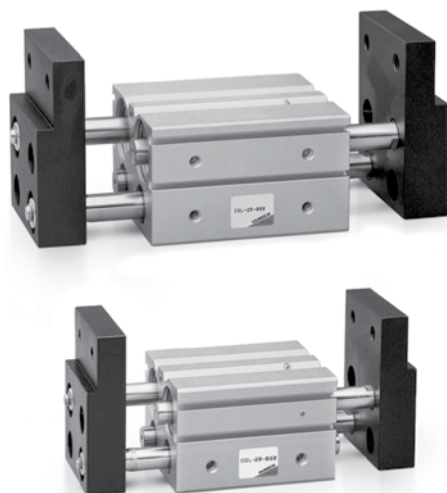


# Wide Opening Parallel Gripper Series CGL

1

Magnetic

Sizes 10 - 16 - 20 - 25 - 32



- » High gripping force
- » Suitable to handle pieces with different sizes
- » Wipers for protection

Due to the relatively long stroke of the fingers, the gripper mod. CGL is suitable to handle workpieces with different sizes. This gripper mod. CGL is equipped with rod wipers to protect against dust. The compact and versatile design offers great freedom of mounting. The proximity switches can be inserted in the C-shaped grooves on the body in order to detect whether the gripper is in an open or closed position.

The wide opening parallel gripper mod. CGL is available in 5 different sizes and has a compact design with a high gripping force and exists in five diameters with three different strokes. The high gripping force is obtained by means of a double piston mechanism and the fingers are synchronized by a rack and pinion mechanism.

## GENERAL DATA

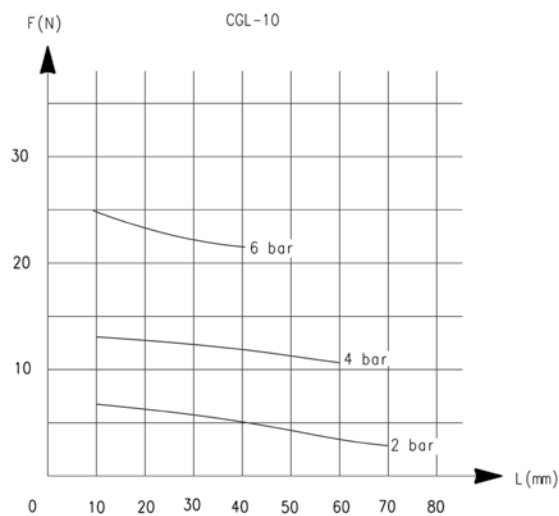
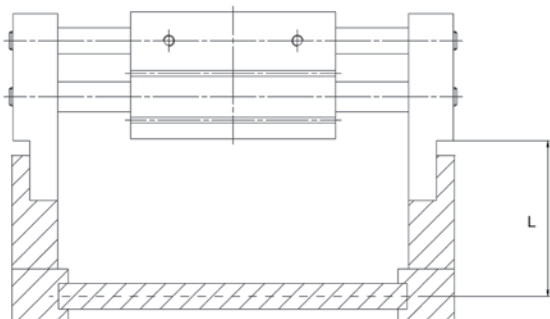
|   |  |
|---|--|
| <b>Model</b>  | CGL-10 CGL-16 CGL-20 CGL-25 CGL-32   |
| <b>Bore sizes (mm)</b>  | Ø 10 - 16 - 20 - 25 - 32   |
| <b>Stroke</b>   | see models' tables   |
| <b>Type of operation</b>  | double-acting, parallel type   |
| <b>Fluid</b>  | filtered air, without lubrication*   |
| <b>Operating pressure (bar)</b>   | 1,5 ÷ 7 bar  |
| <b>Operating pressure</b>   | 0°C ÷ 60°C   |
| <b>Max. operating frequency</b>   | 40 cycles/min  |
| <b>Lubrication</b>  | with or without lubrication  |
| <b>Theoretical holding force * (N)<br/>with a pressure of 5 bar<br/>with gripping point length 5 cm</b> | Ø 10 = 35 N<br>Ø 16 = 70 N<br>Ø 20 = 105 N<br>Ø 25 = 170 N<br>Ø 32 = 270 N   |
| <b>Length of max. gripping point L**<br/>with pressure of 5 bar</b>                                     | Ø 10 = 40 mm<br>Ø 16 = 60 mm<br>Ø 20 = 80 mm<br>Ø 25 = 90 mm<br>Ø 32 = 100 mm  |
| <b>Weight</b>   | see tables   |
| <b>Repeatability</b>  | +/- 0,1mm  |
| <b>Port sizes</b>   | Ø 10 - 16 - 20 - 25 = M5<br>Ø 32 = G1/8  |
|   | *in the event that lubricated air is used, it is recommended to use oil ISO VG32. Once applied, the lubrication should never be interrupted. |

