

ARI Condensate pump (mechanical)

Volume 16.5 to 20 litres

ARI-CONLIFT®
Condensate pump
No electricity required /
float-operated
PN 16

- Body:
Jacket P235GH-TC,
Sockets / flanges P250GH,
Plates P265GH
- Bonnet: P250GH
- Bolts: A4-70

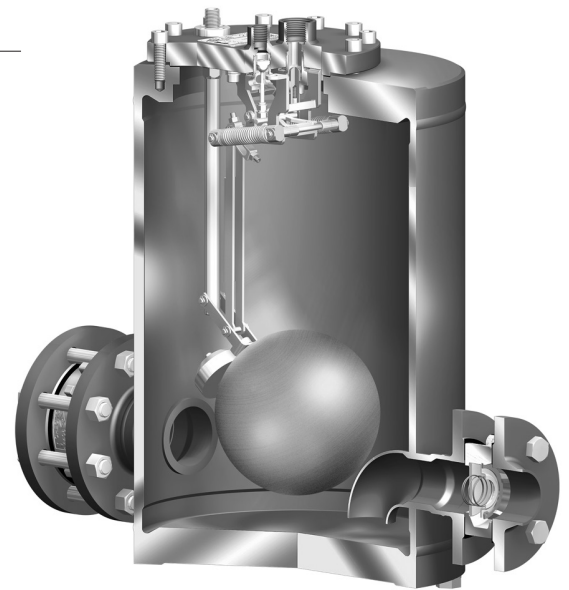
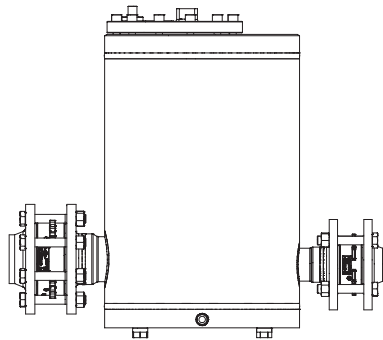


Fig. 691...1

Features:

- Automatic operation, adapts automatically to the condensate level
- Robust, durable design
- All internals made of stainless steel, wearing parts in hardened stainless steel
- High-endurance Inconel X-750 springs
- Body designed with high cycle fatigue strength
- No manual settings required
- Low filling head
- Works without electricity
- No leakage due to moving exterior parts
- Optional:
L-section stand for mounting on frames, etc.

ARI-CONLIFT® Condensate pump

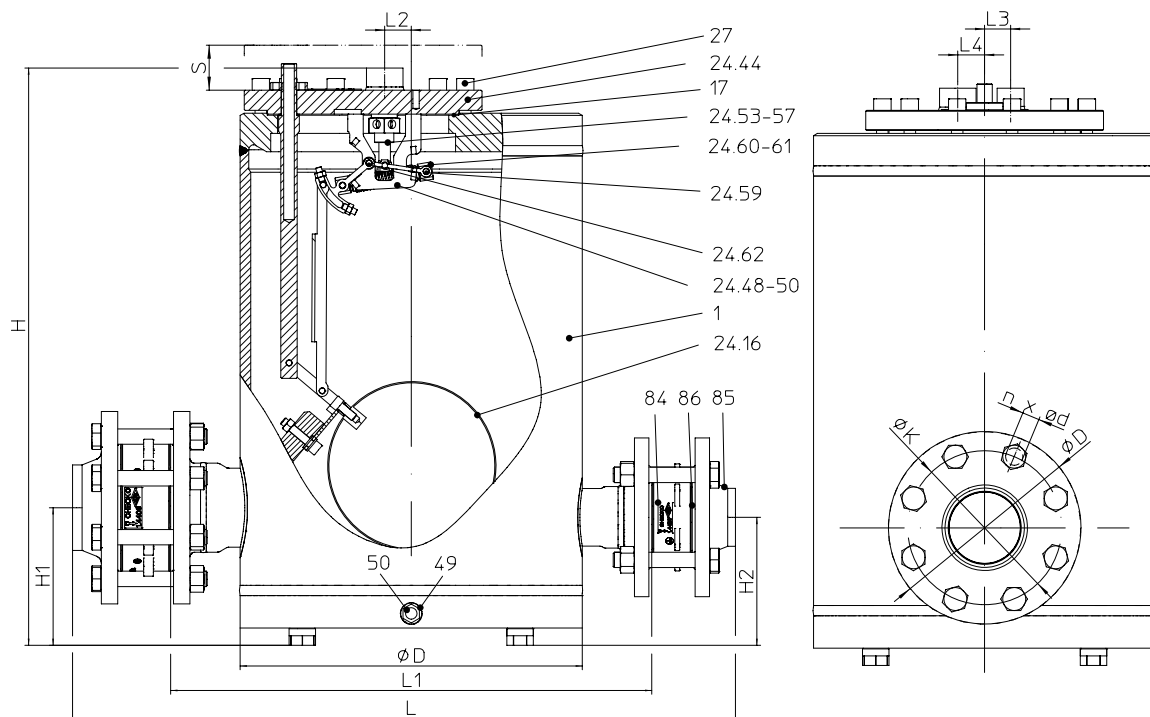
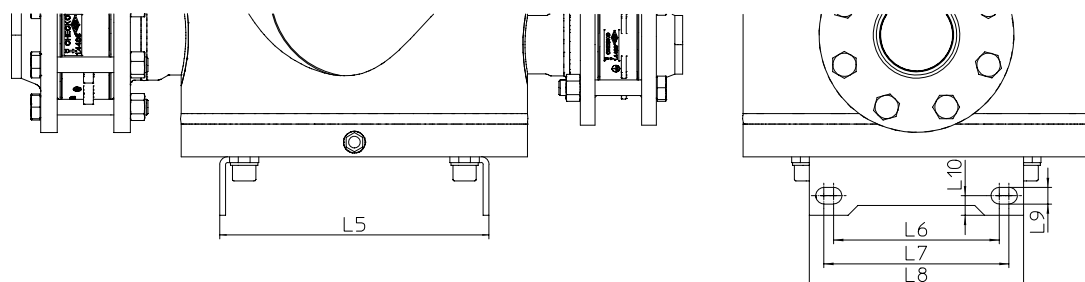


