

NOMENCLATURE

RGP

RÖHM
G long stroke
gripper
Pneumatic
(sealed version)

O

O = Open versi-
on for longer jaw
stroke

- 100

Sizes
RGP: 30-50
RGPO: 40-60

/ GA

Optional:
spring safety
GA = outside
grip

/ V

Optional:
V = Viton FKM-
sealing for
temperatures
up to 150 °C

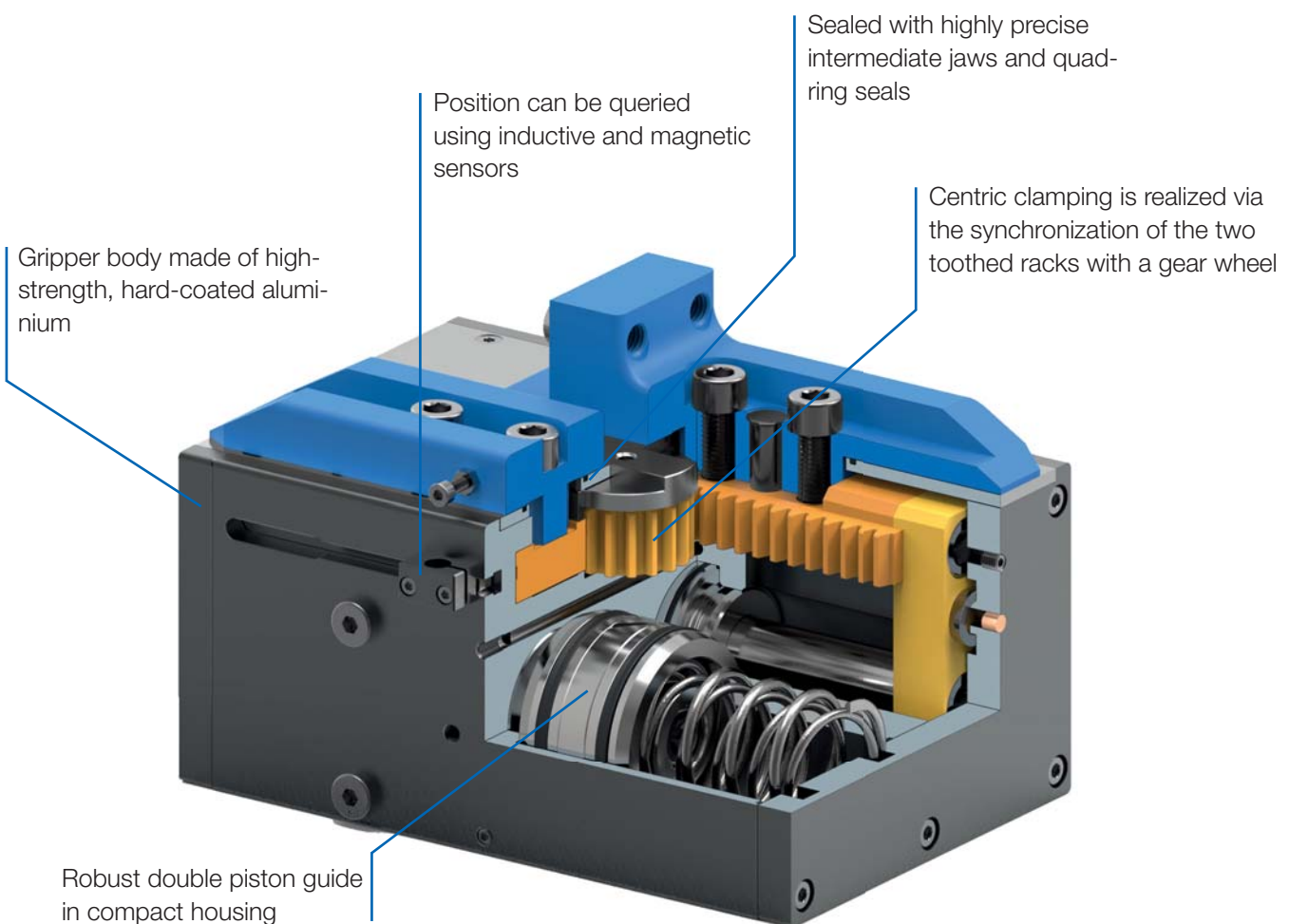


2-JAW LONG STROKE GRIPPER

The 2-jaw long stroke gripper allows for large jaw strokes, thanks to its design, and is therefore optimally suited for handling large parts and a high part diversity. Due to the sealed guide, it is often used in rough environments. The centric clamping is realized via the synchronization of the two toothed racks with a gear wheel.

ADVANTAGES AT A GLANCE

- ⊕ High gripping force with simultaneously high jaw stroke by means of double-acting pressure pistons
- ⊕ High torque support for using long gripper fingers by means of robust flat guide
- ⊕ Sealed for rough ambient conditions with quad-ring seal and highly precise intermediate jaws



2-jaw long stroke gripper



2-jaw long stroke gripper

RGP-30



APPLICATION

Sealed large-stroke gripper for handling large parts and high part variety.

TYPE

Available in sizes 30, 40 and 50 with integrated seal - optionally with gripping force securing device.

High precision thanks to double-piston drive synchronized via gear wheel.

CUSTOMER BENEFITS

- ⊕ High gripping force with simultaneously high jaw stroke by means of double-acting pressure pistons
- ⊕ High torque support for using long gripper fingers thanks to elongated jaw guide
- ⊕ Sealed for rough ambient conditions with quad-ring seal and highly precise intermediate jaws
- ⊕ Maximum flexibility thanks to versatile connection and fastening options

TECHNICAL FEATURES

- Centrally clamping in compact design made of high-strength, hard-coated aluminium alloy
- All functional parts made of hardened steel for maximum service life
- Robust double piston guide in compact design
- Optional inductive and magnetic position sensors
- Optionally available with FKM seals for higher temperatures up to 150°C (on request)
- Integrable purge air connection to prevent contamination

