

 Aliaxis



VKR DN 10÷50

PVDF

DUAL BLOCK® regulating ball valve

VKR DN 10÷50

The VKR DUAL BLOCK® valve combines high reliability and safety aspects typical of VKD full bore ball valves with the new flow adjustment function with typical linear curve that meets the most stringent needs typical of industrial applications.

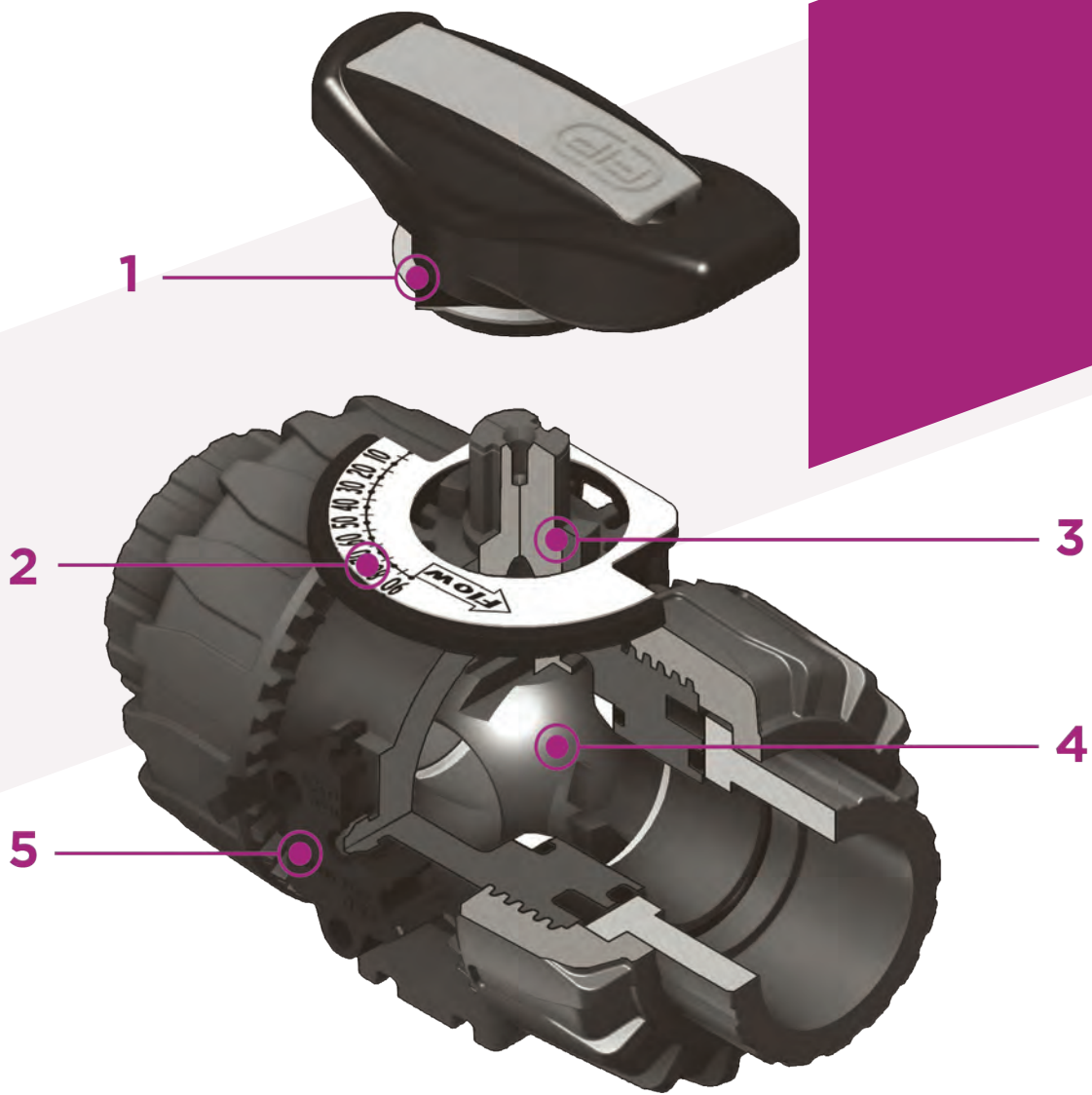


DUAL BLOCK® REGULATING BALL VALVE

- Connection system for weld and flanged joints
- Patented **SEAT STOP®** ball carrier system that lets you micro-adjust ball seats and minimise axial force effects
- 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
- High surface finish stem with double O-Ring and double groove ball connection
- **Integrated bracket** for valve anchoring
- Ball seat carrier can be adjusted using the **Easytorque adjustment kit**
- Actuation option: version with electric modulating actuator with 4-20 mA / 0-10 V inlet and 4-20 mA / 0-10 V outlet to monitor the position
- Valve suitable for carrying fluids that are clean and free of suspended particles

Technical specifications

Construction	2-way True Union regulating 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



