

## Parallel grippers DHPG

**FESTO**



## Key features

### At a glance

#### General

- Resilient and precise ball guide
- High gripping forces with compact dimensions
- Max. repetition accuracy
- Wide range of mounting and connection options
- Optionally with protective dust cap

#### Flexible range of applications

- Sensor technology:
  - Proximity switches for sensing the piston position at the end positions
  - Position transmitter for sensing the piston position at any location
  - Size 16 ... 40 with T-slot and C-slot
- Can be used either as double-acting or single-acting gripper
- Suitable for external and internal gripping

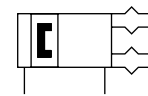
### Gripper characteristic

[L] Long stroke

- Available for sizes 10 ... 25

### Position sensing

[A] Via proximity switch



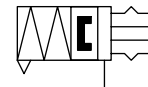
### Gripping force backup

[NC] Normally closed



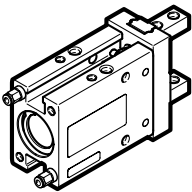
### Gripping force backup

[NO] Normally open



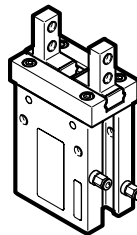
### Pneumatic connection

[B] Underneath



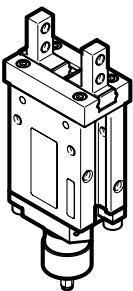
### Pneumatic connection

[S] On the side



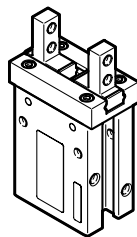
### Pneumatic connection

[Z] Via mounting spigot



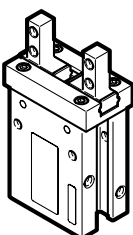
### Type of mounting for gripper fingers

[ ] Standard



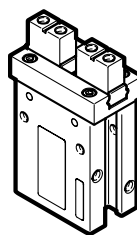
### Type of mounting for gripper fingers

[1] Mounting holes on the side



### Type of mounting for gripper fingers

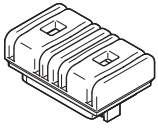
[2] Flat gripper fingers



## Key features

### Dust protection

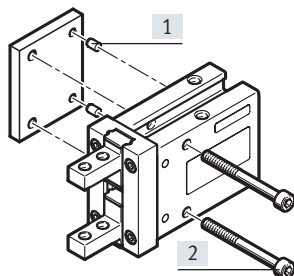
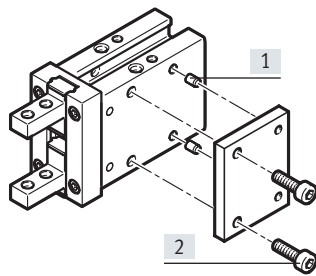
[C] Protective dust cap



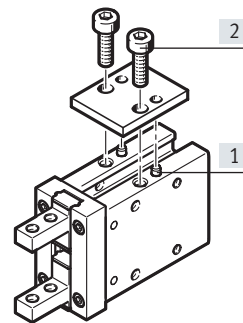
- Available for sizes 10 ... 25

### Mounting options

On the side

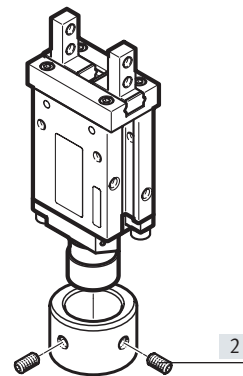
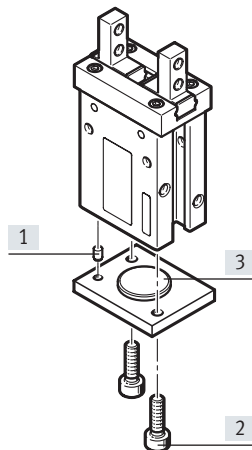
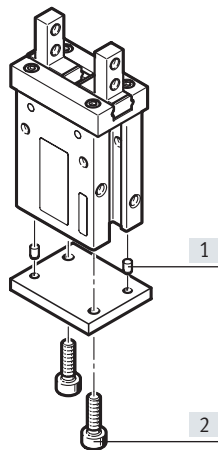


Vertical



- [1] Centring sleeves
- [2] Retaining screws

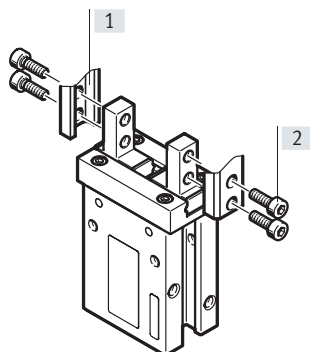
From underneath



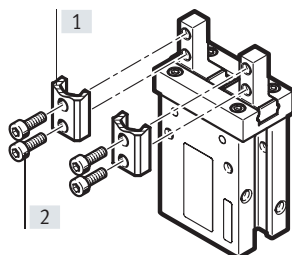
- [1] Centring sleeves
- [2] Retaining screws
- [3] Base

### Mounting external gripper fingers

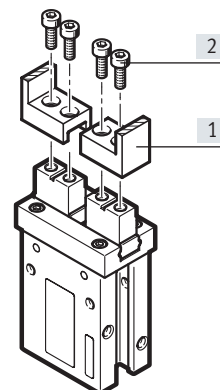
Standard



Mounting holes on the side



Flat gripper fingers

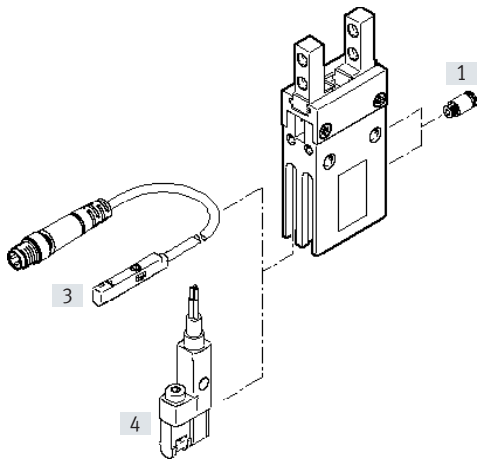


- [1] External gripper fingers
- [2] Retaining screws

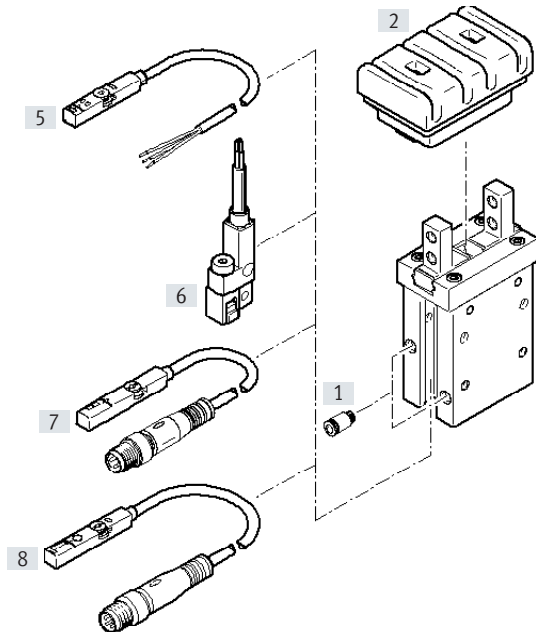
Peripherals overview

Peripherals overview

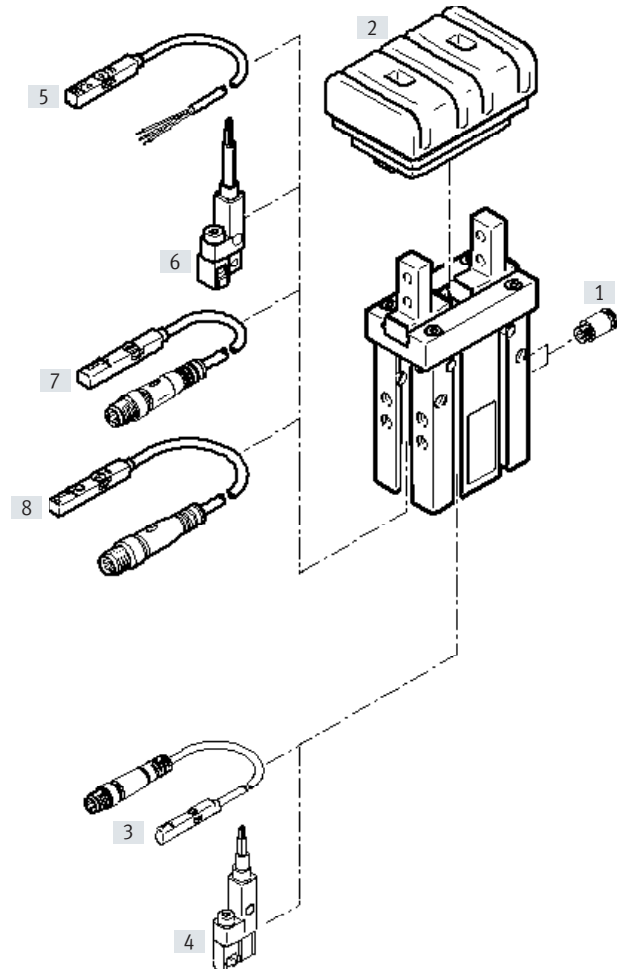
Size 6



Size 10



Size 16 ... 40



## Peripherals overview

| Accessories |                                  |              |  |                 |
|-------------|----------------------------------|--------------|--|-----------------|
|             | Type/order code                  | For size     | Description  | → Page/Internet |
| [1]         | Push-in fitting<br>QS            | 6 ... 40     | For connecting tubing with standard O.D.               | qs              |
| [2]         | Protective dust cap<br>DHAS-DP   | 10 ... 25    | For protecting the gripper against the ingress of dust | 40              |
| [3]         | Proximity switch<br>SMT-10M      | 6, 16 ... 40 | For sensing the piston position at the end positions   | 41              |
| [4]         | Proximity switch<br>SMT-10G      | 6, 16 ... 40 | For sensing the piston position at the end positions   | 41              |
| [5]         | Proximity switch<br>SMT-8M       | 10 ... 40    | For sensing the piston position at the end positions   | 41              |
| [6]         | Proximity switch<br>SMT-8G       | 10 ... 40    | For sensing the piston position at the end positions   | 41              |
| [7]         | Position transmitter<br>SMAT-8M  | 10 ... 40    | For sensing the piston position at any location        | 42              |
| [8]         | Position transmitter<br>SDAS-MHS | 10 ... 40    | For sensing the piston position at any location        | 42              |

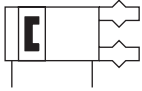
## Type codes

| 001  | Series                 |  |
|------|------------------------|--|
| DHPC | Parallel gripper       |  |
| 002  | Gripper characteristic |  |
|      | Standard               |  |
| L    | Long stroke            |  |
| 003  | Size                   |  |
| 6    | 6                      |  |
| 10   | 10                     |  |
| 16   | 16                     |  |
| 20   | 20                     |  |
| 25   | 25                     |  |
| 32   | 32                     |  |
| 40   | 40                     |  |
| 004  | Position sensing       |  |
| A    | For proximity sensor   |  |

| 005 | Gripping force backup           |  |
|-----|---------------------------------|--|
|     | None                            |  |
| NC  | N/O contact                     |  |
| NO  | Opening                         |  |
| 006 | Pneumatic connection            |  |
| B   | Bottom                          |  |
| S   | On the side                     |  |
| Z   | Via mounting spigot             |  |
| 007 | Dust protection                 |  |
|     | None                            |  |
| C   | Protective dust cap             |  |
| 008 | Type of mounting gripper finger |  |
|     | None                            |  |
| 1   | Mounting holes at the side      |  |
| 2   | Flat gripper fingers            |  |

Datasheet

Function  
Double-acting  
DHPC-...-A



- Size  
6 ... 40 mm
- Total stroke  
4 ... 30 mm

Function  
Single-acting  
Normally closed: DHPC-...-NC



Normally open: DHPC-...-NO



| General technical data                    |  | 6                                | 10 | 16 | 20 | 25 | 32 | 40 |
|---|--|----------------------------------|----|----|----|----|----|----|
| Size                                      |  | 6                                | 10 | 16 | 20 | 25 | 32 | 40 |
| Design                                    | Lever  |                                  |    |    |    |    |    |    |
|   | Force-guided motion sequence                   |                                  |    |    |    |    |    |    |
|   | Connection direction underneath                |                                  |    |    |    |    |    |    |
|   | Connection direction on the side               |                                  |    |    |    |    |    |    |
|   | Connection via mounting spigot                 |                                  |    |    |    |    |    |    |
|   | Type of mounting for gripper fingers: standard |                                  |    |    |    |    |    |    |
|   | Sideways mounting of gripper fingers           |                                  |    |    |    |    |    |    |
| Mode of operation                         | Flat mounting of gripper fingers               |                                  |    |    |    |    |    |    |
|   | Double-acting                                  |                                  |    |    |    |    |    |    |
|   | Single-acting                                  |                                  |    |    |    |    |    |    |
|   | Closed   |                                  |    |    |    |    |    |    |
| Gripper function                          | Open   |                                  |    |    |    |    |    |    |
|   | Parallel                                       |                                  |    |    |    |    |    |    |
| Guide                                     | Ball guide                                     |                                  |    |    |    |    |    |    |
| Number of gripper jaws                    | 2  |                                  |    |    |    |    |    |    |
| Stroke per gripper jaw                    |  |                                  |    |    |    |    |    |    |
| Standard gripper characteristic           | [mm]   | 2                                | 2  | 3  | 5  | 7  | 11 | 15 |
| Long stroke gripper characteristic        | [mm]   | -                                | 4  | 6  | 9  | 11 | -  |    |
| Pneumatic connection                      |  | M3                               |    |    | M5 |    |    |    |
| Connection via mounting spigot            |  | M5                               |    |    |    |    |    |    |
| Gripper repetition accuracy <sup>1)</sup> | [mm]   | ≤ 0.02                           |    |    |    |    |    |    |
| Max. replacement accuracy                 | [mm]   | 0.2                              |    |    |    |    |    |    |
| Max. operating frequency of gripper       | [Hz]   | 3                                |    |    |    |    |    | 1  |
| Rotational symmetry                       | [mm]   | ≤ 0.2                            |    |    |    |    |    |    |
| Position sensing                          |  | Via proximity switch             |    |    |    |    |    |    |
| Type of mounting                          | Direct mounting via through-hole               |                                  |    |    |    |    |    |    |
|   | Direct mounting via thread                     |                                  |    |    |    |    |    |    |
|   | -  | With through-hole and dowel pin  |    |    |    |    |    |    |
|   | -  | With female thread and dowel pin |    |    |    |    |    |    |
|   | On mounting frame                              |                                  |    |    |    |    |    |    |
| Mounting position                         |  | Any                              |    |    |    |    |    |    |

1) Under constant exposure to operating conditions, end-position drift occurs in the direction of movement of the gripper jaws, at 100 consecutive strokes

Datasheet

| Operating and environmental conditions |  |             |      |      |      |      |      |      |
|--|--|-------------|------|------|------|------|------|------|
| Size                                   |  | 6           | 10   | 16   | 20   | 25   | 32   | 40   |
| Min. operating pressure                |  |             |      |      |      |      |      |      |
| Double-acting                          | [MPa]  | 0.15        | 0.2  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  |
| Single-acting                          | [MPa]  | 0.35        | 0.35 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 |
| Double-acting                          | [bar]  | 1.5         | 2    | 1    | 1    | 1    | 1    | 1    |
| Single-acting                          | [bar]  | 3.5         | 3.5  | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  |
| Max. operating pressure                |  |             |      |      |      |      |      |      |
|  | [MPa]  | 0.8         | 0.8  | 0.8  | 0.8  | 0.8  | 0.8  | 0.8  |
|  | [bar]  | 8           | 8    | 8    | 8    | 8    | 8    | 8    |
| Operating medium                       | Compressed air to ISO 8573-1:2010 [7:4:4]  |             |      |      |      |      |      |      |
| Note on the operating/pilot medium     | Lubricated operation possible (in which case lubricated operation will always be required) |             |      |      |      |      |      |      |
| Ambient temperature <sup>1)</sup>      | [°C]   | -10 ... +60 |      |      |      |      |      |      |

1) Note operating range of proximity switches

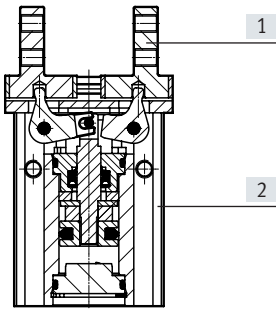
| Weight [g]       |  |    |    |     |     |     |     |      |
|------------------|--|----|----|-----|-----|-----|-----|------|
| Size             |  | 6  | 10 | 16  | 20  | 25  | 32  | 40   |
| Double-acting    |  |    |    |     |     |     |     |      |
| DHPC...A-S       |  | 25 | 49 | 110 | 224 | 440 | 778 | 1396 |
| DHPC...A-S-1     |  | 25 | 49 | 110 | 224 | 440 | 778 | 1396 |
| DHPC...A-S-2     |  | 25 | 49 | 113 | 224 | 437 | 773 | 1487 |
| DHPC...A-B       |  | 25 | 49 | 111 | 224 | 441 | 779 | 1408 |
| DHPC...A-B-1     |  | 25 | 49 | 111 | 224 | 441 | 779 | 1408 |
| DHPC...A-B-2     |  | 25 | 49 | 114 | 224 | 438 | 774 | 1481 |
| DHPC-L...A-S     |  | -  | 59 | 121 | 261 | 484 | -   | -    |
| DHPC-L...A-S-1   |  | -  | 59 | 121 | 261 | 484 | -   | -    |
| DHPC-L...A-S-2   |  | -  | 59 | 124 | 261 | 484 | -   | -    |
| DHPC-L...A-B     |  | -  | 59 | 124 | 261 | 484 | -   | -    |
| DHPC-L...A-B-1   |  | -  | 59 | 124 | 261 | 484 | -   | -    |
| DHPC-L...A-B-2   |  | -  | 59 | 127 | 261 | 484 | -   | -    |
| Single-acting    |  |    |    |     |     |     |     |      |
| DHPC...A...S     |  | 27 | 57 | 111 | 224 | 441 | 831 | 1469 |
| DHPC...A...S-1   |  | 27 | 57 | 111 | 224 | 441 | 831 | 1469 |
| DHPC...A...S-2   |  | 27 | 57 | 114 | 224 | 438 | 826 | 1560 |
| DHPC...A...B     |  | 27 | 57 | 112 | 224 | 442 | 832 | 1473 |
| DHPC...A...B-1   |  | 27 | 57 | 112 | 224 | 442 | 832 | 1473 |
| DHPC...A...B-2   |  | 27 | 57 | 115 | 224 | 439 | 821 | 1564 |
| DHPC...A...Z     |  | 31 | 66 | 136 | 270 | 519 | 938 | 1649 |
| DHPC...A...Z-1   |  | 31 | 66 | 136 | 270 | 519 | 938 | 1649 |
| DHPC...A...Z-2   |  | 31 | 66 | 139 | 270 | 516 | 933 | 1740 |
| DHPC-L...A...S   |  | -  | 66 | 126 | 261 | 495 | -   | -    |
| DHPC-L...A...S-1 |  | -  | 66 | 126 | 261 | 495 | -   | -    |
| DHPC-L...A...S-2 |  | -  | 66 | 129 | 261 | 495 | -   | -    |
| DHPC-L...A...B   |  | -  | 66 | 126 | 261 | 495 | -   | -    |
| DHPC-L...A...B-1 |  | -  | 66 | 126 | 261 | 495 | -   | -    |
| DHPC-L...A...B-2 |  | -  | 66 | 129 | 261 | 495 | -   | -    |
| DHPC-L...A...Z   |  | -  | 74 | 151 | 306 | 571 | -   | -    |
| DHPC-L...A...Z-1 |  | -  | 74 | 151 | 306 | 571 | -   | -    |
| DHPC-L...A...Z-2 |  | -  | 74 | 154 | 306 | 571 | -   | -    |