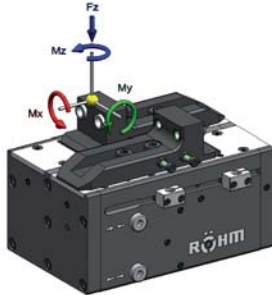


C40
RGP-30 - 2-jaw long stroke gripper air operated

Item No.	170109	170110
Design	RGP 30	RGP 30-GA
Gripping force at 6 bar N	630	720
Stroke per jaw mm	30	30
Gripping force maintained N	-	90
Recommended workpiece weight kg	3	3
Weight kg	3,2	3,2
Width mm	134	134
Height mm	66	66
Depth mm	94	94
Mx Nm	30	30
My Nm	95	95
Mz Nm	45	45
Fz N	1000	1000
Operating pressure min./max. without GA/GI bar	2-8	-
Operating pressure min./max. with GA/GI 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. allowable length of jaw mm	150	100

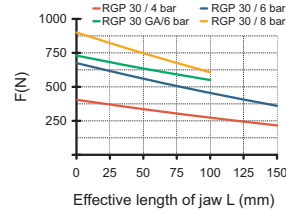
RGP-30

Max. load on gripper and jaw

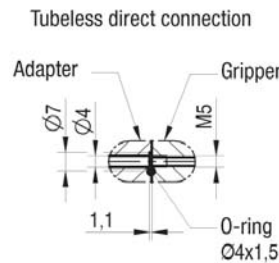
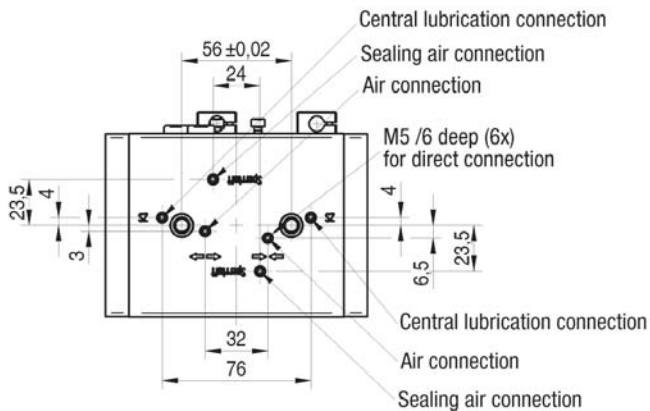
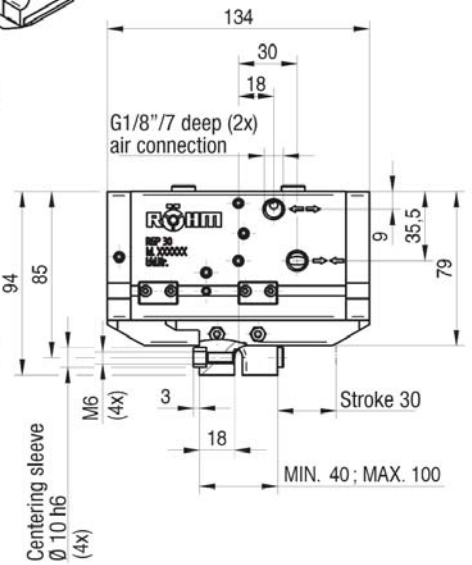
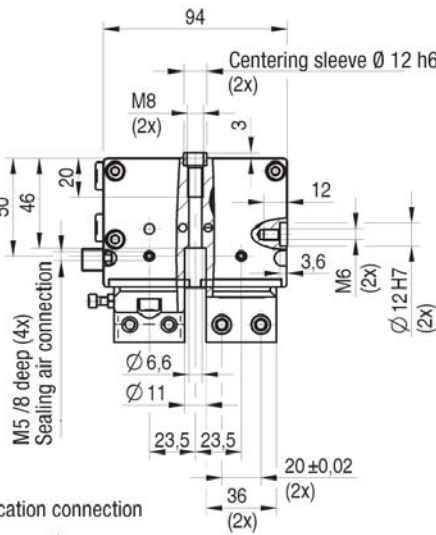
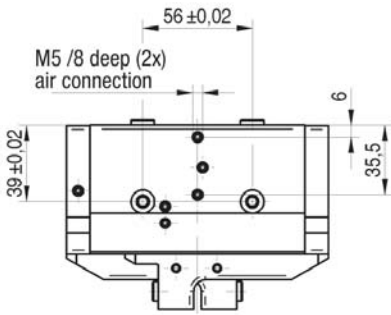
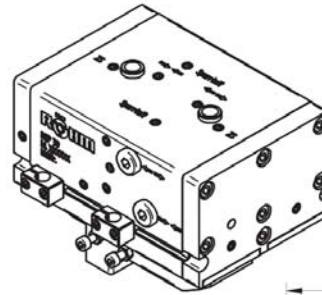
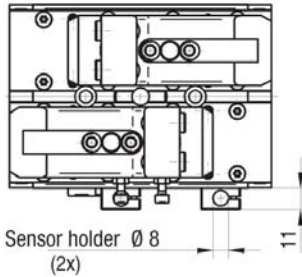
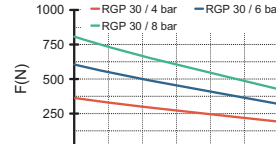


Clamping force diagram

Clamping force diagram – exterior gripping



Clamping force diagram – interior gripping



Long stroke gripper
RGP



2-jaw long stroke gripper

RGP-40



APPLICATION

Sealed large-stroke gripper for handling large parts and high part variety.

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High precision thanks to double-piston drive synchronized via gear wheel.

CUSTOMER BENEFITS

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- ⊕ High torque support for using long gripper fingers thanks to elongated jaw guide
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TECHNICAL FEATURES

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- Optionally available with FKM seals for higher temperatures up to 150°C (on request)
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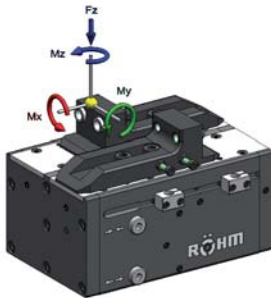


C40
RGP-40 - 2-jaw long stroke gripper air operated

Item No.	170111	170112	170113
Design	RGP 40	RGP 40-GA	RGP 40-GI
Gripping force at 6 bar N	1260	1540	1380
Stroke per jaw mm	40	40	40
Gripping force maintained N	-	150	150
Recommended workpiece weight kg	6,3	6,3	5,5
Weight kg	5,6	5,6	5,6
Width mm	171	171	171
Height mm	83	83	83
Depth mm	115	115	115
Mx Nm	50	50	50
My Nm	100	100	100
Mz Nm	70	70	70
Fz N	1100	1100	1100
Operating pressure min./max. without GA/GI bar	2-8	-	-
Operating pressure min./max. with GA/GI 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. allowable length of jaw mm	200	150	150