Fig. 691....1 with flanges



Optional: L-section stand

| Figure | Nominal pressure | Material | Nominal diameter (input / output) | Operating pressure PS | Operating temperature TS | Allowable differential pressure ΔPMX | For controller |
|--------|------------------|------------------------------------------------|------------------------------------------|----------------------------------|--------------------------|--------------------------------------|----------------|
| 82.691 | PN 16 | Body: P235GH, P250GH, P265GH Bonnet: P250GH | 25 / 25 40 / 40 50 / 50 80 / 50 | Min. -0.8 barg Max. 10.0 barg | Min. -10°C Max. 200°C | 10 bar | R10 |

Types of connection Other types of connection on request (other limits of use may apply)

- Flanges1 _____ acc. to DIN 2533 or DIN EN 1092-1 (PN16). On request: drilled acc. to ANSI Class 150
- Motive medium _____ acc. to EN 10226-1 Rp 1/2"
- Air vent _____ acc. to EN 10226-1 Rp 1"

Features

- Automatic operation, adapts automatically to the condensate level
- Robust, durable design
- All internals made of stainless steel, wearing parts in hardened stainless steel
- High-endurance Inconel X-750 springs
- Body designed with high cycle fatigue strength
- No manual settings required
- Low filling head
- Works without electricity
- No leakage due to moving exterior parts

Fluids pumped

- Group 2 fluids with a density of 0.85 to 1.15 kg/dm³

Mounting position

- | | | |
|-------------|------------|----------------------------------------------------------------------------------------------------|
| • Standard: | Horizontal | Required filling head above pump footprint: • 600 mm • Optional: 640 mm with L-section stand |
|-------------|------------|----------------------------------------------------------------------------------------------------|

Options For options, refer to page 8

- L-section stand (for mounting on frames, etc.)
- Electronic stroke counter
- Insulating jacket

| Types of connection | | Flange connections | | | |
|--------------------------------------------------------------------|------------------------------------|--------------------|-------------------------------------------------|---------|---------|
| DN input / DN output | | 25 / 25 | 40 / 40 | 50 / 50 | 80 / 50 |
| NPS input / NPS output | | 1 / 1 | 1 1/2 / 1 1/2 | 2 / 2 | 3 / 2 |
| Volume | | | | | |
| Displacement | (l) | 16.5 | 16.5 | 20 | 20 |
| Face-to-face acc. to data sheet or as specified by customer | | | For standard flange dimensions, refer to page 8 | | |
| L | (mm) | 604 | 637 | 674 | 689 |
| L1 | (mm) | 480 | 480 | 500 | 500 |
| L2 | (mm) | 12 | 12 | 28 | 28 |
| L3 | (mm) | 27 | 27 | 27 | 27 |
| L4 | (mm) | 28 | 28 | 28 | 28 |
| Optional: L-section stand | L5 | (mm) | 255 | 255 | 276 |
| | L6 | (mm) | 140 | 140 | 170 |
| | L7 | (mm) | 160 | 160 | 190 |
| | L8 | (mm) | 190 | 190 | 220 |
| | L9 | (mm) | 17 | 17 | 17 |
| | L10 | (mm) | 20 | 20 | 20 |
| Dimensions | | | | | |
| H | (mm) | 600 | 600 | 600 | 600 |
| H1 | (mm) | 118 | 128 | 133 | 143 |
| H2 | (mm) | 118 | 128 | 133 | 133 |
| S | (mm) | 300 | 300 | 300 | 300 |
| D | (mm) | 324 | 324 | 356 | 356 |
| Optional: L-section stand | H | (mm) | 642 | 642 | 642 |
| | H1 | (mm) | 160 | 170 | 175 |
| | H2 | (mm) | 160 | 170 | 175 |
| Weights | | | | | |
| Fig. 691, complete | (approx.) (kg) | 95 | 101 | 121 | 126 |
| Fig. 691, pump only | (approx.) (kg) | 91 | 93 | 112 | 113 |
| Optional: L-section stand | Fig. 691, complete (approx.) (kg) | 96 | 103 | 123 | 128 |
| | Fig. 691, pump only (approx.) (kg) | 93 | 95 | 114 | 115 |