1 HIPVC ergonomic multifunctional handle with **position indicator** and tool to adjust the ball seat carrier

2 Flow direction indication plate and opening angle with **graduated scale with 5° detail** for clear and accurate readings

3 90° operating angle that permits **the use of standard quarter turn actuators**

4 The patented ball design provides **linear flow adjustment** throughout its range of operation even when the valve is open just a few degrees and

guarantees minimum pressure drops

5 Patented **DUAL BLOCK®** system: prevents union nuts from loosening even under extreme operating conditions: e.g. vibration or thermal expansion

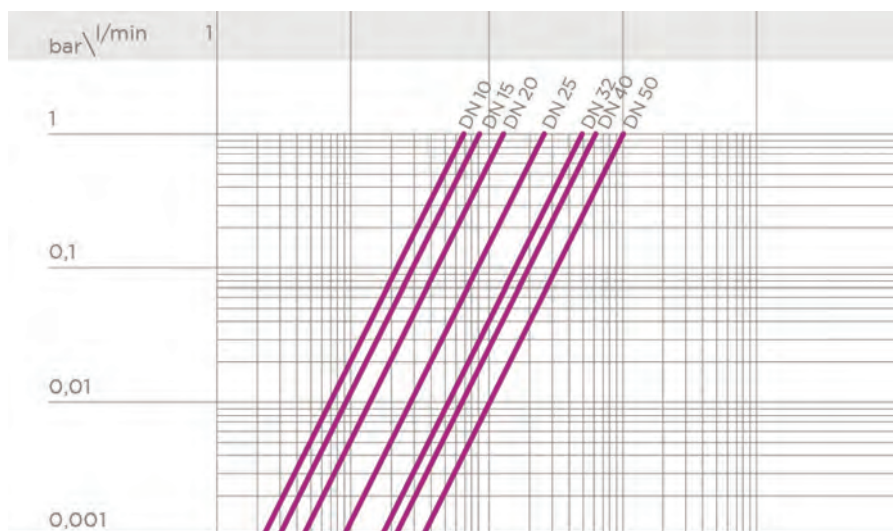
TECHNICAL DATA

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

Per coefficiente di flusso K_v100 si intende la portata Q in litri al minuto di acqua a 20°C che genera una perdita di carico Δp= 1 bar per una determinata posizione della valvola. I valori K_v100 indicati in tabella si intendono per valvola completamente aperta.

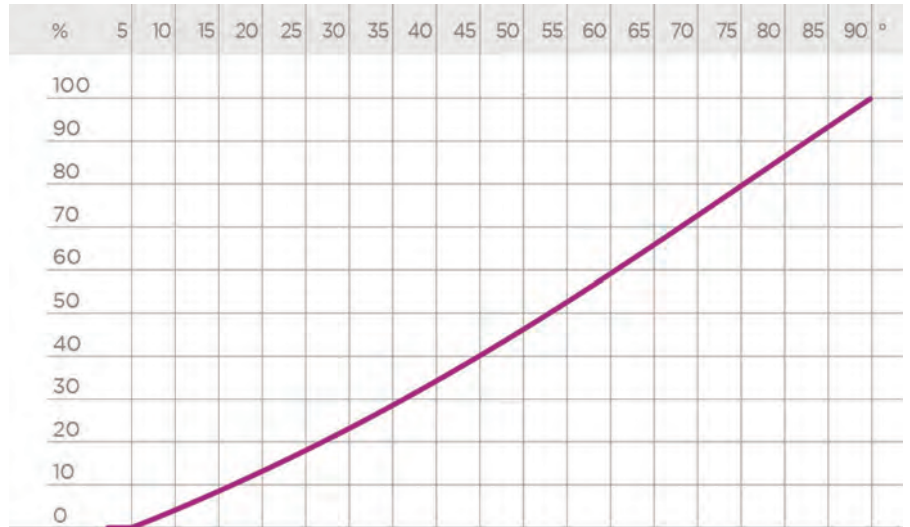
DN	10	15	20	25	32	40	50
Kv100 l/min	83	88	135	256	478	592	1068

