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driven by technology

Gripping Technology

for all loading and assembly systems

Parallel gripper
Centric gripper
Long stroke gripper
Swivel units
Accessories

The headquarter: our parent plant in Sontheim/Brenz.

The RÖHM parent plant is located in Sontheim/Brenz. In this ultra-modern production facility comprising 41,000 m², optimum conditions have been achieved in order to solve the extensive range of discerning construction and production tasks making the company even better, faster and more efficient in the future.

Sontheim/Brenz

All national and international activities are planned and co-ordinated at the administrative headquarters in Sontheim. Thanks to the excellent infrastructure and transport routes available, this location is ideal for a company relying on perfect product quality as well as maximum flexibility. Furthermore, the region around Sontheim offers another key basis for the success of our company: it is rich in quality awareness and motivated employees with the result that we are ideally prepared for the challenges of the future. The parent plant uniquely unites mass production, serial production and customised individual production under a single roof.

PRODUCT GROUP 5 - Gripping technology

Overview parallel gripper

RPP

Description	Total stroke in mm		Maximum gripping force in N		Recommended workpiece weight in kg		Page
Version	**1**	**2**	**1**	**2**	**1**	**2**	
RPP-50	8	4	180	350	0,7	1,45	6
RPP-64	12	6	300	600	1,5	3	8
RPP-80	16	8	450	860	2.2	4.3	10
RPP-100	20	10	700	1400	3.5	7.0	12
RPP-125	26	12	1200	2400	6.0	12	14
RPP-160	32	16	1850	3400	9.0	17	16
RPP-200	50	28	2800	4800	14	24	18
RPP-240	60	34	4200	7000	21	35	20
RPP-300	70	40	6200	10300	31	52	22

Design RPP:

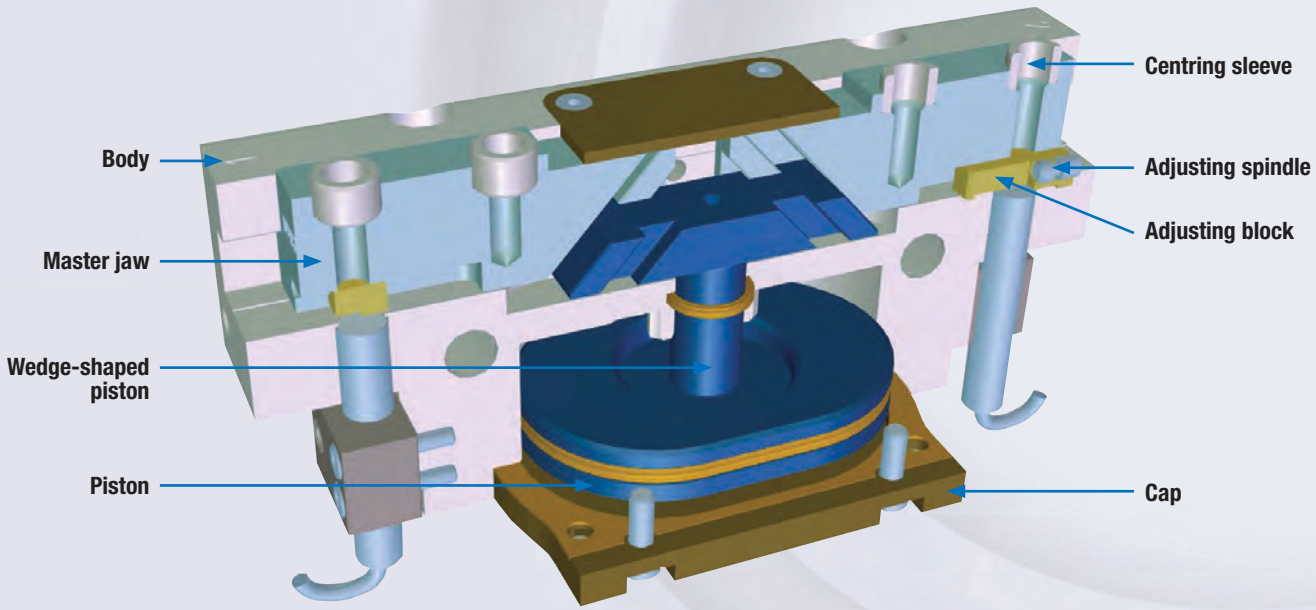
1	long jaw stroke, normal gripping force
2	normal jaw stroke, high gripping force
GA	Integrated springs as gripping force safety device for exterior tension, thus increased gripping force
GI	Integrated springs as gripping force safety device for interior tension, thus increased gripping force

Technical Data	
Pneumatic	
Operating pressure	3 - 10 bar
Cylinder	double-acting
Dynamic seals	NBR seals with interior lubrication
Required valves	
Double-acting	5 paths, 2 positions
Single-acting (options GA or GI)	3 paths, 2 positions
Air quality	
Air filtration	40 µ or better
Air lubrication	not necessary*
Humidity	low (dry)
Operating temperatures	
NBR seals (standard)	-30 °C to 80 °C
FKM seals (optional)	-20 °C to 150 °C
Maintenance	
Expected service life	
At normal use	5 million cycles
At preventive maintenance	10 million cycles
On-site repair of gripper	Yes
Seal set available	Yes

* Preventive maintenance considerably increases service life

2-jaw parallel gripper RPP pneumatic control

Mode of operation



Tried and tested T-groove for gripping at max. loads

Fast and efficient gripping

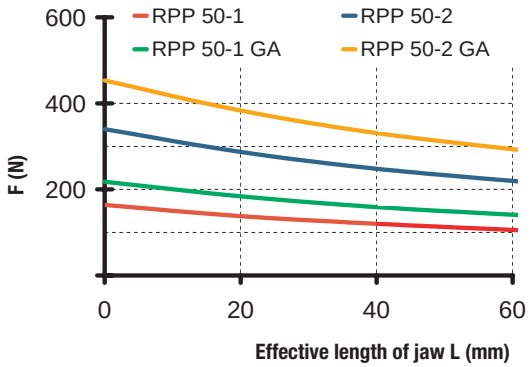
- **Centric gripping of round and angular workpieces**
- **Universal application due to different types of jaws**
- **Ideal for series production**
- **All sizes available with 2 different stroke lengths**
- **Gripping pressure controlled by change of pressure**
- **Constant clamping force at a constant pressure and thus high clamping precision**
- **Compact and ergonomic design**
- **Sealing air connection to prevent contamination**
- **Gripper can be mounted on two sides of the gripper**
- **Optional inductive or magnetic position sensors**
- **Screw connection or direct connection to compressed air**
- **Gripping force safety device as a special type for exterior or interior gripping**
- **Simple interface master jaw / top jaw with only 2 centring sleeves**

Precision parallel gripper

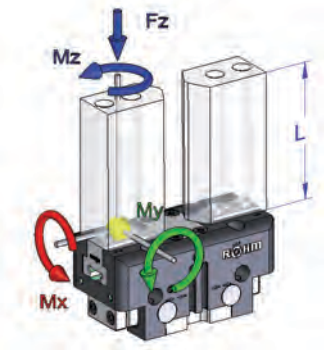
RPP-50

Technical data		RPP-50-1	RPP-50-2	RPP-50-1/GA	RPP-50-2/GA	RPP-50-1/GI	RPP-50-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	s	0.02	0.02	0.02	0.02	0.03	0.03
Opening time	s	0.02	0.02	0.03	0.03	0.02	0.02
Air consumption per cycle	cm3	5.0	5.0	5.0	5.0	5.0	5.0
Max. allowable length of jaw	mm	64	64	64	64	64	64

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



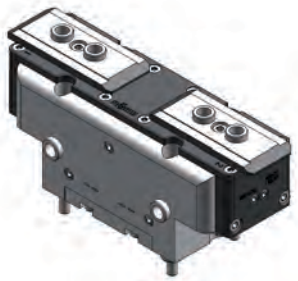
Max. moment	Mx:	max. 20 Nm
Max. moment	My:	max. 25 Nm
Max. moment	Mz:	max. 10 Nm
Max. pressure load	Fz:	max. 500 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170574 steel
Item no. 170584 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170594



Pressure maintenance valve Item no. 1078823

Compressed air connection Item no. 802539

Position measuring system Item no. 1078824

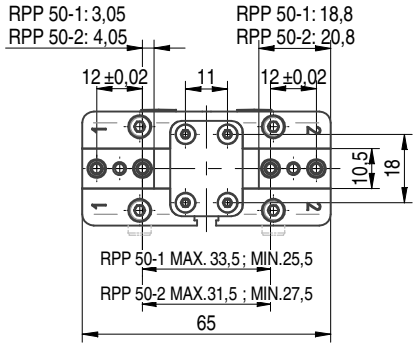
Inductive proximity switch Item no. 1149503

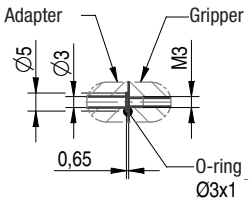
Magnetic field sensors Item no. 1083570

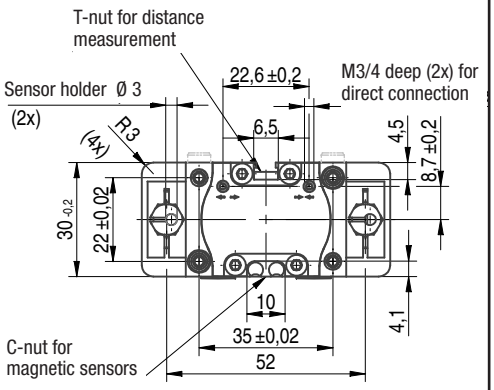
Precision parallel gripper

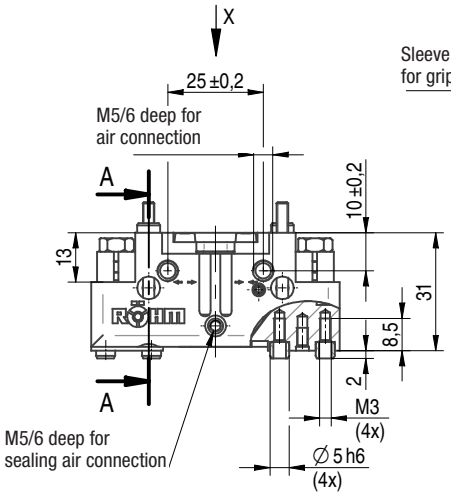
RPP-50

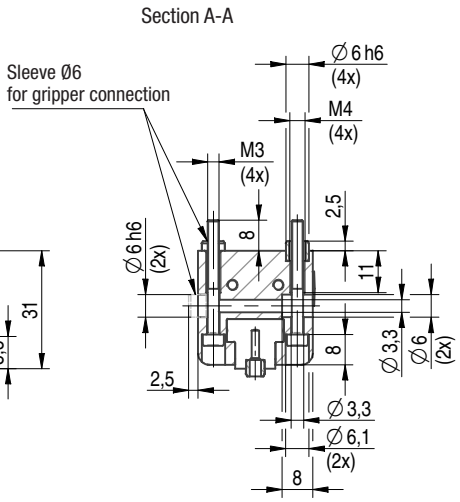
Technical data Item no.		RPP-50-1 170119	RPP-50-2 170120	RPP-50-1/GA 170121	RPP-50-2/GA 170122	RPP-50-1/GI 170123	RPP-50-2/GI 170124
Total gripping force at 6 bar	N	180	350	215	415	235	450
Total stroke	mm	8	4	8	4	8	4
Gripping force maintained by safety device	N	-	-	35	65	35	65
Recommended workpiece weight	kg	0.7	1.45	0.7	1.45	0.7	1.45
Weight	kg	0.19	0.19	0.23	0.23	0.23	0.23

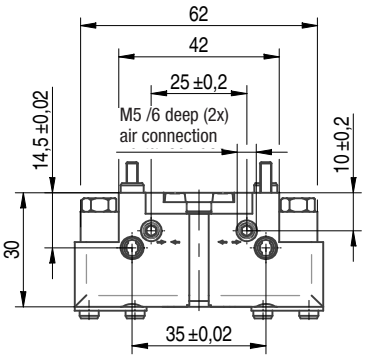




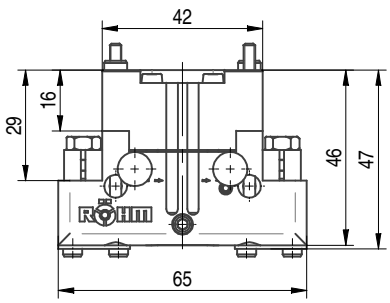




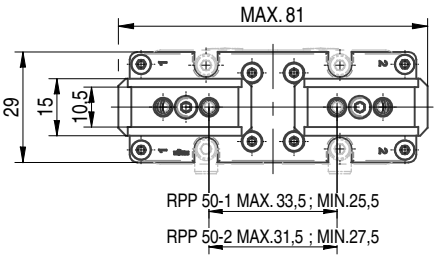


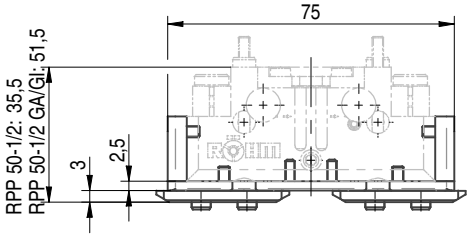


Type GA/GI with gripping force safety device



Accessories: Protective cover



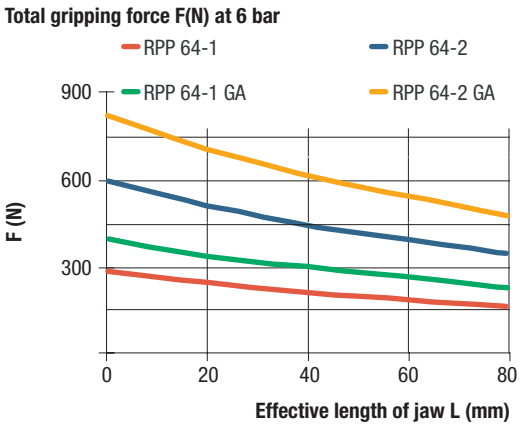


Precision parallel gripper

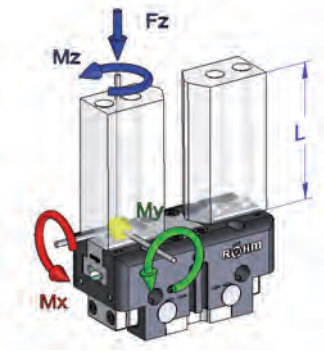
RPP-64

Technical data		RPP-64-1	RPP-64-2	RPP-64-1/GA	RPP-64-2/GA	RPP-64-1/GI	RPP-64-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	s	0.03	0.03	0.02	0.02	0.04	0.04
Opening time	s	0.03	0.03	0.04	0.04	0.02	0.02
Air consumption per cycle	cm3	10	10	10	10	10	10
Max. allowable length of jaw	mm	90	85	85	80	85	80

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



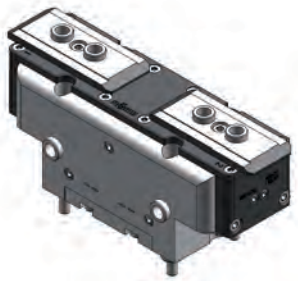
Max. moment	Mx:	max. 40 Nm
Max. moment	My:	max. 60 Nm
Max. moment	Mz:	max. 40 Nm
Max. pressure load	Fz:	max. 1100 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170575 steel
Item no. 170585 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170540



Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 802539

Position measuring system
Item no. 1078824

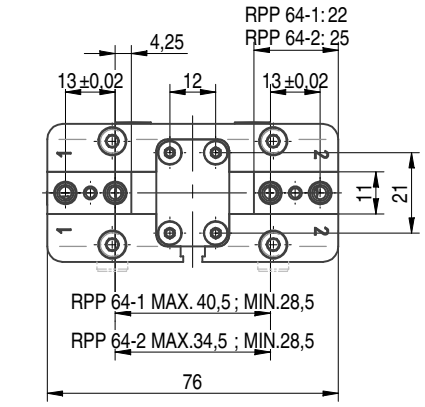
Inductive proximity switch
Item no. 229114

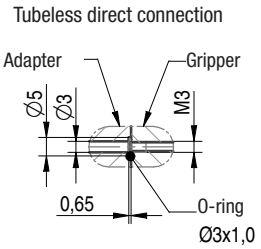
Magnetic field sensors
Item no. 1083570

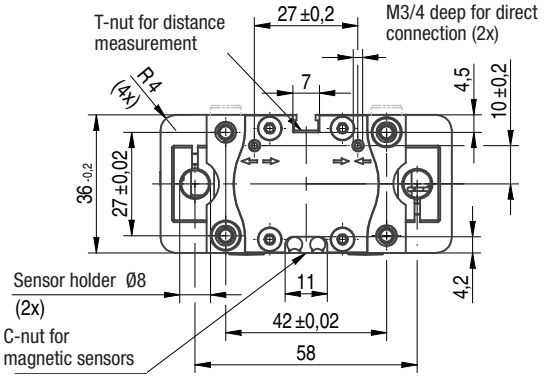
Precision parallel gripper

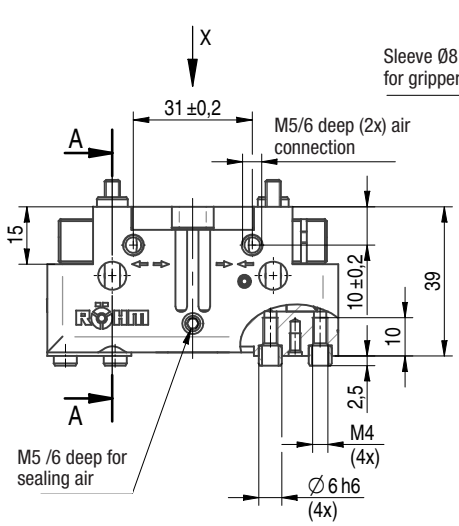
RPP-64

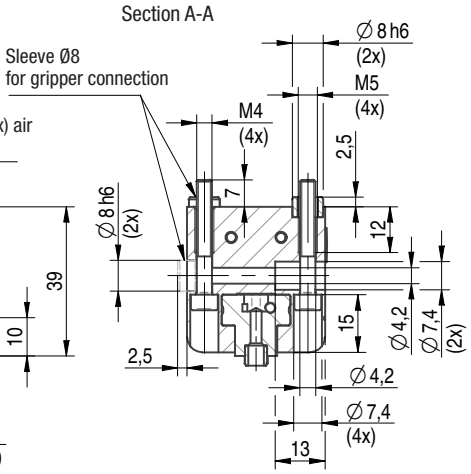
Technical data Item no.		RPP-64-1 170001	RPP-64-2 170002	RPP-64-1/GA 170003	RPP-64-2/GA 170004	RPP-64-1/GI 170005	RPP-64-2/GI 170006
Total gripping force at 6 bar	N	300	600	400	800	450	850
Total stroke	mm	12	6	12	6	12	6
Gripping force maintained by safety device	N	-	-	100	200	100	200
Recommended workpiece weight	kg	1.5	3	1.5	3	1.5	3
Weight	kg	0.3	0.3	0.4	0.4	0.4	0.4

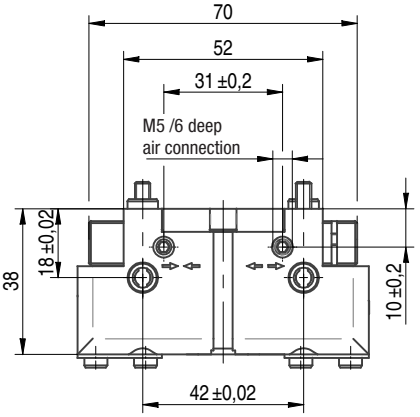




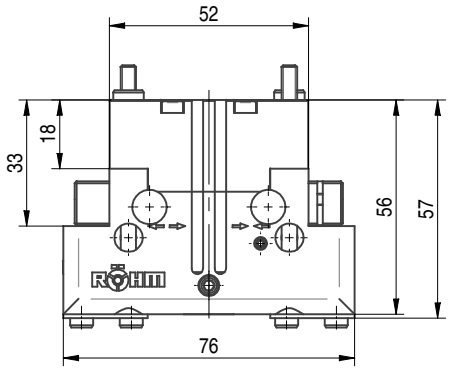




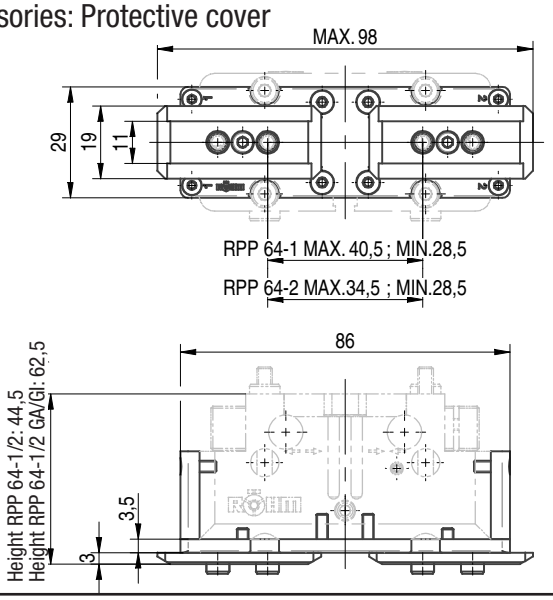




Type GA/GI with gripping force safety device



Accessories: Protective cover



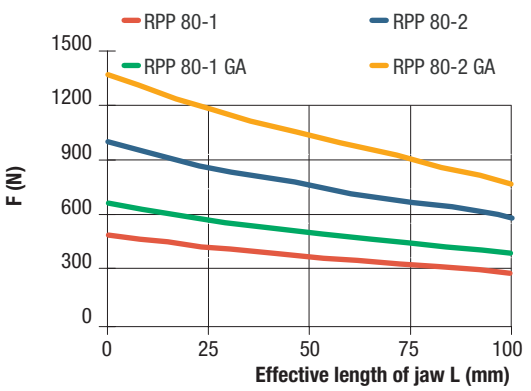
Precision parallel gripper

RPP-80

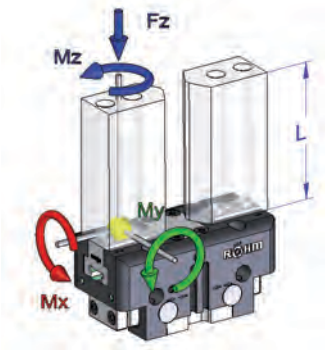
Technical data		RPP-80-1	RPP-80-2	RPP-80-1/GA	RPP-80-2/GA	RPP-80-1/GI	RPP-80-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.04	0.04	0.03	0.03	0.05	0.05
Opening time	sec.	0.04	0.04	0.05	0.05	0.03	0.03
Air consumption per cycle	cm3	21	21	21	21	21	21
Max. allowable length of jaw	mm	110	105	105	100	105	100

Clamping force diagram – exterior gripping

Total gripping force F(N) at 6 bar



Max. load on gripper and jaw



Max. moment	Mx:	max. 60 Nm
Max. moment	My:	max. 95 Nm
Max. moment	Mz:	max. 55 Nm
Max. pressure load	Fz:	max. 1500 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170576 steel
Item no. 170586 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170541

Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 802539

Position measuring system
Item no. 1078824

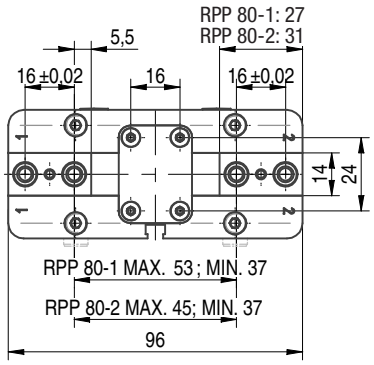
Inductive proximity switch
Item no. 229114

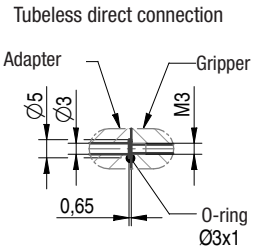
Magnetic field sensors
Item no. 1083570

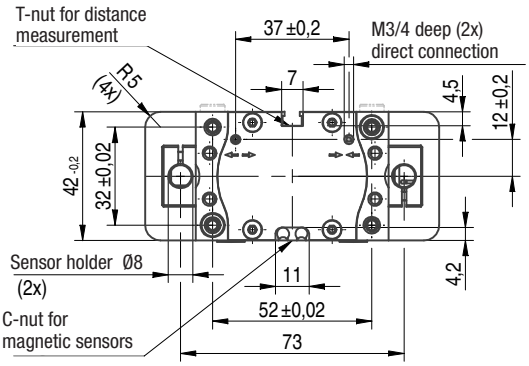
Precision parallel gripper

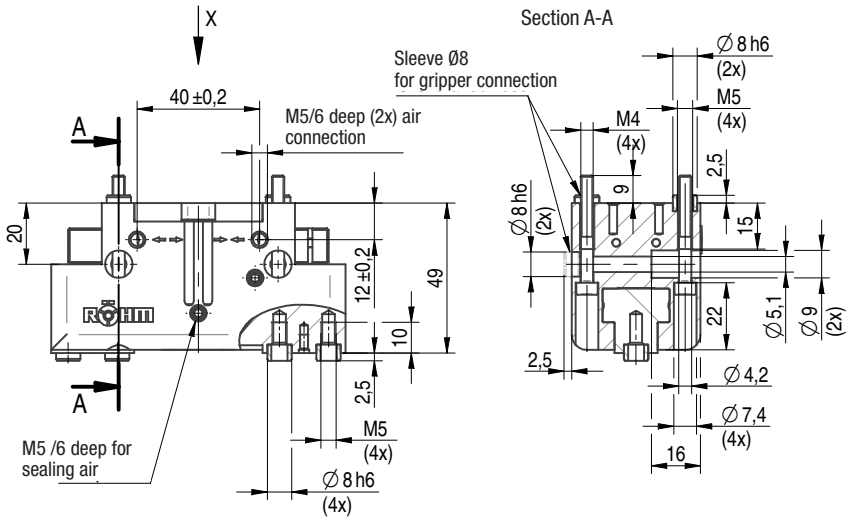
RPP-80

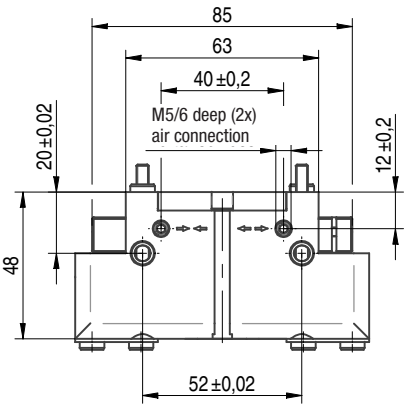
Technical data Item no.		RPP-80-1 170007	RPP-80-2 170008	RPP-80-1/GA 170009	RPP-80-2/GA 170010	RPP-80-1/GI 170011	RPP-80-2/GI 170012
Total gripping force at 6 bar	N	450	860	610	1160	650	1260
Total stroke	mm	16	8	16	8	16	8
Gripping force maintained by safety device	N	-	-	160	300	160	300
Recommended workpiece weight	kg	2.2	4.3	2.2	4.3	2.2	4.3
Weight	kg	0.5	0.5	0.6	0.6	0.6	0.6



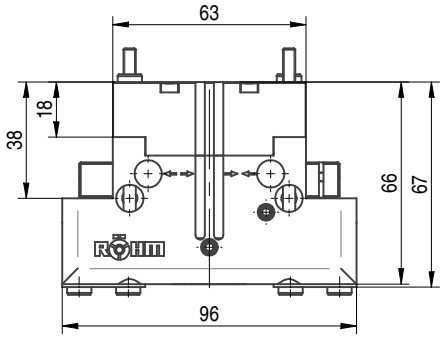




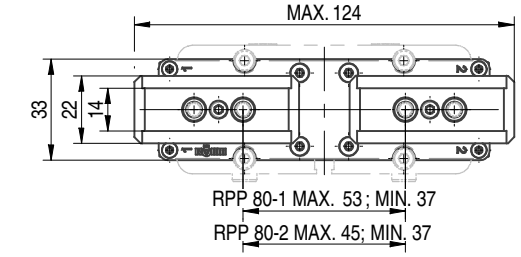


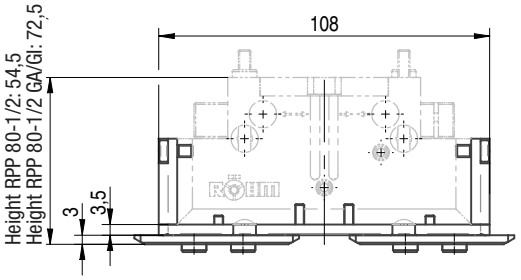


Type GA/GI with gripping force safety device



Accessories: Protective cover

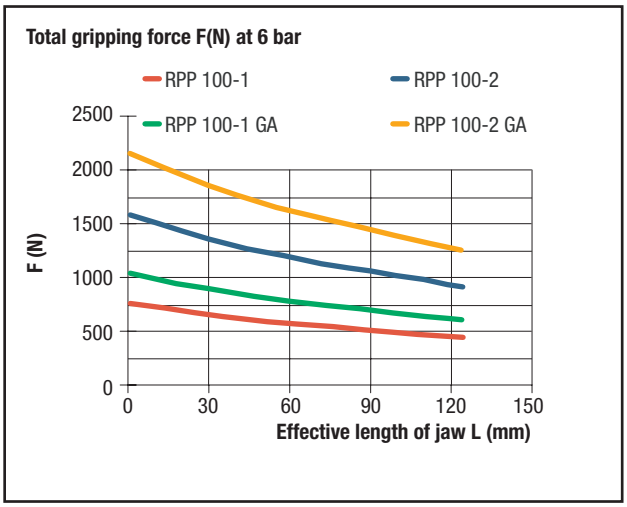




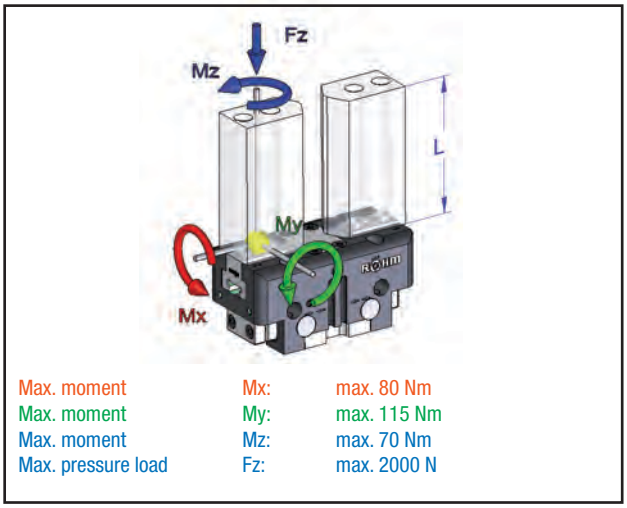
Precision parallel gripper RPP-100

Technical data		RPP-100-1	RPP-100-2	RPP-100-1/GA	RPP-100-2/GA	RPP-100-1/GI	RPP-100-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.07	0.07	0.05	0.05	0.09	0.09
Opening time	sec.	0.07	0.07	0.09	0.09	0.05	0.05
Air consumption per cycle	cm3	40	40	40	40	40	40
Max. allowable length of jaw	mm	145	135	135	125	135	125

Clamping force diagram – exterior gripping



Load on gripper and jaws



Accessory (please order separately)

Jaw blank (set)
Item no. 170577 steel
Item no. 170587 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170542

Pressure maintenance valve
Item no. 1078823

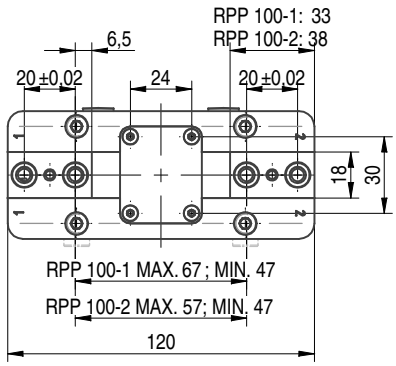
Compressed air connection
Item no. 477025

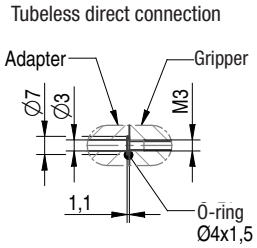
Inductive proximity switch
Item no. 229114

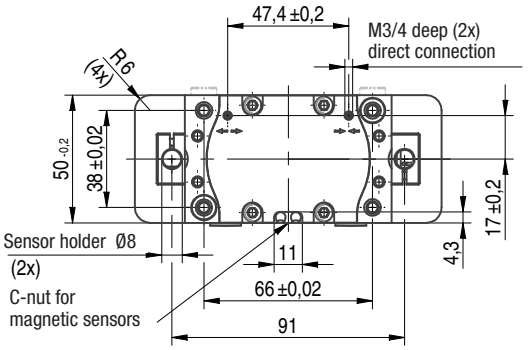
Magnetic field sensors
Item no. 1083570

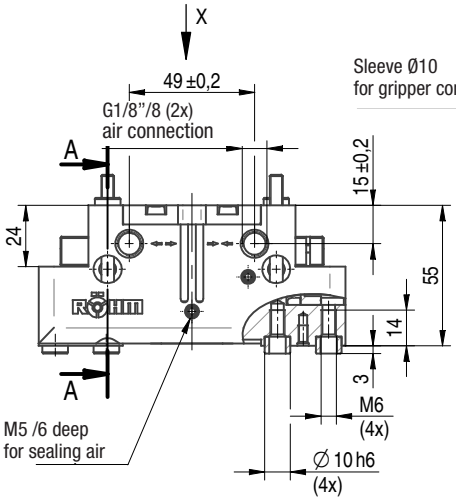
Precision parallel gripper RPP-100

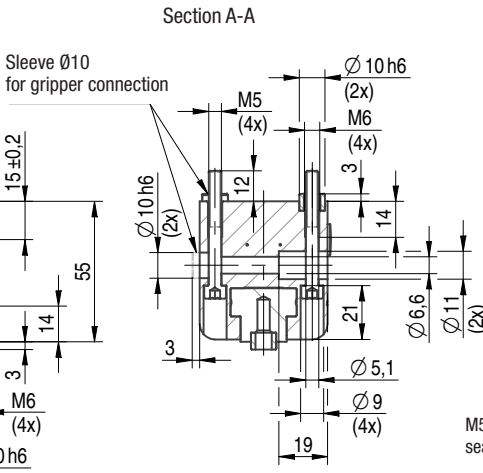
Technical data Item no.		RPP-100-1 170013	RPP-100-2 170014	RPP-100-1/GA 170015	RPP-100-2/GA 170016	RPP-100-1/GI 170018	RPP-100-2/GI 170019
Total gripping force at 6 bar	N	700	1400	960	1850	1000	1900
Total stroke	mm	20	10	20	10	20	10
Gripping force maintained by safety device	N	-	-	260	500	260	450
Recommended workpiece weight	kg	3.5	7.0	3.5	7.0	3.5	7.0
Weight	kg	0.8	0.8	1	1	1	1

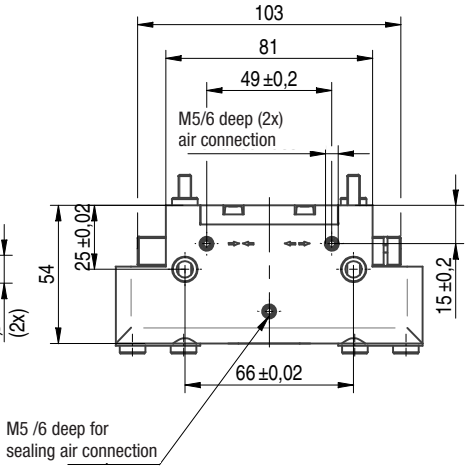




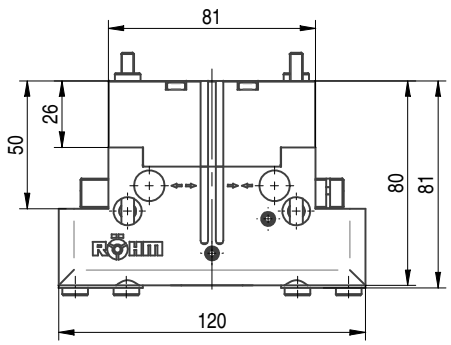




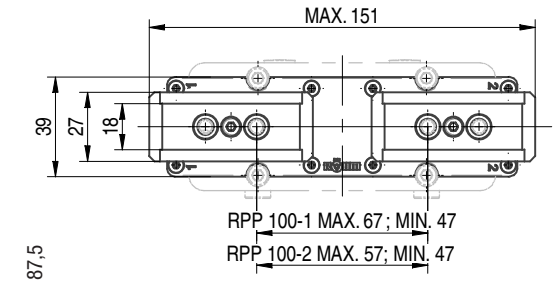


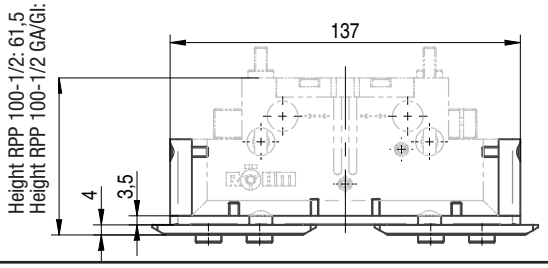


Type GA/GI with gripping force safety device



Accessories: Protective cover

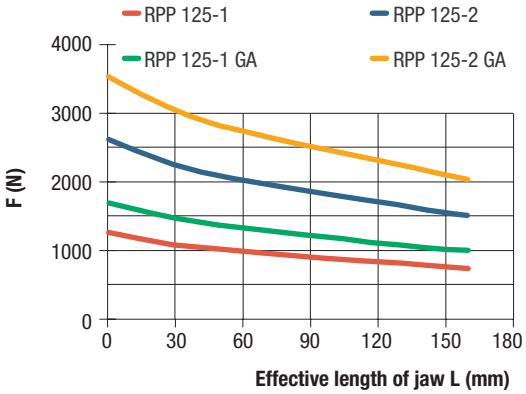




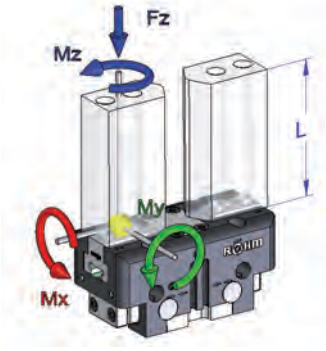
Precision parallel gripper RPP-125

Technical data		RPP-125-1	RPP-125-2	RPP-125-1/GA	RPP-125-2/GA	RPP-125-1/GI	RPP-125-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.1	0.1	0.08	0.08	0.12	0.12
Opening time	sec.	0.1	0.1	0.12	0.12	0.08	0.08
Air consumption per cycle	cm3	80	80	80	80	80	80
Max. allowable length of jaw	mm	180	170	170	160	170	160

