



**Kugelhahn  
Ball Valve**

**M1**

PP-H

**ARA**<sup>®</sup>  
**PNEUMATIK**

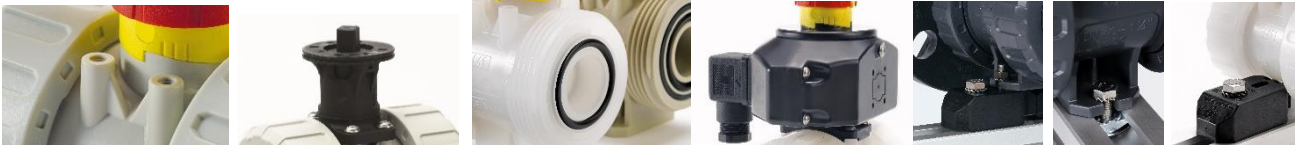
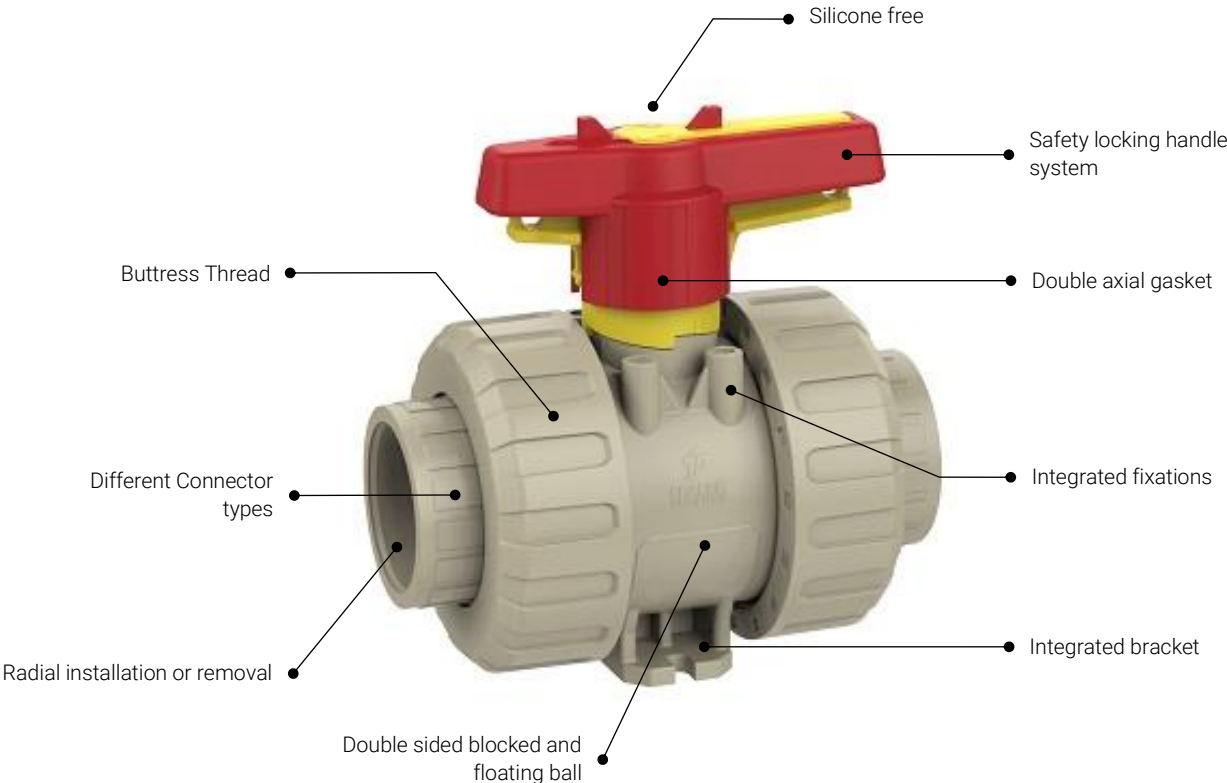
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**DATENBLATT  
DATASHEET**

# 2-way Ball Valve M1

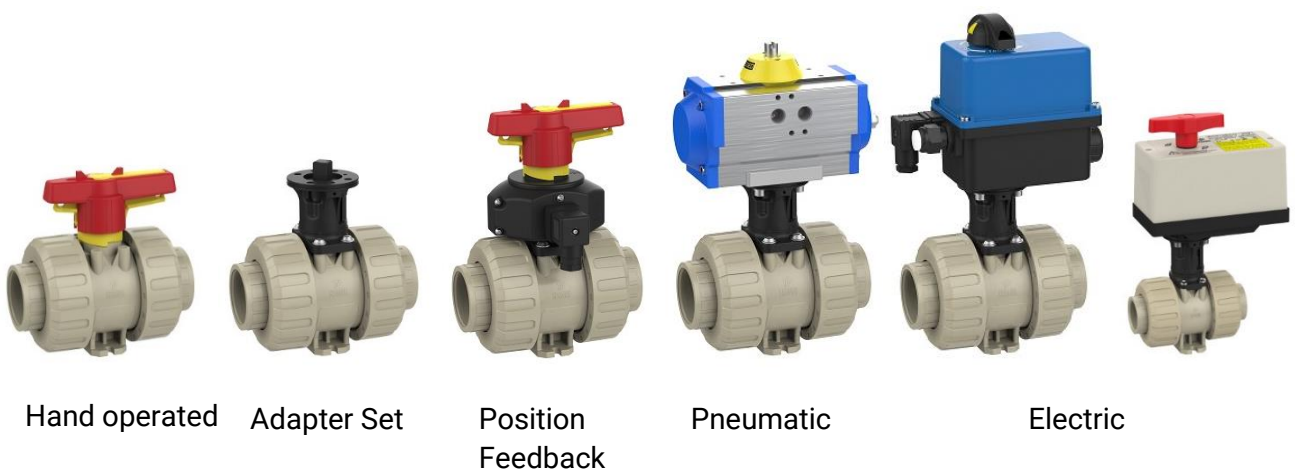


# Overview

## General

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

## Range summery



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2W ball valve electric EO ER

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2W ball valve pneumatic

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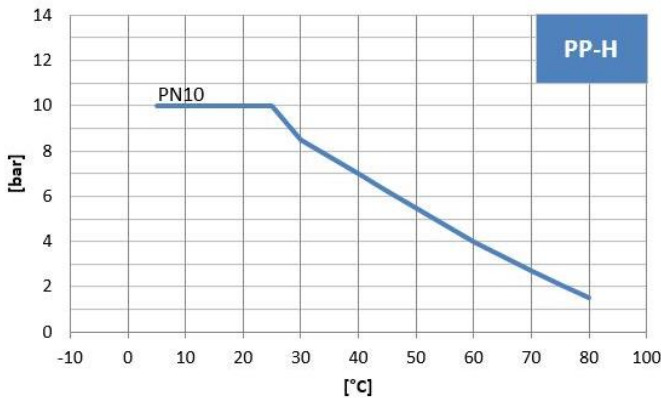


accessories / spare parts

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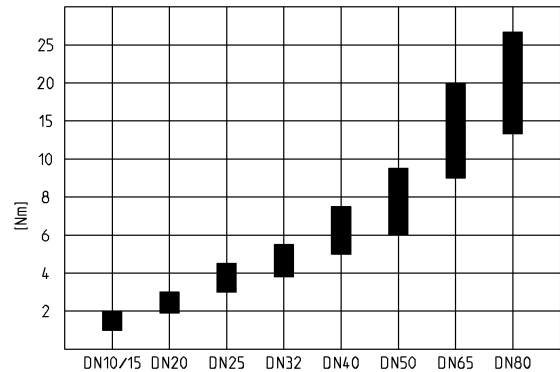
# Technical data

## Pressure – temperature - diagram

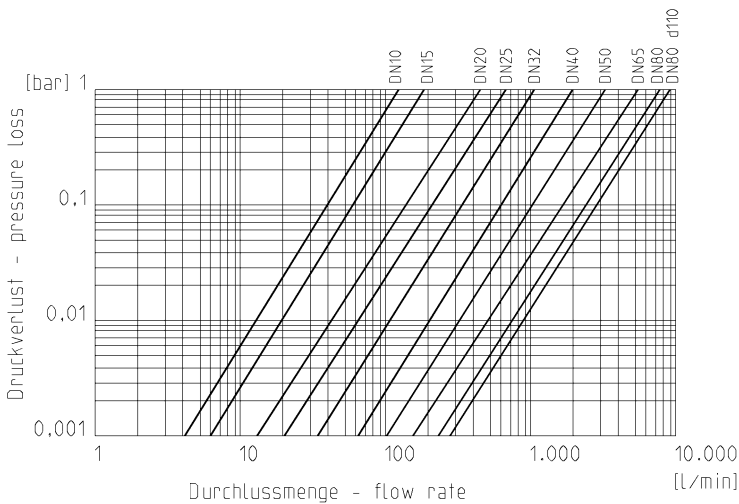


The values of the pressure-temperature-diagram are based on a service life of 25 years at static pressure load and apply to water-like media.

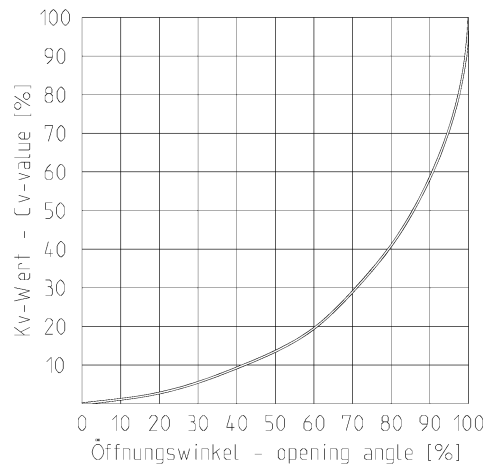
## Torque at the shaft



## Flow rate – pressure loss



## Flow characteristics

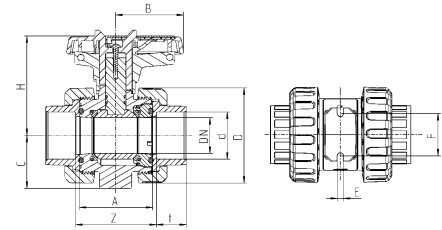


## Cv-value-table

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

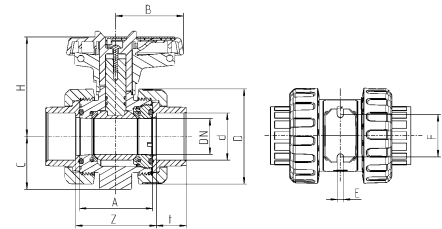
# Dimensions hand operated



## Connector type

### PP-H fusion socket metric (dimensions in mm)

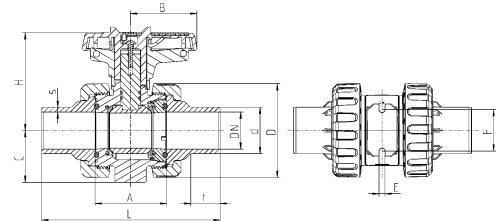
DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
inch	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	39,5	51	51	63,5	72	84	110	132	132
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	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

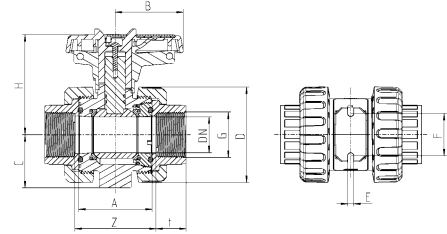


## Connector type

### 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

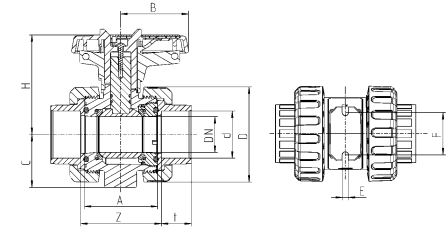
# Dimensions hand operated



## Connector type

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

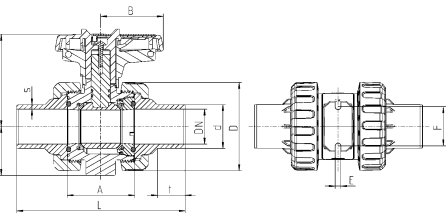
DN	10	15	20	25	32	40	50
inch	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	61,5	61,5	69	73	83	94	109
B	39,5	39,5	51	51	63,5	72	84
C	33	33	40	43,5	51	56,5	64,5
D	58	58	68,5	75,5	92	108	127,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4
F	34	34	36	38	40	45	50
H	71,5	71,5	78	80	98,5	106,5	113,5
t	16	16	19,5	22,5	26	30,5	37
Z	66,5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

