

GRIPPER WITH THREE PARALLEL JAWS SERIES P12K

Parallel double-acting three-jaw gripper, with either internal or external clamping.

Also available in the double-acting with spring version, normally open (NO) for internal grip and normally closed (NC) for external grip.

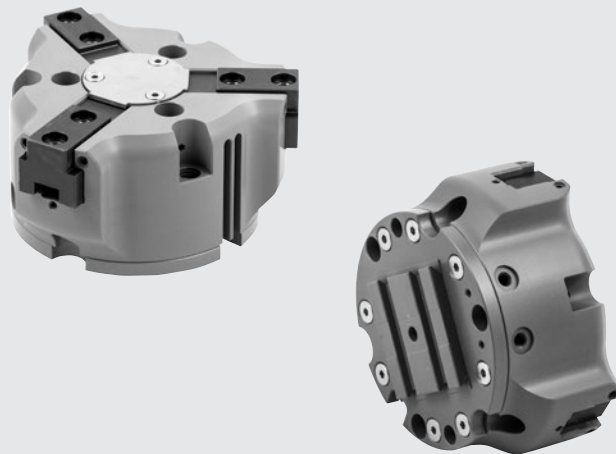
Aluminum alloy body coated with surface hardening treatment; jaws made of wear-resistant coated steel.

The jaw-guiding system and precision in coupling with the body make the gripper extremely stable.

The ceramic-coated body reduces friction and wear, and enhances the movement of the jaws on the body.

All sizes are available in the version with standard stroke and clamping force, while only some in the version with reduced stroke but with higher clamping torque. The gripper is equipped with a magnet and grooves for sensors.

A version designed to house inductive sensors is also available (the inductive sensors are not supplied by Metal Work).



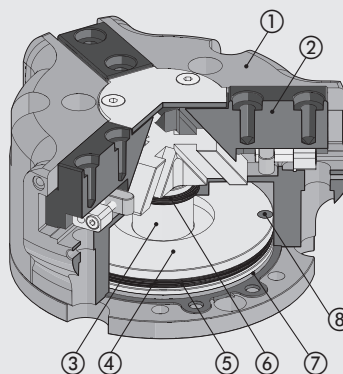
TECHNICAL DATA	P12K-64			P12K-80		P12K-100		
	DA	NO	NC	Standard DA	Increased force DA	Standard DA	Increased force DA	
Minimum operating pressure	bar	2		2		2		
	MPa	0.2		0.2		0.2		
	psi	29		29		29		
Maximum operating pressure	bar	8		8		8		
	MPa	0.8		0.8		0.8		
	psi	116		116		116		
Temperature range	-10 to 80 °C							
Fluid	20 µm filtered, lubricated or unlubricated air; lubrication if used, it must be continuous							
Gripping force at 6.3 bar *	opening	N 310	353	-	435	860	840	1450
	closing	N 279	-	322	392	774	756	1305
Minimum gripping force produced by the spring *	N	-	43	43	-	-	-	-
Maximum movable weight	kg	2.9			4.5	9	9	20
Stroke of each jaw	mm	6			8	4	10	5
Minimum time	opening	s 0.05	0.05	0.1	0.05		0.05	
	closing	s 0.05	0.1	0.05	0.05		0.05	
Repeatability	mm	0.01						
Moment of inertia as regards the piston axis	kg cm ²	1.6	3.0	3.0	6.5		19	
Weight	kg	0.3	0.5	0.5	0.8		1.5	

DA: Double-acting; NO: Double acting with spring, normally open; NC: Double acting with spring, normally closed.

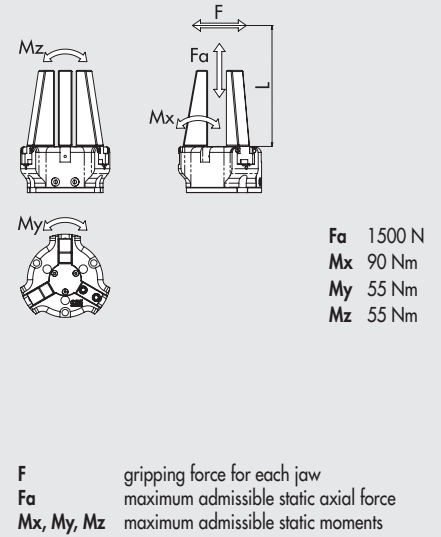
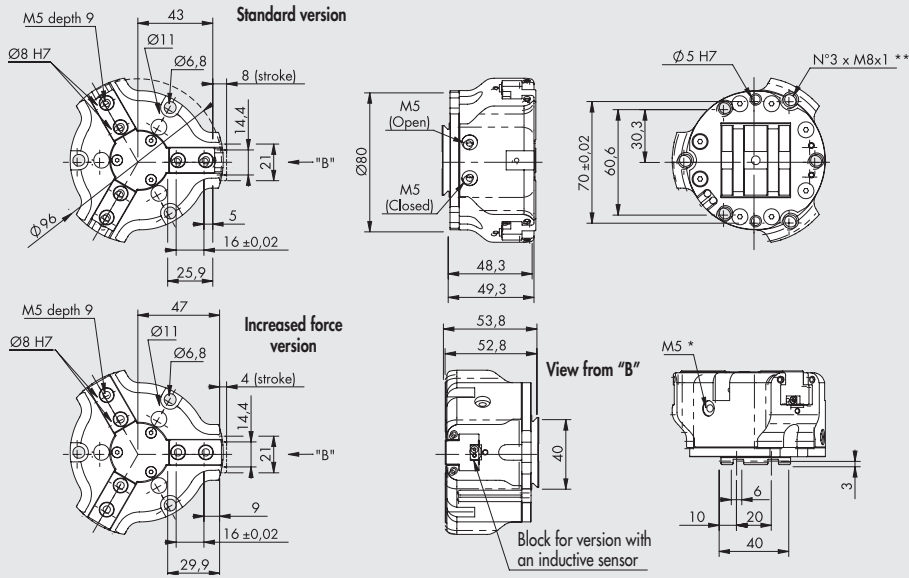
* Referred to a single jaw 20 mm from the upper surface. The total force is obtained by multiplying the reported value by 3.

