

# Series CGP parallel grippers

Magnetic

Sizes: Ø 10, 16, 20, 25, 32 mm

SERIES CGP PARALLEL GRIPPERS



- » High durability
- » Compact design
- » High gripping force

The proximity switches can be inserted in the U-shaped grooves on the body. For an easier installation the gripper can also be equipped with an optional installation adaptor mod. C-CGP (female) or L-CGP (male).

Series CGP parallel grippers are available in 5 different sizes. The closing action of the gripper is generated from the cylinder's thrust side, resulting in a higher gripping force. The gripper is equipped with ring bearings in the sliding section for higher durability. Gripper mod. CGP has mounting holes on three sides which provides flexibility in installation.

## GENERAL DATA

| Model                                   | CGP-10  | CGP-16     | CGP-20     | CGP-25     | CGP-32     |
|---|---|------------|------------|------------|------------|
| Bore sizes (mm)                         | Ø 10  | Ø 16       | Ø 20       | Ø 25       | Ø 32       |
| Type of operation                       | double-acting   |            |            |            |            |
| Operating pressure                      | 1.5 ÷ 7 bar   |            |            |            |            |
| Operating temperature                   | 0°C ÷ 80°C  |            |            |            |            |
| Max. operating frequency                | 180 cycles/min  |            |            |            |            |
| Lubrication                             | lever section - lubrication required on sliding section   |            |            |            |            |
| Opening stroke (mm)                     | Ø 10 = 4  | Ø 16 = 8   | Ø 20 = 12  | Ø 25 = 14  | Ø 32 = 16  |
| Theoretical holding force - opening (N) | Ø 10 = 8  | Ø 16 = 24  | Ø 20 = 47  | Ø 25 = 75  | Ø 32 = 100 |
|   | P = Related to a pressure of 5 bar with gripping point length 3 cm  |            |            |            |            |
| Theoretical holding force - closing (N) | Ø 10 = 5  | Ø 16 = 8   | Ø 25 = 35  | Ø 25 = 60  | Ø 32 = 85  |
|   | P = Related to a pressure of 5 bar with gripping point length 3 cm  |            |            |            |            |
| Length of max gripping point L (cm)     | 3,0   | 4,0        | 6,0        | 7,0        | 8,5        |
|   | L = Related to a pressure of 5 bar  |            |            |            |            |
| Weight(g)                               | Ø 10 = 50   | Ø 16 = 140 | Ø 20 = 250 | Ø 25 = 410 | Ø 32 = 680 |
| Port sizes                              | M5 (CGP-10 M3)  |            |            |            |            |
| Fluid                                   | filtered air, without lubrication.<br>In case lubricated air is used, it is recommended to use oil ISO VG32. Once applied, the lubrication should never be interrupted. |            |            |            |            |

**CODING EXAMPLE**

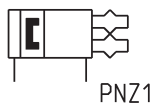
|            |   |           |
|------------|---|-----------|
| <b>CGP</b> | - | <b>20</b> |
|------------|---|-----------|

|            |   |                          |
|------------|---|--------------------------|
| <b>CGP</b> | SERIES  | PNEUMATIC SYMBOL<br>PNZ1 |
| <b>20</b>  | SIZES<br>10 = ø 10 mm<br>16 = ø 16 mm<br>20 = ø 20 mm<br>25 = ø 25 mm<br>32 = ø 32 mm |                          |

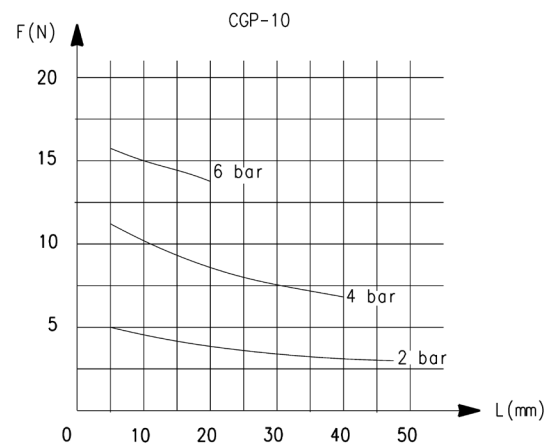
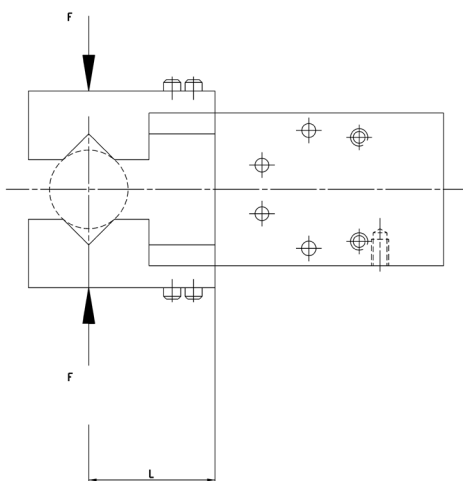
SERIES CGP PARALLEL GRIPPERS

**PNEUMATIC SYMBOLS**

The pneumatic symbols which have been indicated in the CODING EXAMPLE are shown below.



