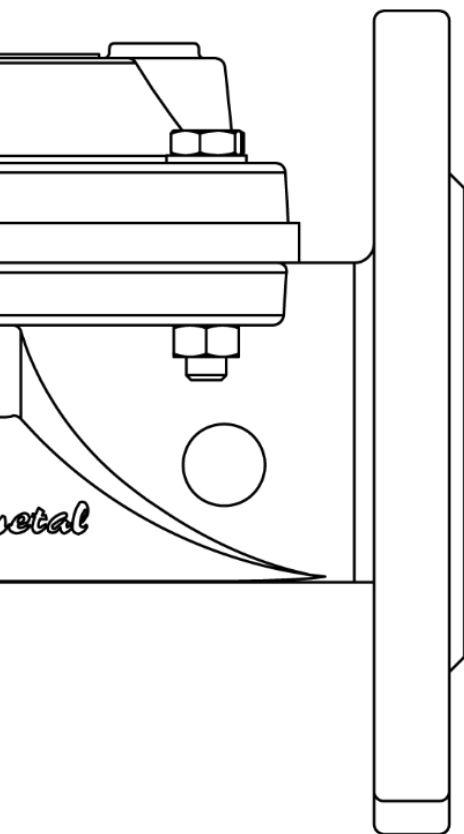


# LINE DESIGN HYDRAULIC VALVES

- ✓ **PATENT MODEL:** Perimeter ring in the platform of the valve body which avoid the diaphragm displacement.
- ✓ **THREE TYPES OF DIAPHRAGMS:** Three models of diaphragms and springs depending on the necessities. PN16 irrigation high pressure, PN06 standard pressure and PN04 irrigation low pressure (valve opens with 4mca).
- ✓ **ACCESS AND MAINTENANCE:** It allows an easy access to the inner part of the valve only manipulating the screws between covers and bodies.
- ✓ **POSITION:** Horizontal or vertical position of the valve, does not affect the operation or hydraulic specifications of the product.



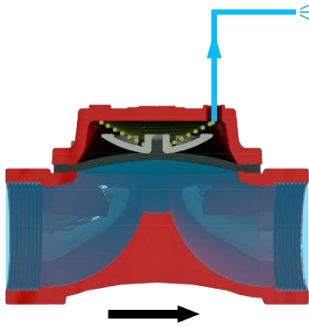
## SPECIFICATIONS

- **CONNECTIONS:** Flanges ISO-7005-2 (ANSI or BS under request)  
Female BSP thread (NPT under request)  
Grooved
- **DESIGN:** Single chamber line design.
- **SIZES RANGE:**  
Threaded: 1" - 1½"P- 1½"G -2"-2½"-3" (323)-3"(333)  
Flanged: DN50-DN80 (333)-DN80(343)-DN100-DN150-DN200.  
Grooved: 2"-3"-4"-6"
- **NOMINAL PRESSURE (bar):** PN04, PN06 or PN16.  
(psi): PN58, PN87 or PN232.
- **MINIMUM ACTIVATION PRESSURE:**  
PN04: 0,4 bar  
PN06: 1,0 bar  
PN16: 1,5 bar

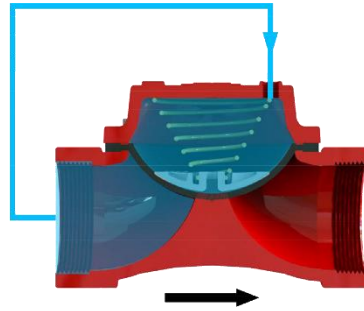
## MATERIALS

- **BODY AND COVER:** GG Cast Iron.
- **DIAPHRAGM:** Natural rubber reinforced with nylon.
- **SPRING:** Stainless steel.
- **COVERING:** Epoxy-polyester double covering.

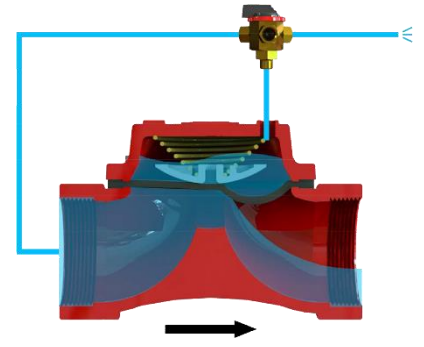
COMETAL hydraulic valves comply with the specifications of the standards **UNE - EN 1074** about valves for the supply of water and **ISO 9635** about irrigation valves with reference to **general requirements, mechanical resistance and watertightness**.



When the sum of the Control Chamber powers is less than the upstream pressure, the valve will open.

