



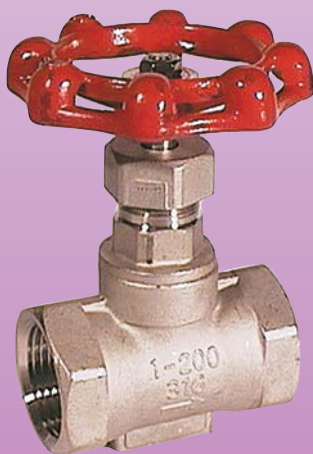
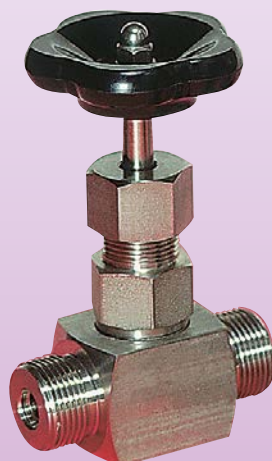
## Valves

from Brass and Stainless Steel



measuring  
•  
monitoring  
•  
analysing

NAD



- $p_{max}$ : PN 250;  $t_{max}$ : 400 °C
- Screw thread: G 1/8... G 3/8  
1/8" NPT... 1" NPT
- Weld ends:  
DN 15... DN 50
- Needle valves
- Angle-seat valves
- Globe valves



Z1

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**Description**

Stainless steel needle valves are used to vary the flow cross section, thus regulating the flow volume. The flow is regulated by a cone-shaped valve that is moved by means of a spindle away from or toward the valve seat. The amount of flow change is determined by the size of the resulting angular gap between the cone and seat. The rate of flow change is determined by how much the valve spindle is turned as well as the pitch of the valve spindle thread.

**Materials**

Body: stainless steel 1.4571  
 Upper part: stainless steel 1.4571  
 Spindle: stainless steel 1.4571  
 Gland packing: PTFE  
 Gland: stainless steel 1.4571  
 Union nut: stainless steel 1.4301  
 Hand wheel: molded resin

**Technical Data**

Design: two-part screwed body, with screwed-on upper part  
 Connections: G 1/8... G 1 1/4 (DIN ISO 228/1) female thread, male thread, female and male thread 1/8" NPT... 1" NPT female thread  
 Temperature range: -20 °C... +120 °C  
 Nominal pressure: PN250  
 Operation: rotation of hand wheel