Datasheet

Materials

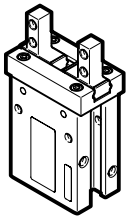
Sectional view



Parallel gripper

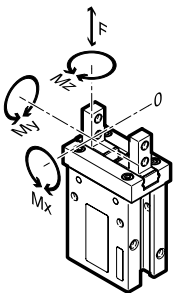
|     |                     |                            |
|-----|---------------------|----------------------------|
| [1] | Gripper jaw         | High-alloy stainless steel |
| [2] | Housing             | Anodised aluminium         |
| -   | Protective dust cap | NBR                        |
|     | Note on materials   | RoHS-compliant             |
|     | PWIS conformity     | VDMA24364-B2-L             |

Gripping force [N] at 6 bar



| Size                           |         | 6   | 10   | 16   | 20   | 25    | 32    | 40    |
|--------------------------------|---------|-----|------|------|------|-------|-------|-------|
| Gripping force per gripper jaw |         |     |      |      |      |       |       |       |
| DHPC...-A                      | Opening | 7.3 | 25.6 | 64.7 | 96.3 | 152.6 | 246.9 | 388.6 |
|                                | Closing | 5.5 | 21.5 | 53.9 | 79.8 | 127.8 | 221.3 | 358.6 |
| DHPC...-NO                     | Closing | 3.9 | 16.4 | 43.4 | 69.7 | 120.6 | 207.6 | 337.5 |
| DHPC...-NC                     | Opening | 5.2 | 19.6 | 50.5 | 85.5 | 145.7 | 233   | 366.8 |

Characteristic load values at the gripper jaws



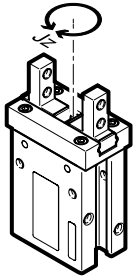
The indicated permissible forces and torques apply to a single gripper jaw. They include the lever arm, additional applied loads due to the workpiece or external gripper fingers and acceleration forces occurring during movement.

The zero coordinate line (gripper jaw guide) must be taken into consideration when calculating torques.

| Size                          |      | 6    | 10   | 16   | 20   | 25    | 32    | 40  |
|-------------------------------|------|------|------|------|------|-------|-------|-----|
| Max. permissible force F      | [N]  | 5    | 29   | 49   | 73.5 | 127.5 | 171.5 | 245 |
| Max. permissible torque $M_x$ | [Nm] | 0.02 | 0.13 | 0.34 | 0.66 | 0.97  | 1.5   | 2.3 |
| Max. permissible torque $M_y$ | [Nm] | 0.04 | 0.27 | 0.68 | 1.33 | 1.94  | 3     | 4.5 |
| Max. permissible torque $M_z$ | [Nm] | 0.02 | 0.13 | 0.68 | 0.66 | 0.97  | 1.5   | 2.3 |

Datasheet

Mass moments of inertia [kgm<sup>2</sup>x10<sup>-4</sup>]

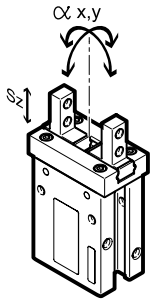


Mass moment of inertia of the parallel gripper in relation to the central axis, without external gripper fingers, with no load.

| Size                 | 6     | 10    | 16    | 20    | 25   | 32   | 40    |
|----------------------|-------|-------|-------|-------|------|------|-------|
| <b>Double-acting</b> |       |       |       |       |      |      |       |
| DHPC-...A-S          | 0.011 | 0.04  | 0.146 | 0.515 | 1.6  | 5.54 | 14.87 |
| DHPC-...A-S-1        | 0.011 | 0.04  | 0.146 | 0.515 | 1.6  | 5.54 | 14.87 |
| DHPC-...A-S-2        | 0.011 | 0.04  | 0.147 | 0.515 | 1.59 | 5.51 | 15.84 |
| DHPC-...A-B          | 0.011 | 0.04  | 0.148 | 0.515 | 1.6  | 5.55 | 15.49 |
| DHPC-...A-B-1        | 0.011 | 0.04  | 0.148 | 0.515 | 1.6  | 5.55 | 15.49 |
| DHPC-...A-B-2        | 0.011 | 0.04  | 0.149 | 0.515 | 1.59 | 5.51 | 16.3  |
| DHPC-L-...A-S        | -     | 0.057 | 0.214 | 0.515 | 2.14 | -    | -     |
| DHPC-L-...A-S-1      | -     | 0.057 | 0.214 | 0.515 | 2.14 | -    | -     |
| DHPC-L-...A-S-2      | -     | 0.057 | 0.219 | 0.515 | 2.14 | -    | -     |
| DHPC-L-...A-B        | -     | 0.057 | 0.215 | 0.515 | 2.14 | -    | -     |
| DHPC-L-...A-B-1      | -     | 0.057 | 0.215 | 0.515 | 2.14 | -    | -     |
| DHPC-L-...A-B-2      | -     | 0.057 | 0.220 | 0.515 | 2.14 | -    | -     |
| <b>Single-acting</b> |       |       |       |       |      |      |       |
| DHPC-...A-...S       | 0.012 | 0.045 | 0.146 | 0.515 | 1.6  | 5.76 | 15.31 |
| DHPC-...A-...S-1     | 0.012 | 0.045 | 0.146 | 0.515 | 1.6  | 5.76 | 15.31 |
| DHPC-...A-...S-2     | 0.012 | 0.045 | 0.150 | 0.515 | 1.59 | 5.73 | 16.27 |
| DHPC-...A-...B       | 0.012 | 0.045 | 0.148 | 0.515 | 1.6  | 5.77 | 15.35 |
| DHPC-...A-...B-1     | 0.012 | 0.045 | 0.148 | 0.515 | 1.6  | 5.77 | 15.35 |
| DHPC-...A-...B-2     | 0.012 | 0.045 | 0.152 | 0.515 | 1.59 | 5.69 | 16.31 |
| DHPC-...A-...Z       | 0.013 | 0.049 | 0.167 | 0.574 | 1.76 | 6.08 | 16.17 |
| DHPC-...A-...Z-1     | 0.013 | 0.049 | 0.167 | 0.574 | 1.76 | 6.08 | 16.17 |
| DHPC-...A-...Z-2     | 0.013 | 0.049 | 0.171 | 0.574 | 1.75 | 6.01 | 17.06 |
| DHPC-L-...A-...S     | -     | 0.062 | 0.215 | 0.764 | 2.18 | -    | -     |
| DHPC-L-...A-...S-1   | -     | 0.062 | 0.215 | 0.764 | 2.18 | -    | -     |
| DHPC-L-...A-...S-2   | -     | 0.062 | 0.220 | 0.764 | 2.18 | -    | -     |
| DHPC-L-...A-...B     | -     | 0.062 | 0.216 | 0.764 | 2.18 | -    | -     |
| DHPC-L-...A-...B-1   | -     | 0.062 | 0.216 | 0.764 | 2.18 | -    | -     |
| DHPC-L-...A-...B-2   | -     | 0.062 | 0.221 | 0.764 | 2.18 | -    | -     |
| DHPC-L-...A-...Z     | -     | 0.069 | 0.258 | 0.828 | 2.34 | -    | -     |
| DHPC-L-...A-...Z-1   | -     | 0.069 | 0.258 | 0.828 | 2.34 | -    | -     |
| DHPC-L-...A-...Z-2   | -     | 0.069 | 0.263 | 0.828 | 2.34 | -    | -     |

## Datasheet

## Gripper jaw backlash

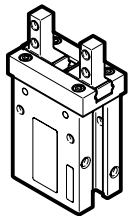


The gripper has a ball guide, which eliminates any possible backlash between the gripper jaws and the housing. The backlash values listed in the table have been calculated based on the traditional accumulative tolerance method.

| Size   | 6 | 10 | 16 | 20 | 25 | 32 | 40 |
|--|---|----|----|----|----|----|----|
| Max. gripper jaw backlash Sz [mm]            | 0 |    |    |    |    |    |    |
| Max. gripper jaw angular backlash a x, y [°] | 0 |    |    |    |    |    |    |

## Opening and closing times [ms] at 6 bar

Without external gripper fingers



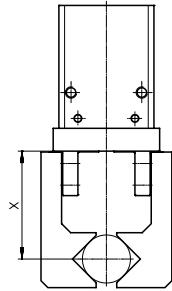
The indicated opening and closing times [ms] were measured at room temperature at an operating pressure of 6 bar with a horizontally mounted gripper without additional gripper fingers. The grippers must be throttled for larger loads [g]. Opening and closing times must then be adjusted accordingly.

| Size           |         | 6  | 10 | 16 | 20  | 25  | 32  | 40  |
|----------------|---------|----|----|----|-----|-----|-----|-----|
| DHPC...-A      | Opening | 9  | 12 | 29 | 62  | 79  | 114 | 158 |
|                | Closing | 11 | 14 | 31 | 40  | 68  | 107 | 153 |
| DHPC...-A-NO   | Opening | 8  | 28 | 29 | 75  | 131 | 174 | 300 |
|                | Closing | 6  | 26 | 11 | 29  | 38  | 76  | 67  |
| DHPC...-A-NC   | Opening | 16 | 12 | 30 | 86  | 114 | 162 | 370 |
|                | Closing | 16 | 26 | 65 | 38  | 49  | 55  | 78  |
| DHPC-L...-A    | Opening | –  | 15 | 40 | 110 | 162 | –   | –   |
|                | Closing | –  | 15 | 40 | 75  | 93  | –   | –   |
| DHPC-L...-A-NO | Opening | –  | 22 | 18 | 156 | 171 | –   | –   |
|                | Closing | –  | 12 | 17 | 51  | 46  | –   | –   |
| DHPC-L...-A-NC | Opening | –  | 25 | 50 | 176 | 176 | –   | –   |
|                | Closing | –  | 26 | 52 | 50  | 83  | –   | –   |

Datasheet

Gripping force  $F_{Gr}$  per gripper jaw as a function of the operating pressure and lever arm  $x$

The gripping forces as a function of the operating pressure and lever arm can be determined from the following graphs.



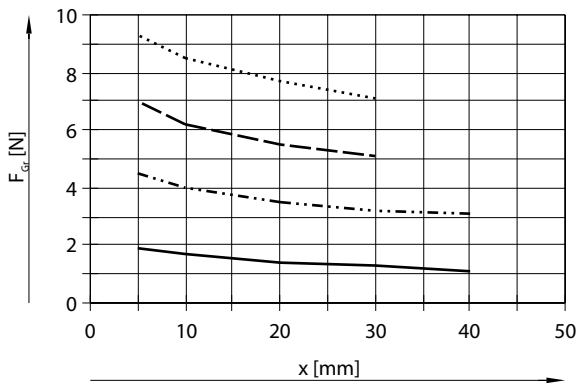
- 2 bar
- · - · - 4 bar
- - - - 6 bar
- 8 bar

**Note**  
 Engineering software  
 Gripper selection  
 → [www.festo.com](http://www.festo.com)

External gripping (closing)

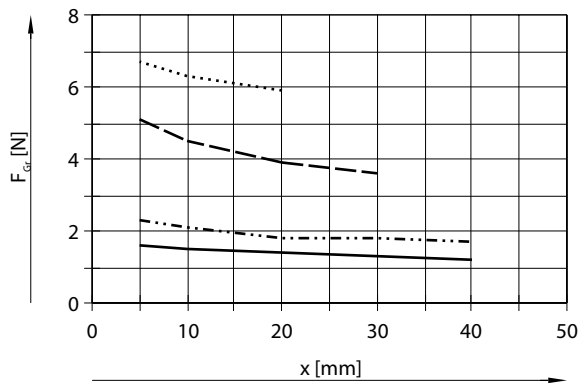
Double-acting

DHPC-6-A

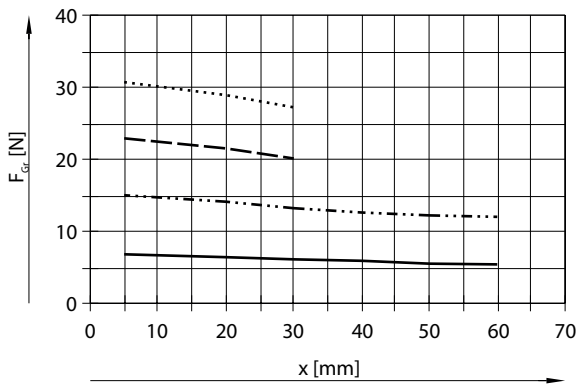


Single-acting

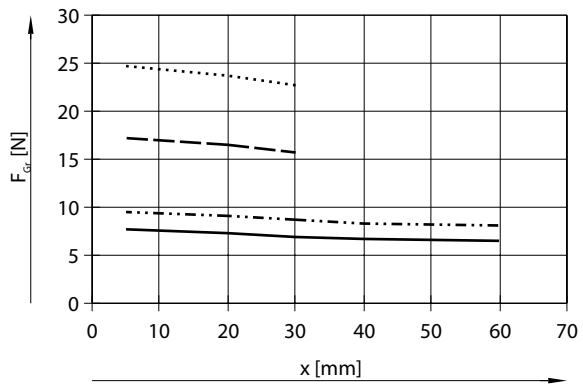
DHPC-6-A-NO



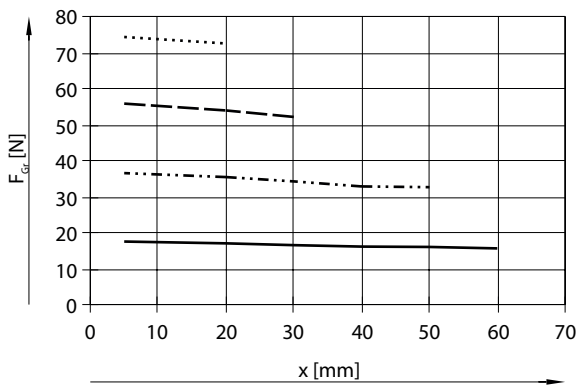
DHPC-10-A/DHPC-L-10-A



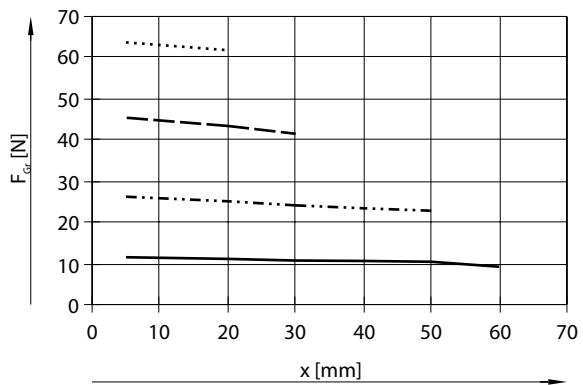
DHPC-10-A-NO/DHPC-L-10-A-NO



DHPC-16-A/DHPC-L-16-A



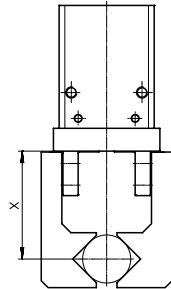
DHPC-16-A-NO/DHPC-L-16-A-NO



Datasheet

Gripping force  $F_{Gr}$  per gripper jaw as a function of the operating pressure and lever arm  $x$

The gripping forces as a function of the operating pressure and lever arm can be determined from the following graphs.



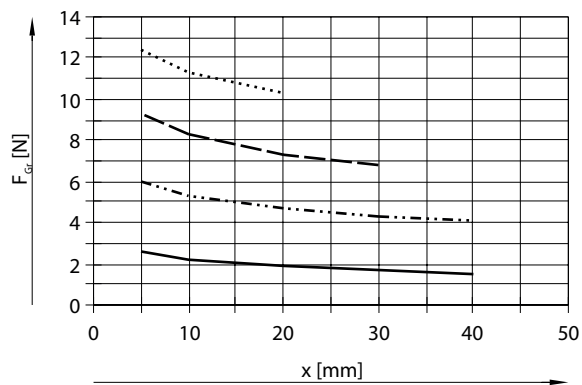
- 2 bar
- · - · 4 bar
- - - 6 bar
- 8 bar

 **Note**  
 Engineering software  
 Gripper selection  
 → [www.festo.com](http://www.festo.com)

Internal gripping (opening)

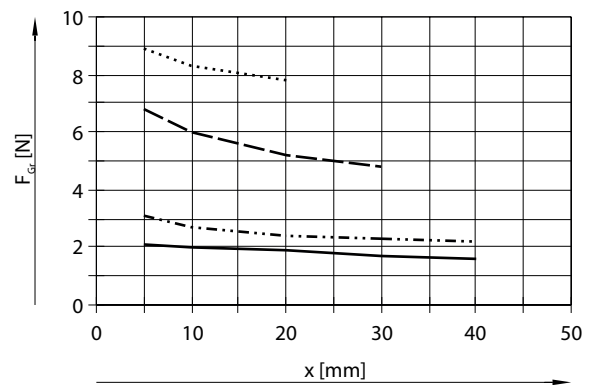
Double-acting

DHPC-6-A

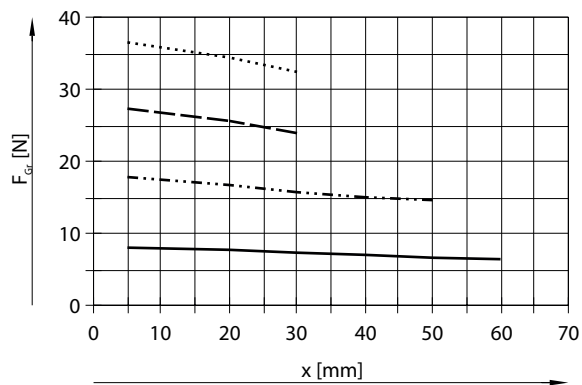


Single-acting

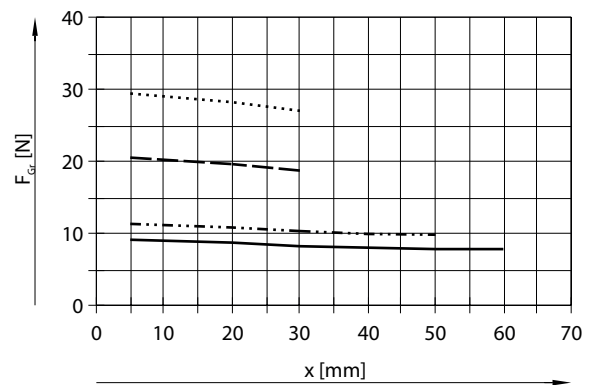
DHPC-6-A-NC



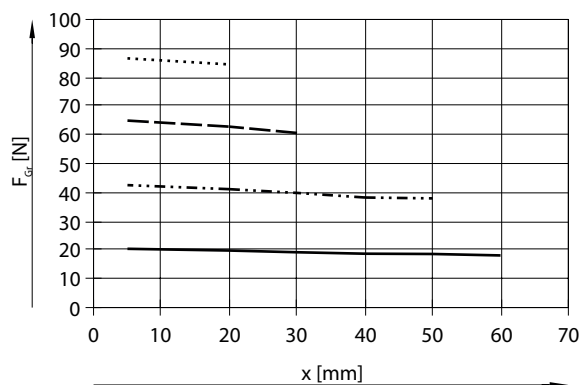
DHPC-10-A/DHPC-L-10-A



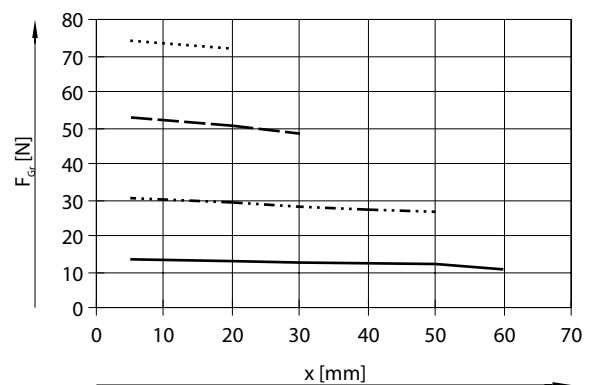
DHPC-10-A-NC/DHPC-L-10-A-NC



DHPC-16-A/DHPC-L-16-A



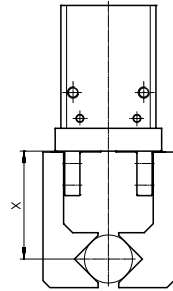
DHPC-16-A-NC/DHPC-L-16-A-NC



Datasheet

Gripping force  $F_{Gr}$  per gripper jaw as a function of the operating pressure and lever arm  $x$

The gripping forces as a function of the operating pressure and lever arm can be determined from the following graphs.



