

 Aliaxis



VKR DN 10÷50

PP-H

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.

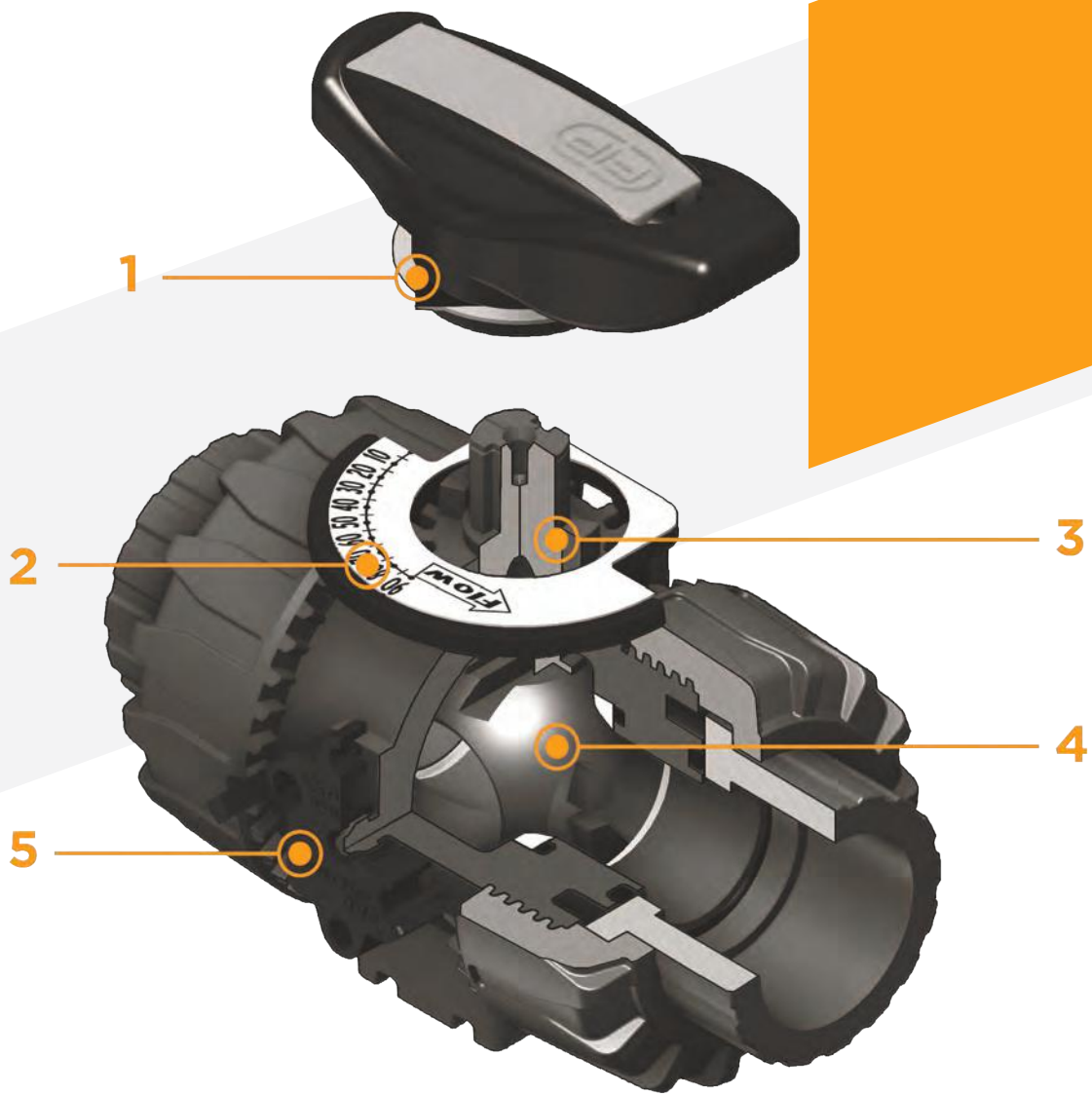


DUAL BLOCK® REGULATING BALL VALVE

- Connection system for weld, threaded and flanged joints
- Patented **SEAT STOP®** ball seat 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
- **PN10 True Union valve body** made for PP-H 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 10 con acqua a 20 °C
Temperature range	0 °C ÷ 100 °C
Coupling standards	<p>Welding: EN ISO 15494 Can be coupled to pipes according to EN ISO 15494</p> <p>Thread: ISO 228-1, DIN 2999</p> <p>Flanging system: ISO 7005-1, EN ISO 1092-1, EN ISO 15494, EN 558-1, DIN 2501, ANSI B.16.5 cl. 150</p>
