



VACUUM-PROOF DIAPHRAGM VALVE



DV Series

DV300

Size :80mm(3")~250mm(10")

MATERIALS : UPVC,PP,PPG .CPVC,PVDF

PATNET:NO, 18490

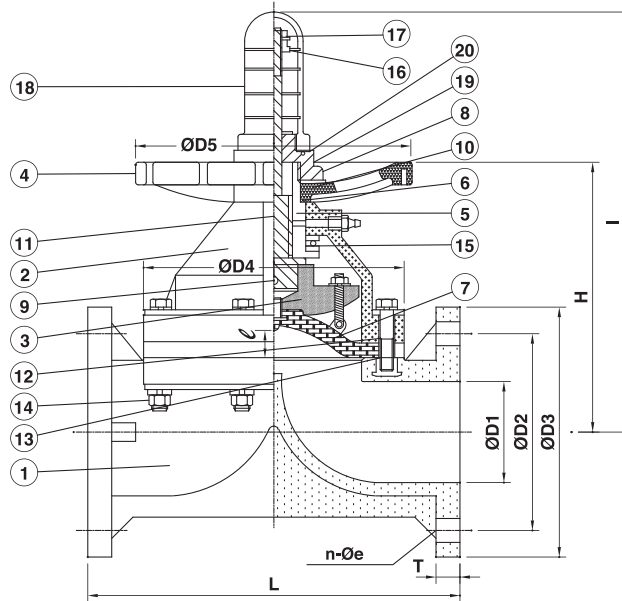
Note: Standard Type Diaphragm valv in size 15mm(1/2")-65mm(2 1/2")can be used under vaccum

FEATURES

- Concerning the standard diaphragm valve, the inserted metal of the diaphragm frequently comes out, when exposed to vacuum, therefore, the valve cannot function at all, S.H.VACUUM PROOF DIAPHRAGM VALVE has solved this problem and has won favorable valuation in various fields.
- S.H. VACUUM-PROOF DIAPHRAGM VALVE has more inserted matels of the diaphragm. Tghe diaphragm is designed forbeing hanged from the compressor (Patent). This prevents the diaphragm from being drawn towards the valve seat (downwards) by vacuum. This valve can endure the perfect vacuum. (-760m/m Hg)
- This VALVE can also be used under pressure.As both body and bonnet are thick and monobloc moldings with vacuum resistance, this can be used not only under vaccum but under pressure. (3kg/cm2 (40lb/in2)-7kg/cm2(100lb/in2)

Reference(Unit: m/mHg)

| Nom. Size m/m(inch) | STANDARD TYPE | VACUUM TYPE | Ball Valv |
|------------------------|---------------|--------------|-----------|
| | Rubber Dia. | Rubbere dia. | |
| 15(1/2") | -760 | - | -760 |
| 20(3/4") | -760 | - | -760 |
| 25(1") | -760 | - | -760 |
| 40(1-1/2") | -760 | - | -760 |
| 50(2") | -760 | - | -760 |
| 65(2-1/2") | -760 | - | -760 |
| 80(3") | -650 ~ -760 | -760 | - |
| 100(4") | -500 ~ -600 | -760 | - |
| 125(5") | -360 ~ -470 | -760 | - |
| 150(6") | -250 ~ -360 | -760 | - |
| 200(8") | -100 ~ -200 | -760 | - |
| 250(10") | below -50 | -760 | - |



DIMENSIONS TABLE

| JIS | | | | | | | | | | | | | Unit: mm | | | | | PRESS Test for Assembly (at 20°C) | | | | |
|------------------------|-----|-----|-----|----|----------------------|-----|-----|----------------|-----|----|-----|-----|---|----|-----|------|------|-----------------------------------|--|--|--|--|
| Nom. Size m/m(inch) | D1 | D2 | D3 | e | n No. of holes | D4 | D5 | Lift ℓ | L | T | H | I | Test Pressure Unit: kgf/cm ² | | | | | | | | | |
| | | | | | | | | | | | | | Rubber Diaphragm | | | | | | | | | |
| | | | | | | | | | | | | | UPVC | PP | PPG | CPVC | PVDF | | | | | |
| 80(3") | 78 | 150 | 185 | 19 | 8 | 215 | 202 | 34 | 280 | 22 | 218 | 293 | 10 | 10 | 10 | 10 | 10 | | | | | |
| 100(4") | 100 | 175 | 210 | 19 | 8 | 255 | 241 | 54 | 340 | 22 | 261 | 370 | 10 | 10 | 10 | 10 | 10 | | | | | |
| 125(5") | 125 | 210 | 250 | 23 | 8 | 320 | 274 | 72 | 410 | 24 | 308 | 412 | 10 | 7 | 7 | 10 | 10 | | | | | |
| 150(6") | 148 | 240 | 280 | 23 | 8 | 385 | 395 | 72 | 480 | 30 | 334 | 471 | 10 | 7 | 7 | 10 | 10 | | | | | |
| 200(8") | 198 | 290 | 330 | 23 | 12 | 430 | 395 | 96 | 570 | 30 | 419 | 625 | 7 | 5 | 5 | 7 | 7 | | | | | |
| 250(10") | 248 | 355 | 400 | 25 | 12 | 540 | 555 | 132 | 680 | 32 | 510 | 750 | 7 | 5 | 5 | 7 | 7 | | | | | |

