Pressure Booster/Fire-fighting Systems

# Accessories

HyaSolo 2 D FL, D FL Compact
HyaDuo 2 D FL, D FL Compact, D FL-R
DeltaBasic / DeltaCompact / DeltaMacro
DeltaPrimo / DeltaSolo / DeltaSolo D

# Type Series Booklet

## Legal information/Copyright

Type Series Booklet Accessories

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# Contents

## Building Services: Water Supply

### Pressure Booster / Fire-fighting Systems

# Accessories

### Related documents

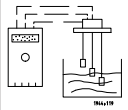
**Table 1:** Information/documents

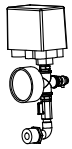
| Document | | Reference number |
|---|---|---|
|  | Type series booklet<br>HyaSolo 2 D FL<br>https://www.ksb.com/de-de/lc/H16B | 1951.54 |
|  | Type series booklet<br>HyaSolo 2 D FL Compact<br>https://www.ksb.com/de-de/lc/H45B | 1951.55 |
|  | Type series booklet<br>HyaDuo 2 D FL<br>https://www.ksb.com/de-de/lc/H44B | 1968.5 |
|  | Type series booklet<br>HyaDuo 2 D FL Compact<br>https://www.ksb.com/de-de/lc/H46B | 1968.51 |
|  | Type series booklet<br>HyaDuo 2 D FL-R<br>https://www.ksb.com/de-de/lc/H26B | 1968.52 |
|  | Type series booklet<br>DeltaBasic (MVP, SVP)<br>https://www.ksb.com/de-de/lc/D07A | 1983.531 |
|  | Type series booklet<br>DeltaCompact<br>https://www.ksb.com/de-de/lc/D05B | 1983.541 |
|  | Type series booklet<br>DeltaMacro (F, VC, SVP)<br>https://www.ksb.com/de-de/lc/D12A | 1983.571 |
|  | Type series booklet<br>DeltaPrimo (F, VC, SVP)<br>https://www.ksb.com/de-de/lc/D08A | 1983.511 |
|  | Type series booklet<br>DeltaSolo (MVP, SVP)<br>https://www.ksb.com/de-de/lc/D11A | 1983.521 |
|  | Type series booklet<br>DeltaSolo D<br>https://www.ksb.com/de-de/lc/H17A | 1951.5 |

1954.5/26-EN

## Dry running protection

**Table 2:** Dry running protection

| Part No. | Description | Cable length [m] | Suitability for drinking water | Supplied fitted Mat. No. | Supplied but not fitted Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81-45  | Float switch as dry running protection, with weight, PG cable gland<br>Special lengths upon request. | 5 | ✗ | - | 19071650 | 1 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | | 5 | ✗ | - | 05063654 | 2,52 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | 10 | ✗ | - | 19070395 | 1,5 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | | 10 | ✗ | - | 05063653 | 2,98 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | 20 | ✗ | - | 19071651 | 1,8 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| 81-45  | Float switch as dry running protection, with power cable type H07RN-F 3 x 1 mm² for lack-of-water monitoring in combination with a reservoir provided by the operator<br>Scope of supply: float switch with power cable | 5 | - | - | 11037630 | 1,1 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | | 5 | - | - | 05063618 | 1,32 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | 10 | - | - | 11037631 | 1,5 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | | 10 | - | - | 05063650 | 1,78 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | 20 | - | - | 11037632 | 2 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | | 20 | - | - | 05063651 | 3,066 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | Float switch as dry running protection, with weight and power cable type H07RN-F for lack-of-water monitoring in combination with a reservoir provided by the operator<br>Scope of supply: float switch with power cable | 5 | - | - | 05063655 | 1,12 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | | 10 | - | - | 05063656 | 2,08 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | | 20 | - | - | 05063659 | 4,366 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| 81-45  | Float switch with free cable end<br>Function: circuit closed in upper float position (NO contact)<br>Float switch housing: polypropylene<br>Fluid temperature: ≤ 70 °C<br>Power cable: H07RN-F3G1 | 3 | - | - | 11037742 | 0,5 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| | | 5 | - | - | 11037743 | 0,8 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| | | 10 | - | - | 11037744 | 1,3 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| | | 15 | - | - | 11037745 | 1,8 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| | | 20 | - | - | 11037746 | 2,4 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| | | 25 | - | - | 11037747 | 2,9 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| | | 30 | - | - | 11037748 | 3,4 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| 59-11  | Weight for adjusting the float switch level<br>Scope of supply: weight with fastening elements | - | - | - | 18040615 | 1,2 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | | - | - | - | 05063652 | 1,26 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| 81-45  | Set of electrodes as dry running protection, with analysis, connection to control cabinet not included in scope of supply | 1,5 | - | 19075400 | - | 1,2 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | Relay<br>ℹ For retrofitting, check whether there is sufficient space in the control unit. Required space: 1 HE. | - | - | - | 01069615 | 0,3 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | Sensor including terminal box with elements for mounting to inlet tank (Control cable not included in the scope of supply) | - | - | - | 00533947 | 0,9 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | ✗ |
| 82-16<br>- | Dry running protection for suction lift operation (flow monitoring)<br>When no flow is detected on the suction side and the inlet pressure drops below an adjustable value, the system stops.<br>Material 1.4457, not approved for drinking water applications to DIN EN 1988-500<br>ℹ Automatic reset is not possible for this type of dry running protection. | - | - | 19075476 | - | 0,3 | - | - | - | - | - | - | - | - | - | - | - | - |

| Part No. | Description | Cable length [m] | Suitability for drinking water | Supplied fitted Mat. No. | Supplied but not fitted Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 693  | Dry running protection (inlet pressure > 1 bar) via pressure switch, wetted membrane made of neoprene<br>Scope of supply: pressure switch 1 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 2B, 4B, 6B, 10B, 15C | - | - | 19075401 | - | 1,2 | - | - | ✘ | ✘ | - | - | - | - | - | - | - | - |
| | | - | - | - | 18041026 | 1,2 | - | - | ✘ | ✘ | - | - | - | - | - | - | - | - |
| | Dry running protection (inlet pressure > 1 bar) via pressure switch, wetted membrane made of neoprene<br>Scope of supply: pressure switch 1 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 25B, 40B, 60B, 90B | - | - | 19075402 | - | 1,2 | - | - | ✘ | ✘ | - | - | - | - | - | - | - | - |
| | | - | - | - | 18040613 | 1,2 | - | - | ✘ | ✘ | - | - | - | - | - | - | - | ✘ |

| Part No. | Description | Cable length [m] | Suitability for drinking water | Supplied fitted Mat. No. | Supplied but not fitted Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 693  | Dry running protection (inlet pressure > 1 bar) via pressure switch<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 2B, 4B | - | - | 18041170 | - | 1,2 | ✘ | - | - | - | - | - | - | - | - | - | - | ✘ |
| | Dry running protection (inlet pressure > 1 bar) via pressure switch<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 6B | - | - | 18040935 | - | 1,8 | ✘ | - | - | - | - | - | - | - | - | - | - | ✘ |
| | Dry running protection (inlet pressure > 1 bar) via pressure switch<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 10B | - | - | 18041171 | - | 1,6 | ✘ | - | - | - | - | - | - | - | - | - | - | ✘ |
| | Dry running protection (inlet pressure > 1 bar) via pressure switch<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 15C | - | - | 18041172 | - | 2 | ✘ | - | - | - | - | - | - | - | - | - | - | ✘ |
| | Dry running protection (inlet pressure > 1 bar) via pressure switch<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 25B | - | - | 18040937 | - | 2,5 | ✘ | - | - | - | - | - | - | - | - | - | - | ✘ |
| | Dry running protection (inlet pressure > 1 bar) via pressure switch<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 40B | - | - | 18040938 | - | 3 | ✘ | - | - | - | - | - | - | - | - | - | - | ✘ |
| | Dry running protection (inlet pressure > 1 bar) via pressure switch<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram<br>For systems with Movitec 60B, 90B | - | - | 18040939 | - | 3,6 | ✘ | - | - | - | - | - | - | - | - | - | - | ✘ |
| 693  | Dry running protection (inlet pressure > 1 bar) via pressure switch for systems made of stainless steel variant C2<br>Scope of supply: pressure switch 0 - 10 bar, pressure gauge 0 - 10 bar, tee, hexagon nipple, circuit diagram | - | - | 19075421 | - | 1,2 | - | - | - | - | - | - | - | - | - | - | - | |

