PRAHER PLASTICS

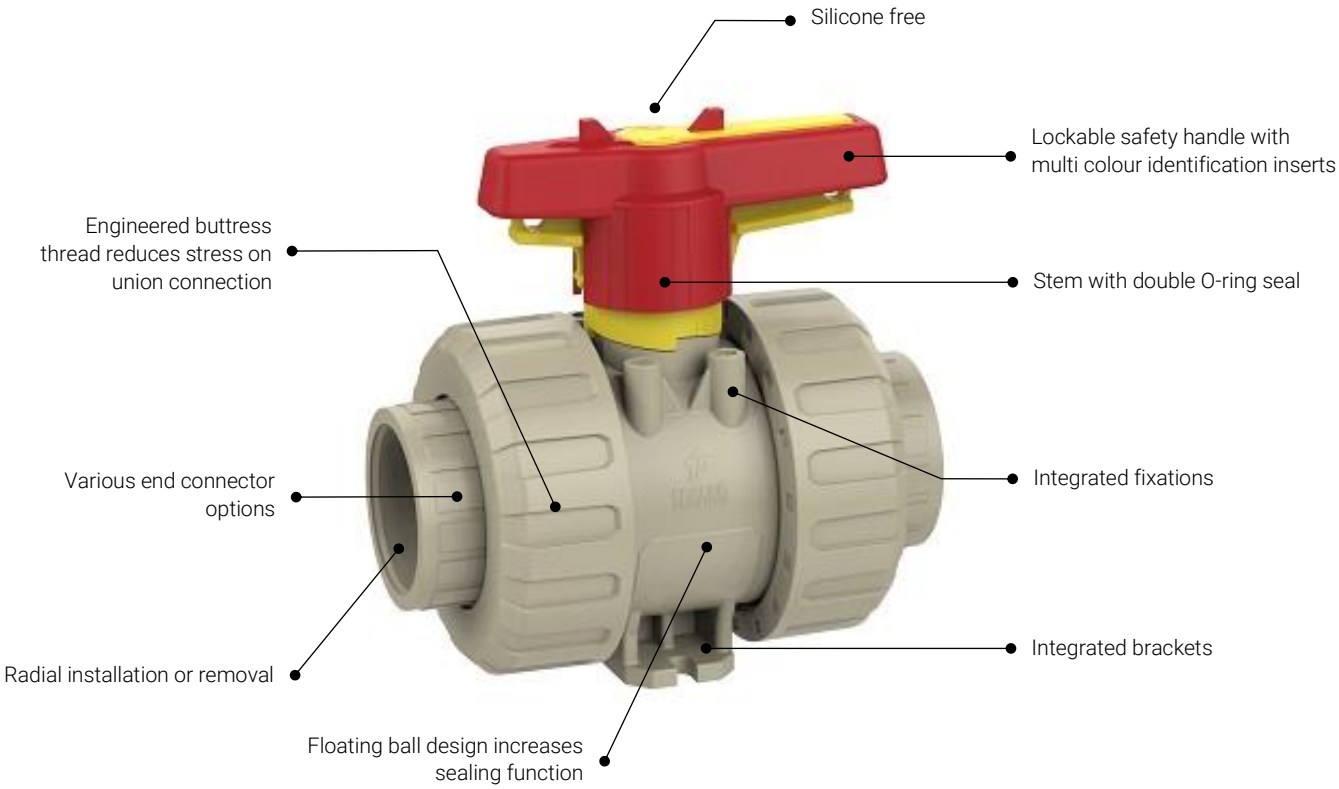


Ball Valve M1

PP-H

DATASHEET

2-way Ball Valve M1

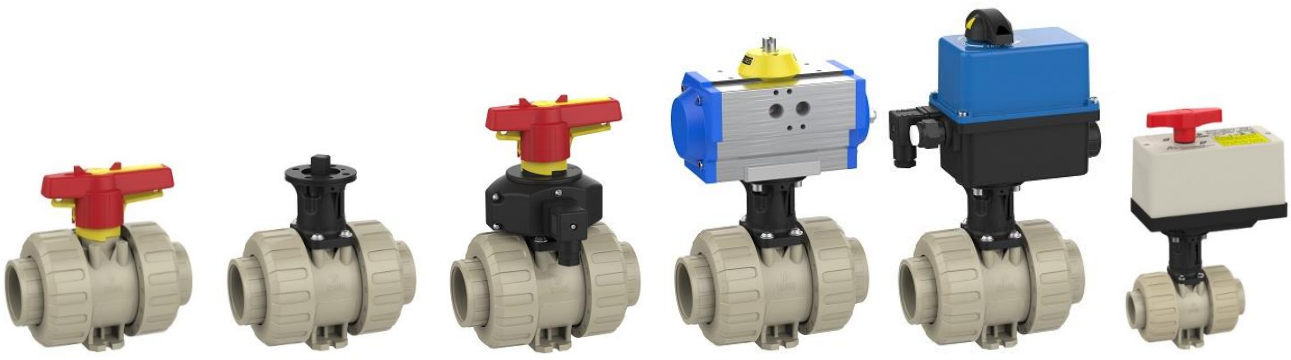




Overview

General		
Material	Body material	PP-H
	Seal material	EPDM / FPM / FFPM
	Ball seat	PTFE
Dimensions	DN10 – DN80 d16 – d110 3/8“ – 4“	
Connector types	Fusion socket	Metric / ASTM
	Fusion spigot	Metric
	Fusion spigot long	Metric
	Threaded socket	BSP / NPT
	PE fusion socket	Metric
	PE fusion spigot	Metric
	PE fusion spigot lang	Metric
	Backing flange	DIN / ANSI
Operating pressure	DN10 – DN80 d110	PN10

Range summary



Hand operated | Adapter Set | Position Feedback | Pneumatic | Electric

Ⓓ European Union CD002415166-0001 to -0004

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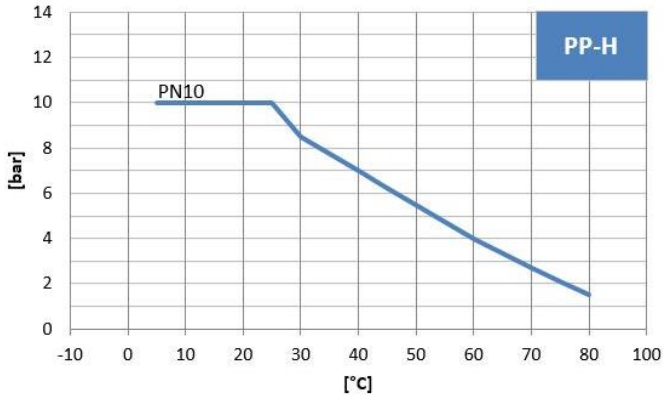
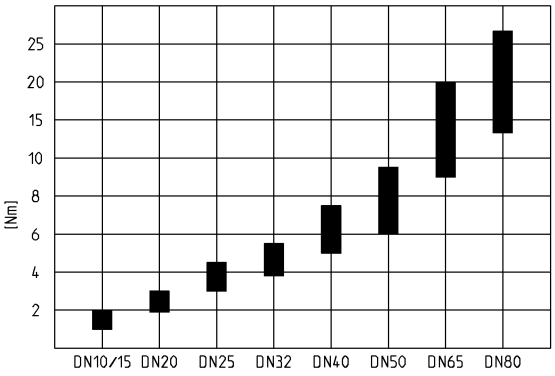
Technical data

Pressure – temperature - diagram

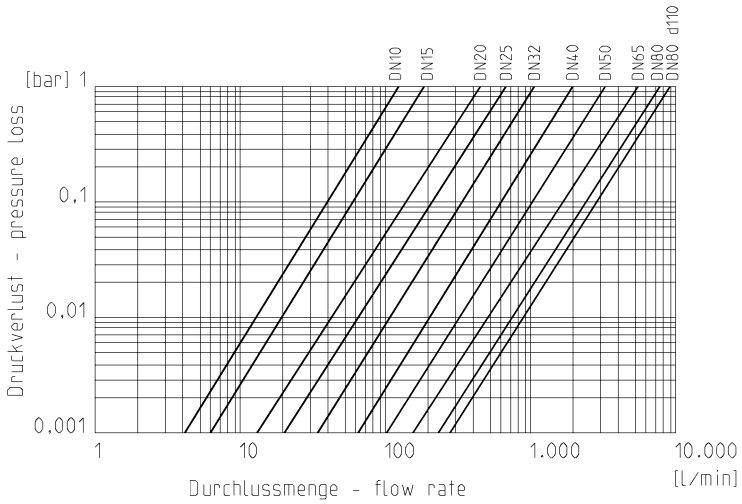


Torque at the shaft

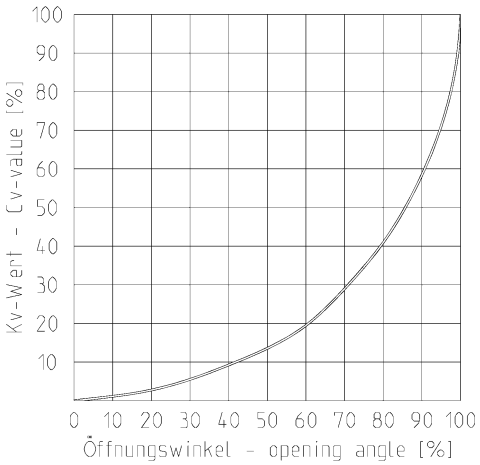


The values of the pressure-temperature-diagram are based on a service life of 25 years at static pressure load and apply to water-like media.

Flow rate – pressure loss



Flow characteristics

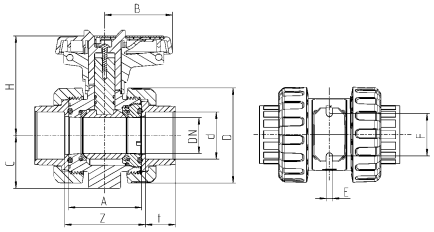


Kv-value-table

pressure loss	DN10 d16	DN15 d20	DN20 d25	DN25 d32	DN32 d40	DN40 d50	DN50 d63	DN65 d75	DN80 d90	DN80 d110
0,001 bar	4,1	6,0	13,9	20,6	34,2	62,6	102,5	164,4	237,1	179,8
1,0 bar	130	190	440	650	1080	1980	3240	5200	7500	8850

Specification in l/min

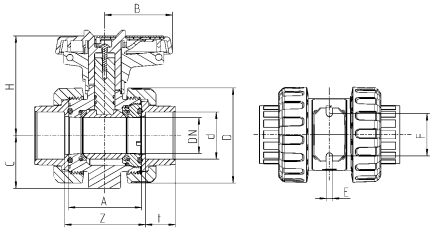
Dimensions hand operated



Connector type

PP-H fusion socket metric (dimensions in mm)

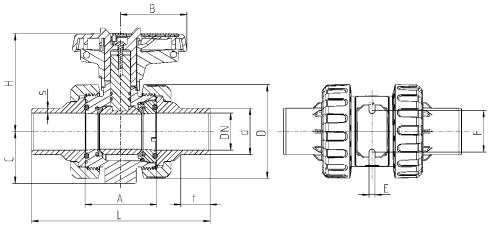
DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
inch	3/8″	1/2″	3/4″	1″	1 1/4″	1 1/2″	2″	2 1/2″	3″	4″
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	39,5	51	51	63,5	72	84	110	132	132
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	71,5	71,5	78	80	98,5	106,5	113,5	143	161	161
t	14,5	16	17,5	19,5	22	25,5	29	34,5	38,5	42
Z	69,5	66,5	78	84	97	114	136,5	162	206,5	207,5
PN	10	10	10	10	10	10	10	10	10	10



Connector type

PP-H fusion socket ASTM (dimensions in mm)

DN	15	20	25	32	40	50
d	20	25	32	40	50	63
inch	1/2″	3/4″	1″	1 1/4″	1 1/2″	2″
A	61,5	69	73	83	94	109
B	39,5	51	51	63,5	72	84
C	33	40	43,5	51	56,5	64,5
D	58	68,5	75,5	92	108	127,5
E	5,4	5,4	6,4	6,4	6,4	6,4
F	34	36	38	40	45	50
H	71,5	78	80	98,5	106,5	113,5
t	16	19	21	23	31	38
Z	66,5	78	84	97	114	136,5
PN	10	10	10	10	10	10

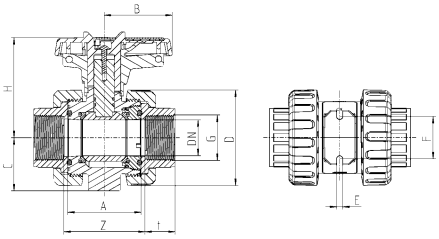


Connector type

PP-H fusion spigot metric (dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	39,5	51	51	63,5	72	84	110	132	132
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	71,5	71,5	78	80	98,5	106,5	113,5	143	161	161
L	113,5	124,5	145,5	156	172,5	193	223	275	292	316,5
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8	6,8	8,2	10
t	13	13,5	15,5	18,5	20,5	23,5	28,5	31	36	40
PN	10	10	10	10	10	10	10	10	10	10

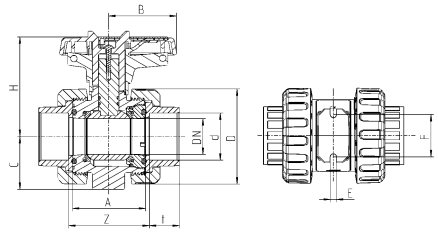
Dimensions hand operated



Connector type

PP-H threaded socket BSP / NPT (dimensions in mm)

