

 Aliaxis



VKD DN 10÷50

PVDF

DUAL BLOCK® 2-way ball valve

VKD DN 10÷50

FIP has developed a VKD DUAL BLOCK® 2-way ball valve to introduce a high reference standard in thermoplastic valve design. VKD is a True Union ball valve that meets the most stringent needs required by industrial applications.

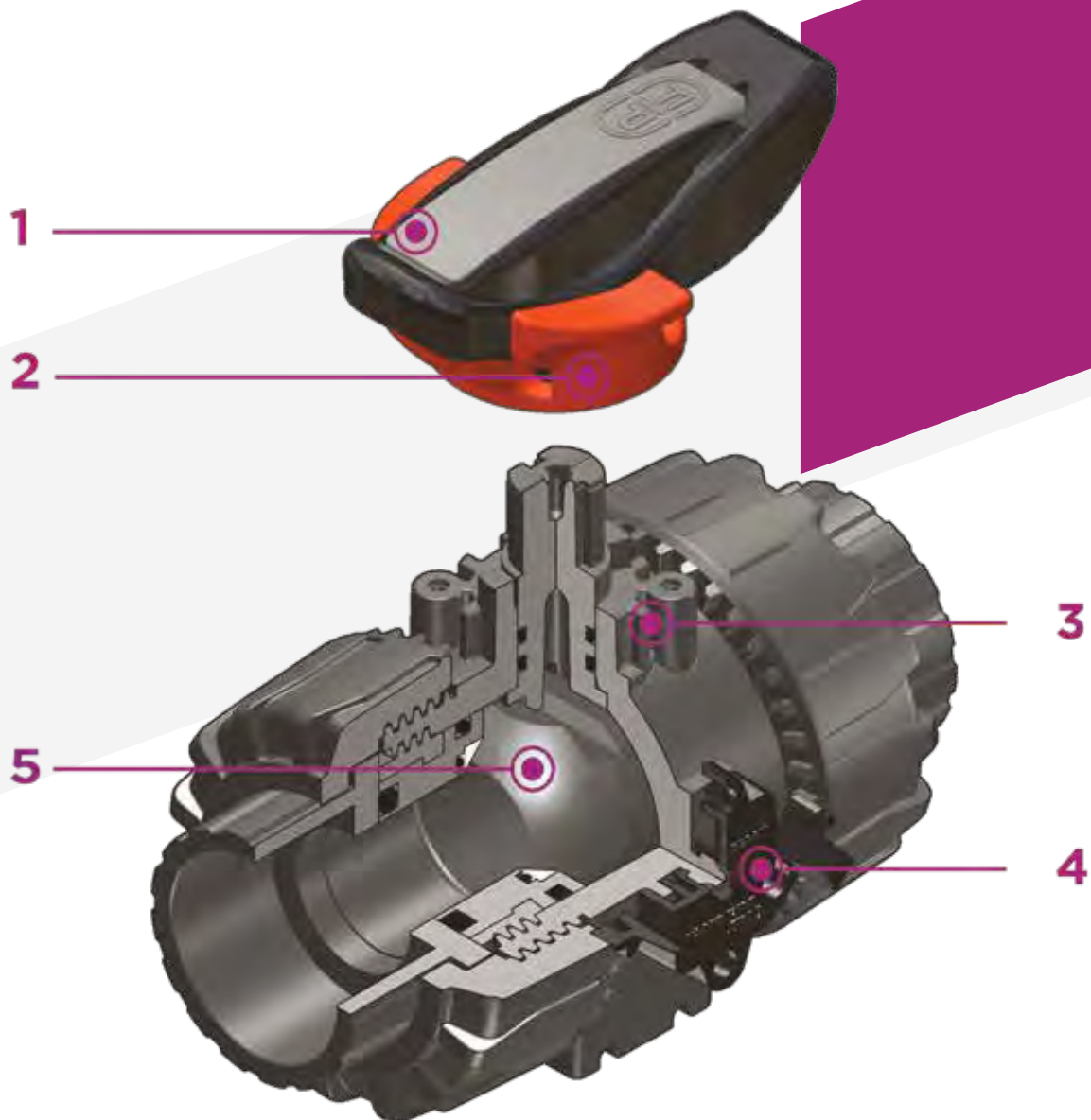


DUAL BLOCK® 2-WAY BALL VALVE

- Connection system for weld and flanged joints
- Patented **SEAT STOP®** ball carrier system that lets you micro-adjust ball seats and minimise the axial force effect.
- Easy radial disassembly allowing quick replacement of O-rings and ball seats without any need for tools
- **PN16 True Union valve body** made for PVDF injection moulding equipped with built-in bores for actuation. ISO 9393 compliant test requisites
- Option of disassembling downstream pipes with the valve in the closed position
- **Floating full bore ball** with high surface finish
- **Integrated bracket** for valve anchoring
- Ball seat carriers can be adjusted using the **Easytorque adjustment kit**
- Possibility to have handle with integrated LSQT limit micro switch, even as a retrofit in existing installations

Technical specifications