| No. | Spare | Description | Material |
|---------------|-----------------------------|------------------------------------------|----------------------------------------------------|
| 1 | | Body (jacket, sockets / flanges, plates) | P235GH-TC1, 1.0345; P250GH, 1.0460; P265GH, 1.0425 |
| 17 | x | Gasket | Graphite (CrNi laminated) |
| 24.16 | x (Controller, complete) | Ball float | X5CrNi18-10, 1.4301 |
| 24.44 | | Bonnet | P250GH, 1.0460 |
| 24.48 - 24.50 | | Switch frame, shift lever | GX22CrNi17, 1.4059 |
| 24.53 - 24.57 | | Seat, stem, stem nut | X20Cr13+QT, 1.4021+QT; X39CrMo17-1+QT, 1.4122+QT |
| 24.60 - 24.61 | | Spring support, tension spring | X20Cr13+QT, 1.4021+QT; Inconel X-750 |
| 24.59 | | Bolt | X20Cr13+QT, 1.4021+QT |
| 24.62 | | Bolt (release lever) | X20Cr13+QT, 1.4021+QT |
| 27 | | | Cheese head screw |
| 49 | x | Sealing ring | Stainless steel |
| 50 | | Screw plug | 5.6 |
| 84 | x | CHECKO-D (disc check valve) | GX5CrNiMo 19-11-2, 1.4408 |
| 85 | | Flange | P250GH, 1.0460 |
| 86 | x | Gasket | Graphite (CrNi laminated) |
| | | L Spare parts | |

Additional information / restrictions in technical regulations must be observed!

Please check the stability and suitability of the materials or contact the manufacturer (refer to the product overview and resistance list).

Operating and installation instructions can be downloaded from www.ari-armaturen.com.

Applications

The ARI-CONLIFT® - BR691 is a float-operated condensate pump operating without electricity.

It is used to pump fluids from a point at a low level or a system with low pressure to a point at a higher level or a system with high pressure.

The condensate pump works according to the positive displacement principle.

Steam, compressed air or inert gas can be used as the motive medium. Pressurised steam and gas spaces, or steam and gas spaces which are under vacuum or subject to changing pressures, can be drained depending on the installation.

Notes

We recommend limiting the operating pressure of the motive medium 2 bar higher than the expected back pressure, to enable the energy contained in the medium to be optimally utilised.

If cold condensates are pumped using compressed air, icing may occur in the vented pipe at low ambient temperatures. The flow rate could be reduced as a result.

Sizing

The following information is required in order to determine the minimum size of the condensate pump:

- Flow capacity
- Type of motive medium
- Motive medium pressure
- Filling head
- Total back pressure

The following information is required in order to calculate the total back pressure:

- Height difference between the pump and the manifold to which the condensate is supplied
- Overpressure in the manifold
- Resistance in the feed pipe

The volume flow per delivery cycle which is necessary to calculate the **resistance in the feed pipe** can be assumed as follows:

The lower of the two values applies:

| | | | | | |
|----------------------------|---------|---|----|---|---------------------------------|
| - Condensate pump DN25/25: | 9 m³/h | } | or | { | 6 x condensate quantity in m³/h |
| - Condensate pump DN40/40: | 18 m³/h | | | | |
| - Condensate pump DN50/50: | 33 m³/h | | | | |
| - Condensate pump DN80/50: | 33 m³/h | | | | |

If the resistance in the feed pipe is higher than the desirable level, we recommend selecting a larger nominal diameter or using a shorter pipe.

PED 97/23/EC

Assessment as per PED 97/23/EC (Group 2 fluids)

EC declaration of conformity / manufacturer's declaration: Refer to the last page of the current Operating Instructions for information on the above-mentioned EU directives.

Please request a copy of the Operating Instructions by phone (+49 52 07) 944-0 or by fax (+49 52 07) 994-297.

Correction factor: Motive medium

The capacities indicated in the table below apply when steam is used as the motive medium.