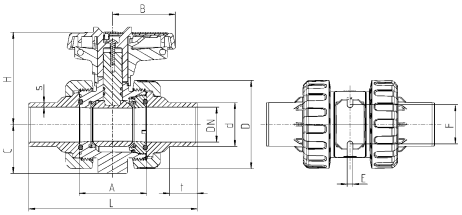
DN	10	15	20	25	32	40	50
inch	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	61,5	61,5	69	73	83	94	109
B	39,5	39,5	51	51	63,5	72	84
C	33	33	40	43,5	51	56,5	64,5
D	58	58	68,5	75,5	92	108	127,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4
F	34	34	36	38	40	45	50
H	71,5	71,5	78	80	98,5	106,5	113,5
t	16	16	19,5	22,5	26	30,5	37
Z	66,5	66,5	74	80	89	103	119
PN	10	10	10	10	10	10	10



Connector type

PE fusion socket metric (dimensions in mm)

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
A	61,5	61,5	69	73	83	94	109
B	39,5	39,5	51	51	63,5	72	84
C	33	33	40	43,5	51	56,5	64,5
D	58	58	68,5	75,5	92	108	127,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4
F	34	34	36	38	40	45	50
H	71,5	71,5	78	80	98,5	106,5	113,5
t	14,5	16	17,5	19,5	22	25,5	29
Z	68,5	66,5	79	83	96	112	137
PN	10	10	10	10	10	10	10

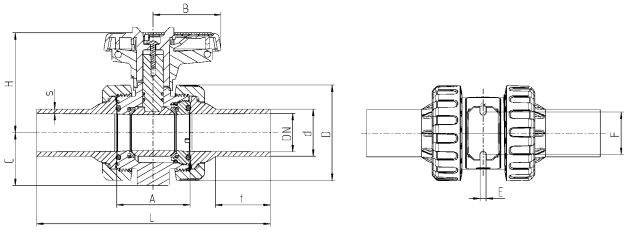


Connector type

PE fusion spigot metric (dimensions mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	39,5	51	51	63,5	72	84	110	132	132
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	71,5	71,5	78	80	98,5	106,5	113,5	143	161	161
L	114,5	124	144	154	173	198	223	247	286,5	316
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8	6,8	8,2	10
t	13	13,5	15,5	18,5	22,5	26	30	32	30	35,5
PN	10	10	10	10	10	10	10	10	10	10

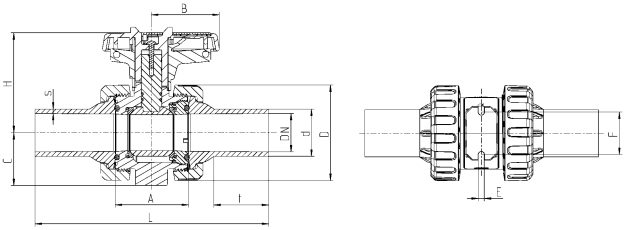
Dimensions hand operated



Connector type

PP-H fusion spigot long metric (dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
A	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	51	51	63,5	72	84	110	132	132
C	33	40	43,5	51	56,5	64,5	85	100	100
D	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	71,5	78	80	98,5	106,5	113,5	143	161	161
L	192	213	223	241,5	262	292	373	441	474
s	3	3	3	3,7	4,6	5,8	6,8	8,2	10
t	47,4	49,4	52	54,9	58	63	87,2	78,5	113,7
PN	10	10	10	10	10	10	10	10	10



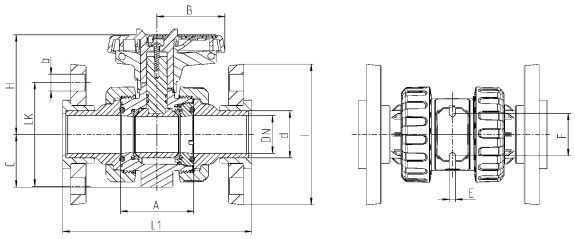
Connector types

PE fusion spigot long metric

(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
A	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	51	51	63,5	72	84	110	132	132
C	33	40	43,5	51	56,5	64,5	85	100	100
D	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	71,5	78	80	98,5	106,5	113,5	143	161	161
L	188	207,5	218	242	264	292	379	441	468
s	3	3	3	3,7	4,6	5,8	6,8	8,2	10
t	45,5	46,5	50	54,5	58	63	85	81	114
PN	10	10	10	10	10	10	10	10	10

Dimensions hand operated

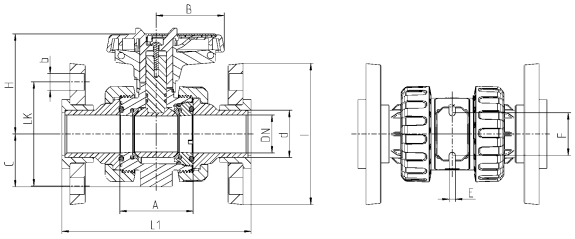


Connector type

PP-GF backing flange DIN with steel insert

(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
A	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	51	51	63,5	72	84	110	132	132
b	14	14	14	18	18	18	18	18	18
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	71,5	78	80	98,5	106,5	113,5	143	161	161
I	95	108	115	140	150	165	186	202	220
L1	203	225	236	253	274	308	420	380	437
LK	65	75	85	100	110	125	145	160	180
PN	10	10	10	10	10	10	10	10	10



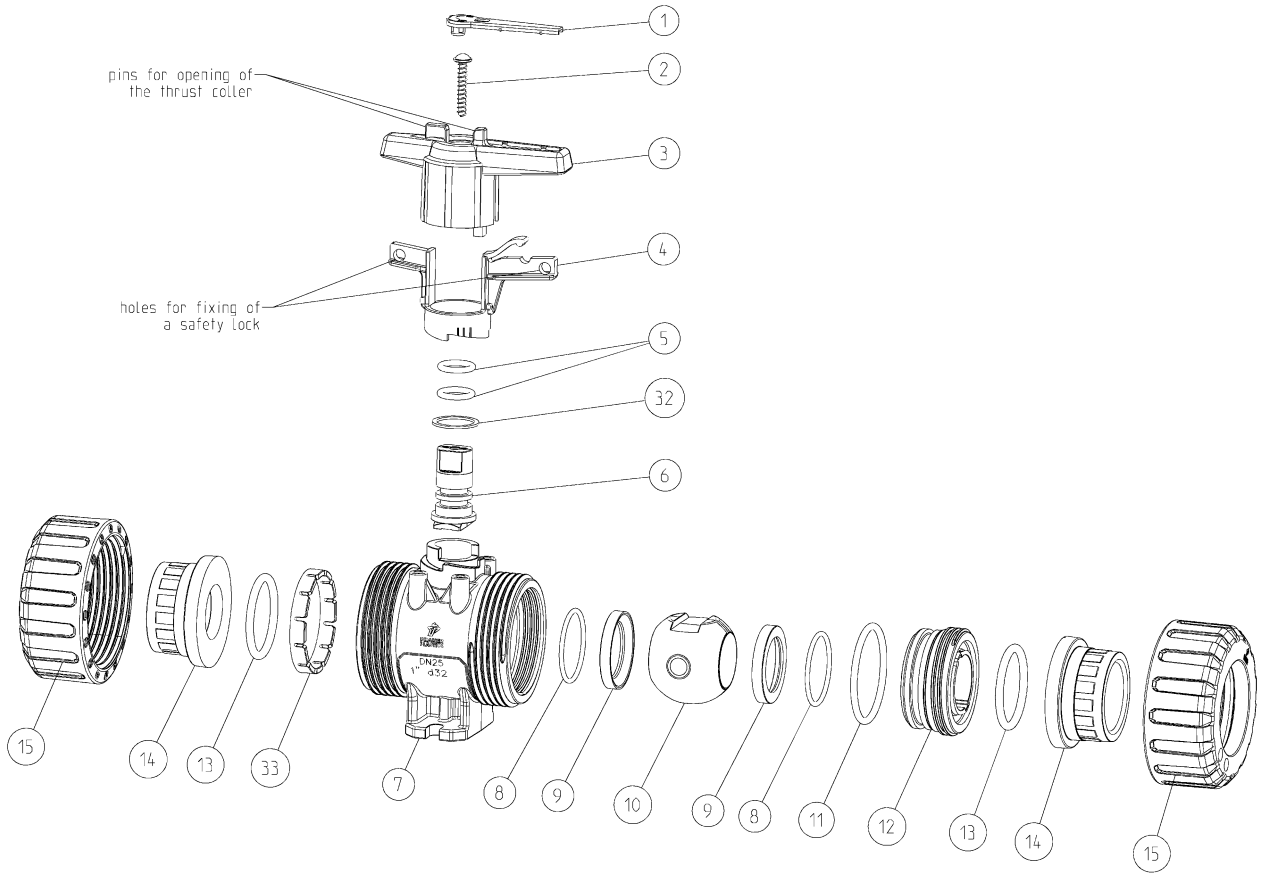
Connector type

PP-GF backing flange ANSI with steel insert

(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	51	51	63,5	72	84	110	132	132
b	16	16	16	16	16	20	20	20	20
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	71,5	78	80	98,5	106,5	113,5	143	161	161
I	95	102	114	130	133	162	184	194	229
L1	203	225	236	253	274	308	420	380	437
LK	60,4	69,8	79,3	89	98,5	120,6	139,7	152,4	190,5
PN	10	10	10	10	10	10	10	10	10

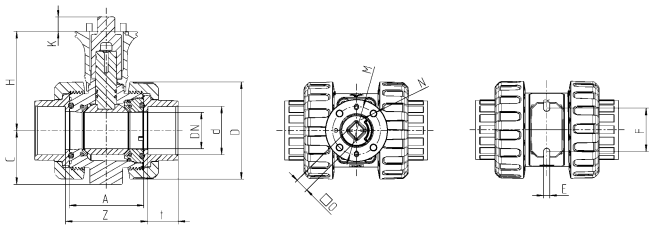
Exploded drawing hand operated



No.	Description	Material
01.	Labeling plate	PBT
02.	Screw	A2
03.	Handle	PP-GF
04.	Spring loaded locking sleeve	PBT
05.	O-ring	EPDM / FPM / FFPM*
06.	Shaft	PP-H
07.	Body	PP-H
08.	O-ring	EPDM / FPM / FFPM*
09.	Ball seat	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM / FFPM*
12.	Retaining ring	PP-H
13.	O-ring	EPDM / FPM / FFPM*
14.	Connector types	
	Fusion socket /-spigot	PP-H
	Threaded socket	PP-H
	Fusion socket /-spigot	PE100
	Flange	PP-GF with steel insert
15.	Union nut	PP-GF
32.	Washer	PTFE
33.	Retaining ring	PP-GF

*FFPM only available in the solvent socket metric assembly

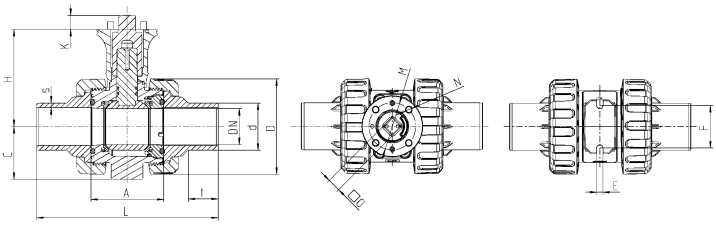
Dimensions adapter set



Connector type

PP-H fusion socket metric (dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
ISO flange	F04	F04	F04	F04	F05	F05	F05	F07	F07	F07
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	81	81	86,5	89,5	97	104,5	111,5	138,5	168	168
K	11	11	11	11	15	15	15	18	18	18
M	42	42	42	42	50	50	50	70	70	70
N	5,5	5,5	5,5	5,5	6,5	6,5	6,5	8,5	8,5	8,5
O	11	11	11	11	14	14	14	17	17	17
t	14,5	16	17,5	19,5	22	25,5	29	34,5	38,5	42
Z	69,5	66,5	78	84	97	114	136,5	162	206,5	207,5
PN	10	10	10	10	10	10	10	10	10	10



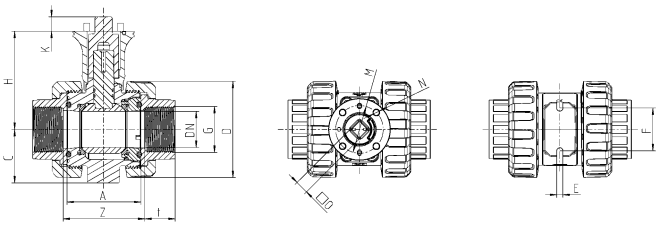
Connector type

PP-H fusion spigot metric

(dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
ISO flange	F04	F04	F04	F04	F05	F05	F05	F07	F07	F07
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	81	81	86,5	89,5	97	104,5	111,5	138,5	168	168
K	11	11	11	11	15	15	15	18	18	18
L	113,5	124,5	145,5	156	172,5	193	223	275	292	316,5
M	42	42	42	42	50	50	50	70	70	70
N	5,5	5,5	5,5	5,5	6,5	6,5	6,5	8,5	8,5	8,5
O	11	11	11	11	14	14	14	17	17	17
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8	6,8	8,2	10
t	13	13,5	15,5	18,5	20,5	23,5	28,5	31	36	40
PN	10	10	10	10	10	10	10	10	10	10

Dimensions adapter set

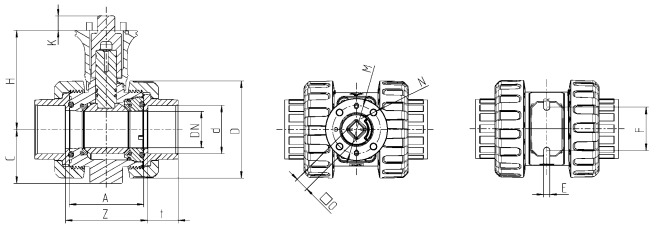


Connector type

PP-H threaded socket BSP / NPT

(dimensions in mm)

