VKD PVC-U, PVC-C, PP, PVDF Ball valve d16-110 (DN10-100)

Description

Plastic ball valve for water and harmless fluids to which the material is resistant.

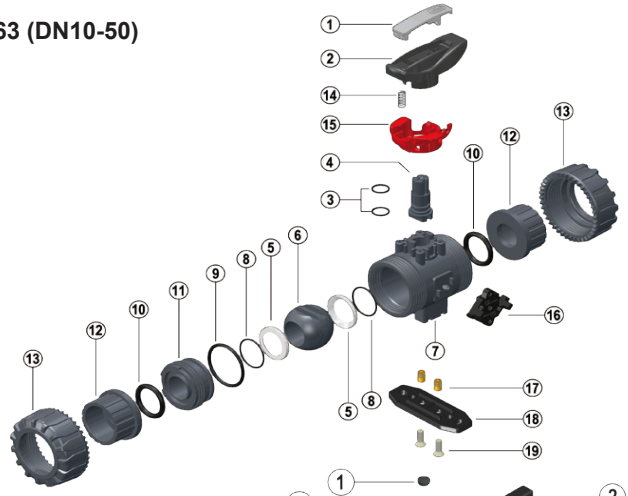
Product features

VKDIV	PVC-U	O-Rings EPDM or Viton® (FPM)	for solvent welding
VKDIC	PVC-C		
VKDIM	PP		for socket fusion
VKDIF	PVDF	O-rings Viton® (FPM)	
• Max. working pressure		PVC-U, PVC-C, PVDF 16 bar, PP 10 bar	

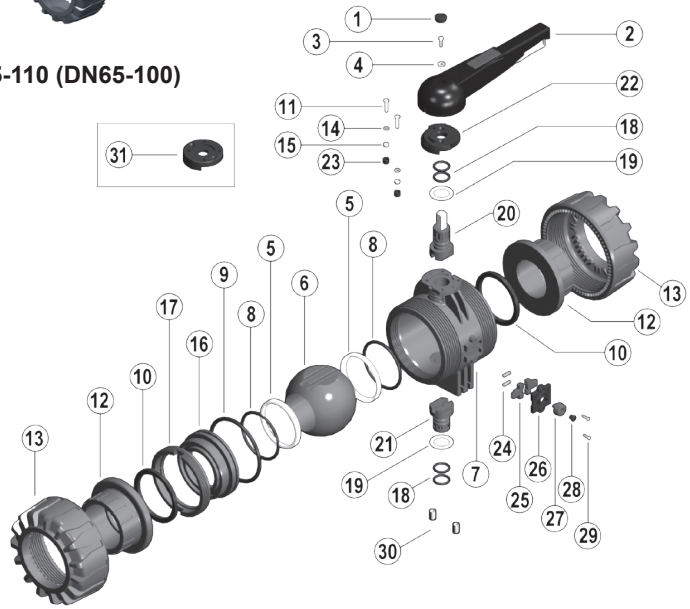
- Easy removal of the valve body from the system, allowing quick replacement of O-rings and ball seats without additional equipment.
- In the closed position the pipeline can be disconnected downstream from the valve without leakage.
- Patented Seat Stop® system. Axial pipe loads blocked with micro-adjustment of ball seal.

Construction

d16-63 (DN10-50)