If the motive medium is compressed air or inert gas, the values contained in the "Flow rate" table must be multiplied by the correction factor given in the table below.

| Back pressure as a percentage of the motive medium pressure | | | | | | | | |
|-------------------------------------------------------------|------|------|-----|------|------|------|------|------|
| Back pressure | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% |
| Correction factor | 1.04 | 1.07 | 1.1 | 1.13 | 1.17 | 1.22 | 1.28 | 1.35 |

Consumption: Motive medium

| Steam / compressed air consumption per 1000 litres of fluid pumped | | | | | | | |
|--------------------------------------------------------------------|--------------------------------------|---------|---------|---------|---------|---------|---------|
| Back pressure | | 0.5 bar | 1.0 bar | 2.0 bar | 3.5 bar | 5.0 bar | 8.0 bar |
| Steam consumption | (kg) | 3.8 | 4.3 | 5.3 | 6.7 | 8.2 | 11.1 |
| Air consumption | (m ³ in normal operation) | 4.5 | 5.4 | 7.2 | 9.9 | 12.6 | 18 |

| DN input / DN output | | Filling head | | | | | | | | | | | | | | | |
|---------------------------|------|--------------|-----|------|------|---------|-----|------|------|---------|-----|------|------|---------|-----|------|------|
| | | 25 / 25 | | | | 40 / 40 | | | | 50 / 50 | | | | 80 / 50 | | | |
| Standard | (mm) | 600 | 800 | 1000 | 1200 | 600 | 800 | 1000 | 1200 | 600 | 800 | 1000 | 1200 | 600 | 800 | 1000 | 1200 |
| Optional: L-section stand | (mm) | 640 | 840 | 1040 | 1240 | 640 | 840 | 1040 | 1240 | 640 | 840 | 1040 | 1240 | 640 | 840 | 1040 | 1240 |