DN	10	15	20	25	32	40	50
inch	3/8″	1/2″	3/4″	1″	1 1/4″	1 1/2″	2″
ISO flange	F04	F04	F04	F04	F05	F05	F05
A	61,5	61,5	69	73	83	94	109
C	33	33	40	43,5	51	56,5	64,5
D	58	58	68,5	75,5	92	108	127,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4
F	34	34	36	38	40	45	50
H	81	81	86,5	89,5	97	104,5	111,5
K	11	11	11	11	15	15	15
M	42	42	42	42	50	50	50
N	5,5	5,5	5,5	5,5	6,5	6,5	6,5
O	11	11	11	11	14	14	14
t	16	16	19,5	22,5	26	30,5	37
Z	66,5	66,5	74	80	89	103	119
PN	10	10	10	10	10	10	10



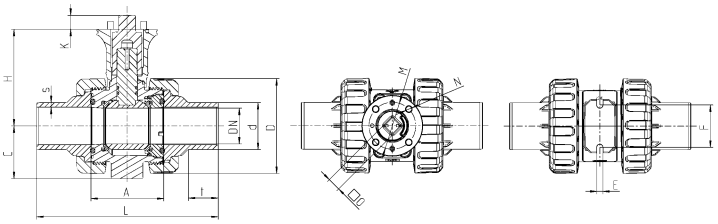
Connector type

PE fusion socket metric

(dimensions in mm)

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
ISO flange	F04	F04	F04	F04	F05	F05	F05
A	61,5	61,5	69	73	83	94	109
C	33	33	40	43,5	51	56,5	64,5
D	58	58	68,5	75,5	92	108	127,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4
F	34	34	36	38	40	45	50
H	81	81	86,5	89,5	97	104,5	111,5
K	11	11	11	11	15	15	15
M	42	42	42	42	50	50	50
N	5,5	5,5	5,5	5,5	6,5	6,5	6,5
O	11	11	11	11	14	14	14
t	14,5	16	17,5	19,5	22	25,5	29
Z	68,5	66,5	79	83	96	112	137
PN	10	10	10	10	10	10	10

Dimensions adapter set

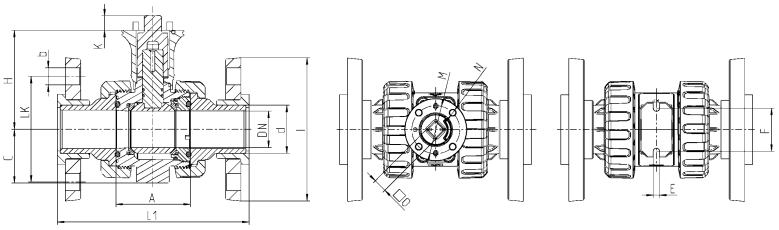


Connector type

PE fusion spigot metric

(dimensions in mm)

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
ISO flange	F04	F04	F04	F04	F05	F05	F05
A	61,5	61,5	69	73	83	94	109
C	33	33	40	43,5	51	56,5	64,5
D	58	58	68,5	75,5	92	108	127,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4
F	34	34	36	38	40	45	50
H	81	81	86,5	89,5	97	104,5	111,5
K	11	11	11	11	15	15	15
L	114,5	124	144	154	173	198	223
M	42	42	42	42	50	50	50
N	5,5	5,5	5,5	5,5	6,5	6,5	6,5
O	11	11	11	11	14	14	14
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8
t	13	13,5	15,5	18,5	22,5	26	30
PN	10	10	10	10	10	10	10



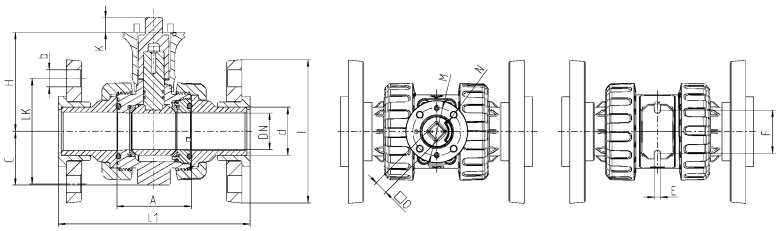
Connector type

PP-GF backing flange DIN with steel insert

(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
ISO flange	F04	F04	F04	F05	F05	F05	F07	F07	F07
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	14	14	14	18	18	18	18	18	18
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	104,5	111,5	138,5	168	168
I	95	108	115	140	150	165	186	202	220
K	11	11	11	11	15	15	15	18	18
L1	203	225	236	253	274	308	420	380	437
LK	65	75	85	100	110	125	145	160	180
M	42	42	42	50	50	50	70	70	70
N	5,5	5,5	5,5	6,5	6,5	6,5	8,5	8,5	8,5
O	11	11	11	14	14	14	17	17	17
PN	10	10	10	10	10	10	10	10	10

Dimensions adapter set



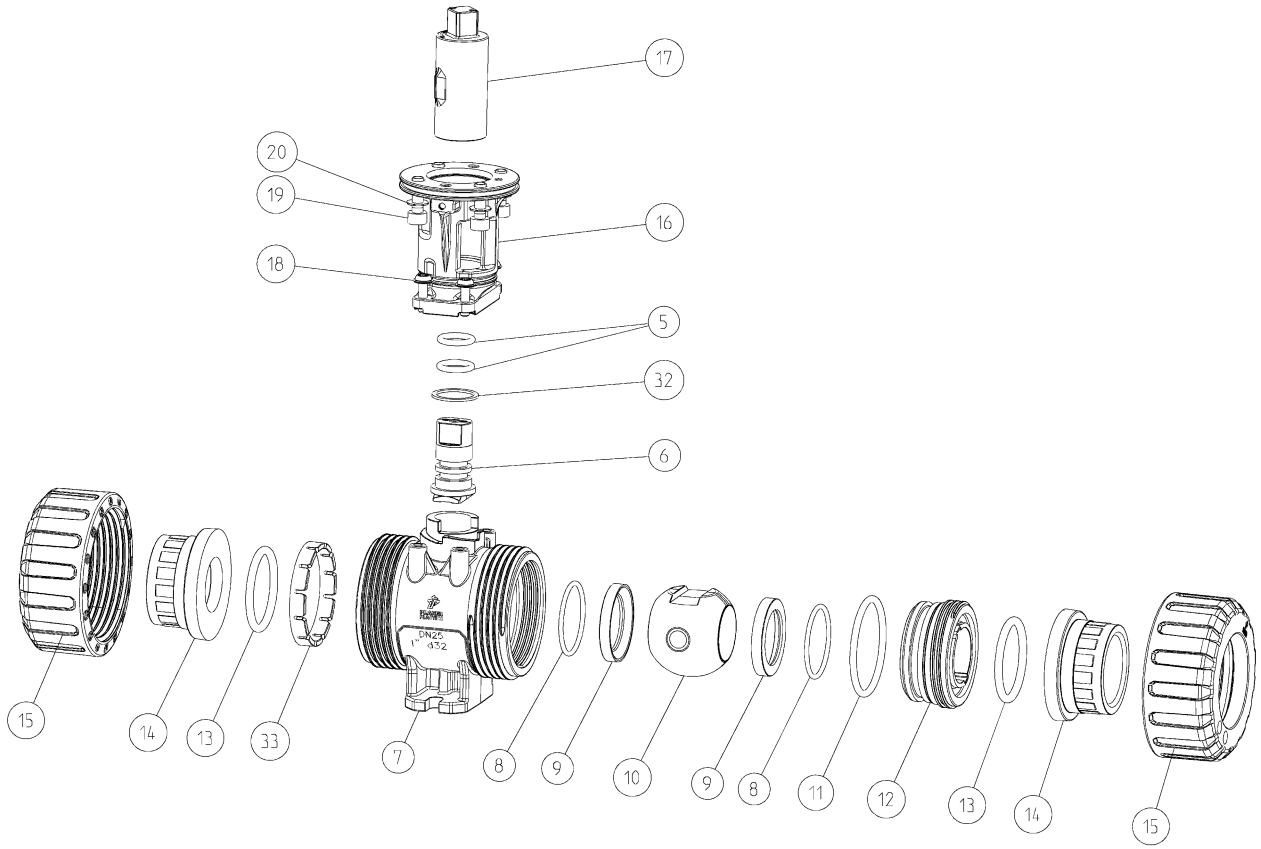
Connector type

PP-GF backing flange ANSI with steel insert

(dimensions in mm)

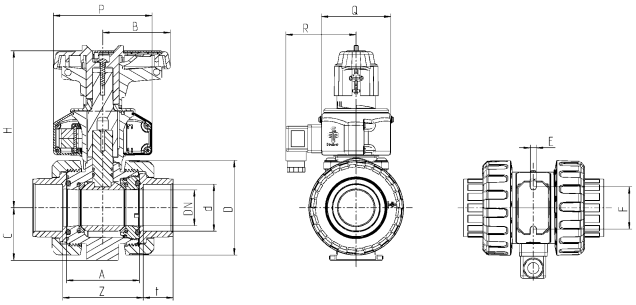
DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
inch	1/2“	3/4“	1“	1 1/4“	1 1/2“	2“	2 1/2“	3“	4“
ISO flange	F04	F04	F04	F05	F05	F05	F07	F07	F07
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	16	16	16	16	16	20	20	20	20
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	104,5	111,5	138,5	168	168
I	95	102	114	130	133	162	184	194	229
K	11	11	11	11	15	15	15	18	18
L1	203	225	236	253	274	308	420	380	437
LK	60,4	69,8	79,3	89	98,5	120,6	139,7	152,4	190,5
M	42	42	42	50	50	50	70	70	70
N	5,5	5,5	5,5	6,5	6,5	6,5	8,5	8,5	8,5
O	11	11	11	14	14	14	17	17	17
PN	10	10	10	10	10	10	10	10	10

Exploded drawing adapter set



Nr.	Description	Material
05.	O-ring	EPDM / FPM
06.	Shaft	PP-H
07.	Body	PP-H
08.	O-ring	EPDM / FPM
09.	Ball seat	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM
12.	Retaining ring	PP-H
13.	O-ring	EPDM / FPM
14.	Connector types	
	Fusion socket /-spigot	PP-H
	Threaded socket	PP-H
	Fusion socket /-spigot	PE100
	Flange	PP-GF with steel insert
15.	Union nut	PP-GF
16.	Bracket	PA-GF
17.	Coupling shaft	PA-GF
18.	Screw	A2
19.	Screw	A4
20.	Toothed washer	A2 / A4 from DN65
32.	Washer	PTFE
33.	Retaining ring	PP-GF

Dimension position feedback

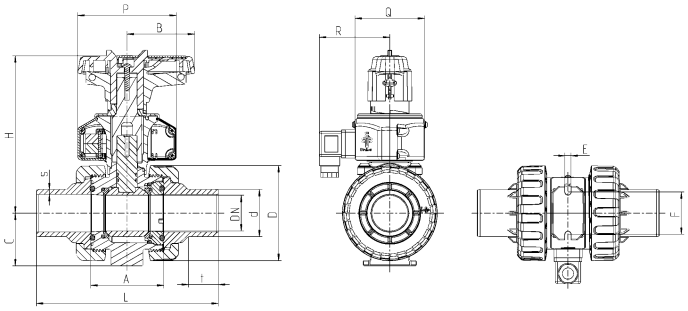


Connector type

PP-H fusion socket metric

(dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	39,5	51	51	63,5	72	84	110	132	132
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	127	127	138	141	159,5	168,5	177,5	215	246,5	246,5
P	98	98	102	102	105	105	105	116	116	116
Q	64	64	64	64	74	74	74	99	99	99
R	70	70	70	70	75	75	75	88	88	88
t	14,5	16	17,5	19,5	22	25,5	29	34,5	38,5	42
Z	69,5	66,5	78	84	97	114	136,5	162	206,5	207,5
PN	10	10	10	10	10	10	10	10	10	10



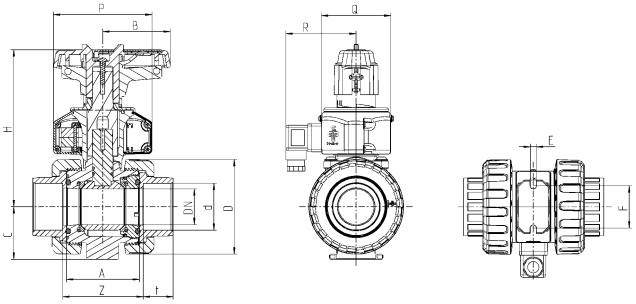
Connector type

PP-H fusion spigot metric

(dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	39,5	51	51	63,5	72	84	110	132	132
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	127	127	138	141	159,5	168,5	177,5	215	246,5	246,5
L	113,5	124,5	145,5	156	172,5	193	223	275	292	316,5
P	98	98	102	102	105	105	105	116	116	116
Q	64	64	64	64	74	74	74	99	99	99
R	70	70	70	70	75	75	75	88	88	88
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8	6,8	8,2	10
t	13	13,5	15,5	18,5	20,5	23,5	28,5	31	36	40
PN	10	10	10	10	10	10	10	10	10	10

