

# DUAL-PLATE WAFER TYPE CHECK VALVE SERIES ACV



The compact design of dual plate wafer check valves gives it the advantages over other check valves in size, weight, cost, ease of installation and maintenance. The construction of the valves is simple and reliable. The plates function independent of each other and the stainless steel torison springs shut the valve quickly to minimize reversal flow and prevent water hammer. It requires only a low force to open the plates, hence minimize the pressure drop across the valve. In shut position, the plates rest on resilient seat which provides good sealing.

|                                                                   |                                                                        |                                                                                     |                                                                                                                                                                |                                                                                                             |
|-------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <br>ISO 9001:2008<br>CERTIFICATE NO.<br>0436-2002-AQ-RGC-RW-Rev.1 | <br>Pressure accessory<br>CERTIFICATE NO.<br>4588-2014-CE-RGC-ACCREDIA | <br>CE<br>Notified Body No.<br>0406<br>CERTIFICATE NO.<br>4590-2014-CE-RGC-ACCREDIA | <br>Det Norske Veritas Rules<br>for Classification of Ships<br>Det Norske Veritas Standards<br>for Certification 2.9 No.5-794,40<br>CERTIFICATE NO.<br>P-12513 | <br>CERTIFICATION<br>ISO 9001:2008<br><br>UKAS<br>MANAGEMENT<br>SYSTEMS<br>012<br>Certificate Number : 8711 |
|-------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|



## Dimensions in mm

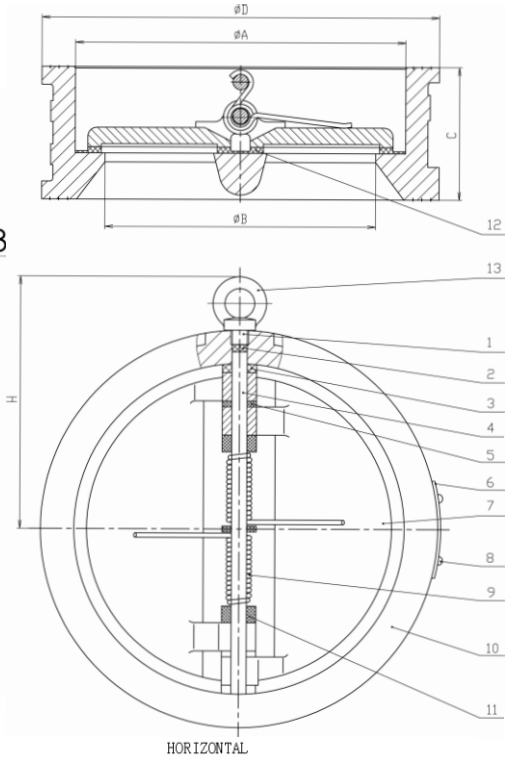
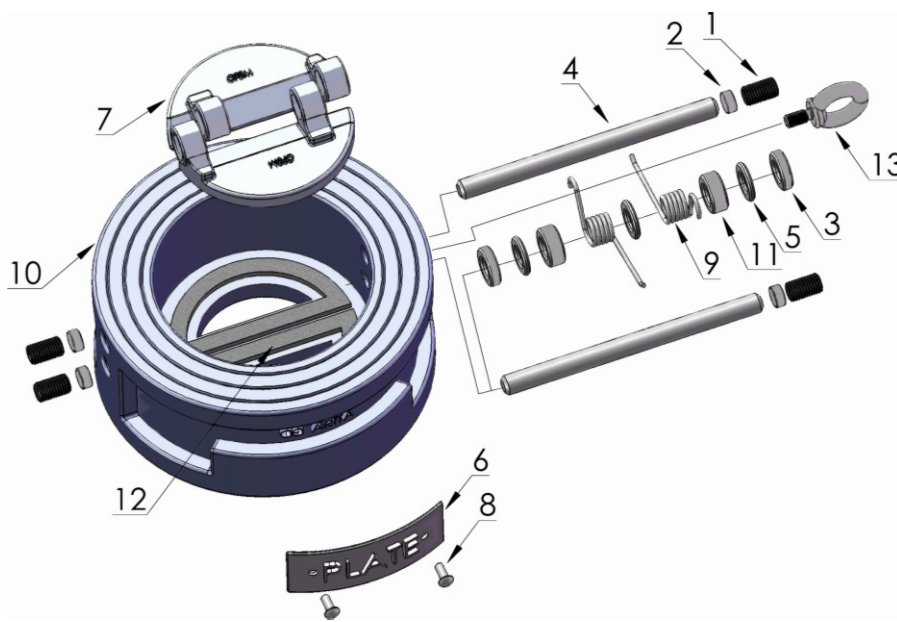
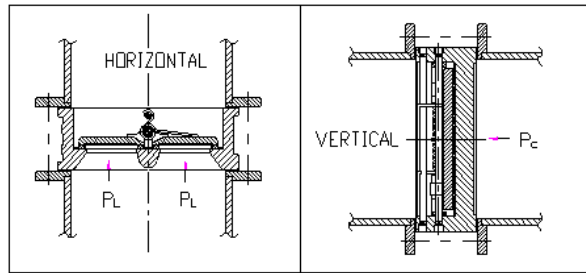
| SIZES |       | ØA    | ØB  | C   | ØD  | H     | Cv   | WT (KG) |
|-------|-------|-------|-----|-----|-----|-------|------|---------|
| DN    | In.   |       |     |     |     |       |      |         |
| 40    | 1 1/2 | 56.0  | 36  | 43  | 78  | —     | 28   | 0.8     |
| 50    | 2     | 65.0  | 40  | 43  | 101 | —     | 42   | 1.4     |
| 65    | 2 1/2 | 78.0  | 58  | 46  | 121 | —     | 68   | 1.9     |
| 80    | 3     | 94.0  | 70  | 64  | 129 | —     | 97   | 3.0     |
| 100   | 4     | 116.2 | 88  | 64  | 156 | —     | 178  | 4.6     |
| 125   | 5     | 145.0 | 115 | 70  | 187 | —     | 278  | 6.0     |
| 150   | 6     | 170.0 | 134 | 76  | 213 | —     | 400  | 7.9     |
| 200   | 8     | 222.0 | 182 | 89  | 267 | 169.5 | 719  | 15.8    |
| 250   | 10    | 265.0 | 220 | 114 | 327 | 199.5 | 1130 | 25.4    |
| 300   | 12    | 310.0 | 260 | 114 | 375 | 223.5 | 1635 | 36.9    |
| 350   | 14    | 360.0 | 302 | 127 | 420 | 246.0 | 1986 | 54.2    |
| 400   | 16    | 410.0 | 350 | 140 | 483 | 285.5 | 2639 | 78.0    |
| 450   | 18    | 450.0 | 385 | 152 | 537 | 320.5 | 3385 | 107.8   |
| 500   | 20    | 505.0 | 438 | 152 | 592 | 348.0 | 4223 | 122.1   |
| 600   | 24    | 624.0 | 538 | 178 | 695 | 399.5 | 6178 | 171.2   |