Reference standards	<p>Construction criteria: EN ISO 16135, EN ISO 15494</p> <p>Test methods and requirements: ISO 9393</p> <p>Installation criteria: DVS 2202-1, DVS 2207-11, DVS 2208-1, UNI 11318</p> <p>Actuator couplings: ISO 5211</p>
Valve material	PP-H
Seal material	EPDM, FKM (standard size O-Rings); 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

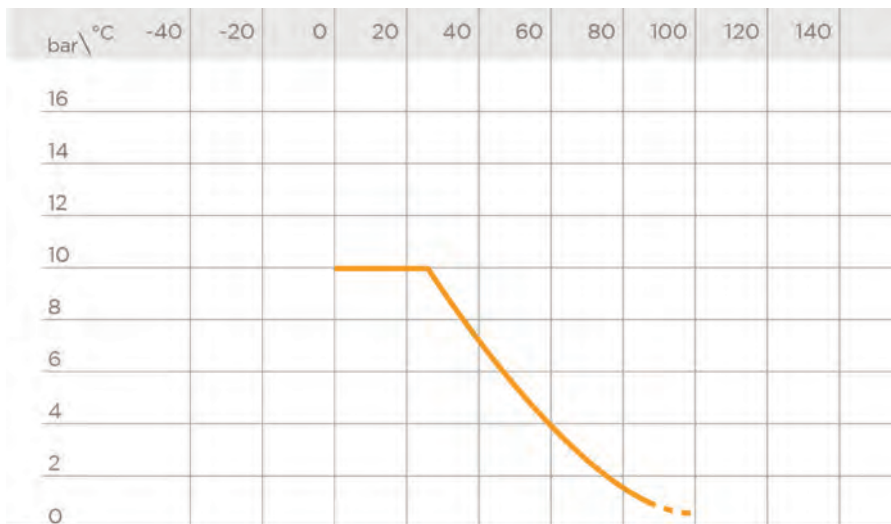
guarantees minimum pressure drops

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

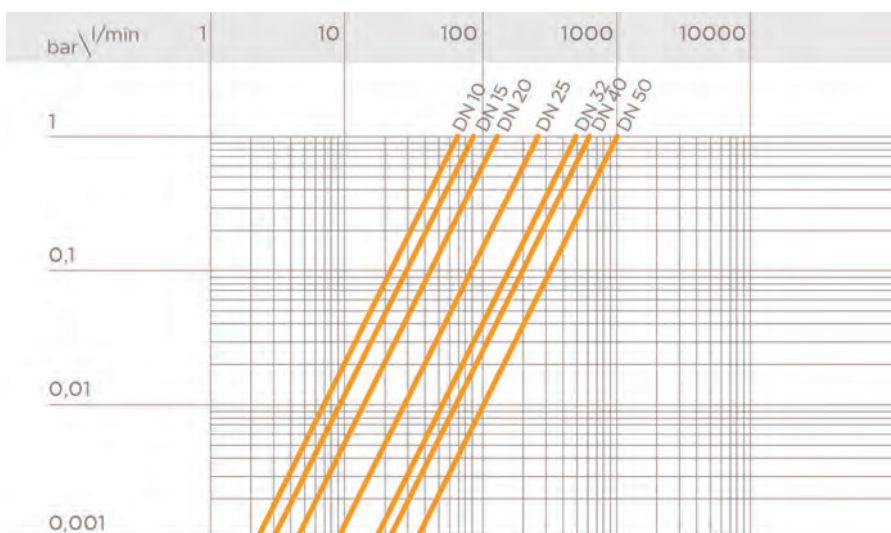
TECHNICAL DATA

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

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 Δp= 1 bar pressure drop at a certain valve position. The Kv100 values shown in the table are calculated with the valve completely open.