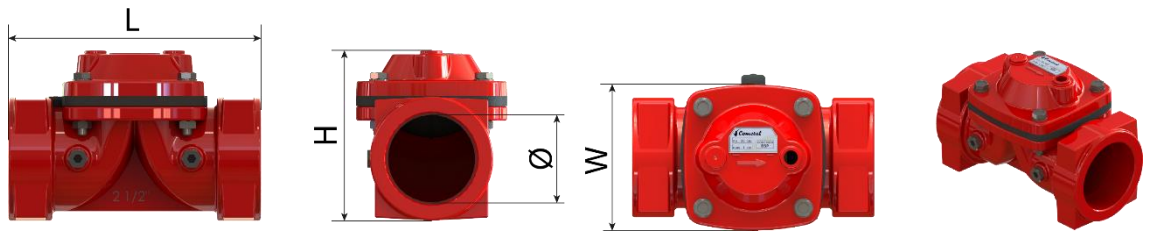


When the sum of the Control Chamber powers is higher or equal than the upstream pressure, the valve will close.



When the Control Chamber is partially full, the valve can be opening, closing or regulating.

DIMENSIONS AND WEIGHTS

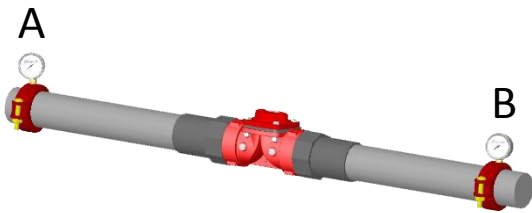
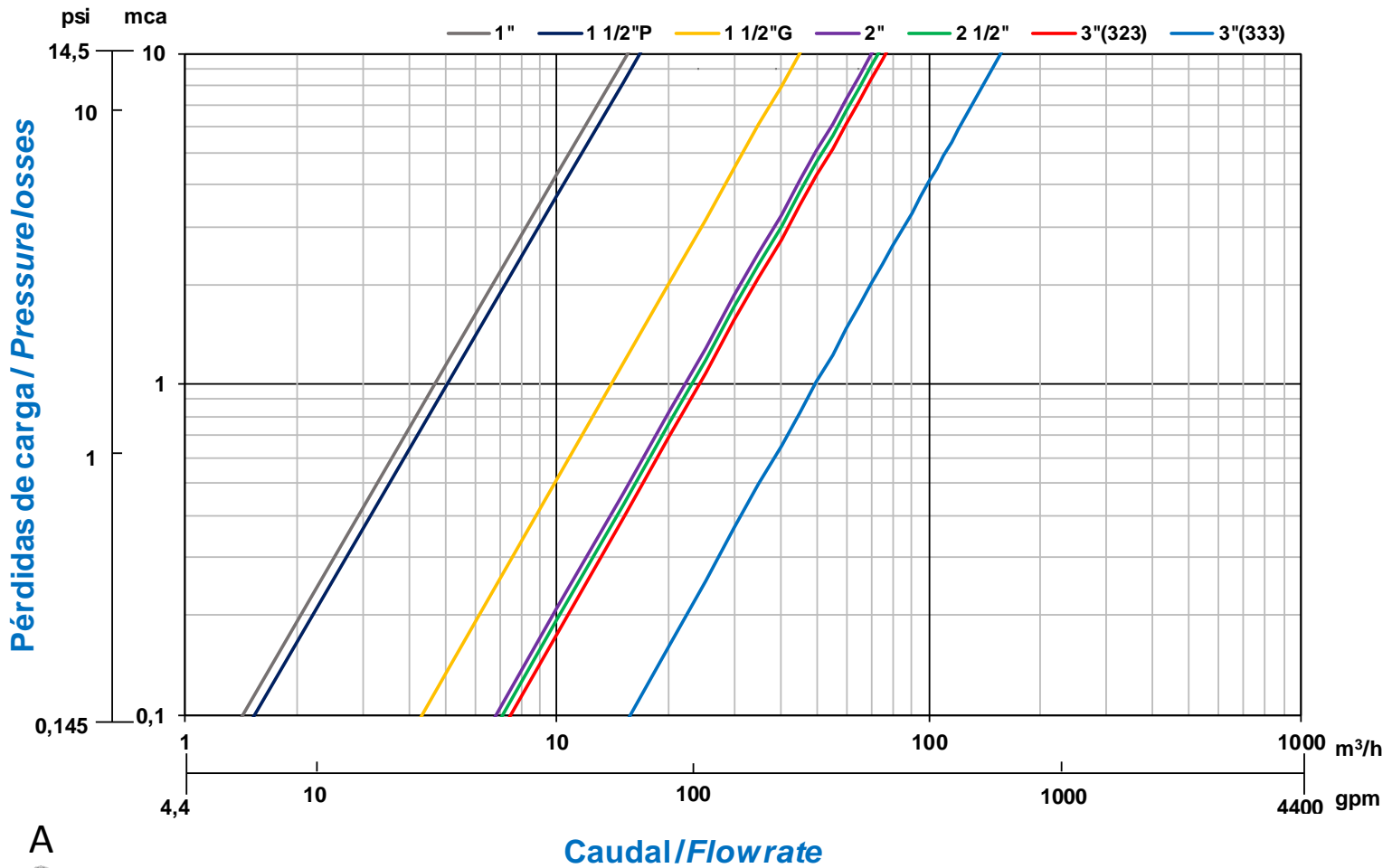