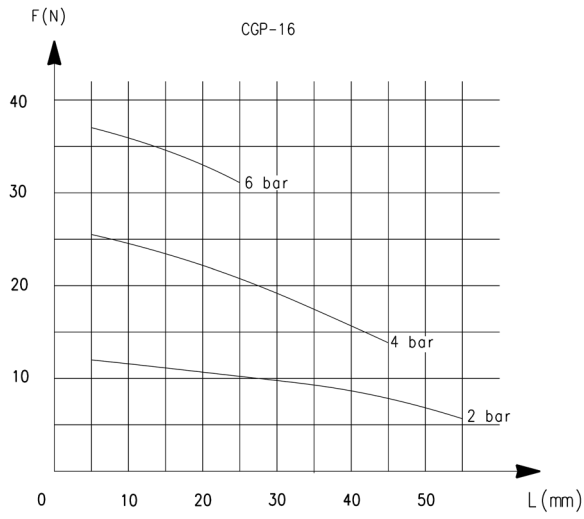
**GRIPPING FORCE CHARACTERISTICS**



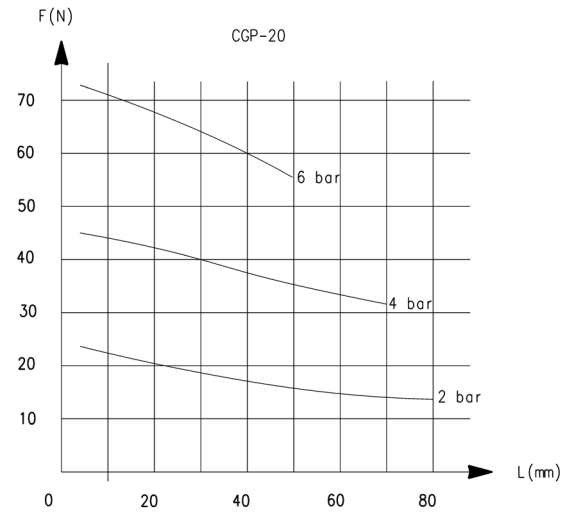
L = Gripping point length  
F = Gripping Force

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**GRIPPING FORCE CHARACTERISTICS**

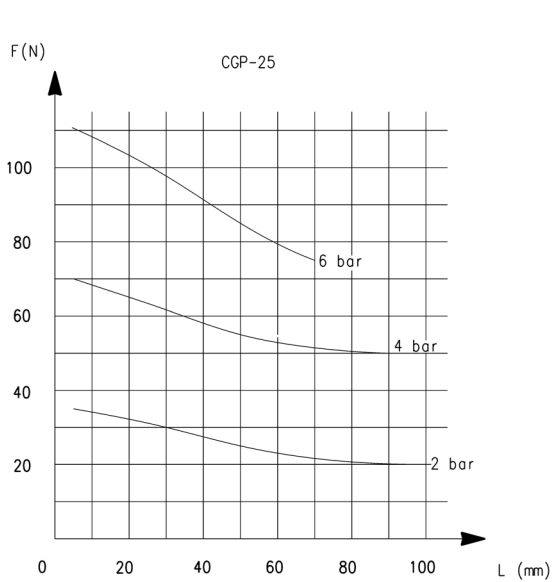


L = Gripping point length  
F = Gripping Force

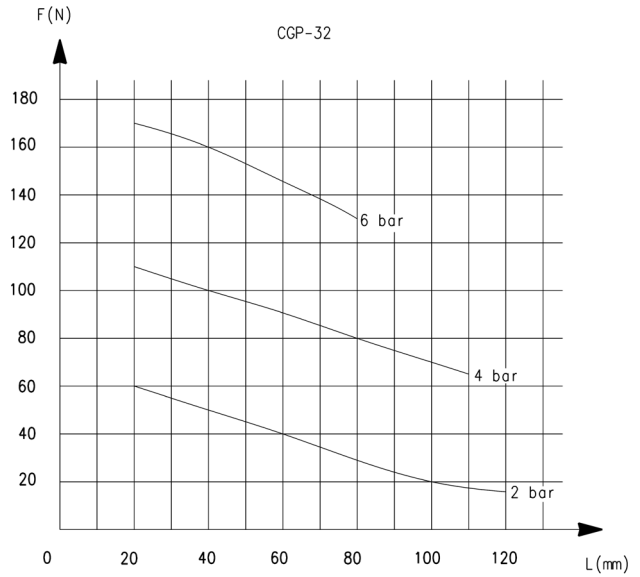


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**GRIPPING FORCE CHARACTERISTICS**