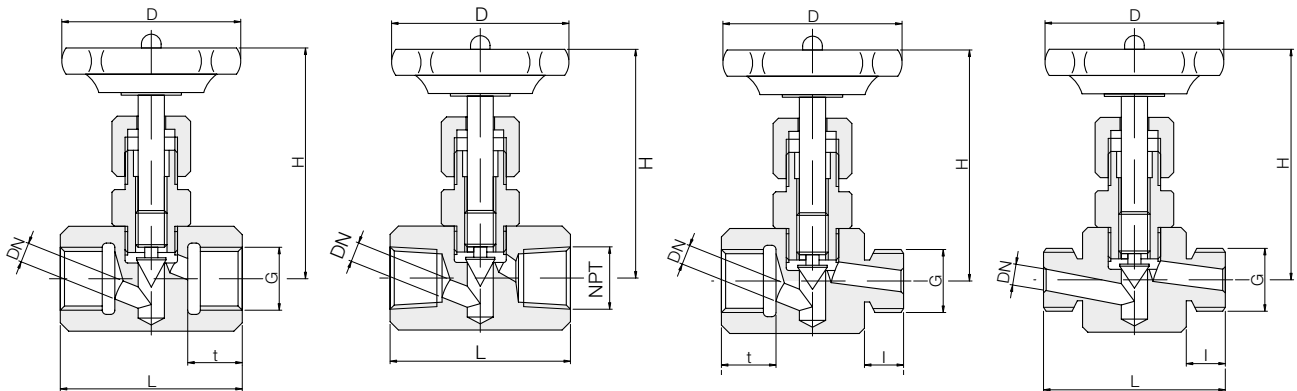


Female thread G

Female thread NPT

Female/male thread

Male thread



**Dimensions and Order Details** (example: NAD-MZR 06)

Screw thread		Order no. G thread			Order no. NPT thread	DN	L <sup>1)</sup>	L <sup>2)</sup>	t	I	H	D	k <sub>v</sub> value	Weight
[G]	[NPT]	Female/male thread	Female thread	Male thread	Female thread	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[m³/h]	[kg]
1/8	1/8-27	NAD-MZR 06	NAD-MMR 06	NAD-ZZR 06	NAD-MMN 06	4	45	50	10	9	74	50	0.27	0.30
1/4	1/4-18	NAD-MZR 08	NAD-MMR 08	NAD-ZZR 08	NAD-MMN 08	5	50	55	13	11	73	50	0.48	0.32
3/8	3/8-18	NAD-MZR 10	NAD-MMR 10	NAD-ZZR 10	NAD-MMN 10	6	55	60	14	11	72	50	0.54	0.32
1/2	1/2-14	NAD-MZR 15	NAD-MMR 15	NAD-ZZR 15	NAD-MMN 15	8	60	70	16	13	83	63	0.75	0.46
3/4	3/4-14	NAD-MZR 20	NAD-MMR 20	NAD-ZZR 20	NAD-MMN 20	10	75	80	18	16	100	63	1.2	0.76
1	1-11.5	NAD-MZR 25	NAD-MMR 25	NAD-ZZR 25	NAD-MMN 25	12	100	110	22	18	110	80	2.7	1.58
1 1/4	-	NAD-MZR 32	NAD-MMR 32	NAD-ZZR 32	-	15	120	-	24	20	135	100	3.6	2.82

<sup>1)</sup> = G thread    <sup>2)</sup> = NPT thread

**Model NAD-... T (High temperature version)**

**Description**

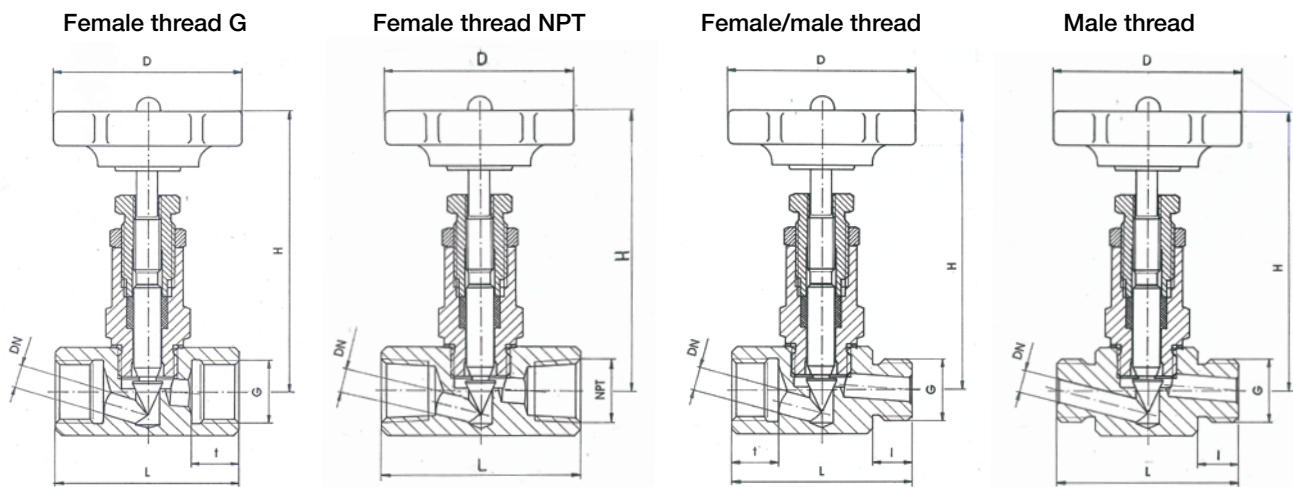
High temperature stainless steel needle valves are used to vary the flow cross section, thus regulating the flow volume. The flow is regulated by a cone-shaped valve that is moved away from or toward the valve seat by means of a spindle with an external spindle thread. The amount of flow change is determined by the size of the resulting angular gap between the cone and seat. The rate of flow change is determined by how much the valve spindle is turned as well as the pitch of the valve spindle thread.

