

Diaphragm metering pump EcoPro / EcoAdd



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1 Diaphragm metering pump EcoPro / EcoAdd

- ▲ Stepper motor technology
- ▲ Electronically adjustable metering capacity from 1:100
- ▲ Modular structure
- ▲ Variable arrangement of control unit and mounting console
- ▲ Different metering modes adjustable (e.g. for high-viscosity products)
- ▲ Multicolor touch display (EcoAdd)
- ▲ USB interface (EcoAdd)
- ▲ Future-oriented safety and communication tools (EcoAdd)



EcoPro

EcoAdd

The EcoPro/EcoAdd is a metering pump series with step motor technology. This drive technology provides a variety of advantages:

- Precise adjustable metering capacity from 1:100
- Almost pulsation-free injection
- Adjustment of the suction lift period for viscous products or difficult suction conditions
- Low-noise operation

The modular structure makes a simple modification of EcoPro to the EcoAdd version possible. The

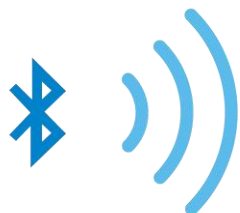
control unit can be turned by 90° with simple methods. This allows the adjustment to local conditions. Also the mounting console is for variable use. This makes it suitable for both installations, on a table or on the wall.

EcoAdd also enables a comfortable data exchange through communication interfaces such as USB or optionally Bluetooth.

The scope of delivery is rounded off by practical accessories, so forming a complete range of equipment for all metering uses.



EcoAdd



EcoAPP

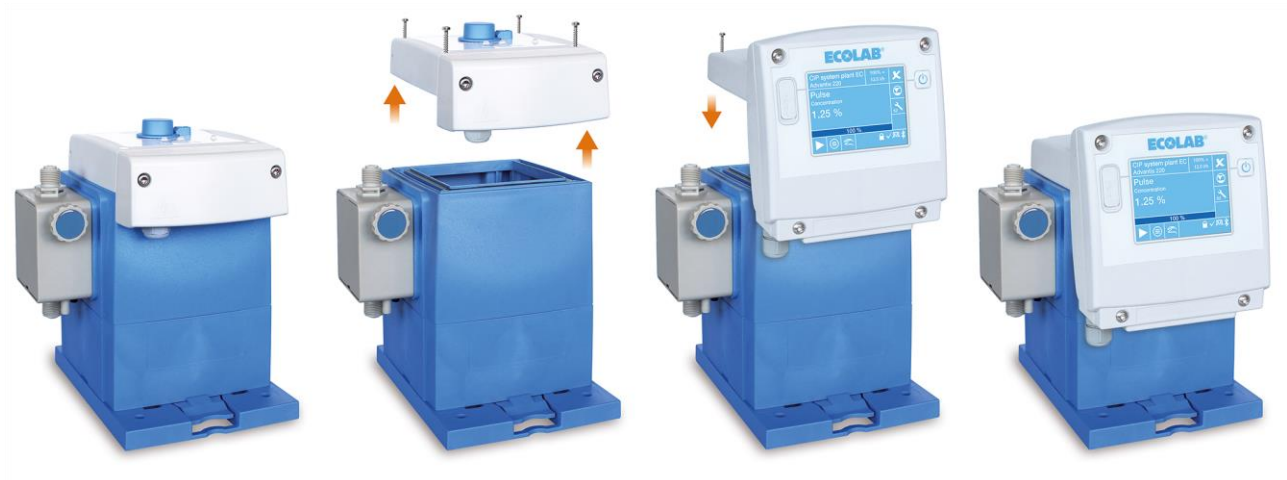


EcoCONNECT

Bluetooth communication by pinboard with smartphone, App and PC software.

Variable structure

Upgrade from EcoPro to EcoAdd



EcoPro

EcoAdd







Control unit can be rotated by 90°:



Standard version:
Operation from the front and
pump head at the side

Option:
Operation from the front and
pump head on the back side

2 Technical data

| Pump type | | 5 | 11 | 30 | 50 | 120 |
|---------------------------------------|-------|---|-----------|---|----------|---|
| EcoPro | |  | |  | |  |
| EcoAdd | |  | |  | |  |
| Pump capacity | l/h | 0.05 - 5 | 0.11 - 11 | 0.3 - 30 | 0.5 - 50 | 1.2 - 120 |
| Max. metering back pressure | bar | 10 | 10 | 3 | 10 | 3 |
| Connection thread | Zoll | 3/8 | 3/8 | 5/8 | 5/8 | 1¼ |
| Reproductivity | | < ±3 % | | | | |
| Max. suction height with wet valves | m | 2 | | | | |
| Max. metering frequency | 1/min | 171 | 190 | 171 | 158 | 164 |
| Max. viscosity (spring-loaded valves) | mPas | 1000 | 1000 | 500 | 1000 | 500 |
| Permissible ambient temperature | °C | 2 - 45 | | | | |
| Power supply | | 100-240 V ±10 % 50/60 Hz | | | | |
| Safety type | | IP 65 | | | | |
| Weight | kg | 3.1 | 3.1 | 3.8 | 5.2 | 5.7 |

Materials:

| | |
|---------------|--|
| Housing: | PPO (Noryl) |
| Pump head: | PP or PVDF optional stainless steel 1.4571 |
| Diaphragm: | PTFE – EPDM compound diaphragm |
| Seals: | FKM or EPDM optional PTFE or FFPM (Kalrez) |
| Valve balls: | ceramics optional PTFE or stainless steel 1.4401 |
| Valve spring: | Hastelloy C4 |
| Colour: | blue RAL 5007 |

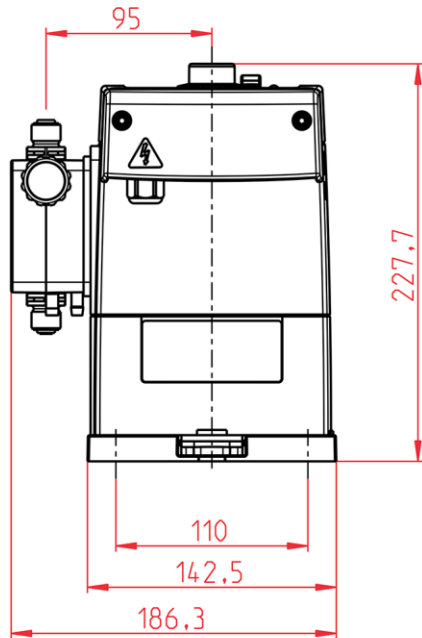
Diaphragm metering pump EcoPro / EcoAdd

Technical data

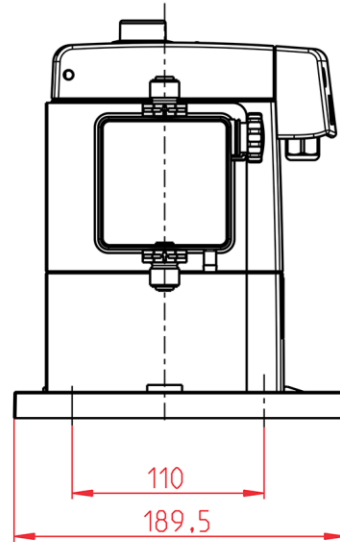


Dimensions

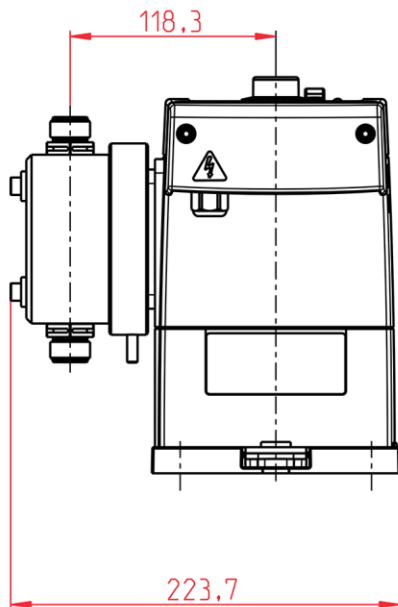
EcoPro:



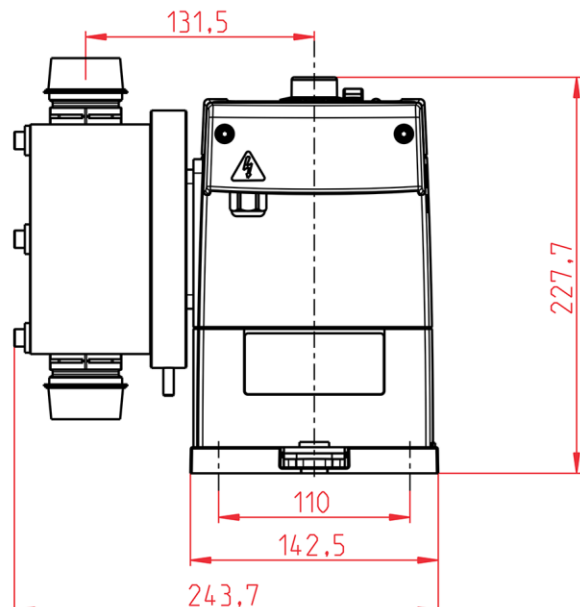
EcoPro 5/11 I/h



EcoPro side view



EcoPro 30/50 I/h



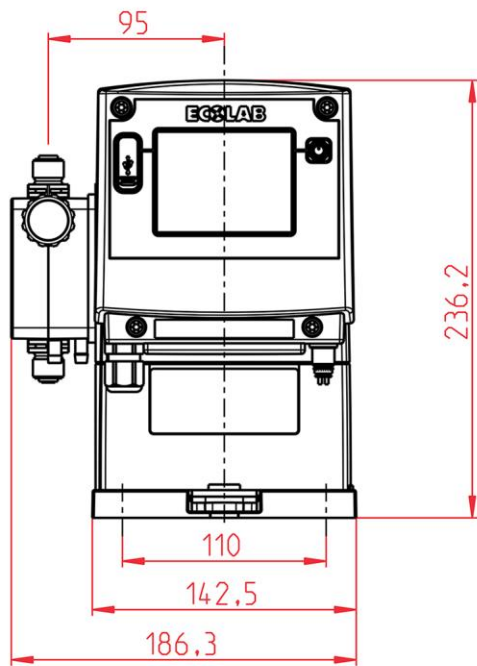
EcoPro 120 I/h

Diaphragm metering pump EcoPro / EcoAdd

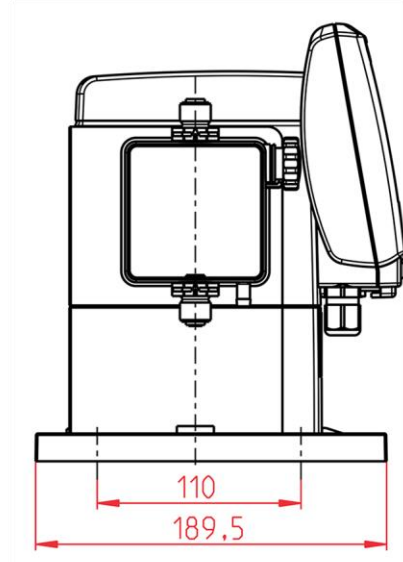
Technical data



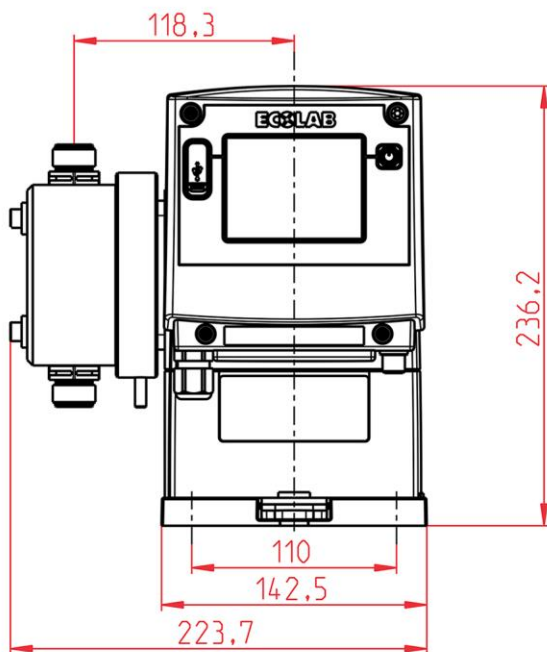
EcoAdd:



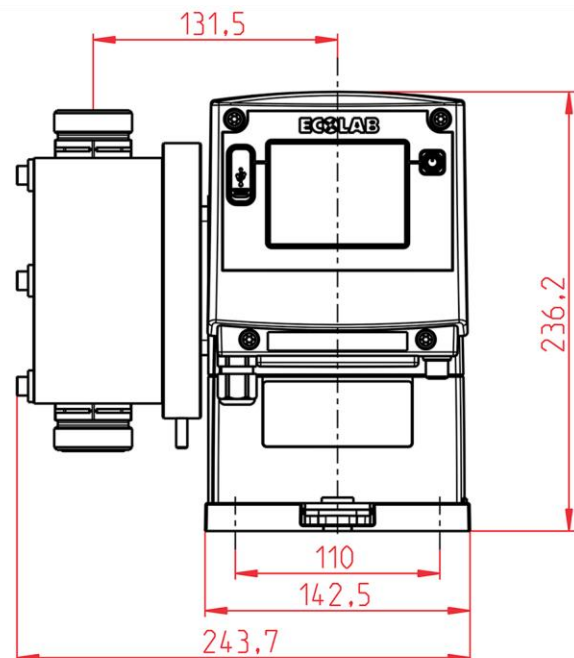
EcoAdd 5/11 l/h



EcoAdd side view



EcoAdd 30/50 l/h



EcoAdd 120 l/h

3 Pump code / ordering data

Control unit

1. Pump name / electrical version

| | | | |
|--------|---|------------------|---|
| EcoPro | = | Keys / settings: | on/off, test, viscosity high/low, adjustment range 1:100 |
| | | LEDs: | operation, viscosity high/low, alarm |
| | | Inputs: | release |
| EcoAdd | = | Keys / settings: | on/off, 4 viscosity modes, 5 operating modes adjustment range 1:100 |
| | | Display: | touch display |
| | | Operation mode: | manual, pulse, current, timer, charge |
| | | Inputs: | release, pulse, current, charge, level, flow, diaphragm break |
| | | Outputs: | stroke signal, alarm |
| | | Communication: | USB, CAN Bus |
| | | Option: | Bluetooth extension module |