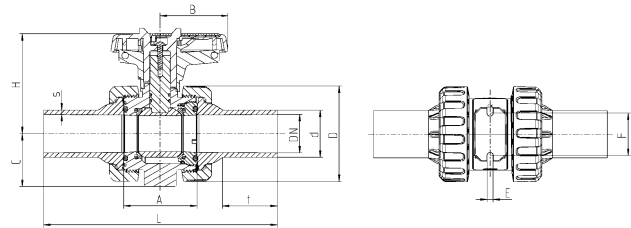


## Connector type

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

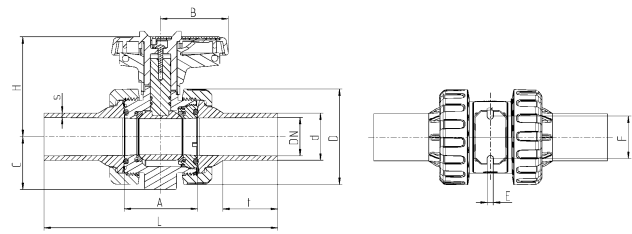
# Dimensions hand operated



## 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

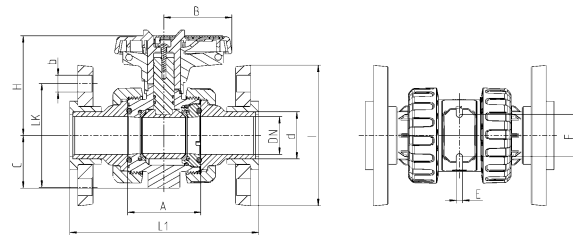
PE fusion spigot long metric

(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

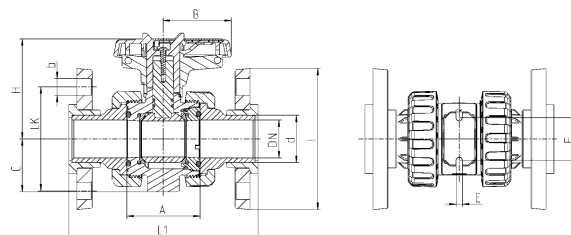


## Connector type

### 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



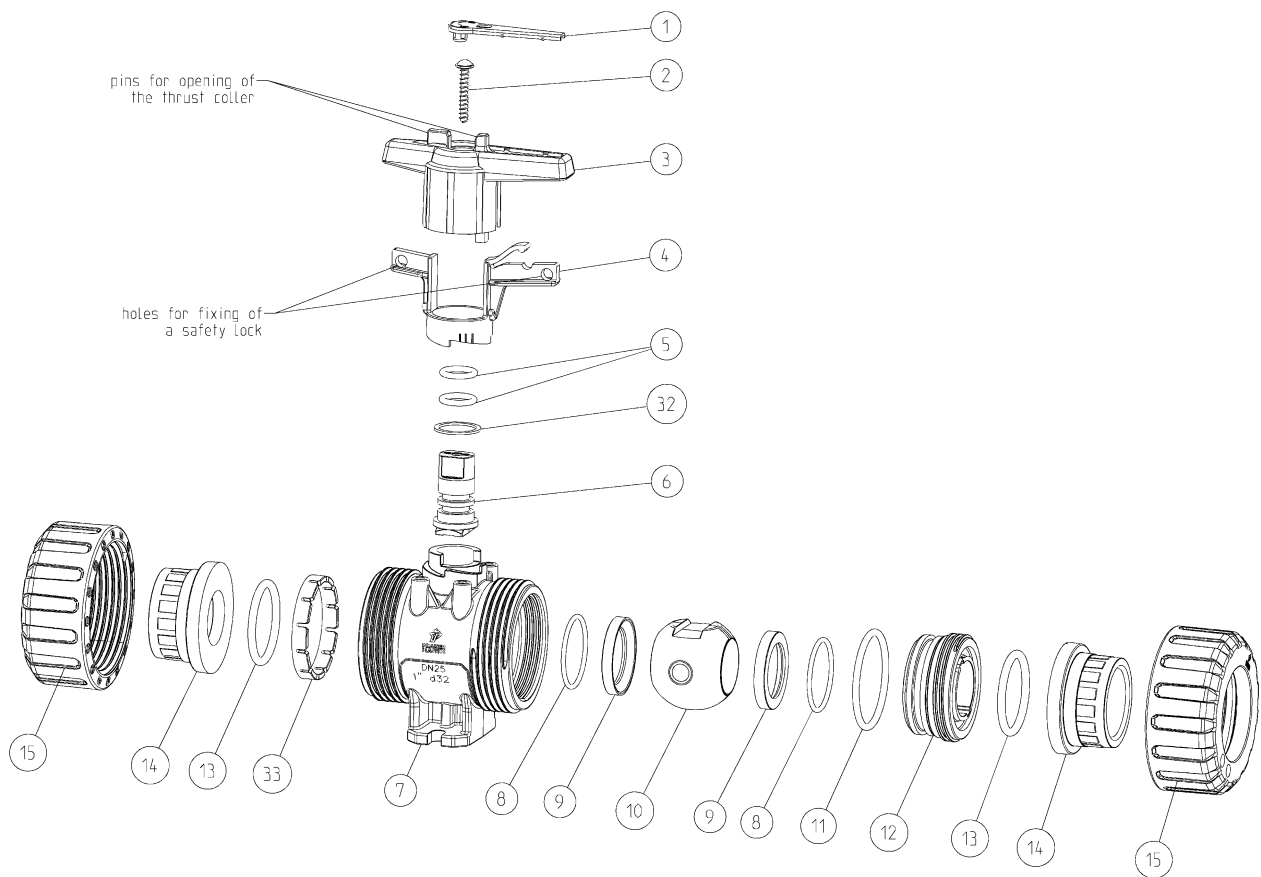
## Connector type

### PP-GF backing flange ANSI with steel insert

(dimensions in mm)

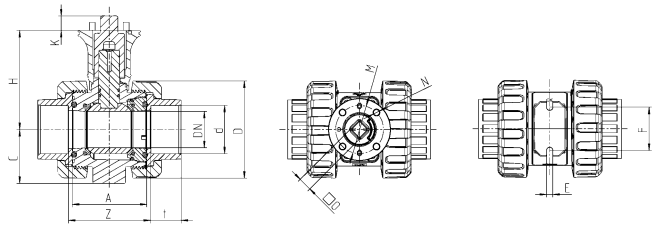
DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	61,5	69	73	83	94	109	131,5	156,5	156,5
B	39,5	51	51	63,5	72	84	110	132	132
b	16	16	16	16	16	20	20	20	20
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	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
06.	Shaft	PP-H (from DN65 PVDF)
07.	Body	PP-H
08.	O-ring	EPDM / FPM
09.	Ball seating joint	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM
12.	Thrust collar	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
32.	Washer	PTFE
33.	Retaining ring	PP-GF

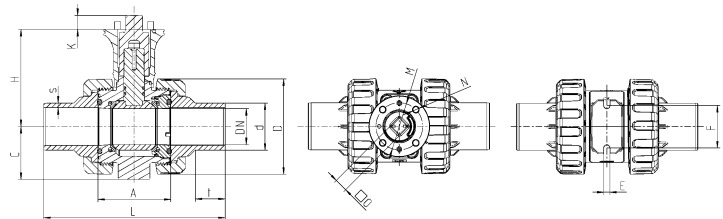
# Dimensions adapter set



## 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



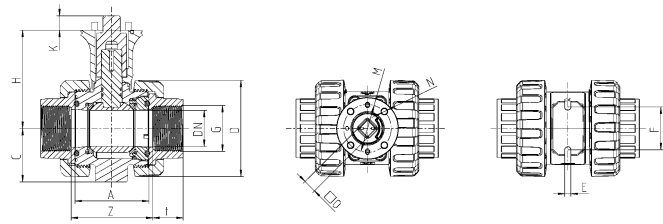
## Connector type

### 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

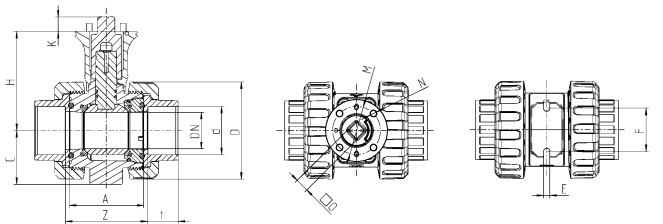


## Connector type

### 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



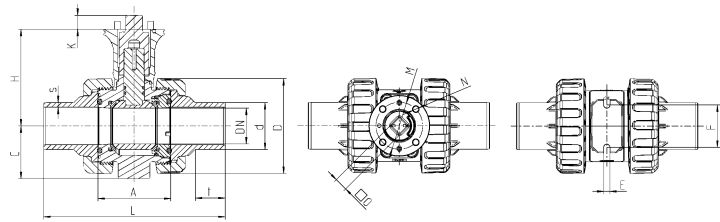
## Connector type

### 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

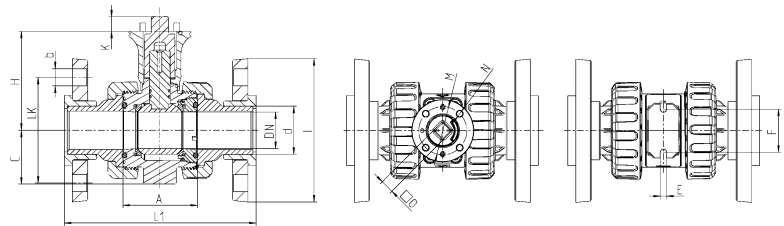


## Connector type

### 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)

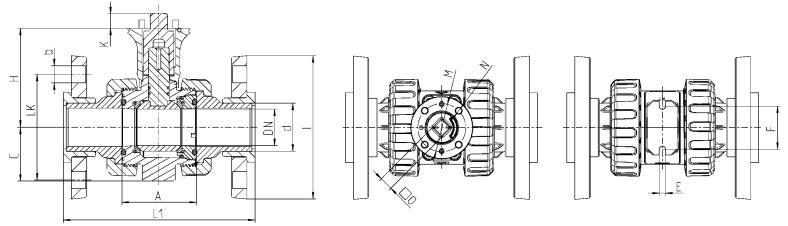
DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
ISO flange	F04	F04	F04	F04	F05	F05	F05	F07	F07
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	14	14	14	18	18	18	18	18	18
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	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

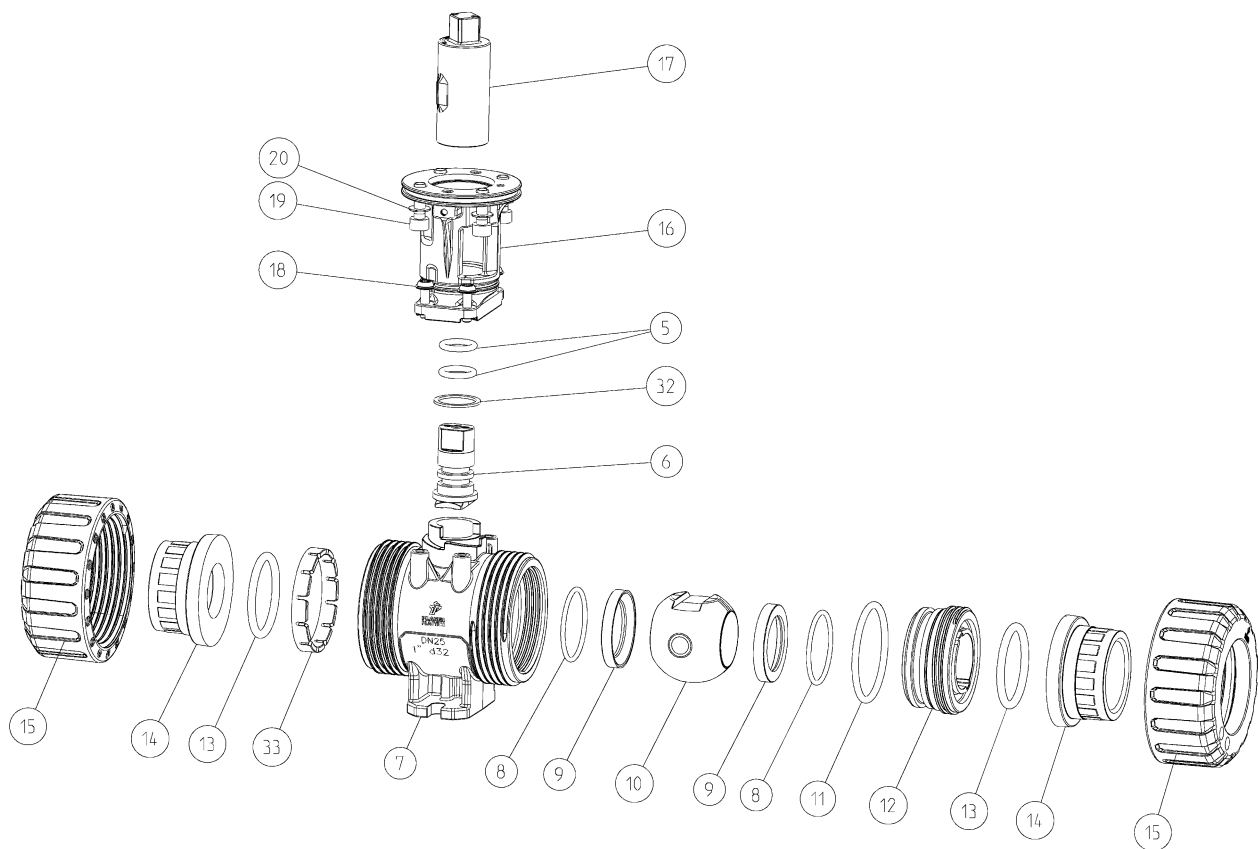
### PP-GF backing flange ANSI with steel insert

(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	F04	F05	F05	F05	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 (from DN65 PVDF)
07.	Body	PP-H
08.	O-ring	EPDM / FPM
09.	Ball seating joint	PTFE
10.	Ball	PP-H
11.	O-ring	EPDM / FPM
12.	Thrust collar	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

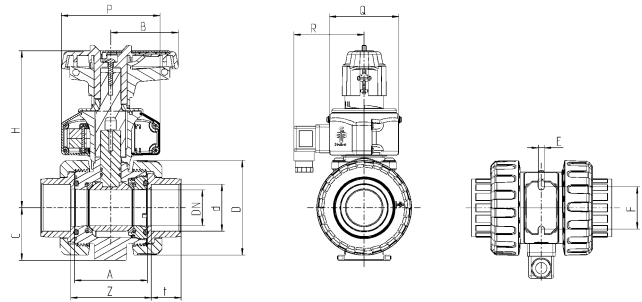
# Dimension position feedback

## 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

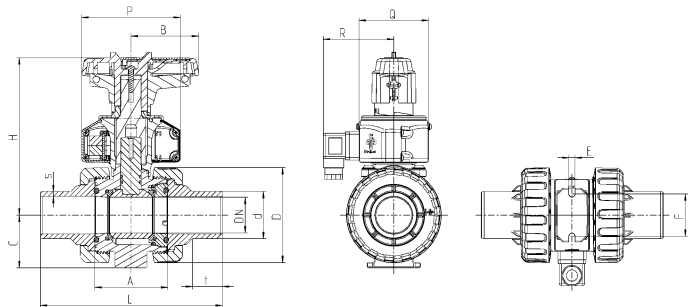


## Connector type

### PP-H fusion spigot metric

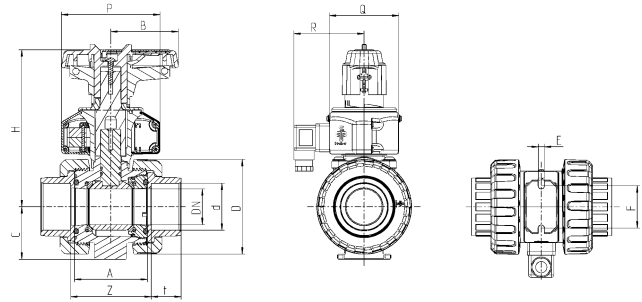
(dimensions in mm)