| ANSI | | | | | | | | | | | | | Unit: inch | | | | | PRESS Test for Assembly (at 20°C) | | | | |
|------------------------|------|-------|-------|------|----------------------|-------|-------|----------------|-------|------|-------|-------|-------------------------|-----|-----|------|------|-----------------------------------|--|--|--|--|
| Nom. Size m/m(inch) | D1 | D2 | D3 | e | n No. of holes | D4 | D5 | Lift ℓ | L | T | H | I | Test Pressure Unit: psi | | | | | | | | | |
| | | | | | | | | | | | | | Rubber Diaphragm | | | | | | | | | |
| | | | | | | | | | | | | | UPVC | PP | PPG | CPVC | PVDF | | | | | |
| 80(3") | 3.07 | 6.00 | 7.52 | 0.75 | 4 | 8.46 | 7.95 | 1.34 | 10.40 | 0.75 | 8.50 | 11.54 | 150 | 150 | 150 | 150 | 150 | | | | | |
| 100(4") | 3.94 | 7.50 | 9.02 | 0.75 | 8 | 10.04 | 9.49 | 2.13 | 12.95 | 0.91 | 10.28 | 14.57 | 150 | 150 | 150 | 150 | 150 | | | | | |
| 125(5") | 4.92 | 8.50 | 10.00 | 0.87 | 8 | 12.60 | 10.79 | 2.83 | 16.14 | 0.94 | 12.13 | 16.22 | 150 | 105 | 105 | 150 | 150 | | | | | |
| 150(6") | 5.83 | 9.51 | 10.98 | 0.87 | 8 | 15.16 | 15.55 | 2.83 | 18.90 | 1.18 | 13.15 | 18.54 | 150 | 105 | 105 | 150 | 150 | | | | | |
| 200(8") | 7.80 | 11.75 | 13.50 | 0.87 | 8 | 16.93 | 15.55 | 3.78 | 22.44 | 1.26 | 16.40 | 24.61 | 105 | 75 | 75 | 105 | 105 | | | | | |
| 250(10") | 9.76 | 14.25 | 15.98 | 0.98 | 12 | 21.26 | 21.85 | 5.20 | 26.77 | 1.26 | 20.08 | 29.53 | 105 | 75 | 75 | 105 | 105 | | | | | |

| DIN | | | | | | | | | | | | | Unit: mm | | | | | PRESS Test for Assembly (at 20°C) | | | | |
|------------------------|-----|-----|-----|----|----------------------|-----|-----|----------------|-----|----|-----|-----|---------------------------|----|-----|------|------|-----------------------------------|--|--|--|--|
| Nom. Size m/m(inch) | D1 | D2 | D3 | e | n No. of holes | D4 | D5 | Lift ℓ | L | T | H | I | Test Pressure Unit: (bar) | | | | | | | | | |
| | | | | | | | | | | | | | Rubber Diaphragm | | | | | | | | | |
| | | | | | | | | | | | | | UPVC | PP | PPG | CPVC | PVDF | | | | | |
| 80(3") | 78 | 160 | 200 | 18 | 8 | 215 | 202 | 34 | 310 | 22 | 218 | 293 | 10 | 10 | 10 | 10 | 10 | | | | | |
| 100(4") | 100 | 180 | 220 | 18 | 8 | 255 | 241 | 54 | 350 | 25 | 261 | 370 | 10 | 10 | 10 | 10 | 10 | | | | | |
| 125(5") | 125 | 210 | 250 | 18 | 8 | 320 | 274 | 72 | 400 | 24 | 308 | 412 | 10 | 7 | 7 | 10 | 10 | | | | | |
| 150(6") | 148 | 240 | 285 | 23 | 8 | 385 | 395 | 72 | 480 | 30 | 334 | 471 | 10 | 7 | 7 | 10 | 10 | | | | | |
| 200(8") | 198 | 290 | 340 | 23 | 8 | 430 | 395 | 96 | 600 | 32 | 419 | 625 | 5 | 5 | 5 | 7 | 7 | | | | | |
| 250(10") | 248 | 350 | 395 | 23 | 12 | 540 | 555 | 132 | 680 | 32 | 510 | 750 | 5 | 5 | 5 | 7 | 7 | | | | | |

* The dimension table is calculated based on PVC material.
 ** The flanged length tolerance is according to EN558-1:1995.