**Materials**

- Body: stainless steel 1.4571
- Upper part: stainless steel 1.4571
- Spindle: stainless steel 1.4571
- Cone: stainless steel 1.4571 carbonitrided
- Gland packing: graphite
- Gland: stainless steel 1.43051
- Union nut: stainless steel 1.4301
- Hand wheel: molded resin

**Technical Data**

- Design: two-part screwed body, with screwed-on upper part
- Connections: G 1/8... G 1 1/4 (DIN ISO 228/1) female thread, male thread, female and male thread 1/8" NPT... 1" NPT female thread
- Temperature range: -20 °C... +400 °C
- Nominal pressure: PN 100
- Operation: rotation of hand wheel



**Dimensions and Order Details (example: NAD-MZR 06T)**

Screw thread		Order no. G thread			Order no. NPT thread	DN	L <sup>1)</sup>	L <sup>2)</sup>	t	l	H <sup>3)</sup>	D	k <sub>v</sub> value	Weight <sup>3)</sup>
[G]	[NPT]	Female/male thread	Female thread	Male thread	Female thread	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[m³/h]	[kg]
1/8	1/8-27	NAD-MZR 06T	NAD-MMR 06T	NAD-ZZR 06T	NAD-MMN 06T	4	45	50	10	9	85	50	0.27	0.32
1/4	1/4-18	NAD-MZR 08T	NAD-MMR 08T	NAD-ZZR 08T	NAD-MMN 08T	5	50	55	13	11	84	50	0.48	0.33
3/8	3/8-18	NAD-MZR 10T	NAD-MMR 10T	NAD-ZZR 10T	NAD-MMN 10T	6	55	60	14	11	83	50	0.54	0.34
1/2	1/2-14	NAD-MZR 15T	NAD-MMR 15T	NAD-ZZR 15T	NAD-MMN 15T	8	60	70	16	13	86	63	0.75	0.47
3/4	3/4-14	NAD-MZR 20T	NAD-MMR 20T	NAD-ZZR 20T	NAD-MMN 20T	10	75	80	18	16	95	63	1.2	0.69
1	1-11.5	NAD-MZR 25T	NAD-MMR 25T	NAD-ZZR 25T	NAD-MMN 25T	12	100	110	22	18	125	80	2.7	1.70
1 1/4	-	NAD-MZR 32T	NAD-MMR 32T	NAD-ZZR 32T	-	14	120	-	24	20	150	100	3.6	2.90

<sup>1)</sup> = G thread    <sup>2)</sup> = NPT thread    <sup>3)</sup> = valid for NAD-MMR...T

### Description

KOBOLD NAD-AC brass-needle valves allow economical regulation of the flow volume of liquids and gases.

The amount of flow change is determined by the size of the resulting angular gap between the cone and seat. The flow is regulated by a cone-shaped valve that is moved by means of a spindle away from or toward the valve seat. The rate of flow change is determined by how much the valve spindle is turned as well as the pitch of the valve spindle thread.

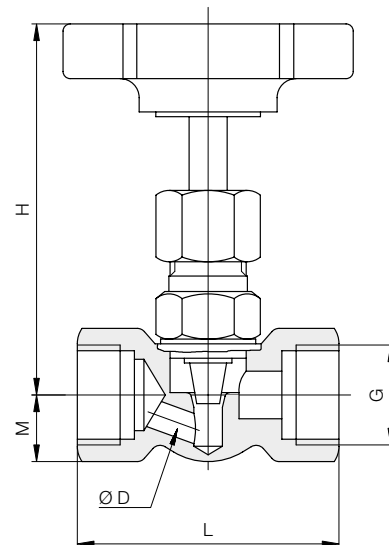
### Materials

Body:	CuZn 39Pb3F37
Bonnet:	brass (Ms 58)
Spindle:	brass (Ms 58)
Packing bottom-ring:	brass (Ms 58)
Spindle seal:	G 1/8 ... G 1/2 = NBR G 3/4 ... G 2 = PTFE
Gland nut:	brass (Ms 58)
Hand wheel:	plastic

### Technical Data

Design:	two-part screwed body, with screwed-on upper part
Connections:	female thread G 1/8 ... G 2 (acc. to DIN 259)
Temperature range:	max. +100 °C
Nominal pressure:	PN 100/PN 40 (from G 1 1/4)
Operation:	rotation of hand wheel