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

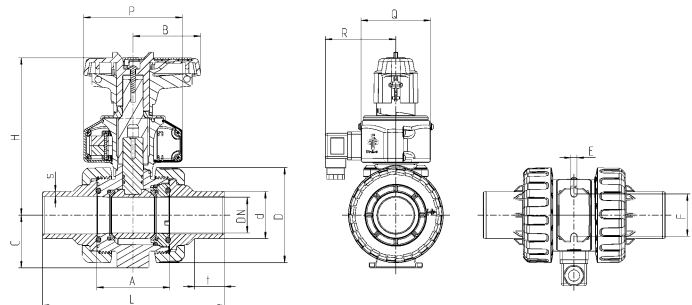


## Connector type

### 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

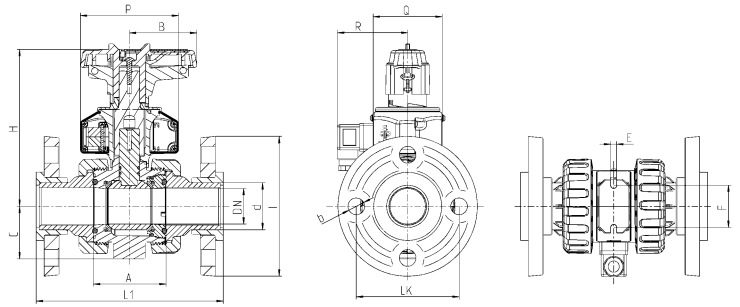
# Dimension position feedback

## 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

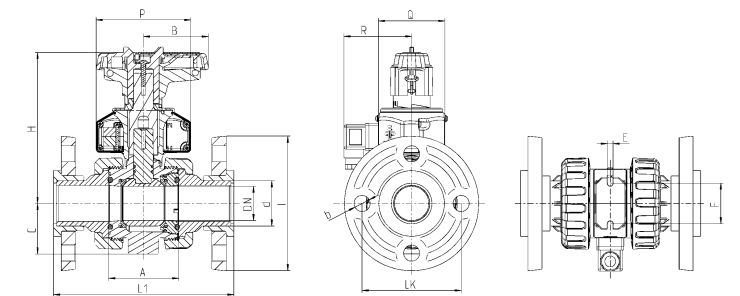


## Connector type

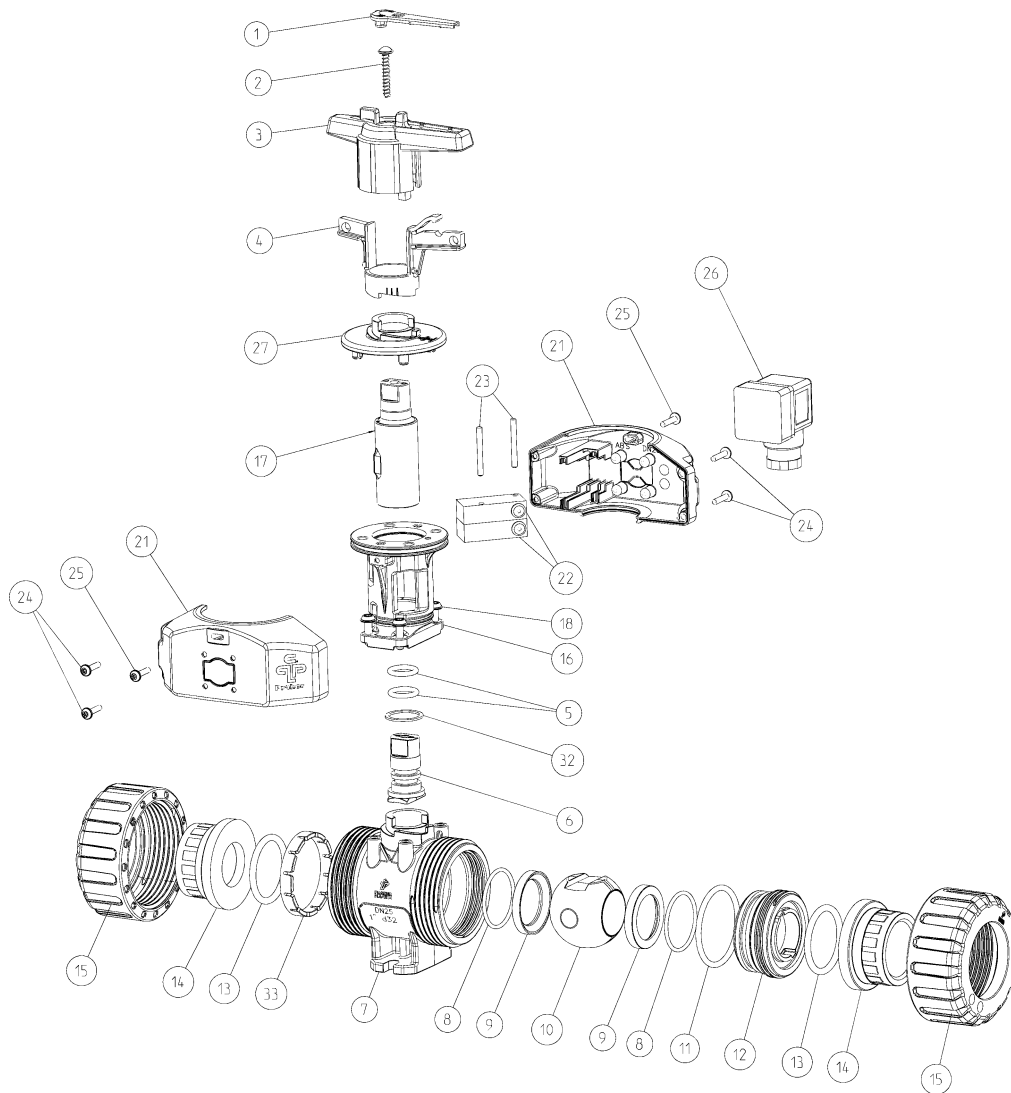
### PP-GF backing flange ANSI with steel insert

(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	No.	Description	Material
01.	Labeling plate	PBT	15.	Union nut	PP-H
02.	Screw	A2	16.	Bracket	PA-GF
03.	Handle	PP-GF	17.	Coupling shaft	PA-GF
04.	Spring loaded locking sleeve	PBT	18.	Screw	A2
05.	O-ring	EPDM / FPM	19.	Screw	A2
06.	Shaft	PP-H (from DN65 PVDF)	20.	Toothed washer	A2
07.	Body	PP-H	21.	Half shells	ABS
08.	O-ring	EPDM / FPM	22.	Limit switch IP67	-
09.	Ball seating joint	PTFE	23.	Pin	A2
10.	Ball	PP-H	24.	Screw	A4
11.	O-ring	EPDM / FPM	25.	Locking screw	A2 / A4 from DN65
12.	Thrust collar	PP-H	26.	Device plug IP65	-
13.	O-ring	EPDM / FPM	27.	Cover	ABS
14.	Connector types		32.	Washer	PTFE
	Fusion socket /-spigot	PP-H	33.	Retaining ring	PP-GF
	Fusion socket /-spigot	PE100			
	Flange	PP-GF with steel insert			

# 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	NO	NC
A pressed ... open		
B pressed... closed		

\* 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

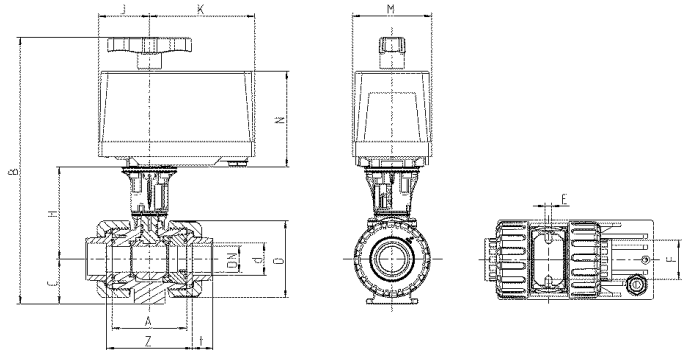
# Dimension electric EO 510

## 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

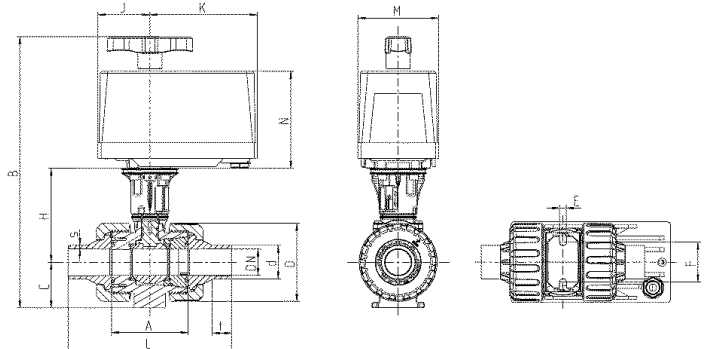


## Connector type

### 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



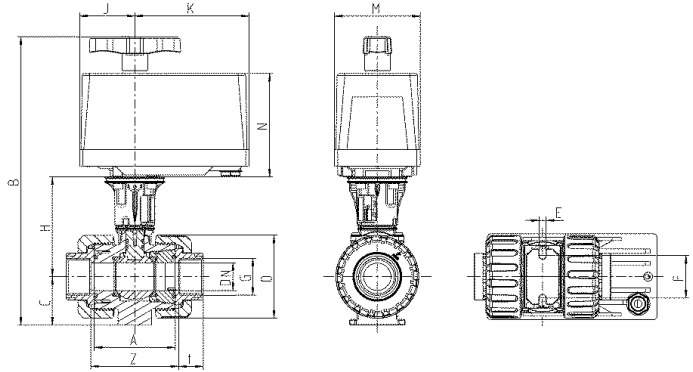
# Dimensions electric EO 510

## 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

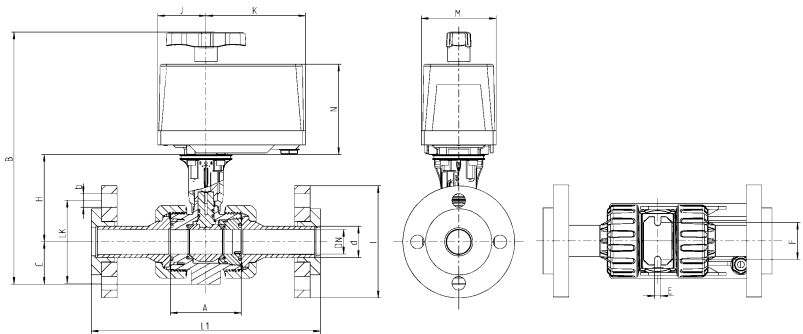


## Connector type

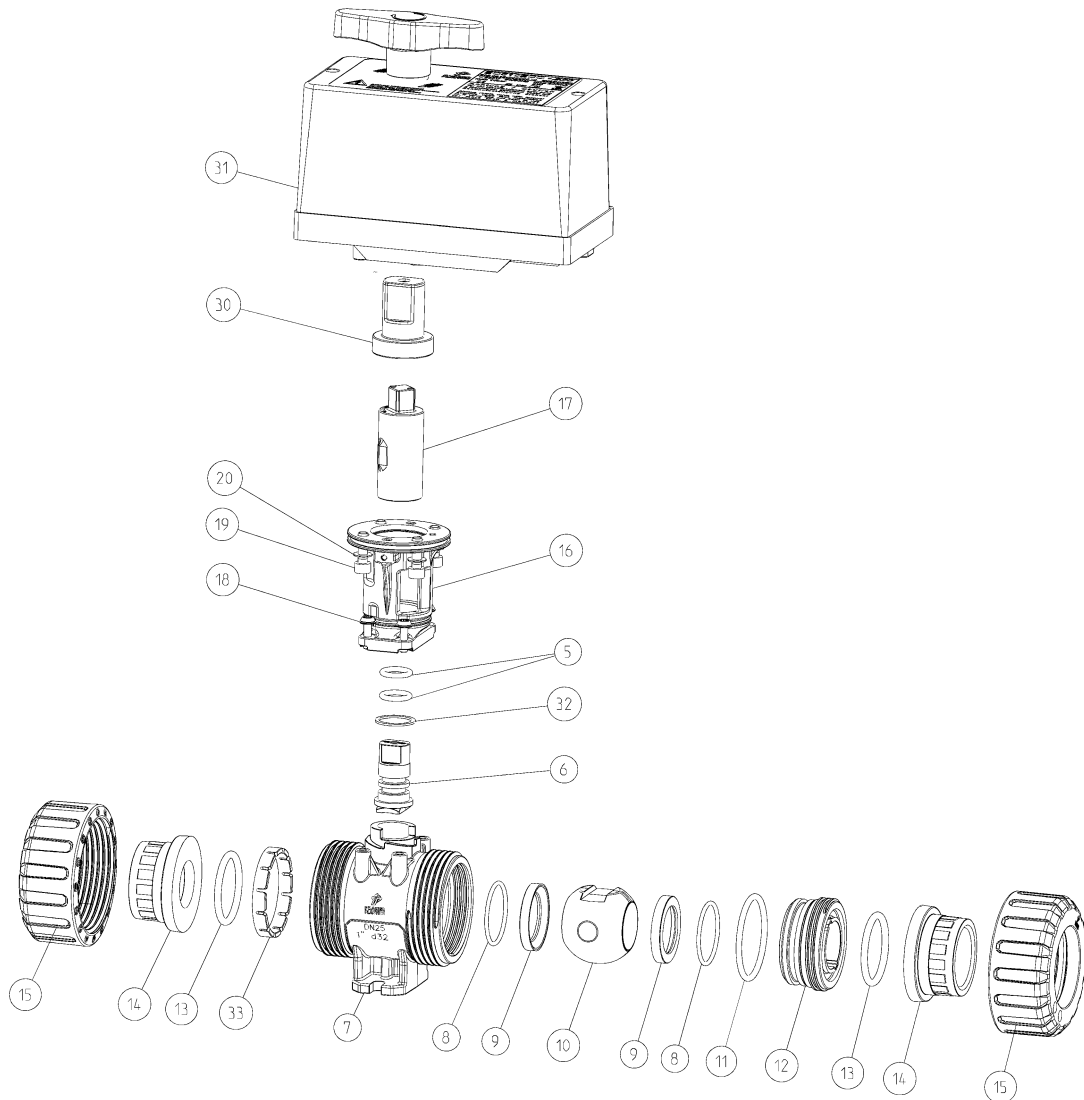
### PP-GF backing flange DIN with steel insert

(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

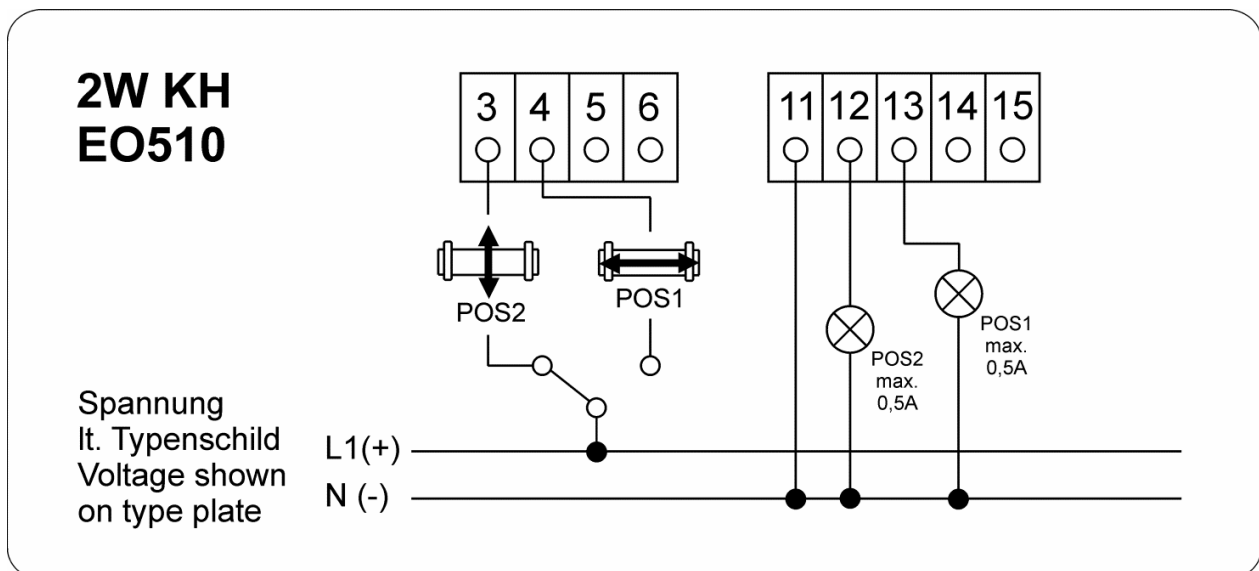


No.	Description	Material	No.	Description	Material
05.	O-ring	EPDM / FPM	15.	Union nut	PP-H
06.	Shaft	PP-H	16.	Bracket	PA-GF
07.	Body	PP-H	17.	Coupling shaft	PA-GF
08.	O-ring	EPDM / FPM	18.	Screw	A2
09.	Ball seating joint	PTFE	19.	Screw	A2
10.	Ball	PP-H	20.	Toothed washer	A2
11.	O-ring	EPDM / FPM	30.	Coupling	PA-GF
12.	Thrust collar	PP-H	31.	Actuator EO 5100	-
13.	O-ring	EPDM / FPM	32.	Washer	PTFE
14.	Connector types		33.	Retaining ring	PP-GF
	Fusion socket /-spigot	PP-H			
	Threaded socket	PP-H			
	Fusion socket /-spigot	PE100			
	Flange	PP-GF with steel insert			

