



# Grippers | Parallel grippers

## 2-finger parallel grippers

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#### Product notes

- > Gripper with high gripping force
- > Double-acting for inside/outside gripping and short duty cycles
- > Single-acting: normally open (NO), compressed air for closing, opening via return spring
- > Body made of high-strength aluminum alloy, jaws are steel
- > Options
  - Base jaws for customization
  - Sensors for monitoring gripper action via piston position
- > Medium: filtered and oiled/unoiled air
- > PNP and NPN sensors:
  - C-slot (straight): GR04.198, GR04.198/NPN
  - C-slot (90° angle): GR04.202P, GR04.202N
  - C-slot (straight, short design): GR04.280P, GR04.280N
  - T-slot (straight): GR04.199, GR04.199/NPN
  - T-slot (straight, short design): GR04.203P, GR04.203N
- > Connector cable for sensors:
  - 20.503: 3-pole M8, cable straight, length 2,500 mm, open wire
  - 20.507: 3-pole M8, cable 90°, length 2,000 mm, open end
  - 20.570: 3-pole M8, length 1,500 mm, end with plug 3-pole M8

#### Technical data

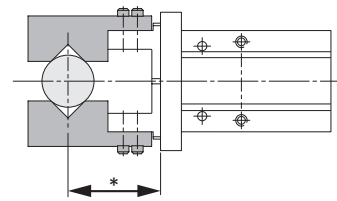
Item no.	Principle of operation	Operating pressure [bar (psi)]	Piston diameter [mm]	Stroke per gripper jaw [mm]	Closing force at 5 bar (72,5 psi) [N]	Opening force at 5 bar (72,5 psi) [N]	Max. operating frequency [1/min]	Operating temperature [°C (°F)]	Weight [g]	Accessories
<b>GR04.122-10</b>	double-acting	3 - 7 (43.5 - 101.5)	10	2	11	17	180	-10 - 60 (14 - 140)	120	Sensor: GR04.199/NPN Sensor: GR04.199 Sensor: GR04.203N Sensor: GR04.203P
<b>GR04.122-10S</b>	single-acting	3 - 7 (43.5 - 101.5)	10	2	7.1	11	180	-10 - 60 (14 - 140)	120	Connector cable: 20.503 Connector cable: 20.507 Connector cable: 20.570 Mounting bracket: GR06.050
<b>GR04.122-16</b>	double-acting	3 - 7 (43.5 - 101.5)	16	3	34	45	180	-10 - 60 (14 - 140)	160	Sensor: GR04.198/NPN Sensor: GR04.198 Sensor: GR04.202N Sensor: GR04.202P Sensor: GR04.280N Sensor: GR04.280P
<b>GR04.122-16S</b>	single-acting	3 - 7 (43.5 - 101.5)	16	3	27	33	180	-10 - 60 (14 - 140)	160	Connector cable: 20.503 Connector cable: 20.507 Connector cable: 20.570 Mounting bracket: GR06.051