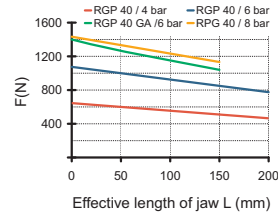
RGP-40

Max. load on gripper and jaw

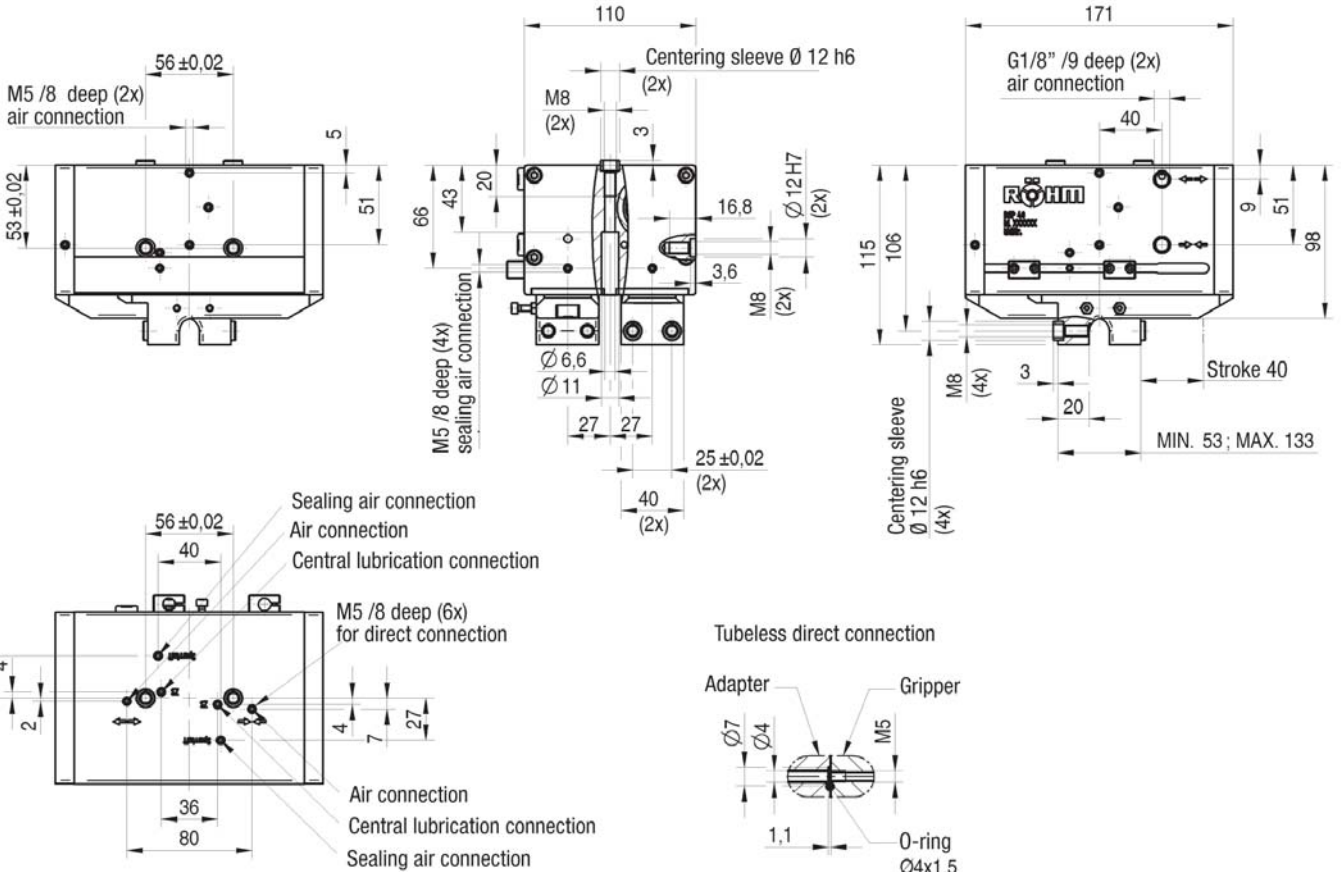
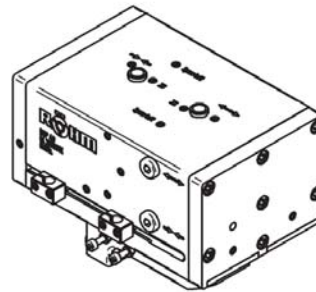
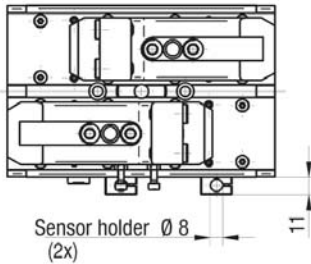
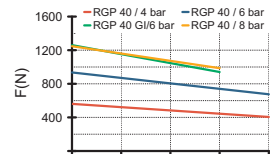


Clamping force diagram

Clamping force diagram – exterior gripping



Clamping force diagram – interior gripping



Long stroke gripper
RGP



2-jaw long stroke gripper

RGP-50



APPLICATION

Sealed large-stroke gripper for handling large parts and high part variety.

TYPE

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High precision thanks to double-piston drive synchronized via gear wheel.