Dimension position feedback

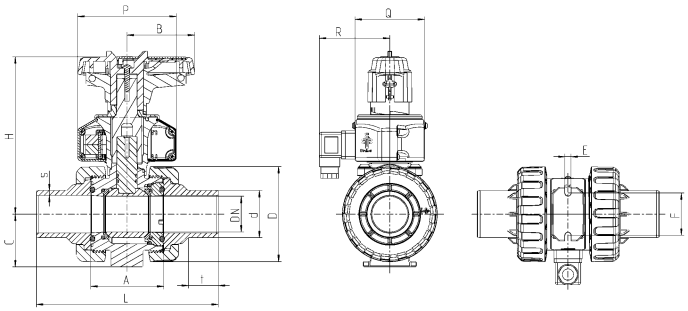


Connector type

PE fusion socket metric

(dimensions in mm)

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
A	61,5	61,5	69	73	83	94	61,5
B	39,5	39,5	51	51	63,5	72	84
C	33	33	40	43,5	51	56,5	33
D	58	58	68,5	75,5	92	108	58
E	5,4	5,4	5,4	6,4	6,4	6,4	5,4
F	34	34	36	38	40	45	34
H	127	127	138	141	159,5	168,5	177,5
P	98	98	102	102	105	105	105
Q	64	64	64	64	74	74	74
R	70	70	70	70	75	75	75
t	14,5	16	17,5	19,5	22	25,5	29
Z	68,5	66,5	79	83	96	112	137
PN	10	10	10	10	10	10	10



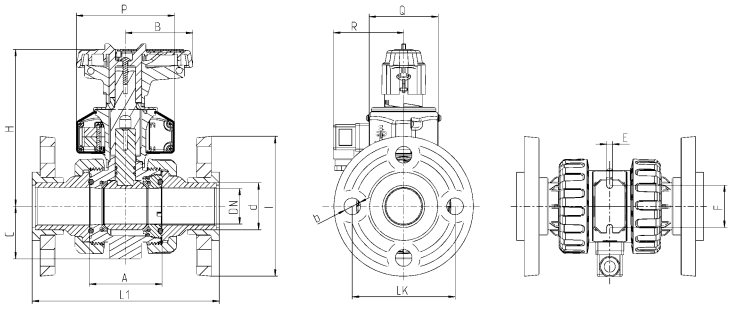
Connector type

PE fusion spigot metric

(dimensions in mm)

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
A	61,5	61,5	69	73	83	94	61,5
B	39,5	39,5	51	51	63,5	72	84
C	33	33	40	43,5	51	56,5	33
D	58	58	68,5	75,5	92	108	58
E	5,4	5,4	5,4	6,4	6,4	6,4	5,4
F	34	34	36	38	40	45	34
H	127	127	138	141	159,5	168,5	177,5
L	114,5	124	144	154	173	198	223
P	98	98	102	102	105	105	105
Q	64	64	64	64	74	74	74
R	70	70	70	70	75	75	75
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8
t	13	13,5	15,5	18,5	22,5	26	30
PN	10	10	10	10	10	10	10

Dimension position feedback

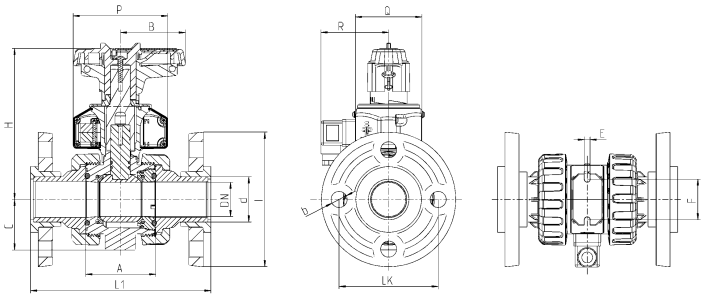


Connector type

PP-GF backing flange DIN with steel insert

(dimensions in mm)

DN	15	20	25	32	40	50
d	20	25	32	40	50	63
A	61,5	69	73	83	94	109
B	39,5	51	51	63,5	72	84
b	14	14	14	18	18	18
C	33	40	43,5	51	56,5	64,5
E	5,4	5,4	6,4	6,4	6,4	6,4
F	34	36	38	40	45	50
H	127	138	141	159,5	168,5	177,5
I	95	108	115	140	150	165
L1	203	225	236	253	274	308
LK	65	75	85	100	110	125
P	98	102	102	105	105	105
Q	64	64	64	74	74	74
R	70	70	70	75	75	75
PN	10	10	10	10	10	10



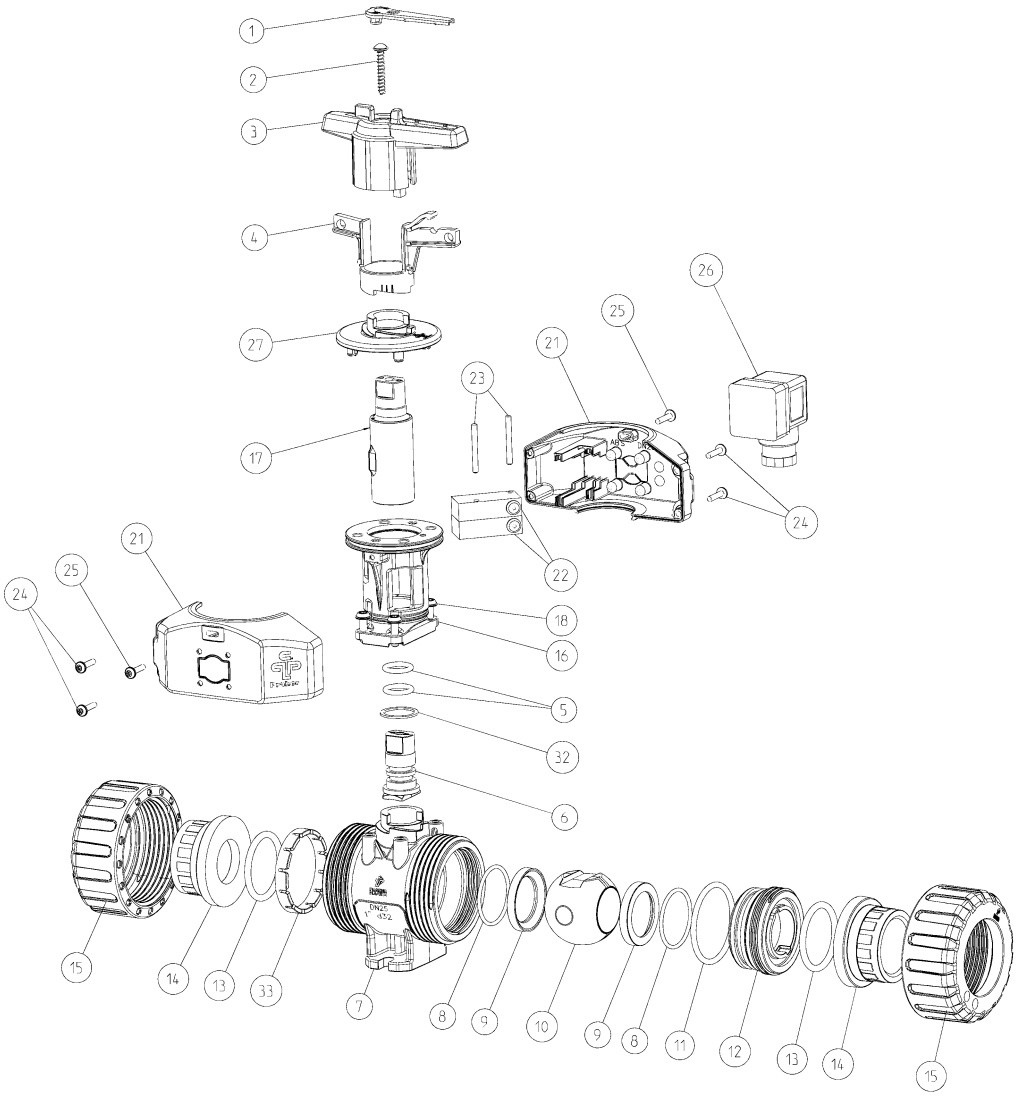
Connector type

PP-GF backing flange ANSI with steel insert

(dimensions in mm)

DN	15	20	25	32	40	50
d	20	25	32	40	50	63
inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	61,5	69	73	83	94	109
B	39,5	51	51	63,5	72	84
b	16	16	16	16	16	20
C	33	40	43,5	51	56,5	64,5
E	5,4	5,4	6,4	6,4	6,4	6,4
F	34	36	38	40	45	50
H	127	138	141	159,5	168,5	177,5
I	95	102	114	130	133	162
L1	203	225	236	253	274	308
LK	60,4	69,8	79,3	89	98,5	120,6
P	98	102	102	105	105	105
Q	64	64	64	74	74	74
R	70	70	70	75	75	75
PN	10	10	10	10	10	10

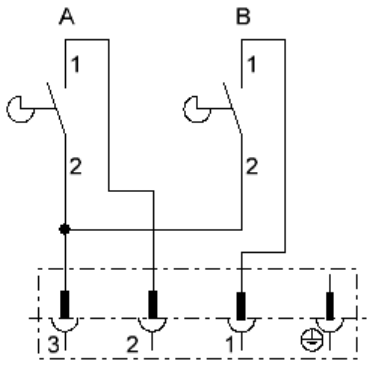
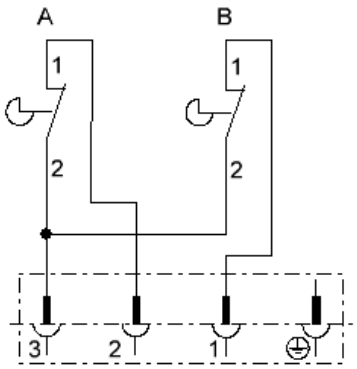
Exploded drawing position feedback



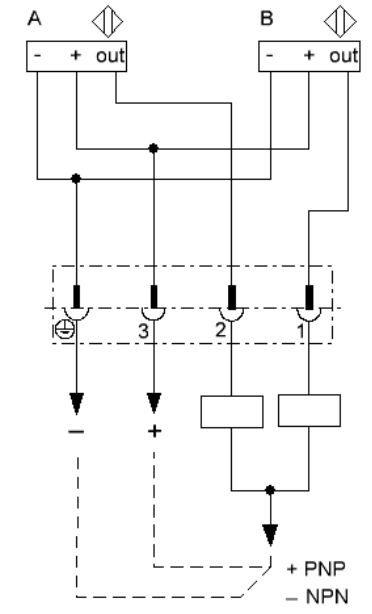
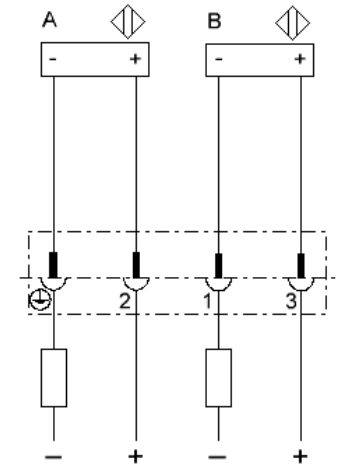
No.	Description	Material
01.	Labeling plate	PBT
02.	Screw	A2
03.	Handle	PP-GF
04.	Spring loaded locking sleeve	PBT
05.	O-ring	EPDM / FPM
06.	Shaft	PP-H
07.	Body	PP-H
08.	O-ring	EPDM / FPM
09.	Ball seat	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM
12.	Retaining ring	PP-H
13.	O-ring	EPDM / FPM
14.	Connector types	
	Fusion socket /-spigot	PP-H
	Fusion socket /-spigot	PE100
	Flange	PP-GF with steel insert

No.	Description	Material
15.	Union nut	PP-H
16.	Bracket	PA-GF
17.	Coupling shaft	PA-GF
18.	Screw	A2
19.	Screw	A2
20.	Toothed washer	A2
21.	Half shells	ABS
22.	Limit switch IP67	-
23.	Pin	A2
24.	Screw	A4
25.	Locking screw	A2 / A4 from DN65
26.	Device plug IP65	-
27.	Cover	ABS
32.	Washer	PTFE
33.	Retaining ring	PP-GF

Technical data position feedback

Limit switch mechanical		
Type	(Ag-Ni) NO/NC*	(Au) NO*/NC*
Voltage max.	15-250V AC (15-30V DC)	5-250V AC (5-30V DC)
Current max.	100mA-5A	1mA-3A
Protection limit switch	IP67	
Protection DIN-plug	IP65	
Ambient temperature	-10°C bis +50°C	
Electric wiring A pressed .. open B pressed.. closed	NO 	NC 

* on request

Limit switch inductive		
Type	NPN*/PNP	NAMUR EMV acc. IEC / EN 60947-5-2:2004; NE 21 DIN EN 60947-5-6
Voltage max.	10-30V DC	8V DC
Current max.	0-100mA	NAMUR intrinsically safe
Protection limit switch	IP67	
Protection DIN-plug	IP65	
Ambient temperature	-10°C bis +50°C	
Electric wiring		

* on request

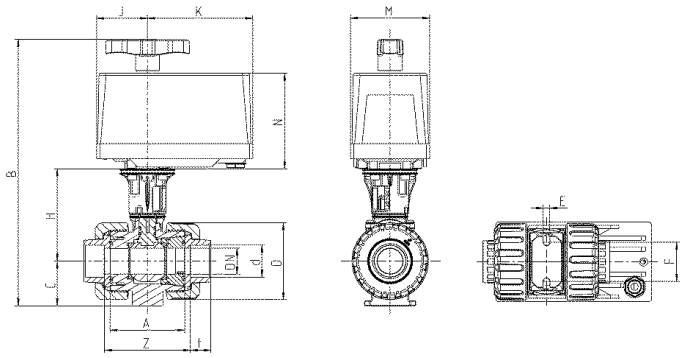
Dimension electric EO 510

Connector type

PP-H fusion socket metric

(dimensions in mm)