### Technical data

Item no.	Principle of operation	Operating pressure [bar (psi)]	Piston diameter [mm]	Stroke per gripper jaw [mm]	Closing force at 5 bar (72,5 psi) [N]	Opening force at 5 bar (72.5 psi) [N]	Max. operating frequency [1/min]	Operating temperature [°C (°F)]	Weight [g]	Accessories
<b>GR04.122-20</b>	double-acting	3 - 7 (43.5 - 101.5)	20	5	42	66	180	-10 - 60 (14 - 140)	300	Sensor: GR04.198/NPN Sensor: GR04.198 Sensor: GR04.202N Sensor: GR04.202P Sensor: GR04.280N Sensor: GR04.280P
<b>GR04.122-20S</b>	single-acting	3 - 7 (43.5 - 101.5)	20	5	33	40	180	-10 - 60 (14 - 140)	300	Connector cable: 20.503 Connector cable: 20.507 Connector cable: 20.570 Mounting bracket: GR06.052
<b>GR04.122-25</b>	double-acting	3 - 7 (43.5 - 101.5)	25	7	65	104	180	-10 - 60 (14 - 140)	365	Sensor: GR04.198/NPN Sensor: GR04.198 Sensor: GR04.202N Sensor: GR04.202P Sensor: GR04.280N Sensor: GR04.280P
<b>GR04.122-25S</b>	single-acting	3 - 7 (43.5 - 101.5)	25	7	45	66	180	-10 - 60 (14 - 140)	365	Connector cable: 20.503 Connector cable: 20.507 Connector cable: 20.570 Mounting bracket: GR06.053
<b>GR04.122-32</b>	double-acting	3 - 7 (43.5 - 101.5)	32	11	158	193	60	-10 - 60 (14 - 140)	860	Sensor: GR04.198/NPN Sensor: GR04.198 Sensor: GR04.202N Sensor: GR04.202P Sensor: GR04.280N Sensor: GR04.280P
<b>GR04.122-32S</b>	single-acting	3 - 7 (43.5 - 101.5)	32	11	131	156	60	-10 - 60 (14 - 140)	860	Connector cable: 20.503 Connector cable: 20.507 Connector cable: 20.570 Mounting bracket: GR06.054
<b>GR04.122-40</b>	double-acting	3 - 7 (43.5 - 101.5)	40	15	254	318	60	-10 - 60 (14 - 140)	950	Sensor: GR04.198/NPN Sensor: GR04.198 Sensor: GR04.202N Sensor: GR04.202P Sensor: GR04.280N Sensor: GR04.280P
<b>GR04.122-40S</b>	single-acting	3 - 7 (43.5 - 101.5)	40	15	217	255	60	-10 - 60 (14 - 140)	950	Connector cable: 20.503 Connector cable: 20.507 Connector cable: 20.570 Mounting bracket: GR06.055