2. Mains supply

| | | |
|---|---|--|
| E | = | mains cable 2.5 m with EU plug |
| U | = | mains cable 2.5 m with US plug |
| N | = | mains cable 2.5 m without plug (end splices) |

3. Control unit versions

| | | |
|---|---|--|
| S | = | standard |
| T | = | rotated control unit |
| C | = | with protective cover (Eco Pro) |
| B | = | with Bluetooth extension (EcoAdd) |
| 1 | = | rotated control unit with protective cover (Eco Pro) |
| 2 | = | rotated control unit with Bluetooth extension (EcoAdd) |

EcoPro- E S - 00510X- P F C - 00 S - 1 S - S0

Pump head

4. Pump capacity / back pressure / drive

| | | |
|--------|---|---|
| 00510X | = | 0.05 - 5 l/h / 10 bar / drive size XS |
| 01110S | = | 0.12 - 11.6 l/h / 10 bar / drive size S |
| 03003S | = | 0.3 - 30 l/h / 3 bar / drive size S |
| 05010M | = | 0.54 - 50 l/h / 10 bar / drive size M |
| 12003M | = | 1.2 - 120 l/h / 3 bar / drive size M |

5. Material pump head / valves

| | | |
|---|---|---------------------|
| P | = | PP |
| D | = | PVDF |
| S | = | stainless steel V4A |

6. Sealing material

| | | |
|---|---|---------------|
| F | = | FKM |
| E | = | EPDM |
| T | = | PTFE-coated |
| K | = | FFPM (Kalrez) |

7. Valve ball material

| | | |
|---|---|---------------------|
| C | = | ceramics |
| T | = | PTFE |
| S | = | stainless steel V4A |

8- Valve spring

| | | |
|---|---|---|
| 0 | = | without spring |
| 1 | = | suction valve (SV): 0.1 bar, pressure valve (PV): 0.1 bar |
| 2 | = | SV: without spring, PV: 0.3 bar |
| 3 | = | SV: without spring, PV: 0.5 bar |

9. Hydraulic connection

| | | |
|---|---|-------------------------|
| 0 | = | without hose connection |
|---|---|-------------------------|

10. Pump head version

| | | |
|---|---|----------|
| S | = | standard |
|---|---|----------|

EcoPro- E S - 00510X- P F C - 00 S - 1 S - S0

Diaphragm metering pump EcoPro / EcoAdd

Pump code / ordering data



Miscellaneous

11. Power supply

1 = 100 – 240 V 50/60 Hz

12. Housing / drive version

S = standard

13. Packaging

0 = without packaging

S = standard packaging

14. Accessories

0 = without accessories

EcoPro- E S - 00510X- P F C - 00 S - **1 S - S 0**

Diaphragm metering pump EcoPro / EcoAdd Pump code / ordering data



Ordering data – standard pumps:

| Article | Pump code | Article no. |
|-------------------------|---|-------------|
| EcoPro PP/FKM | EcoPro-ES-00510X-PFC-00S-1S-S0 | 15201000 |
| | EcoPro-ES-01110S-PFC-00S-1S-S0 | 15202000 |
| | EcoPro-ES-03003S-PFC-00S-1S-S0 | 15203000 |
| | EcoPro-ES-05010M-PFC-00S-1S-S0 | 15205000 |
| | EcoPro-ES-12003M-PFC-00S-1S-S0 | 15206000 |
| PP/EPDM | EcoPro-ES-00510X-PEC-00S-1S-S0 | 15201100 |
| | EcoPro-ES-01110S-PEC-00S-1S-S0 | 15202100 |
| | EcoPro-ES-03003S-PEC-00S-1S-S0 | 15203100 |
| | EcoPro-ES-05010M-PEC-00S-1S-S0 | 15205100 |
| | EcoPro-ES-12003M-PEC-00S-1S-S0 | 15206100 |
| PVDF/FKM | EcoPro-ES-00510X-DFC-00S-1S-S0 | 15201300 |
| | EcoPro-ES-01110S-DFC-00S-1S-S0 | 15202300 |
| | EcoPro-ES-03003S-DFC-00S-1S-S0 | 15203300 |
| | EcoPro-ES-05010M-DFC-00S-1S-S0 | 15205300 |
| | EcoPro-ES-12003M-DFC-00S-1S-S0 | 15206300 |
| PVDF/EPDM | EcoPro-ES-00510X-DEC-00S-1S-S0 | 15201400 |
| | EcoPro-ES-01110S-DEC-00S-1S-S0 | 15202400 |
| | EcoPro-ES-03003S-DEC-00S-1S-S0 | 15203400 |
| | EcoPro-ES-05010M-DEC-00S-1S-S0 | 15205400 |
| | EcoPro-ES-12003M-DEC-00S-1S-S0 | 15206400 |
| EcoAdd PP/FKM | EcoAdd-ES-00510X-PFC-00S-1S-S0 | 15221000 |
| | EcoAdd-ES-01110S-PFC-00S-1S-S0 | 15222000 |
| | EcoAdd-ES-03003S-PFC-00S-1S-S0 | 15223000 |
| | EcoAdd-ES-05010M-PFC-00S-1S-S0 | 15225000 |
| | EcoAdd-ES-12003M-PFC-00S-1S-S0 | 15226000 |
| PP/EPDM | EcoAdd-ES-00510X-PEC-00S-1S-S0 | 15221100 |
| | EcoAdd-ES-01110S-PEC-00S-1S-S0 | 15222100 |
| | EcoAdd-ES-03003S-PEC-00S-1S-S0 | 15223100 |
| | EcoAdd-ES-05010M-PEC-00S-1S-S0 | 15225100 |
| | EcoAdd-ES-12003M-PEC-00S-1S-S0 | 15226100 |
| PVDF/FKM | EcoAdd-ES-00510X-DFC-00S-1S-S0 | 15221300 |
| | EcoAdd-ES-01110S-DFC-00S-1S-S0 | 15222300 |
| | EcoAdd-ES-03003S-DFC-00S-1S-S0 | 15223300 |
| | EcoAdd-ES-05010M-DFC-00S-1S-S0 | 15225300 |
| | EcoAdd-ES-12003M-DFC-00S-1S-S0 | 15226300 |
| PVDF/EPDM | EcoAdd-ES-00510X-DEC-00S-1S-S0 | 15221400 |
| | EcoAdd-ES-01110S-DEC-00S-1S-S0 | 15222400 |
| | EcoAdd-ES-03003S-DEC-00S-1S-S0 | 15223400 |
| | EcoAdd-ES-05010M-DEC-00S-1S-S0 | 15225400 |
| | EcoAdd-ES-12003M-DEC-00S-1S-S0 | 15226400 |
| Scope of supply*: | Mounting console, operating instructions, without hose connection material | |

Hose connection material, see accessories.

* EcoPro and EcoAdd

Diaphragm metering pump EcoPro / EcoAdd Pump code / ordering data



Ordering data – standard pumps:

| Article | Pump code | Article no. |
|---------------------------------------|---|-------------|
| EcoAdd (with Bluetooth module) | | |
| PP/FKM | EcoAdd-EB-00510X-PFC-00S-1S-S0 | 15221001 |
| | EcoAdd-EB-01110S-PFC-00S-1S-S0 | 15222001 |
| | EcoAdd-EB-03003S-PFC-00S-1S-S0 | 15223001 |
| | EcoAdd-EB-05010M-PFC-00S-1S-S0 | 15225001 |
| | EcoAdd-EB-12003M-PFC-00S-1S-S0 | 15226001 |
| PP/EPDM | EcoAdd-EB-00510X-PEC-00S-1S-S0 | 15221101 |
| | EcoAdd-EB-01110S-PEC-00S-1S-S0 | 15222101 |
| | EcoAdd-EB-03003S-PEC-00S-1S-S0 | 15223101 |
| | EcoAdd-EB-05010M-PEC-00S-1S-S0 | 15225101 |
| | EcoAdd-EB-12003M-PEC-00S-1S-S0 | 15226101 |
| PVDF/FKM | EcoAdd-EB-00510X-DFC-00S-1S-S0 | 15221301 |
| | EcoAdd-EB-01110S-DFC-00S-1S-S0 | 15222301 |
| | EcoAdd-EB-03003S-DFC-00S-1S-S0 | 15223301 |
| | EcoAdd-EB-05010M-DFC-00S-1S-S0 | 15225301 |
| | EcoAdd-EB-12003M-DFC-00S-1S-S0 | 15226301 |
| PVDF/EPDM | EcoAdd-EB-00510X-DEC-00S-1S-S0 | 15221401 |
| | EcoAdd-EB-01110S-DEC-00S-1S-S0 | 15222401 |
| | EcoAdd-EB-03003S-DEC-00S-1S-S0 | 15223401 |
| | EcoAdd-EB-05010M-DEC-00S-1S-S0 | 15225401 |
| | EcoAdd-EB-12003M-DEC-00S-1S-S0 | 15226401 |
| Scope of supply: | Mounting console, operating instructions, without hose connection material | |

Hose connection material, see accessories.

4 Spare parts

Designation

Article no.



Mounting plate

35200103

Material: thermoplastic polyester
(without fastening elements)



Accessories fastening elements

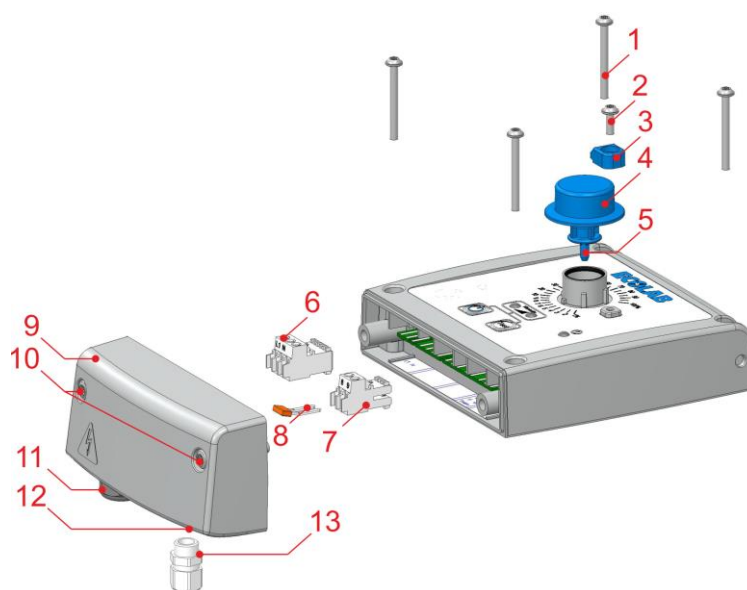
252019

consisting of:
4 fastening elements with code 1 (for stand mounting)
2 fastening elements with code 2 (for wall mounting*)

* For wall mounting, 2 fastening elements each with codes 1 and 2 are used.

4.1 EcoPro control unit

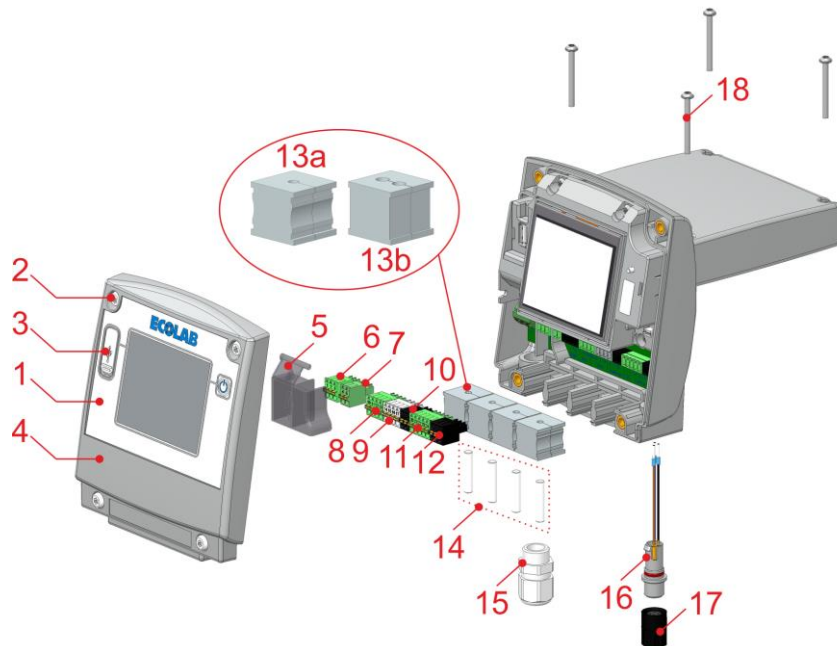
| Pos. | Designation | Article no. |
|------|--|-------------|
| - | Spare part assembly: EcoPro control unit, 5 l/h | 252045 |
| - | Spare part assembly: EcoPro control unit, 11 l/h | 252046 |
| - | Spare part assembly: EcoPro control unit, 30 l/h | 252047 |
| - | Spare part assembly: EcoPro control unit, 50 l/h | 252048 |
| - | Spare part assembly: EcoPro control unit, 120 l/h | 252049 |



| Pos. | Designation | Article no. |
|------|---|-------------|
| 1 | EJOT DELTA PT screw 35x35 WN5451 V2A (4 x) | 413070100 |
| 2 | EJOT DELTA PT screw 35x10 WN5451 V2A | 413070094 |
| 3 | Clamp for rotary knob | 35200155 |
| 4 | Rotary knob potentiometer | 35200152 |
| 5 | Axis rotary knob | 35200153 |
| 6 | Plug-and-socket connector 3-pole RM 5 direct mains | 418461707 |
| 7 | Plug-and-socket connector 2-pole RM 5 direct 8-9 | 418461701 |
| 8 | Bridge for coupling relay 2-pole RM 5 | 418461483 |
| 9 | Connection cover | 35200150 |
| 10 | EJOT DELTA PT screw 50x30/15 WN5452 V2A (2 x) | 413070209 |
| 11 | Cable union M 16x1,5 PA/GR | 418441002 |
| 12 | Protective cap ID6 x L7, PE, red | 32390126 |
| 13 | Cable union, threaded, M 12x1.5 PA/GR (in accessories pack) | 418441001 |