DN	10	15	20	25
d	16	20	25	32
A	61,5	61,5	69	73
C	33	33	40	43,5
D	58	58	68,5	75,5
E	5,4	5,4	5,4	6,4
F	34	34	36	38
H	81	81	86,5	89,5
t	14,5	16	17,5	19,5
PN	10	10	10	10
actuator	EO510 ECO/IND			
B	239	239	251,5	257
J	49,5	49,5	49,5	49,5
K	102,5	102,5	102,5	102,5
M	77	77	77	77
N	93	93	93	93

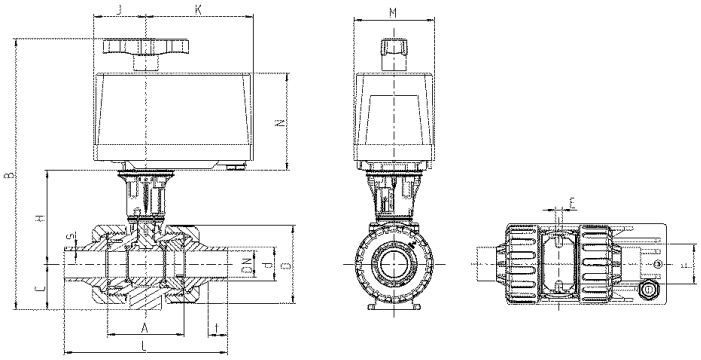


Connector type

PP-H fusion spigot metric

(dimensions in mm)

DN	10	15	20	25
d	16	20	25	32
inch	3/8"	1/2"	3/4"	1"
A	61,5	61,5	69	73
C	33	33	40	43,5
D	58	58	68,5	75,5
E	5,4	5,4	5,4	6,4
F	34	34	36	38
H	81	81	86,5	89,5
L	113,5	124,5	145,5	156
s	1,8	1,9	2,3	2,9
t	13	13,5	15,5	18,5
PN	10	10	10	10
actuator	EO510 ECO/IND			
B	239	239	251,5	257
J	49,5	49,5	49,5	49,5
K	102,5	102,5	102,5	102,5
M	77	77	77	77
N	93	93	93	93



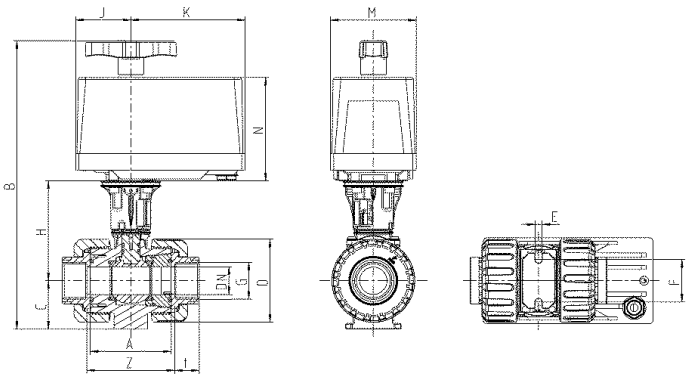
Dimensions electric EO 510

Connector type

PP-H threaded socket BSP / NPT

(dimensions in mm)

DN	10	15	20	25
d	16	20	25	32
inch	3/8"	1/2"	3/4"	1"
A	61,5	61,5	69	73
C	33	33	40	43,5
D	58	58	68,5	75,5
E	5,4	5,4	5,4	6,4
F	34	34	36	38
H	81	81	86,5	89,5
t	16	16	19,5	22,5
Z	66,5	66,5	74	80
PN	10	10	10	10
actuator	EO510 ECO/IND			
B	239	239	251,5	257
J	49,5	49,5	49,5	49,5
K	102,5	102,5	102,5	102,5
M	77	77	77	77
N	93	93	93	93

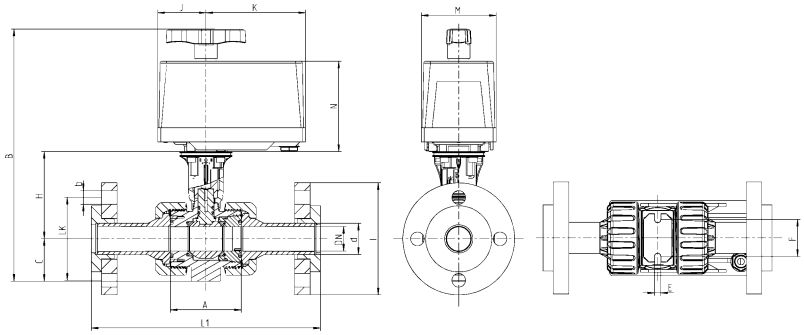


Connector type

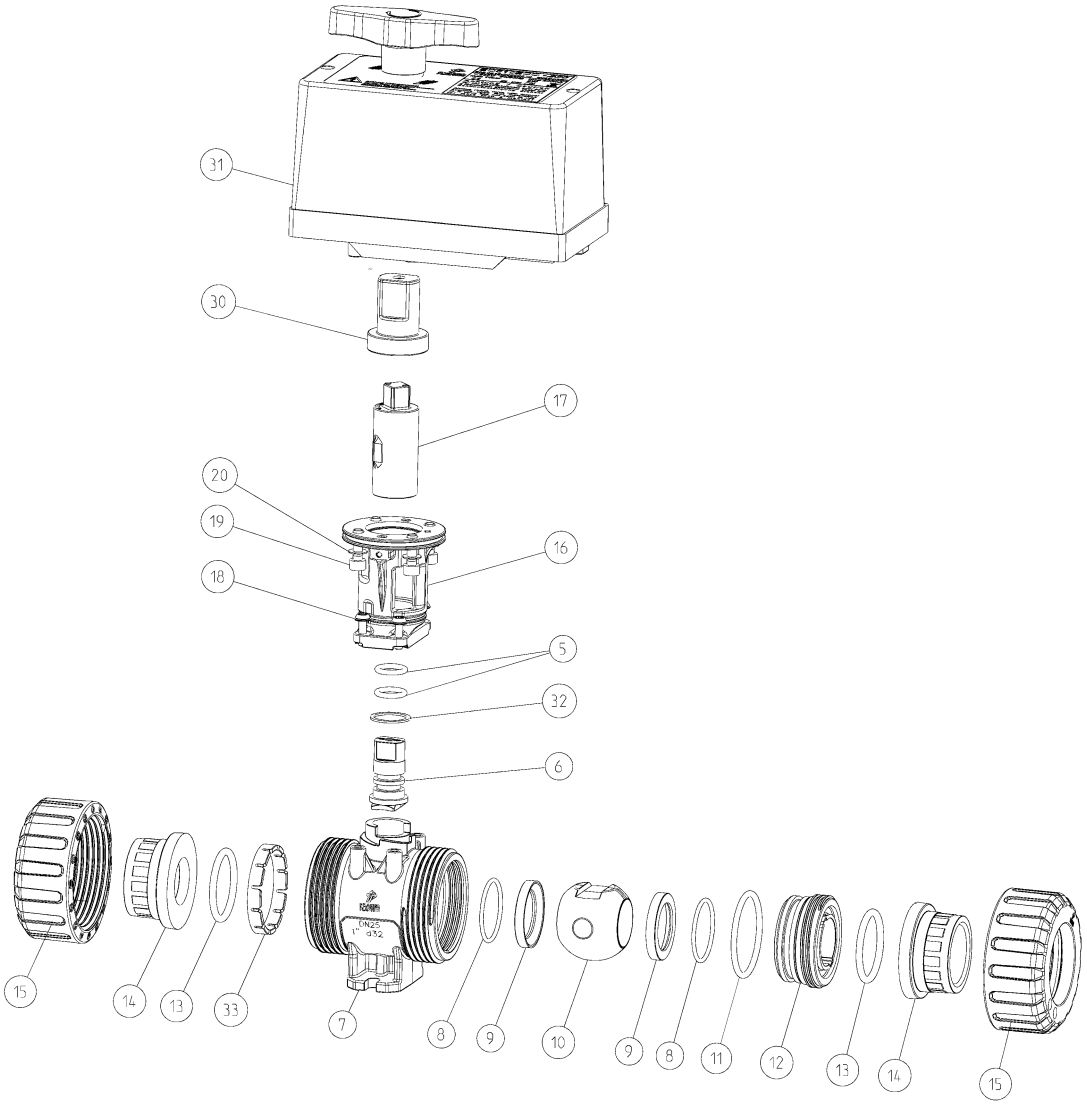
PP-GF backing flange DIN with steel insert

(dimensions in mm)

DN	15	20	25
d	20	25	32
A	61,5	69	73
b	14	14	14
C	33	40	43,5
E	5,4	5,4	6,4
F	34	36	38
H	81	86,5	89,5
I	95	108	115
L1	203	225	236
LK	65	75	85
PN	10	10	10
actuator	EO510 ECO/IND		
B	239	251,5	257
J	49,5	49,5	49,5
K	102,5	102,5	102,5
M	77	77	77
N	93	93	93



Exploded drawing EO 510



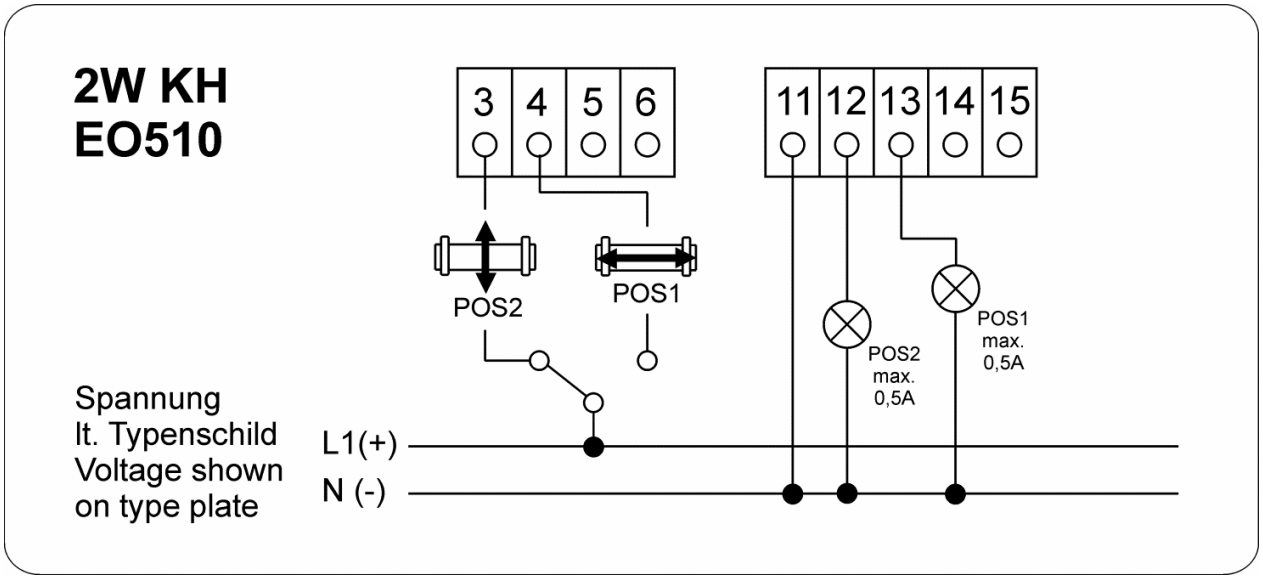
No.	Description	Material
05.	O-ring	EPDM / FPM
06.	Shaft	PP-H
07.	Body	PP-H
08.	O-ring	EPDM / FPM
09.	Ball seat	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM
12.	Retaining ring	PP-H
13.	O-ring	EPDM / FPM
14.	Connector types	
	Fusion socket /-spigot	PP-H
	Threaded socket	PP-H
	Fusion socket /-spigot	PE100
	Flange	PP-GF with steel insert

No.	Description	Material
15.	Union nut	PP-H
16.	Bracket	PA-GF
17.	Coupling shaft	PA-GF
18.	Screw	A2
19.	Screw	A2
20.	Toothed washer	A2
30.	Coupling	PA-GF
31.	Actuator EO 5100	-
32.	Washer	PTFE
33.	Retaining ring	PP-GF

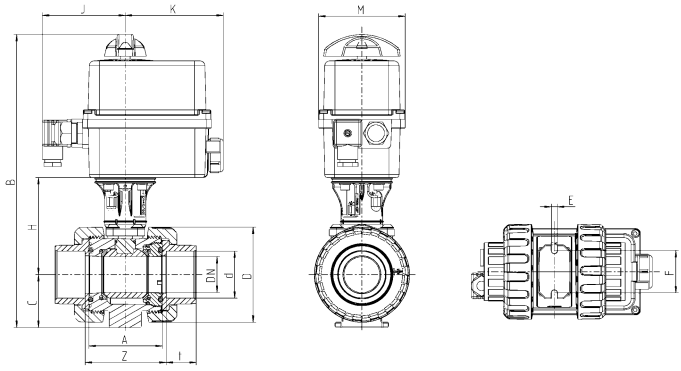
Technical data electric EO 510

Electric actuator EO510		
Type	EO510 ECO-230	EO510 IND-24
Nominal torque	7 Nm	
Peak torque	9 Nm	
Voltage	230V AC	12 - 24V DC / 24V AC
Frequency range	50 / 60Hz	DC / 50 / 60HZ
Operating time	22 sec 90°	12 sec 90°
Power consumption	4W	
Rotation angle	360° adjusted to 90°	
Duty cycle	60% / max. 20 min	
Protection	IP65	
Ambient temperature	0°C bis + 50°C	
Weight	0,7 kg	
Position indicator	Optically (manual override handle)	
Manual override	Integrated	

