



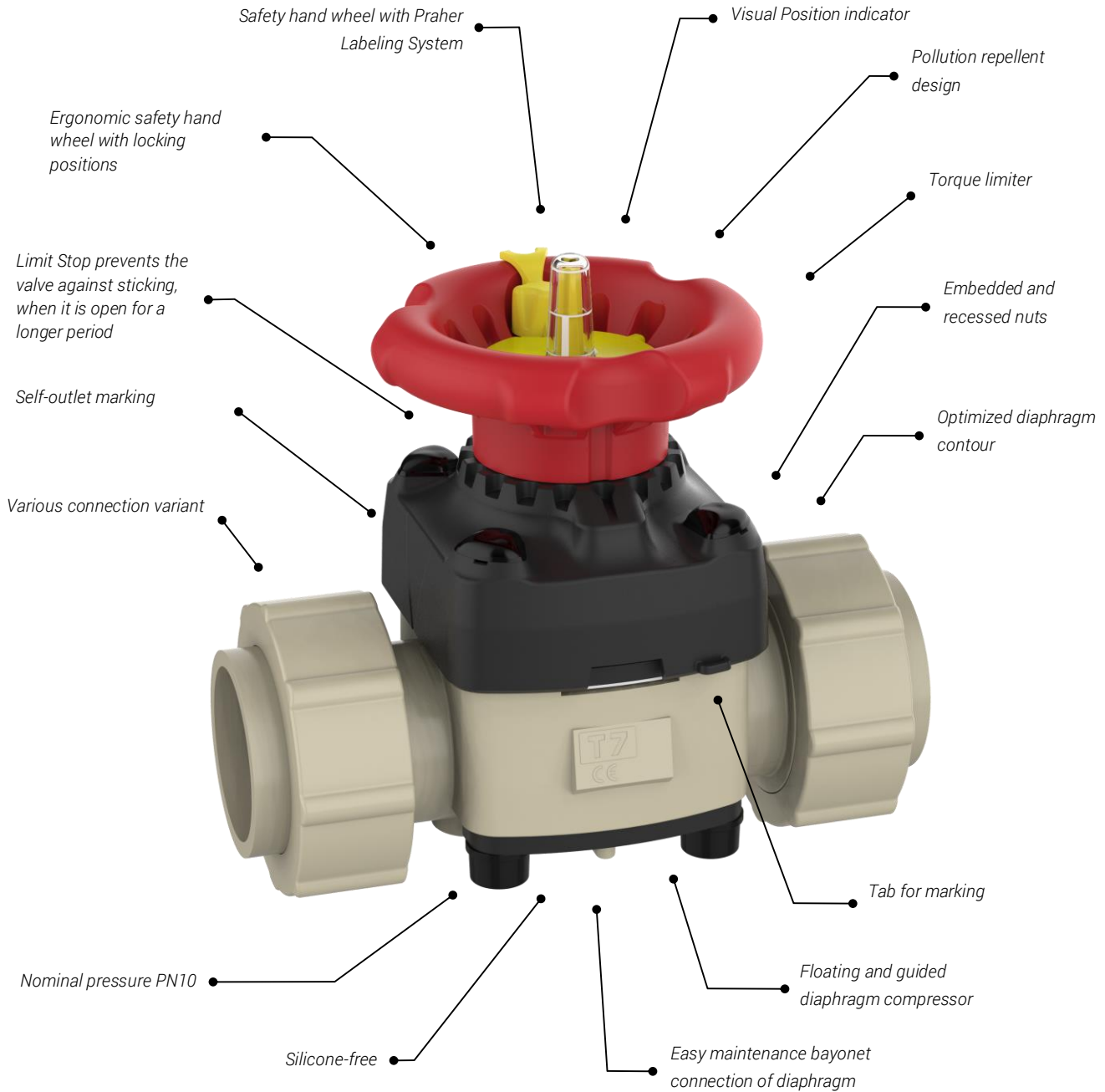
Diaphragm Valve

# T7

PP-H

**DATASHEET**

# Diaphragm Valve T7



© European Union 008392252-0001 to -0006

# Overview

General			
Materials	Body material	PP-H	
	Seal material	EPDM / FPM	
	Diaphragm	EPDM / EPDM+PTFE / FPM	
Dimensions	DN15 – DN50 d20 – d63 1/2" – 2"		
Connection Variants	PP-H Spigot	metric	SDR11 / PN10
	PP-H Fixed flange	DIN / ANSI / JIS	PN10
	<u>Inserts for union:</u>		
	PP-H Fusion socket ends	metric	
	PP-H Fusion spigot ends	metric	SDR11 / PN10
	PE100 Spigot	metric	SDR11 / PN16
	PE100 Spigot long	metric	SDR11 / PN16
	PE100 Fusion socket ends	metric	
Operating Variants	Handwheel Torque limited		
	Handwheel		
Operating Pressure	DN15 – DN50 Diaphragm EPDM	PN10	
	DN15 – DN50 Diaphragm EPDM + PTFE	PN10	
	DN15 – DN50 Diaphragm FPM	PN10	