# 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





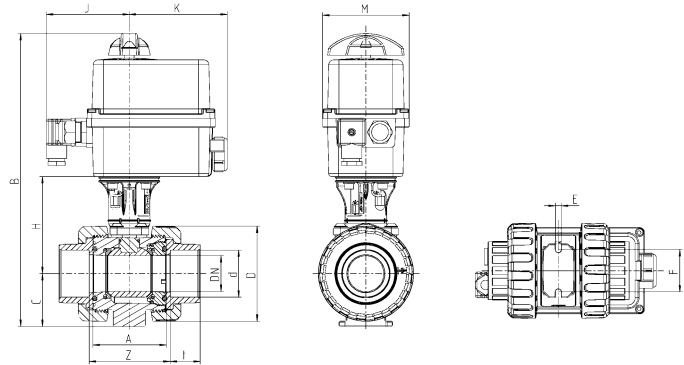
# Dimension electric EO ER

## 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

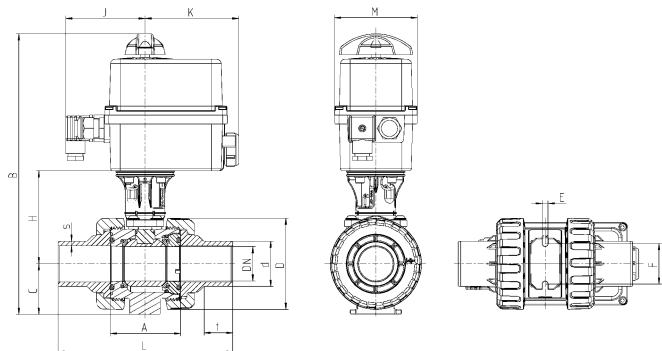


## Connector type

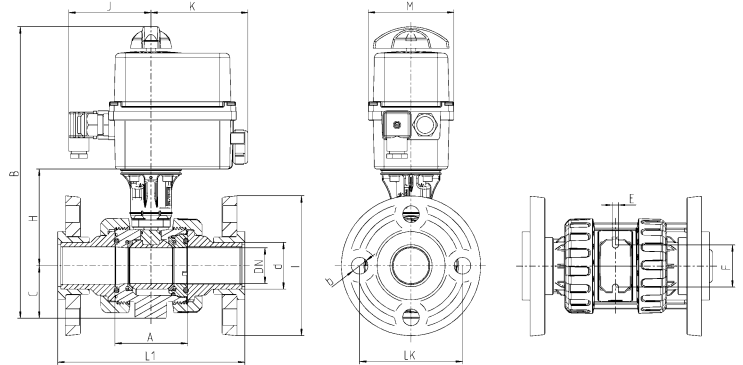
### PP-H fusion spigot metric

(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

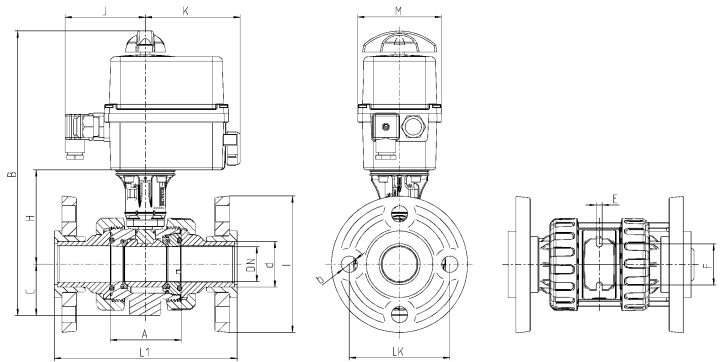


## Connector type

### 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	



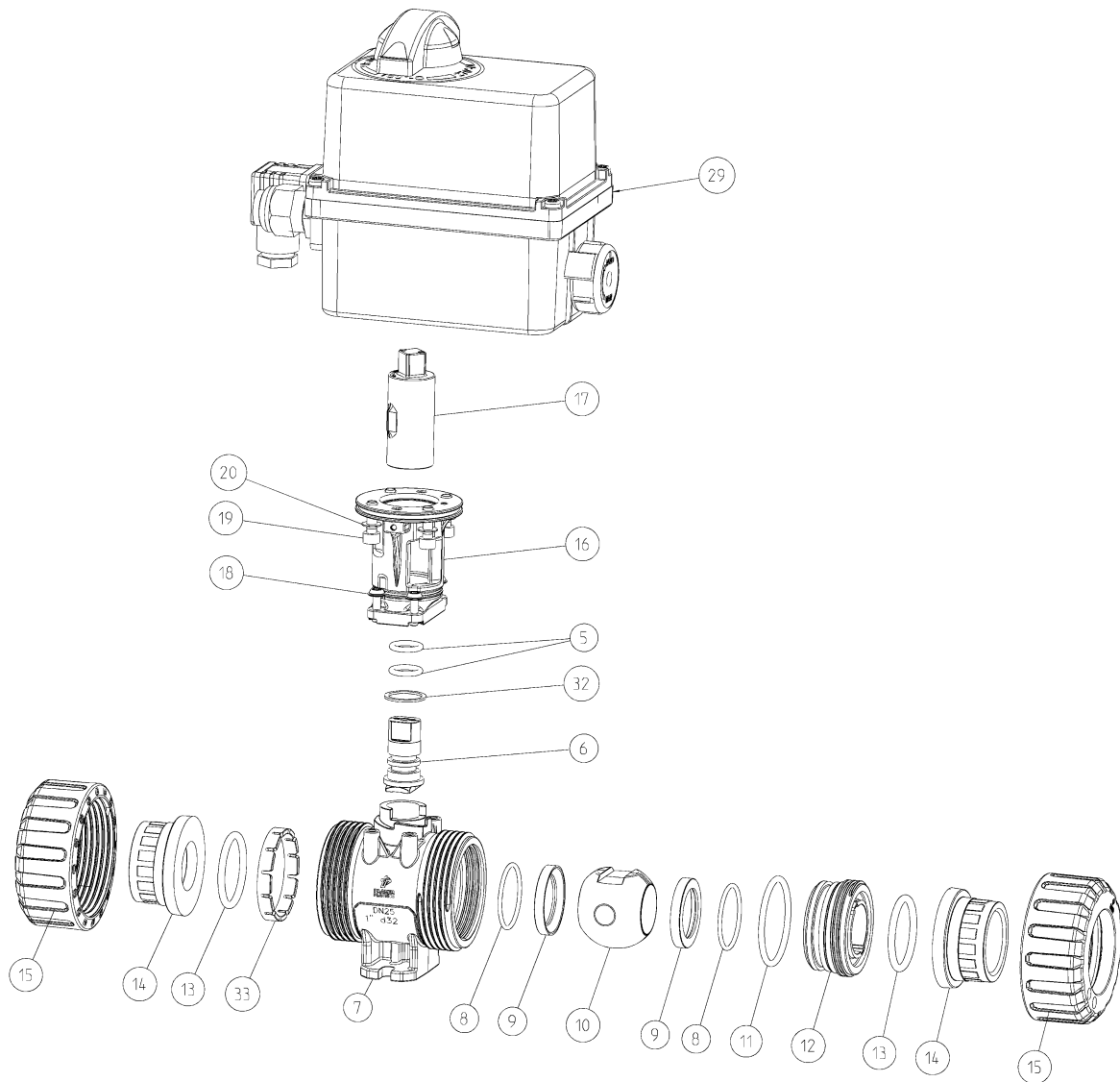
## Connector type

### 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

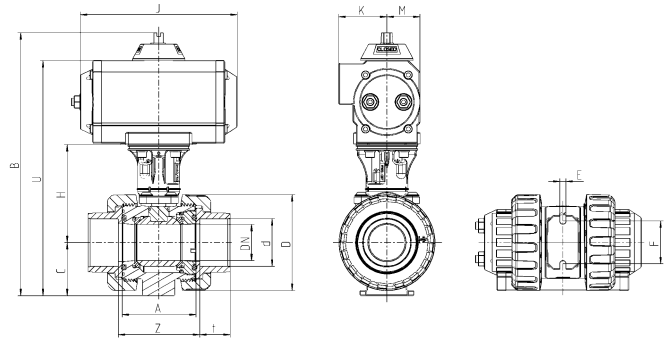


No.	Description	Material	No.	Description	Material
05.	O-ring	EPDM / FPM	15.	Union nut	PP-H
06.	Shaft	PP-H (from DN65 PVDF)	16.	Bracket	PA-GF
07.	Body	PP-H	17.	Coupling	PA-GF
08.	O-ring	EPDM / FPM	18.	Screw	A2
09.	Ball seating joint	PTFE	19.	Screw	A4
10.	Ball	PP-H	20.	Toothed washer	A2 / A4 from DN65
11.	O-ring	EPDM / FPM	29.	Actuator	-
12.	Thrust collar	PP-H		Premier / Posi / Failsafe	
13.	O-ring	EPDM / FPM	32.	Washer	PTFE
14.	Connector types		33.	Retaining ring	PP-GF
	Fusion socket /-spigot	PP-H			
	Flange	PP-GF with steel insert			

# Technical data electric EO ER

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

# Dimensions pneumatic



## Connector type

### PP-H fusion socket metric

(dimensions in mm)

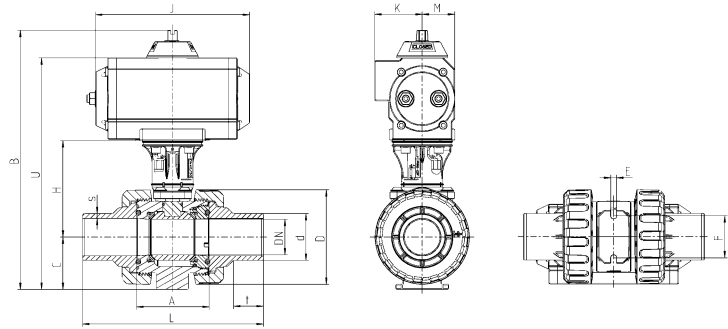
DN	10	15	20	25	32	40	50	65	80	80
d	16	20	25	32	40	50	63	75	90	110
inch	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5
C	33	33	40	43,5	51	56,5	64,5	85	100	100
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	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	UT05DA*				UT15DA			UT20DA		
B	214	214	226,5	233	269	282	297	366,5	411	411
J	119	119	119	119	165	165	165	178	178	178
K	40	40	40	40	50	50	50	53	53	53
M	27	27	27	27	35	35	35	43	43	43
U	185	185	197,5	204	239	252	267	336,5	381	381
actuator	UT05SR**				UT15SR	UT17SR	UT30SR	UT35SR		
B	214	214	226,5	233	269	282	297	385,5	463,5	463,5
J	119	119	119	119	165	165	197	230	246	246
K	40	40	40	40	50	50	50	61,5	72,5	72,5
M	27	27	27	27	35	35	35	52	65,5	65,5
U	185	185	197,5	204	239	252	267	355,5	434	434

\*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)

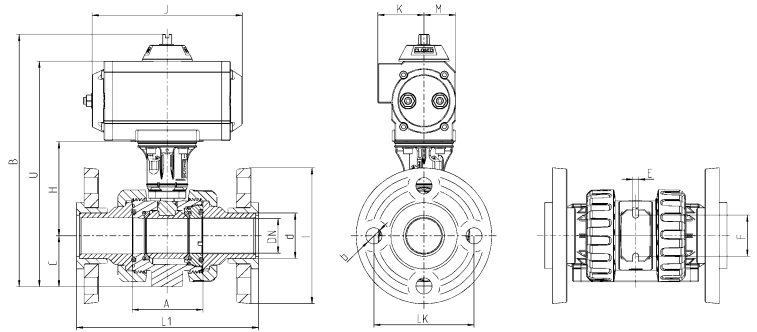
DN	10	15	20	25	32	40	50	65	80	80	
d	16	20	25	32	40	50	63	75	90	110	
A	61,5	61,5	69	73	83	94	109	131,5	156,5	156,5	
C	33	33	40	43,5	51	56,5	64,5	85	100	100	
D	58	58	68,5	75,5	92	108	127,5	160	196,5	196,5	
E	5,4	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3	
F	34	34	36	38	40	45	50	65	80	80	
H	81	81	86,5	89,5	97	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	UT05DA				UT15DA						
B	214	214	226,5	233	269	282	297	366,5	411	411	
J	119	119	119	119	165	165	165	178	178	178	
K	40	40	40	40	50	50	50	53	53	53	
M	27	27	27	27	35	35	35	43	43	43	
U	185	185	197,5	204	239	252	267	336,5	381	381	
actuator	UT05SR				UT15SR		UT17SR				
B	214	214	226,5	233	269	282	297	385,5	463,5	463,5	
J	119	119	119	119	165	165	197	230	246	246	
K	40	40	40	40	50	50	50	61,5	72,5	72,5	
M	27	27	27	27	35	35	35	52	65,5	65,5	
U	185	185	197,5	204	239	252	267	335,5	434	434	

\*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 DIN with steel insert

(dimensions in mm)

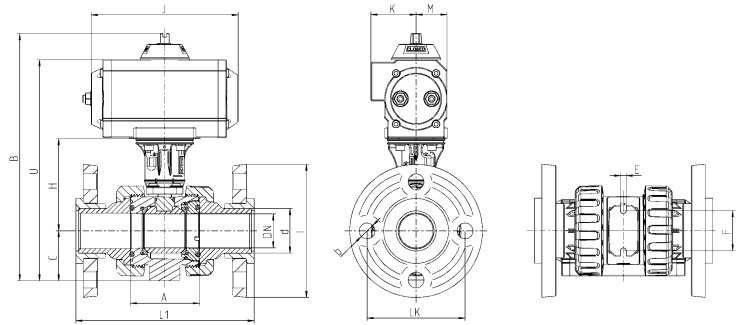
DN	15	20	25	32	40	50	65	80	80
d	20	25	32	40	50	63	75	90	110
A	61,5	69	73	83	94	109	131,5	156,5	156,5
b	14	14	14	18	18	18	18	18	18
C	33	40	43,5	51	56,5	64,5	85	100	100
E	5,4	5,4	6,4	6,4	6,4	6,4	8,3	10,3	10,3
F	34	36	38	40	45	50	65	80	80
H	81	86,5	89,5	97	104,5	111,5	138,5	168	168
I	95	108	115	140	150	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	UT05DA			UT15DA			UT20DA		
B	214	226,5	233	269	282	297	366,5	411	411
J	119	119	119	165	165	165	178	178	178
K	40	40	40	50	50	50	53	53	53
M	27	27	27	35	35	35	43	43	43
U	185	197,5	204	239	252	267	336,5	381	381
actuator	UT05SR		UT15SR		UT17SR	UT30SR	UT35SR		
B	214	226,5	233	269	282	297	385,5	463,5	463,5
J	119	119	119	165	165	197	230	246	246
K	40	40	40	50	50	50	61,5	72,5	72,5
M	27	27	27	35	35	35	52	65,5	65,5
U	185	197,5	204	239	252	267	355,5	434	434