4.2 EcoAdd control unit

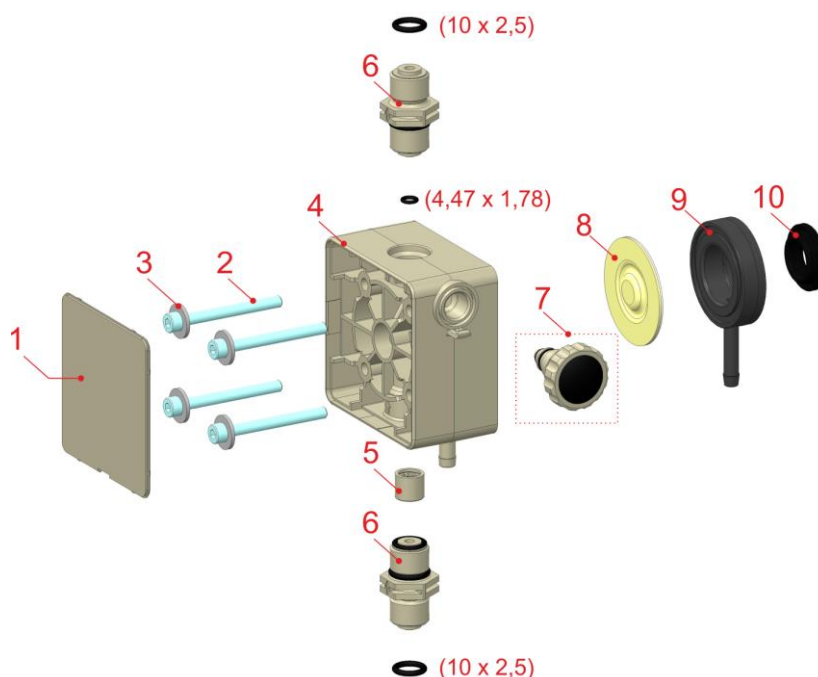
| Pos. | Designation | Article no. |
|------|---|-------------|
| - | Spare part assembly: EcoAdd control unit, complete | 252030 |



| Pos. | Designation | Article no. |
|------|--|-------------|
| 1 | Front sticker | 35200141 |
| 2 | Shaft screw, M 5x20 (4 x) | 413123501 |
| 3 | USB plug | 35200125 |
| 4 | Display cover with seal | 35200127 |
| 5 | Voltage cover (cover power) | 35200130 |
| 6 | Plug part FK-MCP 1,5/ 3-ST-3,5 GN123 | 418461692 |
| 7 | Plug part FK-MCP 1,5/ 2-ST-3,5 GN 4/5 | 418461690 |
| 8 | Plug part FK-MCP 1,5/ 4-ST-3,5 GN10-13 | 418461694 |
| 9 | Plug part FK-MCP 1,5/ 4-ST-3,5 GY14-17 | 418461696 |
| 10 | Plug part FK-MCP 1,5/ 2-ST-3,5 BK18/19 | 418461691 |
| 11 | Plug part FK-MCP 1,5/ 5-ST-3,5 GN20-24 | 418461697 |
| 12 | Plug part FK-MCP 1,5/ 3-ST-3,5 BK25/27 | 418461693 |
| 13a | Cable sleeve KT5 Ø5 grey, for one cable (standard) (4 x) | 417028631 |
| 13b | Cable sleeve KT2/5 2xØ5 grey, for two cables (4 x) | 417028632 |
| 14 | Plug for cable sleeves ST5 Ø 5 mm, white (4 x) | 417028641 |
| 15 | Cable union M 16x1,5 PA/GR | 418441002 |
| 16 | Empty signal plug, 3-pole | 35200123 |
| 17 | Dummy connector, empty signal input | 248186 |
| 18 | EJOT DELTA PT screw 35x35 WN5451 V2A (4 x) | 413070100 |

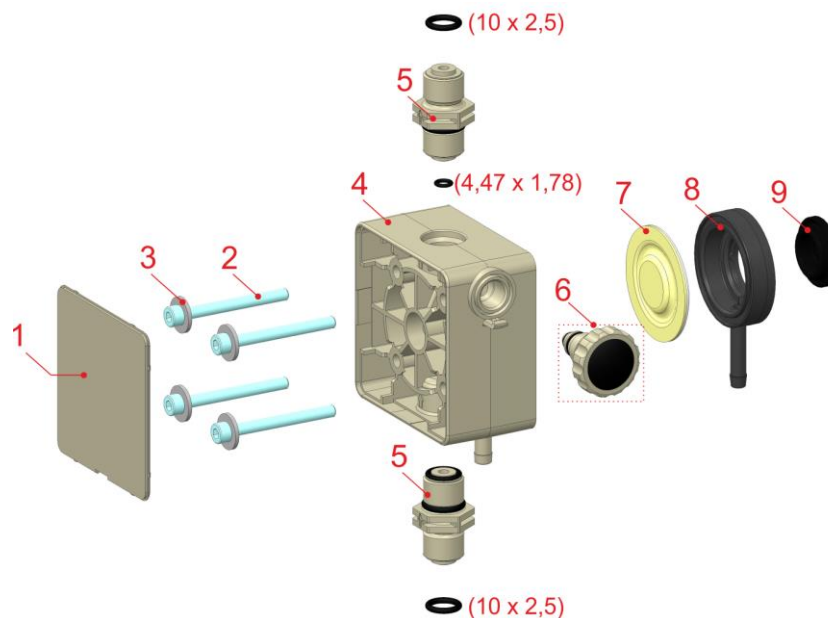
4.3 Pump heads

4.3.1 Pump head 5 l/h



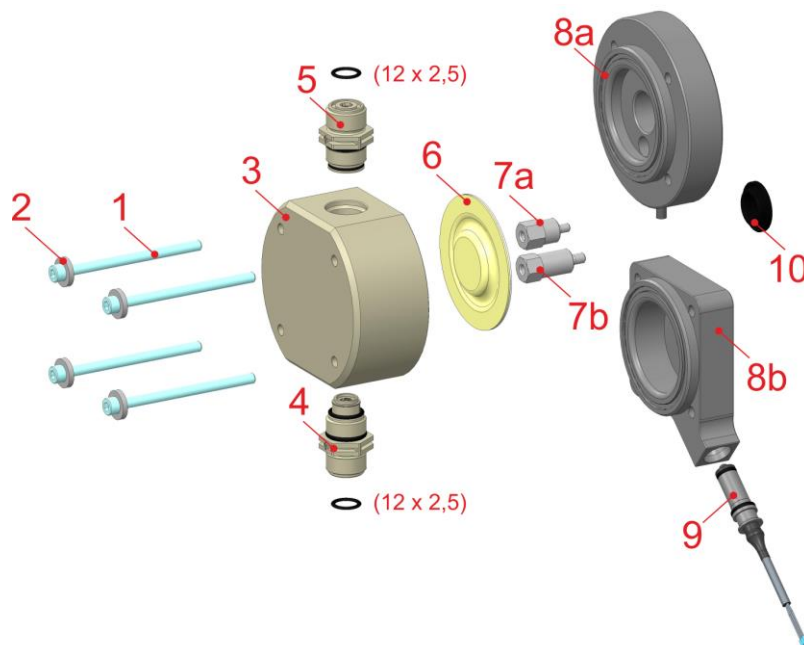
| Pos. | Designation | Article no. |
|------|--|-------------|
| 1 | Cover plate, PP, pebble grey | 35200180 |
| | Cover plate, PVDF, nature | 35200181 |
| 2 | Hexagon socket screw, M 5x50, DIN 912, V2A (4 x) | 413031127 |
| 3 | Washer, 5.3 x 15 1.6, DIN 9021, V2A (4 x) | 413501720 |
| 4 | Pump head, 5 l/h, PP | 35200107 |
| | Pump head, 5 l/h, PVDF | 35200108 |
| 5 | Suction valve cartridge, V3 PFC | 252014 |
| | Suction valve cartridge, V3 PEC | 252015 |
| | Suction valve cartridge, V3 DFC | 252016 |
| | Suction valve cartridge, V3 DEC | 252017 |
| 6 | Suction/pressure valve, PFC-000 G3/8-G3/8-99 (2 x) | 252010 |
| | Suction/pressure valve, PEC-000 G3/8-G3/8-99 (2 x) | 252011 |
| | Suction/pressure valve, DFC-000 G3/8-G3/8-99 (2 x) | 252012 |
| | Suction/pressure valve, DEC-000 G3/8-G3/8-99 (2 x) | 252013 |
| 7 | Vent screw, PP/FKM | 252035 |
| | Vent screw, PP/EPDM | 252034 |
| | Vent screw, PVDF/FKM | 252037 |
| | Vent screw, PVDF/EPDM | 252036 |
| 8 | Diaphragm | 35200109 |
| 9 | Intermediate plate | 35200110 |
| 10 | Protective diaphragm | 35200137 |

4.3.2 Pump head 11 l/h



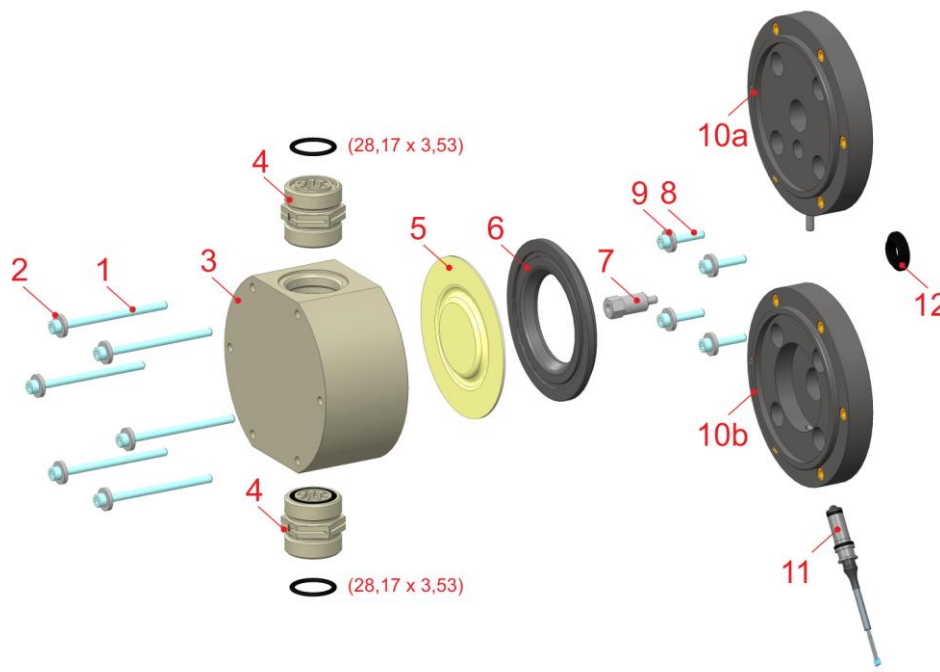
| Pos. | Designation | Article no. |
|------|--|-------------|
| 1 | Cover plate, PP, pebble grey | 35200180 |
| | Cover plate, PVDF, nature | 35200181 |
| 2 | Hexagon socket screw, M 5x50, DIN 912, V2A (4 x) | 413031127 |
| 3 | Washer, 5.3 x 15 1.6, DIN 9021, V2A (4 x) | 413501720 |
| 4 | Pump head, 11 l/h, PP | 35200112 |
| | Pump head, 11 l/h, PVDF | 35200113 |
| 5 | Suction/pressure valve, PFC-000 G3/8-G3/8-99 (2 x) | 252010 |
| | Suction/pressure valve, PEC-000 G3/8-G3/8-99 (2 x) | 252011 |
| | Suction/pressure valve, DFC-000 G3/8-G3/8-99 (2 x) | 252012 |
| | Suction/pressure valve, DEC-000 G3/8-G3/8-99 (2 x) | 252013 |
| 6 | Vent screw, PP/FKM | 252035 |
| | Vent screw, PP/EPDM | 252034 |
| | Vent screw, PVDF/FKM | 252037 |
| | Vent screw, PVDF/EPDM | 252036 |
| 7 | Diaphragm | 35200114 |
| 8 | Intermediate plate | 35200115 |
| 9 | Protective diaphragm | 35200137 |

4.3.3 Pump head 30/50 l/h



| Pos. | Designation | | Article no. |
|------|--|-------|-------------|
| 1 | Hexagon socket screw, M 6 x 90, DIN 912, V2A | (4 x) | 413031148 |
| 2 | Washer, 17 x 6.4 x 3 DIN 7349 V2A | (4 x) | 413501304 |
| 3 | Pump head, 30/50 l/h, PP | | 35200116 |
| | Pump head, 30/50 l/h, PVDF | | 35200117 |
| 4 | Suction valve, PFC-000 G5/8-G5/8-99 | | 252024 |
| | Suction valve, PEC-000 G5/8-G5/8-99 | | 252025 |
| | Suction valve, DFC-000 G5/8-G5/8-99 | | 252026 |
| | Suction valve, DEC-000 G5/8-G5/8-99 | | 252027 |
| 5 | Pressure valve, PFC-000 G5/8-G5/8-99 | | 252020 |
| | Pressure valve, PEC-000 G5/8-G5/8-99 | | 252021 |
| | Pressure valve, DFC-000 G5/8-G5/8-99 | | 252022 |
| | Pressure valve, DEC-000 G5/8-G5/8-99 | | 252023 |
| 6 | Diaphragm | | 35200120 |
| 7a | Diaphragm extension, 30 l/h | | 35200121 |
| 7b | Diaphragm extension, 50 l/h | | 35200148 |
| 8a | Intermediate plate | | 35200118 |
| 8b | Intermediate plate with sensor support | | 35200119 |
| 9 | Diaphragm rupture sensor, complete | | 252081 |
| 10 | Protective diaphragm | | 35200137 |

