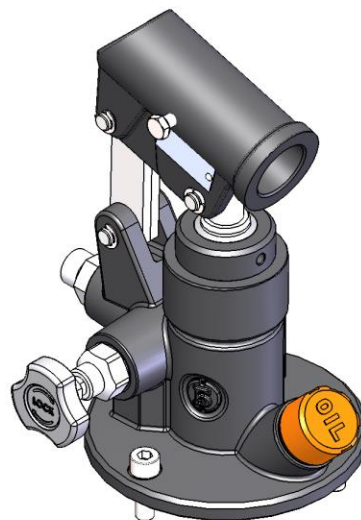
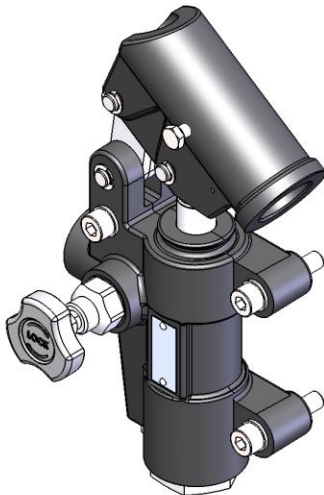
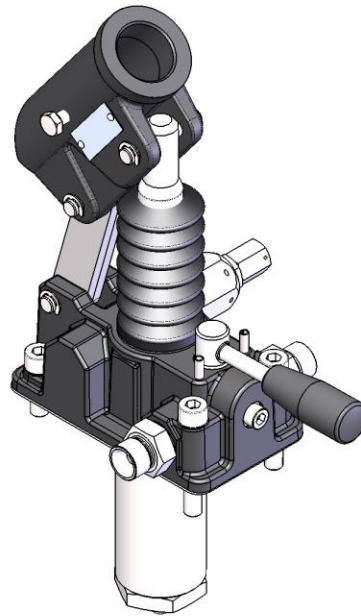
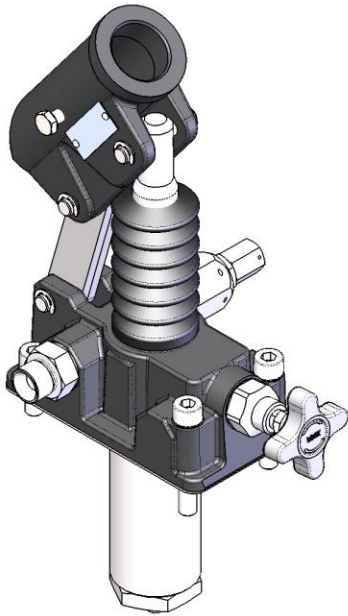


# Piston type hand pumps

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Hand pumps are generally employed for intermittent or emergency applications. The wide range for integrated applications with auxiliary valves allow the solution of any requirement. The cast-iron body, high resistance lapped and chrome plated steel rod. They are available in wall bracket and flangeable on tank versions with various types of pumping single acting (PRP) and double-acting (PRB/D). They can be supplied with steel tanks with alkyd paint from 1 to 10 lt.

PRB – double acting pumps for single acting cylinders

PRBD – double acting pumps for double acting cylinders

PRBC – double acting pump for single acting cylinders

PRP – single acting pump for single acting cylinders

Read this instructions carefully before installation. All operations must be carried out by qualified personnel following the instructions. The user must periodically inspect, based on the conditions of use and the substances used, the presence of corrosion, dirt, the state of wear and correct function of the valves.

All pumps include 550 mm handle, unless WoL code is used. The pump assembly includes suction filter and suction tube. If pump is bought without a tank – suction tube of 176 mm is included in the package.

### Additional information

This catalogue shows the product in the most standard configuration. For special requests please contact sales.

### WARNING!

All specifications of this catalogue refer to the standard product at this date. Badestnost, oriented in continuous improvement, reserves the right to discontinue, modify or revise specifications, without notice.