Clamping force diagram – exterior gripping



Load on gripper and jaws



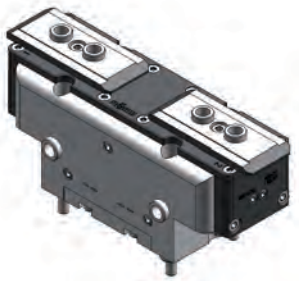
Max. moment	Mx:	max. 120 Nm
Max. moment	My:	max. 145 Nm
Max. moment	Mz:	max. 100 Nm
Max. pressure load	Fz:	max. 2800 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170578 steel
Item no. 170588 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170543



Pressure maintenance valve
Item no. 1078823

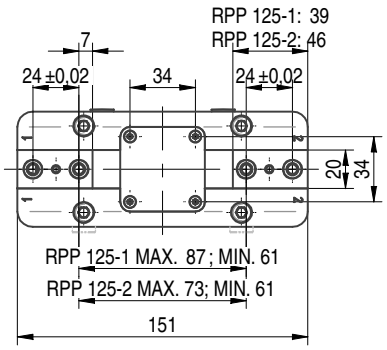
Compressed air connection
Item no. 477025

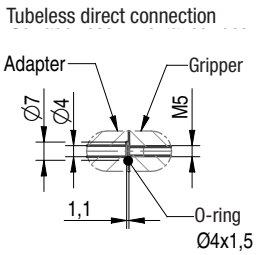
Inductive proximity switch
Item no. 389661

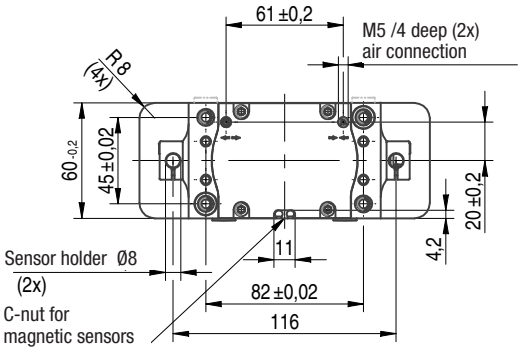
Magnetic field sensors
Item no. 1083570

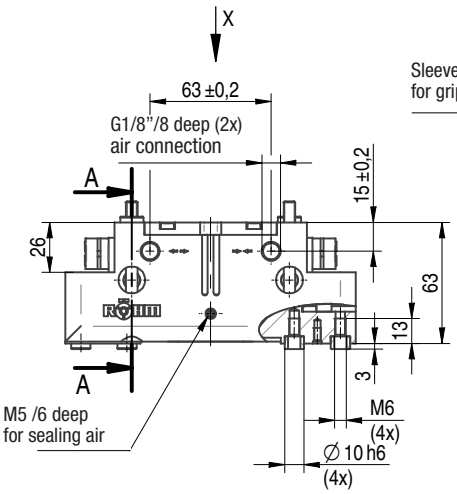
Precision parallel gripper RPP-125

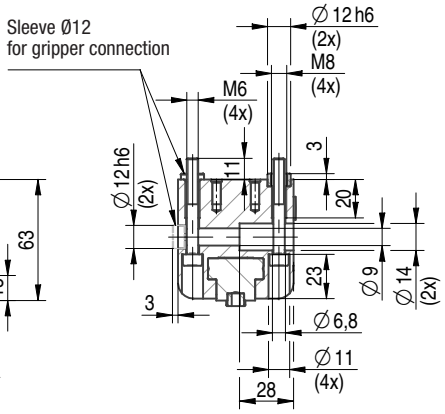
Technical data Item no.		RPP-125-1 170020	RPP-125-2 170021	RPP-125-1/GA 170022	RPP-125-2/GA 170023	RPP-125-1/GI 170025	RPP-125-2/GI 170026
Total gripping force at 6 bar	N	1200	2400	1550	3450	1600	3200
Total stroke	mm	26	12	26	12	26	12
Gripping force maintained by safety device	N	-	-	350	750	350	750
Recommended workpiece weight	kg	6.2	12.5	6.2	12.5	6.2	12.5
Weight	kg	1.5	1.5	1.9	1.9	1.9	1.9

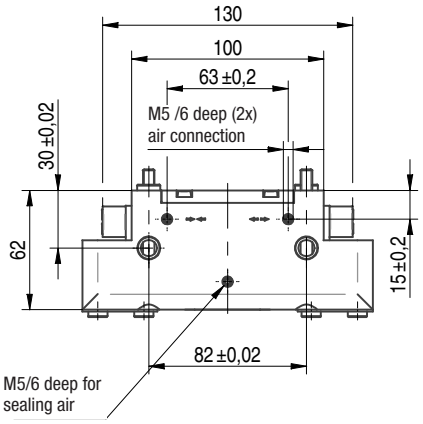




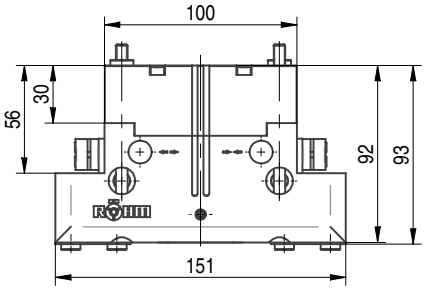




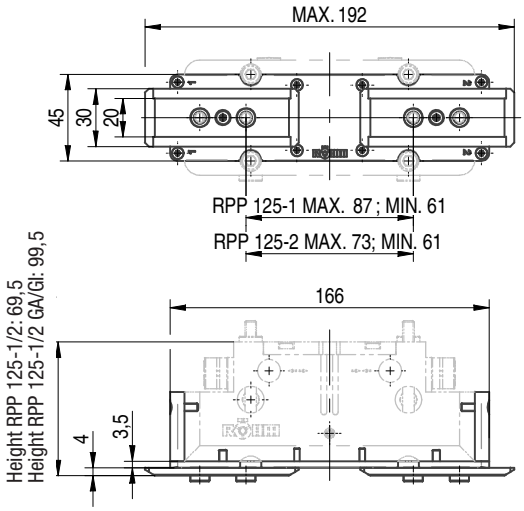




Type GA/GI with gripping force safety device



Accessories: Protective cover

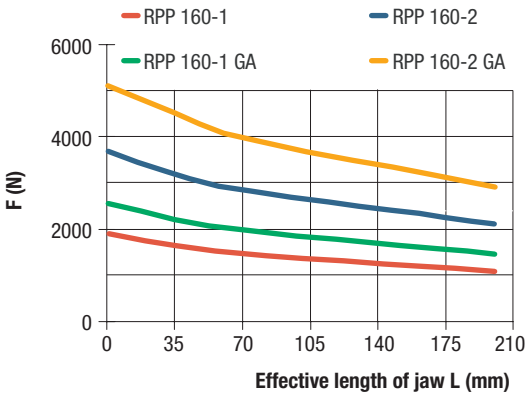


Precision parallel gripper RPP-160

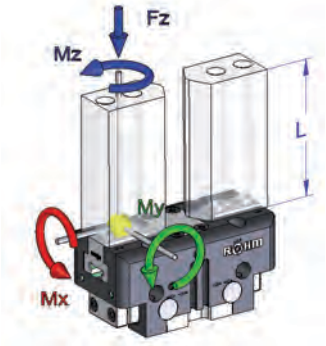
Technical data		RPP-160-1	RPP-160-2	RPP-160-1/GA	RPP-160-2/GA	RPP-160-1/GI	RPP-160-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.15	0.15	0.12	0.12	0.25	0.25
Opening time	sec.	0.15	0.15	0.25	0.25	0.12	0.12
Air consumption per cycle	cm3	160	160	160	160	160	160
Max. allowable length of jaw	mm	220	210	210	200	210	200

Clamping force diagram – exterior gripping

Total gripping force F(N) at 6 bar



Load on gripper and jaws



Max. moment	Mx:	max. 170 Nm
Max. moment	My:	max. 180 Nm
Max. moment	Mz:	max. 130 Nm
Max. pressure load	Fz:	max. 4300 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170579 steel
Item no. 170589 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170544

Pressure maintenance valve
Item no. 1078823

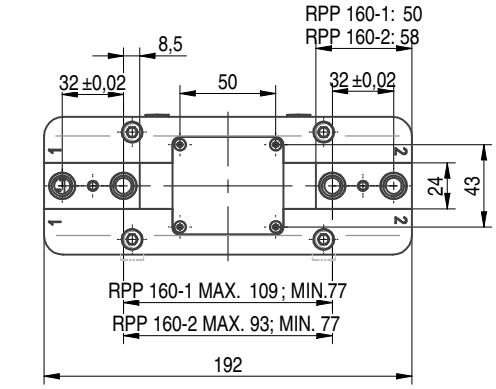
Compressed air connection
Item no. 477025

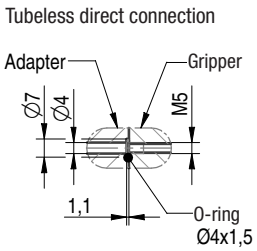
Inductive proximity switch
Item no. 389661

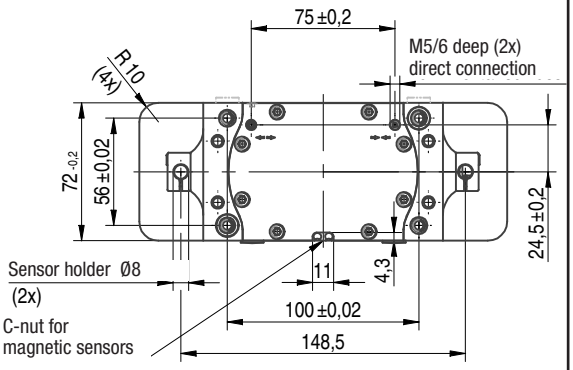
Magnetic field sensors
Item no. 1083570

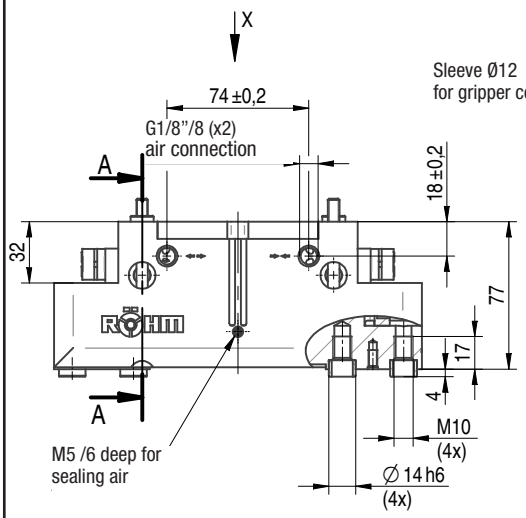
Precision parallel gripper RPP-160

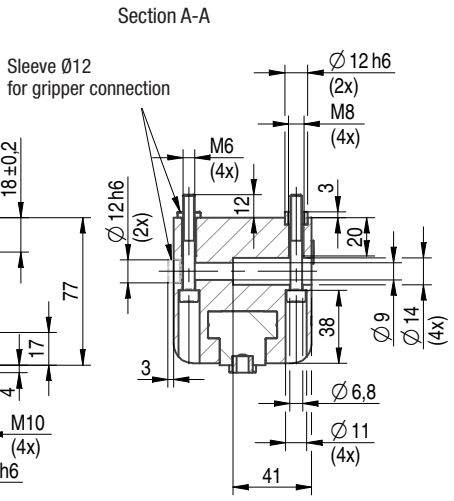
Technical data Item no.		RPP-160-1 170029	RPP-160-2 170030	RPP-160-1/GA 170031	RPP-160-2/GA 170032	RPP-160-1/GI 170033	RPP-160-2/GI 170034
Total gripping force at 6 bar	N	1850	3400	2400	4500	2500	4700
Total stroke	mm	32	16	32	16	32	16
Gripping force maintained by safety device	N	-	-	550	1100	550	1100
Recommended workpiece weight	kg	9	17	9	17	9	17
Weight	kg	2.8	2.8	3.6	3.6	3.6	3.6

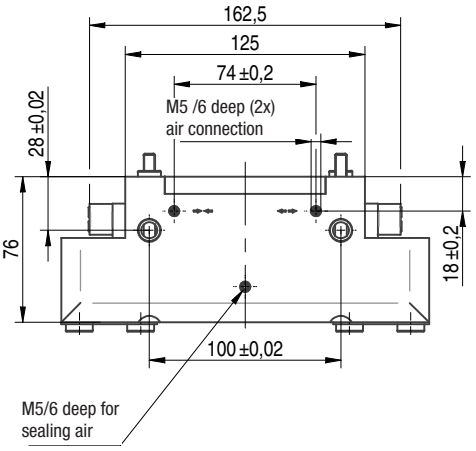




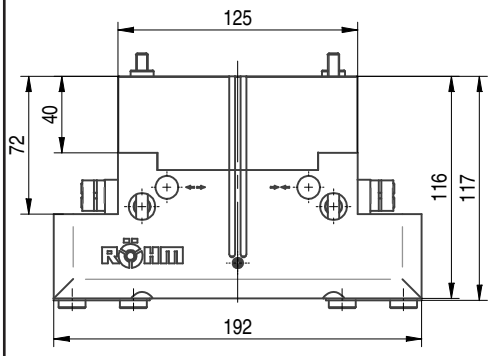




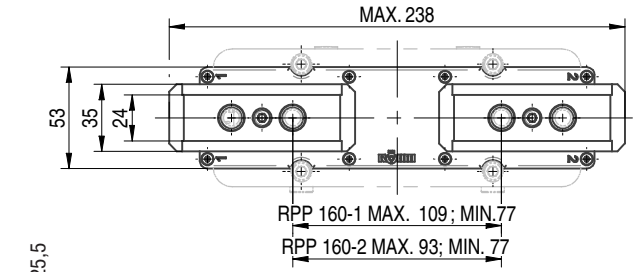


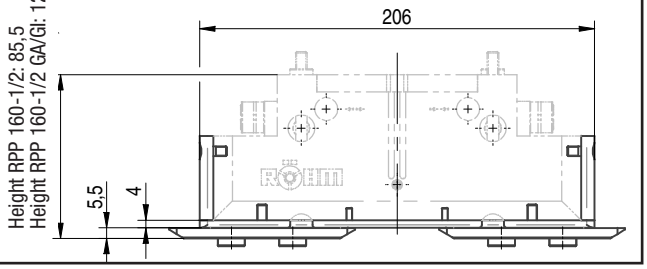


Type GA/GI with gripping force safety device



Accessories: Protective cover

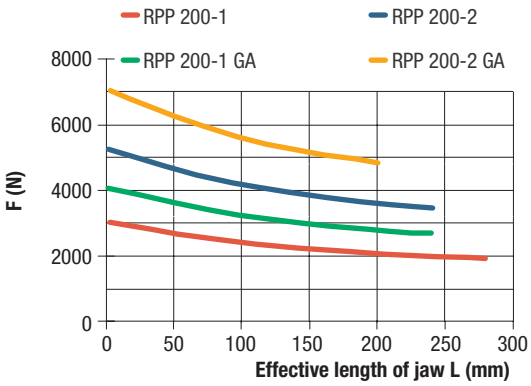




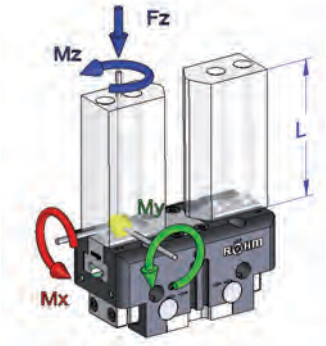
Precision parallel gripper RPP-200

Technical data		RPP-200-1	RPP-200-2	RPP-200-1/GA	RPP-200-2/GA	RPP-200-1/GI	RPP-200-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.35	0.35	0.3	0.3	0.6	0.6
Opening time	sec.	0.35	0.35	0.6	0.6	0.3	0.3
Air consumption per cycle	cm3	390	390	390	390	390	390
Max. allowable length of jaw	mm	280	240	240	200	240	200

Clamping force diagram – exterior gripping



Load on gripper and jaws



Max. moment	Mx:	max. 180 Nm
Max. moment	My:	max. 200 Nm
Max. moment	Mz:	max. 140 Nm
Max. pressure load	Fz:	max. 5000 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170580 steel
Item no. 170590 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170545

Pressure maintenance valve
Item no. 1078823

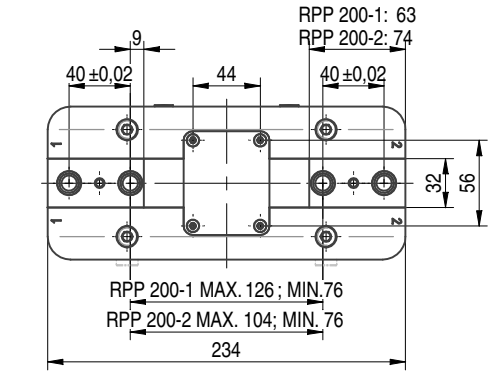
Compressed air connection
Item no. 477025

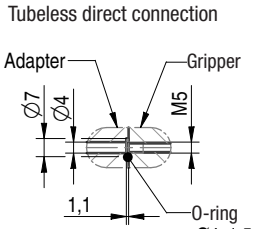
Inductive proximity switch
Item no. 389661

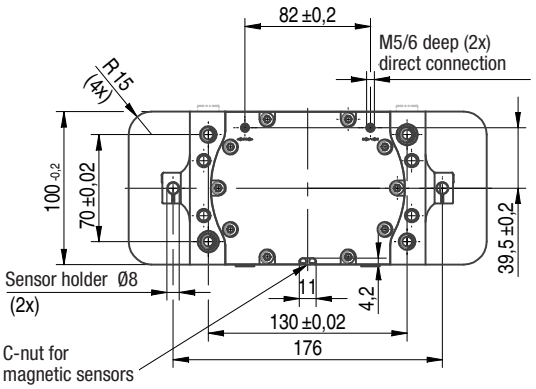
Magnetic field sensors
Item no. 1083570

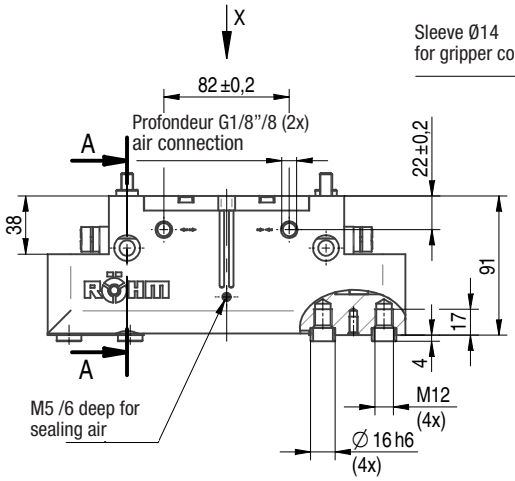
Precision parallel gripper RPP-200

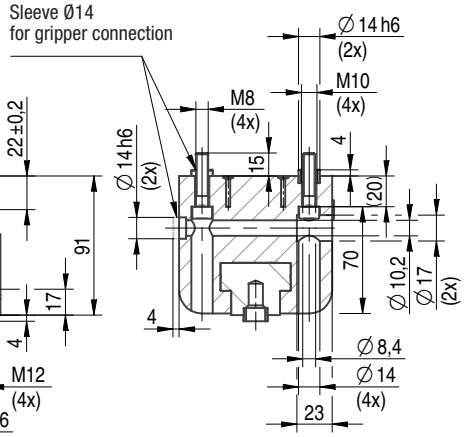
Technical data Item no.		RPP-200-1 170035	RPP-200-2 170036	RPP-200-1/GA 170037	RPP-200-2/GA 170038	RPP-200-2/GI 170039	RPP-200-2/GI 170040
Total gripping force at 6 bar	N	2800	4800	3700	6300	3850	6600
Total stroke	mm	50	28	50	28	50	28
Gripping force maintained by safety device	N	-	-	900	1500	900	1500
Recommended workpiece weight	kg	14	24	14	24	14	24
Weight	kg	5.5	5.5	7.5	7.5	7.5	7.5

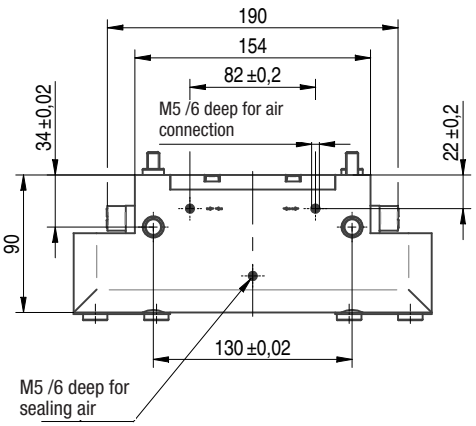




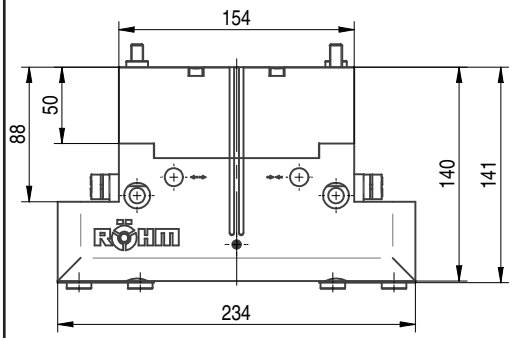




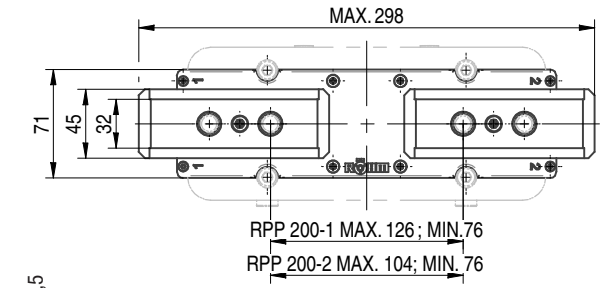


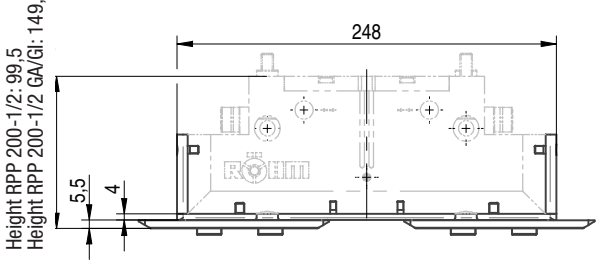


Type GA/GI with gripping force safety device



Accessories: Protective cover



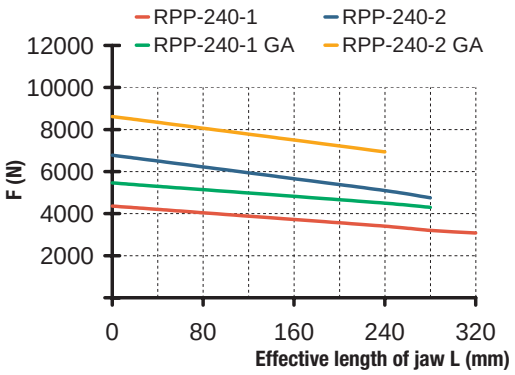


Precision parallel gripper RPP-240

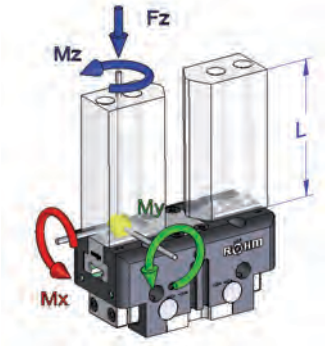
Technical data		RPP-240-1	RPP-240-2	RPP-240-1/GA	RPP-240-2/GA	RPP-240-1/GI	RPP-240-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.45	0.45	0.35	0.35	0.65	0.65
Opening time	sec.	0.45	0.45	0.65	0.65	0.35	0.35
Air consumption per cycle	cm3	650	650	650	650	650	650
Max. allowable length of jaw	mm	320	280	280	240	280	240

Clamping force diagram – exterior gripping

Total gripping force F(N) at 6 bar



Load on gripper and jaws



Max. moment	Mx:	max. 260 Nm
Max. moment	My:	max. 250 Nm
Max. moment	Mz:	max. 160 Nm
Max. pressure load	Fz:	max. 6200 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170581 steel
Item no. 170591 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170546

Pressure maintenance valve
Item no. 1078823

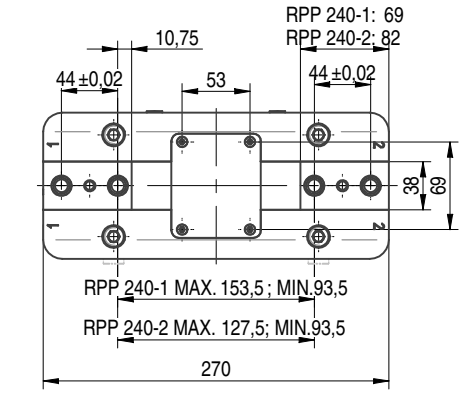
Compressed air connection
Item no. 477025

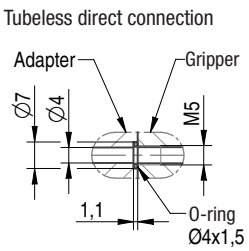
Inductive proximity switch
Item no. 389661

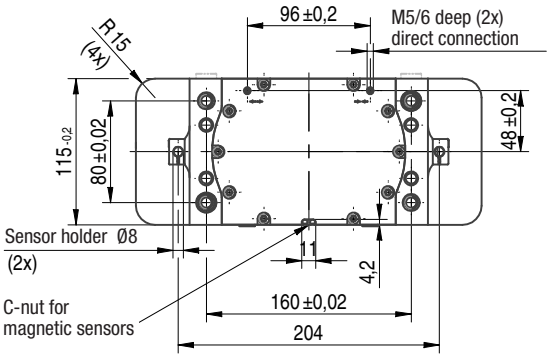
Magnetic field sensors
Item no. 1083570

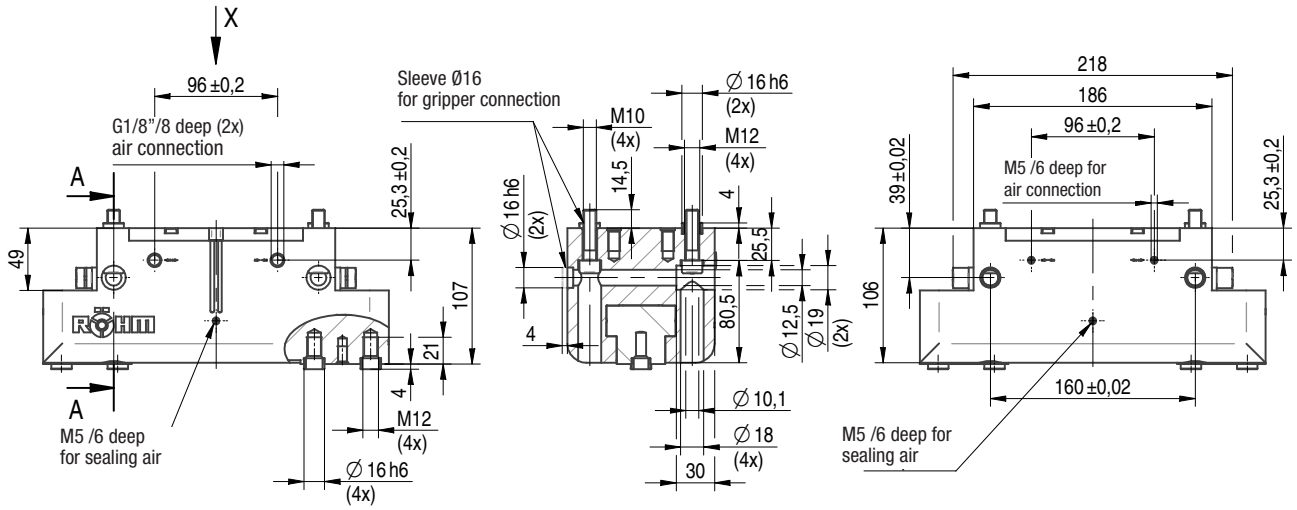
Precision parallel gripper RPP-240

Technical data Item no.		RPP-240-1 170100	RPP-240-2 170101	RPP-240-1/GA 170102	RPP-240-2/GA 170103	RPP-240-2/GI 170104	RPP-240-2/GI 170105
Total gripping force at 6 bar	N	4200	7000	5200	8600	5500	9000
Total stroke	mm	60	34	60	34	60	34
Gripping force maintained by safety device	N	-	-	1000	1600	1000	1600
Recommended workpiece weight	kg	21	35	21	35	21	35
Weight	kg	8.8	9.2	12	12	12	12

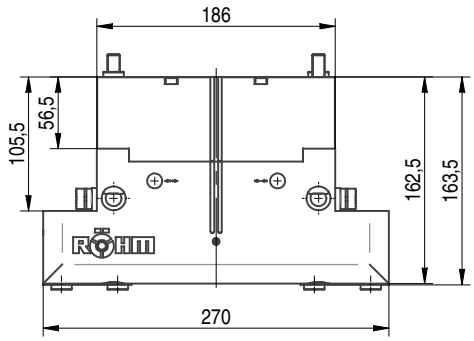




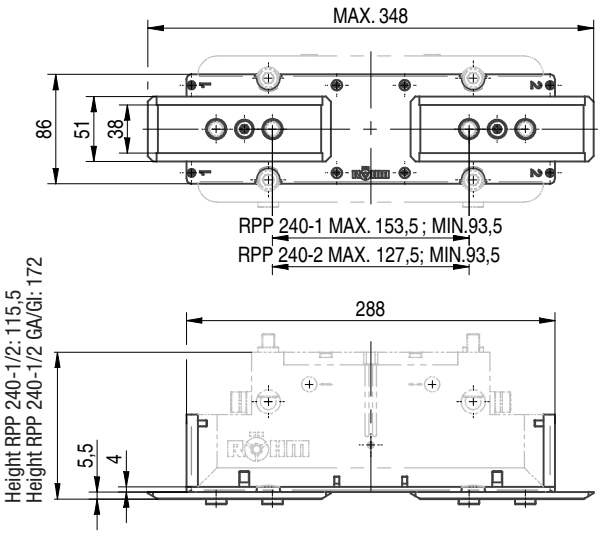




Type GA/GI with gripping force safety device



Accessories: Protective cover

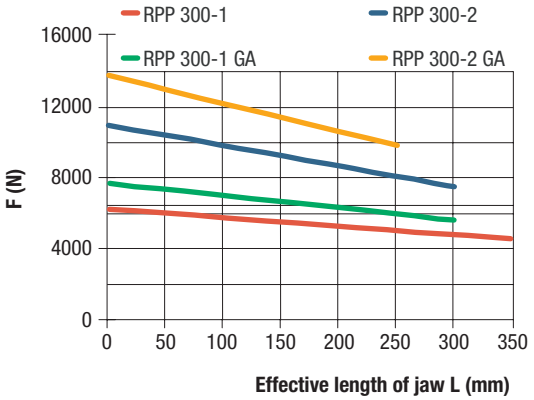


Precision parallel gripper RPP-300

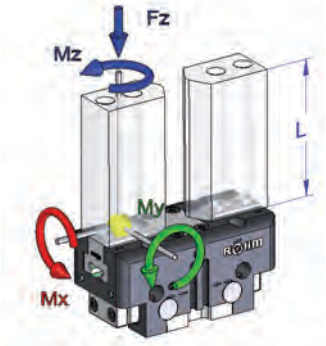
Technical data		RPP-300-1	RPP-300-2	RPP-300-1/GA	RPP-300-2/GA	RPP-300-1/GI	RPP-300-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.5	0.5	0.4	0.4	0.7	0.7
Opening time	sec.	0.5	0.5	0.7	0.7	0.4	0.4
Air consumption per cycle	cm3	1040	1040	1040	1040	1040	1040
Max. allowable length of jaw	mm	350	300	300	250	300	250

Clamping force diagram – exterior gripping

Total gripping force F(N) at 6 bar



Load on gripper and jaws



Max. moment	Mx:	max. 400 Nm
Max. moment	My:	max. 400 Nm
Max. moment	Mz:	max. 250 Nm
Max. pressure load	Fz:	max. 8000 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170582 steel
Item no. 170592 aluminium

Jaw dimensions see page 77

Protective cover
Item no. 170547

Pressure maintenance valve
Item no. 1078823

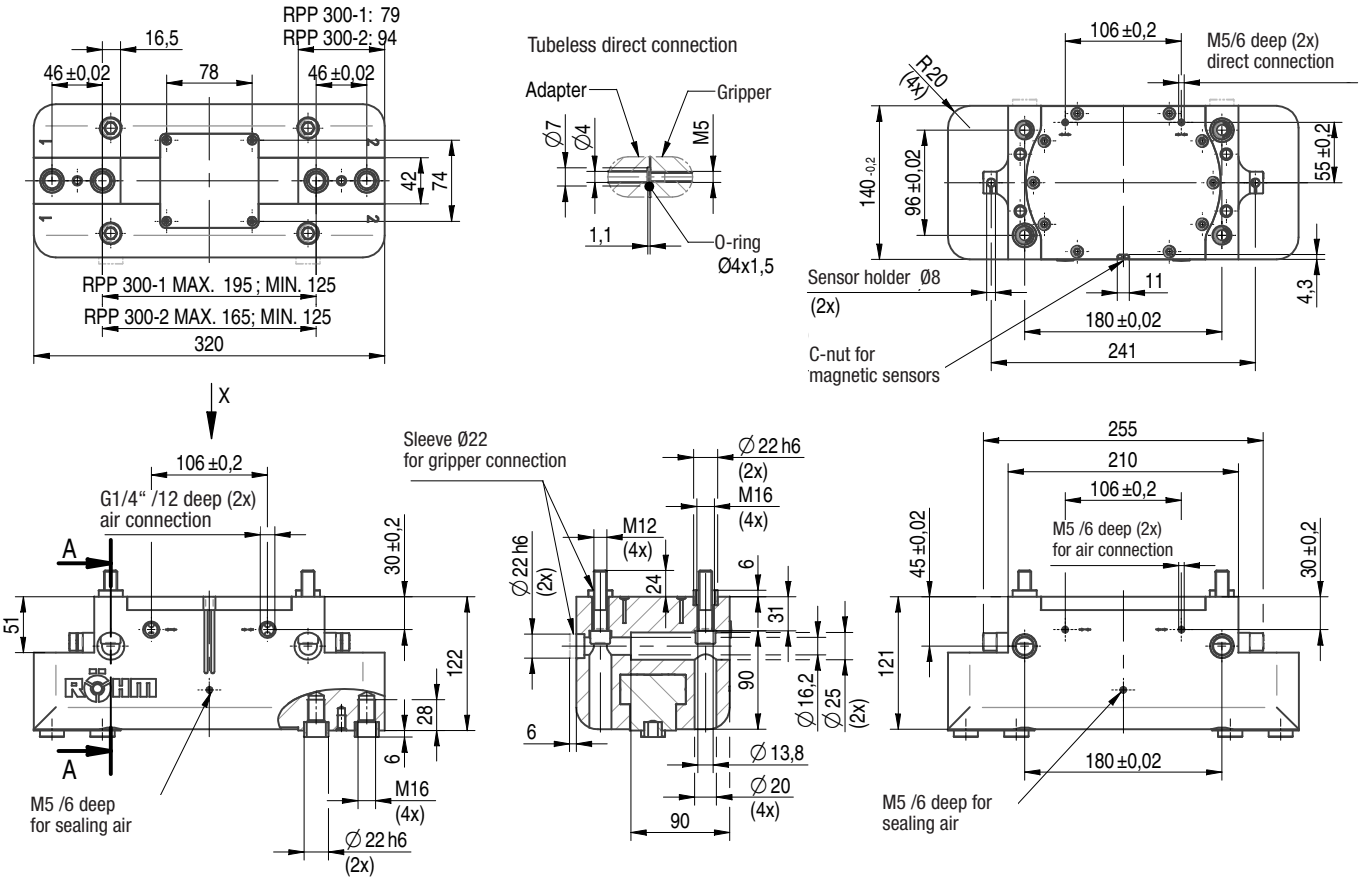
Compressed air connection
Item no. 477024