4.3.4 Pump head 120 l/h



| Pos. | Designation | | Article no. |
|------|--|-------|-------------|
| 1 | Hexagon socket screw, M 6 x 90, DIN 912, V2A | (4 x) | 413031148 |
| 2 | Washer, 17 x 6.4 x 3 DIN 7349 V2A | (4 x) | 413501304 |
| 3 | Pump head, 120 l/h, PP | | 35200142 |
| | Pump head, 120 l/h, PVDF | | 35200143 |
| 4 | Suction/pressure valve, PFC-000 G11/4-G11/4-99 | (2 x) | 249075 |
| | Suction/pressure valve, PEC-000 G11/4-G11/4-99 | (2 x) | 249055 |
| | Suction/pressure valve, DFC-000 G11/4-G11/4-99 | (2 x) | 252028 |
| | Suction/pressure valve, DEC-000 G11/4-G11/4-99 | (2 x) | 252029 |
| 5 | Diaphragm | | 35200144 |
| 6 | Intermediate plate | | 35200147 |
| 7 | Diaphragm extension, 120 l/h | | 35200148 |
| 8 | Hexagon socket screw, M 6 x 30, DIN 912, V2A | (4 x) | 413031140 |
| 9 | Washer, 17 x 6.4 x 3 DIN 7349 V2A | (4 x) | 413501304 |
| 10a | Adapter plate | | 35200145 |
| 10b | Adapter plate with sensor support | | 35200146 |
| 11 | Diaphragm rupture sensor, complete | | 252081 |
| 12 | Protective diaphragm | | 35200137 |

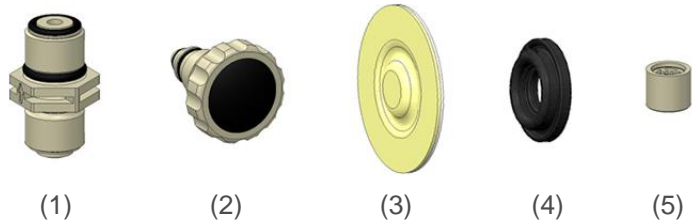
4.4 Wearing parts

4.4.1 Wearing part kit 5 l/h and 11 l/h

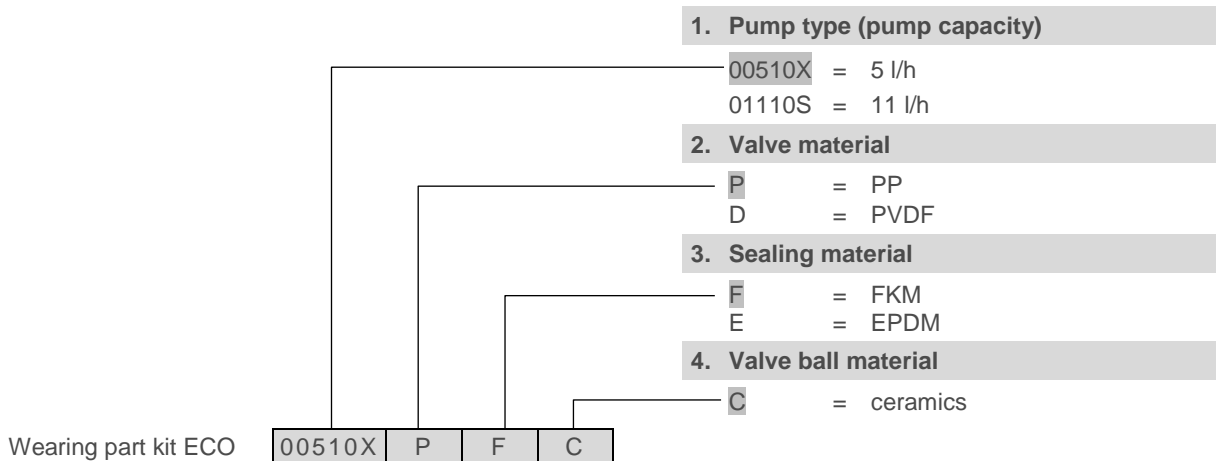
Wearing part kit

consisting of:

- 2 suction/pressure valves (1)
- 1 vent screw (2)
- 1 diaphragm (3)
- 1 protective diaphragm (4)
- 1 valve cartridge (5), only for 5 l/h



| Article | Code | Article no. |
|------------------|----------------|-------------|
| Wearing part kit | ECO 00510X PFC | 252121 |
| | ECO 00510X PEC | 252122 |
| | ECO 00510X DFC | 252123 |
| | ECO 00510X DEC | 252124 |
| | ECO 01110S PFC | 252125 |
| | ECO 01110S PEC | 252126 |
| | ECO 01110S DFC | 252127 |
| | ECO 01110S DEC | 252128 |

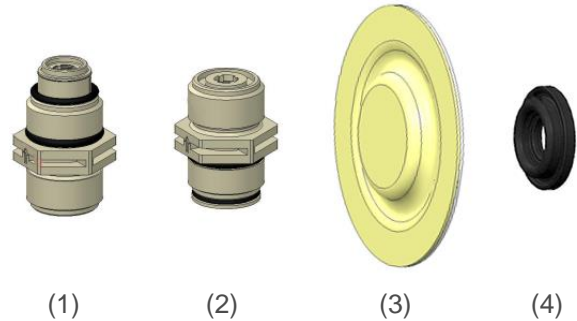


4.4.2 Wearing part kit 30/50 l/h and 120 l/h

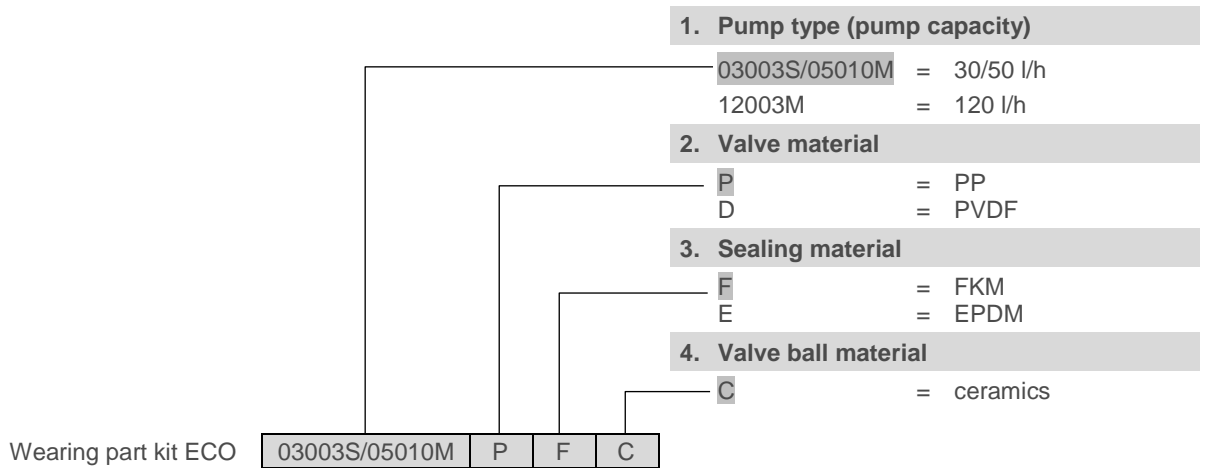
Wearing part kit

consisting of:

- 1 suction valve (1)
- 1 pressure valve (2)
- 1 diaphragm (3)
- 1 protective diaphragm (4)



| Article | Code | Article no. |
|------------------|-----------------------|-------------|
| Wearing part kit | ECO 03003S/05010M PFC | 252129 |
| | ECO 03003S/05010M PEC | 252130 |
| | ECO 03003S/05010M DFC | 252131 |
| | ECO 03003S/05010M DEC | 252132 |
| | ECO 12003M PFC | 252133 |
| | ECO 12003M PEC | 252134 |
| | ECO 12003M DFC | 252135 |
| | ECO 12003M DEC | 252136 |



5 Accessories

5.1 General accessories

Article

Article no.



Bluetooth board

252080

for upgrading EcoAdd pumps
for data exchange via Bluetooth



Adapter cable

for connecting existing EMP pump connections, when
replacing EMP pumps with Eco pumps.

Adapter cable, control input, EMP – EcoAdd

252082

Adapter cable, output, EMP – EcoAdd

252083

Article

Article no.



Oval gear meter
for volumetric measurement of the rate of flow
**Ordering data are to be found in chapter
„Measuring and Controlling, OGM PLUS“**



Signal horn with integrated red flash light
230 V / 50 Hz / IP 33 RO

418271053

5.2 Accessories 5 l/h and 11 l/h

5.2.1 Connection material



| Article | Article no. |
|--|-------------|
| Connection set for PE/PTFE hose 4/6 mm (only for 5 l/h) | |
| Connection set Di4/Da6-G3/8-PVDF-NA | 252101 |
| Connection set Di4/Da6-G3/8-PP-GY | 252102 |
| Connection set for PE/PTFE hose 5/8 mm | |
| Connection set Di5/Da8-G3/8-PVDF-NA | 252103 |
| Connection set Di5/Da8-G3/8-PP-GY | 252104 |
| Screw-on connection PP, G3/8 _i – DN5/8 [“] | 41502356 |
| Connection set for PE/PTFE hose 6/8 mm | |
| Connection set Di6/Da8-G3/8-PVDF-NA | 252105 |
| Connection set Di6/Da8-G3/8-PP-GY | 252106 |
| Connection set for PE/PTFE hose 1/4[“] / 3/8[“] | |
| Screw-on connection PP, G3/8 _i – DN 1/4 [“] / 3/8 [“] | 415102350 |
| Screw-on connection PVDF, G3/8 _i – DN 1/4 [“] / 3/8 [“] | 415102304 |
| Connection set for PE/PTFE hose 6/10 mm | |
| Screw-on connection PVDF, G3/8 _i - 6/10 mm | 415102352 |
| Connection set for PVC hose 6/12 mm | |
| Connection set Di6/Da12-G3/8-PVDF-NA | 252107 |
| Connection set Di6/Da12-G3/8-PP-GY | 252108 |

5.2.2 Suction lances



Article

Article no.

Suction lances D 16 with reserve and empty signal report

incl. ball non-return valve, suction strainer, level pre-warning contact, empty signal contact (when dropping below the level = contact interrupted), hose connection material (4/6 mm, 6/8 mm, 6/10 mm and 6/12 mm)

- Tube diameter: 16 mm
- Suction line: PE
- Connection cable: circular connector incl. 5 m cable
- Turn-on voltage: max.48 V AC/DC
- Switching current: 0.5 A
- Rupturing capacity: 8 W / 8 VA

| | |
|--|--------|
| SGL VCPVFP99GL000 G3/8-06-2SS-0540-99-51 (for container 20 l) | 249020 |
| SGL VCPVFP99GL000 G3/8-06-2SS-0750-99-51 (for container 30/60 l) | 249021 |
| SGL VCPVFP99GL000 G3/8-06-2SS-0970-99-51 (for container 100/200 l) | 249022 |
| SGL VCPVFP99GL000 G3/8-06-2SS-1125-99-51 (for container 200 l) | 249023 |

Suction lances D32 with reserve and empty signal report

incl. of ball non-return valve, suction strainer and zero-potential empty signal contact (empty = contact interrupted), hose connection material (4/6 mm, 6/8 mm and 6/12 mm)

- Rohrdurchmesser: 32 mm
- Anschlusskabel: 3-poliger Rundstecker inkl. 5 m Kabel
- Schaltspannung: max. 50 V AC/DC
- Schaltstrom: 0,5 A
- Schaltleistung: 10 W / 10 VA

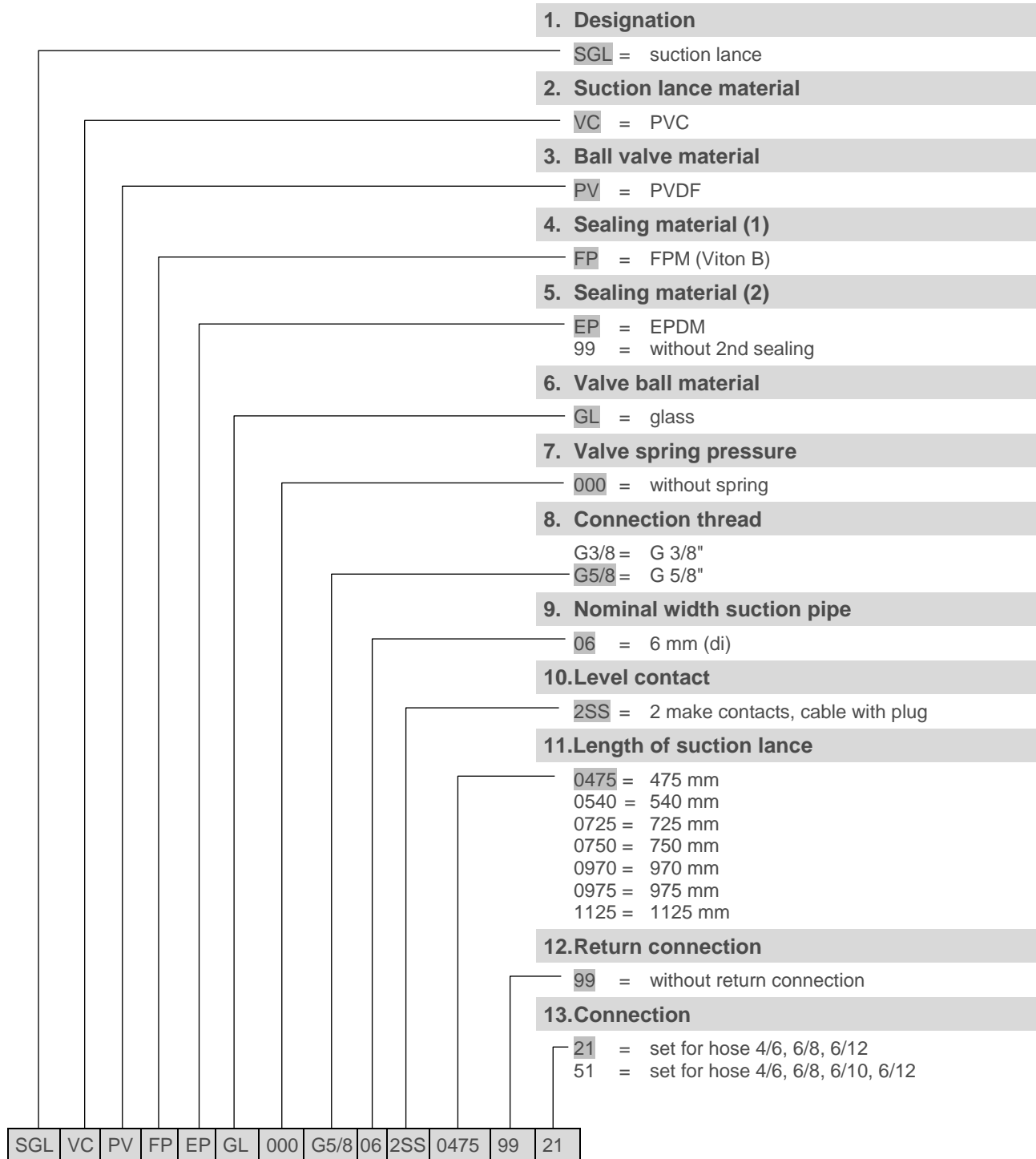
| | |
|--|--------|
| SGL VCPVFPEPGL000 G5/8-06-2SS-0475-99-21 (for container 20 l) | 186140 |
| SGL VCPVFPEPGL000 G5/8-06-2SS-0725-99-21 (for container 30/60 l) | 186141 |
| SGL VCPVFPEPGL000 G5/8-06-2SS-0975-99-21 (for container 100/200 l) | 186142 |
| SGL VCPVFPEPGL000 G5/8-06-2SS-1125-99-21 (for container 200 l) | 186143 |