### Distance to gripping point (\* see diagrams)

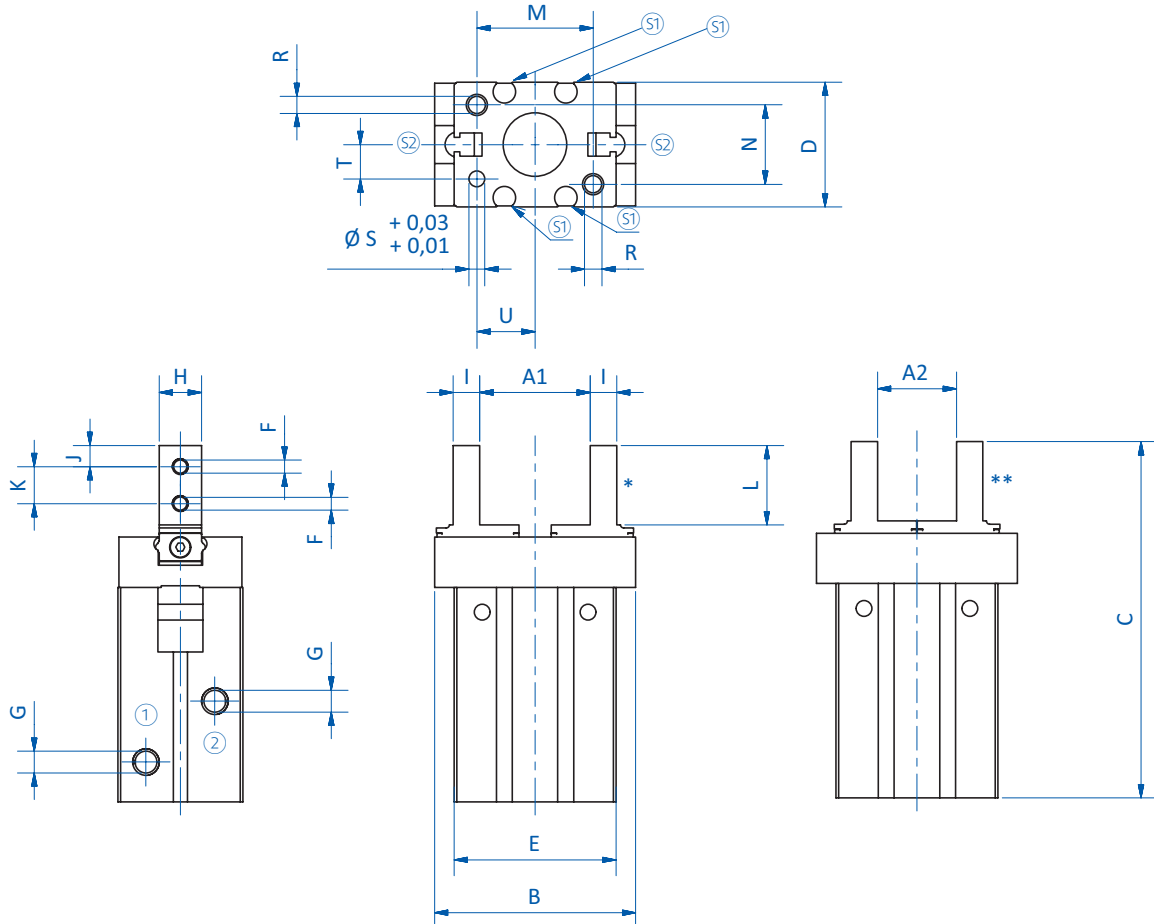




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### Dimensions



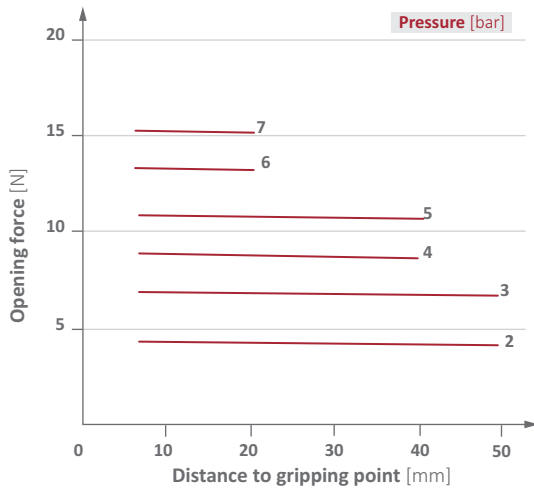
Ⓢ<sub>1</sub> = Sensor slot for GR04.202 and GR04.280 Ⓢ<sub>2</sub> = Sensor slot for GR04.203 ① = Compressed air supply (open) ② = Compressed air supply (close)  
 \* = Gripper jaw opened \*\* = Gripper jaw closed

Item no.	A1 [mm]	A2 [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F	G	H [mm]	I [mm]	J [mm]	K [mm]	L [mm]	M [mm]	N [mm]	R	$\varnothing S$ [mm]	T [mm]	U [mm]
GR04.122-10	15.2	11.2	29	57	16.4	23	M2,5	M3	5	4	3	5.7	12	18	12	M3	2	5.2	7.6
GR04.122-10S	15.2	11.2	29	57	16.4	23	M2,5	M3	5	4	3	5.7	12	18	12	M3	2	5.2	7.6