**CODING EXAMPLE**

|     |   |    |    |
|-----|---|----|----|
| CGL | - | 20 | 40 |
|-----|---|----|----|

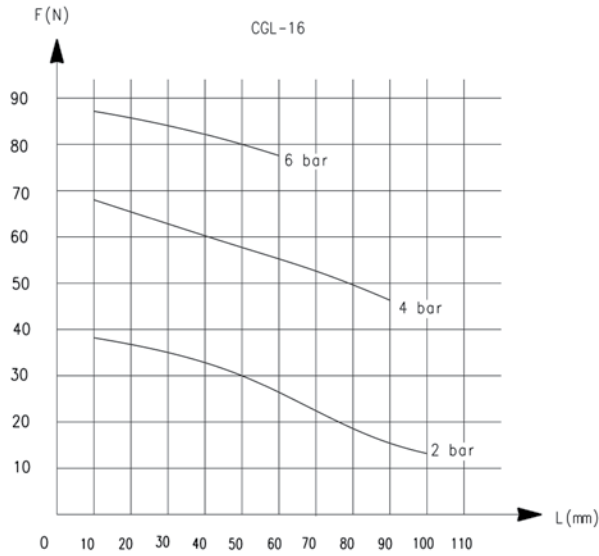
|            |   |
|------------|---|
| <b>CGL</b> | SERIES  |
| <b>20</b>  | SIZES<br>10 = ø 10 mm<br>16 = ø 16 mm<br>20 = ø 20 mm<br>25 = ø 25 mm<br>32 = ø 32 mm |
| <b>40</b>  | STROKE  |