Diaphragm metering pump EcoPro / EcoAdd Accessories 5 l/h and 11 l/h



Suction lance code



5.2.3 Suction lance adaptors

| | Article | Article no. |
|---|--|--------------------|
|  | <p>Adaptor – screw cap for suction lance Ø 16 mm</p> <p>Thread pitch: 5 mm Threaded int. diameter: 50 mm Threaded ext. diameter: 55 mm Hole diameter: 25 mm can be screwed on: canister 10 l and 20 l</p> | 38619003 |
| | <p>as 38619003 but with</p> <p>Threaded int. diameter: 56 mm Threaded ext. diameter: 61 mm can be screwed on: canister 30 l or container 60 – 200 l</p> | 38619004 |
|  | <p>as 38619004 but with return hole</p> | 247627 |
|  | <p>Adaptor – insert cap</p> <p>for suction lance Ø 32 mm PVC soft to attach on: canister 10 l and 20 l</p> | 286198 |
|  | <p>Adaptor – insert cap</p> <p>for suction lance Ø 32 mm PVC – hard / Viton B appropriate for degassing products</p> <p>Return connection: 4/6, 6/8 or 6/12 mm (int.Ø /ext.Ø) Vent connection: 6/12 mm (int.Ø /ext.Ø) to attach on: canister 30 l or container 60 – 200 l</p> | 288534 |
|  | <p>Adaptor – screw joint</p> <p>for suction lance Ø 32 mm PVC hard</p> <p>Thread pitch: 5 mm Threaded int. diameter: 56 mm Threaded ext. diameter: 61 mm can be screwed on: canister 30 l or container 60 – 200 l</p> | 286197 |



Article

Article no.

Adaptor – screw joint

288535

for suction lance Ø 32 mm
PVC – hard / Viton B / silicone
appropriate for **degassing products**
Return connection: 4/6, 6/8 or 6/12 mm (int.Ø /ext.Ø)
Vent connection: 6/12 mm (int.Ø /ext.Ø)
Thread pitch: 5 mm
Threaded int. diameter: 63 mm
Threaded ext. diameter: 69 mm
for barrel with internal thread (L-ring plus barrel 220 l)



Adapter screw connection

288570

for suction lance Ø 32 mm
PVC – hard / Viton B / Silicon
suitable for degassing products
Return connection: 4/6, 6/8 or 6/12 mm (int./ext.Ø)
Vent connection: 6/12 mm (int./ext.Ø)
Thread pitch: 2.31 mm
Threaded int. diameter: 56.66 mm
Threaded ext. diameter: 59.61 mm
for container screw cap with 2" internal thread



Adapter

419800026

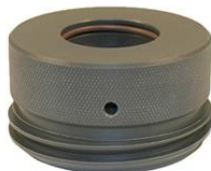
2" internal thread for adapter screw connection **288570**
Tri-Sure external thread for container screw cap



Suction lance adapter, rigid PVC/Viton B

288549

for canister or barrel



Suction lance adapter, rigid PVC/Viton B

288547

for barrels (l-ring plus – barrel 220)



Suction lance adapter, rigid PVC/Viton B

288548

for container (ECOBULK-container with skid pallet)
for screw in in screw cap with 2"
Tri-Sure-Stuffing



Article

Article no.

Terminal box for connection cable of the suction pipe

288419

for connection cable with round plug
incl. cable union PG 7 (max. 2 x 1 m²)



Protection tubes for suction lances, D32

for prevention of mechanical damage of the suction valve
and the float respectively;
suitable for all suction lances Ø 32 mm

Protection tube, PVDF, 32,5/40 (int.Ø /ext.Ø)

286191

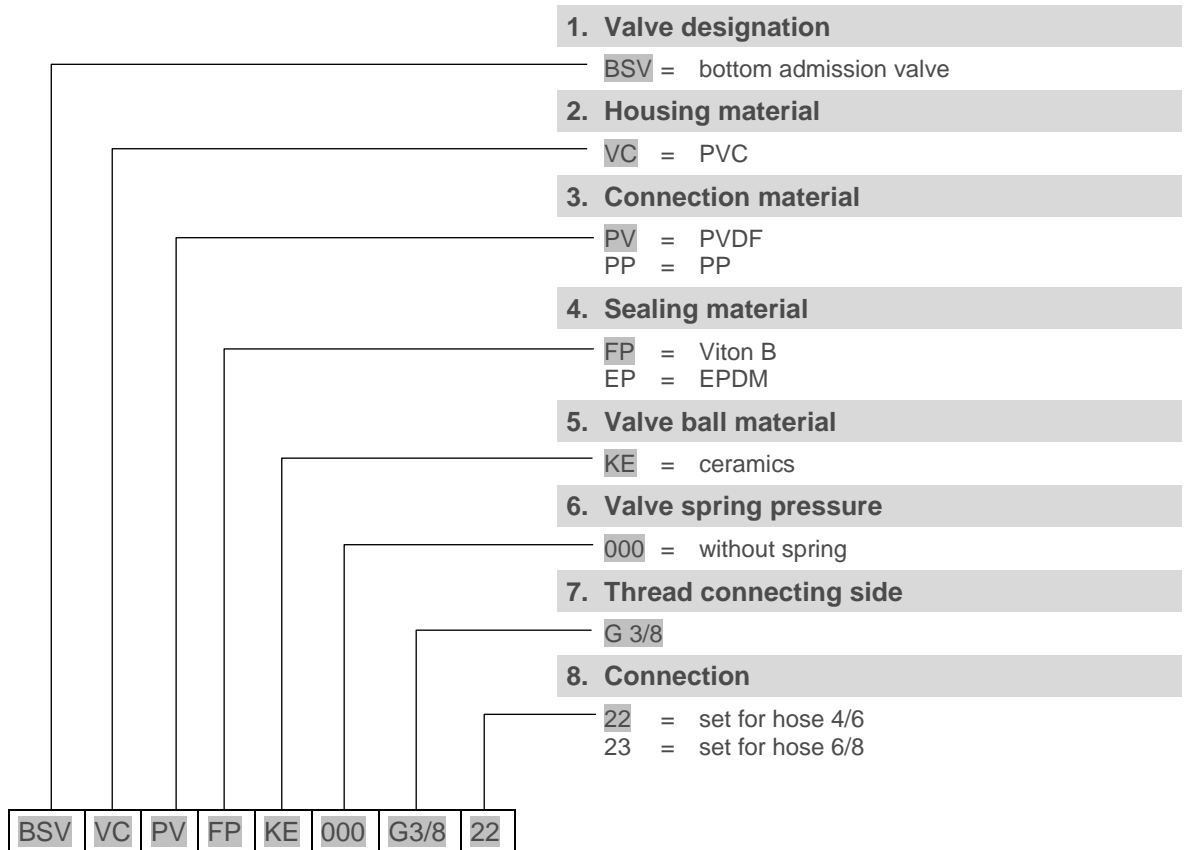
incl. fastening screw

Protection tube, stainless steel (1.4035),

286153

32,5/40 (int.Ø /ext.Ø) incl. fastening screw

5.2.4 Bottom admission valve

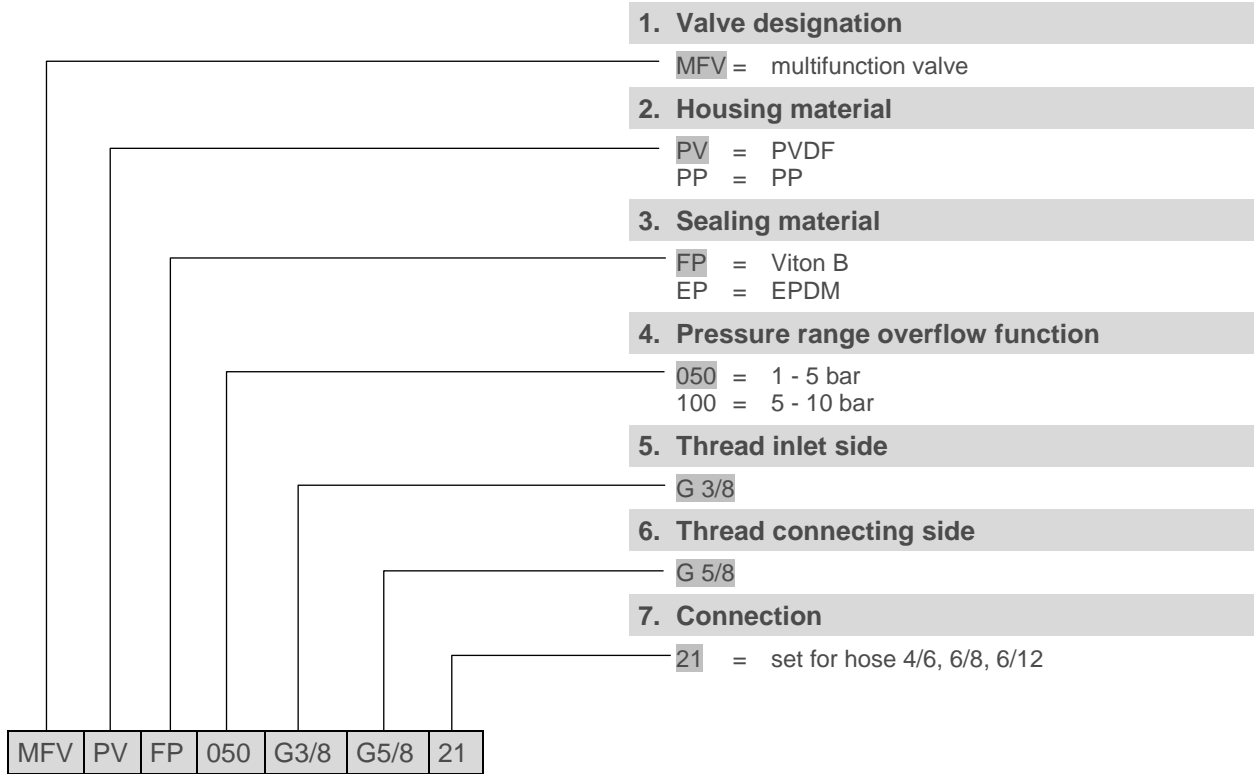


Article

Article no.

| | |
|--------------------------------|--------|
| BSV VC PV FP KE 000 G 3/8 - 22 | 243129 |
| BSV VC PV FP KE 000 G 3/8 - 23 | 243130 |
| BSV VC PV EP KE 000 G 3/8 - 22 | 243131 |
| BSV VC PV EP KE 000 G 3/8 - 23 | 243132 |
| BSV VC PP FP KE 000 G 3/8 - 22 | 243125 |
| BSV VC PP FP KE 000 G 3/8 - 23 | 243126 |
| BSV VC PP EP KE 000 G 3/8 - 22 | 243127 |
| BSV VC PP EP KE 000 G 3/8 - 23 | 243128 |

5.2.5 Multifunction valve



This safety-relevant component serves the purpose of protecting the piping system and the metering pump and permits safe and reliable commissioning and maintenance of the system.

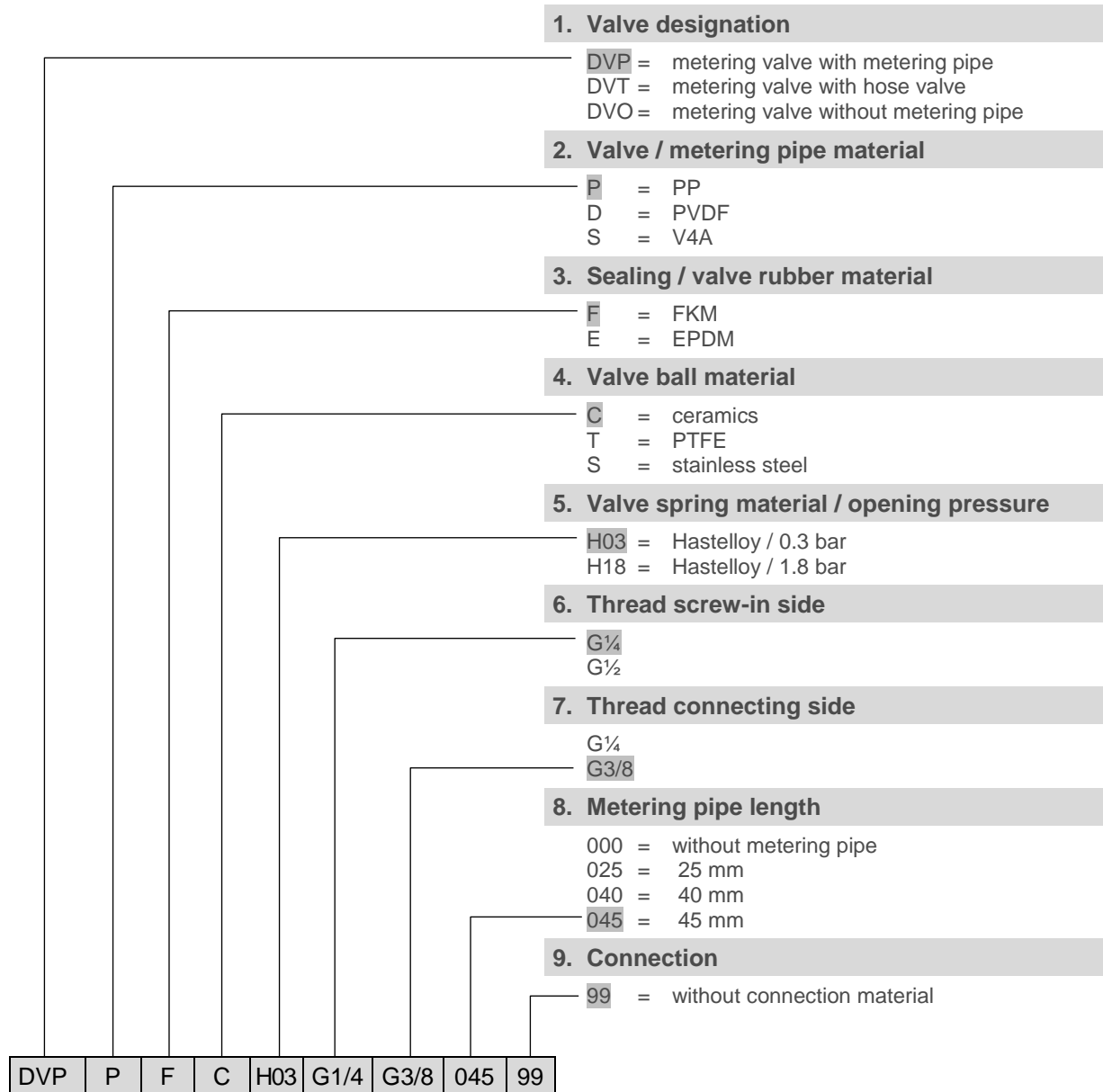
The multiple function valve combines all of the following functions: overflow, pressure maintenance, venting and drainage



| Article | Article no. |
|----------------------------------|-------------|
| MFV PV FP 100 G 3/8 – G 5/8 – 21 | 249241 |
| MFV PV EP 100 G 3/8 – G 5/8 – 21 | 249261 |
| MFV PP FP 100 G 3/8 – G 5/8 – 21 | 249247 |
| MFV PP EP 100 G 3/8 – G 5/8 – 21 | 249267 |

Further material combinations on request!