Inductive proximity switch
Item no. 389661

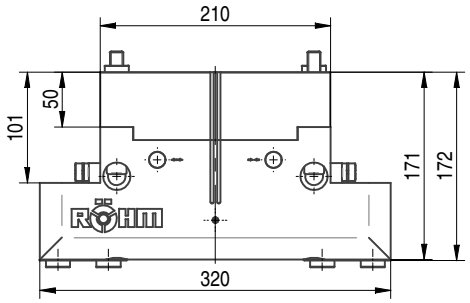
Magnetic field sensors
Item no. 1083570

Precision parallel gripper RPP-300

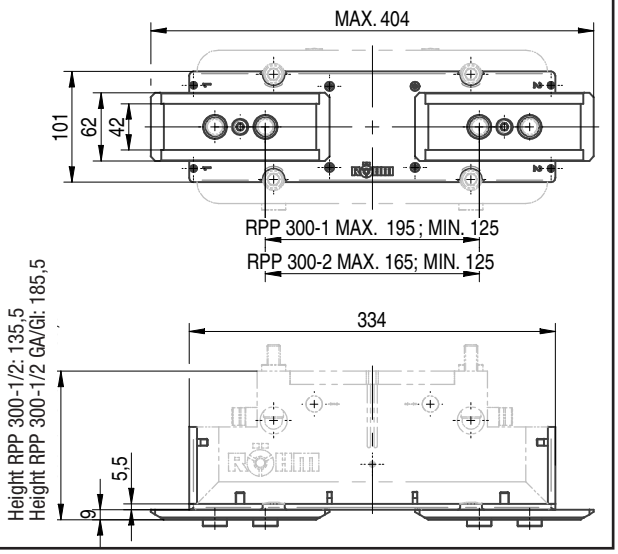
Technical data Item no.		RPP-300-1 170041	RPP-300-2 170042	RPP-300-1/GA 170043	RPP-300-2/GA 170044	RPP-300-1/GI 170045	RPP-300-2/GI 170046
Total gripping force at 6 bar	N	6200	10300	7500	12500	7500	12500
Total stroke	mm	70	40	70	40	70	40
Gripping force maintained by safety device	N	-	-	1300	2200	1300	2200
Recommended workpiece weight	kg	31	52	31	52	31	52
Weight	kg	14	14	17	17	17	17



Type GA/GI with gripping force safety device



Accessories: Protective cover



Description	Total stroke in mm		Maximum gripping force in N		Recommended workpiece weight in kg		Page
Version	**1**	**2**	**1**	**2**	**1**	**2**	
RRP-A 64	12	6	240	450	1,2	2,2	26
RPP-A 80	16	8	380	700	1.9	3.5	28
RPP-A 100	20	10	600	1160	3.0	5.5	30
RPP-A 125	26	12	950	1900	4.5	9.5	32
RPP-A 160	32	16	1300	2500	6.5	12.5	34

Design RPP-A

1	long jaw stroke, normal gripping force
2	normal jaw stroke, high gripping force
GA	Integrated springs as gripping force safety device for exterior tension, thus increased gripping force
GI	Integrated springs as gripping force safety device for interior tension, thus increased gripping force

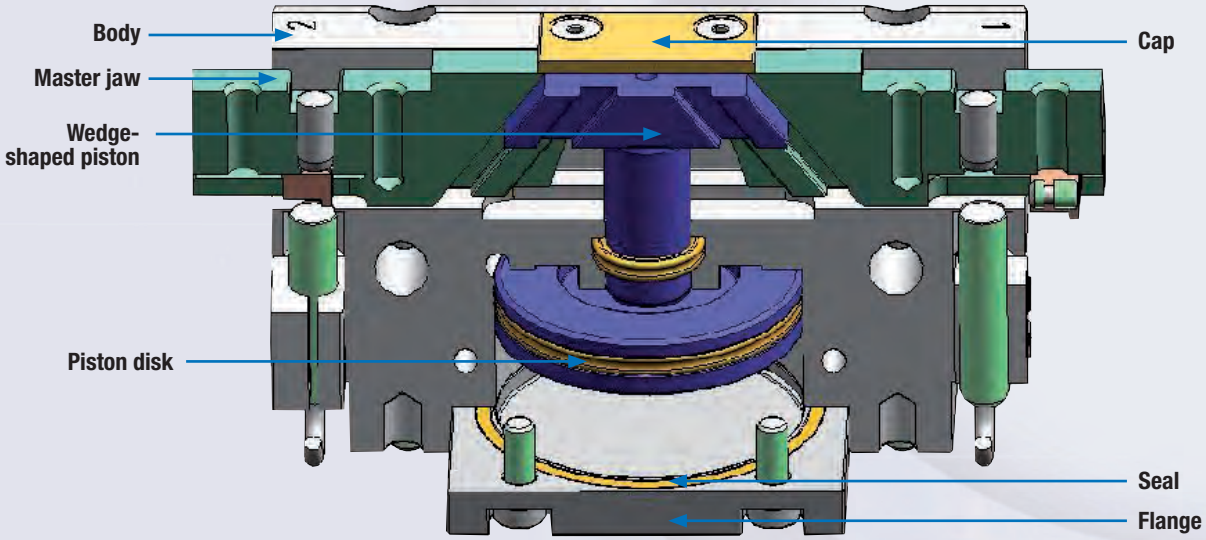
Technical Data	
Pneumatic	
Operating pressure	3 - 10 bar
Cylinder	double-acting
Dynamic seals	NBR seals with interior lubrication
Required valves	
Double-acting	5 paths, 2 positions
Single-acting (options GA or GI)	3 paths, 2 positions
Air quality	
Air filtration	40 µ or better
Air lubrication	not necessary*
Humidity	low (dry)
Operating temperatures	
NBR seals (standard)	-30 °C to 80 °C
FKM seals (optional)	-20 to 150
Maintenance	
Expected service life	
At normal use	5 million cycles
At preventive maintenance	10 million cycles
On-site repair of gripper	Yes
Seal set available	Yes

* Preventive maintenance considerably increases service life

2-jaw parallel gripper RPP-A pneumatic control

With crosswise slot and positioning pin

Mode of operation



- Tried and tested T-groove for gripping at max. loads
- Fast and efficient gripping
- Centric gripping of round and angular workpieces
- Universal application due to different types of jaws
- Ideal for series production
- All sizes available with 2 different stroke lengths
- Gripping pressure controlled by change of pressure
- Constant clamping force at a constant pressure and thus high clamping precision
- Compact and ergonomic design
- Sealing air connection to prevent contamination
- Gripper can be mounted on two sides of the gripper
- Optional inductive position sensors
- Screw connection or direct connection to compressed air
- Gripping force safety device as a special type for exterior or interior gripping
- Simple cut surface of master jaw / top jaw with crosswise slot, positioning pin and positioning borehole

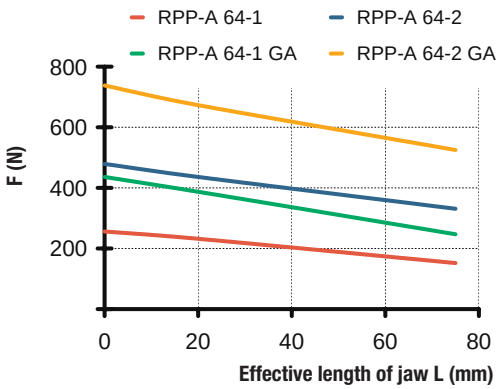
Precision parallel gripper

RPP-A 64

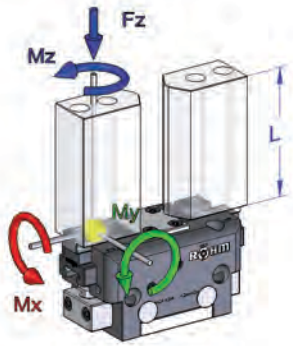
Technical data		RPP-A 64-1	RPP-A 64-2	RPP-A 64-1/GA	RPP-A 64-2/GA	RPP-A 64-1/GI	RPP-A 64-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.02	0.02	0.01	0.01	0.02	0.02
Opening time	s	0.02	0.02	0.02	0.02	0.01	0.01
Air consumption per cycle	cm3	10	10	10	10	10	10
Max. allowable length of jaw	mm	64	64	64	64	64	64

Clamping force diagram – exterior gripping

Total gripping force F(N) at 6 bar



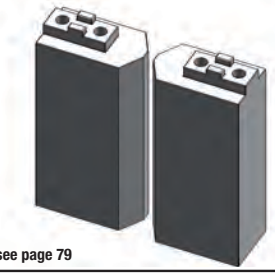
Max. load on gripper and jaw



Max. moment	Mx:	max. 15 Nm
Max. moment	My:	max. 30 Nm
Max. moment	Mz:	max. 25 Nm
Max. pressure load	Fz:	max. 450 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170675 steel
Item no. 170685 aluminium



Jaw dimensions see page 79

Protective cover
Item no. 170700

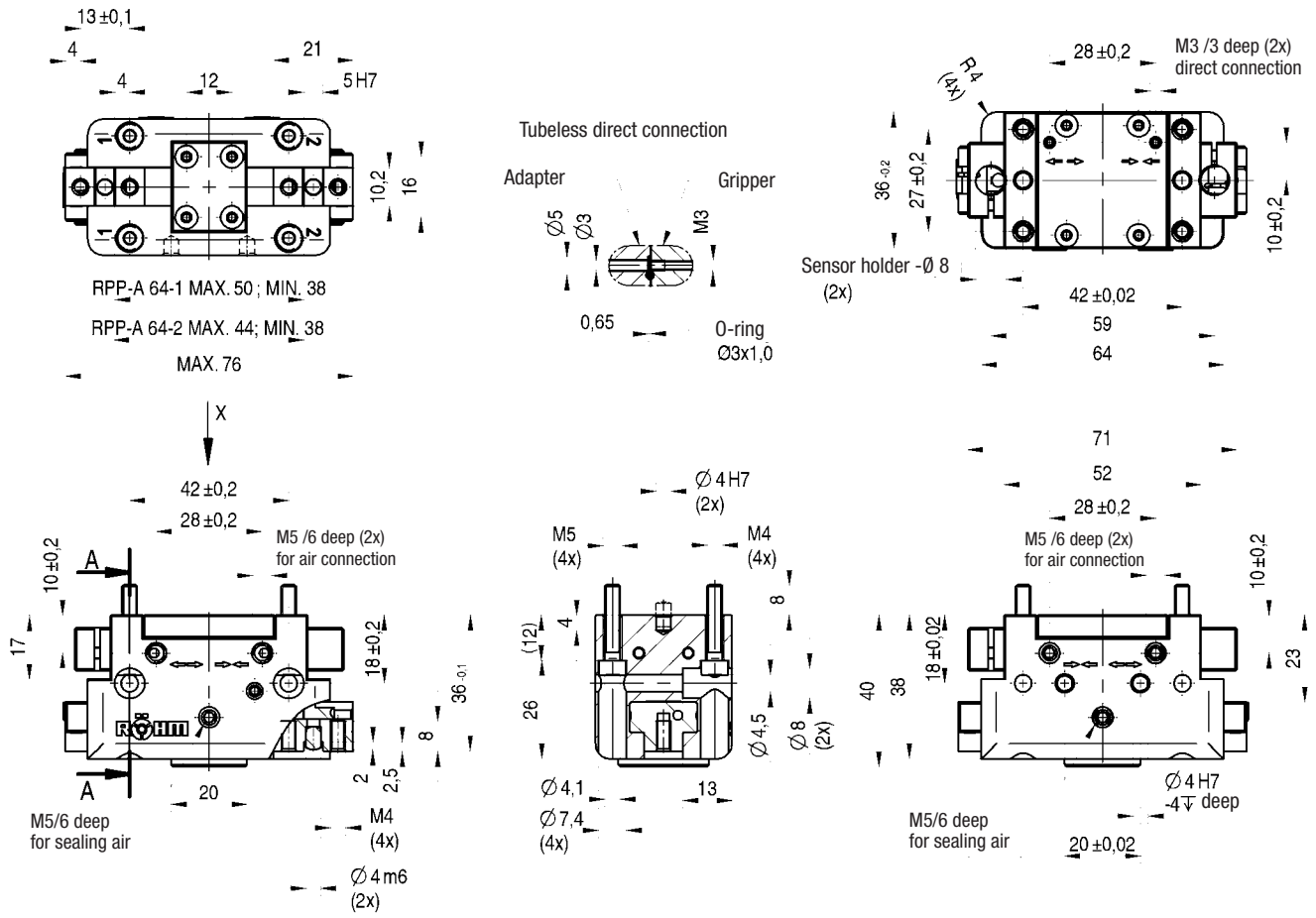
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 802539

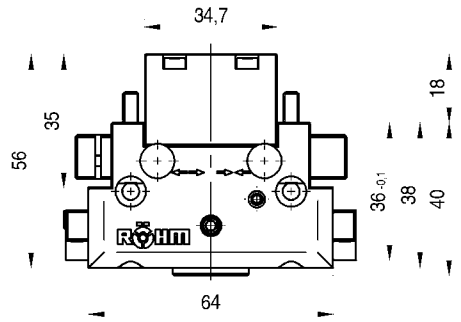
Inductive proximity switch
Item no. 229114

RPP-A 64

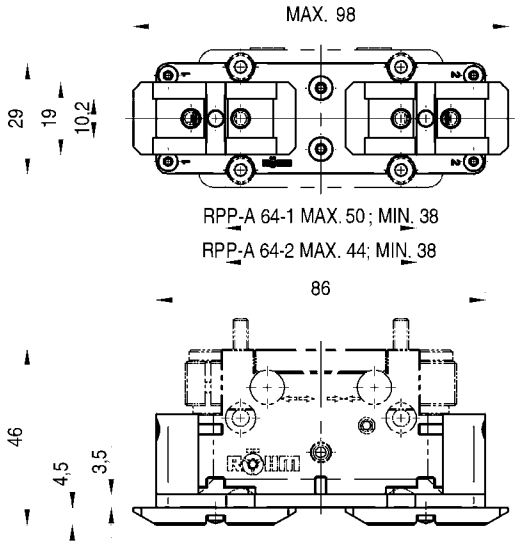
Technical data Item no.		RPP-A 64-1 436763	RPP-A 64-2 436764	RPP-A 64-1/GA 436765	RPP-A 64-2/GA 436766	RPP-A 64-1/GI 436767	RPP-A 64-2/GI 436768
Total gripping force at 6 bar	N	240	450	320	600	350	650
Total stroke	mm	12	6	12	6	12	6
Gripping force maintained by safety device	N	-	-	80	150	80	150
Recommended workpiece weight	kg	1.2	2.2	1.2	2.2	1.2	2.2
Weight	kg	0.3	0.3	0.42	0.42	0.42	0.42



Type GA/GI with gripping force safety device



Accessories: Protective cover

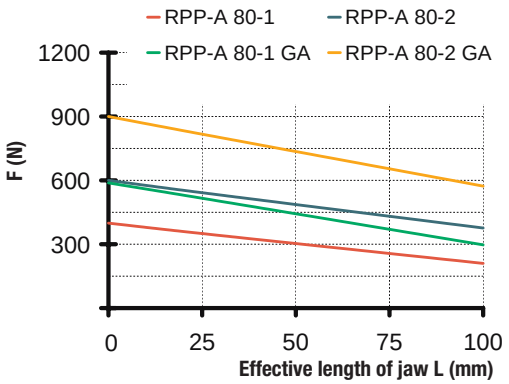


Precision parallel gripper — RPP-A 80

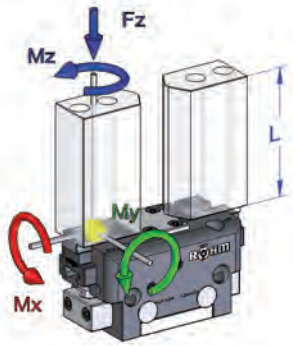
Technical data		RPP-A 80-1	RPP-A 80-2	RPP-A 80-1/GA	RPP-A 80-2/GA	RPP-A 80-1/GI	RPP-A 80-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	s	0.03	0.03	0.02	0.02	0.03	0.03
Opening time	s	0.03	0.03	0.03	0.03	0.02	0.02
Air consumption per cycle	cm^3	20	20	20	20	20	20
Max. allowable length of jaw	mm	80	80	80	80	80	80

Clamping force diagram – exterior gripping

Total gripping force F(N) at 6 bar



Max. load on gripper and jaw



Max. moment	Mx:	max. 30 Nm
Max. moment	My:	max. 90 Nm
Max. moment	Mz:	max. 35 Nm
Max. pressure load	Fz:	max. 600 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170676 steel
Item no. 170686 aluminium

Jaw dimensions see page 79

Protective cover
Item no. 170701

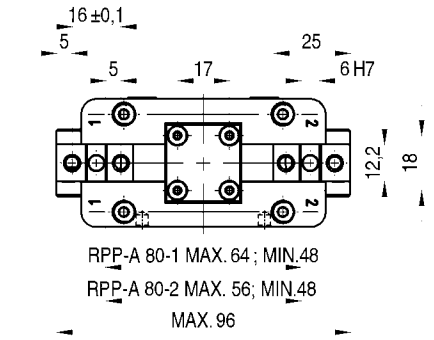
Pressure maintenance valve
Item no. 1078823

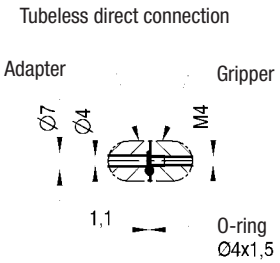
Compressed air connection
Item no. 802539

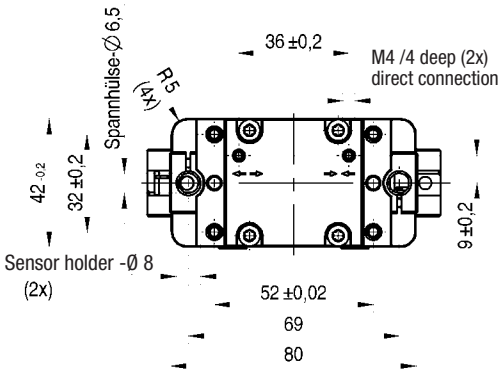
Inductive proximity switch
Item no. 229114

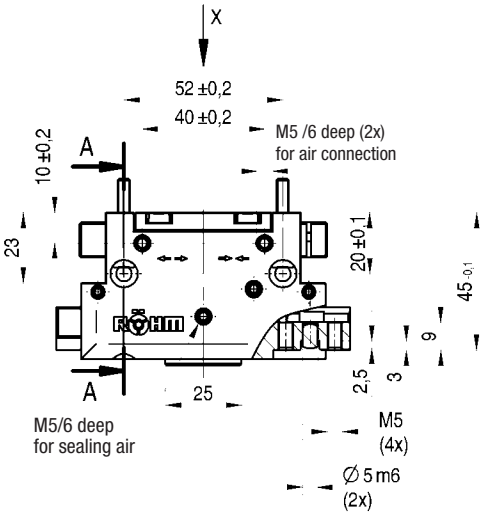
RPP-A 80

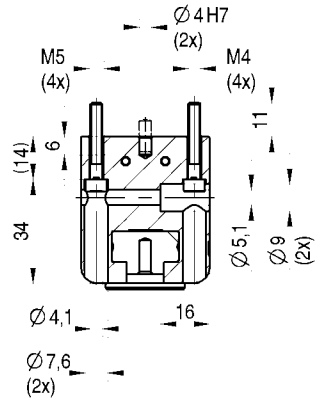
Technical data Item no.		RPP-A 80-1 434844	RPP-A 80-2 435027	RPP-A 80-1/GA 435028	RPP-A 80-2/GA 435029	RPP-A 80-1/GI 435030	RPP-A 80-2/GI 435031
Total gripping force at 6 bar	N	380	700	520	970	550	1000
Total stroke	mm	16	8	16	8	16	8
Gripping force maintained by safety device	N	-	-	140	270	140	270
Recommended workpiece weight	kg	1.9	3.5	1.9	3.5	1.9	3.5
Weight	kg	0.45	0.45	0.6	0.6	0.6	0.6

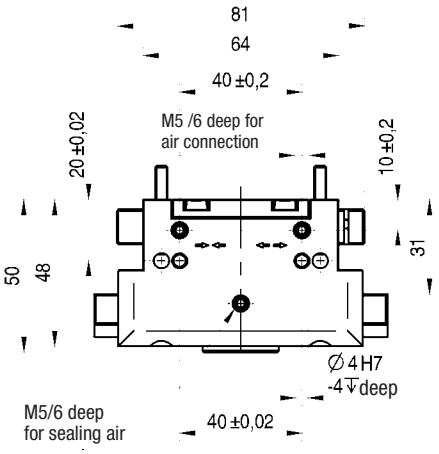




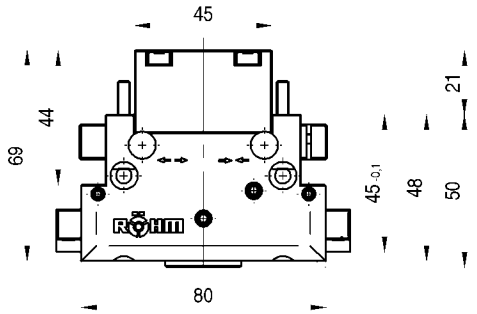




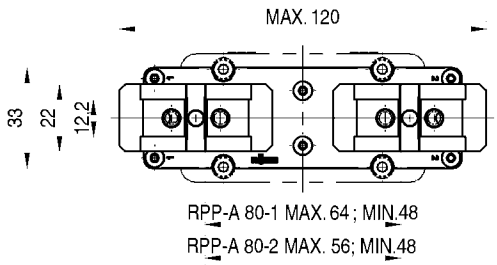


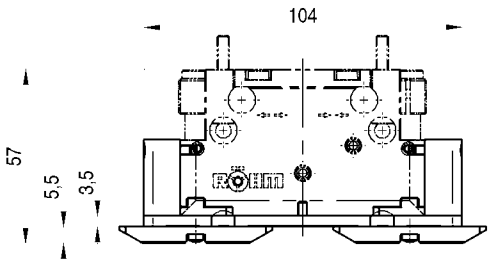


Type GA/GI with gripping force safety device



Accessories: Protective cover

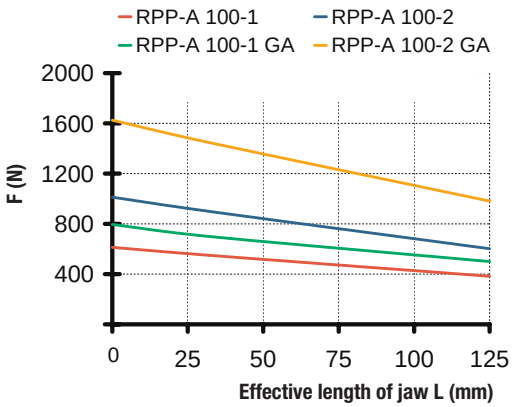




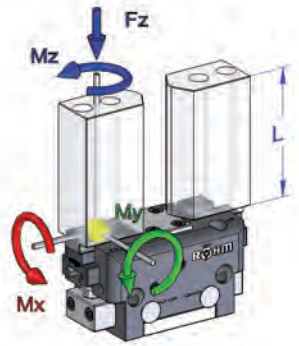
Precision parallel gripper RPP-A 100

Technical data		RPP-A 100-1	RPP-A 100-2	RPP-A 100-1/GA	RPP-A 100-2/GA	RPP-A 100-1/GI	RPP-A 100-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	s	0.05	0.05	0.03	0.03	0.05	0.05
Opening time	s	0.05	0.05	0.05	0.05	0.03	0.03
Air consumption per cycle	cm^3	40	40	40	40	40	40
Max. allowable length of jaw	mm	100	100	100	100	100	100

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 45 Nm
Max. moment	My:	max. 95 Nm
Max. moment	Mz:	max. 45 Nm
Max. pressure load	Fz:	max. 800 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170677 steel
Item no. 170687 aluminium

Jaw dimensions see page 79

Protective cover
Item no. 170702

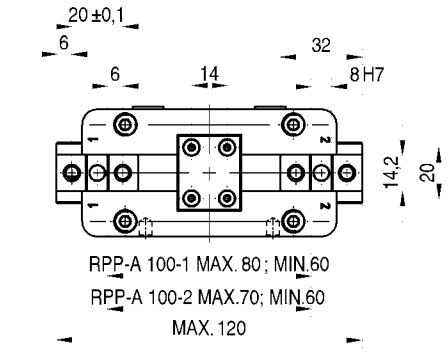
Pressure maintenance valve
Item no. 1078823

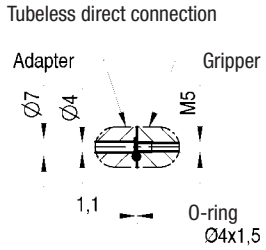
Compressed air connection
Item no. 477025

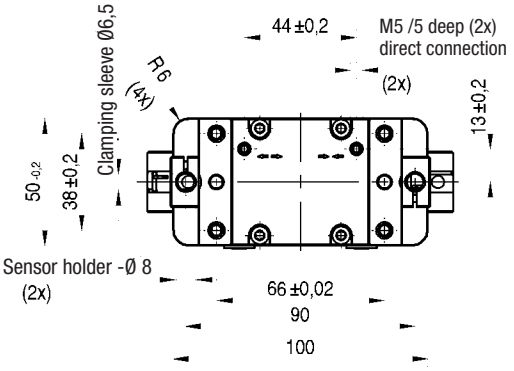
Inductive proximity switch
Item no. 229114

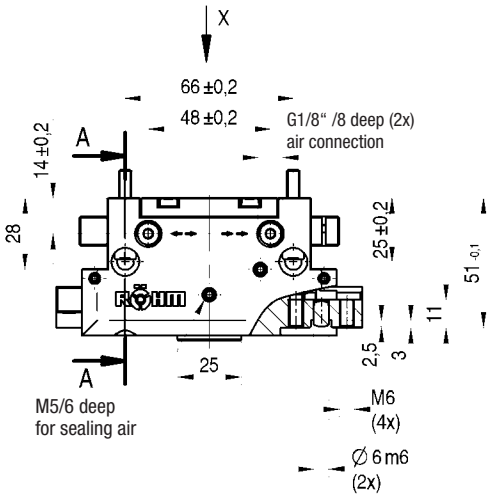
RPP-A 100

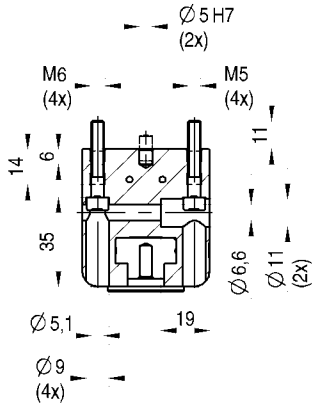
Technical data Item no.		RPP-A 100-1 434845	RPP-A 100-2 435032	RPP-A 100-1/GA 435033	RPP-A 100-2/GA 434846	RPP-A 100-1/GI 435034	RPP-A 100-2/GI 435035
Total gripping force at 6 bar	N	600	1160	750	1450	800	1550
Total stroke	mm	20	10	20	10	20	10
Gripping force maintained by safety device	N	-	-	150	290	150	290
Recommended workpiece weight	kg	3.0	5.5	3.0	5.5	3.0	5.5
Weight	kg	0.75	0.75	0.95	0.95	0.95	0.95

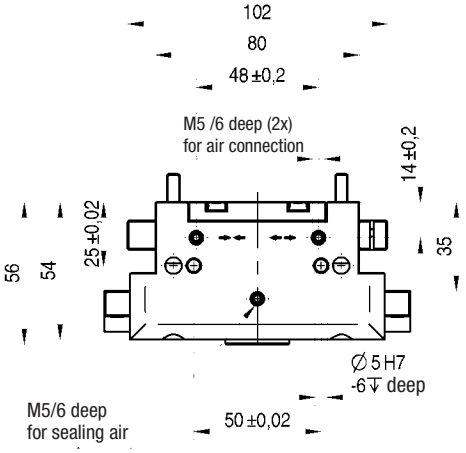




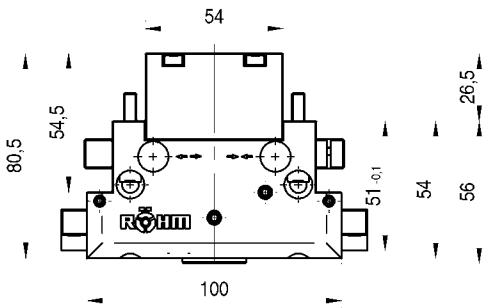




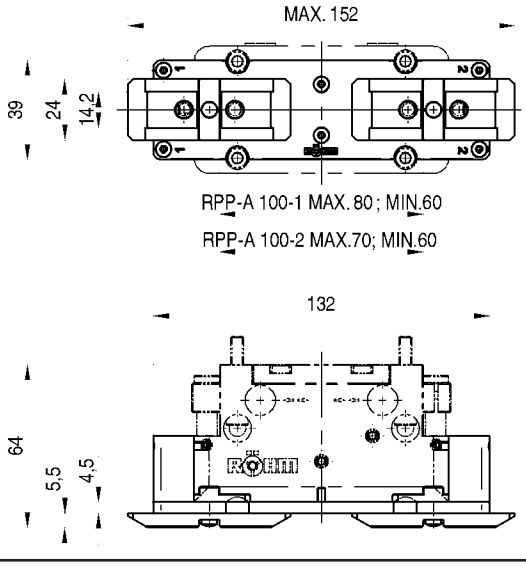




Type GA/GI with gripping force safety device



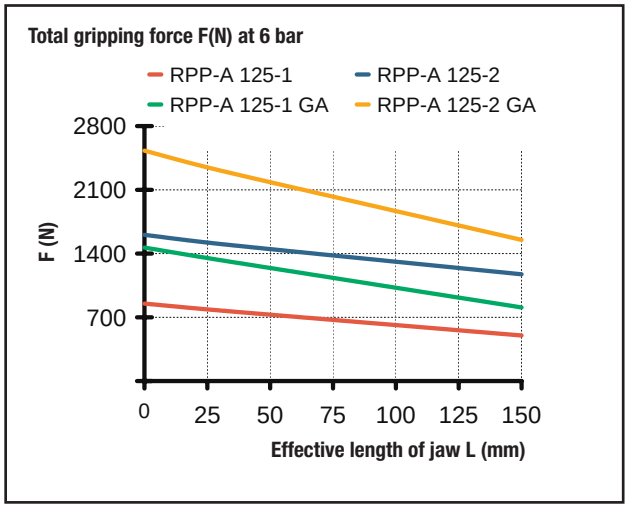
Accessories: Protective cover



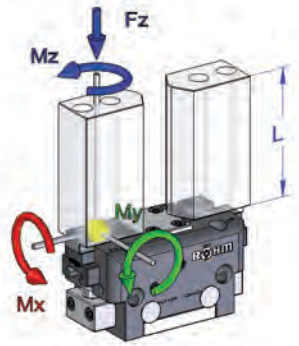
Precision parallel gripper RPP-A 125

Technical data		RPP-A 125-1	RPP-A 125-2	RPP-A 125-1/GA	RPP-A 125-2/GA	RPP-A 125-1/GI	RPP-A 125-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	s	0.08	0.08	0.07	0.07	0.10	0.10
Opening time	s	0.08	0.08	0.10	0.10	0.07	0.07
Air consumption per cycle	cm^3	70	70	70	70	70	70
Max. allowable length of jaw	mm	125	125	125	125	125	125

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 60 Nm
Max. moment	My:	max. 100 Nm
Max. moment	Mz:	max. 70 Nm
Max. pressure load	Fz:	max. 900 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170678 steel
Item no. 170688 aluminium

Jaw dimensions see page 79

Protective cover
Item no. 170703

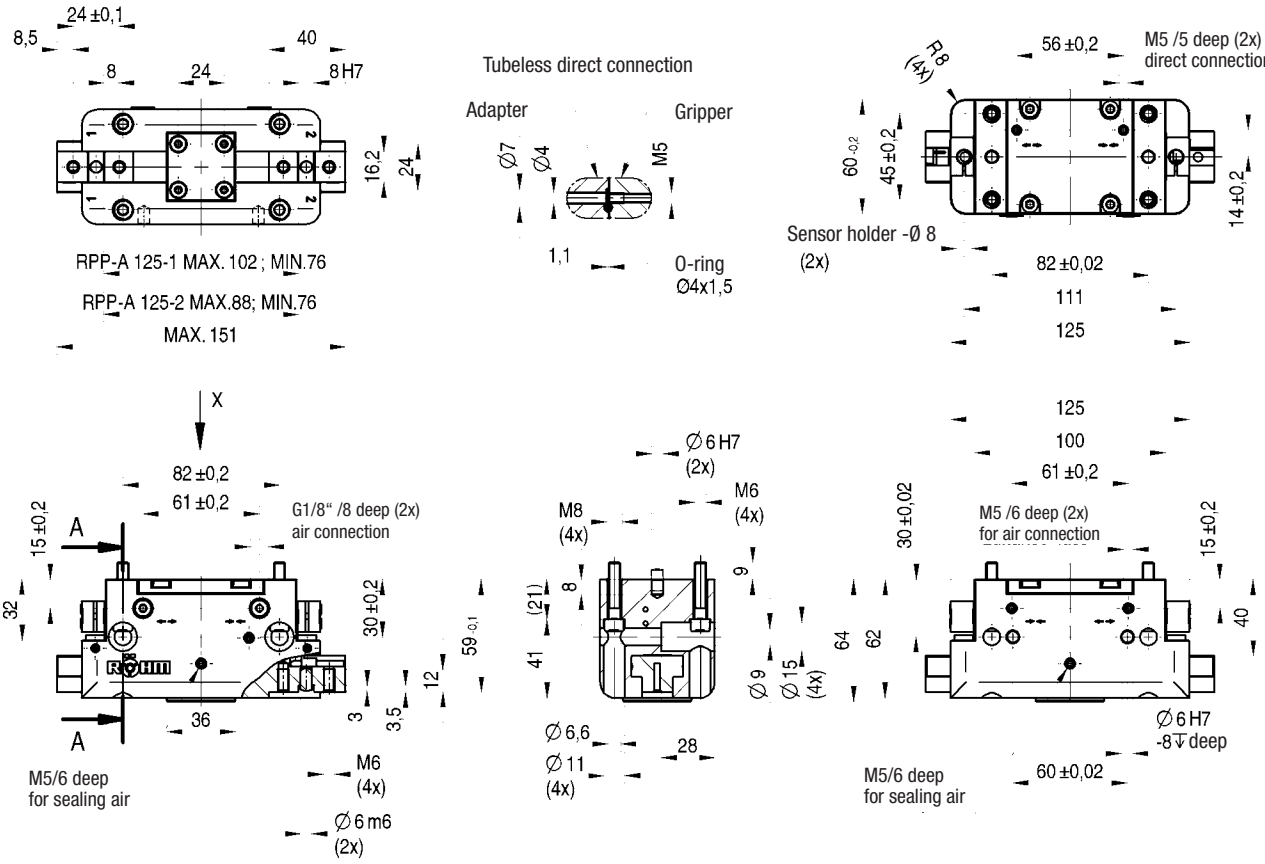
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 477025

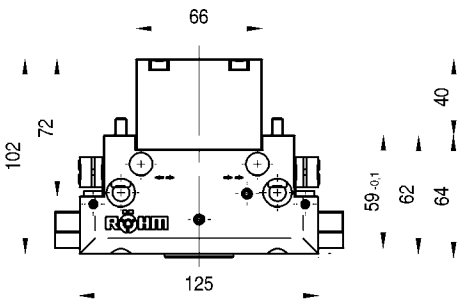
Inductive proximity switch
Item no. 229114

RPP-A 125

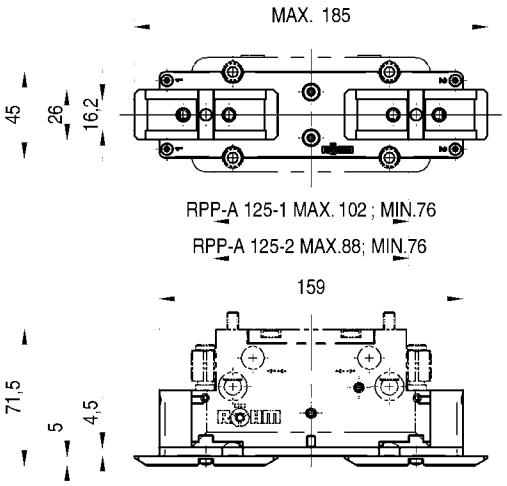
Technical data Item no.		RPP-A 125-1 435036	RPP-A 125-2 435037	RPP-A 125-1/GA 435038	RPP-A 125-2/GA 434847	RPP-A 125-1/GI 435039	RPP-A 125-2/GI 435040
Total gripping force at 6 bar	N	950	1900	1230	2450	1300	2520
Total stroke	mm	26	12	26	12	26	12
Total gripping force maintained by safety device	N	-	-	280	550	280	550
Recommended workpiece weight	kg	4.5	9.5	4.5	9.5	4.5	9.5
Weight	kg	1.3	1.3	1.65	1.65	1.65	1.65



Type GA/GI with gripping force safety device



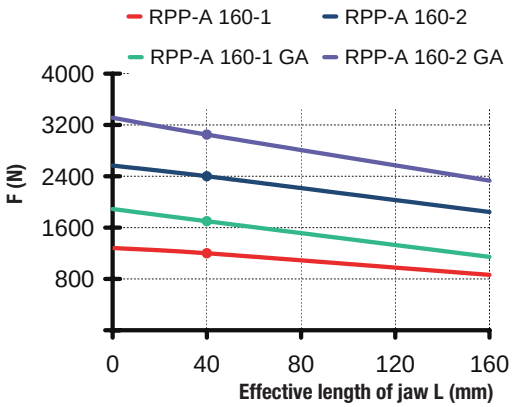
Accessories: Protective cover



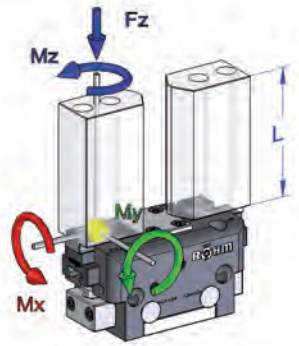
Precision parallel gripper RPP-A 160

Technical data		RPP-A 160-1	RPP-A 160-2	RPP-A 160-1/GA	RPP-A 160-2/GA	RPP-A 160-1/GI	RPP-A 160-2/GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	s	0.10	0.10	0.12	0.12	0.30	0.30
Opening time	s	0.10	0.10	0.30	0.30	0.12	0.12
Air consumption per cycle	cm^3	130	130	130	130	130	130
Max. allowable length of jaw	mm	160	160	160	160	160	160