Construction	2-way True Union ball valve with locked carrier and lockable union nuts.
Size range	DN 10 ÷ 50
Nominal pressure	PN 16 with water at 20° C
Temperature range	-40 °C ÷ 140 °C
Coupling standards	Welding: EN ISO 10931 Can be coupled to pipes according to EN ISO 10931 Flanging system: ISO 7005-1, EN ISO 10931, EN 558-1, DIN 2501, ANSI B.16.5 cl. 150
Reference standards	Construction criteria: EN ISO 16135, EN ISO 10931 Test methods and requirements: ISO 9393 Installation criteria: DVS 2202-1, DVS 2207-15, DVS 2208-1 Actuator couplings: ISO 5211
Valve material	PVDF
Seal material	FKM (standard size O-Ring, EPDM on request); PTFE (ball seats)
Control options	Manual control; electric actuator; pneumatic actuator



1 Ergonomic HIPVC handle equipped with **removable tool to adjust the ball seat carrier.**

2 **Handle lock 0°- 90° SHKD** (available as an accessory) ergonomically operable during service and padlockable

3 Robust **integrated bracket for valve anchoring**, for easy and quick automation even after valve installation on the system via the Power Quick module (optional)

4 **DUAL BLOCK®** patented lock system that ensures union nut

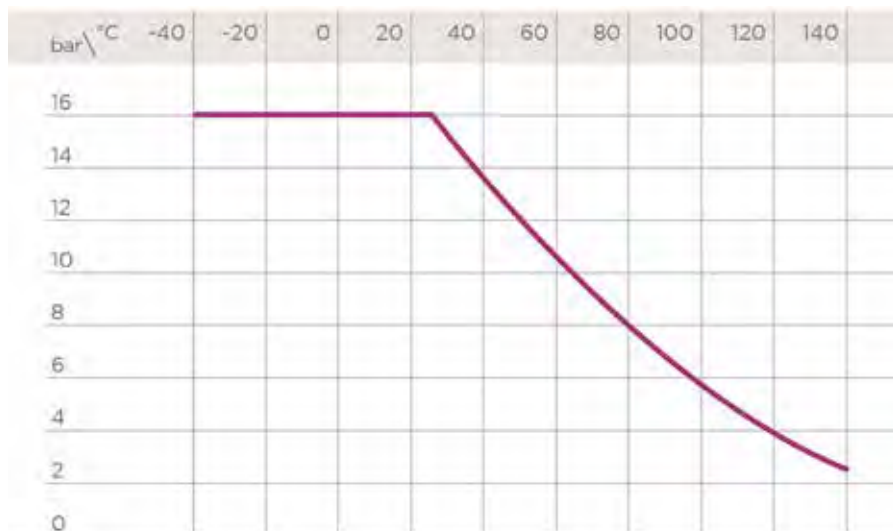
tightening hold even in severe conditions such as vibrations or heat dilation

