



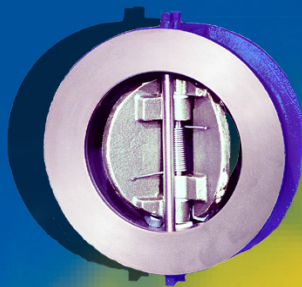
**Manufacturer of Pumps, Tanks, Heat Exchangers and Accessories for HVAC Market.
After-Sales Parts and Service.**

**Manufacturier de POMPES, ÉCHANGEURS, RÉSERVOIRS et ACCESSOIRES HVAC.
Centre de SERVICE après vente et atelier de RÉPARATION**

Wafer check Valves
Series "LSDDDB"

Clapet de Retenue
Série "LSDDDB"

Go with the FLO



Features

Type: Wafer
Face to Face: DIN 3202, ISO 5752
Flange: ANSI
Application: HVAC, Water Supply and Sewage, Chemical and/or Petrochemical Processing, Power and Utilities, Paper and Pulp, Ship building

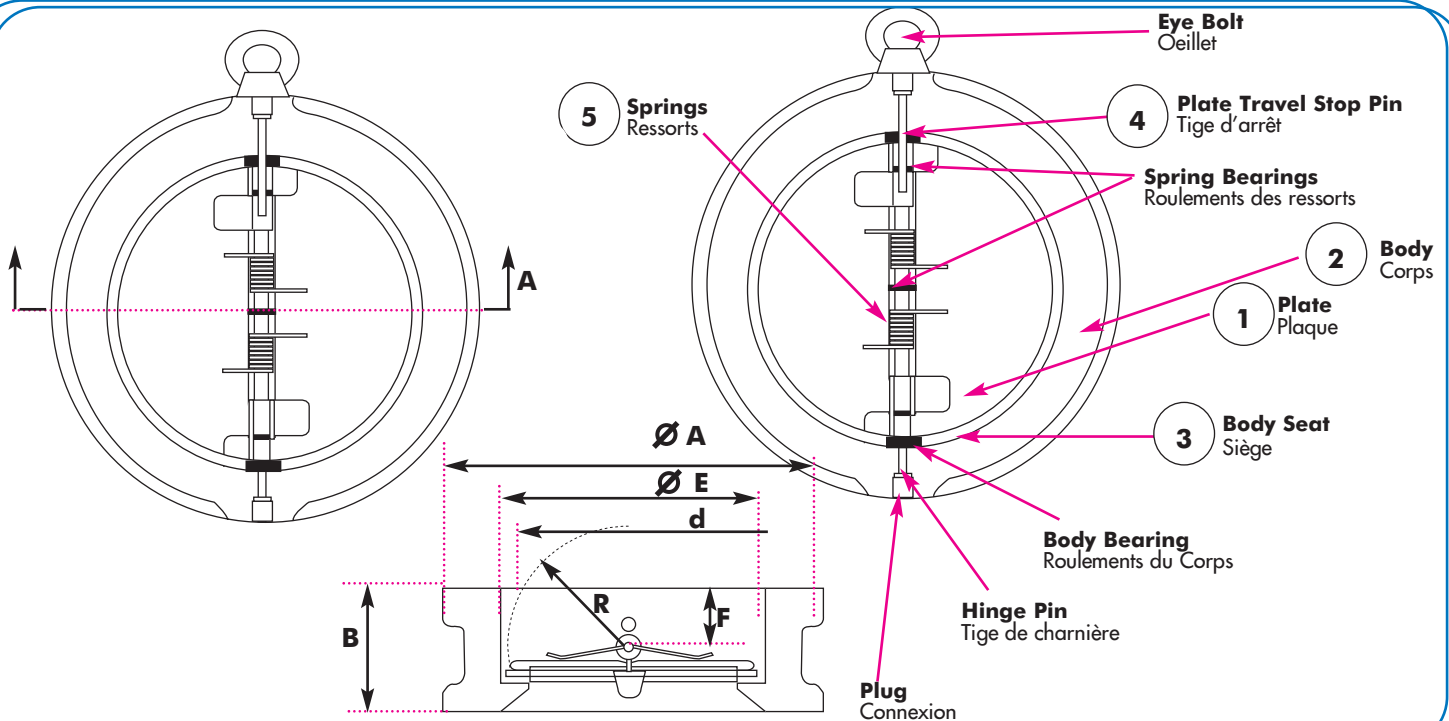
Maximum Working Pressure: From 2" to 18" up to 200PSI

Caractéristiques

Type: Wafer
Face à face: DIN 3202, ISO 5752
Bride: ANSI
Applications: HVAC, Fourniture d'eau et d'égoût, Procédés chimiques et pétrochimiques, Alimentation en énergie et commodités, Pâtes et papier.