**Pressure reducers**

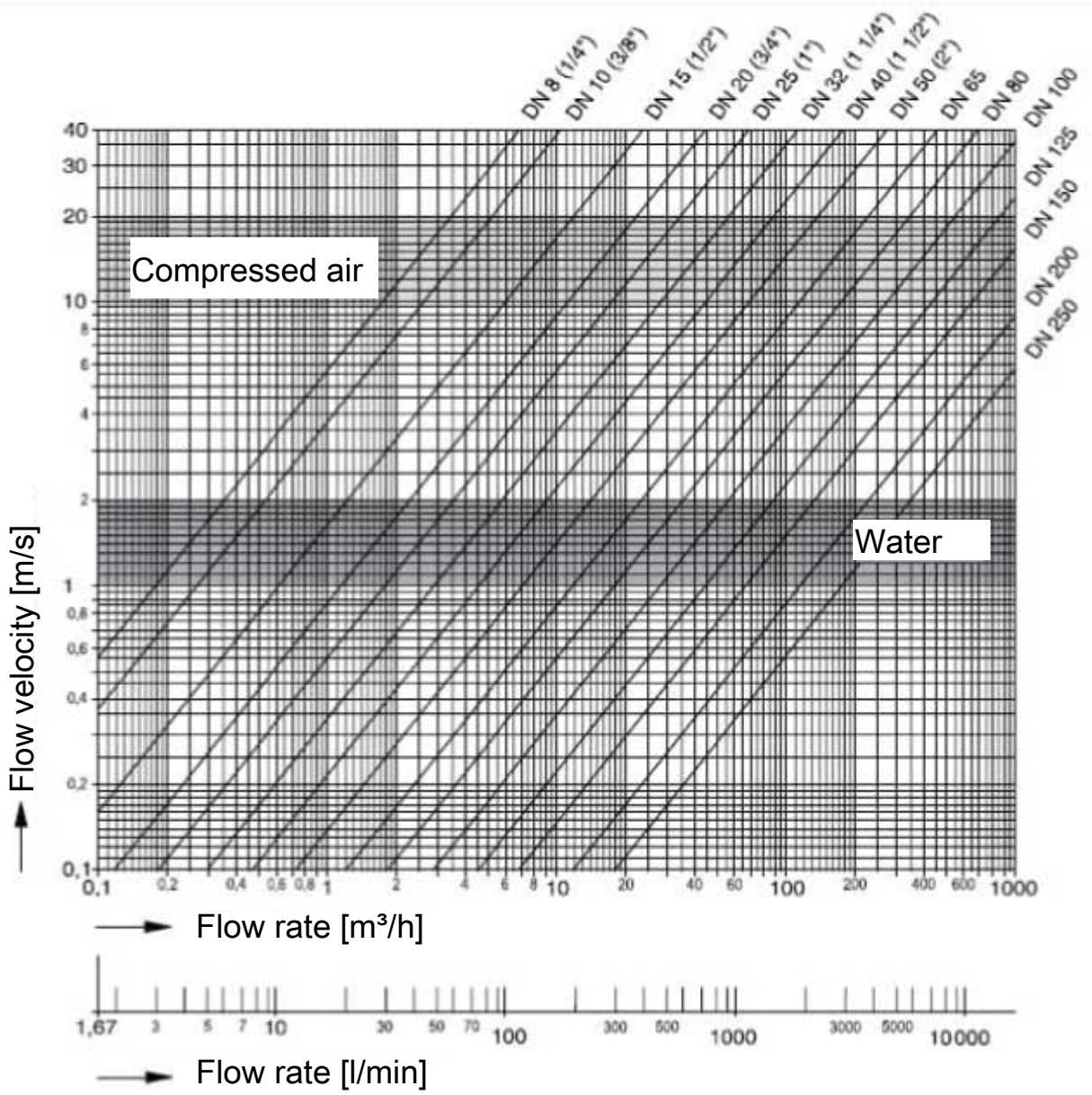



**Fig. 1:** Selection diagram for pressure reducers

**Table 3:** Pressure reducers (flanges drilled to PN 16, DIN 2533)

| Part No. | Description | Connection | Type Honeywell | Maximum inlet pressure [bar] | Downstream pressure [bar] | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 69-7  | Pressure reducer | R 1 | D06 F...A | 25 | 1,5 - 6 | 01057183 | 1,4 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | R 1 | D06 F...A | 25 | 1,5 - 6 | 05063535 | 1,866 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | R 1 1/4 | D06 F...A | 25 | 1,5 - 6 | 01057185 | 2 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | R 1 1/4 | D06 F...A | 25 | 1,5 - 6 | 05063530 | 2,466 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | R 1 1/2 | D06F...A | 25 | 1,5 - 6 | 05063533 | 3,77 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | R 2 | D06 F...A | 25 | 1,5 - 6 | 00522969 | 4,5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | R 2 | D06 F...A | 25 | 1,5 - 6 | 05063528 | 4,966 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| 69-7  | Pressure reducer | R 1 | D06 FN...B | 25 | 0,5 - 2 | 01057184 | 2,4 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | R 1 1/4 | D06 FN...B | 25 | 0,5 - 2 | 01057186 | 2,8 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | R 2 | D06 FN...B | 25 | 0,5 - 2 | 00522960 | 5,6 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| 69-7  | Pressure reducer | DN 65 | D15S-65A | 16 | 1,5 - 7,5 | 00522957 | 34,1 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 65 | D15S-65A | 16 | 1,5 - 7,5 | 05063540 | 34,2 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | | DN 80 | D15S-80A | 16 | 1,5 - 6 | 00522958 | 35,6 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 80 | D15S-80A | 16 | 1,5 - 6 | 05063539 | 35,7 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | | DN 100 | D15S-100A | 16 | 1,5 - 7,5 | 00119996 | 38,1 | - | - | - | ✘ | - | - | - | - | - | - | - | - |
| | | DN 100 | D15S-100A | 16 | 1,5 - 7,5 | 05063538 | 38,2 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| 69-7  | Pressure reducer | DN 65 | D15 NP | 16 | 0,2 - 2 | 00522959 | 37 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 80 | D15 NP | 16 | 0,2 - 2 | 00522956 | 54 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 100 | D15 NP | 16 | 0,2 - 2 | 00119997 | 87,5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 150 | D15 NP | 16 | 0,2 - 2 | 00198247 | 196 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 200 | D15 NP | 16 | 0,2 - 2 | 00198248 | 580 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| 69-7  | Pressure reducer | DN 150 | D15 P | 16 | 1,5 - 6 | 00198244 | 150 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 200 | D15 P | 16 | 1,5 - 6 | 00198245 | 408 | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - |

### Swing check valve

On request

## Expansion joints

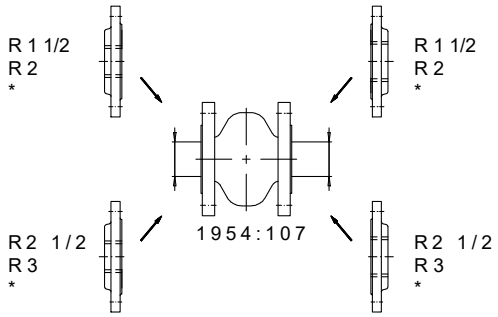



**Fig. 2:** Dimensions of expansion joint PN 10 without length limiter

| | |
|---|---|
| * | Internal thread |

**Table 4:** PN 10 expansion joints

| Part No. | Description | Suitability for drinking water | PN | Connection | Material | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-8  | Expansion joint with adapter flange PN 10/16, type 50, black | ✘ | 10 | DN 40 | - | 01125069 | 3,4 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | Expansion joint with adapter flange PN 10/16, type 50, black | ✘ | 10 | DN 65 | - | 11037184 | 5,6 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | Expansion joint with adapter flange PN 10/16, type 50, black | ✘ | 10 | DN 80 | - | 01125072 | 6,7 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| 71-8  | Threaded flange R 1 1/2 (internal thread) with screws, bolts and washers<br>Suitable for expansion joint DN 40, type 49 | - | 10 | DN 40 | Galvanised steel | 18040968 | 5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | - | 10 | DN 40 | 1.4541 | 18040969 | 5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | Threaded flange R 2 (internal thread) with screws, bolts and washers<br>Suitable for expansion joint DN 50, type 49 | - | 10 | DN 50 | Galvanised steel | 18040647 | 5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | - | 10 | DN 50 | 1.4541 | 18040646 | 5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | Threaded flange R 2 1/2 (internal thread) with screws, bolts and washers<br>Suitable for expansion joint DN 65, type 49 | - | 10 | DN 65 | Galvanised steel | 18040649 | 6 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | - | 10 | DN 65 | 1.4541 | 18040648 | 7 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | Threaded flange R 3 (internal thread) with screws, bolts and washers<br>Suitable for expansion joint DN 80, type 49 | - | 10 | DN 80 | Galvanised steel | 18040970 | 7 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | - | 10 | DN 80 | 1.4541 | 18040971 | 7 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |

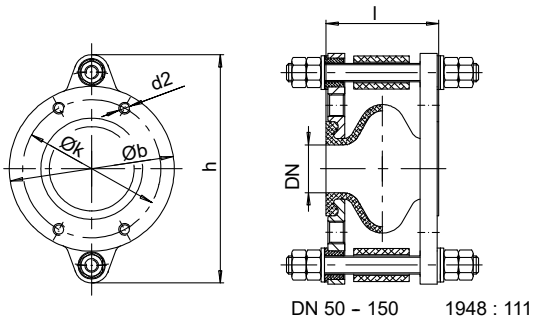



**Fig. 3:** Dimensions of expansion joint PN 16 with length limiter

**Table 5:** PN 16 expansion joint dimensions

| Connection | b | d2 | h | k | l |
|---|---|---|---|---|---|
| | [mm] | [mm] | [mm] | [mm] | [mm] |
| DN 40 | 150 | 4 × M16 | 250 | 110 | 100 |
| DN 50 | 165 | 4 × M16 | 265 | 125 | 100 |
| DN 65 | 185 | 4 × M16 | 285 | 145 | 100 |
| DN 80 | 200 | 8 × M16 | 290 | 160 | 100 |
| DN 100 | 220 | 8 × M16 | 320 | 180 | 100 |
| DN 150 | 285 | 8 × M20 | 385 | 240 | 100 |
| DN 200 | 340 | 12 × M20 | 440 | 295 | 100 |

**Table 6:** PN 16 expansion joints

| Part No. | Description | Suitability for drinking water | PN | Connection | Material | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-8  | Expansion joint type 49 blue, variant C with integrated length limiter | ✗ | 16 | DN 40 | Rubber, galvanised steel | 01125068 | 4,8 | ✗ | - | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | 16 | DN 50 | Rubber, galvanised steel | 01057406 | 8 | ✗ | - | ✗ | ✗ | - | ✗ | - | - | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | 16 | DN 65 | Rubber, galvanised steel | 01057407 | 8 | ✗ | - | ✗ | ✗ | - | ✗ | - | - | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | 16 | DN 80 | Rubber, galvanised steel | 01049847 | 5,5 | ✗ | - | ✗ | ✗ | - | - | - | - | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | 16 | DN 100 | Rubber, galvanised steel | 01049848 | 6,6 | ✗ | - | ✗ | ✗ | - | - | - | - | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | 16 | DN 150 | Rubber, galvanised steel | 01049850 | 11,4 | ✗ | - | ✗ | ✗ | - | - | - | - | ✗ | - | - | ✗ |
| | | ✗ | 16 | DN 200 | Rubber, galvanised steel | 11037185 | 10 | ✗ | - | ✗ | ✗ | - | - | - | - | ✗ | - | - | ✗ |
| 71-8  | Expansion joint type A 46, internal thread (both sides) to DIN 2999 | - | 16 | G 1 | - | 01191314 | 1 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| | | - | 16 | G 1 1/4 | - | 01191315 | 1,5 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| | | - | 16 | G 1 1/2 | - | 01191316 | 1,7 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| | | - | 16 | G 2 | - | 01191557 | 2,6 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |

## Connection set for expansion joints

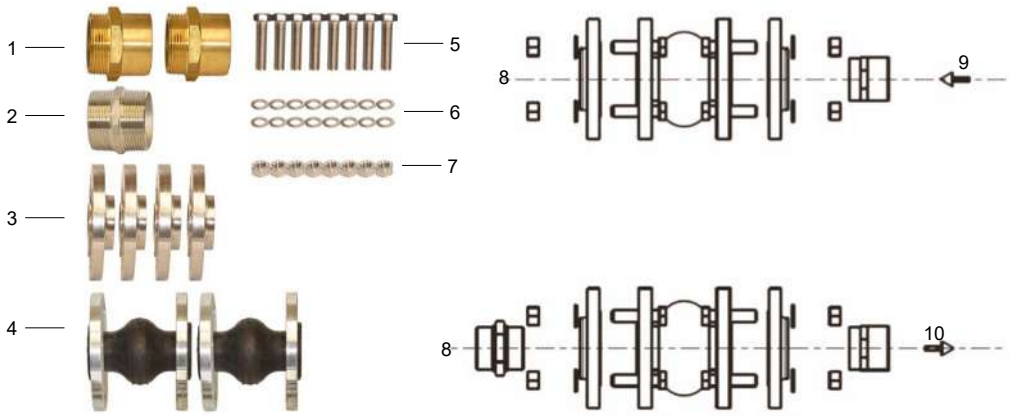



**Fig. 4:** Connection set for expansion joint without length limiter

| | | | |
|---|---|---|---|
| 1 | 2 × CuZn solder fitting with thread | 6 | 16 × washer |
| 2 | 1 × hexagon nipple 1.4301 | 7 | 8 × nut |
| 3 | 4 × threaded flange, stainless steel 1.4301 | 8 | Pressure booster system |
| 4 | 2 × expansion joint with sealing element | 9 | Water inlet |
| 5 | 8 × bolt | 10 | Water outlet |

**Table 7:** Connection set for expansion joint without length limiter

| Part No. | Description | Suitability for drinking water | Connection | Material | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-8<br>- | Connection set, suction side / discharge side, type 50 round, PN16, for expansion joints without length limiter<br>**In accordance with DIN 1988-500, expansion joints without length limiters are not permitted for pressure booster systems installed without anti-vibration mounts.**<br>The connection set comprises one connection each for the discharge side and the suction side.<br>Only one connection set is required per system. The connection set can be used to connect various connection types (threaded, flanged, welded). It includes the corresponding sealing elements.<br>The connection set matches the manifold. | ✗ | G 1 1/2 > 28 mm/ DN 25/G 1 internal thread | EPDM/ CuZn/1.4301 | 05063513 | 10,993 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 1 1/2 > 35 mm/ DN 32/G 1 1/4 internal thread | EPDM/ CuZn/1.4301 | 05063503 | 17,013 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 1 1/2 > 42 mm/ DN 40/G 1 1/2 internal thread | EPDM/ CuZn/1.4301 | 05063500 | 18,833 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 2 > 42 mm/DN 40/ G 1 1/2 internal thread | EPDM/ CuZn/1.4301 | 05063502 | 19,243 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 2 > 54 mm / DN 50 / G 2 internal thread | EPDM/ CuZn/1.4301 | 05063501 | 21,943 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 2 1/2 > 67 mm/ DN 65/G 2 1/2 internal thread | EPDM/ CuZn/1.4301 | 05063499 | 26,753 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | DN 80 / DN 80 | EPDM | 05063498 | 28,06 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | DN 100 / DN 100 | EPDM | 05063497 | 31,26 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | DN 150 / DN 150 | EPDM | 05063496 | 38,83 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | ✗ | - | - | ✗ |

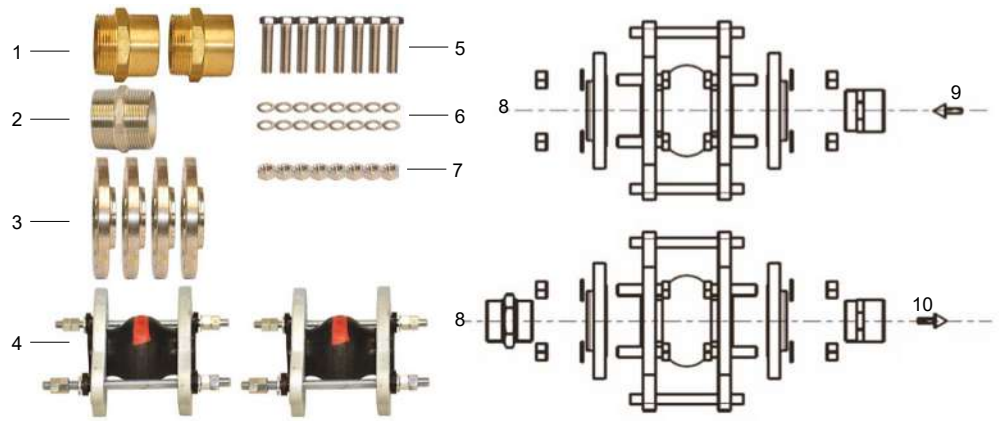



**Fig. 5:** Connection set for expansion joint with length limiter

| | | | |
|---|---|---|---|
| 1 | 2 × CuZn solder fitting with thread | 6 | 16 × washer |
| 2 | 1 × hexagon nipple 1.4301 | 7 | 8 × nut |
| 3 | 4 × threaded flange, stainless steel 1.4301 | 8 | Pressure booster system |
| 4 | 2 × expansion joint with sealing element | 9 | Water inlet |
| 5 | 8 × bolt | 10 | Water outlet |

