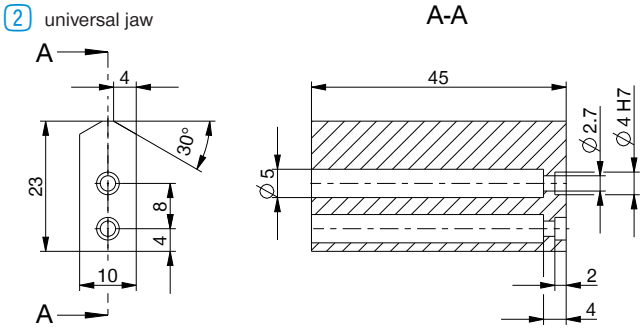
DEV04



Pressure Safety Valve

DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES



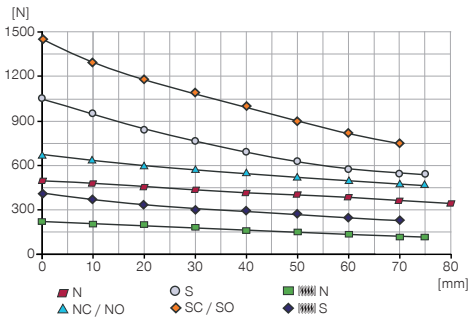
2 One universal jaw is required for each gripper jaw

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5004

▶ PRODUCT SPECIFICATIONS

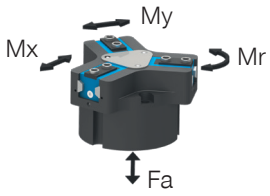
▶ Gripping force diagram

Gripping force as a function finger length.



▶ Forces and moments

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



Mr [Nm]	14
Mx [Nm]	29
My [Nm]	23
Fa [N]	750

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5004N	GPD5004NC	GPD5004NO	GPD5004S	GPD5004SC	GPD5004SO
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	460	650		1010	1430	
Gripping force in opening [N]	500		690	1100		1520
Gripping force secured by spring min. [N]		190	190		420	420
Closing time [s]	0.025	0.018	0.028	0.025	0.018	0.028
Opening time [s]	0.025	0.028	0.018	0.025	0.028	0.018
Weight per jaw max. [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repeatability +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	11	21	21	11	21	21
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.27	0.33	0.33	0.27	0.33	0.33

▶ Technical Data - Protector Version

Order no.	GPD5004NP	GPD5004NCP	GPD5004NOP	GPD5004SP	GPD5004SCP	GPD5004SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.35	0.41	0.41	0.35	0.41	0.41

▶ Technical Data - High Temperature Version

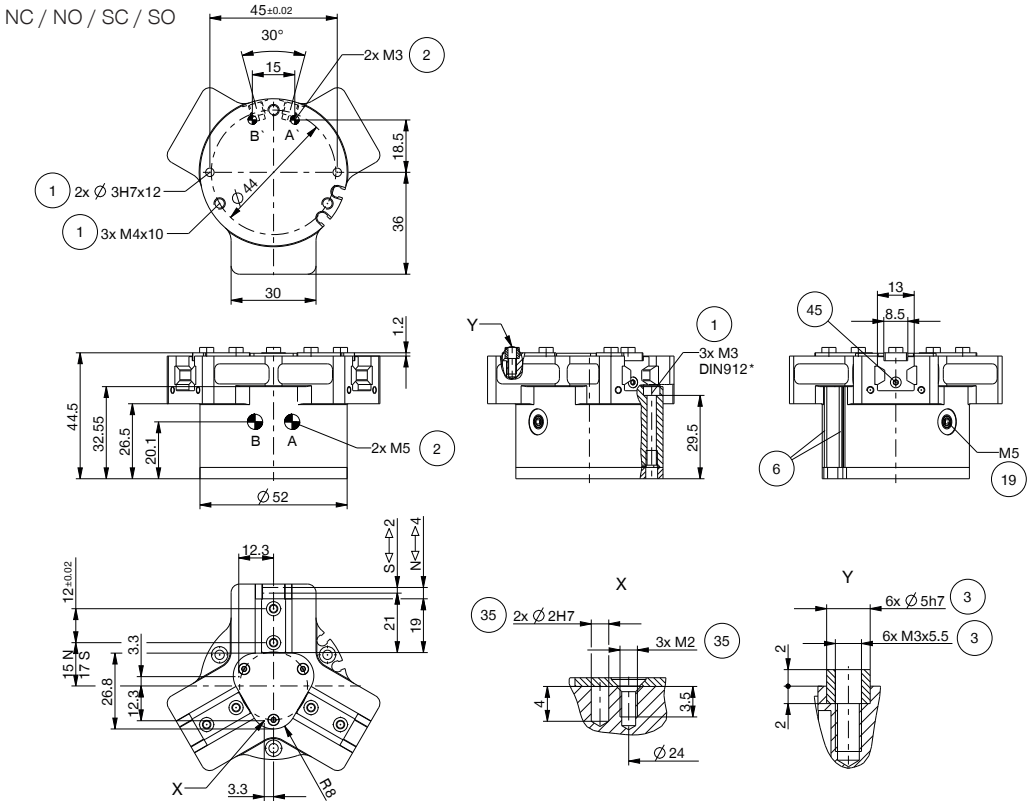
Order no.	GPD5004NT	GPD5004NCT	GPD5004NOT	GPD5004ST	GPD5004SCT	GPD5004SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

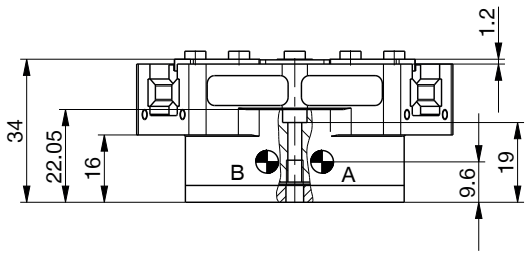
** with purged air

▶ TECHNICAL DRAWINGS

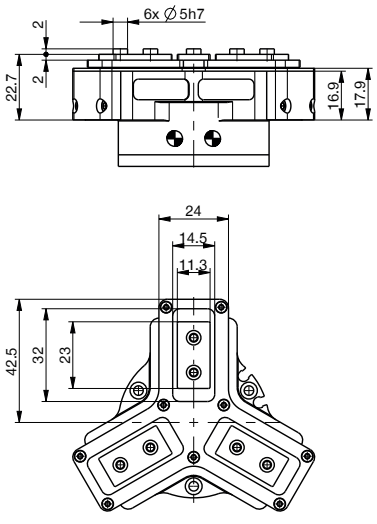
NC / NO / SC / SO



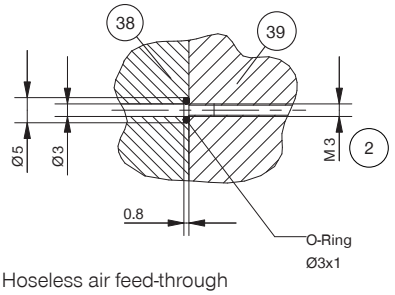
N / S



Protector version

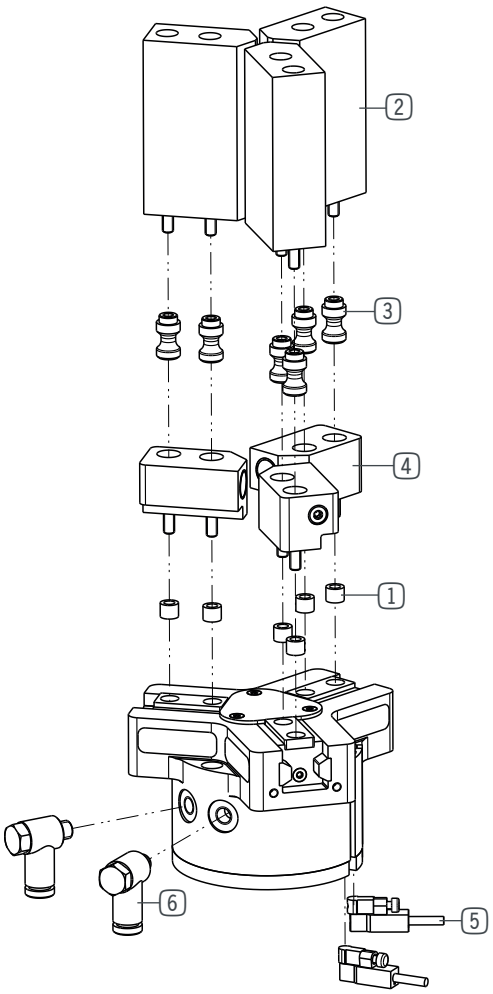


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ Air connection, alternative (close)
Ⓑ Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5004



▶ INCLUDED IN DELIVERY

1

Centering Disc

015761

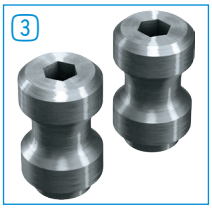
▶ RECOMMENDED ACCESSORIES

[2] Universal jaw aluminium

UB5004AL

[2] Universal jaw steel

UB5004ST



[3] Changeable jaw, loose-part-set

WB5004L

[4] Changeable jaw, fix-part

WB5004F

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

MFS103SKHC

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

MFS204SKHC

[5] 2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01

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

KAW500

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

KAG500

Plug-in connector customizable Straight - Connector M8

S8-G-3

Plug-in connector customizable Straight - Connector M12

S12-G-3

[6] Angled Fittings - Quick Connect Style

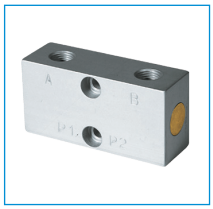
WVM5

[6] Straight Fittings - Quick Connect Style

GVM5

Quick Exhaust Valve

DEV04

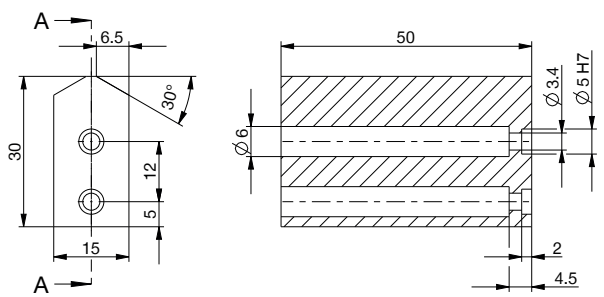


Pressure Safety Valve

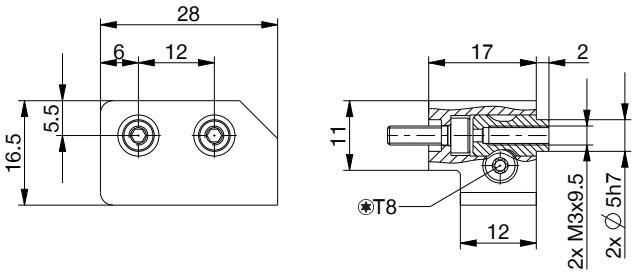
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