Pression Maximale d'opération: De 2" à 18" jusqu'à 200 lbs po ca

| Sizes Dimensions | | B | E | F | R | d | A | Weight Poids |
|------------------|-----|-----|-----|-----|-------|-------|----------|--------------|
| in po | DN | | | | | | ANSI 150 | |
| 2 | 50 | 43 | 65 | 19 | 28.8 | 43.3 | 102 | 1.5 |
| 2½ | 65 | 46 | 80 | 20 | 36.1 | 60.2 | 121 | 2.4 |
| 3 | 80 | 64 | 94 | 28 | 43.4 | 66.4 | 133 | 3.6 |
| 4 | 100 | 64 | 117 | 27 | 52.8 | 90.8 | 171 | 5.7 |
| 5 | 125 | 70 | 145 | 30 | 65.7 | 116.9 | 193 | 7.3 |
| 6 | 150 | 76 | 170 | 31 | 78.6 | 144.6 | 219 | 9.0 |
| 8 | 200 | 89 | 224 | 33 | 104.4 | 198.2 | 276 | 17 |
| 10 | 250 | 114 | 265 | 50 | 127 | 233.7 | 336 | 26 |
| 12 | 300 | 114 | 310 | 43 | 148.3 | 283.9 | 406 | 42 |
| 14 | 350 | 127 | 360 | 45 | 172.4 | 332.9 | 448 | 55 |
| 16 | 400 | 140 | 410 | 52 | 197.4 | 381 | 511 | 75 |
| 18 | 450 | 152 | 450 | 58 | 217.8 | 419.9 | 546 | 107 |
| 20 | 500 | 152 | 505 | 58 | 241 | 467.8 | 603 | 111 |
| 24 | 600 | 178 | 624 | 73 | 295.4 | 572.6 | 714 | 172 |
| 28 | 700 | 229 | 720 | 98 | 354 | 680 | 828 | 219 |
| 32 | 800 | 241 | 825 | 100 | 398 | 770.5 | 936 | 316 |