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 80 Nm
Max. moment	My:	max. 100 Nm
Max. moment	Mz:	max. 80 Nm
Max. pressure load	Fz:	max. 1100 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170679 steel
Item no. 170689 aluminium

Jaw dimensions see page 79

Protective cover
Item no. 170704

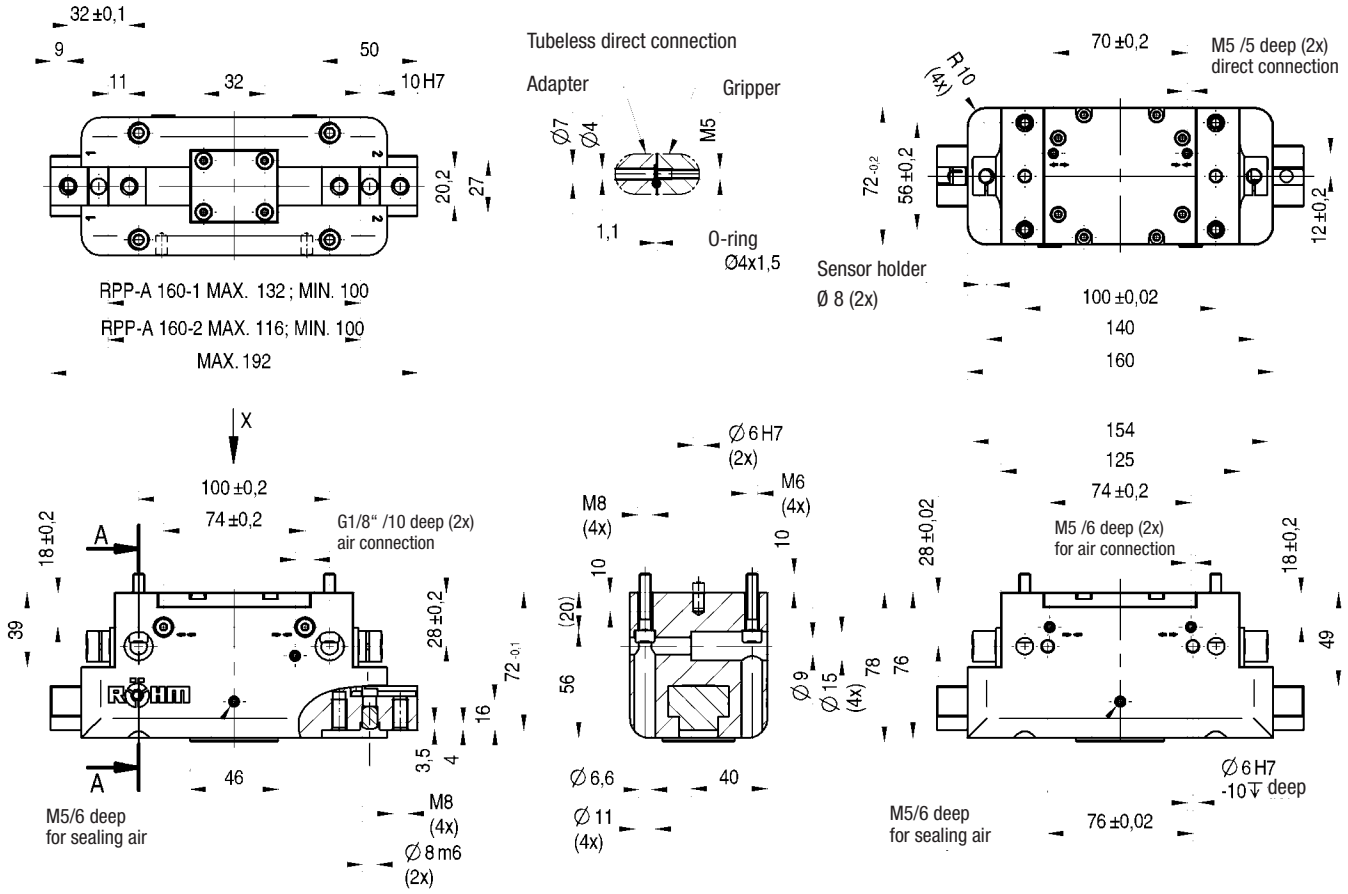
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 477025

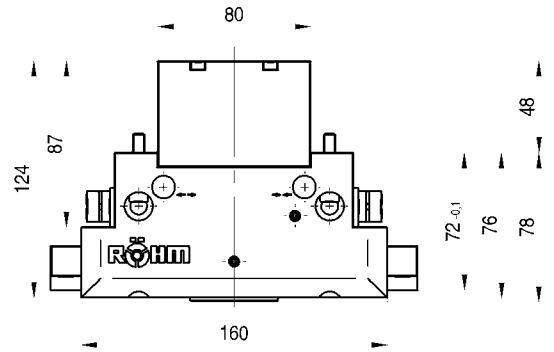
Inductive proximity switch
Item no. 229114

RPP-A 160

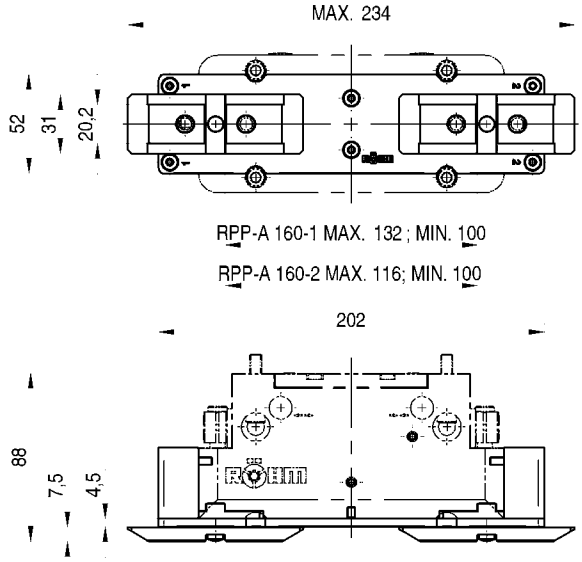
Technical Data Serial no		RPP-A 160-1 434848	RPP-A 160-2 435041	RPP-A 160-1/GA 436525	RPP-A 160-2/GA 436526	RPP-A 160-1/GI 436527	RPP-A 160-2/GI 436528
Total gripping force at 6 bar	N	1300	2500	1700	3300	1850	3450
Total stroke	mm	32	16	32	16	32	16
Total gripping force maintained by safety device	N	-	-	400	800	400	800
Recommended workpiece weight	kg	6.5	12.5	6.5	12.5	6.5	12.5
Weight	kg	2.5	2.5	3.1	3.1	3.1	3.1



Type GA/GI with gripping force safety device



Accessories: Protective cover



Description	Total stroke in mm		Maximum gripping force in N		Recommended workpiece weight in kg		Page
Version	**1**	**2**	**1**	**2**	**1**	**2**	
RZP-64	12	6	650	1200	3.2	6.0	38
RZP-80	16	8	1200	2400	6.0	12.0	40
RZP-100	20	10	2000	4000	10.0	20	42
RZP-125	26	12	3200	6000	16	30	44
RZP-160	32	16	6000	11000	30	55	46
RZP-200	50	28	7500	12500	37	62	48
RZP-240	60	34	10500	18000	53	90	50
RZP-300	70	40	16000	28000	80	140	52

Design RZP:

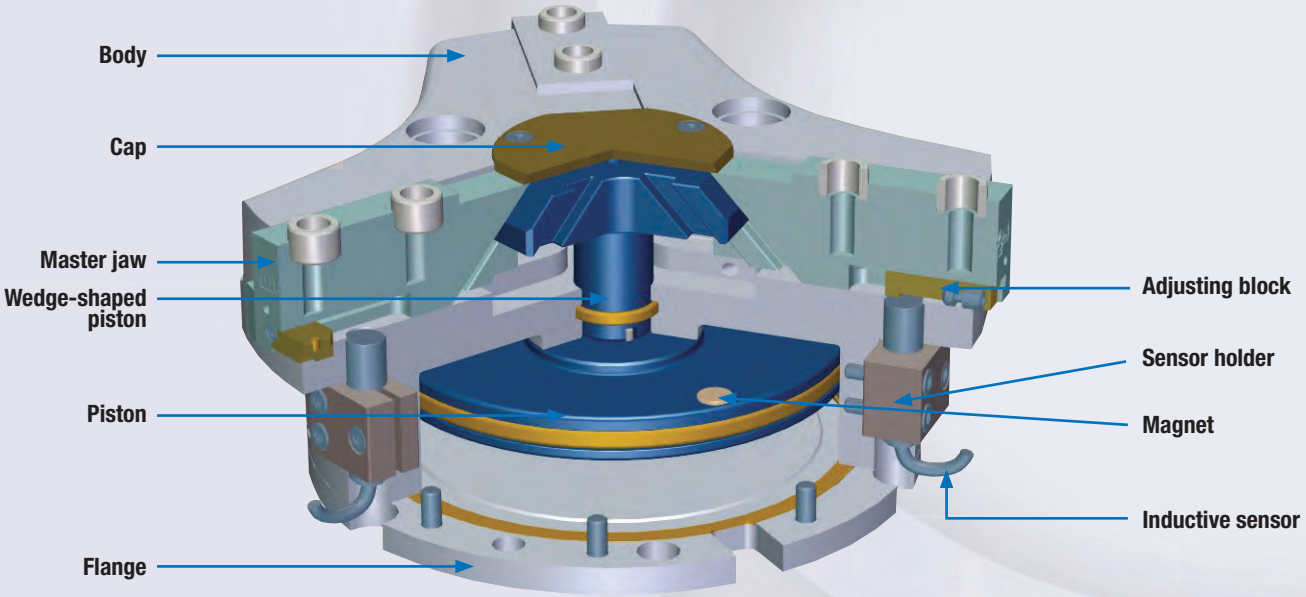
1	long jaw stroke, normal gripping force
2	normal jaw stroke, high gripping force
GA	Integrated springs as gripping force safety device for exterior tension, thus increased gripping force
GI	Integrated springs as gripping force safety device for interior tension, thus increased gripping force

Technical Data	
Pneumatic	
Operating pressure	3 - 10 bar
Cylinder	double-acting
Dynamic seals	NBR seals with interior lubrication
Required valves	
Double-acting	5 paths, 2 positions
Single-acting (options GA or GI)	3 paths, 2 positions
Air quality	
Air filtration	40 µ or better
Air lubrication	not necessary
Humidity	low (dry)
Operating temperatures	
NBR seals (standard)	-30 °C to 80 °C
FKM seals (optional)	-20 to 150
Maintenance	
Expected service life	
At normal use	5 million cycles
At preventive maintenance	10 million cycles
On-site repair of gripper	Yes
Seal set available	Yes

* Preventive maintenance considerably increases service life

3-jaw centric gripper RZP pneumatic control

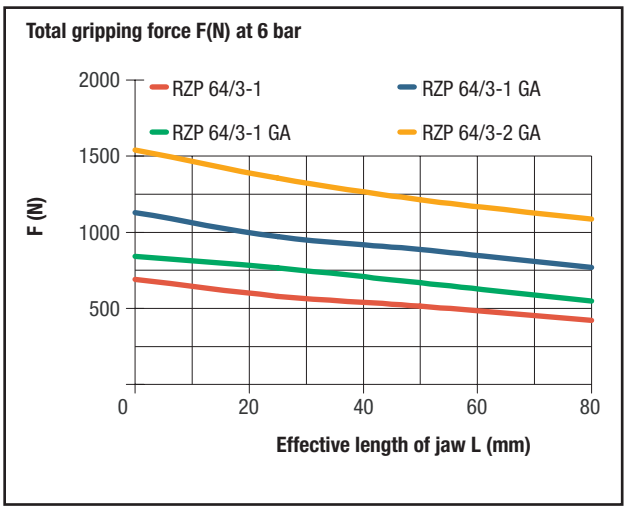
Mode of operation



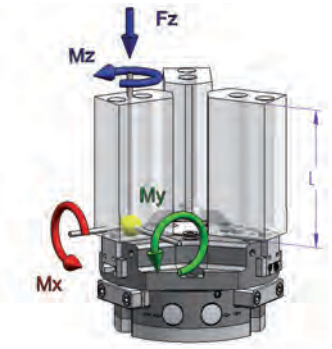
- Tried and tested T-groove gripping guide for master jaw at max. loads
- Suitable Fast and efficient gripping
- Centric gripping of round and angular workpieces
- Universal application due to different types of jaws
- Ideal for series production
- All sizes available with 2 different stroke lengths
- Gripping pressure controlled by change of pressure
- Constant clamping force at a constant pressure and thus high clamping precision
- Compact and ergonomic design
- Sealing air connection to prevent contamination
- Gripper can be mounted on one side of the gripper
- Inductive or magnetic position sensors
- Screw connection or direct connection to compressed air
- Gripping force safety device as a special type for exterior or interior gripping
- Simple interface master jaw / top jaw with 2 centring sleeves and 2 screw threads

Technical data		RZP-64/3-1	RZP-64/3-2	RZP-64/3-1 GA	RZP-64/3-2 GA	RZP-64/3-1 GI	RZP-64/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.03	0.03	0.02	0.02	0.04	0.04
Opening time	sec.	0.03	0.03	0.04	0.04	0.02	0.02
Air consumption per cycle	cm^3	25	25	25	25	25	25
Max. allowable length of jaw	mm	90	85	85	80	85	80

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 40 Nm
Max. moment	My:	max. 60 Nm
Max. moment	Mz:	max. 40 Nm
Max. pressure load	Fz:	max. 1100 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170500 steel
Item no. 170550 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170516

Protective cover
Item no. 170810

Pressure maintenance valve
Item no. 1078823

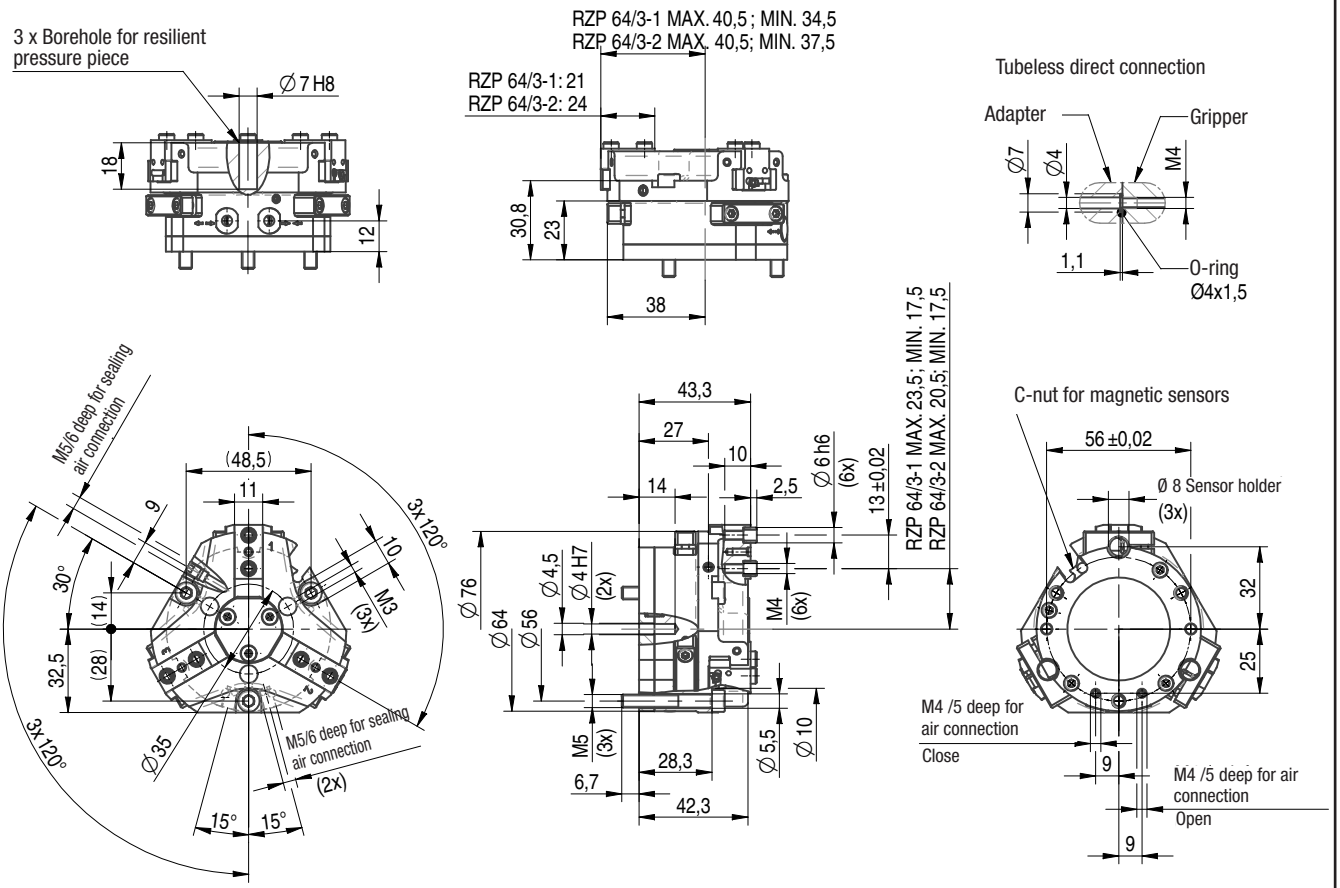
Compressed air connection
Item no. 802539

Inductive proximity switch
Item no. 229114

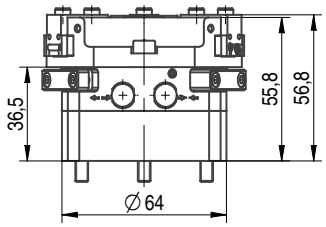
Magnetic field sensors
Item no. 1083570

RZP-64

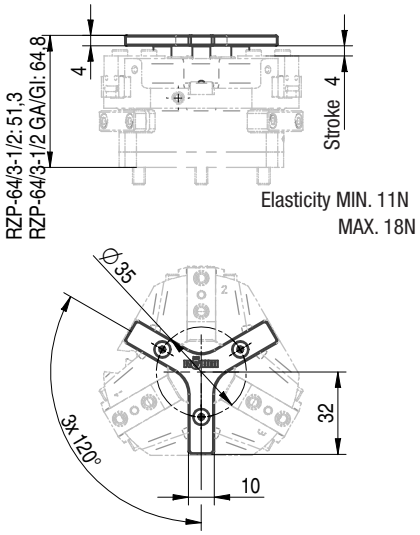
Technical data Item no.		RZP-64/3-1 170050	RZP-64/3-2 170051	RZP-64/3-1 GA 170052	RZP-64/3-2 GA 170053	RZP-64/3-1 GI 170054	RZP-64/3-2 GI 170055
Total gripping force at 6 bar	N	650	1200	850	1600	900	1700
Total stroke	mm	12	6	12	6	12	6
Total grip. force maintained by safety device	N			200	400	200	400
Recommended workpiece weight	kg	3.2	6.0	3.2	6.0	3.2	6.0
Weight	kg	0.45	0.45	0.55	0.55	0.55	0.55



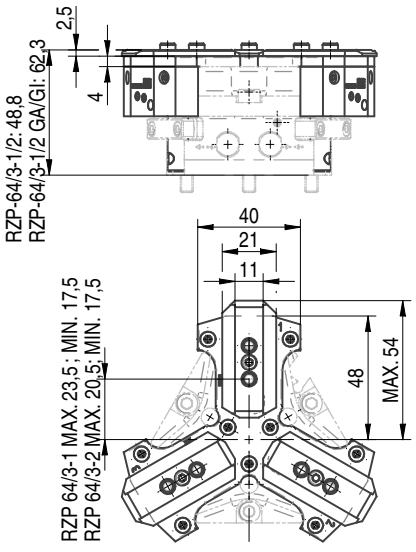
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece

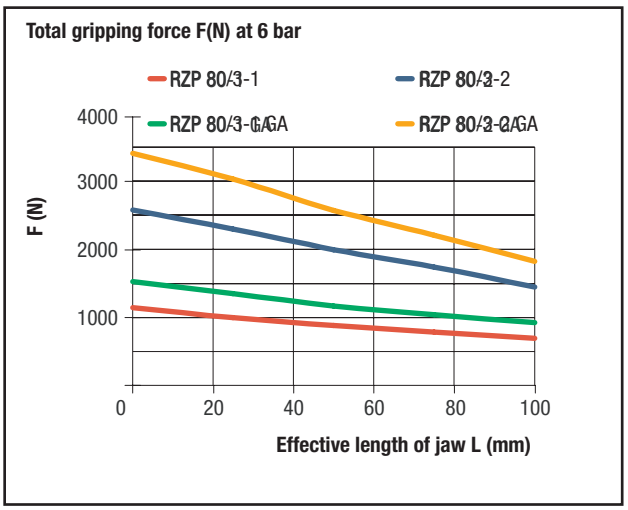


Accessories: Protective cover

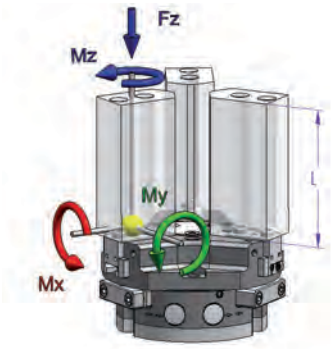


Technical data		RZP-80/3-1	RZP-80/3-2	RZP-80/3-1 GA	RZP-80/3-2 GA	RZP-80/3-1 GI	RZP-80/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.05	0.05	0.03	0.03	0.06	0.06
Opening time	sec.	0.05	0.05	0.05	0.05	0.04	0.04
Air consumption per cycle	cm^3	60	60	60	60	60	60
Max. allowable length of jaw	mm	110	105	100	100	105	100

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 60 Nm
Max. moment	My:	max. 95 Nm
Max. moment	Mz:	max. 55 Nm
Max. pressure load	Fz:	max. 1500 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170502 steel
Item no. 170552 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170517

Protective cover
Item no. 170811

Pressure maintenance valve
Item no. 1078823

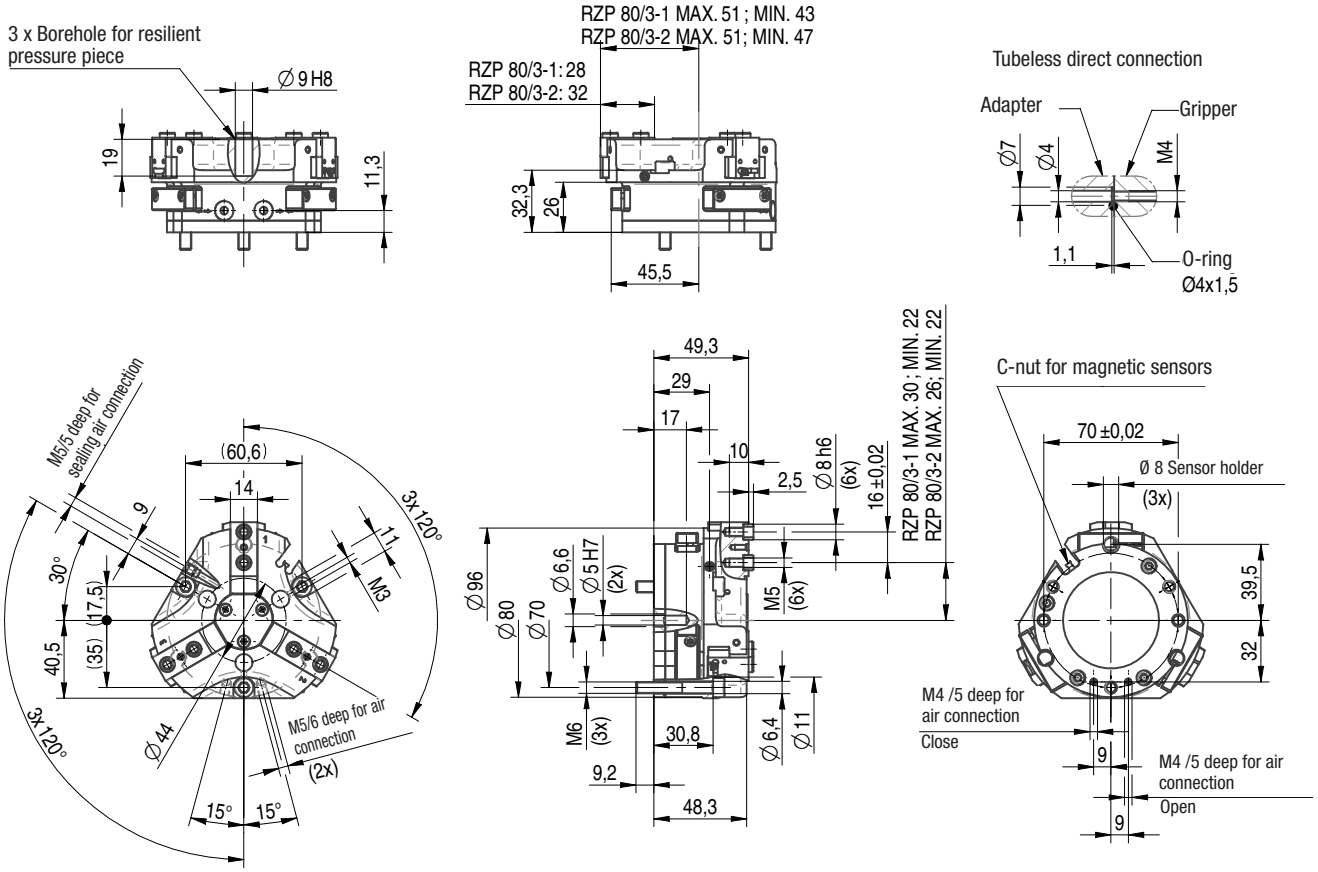
Compressed air connection
Item no. 802539

Inductive proximity switch
Item no. 229114

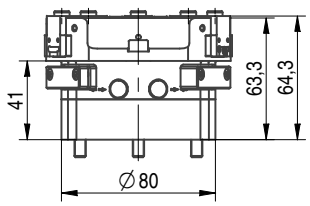
Magnetic field sensors
Item no. 1083570

RZP-80

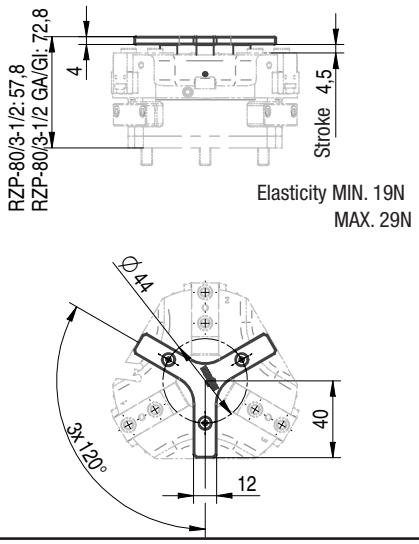
Technical data Item no.		RZP-80/3-1 170056	RZP-80/3-2 170057	RZP-80/3-1 GA 170058	RZP-80/3-2 GA 170059	RZP-80/3-1 GI 170060	RZP-80/3-2 GI 170061
Total gripping force at 6 bar	N	1200	2400	1550	3100	1700	3250
Total stroke	mm	16	8	16	8	16	8
Total grip. force maintained by safety device	N			350	700	350	700
Recommended workpiece weight	kg	6.0	12.0	6.0	12.0	6.0	12.0
Weight	kg	0.8	0.8	1.0	1.0	1.0	1.0



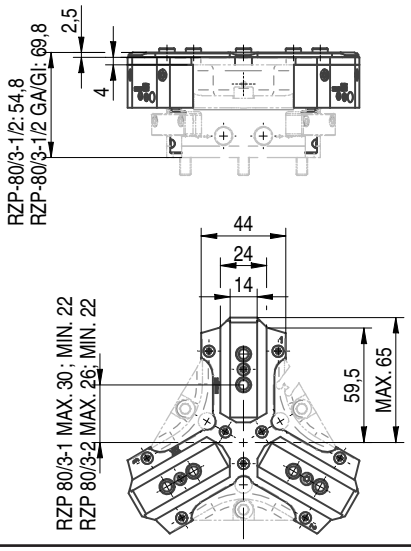
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



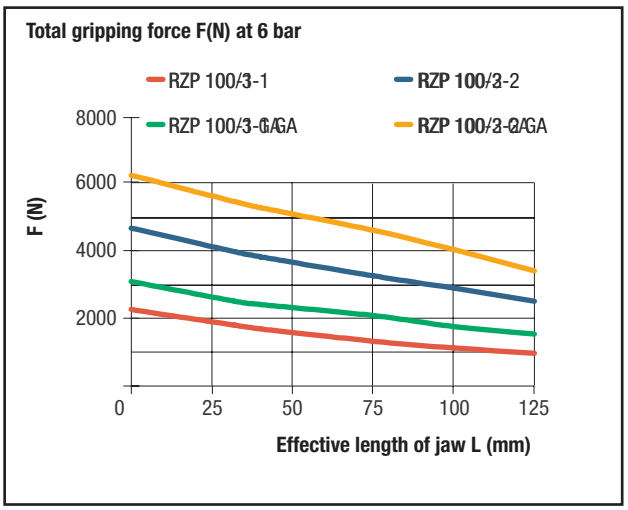
Accessories: Protective cover



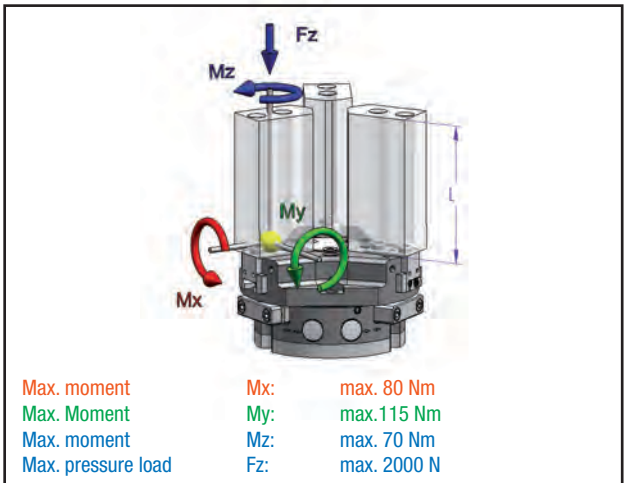
RZP-100

Technical data		RZP-100/3-1	RZP-100/3-2	RZP-100/3-1 GA	RZP-100/3-2 GA	RZP-100/3-1 GI	RZP-100/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.1	0.1	0.1	0.1	0.2	0.2
Opening time	sec.	0.1	0.1	0.2	0.2	0.1	0.1
Air consumption per cycle	cm^3	120	120	120	120	120	120
Max. allowable length of jaw	mm	145	135	135	125	135	125

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 80 Nm
Max. Moment	My:	max.115 Nm
Max. moment	Mz:	max. 70 Nm
Max. pressure load	Fz:	max. 2000 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170504 steel
Item no. 170554 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170518

Protective cover
Item no. 170812

Pressure maintenance valve
Item no. 1078823

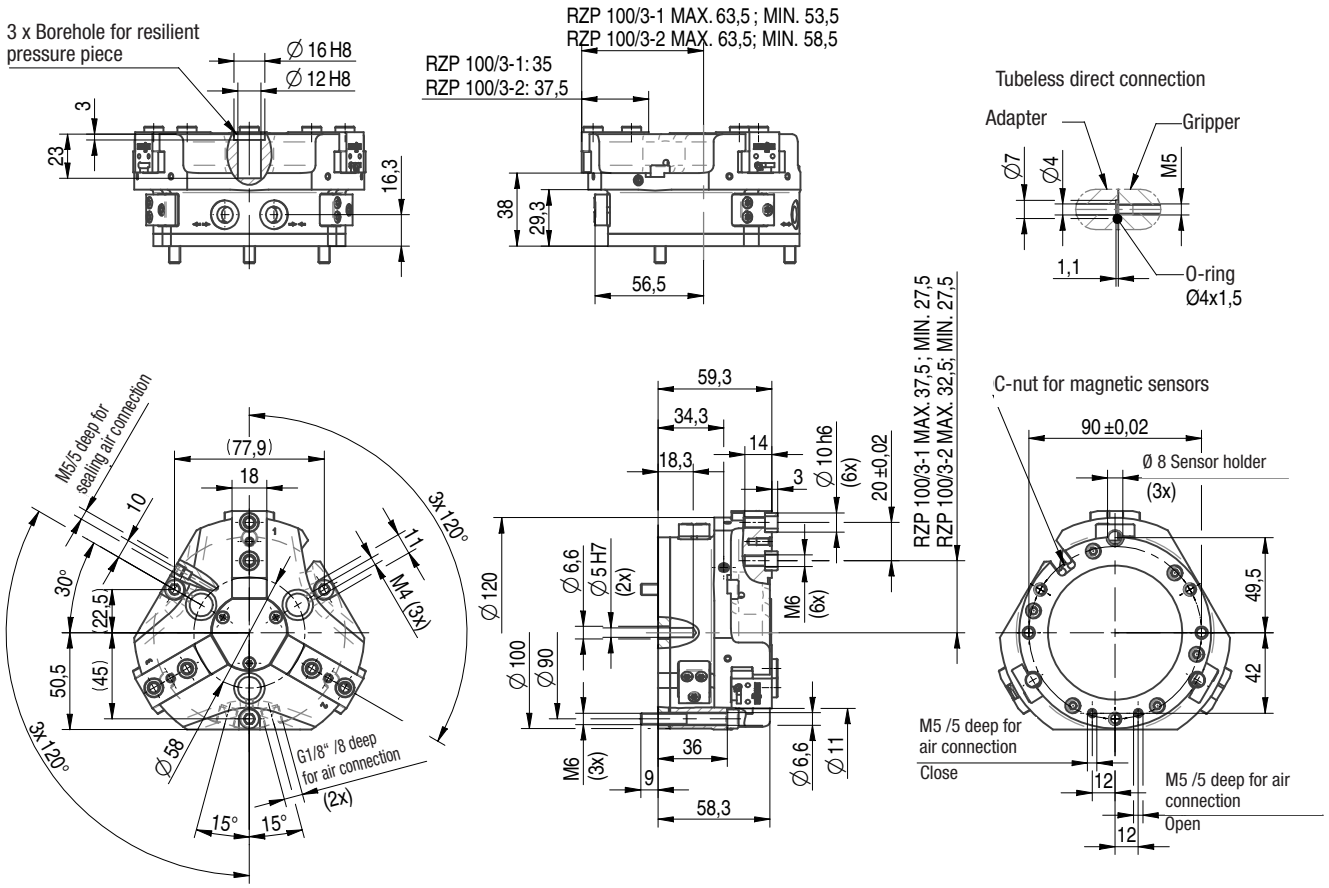
Compressed air connection
Item no. 477025

Inductive proximity switch
Item no. 229114

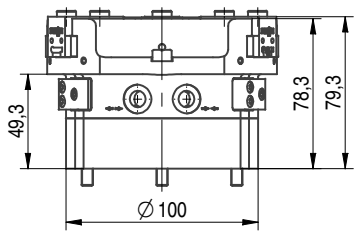
Magnetic field sensors
Item no. 1083570

RZP-100

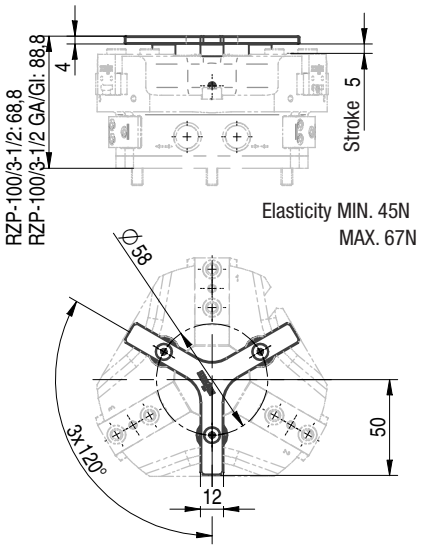
Technical data Item no.		RZP-100/3-1 170062	RZP-100/3-2 170063	RZP-100/3-1 GA 170064	RZP-100/3-2 GA 170065	RZP-100/3-1 GI 170066	RZP-100/3-2 GI 170067
Total gripping force at 6 bar	N	2000	4000	2650	5300	2800	5620
Total stroke	mm	20	10	20	10	20	10
Total grip. force maintained by safety device	N			650	1300	650	1300
Recommended workpiece weight	kg	10	20	10	20	10	20
Weight	kg	1.4	1.4	2	2	2	2



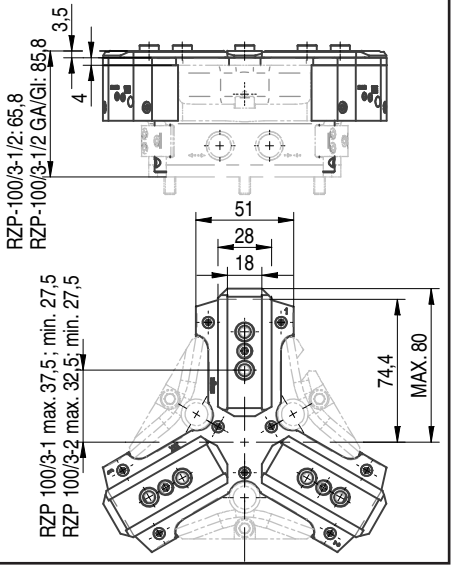
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



