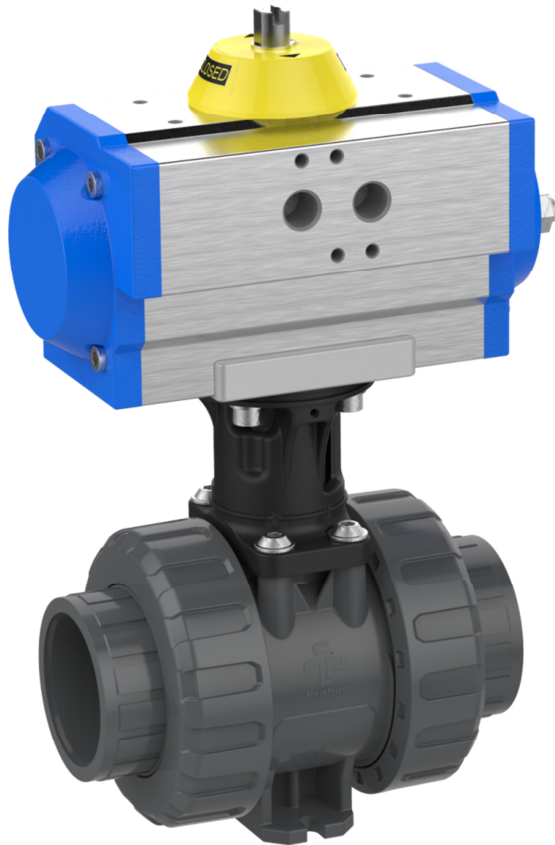


## 2 ball valve M1 with Pneumatic actuator



### General:

- Valve body: PVC-U
- Sealing material: EPDM / FPM
- Ball seating joint: PTFE
- Dimensions: DN10 – DN80  
d16 – d110  
d3/8" – d4"

### Connector types:

- Solvent socket: DIN / ASTM
- Solvent spigot: DIN
- Threaded socket: BSP / NPT
- PE fusion socket: DIN
- PE fusion spigot: DIN
- Backing flange: DIN
- Fix flange: DIN / ANSI / JIS

### Operating pressure:

PVC-U DN10 – DN80 d110	PN16
PVC-U DN10 – DN80 d110	PN10
Backing flange	

### Technical features:

#### Ball Valve

- Silicone free
- Buttress thread
- Double axial gasket
- Floating ball
- Double sided blocked ball
- Adjustable ball seating joint
- Integrated bottom mounting stand
- Radial installation or removal
- Maintenance free