### NAD-AC



### Dimensions and Order Details (example: NAD-ACR 06)

Screw thread [G]	Order no.	D [mm]	L [mm]	H [mm]	M [mm]	k <sub>v</sub> value [m <sup>3</sup> /h]
1/8	NAD-ACR 06	4.0	50	70	12.5	0.24
1/4	NAD-ACR 08	5.0	50	78	12.5	0.48
3/8	NAD-ACR 10	6.0	50	78	12.5	0.60
1/2	NAD-ACR 15	6.5	55	78	14.0	0.66
3/4	NAD-ACR 20	9.0	67	90	18.0	1.08
1	NAD-ACR 25	11.0	75	95	22.5	1.62
1 1/4	NAD-ACR 32	13.0	110	105	30.0	3.0
1 1/2	NAD-ACR 40	15.0	110	110	32.5	3.6
2	NAD-ACR 50	15.0	110	110	32.5	3.6

**Design**

Two-part screwed body

**Materials**

Body: stainless steel 1.4408

Cover: stainless steel 1.4408

Metallic internal parts: stainless steel 1.4401

Packing bottom-ring: brass (Ms 58)

Gasket: metal/metal

**Technical Data**

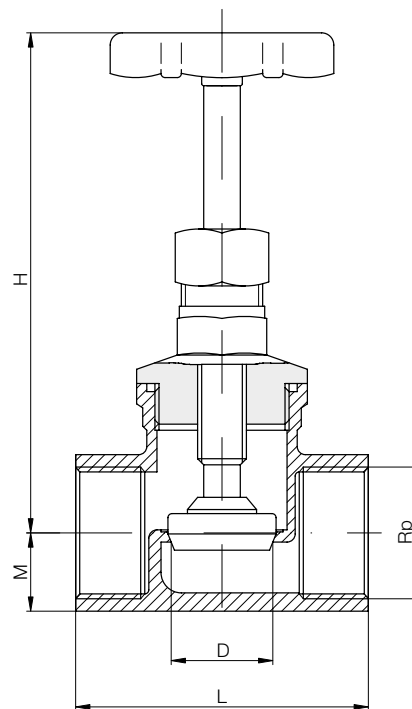
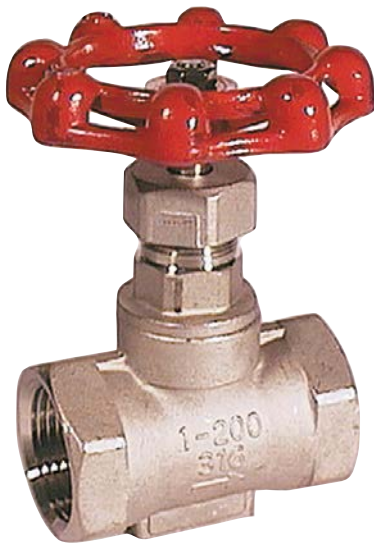
Connections: female thread Rp ¼ ... Rp 2  
(acc. to DIN 2999)

Temperature range: -30 °C ... +130 °C

Nominal pressure: PN 16

Operation: rotation of hand wheel

**NAD-AB**



**Dimensions and Order Details** (example: NAD-ABR 08))

Screw thread [Rp]	Order no.	D [mm]	M [mm]	H [mm]	L [mm]	Weight [kg]
¼	NAD-ABR 08	8	13	93	52	0.40
⅜	NAD-ABR 10	10	13	73	52	0.25
½	NAD-ABR 15	15	15	73	52	0.25
¾	NAD-ABR 20	20	19	85	60	0.45
1	NAD-ABR 25	25	23	92	72	0.60
1¼	NAD-ABR 32	32	29	110	81	0.95
1½	NAD-ABR 40	40	31	125	91	1.25
2	NAD-ABR 50	50	37	140	100	1.75

