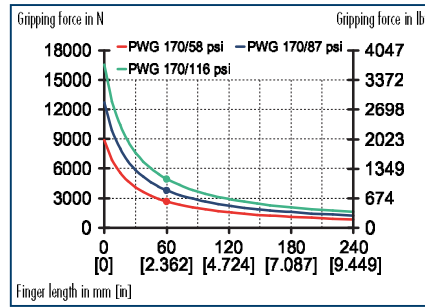


# PWG 170

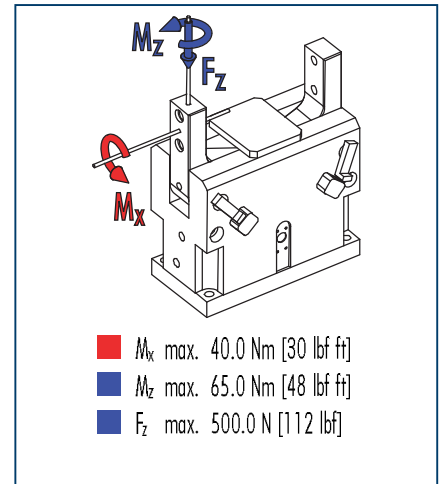
## Pneumatic · 2-Finger Angular Grippers · Universal Angular Grippers



### Gripping force, O.D. gripping



### Finger load

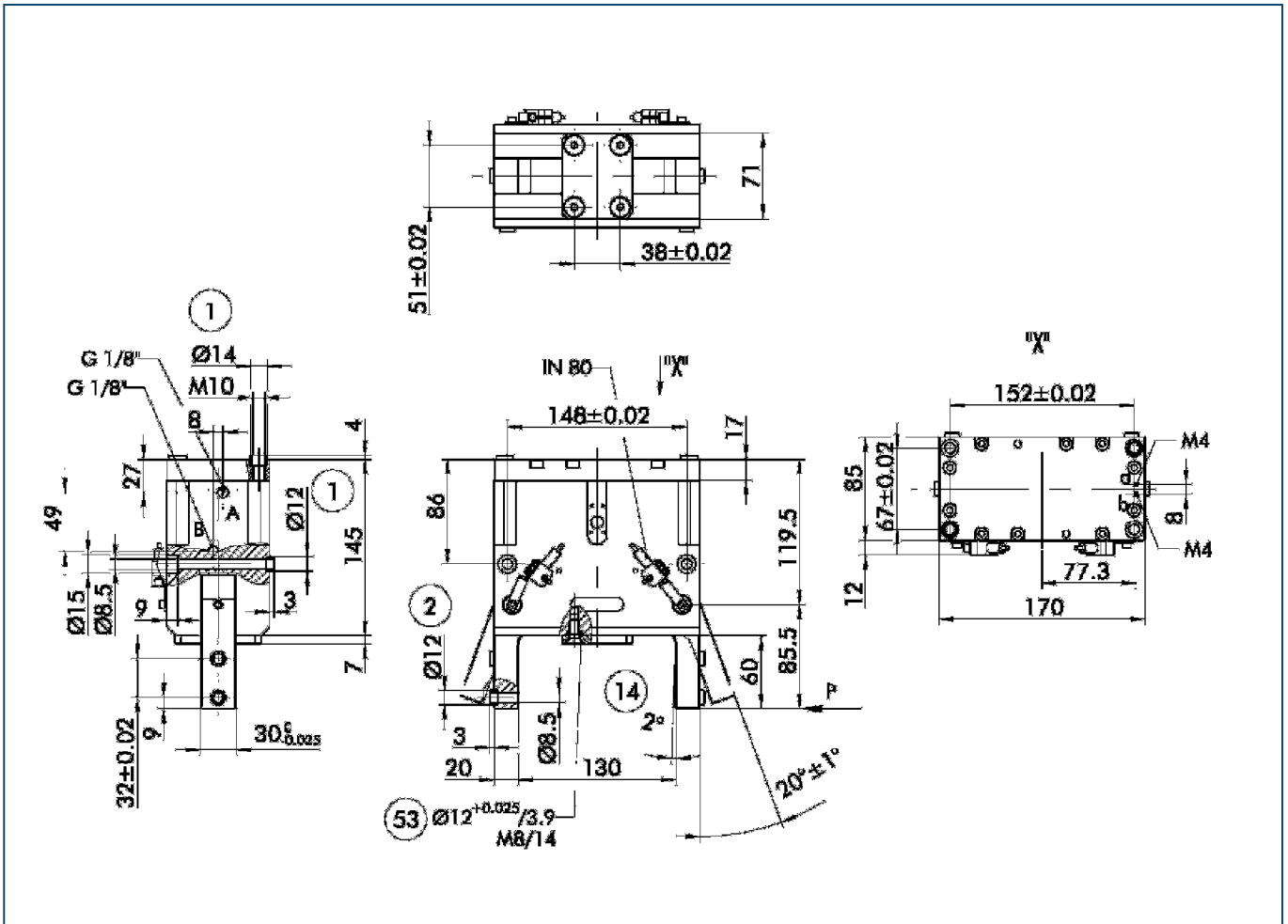


① Moments and forces apply per base jaw and may occur simultaneously. If the max. permitted finger weight is exceeded, it is imperative to throttle the air pressure so that the jaw movement occurs without any hitting or bouncing. Service life may be reduced.

### Technical data

| Description                       |                                    | PWG 170-F     | PWG 170-B     |
|-----------------------------------|------------------------------------|---------------|---------------|
|                                   | ID                                 | 0302636       | 0302637       |
| Connection version                |                                    |               | Base jaw      |
| Opening angle per jaw             | °                                  | 20.0          | 20.0          |
| Opening angle per jaw up to       | °                                  | 2.0           | 2.0           |
| Closing moment                    | Nm [lbf ft]                        | 324.9 [240]   | 324.9 [240]   |
| Closing moment ensured by spring  | Nm [lbf ft]                        | 80.4 [59]     | 80.4 [59]     |
| Weight                            | kg [lbs]                           | 6.6 [14.55]   | 7.0 [15.43]   |
| Recommended workpiece weight      | kg [lbs]                           | 19.0 [41.89]  | 19.0 [41.89]  |