CUSTOMER BENEFITS

- ⊕ High gripping force with simultaneously high jaw stroke by means of double-acting pressure pistons
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- Optionally available with FKM seals for higher temperatures up to 150°C (on request)
- Integrable purge air connection to prevent contamination



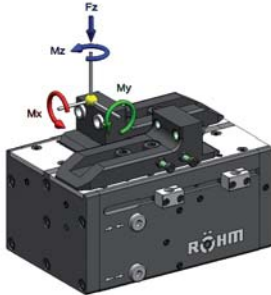
C40
RGP-50 - 2-jaw long stroke gripper air operated

Item No.	170114	170115	170116
Design	RGP 50	RGP 50-GA	RGP 50-GI
Gripping force at 6 bar N	2600	2950	2680
Stroke per jaw mm	50	50	50
Gripping force maintained N	-	450	450
Recommended workpiece weight kg	13	13	11,5
Weight kg	11	11	11
Width mm	218	218	218
Height mm	103	103	103
Depth mm	141	141	141
Mx Nm	60	60	60
My Nm	100	100	100
Mz Nm	80	80	80
Fz N	1300	1300	1300
Operating pressure min./max. without GA/GI bar	2-8	-	-
Operating pressure min./max. with GA/GI 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. allowable length of jaw mm	250	200	200

Long stroke gripper
RGP

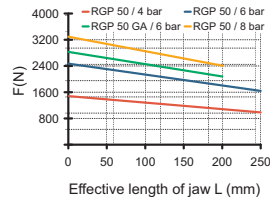
RGP-50

Max. load on gripper and jaw

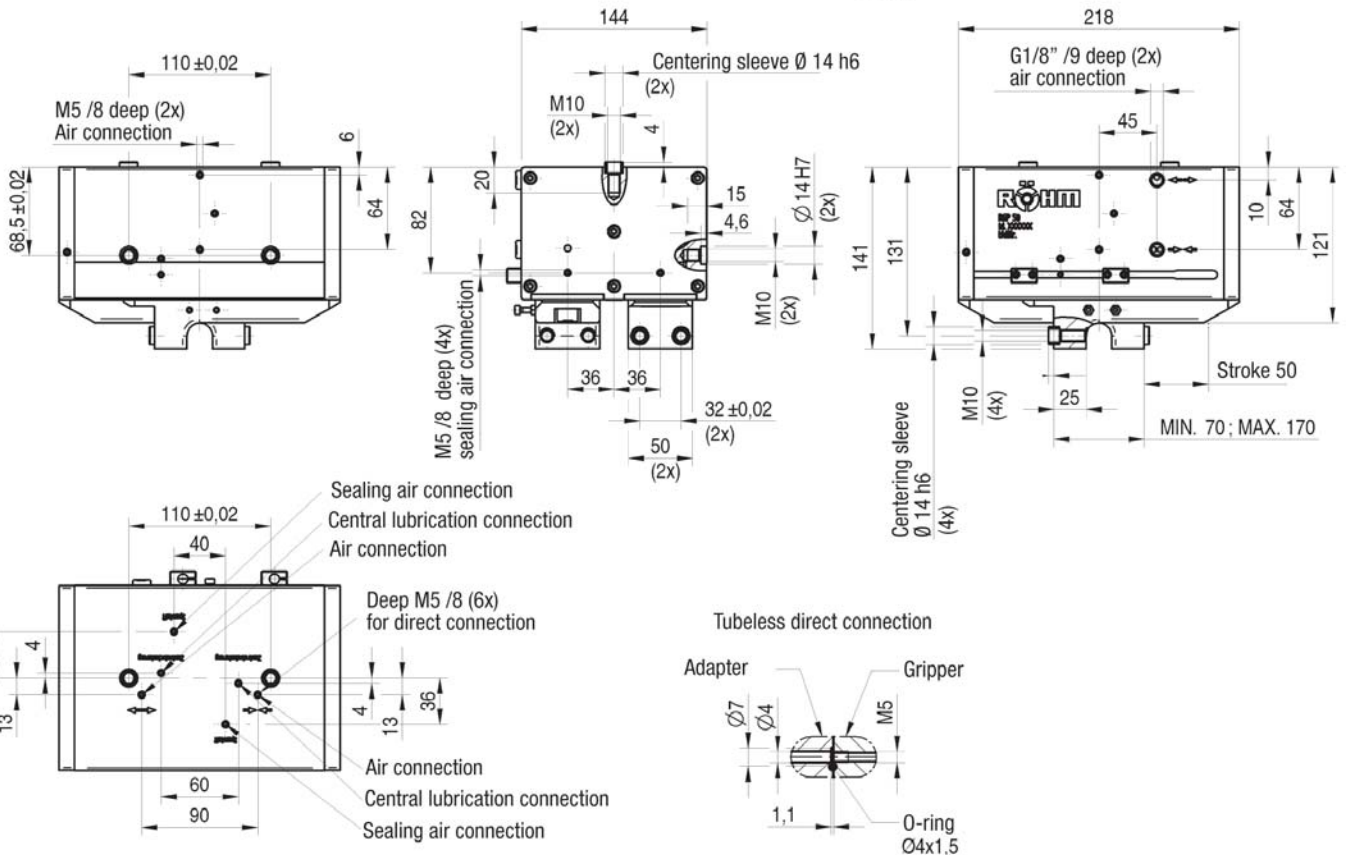
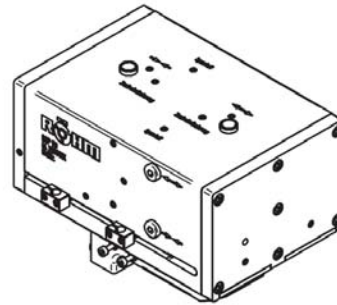
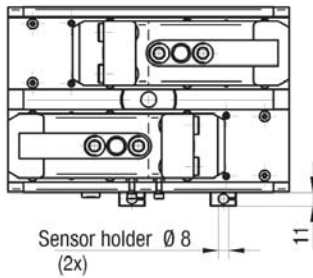
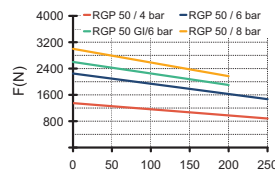


Clamping force diagram

Clamping force diagram – exterior gripping



Clamping force diagram – interior gripping



Long stroke gripper
RGP



2-jaw long stroke gripper

Accessories RGP

Intermediate jaw - steel (including fixing screws)
2-jaw set



Item no.	Number of jaws	Design	For
170993 ▲	2	steel	RGP-30
170995 ▲	2	steel	RGP-40
170997 ▲	2	steel	RGP-50

Jaw blank - steel (including fixing screws)
2-jaw set



Item no.	Number of jaws	Design	For
1146146 ▲	2	steel	RGP-30
1146144 ▲	2	steel	RGP-40
1131198 ▲	2	steel	RGP-50

Pressure maintenance
for double acting gripper (G1/8)



