

 **F.LLI TASSALINI** s.p.a.



## VALVOLE A MEMBRANA

- Realizzate seguendo rigorosamente i criteri e i test imposti dalle norme 3-A.
- Corpo in acciaio inossidabile AISI 316L realizzato mediante stampaggio a caldo, solubilizzato, lavorato meccanicamente e lucidato.
- Comandi manuali e pneumatici in acciaio inossidabile AISI 316L per sterilizzazioni a elevate temperature.
- Membrane in EPDM o PTFE. Membrane in EPDM e supporti elastici per le membrane in PTFE telati per conferire maggiore resistenza meccanica.
- Perfetta tenuta e completo isolamento da fattori inquinanti esterni.
- Completo autodrenaggio di tutte le parti interne durante le fasi di lavaggio CIP.
- Manutenzioni ridotte "top entry" con facilità di accesso e senza necessità di smontare la valvola dall'impianto.
- Produzione standard: estremità Clamp o estremità a saldare. A richiesta, disponibili con estremità filettate norme DIN, SMS, BS, ISS o estremità flangiate UNI, DIN, ANSI.
- Finitura standard: lucidatura esterna e satinatura interna grana 150 (finitura LS); a richiesta, lucidatura esterna e interna grana 240 (finitura LL), lucidatura elettrolitica grana 400 (finitura LE).
- Max. pressione di esercizio: 7 bar.

## DIAPHRAGM VALVES

- Produced in strict conformity with criteria and tests required by 3-A standards.
- Press-forged, solution heat-treated, machined and polished AISI 316L stainless steel body.
- AISI 316L stainless steel manual and pneumatic controls for high temperature sterilization.
- EPDM or PTFE diaphragms. EPDM diaphragms and elastic supports for the PTFE diaphragms fabric-finished to give high mechanical strength.
- Perfect seal and complete insulation from external pollutants.
- Complete self-drainage of all internal parts during CIP process.
- Reduced top-entry maintenance with easy access and no need to remove the valve from the system.
- Standard production: Clamp or welded ends. Available on request with threaded ends to DIN, SMS, BS and ISS standards or flanged ends to UNI, DIN, ANSI standards.
- Standard finish: 150 grain external polishing and internal glazing (LS finish); on request 240 grain external and internal polishing (LL finish), 400 grain electrolytic polishing (LE finish).
- Maximum operating pressure: 7 bars.