| Back pressure pG (bar) | Motive medium pressure pT (bar) | | Flow rate | | | | | | | | | | | | | | | |
|---------------------------|------------------------------------|-----|-----------|------|------|------|---------|------|------|------|---------|------|------|------|---------|------|------|------|
| | | | 25 / 25 | | | | 40 / 40 | | | | 50 / 50 | | | | 80 / 50 | | | |
| 1.0 | 1.5 | l/h | 473 | 692 | 763 | 843 | 670 | 984 | 1090 | 1171 | 1056 | 1483 | 1819 | 1829 | 1590 | 2154 | 2310 | 2789 |
| 1.0 | 2.0 | l/h | 588 | 860 | 948 | 1047 | 821 | 1207 | 1337 | 1437 | 1676 | 2352 | 2778 | 3020 | 2262 | 3186 | 3445 | 3857 |
| 1.0 | 2.5 | l/h | 674 | 986 | 1087 | 1201 | 950 | 1396 | 1546 | 1662 | 1915 | 2688 | 3203 | 3516 | 2590 | 3648 | 4288 | 4382 |
| 1.0 | 3.0 | l/h | 740 | 1083 | 1194 | 1320 | 1030 | 1513 | 1677 | 1802 | 2124 | 2981 | 3505 | 3849 | 2874 | 4049 | 4676 | 4928 |
| 1.0 | 4.0 | l/h | 817 | 1196 | 1318 | 1457 | 1140 | 1675 | 1855 | 1994 | 2300 | 3229 | 3749 | 4119 | 3061 | 4271 | 4874 | 5298 |
| 1.0 | 5.0 | l/h | 860 | 1259 | 1388 | 1533 | 1215 | 1785 | 1977 | 2125 | 2456 | 3448 | 3922 | 4310 | 3138 | 4334 | 5095 | 5317 |
| 1.0 | 6.0 | l/h | 895 | 1310 | 1444 | 1596 | 1278 | 1878 | 2081 | 2236 | 2550 | 3579 | 4049 | 4450 | 3204 | 4380 | 5254 | 5482 |
| 1.0 | 7.0 | l/h | 911 | 1333 | 1470 | 1624 | 1316 | 1933 | 2141 | 2301 | 2562 | 3596 | 4101 | 4509 | 3216 | 4394 | 5326 | 5500 |
| 1.0 | 8.0 | l/h | 931 | 1362 | 1501 | 1659 | 1342 | 1971 | 2184 | 2347 | 2569 | 3607 | 4114 | 4523 | 3234 | 4418 | 5355 | 5529 |
| 1.5 | 2.0 | l/h | 469 | 687 | 757 | 836 | 649 | 954 | 1057 | 1136 | 987 | 1386 | 1701 | 1710 | 1474 | 1931 | 2032 | 2345 |
| 1.5 | 2.5 | l/h | 588 | 860 | 948 | 1047 | 807 | 1186 | 1314 | 1412 | 1566 | 2199 | 2597 | 2824 | 2021 | 2847 | 2924 | 3275 |
| 1.5 | 3.0 | l/h | 670 | 981 | 1081 | 1195 | 917 | 1348 | 1493 | 1605 | 1774 | 2490 | 2967 | 3227 | 2278 | 3238 | 3451 | 3755 |
| 1.5 | 3.5 | l/h | 729 | 1066 | 1176 | 1299 | 1000 | 1470 | 1628 | 1750 | 2011 | 2823 | 3319 | 3580 | 2520 | 3483 | 3899 | 4239 |
| 1.5 | 4.0 | l/h | 766 | 1121 | 1236 | 1366 | 1058 | 1554 | 1722 | 1850 | 2147 | 3013 | 3499 | 3743 | 2625 | 3628 | 4144 | 4592 |
| 1.5 | 5.0 | l/h | 825 | 1207 | 1331 | 1470 | 1136 | 1669 | 1849 | 1987 | 2341 | 3286 | 3738 | 4036 | 2801 | 3946 | 4604 | 4946 |
| 1.5 | 6.0 | l/h | 852 | 1247 | 1375 | 1519 | 1203 | 1768 | 1959 | 2105 | 2421 | 3398 | 3844 | 4189 | 2911 | 4022 | 4833 | 5140 |
| 1.5 | 7.0 | l/h | 884 | 1293 | 1426 | 1575 | 1248 | 1834 | 2032 | 2184 | 2441 | 3426 | 3908 | 4259 | 2981 | 4119 | 4949 | 5315 |
| 1.5 | 8.0 | l/h | 895 | 1310 | 1444 | 1596 | 1278 | 1878 | 2081 | 2236 | 2452 | 3442 | 3926 | 4317 | 3027 | 4223 | 5025 | 5396 |
| 2.0 | 2.5 | l/h | 466 | 682 | 751 | 830 | 639 | 939 | 1041 | 1118 | 944 | 1325 | 1626 | 1634 | 1321 | 1612 | 1918 | 2245 |
| 2.0 | 3.0 | l/h | 577 | 844 | 930 | 1028 | 779 | 1145 | 1268 | 1363 | 1478 | 2075 | 2604 | 2665 | 1708 | 2406 | 2680 | 3075 |
| 2.0 | 3.5 | l/h | 628 | 919 | 1014 | 1120 | 892 | 1310 | 1452 | 1560 | 1690 | 2372 | 3001 | 3074 | 2070 | 2784 | 3281 | 3557 |