#### Actuator

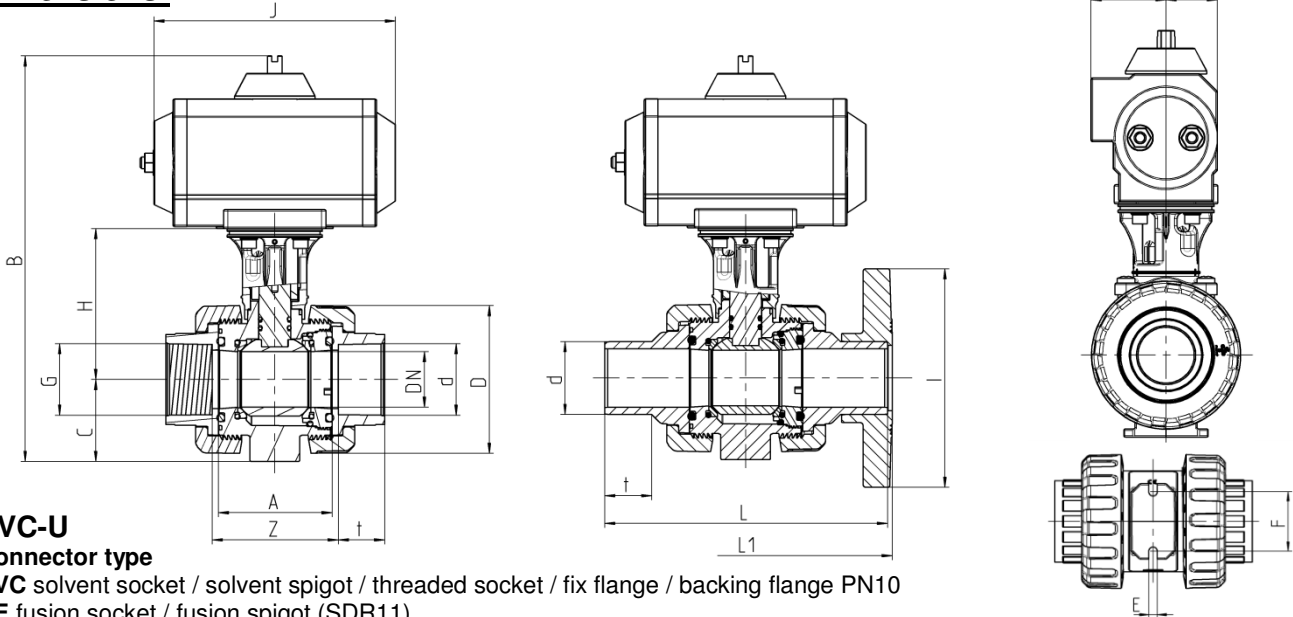
- Technical details on page 6

This document does not constitute a guarantee, it is for initial information purpose only. The product range is continually upgraded, the designs and types therefore only reflect the state of the art at the time of printing. Subject to technical modifications!

## 2 ball valve M1 with integrated Praher Labeling System



### Dimensions:



### PVC-U

#### Connector type

PVC solvent socket / solvent spigot / threaded socket / fix flange / backing flange PN10

PE fusion socket / fusion spigot (SDR11)

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
<b>G</b> TSO <sup>1</sup>	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"
<b>A</b>	45	45	53,5	54	62	78	87	111,5	135,5	135,5
<b>C</b>	33	33	40	43	51	56	64	85	100	100
<b>D</b>	55,5	55,5	62	70	84	101	115	149	182	182
<b>E</b>	5,5	5,5	5,5	6,5	6,5	6,5	6,5	8,3	10,3	10,3
<b>F</b>	34	34	36	38	40	45	50	65	80	80
<b>H</b>	80	80	85,5	88	97	103	109,5	136,5	159,5	159,5
<b>I</b>	-	97	105	125	140	150	165	185	200	-
<b>t</b> SSO <sup>2</sup>	16	16,5	19,5	23	26,5	31,5	38,5	44,5	56,5	61
<b>t</b> SSP <sup>3</sup>	17	16,5	19,5	23	26,5	31,5	38,5	44,5	54	-
<b>Z</b> SSO <sup>2</sup>	51	50	59,5	60	68,5	86	98	122	152,5	162
<b>Z</b> TSO <sup>1</sup>	48	50	60	60	68	87	98	122	156	-
<b>L</b> SSP <sup>3</sup>	98	123,5	143,5	153,5	173,5	193,5	223,5	259,5	297	-
<b>L1</b> FF <sup>4</sup>	-	130	150	160	180	200	230	266	307,5	-
<b>Antrieb</b>	UT05DA			UT15DA			UT20DA			
<b>B</b>	214	214	226,5	232	269	280	294,5	364,5	402,5	402,5
<b>J</b>	119	119	119	119	165	165	165	178	178	178
<b>K</b>	40	40	40	40	50	50	50	53	53	53
<b>M</b>	27	27	27	27	35	35	35	43	43	43
<b>Antrieb</b>	UT05SR			UT15SR		UT17SR	UT30SR	UT35SR		
<b>B</b>	214	214	226,5	232	269	280	294,5	383,5	455	455
<b>J</b>	119	119	119	119	165	165	197	230	246	246
<b>K</b>	40	40	40	40	50	50	50	61,5	72,5	72,5
<b>M</b>	27	27	27	27	35	35	35	52	65,5	65,5