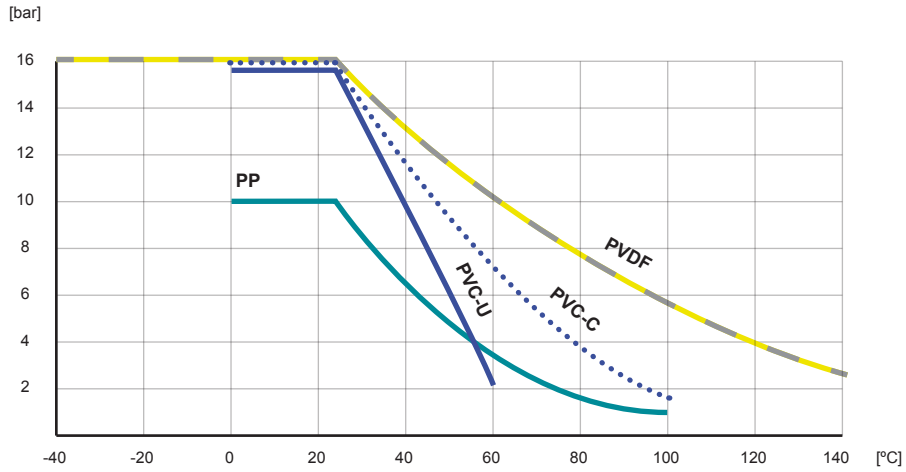
d75-110 (DN65-100)



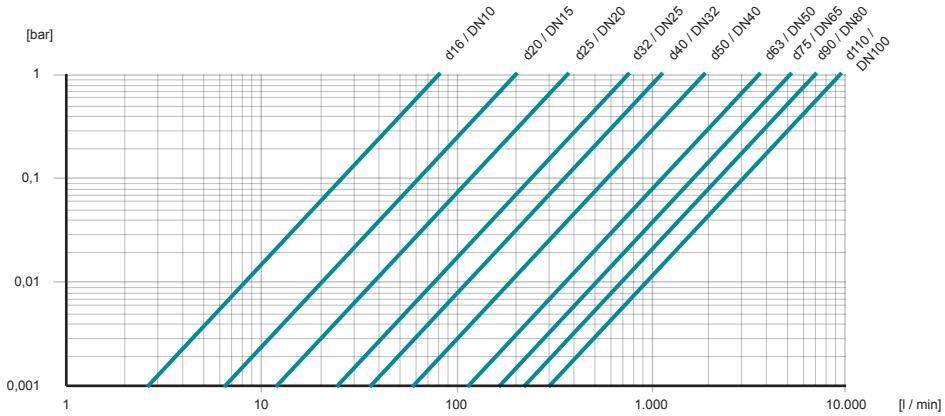
191	Insert	PVC-U
2	Handle	PVC-U
3	O-ring	EPDM-FPM
4	Stem	PVC-U
5	Ball seat	PTFE
6	Ball	PVC-U
7	Body	PVC-U
8	O-ring	EPDM-FPM
9	O-ring	EPDM-FPM
10	O-ring	EPDM-FPM
11	Support for ball seat	PVC-U
12	End connector	PVC-U
13	Union nut	PVC-U
14	Spring	Stainless steel
15	Safety handle block	PP-GR
16	DualBlock®	POM
17	Bracketing bush	Stainless steel or brass
18	Mounting/distance plate	PP-GR
19	Screw	Stainless steel

1	Protection cap	PVC-U
2	Handle	PVC-U
3	Screw	Stainless steel
4	Washer	Stainless steel
5	Ball seat	PTFE
6	Ball	PVC-U, PVC-C, PP, PVDF
7	Body	PVC-U, PVC-C, PP, PVDF
8	O-ring	EPDM or FPM
9	O-ring	EPDM or FPM
10	Seal	EPDM or FPM
11	Screw	Stainless steel
12	End connector	PVC-U, PVC-C, PP, PVDF
13	Union nut	PVC-U, PVC-C, PP, PVDF
14	Washer	Stainless steel
15	Nut	Stainless steel
16	Support for ball seat	PVC-U, PVC-C, PP, PVDF
17	Stop ring	PVC-U, PVC-C, PP, PVDF
18	O-ring	EPDM or FPM
19	Friction reducing bush	PTFE
20	Upper stem	PVC-U, PVC-C, PP, PVDF
21	Lower stem	PVC-U, PVC-C, PP, PVDF
22	Pad	Stainless steel
23	Protection cap	PE
24	Spring	Stainless steel
25	Locking piece	PP-GR
26	Cover	PP
27	Locking button	PP-GR
28	Protection cap	PE
29	Screw	Nylon
30	Bracketing bush	Brass
31	Adapter for actuator	PP-GR