Item no.
1078823

Compressed air connection - L-Plug connector



Item no.	Design	For
477025	L-Plug connector 1/8 - 6 mm	all sizes, all types

Proximity switch



Item no.	Size (diameter/ length)	Design	For
229114	M8x1x30,5	5 m cable, open leads	all sizes, all types

Magnetic field sensors

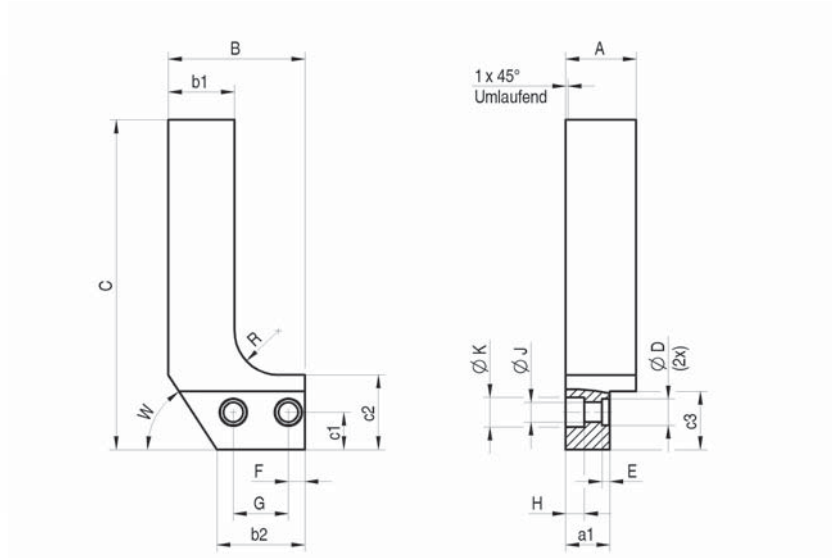


Item no.	Size (diameter/ length)	Design	For
1132737	T-Nut	5 m cable, 3 open leads	all sizes, all types



2-jaw long stroke gripper

Accessories RGP



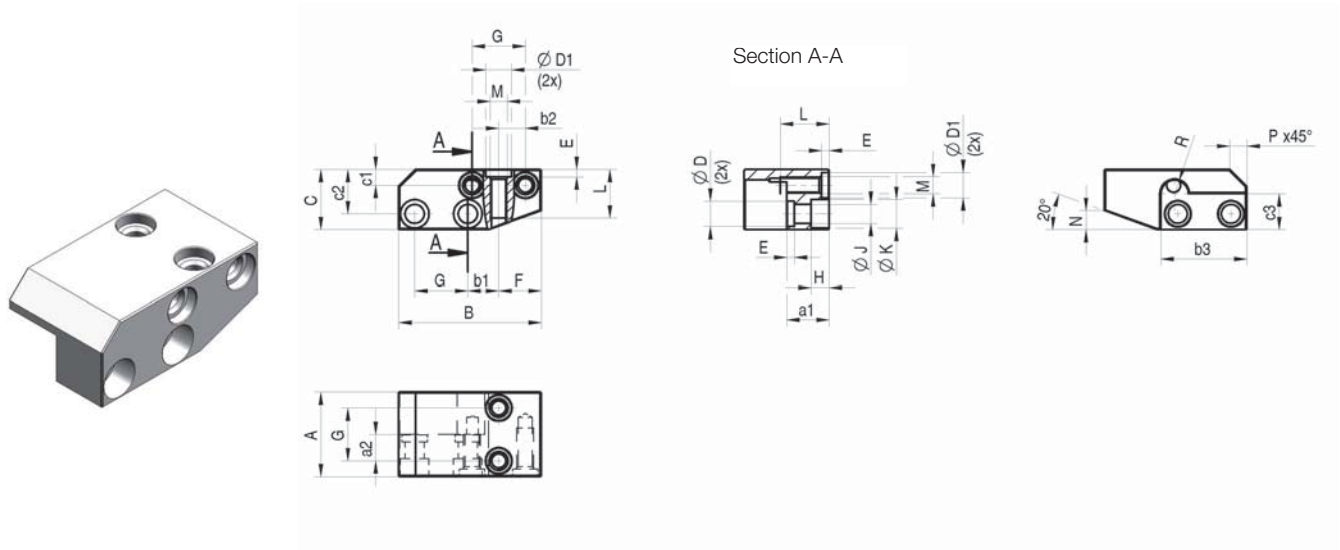
Jaw blank - steel (including fixing screws)

RGP Jaw blank - steel	30	40	50
RGP - 2-jaw set	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+0,02	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 per jaw kg	0,6	1,2	2,6



2-jaw long stroke gripper

Accessories RGP



Intermediate jaw - steel (including fixing screws)

RGP Intermediate jaw - steel	30	40	50
RGP - 2-jaw set	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
E+0,02	3,5	3,5	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 per jaw Kg	0,6	1,2	2,6
Centering sleeve	170264	170265	170266
Size	Ø10	Ø12	Ø14

Accessories RGP



Notes

Notes



Long stroke gripper RGPO

RGPO-4060



APPLICATION

Premium large stroke gripper with large stroke and ground jaw guides.

CUSTOMER BENEFITS

- ④ Up to 5 million cycles maintenance-free
- ④ Available on request: temperature-resistant version (up to approx. 150° C)

TECHNICAL FEATURES

- Gripper body made of high-strength, hard-coated aluminium
- Toothed racks, intermediate jaws and gear wheel made of hardened steel
- High torque absorption of the intermediate jaws due to the robust flat guide of the toothed racks
- Suitable for the use of long top jaws
- Centric clamping is realized via the synchronization of the two toothed racks with one gear wheel
- Special gripper type available with additional spring set to prevent loss of gripping force during external or internal gripping
- Energy supply possible by means of screw connection or via hoseless direct connection