MODEL	CONNECTION	LENGTH (L)		HEIGHT (H)		INSIDE DIAM (Ø)	WIDTH (W)		WEIGHT
		mm	inch	mm	inch		mm	inch	
1"	THREAD	120	4.72	71	2.80	1"	78	3.07	1,2
1 ½" TIPO P	THREAD	155	6.10	84	3.31	1 ½"	78	3.07	1,6
1 ½" TIPO G	THREAD	186	7.32	110	4.33	1 ½"	125	4.92	4,8
2"	THREAD	186	7.32	110	4.33	2"	125	4.92	4,4
2 ½"	THREAD	200	7.87	125	4.92	2 ½"	125	4.92	5,5
3" (323)	THREAD	210	8.27	150	5.90	3"	125	4.92	6,3
3" (333)	THREAD	245	9.65	160	6.29	3"	170	6.36	9,81
DN50	FLANGED	186	7.32	165	6.50	2"	125	4.92	7,6
DN80 (333)	FLANGED	252	9.92	210	8.27	3"	170	6.69	15,5
DN80 (343)	FLANGED	300	11.81	205	8.07	3"	208	8.20	20,2
DN100	FLANGED	305	12.01	230	9.05	4"	208	8.20	21,8
DN150	FLANGED	390	15.35	315	12.40	6"	300	11.81	53,7
DN200	FLANGED	475	18.70	415	16.34	8"	385	15.16	84,4
2"	GROOVED	187	7.36	114	4.50	2"	125	4.92	3,8
3"	GROOVED	287	11.30	150	5.91	3"	218	8.58	12,3
4"	GROOVED	290	11.41	183	7.20	4"	218	8.58	13,1
6"	GROOVED	390	15.35	275	10.83	6"	310	12.20	40,9

THREAD VALVES



COMETAL valves comply with the following standards for threaded connections:  
 BSP. 7.1 ISO - 228.1 ISO - UNE - EN 10226 - BS-EN 10226. ISO standard and European standards.  
 NPT. ASME-ANSI B 1.20. American standard.