Pressure- / temperature diagram:



Pressure loss diagram:

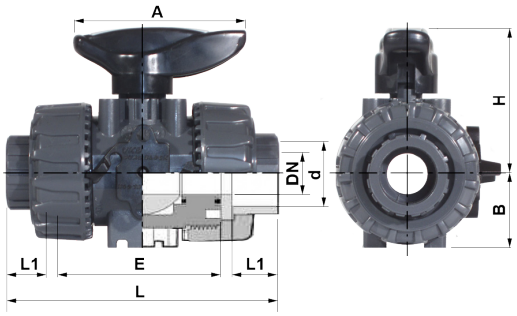


k_V values:

d / DN	kv [l/min]
16 / 10	80
20 / 15	200
25 / 20	385
32 / 25	770
40 / 32	1100
50 / 40	1750
63 / 50	3400
75 / 63	5250
90 / 80	7100
110 / 100	9500

Dimensions d16-63 (DN10-50)

Hand operated



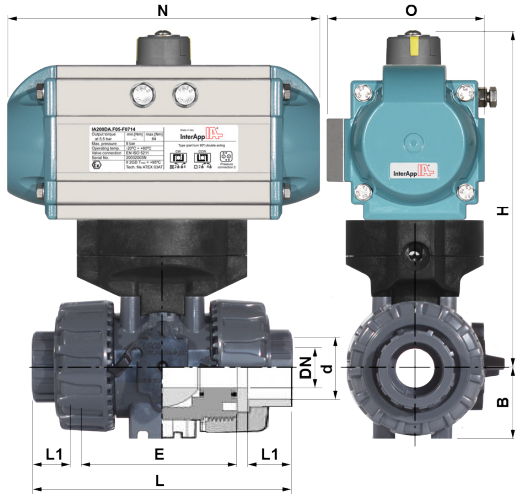
	d	DN	E	B	H	A
VKD** 016 03	16	10	65	29	54	67
VKD** 020 03	20	15	65	29	54	67
VKD** 025 03	25	20	70	34,5	65	85
VKD** 032 03	32	25	78	39	69,5	85
VKD** 040 03	40	32	88	46	82,5	108
VKD** 050 03	50	40	93	52	89	108
VKD** 063 03	63	50	111	62	108	134

			VKDIV(PVC-U) VKDIC(PVC-C)		VKDIM(PP) VKDIF(PVDF)		VKDIV (PVC-U)	VKDIC (PVC-C)	VKDIM (PP)	VKDIF (PVDF)
	d	DN	L	L1	L	L1	[kg]	[kg]	[kg]	[kg]
VKD** 016 03	16	10	103	14	102	13,8	0,215	0,234	0,150	0,291
VKD** 020 03	20	15	103	16	102	14,5	0,205	0,223	0,145	0,272
VKD** 025 03	25	20	115	19	114	16	0,330	0,358	0,218	0,445
VKD** 032 03	32	25	128	22	126	18	0,438	0,476	0,298	0,584
VKD** 040 03	40	32	146	26	141	20,5	0,693	0,753	0,480	0,938
VKD** 050 03	50	40	164	31	164	23,5	0,925	1,007	0,682	1,242
VKD** 063 03	63	50	199	38	199	27,5	1,577	1,717	1,116	2,187

Code **03** = with **EPDM O-rings**
Code **02** = with **Viton® O-Rings**

With pneumatic actuator

Selection of actuator for pmax=16 bar working pressure and 6 bar air supply



Double acting actuator

	d	DN	H	N	O
VKD** 016 03 + IA050D	16	10	147	137	78,5
VKD** 020 03 + IA050D	20	15	147	137	78,5
VKD** 025 03 + IA050D	25	20	163	137	78,5
VKD** 032 03 + IA050D	32	25	163	137	78,5
VKD** 040 03 + IA100D	40	32	202	154	91,5
VKD** 050 03 + IA100D	50	40	209	154	91,5
VKD** 063 03 + IA100D	63	50	219	154	91,5