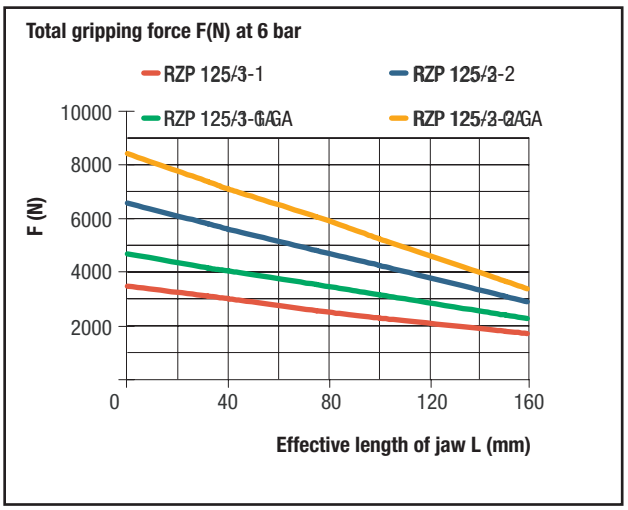
Accessories: Protective cover



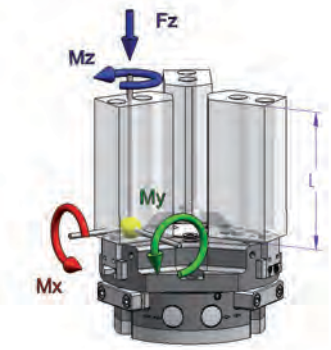
RZP-125

Technical data		RZP-125/3-1	RZP-125/3-2	RZP-125/3-1 GA	RZP-125/3-2 GA	RZP-125/3-1 GI	RZP-125/3-2 GI
Operating pressure min/max with spring	bar	2-8	2-8	2.8	2.8	2.8	2.8
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.2	0.2	0.17	0.17	0.35	0.35
Opening time	sec.	0.2	0.2	0.35	0.35	0.17	0.17
Air consumption per cycle	cm^3	230	230	230	230	230	230
Max. allowable length of jaw	mm	180	170	170	160	170	160

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 120 Nm
Max. Moment	My:	max.145 Nm
Max. moment	Mz:	max. 100 Nm
Max. pressure load	Fz:	max. 2800 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170506 steel
Item no. 170556 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170519

Protective cover
Item no. 170813

Pressure maintenance valve
Item no. 1078823

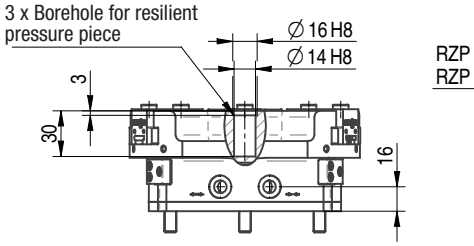
Compressed air connection
Item no. 477025

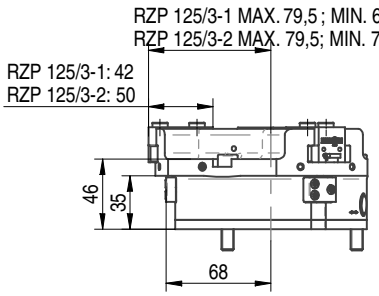
Inductive proximity switch
Item no. 229114

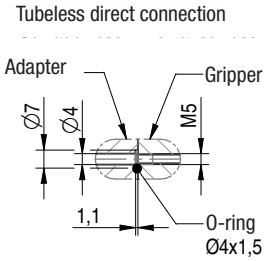
Magnetic field sensors
Item no. 1083570

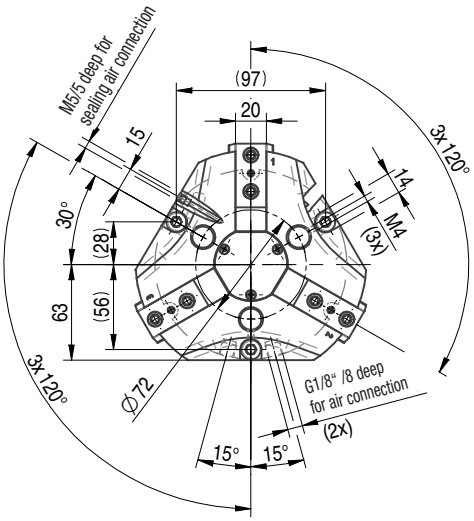
RZP-125

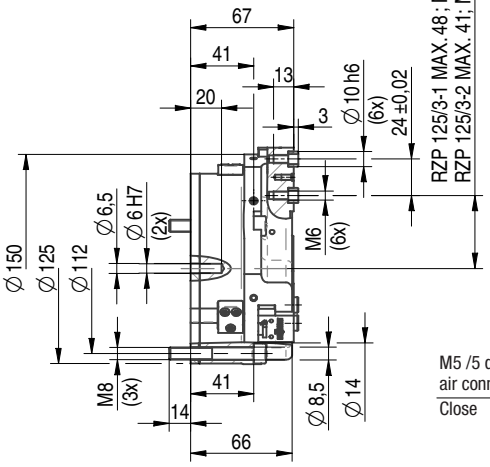
Technical data Item no.		RZP-125/3-1 170068	RZP-125/3-2 170069	RZP-125/3-1 GA 170070	RZP-125/3-2 GA 170071	RZP-125/3-1 GI 170072	RZP-125/3-2 GI 170073
Total gripping force at 6 bar	N	3200	6000	4200	7800	4400	8000
Total stroke	mm	26	12	26	12	26	12
Total grip. force maintained by safety device	N			1000	1800	1000	1800
Recommended workpiece weight	kg	16	30	16	30	16	30
Weight	kg	2.4	2.4	3.2	3.2	3.2	3.2

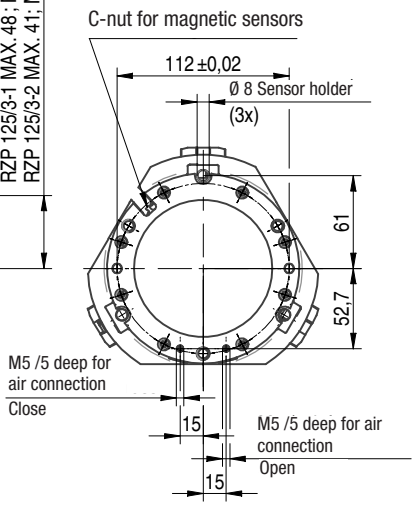




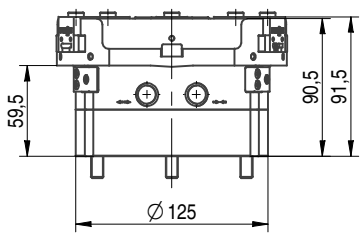




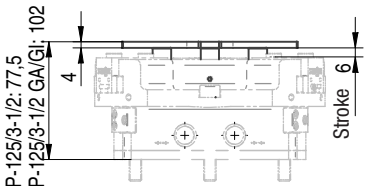




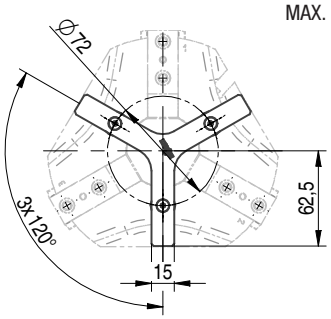
Type GA/GI with gripping force safety device



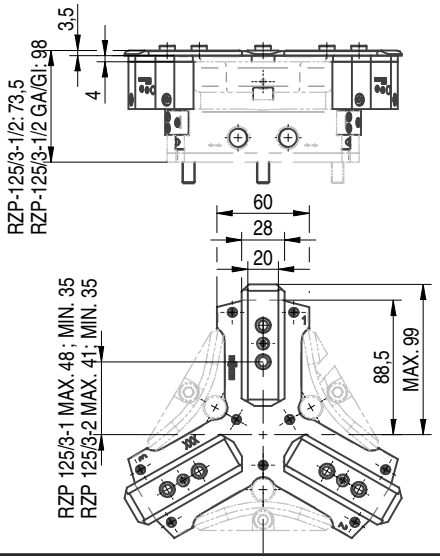
Accessories: Resilient pressure piece



Elasticity MIN. 120N
MAX. 150N



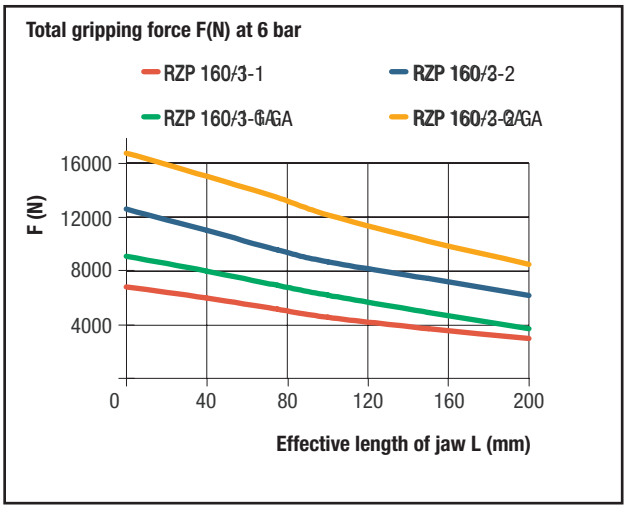
Accessories: Protective cover



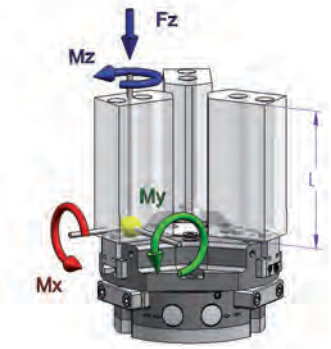
3-jaw centric gripper RZP-160

Technical data		RZP-160/3-1	RZP-160/3-2	RZP-160/3-1 GA	RZP-160/3-2 GA	RZP-160/3-1 GI	RZP-160-3 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.5	0.5	0.4	0.4	0.8	0.8
Opening time	sec.	0.5	0.5	0.8	0.8	0.4	0.4
Air consumption per cycle	cm^3	520	520	520	520	520	520
Max. allowable length of jaw	mm	220	210	210	200	200	200

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 170 Nm
Max. moment	My:	max. 180 Nm
Max. moment	Mz:	max. 130 Nm
Max. pressure load	Fz:	max. 4300 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170508 steel
Item no. 170558 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170520

Protective cover
Item no. 170814

Pressure maintenance valve
Item no. 1078823

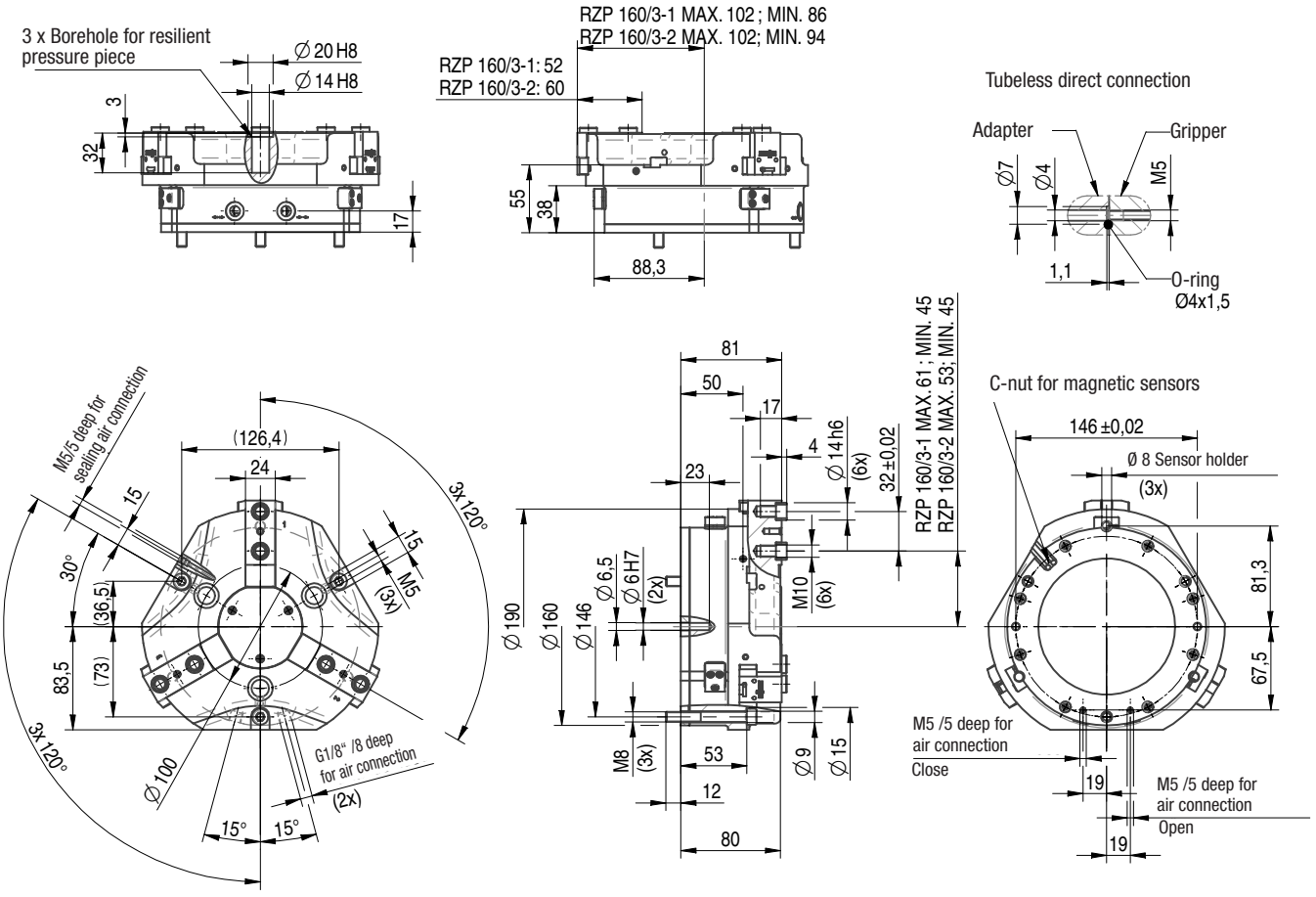
Compressed air connection
Item no. 477025

Inductive proximity switch
Item no. 229114

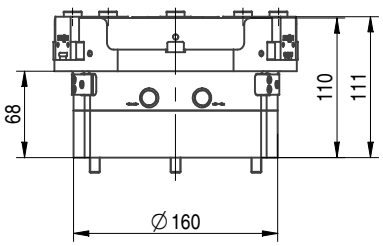
Magnetic field sensors
Item no. 1083570

RZP-160

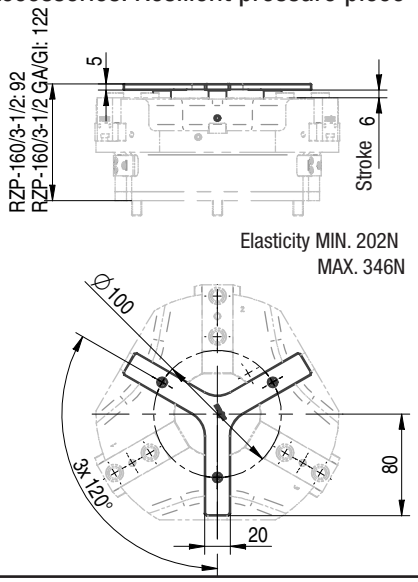
Technical data Item no.		RZP-160/3-1 170074	RZP-160/3-2 170075	RZP-160/3-1 GA 170076	RZP-160/3-2 GA 170077	RZP-160/3-1 GI 170078	RZP-160/3-2 GI 170079
Total gripping force at 6 bar	N	6000	11000	8000	15000	8500	16000
Total stroke	mm	32	16	32	16	32	16
Total grip. force maintained by safety device	N			2000	4000	2000	4000
Recommended workpiece weight	kg	30	55	30	55	30	55
Weight	kg	5.5	5.5	8	8	8	8



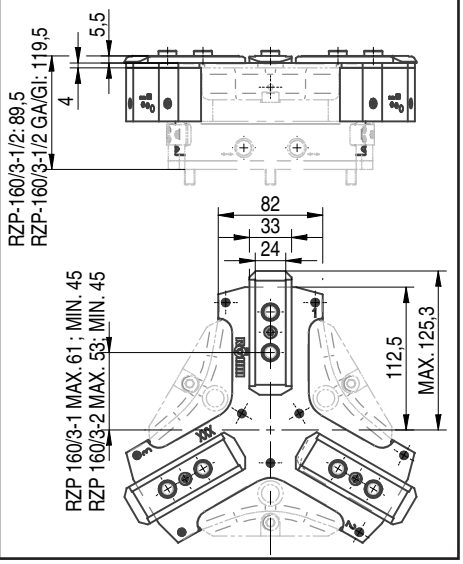
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



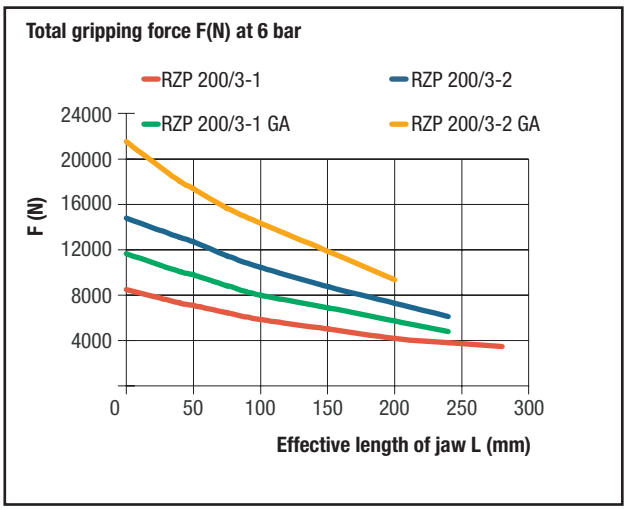
Accessories: Protective cover



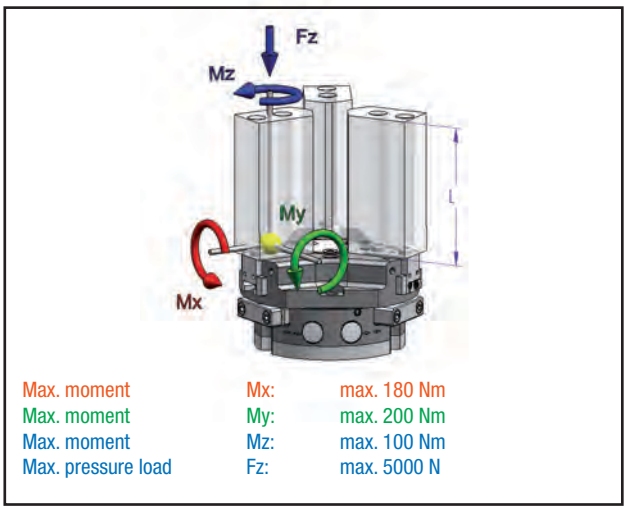
RZP-200

Technical data		RZP-200/3-1	RZP-200/3-2	RZP-200/3-1 GA	RZP-200/3-2 GA	RZP-200/3-1 GI	RZP-200/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	1.2	1.2	1.0	1.0	1.5	1.5
Opening time	sec.	1.2	1.2	1.5	1.5	1.0	1.0
Air consumption per cycle	cm^3	1000	1000	1000	1000	1000	1000
Max. allowable length of jaw	mm	280	250	250	200	250	200

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Accessory (please order separately)

Jaw blank (set)
Item no. 170510 steel
Item no. 170560 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170521

Protective cover
Item no. 170815

Pressure maintenance valve
Item no. 1078823

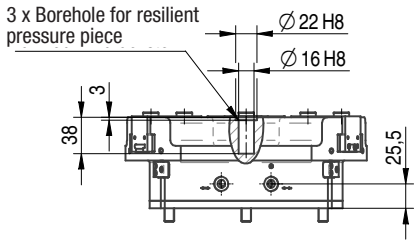
Compressed air connection
Item no. 477025

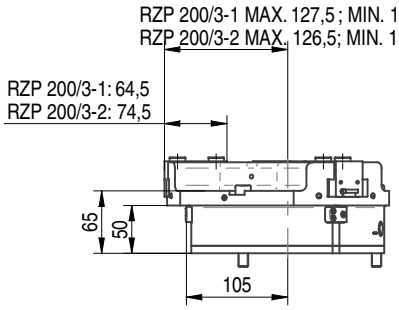
Inductive proximity switch
Item no. 389661

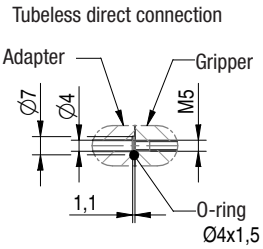
Magnetic field sensors
Item no. 1083570

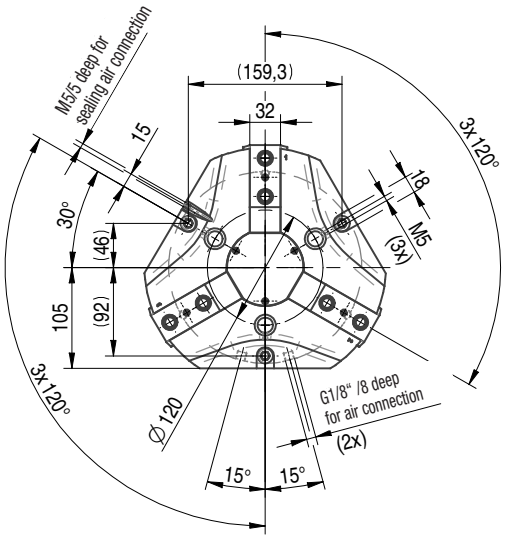
RZP-200

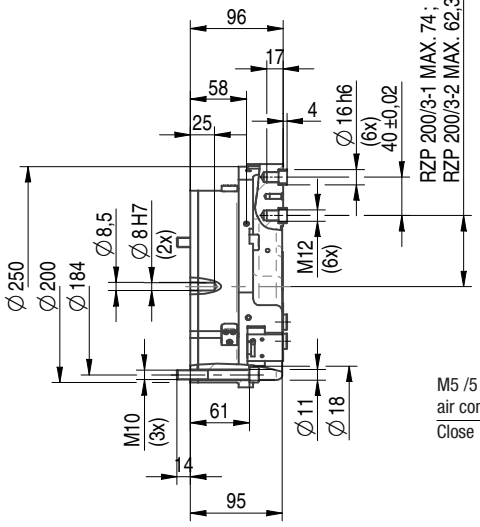
Technical data Item no.		RZP-200/3-1 170080	RZP-200/3-2 170081	RZP-200/3-1 GA 170082	RZP-200/3-2 GA 170083	RZP-200/3-1 GI 170084	RZP-200/3-2 GI 170085
Total gripping force at 6 bar	N	7500	12500	9300	15500	9500	16200
Total stroke	mm	50	28	50	28	50	28
Total grip. force maintained by safety device	N			1800	3000	1800	3000
Recommended workpiece weight	kg	37	62	37	62	37	62
Weight	kg	10.0	10.0	13.0	13.0	13.0	13.0

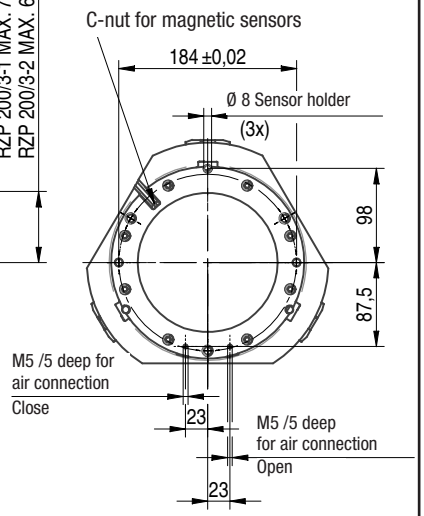




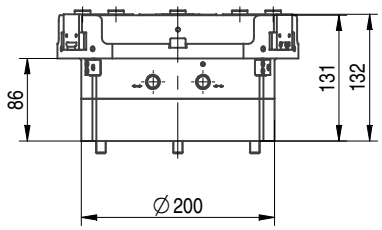




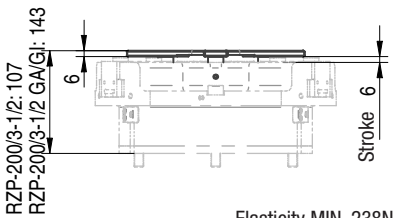


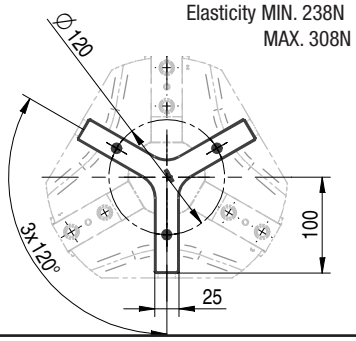


Type GA/GI with gripping force safety device

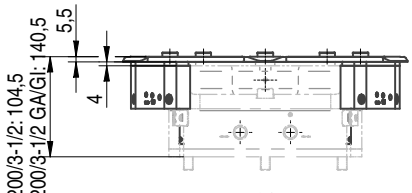


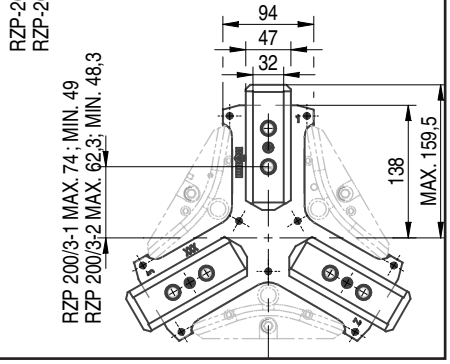
Accessories: Resilient pressure piece





Accessories: Protective cover

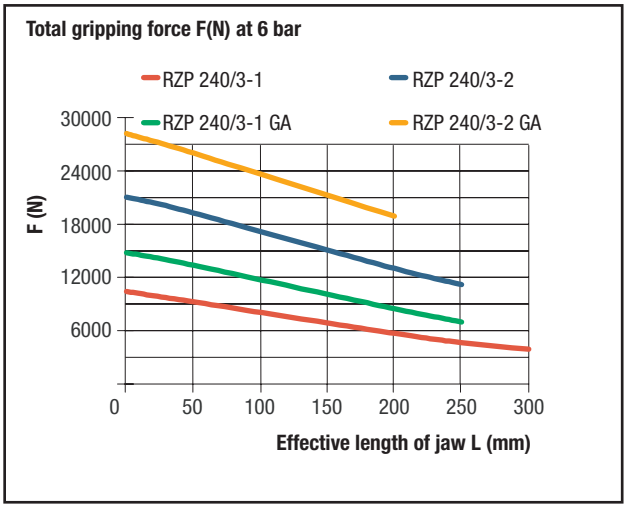




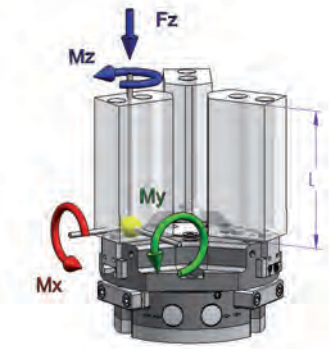
3-jaw centric gripper RZP-240

Technical data		RZP-240/3-1	RZP-240/3-2	RZP-240/3-1 GA	RZP-240/3-2 GA	RZP-240/3-1 GI	RZP-240/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	1.3	1.3	1.1	1.1	1.7	1.7
Opening time	sec.	1.3	1.3	2.1	2.1	1.1	1.1
Air consumption per cycle	cm^3	1700	1700	1700	1700	1700	1700
Max. allowable length of jaw	mm	300	250	250	200	250	200

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 265 Nm
Max. moment	My:	max. 250 Nm
Max. moment	Mz:	max. 160 Nm
Max. pressure load	Fz:	max. 6200 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170512 steel
Item no. 170562 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170522

Protective cover
Item no. 170816

Pressure maintenance valve
Item no. 1078823

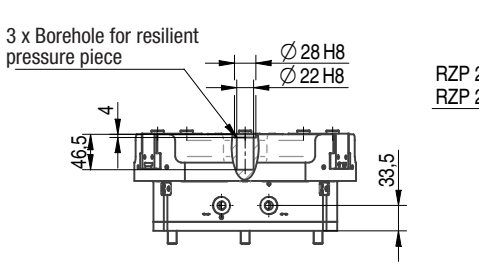
Compressed air connection
Item no. 477024

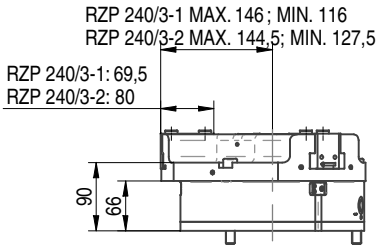
Inductive proximity switch
Item no. 389661

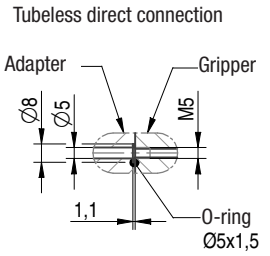
Magnetic field sensors
Item no. 1083570

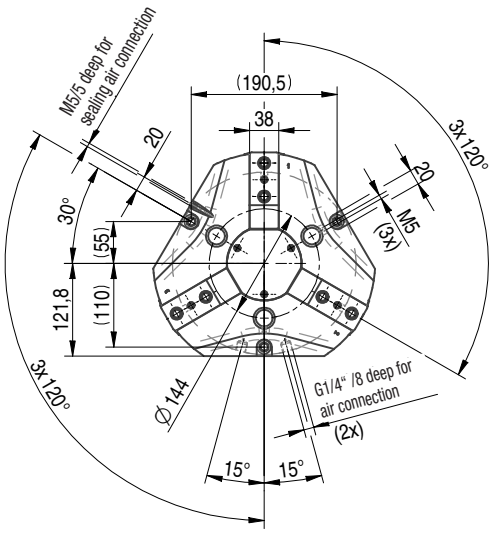
RZP-240

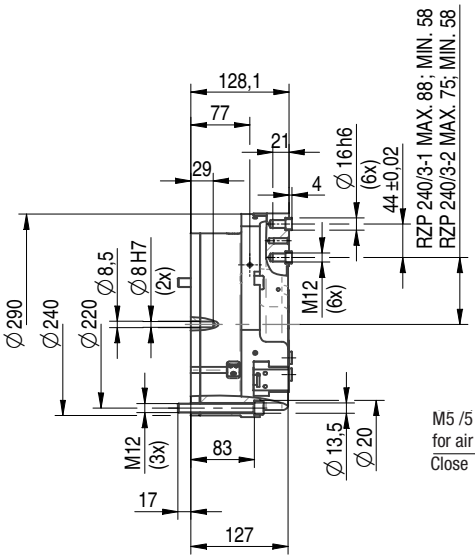
Technical data Item no.		RZP-240/3-1 170086	RZP-240/3-2 170087	RZP-240/3-1 GA 170088	RZP-240/3-2 GA 170089	RZP-240/3-1 GI 170090	RZP-240/3-2 GI 170091
Total gripping force at 6 bar	N	10500	18000	14000	24000	15000	25000
Total stroke	mm	60	34	60	34	60	34
Total grip. force maintained by safety device	N			3500	6000	3500	6000
Recommended workpiece weight	kg	53	90	53	90	53	90
Weight	kg	20	20	24	24	24	24

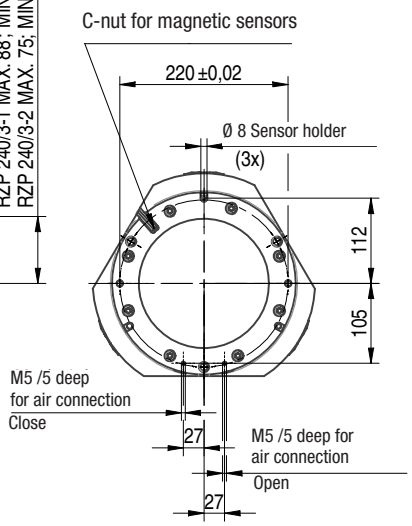




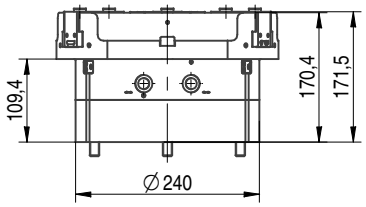




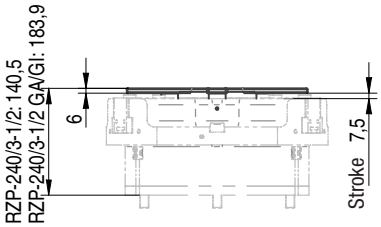




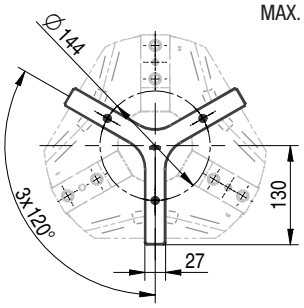
Type GA/GI with gripping force safety device



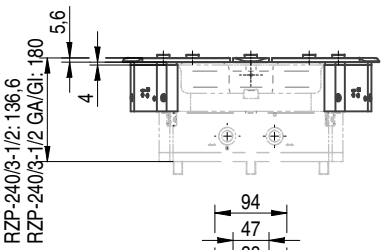
Accessories: Resilient pressure piece

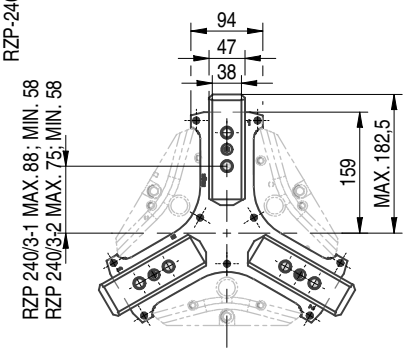


Elasticity MIN. 302N
MAX. 454N



Accessories: Protective cover

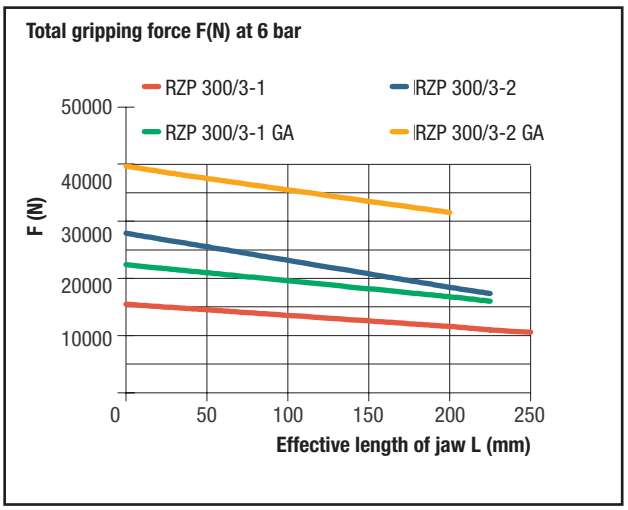




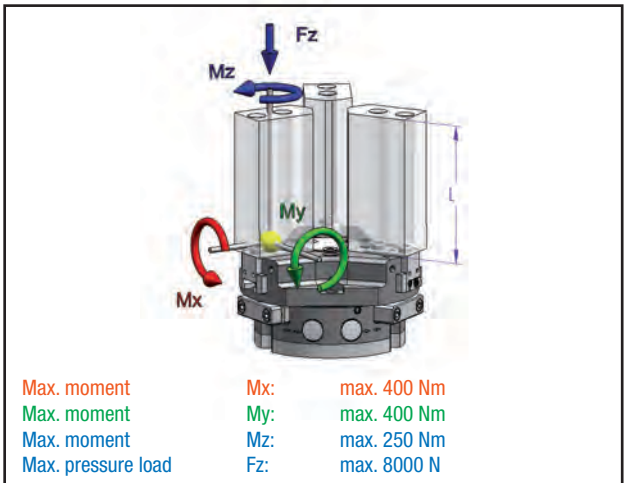
3-jaw centric gripper RZP-300

Technical data		RZP-300/3-1	RZP-300/3-2	RZP-300/3-1 GA	RZP-300/3-2 GA	RZP-300/3-1 GI	RZP-300/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	1.3	1.3	1.2	1.2	2.0	2.0
Opening time	sec.	1.3	1.3	2.5	2.5	1.2	1.2
Air consumption per cycle	cm^3	2700	2700	2700	2700	2700	2700
Max. allowable length of jaw	mm	250	225	225	200	225	200

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 400 Nm
Max. moment	My:	max. 400 Nm
Max. moment	Mz:	max. 250 Nm
Max. pressure load	Fz:	max. 8000 N

Accessory (please order separately)