5.2.6 Metering valve



Article

Article no.

| | |
|------------------------------|--------|
| DVP PFC-H03-G1/4-G3/8-045-99 | 252150 |
| DVP PEC-H03-G1/4-G3/8-045-99 | 252151 |
| DVP DFC-H03-G1/4-G3/8-045-99 | 252153 |
| DVP DEC-H03-G1/4-G3/8-045-99 | 252154 |
| DVP PFC-H03-G1/2-G3/8-045-99 | 252155 |
| DVP PEC-H03-G1/2-G3/8-045-99 | 252156 |
| DVP DFC-H03-G1/2-G3/8-045-99 | 252157 |
| DVP DEC-H03-G1/2-G3/8-045-99 | 252158 |

Article

Article no.

Metering valves with hose valve for chloric products



| | |
|------------------------------|--------|
| DVT PFC-H18-G1/4-G3/8-025-99 | 252159 |
| DVT PEC-H18-G1/4-G3/8-025-99 | 252160 |
| DVT DFC-H18-G1/4-G3/8-025-99 | 252161 |
| DVT DEC-H18-G1/4-G3/8-025-99 | 252162 |
| DVT PFC-H18-G1/2-G3/8-040-99 | 252163 |
| DVT PEC-H18-G1/2-G3/8-040-99 | 252164 |
| DVT DFC-H18-G1/2-G3/8-040-99 | 252165 |
| DVT DEC-H18-G1/2-G3/8-040-99 | 252166 |

Hot-water metering area

consisting of:

Metering valve with metering pipe

| | |
|--------------------------------------|--------|
| DVM VA VA FP GL 004 G1/2 – G1/4 – 41 | 240153 |
|--------------------------------------|--------|

and

Cooling stretch

248411

stainless steel spiral-pipe da 8 mm

with adapter and connection material for hose 4/6, 6/8 and 6/12 mm (ID/AD)

Temperature resistance: max. 130° C.



Optical metering control

288524

The optical metering control is executed by the operation of a ball in the transparent window of the metering display during metering of the product.



5.2.7 Suction and pressure lines

Article

Article no.

Suction and pressure lines

available by the metre
(int.Ø / ext.Ø)

max. operating pressure [bar]
at 20° C



| | | |
|--------------------|----|-----------|
| PVC-fabric 6/12 mm | 16 | 417400123 |
|--------------------|----|-----------|

Note: We explicitly point out that PVC fabric tubes have a limited lifetime if alkaline chemicals will be used. To avoid damage for your staff and your company the tubes have to be exchanged at least every 6 months. In case of non-compliance we exclude all kinds of liability and responsibility.



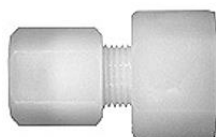
| | | |
|-----------------|----|-----------|
| PE hose 4/6 mm | 12 | 417400301 |
| PE hose 5/8 mm | 13 | 417400300 |
| PE hose 6/8 mm | 8 | 417400310 |
| PE hose 6/10 mm | 15 | 417400302 |



| | | |
|-------------------|----|-----------|
| PTFE hose 4/6 mm | 12 | 417400215 |
| PTFE hose 5/8 mm | 14 | 417400213 |
| PTFE hose 6/8 mm | 9 | 417400224 |
| PTFE hose 6/10 mm | 15 | 417400216 |

5.3 Accessories 30 l/h and 50 l/h

5.3.1 Connection material



| Article | Article no. |
|---|-------------|
| Connection set for PE/PTFE hose 6/8 mm | |
| Connection set Di6/Da8-G5/8-PVDF-NA | 252113 |
| Connection set Di6/Da8-G5/8-PP-GY | 252114 |
| Connection set for PE/PTFE hose 6/10 mm | |
| Screw-on connection PVDF, G5/8"i - 6/10 mm | 415102353 |
| Connection set for PE/PTFE hose 9/12 mm | |
| Connection set Di9/Da12-G5/8-PVDF-NA | 252115 |
| Connection set Di9/Da12-G5/8-PP-GY | 252116 |
| Connection set for PVC hose 6/12 mm | |
| Connection set Di6/Da12-G5/8-PVDF-NA | 252117 |
| Connection set Di6/Da12-G5/8-PP-GY | 252118 |
| Connection set for PVC hose 10/16 mm | |
| Connection set Di10/Da16-G5/8-PVDF-NA | 252119 |
| Connection set Di10/Da16-G5/8-PP-GY | 252120 |
| Screw-on connection for PEX pipe 8/12 mm | |
| Screw-on connection PVDF G5/8"i - PEX 8/12 | 207714 |
| Screw-on connection PP G5/8"i - PEX 8/12 | 207724 |
| Screw-on connection for PEX pipe 12/16 mm | |
| Screw-on connection PVDF G5/8"i - PEX 12/16 | 207729 |
| Screw-on connection PP G5/8"i - PEX 12/16 | 207728 |
| Connecting parts for pipe connection DN8/d12 | |
| Union nut PVDF G5/8" | 34500134 |
| Insertion part (welded sleeve) PVDF DN8/d12 - 5/8" | 34900196 |
| Union nut PP G5/8" | 34500228 |
| Insertion part (welded sleeve) PP DN8/d12 - 5/8" | 34900246 |
| Connecting parts for transition to standard thread | |
| Screw-on connection PVDF G5/8"i - 1/2" a NPT | 34900274 |
| Screw-on connection PP G5/8"i - 1/2" a NPT | 34900273 |

5.3.2 Suction lances



Article

Article no.

Suction lances D32 with reserve and empty signal report

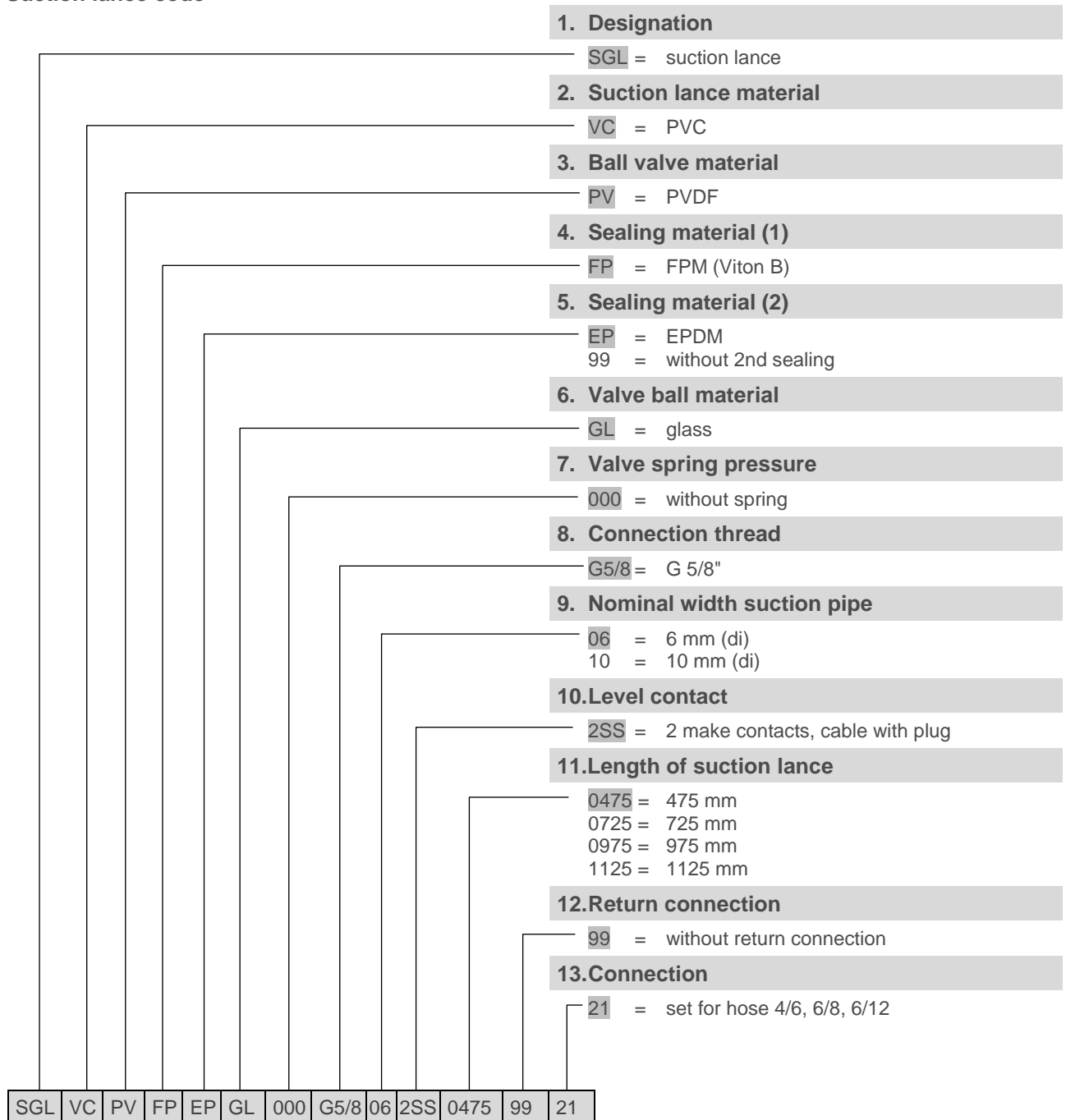
incl. of ball non-return valve, suction strainer and zero-potential empty signal contact (empty = contact interrupted), hose connection material (4/6 mm, 6/8 mm and 6/12 mm)

- Pipe diameter: 32 mm
- Connection cable: circular connector incl. 5 m cable
- Turn-on voltage: max. 50 V AC/DC
- Switching current: 0.5 A
- Rupturing capacity: 10 W / 10 VA

| | |
|--|--------|
| SGL VCPVFPEPGL000 G5/8-06-2SS-0475-99-21 (for container 20 l) | 186140 |
| SGL VCPVFPEPGL000 G5/8-06-2SS-0725-99-21 (for container 30/60 l) | 186141 |
| SGL VCPVFPEPGL000 G5/8-06-2SS-0975-99-21 (for container 100/200 l) | 186142 |
| SGL VCPVFPEPGL000 G5/8-06-2SS-1125-99-21 (for container 200 l) | 186143 |

Suction lance code see next page!

Suction lance code



5.3.3 Suction lance adaptors

| | Article | Article no. |
|---|--|-------------|
|  | <p>Adaptor – insert cap for suction lance Ø 32 mm PVC soft to attach on: canister 10 l and 20 l</p> | 286198 |
|  | <p>Adaptor – screw joint for suction lance Ø 32 mm PVC hard Thread pitch: 5 mm Threaded int. diameter: 56 mm Threaded ext. diameter: 61 mm can be screwed on: canister 30 l or container 60 – 200 l</p> | 286197 |
|  | <p>Suction lance adaptor, D 32, rigid PVC/Viton B for canister or barrel</p> | 288549 |
|  | <p>Suction lance adaptor, D 32, rigid PVC/Viton B for barrels (l-ring plus – barrel 220)</p> | 288547 |
|  | <p>Suction lance adaptor, rigid PVC/Viton B for container (ECOBULK-container with skid pallet) for screw in in screw cap with 2” Tri-Sure-Stuffing</p> | 288548 |



Article

Article no.