Single acting actuator

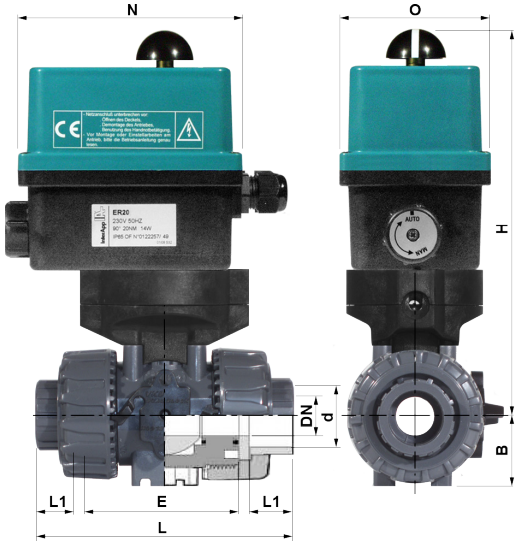
	d	DN	H	N	O
VKD** 016 03 + IA050S12	16	10	147	137	78,5
VKD** 020 03 + IA050S12	20	15	147	137	78,5
VKD** 025 03 + IA050S12	25	20	163	137	78,5
VKD** 032 03 + IA050S12	32	25	163	137	78,5
VKD** 040 03 + IA100S12	40	32	202	154	91,5
VKD** 050 03 + IA100S12	50	40	209	154	91,5
VKD** 063 03 + IA200S12	63	50	236	204	105

Code **03** = with **EPDM O-rings**
Code **02** = with **Viton® O-Rings**

Other dimensions see table VKD hand operated.

With electric actuator

230V50Hz, 1 phase, IP65
Selection of actuator for pmax=16 bar working pressure



	d	DN	H	N	O
VKD** 016 03 + ER10	16	10	205	136	90
VKD** 020 03 + ER10	20	15	205	136	90
VKD** 025 03 + ER10	25	20	221	136	90
VKD** 032 03 + ER10	32	25	221	136	90
VKD** 040 03 + ER20	40	32	238	136	90
VKD** 050 03 + ER20	50	40	251	136	90
VKD** 063 03 + ER35	63	50	289	151	127

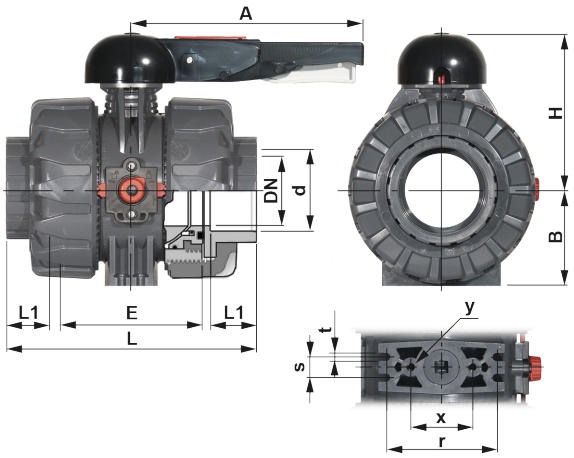
Code **03** = with **EPDM O-rings**
Code **02** = with **Viton® O-Rings**

Other dimensions see table VKD hand operated.

Other tensions on request (115V AC, 12/24V AC/DC)

Dimensions d75-110 (DN65-100)

Hand operated



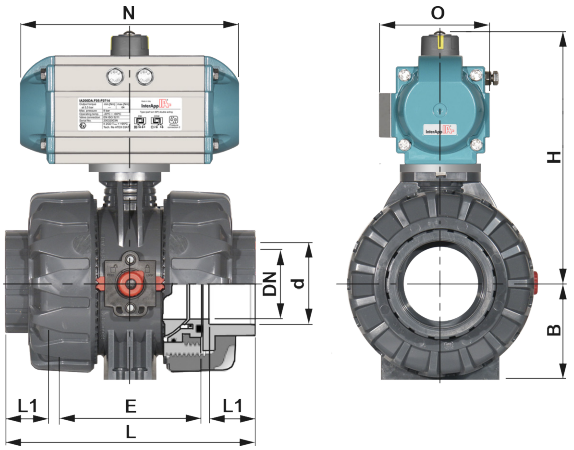
	d	DN	E	B	H	A	r	s	t	x	y
VKD** 075 03	75	65	133	87	164	175	90	17,4	6,3	51,8	M6
VKD** 090 03	90	80	149	105	177	272	112,6	21,2	8,4	63	M8
VKD** 110 03	110	100	167	129	195	330	137	21,2	8,4	67	M8