<sup>1</sup> TSO = threaded socket  
<sup>2</sup> SSO = solvent socket

<sup>3</sup> SSP = solvent spigot  
<sup>4</sup> FF = fix flange

<sup>5</sup> - = currently not realised

Dimensions in mm

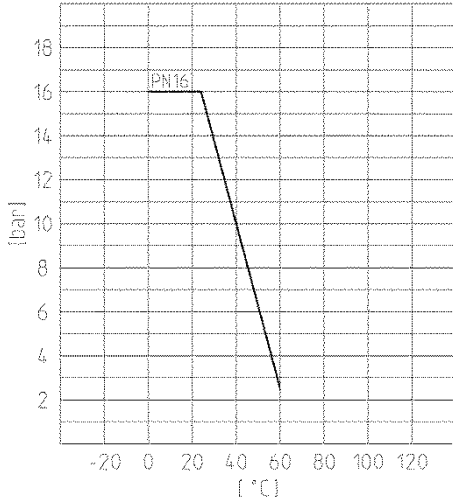


## 2 ball valve M1 with integrated Praher Labeling System

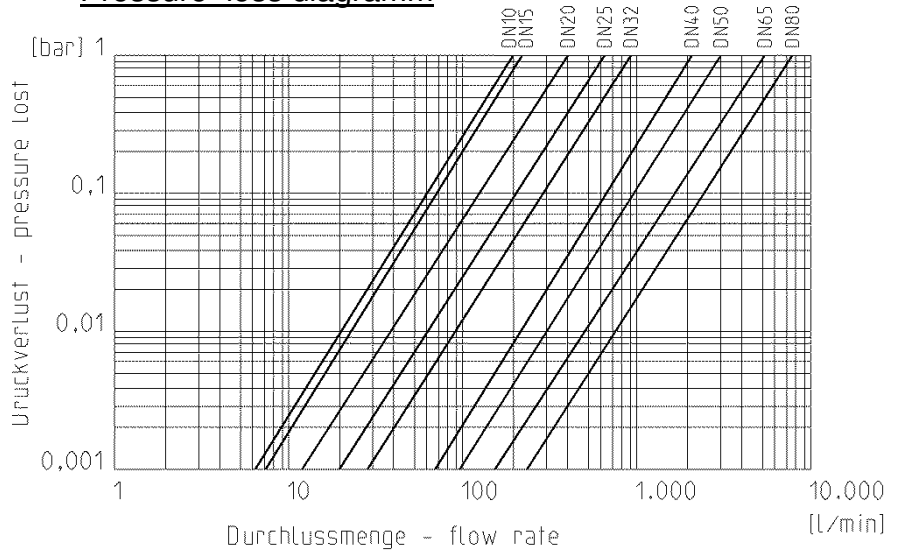


### Diagrams:

#### Pressure – Temperature



#### Pressure loss diagramm

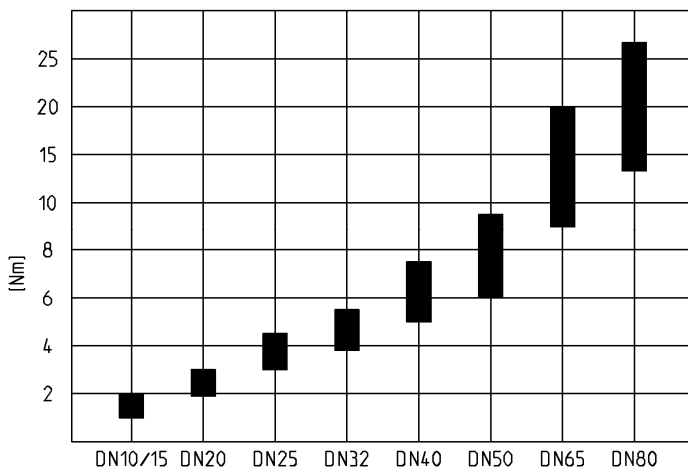


#### Cv value tabelle

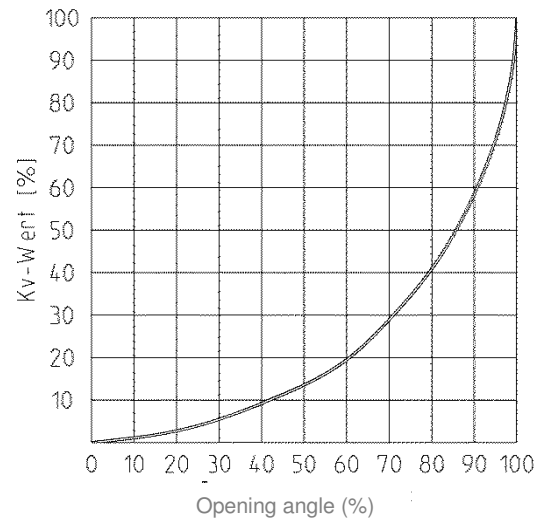
Pressure loss	DN10 d16	DN15 d20	DN20 d25	DN25 d32	DN32 d40	DN40 d50	DN50 d63	DN65 d75	DN80 d90	DN80 d110
<b>0,001 bar</b>	6,2	7,1	12,6	19,9	28,4	67	94,8	162,8	240,3	240,3
<b>1 bar</b>	198	225	400	630	900	2120	3000	5150	7600	7600