\*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	UT05DA			UT15DA			UT20DA		
B	214	226,5	233	269	282	297	366,5	411	411
J	119	119	119	165	165	165	178	178	178
K	40	40	40	50	50	50	53	53	53
M	27	27	27	35	35	35	43	43	43
U	185	197,5	204	239	252	267	336,5	381	381
actuator	UT05SR			UT15SR		UT17SR	UT30SR	UT35SR	
B	214	226,5	233	269	282	297	385,5	463,5	463,5
J	119	119	119	165	165	197	230	246	246
K	40	40	40	50	50	50	61,5	72,5	72,5
M	27	27	27	35	35	35	52	65,5	65,5
U	185	197,5	204	239	252	267	355,5	434	434

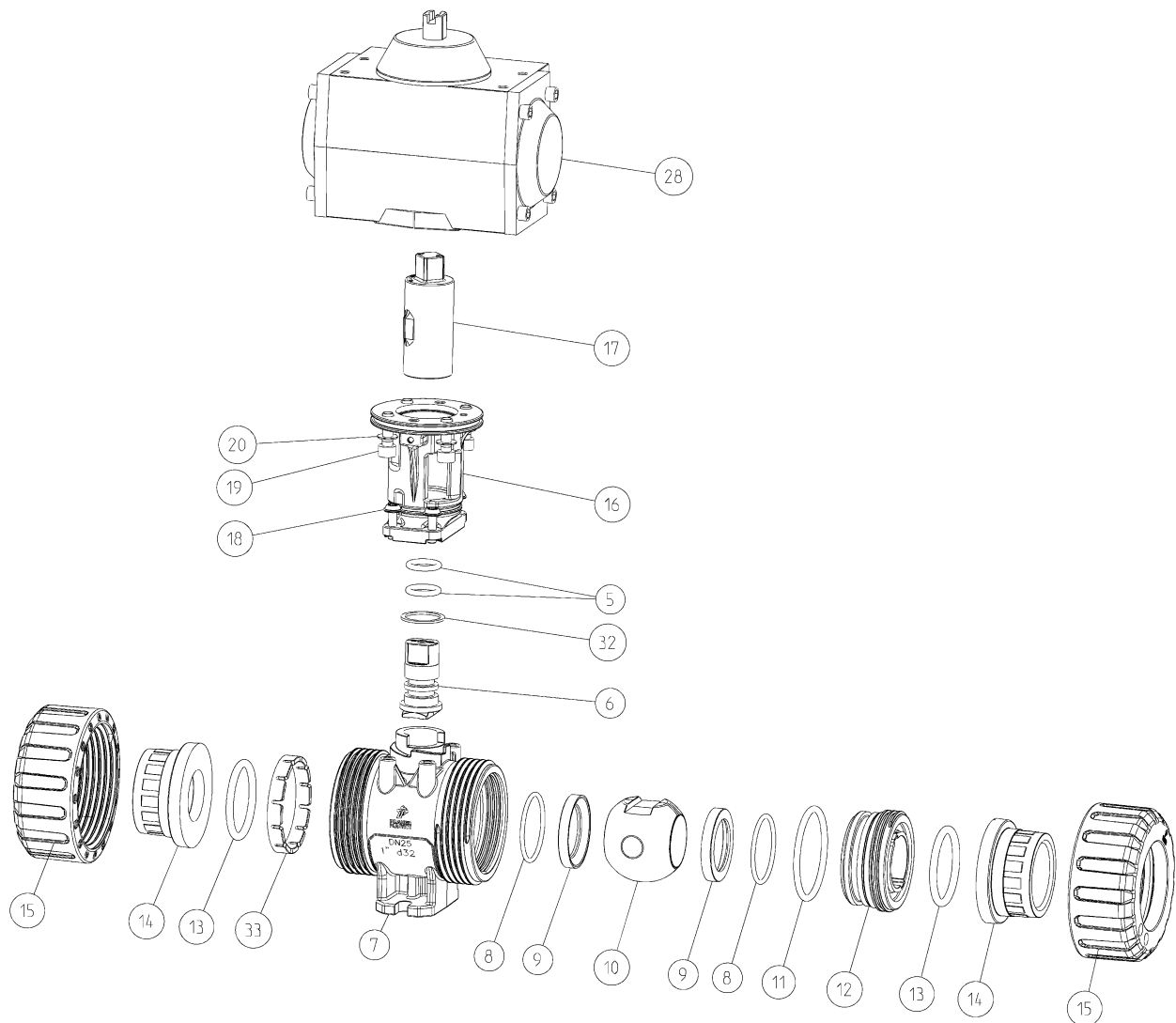
\*DA ... double acting (PO-DA)

\*\*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	No.	Description	Material
05.	O-ring	EPDM / FPM	15.	Union nut	PVC-U
06.	Shaft	PVDF	16.	Bracket	PA-GF
07.	Body	PP-H	17.	Coupling shaft	PA-GF
08.	O-ring	EPDM / FPM	18.	Screw	A2
09.	Ball seating joint	PTFE	19.	Screw	A4
10.	Ball	PP-H	20.	Toothed washer	A2 / A4 from DN65
11.	O-ring	EPDM / FPM	28.	Actuator	-
12.	Trust collar	PP-H	32.	Washer	PTFE
13.	O-ring	EPDM / FPM	33.	Retaining ring	PP-GF
14.	Connector types				
	Fusion socket /-spigot	PP-H			
	Flange	PP-GF with steel insert			

# 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:

- o Body: aluminium anodized
- o End caps: aluminium epoxy powder
- o 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° (UT15 and bigger)

### Installation:

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

## AIR CONSUMPTION (FULL CYCLE)

### DA DOUBLE ACTING

actuator	UT05 DA	UT15 DA	UT20 DA
N. Lt.	0,22	0,41	0,71

## AIR CONSUMPTION (FULL CYCLE)

### SR SPRING RETURN

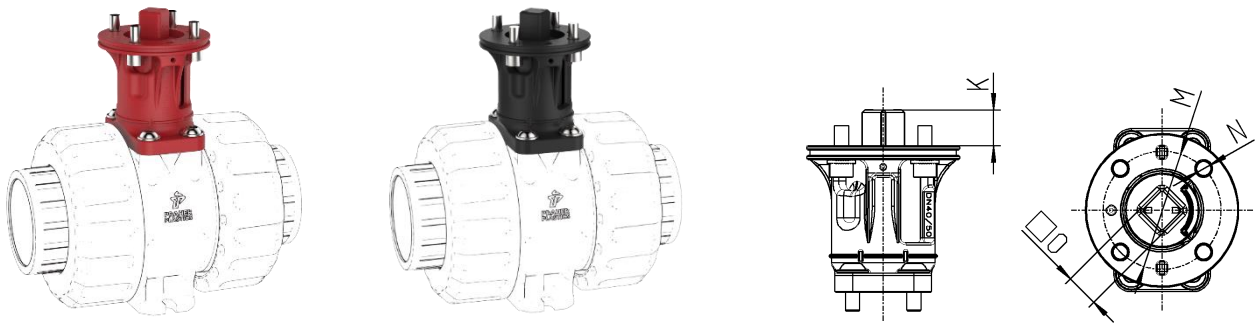
actuator	UT05 SR	UT15 SR	UT17 SR	UT30 SR	UT35 SR
N. Lt.	0,13	0,18	0,25	0,65	1,2

# 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

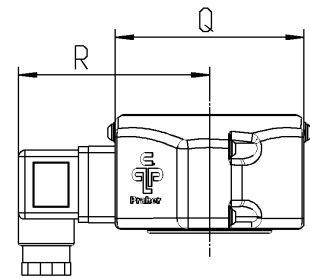
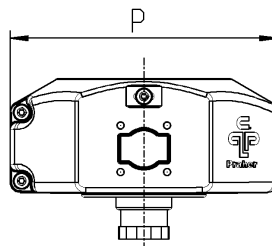
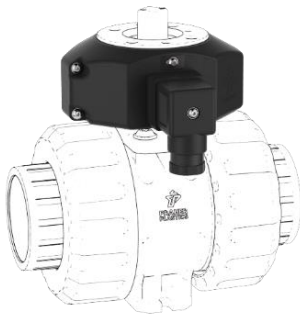
		
Material	PP-GF	PA-GF
Product line	chemical resistance	high durability
Acid resistance	++	0
Tensile modulus of elasticity	+	++
Flexural modulus of elasticity	+	+++
Notch impact strength (23°C)	+	+
Main applications	Electrolysis Acid applications Chrome, Copper, hydrofluoric acid	Water applications Ultrafiltration 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	
ISO 5211	F04 / F05 / F07	

# Accessories / spare parts

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

Consist of:

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



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 or inductive
- Cover
- Coupling for handle
- Device plug
- Screws for half shells
- Locking screws for adjusting position feedback
- Screws for mounting on the ball valve

# Accessories / spare parts

## Feedback set for automatic ball valve DN10 – DN80 d110



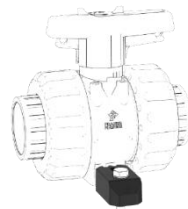
Consist of:

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

### Clamping and spacing element

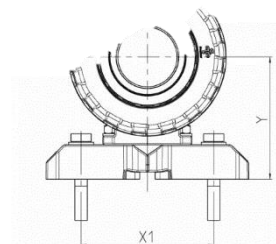
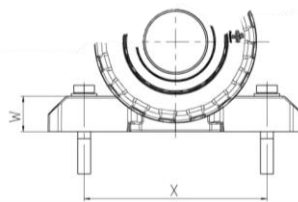
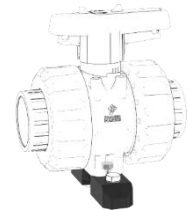
Use for mounting as a clamping element

- Floor / ceiling / wall
- Plate
- Additional screws necessary



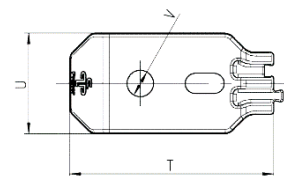
Use for mounting as a spacing element

- for flange connection
- additional screws necessary



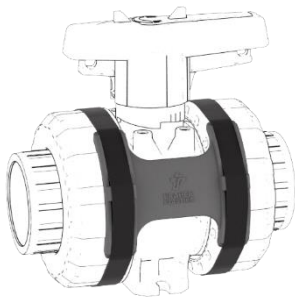
dimensions in mm

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

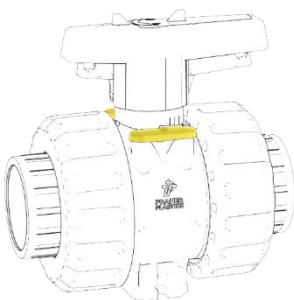
## Union nut locking for ball valve DN10 – DN80 d110



Consist of:

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

## Cover for ball valve DN10 – DN80 d110

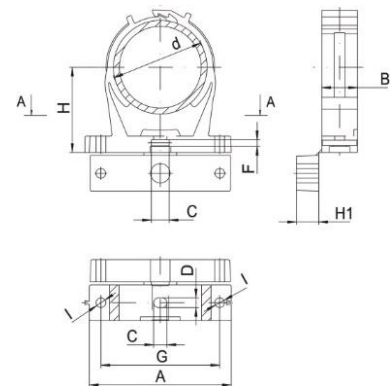


Consist of:

- 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	25 - 28	31 - 35	39 - 43	47 - 51	60 - 65	72 - 80	87 - 95
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

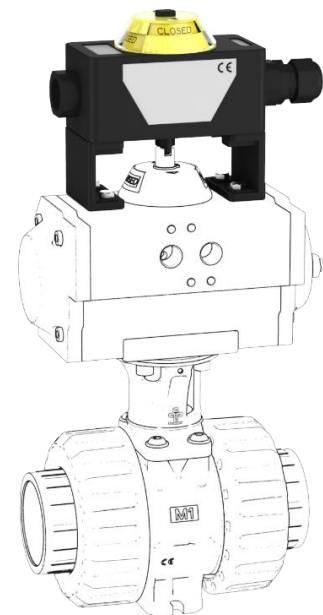
- Body: polycarbonat black
- Cover: polycarbonat clear
- Mounting bracket and screws: stainless steel
- Seals: EPDM

### Voltage

- 1 – 250V

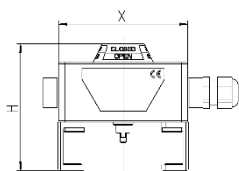
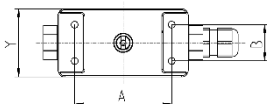
### Current

- 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
- Easy switch from 5/2- to 3/2- ways by turning the sealing plate
- Manual override as standard
- Protection IP65

### Material

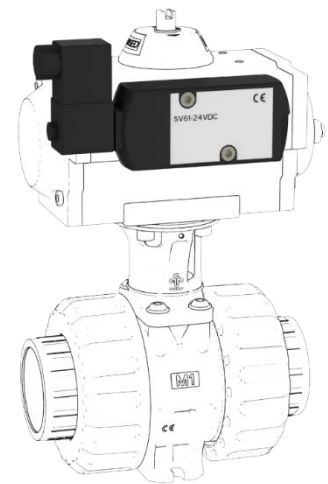
- Body: aluminium anodized
- Piston: aluminium
- Seals: NBR
- Screws and spring: stainless steel

### Voltage

- 24 V DC (3W)
- 230 V AC (5VA)

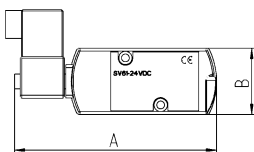
### Accessories

- Flow control silencer
- Silencer



dimensions in mm

A	B	C
139	45	33





# Accessories / spare parts

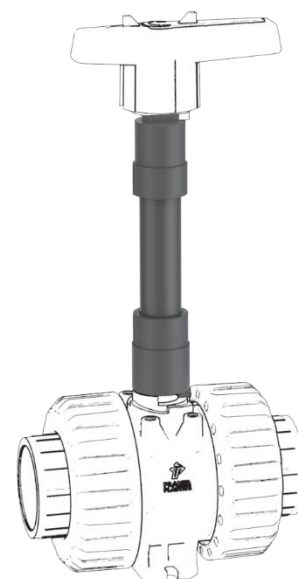
## Handle elongation

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



# 2-Wege modularer Industriekugelhahn M1, silikonfrei

## 2-way modular industrial ball valve M1, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	124084	124140
20	15	10	9	124085	124141
25	20	10	8	124086	124142
32	25	10	8	124087	124143
40	32	10	8	124088	124144
50	40	10	6	124089	124145
63	50	10	4	124090	124146
75	65	10	1	124280	124283
90	80	10	1	124281	124284
110	80	10	1	124282	124285



### Kugelhahn 2W M1 ASTM

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 ASTM

- PP fusion socket ends
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
1/2"	15	10	9	210241	210248
3/4"	20	10	8	210242	210249
1"	25	10	8	210243	210250
1 1/4"	32	10	8	210244	210251
1 1/2"	40	10	6	210245	210252
2"	50	10	4	210246	210253



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	124098	124147
20	15	10	9	124099	124148
25	20	10	8	124100	124149
32	25	10	8	124101	124150
40	32	10	8	124102	124151
50	40	10	6	124103	124152
63	50	10	4	124104	124153
75	65	10	1	124286	124289
90	80	10	1	124287	124290
110	80	10	1	124288	124291