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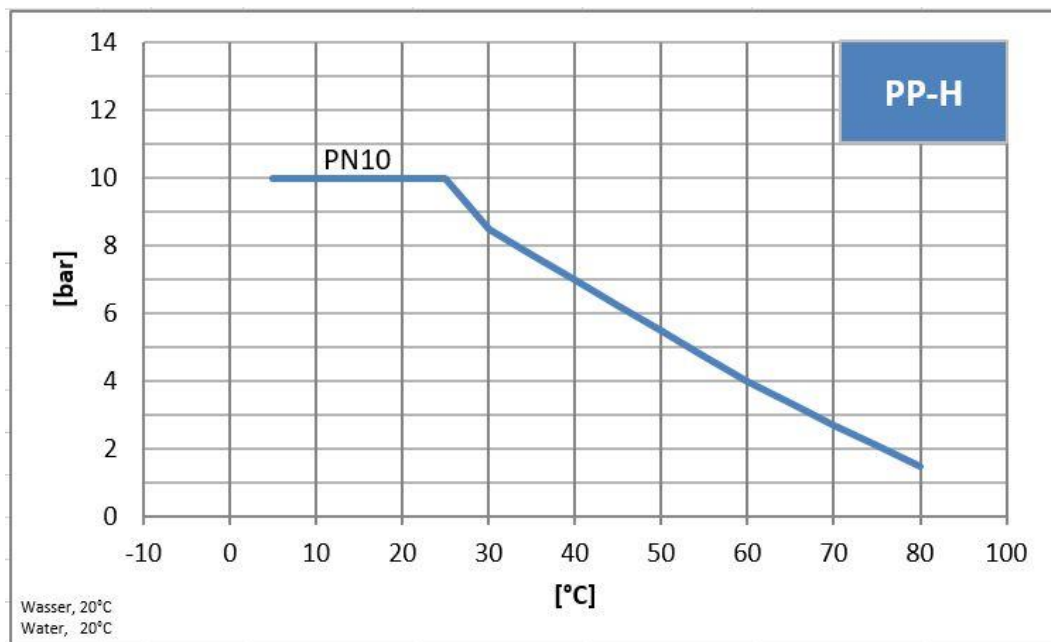


Accessories / Spare Parts

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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 with water at 20°C

## Torque at Handwheel to Reach Closed Position

Dimension	Torque Handwheel [Nm]	
	EPDM – FPM	EPDM/PTFE
DN15/20	3	5
DN25	4	5
DN32/40	12	16
DN50	16	19

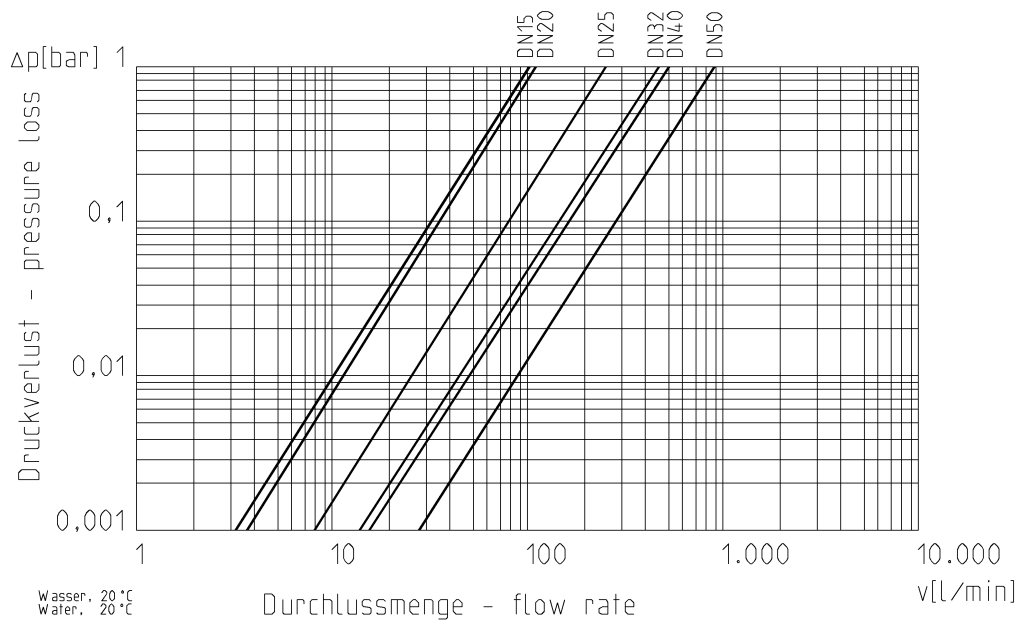
## Torque on the Connecting Screws of the Upper and Lower Part

Screw Torque	
Dimension	[Nm]
DN15/20	4
DN25	5
DN32/40	10
DN50	13

For further information and notes, see operating instructions.