Angaben in l/min (PN16 Rohr)

#### Torque



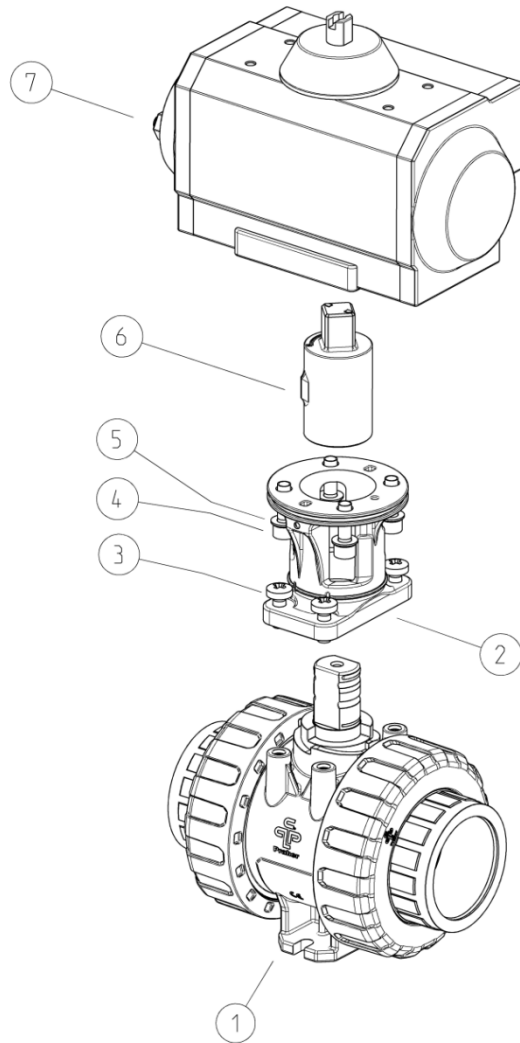
#### Flow characteristics



**2 ball valve M1**  
with integrated Praher Labeling System

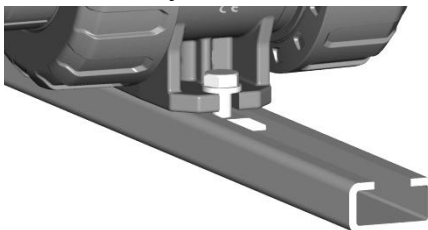
**Exploded drawing:**

- 01. ball valve
- 02. bracket (material: PA-GF)
- 03. screw
- 04. hexagon socket screw
- 05. toothed washer
- 06. coupling – actuator (material: PA-GF)
- 07. actuator

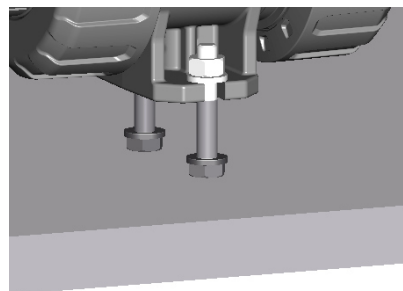


**Bottom mounting stand – mounting possibilities:**

- Assembly rail



- Plate



- Masonry / Concrete
  - Hanger screw and dowel required



## 2 ball valve M1 with integrated Praher Labeling System

### Technical features pneumatic actuator

#### Description actuator

piston actuation with two opposed pistons, power transmission with tooth rack, seal elastic

#### Material actuator

- Body: aluminium anodized
- End caps: aluminium epoxy powder
- Screws and nuts: stainless steel