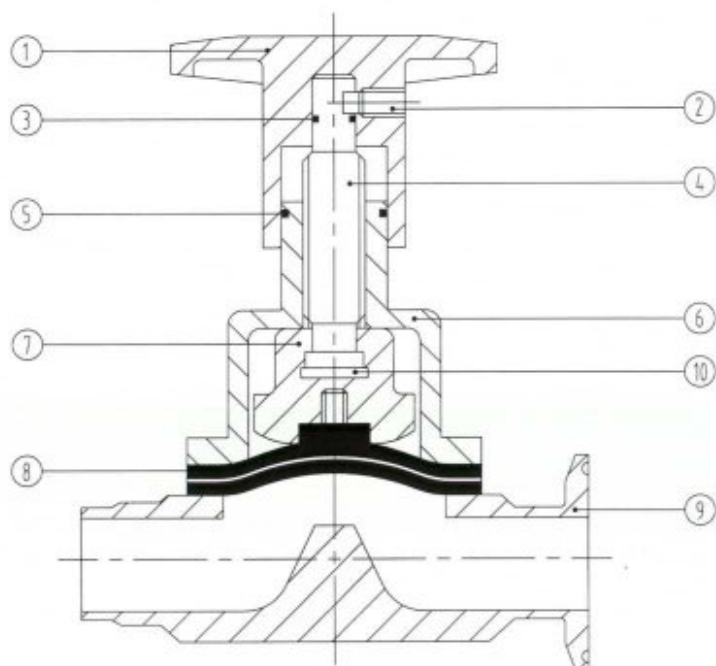


## VANNES À MEMBRANE

- Réalisées en respectant scrupuleusement les critères et les tests imposés par les normes 3-A.
- Corps en acier inoxydable AISI 316L réalisé par moulage à chaud, solubilisé, usiné mécaniquement et poli.
- Commandes manuelles et pneumatiques en acier inoxydable AISI 316L pour les stérilisations aux hautes températures.
- Membranes en EPDM ou PTFE. Membranes en EPDM et supports élastiques pour les membranes en PTFE toilées pour conférer une meilleure résistance mécanique.
- Étanchéité parfaite et isolation complète contre les facteurs polluants extérieurs.
- Autodrainage complet de toutes les parties internes durant les opérations de lavage CIP.
- Opérations d'entretien réduites "top entry", facilité d'accès et aucune nécessité de démonter la vanne de l'installation.
- Production standard: bouts Clamp ou bouts à souder. Sur demande, disponibles avec bouts filetés conformes aux normes DIN, SMS, BS, ISS ou bouts bridés UNI, DIN, ANSI.
- Finissage standard: polissage extérieur et satinage intérieur grain 150 (finissage LS); sur demande, polissage extérieur et intérieur grain 240 (finissage LL), polissage électrolytique grain 400 (finissage LE).
- Pression d'exploitation maximum: 7 bars.

## VÁLVULAS DE MEMBRANA

- Realizadas respectando rigurosamente los criterios y los test establecidos por las normas 3-A.
- Cuerpo de acero inoxidable AISI 316L realizado mediante estampado en caliente, solubilizado, trabajado mecánicamente y pulido.
- Mandos manuales y neumáticos de acero inoxidable AISI 316L para esterilizaciones a elevadas temperaturas.
- Membranas de EPDM o PTFE. Membranas de EPDM y soportes elásticos para las membranas de PTFE entretejados para otorgar mayor resistencia mecánica.
- Cierre perfecto y aislamiento completo de factores contaminantes exteriores.
- Autodrenaje completo de todas las piezas interiores durante el proceso de lavado CIP.
- Mantenimientos reducidos "top entry" con facilidad de acceso y sin necesidad de desmontar la válvula del sistema.
- Producción estándar: extremos Clamp o extremos para soldar. A pedido, disponibles con extremos fileteados según normas DIN, SMS, BS, ISS o extremos rebordados UNI, DIN, ANSI.
- Acabado estándar: pulido exterior y satinado interior grano 150 (acabado LS); a pedido, pulido exterior e interior grano 240 (acabado LL), pulido electrolítico grano 400 (acabado LE).
- Máxima presión de ejercicio: 7 bares.



- |                                                                     |                                                                  |
|---------------------------------------------------------------------|------------------------------------------------------------------|
| 1. Volantino<br>Handwheel<br>Volant<br>Manivela                     | 6. Comando<br>Control<br>Commande<br>Mando                       |
| 2. Grano<br>Dowel<br>Cheville<br>Pasador                            | 7. Compressore<br>Compressor<br>Compresseur<br>Compressor        |
| 3. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR | 8. Membrana<br>Diaphragm<br>Membrane<br>Membrana                 |
| 4. Stelo<br>Spindle<br>Came<br>Varilla                              | 9. Corpo valvola<br>Valve casing<br>Corps vanne<br>Cuerpo        |
| 5. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR | 10. Reggispinta<br>Thrust bearing<br>Butée<br>Cojinete de empuje |

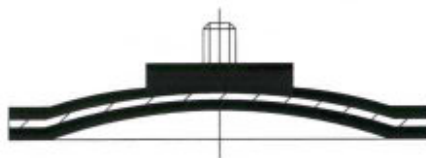
|          |            |
|----------|------------|
| FINITURE | FINISSAGES |
| FINISHES | ACABADOS   |

| GRIT | Max $R_a$ $\mu\text{m}$ | Max $R_a$ $\mu\text{m}$ |
|------|-------------------------|-------------------------|
| 150  | 0,76 - 0,89             | 30 - 35                 |
| 240  | 0,38 - 0,51             | 15 - 20                 |
| 400  | $\leq 0,2$              | $\leq 8$                |