RGPO 4060 - 2-jaw large stroke gripper air operated

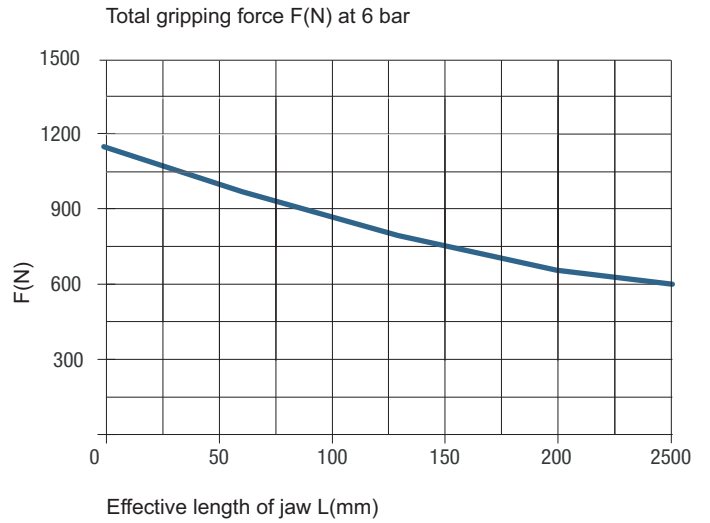
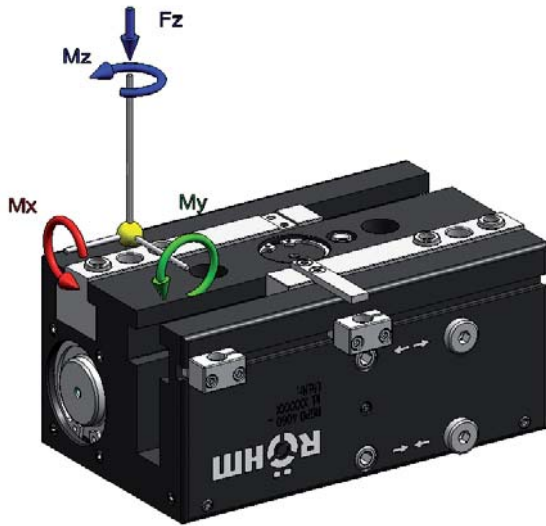
Item No.	172774	172775
Design	RGPO 4060	RGPO 4060-GA
Gripping force at 6 bar N	1250	1920
Stroke per jaw mm	60	60
Recommended workpiece weight kg	5,5	5,5
Weight kg	3,8	4,2
Width mm	170	170
Height mm	80	80
Depth mm	100	100
Mx Nm	80	80
My Nm	125	125
Mz Nm	100	100
Fz N	3000	3000
Operating pressure min./max. without GA/GI bar	3-8	-
Operating pressure min./max. with GA/GI bar	-	4-8
Clamping time s	0,35	0,4
Opening time s	0,35	0,35
Air consumption per cycle cm ³	278	278
Max. allowable length of jaw mm	150	150

2-jaw long stroke gripper

RGPO-4060

Max. load on gripper and jaw

Clamping force diagram exterior gripping



110 HUB 60
10
15 ±0,02 15 ±0,02
11
Relubrication
Sensor-Ø 8

M6 /9 (2x) 100 M6 /9 (2x)
40 ±0,02 40
16,7 4,7
1,9 M6 (6x) Ø 6 H7 /8 (2x)
Ø 10 h6 (4x)
M5 /6 for direct connection (2x)
35 Ø 8 H7 /8 (2x)
35
80
120 ±0,02

Tubeless direct connection

Adapter Gripper
Ø 9
Ø 5
1,5
O-Ring Ø5x2,0
M 5

100
15
54
3
M10 (2x)
Ø 8,2
Ø 15
16
29
25 25

170
8
(42) 43
50
G1/8" /9 deep
Air connection (2x)

Typ: GA with gripping force safety device

47,5 45 47,5
52 170 52
55,3

2-jaw long stroke gripper



Long stroke gripper RGPO

RGPO-40100



APPLICATION

Premium large stroke gripper with large stroke and ground jaw guides.

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TECHNICAL FEATURES

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- Energy supply possible by means of screw connection or via hoseless direct connection



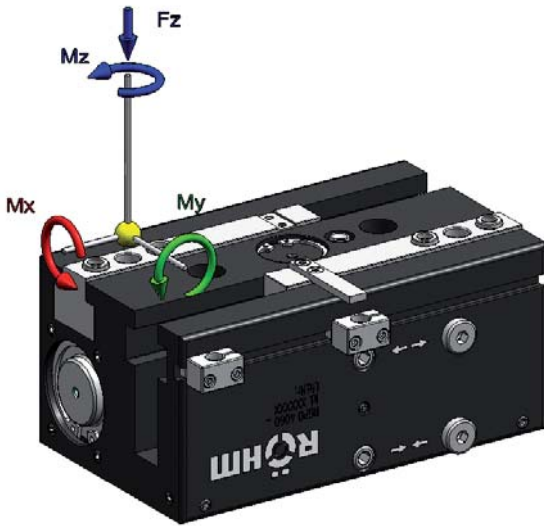
RGPO 40100 - 2-jaw large stroke gripper air operated

Item No.	172777
Design	RGPO 40100
Gripping force at 6 bar N	1250
Stroke per jaw mm	100
Recommended workpiece weight kg	5,5
Weight kg	5,3
Width mm	170
Height mm	80
Depth mm	100
Mx Nm	80
My Nm	125
Mz Nm	100
Fz N	3000
Operating pressure min./max. without GA/GI bar	3-8
Clamping time s	0,35
Opening time s	0,35
Air consumption per cycle cm ³	278
Max. allowable length of jaw mm	150

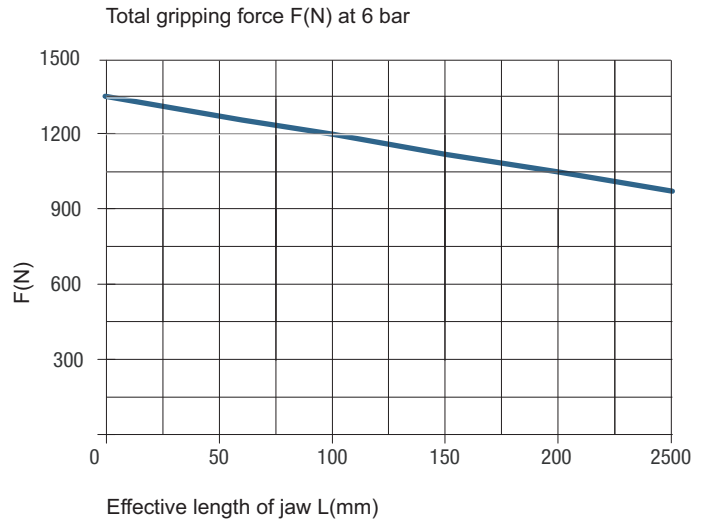
2-jaw long stroke gripper

RGPO-40100

Max. load on gripper and jaw



Clamping force diagram exterior gripping



Tubeless direct connection

2-jaw long stroke gripper



Long stroke gripper RGPO

RGPO-6360



APPLICATION

Premium large stroke gripper with large stroke and ground jaw guides.