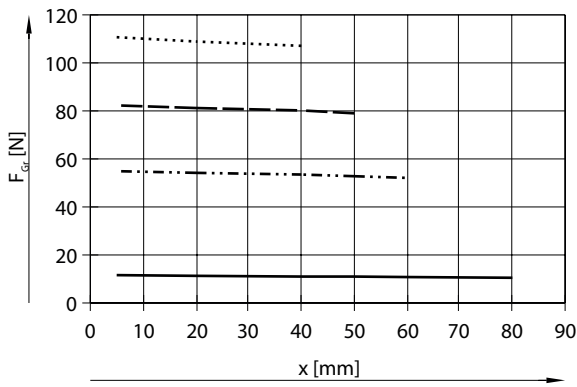
- 2 bar
- · - · - 4 bar
- - - - 6 bar
- 8 bar

 **Note**  
 Engineering software  
 Gripper selection  
 → [www.festo.com](http://www.festo.com)

External gripping (closing)

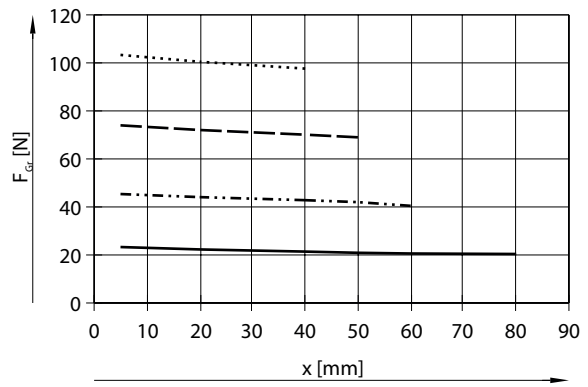
Double-acting

DHPC-20-A/DHPC-L-20-A

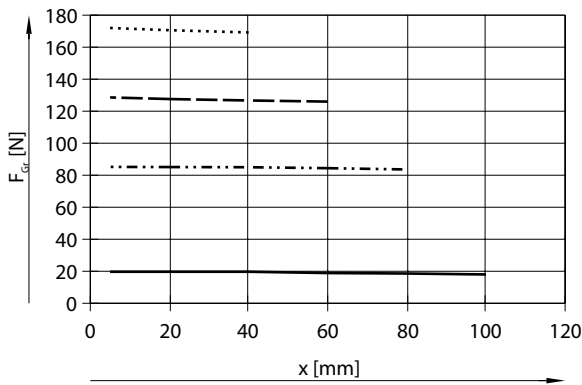


Single-acting

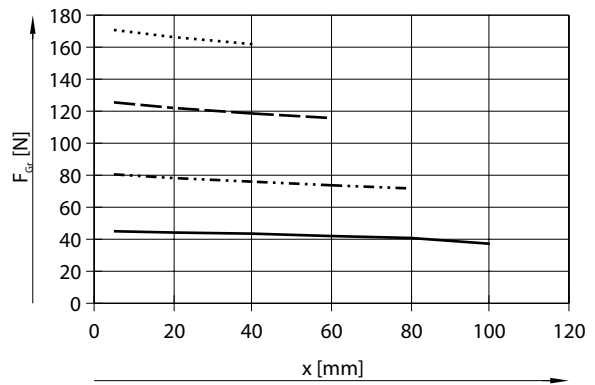
DHPC-20-A-NO/DHPC-L-20-A-NO



DHPC-25-A/DHPC-L-25-A



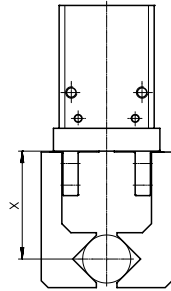
DHPC-25-A-NO/DHPC-L-25-A-NO



Datasheet

Gripping force  $F_{Gr}$  per gripper jaw as a function of the operating pressure and lever arm  $x$

The gripping forces as a function of the operating pressure and lever arm can be determined from the following graphs.



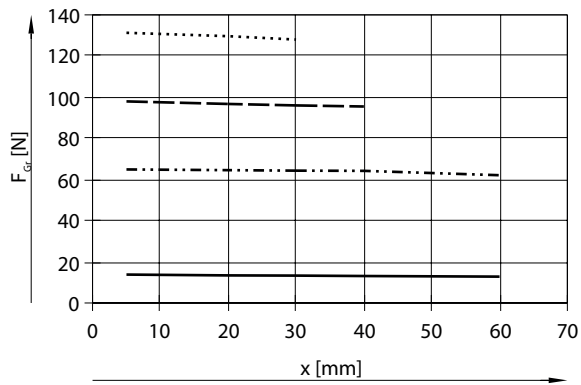
- 2 bar
- · - · - 4 bar
- - - - 6 bar
- 8 bar

**Note**  
 Engineering software  
 Gripper selection  
 → [www.festo.com](http://www.festo.com)

Internal gripping (opening)

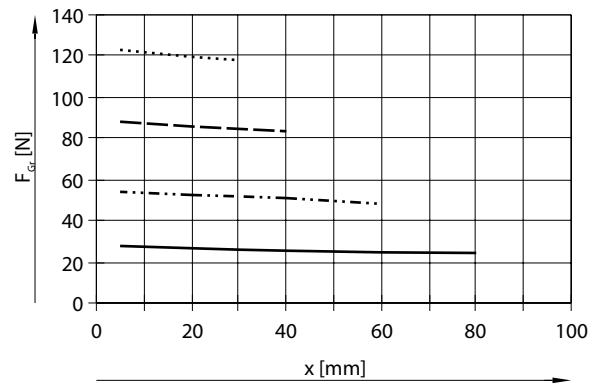
Double-acting

DHPC-20-A/DHPC-L-20-A

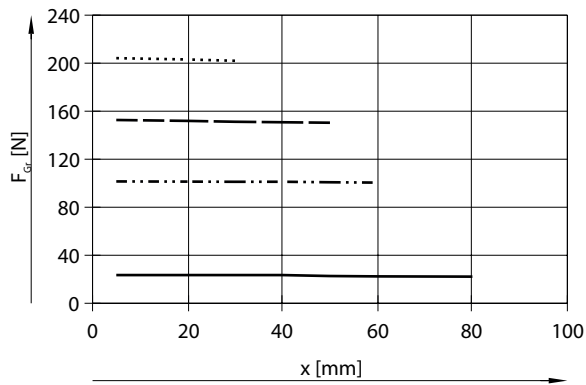


Single-acting

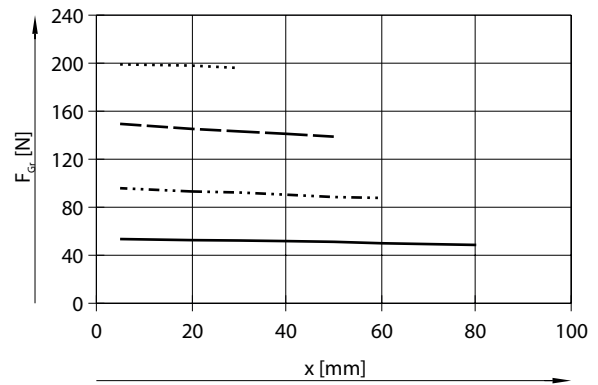
DHPC-20-A-NC/DHPC-L-20-A-NC



DHPC-25-A/DHPC-L-25-A



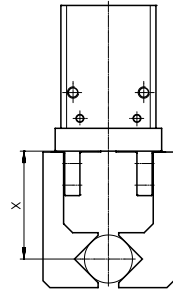
DHPC-25-A-NC/DHPC-L-25-A-NC



Datasheet

**Gripping force  $F_{Gr}$  per gripper jaw as a function of the operating pressure and lever arm  $x$**

The gripping forces as a function of the operating pressure and lever arm can be determined from the following graphs.

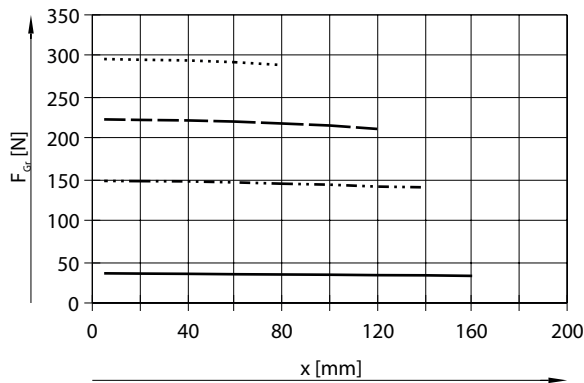


- 2 bar
- · - · - 4 bar
- - - - - 6 bar
- · · · · 8 bar

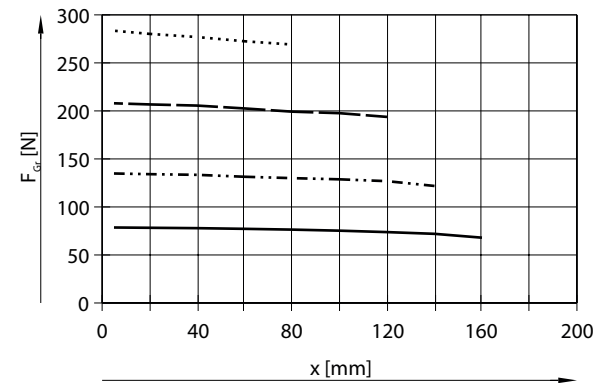
**Note**  
 Engineering software  
 Gripper selection  
 → [www.festo.com](http://www.festo.com)

**External gripping (closing)**

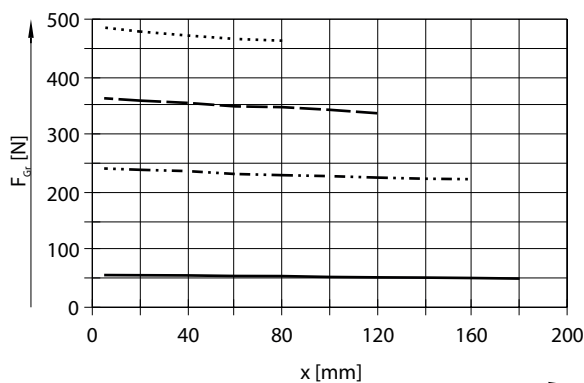
**Double-acting**  
 DHPC-32-A



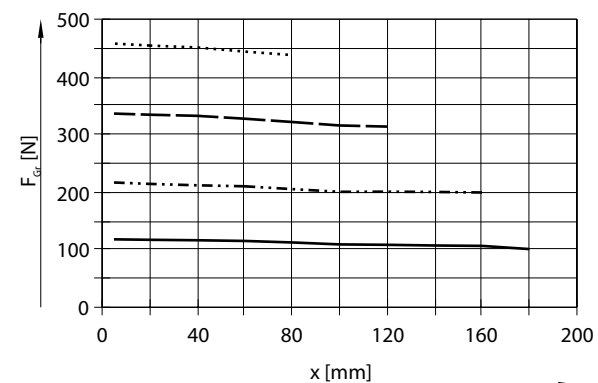
**Single-acting**  
 DHPC-32-A-NO



DHPC-40-A



DHPC-40-A-NO

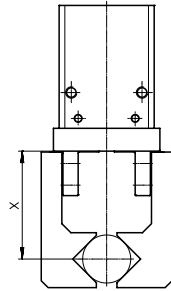




Datasheet

Gripping force  $F_{Gr}$  per gripper jaw as a function of the operating pressure and lever arm  $x$

The gripping forces as a function of the operating pressure and lever arm can be determined from the following graphs.



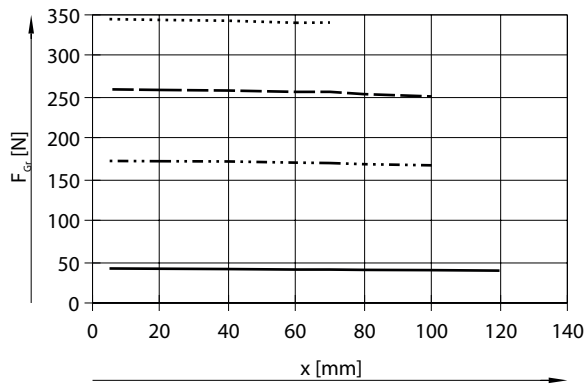
- 2 bar
- · - · - 4 bar
- - - - 6 bar
- 8 bar

**Note**  
 Engineering software  
 Gripper selection  
 → [www.festo.com](http://www.festo.com)

Internal gripping (opening)

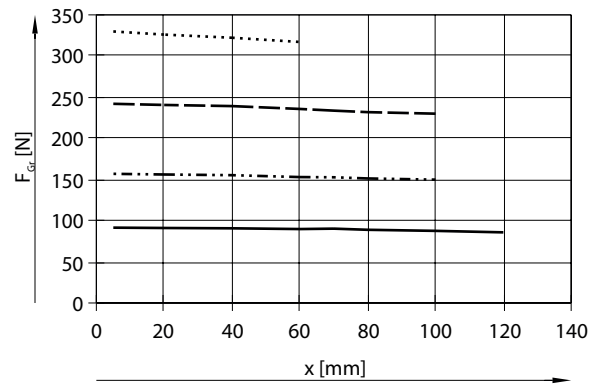
Double-acting

DHPC-32-A

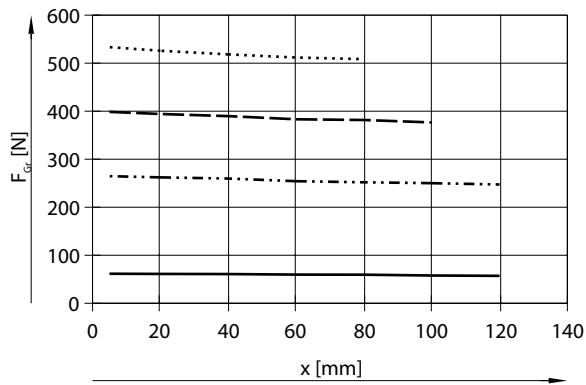


Single-acting

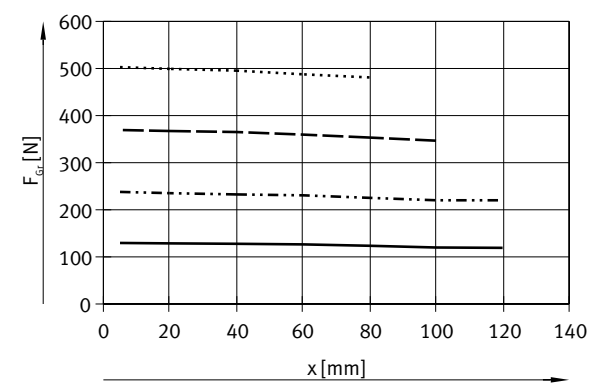
DHPC-32-A-NC



DHPC-40-A



DHPC-40-A-NC

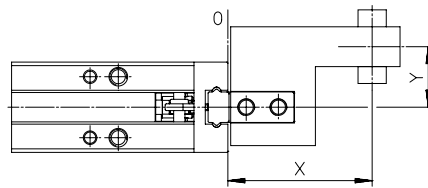


## Datasheet

### Gripping force $F_{Gr}$ per gripper jaw at 6 bar as a function of lever arm $x$ and eccentricity $y$

External and internal gripping (closing and opening)

The gripping forces at 6 bar as a function of eccentric application of force (distance from the zero co-ordinate line shown opposite to the pressure point at which the fingers grip the workpiece) and the maximum permissible off-centre point at which force is applied can be determined for the various sizes using the following graphs (→ page 19/21).