# Technical Data

## Flow - Pressure Drop

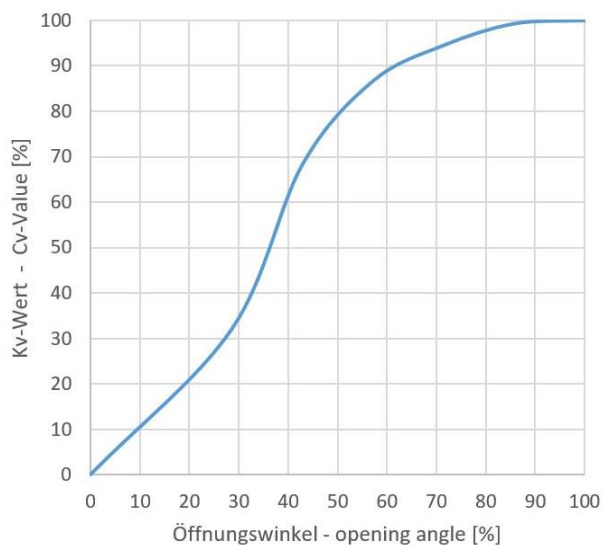


## CV-Value-Table

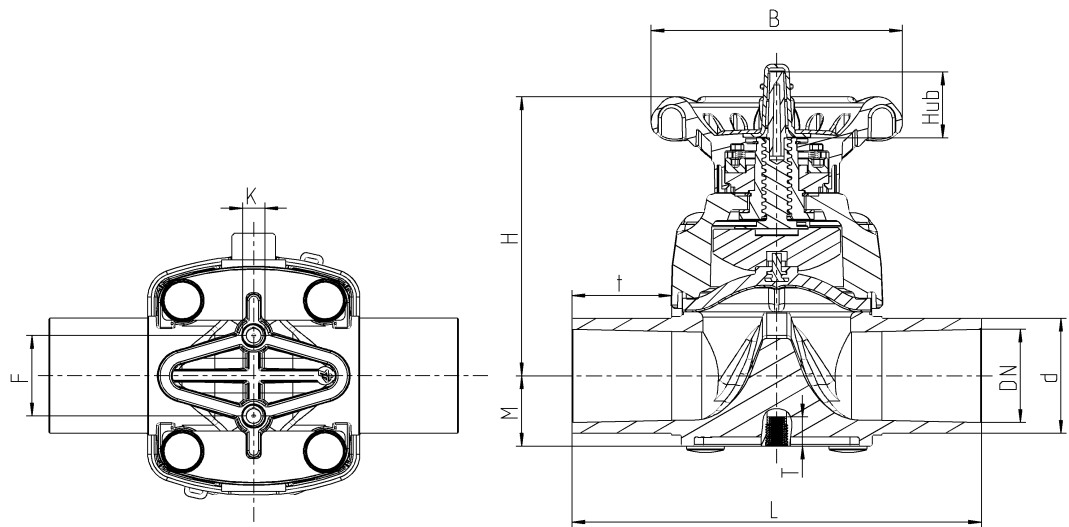
Pressure Loss	DN15 d20	DN20 d25	DN25 d32	DN32 d40	DN40 d50	DN50 d63
0,001 bar	3,2	3,6	7,9	14,2	15,8	27,8
1 bar	102	114	250	450	500	880

Figures in l/min (PN10 pipe)

## Flow characteristics



# Dimensions Manually Operated Valve



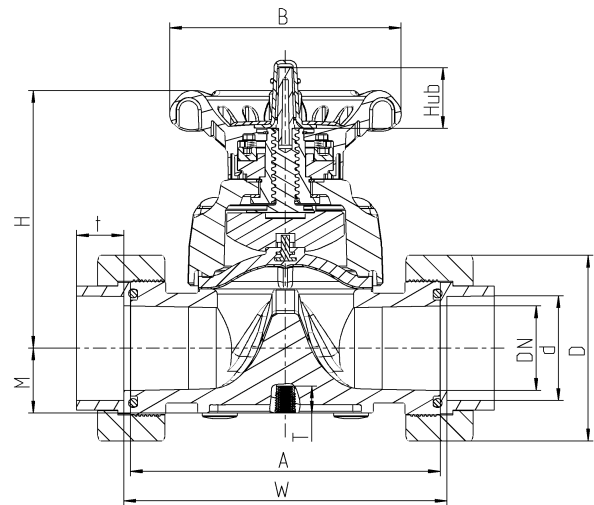
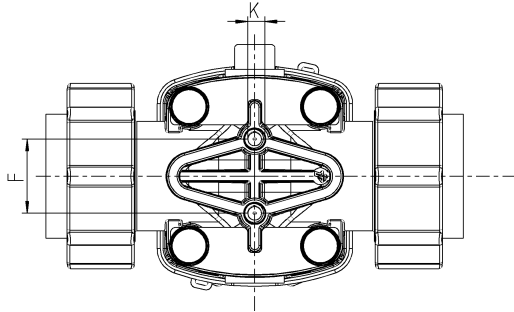
## Connection Variant

### PP-H Fusion Spigot metric

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"
H	87	89	96	135	140	153
B	85	85	85	138	138	138
F	25	25	25	44	44	44
K	M6	M6	M6	M8	M8	M8
Hub	13	13	15	22	22	30
t	36	36	36	36	48	54,5
L	133	144	154	194	194	224
M	18,6	16,5	20	25,5	32	38,5

(Dimensions in mm)

# Dimensions Manually Operated Valve



## Connection Variant

### PP-H Fusion socket Ends via Union Metric

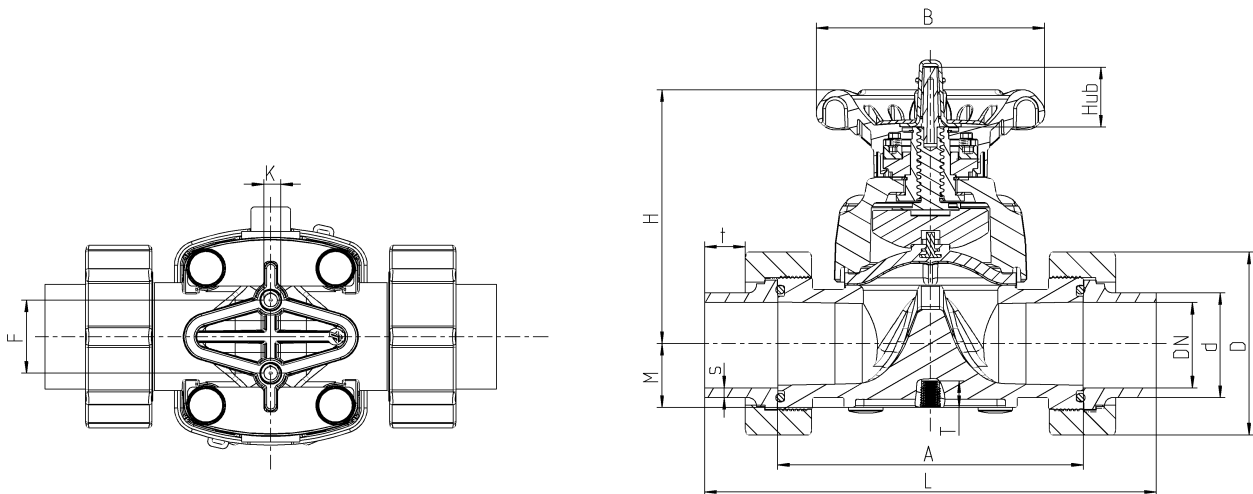
DN	15	20	25	32	40	50
d	20	25	32	40	50	63
Inch	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
H	87	89	96	135	140	153
B	85	85	85	138	138	138
F	25	25	25	44	44	44
K	M6	M6	M6	M8	M8	M8
Hub	13	13	15	22	22	30
t	16	18	19	22	24.5	28
A	90	108	116	134	154	184
D	48	58	65	78	91	110
M	18,6	16,5	20	25,5	32	38,5
W	97	114	124	140,5	161,5	192