[2] universal jaw



[3] changeable jaw, loose-part-set and [4] changeable jaw, fix-part



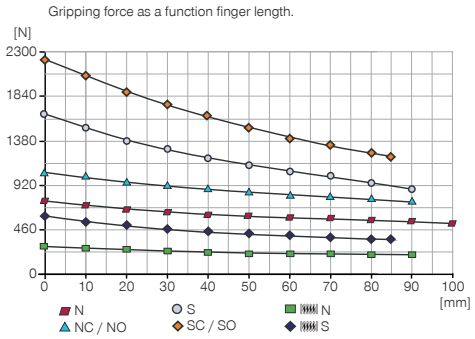
[2] One universal jaw is required for each gripper jaw

[3] [4] Each gripper jaw requires one changeable jaw fix-part and loose-part-set

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5006

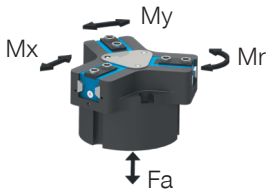
▶ PRODUCT SPECIFICATIONS

▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5006N	GPD5006NC	GPD5006NO	GPD5006S	GPD5006SC	GPD5006SO
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	740	1020		1620	2240	
Gripping force in opening [N]	800		1080	1750		2370
Gripping force secured by spring min. [N]		280	280		620	620
Closing time [s]	0.028	0.018	0.038	0.028	0.018	0.038
Opening time [s]	0.028	0.038	0.018	0.028	0.038	0.018
Weight per jaw max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repeatability +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.48	0.58	0.58	0.48	0.58	0.58

▶ Technical Data - Protector Version

Order no.	GPD5006NP	GPD5006NCP	GPD5006NOP	GPD5006SP	GPD5006SCP	GPD5006SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.61	0.71	0.71	0.61	0.71	0.71

▶ Technical Data - High Temperature Version

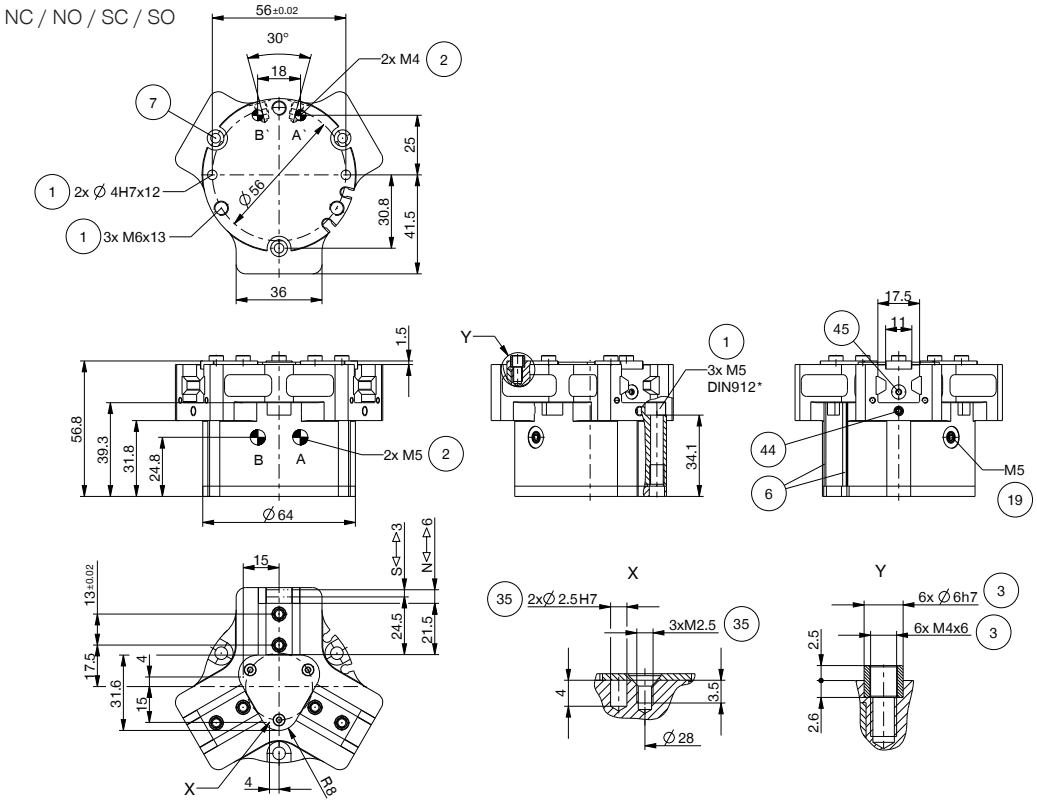
Order no.	GPD5006NT	GPD5006NCT	GPD5006NOT	GPD5006ST	GPD5006SCT	GPD5006SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

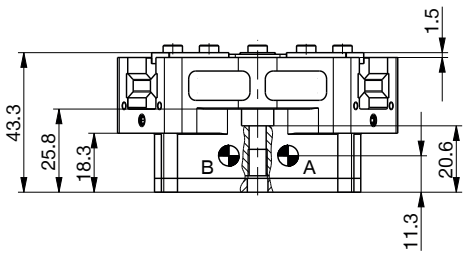
** with purged air

▶ TECHNICAL DRAWINGS

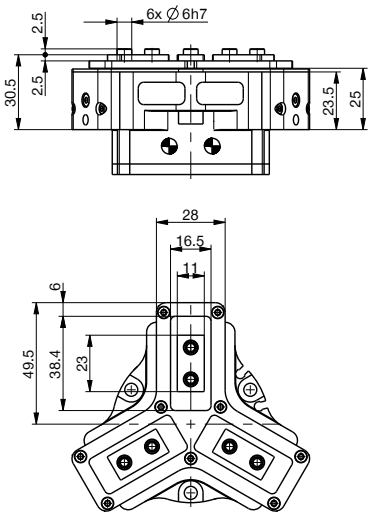
NC / NO / SC / SO



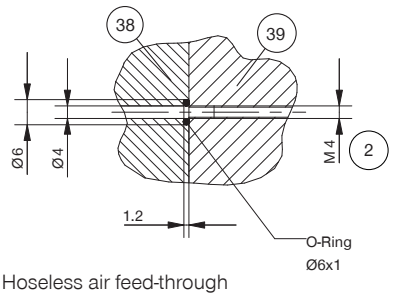
N / S



Protector version

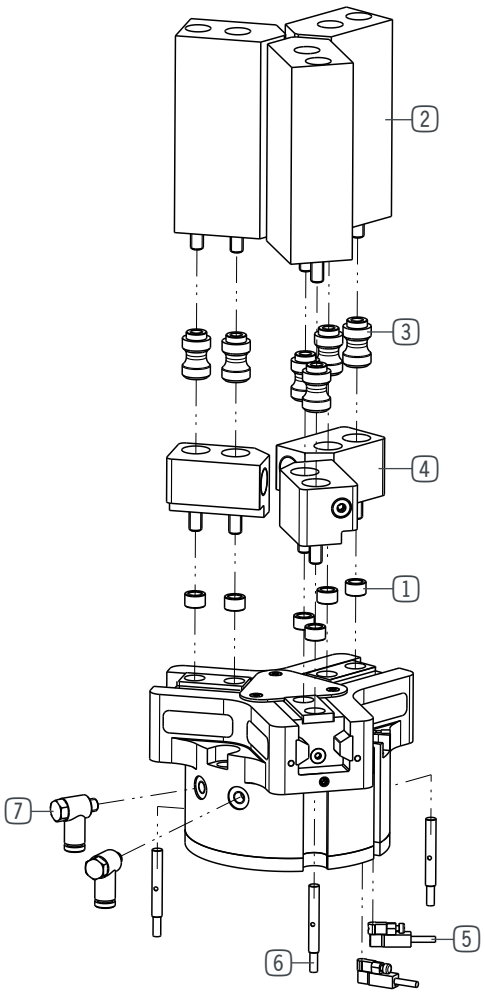


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑦ Mounting block
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊹ Clamp for sensor
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5006



▶ INCLUDED IN DELIVERY

Centering Disc

024230

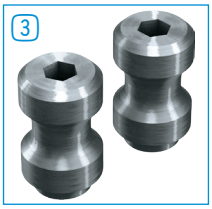
▶ RECOMMENDED ACCESSORIES

Universal jaw aluminium

UB5006AL

Universal jaw steel

UB5006ST



Changeable jaw, loose-part-set

WB5006L

Changeable jaw, fix-part

WB5006F

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-01

Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01

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

KAW500

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

KAG500

Plug-in connector customizable Straight - Connector M8

S8-G-3

Angled Fittings - Quick Connect Style

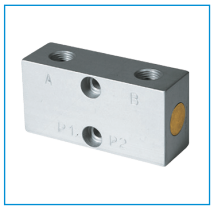
WVM5

Straight Fittings - Quick Connect Style

GVM5

Quick Exhaust Valve

DEV04

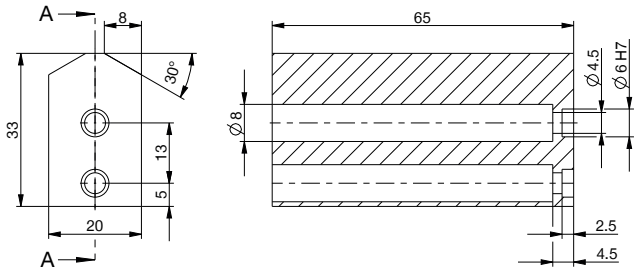


Pressure Safety Valve

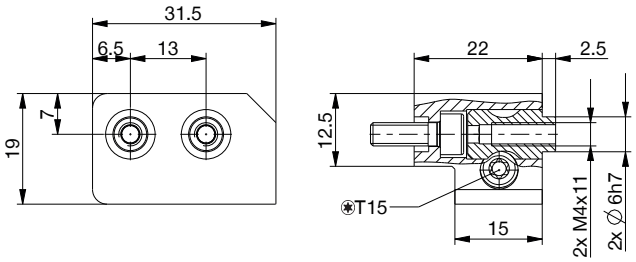
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

2 universal jaw



3 changeable jaw, loose-part-set and 4 changeable jaw, fix-part



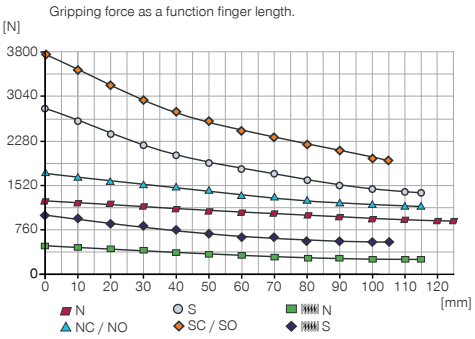
2 One universal jaw is required for each gripper jaw