| Air consumption per double stroke | cm <sup>3</sup> [in <sup>3</sup> ] | 320.0 [19.53] | 320.0 [19.53] |
| Nominal pressure                  | bar [psi]                          | 6.0 [87]      | 6.0 [87]      |
| Minimum pressure                  | bar [psi]                          | 4.0 [58]      | 4.0 [58]      |
| Maximum pressure                  | bar [psi]                          | 8.0 [116]     | 8.0 [116]     |
| Closing time                      | s                                  | 0.27          | 0.27          |
| Opening time                      | s                                  | 0.3           | 0.3           |
| Max. permitted finger length      | mm [in]                            | 160.0 [6.299] | 160.0 [6.299] |
| Max. permitted weight per finger  | kg [lbs]                           | 2.5 [5.51]    | 2.5 [5.51]    |
| IP class                          |                                    | 20            | 20            |
| Min. ambient temperature          | °C [°F]                            | -10.0 [14]    | -10.0 [14]    |
| Max. ambient temperature          | °C [°F]                            | 90.0 [194]    | 90.0 [194]    |
| Repeat accuracy                   | mm [in]                            | 0.05 [0.0020] | 0.05 [0.0020] |

### Main views

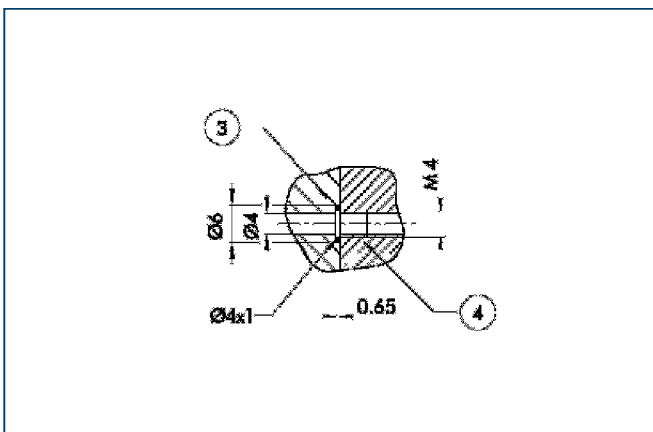


The drawing shows the gripper in the basic version with closed jaws, the dimensions do not include the options described below.

① The SDV-P pressure maintenance valve can also be used (see "Accessories" catalog section) for I.D. or O.D. gripping as an alternative or in addition to the spring-loaded, mechanical gripping force safety device.