**BADESTNOST IS NOT RESPONSIBLE FOR ANY DAMAGE CAUSED BY AN INCORRECT USE OF THE PRODUCT**

First edition 03-2021

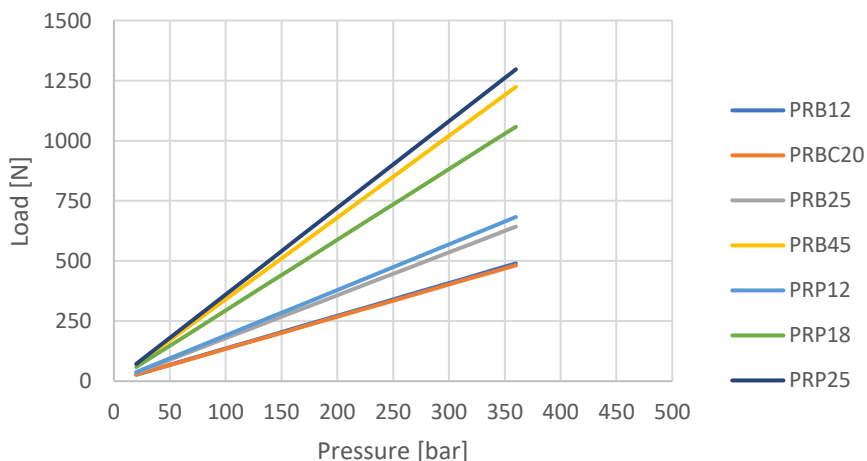
## Working conditions

| Pump type                                                   | PRB(D)12                     | PRB(D)25            | PRB(D)45            | PRBC20              | PRP12                 | PRP18               | PRP25               |
|-------------------------------------------------------------|------------------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|---------------------|
| Type                                                        | Double acting                |                     |                     |                     | Single acting         |                     |                     |
| Displacement                                                | 12 cm <sup>3</sup>           | 25 cm <sup>3</sup>  | 45 cm <sup>3</sup>  | 20 cm <sup>3</sup>  | 12 cm <sup>3</sup>    | 18 cm <sup>3</sup>  | 25 cm <sup>3</sup>  |
|                                                             | 0.7 in <sup>3</sup>          | 1.5 in <sup>3</sup> | 2.7 in <sup>3</sup> | 1.2 in <sup>3</sup> | 0.7 in <sup>3</sup>   | 1.1 in <sup>3</sup> | 1.5 in <sup>3</sup> |
| Max. pressure                                               | 380 bar                      | 350 bar             | 280 bar             | 350 bar             | 300 bar               | 200 bar             | 160 bar             |
|                                                             | 5500 psi                     | 5100 psi            | 4100 psi            | 4100 psi            | 4400 psi              | 2900 psi            | 2300 psi            |
| Optimal pressure                                            | 220 bar                      | 120 bar             | 80 bar              | 225 bar             | 160 bar               | 120 bar             | 80 bar              |
|                                                             | 3200 psi                     | 1700 psi            | 1200 psi            | 1200 psi            | 2300 psi              | 1700 psi            | 1200 psi            |
| Fluid                                                       | Mineral based oil (DIN51524) |                     |                     |                     |                       |                     |                     |
| Fluid                                                       |                              |                     |                     |                     |                       |                     |                     |
| temperature (NBR seals)                                     | from -25 °C to 70 °C         |                     |                     |                     | from -13 °F to 158 °F |                     |                     |
| Viscosity (min.)                                            | 10 mm <sup>2</sup> /s        |                     |                     |                     | 10 cSt                |                     |                     |
| Viscosity (max.)                                            | 500 mm <sup>2</sup> /s       |                     |                     |                     | 500 cSt               |                     |                     |
| Max. level of contamination                                 | 20/18/15 - ISO 4406          |                     |                     |                     | NAS 1683 - class 10   |                     |                     |
| Ambient temperature                                         | from -20 °C to 60 °C         |                     |                     |                     | from -4 °F to 140 °F  |                     |                     |
| Note - for different working conditions contact sales dept. |                              |                     |                     |                     |                       |                     |                     |

## Reference standard

|              | BSP                       | UN-UNF            | Metric                | NPTF         |
|--------------|---------------------------|-------------------|-----------------------|--------------|
| Thread       | ISO 228/1                 | ISO 263           | ISO 262               | Ansi B1.20.3 |
| according to | BS 2779                   | ANSI B1.1 unified |                       |              |
| Cavity       | ISO 1179                  | 11926             | 9974-1                |              |
| dimension    | SAE                       | J1926             | J2244                 | J476a        |
| according to | DIN 3852-2 (Shape X or Y) |                   | 3852-1 (Shape X or Y) |              |