| 2.0 | 4.0 | l/h | 709 | 1038 | 1144 | 1264 | 967 | 1421 | 1574 | 1692 | 1830 | 2568 | 3177 | 3316 | 2244 | 3105 | 3668 | 3896 |
| 2.0 | 5.0 | l/h | 778 | 1139 | 1255 | 1387 | 1069 | 1570 | 1740 | 1870 | 2064 | 2898 | 3509 | 3697 | 2506 | 3468 | 4062 | 4352 |
| 2.0 | 6.0 | l/h | 817 | 1196 | 1318 | 1457 | 1132 | 1664 | 1843 | 1981 | 2156 | 3026 | 3589 | 3784 | 2665 | 3786 | 4360 | 4712 |
| 2.0 | 7.0 | l/h | 848 | 1242 | 1369 | 1512 | 1185 | 1741 | 1928 | 2072 | 2202 | 3091 | 3644 | 3844 | 2740 | 3859 | 4564 | 4931 |
| 2.0 | 8.0 | l/h | 860 | 1259 | 1388 | 1533 | 1222 | 1796 | 1989 | 2138 | 2210 | 3102 | 3657 | 3857 | 2790 | 3930 | 4690 | 5067 |
| 2.0 | 9.0 | l/h | 864 | 1264 | 1394 | 1540 | 1241 | 1823 | 2020 | 2171 | 2210 | 3102 | 3657 | 3857 | 2848 | 3941 | 4788 | 5173 |
| 2.5 | 3.0 | l/h | 462 | 676 | 746 | 824 | 589 | 866 | 959 | 1031 | 839 | 1177 | 1444 | 1466 | 1189 | 1459 | 1672 | 2026 |
| 2.5 | 3.5 | l/h | 573 | 838 | 924 | 1021 | 723 | 1062 | 1177 | 1265 | 1316 | 1848 | 2397 | 2417 | 1520 | 2034 | 2384 | 2872 |
| 2.5 | 4.0 | l/h | 632 | 925 | 1020 | 1127 | 837 | 1230 | 1363 | 1464 | 1489 | 2090 | 2777 | 2808 | 1790 | 2475 | 2917 | 3253 |
| 2.5 | 4.5 | l/h | 694 | 1015 | 1119 | 1237 | 915 | 1345 | 1490 | 1601 | 1673 | 2349 | 3050 | 3115 | 1994 | 2757 | 3317 | 3654 |
| 2.5 | 5.0 | l/h | 727 | 1064 | 1173 | 1296 | 968 | 1422 | 1576 | 1693 | 1780 | 2499 | 3174 | 3272 | 2147 | 2970 | 3542 | 3933 |
| 2.5 | 6.0 | l/h | 766 | 1121 | 1236 | 1366 | 1047 | 1538 | 1703 | 1831 | 1875 | 2632 | 3298 | 3405 | 2343 | 3271 | 3867 | 4180 |
| 2.5 | 7.0 | l/h | 794 | 1161 | 1280 | 1415 | 1095 | 1609 | 1782 | 1916 | 1933 | 2713 | 3378 | 3490 | 2466 | 3444 | 4073 | 4478 |
| 2.5 | 8.0 | l/h | 813 | 1190 | 1312 | 1450 | 1132 | 1664 | 1843 | 1981 | 1945 | 2730 | 3399 | 3511 | 2565 | 3550 | 4236 | 4618 |
| 2.5 | 9.0 | l/h | 825 | 1207 | 1331 | 1470 | 1159 | 1702 | 1886 | 2027 | 1945 | 2730 | 3399 | 3511 | 2625 | 3698 | 4335 | 4683 |
| 3.0 | 3.5 | l/h | 459 | 671 | 740 | 818 | 559 | 821 | 910 | 978 | 726 | 1019 | 1250 | 1269 | 952 | 1310 | 1482 | 1939 |
| 3.0 | 4.0 | l/h | 554 | 811 | 894 | 988 | 688 | 1011 | 1120 | 1203 | 1183 | 1660 | 2136 | 2171 | 1300 | 1812 | 2028 | 2415 |
| 3.0 | 4.5 | l/h | 628 | 919 | 1014 | 1120 | 790 | 1161 | 1286 | 1382 | 1369 | 1922 | 2533 | 2582 | 1602 | 2106 | 2526 | 2910 |
| 3.0 | 5.0 | l/h | 671 | 981 | 1082 | 1195 | 860 | 1263 | 1399 | 1504 | 1481 | 2079 | 2742 | 2757 | 1812 | 2436 | 2871 | 3261 |
| 3.0 | 6.0 | l/h | 716 | 1047 | 1154 | 1275 | 957 | 1406 | 1557 | 1674 | 1560 | 2189 | 2824 | 2866 | 2048 | 2860 | 3317 | 3752 |
| 3.0 | 7.0 | l/h | 747 | 1093 | 1205 | 1331 | 1020 | 1499 | 1661 | 1785 | 1629 | 2286 | 2887 | 2957 | 2195 | 2984 | 3625 | 3986 |
| 3.0 | 8.0 | l/h | 759 | 1110 | 1224 | 1352 | 1058 | 1554 | 1722 | 1850 | 1652 | 2319 | 2887 | 2982 | 2294 | 3204 | 3826 | 4094 |
| 3.0 | 9.0 | l/h | 766 | 1121 | 1236 | 1366 | 1088 | 1598 | 1770 | 1902 | 1652 | 2319 | 2887 | 2982 | 2345 | 3274 | 3909 | 4147 |