\* on request

(Dimensions in mm)



# Dimensions Manually Operated Valve



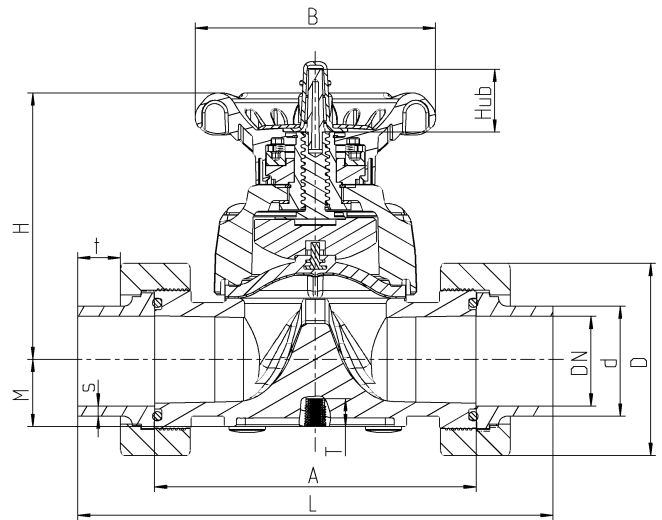
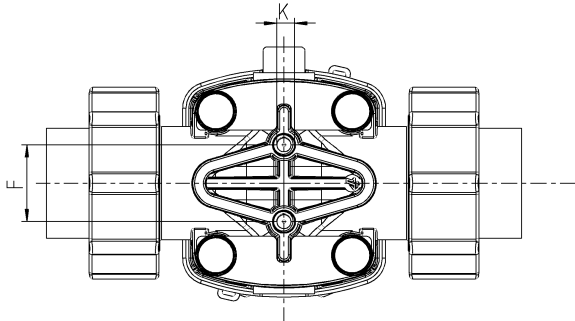
## Connection Variant

### PP-H Spigot metric via Union

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"
H	87	89	96	135	140	153
B	85	85	85	138	138	138
F	25	25	25	44	44	44
K	M6	M6	M6	M8	M8	M8
Hub	13	13	15	22	22	30
t	38,5	38	40	42	44,5	43
L	199	221	238	260	290	319
M	18,6	16,5	20	25,5	32	38,5
A	90	108	116	134	154	184
D	48	58	65	78	91	110
s	1,9	2,3	3	3,7	4,6	5,8

(Dimensions in mm)

# Dimensions Manually Operated Valve



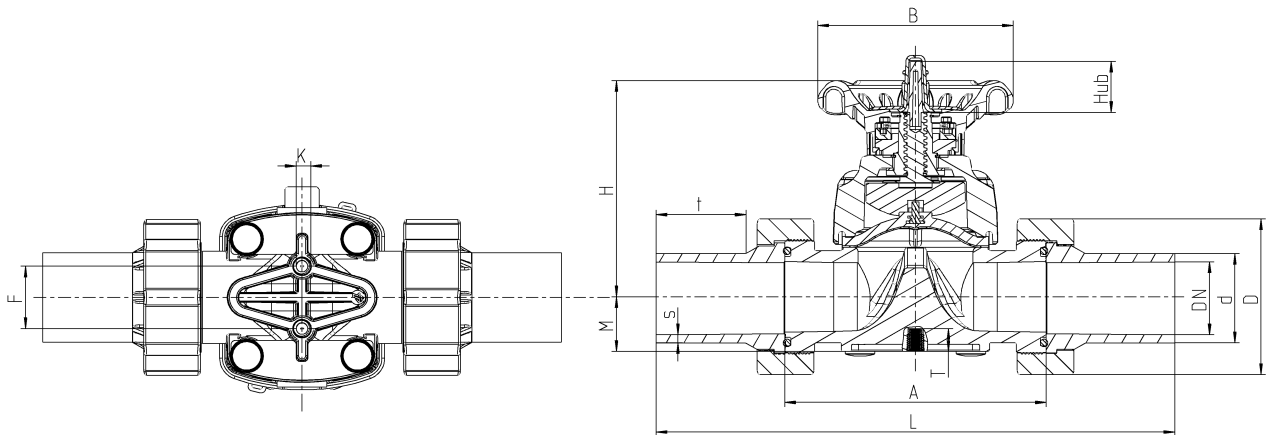
## Connection Variant

### PE Fusion Spigot Metric via Union

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"
H	87	89	96	135	140	153
B	85	85	85	138	138	138
F	25	25	25	44	44	44
K	M6	M6	M6	M8	M8	M8
Hub	13	13	15	22	22	30
t	14	16	18	15	29	26
L	150	180	194	192	240	272
M	18,6	16,5	20	25,5	32	38,5
A	90	108	116	134	154	184
D	48	58	65	78	91	110
s	2,1	2,5	3,1	3,7	5,2	5,8