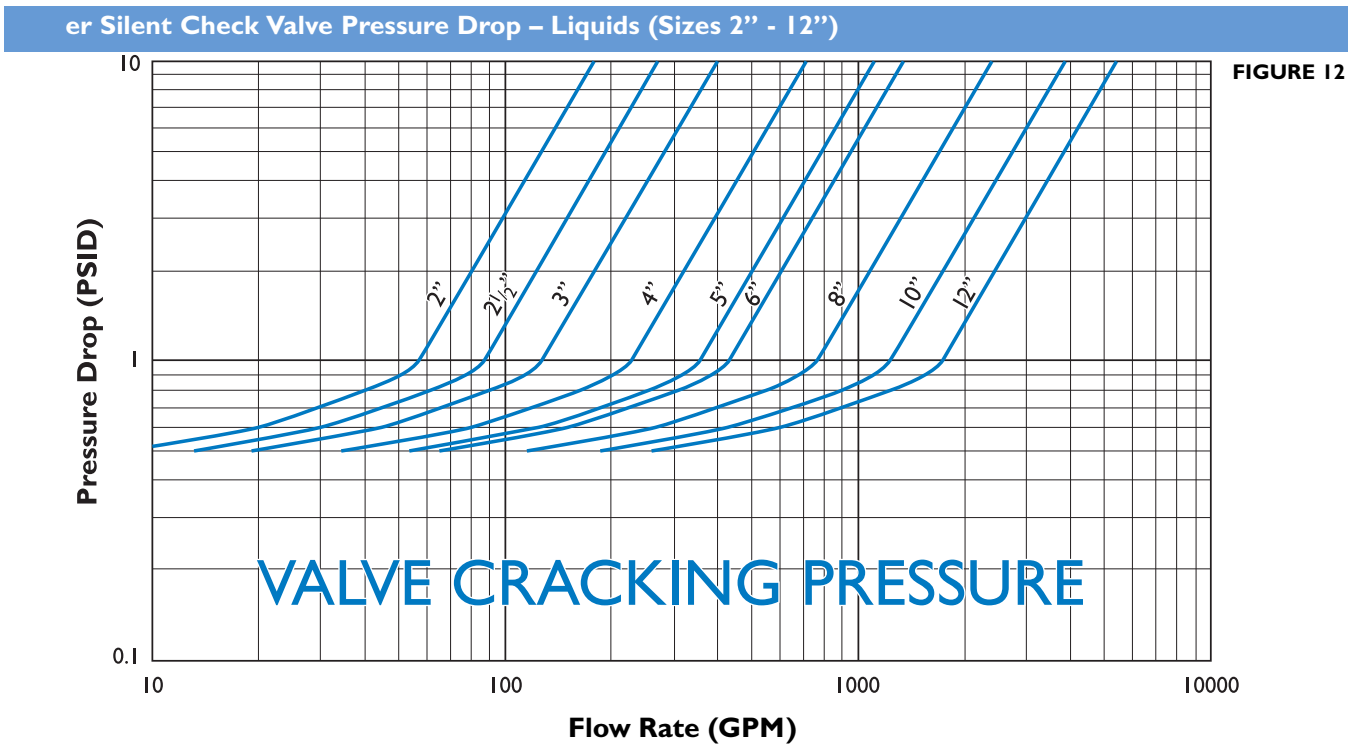