RELATIVE FLOW COEFFICIENT DIAGRAM

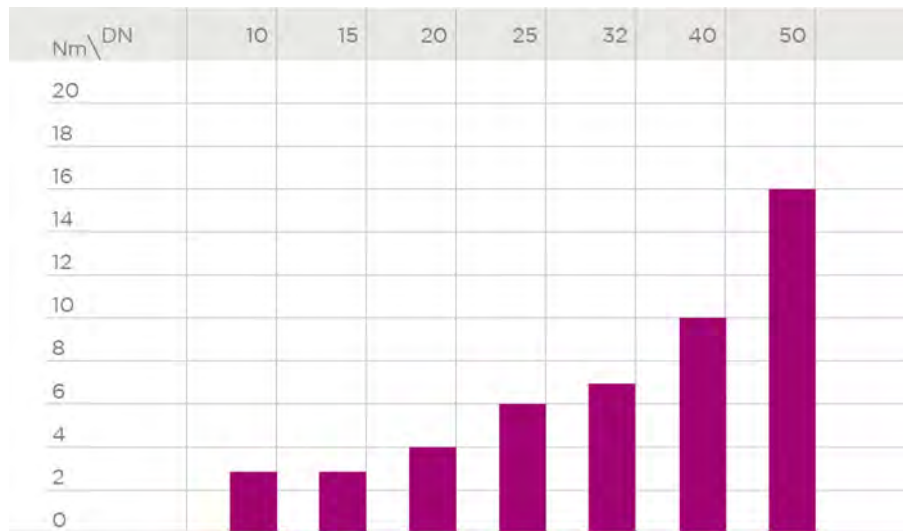
The relative flow coefficient is the flow rate through the valve as a function of the degree of valve aperture.

Horizontal axis: Ball aperture angle

Vertical axis: Relative flow coefficient

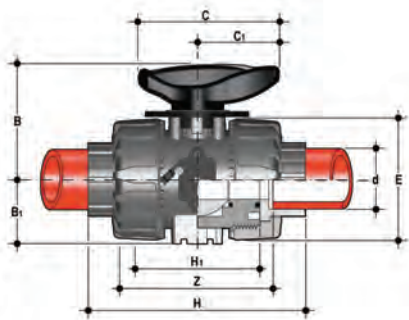


OPERATING TORQUE AT MAXIMUM WORKING PRESSURE



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.

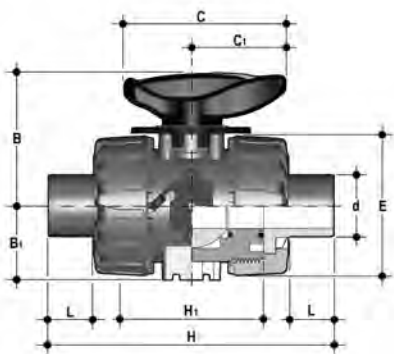
DIMENSIONS



VKRIF

DUAL BLOCK® regulating ball valve with female ends for socket welding, metric series