Load effort for 550 mm handle

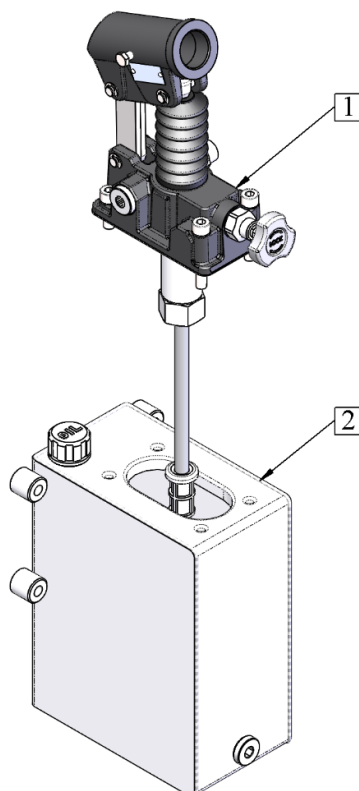


**Full order code (pump and tank)**

**PRB12 + RP3**

1

2



1. Pump (page 5)

2. Prismatic tanks (page 8)

RP1 1L tank

RP2 2L tank

RP3 3L tank

RP5 5L tank

RP7 7L tank

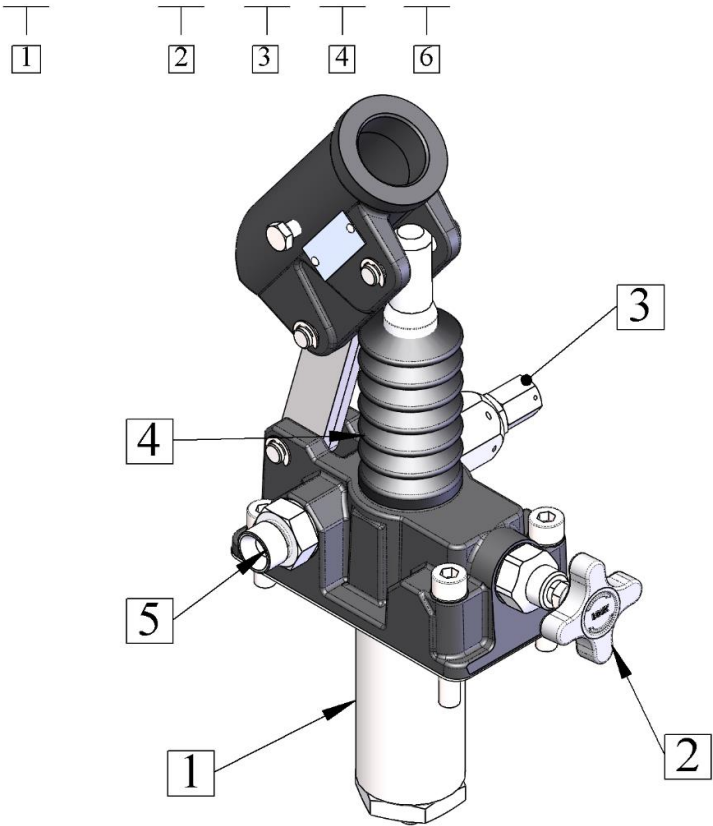
RP10 10L tank

3. Pump location with respect to the tank

(180) Pump rotated 180 deg

Order code

PRB12 / A - R - M - BP



1. Pump type

|              |                                                |
|--------------|------------------------------------------------|
| PRB12/25/45  | Double acting pump for single acting cylinders |
| PRBD12/25/45 | Double acting pump for double acting cylinders |

2. Release valve

|      |                                |
|------|--------------------------------|
| omit | 3S handle of the release valve |
| A    | 4S handle of the release valve |
| E    | without release valve          |

3. Relief valve (PRB/PRBD)

|      |                                           |
|------|-------------------------------------------|
| omit | without relief valve                      |
| R    | with relief valve (right side by default) |
| RL   | with relief valve left side               |

4. Other

|   |                            |
|---|----------------------------|
| M | Dust-proof flexible bellow |
|---|----------------------------|

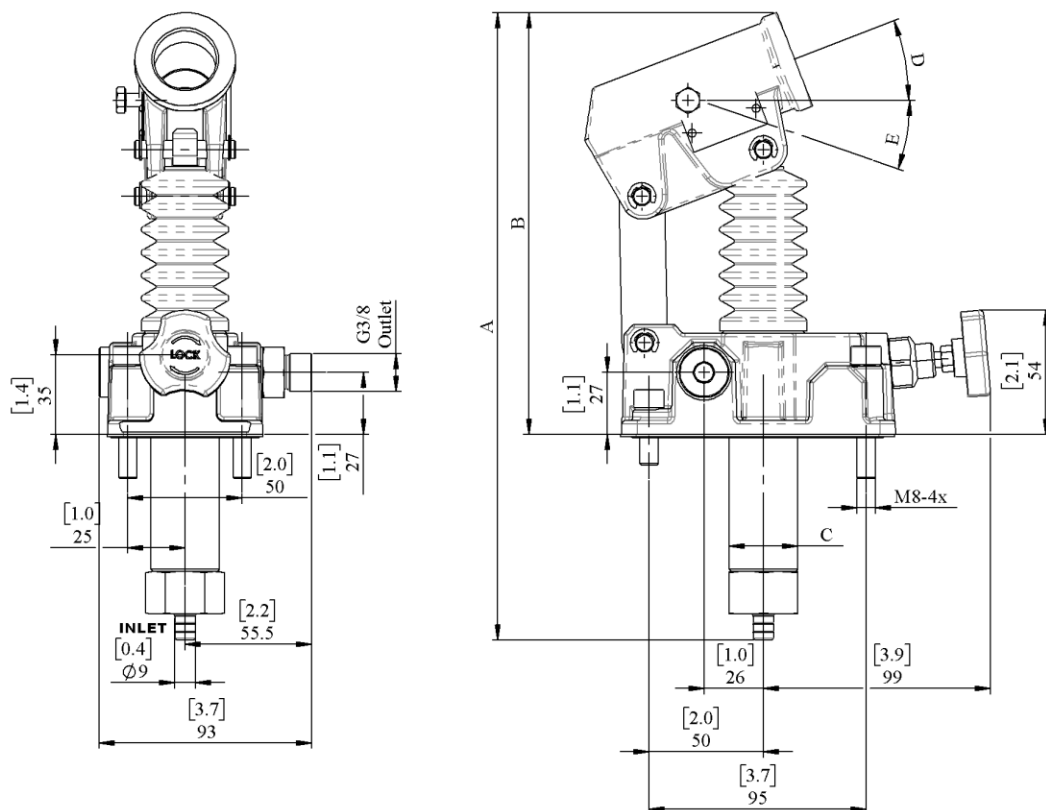
5. Stud connectors and reducers

|           |                                |
|-----------|--------------------------------|
| omit      | Outlet stud G3/8 (60 deg cone) |
| 12L       | Outlet stud 12L (M18x1,5)      |
| ad3/8NPTF | Outlet reducer 3/8NPTF         |
| G1/4B     | G1/4 Banjo                     |
| xA        | no connector on pos. 2 (PRBD)  |
| xB        | no connector on pos. 1(PRBD)   |
| 12S       | Outlet stud 12S (M20x1,5)      |

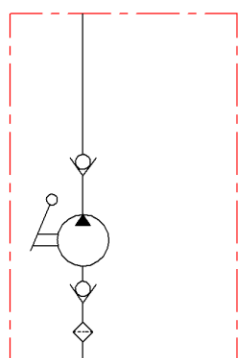
6. Additional options

|     |                        |
|-----|------------------------|
| WoL | without 550 mm lever   |
| WoF | without suction filter |
| BP  | Black paint RAL9005    |