**Table 8:** Connection set for expansion joints with length limiter

| Part No. | Description | Suitability for drinking water | Connection | Material | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-8<br>- | Connection set suction side / discharge side, type 50 round, PN16, for expansion joints with length limiter<br>**In accordance with DIN 1988-500, expansion joints with length limiters are permitted for pressure booster systems installed on anti-vibration mounts.**<br>The connection set comprises one connection each for the discharge side and the suction side. Only one connection set is required per system.<br>The connection set can be used to connect various connection types (threaded, flanged, welded). It includes the corresponding sealing elements.<br>The connection set matches the manifold. | ✗ | G 1 1/2 > 28 mm/ DN 25/G 1 internal thread | EPDM/ CuZn/1.4301 | 05063504 | 14,393 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 1 1/2 > 35 mm/ DN 32/G 1 1/4 internal thread | EPDM/ CuZn/1.4301 | 05063512 | 20,013 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 1 1/2 > 42 mm/ DN 40/G 1 1/2 internal thread | EPDM/ CuZn/1.4301 | 05063509 | 21,833 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 2 > 42 mm/DN 40/ G 1 1/2 internal thread | EPDM/ CuZn/1.4301 | 05063511 | 22,243 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 2 > 54 mm / DN 50 / G 2 internal thread | EPDM/ CuZn/1.4301 | 05063510 | 25,143 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | G 2 1/2 > 67 mm/ DN 65/G 2 1/2 internal thread | EPDM/ CuZn/1.4301 | 05063508 | 29,753 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | DN 80 / DN 80 | EPDM | 05063507 | 31,06 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | DN 100 / DN 100 | EPDM | 05063506 | 34,26 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | ✗ | ✗ | ✗ |
| | | ✗ | DN 150 / DN 150 | EPDM | 05063505 | 38,83 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | ✗ | - | - | ✗ |

### Membrane-type accumulator (steel), double connection

For drinking water applications accumulators with double connection must be used in accordance with DIN 4807-5. On request, the documented accumulators with double connection are available with larger connection cross-sections for larger flow rates.

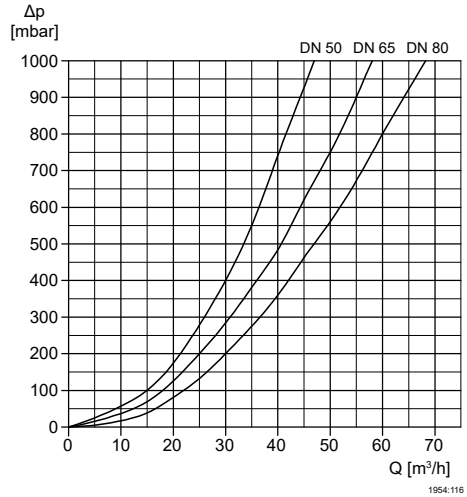



**Fig. 6:** For accumulators with double connection 300 / 400 / 500 / 800 / 1000, documented with DN 50

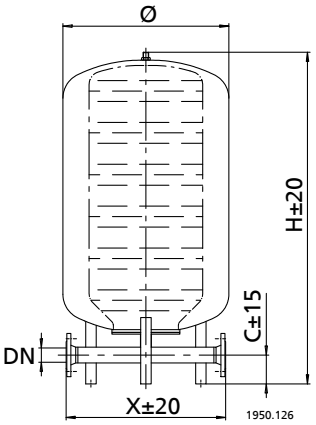



**Fig. 7:** Dimensions of membrane-type accumulator, type DT (steel), with double connection

**Table 9:** Dimensions of membrane-type accumulator, type DT (steel), with double connection

| Type DT | Effective volume | PN | C | H | X | Ø |
|---|---|---|---|---|---|---|
| | [l] | | [mm] | [mm] | [mm] | [mm] |
| 80 l | 60 | 10 | 97 | 750 | 450 | 480 |
| 80 l | 60 | 16 | 100 | 750 | 430 | 480 |
| 200 l | 150 | 10 | 105 | 973 | 600 | 634 |
| 200 l | 150 | 16 | 105 | 973 | 600 | 634 |
| 300 l | 225 | 10 | 105 | 1273 | 600 | 634 |
| 300 l | 225 | 16 | 105 | 1273 | 600 | 634 |
| 400 l | 300 | 16 | 235 | 1394 | 600 | 740 |
| 500 l | 375 | 10 | 90 | 1475 | 600 | 740 |
| 600 l | 450 | 10 | 235 | 1859 | 650 | 740 |
| 600 l | 450 | 16 | 235 | 1859 | 650 | 740 |
| 800 l | 600 | 10 | 235 | 2324 | 650 | 740 |
| 800 l | 600 | 16 | 235 | 2324 | 650 | 740 |
| 1000 l | 750 | 10 | 235 | 2804 | 650 | 740 |
| 1000 l | 750 | 16 | 235 | 2804 | 650 | 740 |

1954.5/26-EN

**Table 10:** Membrane-type accumulator, type DT (steel), with double connection

| Part No. | Description | Type DT | Effective volume [l] | PN | DN | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 591  | Membrane-type accumulator<br>▪ Made of steel<br>▪ Operating pressure up to 16 bar<br>▪ Operating temperature up to 70 °C<br>▪ Pressure gauge<br>▪ Feed valve<br>▪ Drain socket<br>▪ Replaceable membrane to DIN 4807, Part 3, suitable for drinking water in accordance with the German KTW recommendations, category C<br>▪ Accumulator's inside walls powder-coated in accordance with KTW recommendations, category C<br>▪ Connection pipe lined with thermoplastic material, suitable for drinking water in accordance with KTW recommendations, category C<br>▪ Anti-corrosive exterior coating, green RAL 6018<br>▪ Accumulator pre-charged to 4 bar with nitrogen (data not stamped onto name plate)<br>▪ DN 80/100 adapter on request | 80 l | 60 | 10 | 50 | 01064950 | 23 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 80 | 60 | 10 | 50 | 05063566 | 48,7 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 80 l | 60 | 16 | 50 | 00198689 | 32 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 80 | 60 | 16 | 50 | 05063560 | 58 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 200 l | 150 | 10 | 50 | 01065001 | 53 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 200 | 150 | 10 | 50 | 05063565 | 78 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 200 l | 150 | 16 | 50 | 00198690 | 61 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 200 | 150 | 16 | 50 | 05063559 | 86 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 300 l | 225 | 10 | 50 | 01065002 | 59 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 300 | 225 | 10 | 50 | 05063564 | 84 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 300 l | 225 | 16 | 50 | 00198691 | 70 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 300 | 225 | 16 | 50 | 05063558 | 95 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 400 l | 300 | 16 | 50 | 00198692 | 113 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 400 | 300 | 16 | 50 | 05063557 | 138 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 500 l | 375 | 10 | 50 | 01065003 | 85 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 500 | 375 | 10 | 50 | 05063563 | 110 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 600 l | 450 | 10 | 50 | 01056394 | 164 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 600 | 450 | 10 | 50 | 05063562 | 189 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 600 l | 450 | 16 | 50 | 01056395 | 174 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 600 | 450 | 16 | 50 | 05063556 | 199 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 800 l | 600 | 10 | 50 | 00198687 | 204 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 800 | 600 | 10 | 50 | 05063561 | 229 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | 800 l | 600 | 16 | 50 | 00198693 | 224 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 1000 l | 750 | 10 | 50 | 00198688 | 244 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | 1000 l | 750 | 16 | 50 | 00198694 | 259 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |


**Fig. 8:** Dimensions of membrane-type accumulator, type DD (steel), with double connection

**Table 11:** Dimensions of membrane-type accumulator, type DD (steel), with double connection [mm]

| Type DD | PN | c | h | Ø |
|---|---|---|---|---|
| | [bar] | | [mm] | [mm] |
| 25 | 10 | G 3/4 | 528 | 280 |

**Table 12:** Membrane-type accumulator, type DD (steel), with double connection

| Part No. | Description | Type DD | PN | Connection | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 591<br>- | Membrane-type accumulator<br>▪ For drinking water systems, pressure booster systems and water heating systems to DIN 1988<br>▪ Made of steel<br>▪ Operating pressure up to 10 bar<br>▪ Operating temperature up to 70 °C<br>▪ With threaded connection made of stainless steel<br>▪ Non-replaceable full membrane to DIN EN 13831 DIN 4807 T5, KTW-C and W270<br>▪ With external and internal coating to KTW-A<br>▪ Anti-corrosive exterior coating, green RAL 6018<br>▪ WRAS and/or ACS certified | 25 | 10 | G 3/4 | 05063527 | 3,97 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |

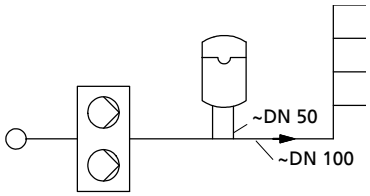
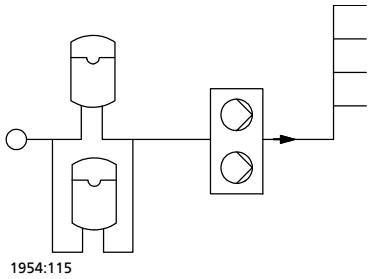



**Fig. 9:** Installation example / connection example, discharge side: For large flow rates on the discharge side smaller double-connection accumulators with small nominal connection diameters can be fitted in the bypass line.




2x DN 65 ≈ DN 100
2x DN 80 ≈ DN 125
2x DN 100 ≈ DN 150

**Fig. 10:** Installation example / connection example, suction side: Bypass operation is not possible on the suction side. To accommodate larger flow rates the double-connection accumulators must be connected in parallel.

## Connection accessories

**Table 13:** Connection accessories

| Part No. | Description | PN | Length [mm] | Connection | Material | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 82-5  | Adapter<br>For connecting DeltaSolo D to fire-fighting systems | - | - | G 1 - R 2 | 1.4301 | 01056171 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| 82-5  | Adapter<br>For connecting DeltaSolo D to fire-fighting systems | - | - | G 1 1/4 - R 2 | 1.4301 | 01056161 | 0,7 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| 73-4  | Hexagon nipple | - | - | G 1 | 1.4571 | 05063495 | 0,16 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | Hexagon nipple | - | - | G 1 1/4 | 1.4571 | 05063494 | 0,23 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | Hexagon nipple | - | - | G 1 1/2 | 1.4571 | 05063547 | 0,24 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | Hexagon nipple | - | - | G 2 | 1.4571 | 05063521 | 0,35 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| 82-5  | Pipe union | - | - | G 1 internal thread | 1.4571 | 05063493 | 0,34 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | Pipe union | - | - | G 1 1/4 internal thread | 1.4571 | 05063492 | 0,46 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | Pipe union | - | - | G 1 1/2 internal thread | 1.4571 | 05063491 | 0,54 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| | Pipe union | - | - | G 2 internal thread | 1.4571 | 05063490 | 0,83 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| 82-5  | Double socket | - | 43 | G 1 internal thread | 1.4571 | 05063489 | 0,2 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | Double socket | - | 48 | G 1 1/4 internal thread | 1.4571 | 05063488 | 0,2 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | Double socket | - | 48 | G 1 1/2 internal thread | 1.4571 | 05063487 | 0,24 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| | Double socket | - | 56 | G 2 internal thread | 1.4571 | 05063486 | 0,34 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| 82-5  | Adapter, model 2211 | 16 | - | R 1 × 28 mm | Bronze / EPDM | 05063485 | 0,21 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | Adapter, model 2211 | 16 | - | R 1 1/4 × 35 mm | Bronze / EPDM | 05063484 | 0,26 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | Adapter, model 2211 | 16 | - | R 1 1/2 × 42 mm | Bronze / EPDM | 05063483 | 0,36 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| | Adapter, model 2211 | 16 | - | R 2 × 54 mm | Bronze / EPDM | 05063482 | 0,56 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| 82-5  | Adapter, model 2212 | 16 | - | R 1 × 28 mm | Bronze / EPDM | 05063481 | 0,21 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | Adapter, model 2212 | 16 | - | R 1 1/4 × 35 mm | Bronze / EPDM | 05063480 | 0,26 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | Adapter, model 2212 | 16 | - | R 1 1/2 × 42 mm | Bronze / EPDM | 05063459 | 0,36 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| | Adapter, model 2212 | 16 | - | R 2 × 54 mm | Bronze / EPDM | 05063458 | 0,56 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| 82-5  | Adapter, model 2259 | 16 | - | DN 40 × 42 mm | Bronze / EPDM | 05063457 | 2,453 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| | Adapter, model 2259 | 16 | - | DN 50 × 54 mm | Bronze / EPDM | 05063456 | 3,053 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |

## Connection set for the flexible tube

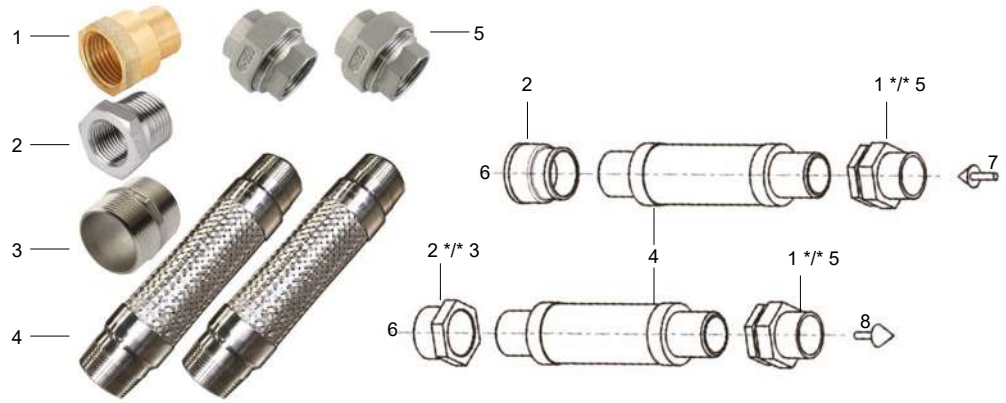



**Fig. 11:** Connection set for the flexible tube

| | | | |
|---|---|---|---|
| */* | or | 5 | 2 x pipe union 1.4301 |
| 1 | 1 x solder fitting CuZn | 6 | Pressure booster system |
| 2 | 1 x adapter 1.4301 | 7 | Water inlet |
| 3 | 1 x hexagon nipple 1.4301 | 8 | Water outlet |
| 4 | 2 x piece of flexible tube with external thread | | |

The connection set is approved for drinking water. It comprises one connection each for the discharge side and the suction side. Only one drinking water approved connection set is required per system.

**Table 14:** Connection set for the flexible tube

| Part No. | Description | Suitability for drinking water | Connection | Material | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-8 - | Flexible tube with solder joint | ✘ | G 1 1/2 > G 1 1/4 | 1.4301/ CuZn | 05063452 | 1,92 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube with solder joint | ✘ | G 1 1/2 | 1.4301/ CuZn | 05063451 | 2,56 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube with solder joint | ✘ | G 2 | 1.4301/ CuZn | 05063520 | 4,26 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube with solder joint | ✘ | G 2 > G 1 1/2 | 1.4301/ CuZn | 05063519 | 2,95 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube | ✘ | G 2 > DN 65 | 1.4301 | 05063518 | 16,693 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube with coupling, internal thread, stainless steel | ✘ | G 1 1/2 > G 1 1/4 | 1.4301/ CuZn (AISI 316) | 05063517 | 2,34 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube with coupling, internal thread, stainless steel | ✘ | G 1 1/2 | 1.4301/ CuZn (AISI 316) | 05063516 | 2,48 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube with coupling, internal thread, stainless steel | ✘ | G 2 | 1.4301/ CuZn (AISI 316) | 05063515 | 4,2 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | Flexible tube with coupling, internal thread, stainless steel | ✘ | G 2 > G 1 1/2 | 1.4301/ CuZn (AISI 316) | 05063514 | 3,15 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |

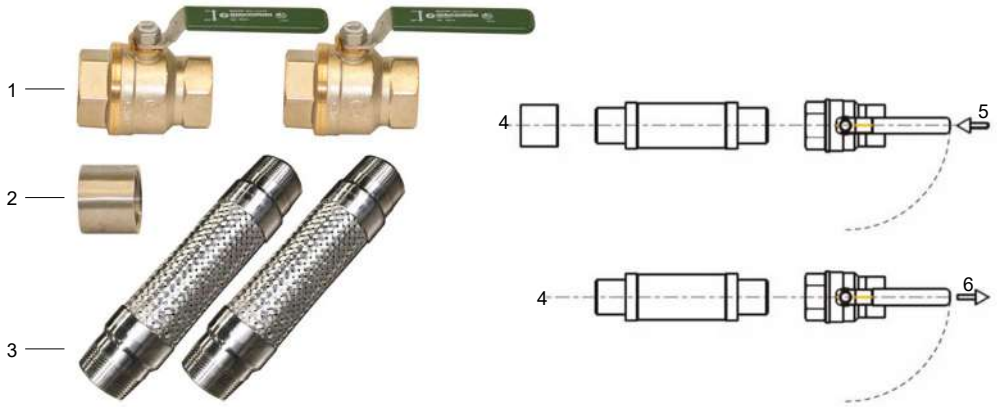



**Fig. 12:** Connection set for flexible tube with ball valve

| | | | |
|---|---|---|---|
| 1 | 2 × CuZn ball valve | 4 | Pressure booster system |
| 2 | 1 × double socket 1.4301 | 5 | Water inlet |
| 3 | 2 × piece of flexible tube 1.4301 | 6 | Water outlet |

The connection set comprises one connection each for the discharge side and the suction side. Only one connection set is required per system.

**Table 15:** Connection set for the flexible tube

| Part No. | Description | ACS/DVGW/WRAS-approved | Connection | Material | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-8 - | Flexible tube with ball valve (max. 16 bar) | ✘ | G 1 1/4 internal thread | 1.4301/ CuZn | 05063455 | 2,44 | - | - | - | - | - | - | ✘ | - | - | - | ✘ | - |
| | Flexible tube with ball valve (max. 16 bar) | ✘ | G 1 1/2 internal thread | 1.4301/ CuZn | 05063454 | 3,984 | - | - | - | - | - | - | ✘ | - | - | - | ✘ | - |
| | Flexible tube with ball valve (max. 16 bar) | ✘ | G 2 internal thread | 1.4301/ CuZn | 05063453 | 6,4 | - | - | - | - | - | - | - | - | - | - | ✘ | - |

## Inlet tank

### Inlet tank with air gap, total volume 300 litres, effective volume 150 litres

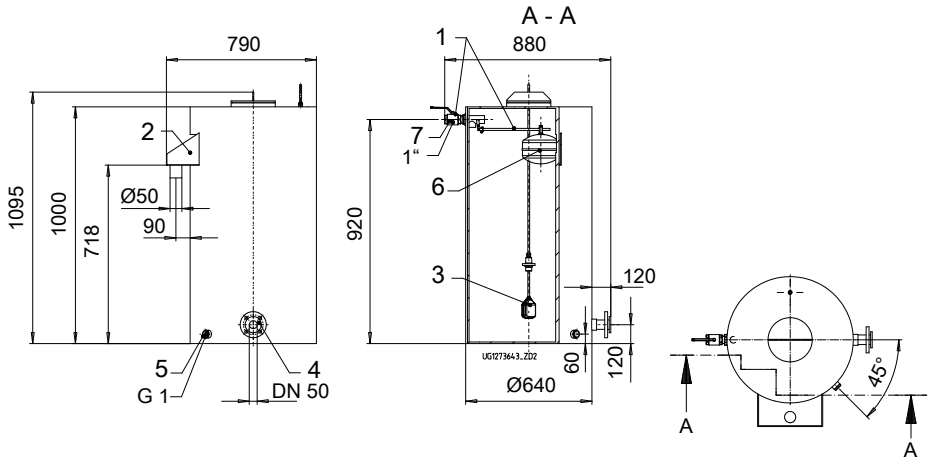



**Fig. 13:** Dimensions of polyethylene inlet tank [mm], total volume 300 litres, effective volume 150 litres

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 16:** Inlet tank with air gap, effective volume 150 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Pipe union | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 280 mm), drain plug, protective caps, round tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 300 | 150 | 1 | DN 50 | PG 13,5 | 01141899 | 30 |

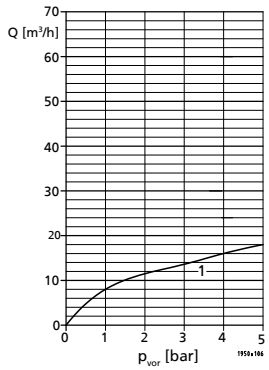
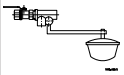



**Fig. 14:** Flow diagram for recommended float valve

**Table 17:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070392 | 1,5 |

### Inlet tank with air gap, total volume 600 litres, effective volume 300 litres

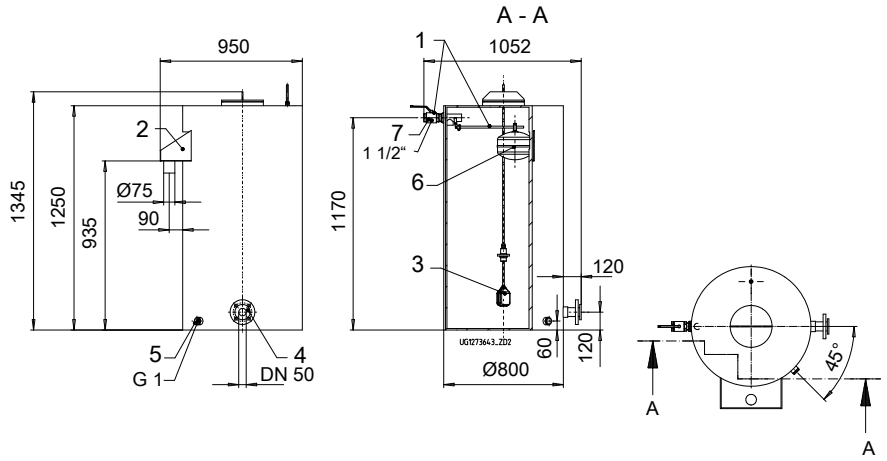



**Fig. 15:** Dimensions of polyethylene inlet tank [mm], total volume 600 litres, effective volume 300 litres

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 18:** Inlet tank with air gap, effective volume 300 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 280 mm), drain plug, protective caps, round tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 600 | 300 | 1 1/2 | DN 50 | 01141900 | 47 |

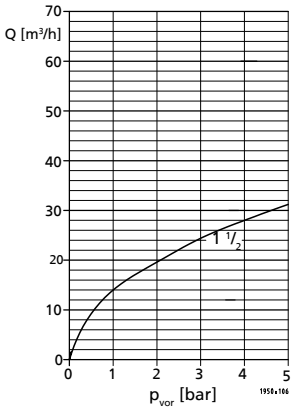
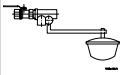



**Fig. 16:** Flow diagram for recommended float valve

**Table 19:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070393 | 2,5 |

## Inlet tank with air gap, total volume 750 litres, effective volume 500 litres

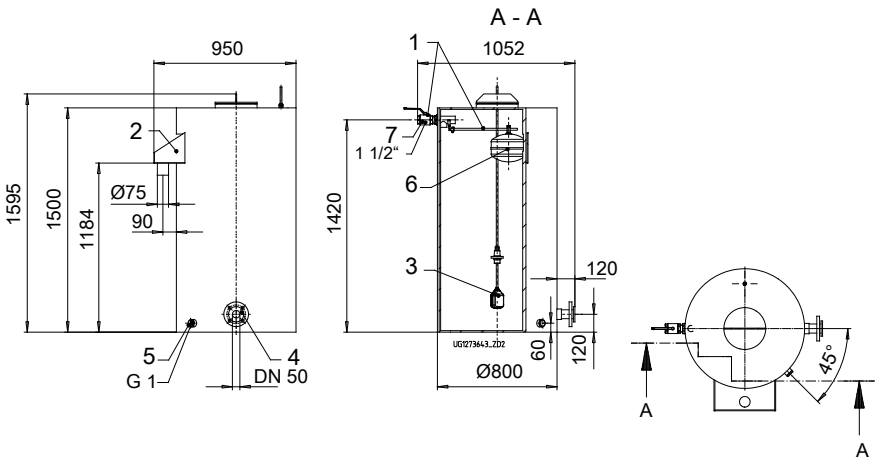



**Fig. 17:** Dimensions of polyethylene inlet tank [mm], total volume 750 litres, effective volume 500 litres

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 20:** Inlet tank with air gap, effective volume 500 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 280 mm), drain plug, protective caps, round tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 750 | 500 | 1 1/2 | DN 50 | 01141901 | 50 |