Jaw blank (set)
Item no. 170514 steel
Item no. 170564 aluminium

Jaw dimensions see page 77

Resilient pressure piece
Item no. 170523

Protective cover
Item no. 170817

Pressure maintenance valve
Item no. 1078823

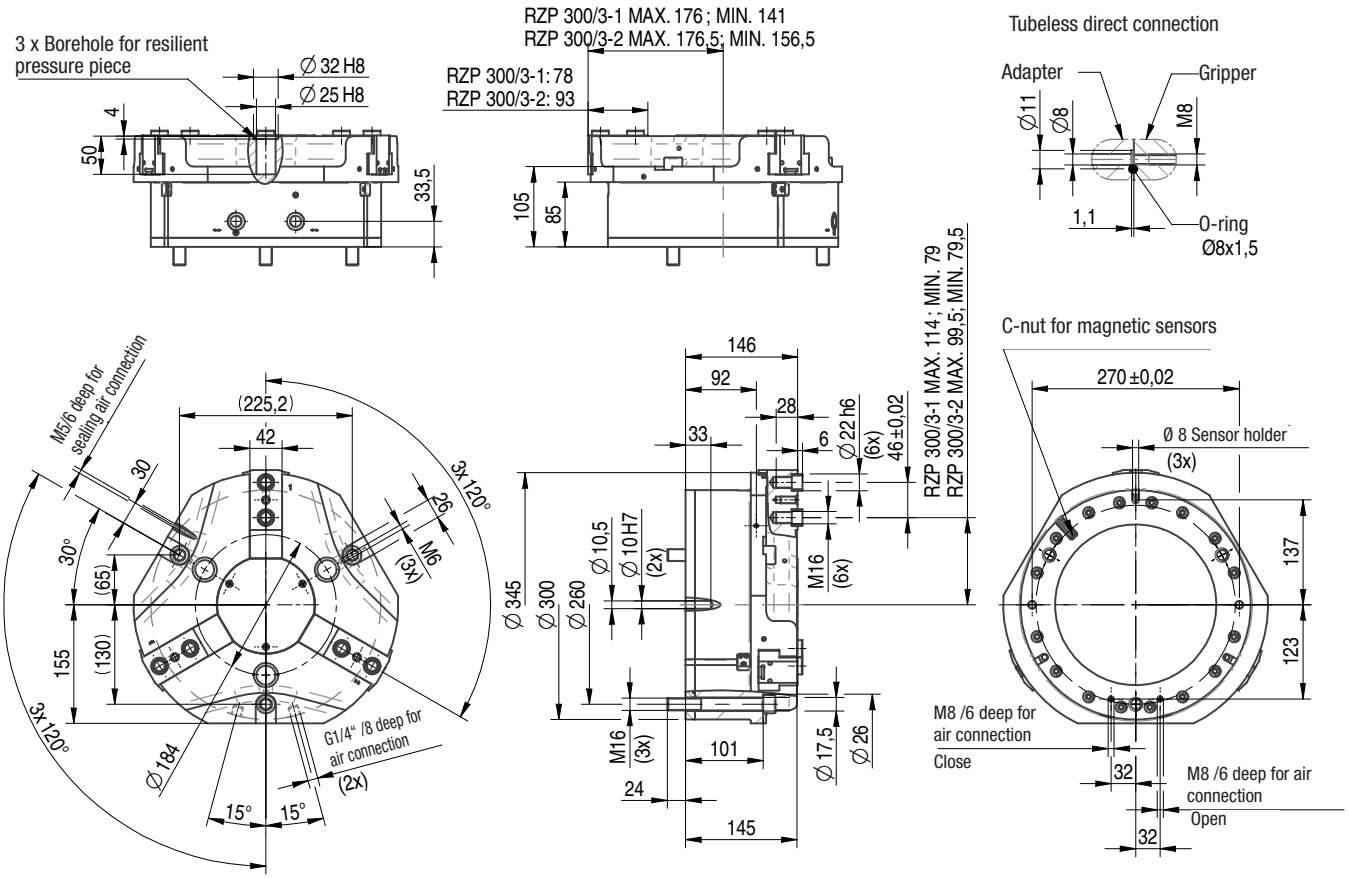
Compressed air connection
Item no. 477024

Inductive proximity switch
Item no. 389661

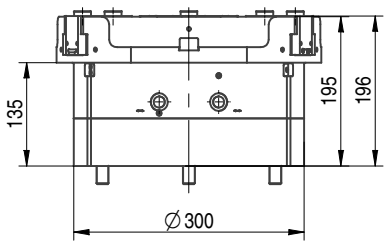
Magnetic field sensors
Item no. 1083570

RZP-300

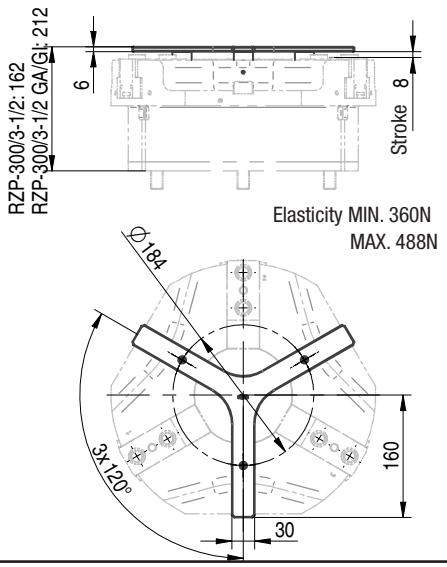
Technical data Item no.		RZP-300/3-1 170092	RZP-300/3-2 170093	RZP-300/3-1 GA 170094	RZP-300/3-2 GA 170095	RZP-300/3-1 GI 170096	RZP-300/3-2 GI 170097
Total gripping force at 6 bar	N	16000	28000	20000	37500	22500	38000
Total stroke	mm	70	40	70	40	70	40
Total grip. force maintained by safety device	N			6000	9500	6000	9500
Recommended workpiece weight	kg	80	140	80	110	80	140
Weight	kg	30	30	40	40	40	40



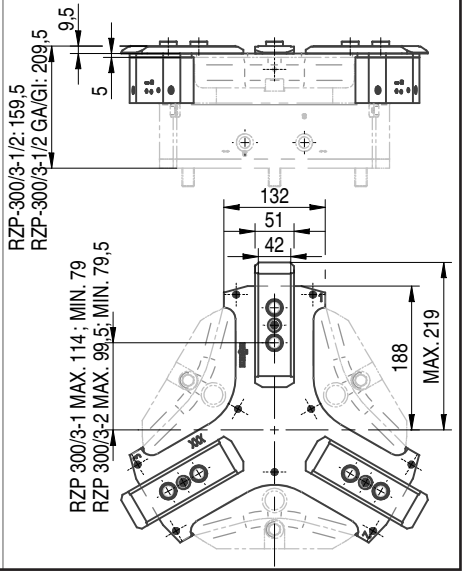
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



Accessories: Protective cover



Description	Total stroke in mm		Maximum gripping force at 6 bar in N		Recommended workpiece weight in kg		Page
Version	**1**	**2**	**1**	**2**	**1**	**2**	
RZP-A 64	12	6	700	1350	3,5	6,5	56
RZP-A 80	16	8	1000	2500	5	12	58
RZP-A 100	20	10	2000	4000	10	20	60
RZP-A 125	26	12	3300	6500	16	32	62
RZP-A 160	32	16	6000	12000	30	60	64

Design RZP-A

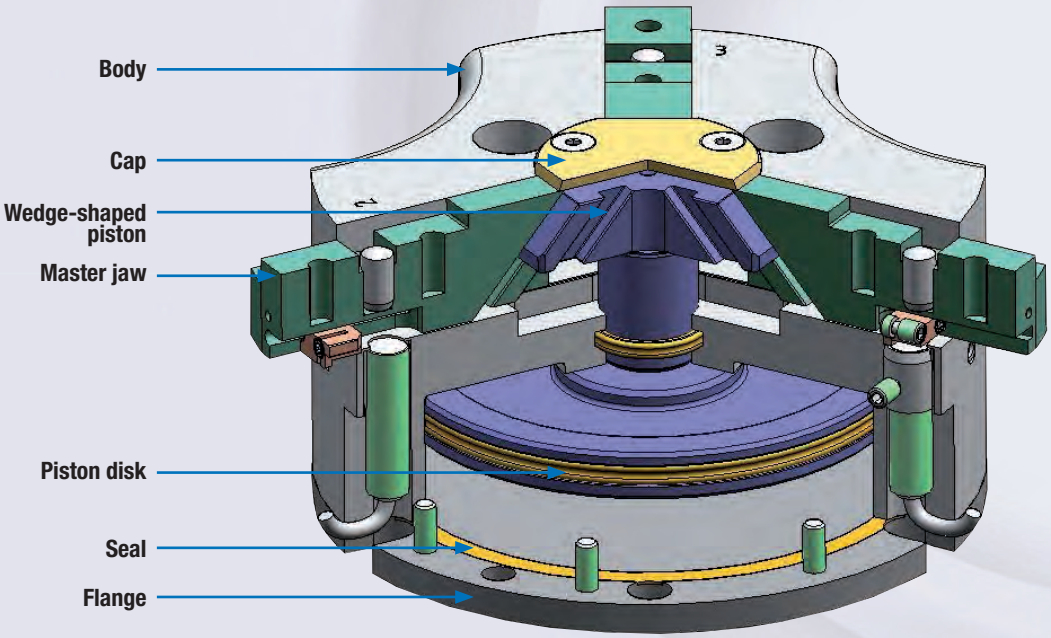
1	long jaw stroke, normal gripping force
2	normal jaw stroke, high gripping force
GA	Integrated springs as gripping force safety device for exterior tension, thus increased gripping force
GI	Integrated springs as gripping force safety device for interior tension, thus increased gripping force

Technical Data	
Pneumatic	
Operating pressure	3 - 10 bar
Cylinder	double-acting
Dynamic seals	NBR seals with interior lubrication
Required valves	
Double-acting	5 paths, 2 positions
Single-acting (options GA or GI)	3 paths, 2 positions
Air quality	
Air filtration	40 µ or better
Air lubrication	not necessary
Humidity	low (dry)
Operating temperatures	
NBR seals (standard)	-30 °C to 80 °C
FKM seals (optional)	-20 to 150
Maintenance	
Expected service life	
At normal use	5 million cycles
At preventive maintenance	10 million cycles
On-site repair of gripper	Yes
Seal set available	Yes

* Preventive maintenance considerably increases service life

3-jaw centric gripper RZP-A pneumatic control with crosswise slot and positioning pin

Mode of operation

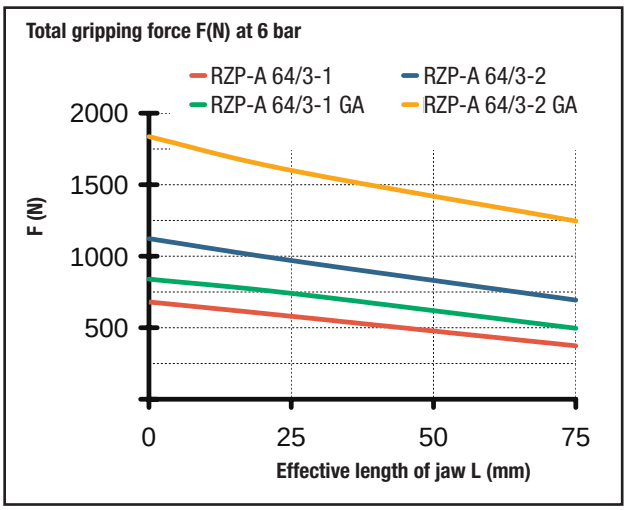


- Tried and tested T-groove gripping guide for master jaw at max. loads
- Suitable Fast and efficient gripping
- Centric gripping of round and angular workpieces
- Universal application due to different types of jaws
- Ideal for series production
- All sizes available with 2 different stroke lengths
- Gripping pressure controlled by change of pressure
- Constant clamping force at a constant pressure and thus high clamping precision
- Compact and ergonomic design
- Optional inductive or magnetic position sensors
- Screw connection or direct connection to compressed air
- Gripping force safety device as a special type for exterior or interior gripping
- Simple cut surface of master jaw / top jaw with crosswise slot, positioning pin and positioning borehole

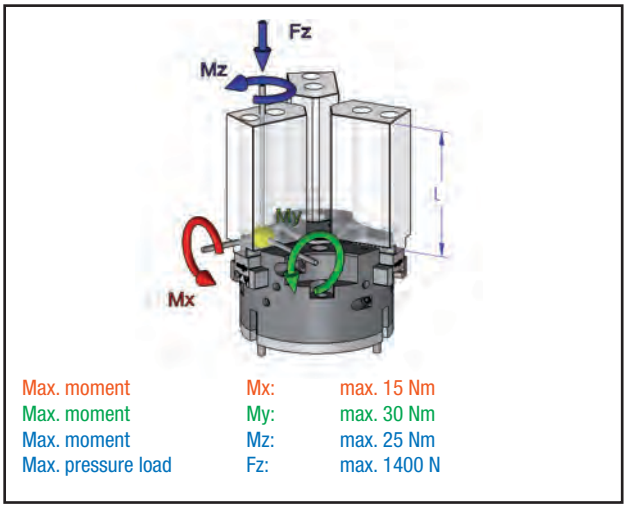
RZP-A 64

Technical data		RZP-A 64/3-1	RZP-A 64/3-2	RZP-A 64/3-1 GA	RZP-A 64/3-2 GA	RZP-A 64/3-1 GI	RZP-A 64/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.01	0.01	0.03	0.03	0.04	0.04
Opening time	sec.	0.01	0.01	0.04	0.04	0.03	0.03
Air consumption per cycle	cm^3	25	25	25	25	25	25
Max. allowable length of jaw	mm	64	64	64	64	64	64

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



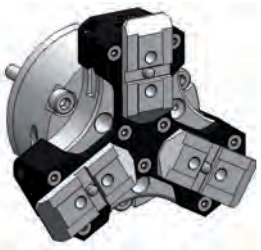
Accessory (please order separately)

Jaw blank (set)
Item no. 170825 steel
Item no. 170835 aluminium

Jaw dimensions see page 79

Resilient pressure piece
Item no. 170868

Protective cover
Item no. 170860



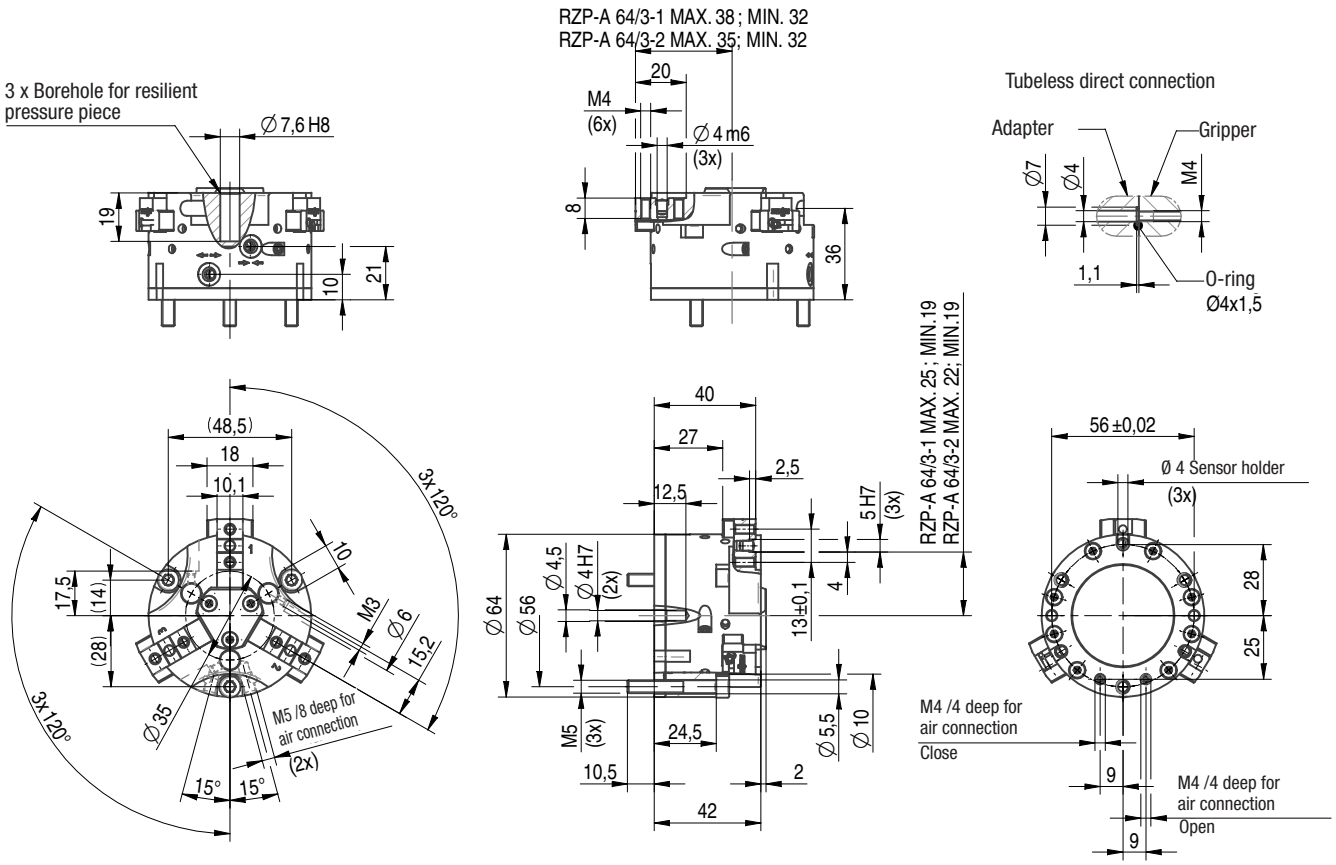
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 802539

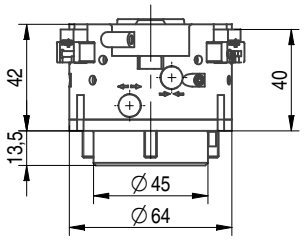
Inductive proximity switch
Item no. 817297

RZP-A 64

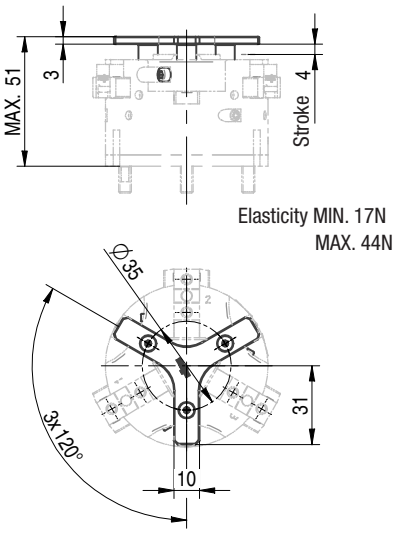
Technical data Item no.		RZP-A 64/3-1 436958	RZP-A 64/3-2 436959	RZP-A 64/3-1 GA 436960	RZP-A 64/3-2 GA 436961	RZP-A 64/3-1 GI 436962	RZP-A 64/3-2 GI 436963
Total gripping force at 6 bar	N	700	1350	880	1700	1000	1900
Total stroke	mm	12	6	12	6	12	6
Total grip. force maintained by safety device	N			180	350	180	350
Recommended workpiece weight	kg	3.5	6.5	3.5	6.5	3.5	6.5
Weight	kg	0.4	0.4	0.5	0.5	0.5	0.5



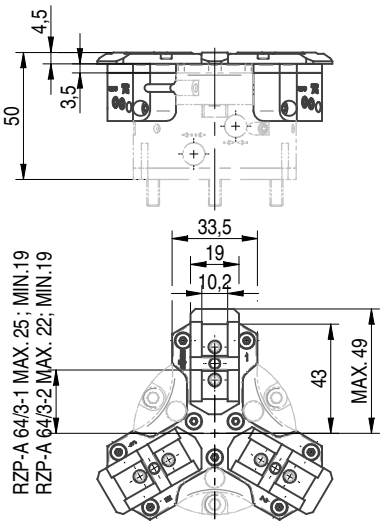
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



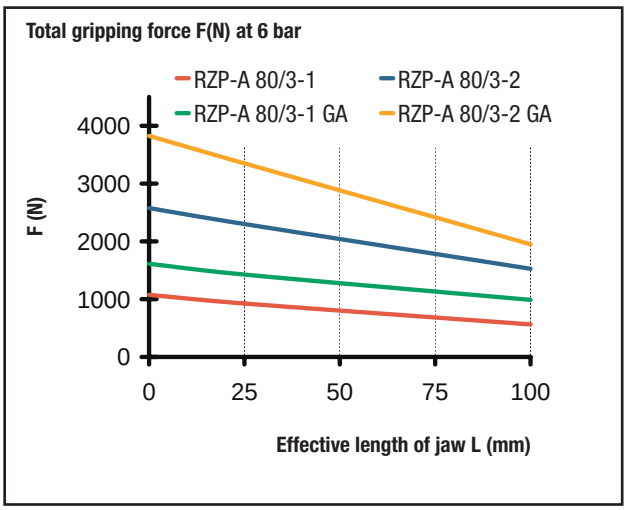
Accessories: Protective cover



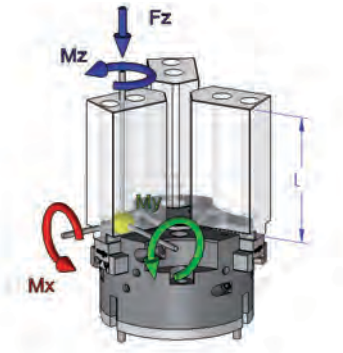
RZP-A 80

Technical data		RZP-A 80/3-1	RZP-A 80/3-2	RZP-A 80/3-1 GA	RZP-A 80/3-2 GA	RZP-A 80/3-1 GI	RZP-A 80/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.06	0.06	0.05	0.05	0.08	0.08
Opening time	sec.	0.05	0.05	0.08	0.08	0.05	0.05
Air consumption per cycle	cm^3	60	60	60	60	60	60
Max. allowable length of jaw	mm	80	80	80	80	80	80

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 30 Nm
Max. moment	My:	max. 90 Nm
Max. moment	Mz:	max. 35 Nm
Max. pressure load	Fz:	max. 1800 N

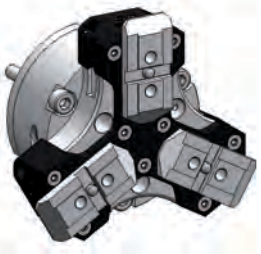
Accessory (please order separately)

Jaw blank (set)
Item no. 170826 steel
Item no. 170836 aluminium

Jaw dimensions see page 79

Resilient pressure piece
Item no. 165573

Protective cover
Item no. 170861



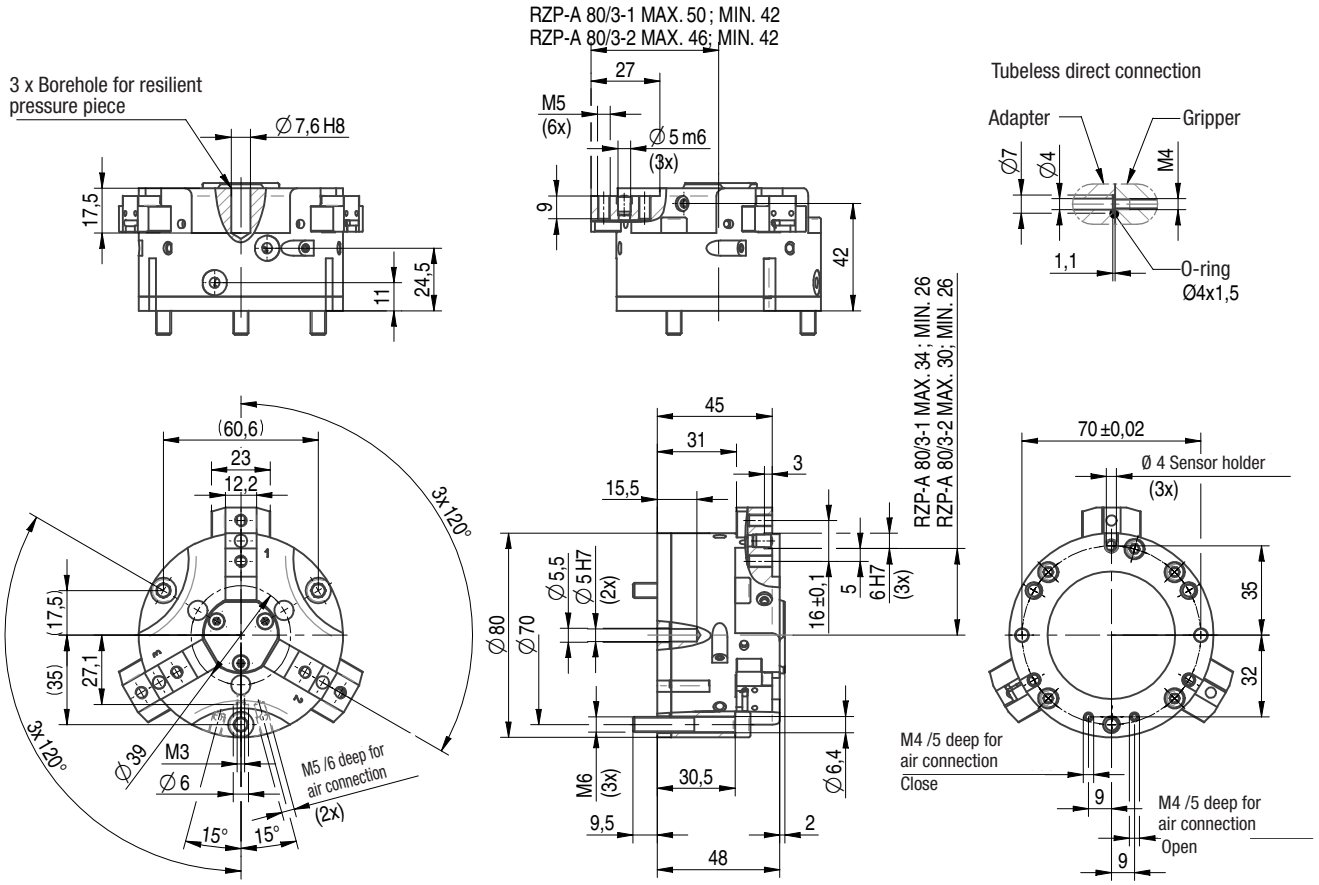
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 802539

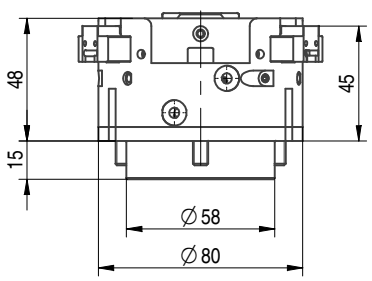
Inductive proximity switch
Item no. 236379

RZP-A 80

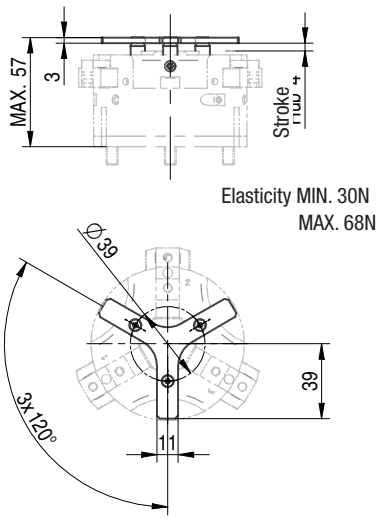
Technical data Item no.		RZP-A 80/3-1 434833	RZP-A 80/3-2 435042	RZP-A 80/3-1 GA 434837	RZP-A 80/3-2 GA 435043	RZP-A 80/3-1 GI 434838	RZP-A 80/3-2 GI 435044
Total gripping force at 6 bar	N	1000	2500	1600	3400	1700	3500
Total stroke	mm	16	8	16	8	16	8
Total grip. force maintained by safety device	N			350	700	350	700
Recommended workpiece weight	kg	5	12	5	12	5	12
Weight	kg	0.75	0.75	0.95	0.95	0.95	0.95



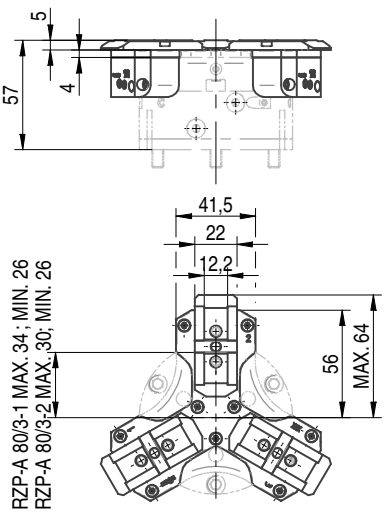
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



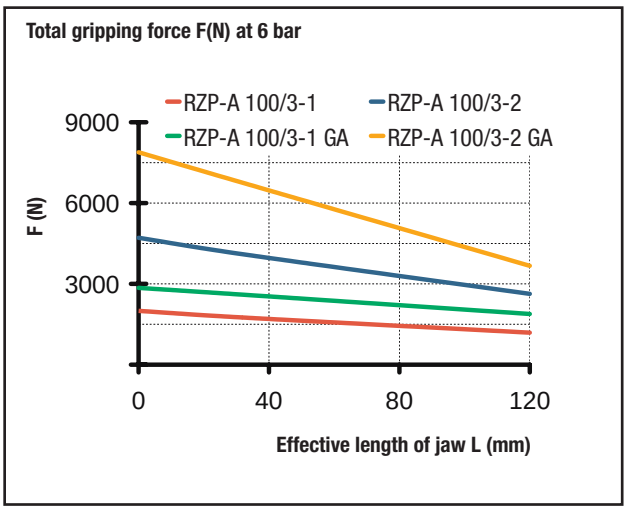
Accessories: Protective cover



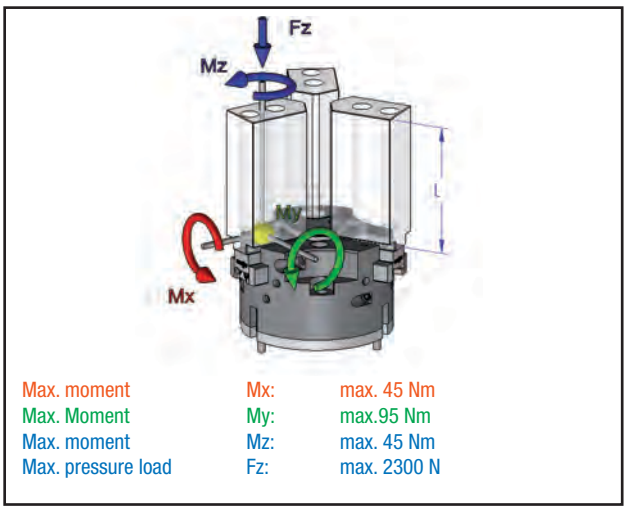
RZP-A 100

Technical data		RZP-A 100/3-1	RZP-A 100/3-2	RZP-A 100/3-1 GA	RZP-A 100/3-2 GA	RZP-A 100/3-1 GI	RZP-A 100/3-2 GI
Operating pressure min/max without spring	bar	2-8	2-8				
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.1	0.1	0.1	0.1	0.2	0.2
Opening time	sec.	0.1	0.1	0.2	0.2	0.1	0.1
Air consumption per cycle	cm^3	120	120	120	120	120	120
Max. allowable length of jaw	mm	100	100	100	100	100	100

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



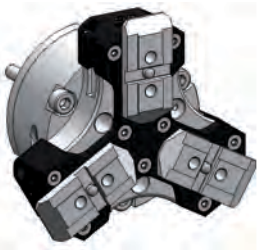
Accessory (please order separately)

Jaw blank (set)
Item no. 170827 steel
Item no. 170837 aluminium

Jaw dimensions see page 79

Resilient pressure piece
Item no. 170870

Protective cover
Item no. 170862



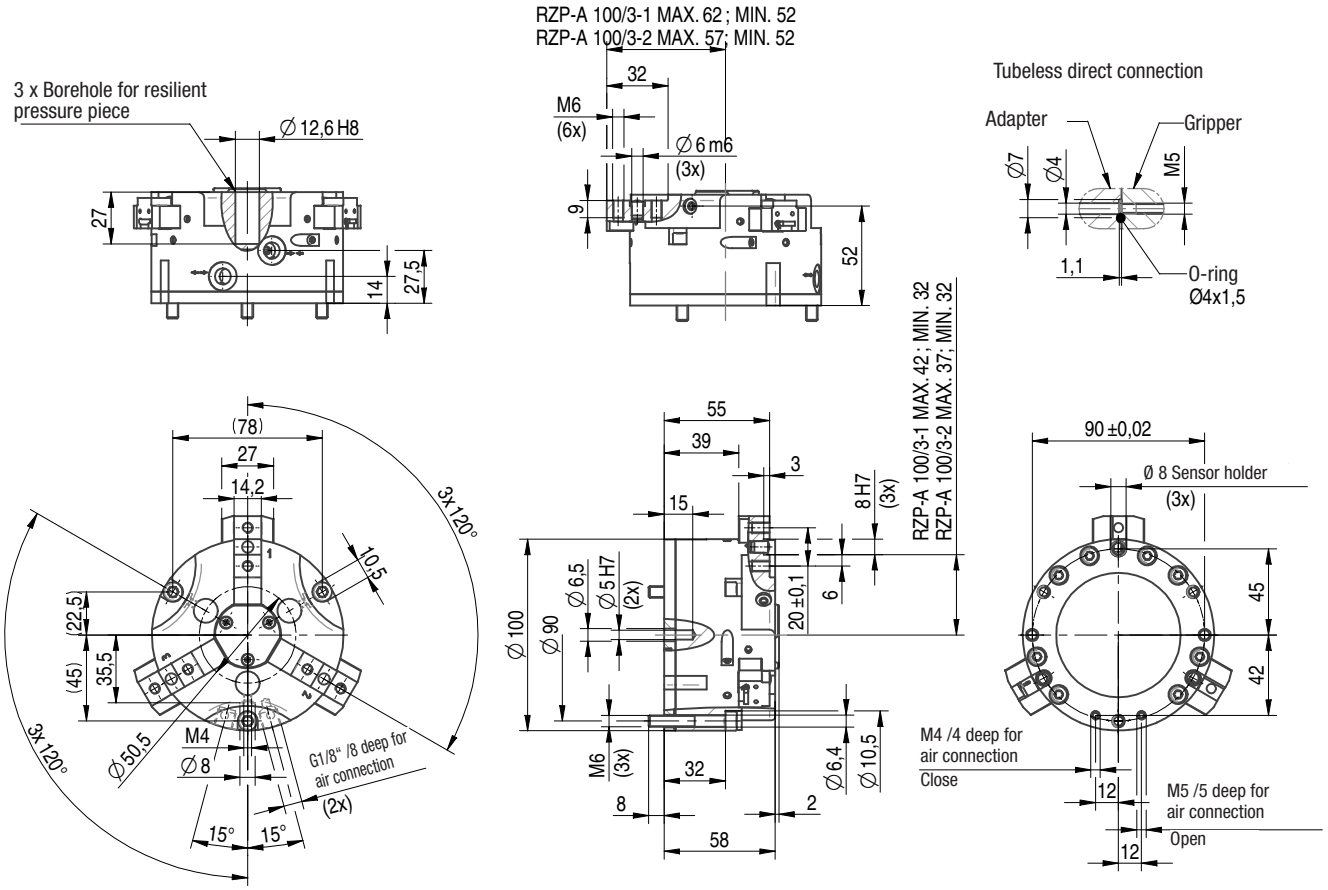
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 477025

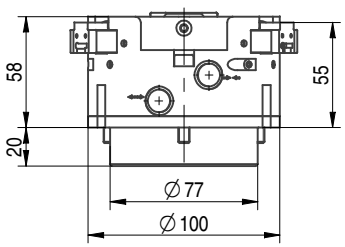
Inductive proximity switch
Item no. 1106440

RZP-A 100

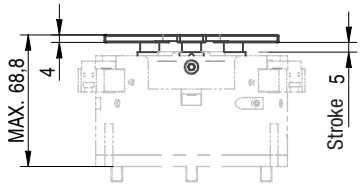
Technical data Item no.		RZP-A 100/3-1 434891	RZP-A 100/3-2 434892	RZP-A 100/3-1 434900	GARZP-A 100/3-2 434840	GARZP-A 100/3-1 GI 434839	RZP-A 100/3-2 GI 434901
Total gripping force at 6 bar	N	2000	4000	2500	5000	2650	5100
Total stroke	mm	20	10	20	10	20	10
Total grip. force maintained by safety device	N			500	1000	500	1000
Recommended workpiece weight	kg	10	20	10	20	10	20
Weight	kg	1.3	1.3	1.9	1.9	1.9	1.9



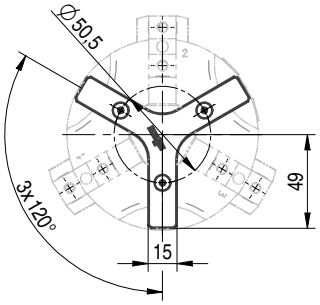
Type GA/GI with gripping force safety device



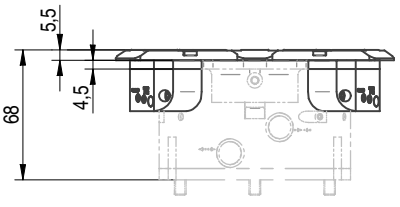
Accessories: Resilient pressure piece

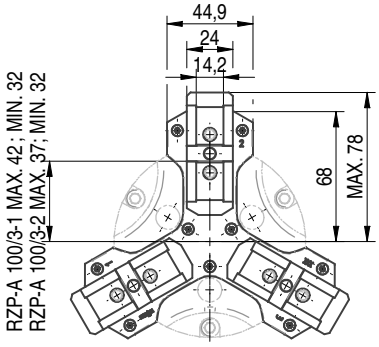


Elasticity MIN. 45N
MAX. 67N



Accessories: Protective cover

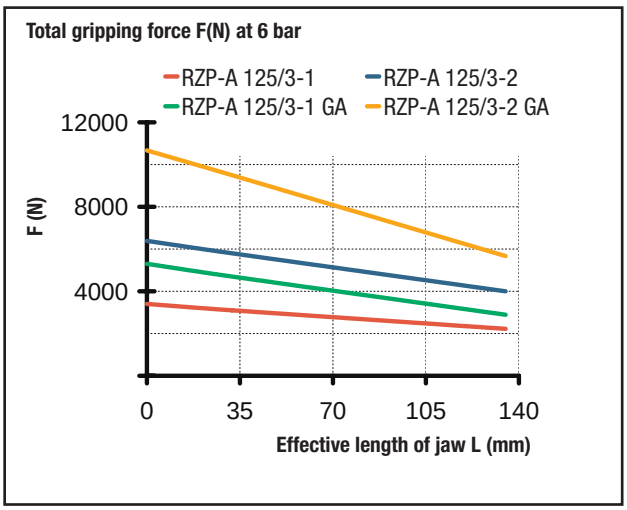




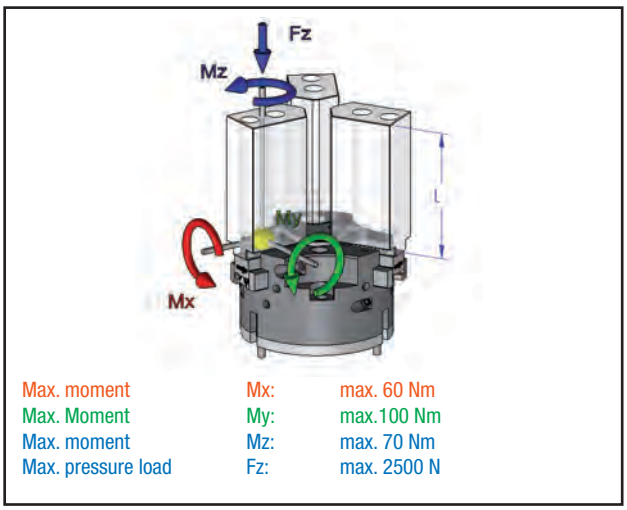
RZP-A 125

Technical data		RZP-A 125/3-1	RZP-A 125/3-2	RZP-A 125/3-1 GA	RZP-A 125/3-2 GA	RZP-A 125/3-1 GI	RZP-A 125/3-2 GI
Operating pressure min/max with spring	bar	2-8	2-8	2.8	2.8	2.8	2.8
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0.2	0.2	0.17	0.17	0.35	0.35
Opening time	sec.	0.2	0.2	0.35	0.35	0.17	0.17
Air consumption per cycle	cm^3	230	230	230	230	230	230
Max. allowable length of jaw	mm	125	125	125	125	125	125