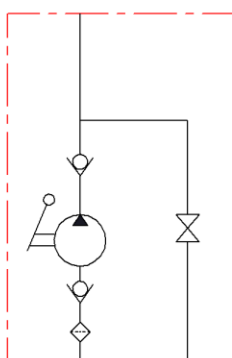
### Dimensional data



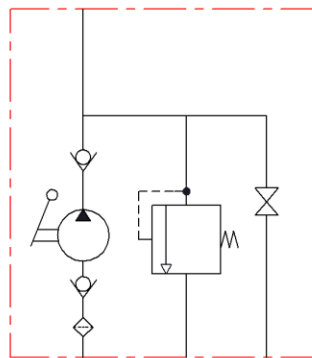
### Hydraulic schemes



Without release and relief valve



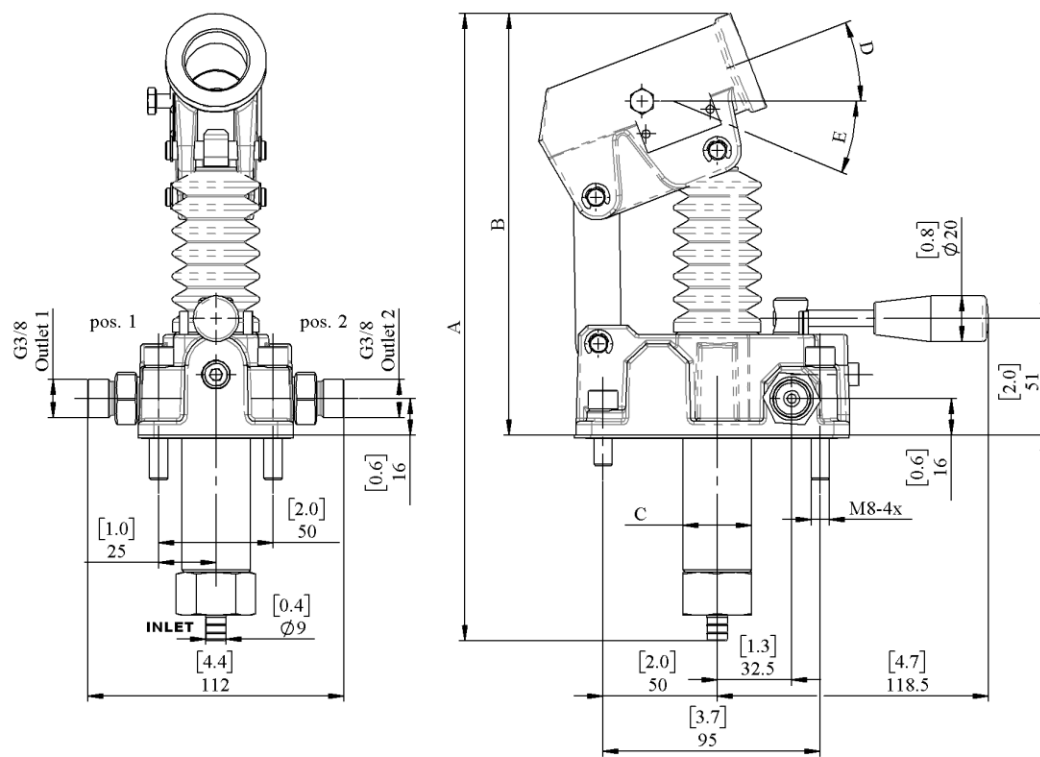
Without relief valve



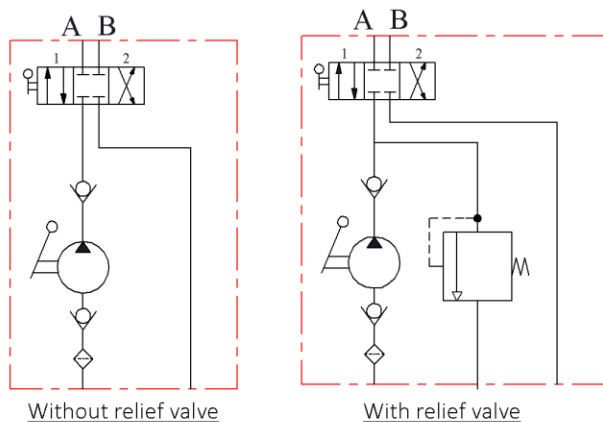
With relief valve

| Type  | A       |      | B   |     | C    |     | D    |    | E   |     | mass     |  |
|-------|---------|------|-----|-----|------|-----|------|----|-----|-----|----------|--|
|       | mm* in* |      |     |     |      |     |      |    | °   |     | kg* /bs* |  |
| PRB12 | 274     | 10.8 | 184 | 7.2 | 30.0 | 1.2 | 21   | 20 | 4.0 | 8.8 |          |  |
| PRB25 | 286     | 11.3 | 195 | 7.7 | 35.0 | 1.2 | 34   | 21 | 4.2 | 9.3 |          |  |
| PRB45 | 307     | 12.1 | 200 | 7.9 | 40   | 1.6 | 53.0 | 25 | 4.5 | 9.9 |          |  |