Friction Head Loss is measured from A to B

Caudal/Flowrate

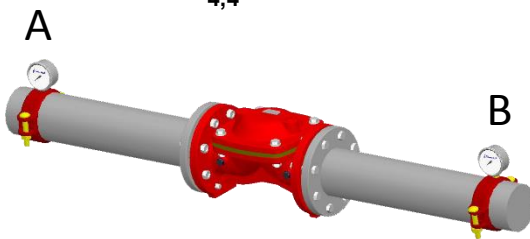
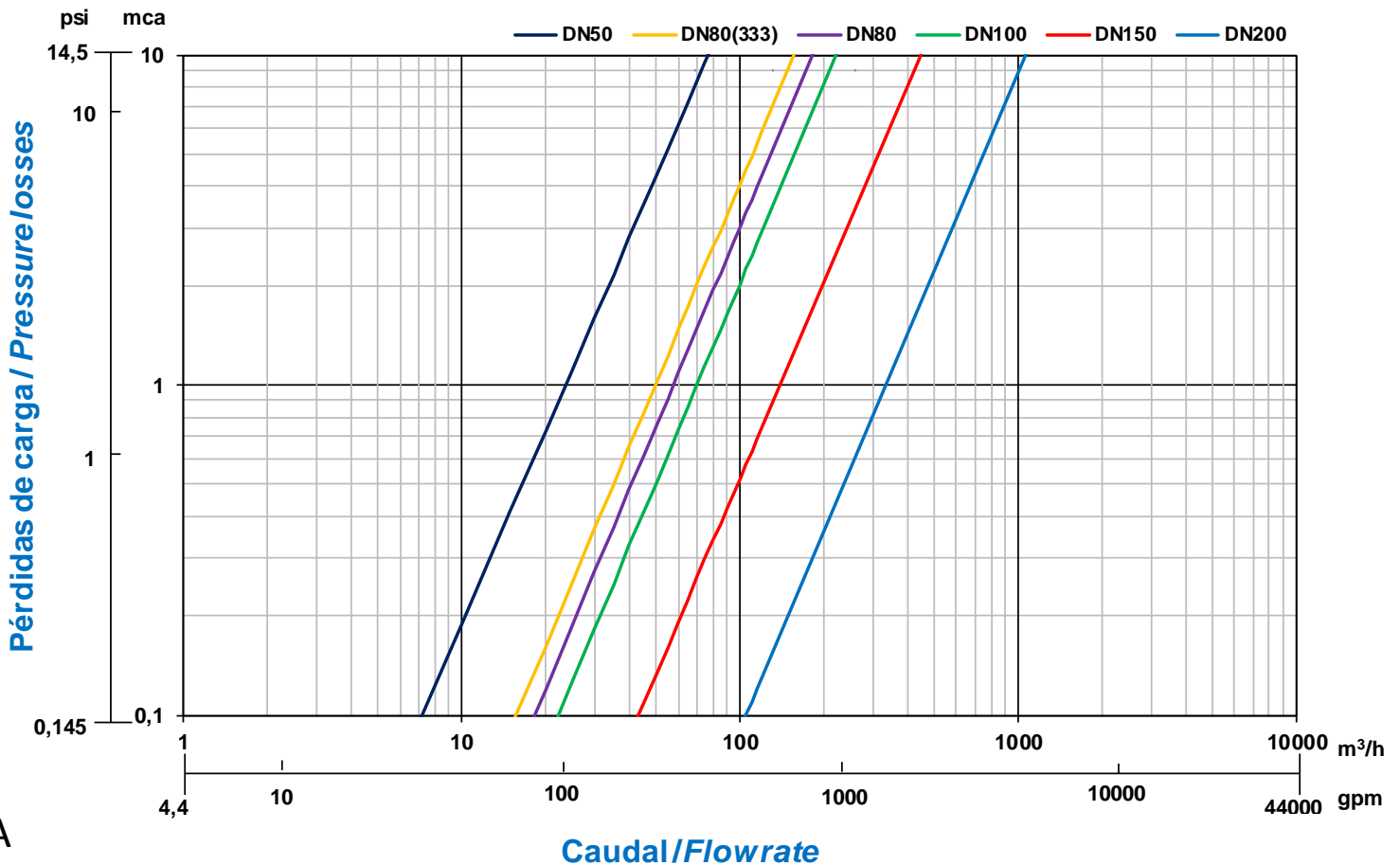
MODEL	CONNECTION	KV		CONTROL CHAMBER VOLUME
		m3/h	gpm	litres
1"	THREAD	15,5	68,2	0,02
1 1/2" TYPE P	THREAD	17	74,8	0,02
1 1/2" TYPE G	THREAD	45	198,1	0,14
2"	THREAD	71	312,6	0,14
2 1/2"	THREAD	74	325,8	0,14
3" (323)	THREAD	77	339,0	0,14
3" (333)	THREAD	165	726,5	0,44

COMETAL hydraulic valves comply with the specifications of the standards UNE-EN 1267 and ISO 9644 in terms of friction head loss tests.

FLANGED VALVES



COMETAL valves comply with the following standards for flanged:  
 ISO 7005 - DIN - UNE-EN 1092-BS-EN 1092. ISO standard and European standards.  
 ASME-ANSI B 16.1 - 16.5 B. American standard.  
 AS 2129. Australian standard.