Adaptor – insert cap

288534

for suction lance Ø 32 mm
PVC – hard / Viton B
appropriate for **degassing products**
Return connection: 4/6, 6/8 or 6/12 mm (int.Ø /ext.Ø)
Vent connection: 6/12 mm (int.Ø /ext.Ø)
to attach on: canister 30 l or
container 60 – 200 l



Adaptor – screw joint

288535

for suction lance Ø 32 mm
PVC – hard / Viton B / silicone
appropriate for **degassing products**
Return connection: 4/6, 6/8 or 6/12 mm (int.Ø /ext.Ø)
Vent connection: 6/12 mm (int.Ø /ext.Ø)
Thread pitch: 5 mm
Threaded int. diameter: 63 mm
Threaded ext. diameter: 69 mm
for barrel with internal thread (L–ring plus barrel 220 l)



Terminal box for connection cable of the suction pipe

288419

for connection cable with round plug
incl. cable union PG 7 (max. 2 x 1 m²)



Protection tubes for suction lances, D32

for prevention of mechanical damage of the suction valve and the float respectively;
suitable for all suction lances Ø 32 mm

Protection tube, PVDF, 32,5/40 (int.Ø /ext.Ø)

286191

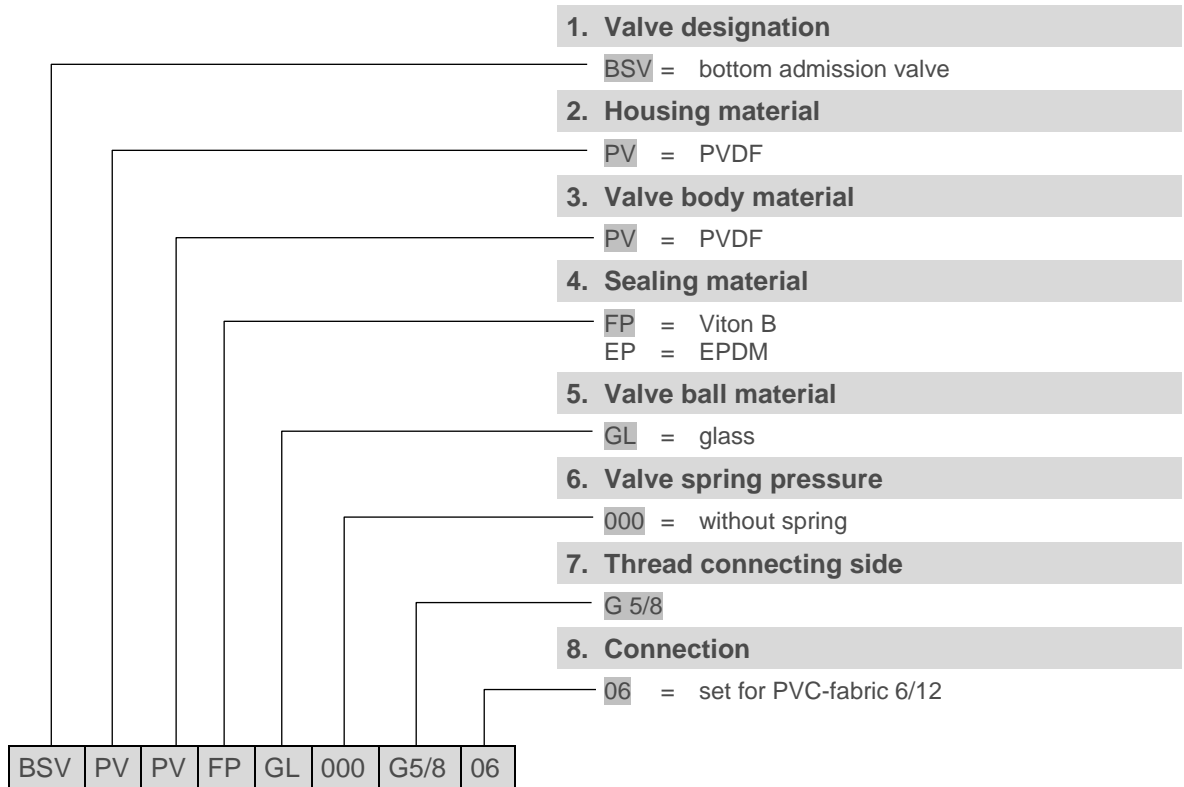
incl. fastening screw

Protection tube, stainless steel (1.4035),

32,5/40 (int.Ø /ext.Ø) incl. fastening screw

286153

5.3.4 Bottom admission valve



Article

Article no.

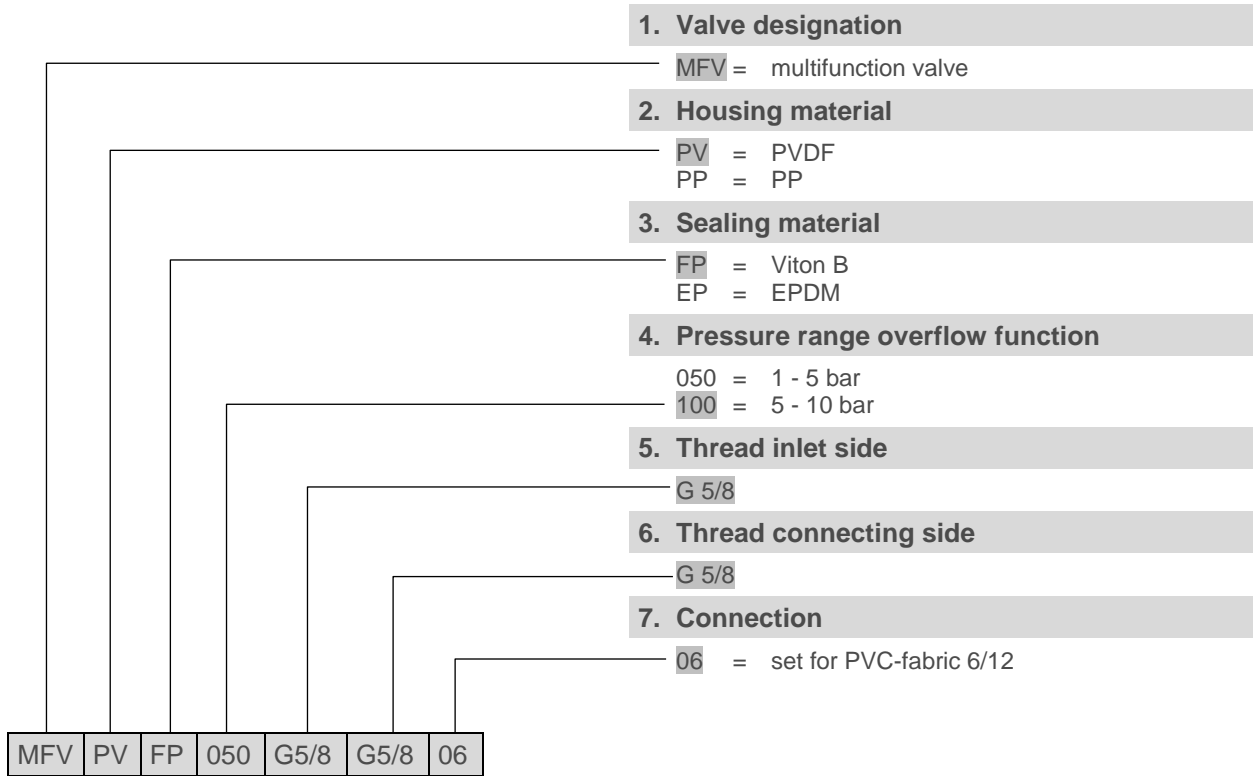
BSV PV PV FP GL 000 G 5/8 – 06

249018

BSV PV PV EP GL 000 G 5/8 – 06

249024

5.3.5 Multifunction valve



This safety-relevant component serves the purpose of protecting the piping system and the metering pump and permits safe and reliable commissioning and maintenance of the system.

The multiple function valve combines all of the following functions: overflow, pressure maintenance, venting and drainage



Article

Article no.

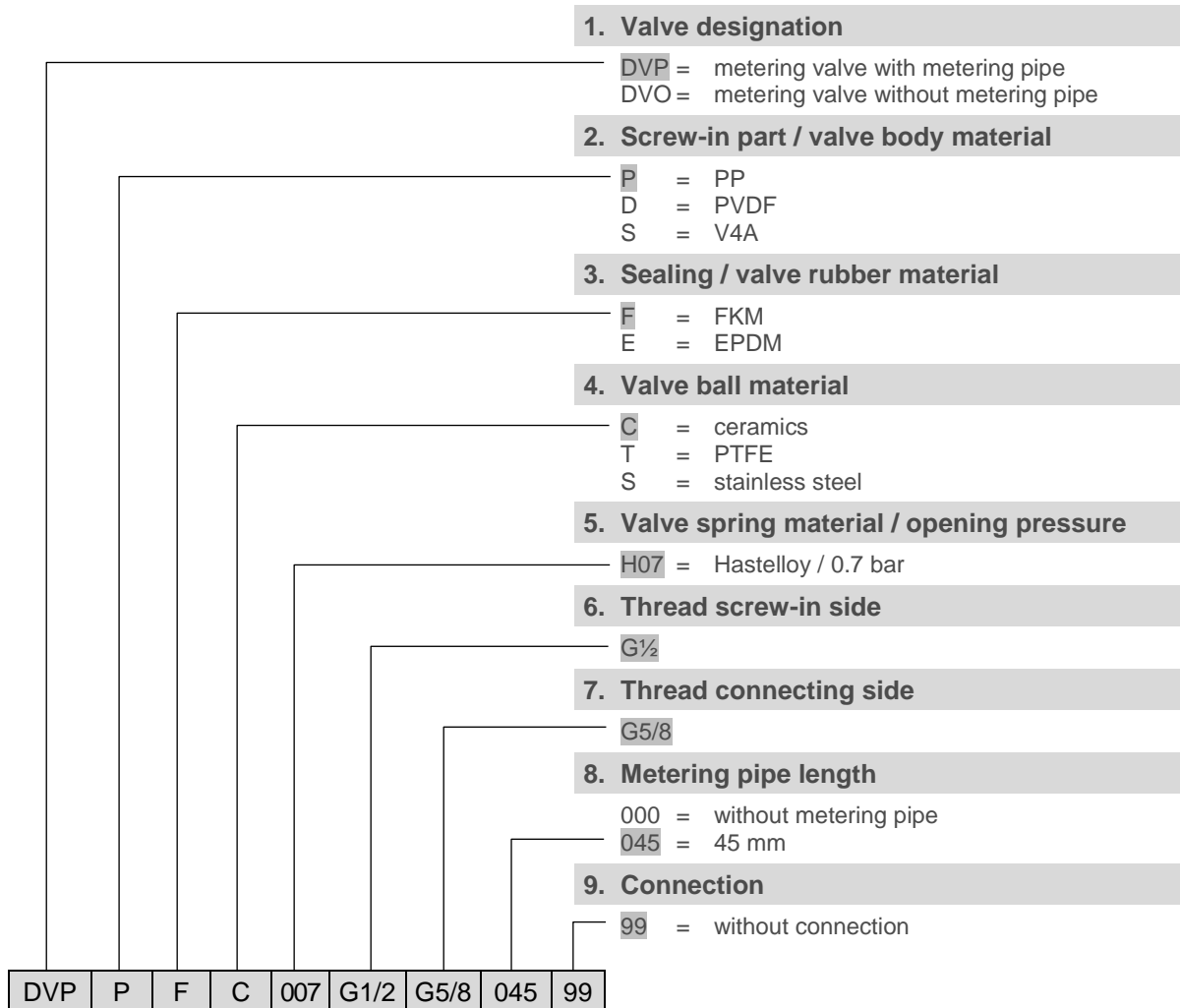
Pump type 30

| | |
|---------------------------------|--------|
| MFV PP FP 50 G 5/8 – G 5/8 – 06 | 249248 |
| MFV PP EP 50 G 5/8 – G 5/8 – 06 | 249268 |
| MFV PV FP 50 G 5/8 – G 5/8 – 06 | 249242 |
| MFV PV EP 50 G 5/8 – G 5/8 – 06 | 249262 |

Pump type 50

| | |
|----------------------------------|--------|
| MFV PP FP 100 G 5/8 – G 5/8 – 06 | 249249 |
| MFV PP EP 100 G 5/8 – G 5/8 – 06 | 249269 |
| MFV PV FP 100 G 5/8 – G 5/8 – 06 | 249243 |
| MFV PV EP 100 G 5/8 – G 5/8 – 06 | 249263 |

5.3.6 Metering valve



Article

Article no.





Metering valve with metering pipe

| | |
|------------------------------|--------|
| DVP PFC-H07-G1/2-G5/8-045-99 | 252177 |
| DVP PEC-H07-G1/2-G5/8-045-99 | 252178 |
| DVP DFC-H07-G1/2-G5/8-045-99 | 252179 |
| DVP DEC-H07-G1/2-G5/8-045-99 | 252180 |

Metering valve without metering pipe

| | |
|------------------------------|--------|
| DVO PFC-H07-G1/2-G5/8-000-99 | 252173 |
| DVO PEC-H07-G1/2-G5/8-000-99 | 252174 |
| DVO DFC-H07-G1/2-G5/8-000-99 | 252175 |
| DVO DEC-H07-G1/2-G5/8-000-99 | 252176 |

5.3.7 Suction and pressure lines

| | Article | | Article no. |
|---|--|---|-------------|
| | Suction and pressure lines | | |
| | available by the metre (int.Ø / ext.Ø) | max. operating pressure [bar] at 20° C | |
|  | PVC-fabric 6/12 mm | 16 bar | 417400123 |
| | Note: We explicitly point out that PVC fabric tubes have a limited lifetime if alkaline chemicals will be used. To avoid damage for your staff and your company the tubes have to be exchanged at least every 6 months. In case of non-compliance we exclude all kinds of liability and responsibility. | | |
|  | PE hose 6/8 mm | 8 bar | 417400310 |
| | PE hose 9/12 mm | 9 bar | 417400304 |
|  | PTFE hose 6/8 mm | 9 bar | 417400224 |
| | PTFE hose 9/12 mm | 9 bar | 417400281 |
|  | PE-X tube 8/12 mm | | 417400361 |
| | PE-X tube 12/16 mm | | 417400362 |

5.4 Accessories 120 l/h

5.4.1 Connection material

| Article | Article no. |
|--|-------------|
| Connection set for PVC hose 12/21 mm | |
| Connection set Di12/Da21-G11/4-PP-GY | 249238 |
| Connection set Di12/Da21-G11/4-PVDF-NA | 249258 |
| Connection set for PEX pipe 12/16 mm | |
| Screw-on connection PVDF, G1¼ _i - PEX 12/16 | 250076 |
| Screw-on connection PP, G1¼ _i - PEX 12/16 | 250099 |
| Connecting parts for pipe connection DN20/d25 | |
| Union nut PVDF G1¼ _a | 415099072 |
| Insertion part (welded sleeve) PVDF DN20/d25 - 1¼ _a | 415099033 |
| Union nut PP G1¼ _a | 415099835 |
| Insertion part (welded sleeve) PP DN20/d25 - 1¼ _a | 415099709 |
| Connecting parts for transition to standard thread | |
| Union nut PVDF G1¼ _a | 415099072 |
| Insertion part PVDF G1/2 _i - 1¼ _a | 34950235 |
| Insertion part PVDF G1 _a (NPT) - 1¼ _a | 34900277 |
| Union nut PP G1¼ _a | 415099835 |
| Insertion part PP G1/2 _i - 1¼ _a | 34950259 |
| Insertion part PP G1 _a (NPT) - 1¼ _a | 34900276 |

5.4.2 Suction lances

Article

Article no.