|            |           |
|------------|-----------|
| MEMBRANE   | MEMBRANES |
| DIAPHRAGMS | MEMBRANAS |

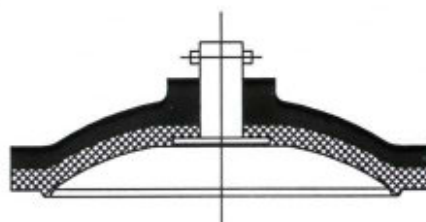
■ EPDM

-40°C + 150°C  
-40°F + 300°F



■ PTFE

-10°C + 150°C  
+15°F + 300°F

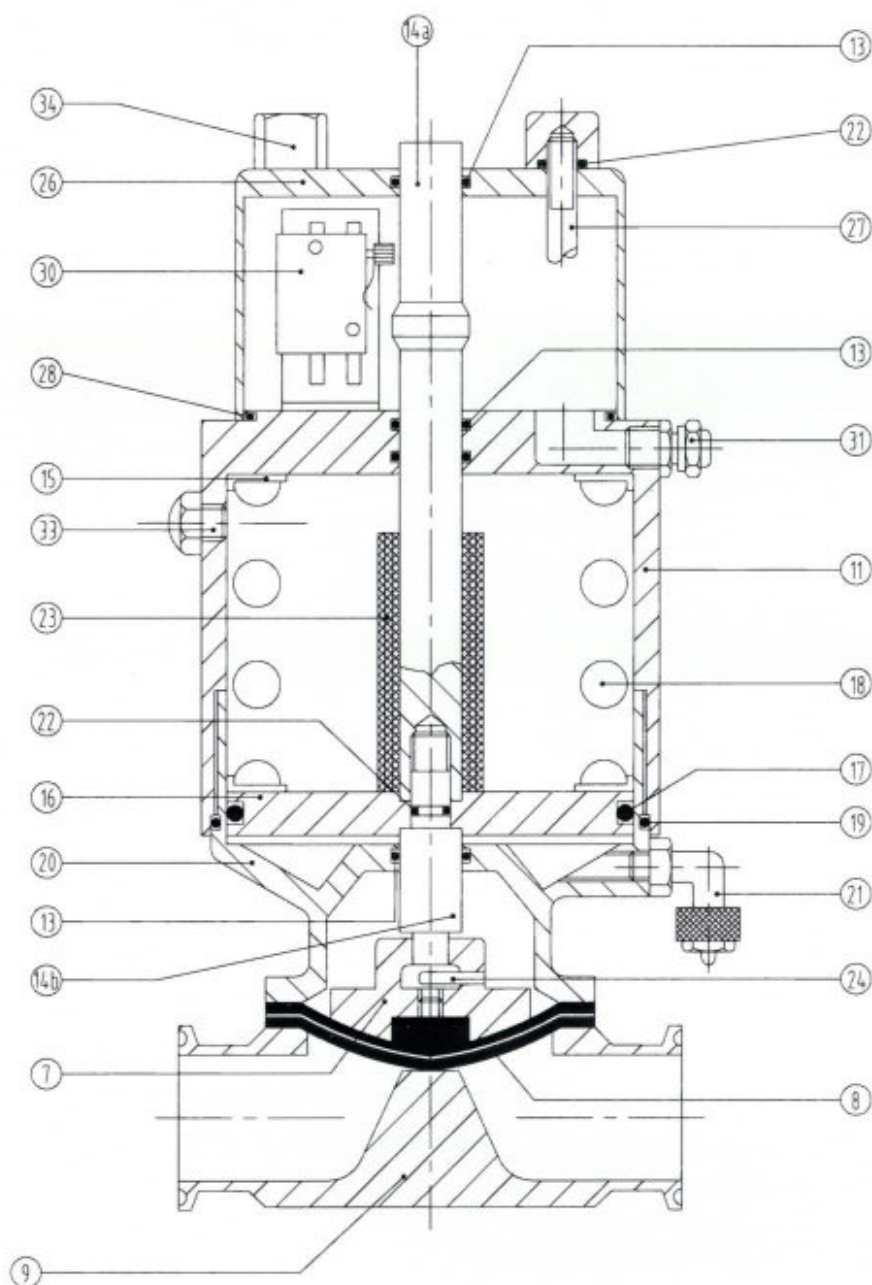


VALVOLA A MEMBRANA PNEUMATICA  
NORMALMENTE CHIUSA CON UNITÀ  
DI CONTROLLO

NORMALLY CLOSED PNEUMATIC DIAPHRAGM  
VALVE WITH CONTROL UNIT

VANNE À MEMBRANE PNEUMATIQUE  
NORMALEMENT FERMÉE AVEC UNITÉ  
DE CONTRÔLE

VÁLVULA NEUMÁTICA DE MEMBRANA  
NORMALMENTE CERRADA CON UNIDAD  
DE CONTROL



- |                                                                                 |                                                                                                        |
|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 7. Compressore<br>Compressor<br>Compresseur<br>Compresor                        | 20. Cilindro<br>Cylinder<br>Cylindre<br>Cilindro                                                       |
| 8. Membrana<br>Diaphragm<br>Membrane<br>Membrana                                | 21. Raccordo aria<br>Air connection<br>Raccord air<br>Racor del aire                                   |
| 9. Corpo valvola<br>Valve body<br>Corps vanne<br>Cuerpo                         | 22. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                   |
| 11. Cappellotto cilindro<br>Cylinder cap<br>Capot cylindre<br>Capuchón cilindro | 23. Distanziale<br>Spacer<br>Entretoise<br>Distanciador                                                |
| 13. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR            | 24. Spina<br>Plug<br>Broche<br>Enchufe                                                                 |
| 14a. Stelo superiore<br>Upper stem<br>Tige supérieure<br>Varilla superior       | 26. Cappellotto unità controllo<br>Control unit cap<br>Capot unità contrôle<br>Capuchón unidad control |
| 14b. Stelo inferiore<br>Lower stem<br>Tige inférieure<br>Varilla inferior       | 27. Tirante<br>Tie rod<br>Tirant<br>Tirante                                                            |
| 15. Guida molla<br>Spring holder<br>Guide ressort<br>Guía muelle                | 28. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR                                   |