**GRIPPING FORCE CHARACTERISTICS**

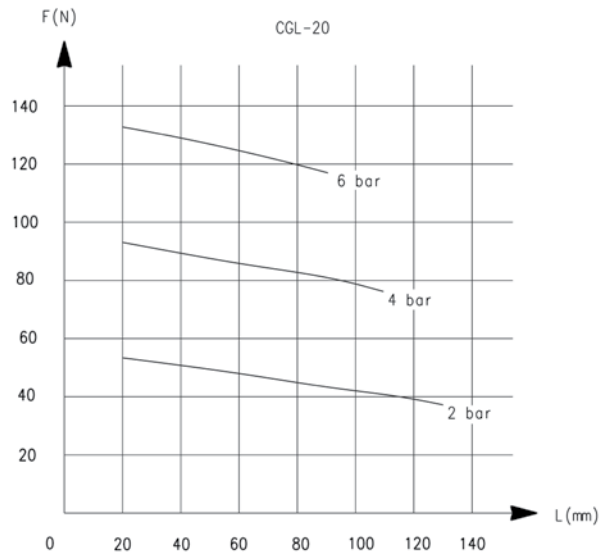


F = Gripping Force  
L = Gripping point length

GRIPPING FORCE CHARACTERISTICS

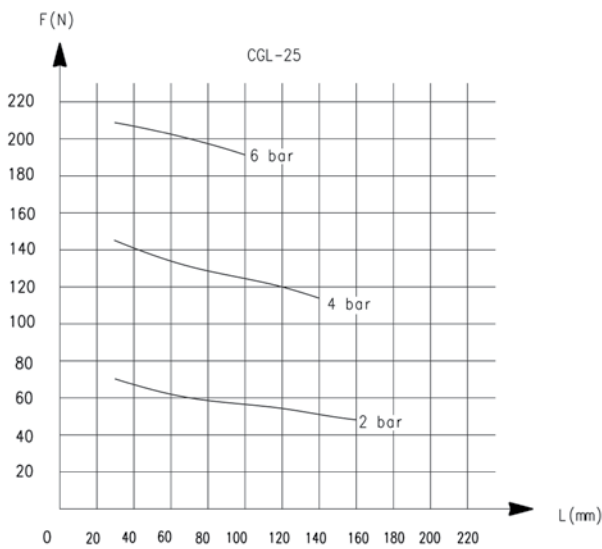


F = Gripping Force  
L = Gripping point length

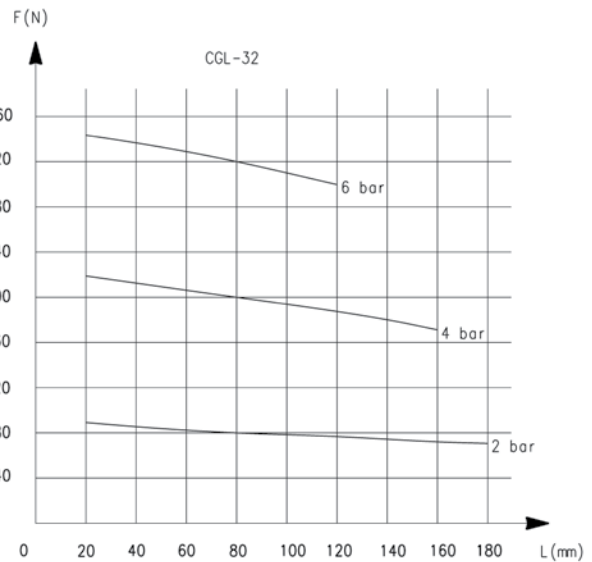


F = Gripping Force  
L = Gripping point length

GRIPPING FORCE CHARACTERISTICS

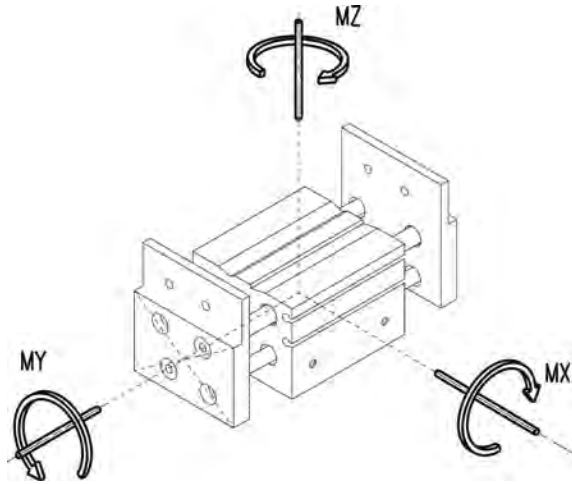


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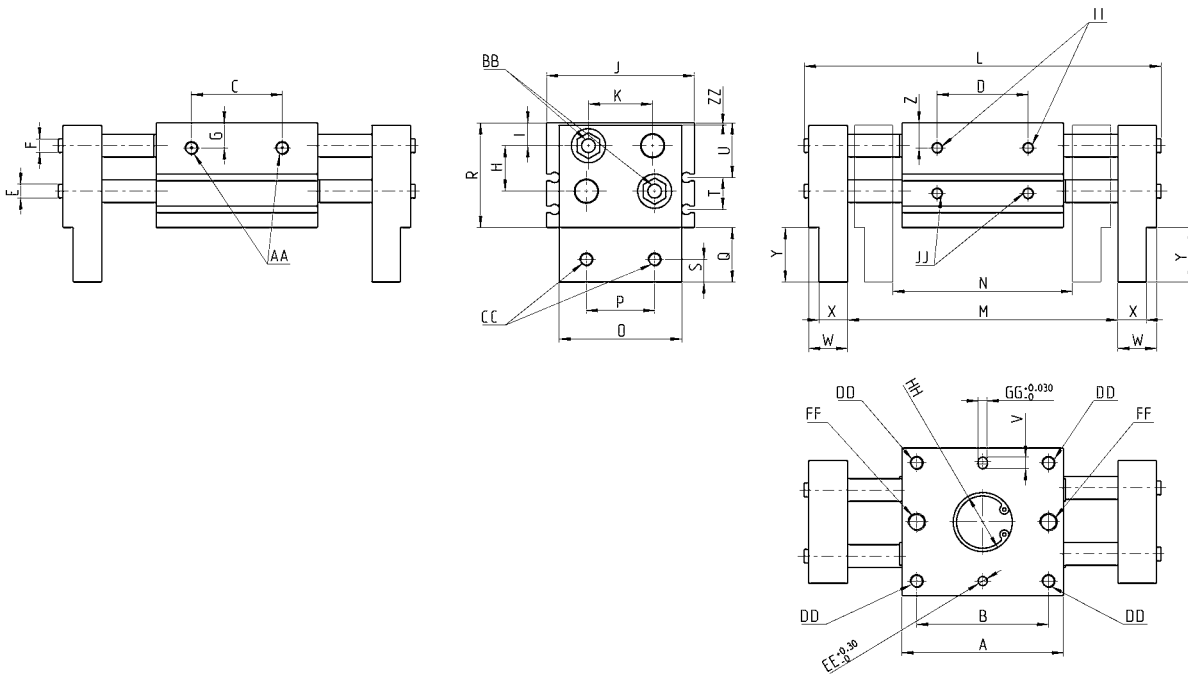
TABLE SHOWING THE LOAD PARAMETERS OF THE FINGERS



| Max. torque force permitted |      |      |      |       |      |
|-----------------------------|------|------|------|-------|------|
| CGL...( Nm )                | 10   | 16   | 20   | 25    | 32   |
| <b>Mx</b>                   | 0,86 | 4,68 | 9,6  | 18,6  | 36   |
| <b>My</b>                   | 0,51 | 2,80 | 5,76 | 11,16 | 21,6 |
| <b>Mz</b>                   | 0,56 | 3,04 | 6,24 | 12,1  | 23,4 |

Wide Opening Parallel Gripper Series CGL

\*\*\*\*Per la tabella delle quote, vedi pagina 1.7.25.06



## CGL - Dimensions

## DIMENSIONS

Mod.

| Mod.             | A   | B   | C   | D   | L        | M   | N   | Peso (g) | Corsa (mm) |
|------------------|-----|-----|-----|-----|----------|-----|-----|----------|------------|