			VKDIV(PVC-U) VKDIC(PVC-C)		VKDIM(PP)		VKDIF(PVDF)		VKDIV (PVC-U)	VKDIC (PVC-C)	VKDIM (PP)	VKDIF (PVDF)
	d	DN	L	L1	L	L1	L	L1	[kg]	[kg]	[kg]	[kg]
VKD** 075 03	75	65	235	44	213	33	235	44	4,380	4,750	3,090	4,380
VKD** 090 03	90	80	270	51	239	36	270	51	7,200	7,838	5,080	7,200
VKD** 110 03	110	100	308	61	268	41	308	61	11,141	12,137	7,725	11,141

Code **03** = with **EPDM O-rings** (not for VKDIF)
Code **02** = with **Viton® O-Rings**

With pneumatic actuator

Selection of actuator for pmax=10 bar working pressure and 6 bar air supply



Double acting actuator

	d	DN	H	N	O
VKD** 075 03 + IA100D	75	65	224	154	91,5
VKD** 090 03 + IA200D	90	80	254	204	105
VKD** 110 03 + IA250D	110	100	285	241	118.5

Single acting actuator

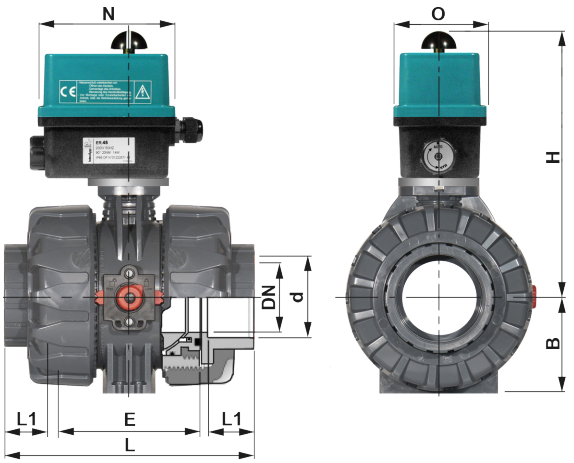
	d	DN	H	N	O
VKD** 075 03 + IA200S12	75	65	241	204	105
VKD** 090 03 + IA250S12	90	80	267	241	118,5
VKD** 110 03 + IA300S12	110	100	297	259	130,5

Code **03** = with **EPDM O-rings** (not for VKDIF)
Code **02** = with **Viton® O-Rings**

Other dimensions see table VKD hand operated.

With electric actuator

230V50Hz, 1 phase, IP65
Selection of actuator for pmax=10 bar working pressure



	d	DN	H	N	O
VKD** 075 03 + ER60	75	65	294	151	127
VKD** 090 03 + ER60	90	80	307	151	127
VKD** 110 03 + ER100	110	100	325	151	127

Code **03** = with **EPDM O-rings** (not for VKDIF)
Code **02** = with **Viton® O-Rings**

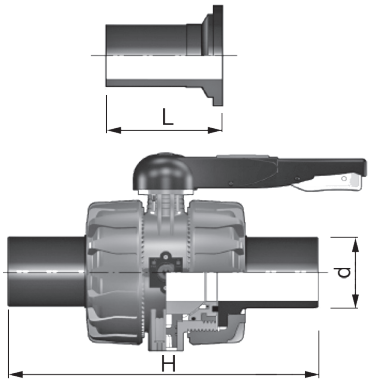
Other dimensions see table VKD hand operated.