5 Machined high surface finish ball that guarantees a smooth operation and increased reliability.

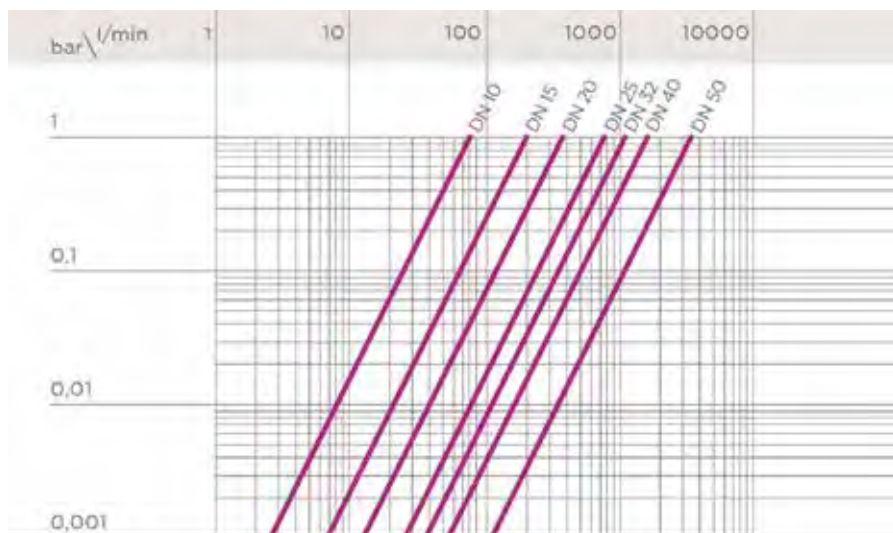
TECHNICAL DATA

PRESSURE VARIATION ACCORDING TO TEMPERATURE

For water and harmless fluids to which the material is classified as CHEMICALLY RESISTANT. In other cases, a reduction of the nominal PN pressure is required (25 years with safety factor).



PRESSURE DROP GRAPH

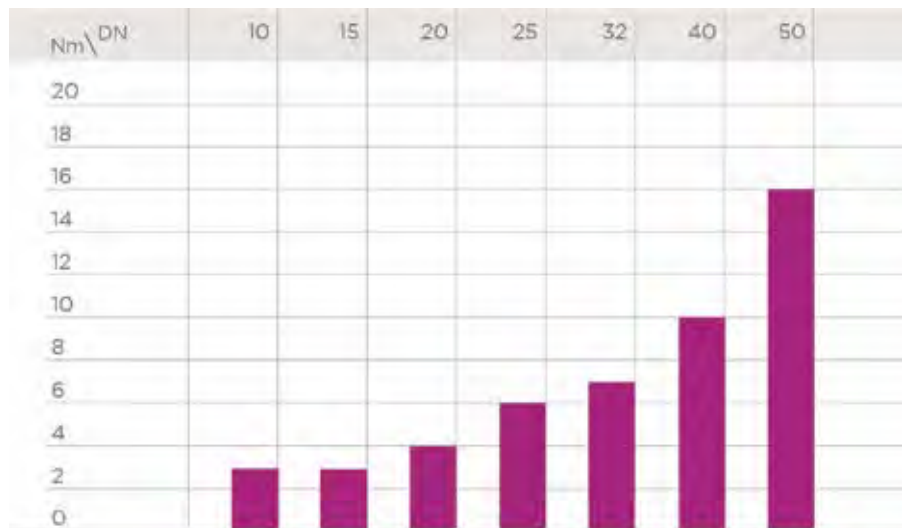


K_v100 FLOW COEFFICIENT

The K_v100 flow coefficient is the Q flow rate of litres per minute of water at a temperature of 20°C that will generate $\Delta p = 1$ bar pressure drop at a certain valve position. The K_v100 values shown in the table are calculated with the valve completely open.