3 4 Each gripper jaw requires one changeable jaw fix-part and loose-part-set

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5008

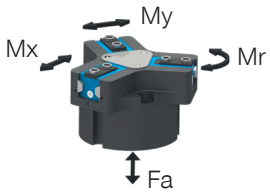
▶ PRODUCT SPECIFICATIONS

▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5008N	GPD5008NC	GPD5008NO	GPD5008S	GPD5008SC	GPD5008SO
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1260	1690		2780	3730	
Gripping force in opening [N]	1340		1770	2960		3910
Gripping force secured by spring min. [N]		430	430		950	950
Closing time [s]	0.048	0.035	0.055	0.048	0.035	0.055
Opening time [s]	0.048	0.055	0.035	0.048	0.055	0.035
Weight per jaw max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repeatability +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	51	90	90	51	90	90
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.83	1	1	0.83	1	1

▶ Technical Data - Protector Version

Order no.	GPD5008NP	GPD5008NCP	GPD5008NOP	GPD5008SP	GPD5008SCP	GPD5008SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	1.03	1.2	1.2	1.03	1.2	1.2

▶ Technical Data - High Temperature Version

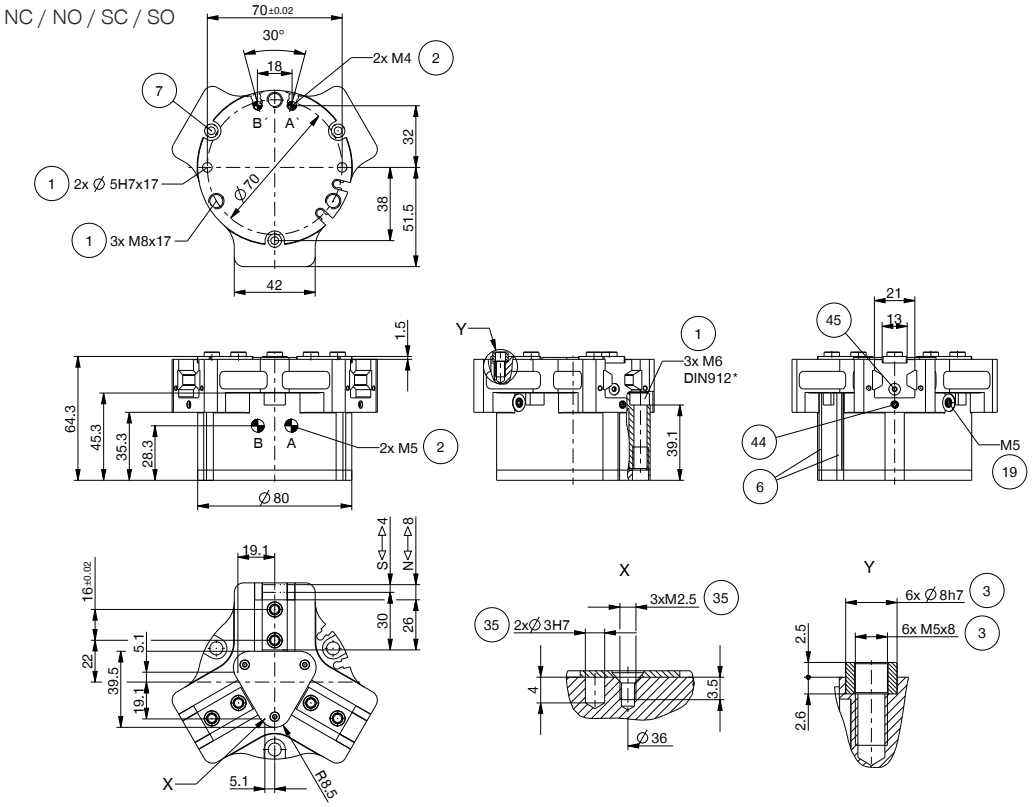
Order no.	GPD5008NT	GPD5008NCT	GPD5008NOT	GPD5008ST	GPD5008SCT	GPD5008SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

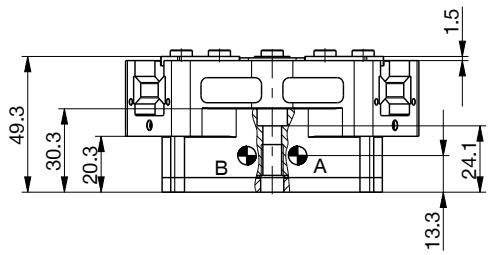
** with purged air

▶ TECHNICAL DRAWINGS

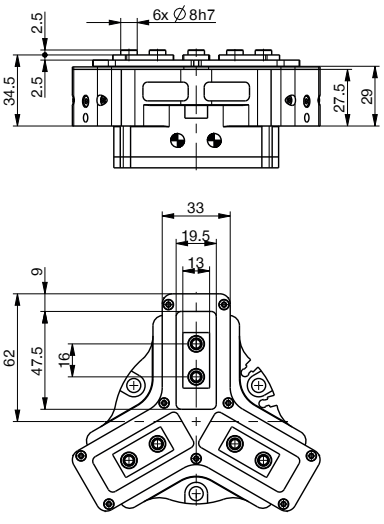
NC / NO / SC / SO



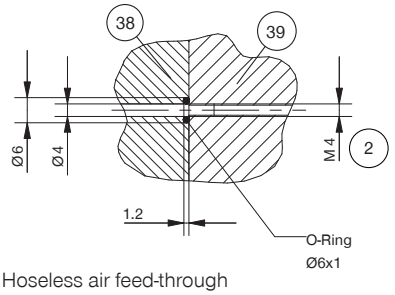
N / S



Protector version

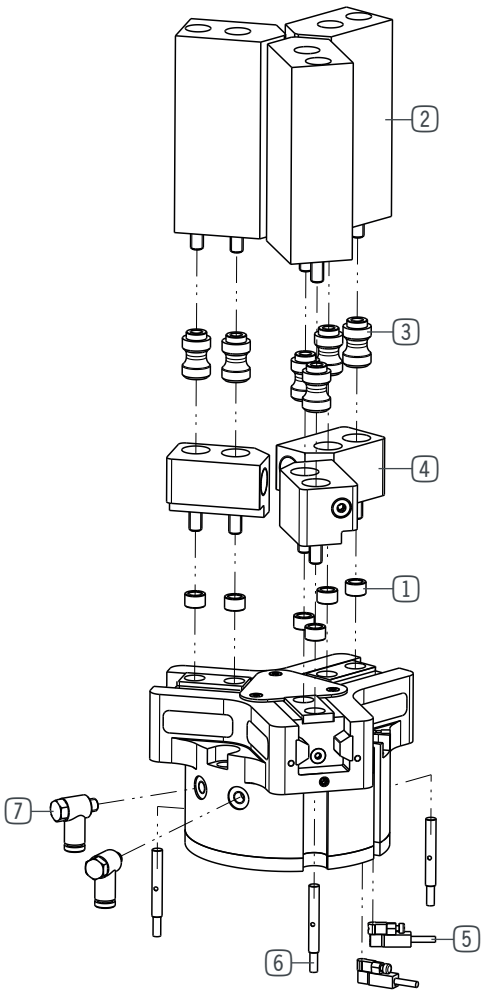


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑦ Mounting block
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊹ Clamp for sensor
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5008



▶ INCLUDED IN DELIVERY

1

Centering Disc

024231

▶ RECOMMENDED ACCESSORIES

2

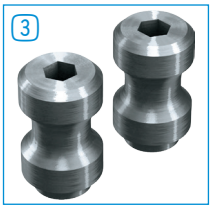
Universal jaw aluminium

UB5008AL

2

Universal jaw steel

UB5008ST



3

Changeable jaw, loose-part-set

WB5008L

4

Changeable jaw, fix-part

WB5008F

5

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

MFS103SKHC

5

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

MFS204SKHC

5

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

MFSP2SKHC-01

6

Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01

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

KAW500

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

KAG500

Plug-in connector customizable Straight - Connector M8

S8-G-3

7

Angled Fittings - Quick Connect Style

WVM5

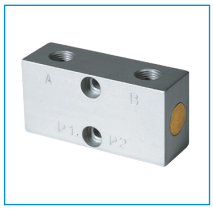
7

Straight Fittings - Quick Connect Style

GVM5

Quick Exhaust Valve

DEV04

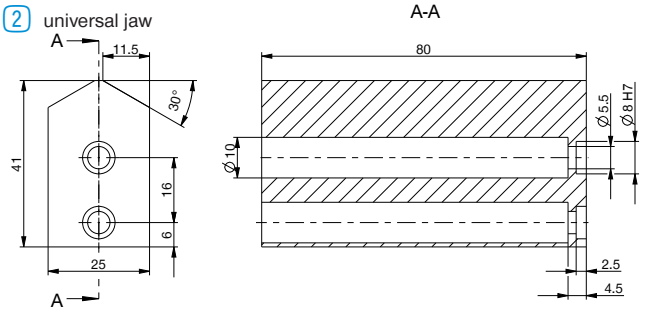


Pressure Safety Valve

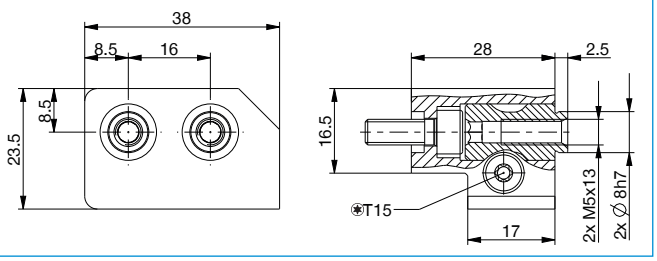
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

2 universal jaw



3 changeable jaw, loose-part-set and 4 changeable jaw, fix-part

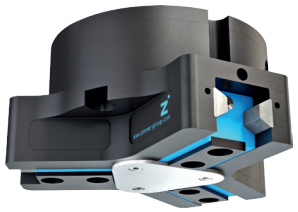


2 One universal jaw is required for each gripper jaw

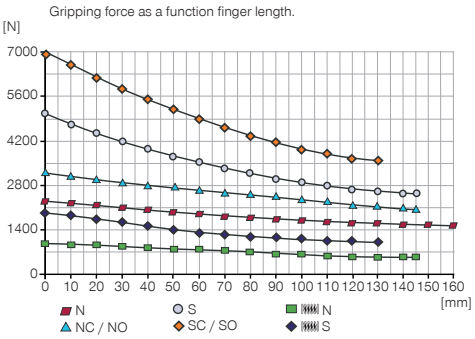
3 4 Each gripper jaw requires one changeable jaw fix-part and loose-part-set

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5010

▶ PRODUCT SPECIFICATIONS

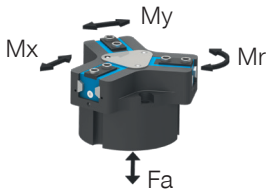


▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5010N	GPD5010NC	GPD5010NO	GPD5010S	GPD5010SC	GPD5010SO
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	2290	3140		5050	6930	
Gripping force in opening [N]	2400		3250	5280		7160
Gripping force secured by spring min. [N]		850	850		1880	1880
Closing time [s]	0.095	0.095	0.19	0.095	0.095	0.19
Opening time [s]	0.095	0.19	0.095	0.095	0.19	0.095
Weight per jaw max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repeatability +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	100	200	200	100	200	200
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	1.45	1.9	1.9	1.45	1.9	1.9