(Dimensions in mm)

## Dimensions Manually Operated Valve



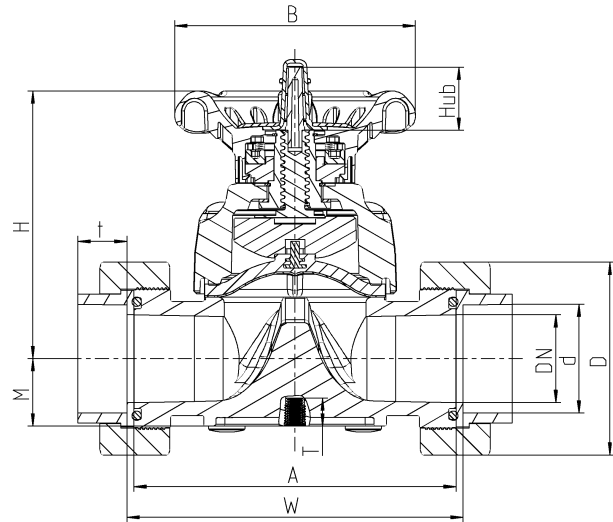
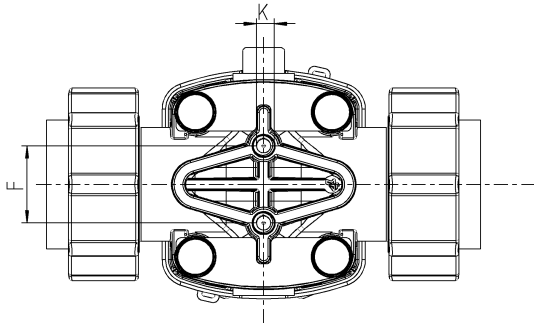
### Connection Variant

#### PE Spigot Long metric via Union

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"
H	87	89	96	135	140	153
B	85	85	85	138	138	138
F	25	25	25	44	44	44
K	M6	M6	M6	M8	M8	M8
Hub	13	13	15	22	22	30
t	46	47	71,5	55	59,5	63
L	214	245	286	292	323	365
M	18,6	16,5	20	25,5	32	38,5
A	90	108	116	134	154	184
D	48	58	65	78	91	110
s	3	3	2,9	3,7	4,6	5,8

(Dimensions in mm)

# Dimensions Manually Operated Valve



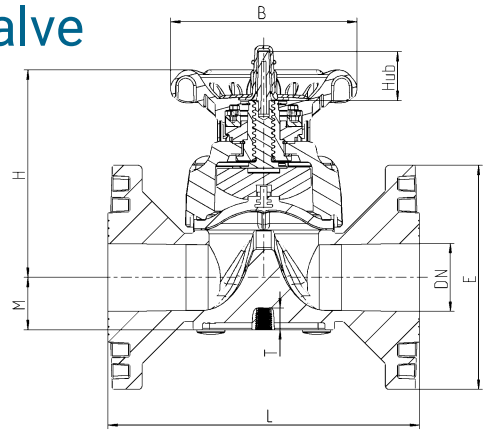
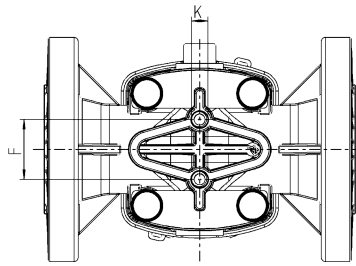
## Connection Variant

PE Fusion socket ends metric via Union

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"
H	87	89	96	135	140	153
B	85	85	85	138	138	138
F	25	25	25	44	44	44
K	M6	M6	M6	M8	M8	M8
Hub	13	13	15	22	22	30
t	16	17,5	19,5	22	25	29
W	95	116	126	146	173	209
M	18,6	16,5	20	25,5	32	38,5
A	90	108	116	134	154	184
D	48	58	65	78	91	110

(Dimensions in mm)

# Dimensions Manually Operated Valve

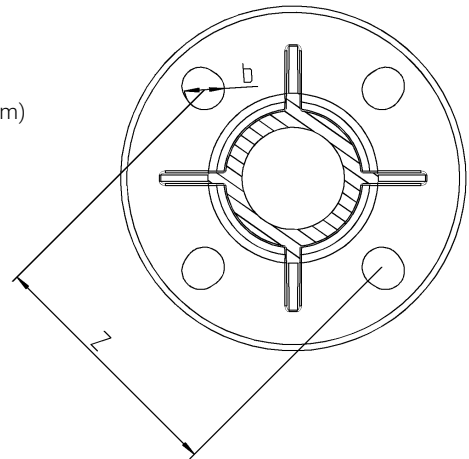


## Connection Variant

### PP-H Fixed flange DIN-ANSI-JIS

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"
H	87	89	96	135	140	153
B	85	85	85	138	138	138
F	25	25	25	44	44	44
K	M6	M6	M6	M8	M8	M8
Hub	13	13	15	22	22	30
L	130	150	160	180	200	230
E	96	105	125	140	150	165
M	18,6	16,5	20	25,5	32	38,5

(Dimensions in mm)