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RGPO 6360 - 2-jaw large stroke gripper air operated

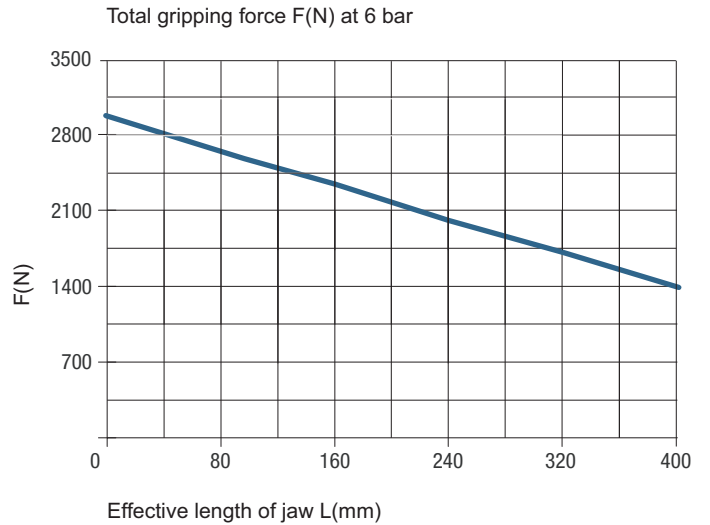
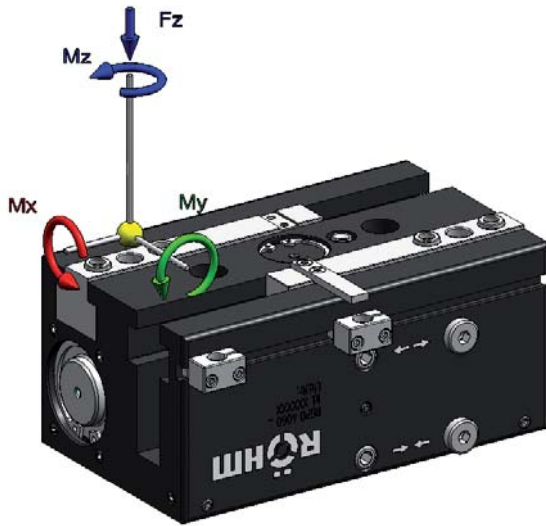
Item No.	172794	172795
Design	RGPO 6360	RGPO 6360-GA
Gripping force at 6 bar N	3000	4000
Stroke per jaw mm	60	60
Recommended workpiece weight kg	15	15
Weight kg	10	11
Width mm	185	185
Height mm	121,5	121,5
Depth mm	154	154
Mx Nm	200	200
My Nm	300	300
Mz Nm	250	250
Fz N	9000	9000
Operating pressure min./max. without GA/GI bar	3-8	-
Operating pressure min./max. with GA/GI bar	-	4-8
Clamping time s	0,4	0,4
Opening time s	0,4	0,5
Air consumption per cycle cm ³	710	710
Max. allowable length of jaw mm	200	200

2-jaw long stroke gripper

RGPO-6360

Max. load on gripper and jaw

Clamping force diagram exterior gripping



Schlauchloser Direktanschluss

Typ: GA mit Greifkraftsicherung

2-jaw long stroke gripper



Long stroke gripper RGPO

RGPO-63100



APPLICATION

Premium large stroke gripper with large stroke and ground jaw guides.

CUSTOMER BENEFITS

- ④ Up to 5 million cycles maintenance-free
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RGPO 63100 - 2-jaw large stroke gripper air operated