| 16. Pistone<br>Piston<br>Piston<br>Pistón                                       | 30. Microinterruttore<br>Microswitch<br>Minirupteur<br>Microrruptor                                    |
| 17. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR            | 31. Pressacavo<br>Cable-grommet<br>Presse-câble<br>Sujeta cables                                       |
| 18. Molla<br>Spring<br>Ressort<br>Muelle                                        | 33. Uscita aria<br>Air vent<br>Décharge air<br>Descarga de aire                                        |
| 19. Anello di tenuta OR<br>OR seal ring<br>Joint torique<br>Junta OR            | 34. Dado<br>Nut<br>Écrou<br>Tuerca                                                                     |



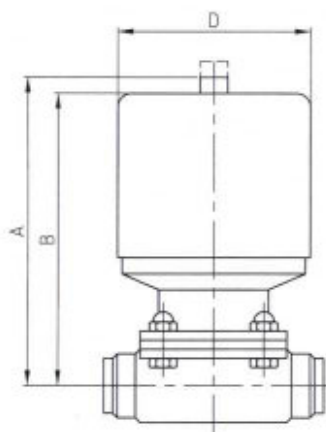
|             |          |
|-------------|----------|
| CONNESSIONI | BOUTS    |
| ENDS        | EXTREMOS |

| DN | BS    |                   |                  | SCHEDULE |           |            |            | ISO  |     | DIN     |      |         |     |         |   |
|----|-------|-------------------|------------------|----------|-----------|------------|------------|------|-----|---------|------|---------|-----|---------|---|
|    | D.E.  | +16<br>swg<br>Sp. | 18<br>swg<br>Sp. | D.E.     | 5S<br>Sp. | 10S<br>Sp. | 40S<br>Sp. | D.E. | Sp. | Serie 1 |      | Serie 2 |     | Serie 3 |   |
|    |       | D.E.              | Sp.              |          | D.E.      | Sp.        | D.E.       |      |     | Sp.     | D.E. | Sp.     |     |         |   |
| 15 | 12,70 | 1,63              | 1,22             | 21,34    | 1,65      | 2,11       | 2,77       | 21,3 | 1,6 | 18      | 1    | 19      | 1,5 | 20      | 2 |
| 20 | 19,05 | 1,63              | 1,22             | 26,67    | 1,65      | 2,11       | 2,87       | 26,9 | 1,6 | 22      | 1    | 23      | 1,5 | 24      | 2 |
| 25 | 25,40 | 1,63              | 1,22             | 33,40    | 1,65      | 2,77       | 3,38       | 33,7 | 2,0 | 28      | 1    | 29      | 1,5 | 30      | 2 |
| 40 | 38,10 | 1,63              | 1,22             | 48,26    | 1,65      | 2,77       | 3,68       | 48,3 | 2,0 | 40      | 1    | 41      | 1,5 | 42      | 2 |
| 50 | 50,80 | 1,63              | 1,22             | 60,33    | 1,65      | 2,77       | 3,91       | 60,3 | 2,6 | 52      | 1    | 53      | 1,5 | 54      | 2 |