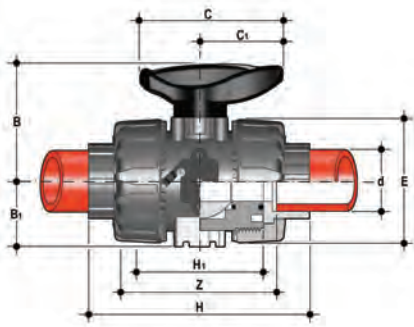
DN	10	15	20	25	32	40	50
Kv100 l/min	80	200	385	770	1100	1750	3400

OPERATING TORQUE AT MAXIMUM WORKING PRESSURE



The information in this leaflet is provided in good faith. No liability will be accepted concerning technical data that is not directly covered by recognised international standards. FIP reserves the right to carry out any modification. Products must be installed and maintained by qualified personnel.

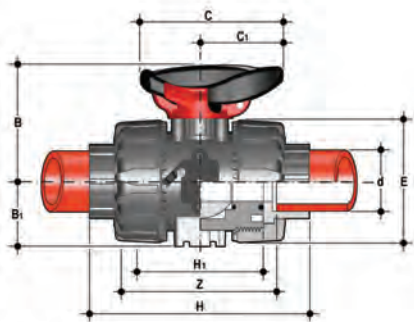
DIMENSIONS



VKDIF

DUAL BLOCK® 2-way ball valve with female ends for socket welding, metric series

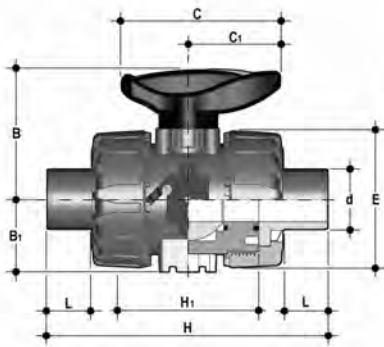
d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	Z	g	FKM code
16	10	16	54	29	67	40	54	102	65	74,5	291	VKDIF016F
20	15	16	54	29	67	40	54	102	65	73	272	VKDIF020F
25	20	16	65	34,5	85	49	65	114	70	82	445	VKDIF025F
32	25	16	69,5	39	85	49	73	126	78	90	584	VKDIF032F
40	32	16	82,5	46	108	64	86	141	88	100	938	VKDIF040F
50	40	16	89	52	108	64	98	164	93	117	1242	VKDIF050F
63	50	16	108	62	134	76	122	199	111	144	2187	VKDIF063F



VKDIF/SHX

DUAL BLOCK® 2-way ball valve with handle lock and STAINLESS steel threaded inserts for fastening, with female ends for butt welding, metric series

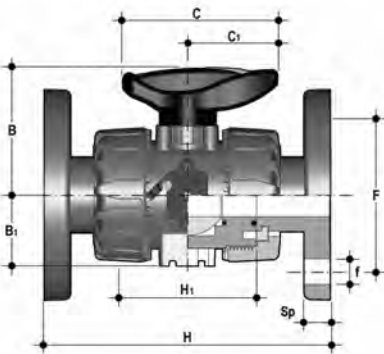
d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	Z	g	FKM code
16	10	16	54	29	67	40	54	102	65	74,5	291	VKDIFSHX016F
20	15	16	54	29	67	40	54	102	65	73	272	VKDIFSHX020F
25	20	16	65	34,5	85	49	65	114	70	82	445	VKDIFSHX025F
32	25	16	69,5	39	85	49	73	126	78	90	584	VKDIFSHX032F
40	32	16	82,5	46	108	64	86	141	88	100	938	VKDIFSHX040F
50	40	16	89	52	108	64	98	164	93	117	1242	VKDIFSHX050F
63	50	16	108	62	134	76	122	199	111	144	2187	VKDIFSHX063F