▶ Technical Data - Protector Version

Order no.	GPD5010NP	GPD5010NCP	GPD5010NOP	GPD5010SP	GPD5010SCP	GPD5010SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	1.8	2.23	2.23	1.8	2.23	2.23

▶ Technical Data - High Temperature Version

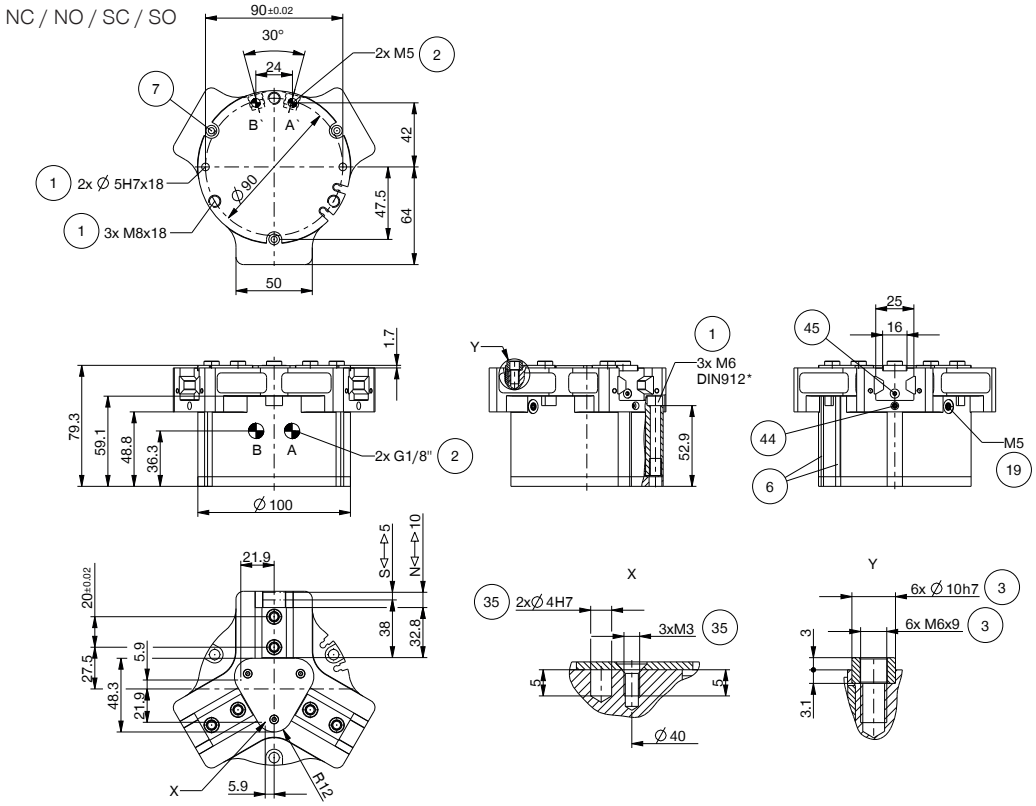
Order no.	GPD5010NT	GPD5010NCT	GPD5010NOT	GPD5010ST	GPD5010SCT	GPD5010SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

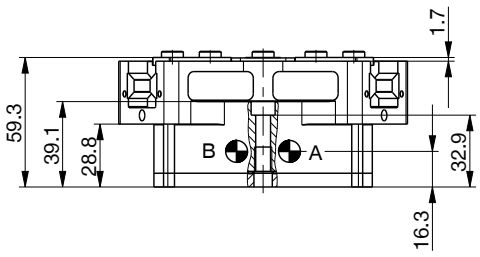
** with purged air

▶ TECHNICAL DRAWINGS

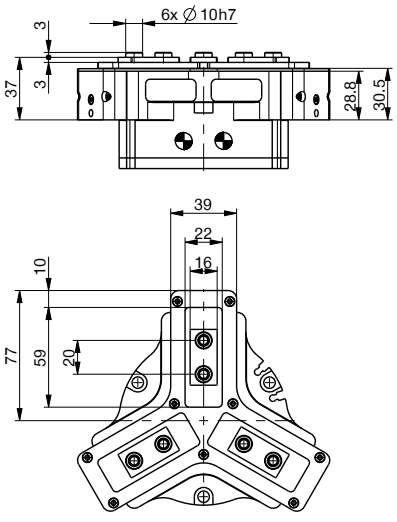
NC / NO / SC / SO



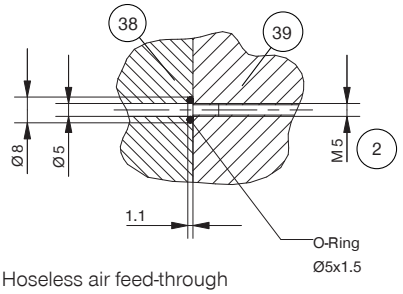
N / S



Protector version

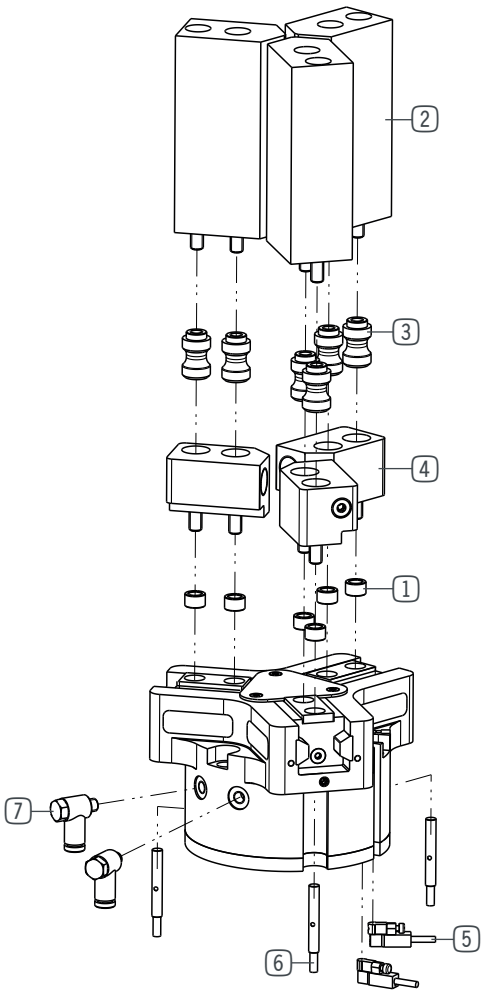


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑦ Mounting block
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊹ Clamp for sensor
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5010



▶ INCLUDED IN DELIVERY

1

Centering Disc

018187

▶ RECOMMENDED ACCESSORIES

2

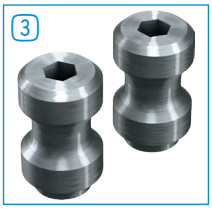
Universal jaw aluminium

UB5010AL

2

Universal jaw steel

UB5010ST



3

Changeable jaw, loose-part-set

WB5010L

4

Changeable jaw, fix-part

WB5010F

5

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

MFS103SKHC

5

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

MFS204SKHC

5

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

MFSP2SKHC-01

6

Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01

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

KAW500

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

KAG500

Plug-in connector customizable Straight - Connector M8

S8-G-3

7

Angled Fittings - Quick Connect Style

WV1-8X6

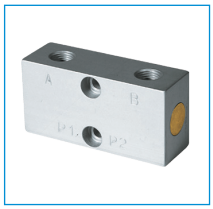
7

Straight Fittings - Quick Connect Style

GV1-8X6

Quick Exhaust Valve

DEV06

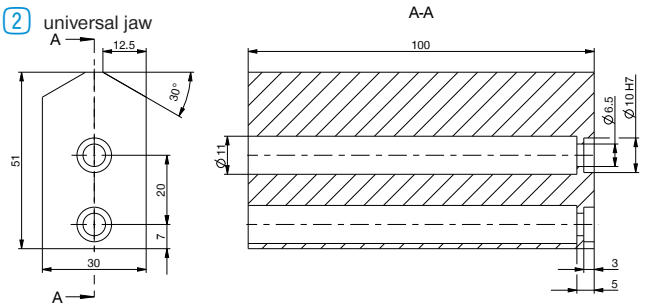


Pressure Safety Valve

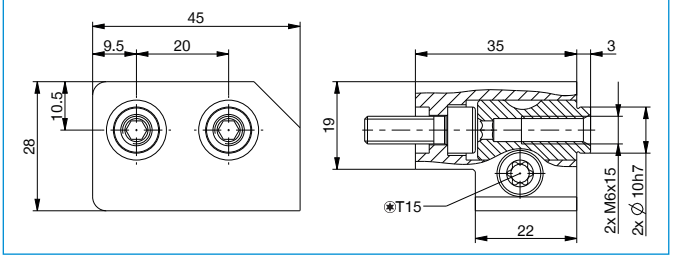
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

2 universal jaw



3 changeable jaw, loose-part-set and 4 changeable jaw, fix-part

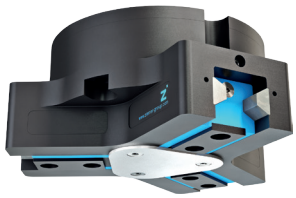


2 One universal jaw is required for each gripper jaw

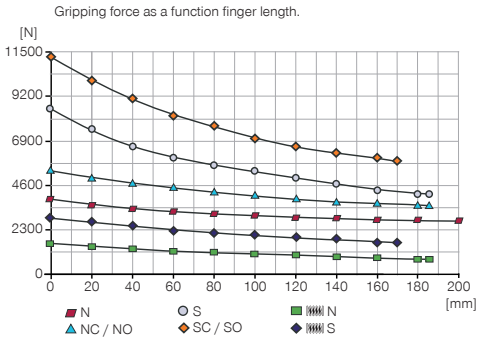
3 4 Each gripper jaw requires one changeable jaw fix-part and loose-part-set

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5013

▶ PRODUCT SPECIFICATIONS

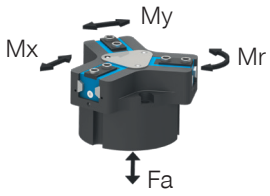


▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	110
Mx [Nm]	150
My [Nm]	130
Fa [N]	3300

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5013N	GPD5013NC	GPD5013NO	GPD5013S	GPD5013SC	GPD5013SO
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	3770	5060		8310	11160	
Gripping force in opening [N]	3910		5200	8600		11450
Gripping force secured by spring min. [N]		1290	1290		2850	2850
Closing time [s]	0.19	0.15	0.25	0.19	0.15	0.25
Opening time [s]	0.19	0.25	0.15	0.19	0.25	0.15
Weight per jaw max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repeatability +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	230	415	415	230	415	415
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.6	3.5	3.5	2.6	3.5	3.5