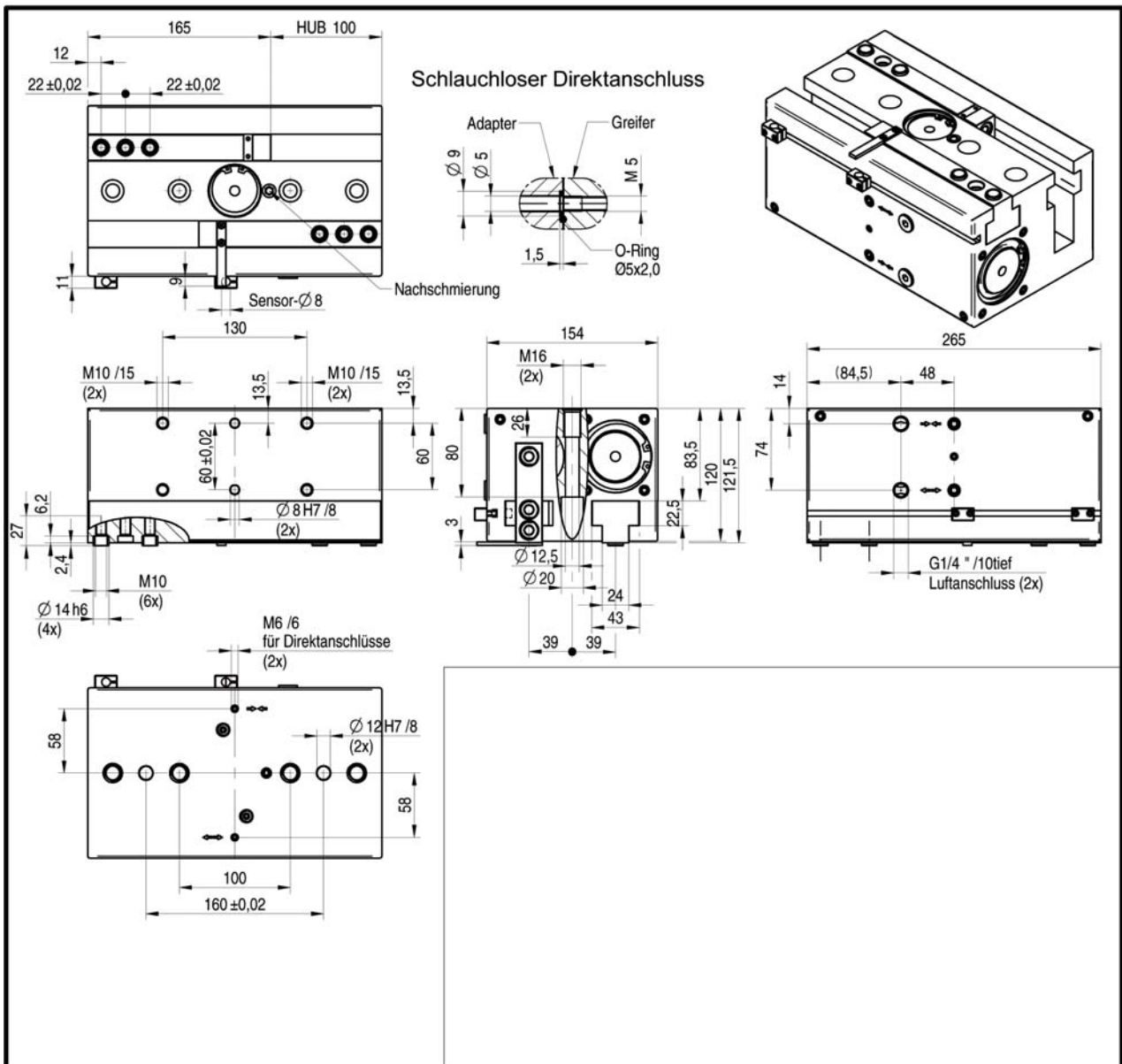
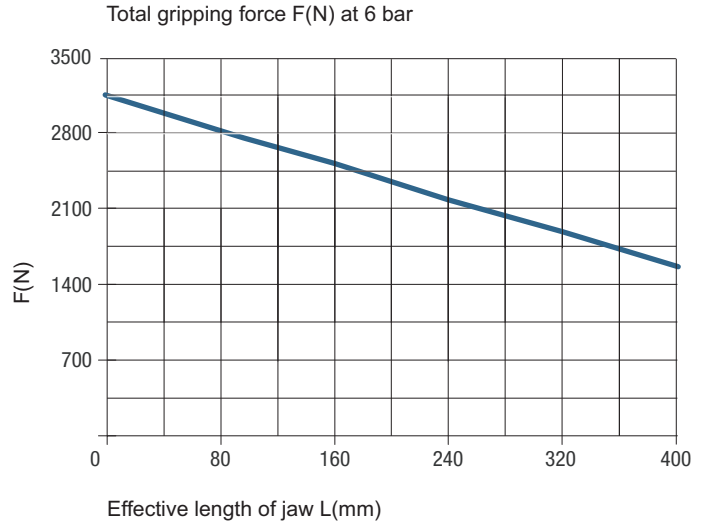
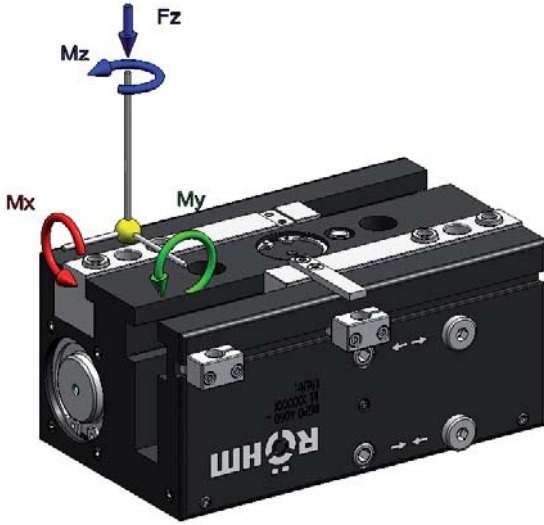
Item No.	172797
Design	RGPO 63100
Gripping force at 6 bar N	3000
Stroke per jaw mm	100
Recommended workpiece weight kg	15
Weight kg	13,4
Width mm	185
Height mm	121,5
Depth mm	154
Mx Nm	200
My Nm	300
Mz Nm	250
Fz N	9000
Operating pressure min./max. without GA/GI bar	3-8
Clamping time s	0,7
Opening time s	0,7
Air consumption per cycle cm ³	1180
Max. allowable length of jaw mm	200

2-jaw long stroke gripper

RGPO-63100

Max. load on gripper and jaw

Clamping force diagram exterior gripping



2-jaw long stroke gripper



Application-specific grippers

Application-specific grippers



RDPP - Sealed parallel gripper

APPLICATION

Sealed parallel gripper with precise square guide for rough environments.

TYPE

Available in sizes 80 to 160 in especially compact design.

CUSTOMER BENEFITS

- Doubly sealed precision square guide for use under drilling or grinding emulsions
- Optionally with gripping force securing device for inner and outer clamping
- Gripper fingers mounted laterally for minimum load distance
- Maximum flexibility thanks to versatile connection and fastening options

TECHNICAL FEATURES

Centrally clamping in compact design made of high-strength, hard-coated aluminium alloy. All functional parts made of hardened steel for maximum service life. Position can be queried using inductive and magnetic sensors.

Other sizes available on request. Optionally available with FKM seals for higher temperatures up to 150°C (on request).



RPR - Compact long stroke gripper

APPLICATION

Compact long stroke gripper for handling large parts and high part variety.

TYPE

Available in sizes 22 and 42 in especially compact design. High precision thanks to double-piston drive synchronized via gear wheel.

CUSTOMER BENEFITS

- Compact design with long jaw stroke for especially cramped spatial conditions
- High gripping force with simultaneously long jaw stroke by means of double-acting pressure pistons
- Gripper fingers mounted laterally for minimum load distance
- Maximum flexibility thanks to versatile connection and fastening options

TECHNICAL FEATURES

Centrally clamping in compact design made of high-strength, hard-coated aluminium alloy. All functional parts made of hardened steel for maximum service life. Robust double-piston guide in compact housing, pneumatically actuated. Position can be queried using inductive and magnetic sensors. Integrated damping ring in the end positions for high availability.

Other sizes available on request. Optionally available with FKM seals for higher temperatures up to 150°C (on request).



Notes

Notes