GR04.122-16	20.9	14.9	38	67.3	23.6	30.6	M3	M5	8	5	4	7	15	22	15	M4	3	6.5	11
GR04.122-16S	20.9	14.9	38	67.3	23.6	30.6	M3	M5	8	5	4	7	15	22	15	M4	3	6.5	11
GR04.122-20	26.3	16.3	50	84.8	27.6	42	M4	M5	10	8	5	9	20	32	18	M5	4	7.5	16.8
GR04.122-20S	26.3	16.3	50	84.8	27.6	42	M4	M5	10	8	5	9	20	32	18	M5	4	7.5	16.8
GR04.122-25	33.3	19.3	63	102.7	33.6	52	M5	M5	12	10	6	12	25	40	22	M6	4	10	21.8
GR04.122-25S	33.3	19.3	63	102.7	33.6	52	M5	M5	12	10	6	12	25	40	22	M6	4	10	21.8
GR04.122-32	48	26	97	113	40	60	M6	M5	15	12	7	14	29	46	26	M6	5	12	23
GR04.122-32S	48	26	97	113	40	60	M6	M5	15	12	7	14	29	46	26	M6	5	12	23
GR04.122-40	60	30	119	139	48	72	M8	M5	18	14	9	17	36	56	32	M8	5	14	29
GR04.122-40S	60	30	119	139	48	72	M8	M5	18	14	9	17	36	56	32	M8	5	14	29