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen extralang
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion spigot extensive
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
20	15	10	9	210547	210557
25	20	10	8	210548	210558
32	25	10	8	210549	210559
40	32	10	8	210550	210560
50	40	10	6	210551	210561
63	50	10	4	210552	210562
75	65	10	1	210553	210563
90	80	10	1	210554	210564
110	80	10	1	210555	210565

# 2-Wege modularer Industriekugelhahn M1, silikonfrei

## 2-way modular industrial ball valve M1, silicone free



### Kugelhahn 2W M1 BSP

- Gewindemuffe R
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 BSP

- female thread socket ends R
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
3/8"	10	10	9	210254	210261
1/2"	15	10	9	210255	210262
3/4"	20	10	8	210256	210263
1"	25	10	8	210257	210264
1 1/4"	32	10	8	210258	210265
1 1/2"	40	10	6	210259	210266
2"	50	10	4	210260	210267



### Kugelhahn 2W M1 NPT

- Gewindemuffe R
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 NPT

- female thread socket ends R
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
3/8"	10	10	9	210268	210275
1/2"	15	10	9	210269	210276
3/4"	20	10	8	210270	210277
1"	25	10	8	210271	210278
1 1/4"	32	10	8	210272	210279
1 1/2"	40	10	6	210273	210280
2"	50	10	4	210274	210281



### Kugelhahn 2W M1 metrisch

- PE Schweißmuffe
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion socket ends
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	210282	210289
20	15	10	9	210283	210290
25	20	10	8	210284	210291
32	25	10	8	210285	210292
40	32	10	8	210286	210293
50	40	10	6	210287	210294
63	50	10	4	210288	210295



### Kugelhahn 2W M1 metrisch

- PE Schweißstutzen
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion spigot
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	210296	210303
20	15	10	9	210297	210304
25	20	10	8	210298	210305
32	25	10	8	210299	210306
40	32	10	8	210300	210307
50	40	10	6	210301	210308
63	50	10	4	210302	210309
75	65	10	1	210566	210569
90	80	10	1	210567	210570
110	80	10	1	210568	210571

# 2-Wege modularer Industriekugelhahn M1, silikonfrei

## 2-way modular industrial ball valve M1, silicone free



### Kugelhahn 2W M1 metrisch

- PE-Schweißstutzen extralang
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion spigot extensive
- seat-sealing: PTFE
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
20	15	10	9	210448	210457
25	20	10	8	210449	210458
32	25	10	8	210450	210459
40	32	10	8	210451	210460
50	40	10	6	210452	210461
63	50	10	4	210453	210462
75	65	10	1	210454	210463
90	80	10	1	210455	210464
110	80	10	1	210456	210465



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- einzeln verpackt

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
20	15	10	9	129973	129979
25	20	10	8	129974	129980
32	25	10	6	129975	129981
40	32	10	6	129976	129982
50	40	10	4	129977	129983
63	50	10	2	129978	129984
75	65	10	1	210572	210575
90	80	10	1	210573	210576
110	80	10	1	210574	210577



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- einzeln verpackt

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
1/2"	15	10	9	129985	129991
3/4"	20	10	8	129986	129992
1"	25	10	6	129987	129993
1 1/4"	32	10	6	129988	129994
1 1/2"	40	10	4	129989	129995
2"	50	10	2	129990	129996
2 1/2"	65	10	1	210578	210581
3"	80	10	1	210579	210582
4"	80	10	1	210580	210583

# 2-Wege modularer Industriekugelhahn M1 Adapterset, silikonfrei

## 2-way modular industrial ball valve M1 Adapter Set, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- Adapterset
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- adapter set
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	124154	124161
20	15	10	9	124155	124162
25	20	10	8	124156	124163
32	25	10	8	124157	124164
40	32	10	8	124158	124165
50	40	10	6	124159	124166
63	50	10	4	124160	124167
75	65	10	1	124304	210584
90	80	10	1	124305	210585
110	80	10	1	124306	210586



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- Adapterset
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- adapter set
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	124168	124500
20	15	10	9	124169	124501
25	20	10	8	124170	124502
32	25	10	8	124171	124503
40	32	10	8	124172	124504
50	40	10	6	124173	124505
63	50	10	4	124174	124506
75	65	10	1	210587	210590
90	80	10	1	210588	210591
110	80	10	1	210589	210592



### Kugelhahn 2W M1 BSP

- Gewindemuffe R
- Sitzdichtung: PTFE
- Adapterset
- einzeln verpackt

### Ball Valve 2W M1 BSP

- female thread socket ends R
- seat-sealing: PTFE
- adapter set
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
3/8"	10	10	9	210310	210317
1/2"	15	10	9	210311	210318
3/4"	20	10	8	210312	210319
1"	25	10	8	210313	210320
1 1/4"	32	10	8	210314	210321
1 1/2"	40	10	6	210315	210322
2"	50	10	4	210316	210323



### Kugelhahn 2W M1 NPT

- Gewindemuffe R
- Sitzdichtung: PTFE
- Adapterset
- einzeln verpackt

### Ball Valve 2W M1 NPT

- female thread socket ends R
- seat-sealing: PTFE
- adapter set
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
3/8"	10	10	9	210324	210331
1/2"	15	10	9	210325	210332
3/4"	20	10	8	210326	210333
1"	25	10	8	210327	210334
1 1/4"	32	10	8	210328	210335
1 1/2"	40	10	6	210329	210336
2"	50	10	4	210330	210337

# 2-Wege modularer Industriekugelhahn M1 Adapterset, silikonfrei

## 2-way modular industrial ball valve M1 Adapter Set, silicone free



### Kugelhahn 2W M1 metrisch

- PE Schweißmuffe
- Sitzdichtung: PTFE
- Adapterset
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion socket ends
- seat-sealing: PTFE
- adapter set
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	210338	210345
20	15	10	9	210339	210346
25	20	10	8	210340	210347
32	25	10	8	210341	210348
40	32	10	8	210342	210349
50	40	10	6	210343	210350
63	50	10	4	210344	210351



### Kugelhahn 2W M1 metrisch

- PE Schweißstutzen
- Sitzdichtung: PTFE
- Adapterset
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion spigot
- seat-sealing: PTFE
- adapter set
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
16	10	10	9	210352	210359
20	15	10	9	210353	210360
25	20	10	8	210354	210361
32	25	10	8	210355	210362
40	32	10	8	210356	210363
50	40	10	6	210357	210364
63	50	10	4	210358	210365



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- Adapterset
- lang
- einzeln verpackt

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- adapter set
- long
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
20	15	10	9	210366	210372
25	20	10	8	210367	210373
32	25	10	8	210368	210374
40	32	10	6	210369	210375
50	40	10	4	210370	210376
63	50	10	2	210371	210377
75	65	10	1	210593	210596
90	80	10	1	210594	210597
110	80	10	1	210595	210598



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- Adapterset
- lang
- einzeln verpackt

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- adapter set
- long
- single packed

Code  
30M

d	DN	PN	VE Pack	EPDM	FPM
1/2"	15	10	9	210378	210384
3/4"	20	10	8	210379	210385
1"	25	10	6	210380	210386
1 1/4"	32	10	6	210381	210387
1 1/2"	40	10	4	210382	210388
2"	50	10	2	210383	210389
2 1/2"	65	10	1	210599	210602
3"	80	10	1	210600	210603
4"	80	10	1	210601	210604

# 2-Wege modularer Industriekugelhahn M1 mit Stellungsrückmeldung, silikonfrei

## 2-way modular industrial ball valve M1 with position feedback, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi NO Ag-Ni 15-250V AC	10	1	120452	120512
20	15	pi NO Ag-Ni 15-250V AC	10	1	120453	120513
25	20	pi NO Ag-Ni 15-250V AC	10	1	120454	120514
32	25	pi NO Ag-Ni 15-250V AC	10	1	120455	120515
40	32	pi NO Ag-Ni 15-250V AC	10	1	120456	120516
50	40	pi NO Ag-Ni 15-250V AC	10	1	120457	120517
63	50	pi NO Ag-Ni 15-250V AC	10	1	120458	120518
75	65	pi NO Ag-Ni 15-250V AC	10	1	124307	513762
90	80	pi NO Ag-Ni 15-250V AC	10	1	124308	513763
110	80	pi NO Ag-Ni 15-250V AC	10	1	124309	513764



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi NO Ag-Ni 15-250V AC	10	1	512356	512363
20	15	pi NO Ag-Ni 15-250V AC	10	1	512357	512364
25	20	pi NO Ag-Ni 15-250V AC	10	1	512358	512365
32	25	pi NO Ag-Ni 15-250V AC	10	1	512359	512366
40	32	pi NO Ag-Ni 15-250V AC	10	1	512360	512367
50	40	pi NO Ag-Ni 15-250V AC	10	1	512361	512368
63	50	pi NO Ag-Ni 15-250V AC	10	1	512362	512369
75	65	pi NO Ag-Ni 15-250V AC	10	1	513765	513768
90	80	pi NO Ag-Ni 15-250V AC	10	1	513766	513769
110	80	pi NO Ag-Ni 15-250V AC	10	1	513767	513770



### Kugelhahn 2W M1 metrisch

- PE Schweißmuffe
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion socket ends
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi NO Ag-Ni 15-250V AC	10	1	512370	512377
20	15	pi NO Ag-Ni 15-250V AC	10	1	512371	512378
25	20	pi NO Ag-Ni 15-250V AC	10	1	512372	512379
32	25	pi NO Ag-Ni 15-250V AC	10	1	512373	512380
40	32	pi NO Ag-Ni 15-250V AC	10	1	512374	512381
50	40	pi NO Ag-Ni 15-250V AC	10	1	512375	512382
63	50	pi NO Ag-Ni 15-250V AC	10	1	512376	512383



### Kugelhahn 2W M1 metrisch

- PE Schweißstutzen
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion spigot
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi NO Ag-Ni 15-250V AC	10	1	512384	512391
20	15	pi NO Ag-Ni 15-250V AC	10	1	512385	512392
25	20	pi NO Ag-Ni 15-250V AC	10	1	512386	512393
32	25	pi NO Ag-Ni 15-250V AC	10	1	512387	512394
40	32	pi NO Ag-Ni 15-250V AC	10	1	512388	512395
50	40	pi NO Ag-Ni 15-250V AC	10	1	512389	512396
63	50	pi NO Ag-Ni 15-250V AC	10	1	512390	512397

# 2-Wege modularer Industriekugelhahn M1 mit Stellungsrückmeldung, silikonfrei

## 2-way modular industrial ball valve M1 with position feedback, silicone free



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- einzeln verpackt

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
20	15	pi NO Ag-Ni 15-250V AC	10	1	512398	512404
25	20	pi NO Ag-Ni 15-250V AC	10	1	512399	512405
32	25	pi NO Ag-Ni 15-250V AC	10	1	512400	512406
40	32	pi NO Ag-Ni 15-250V AC	10	1	512401	512407
50	40	pi NO Ag-Ni 15-250V AC	10	1	512402	512408
63	50	pi NO Ag-Ni 15-250V AC	10	1	512403	512409



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- einzeln verpackt

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
1/2"	15	pi NO Ag-Ni 15-250V AC	10	1	512410	512416
3/4"	20	pi NO Ag-Ni 15-250V AC	10	1	512411	512417
1"	25	pi NO Ag-Ni 15-250V AC	10	1	512412	512418
1 1/4"	32	pi NO Ag-Ni 15-250V AC	10	1	512413	512419
1 1/2"	40	pi NO Ag-Ni 15-250V AC	10	1	512414	512420
2"	50	pi NO Ag-Ni 15-250V AC	10	1	512415	512421



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi PNP 10-30V DC	10	1	512422	512429
20	15	pi PNP 10-30V DC	10	1	512423	512430
25	20	pi PNP 10-30V DC	10	1	512424	512431
32	25	pi PNP 10-30V DC	10	1	512425	512432
40	32	pi PNP 10-30V DC	10	1	512426	512433
50	40	pi PNP 10-30V DC	10	1	512427	512434
63	50	pi PNP 10-30V DC	10	1	512428	512435
75	65	pi PNP 10-30V DC	10	1	513771	513774
90	80	pi PNP 10-30V DC	10	1	513772	513775
110	80	pi PNP 10-30V DC	10	1	513773	513776



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi PNP 10-30V DC	10	1	512436	512443
20	15	pi PNP 10-30V DC	10	1	512437	512444
25	20	pi PNP 10-30V DC	10	1	512438	512445
32	25	pi PNP 10-30V DC	10	1	512439	512446
40	32	pi PNP 10-30V DC	10	1	512440	512447
50	40	pi PNP 10-30V DC	10	1	512441	512448
63	50	pi PNP 10-30V DC	10	1	512442	512449
75	65	pi PNP 10-30V DC	10	1	513777	513780
90	80	pi PNP 10-30V DC	10	1	513778	513781
110	80	pi PNP 10-30V DC	10	1	513779	513782



# 2-Wege modularer Industriekugelhahn M1 mit Stellungsrückmeldung, silikonfrei

2-way modular industrial ball valve M1 with position feedback, silicone free



### Kugelhahn 2W M1 metrisch

- PE Schweißmuffe
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion socket ends
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi PNP 10-30V DC	10	1	512450	512457
20	15	pi PNP 10-30V DC	10	1	512451	512458
25	20	pi PNP 10-30V DC	10	1	512452	512459
32	25	pi PNP 10-30V DC	10	1	512453	512460
40	32	pi PNP 10-30V DC	10	1	512454	512461
50	40	pi PNP 10-30V DC	10	1	512455	512462
63	50	pi PNP 10-30V DC	10	1	512456	512463



### Kugelhahn 2W M1 metrisch

- PE Schweißstutzen
- Sitzdichtung: PTFE
- einzeln verpackt

### Ball Valve 2W M1 metric

- PE fusion spigot
- seat-sealing: PTFE
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
16	10	pi PNP 10-30V DC	10	1	512464	512471
20	15	pi PNP 10-30V DC	10	1	512465	512472
25	20	pi PNP 10-30V DC	10	1	512466	512473
32	25	pi PNP 10-30V DC	10	1	512467	512474
40	32	pi PNP 10-30V DC	10	1	512468	512475
50	40	pi PNP 10-30V DC	10	1	512469	512476
63	50	pi PNP 10-30V DC	10	1	512470	512477



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- einzeln verpackt

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
20	15	pi PNP 10-30V DC	10	1	512478	512484
25	20	pi PNP 10-30V DC	10	1	512479	512485
32	25	pi PNP 10-30V DC	10	1	512480	512486
40	32	pi PNP 10-30V DC	10	1	512481	512487
50	40	pi PNP 10-30V DC	10	1	512482	512488
63	50	pi PNP 10-30V DC	10	1	512483	512489



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- einzeln verpackt

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- single packed

Code  
38M

d	DN	Schalter	PN	VE Pack	EPDM	FPM
1/2"	15	pi PNP 10-30V DC	10	1	512490	512496
3/4"	20	pi PNP 10-30V DC	10	1	512491	512497
1"	25	pi PNP 10-30V DC	10	1	512492	512498
1 1/4"	32	pi PNP 10-30V DC	10	1	512493	512499
1 1/2"	40	pi PNP 10-30V DC	10	1	512494	512500
2"	50	pi PNP 10-30V DC	10	1	512495	512501