## Screw Connection Diagram Fixed Flange

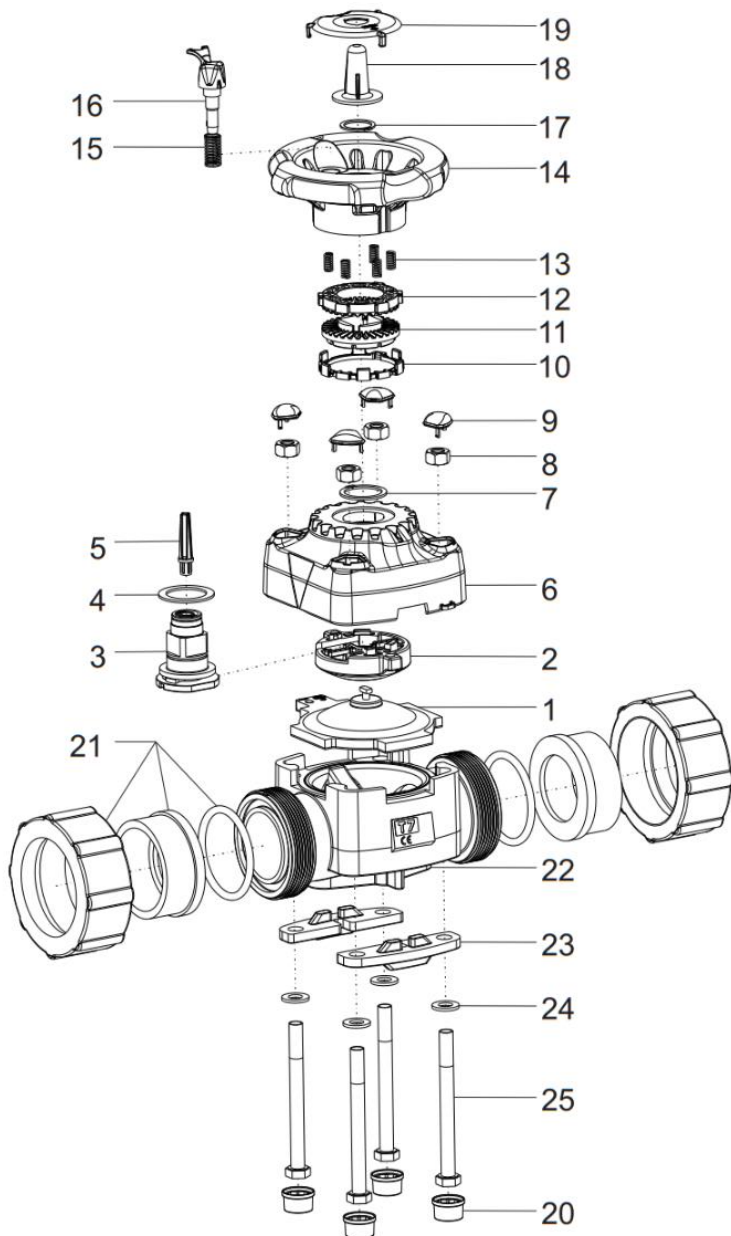
### Multinorm DIN-ANSI-JIS

Norm	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"
DIN 2501	b	14	14	14	18	18	18
	Z	65	75	85	100	110	125
ANSI Class 150	b	15,5	15,5	15,5	15,5	15,5	19
	Z	60,3	69,8	79,3	89	98,5	120,6
JIS 10 k	b	15	15	19	19	19	19
	Z	70	75	90	100	105	120

(Dimensions in mm)