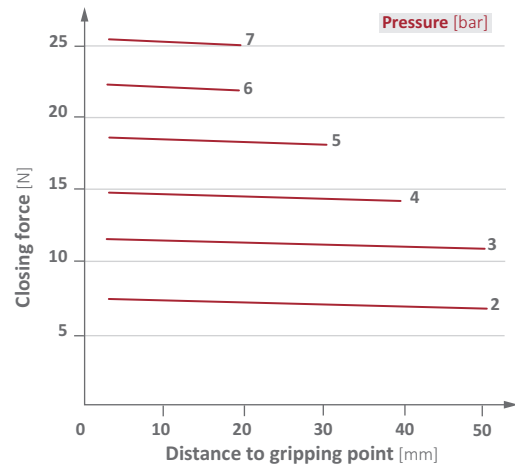
### Diagrams

> Opening force as a function of distance to gripping point and feed pressure



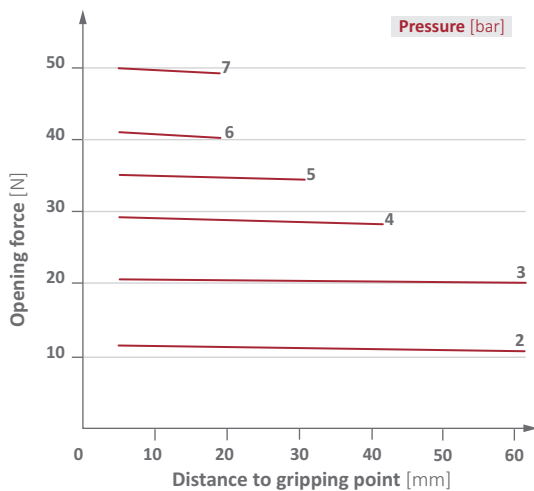
GR04.122-10 | GR04.122-10S

> Closing force as a function of distance to gripping point and feed pressure



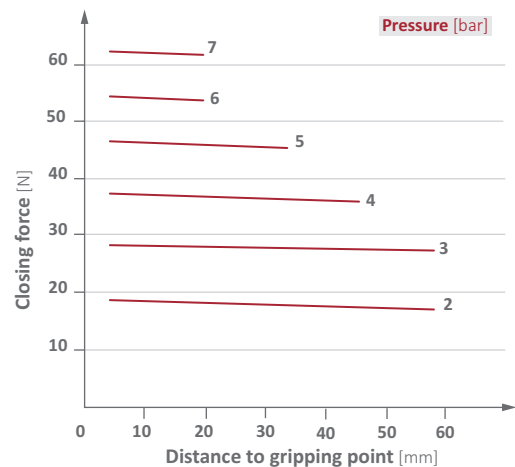
GR04.122-10 | GR04.122-10S

> Opening force as a function of distance to gripping point and feed pressure



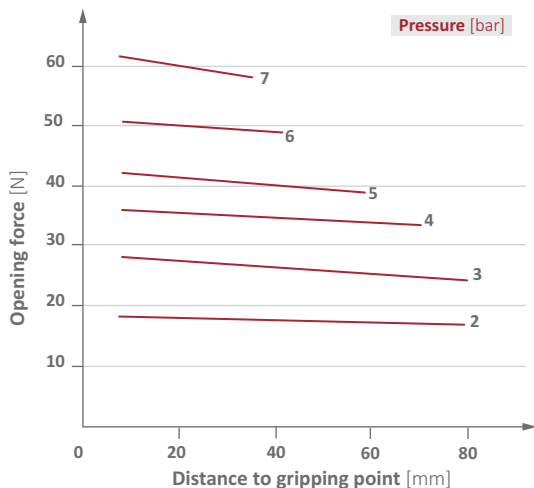
GR04.122-16 | GR04.122-16S

> Closing force as a function of distance to gripping point and feed pressure

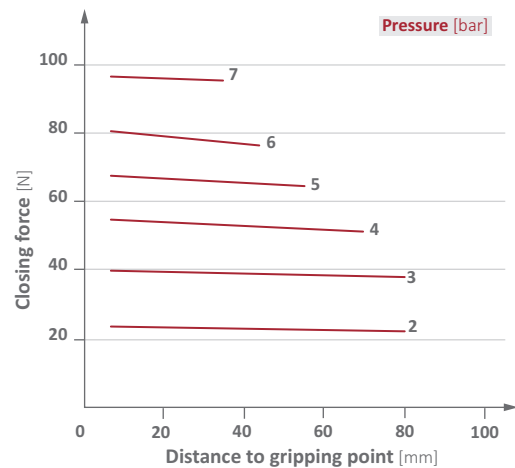


GR04.122-16 | GR04.122-16S

> Opening force as a function of distance to gripping point and feed pressure



> Closing force as a function of distance to gripping point and feed pressure





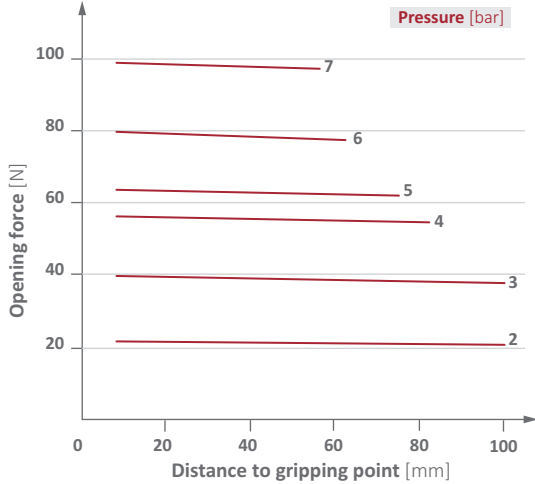
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### Diagrams