## 2-Wege modularer Kugelhahn M1 mit Elektroantrieb standard, silikonfrei

### 2-way modular industrial ball valve M1 with electric actuator standard, silicone free



#### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO

#### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO

Code  
**38M**

d	DN	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	IND 12-24V AC/DC	10	1	129950	129954
20	15	IND 12-24V AC/DC	10	1	129951	129955
25	20	IND 12-24V AC/DC	10	1	129952	129956
32	25	IND 12-24V AC/DC	10	1	129953	129957



#### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO

#### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO

Code  
**38M**

d	DN	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ECO 230VAC	10	1	129942	129946
20	15	ECO 230VAC	10	1	129943	129947
25	20	ECO 230VAC	10	1	129944	129948
32	25	ECO 230VAC	10	1	129945	129949



#### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO

#### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO

Code  
**38M**

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	24V AC/DC	10	1	123756	123770
20	15	ER20	24V AC/DC	10	1	123757	123771
25	20	ER20	24V AC/DC	10	1	123758	123772
32	25	ER20	24V AC/DC	10	1	123759	123773
40	32	ER20	24V AC/DC	10	1	123760	123774
50	40	ER20	24V AC/DC	10	1	123761	123775
63	50	ER20	24V AC/DC	10	1	123762	123776
75	65	ER60	24V AC/DC	10	1	513783	513786
90	80	ER60	24V AC/DC	10	1	513784	513787
110	80	ER60	24V AC/DC	10	1	513785	513788



#### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO

#### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO

Code  
**38M**

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	90-240VAC	10	1	123763	123777
20	15	ER20	90-240VAC	10	1	123764	123778
25	20	ER20	90-240VAC	10	1	123765	123779
32	25	ER20	90-240VAC	10	1	123766	123780
40	32	ER20	90-240VAC	10	1	123767	123781
50	40	ER20	90-240VAC	10	1	123768	123782
63	50	ER20	90-240VAC	10	1	123769	123783
75	65	ER60	90-240VAC	10	1	124310	513789
90	80	ER60	90-240VAC	10	1	124311	513790
110	80	ER60	90-240VAC	10	1	124312	513791

## 2-Wege modularer Kugelhahn M1 mit Elektroantrieb standard, silikonfrei

### 2-way modular industrial ball valve M1 with electric actuator standard, silicone free



#### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- EO

#### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- EO

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	24V AC/DC	10	1	512502	512516
20	15	ER20	24V AC/DC	10	1	512503	512517
25	20	ER20	24V AC/DC	10	1	512504	512518
32	25	ER20	24V AC/DC	10	1	512505	512519
40	32	ER20	24V AC/DC	10	1	512506	512520
50	40	ER20	24V AC/DC	10	1	512507	512521
63	50	ER20	24V AC/DC	10	1	512508	512522
75	65	ER60	24V AC/DC	10	1	513792	513798
90	80	ER60	24V AC/DC	10	1	513793	513799
110	80	ER60	24V AC/DC	10	1	513794	513800



#### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- EO

#### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- EO

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	90-240VAC	10	1	512509	512523
20	15	ER20	90-240VAC	10	1	512510	512524
25	20	ER20	90-240VAC	10	1	512511	512525
32	25	ER20	90-240VAC	10	1	512512	512526
40	32	ER20	90-240VAC	10	1	512513	512527
50	40	ER20	90-240VAC	10	1	512514	512528
63	50	ER20	90-240VAC	10	1	512515	512529
75	65	ER60	90-240VAC	10	1	513795	513801
90	80	ER60	90-240VAC	10	1	513796	513802
110	80	ER60	90-240VAC	10	1	513797	513803



#### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- EO

#### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- EO

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
20	15	ER20	90-240VAC	10	1	512536	512548
25	20	ER20	90-240VAC	10	1	512537	512549
32	25	ER20	90-240VAC	10	1	512538	512550
40	32	ER20	90-240VAC	10	1	512539	512551
50	40	ER20	90-240VAC	10	1	512540	512552
63	50	ER20	90-240VAC	10	1	512541	512553
75	65	ER60	90-240VAC	10	1	513807	513813
90	80	ER60	90-240VAC	10	1	513808	513814
110	80	ER60	90-240VAC	10	1	513809	513815

## 2-Wege modularer Kugelhahn M1 mit Elektroantrieb standard, silikonfrei

### 2-way modular industrial ball valve M1 with electric actuator standard, silicone free



#### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- EO

#### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- EO

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
20	15	ER20	24V AC/DC	10	1	512530	512542
25	20	ER20	24V AC/DC	10	1	512531	512543
32	25	ER20	24V AC/DC	10	1	512532	512544
40	32	ER20	24V AC/DC	10	1	512533	512545
50	40	ER20	24V AC/DC	10	1	512534	512546
63	50	ER20	24V AC/DC	10	1	512535	512547
75	65	ER60	24V AC/DC	10	1	513804	513810
90	80	ER60	24V AC/DC	10	1	513805	513811
110	80	ER60	24V AC/DC	10	1	513806	513812



#### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- EO

#### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- EO

Code  
38m

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
1/2"	15	ER20	24V AC/DC	10	1	512554	512566
3/4"	20	ER20	24V AC/DC	10	1	512555	512567
1"	25	ER20	24V AC/DC	10	1	512556	512568
1 1/4"	32	ER20	24V AC/DC	10	1	512557	512569
1 1/2"	40	ER20	24V AC/DC	10	1	512558	512570
2"	50	ER20	24V AC/DC	10	1	512559	512571
2 1/2"	65	ER60	24V AC/DC	10	1	513816	513822
3"	80	ER60	24V AC/DC	10	1	513817	513823
4"	80	ER60	24V AC/DC	10	1	513818	513824



#### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- EO

#### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- EO

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
1/2"	15	ER20	90-240VAC	10	1	512560	512572
3/4"	20	ER20	90-240VAC	10	1	512561	512573
1"	25	ER20	90-240VAC	10	1	512562	512574
1 1/4"	32	ER20	90-240VAC	10	1	512563	512575
1 1/2"	40	ER20	90-240VAC	10	1	512564	512576
2"	50	ER20	90-240VAC	10	1	512565	512577
2 1/2"	65	ER60	90-240VAC	10	1	513819	513825
3"	80	ER60	90-240VAC	10	1	513820	513826
4"	80	ER60	90-240VAC	10	1	513821	513827

## 2-Wege modularer Industriekugelhahn M1 elektrisch mit Positioner, silikonfrei

2-way modular industrial ball valve M1 electric with positioner, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO
- posi

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO
- posi

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	15-30VAC	10	1	512578	512592
20	15	ER20	15-30VAC	10	1	512579	512593
25	20	ER20	15-30VAC	10	1	512580	512594
32	25	ER20	15-30VAC	10	1	512581	512595
40	32	ER20	15-30VAC	10	1	512582	512596
50	40	ER20	15-30VAC	10	1	512583	512597
63	50	ER20	15-30VAC	10	1	512584	512598



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO
- posi

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO
- posi

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	90-240VAC	10	1	512585	512599
20	15	ER20	90-240VAC	10	1	512586	512600
25	20	ER20	90-240VAC	10	1	512587	512601
32	25	ER20	90-240VAC	10	1	512588	512602
40	32	ER20	90-240VAC	10	1	512589	512603
50	40	ER20	90-240VAC	10	1	512590	512604
63	50	ER20	90-240VAC	10	1	512591	512605



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- EO
- posi

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- EO
- posi

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	15-30VAC	10	1	512606	512620
20	15	ER20	15-30VAC	10	1	512607	512621
25	20	ER20	15-30VAC	10	1	512608	512622
32	25	ER20	15-30VAC	10	1	512609	512623
40	32	ER20	15-30VAC	10	1	512610	512624
50	40	ER20	15-30VAC	10	1	512611	512625
63	50	ER20	15-30VAC	10	1	512612	512626



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- EO
- posi

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- EO
- posi

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	90-240VAC	10	1	512613	512627
20	15	ER20	90-240VAC	10	1	512614	512628
25	20	ER20	90-240VAC	10	1	512615	512629
32	25	ER20	90-240VAC	10	1	512616	512630
40	32	ER20	90-240VAC	10	1	512617	512631
50	40	ER20	90-240VAC	10	1	512618	512632
63	50	ER20	90-240VAC	10	1	512619	512633

Valves PP-H

## 2-Wege modularer Industriekugelhahn M1 elektrisch mit Failsafe, silikonfrei

2-way modular industrial ball valve M1 electric with failsafe, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO
- failsafe

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO
- failsafe

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	15-30VAC	10	1	512634	512648
20	15	ER20	15-30VAC	10	1	512635	512649
25	20	ER20	15-30VAC	10	1	512636	512650
32	25	ER20	15-30VAC	10	1	512637	512651
40	32	ER20	15-30VAC	10	1	512638	512652
50	40	ER20	15-30VAC	10	1	512639	512653
63	50	ER20	15-30VAC	10	1	512640	512654



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- EO
- failsafe

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- EO
- failsafe

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	90-240VAC	10	1	512641	512655
20	15	ER20	90-240VAC	10	1	512642	512656
25	20	ER20	90-240VAC	10	1	512643	512657
32	25	ER20	90-240VAC	10	1	512644	512658
40	32	ER20	90-240VAC	10	1	512645	512659
50	40	ER20	90-240VAC	10	1	512646	512660
63	50	ER20	90-240VAC	10	1	512647	512661



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- EO
- failsafe

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- EO
- failsafe

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	15-30VAC	10	1	512662	512676
20	15	ER20	15-30VAC	10	1	512663	512677
25	20	ER20	15-30VAC	10	1	512664	512678
32	25	ER20	15-30VAC	10	1	512665	512679
40	32	ER20	15-30VAC	10	1	512666	512680
50	40	ER20	15-30VAC	10	1	512667	512681
63	50	ER20	15-30VAC	10	1	512668	512682



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- EO
- failsafe

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- EO
- failsafe

Code  
38M

d	DN	Typ	Spannung Voltage	PN	VE Pack	EPDM	FPM
16	10	ER20	90-240VAC	10	1	512669	512683
20	15	ER20	90-240VAC	10	1	512670	512684
25	20	ER20	90-240VAC	10	1	512671	512685
32	25	ER20	90-240VAC	10	1	512672	512686
40	32	ER20	90-240VAC	10	1	512673	512687
50	40	ER20	90-240VAC	10	1	512674	512688
63	50	ER20	90-240VAC	10	1	512675	512689

## 2-Wege modularer Industriekugelhahn M1 mit Pneumatiktrieb standard, silikonfrei

*2-way modular industrial ball valve M1 with pneumatic actuator standard, silicone free*



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NC

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NC

Code  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	123798	123805
20	15	UT05-2	10	1	123799	123806
25	20	UT05-2	10	1	123800	123807
32	25	UT05-2	10	1	123801	123808
40	32	UT15-4	10	1	123802	123809
50	40	UT15-4	10	1	123803	123810
63	50	UT17-4	10	1	123804	123811
75	65	UT30-4	10	1	124313	513828
90	80	UT35-4	10	1	124314	513829
110	80	UT35-4	10	1	124315	513830



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NO

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NO

Code  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	123819	123826
20	15	UT05-2	10	1	123820	123827
25	20	UT05-2	10	1	123821	123828
32	25	UT05-2	10	1	123822	123829
40	32	UT15-4	10	1	123823	123830
50	40	UT15-4	10	1	123824	123831
63	50	UT17-4	10	1	123825	123832
75	65	UT30-4	10	1	513831	513834
90	80	UT35-4	10	1	513832	513835
110	80	UT35-4	10	1	513833	513836



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-DA

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-DA

Code  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	123840	123847
20	15	UT05DA	10	1	123841	123848
25	20	UT05DA	10	1	123842	123849
32	25	UT05DA	10	1	123843	123850
40	32	UT15DA	10	1	123844	123851
50	40	UT15DA	10	1	123845	123852
63	50	UT15DA	10	1	123846	123853
75	65	UT20DA	10	1	513837	513840
90	80	UT20DA	10	1	513838	513841
110	80	UT20DA	10	1	513839	513842

## 2-Wege modularer Industriekugelhahn M1 mit Pneumatiktrieb standard, silikonfrei

2-way modular industrial ball valve M1 with pneumatic actuator standard, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NC

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512690	512697
20	15	UT05-2	10	1	512691	512698
25	20	UT05-2	10	1	512692	512699
32	25	UT05-2	10	1	512693	512700
40	32	UT15-4	10	1	512694	512701
50	40	UT15-4	10	1	512695	512702
63	50	UT17-4	10	1	512696	512703
75	65	UT30-4	10	1	513843	513846
90	80	UT35-4	10	1	513844	513847
110	80	UT35-4	10	1	513845	513848



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NO

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NO

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512704	512711
20	15	UT05-2	10	1	512705	512712
25	20	UT05-2	10	1	512706	512713
32	25	UT05-2	10	1	512707	512714
40	32	UT15-4	10	1	512708	512715
50	40	UT15-4	10	1	512709	512716
63	50	UT17-4	10	1	512710	512717
75	65	UT30-4	10	1	513849	513852
90	80	UT35-4	10	1	513850	513853
110	80	UT35-4	10	1	513851	513854



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-DA

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-DA

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	512718	512725
20	15	UT05DA	10	1	512719	512726
25	20	UT05DA	10	1	512720	512727
32	25	UT05DA	10	1	512721	512728
40	32	UT15DA	10	1	512722	512729
50	40	UT15DA	10	1	512723	512730
63	50	UT15DA	10	1	512724	512731
75	65	UT20DA	10	1	513855	513858
90	80	UT20DA	10	1	513856	513859
110	80	UT20DA	10	1	513857	513860



## 2-Wege modularer Industriekugelhahn M1 mit Pneumatiktrieb standard, silikonfrei

*2-way modular industrial ball valve M1 with pneumatic actuator standard, silicone free*



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC

**Code**  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	124366	512732
25	20	UT05-2	10	1	124367	512733
32	25	UT05-2	10	1	124368	512734
40	32	UT15-4	10	1	124369	512735
50	40	UT15-4	10	1	124370	512736
63	50	UT17-4	10	1	124371	512737
75	65	UT30-4	10	1	513861	513864
90	80	UT35-4	10	1	513862	513865
110	80	UT35-4	10	1	513863	513866



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO

**Code**  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	512738	512744
25	20	UT05-2	10	1	512739	512745
32	25	UT05-2	10	1	512740	512746
40	32	UT15-4	10	1	512741	512747
50	40	UT15-4	10	1	512742	512748
63	50	UT17-4	10	1	512743	512749
75	65	UT30-4	10	1	513867	513870
90	80	UT35-4	10	1	513868	513871
110	80	UT35-4	10	1	513869	513872



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA

**Code**  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05DA	10	1	512750	512756
25	20	UT05DA	10	1	512751	512757
32	25	UT05DA	10	1	512752	512758
40	32	UT15DA	10	1	512753	512759
50	40	UT15DA	10	1	512754	512760
63	50	UT15DA	10	1	512755	512761
75	65	UT20DA	10	1	513873	513876
90	80	UT20DA	10	1	513874	513877
110	80	UT20DA	10	1	513875	513878

Valves PP-H

## 2-Wege modularer Industriekugelhahn M1 mit Pneumatiktrieb standard, silikonfrei

2-way modular industrial ball valve M1 with pneumatic actuator standard, silicone free