| <b>CGL-1020</b>  | 52  | 36  | 30  | 30  | 100(80)  | 76  | 56  | 300      | 20         |
| <b>CGL-1040</b>  | 68  | 52  | 46  | 46  | 136(96)  | 112 | 72  | 360      | 40         |
| <b>CGL-1060</b>  | 86  | 70  | 64  | 64  | 174(114) | 150 | 90  | 440      | 60         |
| <b>CGL-1630</b>  | 60  | 45  | 26  | 26  | 128(98)  | 98  | 68  | 560      | 30         |
| <b>CGL-1660</b>  | 90  | 75  | 56  | 56  | 188(128) | 158 | 98  | 780      | 60         |
| <b>CGL-1680</b>  | 110 | 95  | 76  | 76  | 228(148) | 198 | 118 | 1100     | 80         |
| <b>CGL-2040</b>  | 71  | 58  | 40  | 40  | 157(117) | 119 | 79  | 1000     | 40         |
| <b>CGL-2080</b>  | 113 | 100 | 82  | 82  | 239(159) | 201 | 121 | 1400     | 80         |
| <b>CGL-20100</b> | 133 | 120 | 102 | 102 | 279(179) | 241 | 141 | 1660     | 100        |
| <b>CGL-2550</b>  | 88  | 70  | 50  | 50  | 192(142) | 146 | 96  | 1720     | 50         |
| <b>CGL-25100</b> | 142 | 124 | 104 | 104 | 296(196) | 250 | 150 | 2480     | 100        |
| <b>CGL-25120</b> | 160 | 142 | 122 | 122 | 334(214) | 288 | 168 | 3480     | 120        |
| <b>CGL-3270</b>  | 110 | 86  | 69  | 69  | 240(170) | 188 | 118 | 2940     | 70         |
| <b>CGL-32120</b> | 158 | 134 | 117 | 117 | 338(218) | 286 | 166 | 4120     | 120        |
| <b>CGL-32160</b> | 202 | 178 | 161 | 161 | 422(262) | 370 | 210 | 5770     | 160        |