COMPONENTS

- ① BODY: hard-anodized aluminium
- ② JAWS: nitrided steel
- ③ PISTON ROD + GUIDE: nitrided steel
- ④ PISTON: hard-anodized aluminium
- ⑤ PISTON GASKET: NBR
- ⑥ PISTON ROD GASKET: NBR / polyurethane
- ⑦ BASE GASKET: reinforced SBR / NBR
- ⑧ MAGNET: neodymium

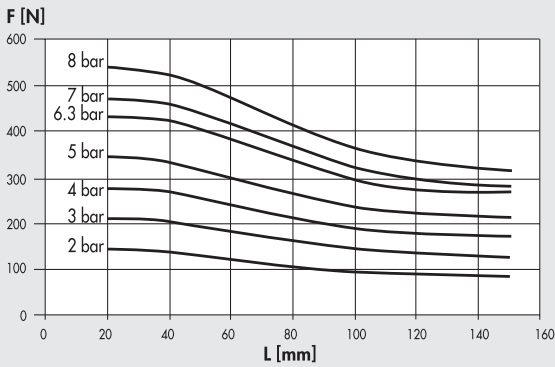


GRIPPER P12K-80

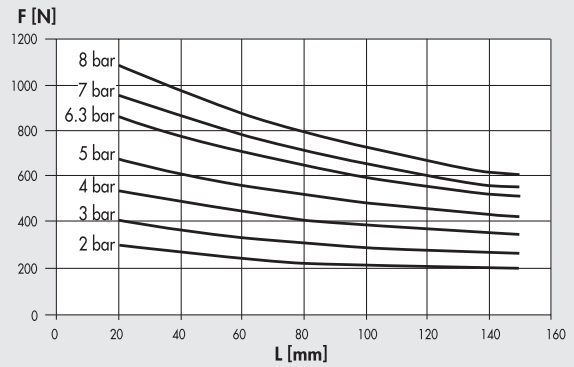


* Discharge pressurization connection
 ** Inductive sensor slot
 NOTE: For standard dovetail dimensions, see chapter V-Lock adaptors.

Standard version

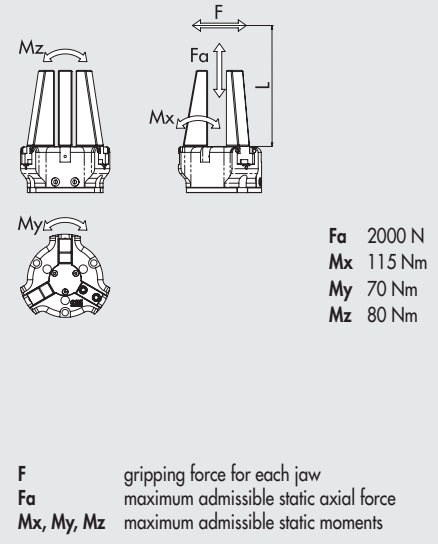
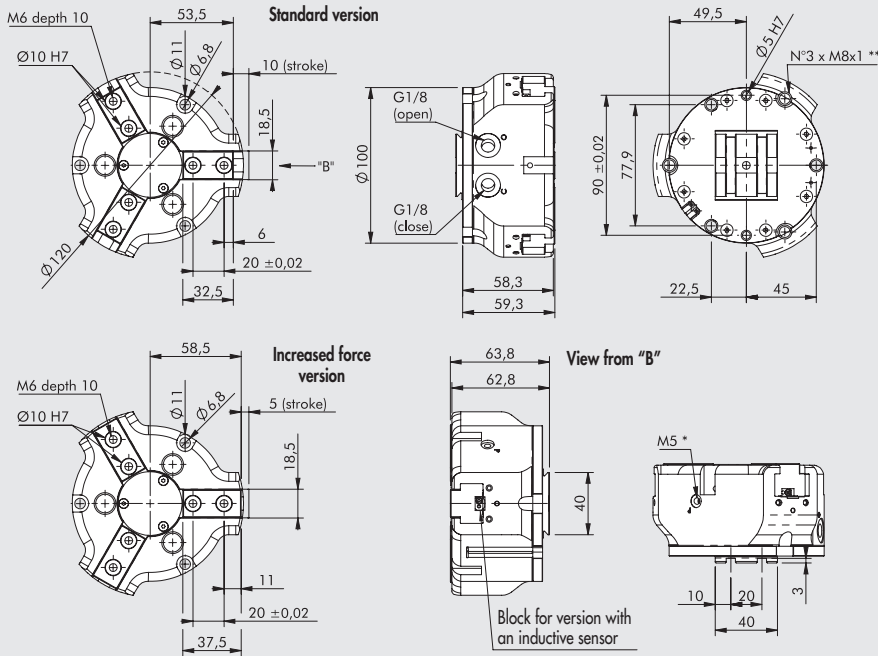