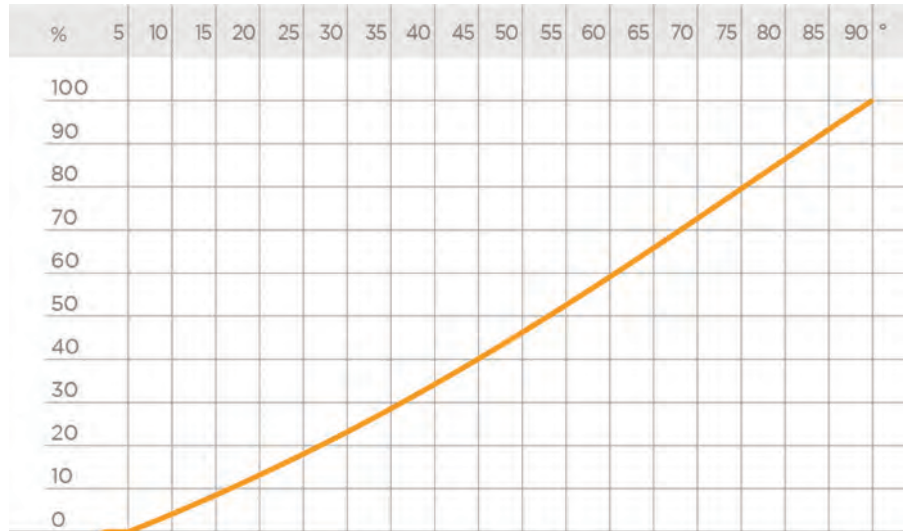
DN	10	15	20	25	32	40	50
Kv100 l/min	83	88	135	256	478	592	1068

RELATIVE FLOW COEFFICIENT DIAGRAM

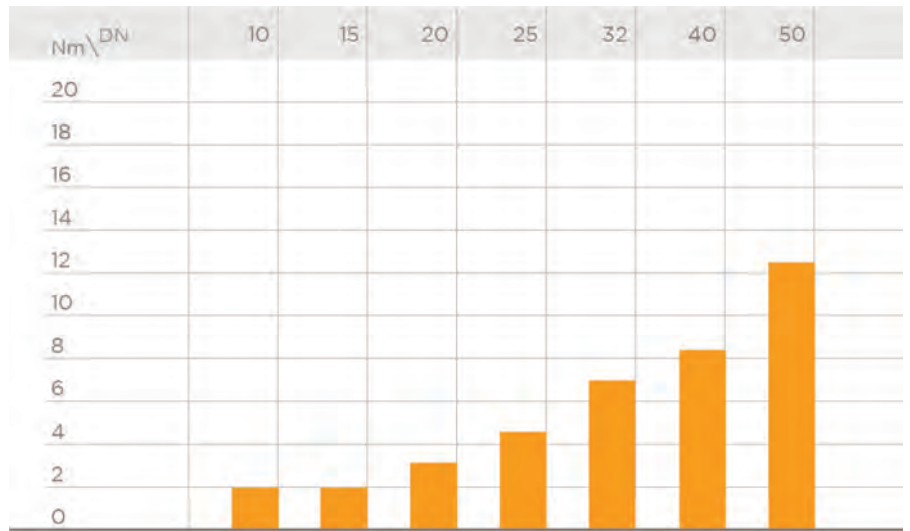
The relative flow coefficient is the flow rate through the valve as a function of the degree of valve aperture.

Horizontal axis: Ball aperture angle

Vertical axis: Relative flow coefficient

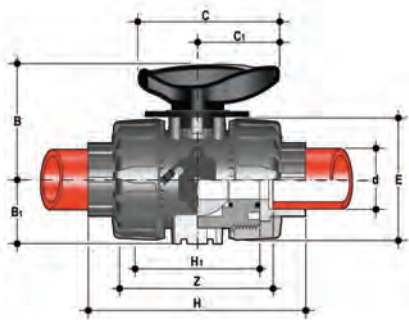


OPERATING TORQUE AT MAXIMUM WORKING PRESSURE



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.