Electric connection



Dimension electric EO ER

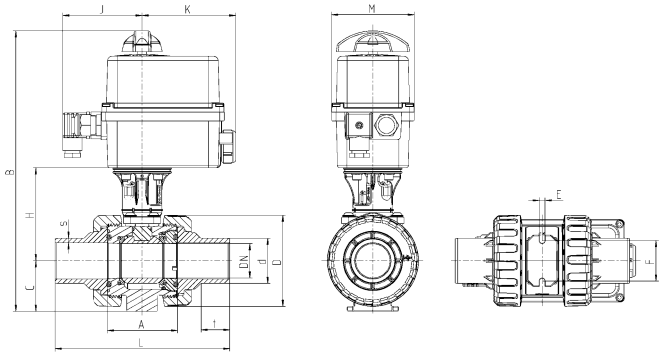


Connector type

PP-H fusion socket metric

(dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	81	81	86,5	89,5	97	104,5	111,5	138,5	168	168
t	14,5	16	17,5	19,5	22	25,5	29	34,5	38,5	42
Z	69,5	66,5	78	84	97	114	136,5	162	206,5	207,5
PN	10	10	10	10	10	10	10	10	10	10
actuator	ER20							ER60		
B	266	266	278,5	285	300	313	328	400	445	445
J	90	90	90	90	90	90	90	98	98	98
K	107	107	107	107	107	107	107	107	107	107
M	92	92	92	92	92	92	92	128	128	128



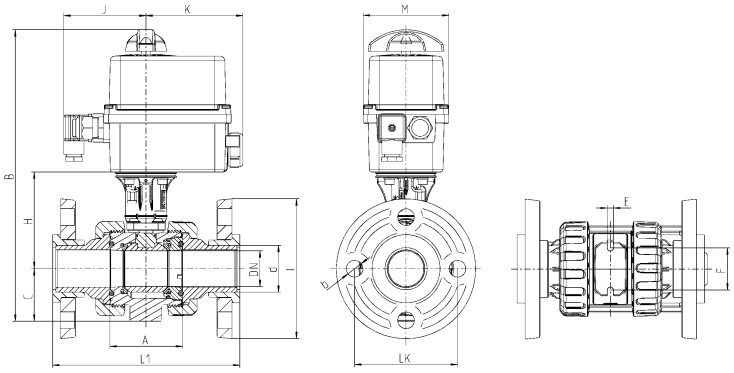
Connector type

PP-H fusion spigot metric

(dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	81	81	86,5	89,5	97	104,5	111,5	138,5	168	168
L	113,5	124,5	145,5	156	172,5	193	223	275	292	316,5
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8	6,8	8,2	10
t	13	13,5	15,5	18,5	20,5	23,5	28,5	31	36	40
PN	10	10	10	10	10	10	10	10	10	10
actuator	ER20							ER60		
B	266	266	278,5	285	300	313	328	400	445	445
J	90	90	90	90	90	90	90	98	98	98
K	107	107	107	107	107	107	107	107	107	107
M	92	92	92	92	92	92	92	128	128	128

Dimensions electric EO ER

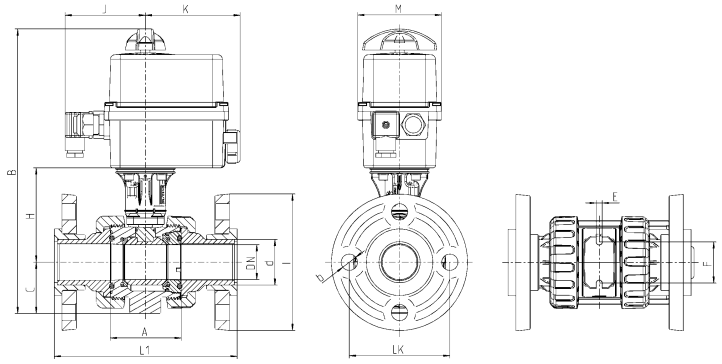


Connector type

PP-GF backing flange DIN with steel insert

(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	14	14	14	18	18	18	18	18	18
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	104,5	111,5	138,5	168	168
I	95	108	115	140	150	165	186	202	220
L1	203	225	236	253	274	308	420	380	437
LK	65	75	85	100	110	125	145	160	180
PN	10	10	10	10	10	10	10	10	10
actuator	ER20						ER60		
B	266	278,5	285	300	313	328	400	445	445
J	90	90	90	90	90	90	98	98	98
K	107	107	107	107	107	107	107	107	107
M	92	92	92	92	92	92	128	128	128



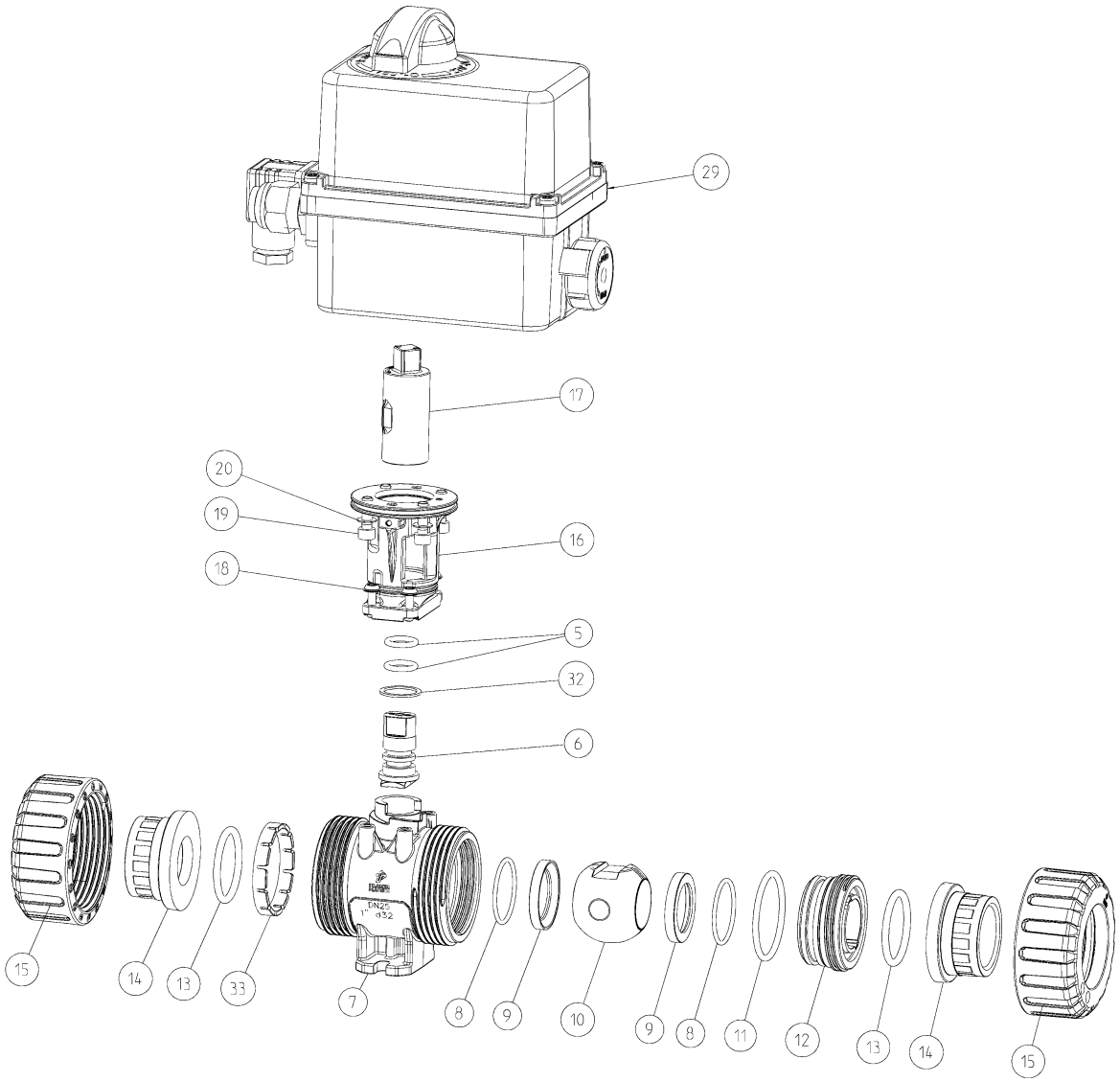
Connector type

PP-GF backing flange ANSI with steel insert

(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
inch	1/2″	3/4″	1″	1 1/4″	1 1/2″	2″	2 1/2″	3″	4″
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	16	16	16	16	16	20	20	20	20
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	104,5	111,5	138,5	168	168
I	95	102	114	130	133	162	184	194	229
L1	203	225	236	253	274	308	420	380	437
LK	60,4	69,8	79,3	89	98,5	120,6	139,7	152,4	190,5
PN	10	10	10	10	10	10	10	10	10
actuator	ER20						ER60		
B	266	278,5	285	300	313	328	400	445	445
J	90	90	90	90	90	90	98	98	98
K	107	107	107	107	107	107	107	107	107
M	92	92	92	92	92	92	128	128	128

Exploded drawing electric EO ER



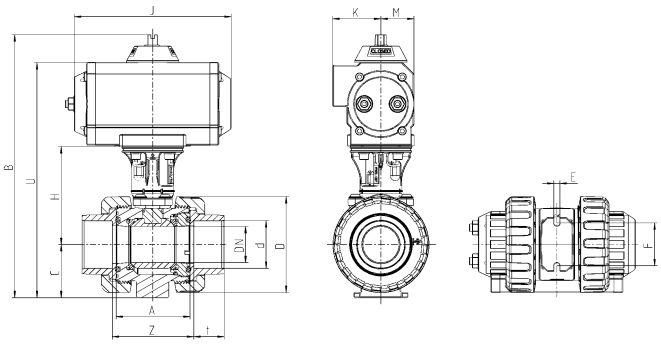
No.	Description	Material
05.	O-ring	EPDM / FPM
06.	Shaft	PP-H
07.	Body	PP-H
08.	O-ring	EPDM / FPM
09.	Ball seat	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM
12.	Retaining ring	PP-H
13.	O-ring	EPDM / FPM
14.	Connector types	
	Fusion socket /-spigot	PP-H
	Flange	PP-GF with steel insert

No.	Description	Material
15.	Union nut	PP-H
16.	Bracket	PA-GF
17.	Coupling	PA-GF
18.	Screw	A2
19.	Screw	A4
20.	Toothed washer	A2 / A4 from DN65
29.	Actuator	-
	Premier / Posi / Failsafe	
32.	Washer	PTFE
33.	Retaining ring	PP-GF

Technical data electric EO ER

Electric actuator		
Type	ER20	ER60
Torque	20 Nm	60 Nm
Voltage	Premier 24V 50/60Hz (24V DC) 100 - 240V 50/60Hz (100 – 350V DC) Posi 15 – 30V AC 50/60 Hz (12V – 48V DC) 100V – 240V AC 50/60 Hz (100 – 230V DC) Failsafe 15 – 30V AC 50/60 Hz (24V – 48V DC) 100V – 240V AC 50/60 Hz (100 – 230V DC)	Premier 24V 50/60Hz (24V DC) 90 - 240V 50/60Hz (90 – 350V DC) Posi 15 – 30V AC 50/60 Hz (12V – 48V DC) 100V – 240V AC 50/60 Hz (100 – 230V DC) Failsafe 15 – 30V AC 50/60 Hz (24V – 48V DC) 100V – 240V AC 50/60 Hz (100 – 230V DC)
Operating time	Premier: 13s Failsafe / Posi: 11s	Premier: 15s Failsafe / Posi: 12s
Power	15W	45W
ISO flange	F03-F04-F05	F05-F07
Star drive nut	14	22
Rotation angle	90°	90°
Duration duty	30%	50%
Protection	Premier: IP65 Failsafe / Posi: IP66	
Ambient temperature	Premier / Posi: -10°C bis +55°C Failsafe: -10°C bis +40°C	
Weight	1 kg	2,1 kg

Dimensions pneumatic



Connector type

PP-H fusion socket metric

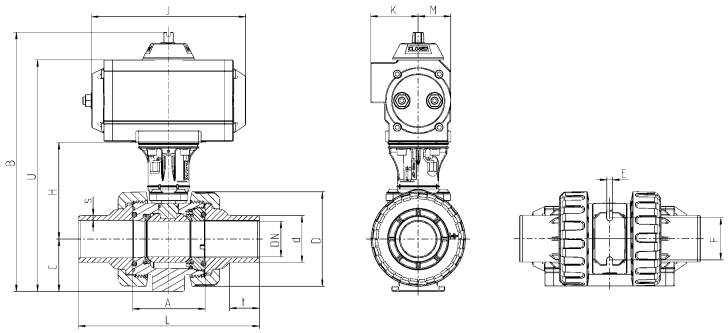
(dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
inch	3/8″	1/2″	3/4″	1″	1 1/4″	1 1/2″	2″	2 1/2″	3″	4″
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	81	81	86,5	89,5	97	104,5	111,5	138,5	168	168
t	14,5	16	17,5	19,5	22	25,5	29	34,5	38,5	42
Z	69,5	66,5	78	84	97	114	136,5	162	206,5	207,5
PN	10	10	10	10	10	10	10	10	10	10
actuator	MT05DA*				MT15DA			MT20DA		
B	214	214	226,5	233	260	273	288	352,5	397	397
J	119	119	119	119	175	175	175	186	186	186
K	40	40	40	40	47	47	47	54	54	54
M	27	27	27	27	34	34	34	42	42	42
U	185	185	197,5	204	230	243	267	322,5	367	367
actuator	MT05SR**				MT15SR		MT17SR	MT30SR	MT35SR	
B	214	214	226,5	233	260	273	288	371,5	452,5	452,5
J	119	119	119	119	175	175	207	241	261	261
K	40	40	40	40	47	47	47	62	66	66
M	27	27	27	27	34	34	34	52	65	65
U	185	185	197,5	204	230	243	258	341,5	423	423