Note : Cv = US Gallon per minutes

## 1.5"- 24" Dual Plate Wafer Check minimum opening pressure

| Specification               | 1.5" | 2"   | 2.5" | 3"   | 4"   | 5"   | 6"   | 8"   | 10"  | 12"  | 14"  | 16"  | 18"  | 20"  | 24"  |
|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Opening pressure $P_L$ KPa  | 9.41 | 8.09 | 7.8  | 6.43 | 3.22 | 2.68 | 2.29 | 3.7  | 3.07 | 3.33 | 3.71 | 4.95 | 4.21 | 3.5  | 2.77 |
| Vertical pressure $P_c$ KPa | 8.87 | 7.26 | 7.2  | 5.35 | 2.08 | 1.76 | 1.26 | 2.63 | 1.74 | 1.75 | 1.87 | 2.42 | 1.45 | 0.93 | 0.66 |

Note: The above calculated data, not as an end-use data for reference only.



## Working Temperature

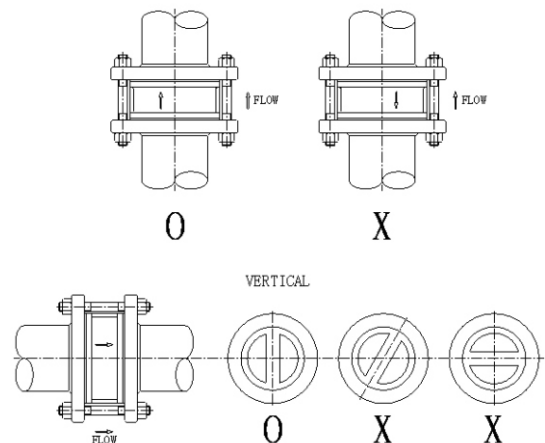
|                |           |          |           |
|----------------|-----------|----------|-----------|
| Temperature °C | -15 ~ 140 | -10 ~ 80 | -20 ~ 150 |
| Seat Material  | EPDM      | NBR      | VITON     |

## Pressure Test

| Working Pressure | Hydrostatic Test |          |
|------------------|------------------|----------|
| 16 Bar           | Body             | 24 Bar   |
|                  | Seat             | 17.6 Bar |

## Materials

| No. | PART        | QTY. | MATERIAL                   |
|-----|-------------|------|----------------------------|
| 1   | SET SCREW   | 4    | SS304                      |
| 2   | STEM WASHER | 4    | EPDM                       |
| 3   | DISC RING   | 2    | PTFE                       |
| 4   | STEM        | 2    | SS416                      |
| 5   | WASHER      | 3    | PTFE                       |
| 6   | NAMEPLATE   | 1    | ALUMINIUM                  |
| 7   | DISC        | 2    | DUCTILE IRON NICKEL PLATED |
| 8   | RIVET       | 2    | ALUMINIUM                  |
| 9   | SPRING      | 2    | SS304                      |
| 10  | BODY        | 1    | CAST IRON                  |
| 11  | WASHER      | 2    | PTFE                       |
| 12  | SEAT        | 2    | EPDM                       |
| 13  | EYE BOLT    | 1    | CARBON STEEL               |



## Standard:

|                   |                                                         |
|-------------------|---------------------------------------------------------|
| Face to Face      | : BS EN558-1                                            |
| Flange Connection | : ANSI B16 125/150<br>EN1092-1 PN10/16<br>JIS B2220 10K |
| Test Standard     | : BS EN 12266-1 / API 598                               |