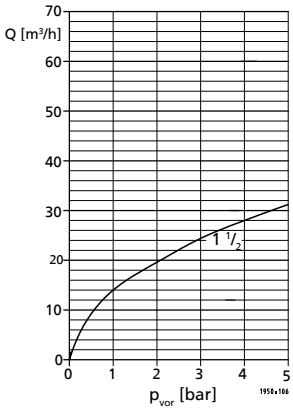
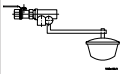



**Fig. 18:** Flow diagram for recommended float valve

**Table 21:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070393 | 2,5 |

### Inlet tank with air gap, total volume 850 litres, effective volume 600 litres

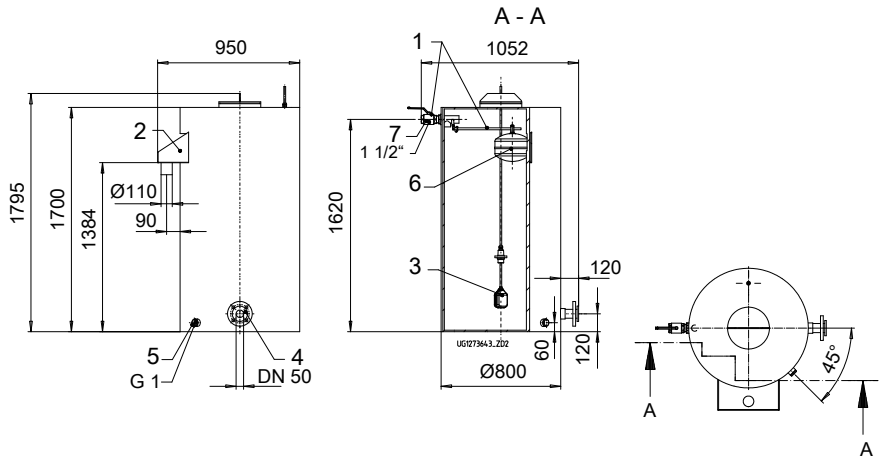



**Fig. 19:** Dimensions of polyethylene inlet tank [mm], total volume 850 litres, effective volume 600 litres

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 22:** Inlet tank with air gap, effective volume 600 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, round tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 850 | 600 | 1 1/2 | DN 50 | 01374941 | 56 |

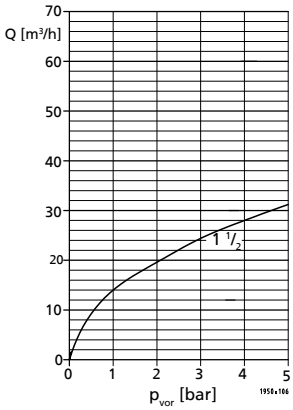
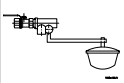



**Fig. 20:** Flow diagram for recommended float valve

**Table 23:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070393 | 2,5 |

### Inlet tank with air gap, total volume 1500 litres, effective volume 800 litres

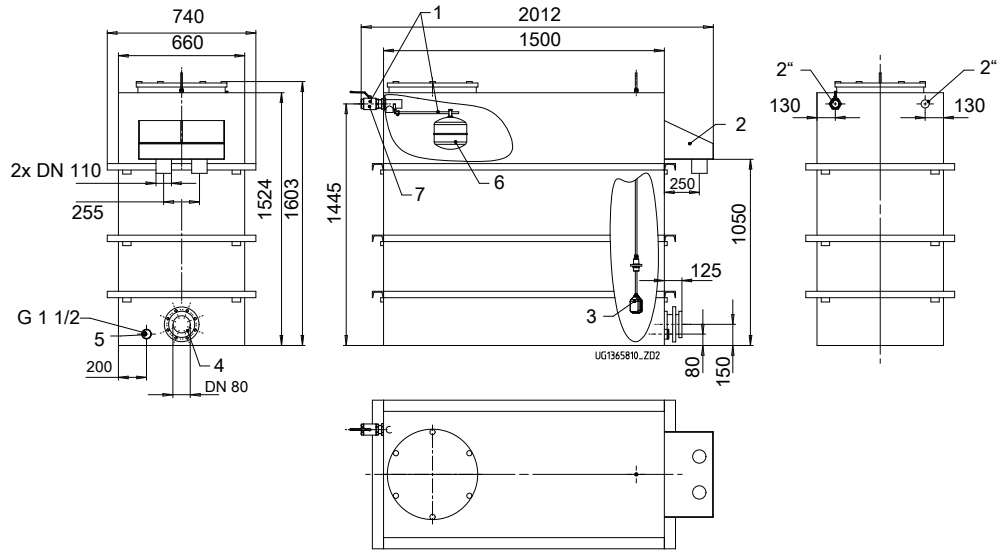
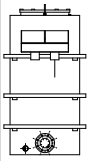



**Fig. 21:** Dimensions of polyethylene inlet tank [mm], total volume 1500 litres, effective volume 800 litres

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 24:** Inlet tank with air gap, effective volume 800 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 1500 | 800 | 2 × 2 | DN 80 | 01371575 | 157 |

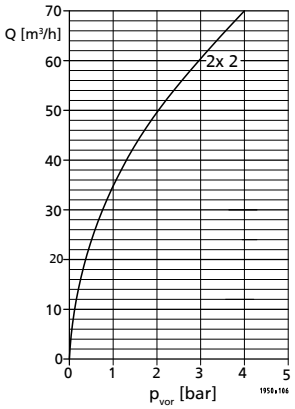
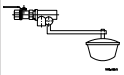



**Fig. 22:** Flow diagram for recommended float valve

**Table 25:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070394 | 3,2 |

1954.5/26-EN

## Inlet tank with air gap, total volume 1800 litres, effective volume 1080 litres

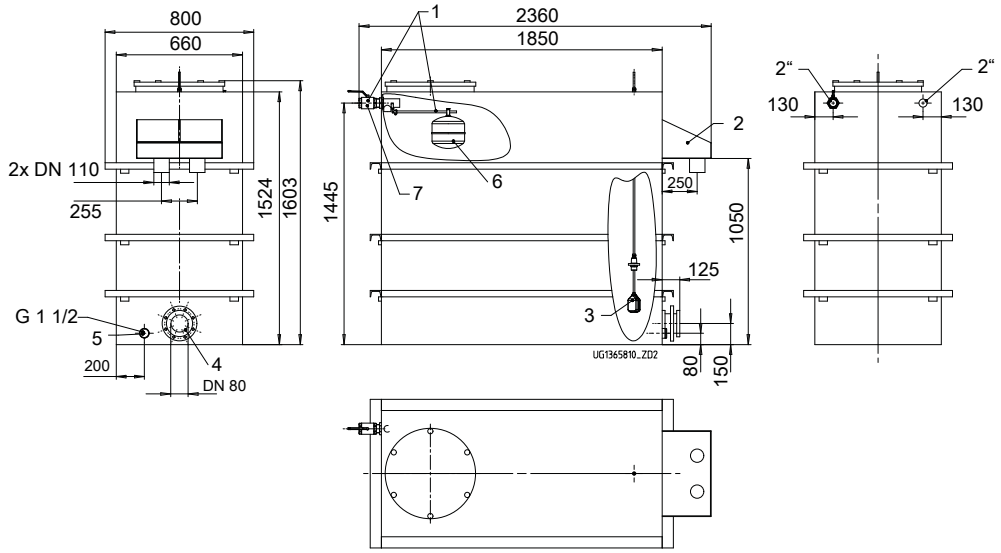
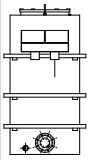



**Fig. 23:** Dimensions of polyethylene inlet tank [mm], total volume 1800 litres, effective volume 1080 litres

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 26:** Inlet tank with air gap, effective volume 1080 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 1800 | 1080 | 2 × 2 | DN 80 | 01371576 | 170 |

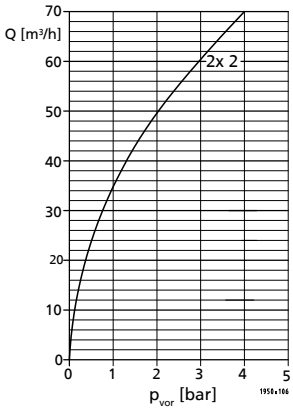
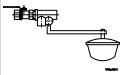



**Fig. 24:** Flow diagram for recommended float valve

**Table 27:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070394 | 3,2 |

1954.5/26-EN

## Inlet tank with air gap, total volume 2700 litres, effective volume 1500 litres, for installing a float valve

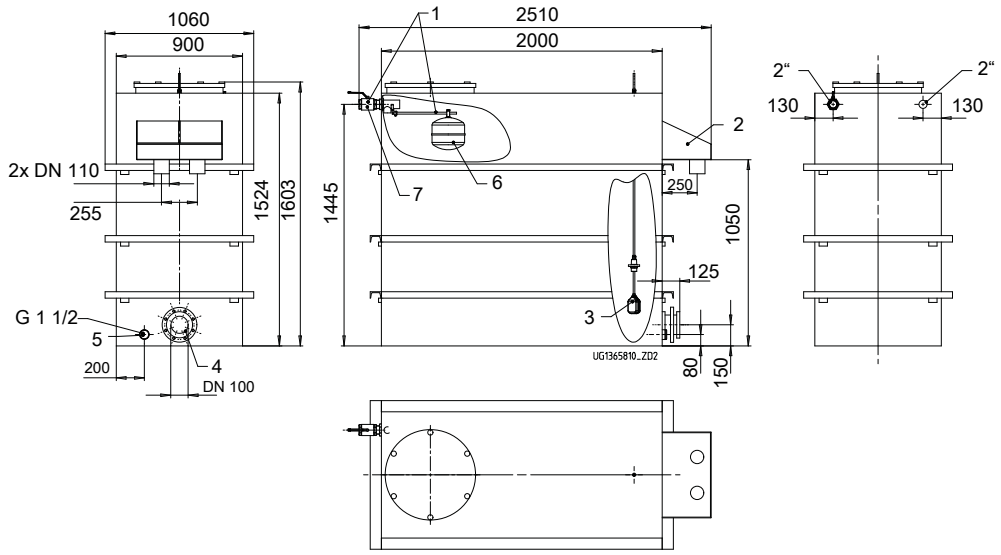
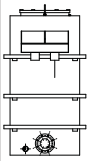



**Fig. 25:** Dimensions of polyethylene inlet tank [mm], total volume 2700 litres, effective volume 1500 litres, for float valve installation

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 28:** Inlet tank with air gap, effective volume 1500 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 2700 | 1500 | 2 × 2 | DN 100 | 01371657 | 250 |

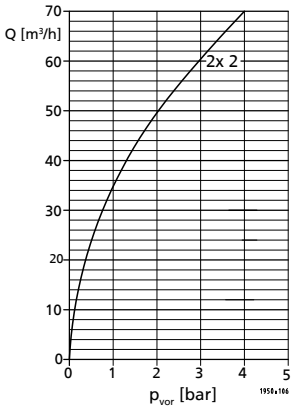
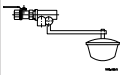



**Fig. 26:** Flow diagram for recommended float valve

**Table 29:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070394 | 3,2 |

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**Inlet tank with air gap, total volume 2700 litres, effective volume 1500 litres, for installing a pilot valve**

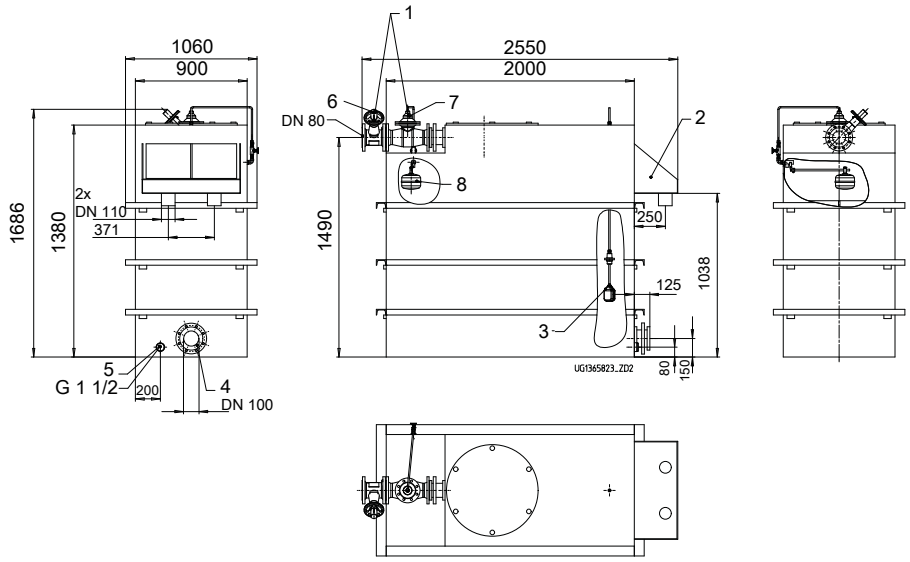
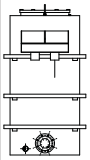