▶ Technical Data - Protector Version

Order no.	GPD5013NP	GPD5013NCP	GPD5013NOP	GPD5013SP	GPD5013SCP	GPD5013SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	3.15	4.05	4.05	3.15	4.05	4.05

▶ Technical Data - High Temperature Version

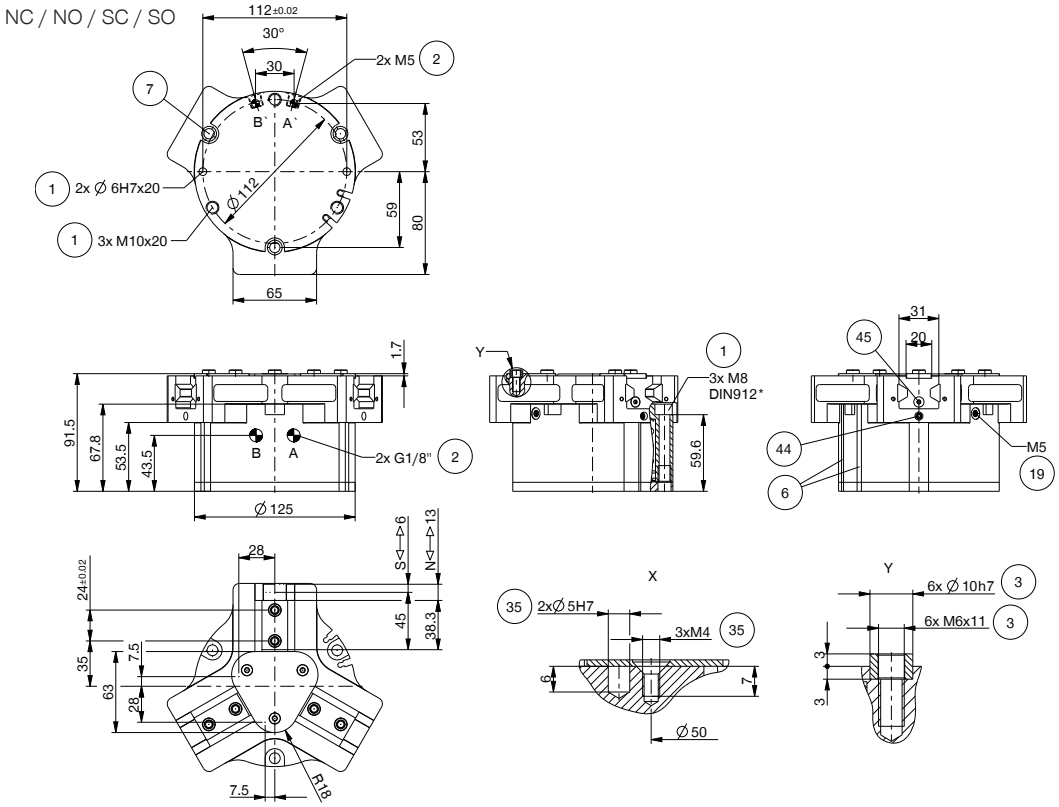
Order no.	GPD5013NT	GPD5013NCT	GPD5013NOT	GPD5013ST	GPD5013SCT	GPD5013SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

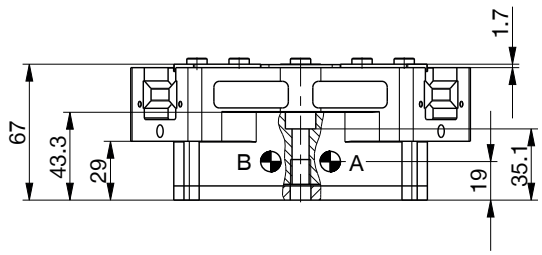
** with purged air

▶ TECHNICAL DRAWINGS

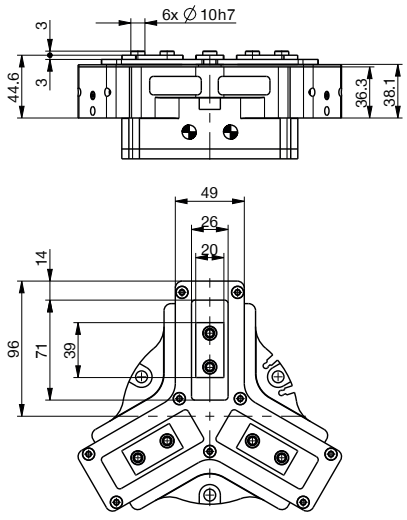
NC / NO / SC / SO



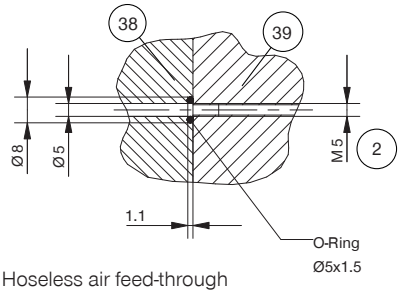
N / S



Protector version

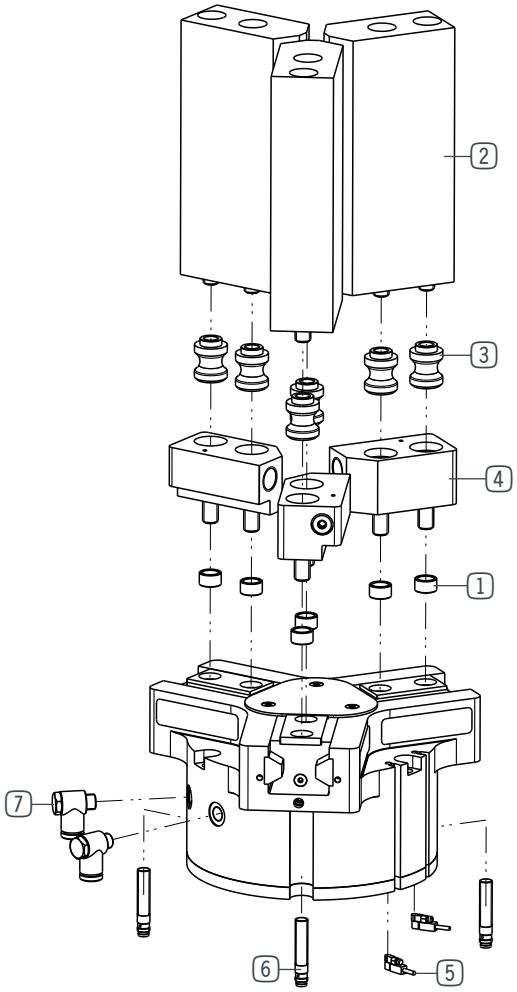


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑦ Mounting block
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊹ Clamp for sensor
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5013



▶ INCLUDED IN DELIVERY

1

Centering Disc

018187

▶ RECOMMENDED ACCESSORIES

2

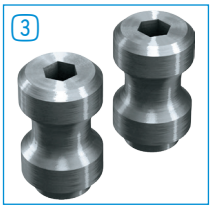
Universal jaw aluminium

UB5013AL

2

Universal jaw steel

UB5013ST



3

Changeable jaw, loose-part-set

WB5013L

4

Changeable jaw, fix-part

WB5013F

5

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

MFS103SKHC

5

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

MFS204SKHC

5

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

MFSP2SKHC-01

6

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

Plug-in connector customizable Straight - Connector M8

S8-G-3

7

Angled Fittings - Quick Connect Style

WV1-8X6

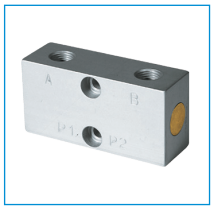
7

Straight Fittings - Quick Connect Style

GV1-8X6

Quick Exhaust Valve

DEV06

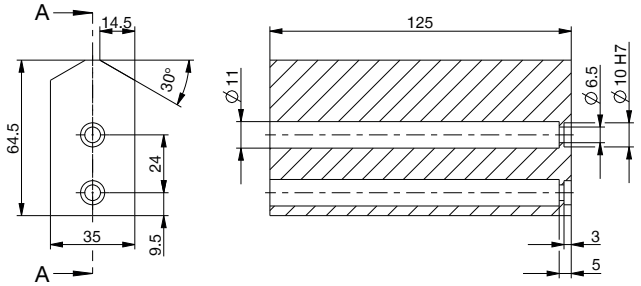


Pressure Safety Valve

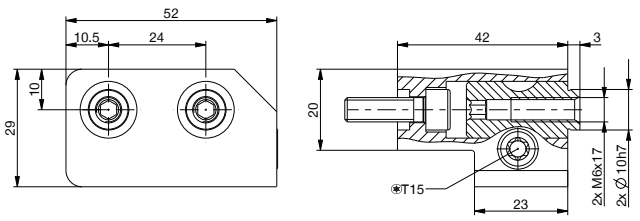
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

2 universal jaw



3 changeable jaw, loose-part-set and 4 changeable jaw, fix-part

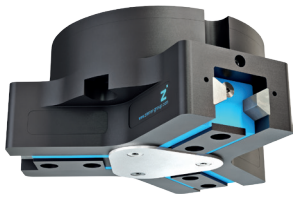


2 One universal jaw is required for each gripper jaw

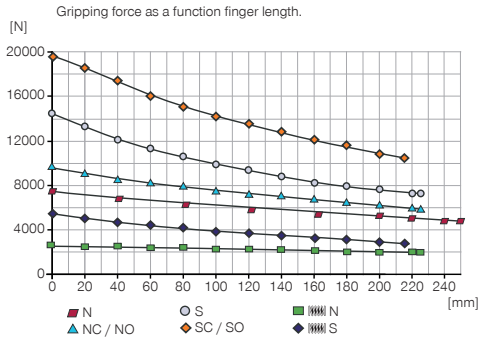
3 4 Each gripper jaw requires one changeable jaw fix-part and loose-part-set

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5016

▶ PRODUCT SPECIFICATIONS

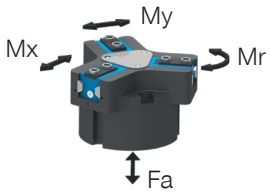


▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	145
Mx [Nm]	195
My [Nm]	185
Fa [N]	5200

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5016N	GPD5016NC	GPD5016NO	GPD5016S	GPD5016SC	GPD5016SO
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6870	9240		14700	19780	
Gripping force in opening [N]	7120		9490	15250		20330
Gripping force secured by spring min. [N]		2370	2370		5080	5080
Closing time [s]	0.4	0.3	0.5	0.4	0.3	0.5
Opening time [s]	0.4	0.5	0.3	0.4	0.5	0.3
Weight per jaw max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repeatability +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	525	925	925	525	925	925
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	5.7	7.5	7.5	5.7	7.5	7.5

▶ Technical Data - Protector Version

Order no.	GPD5016NP	GPD5016NCP	GPD5016NOP	GPD5016SP	GPD5016SCP	GPD5016SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	6.8	8.6	8.6	6.8	8.6	8.6