## Dimensional data:



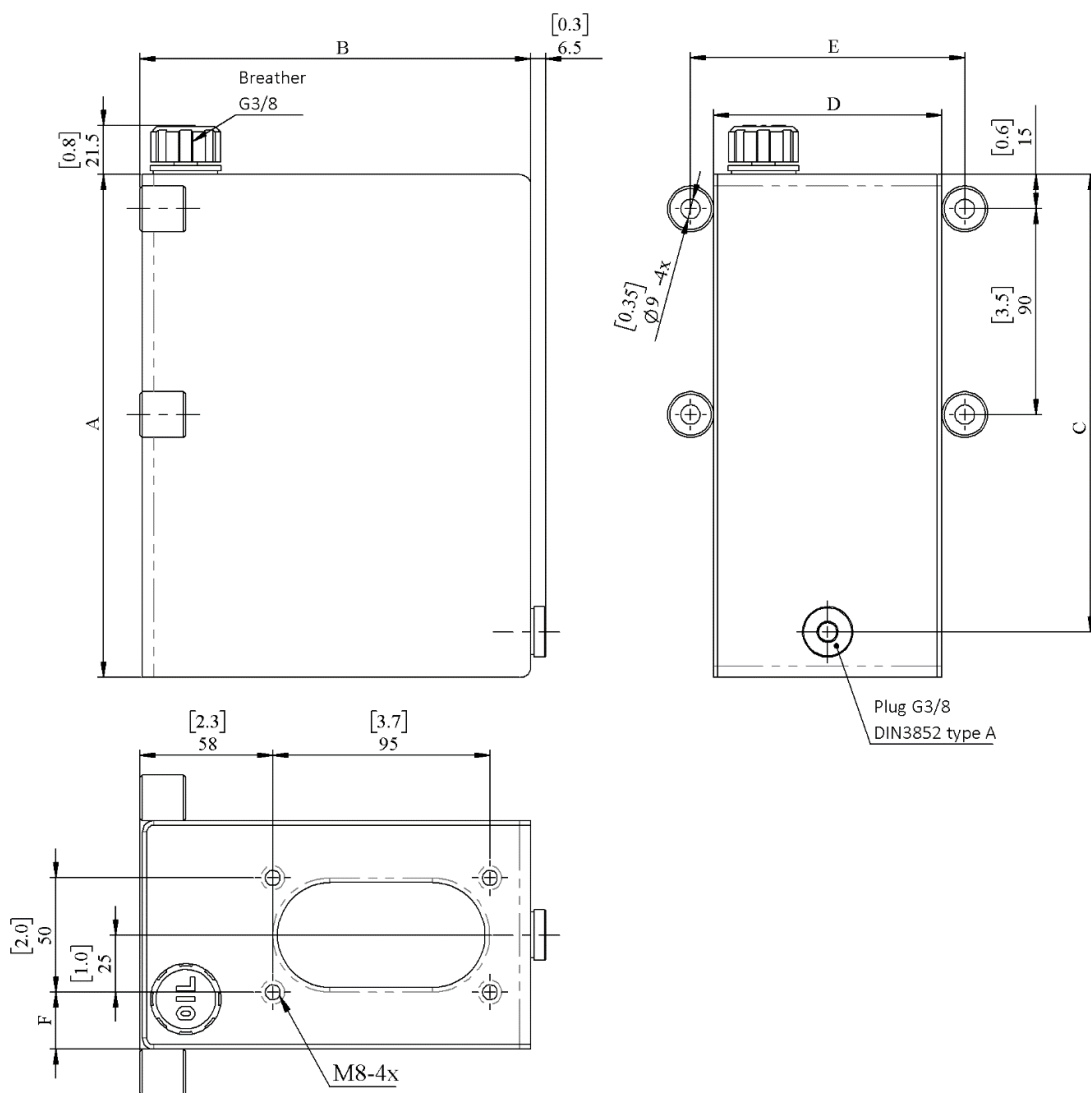
## Hydraulic schemes



| Type   | A      |      | B   |     | C    |     | D    |  | E  |  | mass    |     |
|--------|--------|------|-----|-----|------|-----|------|--|----|--|---------|-----|
|        | mm*in* |      |     |     |      |     |      |  | °  |  | kg*lbs* |     |
| PRBD12 | 274    | 10.8 | 184 | 7.2 | 30.0 | 1.2 | 21   |  | 20 |  | 4.0     | 8.8 |
| PRBD25 | 286    | 11.3 | 195 | 7.7 | 35.0 | 1.2 | 34   |  | 21 |  | 4.2     | 9.3 |
| PRBD45 | 307    | 12.1 | 200 | 7.9 | 40   | 1.6 | 53.0 |  | 25 |  | 4.5     | 9.9 |

### Dimensional data:

Each tank is painted in RAL9005 and includes the corresponding suction tube and filter