VKDDF

DUAL BLOCK® 2-way ball valve with male ends for socket welding, metric series

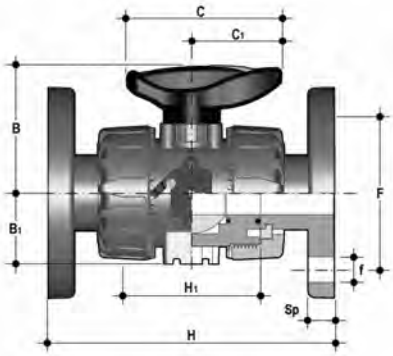
d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	L	g	FKM code
20	15	16	54	29	67	40	54	124	65	16	299	VKDDF020F
25	20	16	65	34,5	85	49	65	144	70	18	466	VKDDF025F
32	25	16	69,5	39	85	49	73	154	78	20	604	VKDDF032F
40	32	16	82,5	46	108	64	86	174	88	22	951	VKDDF040F
50	40	16	89	52	108	64	98	194	93	23	1284	VKDDF050F
63	50	16	108	62	134	76	122	224	111	29	2229	VKDDF063F



VKDOF

DUAL BLOCK® 2-way ball valve with fixed flanges, drilled EN/ISO/DIN PN10/16. Face to face according to EN 558-1

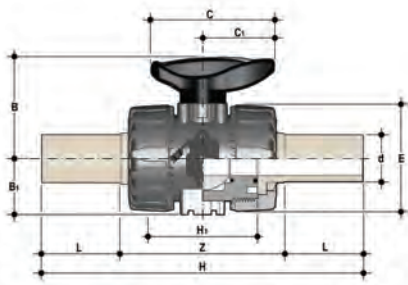
d	DN	PN	B	B ₁	C	C ₁	F	f	H	H ₁	Sp	U	g	FKM code
20	15	16	54	29	67	40	65	14	130	65	11	4	547	VKDOF020F
25	20	16	65	34,5	85	49	75	14	150	70	14	4	772	VKDOF025F
32	25	16	69,5	39	85	49	85	14	160	78	14	4	1024	VKDOF032F
40	32	16	82,5	46	108	64	100	18	180	88	14	4	1583	VKDOF040F
50	40	16	89	52	108	64	110	18	200	93	16	4	2024	VKDOF050F
63	50	16	108	62	134	76	125	18	230	111	16	4	3219	VKDOF063F



VKDOAF

DUAL BLOCK® 2-way ball valve with fixed flanges, drilled ANSI B16.5 cl.150 #FF

d	DN	PN	B	B ₁	C	C ₁	F	f	H	H ₁	Sp	U	g	FKM code
1/2"	15	16	54	29	67	40	60,3	15,9	143	65	11	4	547	VKDOAF012F
3/4"	20	16	65	34,5	85	49	69,9	15,9	172	70	14	4	772	VKDOAF034F
1"	25	16	69,5	39	85	49	79,4	15,9	187	78	14	4	1024	VKDOAF100F
1" 1/4	32	16	82,5	46	108	64	88,9	15,9	190	88	14	4	1583	VKDOAF114F
1" 1/2	40	16	89	52	108	64	98,4	15,9	212	93	16	4	2024	VKDOAF112F
2"	50	16	108	62	134	76	120,7	19,1	234	111	16	4	3219	VKDOAF200F



VKDBF

DUAL BLOCK® 2-way ball valve with long spigot male ends in PVDF for butt welding/ IR (CVDF)

d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	L	Z	g	FKM code
20	15	16	54	29	67	40	54	175	65	40,5	94	450	VKDBF020F
25	20	16	65	35	85	49	65	212	70	54	106	516	VKDBF025F
32	25	16	70	39	85	49	73	226	78	56	117	664	VKDBF032F
40	32	16	83	46	108	64	86	246	88	56	131	1020	VKDBF040F
50	40	16	89	52	108	64	98	271	93	60,5	145	1350	VKDBF050F
63	50	16	108	62	134	76	122	300	111	65,5	161	2330	VKDBF063F