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC

Code  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	512762	512768
3/4"	20	UT05-2	10	1	512763	512769
1"	25	UT05-2	10	1	512764	512770
1 1/4"	32	UT15-4	10	1	512765	512771
1 1/2"	40	UT15-4	10	1	512766	512772
2"	50	UT17-4	10	1	512767	512773
2 1/2"	65	UT30-4	10	1	513879	513882
3"	80	UT35-4	10	1	513880	513883
4"	80	UT35-4	10	1	513881	513884



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO

Code  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	512774	512780
3/4"	20	UT05-2	10	1	512775	512781
1"	25	UT05-2	10	1	512776	512782
1 1/4"	32	UT15-4	10	1	512777	512783
1 1/2"	40	UT15-4	10	1	512778	512784
2"	50	UT17-4	10	1	512779	512785
2 1/2"	65	UT30-4	10	1	513885	513888
3"	80	UT35-4	10	1	513886	513889
4"	80	UT35-4	10	1	513887	513890



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA

Code  
**38M**

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05DA	10	1	512786	512792
3/4"	20	UT05DA	10	1	512787	512793
1"	25	UT05DA	10	1	512788	512794
1 1/4"	32	UT15DA	10	1	512789	512795
1 1/2"	40	UT15DA	10	1	512790	512796
2"	50	UT15DA	10	1	512791	512797
2 1/2"	65	UT20DA	10	1	513891	513894
3"	80	UT20DA	10	1	513892	513895
4"	80	UT20DA	10	1	513893	513896

# 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Stellungsrückmelder, silikonfrei

2-way modular industrial ball valve M1 pneumatic with position feedback, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NC
- pi-250V

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NC
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512798	512805
20	15	UT05-2	10	1	512799	512806
25	20	UT05-2	10	1	512800	512807
32	25	UT05-2	10	1	512801	512808
40	32	UT15-4	10	1	512802	512809
50	40	UT15-4	10	1	512803	512810
63	50	UT17-4	10	1	512804	512811



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NO
- pi-250V

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NO
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512812	512819
20	15	UT05-2	10	1	512813	512820
25	20	UT05-2	10	1	512814	512821
32	25	UT05-2	10	1	512815	512822
40	32	UT15-4	10	1	512816	512823
50	40	UT15-4	10	1	512817	512824
63	50	UT17-4	10	1	512818	512825



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-DA
- pi-250V

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-DA
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	512826	512833
20	15	UT05DA	10	1	512827	512834
25	20	UT05DA	10	1	512828	512835
32	25	UT05DA	10	1	512829	512836
40	32	UT15DA	10	1	512830	512837
50	40	UT15DA	10	1	512831	512838
63	50	UT15DA	10	1	512832	512839



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NC
- pi-250V

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NC
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512840	512847
20	15	UT05-2	10	1	512841	512848
25	20	UT05-2	10	1	512842	512849
32	25	UT05-2	10	1	512843	512850
40	32	UT15-4	10	1	512844	512851
50	40	UT15-4	10	1	512845	512852
63	50	UT17-4	10	1	512846	512853

Valves PP-H

# 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Stellungsrückmelder, silikonfrei

2-way modular industrial ball valve M1 pneumatic with position feedback, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NO
- pi-250V

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NO
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512854	512861
20	15	UT05-2	10	1	512855	512862
25	20	UT05-2	10	1	512856	512863
32	25	UT05-2	10	1	512857	512864
40	32	UT15-4	10	1	512858	512865
50	40	UT15-4	10	1	512859	512866
63	50	UT17-4	10	1	512860	512867



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-DA
- pi-250V

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-DA
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	512868	512875
20	15	UT05DA	10	1	512869	512876
25	20	UT05DA	10	1	512870	512877
32	25	UT05DA	10	1	512871	512878
40	32	UT15DA	10	1	512872	512879
50	40	UT15DA	10	1	512873	512880
63	50	UT15DA	10	1	512874	512881



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC
- pi-250V

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	512882	512888
25	20	UT05-2	10	1	512883	512889
32	25	UT05-2	10	1	512884	512890
40	32	UT15-4	10	1	512885	512891
50	40	UT15-4	10	1	512886	512892
63	50	UT17-4	10	1	512887	512893



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO
- pi-250V

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	512894	512900
25	20	UT05-2	10	1	512895	512901
32	25	UT05-2	10	1	512896	512902
40	32	UT15-4	10	1	512897	512903
50	40	UT15-4	10	1	512898	512904
63	50	UT17-4	10	1	512899	512905

Valves PP-H

# 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Stellungsrückmelder, silikonfrei

2-way modular industrial ball valve M1 pneumatic with position feedback, silicone free



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA
- pi-250V

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05DA	10	1	512906	512912
25	20	UT05DA	10	1	512907	512913
32	25	UT05DA	10	1	512908	512914
40	32	UT15DA	10	1	512909	512915
50	40	UT15DA	10	1	512910	512916
63	50	UT15DA	10	1	512911	512917



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC
- pi-250V

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	512918	512924
3/4"	20	UT05-2	10	1	512919	512925
1"	25	UT05-2	10	1	512920	512926
1 1/4"	32	UT15-4	10	1	512921	512927
1 1/2"	40	UT15-4	10	1	512922	512928
2"	50	UT17-4	10	1	512923	512929



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO
- pi-250V

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	512930	512936
3/4"	20	UT05-2	10	1	512931	512937
1"	25	UT05-2	10	1	512932	512938
1 1/4"	32	UT15-4	10	1	512933	512939
1 1/2"	40	UT15-4	10	1	512934	512940
2"	50	UT17-4	10	1	512935	512941



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA
- pi-250V

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA
- pi-250V

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05DA	10	1	512942	512948
3/4"	20	UT05DA	10	1	512943	512949
1"	25	UT05DA	10	1	512944	512950
1 1/4"	32	UT15DA	10	1	512945	512951
1 1/2"	40	UT15DA	10	1	512946	512952
2"	50	UT15DA	10	1	512947	512953

Valves PP-H

# 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Magnetventil, silikonfrei

## 2-way modular industrial ball valve M1 pneumatic with solenoid valve, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NC
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NC
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512954	512961
20	15	UT05-2	10	1	512955	512962
25	20	UT05-2	10	1	512956	512963
32	25	UT05-2	10	1	512957	512964
40	32	UT15-4	10	1	512958	512965
50	40	UT15-4	10	1	512959	512966
63	50	UT17-4	10	1	512960	512967



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NO
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NO
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512968	512975
20	15	UT05-2	10	1	512969	512976
25	20	UT05-2	10	1	512970	512977
32	25	UT05-2	10	1	512971	512978
40	32	UT15-4	10	1	512972	512979
50	40	UT15-4	10	1	512973	512980
63	50	UT17-4	10	1	512974	512981



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-DA
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-DA
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	512982	512989
20	15	UT05DA	10	1	512983	512990
25	20	UT05DA	10	1	512984	512991
32	25	UT05DA	10	1	512985	512992
40	32	UT15DA	10	1	512986	512993
50	40	UT15DA	10	1	512987	512994
63	50	UT15DA	10	1	512988	512995



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NC
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NC
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	512996	513003
20	15	UT05-2	10	1	512997	513004
25	20	UT05-2	10	1	512998	513005
32	25	UT05-2	10	1	512999	513006
40	32	UT15-4	10	1	513000	513007
50	40	UT15-4	10	1	513001	513008
63	50	UT17-4	10	1	513002	513009

Valves PP-H

# 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Magnetventil, silikonfrei

## 2-way modular industrial ball valve M1 pneumatic with solenoid valve, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NO
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NO
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	513010	513017
20	15	UT05-2	10	1	513011	513018
25	20	UT05-2	10	1	513012	513019
32	25	UT05-2	10	1	513013	513020
40	32	UT15-4	10	1	513014	513021
50	40	UT15-4	10	1	513015	513022
63	50	UT17-4	10	1	513016	513023



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-DA
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-DA
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	513024	513031
20	15	UT05DA	10	1	513025	513032
25	20	UT05DA	10	1	513026	513033
32	25	UT05DA	10	1	513027	513034
40	32	UT15DA	10	1	513028	513035
50	40	UT15DA	10	1	513029	513036
63	50	UT15DA	10	1	513030	513037



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	513038	513044
25	20	UT05-2	10	1	513039	513045
32	25	UT05-2	10	1	513040	513046
40	32	UT15-4	10	1	513041	513047
50	40	UT15-4	10	1	513042	513048
63	50	UT17-4	10	1	513043	513049



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	513050	513056
25	20	UT05-2	10	1	513051	513057
32	25	UT05-2	10	1	513052	513058
40	32	UT15-4	10	1	513053	513059
50	40	UT15-4	10	1	513054	513060
63	50	UT17-4	10	1	513055	513061

# 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Magnetventil, silikonfrei

## 2-way modular industrial ball valve M1 pneumatic with solenoid valve, silicone free



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05DA	10	1	513062	513068
25	20	UT05DA	10	1	513063	513069
32	25	UT05DA	10	1	513064	513070
40	32	UT15DA	10	1	513065	513071
50	40	UT15DA	10	1	513066	513072
63	50	UT15DA	10	1	513067	513073



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	513074	513080
3/4"	20	UT05-2	10	1	513075	513081
1"	25	UT05-2	10	1	513076	513082
1 1/4"	32	UT15-4	10	1	513077	513083
1 1/2"	40	UT15-4	10	1	513078	513084
2"	50	UT17-4	10	1	513079	513085



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	513086	513092
3/4"	20	UT05-2	10	1	513087	513093
1"	25	UT05-2	10	1	513088	513094
1 1/4"	32	UT15-4	10	1	513089	513095
1 1/2"	40	UT15-4	10	1	513090	513096
2"	50	UT17-4	10	1	513091	513097



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA
- 5/2-3/2-wege Magnetventil 24VDC

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA
- 5/2-3/2way Solenoid Valve 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05DA	10	1	513098	513104
3/4"	20	UT05DA	10	1	513099	513105
1"	25	UT05DA	10	1	513100	513106
1 1/4"	32	UT15DA	10	1	513101	513107
1 1/2"	40	UT15DA	10	1	513102	513108
2"	50	UT15DA	10	1	513103	513109



## 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Stellungsrückmelder und Magnetventil, silikonfrei

2-way modular industrial ball valve M1 pneumatic with position feedback and solenoid valve, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NC
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NC
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	513110	513117
20	15	UT05-2	10	1	513111	513118
25	20	UT05-2	10	1	513112	513119
32	25	UT05-2	10	1	513113	513120
40	32	UT15-4	10	1	513114	513121
50	40	UT15-4	10	1	513115	513122
63	50	UT17-4	10	1	513116	513123



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-NO
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-NO
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	513124	513131
20	15	UT05-2	10	1	513125	513132
25	20	UT05-2	10	1	513126	513133
32	25	UT05-2	10	1	513127	513134
40	32	UT15-4	10	1	513128	513135
50	40	UT15-4	10	1	513129	513136
63	50	UT17-4	10	1	513130	513137



### Kugelhahn 2W M1 metrisch

- PP-Schweißmuffe
- Sitzdichtung: PTFE
- PO-DA
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 metric

- PP fusion socket ends
- seat-sealing: PTFE
- PO-DA
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	513138	513145
20	15	UT05DA	10	1	513139	513146
25	20	UT05DA	10	1	513140	513147
32	25	UT05DA	10	1	513141	513148
40	32	UT15DA	10	1	513142	513149
50	40	UT15DA	10	1	513143	513150
63	50	UT15DA	10	1	513144	513151



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NC
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NC
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	513152	513159
20	15	UT05-2	10	1	513153	513160
25	20	UT05-2	10	1	513154	513161
32	25	UT05-2	10	1	513155	513162
40	32	UT15-4	10	1	513156	513163
50	40	UT15-4	10	1	513157	513164
63	50	UT17-4	10	1	513158	513165

## 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Stellungsrückmelder und Magnetventil, silikonfrei

2-way modular industrial ball valve M1 pneumatic with position feedback and solenoid valve, silicone free



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-NO
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-NO
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05-2	10	1	513166	513173
20	15	UT05-2	10	1	513167	513174
25	20	UT05-2	10	1	513168	513175
32	25	UT05-2	10	1	513169	513176
40	32	UT15-4	10	1	513170	513177
50	40	UT15-4	10	1	513171	513178
63	50	UT17-4	10	1	513172	513179



### Kugelhahn 2W M1 metrisch

- PP-Schweißstutzen
- Sitzdichtung: PTFE
- PO-DA
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 metric

- PP fusion spigot ends
- seat-sealing: PTFE
- PO-DA
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
16	10	UT05DA	10	1	513180	513187
20	15	UT05DA	10	1	513181	513188
25	20	UT05DA	10	1	513182	513189
32	25	UT05DA	10	1	513183	513190
40	32	UT15DA	10	1	513184	513191
50	40	UT15DA	10	1	513185	513192
63	50	UT15DA	10	1	513186	513193



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	513194	513200
25	20	UT05-2	10	1	513195	513201
32	25	UT05-2	10	1	513196	513202
40	32	UT15-4	10	1	513197	513203
50	40	UT15-4	10	1	513198	513204
63	50	UT17-4	10	1	513199	513205



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05-2	10	1	513206	513212
25	20	UT05-2	10	1	513207	513213
32	25	UT05-2	10	1	513208	513214
40	32	UT15-4	10	1	513209	513215
50	40	UT15-4	10	1	513210	513216
63	50	UT17-4	10	1	513211	513217

## 2-Wege modularer Industriekugelhahn M1 pneumatisch mit Stellungsrückmelder und Magnetventil, silikonfrei

2-way modular industrial ball valve M1 pneumatic with position feedback and solenoid valve, silicone free



### Kugelhahn 2W M1 DIN

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 DIN

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
20	15	UT05DA	10	1	513218	513224
25	20	UT05DA	10	1	513219	513225
32	25	UT05DA	10	1	513220	513226
40	32	UT15DA	10	1	513221	513227
50	40	UT15DA	10	1	513222	513228
63	50	UT15DA	10	1	513223	513229



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NC
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NC
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	513230	513236
3/4"	20	UT05-2	10	1	513231	513237
1"	25	UT05-2	10	1	513232	513238
1 1/4"	32	UT15-4	10	1	513233	513239
1 1/2"	40	UT15-4	10	1	513234	513240
2"	50	UT17-4	10	1	513235	513241



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-NO
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-NO
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05-2	10	1	513242	513248
3/4"	20	UT05-2	10	1	513243	513249
1"	25	UT05-2	10	1	513244	513250
1 1/4"	32	UT15-4	10	1	513245	513251
1 1/2"	40	UT15-4	10	1	513246	513252
2"	50	UT17-4	10	1	513247	513253



### Kugelhahn 2W M1 ANSI

- Losflansch
- Sitzdichtung: PTFE
- lang
- PO-DA
- pi-250V, 5/2-3/2W MV 24VDC

### Ball Valve 2W M1 ANSI

- Backing flange
- seat-sealing: PTFE
- long
- PO-DA
- pi-250V, 5/2-3/2W SV 24VDC

Code  
38M

d	DN	Typ	PN	VE Pack	EPDM	FPM
1/2"	15	UT05DA	10	1	513254	513260
3/4"	20	UT05DA	10	1	513255	513261
1"	25	UT05DA	10	1	513256	513262
1 1/4"	32	UT15DA	10	1	513257	513263
1 1/2"	40	UT15DA	10	1	513258	513264
2"	50	UT15DA	10	1	513259	513265



M1 Ball Valve Series – Modularity for any application  
<https://youtu.be/aAF5omvfaoM>



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