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



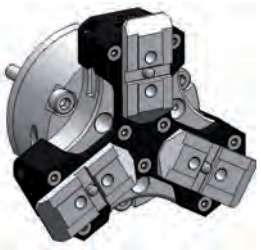
Accessory (please order separately)

Jaw blank (set)
Item no. 170828 steel
Item no. 170838 aluminium

Jaw dimensions see page 79

Resilient pressure piece
Item no. 170871

Protective cover
Item no. 170863

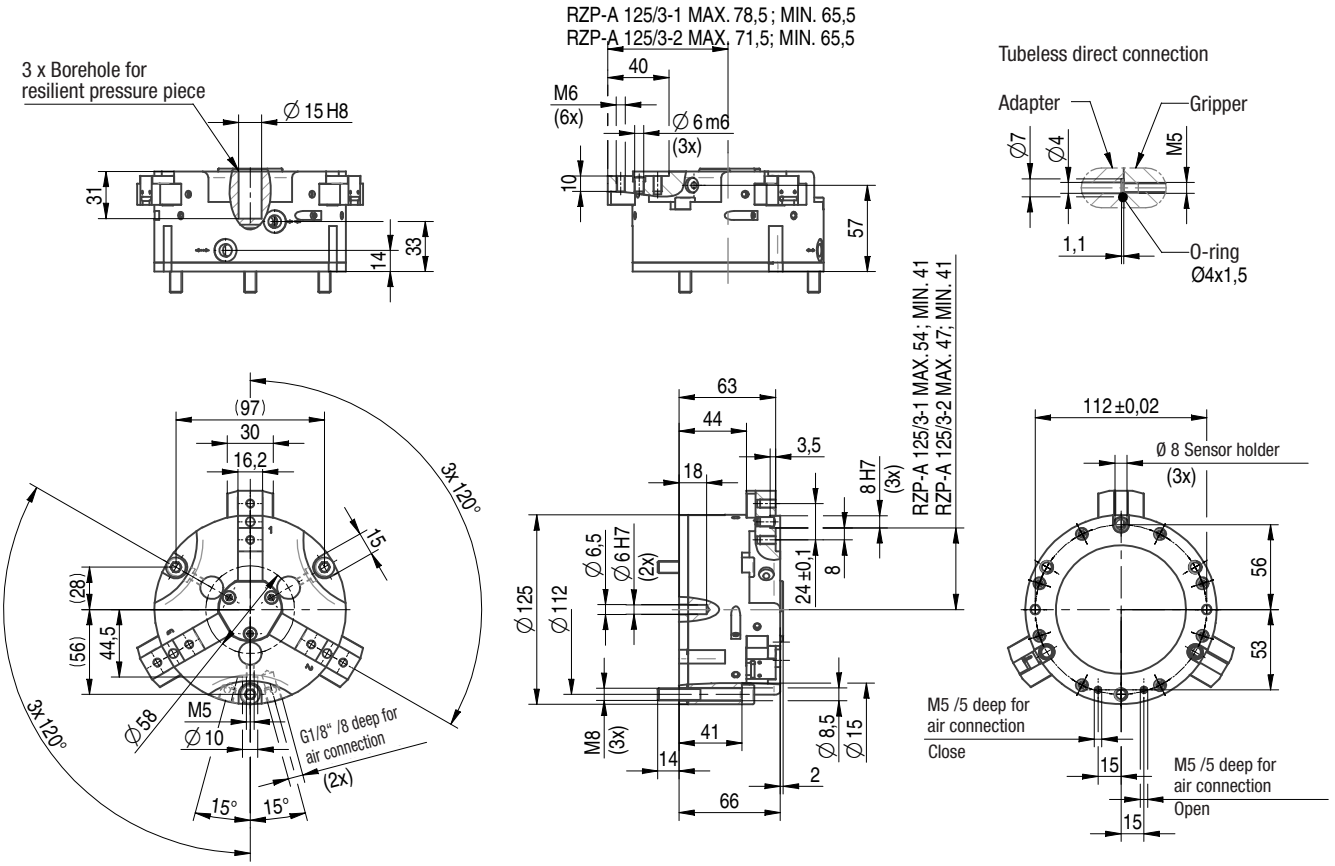


Pressure maintenance valve
Item no. 1078823

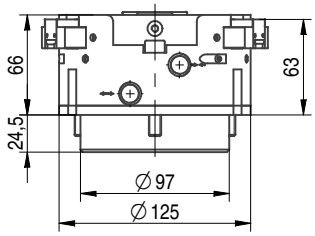
Compressed air connection
Item no. 477025

Inductive proximity switch
Item no. 229114

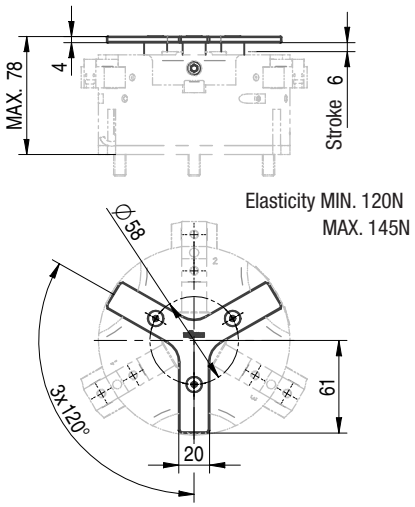
Technical data Item no.		RZP-A 125/3-1 434841	RZP-A 125/3-2 434902	RZP-A 125/3-1 GA 434842	RZP-A 125/3-2 GA 434914	RZP-A 125/3-1 GI 434843	RZP-A 125/3-2 GI 434915
Total gripping force at 6 bar	N	3300	6500	4200	8100	4300	8300
Total stroke	mm	26	12	26	12	26	12
Total grip. force maintained by safety device	N			900	1600	800	1600
Recommended workpiece weight	kg	16	32	16	32	16	32
Weight	kg	2.3	2.3	3.4	3.4	3.4	3.4



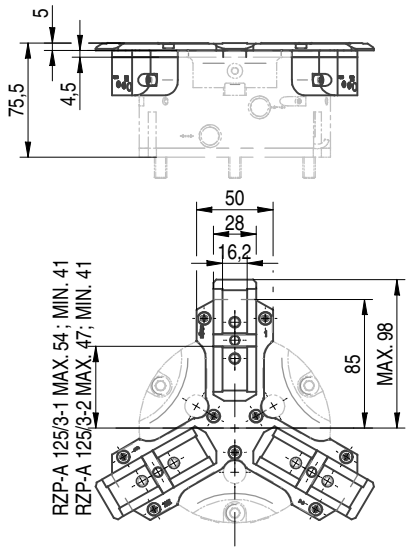
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



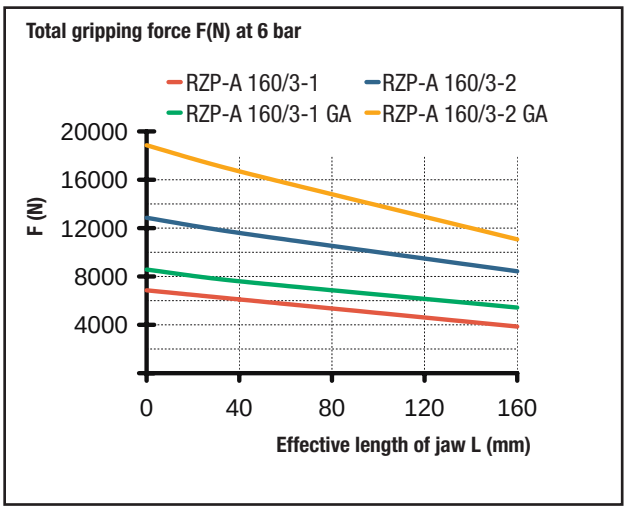
Accessories: Protective cover



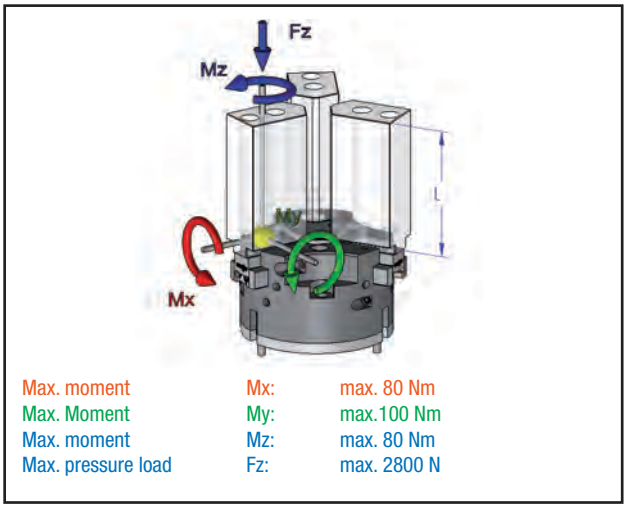
RZP-A 160

Technical data		RZP-A 160/3-1	RZP-A 160/3-2	RZP-A 160/3-1 GA	RZP-A 160/3-2 GA	RZP-A 160/3-1 GI	RZP-A 160/3-2 GI
Operating pressure min/max with spring	bar	2-8	2-8	2.8	2.8	2.8	2.8
Operating pressure min/max with spring	bar			4-7	4-7	4-7	4-7
Clamping time	sec.	0,4	0,4	0,4	0,4	0,8	0,8
Opening time	sec.	0,4	0,4	0,8	0,8	0,4	0,4
Air consumption per cycle	cm^3	520	520	520	520	520	520
Max. allowable length of jaw	mm	160	160	160	160	160	160

Clamping force diagram – exterior gripping



Max. load on gripper and jaw



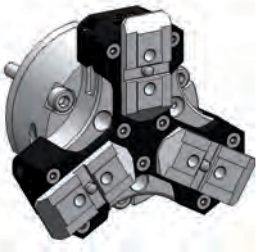
Accessory (please order separately)

Jaw blank (set)
Item no. 170829 steel
Item no. 170839 aluminium

Jaw dimensions see page 79

Resilient pressure piece
Item no. 170872

Protective cover
Item no. 170864



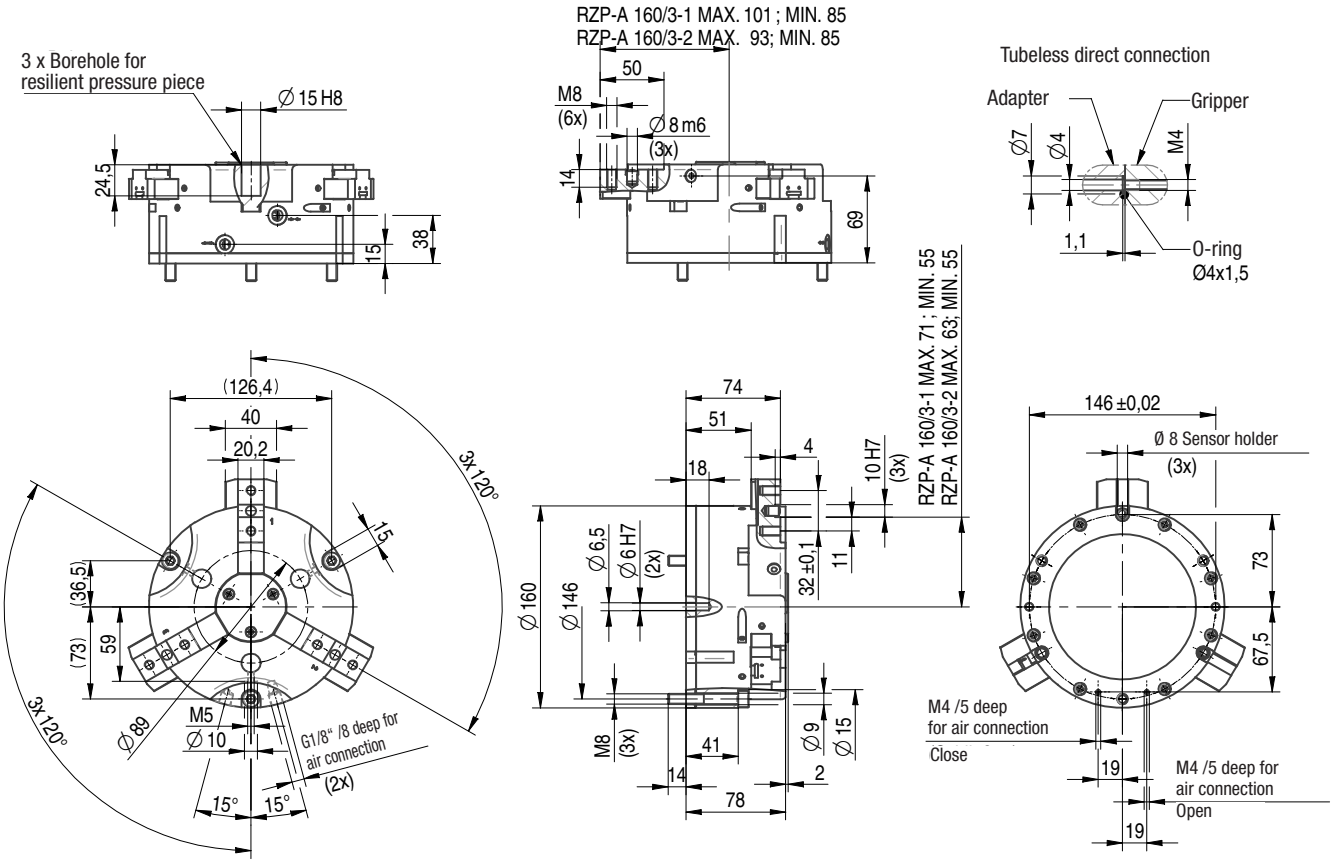
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 477025

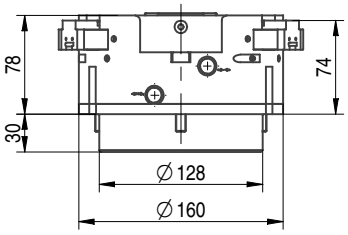
Inductive proximity switch
Item no. 229114

RZP-A 160

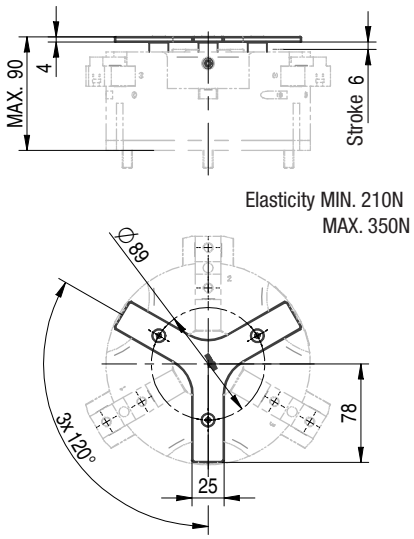
Technical data Item no.		RZP-A 160/3-1 435045	RZP-A 160/3-2 435046	RZP-A 160/3-1 GA 435055	RZP-A 160/3-2 GA 435056	RZP-A 160/3-1 GI 435057	RZP-A 160/3-2 GI 435058
Total gripping force at 6 bar	N	6000	12000	8000	16000	8500	16500
Total stroke	mm	32	16	32	16	32	16
Total grip. force maintained by safety device	N			2000	4000	2000	4000
Recommended workpiece weight	kg	30	60	30	60	30	60
Weight	kg	4.5	4.5	6.6	6.6	6.6	6.6



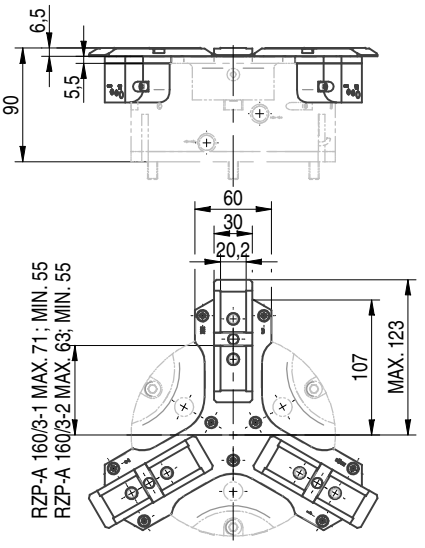
Type GA/GI with gripping force safety device



Accessories: Resilient pressure piece



Accessories: Protective cover



Description	Total stroke in mm	Maximum gripping force in N	Recommended workpiece weight in kg	Page
RGP 30	60	630	3.0	68
RGP 40	80	1260	6.3	70
RGP 50	100	2600	13	72

Design RGP:

GA Integrated springs as gripping force safety device for exterior tension, thus increased gripping force

GI Integrated springs as gripping force safety device for interior tension, thus increased gripping force

Technical Data	
Pneumatic	
Operating pressure	3 - 10 bar
Cylinder	double-acting
Dynamic seals	NBR seals with interior lubrication
Required valves	
Double-acting	5 paths, 2 positions
Single-acting (options GA or GI)	3 paths, 2 positions
Air quality	
Air filtration	40 µ or better
Air lubrication	not necessary*
Humidity	low (dry)
Operating temperatures	
NBR seals (standard)	-30 °C to 80 °C
FKM seals (optional)	-20 to 150
Maintenance	
Expected service life	
At normal use	5 million cycles
At preventive maintenance	10 million cycles
On-site repair of gripper	Yes
Seal set available	Yes

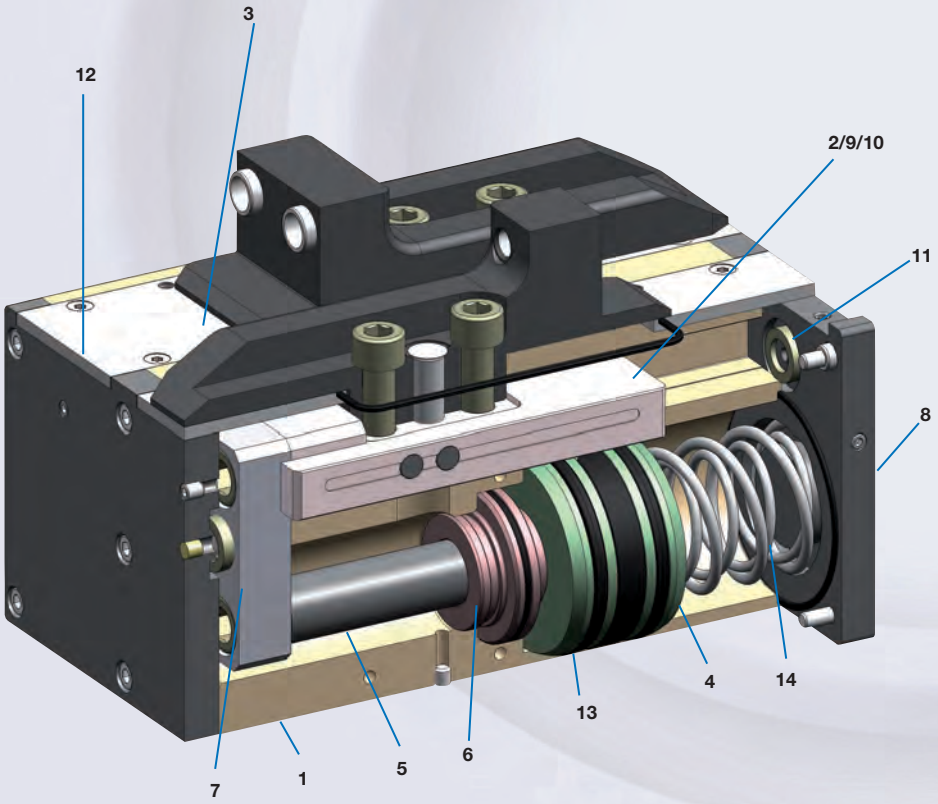
* Preventive maintenance considerably increases service life

Long stroke gripper RGP pneumatic control

Mode of operation

Parts:

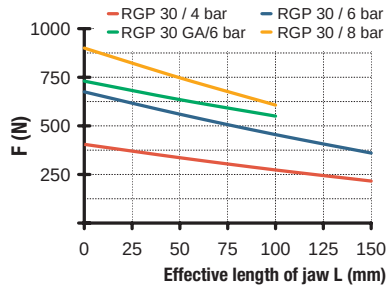
1) Body
2) steering rack
3) Intermediate jaw
4) Piston disk
5) Piston rod
6) Socket
7) Carrier
8) Cover
9) Gearwheel
10) Gearwheel bearing
11) Damping ring
12) Wiper blade
13) Seals
14) Pressure spring for Type GA/GI



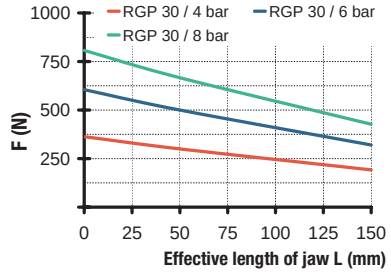
- Gripper body made of high-strength hard-coated aluminium.
- Steering racks, intermediate jaws and gear made of hardened steel.
- Due to a robust flat guidance of steering racks, intermediate jaws absorb large moments
- Suitable for long top jaws.
- Construction allows long jaw strokes.
- Quad-ring extensively sealed off due to wiping between wiper blade and intermediate jaw.
- Gear synchronizes both steering racks for centric gripping.
- Optional, separate delivery of a gripping force safety device for exterior tension (GA) and interior tension (GI) of gripper.
- Tubeless direct connection for central lubrication and sealing air.
- Optional tubeless, direct screw connection for power supply.
- Simple interface: Gripper intermediate jaw / top jaw (centring sleeves).
- Economical production of top jaws,
- Inductive or magnetic positioning sensors.

Clamping force diagram

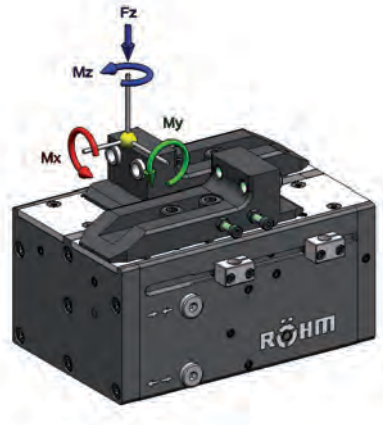
Clamping force diagram – exterior gripping



Clamping force diagram – interior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 30 Nm
Max. moment	My:	max. 95 Nm
Max. moment	Mz:	max. 45 Nm
Max. pressure load	Fz:	max. 1000 N

Accessory (please order separately)

Intermediate jaws (set)
Item no. 170993 steel

Dimensions see page 82

Jaw blank (set)
Item no. 1146146 steel

Dimensions see page 81

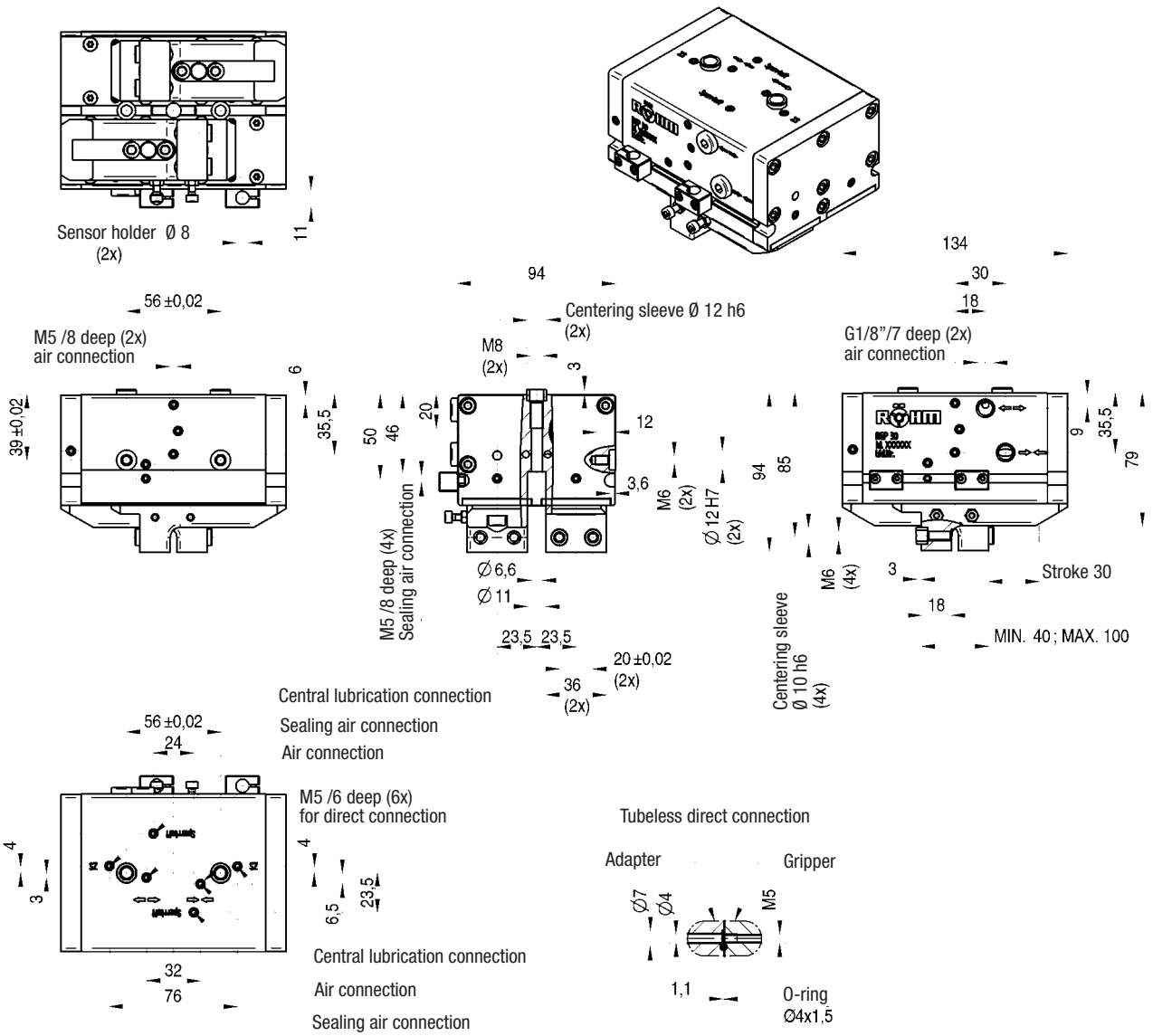
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 477025

Inductive proximity switch
Item no. 229114

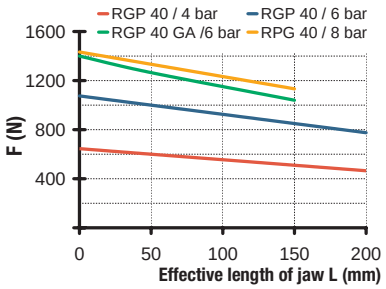
Magnetic field sensors
Item no. 1132737

Technical data Item no.		RGP 30 170109	RGP 30-GA 170110
Total gripping force [6 bar]	N	630	720
Total stroke	mm	60	60
Min. grip. force maintained by safety device	N		90
Recommended workpiece weight	kg	3.0	3.0
Weight	kg	3.2	3.2
Oper. pressure without spring min / max.	bar	2 - 8	
Oper. pressure with spring min / max.	bar		5 - 6.5
Clamping time	s	0.3	0.35
Opening time	s	0.3	0.35
Air consumption per cycle	cm^3	92	92
Max. allowed length of top jaw	mm	150	100
Max. allowed mass per top jaw	kg	2	2

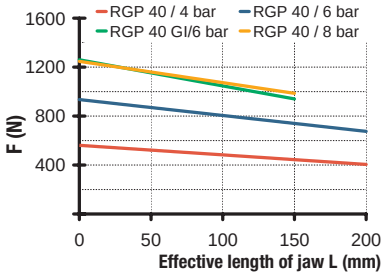


Clamping force diagram

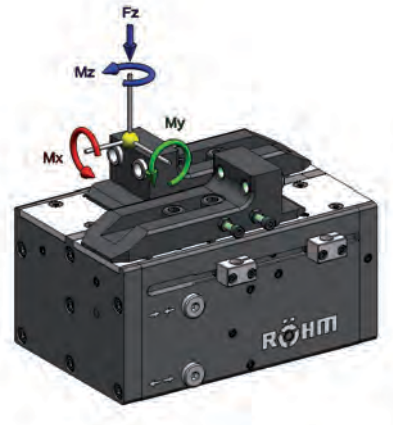
Clamping force diagram – exterior gripping



Clamping force diagram – interior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 50 Nm
Max. moment	My:	max. 100 Nm
Max. moment	Mz:	max. 70 Nm
Max. pressure load	Fz:	max. 1100 N

Accessory (please order separately)

Intermediate jaws (set)
Item no. 170995 steel

Dimensions see page 82

Jaw blank (set)
Item no. 1146144 steel

Dimensions see page 81

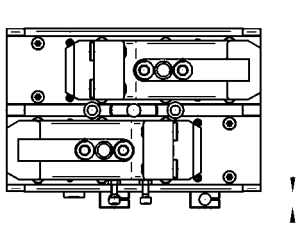
Pressure maintenance valve
Item no. 1078823

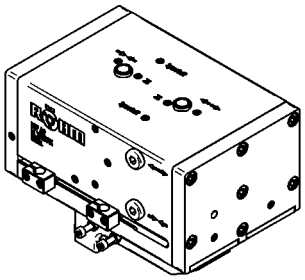
Compressed air connection
Item no. 477025

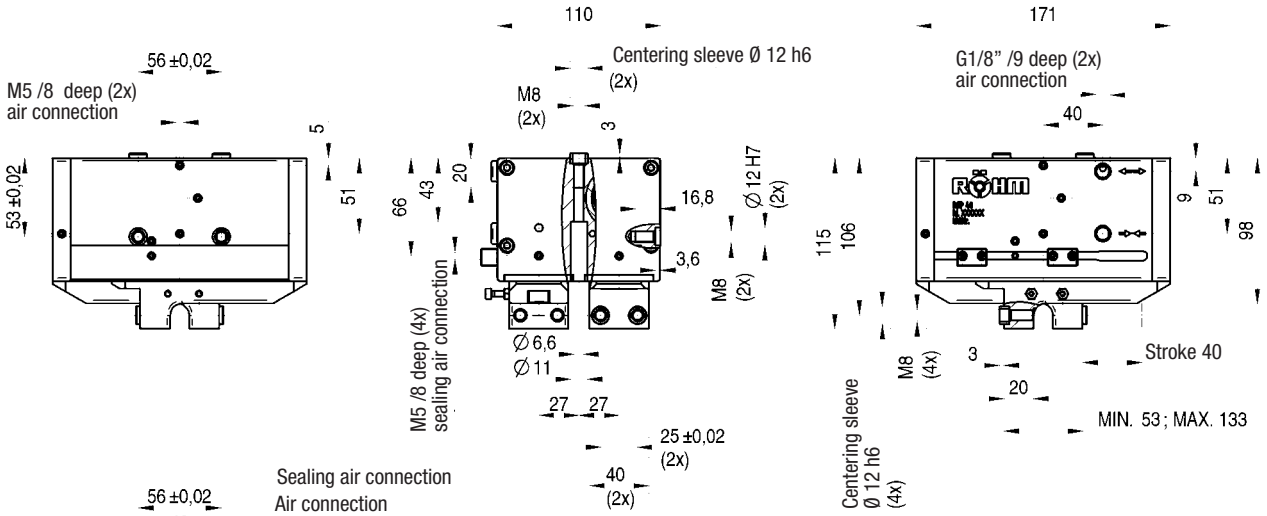
Inductive proximity switch
Item no. 229114

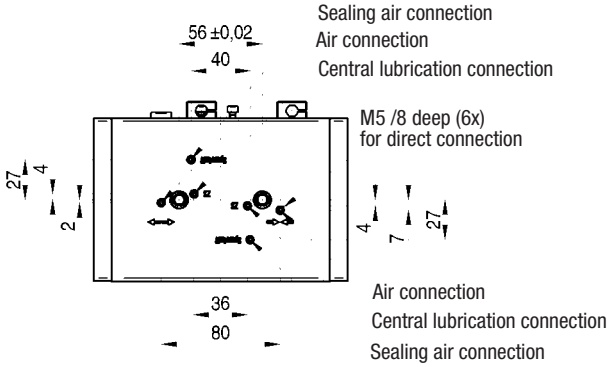
Magnetic field sensors
Item no. 1132737

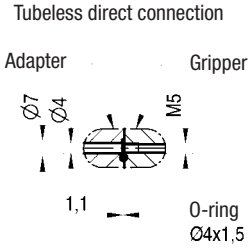
Technical data Item no.		RGP 40 170111	RGP 40-GA 170112	RGP 40-GI 170113
Total gripping force [6 bar]	N	1260	1540	1380
Total stroke	mm	80	80	80
Min. grip. force maintained by safety device	N		150	150
Recommended workpiece weight	kg	6.3	6.3	5.5
Weight	kg	5,6	5,6	5,6
Oper. pressure without spring min / max.	bar	2 - 8		
Oper. pressure with spring min / max.	bar		5 - 6.5	5 - 6.5
Clamping time	s	0.3	0.3	0.4
Opening time	s	0.3	0.4	0.3
Air consumption per cycle	cm^3	240	240	240
Max. allowed length of top jaw	mm	200	150	150
Max. allowed mass per top jaw	kg	3	3	3





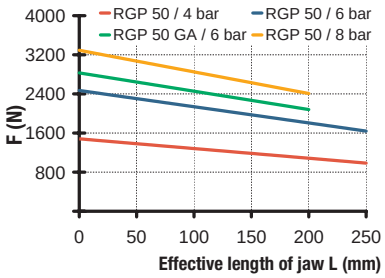




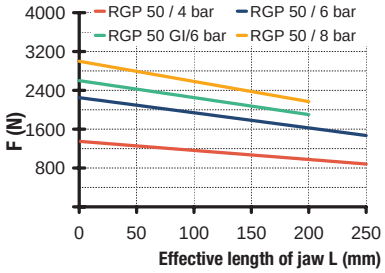


Clamping force diagram

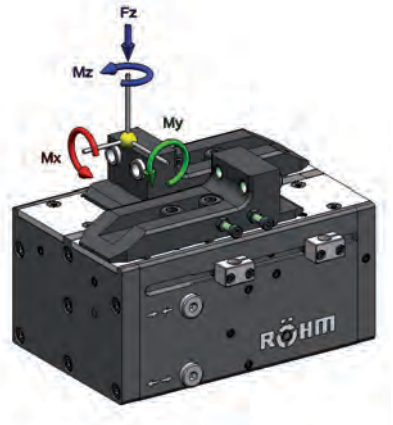
Clamping force diagram – exterior gripping



Clamping force diagram – interior gripping



Max. load on gripper and jaw



Max. moment	Mx:	max. 60 Nm
Max. moment	My:	max. 100 Nm
Max. moment	Mz:	max. 80 Nm
Max. pressure load	Fz:	max. 1300 N

Accessory (please order separately)