**Fig. 27:** Dimensions of polyethylene inlet tank [mm], total volume 2700 litres, effective volume 1500 litres, for pilot valve installation

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Shut-off valve (accessory) |
| 3 | Dry running protection set (accessory) | 7 | Diaphragm valve |
| 4 | Outlet to the pressure booster system | 8 | Pilot valve for diaphragm valve |

**Table 30:** Inlet tank with air gap, effective volume 1500 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 2700 | 1500 | DN 80 | DN 100 | 01371659 | 250 |

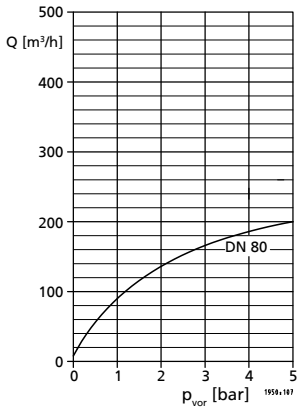
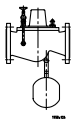



**Fig. 28:** Flow diagram for recommended float valve

**Table 31:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 741  | 1× Diaphragm valve inlet set, DN 80 | 19071381 | 30 |

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## Inlet tank with air gap, total volume 2000 litres, effective volume 1850 litres (for HyaDuo 2 D FL-R)

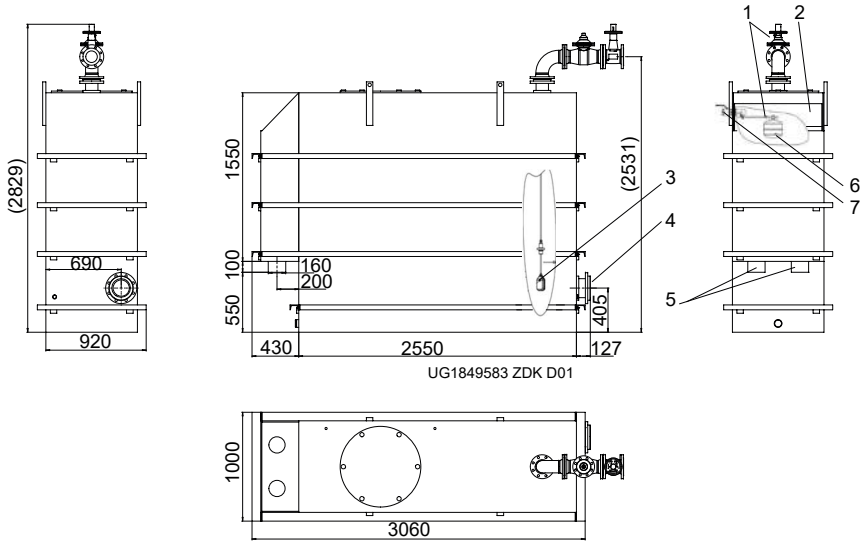
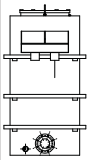
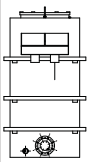



**Fig. 29:** Dimensions of polyethylene inlet tank [mm], total volume 2000 litres, effective volume 1850 litres

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Shut-off valve (accessory) |
| 3 | Dry running protection set (accessory) | 7 | Diaphragm valve |
| 4 | Outlet to the pressure booster system | | |

**Table 32:** Inlet tank with air gap, effective volume 1850 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection | Outlet connection | Overflow connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set.<br>For systems up to 192 m³/h | 2000 | 1850 | DN 100 | DN 125 | 2 × DN 150 | 05054978 | 525 |
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set.<br>For systems up to 96 m³/h | 2000 | 1850 | DN 100 | DN 125 | 1 × DN 150 | 05055175 | 505 |

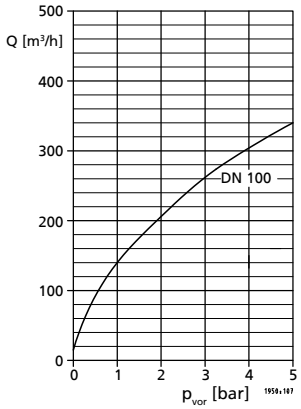
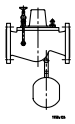



**Fig. 30:** Flow diagram for recommended float valve

**Table 33:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 741  | 1× Diaphragm valve inlet set, DN 100 | 19071382 | 40 |

**Inlet tank with air gap, total volume 3200 litres, effective volume 2000 litres, for installing a float valve**

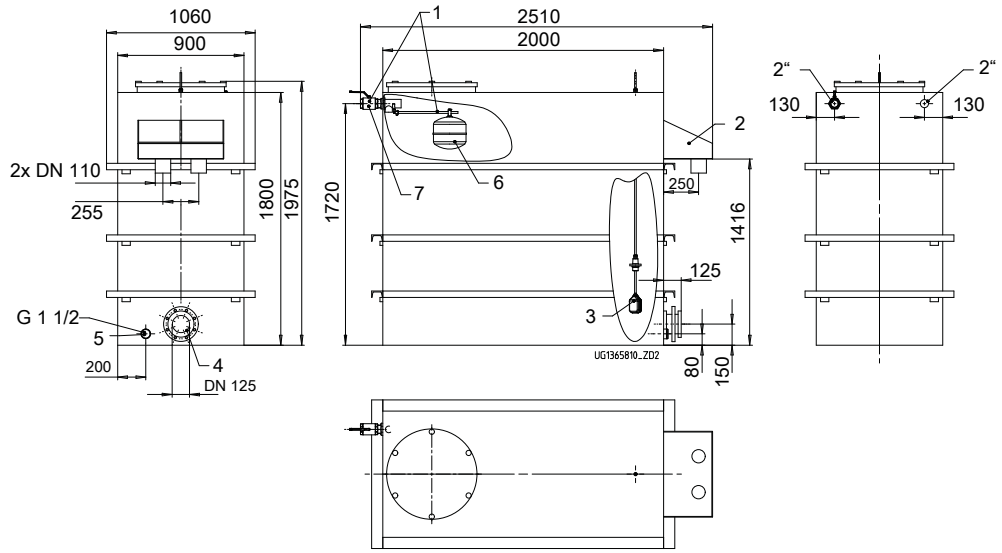
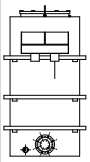



**Fig. 31:** Dimensions of polyethylene inlet tank [mm], total volume 3200 litres, effective volume 2000 litres, for float valve installation

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Float valve |
| 3 | Dry running protection set (accessory) | 7 | Ball valve |
| 4 | Outlet to the pressure booster system | | |

**Table 34:** Inlet tank with air gap, effective volume 2000 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection [inch] | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 3200 | 2000 | 2 × 2 | DN 125 | 01371658 | 330 |

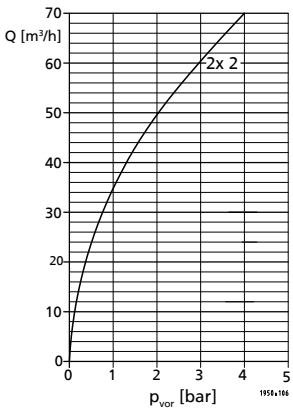
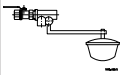



**Fig. 32:** Flow diagram for recommended float valve

**Table 35:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 81-42 and 741  | 1× Float valve inlet set for drinking water installations | 19070394 | 3,2 |

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## Inlet tank with air gap, total volume 3200 litres, effective volume 2000 litres, for installing a pilot valve

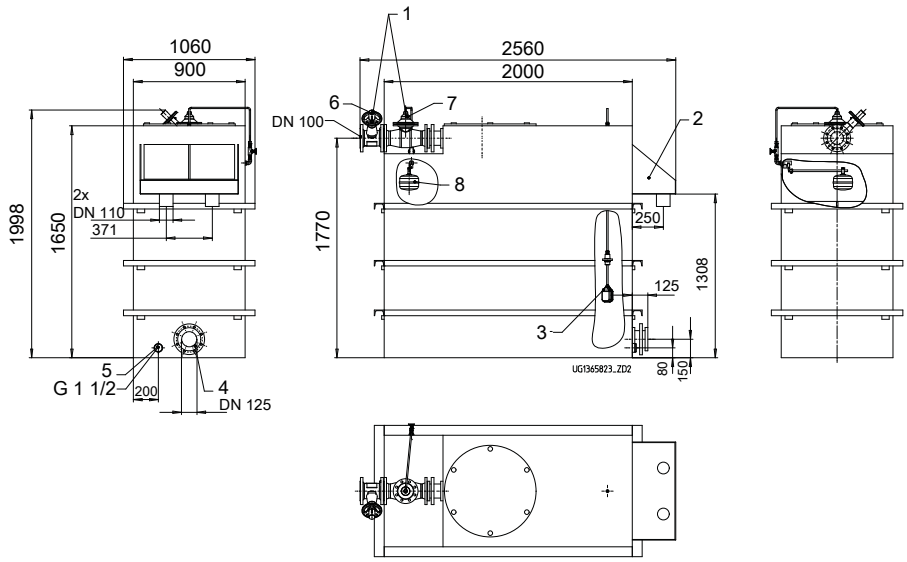
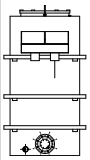



**Fig. 33:** Dimensions of polyethylene inlet tank [mm], total volume 3200 litres, effective volume 2000 litres, for pilot valve installation

| | | | |
|---|---|---|---|
| 1 | Float valve inlet set | 5 | Drain |
| 2 | Overflow | 6 | Shut-off valve (accessory) |
| 3 | Dry running protection set (accessory) | 7 | Diaphragm valve |
| 4 | Outlet to the pressure booster system | 8 | Pilot valve for diaphragm valve |

**Table 36:** Inlet tank with air gap, effective volume 2000 litres

| Part No. | Description | Total volume [l] | Effective volume [l] | Inlet connection | Outlet connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|---|
| 591.01  | Polyethylene inlet tank with air gap in accordance with DIN EN 1717 and DIN EN 13077:<br>▪ Under atmospheric pressure, for use with indirect connection to public drinking water systems, recognised as safe and therefore food-approved<br>▪ Maximum operating temperature 50 °C<br>▪ With inspection cover (diameter = 600 mm), drain plug, protective caps, rectangular tank, front face overflow<br>Requires combination with float valve inlet set and dry running protection set. | 3200 | 2000 | DN 100 | DN 125 | 01371660 | 330 |

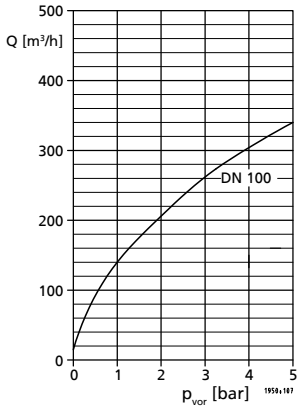
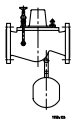



**Fig. 34:** Flow diagram for recommended float valve

**Table 37:** Recommended float valve. Further valves (⇨ Page 39)

| Part No. | Description | Mat. No. | [kg] |
|---|---|---|---|
| 741  | 1× Diaphragm valve inlet set, DN 100 | 19071382 | 40 |

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## Inlet tank accessories

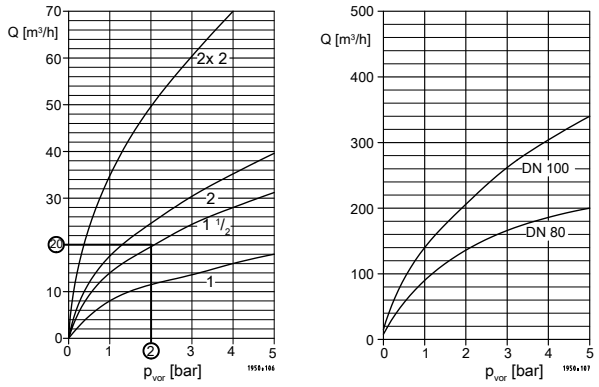



**Fig. 35:** Inlet valve selection chart

Example:

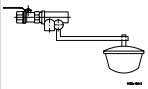
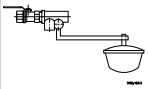
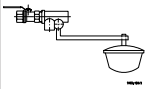
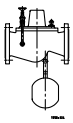
Flow rate Q = 20 m³/h
Inlet pressure $p_{in}$ = 2 bar

Result:

Float valve 1 1/2

Suitable tank: total volume 600 litres (without volume balancing)

**Table 38:** Inlet tank accessories (inlet valve)

| Part No. | Description | DVGWapproved to DIN 3546-1: NW-6150BQ0465 | Suitability for drinking water | Connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|
| 81-42 and 741  | Float valve inlet set for polyethylene inlet tank | - | - | R 1 | 19072300 | 2,5 |
| | Scope of supply: float valve, ball valve and gasket | - | - | R 1 1/2 | 19072301 | 2,5 |
| | For inlet pressures exceeding 5 bar a pressure reducer must be installed in the suction line. | - | - | R 2 | 19072302 | 3,2 |
| | Suitable for fully desalinated water. | | | | | |
| 81-42 and 741  | Float valve inlet set for drinking water installations | ✘ | ✘ | R 1 | 19070392 | 1,5 |
| | Scope of supply: float valve, ball valve and gasket | ✘ | ✘ | R 1 1/2 | 19070393 | 2,5 |
| | For inlet pressures exceeding 5 bar a pressure reducer must be installed in the suction line. | ✘ | ✘ | R 2 | 19070394 | 3,2 |
| 81-42 and 741  | Float valve inlet set for fire-fighting systems with lockable ball valve | - | ✘ | R 1 | 19066360 | 1,5 |
| | | - | ✘ | R 1 1/2 | 19066361 | 2,5 |
| | Scope of supply: float valve, lockable ball valve and gasket | - | ✘ | R 2 | 19066362 | 3,2 |
| | For inlet pressures exceeding 5 bar a pressure reducer must be installed in the suction line. | | | | | |
| 741  | Diaphragm valve inlet set | - | ✘ | DN 80 | 19071381 | 30 |
| | Scope of supply: float valve and pilot valve for control function, minimum inlet pressure 0.8 bar (for polyethylene inlet tanks with effective volumes of 1500 litres or 2000 litres), installation drawing | - | ✘ | DN 100 | 19071382 | 40 |
| 81-42  | BOA-Compact EKB soft-seated globe valve with non-rising handwheel | ✘ | ✘ | DN 80 | 19071383 | 18 |
| | PN 10/16: flanges DIN1092-2 T21, with sealing element | ✘ | ✘ | DN 100 | 19071384 | 21 |
| | BOA-Compact EKB soft-seated globe valve with non-rising handwheel | ✘ | ✘ | DN 80 | 48013365 | 12,5 |
| | PN 10/16: flanges DIN1092-2 T21, without sealing element | ✘ | ✘ | DN 100 | 48013366 | 17,1 |

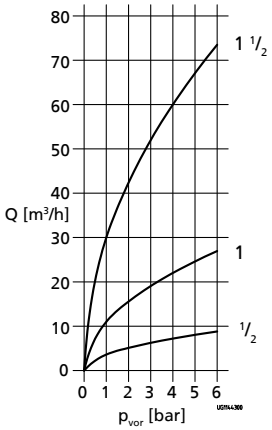



**Fig. 36:** Solenoid valve selection chart

Example:

Flow rate Q = 35 m³/h
Inlet pressure $p_{in}$ = 2 bar

Result:

1 1/2 solenoid valve

**Table 39:** Inlet tank accessories (solenoid valve, orifice plate)

| Part No. | Description | DVGWapproved to DIN 3546-1: NW-6150BQ0465 | Suitability for drinking water | Connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|
| 70-3  | Solenoid valve 1/2 inch (kv = 3.6 m³/h), 24 V AC/DC | - | - | - | 19074196 | 1,4 |
| | Solenoid valve 1 inch (kv = 11 m³/h), 24 V AC/DC | - | - | - | 19074197 | 1,8 |
| | Solenoid valve 1 1/2 inches (kv = 30 m³/h), 24 V AC/DC | - | - | - | 19074198 | 2 |
| 70-3   | Solenoid valve 1/2 inch (kv = 3.6 m³/h)<br>Flushing device for inlet set with solenoid valve and digital timer, approx. 2.5 m power cable with shockproof plug<br>Not suitable for fully desalinated water | - | - | - | 19074174 | 1,5 |
| | Solenoid valve 1 inch (kv = 11 m³/h)<br>Flushing device for inlet set with solenoid valve and digital timer, approx. 2.5 m power cable with shockproof plug<br>Not suitable for fully desalinated water | - | - | - | 19074175 | 2 |
| | Solenoid valve 1 1/2 inches (kv = 30 m³/h)<br>Flushing device for inlet set with solenoid valve and digital timer, approx. 2.5 m power cable with shockproof plug<br>Not suitable for fully desalinated water | - | - | - | 19074176 | 2,5 |
| 5754  | Stainless steel orifice plates for reducing the flow pressure for fire-fighting systems to DIN 14462<br>For installation in standardised hose connection valves to DIN 14461-3, including sealing element, thickness 2.5 mm<br>3 bar at 100 l/min | - | - | - | 01710591 | 0,25 |
| | Stainless steel orifice plates for reducing the flow pressure for fire-fighting systems to DIN 14462<br>For installation in standardised hose connection valves to DIN 14461-3, including sealing element, thickness 2.5 mm<br>2 bar at 100 l/min | - | - | - | 01710592 | 0,25 |

| Part No. | Description | DVGWapproved to DIN 3546-1: NW-6150BQ0465 | Suitability for drinking water | Connection | Mat. No. | [kg] |
|---|---|---|---|---|---|---|
| 5754  | Stainless steel orifice plates for reducing the flow pressure for fire-fighting systems to DIN 14462<br>For installation in standardised hose connection valves to DIN 14461-3, including sealing element, thickness 2.5 mm<br>3 bar at 200 l/min | - | - | - | 01710593 | 0,25 |
| | Stainless steel orifice plates for reducing the flow pressure for fire-fighting systems to DIN 14462<br>For installation in standardised hose connection valves to DIN 14461-3, including sealing element, thickness 2.5 mm<br>2 bar at 200 l/min | - | - | - | 01710594 | 0,25 |

## Installation accessories for inlet tank

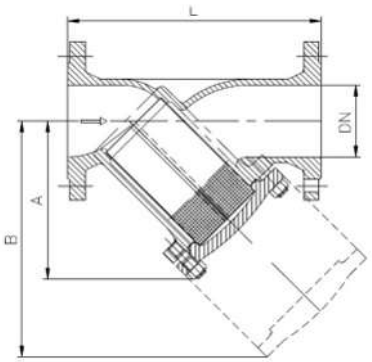
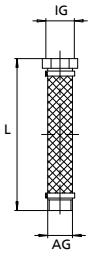



**Fig. 37:** Strainer dimensions

**Table 40:** Strainer dimensions

| Connection | A | B | L |
|---|---|---|---|
| | [mm] | [mm] | [mm] |
| DN 50 | 120 | 190 | 230 |
| DN 65 | 140 | 220 | 290 |
| DN 80 | 165 | 265 | 310 |
| DN 100 | 220 | 340 | 350 |
| DN 125 | 260 | 410 | 400 |
| DN 150 | 300 | 475 | 480 |

**Table 41:** Installation accessories for inlet tank

| Part No. | Description | Connection | PN | Length [mm] | ACS-approved | DVGW-approved | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71-8   | Flexible tube for compensating any offsets in the installation or for a flexible connection of the system | R 1 | 10 | 300 | - | ✗ | 11037177 | 0,378 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| | | | | | | | 05063611 | 0,52 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | | R 1 1/4 | 10 | 300 | - | ✗ | 11037178 | 0,605 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| | | | | | | | 05063612 | 0,62 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | | R 1 1/2 | 10 | 350 | - | ✗ | 01824074 | 1,995 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | ✗ |
| | | | | | | | 05063613 | 0,92 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| 71-8  | EPDM expansion joint | R 1 external thread | 9 | 218 | ✗ | - | 05063551 | 0,72 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | | R 1 1/4 external thread | 9 | 226 | ✗ | - | 05063550 | 0,92 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | | R 1 1/2 external thread | 7 | 226 | ✗ | - | 05063549 | 1,44 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | | R 2 external thread | 7 | 285 | ✗ | - | 05063548 | 1,84 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |
| 71-8  | Flexible tube with wire mesh and external thread | R 1 external thread | 16 | 218 | - | ✗ | 05063614 | 0,42 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | | R 1 1/4 external thread | 16 | 226 | - | ✗ | 05063615 | 0,52 | - | - | - | - | - | - | ✗ | - | - | - | ✗ | - |
| | | R 1 1/2 external thread | 16 | 226 | - | ✗ | 05063616 | 0,74 | - | - | - | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | - |
| | | R 2 external thread | 16 | 285 | - | ✗ | 05063617 | 1,14 | - | - | - | - | - | ✗ | - | ✗ | ✗ | ✗ | ✗ | - |

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| Part No. | Description | Connection | PN | Length [mm] | ACS-approved | DVGW-approved | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 113-17  | Strainer with double screen, mesh width approx. 1 mm, body made of grey cast iron, screen made of stainless steel | DN 50 | 16 | - | - | ✘ | 01708594 | 8,5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | | | | | | 05063555 | 12 | - | - | - | - | - | ✘ | ✘ | ✘ | ✘ | ✘ | ✘ | - |
| | | DN 65 | 16 | - | - | ✘ | 01708595 | 12 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | | | | | | 05063554 | 15,5 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | | DN 80 | 16 | - | - | ✘ | 01708596 | 16,6 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | | | | | | 05063553 | 20,1 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | | DN 100 | 16 | - | - | ✘ | 01708605 | 25 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | | | | | | 05063552 | 28,5 | - | - | - | - | - | ✘ | - | ✘ | ✘ | ✘ | ✘ | - |
| | | DN 125 | 16 | - | - | ✘ | 01906077 | 39 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| | | DN 150 | 16 | - | - | ✘ | 01906089 | 61,5 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | - | - | - | - | ✘ |
| 113-17  | Screen | DN 50 | - | - | - | - | 01907012 | 0,1 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | | - | - | - | ✘ |
| | | DN 65 | - | - | - | - | 01907013 | 0,1 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | | - | - | - | ✘ |
| | | DN 80 | - | - | - | - | 01907014 | 0,1 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | | - | - | - | ✘ |
| | | DN 100 | - | - | - | - | 01907015 | 0,1 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | | - | - | - | ✘ |
| | | DN 125 | - | - | - | - | 01907016 | 0,1 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | | - | - | - | ✘ |
| | | DN 150 | - | - | - | - | 01907017 | 0,1 | ✘ | ✘ | ✘ | ✘ | ✘ | - | - | | - | - | - | ✘ |

### Drainage set for use below the flood level

**Table 42:** Single-pump station for HyaSolo 2 D FL (flow rate 18 m³/h)

| | Description | Supplied but not fitted<br>Mat. No. | [kg] |
|---|---|---|---|
|  | Collecting tank 1.1 B - 100 l above-floor | 19074493 | 8,7 |
|  | AmaDrainer DN 40 connection set, free passage 10 mm | 19074497 | 0,4 |
|  | AmaDrainer A415 SD/10 | 29128745 | 16,9 |

**Table 43:** Single-pump station for HyaSolo 2 D FL (flow rate 36 m³/h)

| | Description | Supplied but not fitted<br>Mat. No. | [kg] |
|---|---|---|---|
|  | Collecting tank Box X 2B – 200 litres, above-floor, with AmaDrainer DN 50 connection set | 19074510 | 34,4 |
|  | AmaDrainer A522 SD/11 | 29128866 | 27 |

**Table 44:** Dual-pump station for HyaDuo 2 D FL (flow rate 18 m³/h)

| | Description | Supplied but not fitted<br>Mat. No. | [kg] |
|---|---|---|---|
|  | Collecting tank Z2.1 B - 200 l above-floor | 19074495 | 28,9 |
|  | AmaDrainer DN 40 connection set, free passage 10 mm | 19074501 | 5,7 |
|  | AmaDrainer A415 ND/10<br>(Order 2x AmaDrainer for a dual-pump station.) | 29128661 | 15,6 |
|  | LevelControl Basic 2 control unit - BC2 400 DFNO 040 | 19073777 | 4,7 |

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**Table 45:** Dual-pump station for HyaDuo 2 D FL (flow rate 36 m³/h)

| | Description | Supplied but not fitted<br>Mat. No. | [kg] |
|---|---|---|---|
|  | Collecting tank Z2.1 B - 200 l above-floor | 19074495 | 28,9 |
|  | AmaDrainer DN 50 connection set, free passage 11 mm | 19074502 | 5,5 |
|  | AmaDrainer A522 ND/11<br>(Order 2x AmaDrainer for a dual-pump station.) | 29128865 | 25 |
|  | LevelControl Basic 2 control unit - BC2 200 DFNO 063 | 19073778 | 4,7 |

## Installation parts

**Table 46:** Foot set for uneven foundations to compensate any differences in height for systems with Movitec 2B / 4B / 6B / 10B / 15C

| Part No. | Description | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R 96 m³/h | HyaDuo 2 D FL-R 192 m³/h | HyaDuo 2 D FL Compact | DeltaBasic Compact | DeltaSolo Compact | DeltaSolo | DeltaBasic | DeltaPrimo | DeltaMacro | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 182 | Accessories | | | | | | | | | | | | | | | |
|  | 4 feet including fastening elements | 18040619 | 2 | ✗ | ✗ | ✗ | ✗ | - | ✗ | - | | - | - | - | - | - |
| | 6 feet including fastening elements | 18040620 | 2 | - | ✗ | - | ✗ | - | ✗ | - | | - | - | - | - | - |
| | Retrofit set | | | | | | | | | | | | | | | |
| | 4 feet including fastening elements | 19074231 | 2,8 | - | - | ✗ | ✗ | - | - | - | | - | - | - | - | - |
| | 6 feet including fastening elements | 19075800 | 4,2 | - | ✗ | - | - | - | ✗ | - | | - | - | - | - | - |

For systems with Movitec 25B / 40B / 60B / 90B / 125B the feet are included in the scope of supply.