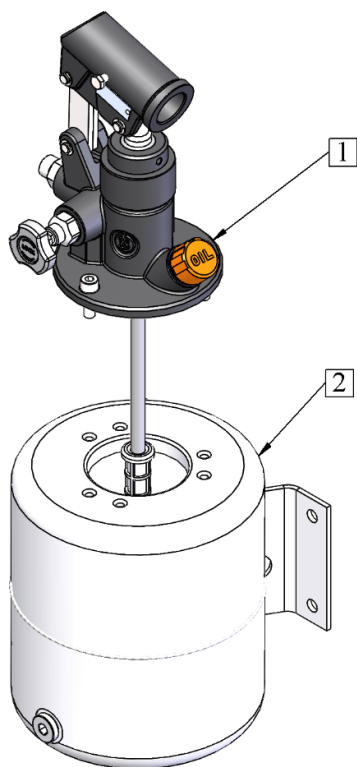


| Type | A       |      | B   |     | C   |     | D   |     | E   |     | F    |     | mass |      |         |  |
|------|---------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|------|---------|--|
|      | mm* in* |      |     |     |     |     |     |     |     |     |      |     |      |      | kg*lbs* |  |
|      |         |      |     |     |     |     |     |     |     |     |      |     |      |      |         |  |
| RP1  | 120     | 4.7  | 171 | 6.7 | 100 | 3.9 | 100 | 3.9 | 120 | 4.7 | 25   | 1.0 | 1.7  | 3.7  |         |  |
| RP2  | 170     | 4.7  | 171 | 6.7 | 150 | 3.9 | 100 | 3.9 | 120 | 4.7 | 25   | 1.0 | 2.2  | 4.9  |         |  |
| RP3  | 220     | 8.7  | 171 | 6.7 | 200 | 8   | 100 | 4   | 120 | 5   | 25   | 1   | 2.6  | 5.7  |         |  |
| RP5  | 200     | 7.9  | 176 | 6.9 | 180 | 7   | 175 | 7   | 195 | 8   | 62.5 | 2   | 3.3  | 7.3  |         |  |
| RP7  | 290     | 11.4 | 176 | 6.9 | 270 | 11  | 175 | 7   | 195 | 8   | 62.5 | 2   | 4.3  | 9.5  |         |  |
| RP10 | 380     | 15.0 | 176 | 6.9 | 360 | 14  | 175 | 7   | 195 | 8   | 62.5 | 2   | 5.3  | 11.7 |         |  |

**Full order code (pump and tank)**

**PRP18/S60** + **R5**

1
2
3



1. Pump (page 10)

2. Cylindrical tanks (page 13-14)

R2 2L tank

R3 3L tank

R5 5L tank

R7 7L tank

R4 4L tank, no breather (page 14)