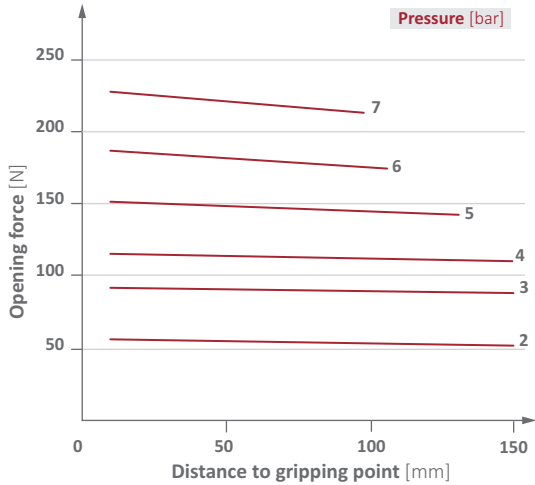
GR04.122-20 | GR04.122-20S

> Opening force as a function of distance to gripping point and feed pressure



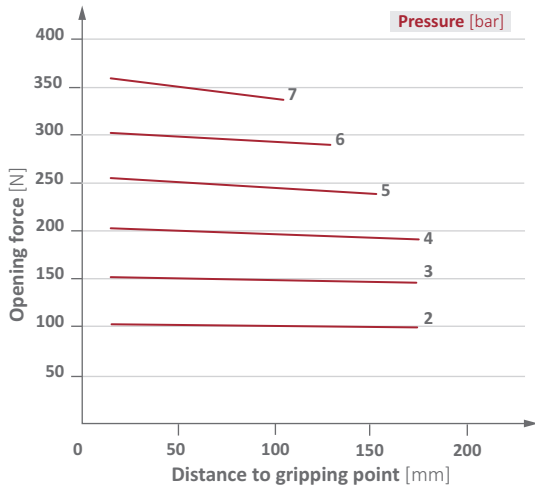
GR04.122-25 | GR04.122-25S

> Opening force as a function of distance to gripping point and feed pressure



GR04.122-32 | GR04.122-32S

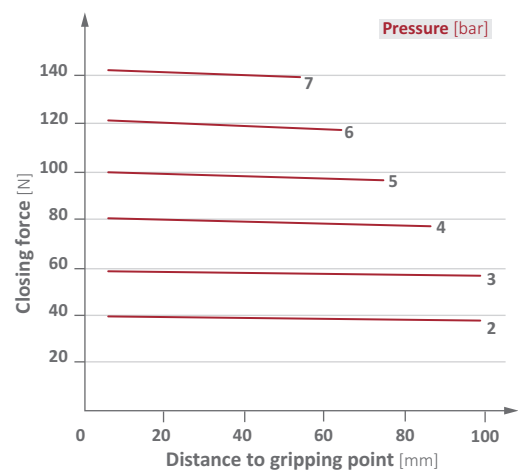
> Opening force as a function of distance to gripping point and feed pressure



GR04.122-40 | GR04.122-40S

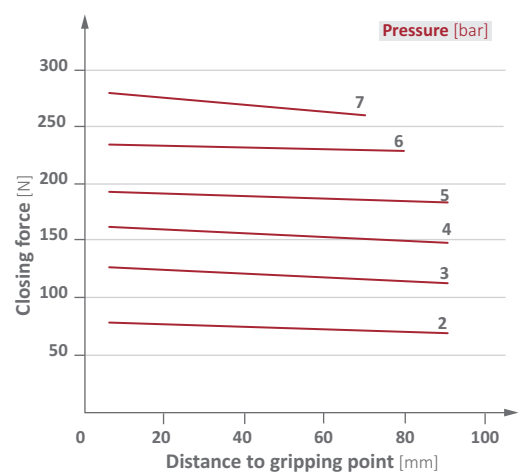
GR04.122-20 | GR04.122-20S

> Closing force as a function of distance to gripping point and feed pressure



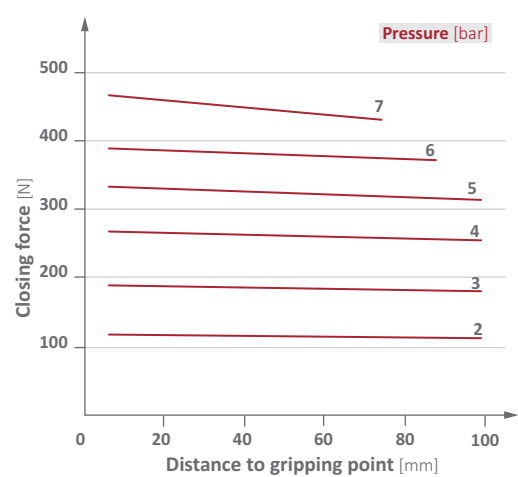
GR04.122-25 | GR04.122-25S

> Closing force as a function of distance to gripping point and feed pressure



GR04.122-32 | GR04.122-32S

> Closing force as a function of distance to gripping point and feed pressure



GR04.122-40 | GR04.122-40S