## Alarm switchgears for pumps, non-ATEX-compliant (optional supplementary equipment)

**Table 47:** Alarm switchgears for pumps, non-ATEX-compliant (optional supplementary equipment)

| Part No. | Description | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E50  | Alarm switchgear AS 0<br>With circuit breaker, acoustic signalling device with 85 dB(A), green equipment-on lamp<br>Plastic housing, IP20, H × W × D = 140 × 80 × 57 [mm]. Use float switch, F1 leakage sensor (item E64), M1 alarm contactor or signal relay of control unit as contactor. | 29128401 | 0,5 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| E51  | Alarm switchgear AS 2<br>With circuit breaker, acoustic signalling device with 85 dB(A), green equipment-on lamp, volt-free contact for hook-up to a control station<br>Plastic housing, IP20, H × W × D = 140 × 80 × 57 [mm]. Use float switch, F1 leakage sensor (item E64) or signal relay of control unit as contactor. | 29128422 | 0,5 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| E52  | Alarm switchgear AS 4<br>With circuit breaker, acoustic signalling device with 85 dB(A), green equipment-on lamp, volt-free contact for hook-up to a control station, self-charging power supply unit for 5 hours of operation in the event of a power failure<br>Plastic housing, IP20, H × W × D = 140 × 80 × 57 [mm]. Use float switch (E60), F1 leakage sensor (item E64) or signal relay of control unit as contactor. | 29128442 | 0,5 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| E53  | Alarm switchgear AS 5<br>Mains-independent, with self-charging power supply unit for 10 hours of operation in the event of a power failure, mains pilot LED, fault indicator light, acknowledgement button, volt-free contact for hook-up to a control station, ready for connection with 1.8 m power cable and plug.<br>ISO housing, IP41, H × W × D = 190 × 165 × 75 [mm]. Use float switch (E60) or signal relay of control unit as contactor.<br>For use in combination with horn E70 | 00530561 | 1,7 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| E64  | F1 leakage sensor, contactor for alarm switchgears AS 0, AS 2, AS 4 or as alarm transmitter for LevelControl Basic 2<br>Alarm transmission options:<br>High water alert by suspending the sensor in a (pump) sump above the pump start-up point.<br>Warning at a water level of 1 mm in areas with a flooding or leakage risk (e.g. in the cellar or next to the washing machine in the kitchen or bathroom)<br>Dimensions [mm]: 52 × 21 × 20 (H × W × D) | 19072366 | 0,2 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| E70  | Horn, 12 V DC, 105 dB, 150 mA, IP54<br>Suitable for indoor installation and outdoor installation. Protect against moisture.<br>For use in combination with AS 5 | 01086547 | 0,1 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| E71  | Alarm combination (yellow lamp and piezo buzzer 92 dB), 12 V DC, 120 mA, IP65<br>For use in combination with AS 5 | 01139930 | 0,1 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |

| Part No. | Description | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E72  | Yellow alarm strobe light, 12 V DC, 195 mA, IP65<br>For use in combination with AS 5 | 01056355 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| O45  | Plastic housing, IP65, for easier installation of alarm strobe light, for wall mounting | 01061067 | 0,2 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| O140  | Earth rail<br>For additional on-site potential equalisation to VDE0100, Part 410<br>For mounting on the wall or system next to the switchgear | 01206018 | 2,4 | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |

## Electrical accessories (supplementary equipment supplied fitted, optional)

**Table 48:** Electrical accessories (supplementary equipment supplied fitted, optional)

| Part No. | Description | P [kW] | Measuring range / overload range [A/A] | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E010  | Terminals for additional consumer installations (230 V, 6 A), protected by a circuit breaker in the control unit<br>Cannot be used for connection to three-phase networks without a neutral conductor (3~ 4-wire networks) | - | - | 19075458 | 0,5 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| E011  | Sensor for flow-dependent start-up of the system, for installation in the piping provided at the site<br>Hydraulic connection: 3/4 inch external thread | - | - | 19075459 | 1,1 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| E030  | Volt-free individual message: position of manual-automatic selector switch, external connection via knife disconnect terminals in the control cabinet | - | - | 19075440 | 0,3 | ✗ | ✗ | ✗ | - | 2✗ | - | - | - | - | - | - | - |
| E031  | Volt-free individual message: position of master switch, external connection via knife disconnect terminals in the control cabinet | - | - | 19075441 | 0,3 | ✗ | ✗ | 2✗ | 2✗ | 2✗ | - | - | - | - | - | - | - |
| E032  | Volt-free individual message: control voltage fuse, external connection via knife disconnect terminals in the control cabinet | - | - | 19075477 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| E039  | Control cabinet heating, 20 W, with hygrostat for specific climatic conditions, for using pressure booster systems in areas with particularly low temperatures and a risk of condensation in the control cabinet | 0,02 | - | 19075445 | 0,8 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| E050  | Functional check run module with digital time display, timer for daily functional check run of the pumps<br>A daily functional check run must be performed to comply with DIN EN 1988. | - | - | 19075431 | 0,8 | - | - | - | - | - | - | - | - | - | - | - | ✗ |
| E051  | Volt-free individual message: position of master switch, external connection relay terminals in the control cabinet | - | - | 19075432 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |

| Part No. | Description | P [kW] | Measuring range / overload range [A/A] | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E058  | Connection to emergency back-up power supply on second terminal strip, for connection to an emergency back-up power supply system which includes mains monitoring and switching between mains networks<br>The control unit does not include mains monitoring and switching between the low-voltage distribution system and the generator supply terminal. Upon request only.<br>Observe the total power input of the system. | 4,00 | - | 19075443 | 0,8 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | 7,50 | - | 19075479 | 0,8 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | 15,00 | - | 19075480 | 1 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | 22,00 | - | 19075481 | 1 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | >22,00 | - | On request | - | ✗ | - | 2✗ | 2✗ | - | - | - | - | - | - | - | - |
| E060  | Lightning protection / surge protective device type 1 to EN 61643-11, installed as service entrance SPD in the power cable<br>Spark-gap-based combined lightning current and surge arrester (base part and plug-in protection modules)<br>Service entrance current: up to 125 A<br>Maximum system availability: integrated follow current limitation<br>No tripping of 20 A gL/gG fuses up to short-circuit currents of 50 kA<br>Discharge capacity: up to 100 kA<br>Protection of terminal devices<br>Operating state indication / fault indication: indicator flag in the inspection window<br>Replacement of protection modules: simple, without tools<br>Vibration tested and shock tested in accordance with EN 60068-2 | - | - | 19075449 | 1,1 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| E061  | Separate control cabinet installation (wall mounting) without terminal box, 5 m length per pump 0.37 - 5.5 kW Maximum length: 20 m | - | - | 19075450 | 2,2 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | Separate control cabinet installation (wall mounting) without terminal box, 5 m length per pump 7.5 - 15 kW Maximum length: 20 m | - | - | 19075451 | 10 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | Separate control cabinet installation (wall mounting) without terminal box, 5 m length per pump 18.5 - 22 kW Maximum length: 20 m | - | - | 19075452 | 12 | ✗ | - | ✗ | ✗ | - | - | - | - | - | - | - | - |
| | Terminal box | - | - | 19075453 | 0,3 | S[1)] | S[1)] | S[1)] | S[1)] | S[1)] | - | - | - | - | - | - | - |
| E320  | Phase monitoring relay, for network monitoring of clockwise rotating field, phase sequence and phase presence (phase failure protection)<br>In the event of a fault in the power supply, a message is transmitted to the control unit. In addition, a volt-free message is transmitted to the outside via knife disconnect terminals. | - | - | 19075448 | 0,8 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |

1 Standard

| Part No. | Description | P [kW] | Measuring range / overload range [A/A] | Mat. No. | [kg] | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| E330  | 1 operating hours counter per pump, for displaying the operating hours of each pump | - | - | 19075429 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| E340  | 1 ammeter per pump, for displaying the electric current of each pump, in combination with a voltmeter | - | 6/12 | 19075424 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | - | 10/20 | 19075425 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | - | 15/30 | 19075426 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | - | 25/50 | 19075427 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| | | - | 40/80 | 19075428 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| E341  | 1 voltmeter for each system, for displaying the mains voltage, requires combination with an ammeter | - | - | 19075423 | 0,3 | ✗ | ✗ | ✗ | ✗ | ✗ | - | - | - | - | - | - | - |
| -  | Gateway BACnet MS/TP additional module<br>Model: Intesis INBACMBM25000<br>Can be connected to BMS-based SCADA systems, preconfigured ex works Alphen, with power supply, top hat rail mounted | - | - | 05155902 | 0,345 | - | - | - | - | - | - | - | - | ✗ | - | - | - |
| -  | Gateway Profibus DP additional module<br>Model: Anybus Communicator AB7000<br>Can be connected to BMS-based SCADA systems, preconfigured ex works Alphen, with power supply, top hat rail mounted | - | - | 05155901 | 0,33 | - | - | - | - | - | - | - | - | ✗ | - | - | - |
| -  | Insulation monitoring relay for each pump, for monitoring the motor insulation<br>The monitoring relays emit a warning before the insulation values fall below the critical limits.<br>Damage is detected at an early stage.<br>Long downtimes are prevented.<br>Necessary service work can be carried out when required.<br>The motor insulation is monitored in volt-free condition.<br>In IT mains, insulation monitors must be used in accordance with EN 60204-1 and VDE0100-410. | - | - | 19075457 | 0,8 | ✗ | ✗ | - | 2✗ | 2✗ | - | - | - | - | - | - | - |
| -  | Leakage detection sensor<br>Model: Finder 072.51<br>Electrode holder for level sensor, length of electric cable: 3 m | - | - | 05236744 | 0,5 | - | - | - | - | - | - | - | - | ✗ | ✗ | - | - |

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## Commissioning

**Table 49:** Commissioning

| Description | Mat. No. | HyaSolo 2 D FL | HyaSolo 2 D FL Compact | HyaDuo 2 D FL | HyaDuo 2 D FL-R | HyaDuo 2 D FL Compact | DeltaBasic | DeltaBasic Compact | DeltaSolo Compact | DeltaMacro | DeltaPrimo | DeltaSolo | DeltaSolo D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Commissioning of a multiple-pump pressure booster system as described in Specification 8 | 01738246 | - | - | ✗ | ✗ | ✗ | ✗ | ✗ | - | ✗ | ✗ | - | - |
| Commissioning of a single-pump pressure booster system as described in Specification 8 | 01738247 | ✗ | ✗ | - | - | - | - | - | ✗ | - | - | ✗ | ✗ |

# Glossary

## ACS

French drinking water regulations (ACS = Attestation de Conformité Sanitaire)

## DVGW

Suitability as per the German drinking water regulations (DVGW = German Technical and Scientific Association for Gas and Water)

## Mat. No.

This identification number is composed of an 8-digit numerical code that uniquely identifies a product entered in SAP.

## WRAS

Approved by all water suppliers in the UK (WRAS = Water Regulations Advisory Scheme)

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