Suction lances with reserve and empty signal report

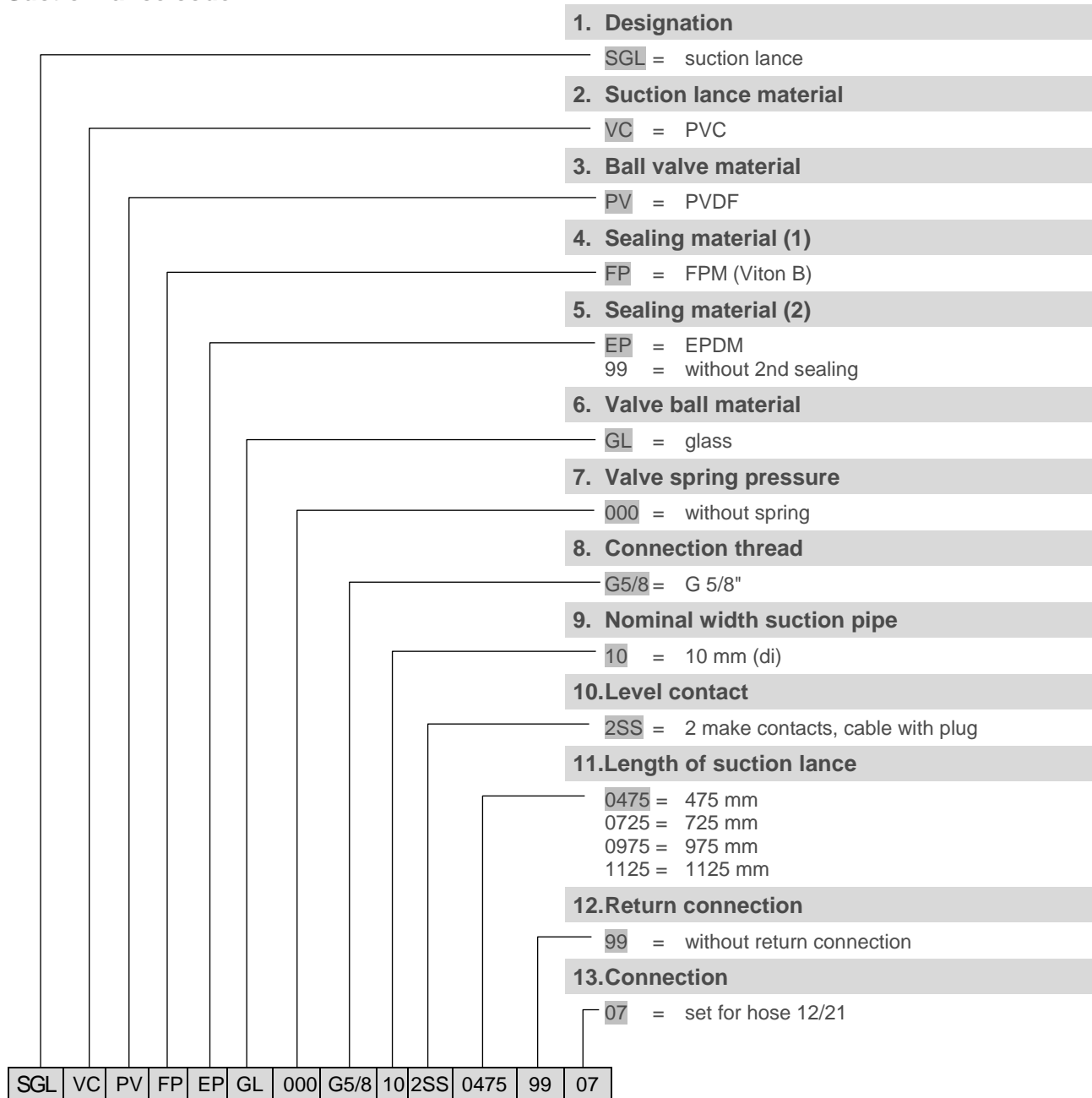
incl. of ball non-return valve, suction strainer, zero-potential empty signal contact (empty = contact interrupted)

- Tube diameter: 32 mm
- Hose connection: 12/21 mm
- Connection cable: circular connector
- Turn-on voltage: max.50 V AC/DC
- Switching current: 0.5 A
- Rupturing capacity: 10 W / 10 VA

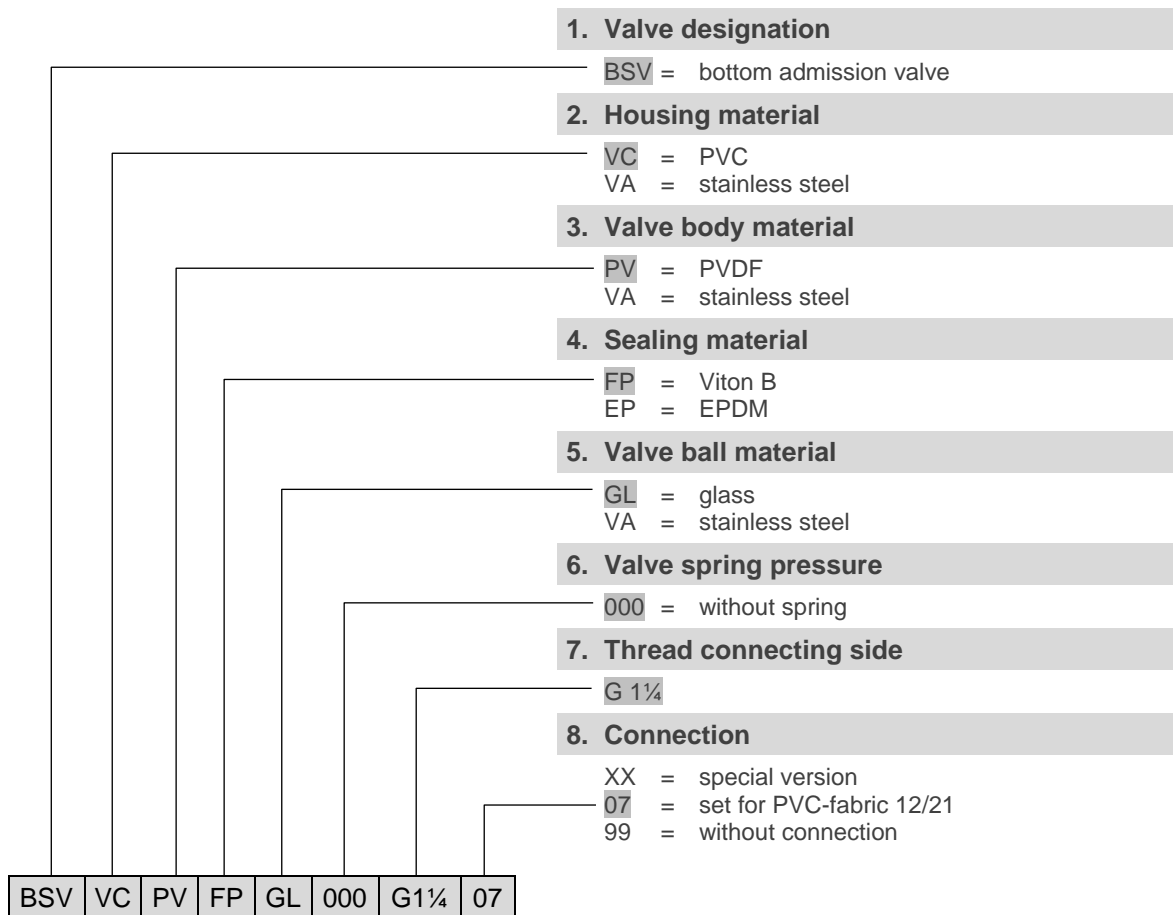
| | |
|---|--------|
| SGL VCPVFPEPGL000 G5/8-10-2SS-0475-99-07 (for container 20 l) | 186157 |
| SGL VCPVFPEPGL000 G5/8-10-2SS-0725-99-07 (for container 30/60 l) | 186158 |
| SGL VCPVFPEPGL000 G5/8-10-2SS-0975-99-07 for container 100/200 l) | 186159 |
| SGL VCPVFPEPGL000 G5/8-10-2SS-1125-99-07 (for container 200 l) | 186160 |

Suction lance code see next page!

Suction lance code



5.4.3 Bottom admission valve



Article

- BSV VC PV FP GL 000 G 1¼ – 07
- BSV VC PV EP GL 000 G 1¼ – 07
- BSV VA VA FP VA 000 G 1¼ – 99
- BSV VA VA EP VA 000 G 1¼ – 99

Article no.

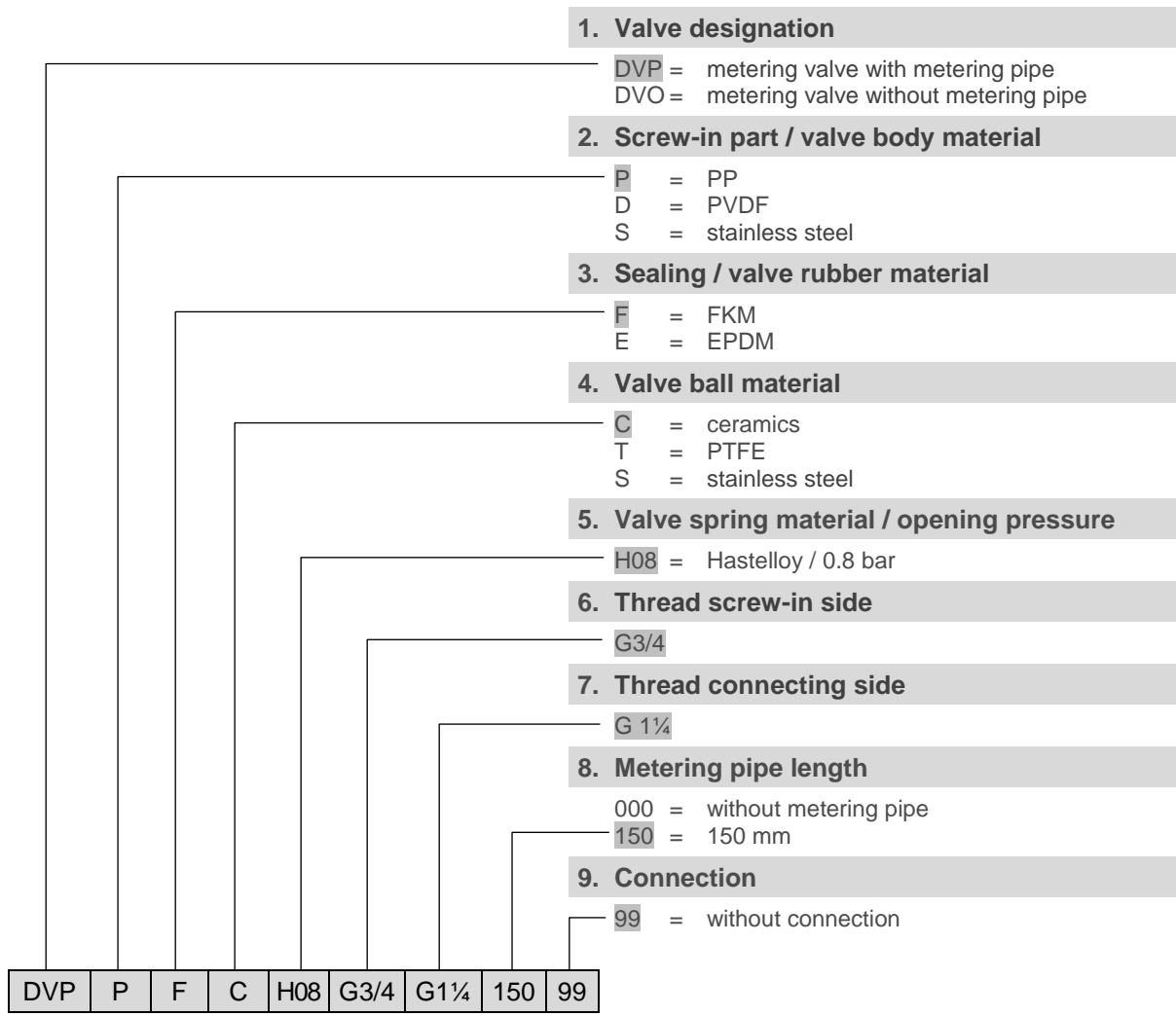
- 249019
- 249025
- 249036
- on request

Hose connection: bush for hose NW 16 mm and NW 19 mm

- BSV VC PV FP GL 000 G 1¼ – XX
- BSV VC PV EP GL 000 G 1¼ – XX

- 249017
- 249030

5.4.4 Metering valves



| | | | | | | | | |
|-----|---|---|---|-----|------|--------|-----|----|
| DVP | P | F | C | H08 | G3/4 | G1 1/4 | 150 | 99 |
|-----|---|---|---|-----|------|--------|-----|----|



| Article | Article no. |
|--|-------------|
| Metering valve with metering pipe | |
| DVP PFC-H08-G3/4-G11/4-150-99 | 252184 |
| DVP PEC-H08-G3/4-G11/4-150-99 | 252185 |
| DVP DFC-H08-G3/4-G11/4-150-99 | 252186 |
| DVP DEC-H08-G3/4-G11/4-150-99 | 252187 |



Article

Article no.

Metering valve without metering pipe (suction / pressure valve)

| | |
|----------------------------|--------|
| SDV PFC-H08-G11/4-G11/4-99 | 249518 |
| SDV PEC-H08-G11/4-G11/4-99 | 249519 |
| SDV DFC-H08-G11/4-G11/4-99 | 252038 |
| SDV DEC-H08-G11/4-G11/4-99 | 252039 |

5.4.5 Suction and pressure lines

Suction and pressure lines

available by the metre
max. operating pressure: 15 bar (at 20° C)



PVC-fabric, 12/21 mm (int.Ø/ext.Ø)
PVC-fabric, 19/27 mm (int.Ø/ext.Ø)

417400127
417400131

Note:

We explicitly point out that PVC fabric tubes have a limited lifetime if alkaline chemicals will be used. To avoid damage for your staff and your company the tubes have to be exchanged at least every 6 months. In case of non-compliance we exclude all kinds of liability and responsibility.



PE-X tube 12/16 mm

417400362