Increased force version



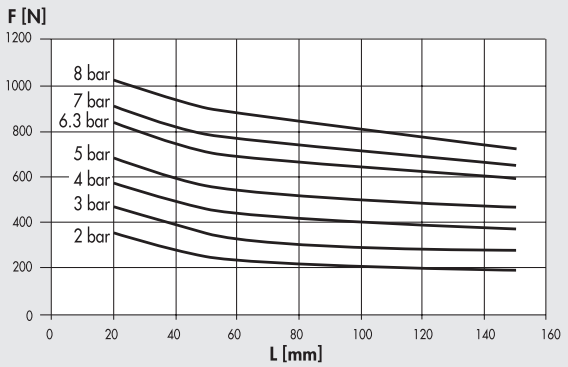
Code	Description
W1560800300K	Gripper with 3 parallel jaws P12K-80
W1560800301K	Gripper with 3 parallel jaws P12K-80 for inductive sensors
W1560800320K	Gripper with 3 parallel jaws P12K-80 increased force
W1560800321K	Gripper with 3 parallel jaws P12K-80 increased force for inductive sensors

GRIPPER P12K-100

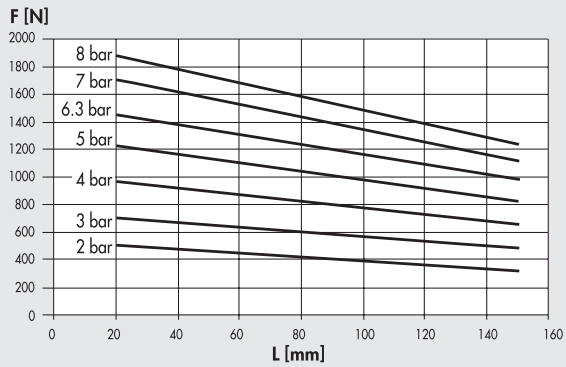


* Discharge pressurization connection
 ** Inductive sensor slot
 NOTE: For standard dovetail dimensions, see chapter V-Lock adaptors.

Standard version



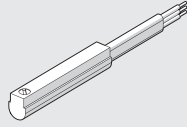
Increased force version



Code	Description
W1561000300K	Gripper with 3 parallel jaws P12K-100
W1561000301K	Gripper with 3 parallel jaws P12K-100 for inductive sensors
W1561000320K	Gripper with 3 parallel jaws P12K-100 increased force
W1561000321K	Gripper with 3 parallel jaws P12K-100 increased force for inductive sensors

ACCESSORIES

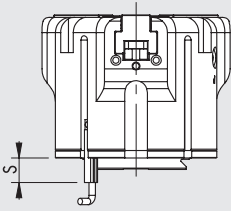
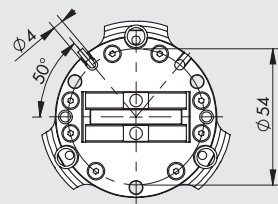
SENSOR Ø 4



For codes and technical data, see [chapter A6](#).

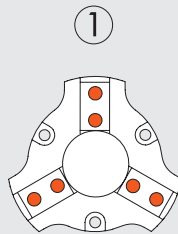
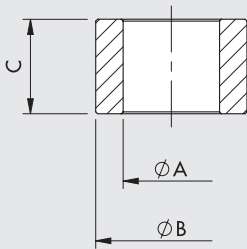
SENSOR MOUNTING IN THE NO AND NC GRIPPERS SLOTS

P12K-64



	S
	P12K-64
NO	10
NC	10

CENTRING RING



Code	Size	ØA	ØB ¹⁷	C	QUANTITY OF KITS NEEDED
					① - Use with jaws
W1560649201	64	4.5 ⁰ _{-0.1}	6	5 ⁰ _{-0.1}	2 code W1560649201
W1560809201	80	5.1 ⁰ _{-0.1}	8	5 ⁰ _{-0.05}	2 code W1560809201
W1561009201	100	6.2 ⁰ _{±0.1}	10	6.9 ⁰ _{-0.1}	2 code W1561009201

Note: 2-pieces pack

NOTES