- A,a Main/direct connection, gripper opening
- B,b Main/direct connection, gripper closing
- ① Gripper connection
- ② Finger connection
- ⑭ Clamping reserve per finger
- ⑤③ Connection for shaft support

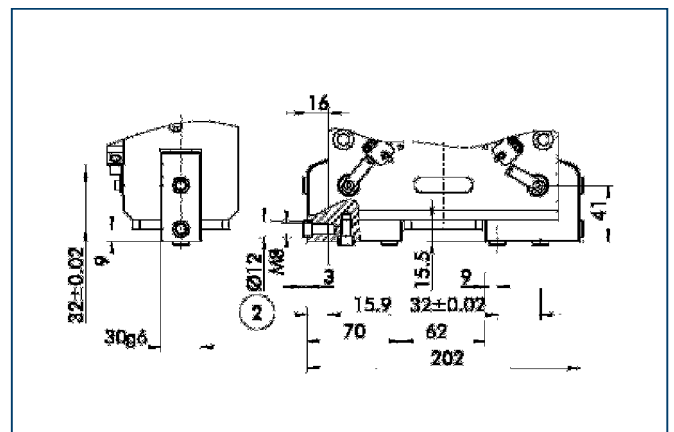
### Hoseless direct connection



- ③ Adapter
- ④ Gripper

The direct connection is used for supplying compressed air to the gripper without vulnerable hoses. Instead, the pressure medium is fed through bore-holes in the mounting plate.

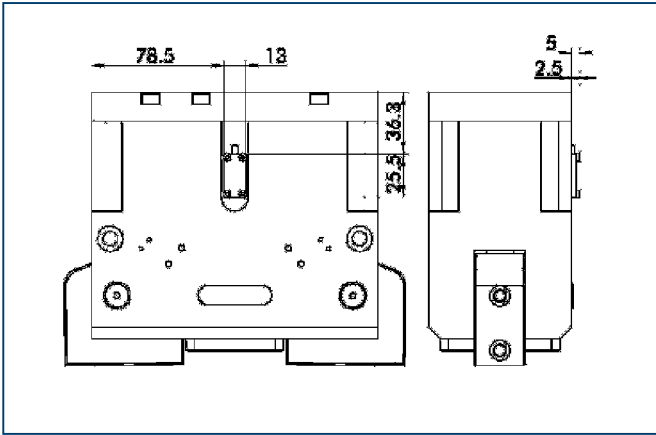
### Jaw version



- ② Finger connection

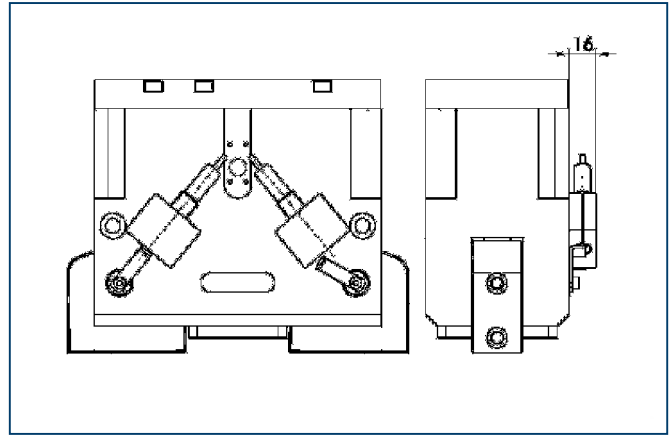
Different dimensions for version "B" (jaw version).

### FPS measuring system



In the PWG, up to 3 intermediate positions can be monitored by the FPS flexible position sensor.

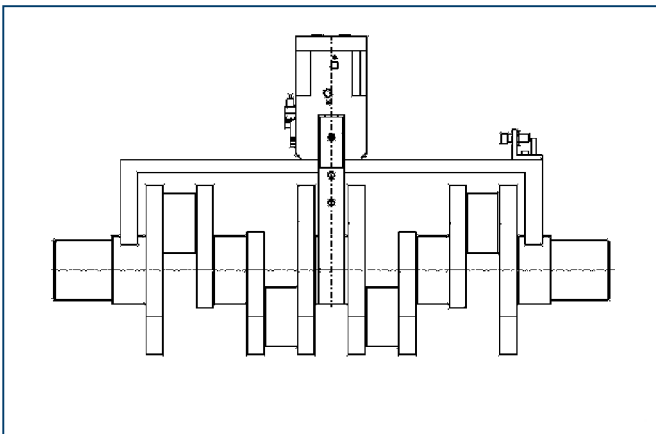
### Mounting kit for proximity switch



The mounting kit consists of brackets, switch cams and the associated mounting materials. The proximity switches must be ordered separately.

| Description    | ID      |
|----------------|---------|
| HG-PWG 130-230 | 0300763 |

### Shaft support

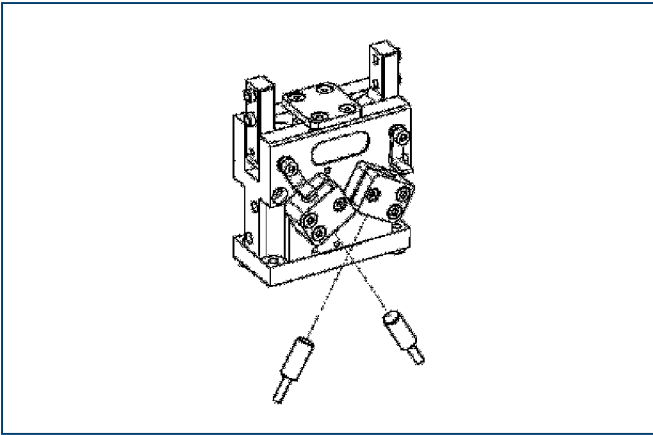


We will supply the complete module for handling crankshafts and camshafts on request.