# EXPLOSION DRAWING

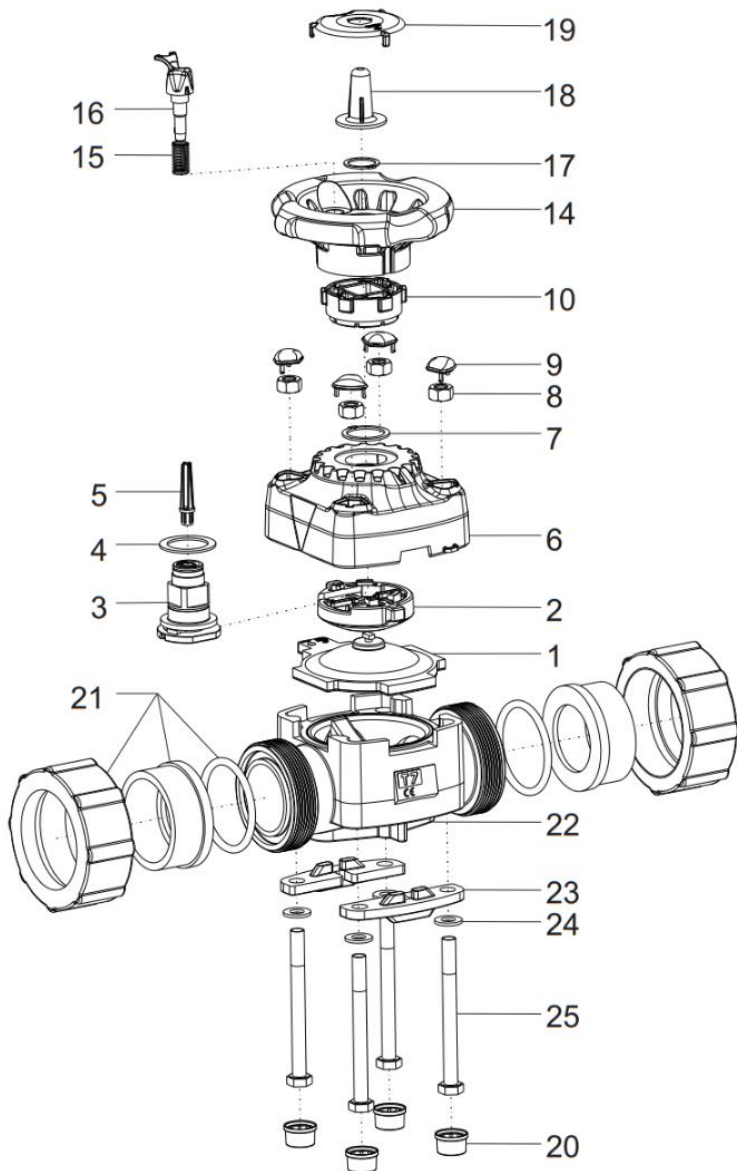
With Torque Limiter



No.	Description	Material
1.	Diaphragm	EPDM FPM EPDM+PTFE
2.	Pressure body	PP-GF
3.	Spindle assembly	Brass +1.4305
4.	Sliding washer	PTFE
5.	Indicator pin	PS
6.	Upper part	PP-GF
7.	Circlip	A4
8.	Hexagon nut	PTFE-coated
9.	Cover cap	ABS
	Torque Limiter	
10.	Support-Ring(DN32-50)	ABS
11.	Lower part	POM
12.	Upper part	PA
13.	Spring	1.4310
14.	Handwheel	PP-GF
15.	Spring	1.4401
16.	Latch pin	PBT
17.	Circlip	Galvanized steel
18.	Inspection glass	ABS
19.	PLS-labelling insert	ABS
20.	Cover cap	PE
21.	Connection variant Union	
	O-Ring	EPDM / FPM
	Union nut	PP-R
	Fusion socket	PP-H
	Fusion spigot	PP-H
	PE spigot	PE
	PE socket	PE
22.	Lower part	PP-H
23.	Support Plate (PP-H Lower part)	PBT-GF
24.	Rip-Lock washer	A4
25.	Hexagon screw	A2

# EXPLOSION DRAWING

without Torque Limiter



No.	Description	Material
1.	Diaphragm	EPDM FPM EPDM+PTFE
2.	Pressure body	PP-GF
3.	Spindle assembly	Brass +1.4305
4.	Sliding washer	PTFE
5.	Indicator pin	PS
6.	Upper part	PP-GF
7.	Circlip	A4
8.	Hexagon nut	PTFE-coated
9.	Cover cap	ABS
Without Torque Limiter		
10.	Actuating unit	PP-GF
14.	Handwheel	PP-GF
15.	Spring	1.4401
16.	Latch pin	PBT
17.	Circlip	Galvanized steel
18.	Inspection glass	ABS
19.	PLS-labelling insert	ABS
20.	Cover cap	PE
21.	Connection variant Union	
	O-Ring	EPDM / FPM
	Union nut	PP-R
	Fusion socket	PP-H
	Fusion spigot	PP-H
	PE spigot	PE
	PE socket	PE
22.	Lower part	PP-H
23.	Support Plate (PP-H Lower part)	PBT-GF
24.	Rip-Lock washer	A4
25.	Hexagon screw	A2

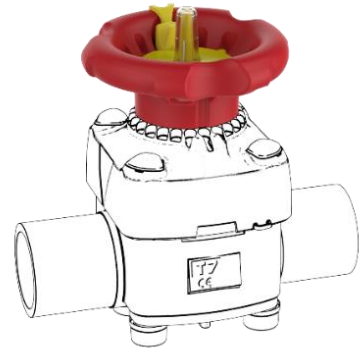
# ACCESSORIES / Spare Parts

## Handwheel Unit

### With Torque Limiter DN15 – DN50

Consisting of:

- Handwheel
- With Marking at Handwheel (see sketch detail)
- Torque limiter elements
- Latch pin + Spring
- Circlip
- Inspection Glass
- Inspection Glass Holder



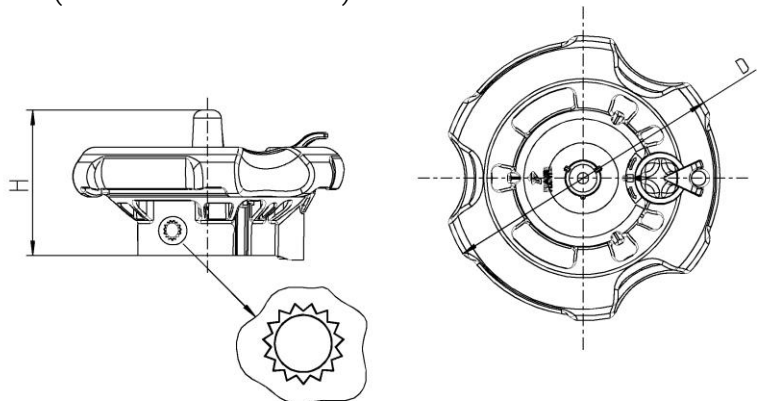
Handwheel Versions:

- 1 Version = DN15/DN20/DN25 für EPDM, FPM und PTFE Diaphragm
- 2 Version = DN32/DN40 für EPDM und FPM Diaphragm
- 3 Version = DN32/DN40 für PTFE Diaphragm
- 4 Version = DN50 für EPDM und FPM Diaphragm
- 5 Version = DN50 for PTFE Diaphragm

### Without Torque Limiter DN15 – DN50

Consisting of:

- Handwheel
- Without Marking at Handwheel (siehe Skizze Detail)
- Actuating Unit
- Latch pin + Spring
- Circlip
- Inspection Glass
- Inspection Glass Holder



Handwheel Versions:

- 6 Version = DN15/DN20/DN25
- 7 Version = DN32/DN40
- 8 Version = DN50

DN	15 – 25	32 – 50
d	20 – 32	40 – 63
Inch	1/2" – 1"	1 1/4" – 2"
D	85	138
H	42	70

(Dimensions in mm)