**Ambient temperature:** -20°C to +80°C

#### Control fluid

Filtered air according to PNEUROP/ISO class 4

#### 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 -10° to +10°

#### Installation

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

#### AIR CONSUMPTION (FULL CYCLE)

##### **DA DOUBLE ACTING**

actuator	MT52 DA	MT63 DA	MT75 DA
N. Lt.	0,22	0,41	0,55

#### AIR CONSUMPTION (FULL CYCLE)

##### **SR SPRING RETURN**

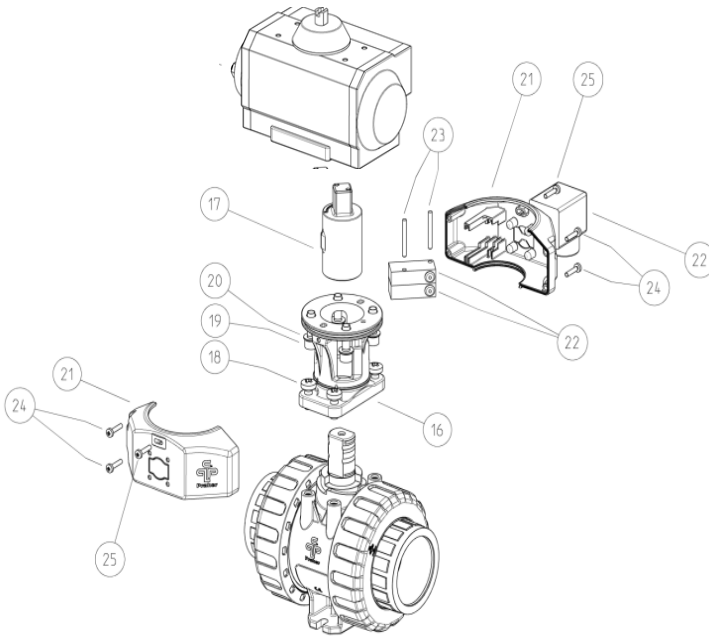
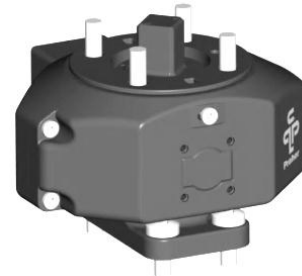
actuator	MT52 SR	MT63 SR	MT63 SR	MT75 SR	MT83 SR
N. Lt.	0,13	0,18	0,25	0,48	0,65

## 2 ball valve M1 with integrated Praher Labeling System



### ACCESSORIES:

#### Position feedback (bottom mounted) - Mounted on adapter set -



- 16. Bracket (material : PA-GF)
- 17. Coupling shaft
- 18. Screw
- 19. Hexagon socket screw
- 20. Toothed washer
- 21. Half-shells (material: ABS)
- 22. Limit switch
- 23. Pin
- 24. Screw
- 25. Locking screw for adjusting position feedback
- 26. Cover

### 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	Operating: -10°C bis +50°C	
Electrical wiring	NO	NC

\* on request

### *Inductive position feedback: on request*



## 2 ball valve M1 with integrated Praher Labeling System



### Limit switch box (top mounted)

- *Mounted on actuator -*

#### General:

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

#### Material:

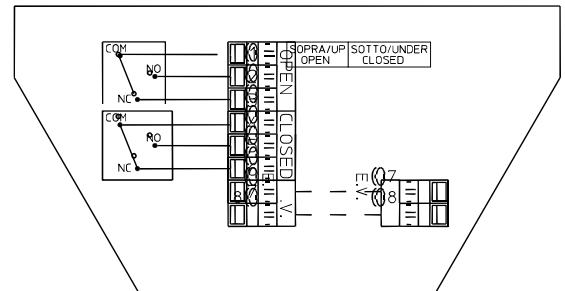
- Body: black polycarbonate
- Cover: clear polycarbonate
- Mounting bracket + screw: stainless steel
- Seals: EPDM