### Calculation example

Assuming:

DHPC-16-A

Lever arm  $x = 10$  mm

Eccentricity  $y = 11$  mm

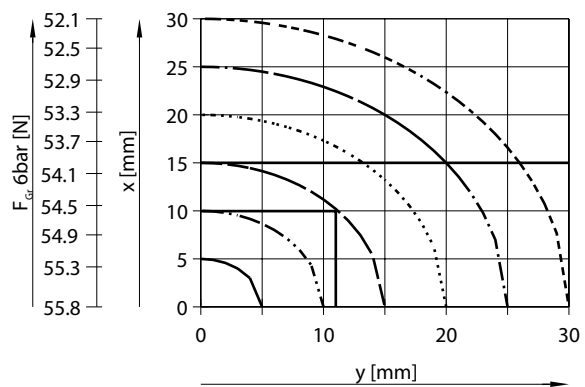
To be determined:

Gripping force at 6 bar

Procedure:

- Determine the intersection  $xy$  between the lever arm  $x$  and eccentricity  $y$  in the graph

- Draw an arc (with centre at origin) through intersection  $xy$
  - Determine the intersection between the arc and X-axis
  - Read the gripping force
- Result:  
gripping force  $F_{Gr} = \text{approx. } 53.9$  N

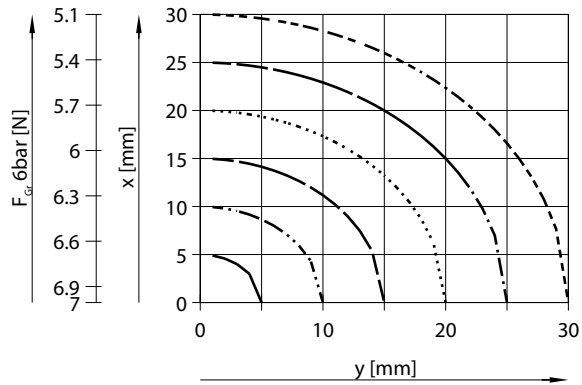


Datasheet

External gripping (closing)

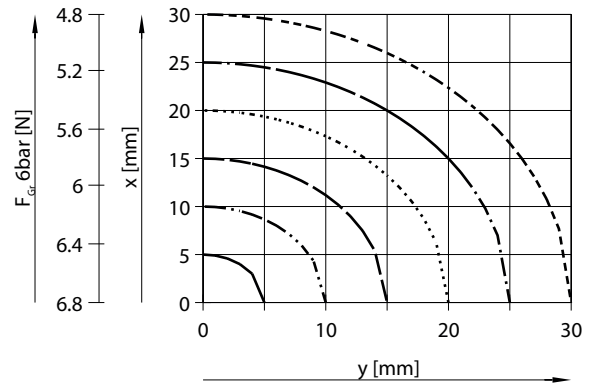
Double-acting

DHPC-6-A

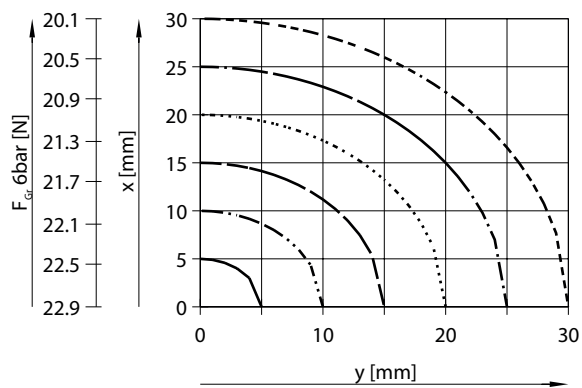


Single-acting

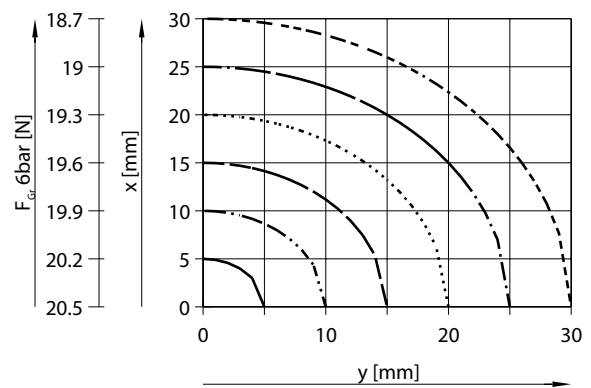
DHPC-6-A-NC



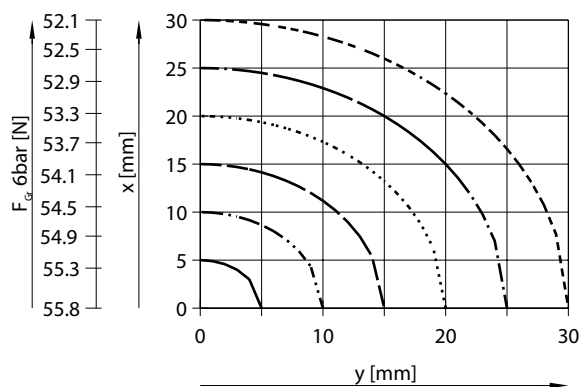
DHPC-10-A/DHPC-L-10-A



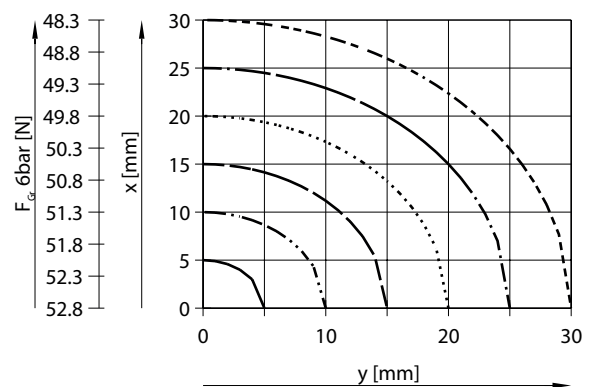
DHPC-10-A-NC/DHPC-L-10-A-NC



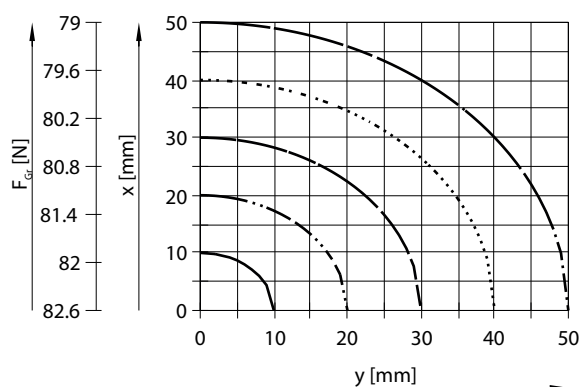
DHPC-16-A/DHPC-L-16-A



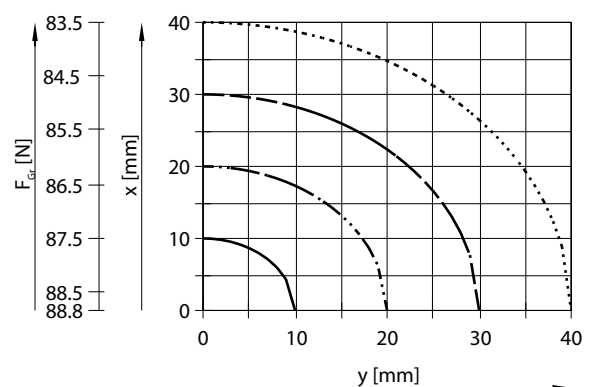
DHPC-16-A-NC/DHPC-L-16-A-NC



DHPC-20-A/DHPC-L-20-A



DHPC-20-A-NC/DHPC-L-20-A-NC

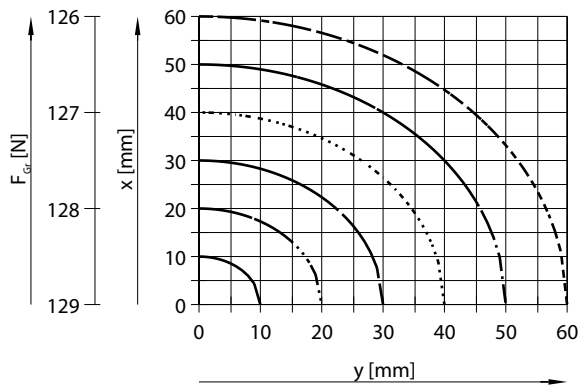


Datasheet

External gripping (closing)

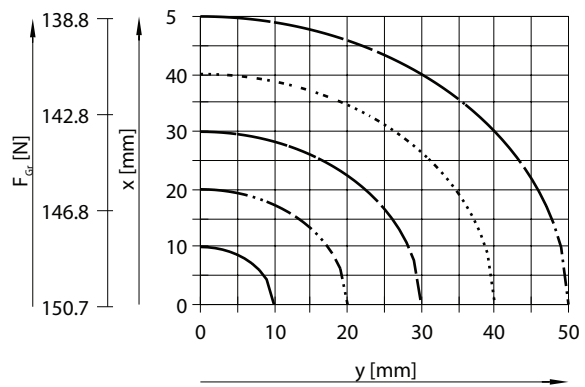
Double-acting

DHPC-25-A/DHPC-L-25-A

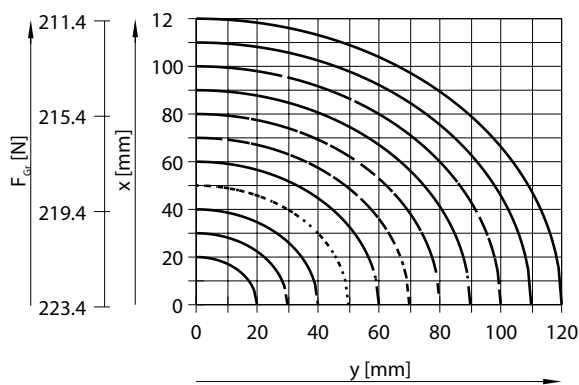


Single-acting

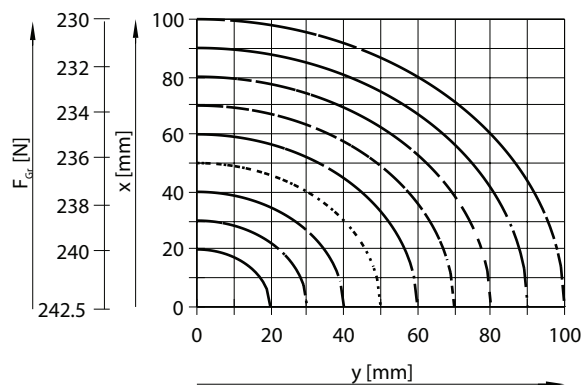
DHPC-25-A-NC/DHPC-L-25-A-NC



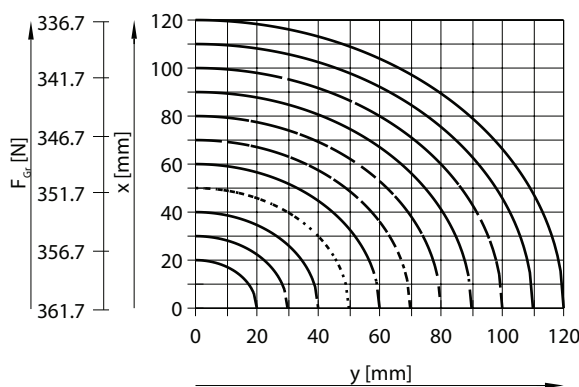
DHPC-32-A



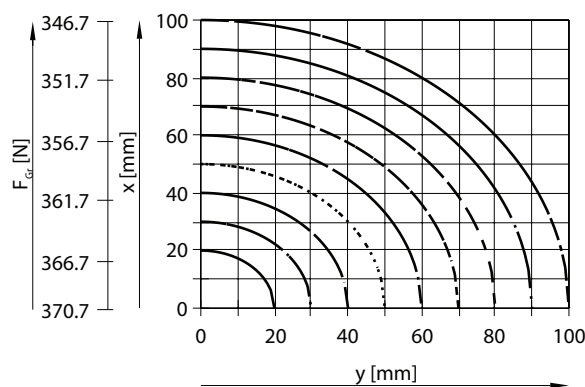
DHPC-32-A-NC



DHPC-40-A



DHPC-40-A-NC

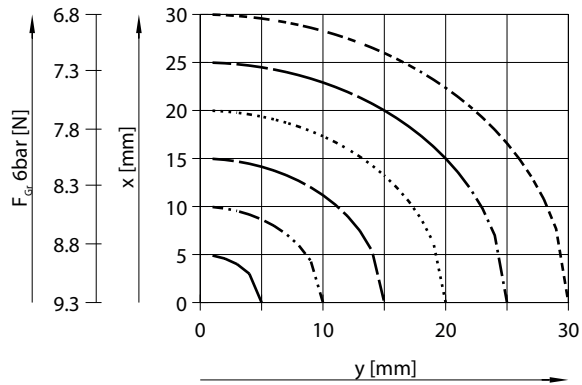


Datasheet

Internal gripping (opening)

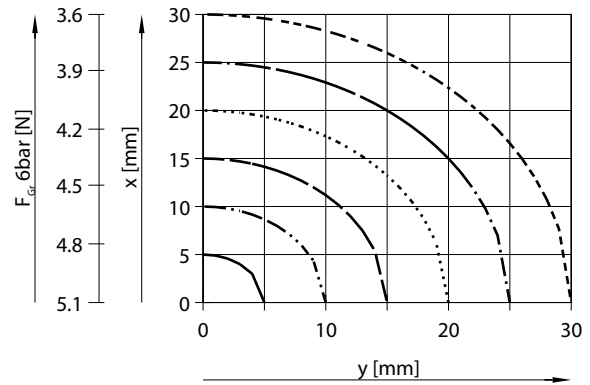
Double-acting

DHPC-6-A

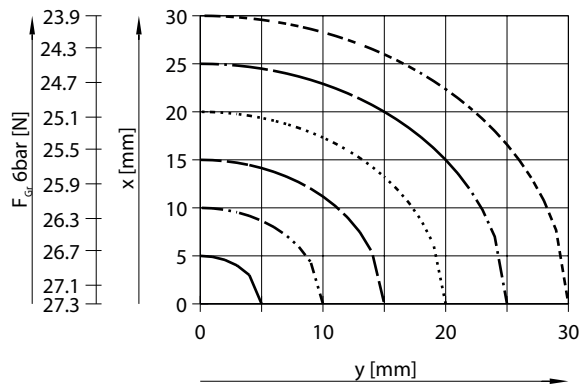


Single-acting

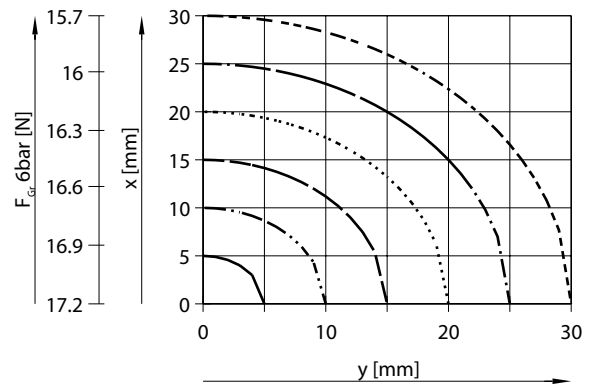
DHPC-6-A-NO



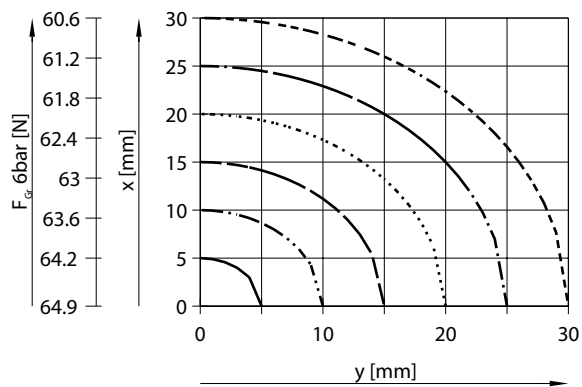
DHPC-10-A/DHPC-L-10-A



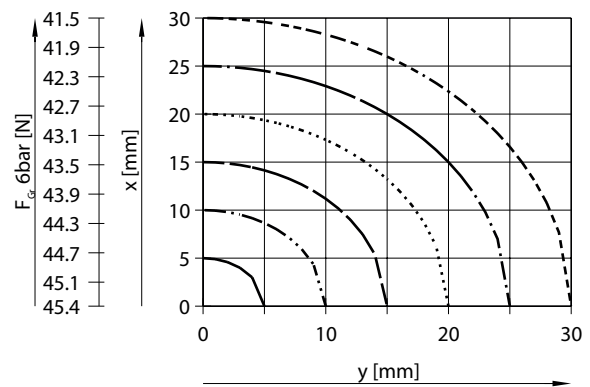
DHPC-10-A-NO/DHPC-L-10-A-NO



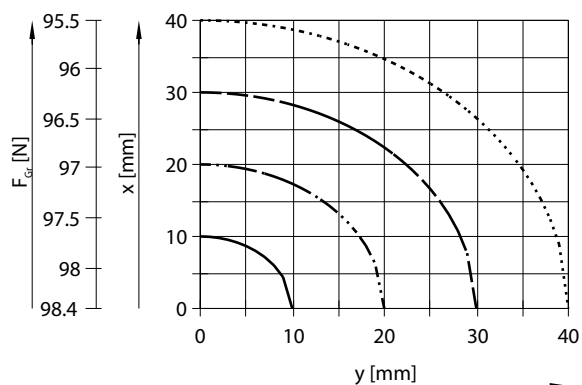
DHPC-16-A/DHPC-L-16-A



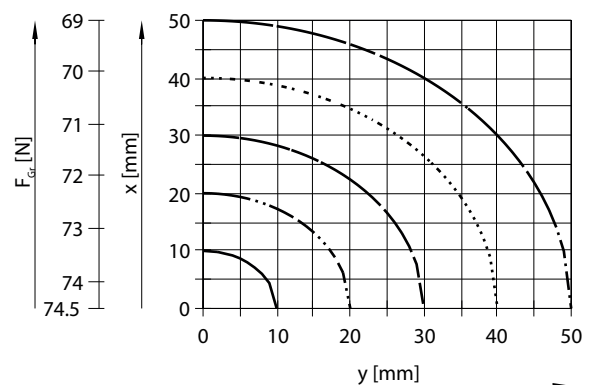
DHPC-16-A-NO/DHPC-L-16-A-NO



DHPC-20-A/DHPC-L-20-A



DHPC-20-A-NO/DHPC-L-20-A-NO

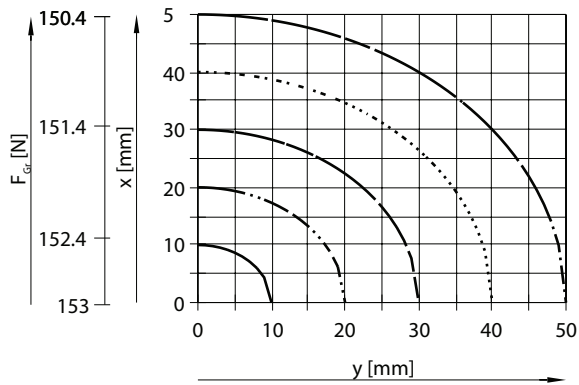


Datasheet

Internal gripping (opening)