| Mod.          | ØE | ØF | G    | H    | I    | J  | K    | O  | P  | Q  | R  | S  | T  | U  | V | W  | X    | Y  | Z    | ZZ  |
|---------------|----|----|------|------|------|----|------|----|----|----|----|----|----|----|---|----|------|----|------|-----|
| <b>CGL-10</b> | 6  | 6  | 8,5  | 12,5 | 8    | 44 | 18,2 | 34 | 20 | 15 | 31 | 7  | 12 | 15 | 4 | 10 | 7    | 15 | 8,5  | 0,5 |
| <b>CGL-16</b> | 8  | 8  | 9,5  | 16,5 | 9    | 55 | 22,6 | 43 | 25 | 19 | 39 | 8  | 14 | 19 | 4 | 13 | 9    | 19 | 9,5  | 0,5 |
| <b>CGL-20</b> | 10 | 10 | 11   | 20   | 10   | 65 | 28   | 54 | 30 | 24 | 46 | 10 | 14 | 24 | 5 | 17 | 12,5 | 24 | 11   | 0,6 |
| <b>CGL-25</b> | 12 | 12 | 12   | 24   | 11   | 76 | 33,2 | 64 | 40 | 29 | 52 | 12 | 20 | 26 | 6 | 21 | 14   | 29 | 12   | 1   |
| <b>CGL-32</b> | 16 | 14 | 15,5 | 30   | 14,5 | 82 | 32,2 | 70 | 42 | 32 | 68 | 15 | 25 | 33 | 7 | 24 | 15   | 32 | 15,5 | 1   |

| Mod.          | AA     | AA    | BB     | BB    | CC     | CC    | DD     | DD    | ØEE    | ØEE   | ØFF    | ØFF   | ØGG    | ØGG   | HH     | HH    | II     | II    | JJ     | JJ    |
|---------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| Mod.          | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. | Filet. | Prof. |
| <b>CGL-10</b> | M5     | 6     | M5     | -     | M4     | -     | M4     | 5     | 3      | 3     | M5     | 7     | 3      | 3     | 19     | -     | M5     | 6     | M5     | -     |
| <b>CGL-16</b> | M5     | 7     | M6     | -     | M5     | -     | M5     | 8     | 3      | 3     | M6     | 10    | 3      | 3     | 24     | -     | M5     | 7     | M5     | -     |
| <b>CGL-20</b> | M5     | 6     | M6     | -     | M6     | -     | M6     | 9     | 4      | 4     | M8     | 10    | 4      | 4     | 26     | -     | M5     | 8     | M5     | -     |
| <b>CGL-25</b> | M5     | 6     | M8     | -     | M8     | -     | M8     | 10    | 5      | 4     | M10    | 15    | 5      | 4     | 28     | -     | M5     | 6     | M5     | -     |
| <b>CGL-32</b> | M6     | 8     | M10    | -     | M10    | -     | M8     | 10    | 6      | 6     | M10    | 13    | 6      | 6     | 26     | -     | G1/8   | -     | -      | -     |