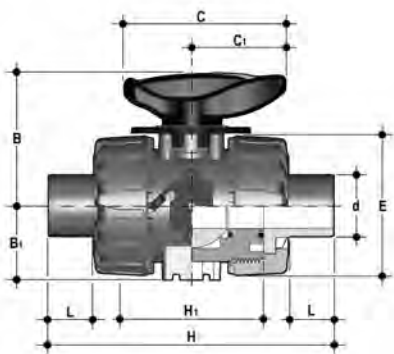
DIMENSIONS



VKRIM

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

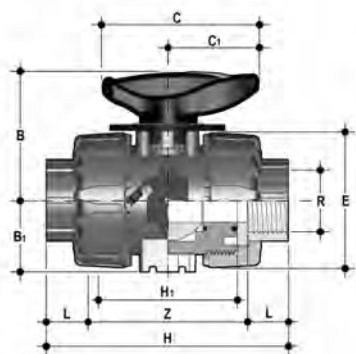
d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	Z	g	EPDM code	FKM code
16	10	10	54	29	67	40	54	102	65	74,5	150	VKRIM016E	VKRIM016F
20	15	10	54	29	67	40	54	102	65	73	145	VKRIM020E	VKRIM020F
25	20	10	65	34,5	85	49	65	114	70	82	218	VKRIM025E	VKRIM025F
32	25	10	69,5	39	85	49	73	126	78	90	298	VKRIM032E	VKRIM032F
40	32	10	82,5	46	108	64	86	141	88	100	480	VKRIM040E	VKRIM040F
50	40	10	89	52	108	64	98	164	93	117	682	VKRIM050E	VKRIM050F
63	50	10	108	62	134	76	122	199	111	144	1166	VKRIM063E	VKRIM063F



VKRDM

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

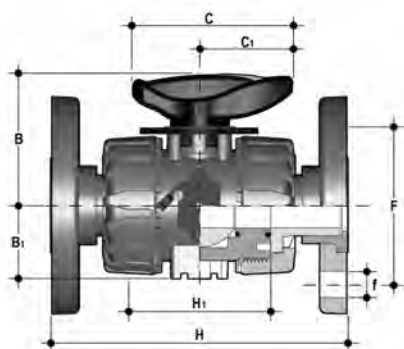
d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	L	g	EPDM code	FKM code
20	15	10	54	29	67	40	54	144	70	18	222	VKRDM020E	VKRDM020F
25	20	10	65	34,5	85	49	65	154	78	20	303	VKRDM025E	VKRDM025F
32	25	10	69,5	39	85	49	73	174	88	22	485	VKRDM032E	VKRDM032F
40	32	10	82,5	46	108	64	86	194	93	23	672	VKRDM040E	VKRDM040F
50	40	10	89	52	108	64	98	224	111	29	1176	VKRDM050E	VKRDM050F
63	50	10	108	62	134	76	122	224	111	38	1607	VKRDM063E	VKRDM063F



VKRFM

DUAL BLOCK® regulating ball valve with BSP threaded female ends

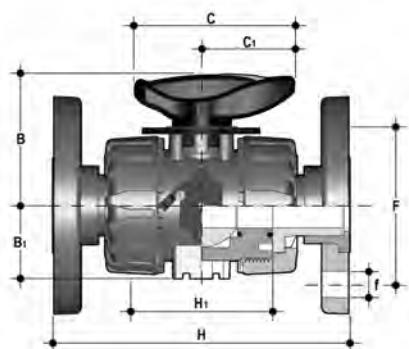
R	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	L	Z	g	EPDM code	FKM code
3/8"	10	10	54	29	67	40	54	103	65	15	80	145	VKRFM038E	VKRFM038F
1/2"	15	10	54	29	67	40	54	110	65	16	83	220	VKRFM012E	VKRFM012F
3/4"	20	10	65	34,5	85	49	65	116	70	19	96	298	VKRFM034E	VKRFM034F
1"	25	10	69,5	39	85	49	73	134	78	21	110	488	VKRFM100E	VKRFM100F
1" 1/4	32	10	82,5	46	108	64	86	153	88	21	113	682	VKRFM114E	VKRFM114F
1" 1/2	40	10	89	52	108	64	98	156	93	26	135	1161	VKRFM112E	VKRFM112F
2"	50	10	108	62	134	76	122	186	111	26	135	1667	VKRFM200E	VKRFM200F