Assumptions:

- Fluid pumped: Hot steam condensate (90 to 94°C).
- Inlet pipe: ARI CHECKO-D disc check valves and ARI strainer (standard screen).

The actual values may deviate from those given above if other operating conditions apply or other valves are used.

Intermediate values may be interpolated.

| DN input / DN output | | Filling head | | | | | | | | | | | | | | | |
|---------------------------|------|--------------|-----|------|------|---------|-----|------|------|---------|-----|------|------|---------|-----|------|------|
| | | 25 / 25 | | | | 40 / 40 | | | | 50 / 50 | | | | 80 / 50 | | | |
| Standard | (mm) | 600 | 800 | 1000 | 1200 | 600 | 800 | 1000 | 1200 | 600 | 800 | 1000 | 1200 | 600 | 800 | 1000 | 1200 |
| Optional: L-section stand | (mm) | 640 | 840 | 1040 | 1240 | 640 | 840 | 1040 | 1240 | 640 | 840 | 1040 | 1240 | 640 | 840 | 1040 | 1240 |

| Back pressure pG (bar) | Motive medium pressure pT (bar) | | Flow rate | | | | | | | | | | | | | | | |
|------------------------------|---------------------------------------|-----|-----------|------|------|------|---------|------|------|------|---------|------|------|------|---------|------|------|------|
| | | | 25 / 25 | | | | 40 / 40 | | | | 50 / 50 | | | | 80 / 50 | | | |
| 3.5 | 4.0 | l/h | 455 | 666 | 734 | 811 | 536 | 787 | 872 | 937 | 668 | 938 | 1198 | 1211 | 831 | 1097 | 1357 | 1682 |
| 3.5 | 4.5 | l/h | 554 | 811 | 894 | 988 | 670 | 985 | 1091 | 1173 | 1042 | 1462 | 1851 | 1878 | 1180 | 1524 | 1822 | 2280 |
| 3.5 | 5.0 | l/h | 609 | 892 | 983 | 1086 | 764 | 1123 | 1244 | 1337 | 1239 | 1739 | 2237 | 2275 | 1415 | 2012 | 2252 | 2571 |
| 3.5 | 5.5 | l/h | 651 | 953 | 1050 | 1161 | 841 | 1236 | 1369 | 1471 | 1350 | 1895 | 2423 | 2491 | 1621 | 2283 | 2671 | 2917 |
| 3.5 | 6.0 | l/h | 680 | 995 | 1098 | 1213 | 886 | 1301 | 1442 | 1549 | 1436 | 2016 | 2601 | 2617 | 1728 | 2499 | 2958 | 3110 |
| 3.5 | 7.0 | l/h | 716 | 1047 | 1154 | 1275 | 957 | 1406 | 1557 | 1674 | 1494 | 2097 | 2648 | 2667 | 1858 | 2640 | 3296 | 3404 |
| 3.5 | 8.0 | l/h | 739 | 1081 | 1192 | 1317 | 1005 | 1477 | 1636 | 1759 | 1523 | 2138 | 2662 | 2727 | 1954 | 2776 | 3406 | 3579 |
| 3.5 | 9.0 | l/h | 747 | 1093 | 1205 | 1331 | 1043 | 1532 | 1697 | 1824 | 1531 | 2149 | 2675 | 2764 | 2014 | 2837 | 3481 | 3626 |
| 3.5 | 10.0 | l/h | 751 | 1098 | 1211 | 1338 | 1061 | 1560 | 1728 | 1857 | 1531 | 2149 | 2675 | 2764 | 2014 | 2862 | 3481 | 3626 |
| 4.0 | 4.5 | l/h | 444 | 650 | 716 | 791 | 474 | 696 | 772 | 829 | 661 | 927 | 1185 | 1198 | 751 | 1017 | 1225 | 1646 |
| 4.0 | 5.0 | l/h | 531 | 777 | 857 | 947 | 598 | 879 | 974 | 1046 | 972 | 1364 | 1797 | 1849 | 1027 | 1447 | 1596 | 2010 |
| 4.0 | 5.5 | l/h | 595 | 870 | 959 | 1060 | 715 | 1051 | 1164 | 1251 | 1130 | 1586 | 2124 | 2188 | 1193 | 1697 | 2015 | 2324 |
| 4.0 | 6.0 | l/h | 628 | 919 | 1014 | 1120 | 783 | 1150 | 1274 | 1369 | 1274 | 1788 | 2359 | 2433 | 1338 | 1976 | 2378 | 2526 |
| 4.0 | 7.0 | l/h | 680 | 995 | 1097 | 1212 | 878 | 1290 | 1429 | 1535 | 1399 | 1963 | 2533 | 2615 | 1511 | 2187 | 2658 | 2770 |
| 4.0 | 8.0 | l/h | 703 | 1029 | 1134 | 1253 | 940 | 1381 | 1530 | 1645 | 1440 | 2021 | 2553 | 2637 | 1611 | 2330 | 2833 | 2926 |
| 4.0 | 9.0 | l/h | 715 | 1046 | 1153 | 1274 | 988 | 1451 | 1608 | 1728 | 1460 | 2050 | 2553 | 2659 | 1679 | 2407 | 2927 | 3023 |
| 4.0 | 10.0 | l/h | 722 | 1057 | 1165 | 1287 | 1003 | 1473 | 1632 | 1754 | 1460 | 2050 | 2553 | 2659 | 1694 | 2449 | 2927 | 3050 |
| 5.0 | 5.5 | l/h | 426 | 623 | 687 | 759 | 446 | 656 | 727 | 781 | 581 | 815 | 1042 | 1053 | 619 | 872 | 990 | 1336 |
| 5.0 | 6.0 | l/h | 515 | 754 | 831 | 919 | 593 | 871 | 964 | 1036 | 803 | 1127 | 1485 | 1527 | 799 | 1160 | 1364 | 1601 |
| 5.0 | 6.5 | l/h | 567 | 830 | 915 | 1011 | 684 | 1005 | 1113 | 1196 | 957 | 1344 | 1800 | 1854 | 938 | 1283 | 1635 | 1801 |
| 5.0 | 7.0 | l/h | 600 | 878 | 968 | 1070 | 750 | 1102 | 1221 | 1313 | 1045 | 1467 | 1936 | 1997 | 1021 | 1438 | 1779 | 1921 |
| 5.0 | 8.0 | l/h | 647 | 947 | 1044 | 1154 | 826 | 1214 | 1345 | 1445 | 1107 | 1554 | 2005 | 2069 | 1069 | 1519 | 1879 | 1992 |
| 5.0 | 9.0 | l/h | 663 | 970 | 1069 | 1181 | 870 | 1278 | 1416 | 1522 | 1140 | 1600 | 2020 | 2087 | 1078 | 1546 | 1913 | 2027 |
| 5.0 | 10.0 | l/h | 670 | 981 | 1081 | 1195 | 888 | 1305 | 1446 | 1554 | 1156 | 1622 | 2020 | 2104 | 1078 | 1559 | 1913 | 2061 |
| 6.5 | 7.0 | l/h | 409 | 598 | 659 | 728 | 420 | 617 | 684 | 735 | 485 | 681 | 847 | 923 | 585 | 732 | 883 | 1111 |
| 6.5 | 7.5 | l/h | 501 | 733 | 808 | 893 | 541 | 795 | 880 | 946 | 808 | 1098 | 1420 | 1532 | 722 | 996 | 1233 | 1326 |
| 6.5 | 8.0 | l/h | 548 | 803 | 885 | 978 | 609 | 895 | 992 | 1066 | 859 | 1177 | 1536 | 1643 | 820 | 1133 | 1444 | 1533 |
| 6.5 | 9.0 | l/h | 600 | 878 | 968 | 1070 | 678 | 996 | 1104 | 1186 | 894 | 1234 | 1598 | 1726 | 871 | 1192 | 1518 | 1596 |
| 6.5 | 10.0 | l/h | 621 | 908 | 1001 | 1106 | 717 | 1054 | 1167 | 1254 | 901 | 1255 | 1612 | 1741 | 887 | 1204 | 1518 | 1596 |
| 8.0 | 8.5 | l/h | 401 | 587 | 647 | 715 | 410 | 602 | 667 | 716 | 423 | 593 | 750 | 817 | 556 | 730 | 871 | 1047 |
| 8.0 | 9.0 | l/h | 481 | 704 | 776 | 857 | 460 | 675 | 748 | 804 | 634 | 875 | 1132 | 1233 | 633 | 901 | 1069 | 1151 |
| 8.0 | 9.5 | l/h | 523 | 765 | 843 | 931 | 493 | 724 | 802 | 862 | 734 | 1014 | 1334 | 1428 | 685 | 965 | 1137 | 1233 |
| 8.0 | 10.0 | l/h | 549 | 804 | 886 | 979 | 515 | 756 | 838 | 900 | 740 | 1030 | 1345 | 1441 | 705 | 974 | 1160 | 1245 |