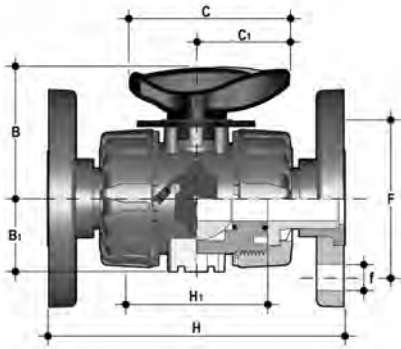
d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	Z	g	FKM code
16	10	16	54	29	67	40	54	102	65	74,5	291	VKRIF016F
20	15	16	54	29	67	40	54	102	65	73	272	VKRIF020F
25	20	16	65	34,5	85	49	65	114	70	82	445	VKRIF025F
32	25	16	69,5	39	85	49	73	126	78	90	584	VKRIF032F
40	32	16	82,5	46	108	64	86	141	88	100	938	VKRIF040F
50	40	16	89	52	108	64	98	164	93	117	1242	VKRIF050F
63	50	16	108	62	134	76	122	199	111	144	2187	VKRIF063F



VKRDF

DUAL BLOCK® regulating ball valve with male ends for socket welding, metric series

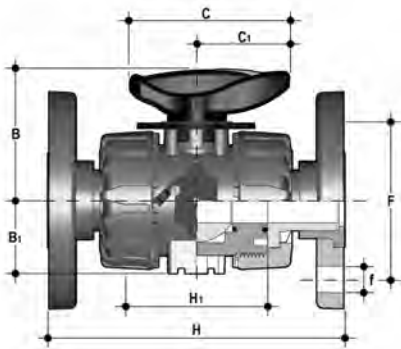
d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	L	g	FKM code
20	15	16	54	29	65	40	54	124	65	16	299	VKRDF020F
25	20	16	65	34,5	70	49	65	144	70	18	466	VKRDF025F
32	25	16	69,5	39	78	49	73	154	78	20	604	VKRDF032F
40	32	16	82,5	46	88	64	86	174	88	22	951	VKRDF040F
50	40	16	89	52	93	64	98	194	93	23	1284	VKRDF050F
63	50	16	108	62	111	76	122	224	111	29	2229	VKRDF063F



VKROF

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

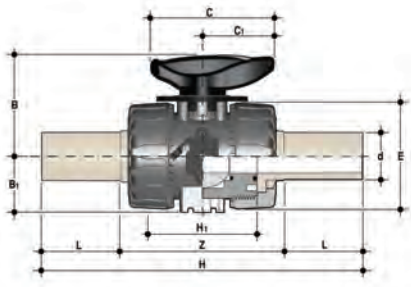
d	DN	PN	B	B ₁	C	C ₁	F	f	H	H ₁	Sp	U	g	FKM code
20	15	16	54	29	67	40	65	14	130	65	11	4	547	VKROF020F
25	20	16	65	34,5	85	49	75	14	150	70	14	4	772	VKROF025F
32	25	16	69,5	39	85	49	85	14	160	78	14	4	1024	VKROF032F
40	32	16	82,5	46	108	64	100	18	180	88	14	4	1583	VKROF040F
50	40	16	89	52	108	64	110	18	200	93	16	4	2024	VKROF050F
63	50	16	108	62	134	76	125	18	230	111	16	4	3219	VKROF063F



VKROAF

DUAL BLOCK® regulating ball valve with ANSI B16.5 cl.150#FF fixed flange bore

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	VKROAF012F
3/4"	20	16	65	34,5	85	49	69,9	15,9	172	70	14	4	772	VKROAF034F
1"	25	16	69,5	39	85	49	79,4	15,9	187	78	14	4	1024	VKROAF100F
1" 1/4	32	16	82,5	46	108	64	88,9	15,9	190	88	14	4	1583	VKROAF114F
1" 1/2	40	16	89	52	108	64	98,4	15,9	212	93	16	4	2024	VKROAF112F
2"	50	16	108	62	134	76	120,7	19,1	234	111	16	4	3219	VKROAF200F



VKRBF

DUAL BLOCK® regulating 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	VKRBF020F
25	20	16	65	35	85	49	65	212	70	54	106	516	VKRBF025F
32	25	16	70	39	85	49	73	226	78	56	117	664	VKRBF032F
40	32	16	83	46	108	64	86	246	88	56	131	1020	VKRBF040F
50	40	16	89	52	108	64	98	271	93	60,5	145	1350	VKRBF050F
63	50	16	108	62	134	76	122	300	111	65,5	161	2330	VKRBF063F