**Design**

Two-part screwed body

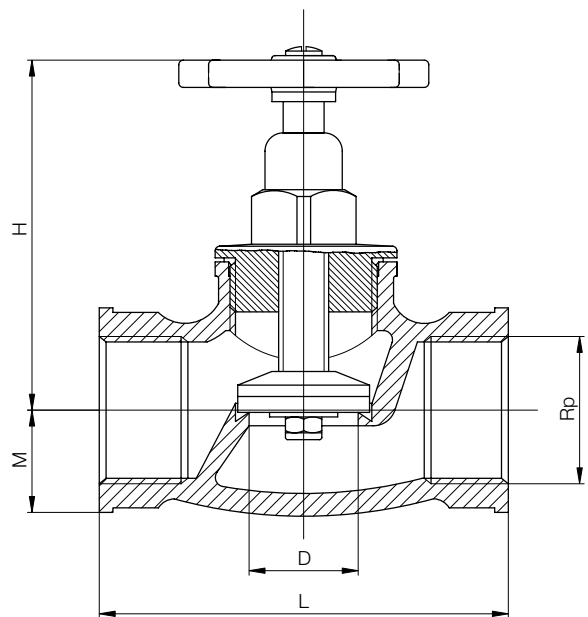
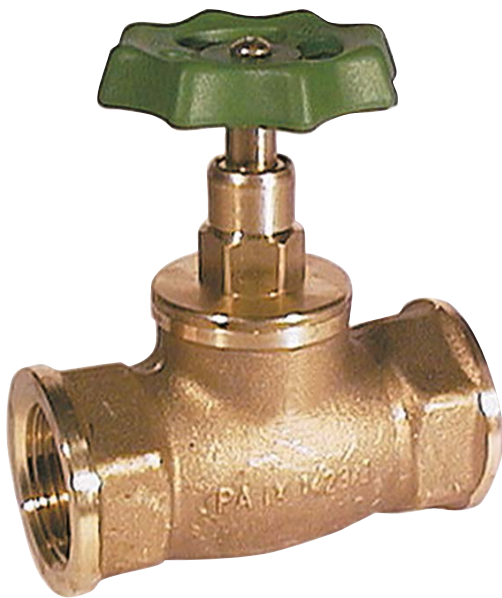
**Materials**

Body: brass  
 Cover: brass  
 Metallic internal parts: brass  
 Packing bottom-ring: NBR  
 Gasket: EPDM

**Technical Data**

Connections: female thread Rp 1/4 ... Rp 3  
 (acc. to DIN 2999)  
 Temperature range: -10 °C ... +90 °C  
 Nominal pressure: PN 10  
 Operation: rotation of hand wheel

**NAD-BF**



**Dimensions and Order Details** (example: NAD-BFR 08)

Screw thread [Rp]	Order no.	D [mm]	M [mm]	H [mm]	L [mm]	Weight [kg]
1/4	NAD-BFR 08	8	10.5	45	50	0.14
3/8	NAD-BFR 10	10	12.5	68	65	0.20
1/2	NAD-BFR 15	15	15.0	63	65	0.27
3/4	NAD-BFR 20	20	18.5	82	75	0.43
1	NAD-BFR 25	25	20.5	88	90	0.70
1 1/4	NAD-BFR 32	32	26.5	98	110	1.10
1 1/2	NAD-BFR 40	40	30.0	124	120	1.40
2	NAD-BFR 50	50	37.5	138	150	2.50
2 1/2	NAD-BFR 65	65	47.5	173	190	4.70
3	NAD-BFR 80	80	53.0	270	205	6.50



**Design**

Two-part screwed body

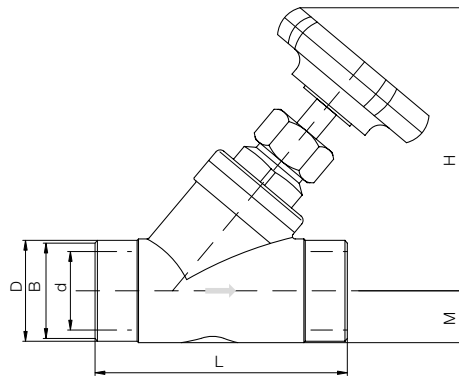
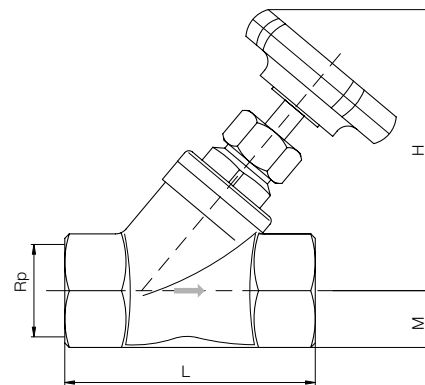
**Materials**