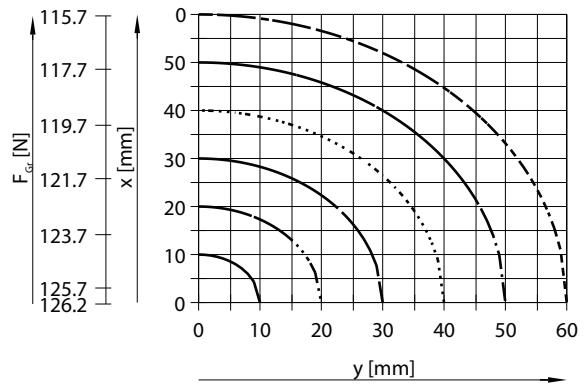
Double-acting

DHPC-25-A/DHPC-L-25-A

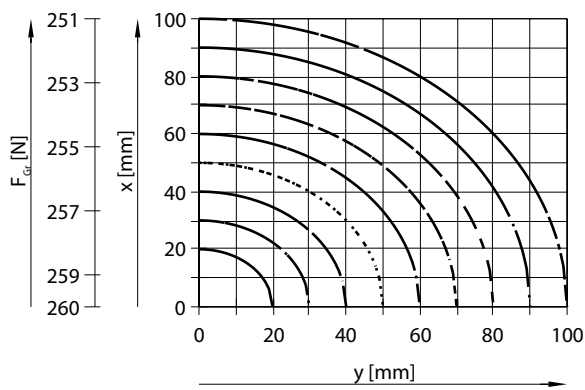


Single-acting

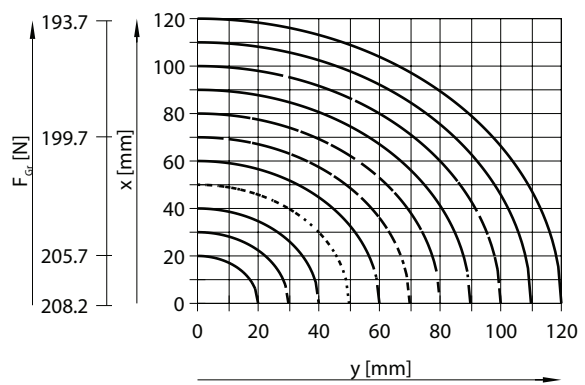
DHPC-25-A-NO/DHPC-L-25-A-NO



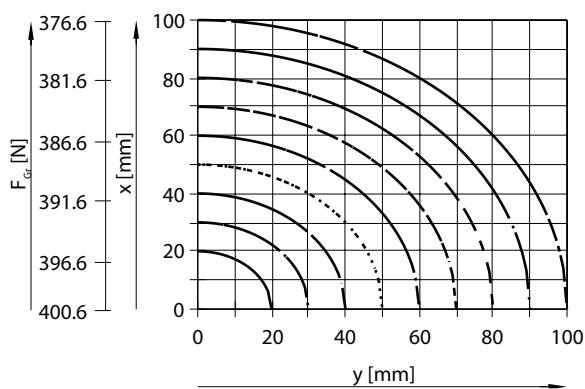
DHPC-32-A



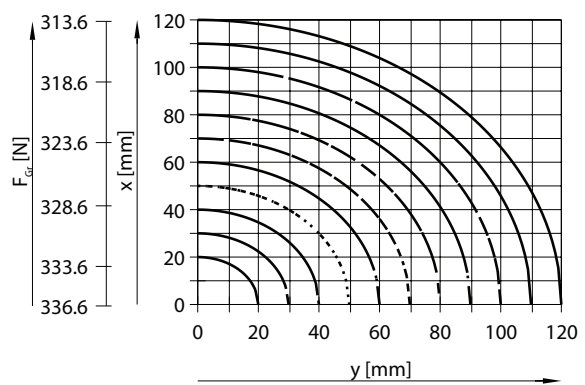
DHPC-32-A-NO



DHPC-40-A



DHPC-40-A-NO

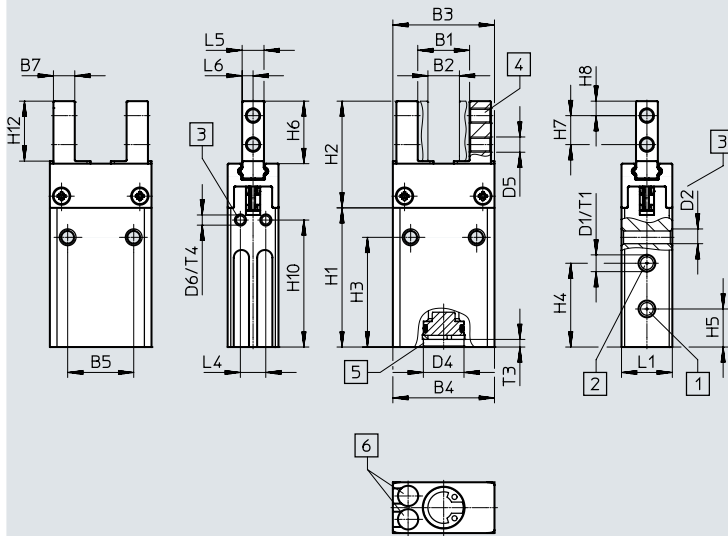


Datasheet

Dimensions

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DHPC-6-...-S: Pneumatic connection on the side



- [1] Pneumatic connection, opening
- [2] Pneumatic connection, closing
- [3] Threaded hole for mounting the gripper
- [4] Threaded hole for mounting the gripper fingers
- [5] Centring hole
- [6] C-slot for proximity switch

| Size             | B1   | B2  | B3   | B4   | B5 | B7   | D1 | D2 | D4<br>∅<br>H11 | D5 | D6 | H1   | H2 | H3   |
|------------------|------|-----|------|------|----|------|----|----|----------------|----|----|------|----|------|
| [mm]             |      |     | -0.2 | +0.3 |    | -0.1 |    |    |                |    |    |      |    |      |
| DHPC-6-A-S       | 10.2 | 6.2 | 20   | 20   | 13 | 4.3  | M3 | M3 | 8              | M3 | M2 | 27.4 | 21 | 21.6 |
| DHPC-6-A-NO/NC-S |      |     |      |      |    |      |    |    |                |    |    | 32   |    | 24.8 |

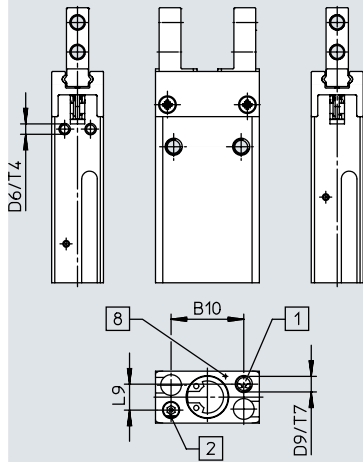
| Size             | H4   | H5  | H6   | H7  | H8  | H10 | H12  | L1    | L4 | L5    | L6  | T1  | T3  | T4  |
|------------------|------|-----|------|-----|-----|-----|------|-------|----|-------|-----|-----|-----|-----|
| [mm]             |      |     |      |     |     |     |      | +0.25 |    | -0.05 |     |     |     |     |
| DHPC-6-A-S       | 16.5 | 7.5 | 12.3 | 5.7 | 2.9 | 25  | 11.8 | 10    | 5  | 4.3   | 2.2 | 4.5 | 1.5 | 4.5 |
| DHPC-6-A-NO/NC-S |      |     |      |     |     | 28  |      |       |    |       |     |     |     |     |

Datasheet

**Dimensions**

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DHPC-6-...-B: Pneumatic connection underneath



- [1] Pneumatic connection, opening
- [2] Pneumatic connection, closing
- [8] Marking: pneumatic connection, opening

| Size             | B10 | D6 | D9 | L9 | T4  | T7 |
|------------------|-----|----|----|----|-----|----|
| [mm]             |     |    |    |    |     |    |
| DHPC-6-A-B       | 14  | M2 | M3 | 5  | 4.5 | 4  |
| DHPC-6-A-NO/NC-B |     |    |    |    |     |    |

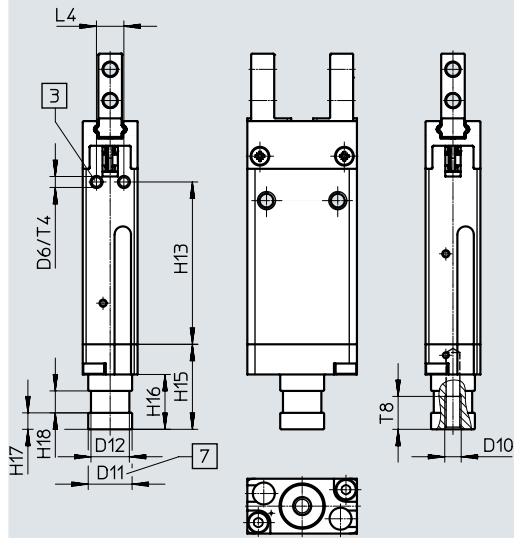


Datasheet

Dimensions

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DHPC-6-...-Z: Pneumatic connection via mounting spigot



[3] Threaded hole for mounting the gripper

[7] Mounting spigot

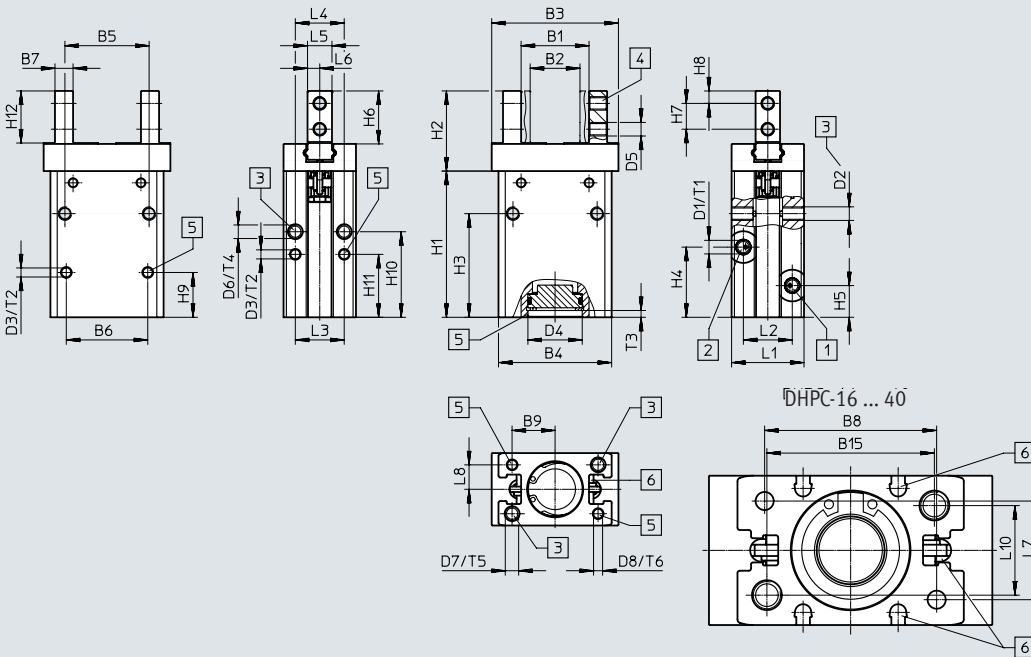
| Size             | D6 | D10 | D11<br>∅<br>f8 | D12<br>∅ | H13 | H15  | H16 | H17 | H18 | L4 | T4  | T8 |
|------------------|----|-----|----------------|----------|-----|------|-----|-----|-----|----|-----|----|
| [mm]             |    |     |                |          |     |      |     |     |     |    |     |    |
| DHPC-6-A-NO/NC-Z | M2 | M5  | 8              | 7        | 28  | 15.5 | 10  | 3   | 4   | 5  | 4.5 | 6  |

Datasheet

**Dimensions**

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DHPC-10...40...S: Pneumatic connection on the side



- [1] Pneumatic connection, opening
- [2] Pneumatic connection, closing
- [3] Threaded hole for mounting the gripper
- [4] Threaded hole for mounting the gripper fingers
- [5] Centring hole
- [6] DHPC-10: T-slot for proximity switch  
DHPC-16 ... 40: C-slot and T-slot for proximity switch

| Size               | B1   | B2   | B3   | B4   | B5   | B6    | B7   | B8    | B9    | B15 | D1 | D2 | D3<br>∅<br>H9 | D4<br>∅ | D5    |    |
|--------------------|------|------|------|------|------|-------|------|-------|-------|-----|----|----|---------------|---------|-------|----|
| [mm]               |      |      | -0.2 | +0.3 |      | ±0.02 | -0.1 | ±0.02 | ±0.02 |     |    |    |               |         |       |    |
| DHPC-10-A-S        | 15   | 11   | 28   | 25   | 18.6 | 18    | 4    | 19    | 9.5   | 19  | M3 | M3 | 2             | 12 H9   | M3    |    |
| DHPC-L-10-A-S      | 19   |      | 34   |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-10-A-NO/NCS   | 15   |      | 28   |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-L-10-A-NO/NCS | 19   |      | 34   |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-16-A-S        | 19.8 | 13.8 | 37.4 | 32   | 27   | 24.4  | 5    | 25    | 12.5  | 25  |    | M4 | 3             | 17 H8   |       |    |
| DHPC-L-16-A-S      | 25.8 |      | 46.4 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-16-A-NO/NCS   | 19.8 |      | 37.4 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-L-16-A-NO/NCS | 25.8 |      | 46.4 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-20-A-S        | 25.6 | 15.6 | 50.2 | 40   | 31.6 | 28.4  | 8    | 31    | 15.5  | 30  | M5 | M5 | 4             | 21 H8   | M4    |    |
| DHPC-L-20-A-S      | 33.6 |      | 62.2 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-20-A-NO/NCS   | 25.6 |      | 50.2 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-L-20-A-NO/NCS | 33.6 |      | 62.2 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-25-A-S        | 32.6 | 18.6 | 62.6 | 50   | 37.4 | 33    | 10   | 38    | 19    | 37  |    | M5 | M6            | 4       | 26 H8 | M5 |
| DHPC-L-25-A-S      | 40.6 |      | 74.6 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-25-A-NO/NCS   | 32.6 |      | 62.6 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-L-25-A-NO/NCS | 40.6 |      | 74.6 |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-32-A-S        | 47.9 | 25.9 | 97   | 60   | 40   | 46    | 12   | 46    | 23    | 46  | M8 | 5  | 33 H9         | M6      |       |    |
| DHPC-32-A-NO/NCS   | 47.9 |      |      |      |      |       |      |       |       |     |    |    |               |         |       |    |
| DHPC-40-A-S        | 60.9 | 30.9 | 118  | 72   | 54   | 28    | 14   | 56    | 28    | 56  |    | M8 | 5             | 41 H9   | M8    |    |
| DHPC-40-A-NO/NCS   | 60.9 |      |      |      |      |       |      |       |       |     |    |    |               |         |       |    |

## Datasheet

| Size<br>[mm]       | D6 | D7 | D8<br>∅<br>H9 | H1    | H2   | H3    | H4   | H5   | H6   | H7  | H8   | H9<br>+0.1 | H10   | H11<br>+0.1 | H12  |
|--------------------|----|----|---------------|-------|------|-------|------|------|------|-----|------|------------|-------|-------------|------|
| DHPC-10-A-S        | M3 | M3 | 2             | 32.3  | 17.7 | 22.9  | 15.5 | 7    | 11.7 | 5.7 | 2.75 | 9.9        | 18.9  | 13.9        | 11.5 |
| DHPC-L-10-A-S      |    |    |               | 39.9  |      | 26    | 18.9 |      |      |     |      | 12         | 21    | 16          |      |
| DHPC-10-A-NO/NCS   |    |    |               | 41.4  |      | 32    | 19   |      |      |     |      | 28         | 23    |             |      |
| DHPC-L-10-A-NO/NCS |    |    |               | 48.06 |      | 34.16 | 21   |      |      |     |      | 20.16      | 29.16 | 24.16       |      |
| DHPC-16-A-S        | M4 | M4 | 3             | 43.1  | 24.3 | 31.7  | 26.5 | 9    | 16.3 | 7   | 4    | 14         | 25.6  | 19          | 15   |
| DHPC-L-16-A-S      |    |    |               | 46.8  |      | 34.3  | 30.2 |      |      |     |      | 29.3       |       |             |      |
| DHPC-16-A-NO/NCS   |    |    |               | 43.1  |      | 31.7  | 26.5 |      |      |     |      | 25.6       |       |             |      |
| DHPC-L-16-A-NO/NCS |    |    |               | 51.1  |      | 38.6  | 33.4 |      |      |     |      | 18.3       | 33.6  | 23.3        |      |
| DHPC-20-A-S        | M5 | M5 | 4             | 53.6  | 30.8 | 41    | 33   | 10.2 | 21.3 | 9   | 5    | 16         | 33    | 23          | 20   |
| DHPC-L-20-A-S      |    |    |               | 59.2  |      | 44    | 36   |      |      |     |      | 36         |       |             |      |
| DHPC-20-A-NO/NCS   |    |    |               | 53.6  |      | 41    | 33   |      |      |     |      | 33         |       |             |      |
| DHPC-L-20-A-NO/NCS |    |    |               | 62.9  |      | 47.7  | 40   |      |      |     |      | 19.7       | 39.7  | 26.7        |      |
| DHPC-25-A-S        | M6 | M6 | 5             | 65.1  | 37.6 | 45.5  | 37.5 | 10.5 | 26.7 | 12  | 6    | 20         | 36    | 25          | 25   |
| DHPC-L-25-A-S      |    |    |               | 70.1  |      | 49    | 41.7 |      |      |     |      | 24         | 40    | 29          |      |
| DHPC-25-A-NO/NCS   |    |    |               | 65.1  |      | 45.5  | 37.5 |      |      |     |      | 22         | 39    | 30          |      |
| DHPC-L-25-A-NO/NCS |    |    |               | 74.1  |      | 53    | 45.2 |      |      |     |      | 31.4       | 49.4  | 40.4        |      |
| DHPC-32-A-S        | M8 | M8 | 5             | 71    | 43.5 | 48    | 39   | 11   | 31.5 | 14  | 7    | 22         | 39    | 30          | 29.3 |
| DHPC-L-32-A-S      |    |    |               | 80.4  |      | 57.4  | 41   |      |      |     |      | 28         | 49    | 36          |      |
| DHPC-32-A-NO/NCS   |    |    |               | 86.4  |      | 60.4  | 47.4 |      |      |     |      | 37.3       | 58.3  | 45.3        |      |
| DHPC-40-A-S        | M8 | M8 | 5             | 86.4  | 54.5 | 60.4  | 47.4 | 12   | 39.5 | 17  | 9    | 28         | 49    | 36          | 36   |
| DHPC-L-40-A-NO/NCS |    |    |               | 95.7  |      | 69.7  | 49   |      |      |     |      | 37.3       | 58.3  | 45.3        |      |

| Size<br>[mm]       | L1<br>+0.3 | L2   | L3<br>±0.02 | L4   | L5<br>-0.05 | L6  | L7 <sup>1)</sup><br>±0.02 | L8<br>±0.02 | L10  | T1  | T2 | T3  | T4  | T5 | T6 |
|--------------------|------------|------|-------------|------|-------------|-----|---------------------------|-------------|------|-----|----|-----|-----|----|----|
| DHPC-10-A-S        | 16         | 10.8 | 10.8        | 10.8 | 5.4         | 2.7 | 10.8                      | 5.4         | 10.8 | 4   | 3  | 1.5 | 4   | 4  | 3  |
| DHPC-L-10-A-S      |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-10-A-NO/NCS   |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-L-10-A-NO/NCS |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-16-A-S        | 20         | 11.9 | 12          | 12   | 7           | 3.5 | 13                        | 6.5         | 13   | 4.5 | 4  | 2   | 4.5 | 6  | 4  |
| DHPC-L-16-A-S      |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-16-A-NO/NCS   |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-L-16-A-NO/NCS |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-20-A-S        | 26         | 15.6 | 16          | 14   | 8.3         | 4.2 | 17                        | 8.5         | 16.6 | 6   | 4  | 3   | 8   | 10 | 4  |
| DHPC-L-20-A-S      |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-20-A-NO/NCS   |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-L-20-A-NO/NCS |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-25-A-S        | 33         | 20.4 | 21          | 21   | 12          | 6   | 21.8                      | 10.9        | 19.8 | 7.5 | 5  | 3.5 | 10  | 12 | 4  |
| DHPC-L-25-A-S      |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-25-A-NO/NCS   |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-L-25-A-NO/NCS |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-32-A-S        | 40         | 24   | 26          | 26   | 15.2        | 7.6 | 26                        | 13          | 26   | 5   | 4  | 4   | 13  | 17 | 5  |
| DHPC-L-32-A-S      |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-32-A-NO/NCS   | 48         | 28   | 32          | 32   | 18          | 9   | 32                        | 16          | 32   | 8   | 5  | 4   | 13  | 17 | 5  |
| DHPC-L-40-A-S      |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |
| DHPC-40-A-NO/NCS   | 48         | 28   | 32          | 32   | 18          | 9   | 32                        | 16          | 32   | 8   | 5  | 4   | 13  | 17 | 5  |
| DHPC-L-40-A-NO/NCS |            |      |             |      |             |     |                           |             |      |     |    |     |     |    |    |