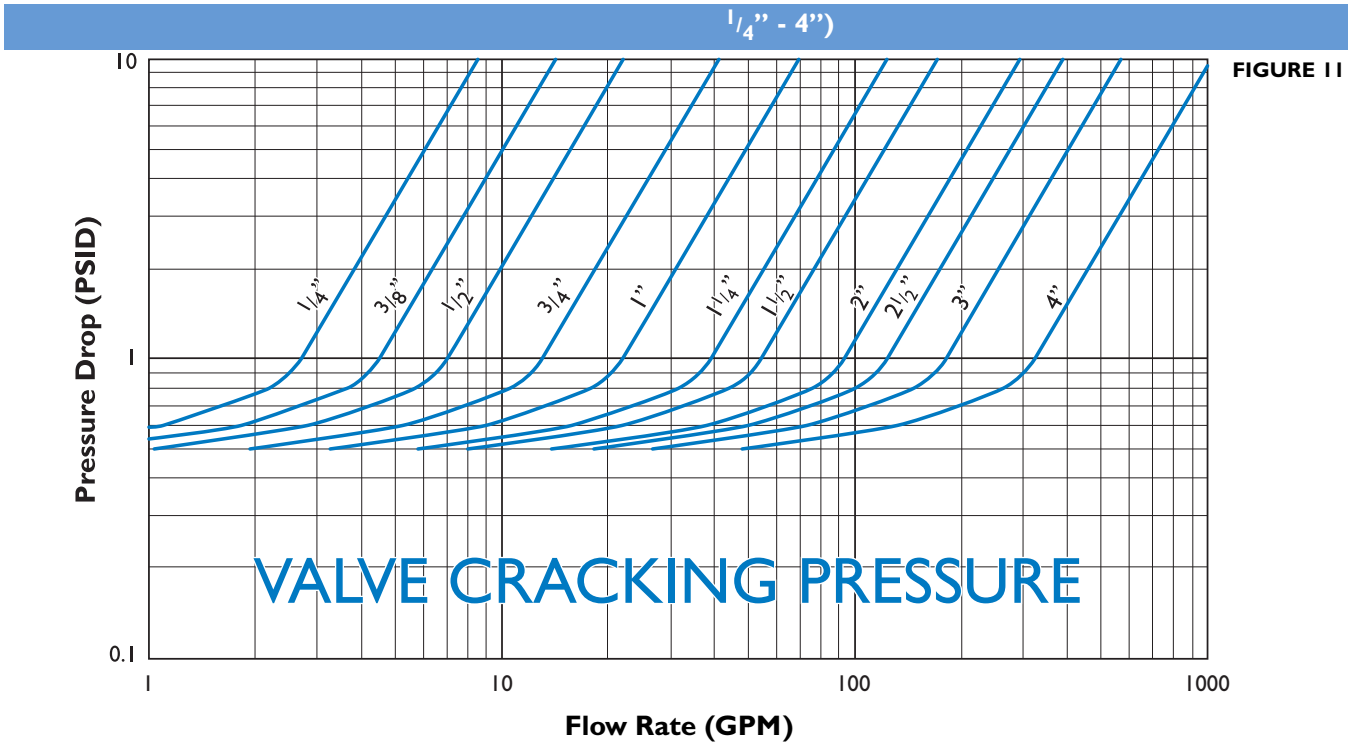
Construction