Other tensions on request (115V AC, 12/24V AC/DC)

Other end connectors

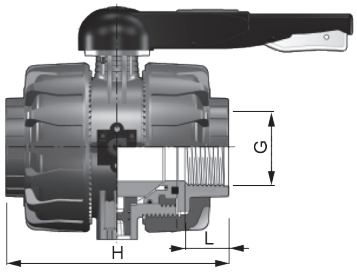
End connectors with long spigot for electrofusion or butt weld

in PE100 (SDR11, PN16) or PP (SDR11, PN10).



PE100	PP	d	DN	L	H
CVDE 020	**CVDM 020**	20	15	55	175
CVDE 025	**CVDM 025**	25	20	70	210
CVDE 032	**CVDM 032**	32	25	74	226
CVDE 040	**CVDM 040**	40	32	78	243
CVDE 050	**CVDM 050**	50	40	84	261
CVDE 063	**CVDM 063**	63	50	91	293
CVDE 075	**CVDM 075**	75	65	111	356
CVDE 090	**CVDM 090**	90	80	118	390
CVDE 110	**CVDM 110**	110	100	132	431

Threaded female ends in PVC-U

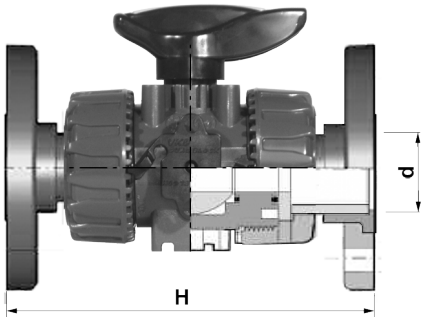


for VKDIV (PVC-U)

	d	DN	G	L	H
POFV 038	16	10	⅜"	11,4	103
POFV 012	20	15	½"	15,0	110
POFV 034	25	20	¾"	16,3	116
POFV 100	32	25	1"	19,1	134
POFV 114	40	32	1¼"	21,4	153
POFV 112	50	40	1½"	21,4	156
POFV 200	63	50	2"	25,7	186
POFV 212	75	65	2½"	30,2	235
POFV 300	90	80	3"	33,3	270
POFV 400	110	100	4"	39,3	308

Flanged ends PN10/16

SETFL... = 1x Flange with connection parts



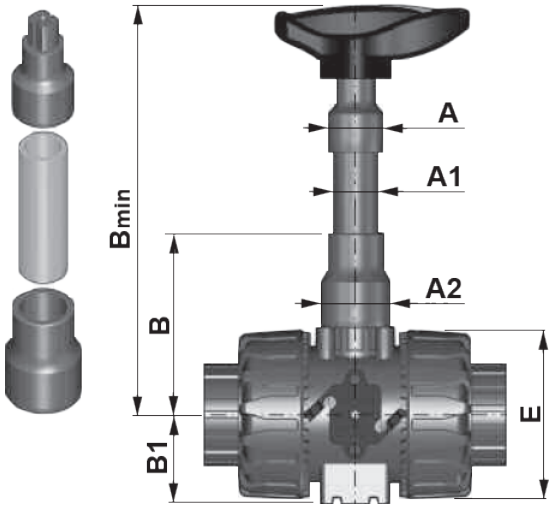
PVC-U	PP	PVDF	d	DN	H
SETFLOV 020	**SETFLOM 020**	**SETFLOF 020**	20	15	130
SETFLOV 025	**SETFLOM 025**	**SETFLOF 025**	25	20	150
SETFLOV 032	**SETFLOM 032**	**SETFLOF 032**	32	25	160
SETFLOV 040	**SETFLOM 040**	**SETFLOF 040**	40	32	180
SETFLOV 050	**SETFLOM 050**	**SETFLOF 050**	50	40	200
SETFLOV 063	**SETFLOM 063**	**SETFLOF 063**	63	50	230
SETFLOV 075	**SETFLOM 075**	**SETFLOF 075**	75	65	290
SETFLOV 090	**SETFLOM 090**	**SETFLOF 090**	90	80	310
SETFLOV 110	**SETFLOM 110**	**SETFLOF 110**	110	100	350