3. Outlet orientation (optional for cylindrical tanks)

outlet is oriented to pos. 3

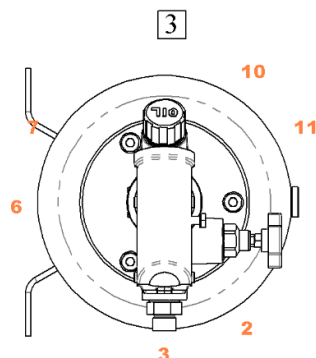
C2 outlet is oriented to pos. 2

C6 outlet is oriented to pos. 6

C7 outlet is oriented to pos. 7

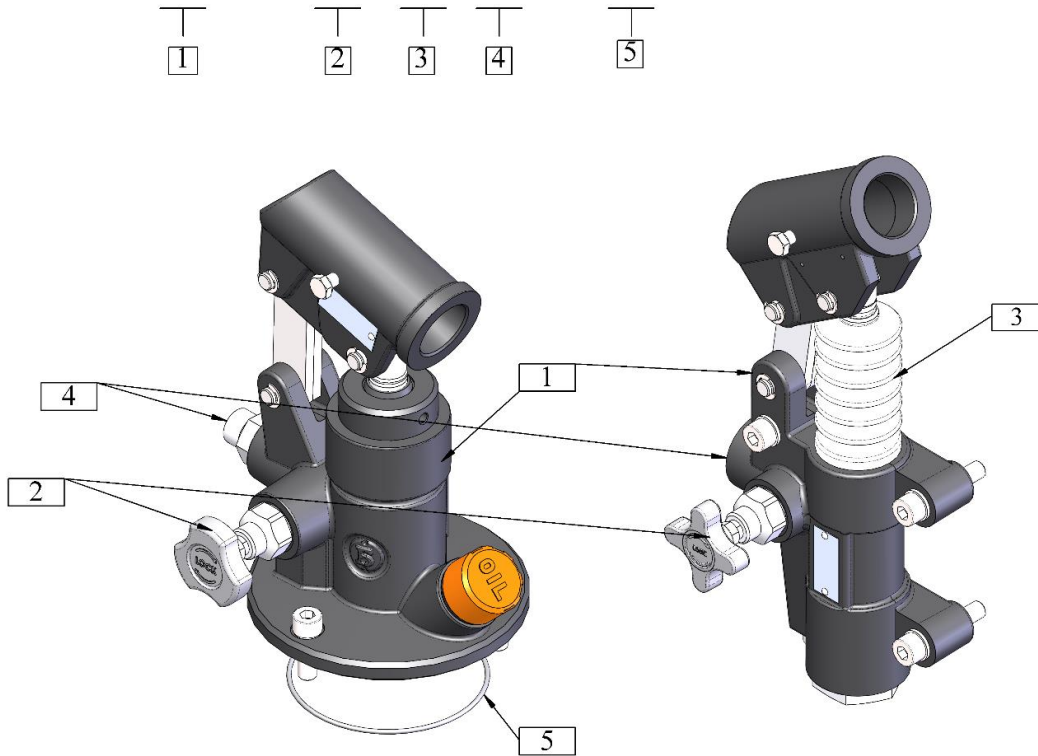
C11 outlet is oriented to pos. 11

C10 outlet is oriented to pos. 10



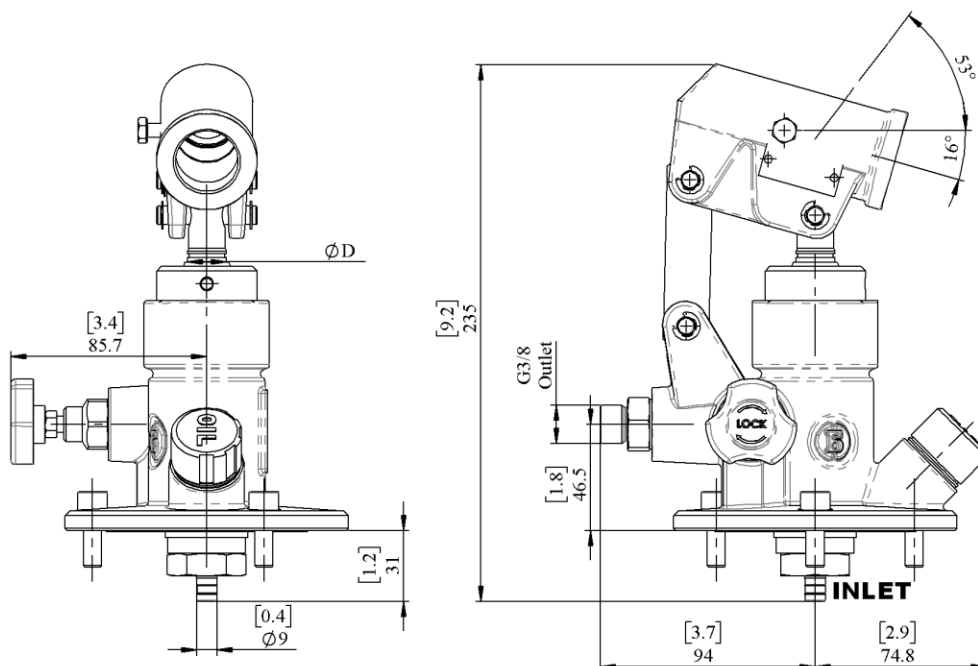
## Order code

**PRP12/**  
**PRBC20/**      **A -M**      **S60- V-BP**  
**-BP**

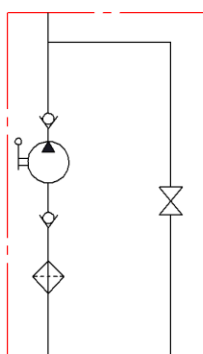


| 1. Pump type     |                                                | 4. Stud connectors and reducers |                                                  |
|------------------|------------------------------------------------|---------------------------------|--------------------------------------------------|
| PRP12/18/25      | Single acting pump for single acting cylinders | omit                            | Outlet port G3/8 according to ISO1179-1          |
| PRBC20           | Double acting pump for single acting cylinders | S60                             | Outlet stud G3/8 (60 deg cone)                   |
|                  |                                                | 12L                             | Outlet stud 12L (M18x1,5)                        |
|                  |                                                | ad3/8NPTF                       | Outlet reducer 3/8NPTF                           |
| 2. Release valve |                                                | 5. Additional options           |                                                  |
| omit             | 3S handle of the release valve                 | x                               | no connectors                                    |
| A                | 4S handle of the release valve                 | 12S                             | Outlet stud 12S (M20x1,5)                        |
| E                | without release valve                          |                                 |                                                  |
| 3. Other         |                                                |                                 |                                                  |
| M                | Dust-proof flexible bellow, only for PRBC20    | V                               | Sealing outside M8 area, only PRP                |
|                  |                                                | DDM                             | Bonded seal washers for PRPs M8 screws, only PRP |
|                  |                                                | WoL                             | without 550 mm lever                             |
|                  |                                                | WoF                             | without suction filter                           |
|                  |                                                | O                               | Reverse lever arm (180 deg.)                     |
|                  |                                                | BP                              | Black paint RAL9005                              |