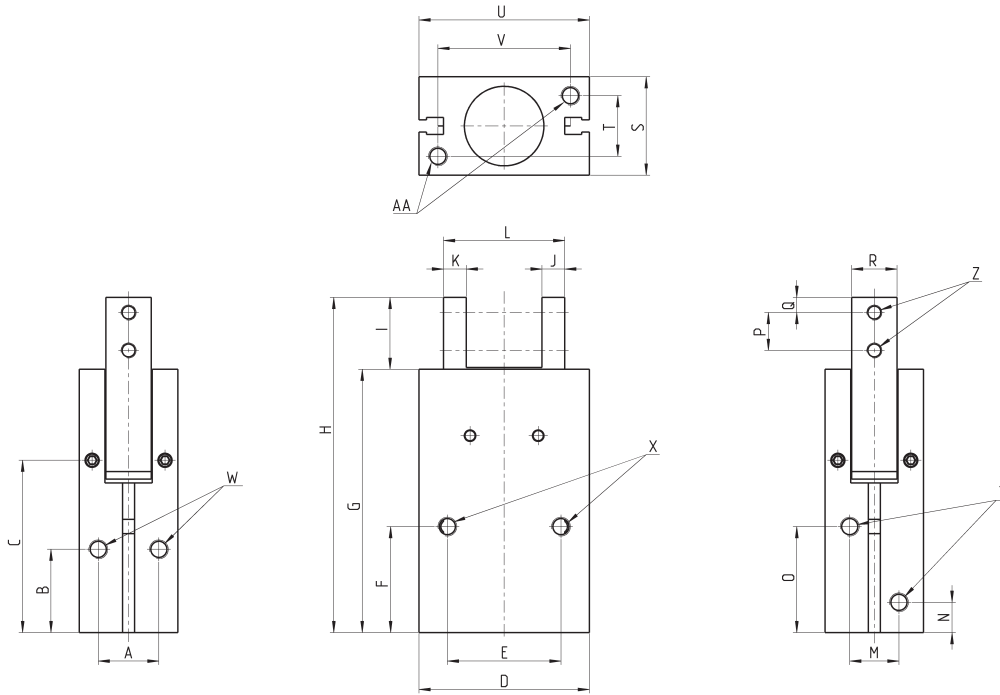


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**Parallel grippers Series CGP**