#### Voltage:

- 1-250 V

#### Current:

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



### Solenoid Valve

#### General:

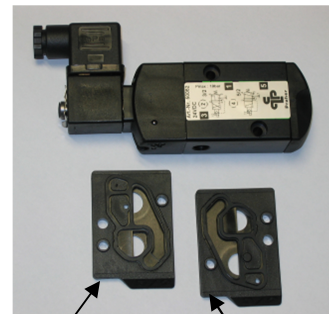
- Solenoid valve NAMUR with combined 5/2- and 3/2- ways function + standard coil
- Easy switch from 5/2- to 3/2-ways by turning around the sealing-plate
- Manual override as standard

#### Material:

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

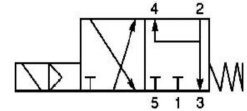
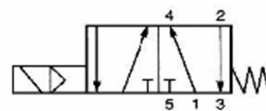
#### Voltage:

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



5/2 FUNCTION

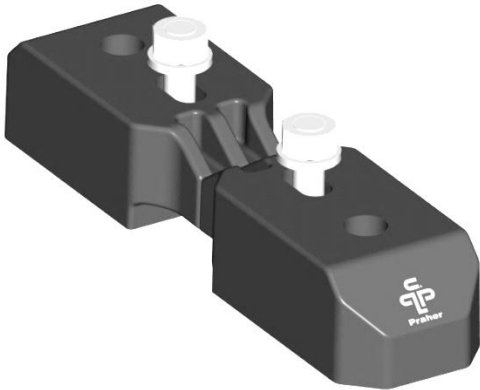
3/2 FUNCTION



## 2 ball valve M1 with integrated Praher Labeling System

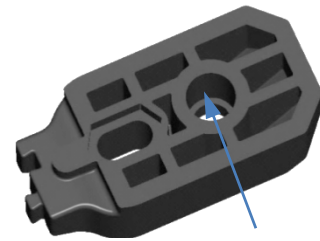
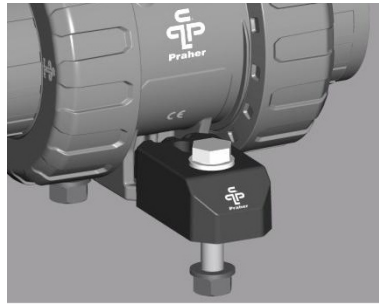
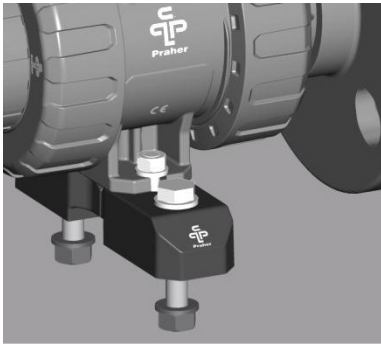


### Clamping / spacing element:



### Technical features:

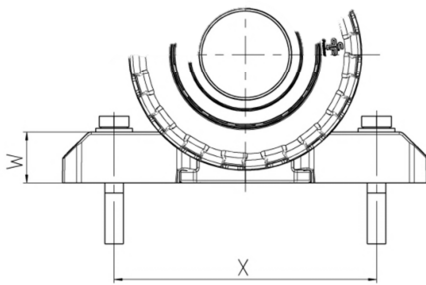
- Using for fixing as:
  - Clamping element
    - floors, walls, ceilings
    - plate
  - Spacing element  
*(screws additionally necessary)*
    - for flange connection
- Bore for threaded bush



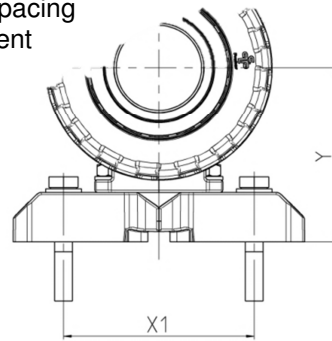
Bore for threaded bush

### Dimensions:

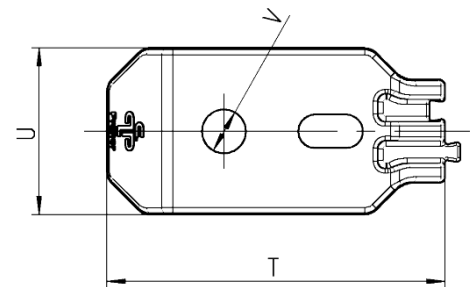
Use as clamping element



Use as spacing element



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



Dimensions in mm