▶ Technical Data - High Temperature Version

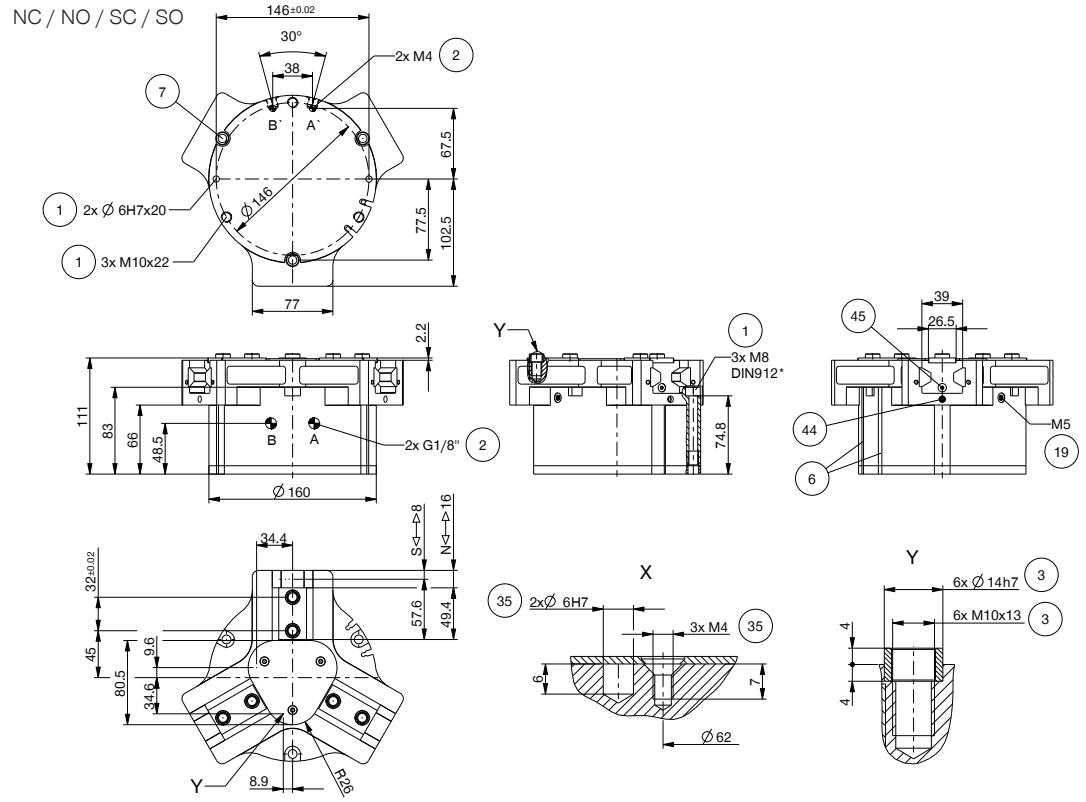
Order no.	GPD5016NT	GPD5016NCT	GPD5016NOT	GPD5016ST	GPD5016SCT	GPD5016SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

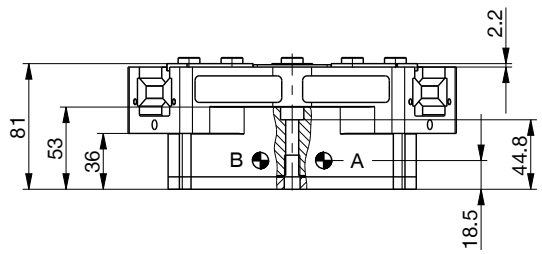
** with purged air

▶ TECHNICAL DRAWINGS

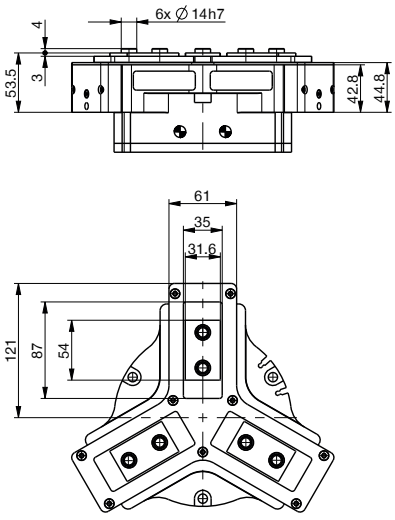
NC / NO / SC / SO



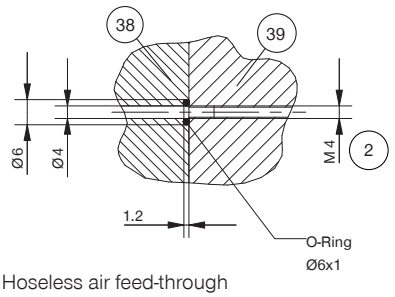
N / S



Protector version

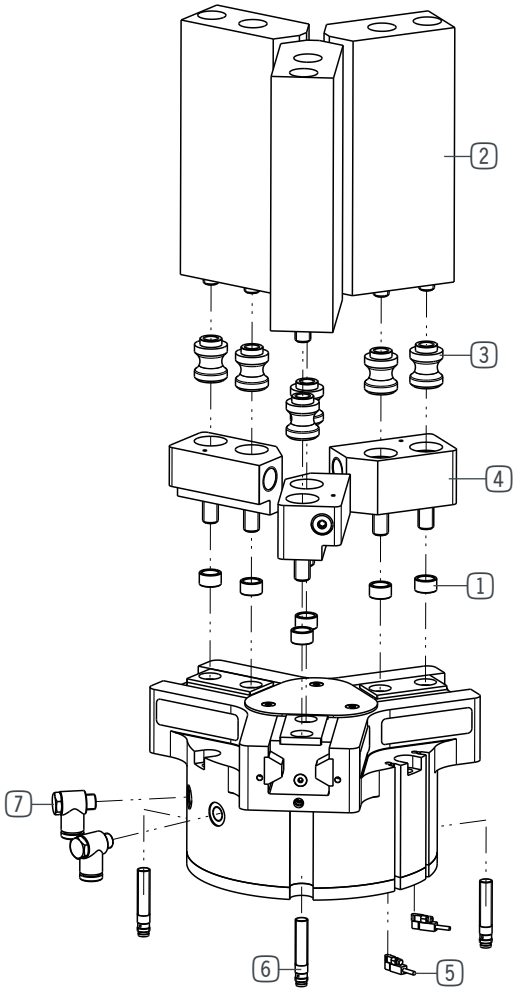


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑦ Mounting block
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊹ Clamp for sensor
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5016



▶ INCLUDED IN DELIVERY

1

Centering Disc

019387

▶ RECOMMENDED ACCESSORIES

2

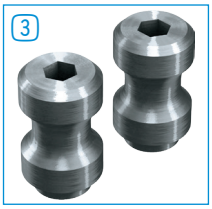
Universal jaw aluminium

UB5016AL

2

Universal jaw steel

UB5016ST



3

Changeable jaw, loose-part-set

WB5016L

4

Changeable jaw, fix-part

WB5016F

5

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

MFS103SKHC

5

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

MFS204SKHC

5

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

MFSP2SKHC-01

6

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

Plug-in connector customizable Straight - Connector M8

S8-G-3

7

Angled Fittings - Quick Connect Style

WV1-8X8

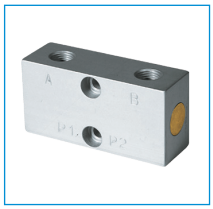
7

Straight Fittings - Quick Connect Style

GV1-8X8

Quick Exhaust Valve

DEV08

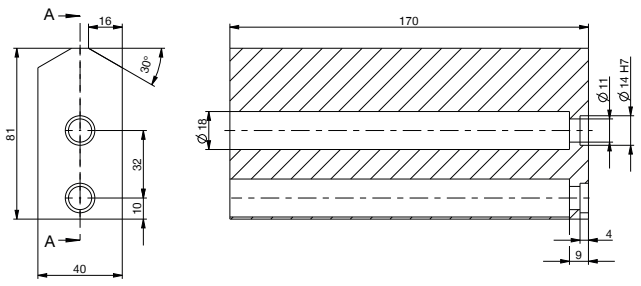


Pressure Safety Valve

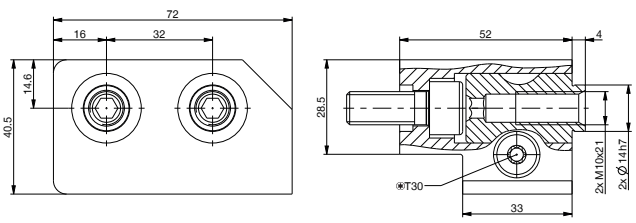
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

2 universal jaw



3 changeable jaw, loose-part-set and 4 changeable jaw, fix-part

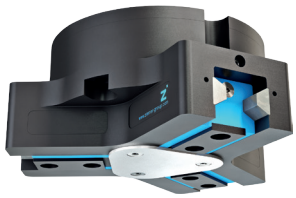


2 One universal jaw is required for each gripper jaw

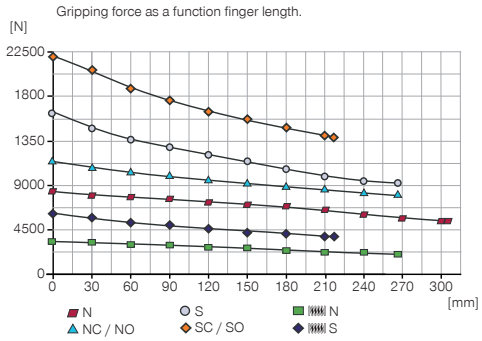
3 4 Each gripper jaw requires one changeable jaw fix-part and loose-part-set

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5025

▶ PRODUCT SPECIFICATIONS

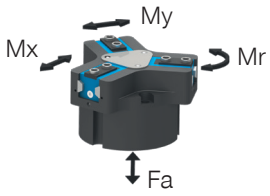


▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	180
Mx [Nm]	205
My [Nm]	225
Fa [N]	7500

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5025N	GPD5025NC	GPD5025NO	GPD5025S	GPD5025SC	GPD5025SO
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	8430	11560		16240	22270	
Gripping force in opening [N]	8730		11860	16820		22850
Gripping force secured by spring min. [N]		3130	3130		6030	6030
Closing time [s]	0.6	0.6	1.0	0.6	0.6	1.0
Opening time [s]	0.6	1.0	0.6	0.6	1.0	0.6
Weight per jaw max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repeatability +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	1025	1750	1750	1025	1750	1750
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	11.8	15.4	15.4	11.8	15.4	15.4

▶ Technical Data - Protector Version

Order no.	GPD5025NP	GPD5025NCP	GPD5025NOP	GPD5025SP	GPD5025SCP	GPD5025SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	14	17.6	17.6	14	17.6	17.6