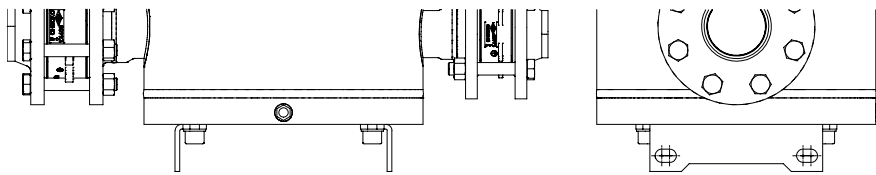
Assumptions:

- Fluid pumped: Hot steam condensate (90 to 94°C).
- Inlet pipe: ARI CHECKO-D disc check valves and ARI strainer (standard screen).

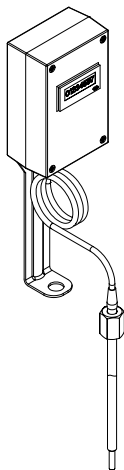
The actual values may deviate from those given above if other operating conditions apply or other valves are used.
Intermediate values may be interpolated.

| Standard flange dimensions to DIN 2533 or DIN EN 1092-1 | | | | | | |
|---------------------------------------------------------|--------|------|--------|--------|--------|--------|
| DN | (mm) | 25 | 40 | 50 | 80 | |
| NPS | (inch) | 1 | 1 1/2 | 2 | 3 | |
| PN 16 | ØD | (mm) | 115 | 150 | 165 | 200 |
| | ØK | (mm) | 85 | 110 | 125 | 160 |
| | n x Ød | (mm) | 4 x 14 | 4 x 18 | 4 x 18 | 8 x 18 |

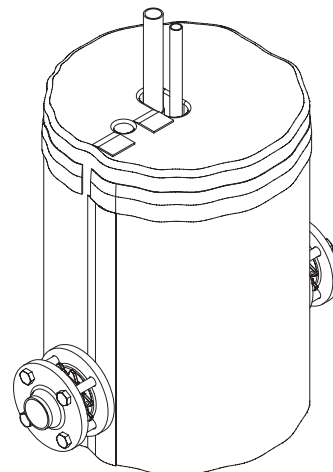
Options



L-section stand (for mounting on frames, etc.)



Electronic stroke counter



Insulating jacket