- 1 Dual Plates:** Dual plates provide full seal for bubble-tight shut off
- 2 Body:** Wafer type with plain face, small and light design, easy to install between different standard pipe flanges.
- 3 Body Seat:** Body seat has choice for several different elastometer compounds lining on the body to meet different application demands.
- 4 Plate Travel Stop Pin:** Made of stainless steel.
- 5 Dual Corrosion resistant Springs:** Activate the check valve plates and distribute the load force evenly across each plate, ensuring quick sure response.

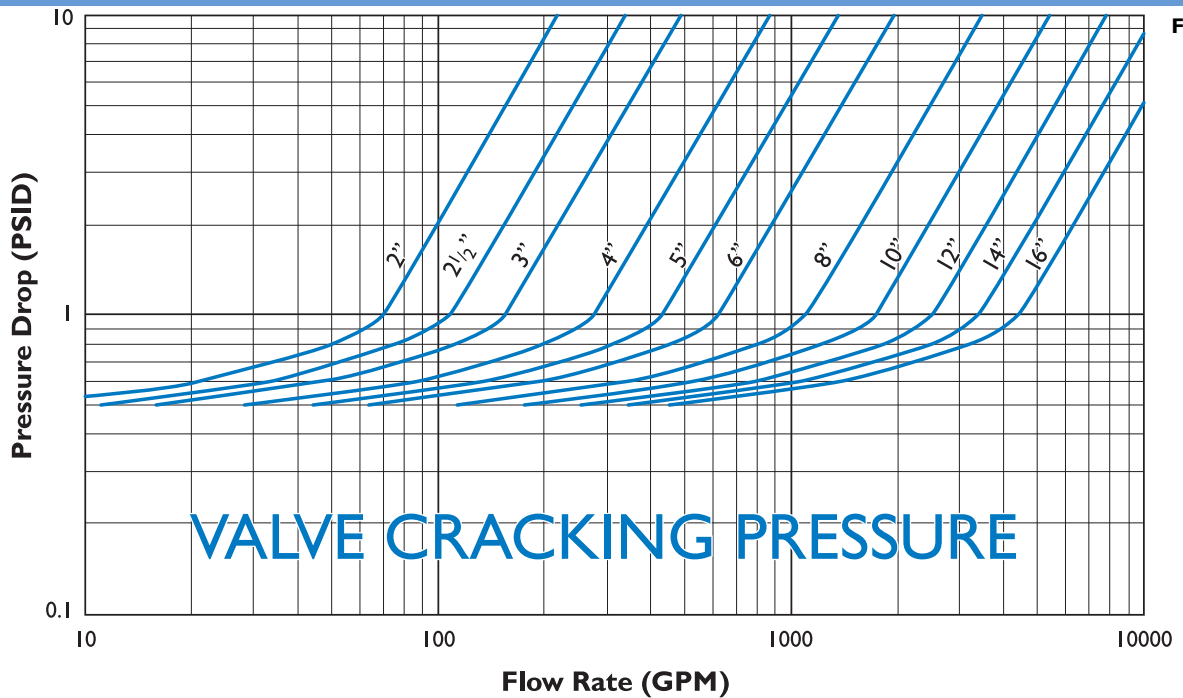
Construction

- 1 Disques doubles:** Pour une étanchéité accrue qui permet un arrêt de précision du clapet.
- 2 Corps:** De type "wafer" à face plane, de petite conception et légère, facile à installer entre les brides d'une tuyauterie standard.
- 3 Siège:** Le siège du corps offre plusieurs choix de doublures de composés élastomère afin de répondre aux exigences de différentes applications.
- 4 Tige d'arrêt:** Fait en acier inoxydable.
- 5 Ressorts anti-corrosion:** Activent les plaques du clapet et distribuent uniformément la pression sur les plaques afin d'assurer une réponse sûre et rapide.

| Parts / Pièces | Standard Material | Matériaux Standards | Other Optional Material | Autres Matériaux Optionels |
|--|-------------------|---------------------|-------------------------|----------------------------|
| Body / Corps | Cast Iron | Fonte | Ductil Iron | Fonte ductile |
| Body Seat / Siège | EPDM | EPDM | NBR, Viton, Neoprene | NBR, Viton, Néoprène |
| Dual Plates / Disques doubles | Bronze | Bronze | CF 8, CF 8M | CF 8, CF 8M |
| Plate Travel Stop Pin / Tige d'arrêt | Stainless Steel | Acier inoxydable | ----- | ----- |
| Springs / Ressorts | Stainless Steel | Acier inoxydable | ----- | ----- |
| Body Bearing / Roulements (corps) | PTFE | PTFE | ----- | ----- |
| Spring Bearing / Roulements (ressorts) | PTFE | PTFE | ----- | ----- |
| Eye Bolt / Oeillet | Carbon steel | Acier au carbone | ----- | ----- |
| Plug / Connexion | Carbon Steel | Acier au carbone | ----- | ----- |
| Hinge Pin / Tige de charnière | Stainless Steel | Acier inoxydable | ----- | ----- |



Flanged Silent Check Valve Pressure Drop – Liquids (Sizes 2” - 16”)



- Notes:**
1. Pressure drop curves are based on water flow.
 2. Valve cracking pressure is equal to or less than 0.5 psid.
 3. Valve cracking pressure increases to between 0.75 and 1.25 psid when installed vertically with flow upwards.

Method of Calculating Flow

Liquid Flow

$$C_v = Q \sqrt{\frac{G}{\Delta P}} \quad Q = C_v \sqrt{\frac{\Delta P}{G}} \quad \Delta P = G \left(\frac{Q}{C_v} \right)^2$$

Gas Flow

$$C_v = \frac{Q}{963} \sqrt{\frac{GT}{\Delta P (P_1 + P_2)}} \quad Q = 963 C_v \sqrt{\frac{\Delta P (P_1 + P_2)}{GT}}$$

Saturated Vapour

$$C_v = \frac{W}{K} \sqrt{\frac{1}{\Delta P (P_1 + P_2)}} \quad W = C_v K \sqrt{\Delta P (P_1 + P_2)}$$