*DA … double acting (PO-DA)
**SR … spring return (PO-NC / PO-NO)

We recommend using a damper and supporting the actuator accordingly when installing the valve in a vertical position
Additional information or dimensions for solenoid valve and position feedback see accessories and spare parts

Dimensions pneumatic



Connector type

PP-H fusion spigot metric

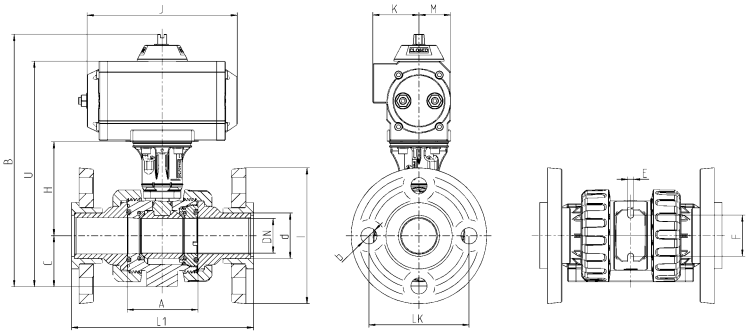
(dimensions in mm)

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	34	36	38	40	45	50	65	80	80
H	81	81	86,5	89,5	97	104,5	111,5	138,5	168	168
L	113,5	124,5	145,5	156	172,5	193	223	275	292	316,5
s	1,8	1,9	2,3	2,9	3,7	4,6	5,8	6,8	8,2	10
t	13	13,5	15,5	18,5	20,5	23,5	28,5	31	36	40
PN	10	10	10	10	10	10	10	10	10	10
actuator	MT05DA				MT15DA			MT20DA		
B	214	214	226,5	233	260	273	288	352,5	397	397
J	119	119	119	119	175	175	175	186	186	186
K	40	40	40	40	47	47	47	54	54	54
M	27	27	27	27	34	34	34	42	42	42
U	185	185	197,5	204	230	243	267	322,5	367	367
actuator	MT05SR				MT15SR		MT17SR	MT30SR	MT35SR	
B	214	214	226,5	233	260	273	288	371,5	452,5	452,5
J	119	119	119	119	175	175	207	241	261	261
K	40	40	40	40	47	47	47	62	66	66
M	27	27	27	27	34	34	34	52	65	65
U	185	185	197,5	204	230	243	258	341,5	423	423

*DA … double acting (PO-DA)
**SR … spring return (PO-NC / PO-NO)

We recommend using a damper and supporting the actuator accordingly when installing the valve in a vertical position
Additional information and dimesions for solenoid valve and position feedback see accessories and spare parts

Dimensions pneumatic



Connector type

PP-H backing flange DIN with steel insert

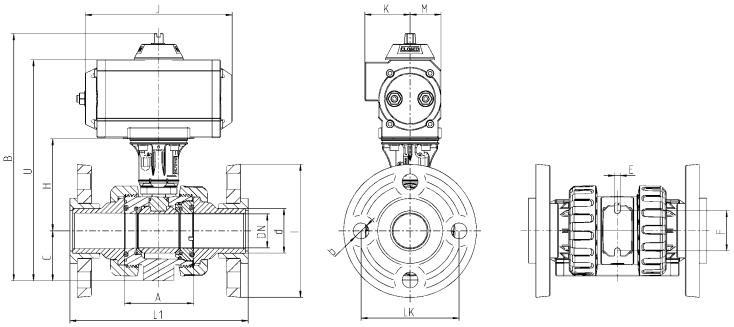
(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	14	14	14	18	18	18	18	18	18
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	104,5	111,5	138,5	168	168
I	95	108	115	140	150	165	186	202	220
L1	203	225	236	253	274	308	420	380	437
LK	65	75	85	100	110	125	145	160	180
PN	10	10	10	10	10	10	10	10	10
actuator		MT05DA			MT15DA			MT20DA	
B	214	226,5	233	260	273	288	352,5	397	397
J	119	119	119	175	175	175	186	186	186
K	40	40	40	47	47	47	54	54	54
M	27	27	27	34	34	34	42	42	42
U	185	197,5	204	230	243	267	322,5	367	367
actuator		MT05SR			MT15SR	MT17SR	MT30SR	MT35SR	
B	214	226,5	233	260	273	288	371,5	452,5	452,5
J	119	119	119	175	175	207	241	261	261
K	40	40	40	47	47	47	62	66	66
M	27	27	27	34	34	34	52	65	65
U	185	197,5	204	230	243	258	341,5	423	423

*DA … double acting (PO-DA)
**SR … spring return (PO-NC / PO-NO)

We recommend using a damper and supporting the actuator accordingly when installing the valve in a vertical position
Additional information and dimensions for solenoid valve and position feedback see accessories and spare parts

Dimensions pneumatic



Connector type

PP-H backing flange ANSI with steel insert

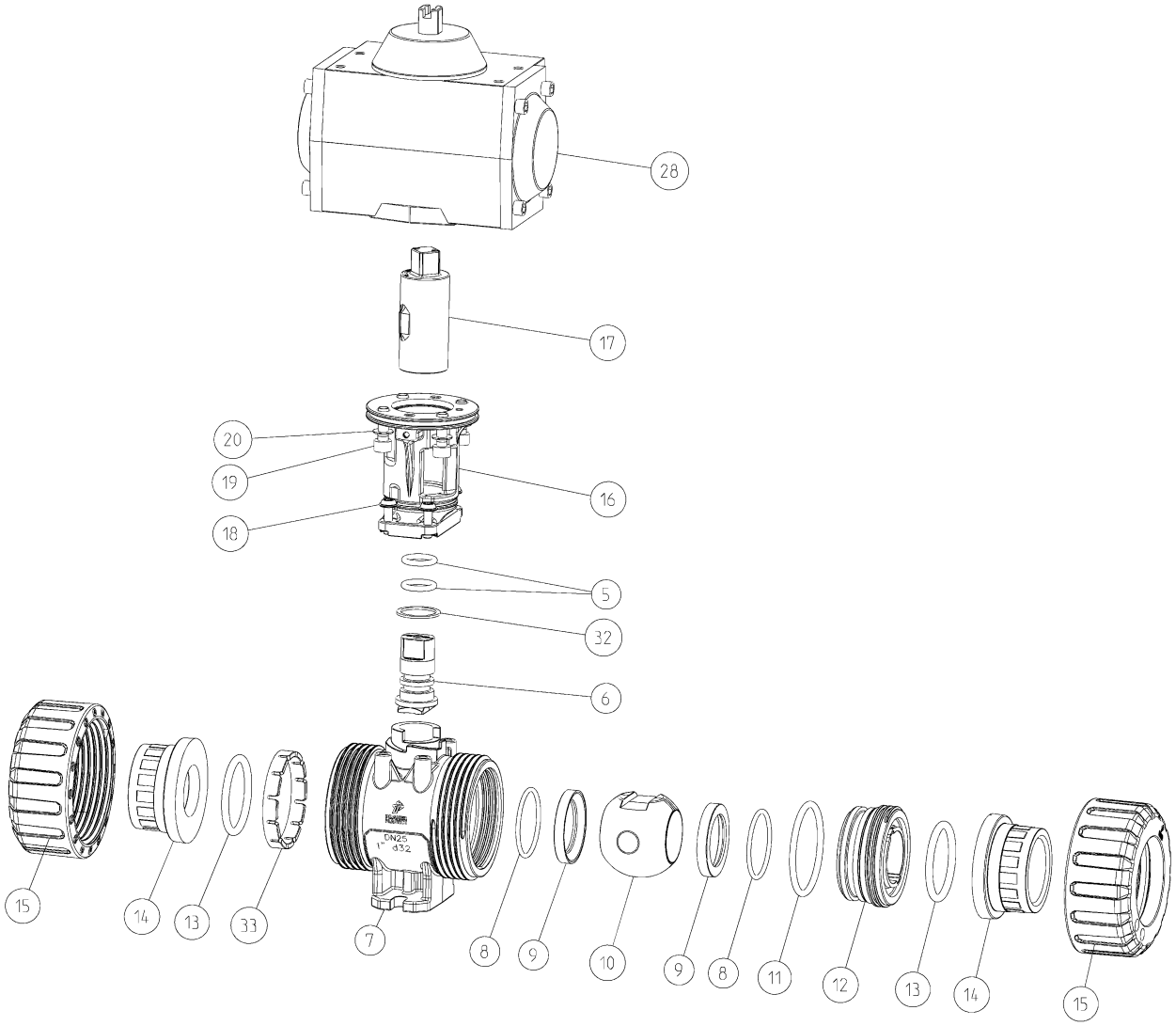
(dimensions in mm)

DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	16	16	16	16	16	20	20	20	20
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	104,5	111,5	138,5	168	168
I	95	102	114	130	133	162	184	194	229
L1	203	225	236	253	274	308	420	380	437
LK	60,4	69,8	79,3	89	98,5	120,6	139,7	152,4	190,5
PN	10	10	10	10	10	10	10	10	10
actuator		MT05DA			MT15DA			MT20DA	
B	214	226,5	233	260	273	288	352,5	397	397
J	119	119	119	175	175	175	186	186	186
K	40	40	40	47	47	47	54	54	54
M	27	27	27	34	34	34	42	42	42
U	185	197,5	204	230	243	267	322,5	367	367
actuator		MT05SR			MT15SR	MT17SR	MT30SR	MT35SR	
B	214	226,5	233	260	273	288	371,5	452,5	452,5
J	119	119	119	175	175	207	241	261	261
K	40	40	40	47	47	47	62	66	66
M	27	27	27	34	34	34	52	65	65
U	185	197,5	204	230	243	258	341,5	423	423

*DA … double acting (PO-DA)
**SR … spring return (PO-NC / PO-NO)

We recommend using a damper and supporting the actuator accordingly when installing the valve in a vertical position
Additional information and dimensions for solenoid valve and position feedback see accessories and spare parts

Exploded drawing pneumatic



No.	Description	Material
05.	O-ring	EPDM / FPM
06.	Shaft	PP-H (from DN65 PVDF)
07.	Body	PP-H
08.	O-ring	EPDM / FPM
09.	Ball seat	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM
12.	Retaining ring	PP-H
13.	O-ring	EPDM / FPM
14.	Connector types	
	Fusion socket /-spigot	PP-H
	Flange	PP-GF with steel insert

No.	Description	Material
15.	Union nut	PVC-U
16.	Bracket	PA-GF
17.	Coupling shaft	PA-GF
18.	Screw	A2
19.	Screw	A4
20.	Toothed washer	A2 / A4 from DN65
28.	Actuator	-
32.	Washer	PTFE
33.	Retaining ring	PP-GF

Technical data pneumatic

Technical features of pneumatic actuator

Description actuator:
Piston actuation with two opposed pistons, power transmission with tooth rack, seal elastic

Material actuator:
- Body: Aluminium anodized
- End caps: Aluminium epoxy powder
- Screws / nuts: Stainless steel

Ambient temperature: -20°C to +80°C

Control fluid:
Filtered air according to PNEUROP/ISO class 4 – Thread ¼"

Mounting: in every possible direction

Control function / control pressure:
DA: double acting / max. 10 bar
SR: spring return / max. 8 bar

Rotation angle:
90°; adjustment in both directions from -10° to +10° (MT15 and bigger)

Installation:
- actuator – valve: ISO 5211
- actuator – solenoid valve: NAMUR (VDI/VDE 3845)
- actuator – limit switch box: NAMUR (VDI/VDE 3845)

AIR CONSUMPTION (FULL CYCLE)
DA DOUBLE ACTING

actuator	MT05 DA	MT15 DA	MT20 DA
N. Lt.	0,22	0,41	0,71

AIR CONSUMPTION (FULL CYCLE)
SR SPRING RETURN

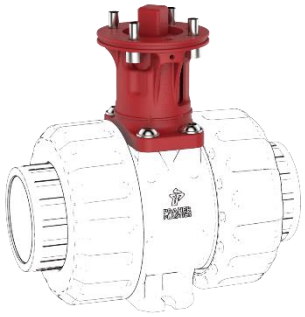
actuator	MT05 SR	MT15 SR	MT17 SR	MT30 SR	MT35 SR
N. Lt.	0,13	0,18	0,25	0,65	1,2

Accessories / spare parts

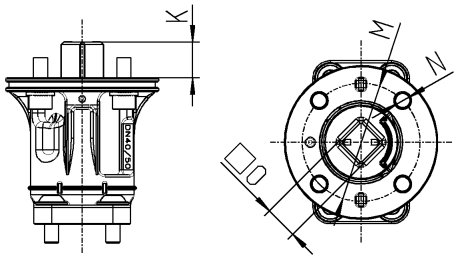
Adapter set for automation electric or pneumatic

Consist of:

- Bracket for mounting of actuator and position feedback
- Coupling for actuator
- Screws for mounting on ball valve and actuator







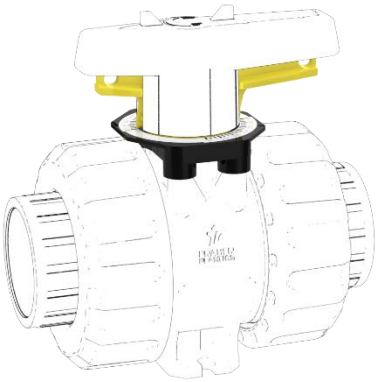
dimensions in mm

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
K	11	11	11	11	15	15	15	18	18	18
M	42	42	42	42	50	50	50	70	70	70
N	5,5	5,5	5,5	5,5	6,5	6,5	6,5	8,5	8,5	8,5
O	11	11	11	11	14	14	14	17	17	17
ISO5211	F04	F04	F04	F04	F05	F05	F05	F07	F07	F07