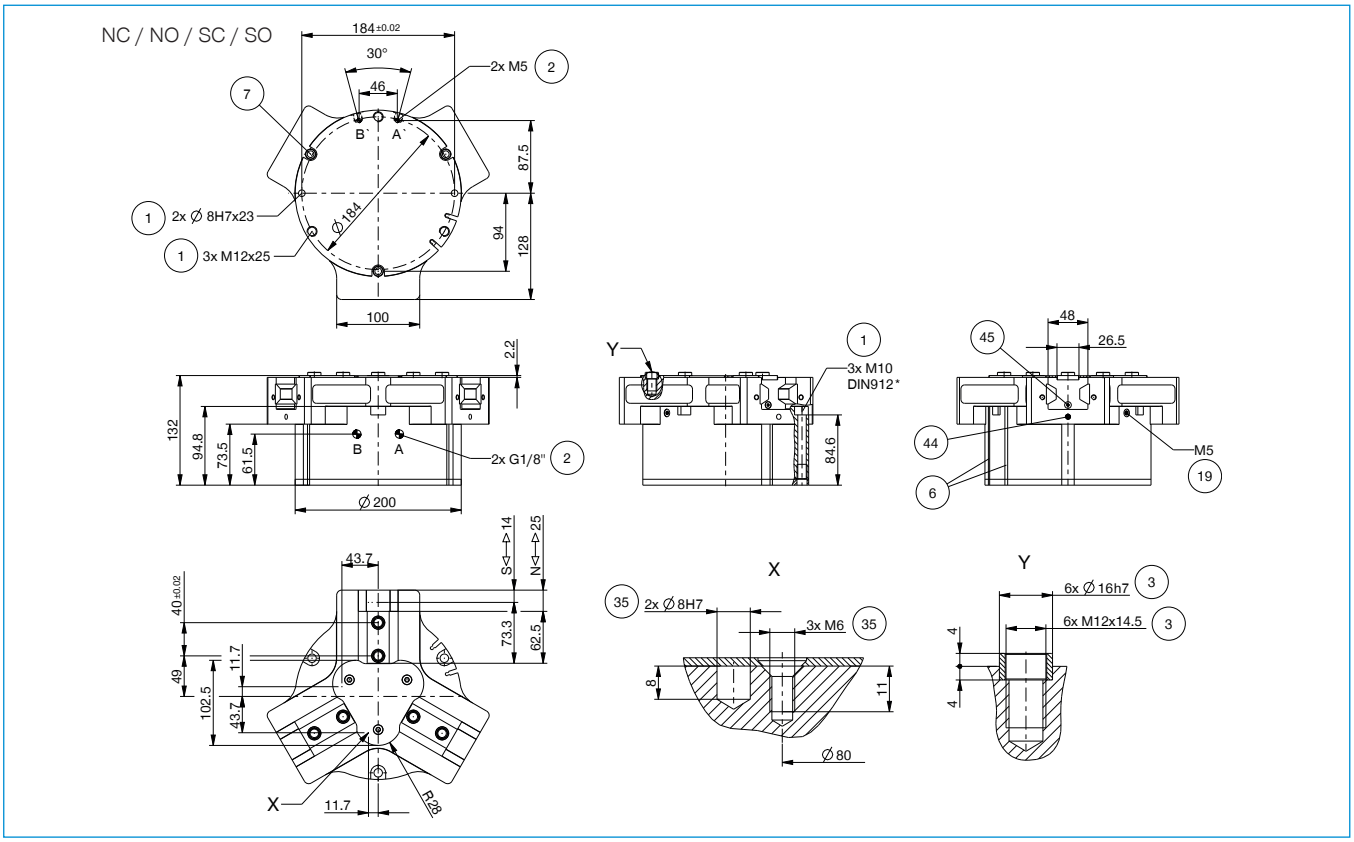
▶ Technical Data - High Temperature Version

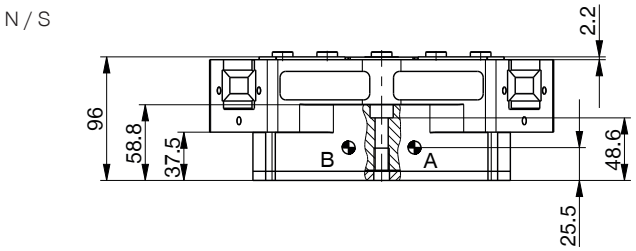
Order no.	GPD5025NT	GPD5025NCT	GPD5025NOT	GPD5025ST	GPD5025SCT	GPD5025SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

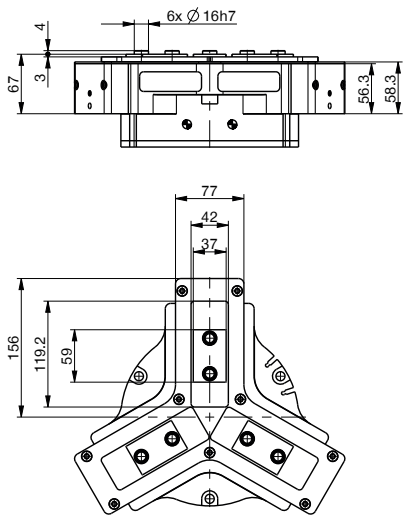
** with purged air

▶ TECHNICAL DRAWINGS

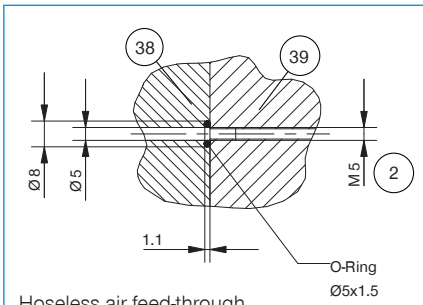




Protector version

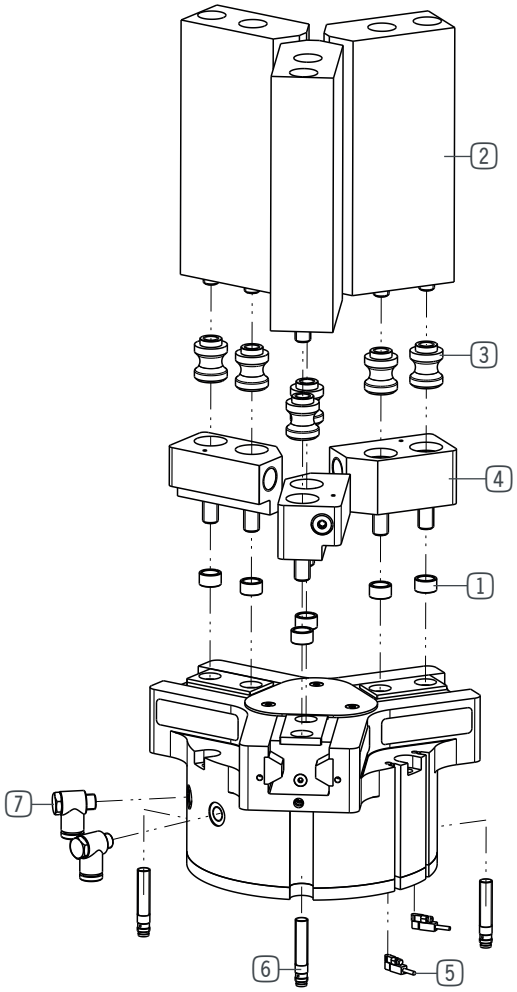


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑦ Mounting block
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊹ Clamp for sensor
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5025



▶ INCLUDED IN DELIVERY

1

Centering Disc

030529

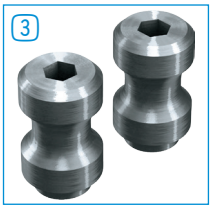
▶ RECOMMENDED ACCESSORIES

Universal jaw aluminium

UB5025AL

Universal jaw steel

UB5025ST



Changeable jaw, loose-part-set

WB5025L

Changeable jaw, fix-part

WB5025F

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-01

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

Plug-in connector customizable Straight - Connector M8

S8-G-3

Angled Fittings - Quick Connect Style

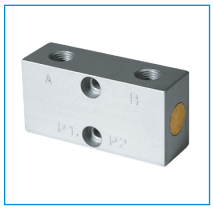
WV1-8X8

Straight Fittings - Quick Connect Style

GV1-8X8

Quick Exhaust Valve

DEV08

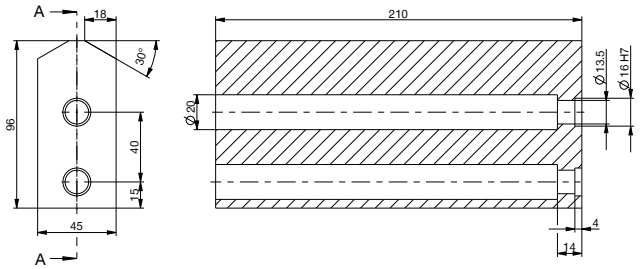


Pressure Safety Valve

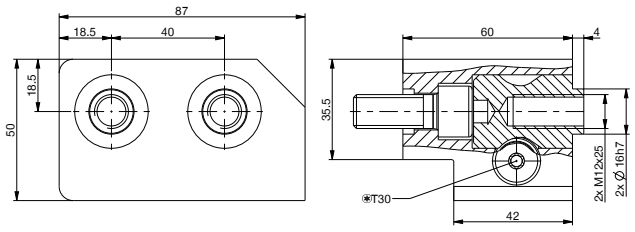
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

2 universal jaw



3 changeable jaw, loose-part-set and 4 changeable jaw, fix-part

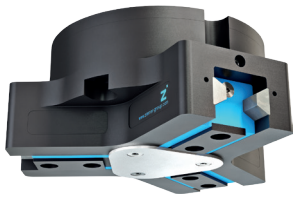


2 One universal jaw is required for each gripper jaw

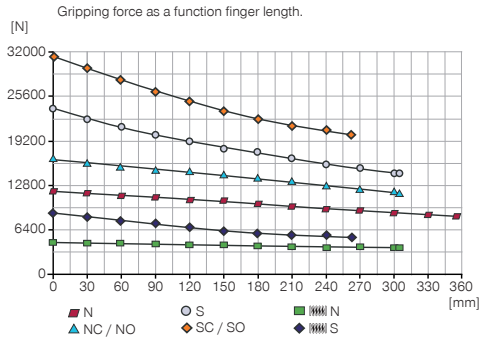
3 4 Each gripper jaw requires one changeable jaw fix-part and loose-part-set

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5030

▶ PRODUCT SPECIFICATIONS

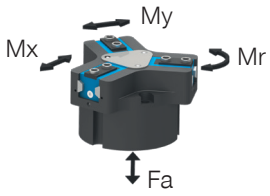


▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	210
Mx [Nm]	290
My [Nm]	310
Fa [N]	9500

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5030N	GPD5030NC	GPD5030NO	GPD5030S	GPD5030SC	GPD5030SO
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	12130	16560		23150	31620	
Gripping force in opening [N]	12540		16970	23930		32400
Gripping force secured by spring min. [N]		4430	4430		8470	8470
Closing time [s]	1.13	1.0	1.9	1.13	1.0	1.9
Opening time [s]	1.13	1.9	1.0	1.13	1.9	1.0
Weight per jaw max. [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	355	305	305	305	260	260
Repeatability +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	1780	3000	3000	1780	3000	3000
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	21	27.5	27.5	21	27.5	27.5