Accessories

Handle block kit with padlock:
for VKD d16-63 (DN10-50)

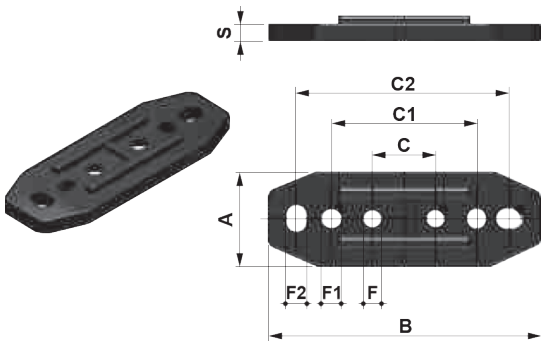
	d	DN
SHKD 016020	16-20	10-15
SHKD 025032	25-32	20-25
SHKD 040050	40-50	32-40
SHKD 063	63	50

Stem extension:
for VKD d16-63 (DN10-50)



	d	DN	A	A1	A2	E	B	B1	Bmin
PSKD 016020	16-20	10-15	32	25	32	54	70	29	139,5
PSKD 025	25	20	32	25	40	65	89	34,5	164,5
PSKD 032	32	25	32	25	40	73	93,5	39	169
PSKD 040	40	32	40	32	50	86	110	46	200
PSKD 050	50	40	40	32	50	98	116	52	206
PSKD 063	63	50	40	32	59	122	122	62	225

Mounting plate:
for VKD d16-63 (DN10-50)



	d	DN	A	B	C	C1	C2	F	F1	F2	S
PMKD 016032	16-32	10-25	30	86	20	46	67,5	5,3	5,5	6,5	5
PMKD 040063	40-63	32-50	40	122	30	72	102	6,3	6,5	6,5	6

Installation

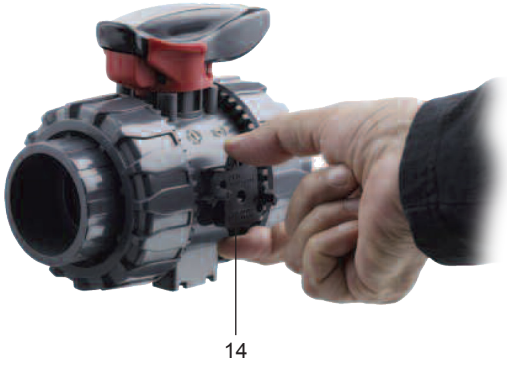
Connection to the system:

1) Unscrew the union nuts (13) and slide them onto the pipe.
2) Solvent weld or screw the valve end connectors (12) onto the pipe ends.
3) Position the valve between the two end connectors and tighten the union nuts.

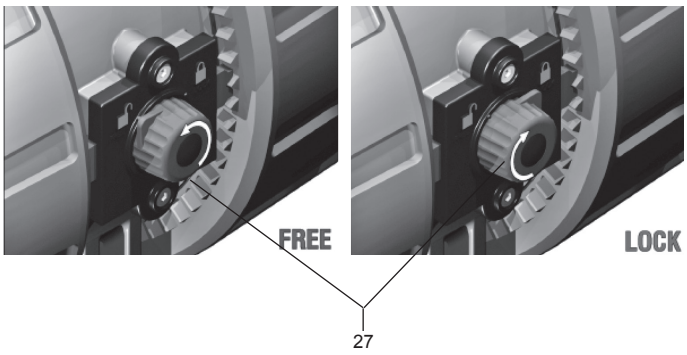
Blocking the union nuts:

The locking device ensures the union nuts are held in position even under severe service conditions: i.e. vibration or thermal expansion.

VKD d16-63 (DN10-50)
Install the lock nut device
DUAL BLOCK® (14) on the valve body



VKD d75-110 (DN65-100)
Block the union nuts
turning the button (27) clock-wise.



Notes