VKROM

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

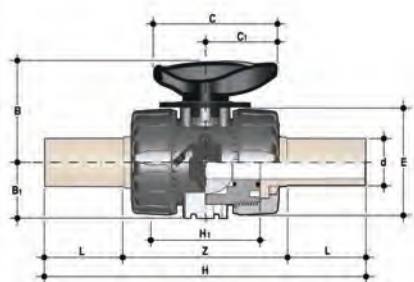
d	DN	PN	B	B ₁	C	C ₁	F	f	H	H ₁	U	Sp	g	EPDM code	FKM code
20	15	10	54	29	67	40	65	14	130	65	4	11	387	VKROM020E	VKROM020F
25	20	10	65	34,5	85	49	75	14	150	70	4	14	504	VKROM025E	VKROM025F
32	25	10	69,5	39	85	49	85	14	160	78	4	14	697	VKROM032E	VKROM032F
40	32	10	82,5	46	108	64	100	18	180	88	4	14	1075	VKROM040E	VKROM040F
50	40	10	89	52	108	64	110	18	200	93	4	16	1346	VKROM050E	VKROM050F
63	50	10	108	62	134	76	125	18	230	111	4	16	2060	VKROM063E	VKROM063F



VKROAM

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

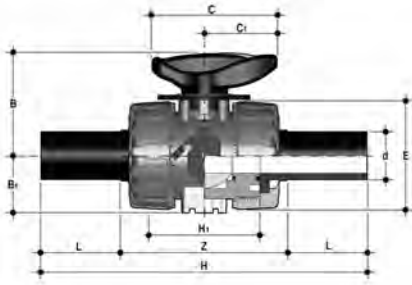
d	DN	PN	B	B ₁	C	C ₁	F	f	H	H ₁	Sp	U	g	EPDM code	FKM code
1/2"	15	10	54	29	67	40	60,3	15,9	143	65	11	4	387	VKROAM012E	VKROAM012F
3/4"	20	10	65	34,5	85	49	69,9	15,9	172	70	14	4	504	VKROAM034E	VKROAM034F
1"	25	10	69,5	39	85	49	79,4	15,9	187	78	14	4	697	VKROAM100E	VKROAM100F
1" 1/4	32	10	82,5	46	108	64	88,9	15,9	190	88	14	4	1075	VKROAM114E	VKROAM114F
1" 1/2	40	10	89	52	108	64	98,4	15,9	212	93	16	4	1346	VKROAM112E	VKROAM112F
2"	50	10	108	62	134	76	120,7	19,1	234	111	16	4	2060	VKROAM200E	VKROAM200F



VKRBM

DUAL BLOCK® regulating ball valve with long spigot male ends in PP-H for butt welding or electrofusion (CVDM)

d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	L	Z	g	EPDM code	FKM code
20	15	10	54	29	67	40	54	175	65	40,5	94	220	VKRBM020E	VKRBM020F
25	20	10	65	35	85	49	65	212	70	54	106	340	VKRBM025E	VKRBM025F
32	25	10	70	39	85	49	73	226	78	56	117	443	VKRBM032E	VKRBM032F
40	32	10	83	46	108	64	86	246	88	56	131	593	VKRBM040E	VKRBM040F
50	40	10	89	52	108	64	98	271	93	60,5	145	945	VKRBM050E	VKRBM050F
63	50	10	108	62	134	76	122	300	111	65,5	161	1607	VKRBM063E	VKRBM063F



VKRBEM

Dual Block® regulating ball valve with PE100 SDR 11 male end connectors for butt welding or electrofusion (CVDE)

d	DN	PN	B	B ₁	C	C ₁	E	H	H ₁	L	Z	g	EPDM code	FKM code
20	15	10	54	29	67	40	54	175	65	40,5	94	210	VKRBEM020E	VKRBEM020F
25	20	10	65	34,5	85	49	65	213	70	54	106	325	VKRBEM025E	VKRBEM025F
32	25	10	69,5	39	85	49	73	228	78	56	117	420	VKRBEM032E	VKRBEM032F
40	32	10	82,5	46	108	64	86	247	88	56	131	570	VKRBEM040E	VKRBEM040F
50	40	10	89	52	108	64	98	271	93	60,5	145	900	VKRBEM050E	VKRBEM050F
63	50	10	108	62	134	76	122	300	111	65,5	161	1500	VKRBEM063E	VKRBEM063F