Body: stainless steel 1.4408  
 Cover: stainless steel 1.4408  
 Metallic internal parts: stainless steel 1.4404  
 Gasket: PTFE  
 Mounting position: any, note specified direction of flow

**Technical Data**

Connections: female thread Rp 1/4 ... Rp 2  
 (acc. to DIN 2999)  
 weld ends DN 15 ... DN 50  
 (acc. to DIN 3239)  
 Temperature range: -20°C ... +180°C  
 Nominal pressure: PN 16  
 Operation: rotation of hand wheel

**NAD-AD**



**Dimensions and Order Details** (example: NAD-ADR 15))

Screw thread [Rp]	Weld ends [DN]	Order no. female thread	Order no. weld ends	L [mm]	H [mm]	M [mm]	DIN 3239 Ø B [mm]	DIN 3239 Ø D [mm]	DIN 3239 Ø d [mm]
1/2	15	NAD-ADR 15	NAD-ADW 15	65.5	97.0	13.5	22	27	19
3/4	20	NAD-ADR 20	NAD-ADW 20	75.5	110.0	16.0	28	33	24
1	25	NAD-ADR 25	NAD-ADW 25	90.5	117.0	20.5	34	41	31
1 1/4	32	NAD-ADR 32	NAD-ADW 32	111.0	138.0	25.0	43	50	39
1 1/2	40	NAD-ADR 40	NAD-ADW 40	121.0	150.0	27.8	49	56	45
2	50	NAD-ADR 50	NAD-ADW 50	115.0	168.0	35.0	61	70	57

**Design**

Two-part screwed body

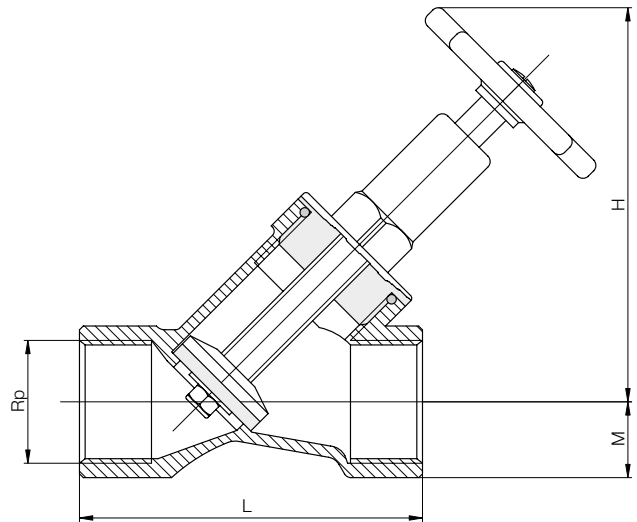
**Materials**

Body: brass  
 Cover: brass  
 Metallic internal parts: brass  
 O-rings: NBR  
 Seat gasket: EPDM

**Technical Data**

Connections: female thread Rp  $\frac{3}{8}$ ...Rp 3  
 (acc. to DIN 2999)  
 Temperature range: -10 °C...+90 °C  
 Nominal pressure: PN 16  
 Operation: rotation of hand wheel

**NAD-BE**



**Dimensions and Order Details** (example: NAD-BER 10)

Screw thread [Rp]	Order no.	M [mm]	H [mm]	L [mm]	Weight [kg]
$\frac{3}{8}$	NAD-BER 10	14.0	78	65	0.20
$\frac{1}{2}$	NAD-BER 15	14.0	78	65	0.25
$\frac{3}{4}$	NAD-BER 20	16.0	84	75	0.35
1	NAD-BER 25	20.0	108	90	0.65
1 $\frac{1}{4}$	NAD-BER 32	27.0	135	110	1.15
1 $\frac{1}{2}$	NAD-BER 40	30.0	148	120	1.30
2	NAD-BER 50	38.0	177	150	2.50
2 $\frac{1}{2}$	NAD-BER 65	42.5	195	180	3.60
3	NAD-BER 80	50.0	240	210	6.10