Intermediate jaws (set)
Item no. 170997 steel

Dimensions see page 82

Jaw blank (set)
Item no. 1131198 steel

Dimensions see page 81

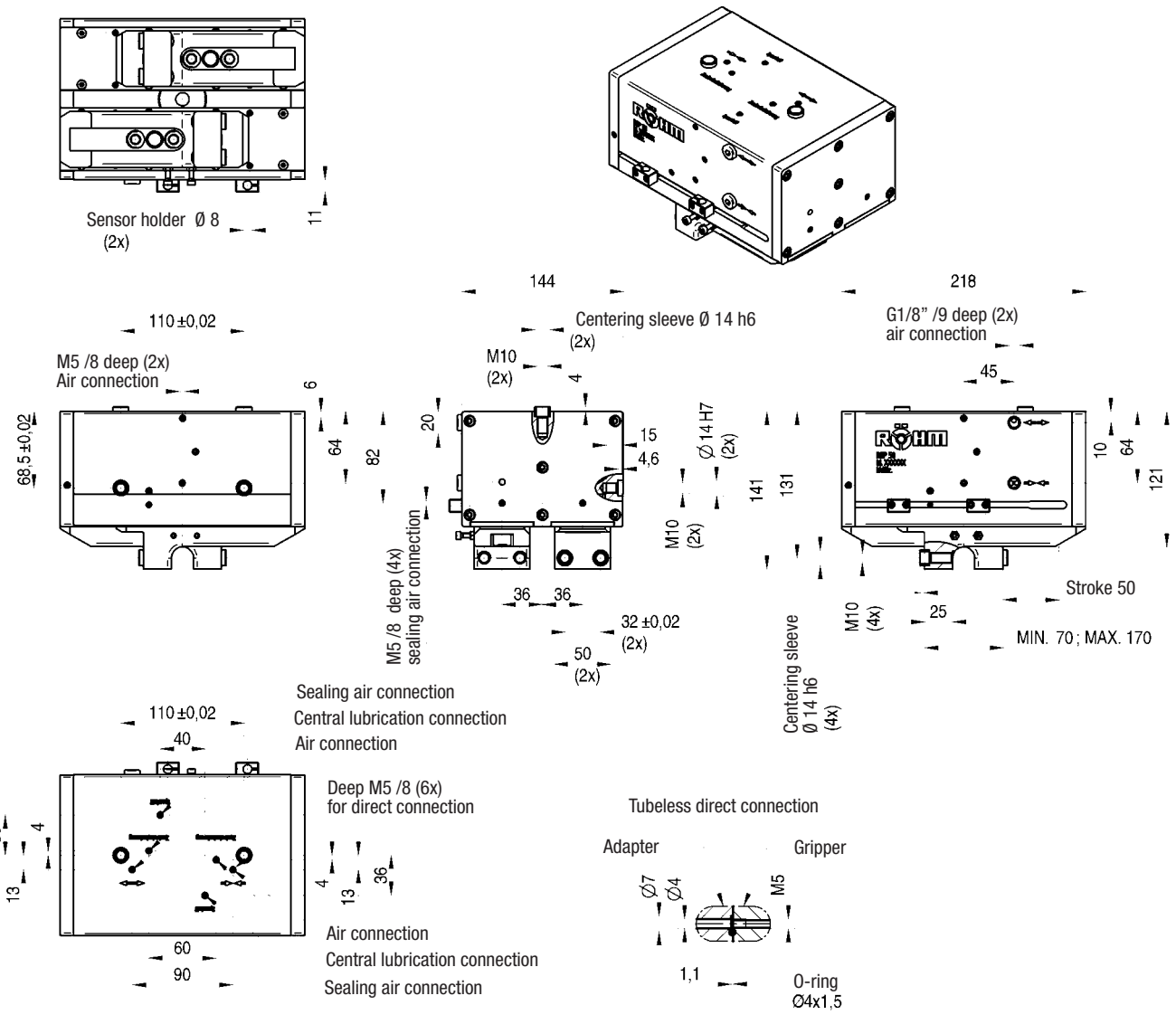
Pressure maintenance valve
Item no. 1078823

Compressed air connection
Item no. 477025

Inductive proximity switch
Item no. 229114

Magnetic field sensors
Item no. 1132737

Technical data Item no.		RGP 50 170114	RGP 50-GA 170115	RGP 50-GI 170116
Total gripping force [6 bar]	N	2600	2950	2680
Total stroke	mm	100	100	100
Min. grip. force maintained by safety device	N		450	450
Recommended workpiece weight	kg	13	13	11.5
Weight	kg	11	11	11
Oper. pressure without spring min / max.	bar	2 - 8		
Oper. pressure with spring min / max.	bar		5 - 6.5	5 - 6.5
Clamping time	s	0.6	0.5	0.7
Opening time	s	0.7	0.8	0.6
Air consumption per cycle	cm^3	600	600	600
Max. allowed length of top jaw	mm	250	200	200
Max. allowed mass per top jaw	kg	4	4	4

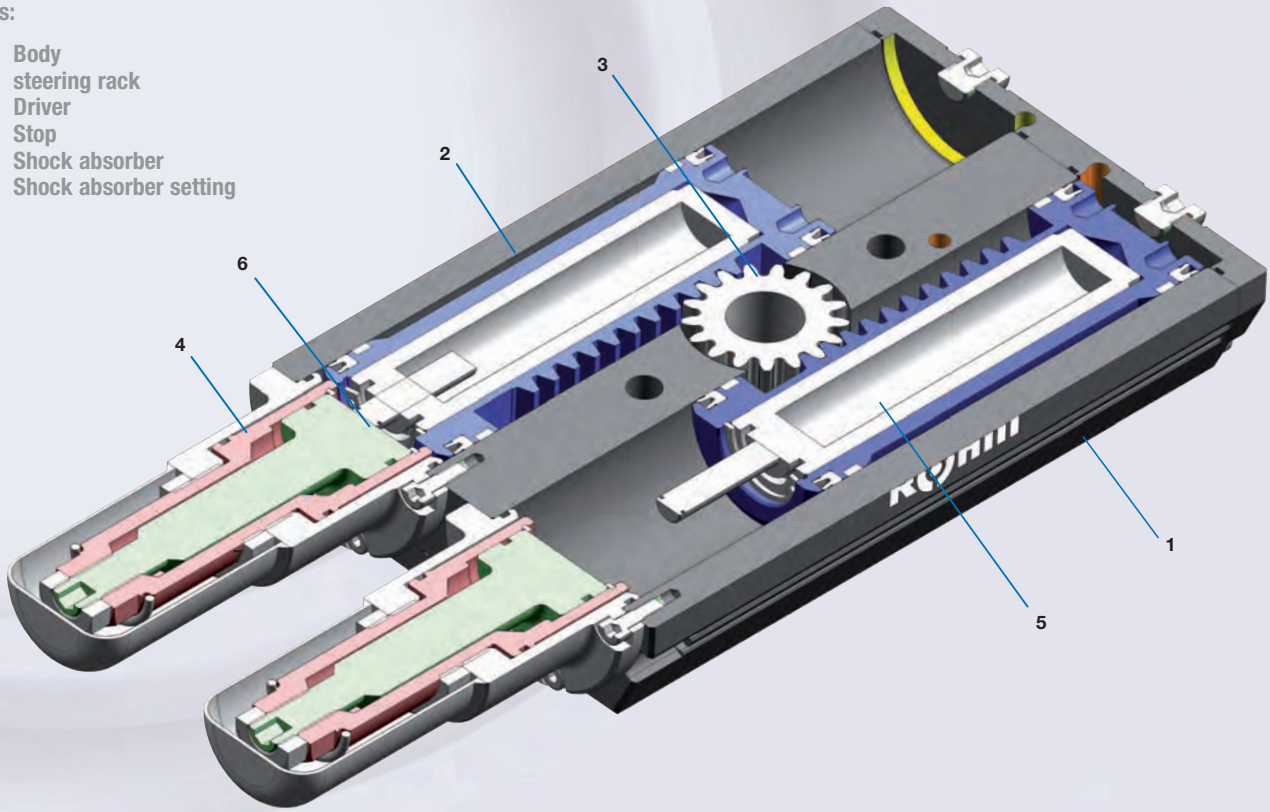


Swivel unit RSP pneumatic control

Mode of operation

Parts:

1) Body
2) steering rack
3) Driver
4) Stop
5) Shock absorber
6) Shock absorber setting

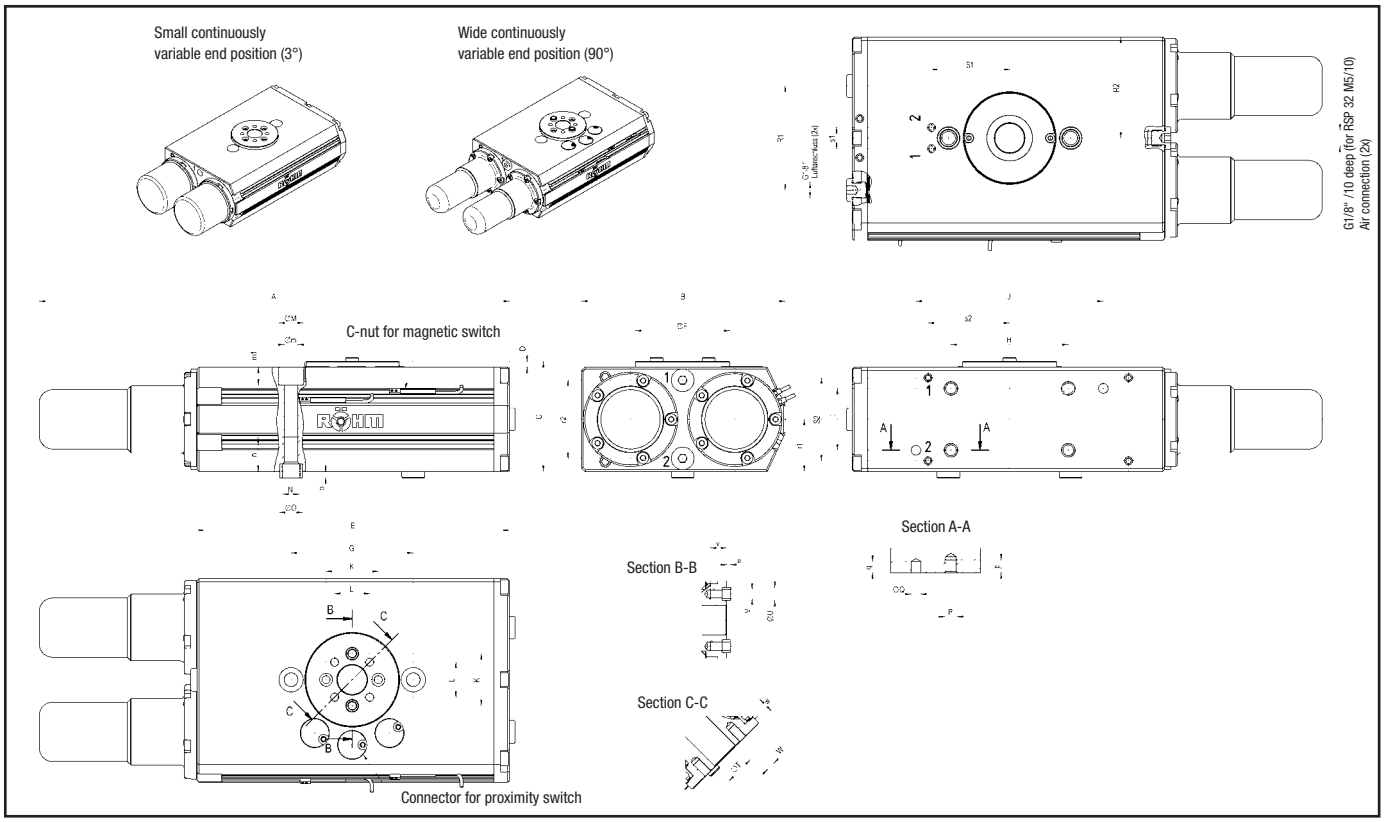


- Body made of high-strength hard-coated aluminium.
- Steering racks and driver made of hardened steel.
- High repeat accuracy, compact design, high torque
- Optional automated operation
- Uniform end-of-stroke damping
- Usable in all position, e.g. vertical, hanging, horizontal
- Continuously variable end position between ±3° or ±90°
- Inductive or magnetic positioning sensors.
- Ideal bearing of turn table for many millions of cycles
- Optional tubeless, direct screw connection for power supply.
- Simple interface: Driver / Construction

Technical data Item no.		RSP 32-180 171158	RSP 32-180-G 171159	RSP 42-180 171166	RSP 42-180-G 171167	RSP 52-180 171174	RSP 52-180-G 171175
Technical data (single impingement) **Item no.**		RSP 32-180-E 171162	RSP 32-180-G-E 171163	RSP 42-180-E 171170	RSP 42-180-G-E 171171	RSP 52-180-E 171178	RSP 52-180-G 171179
	A	190	230	245	290	320	390
	B	97	97	125	125	151	151
	C	57	57	67.5	67.5	88	88
	D	3	3	3.5	3.5	8	8
	E	148	148	192	192	267	267
	ØF	Ø41.9	Ø41.9	Ø57.9	Ø57.9	Ø84.9	Ø84.9
	G ±0.02	62	62	75	75	120	120
	H	55	55	72	72	115	115
	I	28	28	38	38	44	44
	J	95	95	115	115	180	180
	K ±0.02	22	22	32	32	43	43
	L	15	15	21.5	21.5	29	29
Anchor point	ØM/Øm/m1	Ø11/Ø6.6/8	Ø11/Ø6.6/8	Ø15/Ø8.5/11	Ø15/Ø8.5/11	Ø18/Ø10.5/16	Ø18/Ø10.5/16
Anchor thread	N / n	M8 / 19	M8 / 19	M10 / 21	M10 / 21	M12 / 25	M12 / 25
Centring sleeve	ØO / o	Ø12 / 3	Ø12 / 3	Ø14 / 4	Ø14 / 4	Ø16 / 4	Ø16 / 4
Anchor thread	P / p	M6 /6	M6 /6	M8 / 8	M8 / 8	M10 / 10	M10 / 10
Centre hole	ØQ / q	Ø5 / 7	Ø5 / 7	Ø6 / 7	Ø6 / 7	Ø8 / 8	Ø8 / 8
Pneumatic connection	R1	48	48	64	64	76,5	76,5
	r1	27	27	32	32	40	40
Pneumatic connection	R2	48.5	48.5	62	62	74	74
	r2	40	40	48	48	60	60
Pneumatic connection	S1	41	41	48	48	75	75
Tubeless direct connection	S1	13	13	13	13	13	13
Pneumatic connection	S2	41	41	51	51	63	63
Tubeless direct connection	S2	41	41	50	50	75	75
Through-hole driver	ØT	Ø12	Ø12	Ø18	Ø18	Ø28	Ø28
Centring sleeves driver	ØU / u	Ø8 / 2.5	Ø8 / 2.5	Ø8 / 2.5	Ø8 / 2.5	Ø12 / 3	Ø12 / 3
Anchor thread driver	V / v	M5 / 9	M5 / 9	M6 / 10	M6 / 10	M8 / 14	M8 / 14
Anchor thread driver	W / w	M6 / 8	M6 / 8	M6 / 10	M6 / 10	M10 / 14	M10 / 14
Pivot angle	[°]	180	180	180	180	180	180
Torque ati 6 bar	[Nm]	10 (5)	10 (5)	22 (11)	22 (11)	46 (23)	46 (23)
Adjustability of end position	[°]	3	90	3	90	3	90
Dead weight	[kg]	2.5	2.8	4.8	5	10.5	11.3
Operating pressure	[bar]	3 - 7	3 - 7	3 - 7	3 - 7	3 - 7	3 - 7

RSP on request with fluid feeder **Item no.**	RSP 32-180-F 171160	RSP 32-180-G-F 171161	RSP 42-180-F 171168	RSP 42-180-G-F 171169	RSP 52-180-F 171176	RSP 52-180-G-F 171177
RSP with fluid feeder (single impingement) **Item no.**	RSP 32-180-F-E 171164	RSP 32-180-G-F-E 171165	RSP 42-180-F-E 171172	RSP 42-180-G-F-E 171173	RSP 52-180-F-E 171180	RSP 52-180-G-F-E 171181

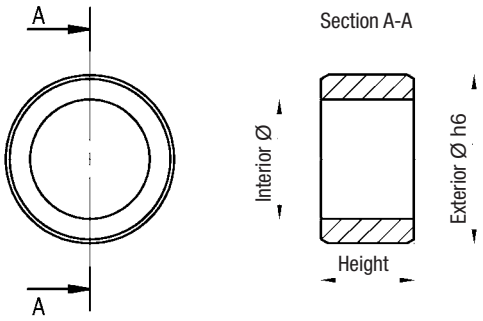
E = single impingement G = wide adjustability of end position



Accessories: Centring sleeves´, hardened and polished

Application:
any centring tasks of grippers and swivel units

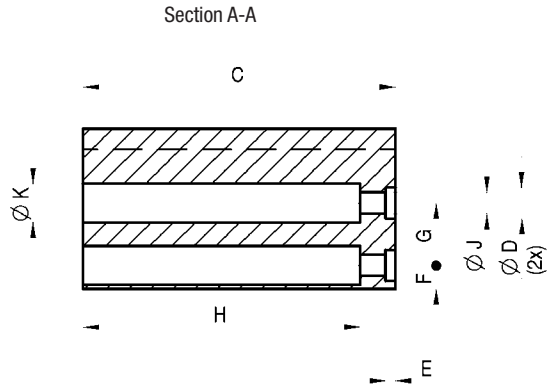
Advantages:
- simple and space saving centring
- simple assembly
- high precision when changing units



Item no.	Designation mm	Exterior-Ø mm	Interior-Ø mm	Height mm	Protrusion of centring sleeve mm	Borehole depth for centring sleeve mm
170260	centring sleeve	Ø 4_{h6}	Ø 2.5	$3.8_{-0.2}$	2.0	$2.0^{+0.2}$
17026170260	centring sleeve	Ø 5_{h6}	Ø 3.3	$4.3_{-0.2}$	2.0	$2.3^{+0.2}$
17026270260	centring sleeve	Ø 6_{h6}	Ø 4.3	$5.2_{-0.2}$	2.5	$2.7^{+0.2}$
17026370260	centring sleeve	Ø 8_{h6}	Ø 5.3	$5.2_{-0.2}$	2.5	$2.7^{+0.2}$
17026470260	centring sleeve	Ø 10_{h6}	Ø 6.5	$6.6_{-0.2}$	3.0	$3.6^{+0.2}$
170265	Centring Sleeve	Ø 12_{h6}	Ø 8.5	$6.6_{-0.2}$	3.0	$3.6^{+0.2}$
170266	Centring Sleeve	Ø 14_{h6}	Ø 11.0	$8.6_{-0.2}$	4.0	$4.6^{+0.2}$
170267	Centring Sleeve	Ø 16_{h6}	Ø 13.0	$8.6_{-0.2}$	4.0	$4.6^{+0.2}$
170268	Centring Sleeve	Ø 22_{h6}	Ø 17.5	$13.6_{-0.2}$	6.0	$7.6^{+0.2}$

Design steel

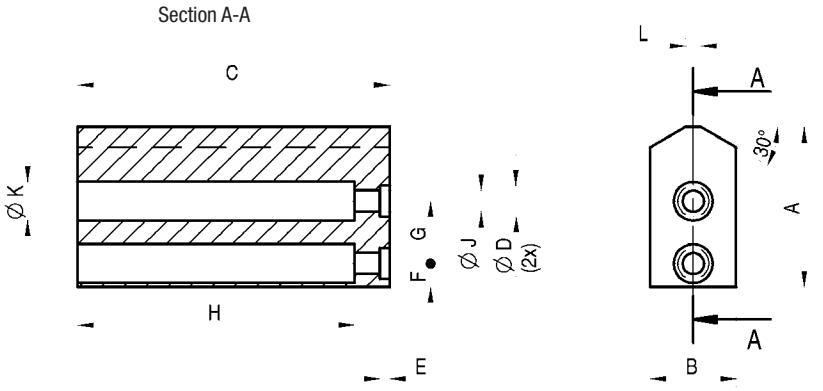
Top jaw set AB-ST
inclusive of screws



RPP / RZP	50	64	80	100	125	160	200	240	300
RPP AB steel 2 jaws Item no.	**170574**	**170575**	**170576**	**170577**	**170578**	**170579**	**170580**	**170581**	**170582**
RZP AB steel 3 jaws Item no.	**170596**	**170500**	**170502**	**170504**	**170506**	**170508**	**170510**	**170512**	**170514**
A	30	32	41	51	60	80	96	109	130
B	15	20	22	30	35	40	40	50	60
C	50	64	80	100	125	160	200	220	200
D +0.04/+0.02	5	6	8	10	10	14	16	16	22
E+0.2	2	2.5	2.5	3	3	4	4	4	6
F±0.1	5	5	6	7	9.5	10	15	15.5	20
G±0.02	12	13	16	20	24	32	40	44	46
H	45	57	71	91	115	146	181	204	177
J	3.4	4.5	5.5	6.6	6.6	11	13.5	13.5	17.5
K	6	8	10	11	11	18	20	20	26
L	2	3	4	5	6	8	13	10	16
Weight of a single top jaw kg	0.15	0.25	0.45	1.0	1.75	3.2	5.0	8.0	10.2
Anchor point - Item no.	**630500**	**367539**	**757443**	**243831**	**243831**	**233029**	**233024**	**233024**	**220565**
Dimension	M3x12	M4x16	M5x18	M6x22	M6x22	M10x30	M12x35	M12x35	M16x50

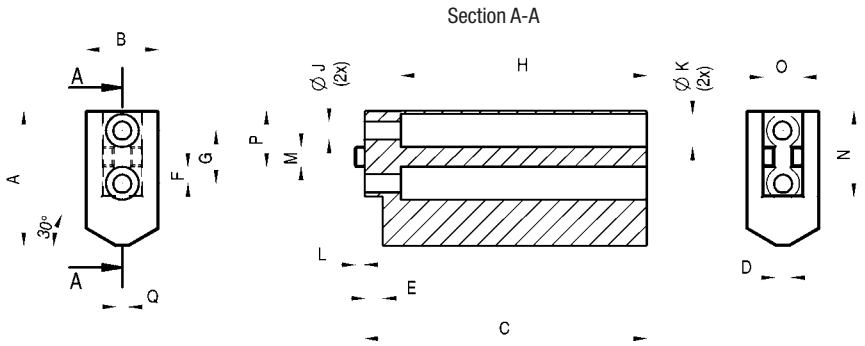
Design aluminium

Top jaw set AB-AL
inclusive of screws



RPP / RZP	50	64	80	100	125	160	200	240	300
RPP AB aluminium 2 jaws Item no.	**170584**	**170585**	**170586**	**170587**	**170588**	**170589**	**170590**	**170591**	**170592**
RZP AB aluminium 3 jaws Item no.	**170597**	**170550**	**170552**	**170554**	**170556**	**170558**	**170560**	**170562**	**170564**
A	30	32	41	51	60	80	96	109	130
B	15	20	25	30	35	40	45	50	60
C	50	64	80	100	125	160	200	220	200
D+0.04/+0.02	5	6	8	10	10	14	16	16	22
E+0.2	2	2.5	2.5	3	3	4	4	4	6
F±0.1	5	5	6	7	9.5	10	15	15.5	20
G±0.02	12	13	16	20	24	32	40	44	46
H	43	55	69	88	112	141	176	200	170
J	3.4	4.5	5.5	6.6	6.6	11	13.5	13.5	17.5
K	6	8	10	11	11	18	20	20	26
L	2	3	2	5	6	8	9	10	16
Weight of a single top jaw kg	0.05	0.1	0.18	0.35	0.6	1.2	2.0	2.8	3.5
Screw Item no.	**1092236**	**1145099**	**607323**	**319322**	**319322**	**249301**	**233025**	**233025**	**243617**
Dimension	M3x14	M4x18	M5x20	M6x25	M6x25	M10x35	M12x40	M12x40	M16x55

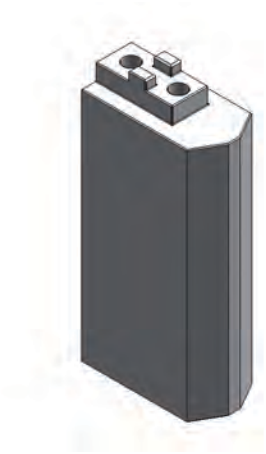
Design steel
Top jaw set AB-ST
inclusive of screws

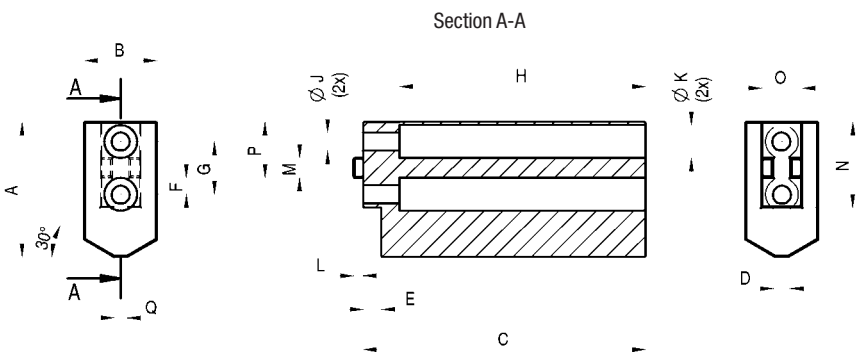


RPP-A / RZP-A			64	80	100	125	160	200	300
RPP-A AB steel	**2 jaws**	**Item no.**	**170675**	**170676**	**170677**	**170678**	**170679**	**170680**	**170682**
RZP-A AB steel	**3 jaws**	**Item no.**	**170825**	**170826**	**170827**	**170828**	**170829**	**170830**	**170832**
A			32	41	51	60	80	94	118
B			20	22	30	35	40	46	60
C			68.5	85.5	105.5	130.5	166.5	221	200
D+0.01/+0.03			4	5	6	6	8	8	10
E±0.2			4.5	5.5	5.5	5.5	6.5	8	0
F±0.1			4	5	6	8	11	15	17
G±0.1			13	16	20	24	32	40	46
H			59.5	74.5	94.5	119.5	153.5	200	189
J			4.5	5.5	6.6	6.6	9	13.5	17.5
K			8	10	11	11	15	20	26
L-0.3			2.5	3	3	3.5	4	5	5
Mf7			5	6	8	8	10	10	12
N-0.3/-0.5			21	26	33	41	51	64	0
O-0.3/-0.5			10.2	12.2	14.2	16.2	20.2	25.2	36.2
P+0.1			14	17	21	25.5	31	40	46
Q			3	4	5	6	8	10	16
Weight of a single top jaw kg			0.26	0.46	1.0	1.8	3.5	6.2	9.1
Screw Item no.			**367539**	**757443**	**249299**	**249299**	**236949**	**233024**	**229157**
Dimension			M4x16	M5x18	M6x20	M6x20	M8x25	M12x35	M16x30

Design aluminium

Top jaw set AB-AL
inclusive of screws

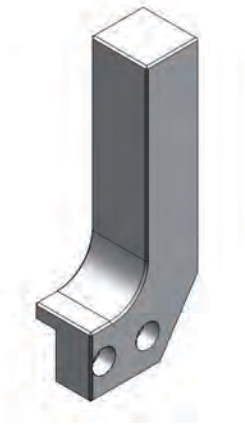


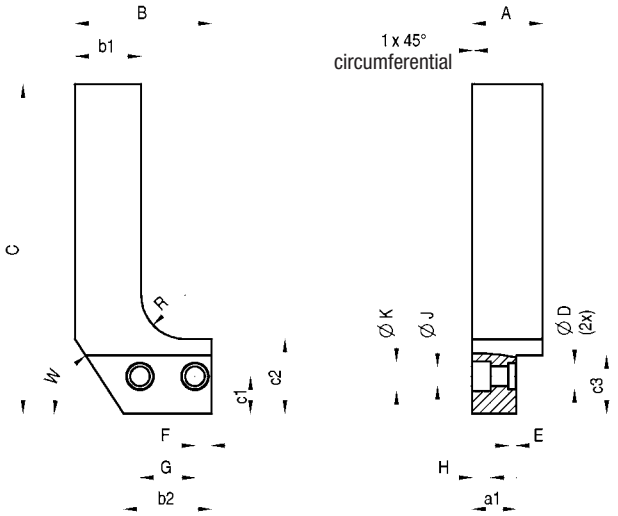


RPP-A / RZP-A			64	80	100	125	160	200	300
RPP-A AB alu	**2 jaws**	**Item no.**	**170685**	**170686**	**170687**	**170688**	**170689**	**170690**	**170692**
RZP-A AB alu	**3 jaws**	**Item no.**	**170835**	**170836**	**170837**	**170838**	**170839**	**170840**	**170842**
A			32	41	51	60	80	96	118
B			20	22	30	35	40	46	60
C			68.5	85.5	105.5	130.5	166.5	221	200
D+0.01/+0.03			4	5	6	6	8	8	10
E±0.2			4.5	5.5	5.5	5.5	6.5	8	0
F±0.1			4	5	6	8	11	15	17
G±0.1			13	16	20	24	32	40	46
H			59.5	74.5	94.5	119.5	153.5	200	189
J			4.5	5.5	6.6	6.6	9	13.5	17.5
K			8	10	11	11	15	20	26
L-0.3			2.5	3	3	3.5	4	5	5
Mf7			5	6	8	8	10	10	12
N-0.3/-0.5			21	26	33	41	51	64	0
O-0.3/-0.5			10.2	12.2	14.2	16.2	20.2	25.2	36.2
P+0.1			14	17	21	25.5	31	40	46
Q			3	4	5	6	8	10	16
Weight of a single top jaw kg			0.1	0.16	0.35	0.62	1.2	2.2	3.2
Screws Item no.			**367539**	**757443**	**249299**	**249299**	**236949**	**233024**	**229157**
Dimension			M4x16	M5x18	M6x20	M6x20	M8x25	M12x35	M16x30

Design steel

Top jaw set AB-ST
inclusive of screws

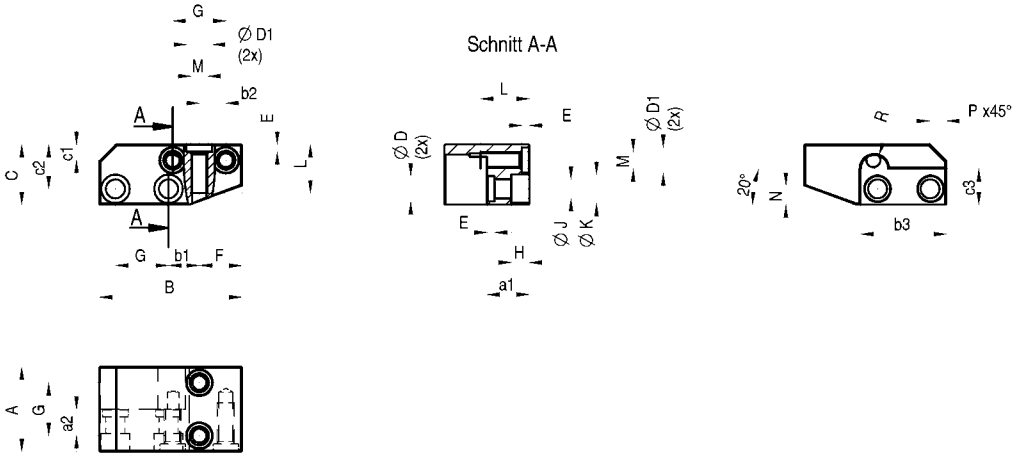




RGP	30	40	50
RGP AB steel 2 jaws Item no.	**1146146**	**1146144**	**1131198**
A	28	32	42
a1	18	20	25
B	54	62	80
b1	25	30	38
b2	36	40	50
C	100	150	200
c1	13	17	22
c2	30	34	40
c3	22,5	26,5	32,5
D+0.02/+0.04	10	12	14
E+0.2	3.6	3.6	4.6
F±0.1	8	7.5	9
G±0.02	20	25	32
H	6.8	8.5	11
J	6.6	9	11
K	11	13.5	16.5
R	15	20	25
W	57°	57°	57°
Weight of a single jaw kg	0.6	1.2	2.6
Screws Item no.	**319322**	**334571**	**249301**
Dimension	M6x25	M8x30	M10x35

Design steel

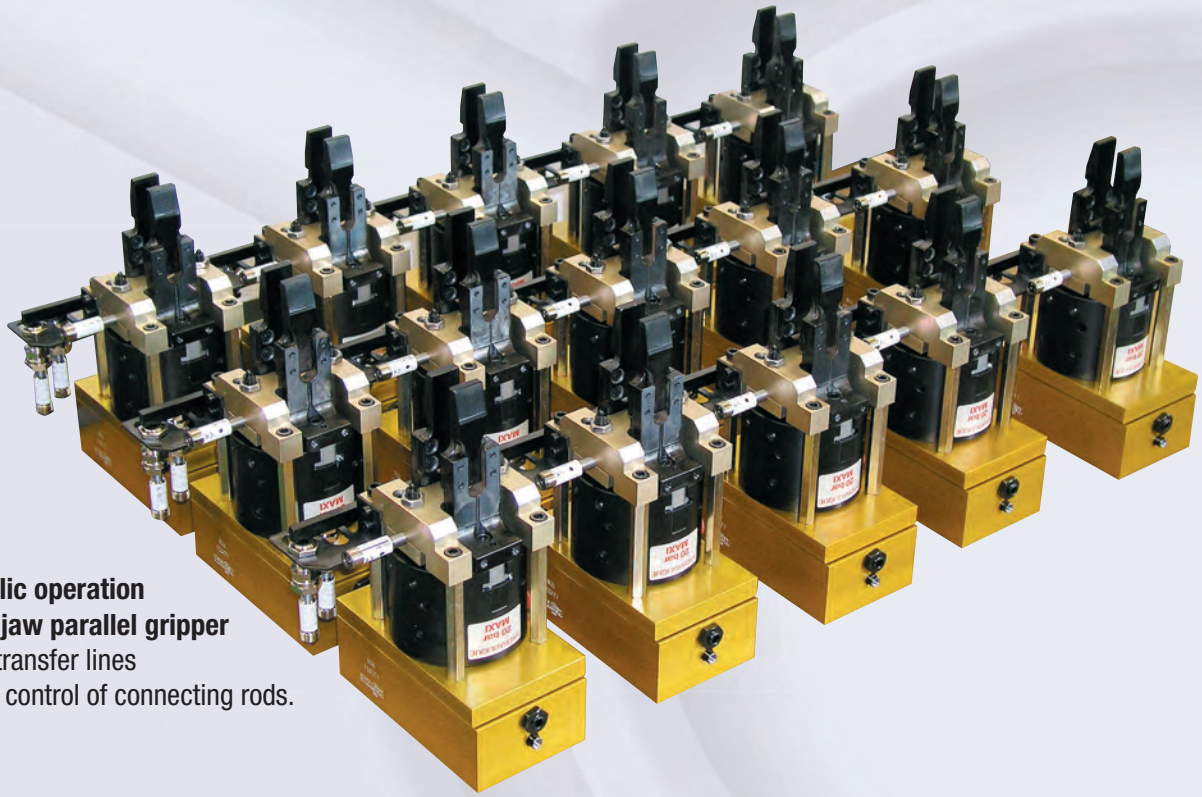
Intermediate jaw set ZB-ST
incl. srews and centring sleeves



RGP		30	40	50
RGP ZB steel 2 jaws	**Item no.**	**170993**	**170995**	**170997**
A		36	40	50
a1		18	20	25
a2		10	12.5	16
B		59.5	67	86
b1		13.5	14.5	20
b2		10	12.5	16
b3		36.5	40.5	50.5
C		26.5	28.5	35
c1		8	7.5	9
c2		20	21	25
c3		16	17	20,5
D+0.02/+0.04		10	12	14
D1 H7		10	12	14
E+0.2		3.6	3.6	4.6
F±0.1		18	20	25
G±0.02		20	25	32
H		6.8	8.5	11
J		6.6	9	11
K		11	13.5	16.5
L		18	23	28
M		M6	M8	M10
Nx20°		8	9	12
Px45°		7	8	10
R		5.5	6.5	6.5
Weight of a single intermediate jaw kg		0.3	0.4	0.75
Centrin sleeve Item no.		**170264**	**170265**	**170266**
Dimension		Ø10	Ø12	Ø14
Screws Item no.		**319322**	**334571**	**249301**
Dimension		M6x25	M8x30	M10x35

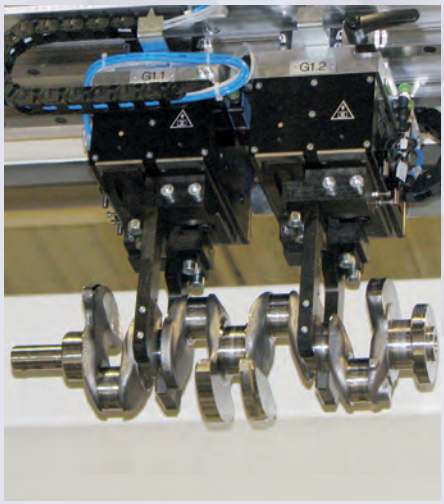
Special gripper

We develop and manufacture standard and special gripper.
Contact us - we'll find a solution.

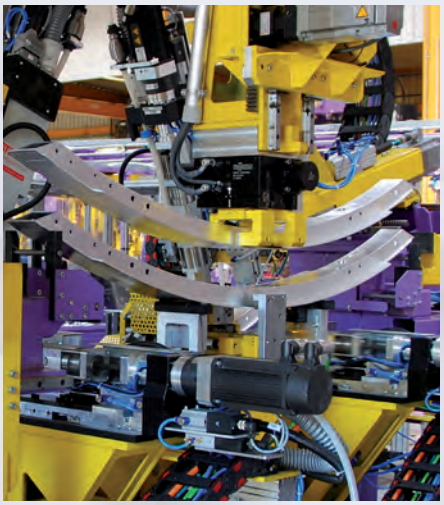


Hydraulic operation
of two-jaw parallel gripper
for top transfer lines
and the control of connecting rods.

Gripper changing station with 20
integrated RZP-grippers



Two large-stroke grippers RGP 50
for the transport of crankshafts

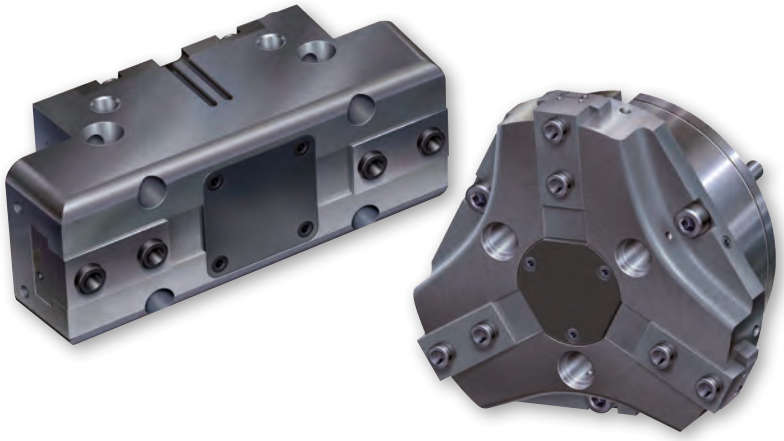


Large stroke gripper RGPO 6360 for
the transport of aluminum bumpers

Gripper RPQ 22-2 for built-on a packing
machine

Gripper RPP 80-1 for the leak test of
taps

Large stroke gripper RGP 60 for large
and heavy workpieces up to 70 kg



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