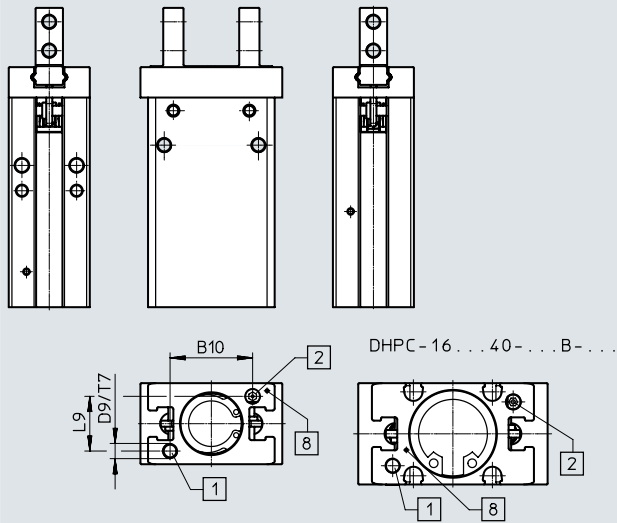
1) Dimension L7 refers exclusively to the distance between the centring hole [5] and the threaded hole for mounting the gripper [3]

Datasheet

**Dimensions**

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DHPC-10...40-...-B: Pneumatic connection underneath



- [1] Pneumatic connection, opening
- [2] Pneumatic connection, closing
- [8] Marking: pneumatic connection, closing

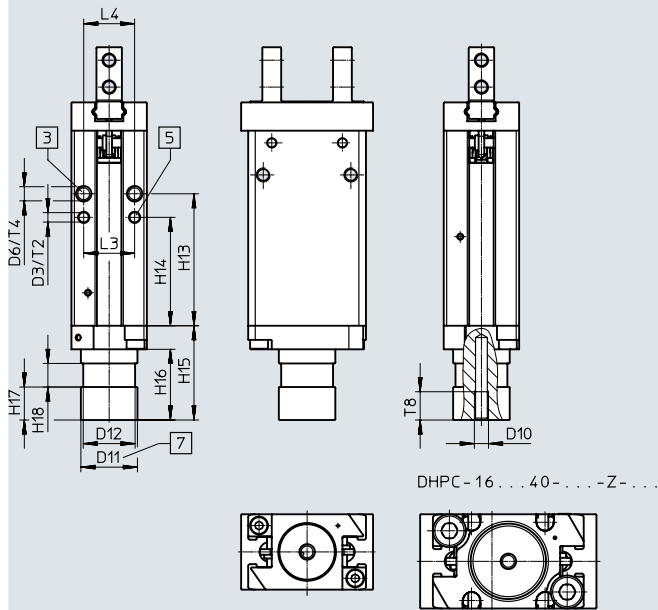
| Size                | B10  | D9 | L9   | T7  |
|---------------------|------|----|------|-----|
| [mm]                |      |    |      |     |
| DHPC-10-A-B         | 16.3 | M3 | 10.8 | 4   |
| DHPC-L-10-A-B       |      |    |      |     |
| DHPC-10-A-NO/NC-B   |      |    |      |     |
| DHPC-L-10-A-NO/NC-B |      |    |      |     |
| DHPC-16-A-B         | 23.8 | M3 | 12.6 | 4.5 |
| DHPC-L-16-A-B       |      |    |      |     |
| DHPC-16-A-NO/NC-B   |      |    |      |     |
| DHPC-L-16-A-NO/NC-B |      |    |      |     |
| DHPC-20-A-B         | 29   | M3 | 16.6 | 7   |
| DHPC-L-20-A-B       |      |    |      |     |
| DHPC-20-A-NO/NC-B   |      |    |      |     |
| DHPC-L-20-A-NO/NC-B |      |    |      |     |
| DHPC-25-A-B         | 38   | M5 | 21   | 7   |
| DHPC-L-25-A-B       |      |    |      |     |
| DHPC-25-A-NO/NC-B   |      |    |      |     |
| DHPC-L-25-A-NO/NC-B |      |    |      |     |
| DHPC-32-A-B         | 46   | M5 | 26   | 8   |
| DHPC-L-32-A-B       |      |    |      |     |
| DHPC-32-A-NO/NC-B   |      |    |      |     |
| DHPC-L-32-A-NO/NC-B |      |    |      |     |
| DHPC-40-A-B         | 56   | M5 | 32   | 8   |
| DHPC-L-40-A-B       |      |    |      |     |
| DHPC-40-A-NO/NC-B   |      |    |      |     |

Datasheet

Dimensions

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DHPC-10...40-...-Z: Pneumatic connection via mounting spigot



- [3] Threaded hole for mounting the gripper
- [5] Centring hole
- [7] Mounting spigot

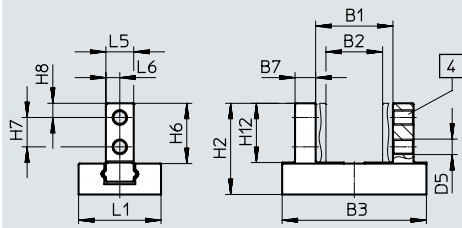
| Size                | D3      | D6 | D10 | D11     | D12  | H13  | H14  | H15 | H16 | H17 | H18 | L3    | L4   | T2 | T4   | T8 |
|---------------------|---------|----|-----|---------|------|------|------|-----|-----|-----|-----|-------|------|----|------|----|
| [mm]                | ∅<br>H9 |    |     | ∅<br>f8 | ∅    |      |      |     |     |     |     | ±0.02 |      |    |      |    |
| DHPC-10-A-NO/NC-Z   | 2       | M3 | M5  | 12      | 11   | 28   | 23   | 20  | 15  | 7   | 5   | 10.8  | 10.8 | 3  | 4    | 6  |
| DHPC-L-10-A-NO/NC-Z |         |    |     |         |      | 29.2 | 24.2 |     |     |     |     |       |      |    | 4.5  | 8  |
| DHPC-16-A-NO/NC-Z   | 3       | M4 |     | 16      | 14   | 25.6 | 19   | 28  | 18  | 8   |     | 16    | 14   | 4  | 8    | 10 |
| DHPC-L-16-A-NO/NC-Z |         |    |     |         |      | 33.6 | 23.3 |     |     |     |     |       |      |    |      |    |
| DHPC-20-A-NO/NC-Z   | 4       | M5 |     | 20      | 18   | 33   | 23   | 30  | 20  | 10  |     | 21    | 21   | 4  | 10   | 10 |
| DHPC-L-20-A-NO/NC-Z |         |    |     |         |      | 39.7 | 26.7 |     |     |     |     |       |      |    |      |    |
| DHPC-25-A-NO/NC-Z   |         | M6 |     | 25      | 23   | 36   | 25   | 34  | 23  | 13  |     | 26    | 26   | 5  | 13   | 10 |
| DHPC-L-25-A-NO/NC-Z | 40      |    |     |         |      | 29   |      |     |     |     |     |       |      |    |      |    |
| DHPC-32-A-NO/NC-Z   | 5       | M8 | 32  | 30      | 49.4 | 40.4 | 35.4 | 23  | 13  | 26  | 26  | 5     | 13   | 10 |      |    |
| DHPC-L-40-A-NO/NC-Z |         |    |     |         | 58.3 | 45.3 |      |     |     |     |     |       |      |    | 37.4 |    |

Datasheet

Dimensions – Gripper finger mounting

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DHPC-...-A: Standard



[4] Threaded hole for mounting the gripper fingers

| Size        | B1   | B2   | B3        | B7   | D5 | H2   | H6   |
|-------------|------|------|-----------|------|----|------|------|
| [mm]        |      |      |           | -0.1 |    |      |      |
| DHPC-6-A    | 10.2 | 6.2  | 20 -0.2   | 4.2  | M3 | 21   | 12.3 |
| DHPC-10-A   | 15   | 11   | 28 -0.2   | 4    |    | 17.7 | 11.7 |
| DHPC-L-10-A | 19   |      | 34 -0.2   | 5    |    | 24.3 | 16.3 |
| DHPC-16-A   | 19.8 | 13.8 | 37.4 -0.2 |      | 8  |      |      |
| DHPC-L-16-A | 25.8 |      | 46.4 -0.2 |      |    |      |      |
| DHPC-20-A   | 25.6 | 15.6 | 50.2 -0.2 | 10   | M5 | 37.6 | 26.6 |
| DHPC-L-20-A | 33.6 |      | 62.2 -0.2 |      |    |      |      |
| DHPC-25-A   | 32.6 | 18.6 | 62.6      | 12   | M6 | 43.5 | 31.5 |
| DHPC-L-25-A | 40.6 |      | 74.6      |      |    |      |      |
| DHPC-32-A   | 47.9 | 25.9 | 97        | 14   | M8 | 54.5 | 39.5 |
| DHPC-40-A   | 60.9 | 30.9 | 118       |      |    |      |      |

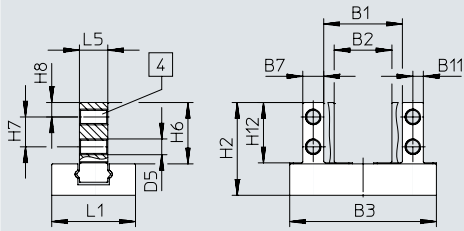
| Size        | H7  | H8  | H12  | L1 | L5    | L6  |
|-------------|-----|-----|------|----|-------|-----|
| [mm]        |     |     |      |    | -0.05 |     |
| DHPC-6-A    | 5.7 | 2.9 | 11.8 | 10 | 4.3   | 2.2 |
| DHPC-10-A   |     | 2.8 | 11.5 | 16 | 5.4   | 2.7 |
| DHPC-L-10-A |     |     |      |    |       |     |
| DHPC-16-A   | 7   | 4   | 15   | 20 | 7     | 3.5 |
| DHPC-L-16-A |     |     |      |    |       |     |
| DHPC-20-A   | 9   | 5   | 20   | 26 | 8.3   | 4.2 |
| DHPC-L-20-A |     |     |      |    |       |     |
| DHPC-25-A   | 12  | 6   | 37.6 | 33 | 12    | 6   |
| DHPC-L-25-A |     |     |      |    |       |     |
| DHPC-32-A   | 14  | 7   | 43.5 | 40 | 15.2  | 7.6 |
| DHPC-40-A   | 17  | 9   | 54.5 | 48 | 18    | 9   |

## Datasheet

## Dimensions – Gripper finger mounting

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DHPC-...-A-...-1: Mounting holes on the side



[4] Threaded hole for mounting the gripper fingers

| Size              | B1   | B2   | B3        | B7   | B11 | D5 | H2   |
|-------------------|------|------|-----------|------|-----|----|------|
| [mm]              |      |      |           | -0.1 |     |    |      |
| DHPC-6-A-...-1    | 10.2 | 6.2  | 20 -0.2   | 4.2  | 2.1 | M3 | 21   |
| DHPC-10-A-...-1   | 15   | 11   | 28 -0.2   | 4    | 2   |    | 17.7 |
| DHPC-L-10-A-...-1 | 19   |      | 34 -0.2   |      |     |    |      |
| DHPC-16-A-...-1   | 19.8 | 13.8 | 37.4 -0.2 | 5    | 2.5 | M4 | 24.3 |
| DHPC-L-16-A-...-1 | 25.8 |      | 46.4 -0.2 |      |     |    |      |
| DHPC-20-A-...-1   | 25.6 | 15.6 | 50.2 -0.2 | 8    | 4   | M5 | 30.8 |
| DHPC-L-20-A-...-1 | 33.6 |      | 62.2 -0.2 |      |     |    |      |
| DHPC-25-A-...-1   | 32.6 | 18.6 | 62.6      | 10   | 5   | M6 | 37.6 |
| DHPC-L-25-A-...-1 | 40.6 |      | 74.6      |      |     |    |      |
| DHPC-32-A-...-1   | 47.9 | 25.9 | 97        | 12   | 6   | M8 | 43.5 |
| DHPC-40-A-...-1   | 60.9 | 30.9 | 118       | 14   | 7   |    | 54.5 |

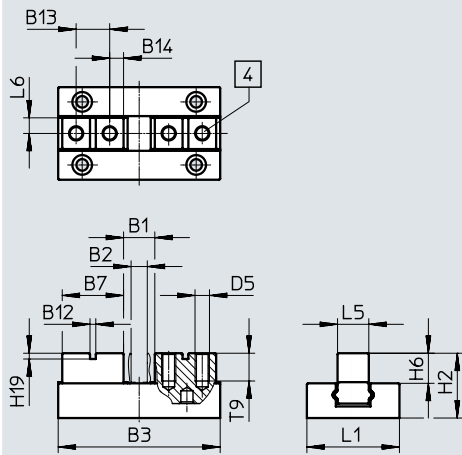
| Size              | H6   | H7  | H8  | H12  | L1 | L5    |
|-------------------|------|-----|-----|------|----|-------|
| [mm]              |      |     |     |      |    | -0.05 |
| DHPC-6-A-...-1    | 12.3 | 5.7 | 2.9 | 11.8 | 10 | 4.3   |
| DHPC-10-A-...-1   | 11.7 |     | 2.8 | 11.5 | 16 | 5.4   |
| DHPC-L-10-A-...-1 |      |     |     |      |    |       |
| DHPC-16-A-...-1   | 16.3 | 7   | 4   | 15   | 20 | 7     |
| DHPC-L-16-A-...-1 |      |     |     |      |    |       |
| DHPC-20-A-1       | 21.3 | 9   | 5   | 20   | 26 | 8.3   |
| DHPC-L-20-A-1     |      |     |     |      |    |       |
| DHPC-25-A-1       | 26.6 | 12  | 6   | 37.6 | 33 | 12    |
| DHPC-L-25-A-1     |      |     |     |      |    |       |
| DHPC-32-A-1       | 31.5 | 14  | 7   | 43.5 | 40 | 15.2  |
| DHPC-40-A-1       | 39.5 | 17  | 9   | 54.5 | 48 | 18    |

Datasheet

**Dimensions – Gripper finger mounting**

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DHPC-...-A-...-2: Flat gripper fingers



[4] Threaded hole for mounting the gripper fingers

| Size              | B1   | B2        | B3        | B7   | B12  | B13  | B14 | D5   |
|-------------------|------|-----------|-----------|------|------|------|-----|------|
| [mm]              |      |           |           | -0.1 | H9   |      |     |      |
| DHPC-6-A-...-2    | 5.4  | 1.4       | 20 -0.2   | 6.6  | –    | 3.8  | 1.4 | M2   |
| DHPC-10-A-...-2   |      |           | 28 -0.2   | 10.6 | 2    | 6    | 2.3 | M2.5 |
| DHPC-L-10-A-...-2 | 9.4  |           | 34 -0.2   | 11.6 |      | 7    |     |      |
| DHPC-16-A-...-2   | 7.4  |           | 37.4 -0.2 | 14.3 | 2.5  | 8    | 3.2 | M3   |
| DHPC-L-16-A-...-2 | 13.4 | 46.4 -0.2 | 15.8      | 3    | 9    | 3.4  |     |      |
| DHPC-20-A-...-2   | 12   | 50.2 -0.2 | 18.1      |      | 4    | 10.1 | 4   | M4   |
| DHPC-L-20-A-...-2 | 20   | 62.2 -0.2 | 20.1      | 12.1 |      | 4    |     |      |
| DHPC-25-A-...-2   | 16   | 2         | 62.6      | 22.3 | 4    | 11.9 | 5.2 | M5   |
| DHPC-L-25-A-...-2 | 24   |           | 74.6      | 24.3 |      | 13.1 | 5.6 |      |
| DHPC-32-A-...-2   | 24.9 |           | 2.9       | 97   | 34.6 | 5    | 20  | 7.3  |
| DHPC-40-A-...-2   | 32.9 | 118       |           | 41.1 | 6    | 23.1 | 9   | M8   |

| Size              | H2   | H6   | H19 | L1 | L5    | L6  | T9 |
|-------------------|------|------|-----|----|-------|-----|----|
| [mm]              |      |      |     |    | -0.05 |     |    |
| DHPC-6-A-...-2    | 15.1 | 6.4  | –   | 10 | 4.3   | 2.2 | 4  |
| DHPC-10-A-...-2   | 11.2 | 5.2  | 2   | 16 | 5.4   | 2.7 | 5  |
| DHPC-L-10-A-...-2 |      |      |     |    |       |     |    |
| DHPC-16-A-...-2   | 16.3 | 8.3  | 2.5 | 20 | 7     | 3.5 | 6  |
| DHPC-L-16-A-...-2 |      |      |     |    |       |     |    |
| DHPC-20-A-...-2   | 20   | 10.5 | 3   | 26 | 8.3   | 4.2 | 7  |
| DHPC-L-20-A-...-2 |      |      |     |    |       |     |    |
| DHPC-25-A-...-2   | 24.1 | 13.1 | 4   | 33 | 12    | 6   | 10 |
| DHPC-L-25-A-...-2 |      |      |     |    |       |     |    |
| DHPC-32-A-...-2   | 24   | 12   | 5   | 40 | 15.2  | 7.6 | 12 |
| DHPC-40-A-...-2   | 39.5 | 24.5 | 6   | 48 | 18    | 9   | 16 |