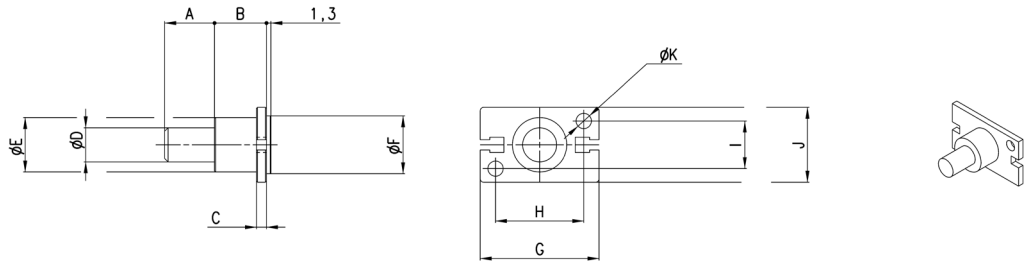


Y = port connection  
Z = finger mounting-holes  
X.W.AA = Mounting holes

| DIMENSIONS    |    |      |      |    |    |      |      |       |    |   |   |          |        |    |     |      |    |   |    |    |    |    |    |
|---------------|----|------|------|----|----|------|------|-------|----|---|---|----------|--------|----|-----|------|----|---|----|----|----|----|----|
| Mod.          | A  | B    | C    | D  | E  | F    | G    | H     | I  | J | K | L closed | L open | M  | N   | O    | P  | Q | R  | S  | T  | U  | V  |
| <b>CGP-10</b> | 10 | 15,5 | 31,5 | 23 | 18 | 20   | 45   | 58    | 13 | 4 | 4 | 18       | 22     | 10 | 7,5 | 19   | 6  | 3 | 7  | 16 | 10 | 23 | 17 |
| <b>CGP-16</b> | 14 | 21   | 39,5 | 34 | 24 | 25,5 | 58,8 | 73,5  | 15 | 5 | 5 | 25       | 33     | 12 | 7,5 | 25,5 | 8  | 3 | 11 | 22 | 14 | 34 | 26 |
| <b>CGP-20</b> | 16 | 22   | 45,5 | 45 | 30 | 28   | 69,5 | 88,5  | 19 | 6 | 6 | 32       | 44     | 13 | 8   | 28   | 10 | 4 | 12 | 26 | 16 | 45 | 35 |
| <b>CGP-25</b> | 20 | 24,5 | 51   | 52 | 36 | 31,5 | 79,5 | 103,5 | 24 | 8 | 8 | 37       | 51     | 18 | 9   | 31   | 12 | 5 | 14 | 32 | 20 | 52 | 40 |
| <b>CGP-32</b> | 26 | 30   | 56   | 60 | 44 | 37,5 | 88   | 119   | 31 | 9 | 9 | 44       | 60     | 24 | 10  | 35   | 15 | 7 | 18 | 40 | 26 | 60 | 46 |

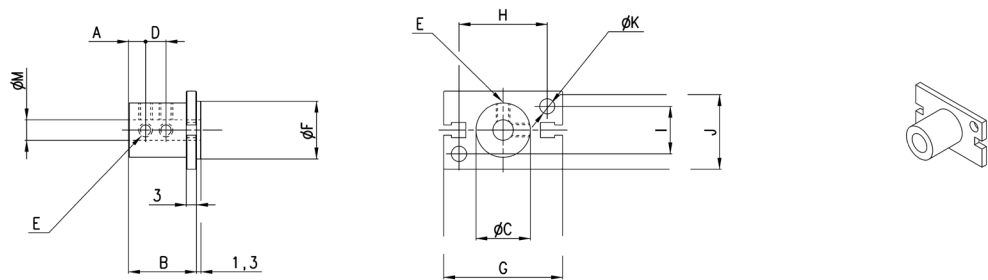
| DIMENSIONS    |          |         |          |         |          |         |          |         |           |          |  |
|---------------|----------|---------|----------|---------|----------|---------|----------|---------|-----------|----------|--|
| Mod.          | X thread | X depth | Y thread | Y depth | W thread | W depth | Z thread | Z depth | AA thread | AA depth |  |
| <b>CGP-10</b> | M3       | 7       | M3       | -       | M3       | 5       | M3       | -       | M3        | 5        |  |
| <b>CGP-16</b> | M4       | 11      | M5       | -       | M4       | 7       | M3       | -       | M4        | 7        |  |
| <b>CGP-20</b> | M5       | 13      | M5       | -       | M4       | 8       | M4       | -       | M5        | 8        |  |
| <b>CGP-25</b> | M6       | 14      | M5       | -       | M6       | 10      | M5       | -       | M6        | 10       |  |
| <b>CGP-32</b> | M6       | 20      | M5       | -       | M6       | 10      | M6       | -       | M6        | 10       |  |

### Mounting brackets Mod. L-CGP



| Mod.     | A  | B  | C | D  | E  | F  | G  | H  | I  | J  | K   |
|----------|----|----|---|----|----|----|----|----|----|----|-----|
| L-CGP-16 | 15 | 15 | 3 | 10 | 16 | 17 | 35 | 26 | 14 | 22 | 4,5 |
| L-CGP-20 | 15 | 15 | 3 | 10 | 18 | 21 | 46 | 35 | 16 | 26 | 5,5 |
| L-CGP-25 | 25 | 17 | 5 | 14 | 26 | 26 | 53 | 40 | 20 | 32 | 6,6 |
| L-CGP-32 | 25 | 20 | 6 | 16 | 30 | 34 | 61 | 46 | 26 | 40 | 6,6 |

### Mounting brackets Mod. C-CGP



| Mod.     | A  | B    | C  | D  | E  | F  | G  | H  | I  | J  | K   | M  |
|----------|----|------|----|----|----|----|----|----|----|----|-----|----|
| C-CGP-16 | 5  | 20,5 | 16 | 7  | M4 | 17 | 35 | 26 | 14 | 23 | 4,5 | 6  |
| C-CGP-20 | 7  | 25,5 | 20 | 9  | M4 | 21 | 46 | 35 | 16 | 27 | 5,5 | 8  |
| C-CGP-25 | 8  | 30,5 | 25 | 10 | M4 | 26 | 53 | 40 | 20 | 33 | 6,6 | 10 |
| C-CGP-32 | 10 | 40,5 | 32 | 15 | M4 | 34 | 61 | 46 | 26 | 41 | 6,6 | 12 |