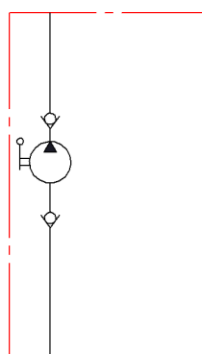
## Dimensional data



## Hydraulic schemes

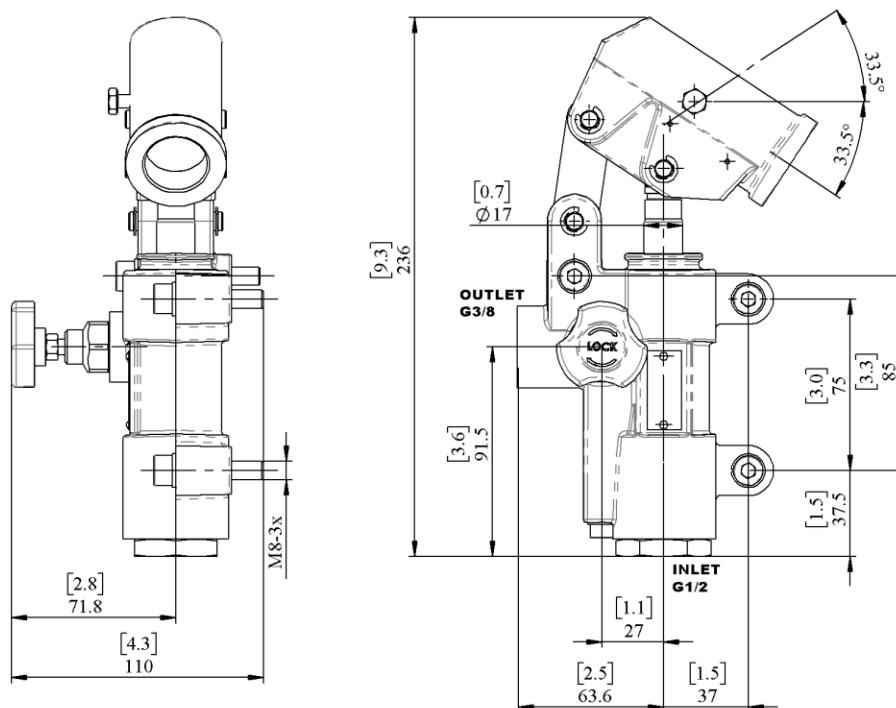


With release valve

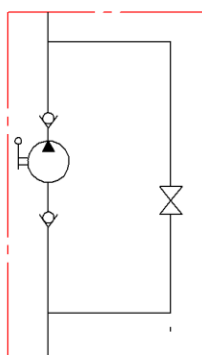


Without release valve

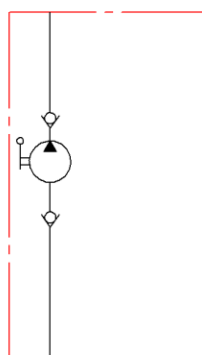
**Dimensional data:**



Hydraulic schemes



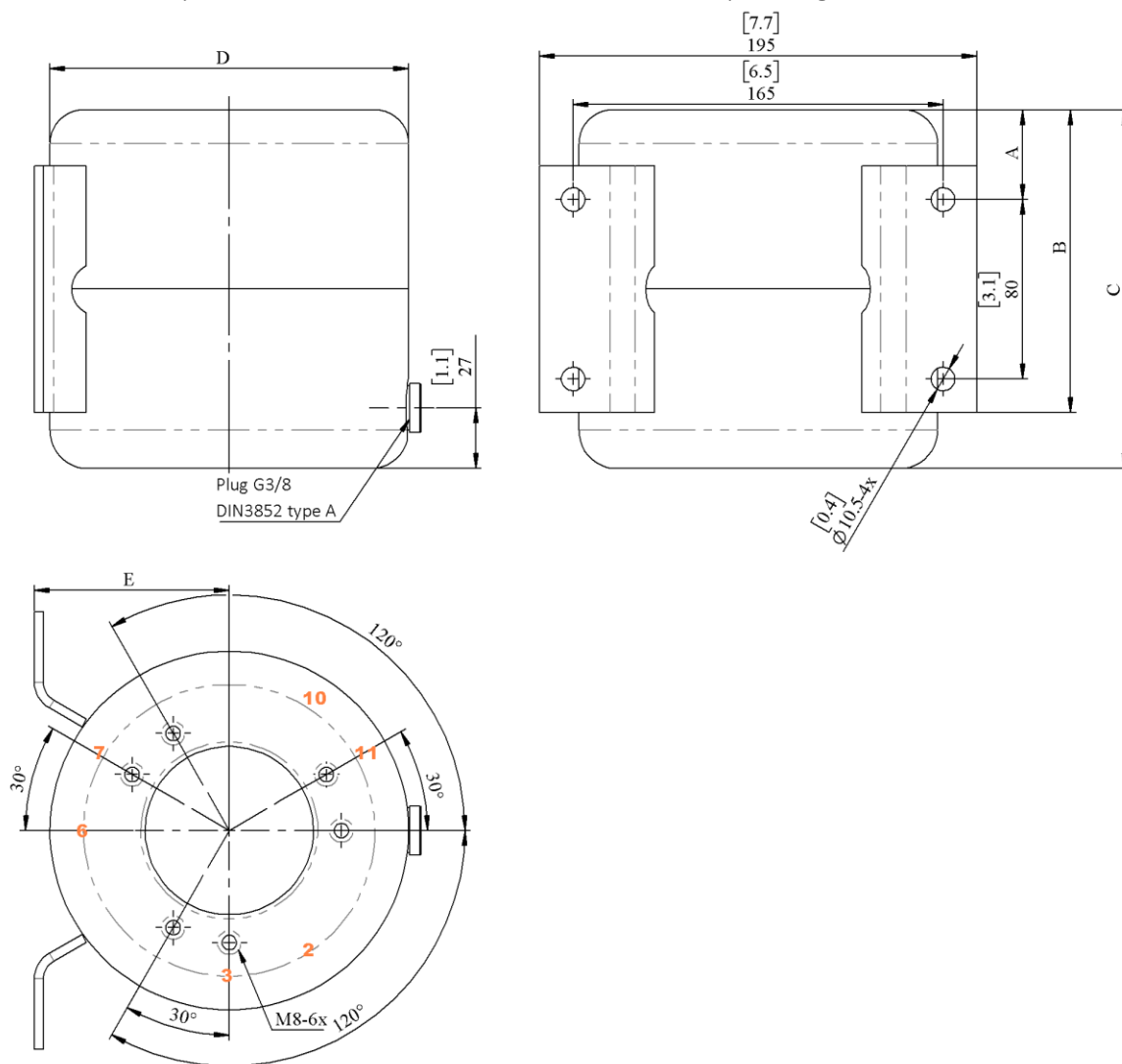
With release valve



Without release valve

**Dimensional data:**

Each tank is painted in RAL9005 and includes the corresponding suction tube and filter



| Type | A      |     | B   |     | C   |     | D   |     | E   |     | mass     |     |
|------|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|-----|
|      | mm*in* |     |     |     |     |     |     |     |     |     | kg*/lbs* |     |
| R2G  | 30     | 1.2 | 125 | 4.9 | 130 | 5.1 | 160 | 6.3 | 87  | 3.4 | 1.9      | 4.2 |
| R3G  | 40     | 1.2 | 135 | 4.9 | 160 | 5.1 | 160 | 6.3 | 87  | 3.4 | 2.1      | 4.6 |
| R5G  | 53     | 2   | 148 | 5.8 | 214 | 8.4 | 185 | 7.3 | 101 | 4.0 | 3.0      | 6.6 |
| R7G  | 53     | 2   | 148 | 5.8 | 240 | 9.4 | 205 | 8.1 | 113 | 4.4 | 3.7      | 8.2 |

**Dimensional data:**

Each tank is painted in RAL9005 and includes the corresponding suction tube and filter