|           |            |
|-----------|------------|
| VALORI CV | VALEURS CV |
| CV VALUES | VALORES CV |

| %        | DN 15<br>1/2" |      | DN 20<br>3/4" |      | DN 25<br>1" |      | DN 40<br>1 1/2" |      | DN 50<br>2" |       |
|----------|---------------|------|---------------|------|-------------|------|-----------------|------|-------------|-------|
| APERTURA | CV            | KV   | CV            | KV   | CV          | KV   | CV              | KV   | CV          | KV    |
| 100      | 6,7           | 1,6  | 13,3          | 3,16 | 20          | 4,76 | 50              | 12   | 101         | 24,04 |
| 90       | 6,4           | 1,5  | 12,8          | 3,04 | 19,2        | 4,57 | 48              | 11,4 | 97          | 23,1  |
| 80       | 6,11          | 1,45 | 12,3          | 2,9  | 18,4        | 4,37 | 46              | 11   | 92,9        | 22,1  |
| 70       | 5,85          | 1,4  | 11,7          | 2,8  | 17,6        | 4,2  | 44              | 10,5 | 88,9        | 21,15 |
| 60       | 5,58          | 1,32 | 11,2          | 2,65 | 16,8        | 4    | 42              | 10   | 84,83       | 20,2  |
| 50       | 4,65          | 1,1  | 9,3           | 2,2  | 14          | 3,33 | 35              | 8,4  | 70,7        | 16,83 |
| 40       | 3,7           | 0,9  | 7,45          | 1,76 | 11,2        | 2,66 | 28              | 6,7  | 56,5        | 13,46 |
| 30       | 2,8           | 0,65 | 5,6           | 1,3  | 8,4         | 2    | 21              | 5    | 42,4        | 10,1  |
| 20       | 1,85          | 0,43 | 3,7           | 0,9  | 5,6         | 1,33 | 14              | 3,8  | 28,27       | 6,73  |
| 10       | 0,92          | 0,21 | 1,85          | 0,43 | 2,8         | 0,66 | 7               | 1,66 | 14,13       | 3,36  |
| 0        | 0             |      | 0             |      | 0           |      | 0               |      | 0           |       |

**DIMENSIONI, VOLUMI E TEMPI DI MANOVRA**  
**DIMENSIONS, AIR VOLUMES AND OPERATING TIMES**  
**DIMENSIONES, VOLUMES ET TEMPS DE MANŒUVRE**  
**DIMENSIONES, VOLUMENES Y TIEMPOS DE MANIOBRA**

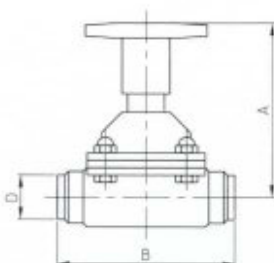


| Diametro<br>valvola | D   | A   | B   | Vol.<br>Aria chiude | Vol.<br>Aria apre | Tempi   |
|---------------------|-----|-----|-----|---------------------|-------------------|---------|
| mm                  | mm  | mm  | mm  | cm <sup>3</sup>     | cm <sup>3</sup>   | secondi |
| 15                  | 70  | 125 | 120 | 50                  | 20                | 1       |
| 20                  | 89  | 140 | 135 | 230                 | 65                | 1       |
| 25                  |     | 145 | 140 |                     |                   |         |
| 40                  | 129 | 208 | 203 | 1000                | 250               | 2       |
| 50                  |     | 220 | 215 |                     | 350               |         |

| Valve<br>size | D      | A      | B      | Vol.<br>Air close | Vol.<br>Air open | Time    |
|---------------|--------|--------|--------|-------------------|------------------|---------|
| inches        | inches | inches | inches | in <sup>3</sup>   | in <sup>3</sup>  | seconds |
| 1/2"          | 2 3/4" | 5"     | 4 3/4" | 3.0               | 1.0              | 1       |
| 3/4"          | 3 1/2" | 5 1/2" | 5 3/8" | 13.0              | 4.0              | 1       |
| 1"            |        | 5 3/4" | 5 1/2" |                   |                  |         |
| 1 1/2"        | 5"     | 8"     | 8"     | 60.5              | 15.0             | 2       |
| 2"            |        | 9"     | 8 1/2" | 61                | 20.5             |         |