		
Material	PP-GF	PA-GF
Product line	chemical resistance	high durability
Acid resistance Tensile modulus of elasticity Flexural modulus of elasticity Notch impact strength (23°C)	++ + + +	o ++ +++ +
Main applications	Electrolysis Acid applications Chrome, Copper, hydrofluoric acid	Water applications Ultrafiltration Semiconductor industry
Recommended installation	Horizontal	Horizontal Vertical (support the actuator)
Recommended maintenance	Short maintenance intervals	Regular inspections
Recommended accessories	Silencer for pneumatic actuator	
M1 Ball Valve	PVC-U / PP-H / PVDF	

Accessories / spare parts

Flow Adjust

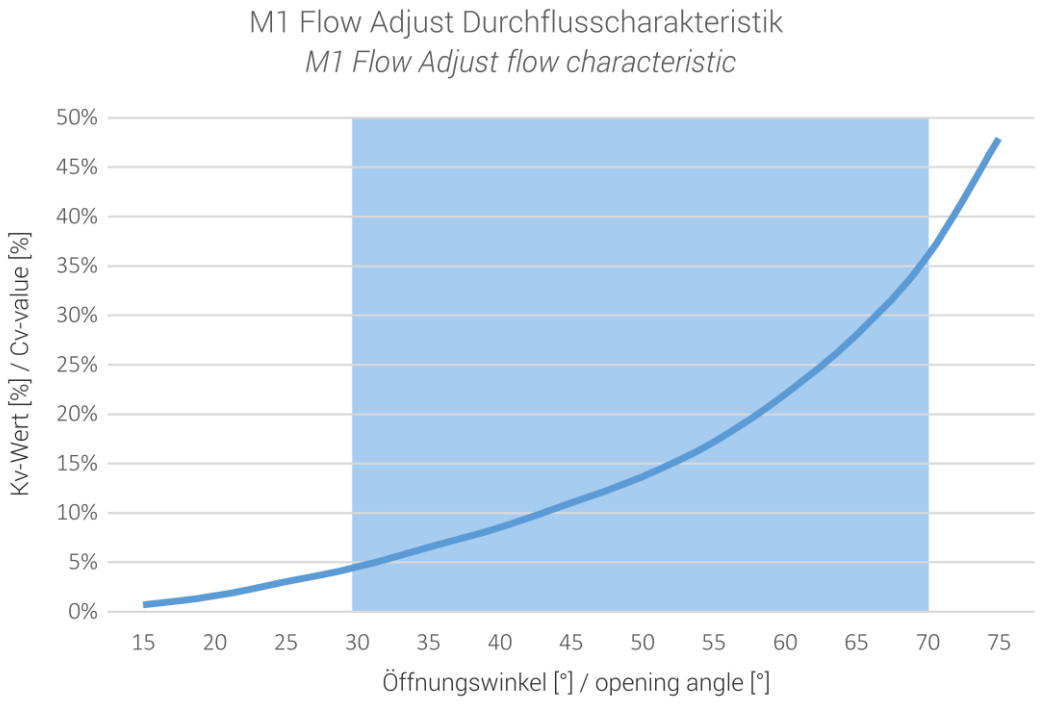


Consist of:

- Grid console
- Locking sleeve for Flow Adjust
- Assembly instruction

Functionality:

- Two arrows on the locking sleeve mark the opening angle
- Scaling on the grid console is marked into 5° steps
- 15° positions are marked with a long line

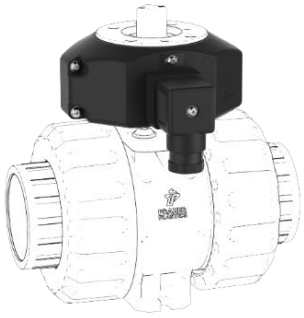


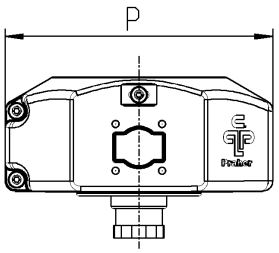
Accessories / spare parts

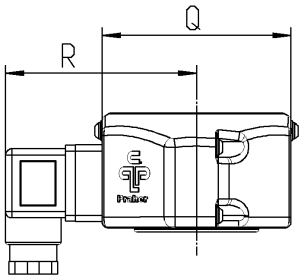
Half shell set with position feedback for hand operated and automatic ball valves

Consist of:

- Half shells including limit switch mechanical, inductive or NAMUR
- Device plug
- Screws for half shells
- Locking screws for adjusting position feedback
- including coupling mechanical , inductive or NAMUR







dimensions in mm

DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
P	98	98	102	102	105	105	105	116	116	116
Q	64	64	64	64	74	74	74	99	99	99
R	70	70	70	70	75	75	75	88	88	88

Feedback set for hand operated ball valve DN10 – DN80 d110



Consist of:

- Half shells including limit switch mechanical, inductive or NAMUR
- Cover
- Coupling for handle
- Device plug
- Screws for half shells
- Locking screws for adjusting position feedback
- Screws for mounting on the ball valve
- Bracket for mounting of the position feedback

Accessories / spare parts

Feedback set for automatic ball valve DN10 – DN80 d110



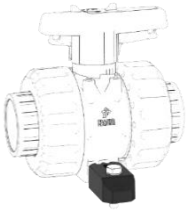
Consist of:

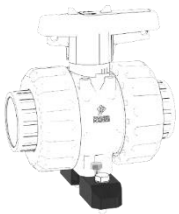
- Half shells including limit switch mechanical, inductive or NAMUR
- Coupling for actuator
- Device plug
- Screws for half shells
- Locking screws for adjusting position feedback
- Screws for mounting on the ball valve and actuator
- Bracket for mounting of the position feedback

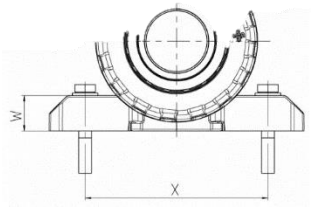
Clamping and spacing element

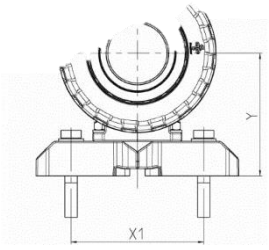
Use for mounting as a clamping element
- Floor / ceiling / wall
- Plate
- Additional screws necessary

Use for mounting as a spacing element
- For flange connection
- Additional screws necessary



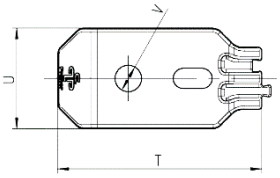






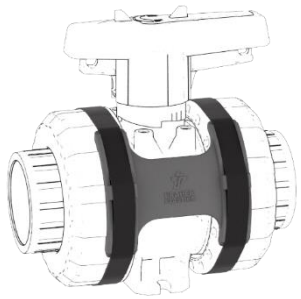
dimensions in mm

DN	10	15	20	25	32	40	50
d	16	20	25	32	40	50	63
T	54	54	54	65	65	65	65
U	25	25	25	32	32	32	32
V	6,5	6,5	6,5	8,5	8,5	8,5	8,5
W	16	16	16	22	22	22	22
X	90	90	94	107	109	114	119
X1	70	70	70	85	85	85	85
Y	49	49	56	65	73	78	86



Accessories / spare parts

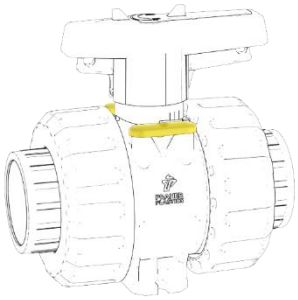
Union nut locking for ball valve DN10 – DN80 d110



Consist of:

- Plate for PVC-U or PP-H / PVDF ball valve
- Velcro straps for fixation

Cover for ball valve DN10 – DN80 d110



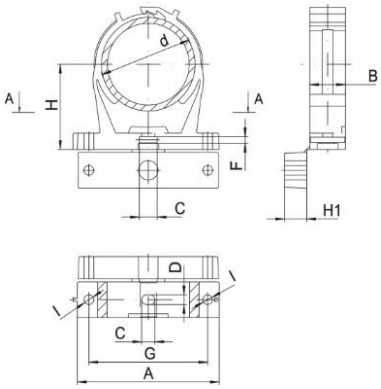
Consist of:

- Cover for PVC-U, PP-H and PVDF ball valve
- Pack unit 50 pieces
- Including eyelet for marking



Pipe clip type B





dimensions in mm

d	20 - 23 1/2"	25 – 28 3/4"	31 – 35 1"	39 – 43 1 1/4"	47 – 51 1 1/2"	60 – 65 2"	72 – 80 2 1/2"	87 – 95 3"
A	56	61	67	80	84,5	96,5	126	137
B	14	16	16	17,5	20	24	26	26
C	9	9	9	9	9	9	12	12
D	6,5	6,5	6,5	6,5	6,5	6,5	8,5	8,5
F	3,5	3,5	3,5	3,5	3,5	3,5	4,3	4,3
G	41	47	52	64	70	80	106	117
H	27	30	31,5	37	41	49	70	80
H1	6	10	11,5	14	15	15	15	20
I	6,5	6,5	6,5	6,5	6,5	6,5	8,5	8,5

Accessories / spare parts

PLS – Praher Labeling System

Features

- Clear and durable label
- Convenient marking by touch-up pen or laser engraving
- Standard version in yellow, blue, green and red
- Simple and easy to change
- Corrosion-resistant
- No effect on the function of the handle



Limit switch box for pneumatic actuator

General

- Limit switch box with two mechanical switches
- Protection IP65
- Cable gland M20*1,5

Material

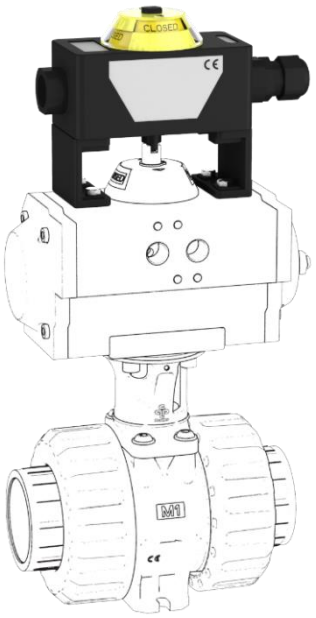
- Body: polycarbonat black
- Cover: polycarbonat clear
- Mounting bracket and screws: stainless steel
- Seals: EPDM

Voltage

- 1 – 250V

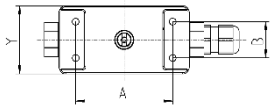
Current

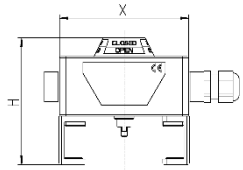
- 16 A (250V AC)
- 2,5 A (24 DC)



dimensions in mm

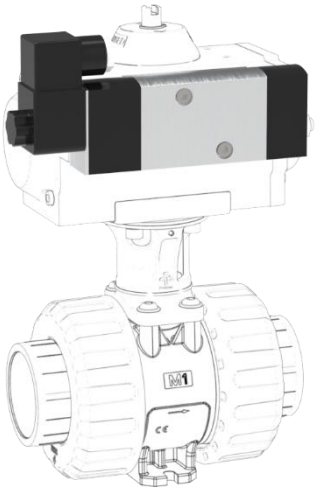
A	B	H	X	Y
80	30	110	107	56





Accessories / spare parts

Solenoid valve



General

- Solenoid valve NAMUR with combined 5/2- and 3/2- ways function and standard coil function
- Easy switch from 5/2- to 3/2- ways by turning the sealing plate
- Manual override as standard
- Protection IP65

Material

- Body: aluminium
- Piston. aluminium
- Seals: NBR
- Screws and spring: stainless steel

Voltage

- 24V DC
- 110V AC
- 230V AC

Accessories

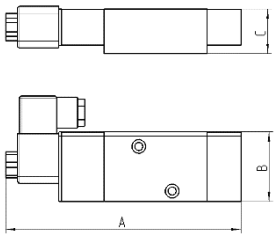
- Flow control silencer
- Silencer

Versions

o Atex protected

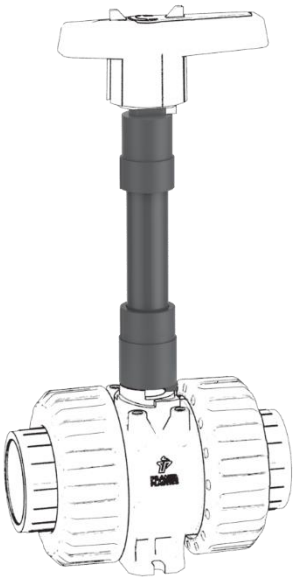
dimensions in mm

A	B	C
168,3	49,8	31,8



Accessories / spare parts

Handle elongation



Material:	PVC-U
Dimensions:	DN10 – DN80 d110
Standard pipe length:	200 mm
Max. pipe length possible:	1 m

Features

- Simple assembly by gluing the handle- and shaft-coupling with a metric pipe
- Marking on handle- and shaft-coupling for alignment to the ball valve
- Subsequent installation in existing installation possible
- Direction arrows on the handle coupling show the flow direction of the ball valve when handle is removed

Further details see data sheet for handle extension 2W and 3W ball valve

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M1 Ball Valve Series – Modularity for any application
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