Superheated Vapour

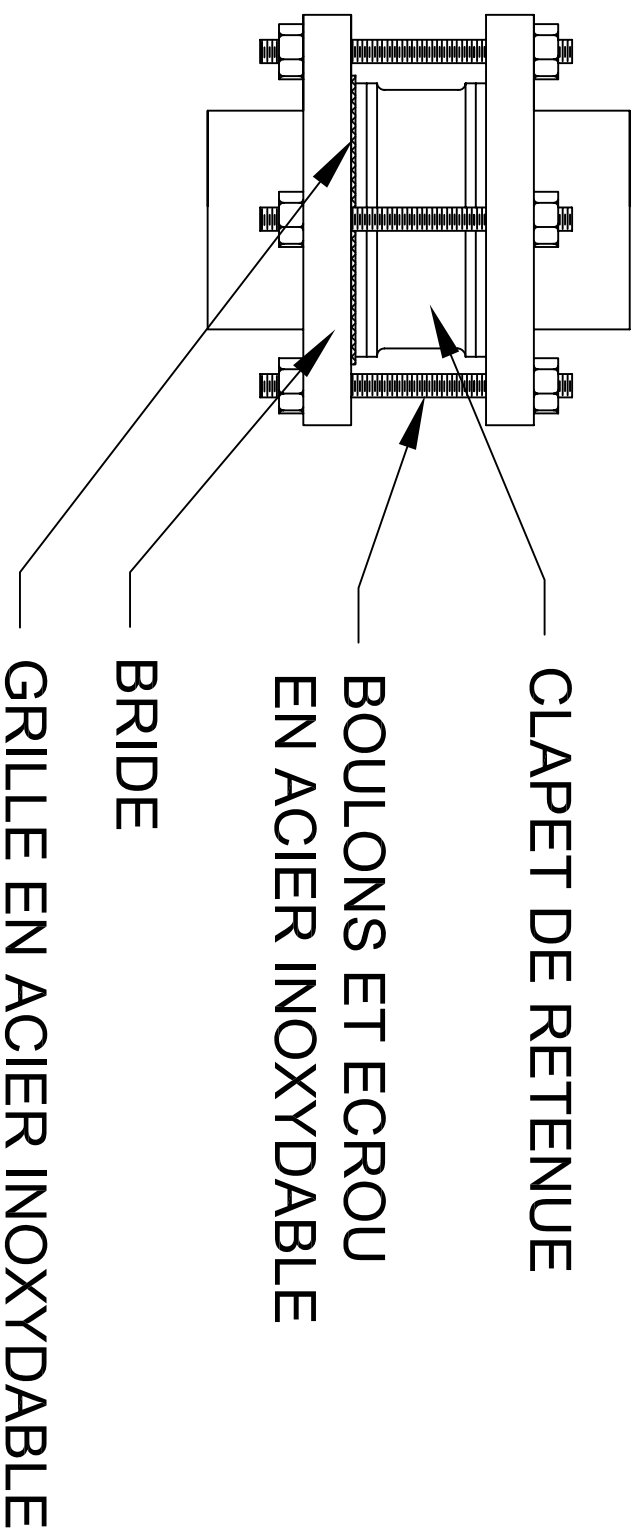
$$C_v = \frac{W(1+0.0007T_{SH})}{K} \sqrt{\frac{1}{\Delta P (P_1 + P_2)}} \quad C_v = \frac{C_v K}{(1+0.0007T_{SH})} \sqrt{\Delta P (P_1 + P_2)}$$

Variables

- C_v = Valve Coefficient
- ΔP = (P₁ - P₂) Pressure Drop
- P₁ = Inlet Pressure (PSIA)
- P₂ = Outlet Pressure (PSIA)
- G = Specific Gravity
- Water = 1.0 at 60°F and 1 ATM
- Air = 1.0 at 60°F and 1 ATM

- Q = Flow
- Liquid = USGPM
- Gas = SCFH
- T = Absolute Temperature (°F + 460)
- T_{SH} = Superheat (°F)
Total Temperature Minus Saturation Temperature
- W = lbs. Per Hour (LB/H)
- K = Constant For Vapours

ARRANGEMENT DE "FOOT VALVE"



| | | | |
|---|--|--------------------------------------|--|
| DESSIN TYPIQUE, LES DIMENSIONS FINALES ET LE DESIGN PEUVENT VARIER. TYPICAL DRAWING, FINALE DIMENSIONS AND DESIGN MAY VARY | | | |
| TITRE / TITLE | | | |
| FLO FAB FOOT VALVE | | ENGINEER / INGENIEUR | |
| FLO FAB AQUA PROFAB | | CUSTOMER / CLIENT | |
| 860 BOULEVARD INDUSTRIEL BOIS-DES-FILON, QC J6Z 4V7, (450) 621-2395 | | PART LIST N° / LISTE DE MATERIEL N° | |
| DRAWING BY / DESSINATEUR M.LYMBURNER | | DATE / DATE 2007/1/20 | |
| SCALE / ECHELLE N / A | | DRAWING N° / N° DESSIN FOOT VALVE | |
| | | REV 0 | |



FLO FAB



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**860, Industrial Blvd., Bois-des-Filion (Québec) J6Z 4V7
Tel.: 450.621.2995 Fax: 450.621.4995**



Dec., 2005