V. MEMBRANA EL.  
DIAPHRAGM V. PE.  
V. MEMBRANE BL.  
V. MEMBRANA EL.

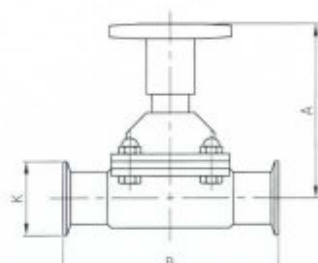
57W



| DN        | A     | B     | D    | gr    |
|-----------|-------|-------|------|-------|
| 1/2" 12   | 78,0  | 89,0  | 12,7 | 840   |
| 3/4" 19   | 79,0  | 102,0 | 19,0 | 1.200 |
| 1" 25     | 92,0  | 114,0 | 25,4 | 1.680 |
| 1 1/2" 38 | 112,0 | 140,0 | 38,1 | 3.140 |
| 2" 51     | 135,0 | 159,0 | 50,8 | 5.040 |

V. MEMBRANA E. SM.  
DIAPHRAGM V. E. FR.  
V. MEMBRANE B. FR.  
V. MEMBRANA E. SM.

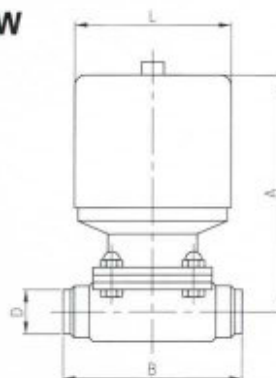
57K



| DN        | A     | B     | K    | gr    |
|-----------|-------|-------|------|-------|
| 1/2" 12   | 78,0  | 89,0  | 25,0 | 840   |
| 3/4" 19   | 79,0  | 102,0 | 25,0 | 1.200 |
| 1" 25     | 92,0  | 114,0 | 50,5 | 1.680 |
| 1 1/2" 38 | 112,0 | 140,0 | 50,5 | 3.140 |
| 2" 51     | 135,0 | 159,0 | 64,0 | 5.040 |

V. M. PNEUMATICA EL.  
PNEUMATIC D. V. PE.  
V. M. PNEUMATIQUE BL.  
V. M. NEUMÁTICA EL.

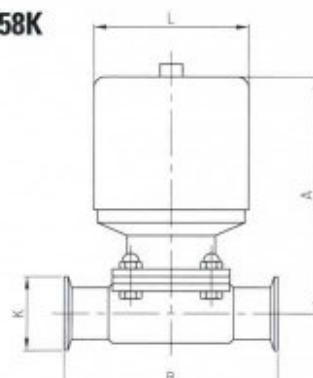
58W



| DN        | A     | B     | D    | L     | gr    |
|-----------|-------|-------|------|-------|-------|
| 1/2" 12   | 120,0 | 89,0  | 12,7 | 60,0  | 1.360 |
| 3/4" 19   | 135,0 | 102,0 | 19,0 | 90,0  | 2.460 |
| 1" 25     | 140,0 | 114,0 | 25,4 | 90,0  | 2.780 |
| 1 1/2" 38 | 203,0 | 140,0 | 38,1 | 127,0 | 6.880 |
| 2" 51     | 215,0 | 159,0 | 50,8 | 127,0 | 8.160 |

V. M. PNEUMATICA E. SM.  
PNEUMATIC D. V. E. FR.  
V. M. PNEUMATIQUE B. FR.  
V. M. NEUMÁTICA E. SM.

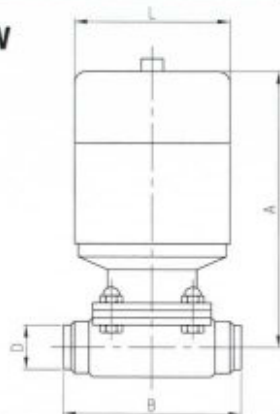
58K



| DN        | A     | B     | K    | L     | gr    |
|-----------|-------|-------|------|-------|-------|
| 1/2" 12   | 129,0 | 89,0  | 25,0 | 60,0  | 1.360 |
| 3/4" 19   | 135,0 | 102,0 | 25,0 | 90,0  | 2.460 |
| 1" 25     | 140,0 | 114,0 | 50,5 | 90,0  | 2.780 |
| 1 1/2" 38 | 203,0 | 140,0 | 50,5 | 127,0 | 6.880 |
| 2" 51     | 215,0 | 159,0 | 64,0 | 127,0 | 8.160 |