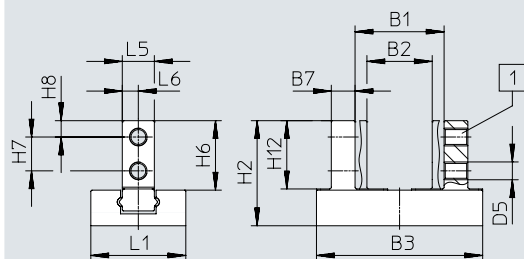


## Datasheet

## Dimensions – Dust protection

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DHPC-...-A-...-C: With protective dust cap



[1] Threaded hole for mounting the gripper fingers

| Size              | B1   | B2   | B3   | B7   | D5 | H2   | H6   |
|-------------------|------|------|------|------|----|------|------|
| [mm]              |      |      |      | -0.1 |    |      |      |
| DHPC-10-A-...-C   | 15   | 11   | 28   | 4    | M3 | 21.3 | 15.3 |
| DHPC-L-10-A-...-C | 19   |      | 34   |      |    |      |      |
| DHPC-16-A-...-C   | 19.8 | 13.8 | 37.4 | 5    |    | M4   | 28.9 |
| DHPC-L-16-A-...-C | 25.8 |      | 46.4 |      |    |      |      |
| DHPC-20-A-...-C   | 25.6 | 15.6 | 50.2 | 8    | M4 | 35.7 | 26.2 |
| DHPC-L-20-A-...-C | 33.6 |      | 62.2 |      |    |      |      |
| DHPC-25-A-...-C   | 32.6 | 18.6 | 62.6 | 10   | M5 | 43.1 | 32.1 |
| DHPC-L-25-A-...-C | 40.6 |      | 74.6 |      |    |      |      |

| Size              | H7  | H8  | H12  | L1 | L5    | L6  |
|-------------------|-----|-----|------|----|-------|-----|
| [mm]              |     |     |      |    | -0.05 |     |
| DHPC-10-A-...-C   | 5.7 | 2.8 | 15.1 | 16 | 5.4   | 2.7 |
| DHPC-L-10-A-...-C |     |     |      |    |       |     |
| DHPC-16-A-...-C   | 7   | 4   | 19.6 | 20 | 7     | 3.5 |
| DHPC-L-16-A-...-C |     |     |      |    |       |     |
| DHPC-20-A-...-C   | 9   | 5   | 24.9 | 26 | 8.3   | 4.2 |
| DHPC-L-20-A-...-C |     |     |      |    |       |     |
| DHPC-25-A-...-C   | 12  | 6   | 30.5 | 33 | 12    | 6   |
| DHPC-L-25-A-...-C |     |     |      |    |       |     |

Datasheet

| Ordering data – Pneumatic connection underneath |  |                 |                     |      |          |      |
|---|--|-----------------|---------------------|------|----------|------|
| Size<br>[mm]                                    | Double-acting  |                 | Single-acting       |      | Closing  |      |
|   | Part no.   | Type            | Opening<br>Part no. | Type | Part no. | Type |
| 6   | Standard gripper characteristic                                  |                 |                     |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                     |      |          |      |
|   | 8116738  | DHPC-6-A-B      | -                   | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |      |          |      |
|   | 8116739  | DHPC-6-A-B-1    | -                   | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                     |      |          |      |
|   | 8116740  | DHPC-6-A-B-2    | -                   | -    | -        | -    |
| 10  | Standard gripper characteristic                                  |                 |                     |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                     |      |          |      |
|   | 8116756  | DHPC-10-A-B     | -                   | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |      |          |      |
|   | 8116757  | DHPC-10-A-B-1   | -                   | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                     |      |          |      |
|   | 8116758  | DHPC-10-A-B-2   | -                   | -    | -        | -    |
|   | Long stroke gripper characteristic                               |                 |                     |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                     |      |          |      |
|   | 8116774  | DHPC-L-10-A-B   | -                   | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |      |          |      |
|   | 8116775  | DHPC-L-10-A-B-1 | -                   | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                     |      |          |      |
|   | 8116776  | DHPC-L-10-A-B-2 | -                   | -    | -        | -    |
| 16  | Standard gripper characteristic                                  |                 |                     |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                     |      |          |      |
|   | 8116788  | DHPC-16-A-B     | -                   | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |      |          |      |
|   | 8116789  | DHPC-16-A-B-1   | -                   | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                     |      |          |      |
|   | 8116790  | DHPC-16-A-B-2   | -                   | -    | -        | -    |
|   | Long stroke gripper characteristic                               |                 |                     |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                     |      |          |      |
|   | 8116806  | DHPC-L-16-A-B   | -                   | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |      |          |      |
|   | 8116807  | DHPC-L-16-A-B-1 | -                   | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                     |      |          |      |
|   | 8116808  | DHPC-L-16-A-B-2 | -                   | -    | -        | -    |
| 20  | Standard gripper characteristic                                  |                 |                     |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                     |      |          |      |
|   | 8116820  | DHPC-20-A-B     | -                   | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |      |          |      |
|   | 8116821  | DHPC-20-A-B-1   | -                   | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                     |      |          |      |
|   | 8116822  | DHPC-20-A-B-2   | -                   | -    | -        | -    |
|   | Long stroke gripper characteristic                               |                 |                     |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                     |      |          |      |
|   | 8116838  | DHPC-L-20-A-B   | -                   | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |      |          |      |
|   | 8116839  | DHPC-L-20-A-B-1 | -                   | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                     |      |          |      |
|   | 8116840  | DHPC-L-20-A-B-2 | -                   | -    | -        | -    |

## Datasheet

| Ordering data – Pneumatic connection underneath |  |                 |                          |      |          |      |
|---|--|-----------------|--------------------------|------|----------|------|
| Size<br>[mm]                                    | Double-acting  |                 | Single-acting<br>Opening |      | Closing  |      |
|   | Part no.   | Type            | Part no.                 | Type | Part no. | Type |
| 25  | Standard gripper characteristic                                  |                 |                          |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                          |      |          |      |
|   | 8116852  | DHPC-25-A-B     | -                        | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |      |          |      |
|   | 8116853  | DHPC-25-A-B-1   | -                        | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                          |      |          |      |
|   | 8116854  | DHPC-25-A-B-2   | -                        | -    | -        | -    |
|   | Long stroke gripper characteristic                               |                 |                          |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                          |      |          |      |
|   | 8116870  | DHPC-L-25-A-B   | -                        | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |      |          |      |
|   | 8116871  | DHPC-L-25-A-B-1 | -                        | -    | -        | -    |
| Type of mounting for flat gripper fingers       |  |                 |                          |      |          |      |
| 8116872   | DHPC-L-25-A-B-2  | -               | -                        | -    | -        |      |
| 32  | Standard gripper characteristic                                  |                 |                          |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                          |      |          |      |
|   | 8116884  | DHPC-32-A-B     | -                        | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |      |          |      |
|   | 8116885  | DHPC-32-A-B-1   | -                        | -    | -        | -    |
|   | Type of mounting for flat gripper fingers                        |                 |                          |      |          |      |
| 8116886   | DHPC-32-A-B-2  | -               | -                        | -    | -        |      |
| 40  | Standard gripper characteristic                                  |                 |                          |      |          |      |
|   | Type of mounting for gripper fingers: standard                   |                 |                          |      |          |      |
|   | 8116897  | DHPC-40-A-B     | -                        | -    | -        | -    |
|   | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |      |          |      |
|   | 8116898  | DHPC-40-A-B-1   | -                        | -    | -        | -    |
| Type of mounting for flat gripper fingers       |  |                 |                          |      |          |      |
| 8116899   | DHPC-40-A-B-2  | -               | -                        | -    | -        |      |

Datasheet

| Ordering data – Pneumatic connection on the side |  |                 |                     |                    |                    |                    |
|--|--|-----------------|---------------------|--------------------|--------------------|--------------------|
| Size<br>[mm]                                     | Double-acting  |                 | Single-acting       |                    | Closing            |                    |
|  | Part no.   | Type            | Opening<br>Part no. | Type               | Part no.           | Type               |
| 6  | Standard gripper characteristic                                  |                 |                     |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                     |                    |                    |                    |
|  | 8116735  | DHPC-6-A-S      | 8116741             | DHPC-6-A-NO-S      | 8116747            | DHPC-6-A-NC-S      |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |                    |                    |                    |
|  | 8116736  | DHPC-6-A-S-1    | 8116742             | DHPC-6-A-NO-S-1    | 8116748            | DHPC-6-A-NC-S-1    |
|  | Type of mounting for flat gripper fingers                        |                 |                     |                    |                    |                    |
|  | 8116737  | DHPC-6-A-S-2    | 8116743             | DHPC-6-A-NO-S-2    | 8116749            | DHPC-6-A-NC-S-2    |
| 10   | Standard gripper characteristic                                  |                 |                     |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                     |                    |                    |                    |
|  | 8116753  | DHPC-10-A-S     | 8116759             | DHPC-10-A-NO-S     | 8116765            | DHPC-10-A-NC-S     |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |                    |                    |                    |
|  | 8116754  | DHPC-10-A-S-1   | 8116760             | DHPC-10-A-NO-S-1   | 8116766            | DHPC-10-A-NC-S-1   |
|  | Type of mounting for flat gripper fingers                        |                 |                     |                    |                    |                    |
|  | 8116755  | DHPC-10-A-S-2   | 8116761             | DHPC-10-A-NO-S-2   | 8116767            | DHPC-10-A-NC-S-2   |
|  | Long stroke gripper characteristic                               |                 |                     |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                     |                    |                    |                    |
|  | 8116771  | DHPC-L-10-A-S   | 8116777             | DHPC-L-10-A-NO-S   | 8116780            | DHPC-L-10-A-NC-S   |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |                    |                    |                    |
|  | 8116772  | DHPC-L-10-A-S-1 | 8116778             | DHPC-L-10-A-NO-S-1 | 8116781            | DHPC-L-10-A-NC-S-1 |
|  | Type of mounting for flat gripper fingers                        |                 |                     |                    |                    |                    |
| 8116773  | DHPC-L-10-A-S-2  | 8116779         | DHPC-L-10-A-NO-S-2  | 8116782            | DHPC-L-10-A-NC-S-2 |                    |
| 16   | Standard gripper characteristic                                  |                 |                     |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                     |                    |                    |                    |
|  | 8116785  | DHPC-16-A-S     | 8116791             | DHPC-16-A-NO-S     | 8116797            | DHPC-16-A-NC-S     |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |                    |                    |                    |
|  | 8116786  | DHPC-16-A-S-1   | 8116792             | DHPC-16-A-NO-S-1   | 8116798            | DHPC-16-A-NC-S-1   |
|  | Type of mounting for flat gripper fingers                        |                 |                     |                    |                    |                    |
|  | 8116787  | DHPC-16-A-S-2   | 8116793             | DHPC-16-A-NO-S-2   | 8116799            | DHPC-16-A-NC-S-2   |
|  | Long stroke gripper characteristic                               |                 |                     |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                     |                    |                    |                    |
|  | 8116803  | DHPC-L-16-A-S   | 8116809             | DHPC-L-16-A-NO-S   | 8116812            | DHPC-L-16-A-NC-S   |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |                    |                    |                    |
|  | 8116804  | DHPC-L-16-A-S-1 | 8116810             | DHPC-L-16-A-NO-S-1 | 8116813            | DHPC-L-16-A-NC-S-1 |
|  | Type of mounting for flat gripper fingers                        |                 |                     |                    |                    |                    |
| 8116805  | DHPC-L-16-A-S-2  | 8116811         | DHPC-L-16-A-NO-S-2  | 8116814            | DHPC-L-16-A-NC-S-2 |                    |
| 20   | Standard gripper characteristic                                  |                 |                     |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                     |                    |                    |                    |
|  | 8116817  | DHPC-20-A-S     | 8116823             | DHPC-20-A-NO-S     | 8116829            | DHPC-20-A-NC-S     |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |                    |                    |                    |
|  | 8116818  | DHPC-20-A-S-1   | 8116824             | DHPC-20-A-NO-S-1   | 8116830            | DHPC-20-A-NC-S-1   |
|  | Type of mounting for flat gripper fingers                        |                 |                     |                    |                    |                    |
|  | 8116819  | DHPC-20-A-S-2   | 8116825             | DHPC-20-A-NO-S-2   | 8116831            | DHPC-20-A-NC-S-2   |
|  | Long stroke gripper characteristic                               |                 |                     |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                     |                    |                    |                    |
|  | 8116835  | DHPC-L-20-A-S   | 8116841             | DHPC-L-20-A-NO-S   | 8116844            | DHPC-L-20-A-NC-S   |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                     |                    |                    |                    |
|  | 8116836  | DHPC-L-20-A-S-1 | 8116842             | DHPC-L-20-A-NO-S-1 | 8116845            | DHPC-L-20-A-NC-S-1 |
|  | Type of mounting for flat gripper fingers                        |                 |                     |                    |                    |                    |
| 8116837  | DHPC-L-20-A-S-2  | 8116843         | DHPC-L-20-A-NO-S-2  | 8116846            | DHPC-L-20-A-NC-S-2 |                    |

## Datasheet

| Ordering data – Pneumatic connection on the side |  |                 |                          |                    |                    |                    |
|--|--|-----------------|--------------------------|--------------------|--------------------|--------------------|
| Size<br>[mm]                                     | Double-acting  |                 | Single-acting<br>Opening |                    | Closing            |                    |
|  | Part no.   | Type            | Part no.                 | Type               | Part no.           | Type               |
| 25   | Standard gripper characteristic                                  |                 |                          |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                          |                    |                    |                    |
|  | 8116849  | DHPC-25-A-S     | 8116855                  | DHPC-25-A-NO-S     | 8116861            | DHPC-25-A-NC-S     |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |                    |                    |                    |
|  | 8116850  | DHPC-25-A-S-1   | 8116856                  | DHPC-25-A-NO-S-1   | 8116862            | DHPC-25-A-NC-S-1   |
|  | Type of mounting for flat gripper fingers                        |                 |                          |                    |                    |                    |
|  | 8116851  | DHPC-25-A-S-2   | 8116857                  | DHPC-25-A-NO-S-2   | 8116863            | DHPC-25-A-NC-S-2   |
|  | Long stroke gripper characteristic                               |                 |                          |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                          |                    |                    |                    |
|  | 8116867  | DHPC-L-25-A-S   | 8116873                  | DHPC-L-25-A-NO-S   | 8116876            | DHPC-L-25-A-NC-S   |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |                    |                    |                    |
|  | 8116868  | DHPC-L-25-A-S-1 | 8116874                  | DHPC-L-25-A-NO-S-1 | 8116877            | DHPC-L-25-A-NC-S-1 |
| Type of mounting for flat gripper fingers        |  |                 |                          |                    |                    |                    |
| 8116869  | DHPC-L-25-A-S-2  | 8116875         | DHPC-L-25-A-NO-S-2       | 8116878            | DHPC-L-25-A-NC-S-2 |                    |
| 32   | Standard gripper characteristic                                  |                 |                          |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                          |                    |                    |                    |
|  | 8116881  | DHPC-32-A-S     | 8116887                  | DHPC-32-A-NO-S     | 8116890            | DHPC-32-A-NC-S     |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |                    |                    |                    |
|  | 8116882  | DHPC-32-A-S-1   | 8116888                  | DHPC-32-A-NO-S-1   | 8116891            | DHPC-32-A-NC-S-1   |
|  | Type of mounting for flat gripper fingers                        |                 |                          |                    |                    |                    |
| 8116883  | DHPC-32-A-S-2  | 8116889         | DHPC-32-A-NO-S-2         | 8116892            | DHPC-32-A-NC-S-2   |                    |
| 40   | Standard gripper characteristic                                  |                 |                          |                    |                    |                    |
|  | Type of mounting for gripper fingers: standard                   |                 |                          |                    |                    |                    |
|  | 8116894  | DHPC-40-A-S     | 8116900                  | DHPC-40-A-NO-S     | 8116903            | DHPC-40-A-NC-S     |
|  | Type of mounting for gripper fingers: mounting holes on the side |                 |                          |                    |                    |                    |
|  | 8116895  | DHPC-40-A-S-1   | 8116901                  | DHPC-40-A-NO-S-1   | 8116904            | DHPC-40-A-NC-S-1   |
| Type of mounting for flat gripper fingers        |  |                 |                          |                    |                    |                    |
| 8116896  | DHPC-40-A-S-2  | 8116902         | DHPC-40-A-NO-S-2         | 8116905            | DHPC-40-A-NC-S-2   |                    |

## Datasheet

| Ordering data – Pneumatic connection via mounting spigot |  |         |                     |                |                  |                |
|--|--|---------|---------------------|----------------|------------------|----------------|
| Size<br>[mm]   | Double-acting  |         | Single-acting       |                | Closing          |                |
|  | Part no.   | Type    | Opening<br>Part no. | Type           | Part no.         | Type           |
| 6  | Standard gripper characteristic                                  |         |                     |                |                  |                |
|  | Type of mounting for gripper fingers: standard                   |         |                     |                |                  |                |
|  | –  |         | 8116744             | DHPC-6-A-NO-Z  | 8116750          | DHPC-6-A-NC-Z  |
|  | Type of mounting for gripper fingers: mounting holes on the side |         |                     |                |                  |                |
| –  |  | 8116745 | DHPC-6-A-NO-Z-1     | 8116751        | DHPC-6-A-NC-Z-1  |                |
| Type of mounting for flat gripper fingers                |  |         |                     |                |                  |                |
| –  |  | 8116746 | DHPC-6-A-NO-Z-2     | 8116752        | DHPC-6-A-NC-Z-2  |                |
| 10   | Standard gripper characteristic                                  |         |                     |                |                  |                |
|  | Type of mounting for gripper fingers: standard                   |         |                     |                |                  |                |
|  | –  |         | 8116762             | DHPC-10-A-NO-Z | 8116768          | DHPC-10-A-NC-Z |
|  | Type of mounting for gripper fingers: mounting holes on the side |         |                     |                |                  |                |
| –  |  | 8116763 | DHPC-10-A-NO-Z-1    | 8116769        | DHPC-10-A-NC-Z-1 |                |
| Type of mounting for flat gripper fingers                |  |         |                     |                |                  |                |
| –  |  | 8116764 | DHPC-10-A-NO-Z-2    | 8116770        | DHPC-10-A-NC-Z-2 |                |
| 16   | Standard gripper characteristic                                  |         |                     |                |                  |                |
|  | Type of mounting for gripper fingers: standard                   |         |                     |                |                  |                |
|  | –  |         | 8116794             | DHPC-16-A-NO-Z | 8116800          | DHPC-16-A-NC-Z |
|  | Type of mounting for gripper fingers: mounting holes on the side |         |                     |                |                  |                |
| –  |  | 8116795 | DHPC-16-A-NO-Z-1    | 8116801        | DHPC-16-A-NC-Z-1 |                |
| Type of mounting for flat gripper fingers                |  |         |                     |                |                  |                |
| –  |  | 8116796 | DHPC-16-A-NO-Z-2    | 8116802        | DHPC-16-A-NC-Z-2 |                |
| 20   | Standard gripper characteristic                                  |         |                     |                |                  |                |
|  | Type of mounting for gripper fingers: standard                   |         |                     |                |                  |                |
|  |  |         | 8116826             | DHPC-20-A-NO-Z | 8116832          | DHPC-20-A-NC-Z |
|  | Type of mounting for gripper fingers: mounting holes on the side |         |                     |                |                  |                |
|  |  | 8116827 | DHPC-20-A-NO-Z-1    | 8116833        | DHPC-20-A-NC-Z-1 |                |
| Type of mounting for flat gripper fingers                |  |         |                     |                |                  |                |
|  |  | 8116828 | DHPC-20-A-NO-Z-2    | 8116834        | DHPC-20-A-NC-Z-2 |                |
| 25   | Standard gripper characteristic                                  |         |                     |                |                  |                |
|  | Type of mounting for gripper fingers: standard                   |         |                     |                |                  |                |
|  | –  |         | 8116858             | DHPC-25-A-NO-Z | 8116864          | DHPC-25-A-NC-Z |
|  | Type of mounting for gripper fingers: mounting holes on the side |         |                     |                |                  |                |
| –  |  | 8116859 | DHPC-25-A-NO-Z-1    | 8116865        | DHPC-25-A-NC-Z-1 |                |
| Type of mounting for flat gripper fingers                |  |         |                     |                |                  |                |
| –  |  | 8116860 | DHPC-25-A-NO-Z-2    | 8116866        | DHPC-25-A-NC-Z-2 |                |