# ACCESSORIES / Spare Parts

## Upper part unit

Consisting of:

- Pressure body
- Spindle unit
- Sliding washer
- Indicator pin
- Upper part
- Circlip
- Hexagon nut
- Cover cap (No. 10)

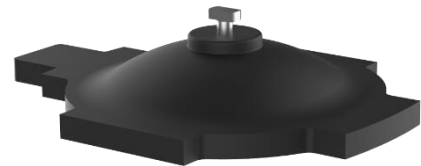


Upper part Versions:

- 1 Version = DN15/DN20
- 2 Version = DN25
- 3 Version = DN32/DN40
- 4 Version = DN50

## Diaphragm

- Material: EPDM / FPM
- Bayonet connection
- Optimized contour



## Coated Diaphragm

- Material: EPDM PTFE coated
- Bayonet connection
- Optimized contour



# ACCESSORIES / Spare Parts

## Accessories / Spare Parts for Union Variant

### Union End / Union Nut / Connection O-Ring

- The inserts and union nuts from the Accessories Diaphragm Valve, can be combined.
- O-rings from the PVC-U IBG range for fittings can be used with the same nominal diameter of the diaphragm valve.



## PLS – Praher Labeling System

### Features

- Material ABS
- Unique permanent marking
- Reliable, indelible marking by paint pen or laser
- Standard version in the colors yellow, blue, green and red
- Marking plates are simple to replace
- Corrosion resistant
- No effect on the function of the handle

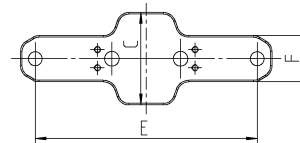
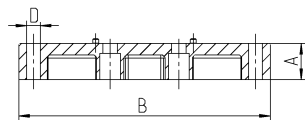


# ACCESSORIES / Spare Parts

## Mounting Plates

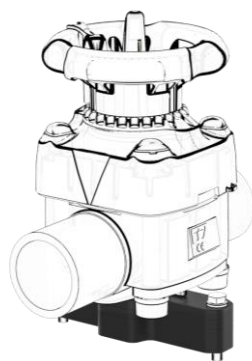
Use as mounting aid and height compensation.

- Material: PP-CF
- Floor / ceiling / wall -mounting
- Additional screws necessary



DN	15 - 25			32 - 50		
d	20 - 32			40 - 63		
Inch	1/2" - 1"			1 1/4" - 2"		
Version	1	2	3	4	5	6
A	23	16	3,5	23,5	18,5	7,5
B	104	104	104	164,5	164,5	164,5
C	45	45	45	60	60	60
D	7	7	7	9	9	9
E	90	90	90	145,5	145,5	145,5
F	22	22	22	30	30	30

(Dimensions in mm)



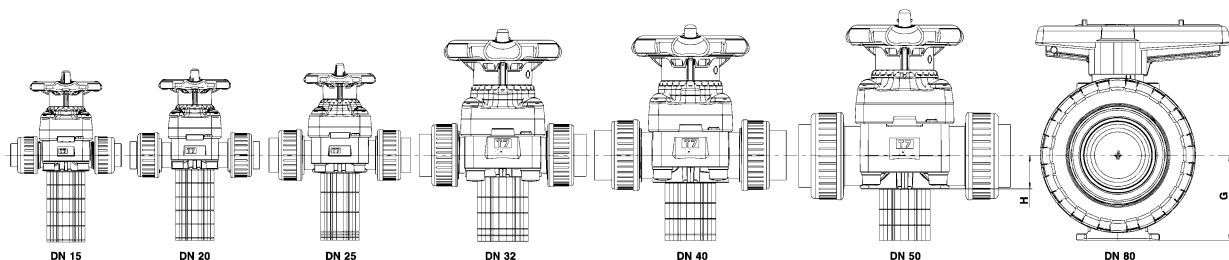
*Note on the Use of Mounting Plates:*

The table shows the number of mounting plates (e.g. 1x) and the mounting plate version (e.g. **2**).

These combinations can be used to compensate for height differences between the various nominal diameters from the M1 ball valve to the T7 diaphragm valve.

		<i>Ball Valve M1</i>								
		<b>G[mm]</b>	33	40	43	51	56	64	85	100
		<b>H [mm]</b>	<b>DN</b>	15	20	25	32	40	50	80
<b>Diaphragm Valve T7</b>	18,6	15	1x 2 	1x 1 	1x 1 1x 3	1x 1 3x 3	2x 2 2x 3	2x 1 	4x 2 1x 3	5x 2 1x 3
	16,5	20		1x 1 	1x 1 1x 3	1x 1 3x 3	2x 2 2x 3	2x 1 	4x 2 1x 3	5x 2 1x 3
	20	25			1x 1 	1x 1 2x 3	2x 2 1x 3	1x 1 1x 2 1x 3	4x 2 	3x 1 3x 3
	25,5	32				1x 4 	1x 4 1x 6	1x 4 2x 6	2x 5 3x 6	1x 4 2x 5 2x 6
	32	40					1x 4 	1x 4 1x 6	2x 5 2x 6	1x 4 2x 5 1x 6
	38,5	50						1x 4 	1x 4 3x 6	1x 4 2x 5

Examples for all nominal diameters of the Diaphragm Valve T7 combined with a Ball Valve M1 DN80:





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*T7 Diaphragm Valve – For safe control*

*<https://youtu.be/pBEfpFKEuaY?si=iqqhwgblGji6>  
WDk2*



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Zertifiziert nach / certified acc. to  
EN ISO 9001:2015

PM LD 4.2-001A DEEN  
DB/DEEN/24/03/460/D

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