V. M. UN. CONTROLLO EL.  
D. V. CONTROL UNIT PE.  
V. M. UN. CONTRÔLE BL.  
V. M. UN. CONTROL EL.

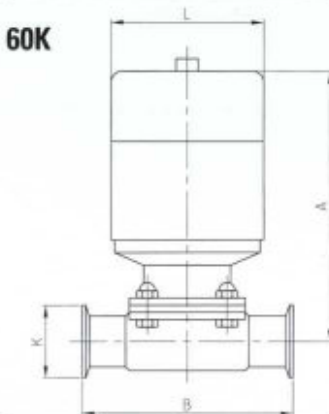
60W



| DN        | A     | B     | D    | L     | gr    |
|-----------|-------|-------|------|-------|-------|
| 1/2" 12   | 153,0 | 89,0  | 12,7 | 60,0  | 1.660 |
| 3/4" 19   | 154,0 | 102,0 | 19,0 | 90,0  | 3.010 |
| 1" 25     | 167,0 | 114,0 | 25,4 | 90,0  | 3.330 |
| 1 1/2" 38 | 187,0 | 140,0 | 38,1 | 127,0 | 7.880 |
| 2" 51     | 210,0 | 159,0 | 50,8 | 127,0 | 9.160 |

V. M. UN. CONTROLLO E. SM.  
D. V. CONTROL UNIT E. FR.  
V. M. UN. CONTRÔLE B. FR.  
V. M. UN. CONTROL E. SM.

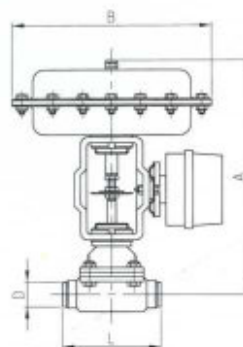
60K



| DN        | A     | B     | K    | L     | gr    |
|-----------|-------|-------|------|-------|-------|
| 1/2" 12   | 153,0 | 89,0  | 25,0 | 60,0  | 1.660 |
| 3/4" 19   | 154,0 | 102,0 | 25,0 | 90,0  | 3.010 |
| 1" 25     | 167,0 | 114,0 | 50,5 | 90,0  | 3.330 |
| 1 1/2" 38 | 187,0 | 140,0 | 50,5 | 127,0 | 7.880 |
| 2" 51     | 210,0 | 159,0 | 64,0 | 127,0 | 9.160 |

V. M. MODULANTE EL.  
MODULATING D. V. PE.  
V. M. MODULANTE BL.  
V. M. MODULANTE EL.

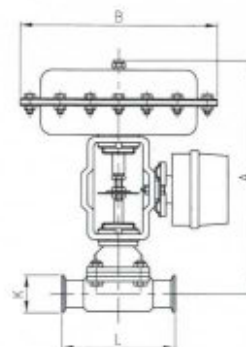
59W



| DN        | A     | B     | D    | L     | gr     |
|-----------|-------|-------|------|-------|--------|
| 1/2" 12   | 305,5 | 290,0 | 12,7 | 89,0  | 11.840 |
| 3/4" 19   | 307,0 | 290,0 | 19,0 | 102,0 | 12.200 |
| 1" 25     | 311,0 | 290,0 | 25,4 | 114,0 | 12.680 |
| 1 1/2" 38 | 330,5 | 290,0 | 38,1 | 140,0 | 14.140 |
| 2" 51     | 345,5 | 290,0 | 50,8 | 159,0 | 16.040 |

V. M. MODULANTE E. SM.  
MODULATING D. V. E. FR.  
V. M. MODULANTE B. FR.  
V. M. MODULANTE E. SM.

59K



| DN        | A     | B     | K    | L     | gr     |
|-----------|-------|-------|------|-------|--------|
| 1/2" 12   | 305,5 | 290,0 | 25,0 | 89,0  | 11.840 |
| 3/4" 19   | 307,0 | 290,0 | 25,0 | 102,0 | 12.200 |
| 1" 25     | 311,0 | 290,0 | 50,5 | 114,0 | 12.680 |
| 1 1/2" 38 | 330,5 | 290,0 | 50,5 | 140,0 | 14.140 |
| 2" 51     | 345,5 | 290,0 | 64,0 | 159,0 | 16.040 |

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