▶ Technical Data - Protector Version

Order no.	GPD5030NP	GPD5030NCP	GPD5030NOP	GPD5030SP	GPD5030SCP	GPD5030SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	24	30.5	30.5	24	30.5	30.5

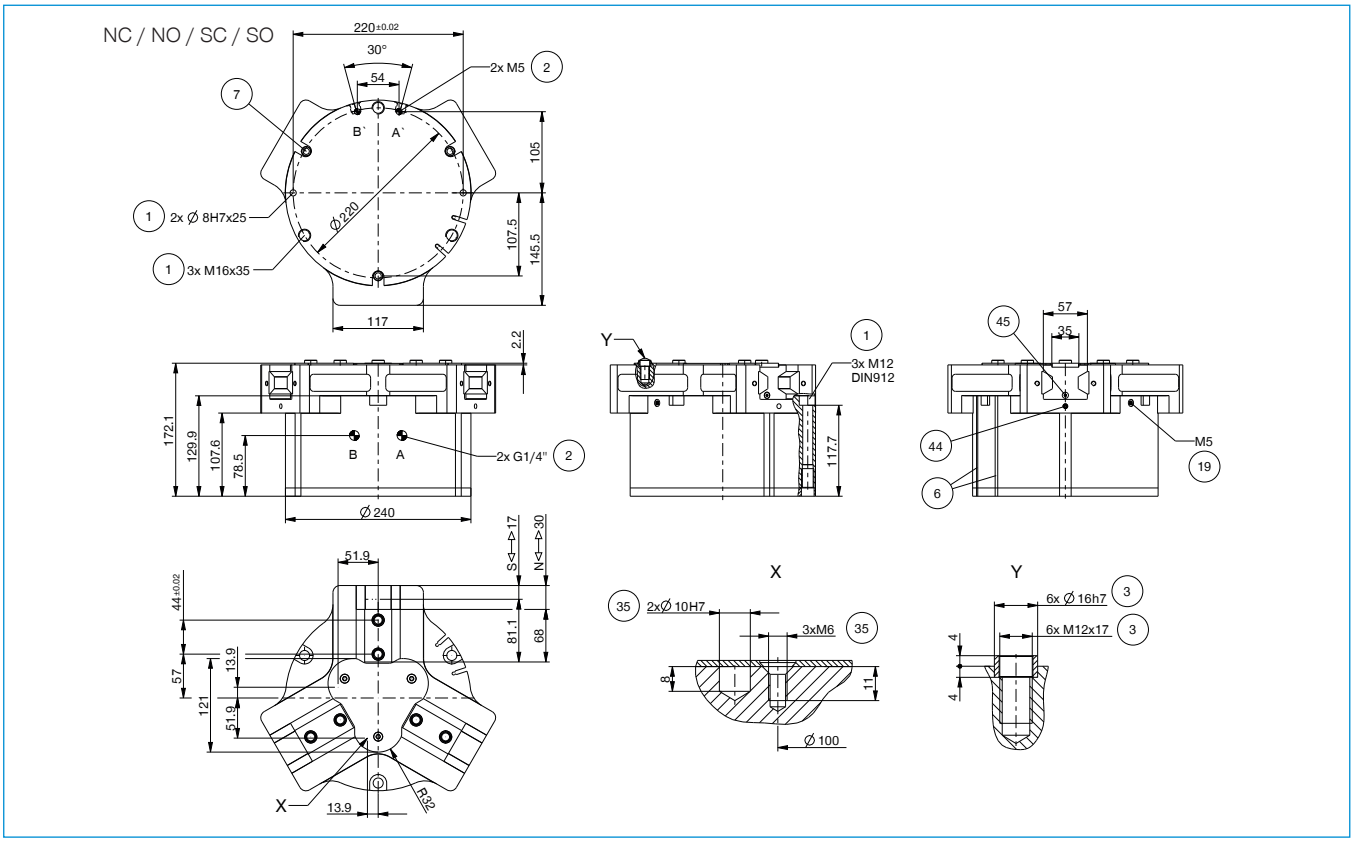
▶ Technical Data - High Temperature Version

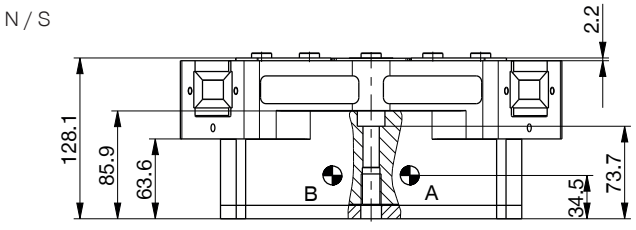
Order no.	GPD5030NT	GPD5030NCT	GPD5030NOT	GPD5030ST	GPD5030SCT	GPD5030SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

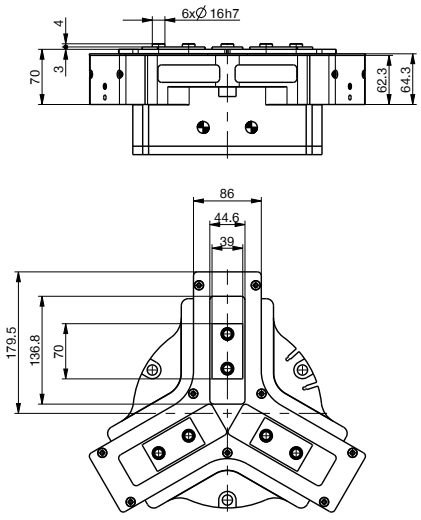
** with purged air

▶ TECHNICAL DRAWINGS

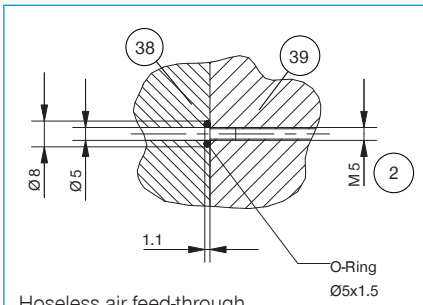




Protector version

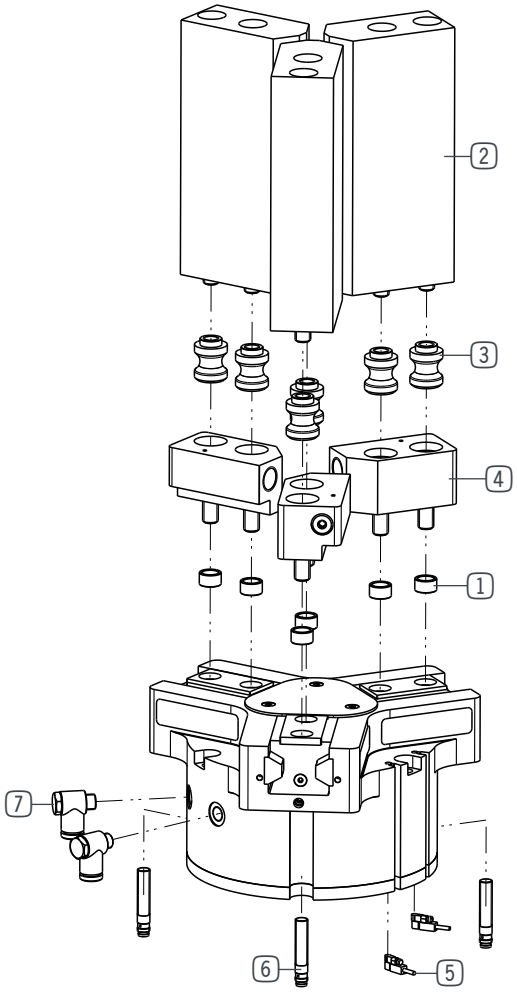


① Gripper attachment
② Energy supply
③ Fixing for gripper finger
⑥ Integrated slot for magnetic field sensor
⑦ Mounting block
⑲ Air purge connection option
㉟ Attachment option for customer-specific fittings
㊳ Adapter
㊴ Gripper
㊹ Clamp for sensor
㊺ Switch cam adjustment
Ⓐ Air connection (close)
Ⓑ Air connection (open)
Ⓐ' Air connection, alternative (close)
Ⓑ' Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS
INSTALLATION SIZE GPD5030



▶ INCLUDED IN DELIVERY

Centering Disc

030529

▶ RECOMMENDED ACCESSORIES

2

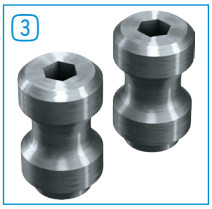
Universal jaw aluminium

UB5030AL

2

Universal jaw steel

UB5030ST



3

Changeable jaw, loose-part-set

WB5030L

4

Changeable jaw, fix-part

WB5030F

5

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

MFS103SKHC

5

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

MFS204SKHC

5

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

MFSP2SKHC-01

6

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

Plug-in connector customizable Straight - Connector M8

S8-G-3

7

Angled Fittings - Quick Connect Style

WV1-4X8

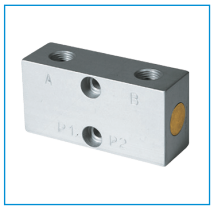
7

Straight Fittings - Quick Connect Style

GV1-4X8

Quick Exhaust Valve

DEV08

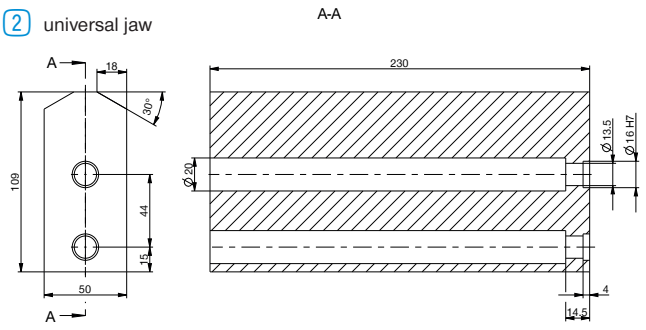


Pressure Safety Valve

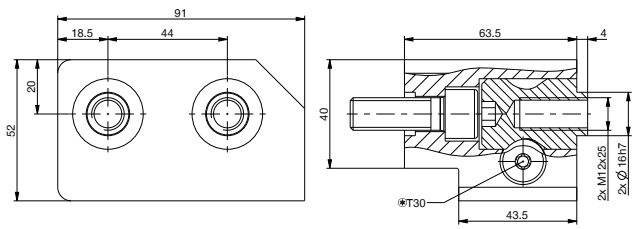
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

2 universal jaw



3 changeable jaw, loose-part-set and 4 changeable jaw, fix-part



2 One universal jaw is required for each gripper jaw

3 4 One fixed-part interchangeable jaw and one loose-part interchangeable jaw are required for each gripper jaw