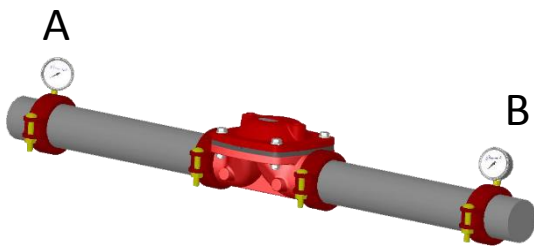
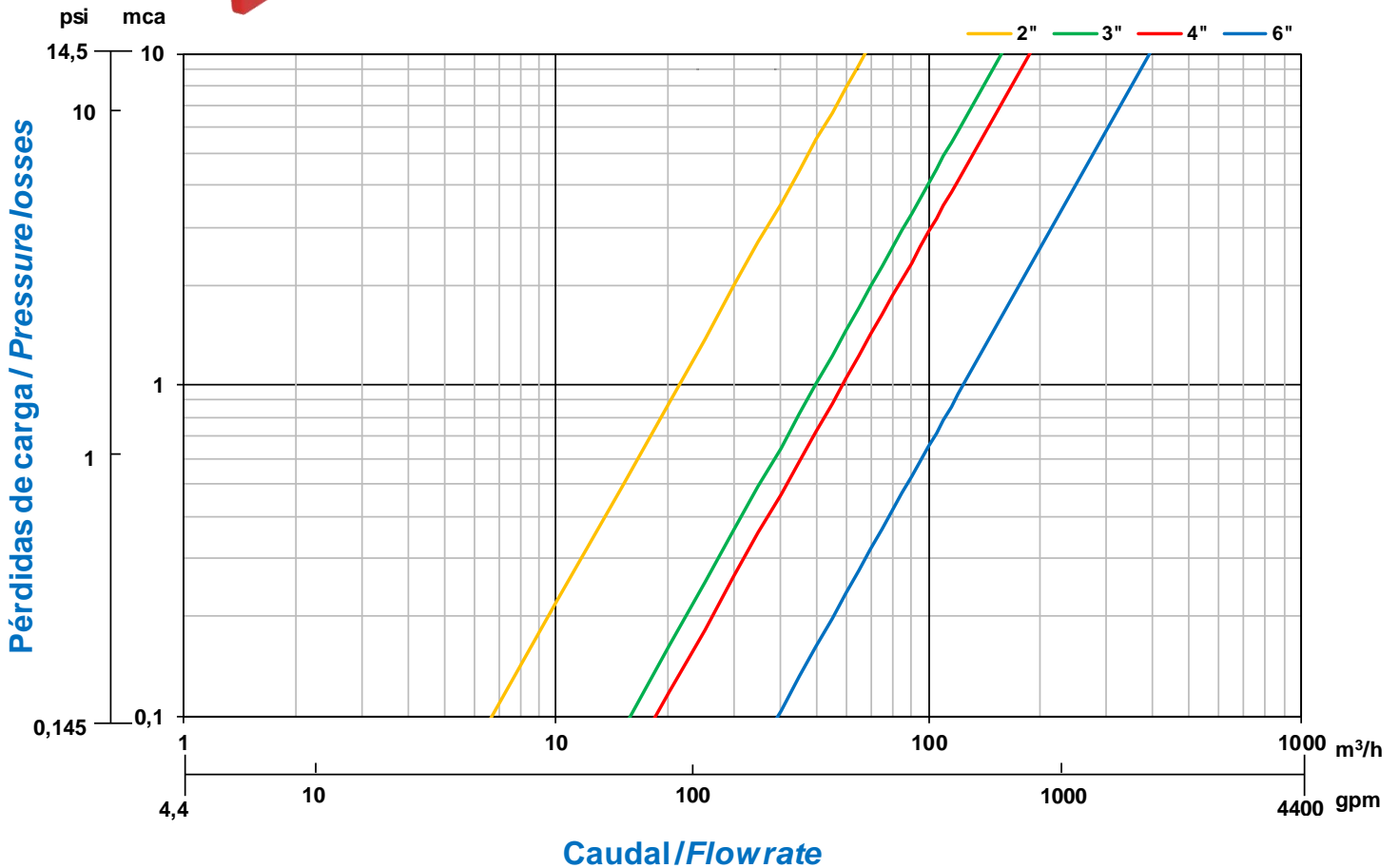
Friction Head Loss is measured from A to B

COMETAL hydraulic valves comply with the specifications of the standards UNE-EN 1267 and ISO 9644 in terms of friction head loss tests.

MODEL	CONNECTION	KV		CONTROL CHAMBER VOLUME
		m3/h	gpm	litres
DN50	FLANGED	75	330.2	0,14
DN80 (333)	FLANGED	165	726.5	0,56
DN80 (343)	FLANGED	180	192.5	0,63
DN100	FLANGED	220	968.6	0,64
DN150	FLANGED	450	1981.3	1,60
DN200	FLANGED	1075	4733.1	2,65

GROOVED VALVES

COMETAL valves comply with standard grooved specifications.



Friction Head Loss is measured from A to B

COMETAL hydraulic valves comply with the specifications of the standards UNE-EN 1267 and ISO 9644 in terms of friction head loss tests.

MODEL	CONNECTION	KV		CONTROL CHAMBER VOLUME
		m <sup>3</sup> /h	gpm	litres
2"	GROOVED	68	299.4	0,14
3"	GROOVED	158	695.7	0,67
4"	GROOVED	206	907.0	0,65
6"	GROOVED	395	1739.1	1,60