## Ordering data – Modular product system

| Ordering table                       |                            |         |         |         |                     |         |         |            |      |            |    |
|--------------------------------------|----------------------------|---------|---------|---------|---------------------|---------|---------|------------|------|------------|----|
| Size                                 | 6                          | 10      | 16      | 20      | 25                  | 32      | 40      | Conditions | Code | Enter code |    |
| Module no.                           | 8116728                    | 8116729 | 8116730 | 8116731 | 8116732             | 8116733 | 8116734 |            |      |            |    |
| Design                               | Parallel gripper           |         |         |         |                     |         |         |            | DHPC | DHPC       |    |
| Gripper characteristic               | Standard                   |         |         |         |                     |         |         |            |      |            |    |
|                                      | –                          |         |         |         | Long stroke         |         |         | –          |      | -L         |    |
| Size [mm]                            | 6                          | 10      | 16      | 20      | 25                  | 32      | 40      |            | ...  |            |    |
| Position sensing                     | Via proximity switch       |         |         |         |                     |         |         |            |      | -A         | -A |
| Gripping force backup                | None                       |         |         |         |                     |         |         |            |      |            |    |
|                                      | Closing                    |         |         |         |                     |         |         | [1]        |      | -NC        |    |
|                                      | Opening                    |         |         |         |                     |         |         | [1]        |      | -NO        |    |
| Pneumatic connection                 | Underneath                 |         |         |         |                     |         |         |            |      | -B         |    |
|                                      | On the side                |         |         |         |                     |         |         |            |      | -S         |    |
|                                      | Via mounting spigot        |         |         |         |                     |         |         |            |      | -Z         |    |
| Dust protection                      | None                       |         |         |         |                     |         |         |            |      |            |    |
|                                      | –                          |         |         |         | Protective dust cap |         |         | –          |      | -C         |    |
| Type of mounting for gripper fingers | Standard                   |         |         |         |                     |         |         |            |      |            |    |
|                                      | Mounting holes on the side |         |         |         |                     |         |         |            |      | -1         |    |
|                                      | Flat gripper fingers       |         |         |         |                     |         |         | [2]        |      | -2         |    |

[1] NC, NO Mandatory specification with pneumatic connection via mounting spigot Z

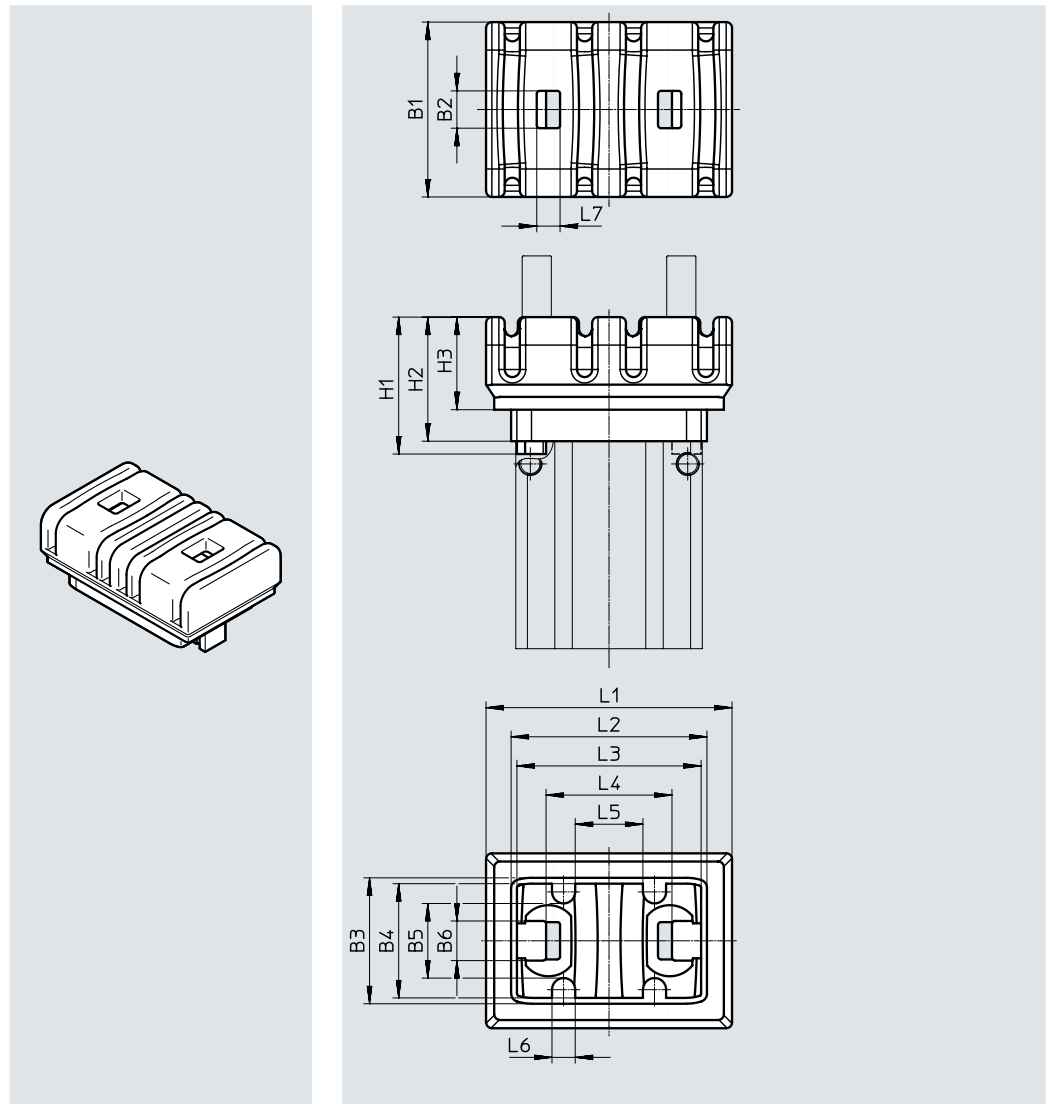
[2] 2 Not with dust protection via protective dust cap C

Accessories

Protective dust cap  
DHAS-DP-B23-...-N


Material: NBR

RoHS-compliant



Dimensions and ordering data

| Size | B1   | B2   | B3   | B4   | B5   | B6  | H1   | H2   | H3   | L1   | L2   | L3   | L4   | L5   | L6  | L7  | Weight [g] | Part no.           | Type               |
|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|-----|-----|------------|--------------------|--------------------|
| 10   | 22   | 5    | 17.2 | 15.6 | -    | 6.8 | 17   | 15.5 | 10.5 | 33.4 | 26.2 | 24.6 | 14.8 | -    | -   | 3.2 | 2.7        | 8116783            | DHAS-DP-B23-10-N   |
|      | 19.8 |      |      |      |      |     | 17.3 | 11.3 | 37.6 | 3.7  |      |      |      |      |     |     | 8116784    | DHAS-DP-B23-10-L-N |                    |
| 16   | 30   | 6.4  | 21.6 | 19.6 | 12.8 |     | 23.5 | 21.3 | 15.9 | 42.2 | 33.6 | 31.6 | 21.6 | 11.6 | 4   | 4   | 6.7        | 8116815            | DHAS-DP-B23-16-N   |
|      |      |      |      |      |      |     | 24.6 | 21.9 |      | 52   |      |      |      |      |     |     | 8.1        | 8116816            | DHAS-DP-B23-16-L-N |
| 20   | 36   | 8    | 27.4 | 25.4 | 18.4 |     | 26.9 | 23.7 | 17.7 | 55.2 | 41.4 | 39.4 | 22   | 12.8 | 4   | 6.8 | 10         | 8116847            | DHAS-DP-B23-20-N   |
|      |      |      |      |      |      |     | 27.9 |      |      | 67.2 |      |      |      |      |     |     | 12.1       | 8116848            | DHAS-DP-B23-20-L-N |
| 25   | 43   | 11.5 | 34.6 | 32.6 | 23.4 |     | 35   | 27   | 20   | 67.8 | 51.6 | 49.6 | 32   | 16.8 | 4.2 | 8.6 | 16.6       | 8116879            | DHAS-DP-B23-25-N   |
|      |      |      |      |      |      |     | 36.5 |      |      | 79.5 |      |      |      |      |     |     | 17.6       | 8116880            | DHAS-DP-B23-25-L-N |


 Note

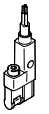
The protective dust cap can only be fitted on grippers with variant DHPC-...-C.





## Accessories

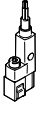
## Proximity switch for size 6, 16 ... 40



| Ordering data – Proximity switch for C-slot, magneto-resistive                    |                                 |  |                     |                     |          |                            | Datasheets → Internet: smt |
|---|---------------------------------|--|---------------------|---------------------|----------|----------------------------|----------------------------|
|   | Type of mounting                | Electrical connection,<br>outlet direction of connection | Switching<br>output | Cable length<br>[m] | Part no. | Type                       |                            |
| N/O   |                                 |  |                     |                     |          |                            |                            |
|  | Inserted in the slot from above | Cable, 3-core, lengthwise                                | PNP                 | 2.5                 | 551373   | SMT-10M-PS-24V-E-2.5-L-OE  |                            |
|   |                                 | Plug M8x1, 3-pin, in-line                                |                     | 0.3                 | 551375   | SMT-10M-PS-24V-E-0.3-L-M8D |                            |
|   |                                 | Cable, 3-core, crosswise                                 | NPN                 | 2.5                 | 551374   | SMT-10M-PS-24V-E-2.5-Q-OE  |                            |
|   |                                 | Plug M8x1, 3-pin, crosswise                              |                     | 0.3                 | 551376   | SMT-10M-PS-24V-E-0.3-Q-M8D |                            |

| Ordering data – Proximity switch for C-slot, magneto-resistive                    |                                      |  |                     |                     |          |                           | Datasheets → Internet: smt |
|---|--------------------------------------|--|---------------------|---------------------|----------|---------------------------|----------------------------|
|   | Type of mounting                     | Electrical connection,<br>outlet direction of connection | Switching<br>output | Cable length<br>[m] | Part no. | Type                      |                            |
| N/O   |                                      |  |                     |                     |          |                           |                            |
|  | Inserted into the slot<br>lengthwise | Cable, 3-core, crosswise                                 | PNP                 | 2.5                 | 547862   | SMT-10G-PS-24V-E-2.5Q-OE  |                            |
|   |                                      | Plug M8x1, 3-pin, crosswise                              |                     | 0.3                 | 547863   | SMT-10G-PS-24V-E-0.3Q-M8D |                            |
|   |                                      | Cable, 3-core, crosswise                                 | NPN                 | 2.5                 | 8065030  | SMT-10G-NS-24V-E-2.5Q-OE  |                            |
|   |                                      | Plug M8x1, 3-pin, crosswise                              |                     | 0.3                 | 8065029  | SMT-10G-NS-24V-E-0.3Q-M8D |                            |

## Proximity switch for size 10 ... 40

| Ordering data – Proximity switch for T-slot, magneto-resistive                      |  |   |                     |                     |          |                           | Datasheets → Internet: smt |
|---|--|---|---------------------|---------------------|----------|---------------------------|----------------------------|
|   | Type of mounting                                 | Electrical connection<br>outlet direction of connection | Switching<br>output | Cable length<br>[m] | Part no. | Type                      |                            |
| N/O   |  |   |                     |                     |          |                           |                            |
|  | Inserted in the slot from above,<br>short design | Cable, 3-core, lengthwise                               | PNP                 | 2.5                 | 574335   | SMT-8M-A-PS-24V-E-2.5-OE  |                            |
|   |  | Plug M8x1, 3-pin, in-line                               |                     | 0.3                 | 574334   | SMT-8M-A-PS-24V-E-0.3-M8D |                            |
|   |  | Plug M12x1, 3-pin, in-line                              |                     | 0.3                 | 574337   | SMT-8M-A-PS-24V-E-0.3-M12 |                            |
|   |  | Cable, 3-core, lengthwise                               | NPN                 | 2.5                 | 574338   | SMT-8M-A-NS-24V-E-2.5-OE  |                            |
|   |  | Plug M8x1, 3-pin, in-line                               |                     | 0.3                 | 574339   | SMT-8M-A-NS-24V-E-0.3-M8D |                            |
| N/C   |  |   |                     |                     |          |                           |                            |
|  | Inserted in the slot from above,<br>short design | Cable, 3-core, lengthwise                               | PNP                 | 7.5                 | 574340   | SMT-8M-A-PO-24V-E-7.5-OE  |                            |

| Ordering data – Proximity switch for T-slot, magneto-resistive                      |                                      |  |                     |                     |          |                          | Datasheets → Internet: smt |
|---|--------------------------------------|--|---------------------|---------------------|----------|--------------------------|----------------------------|
|   | Type of mounting                     | Electrical connection,<br>outlet direction of connection | Switching<br>output | Cable length<br>[m] | Part no. | Type                     |                            |
| N/O   |                                      |  |                     |                     |          |                          |                            |
|  | Inserted into the slot<br>lengthwise | Cable, 3-core, crosswise                                 | PNP                 | 2.5                 | 547859   | SMT-8G-PS-24V-E-2.5Q-OE  |                            |
|   |                                      | Plug M8x1, 3-pin, crosswise                              |                     | 0.3                 | 547860   | SMT-8G-PS-24V-E-0.3Q-M8D |                            |
|   |                                      | Cable, 3-core, crosswise                                 | NPN                 | 2.5                 | 8065028  | SMT-8G-NS-24V-E-2.5Q-OE  |                            |
|   |                                      | Plug M8x1, 3-pin, crosswise                              |                     | 0.3                 | 8065027  | SMT-8G-NS-24V-E-0.3Q-M8D |                            |

| Ordering data – Connecting cables   |                               |                              |                     |          |                      | Datasheets → Internet: nebu |
|---|-------------------------------|------------------------------|---------------------|----------|----------------------|-----------------------------|
|   | Electrical connection, left   | Electrical connection, right | Cable length<br>[m] | Part no. | Type                 |                             |
|  | Straight socket, M8x1, 3-pin  | Cable, open end, 3-core      | 2.5                 | 541333   | NEBU-M8G3-K-2.5-LE3  |                             |
|   |                               |                              | 5                   | 541334   | NEBU-M8G3-K-5-LE3    |                             |
|   | Straight socket, M12x1, 5-pin | Cable, open end, 3-core      | 2.5                 | 541363   | NEBU-M12G5-K-2.5-LE3 |                             |
|   |                               |                              | 5                   | 541364   | NEBU-M12G5-K-5-LE3   |                             |
|  | Angled socket, M8x1, 3-pin    | Cable, open end, 3-core      | 2.5                 | 541338   | NEBU-M8W3-K-2.5-LE3  |                             |
|   |                               |                              | 5                   | 541341   | NEBU-M8W3-K-5-LE3    |                             |
|   | Angled socket, M12x1, 5-pin   | Cable, open end, 3-core      | 2.5                 | 541367   | NEBU-M12W5-K-2.5-LE3 |                             |
|   |                               |                              | 5                   | 541370   | NEBU-M12W5-K-5-LE3   |                             |


## Accessories

## Position transmitter for size 10 ... 40

The position transmitter continuously senses the position of the piston.  
It has an analogue output with an output signal relative to the piston position.


## Ordering data – Position transmitters for T-slot

Datasheets → Internet: position transmitter

|  | Position measuring range | Analogue output [V] | [mA] | Type of mounting                | Electrical connection     | Cable length [m] | Part no. | Type                |
|--|--------------------------|---------------------|------|---------------------------------|---------------------------|------------------|----------|---------------------|
|  | 0 ... 40                 | 0 ... 10            | –    | Inserted in the slot from above | Plug M8x1, 4-pin, in-line | 0.3              | 553744   | SMAT-8M-U-E-0.3-M8D |



## Ordering data – Position transmitters for T-slot

Datasheets → Internet: sdas

|  | Description  | Type of mounting                | Electrical connection     | Cable length [m] | Part no. | Type                             |
|--|--|---------------------------------|---------------------------|------------------|----------|----------------------------------|
|  | Choice of two operating modes:<br>• two adjustable switching outputs<br>• IO-Link® | Inserted in the slot from above | Plug M8x1, 4-pin, in-line | 0.3              | 8063974  | SDAS-MHS-M40-1L-PNLK-PN-E-0.3-M8 |
|  |  |                                 | Cable, open end           | 2.5              | 8063975  | SDAS-MHS-M40-1L-PNLK-PN-E-2.5-LE |

## Ordering data – Connecting cables

Datasheets → Internet: nebu

|  | Electrical connection, left  | Electrical connection, right | Cable length [m] | Part no. | Type                |
|--|------------------------------|------------------------------|------------------|----------|---------------------|
|   | Straight socket, M8x1, 4-pin | Cable, open end, 4-core      | 2.5              | 541342   | NEBU-M8G4-K-2.5-LE4 |
|  |                              |                              | 5                | 541343   | NEBU-M8G4-K-5-LE4   |
|  | Angled socket, M8x1, 4-pin   | Cable, open end, 4-core      | 2.5              | 541344   | NEBU-M8W4-K-2.5-LE4 |
|  |                              |                              | 5                | 541345   | NEBU-M8W4-K-5-LE4   |

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