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.

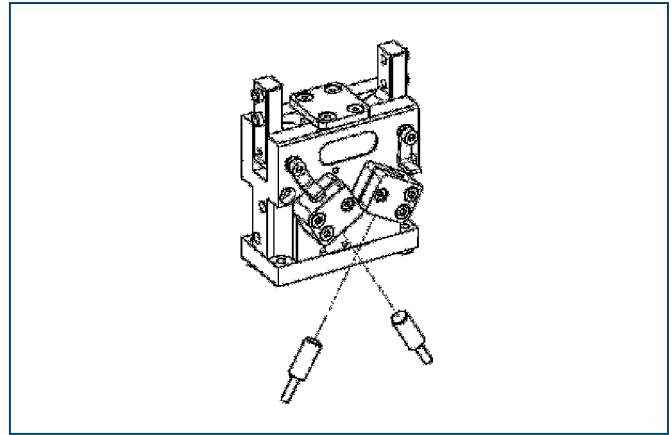
### Sensor system



End position monitoring:  
Inductive proximity switches, for direct mounting

| Description  | ID      | Recommended product |
|--------------|---------|---------------------|
| IN 80/S-M12  | 0301578 |                     |
| IN 80/S-M8   | 0301478 | •                   |
| IN-B 80/S-M8 | 0301477 |                     |
| INK 80/S     | 0301550 |                     |

① Two sensors (NO contacts) are required for each gripper, plus extension cables as an option.



End position monitoring:  
Inductive proximity switches, mounted with mounting kit

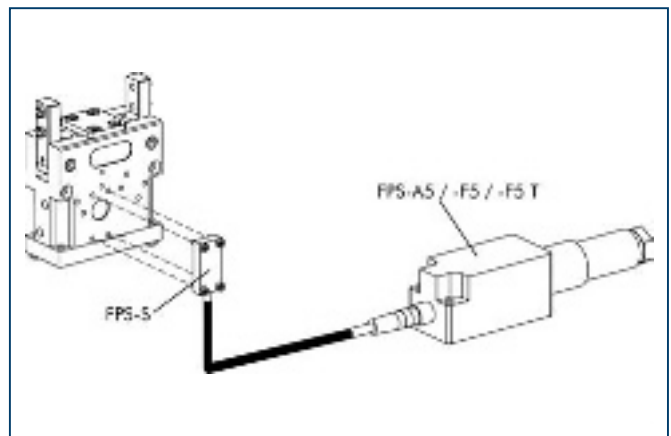
| Description    | ID      | Recommended product |
|----------------|---------|---------------------|
| HG-PWG 130-230 | 0300763 |                     |
| IN 120/S-M12   | 0301592 | •                   |
| INK 120/S      | 0301562 |                     |

① Two sensors (NO contacts) are required for each gripper, plus extension cables as an option.

### Extension cables for proximity switches/magnetic switches

| Description | ID      |
|-------------|---------|
| GK 3-M8     | 0301622 |
| KV 10-M12   | 0301596 |
| KV 10-M8    | 0301496 |
| KV 20-M12   | 0301597 |
| KV 20-M8    | 0301497 |
| KV 3-M12    | 0301595 |
| KV 3-M8     | 0301495 |
| W 3-M12     | 0301503 |
| W 5-M12     | 0301507 |
| WK 3-M8     | 0301594 |
| WK 5-M8     | 0301502 |

① Please note the minimum permitted bending radii for the sensor cables, which are generally 35 mm.



Measuring system:  
FPS position monitor

| Description | ID      |
|-------------|---------|
| FPS-A5      | 0301802 |
| FPS-F5      | 0301805 |
| FPS-F5 T    | 0301807 |
| FPS-S 13    | 0301705 |

When using an FPS system, an FPS sensor (FPS-S) and an electronic processor (FPS-F5 / F5 T or A5) are required for each gripper as well as a mounting kit (AS), if listed. Cable extensions (KV) are available as options in the "Accessories" catalog section.



You can find more detailed information and individual parts of the above-mentioned accessories in the "Accessories" catalog section.