

## Stop valve with gland seal - metallic sealing

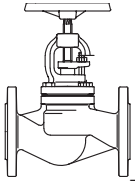
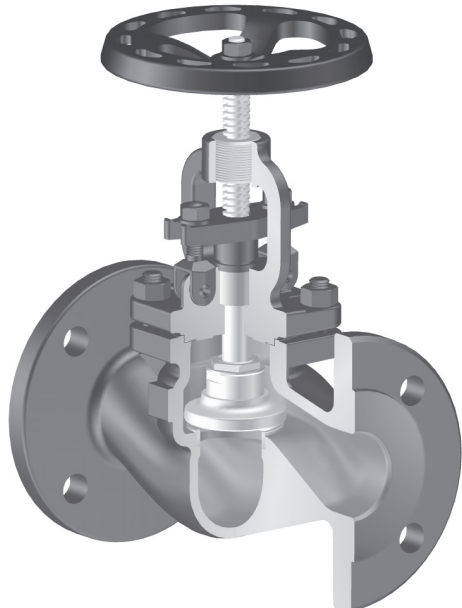
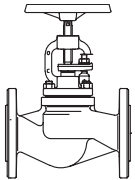
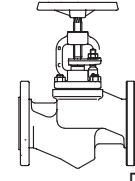
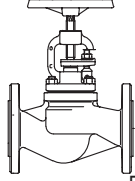
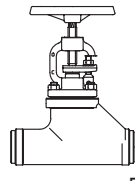
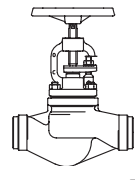
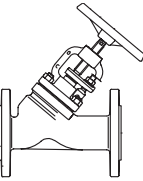
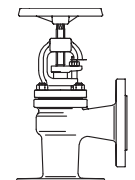
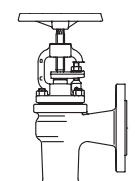
<p><b>ARI-STOBU® -</b>  <b>Straight through with flanges</b></p> <ul style="list-style-type: none"> <li>• TRB 801 Annex II No. 45 (except EN-JL1040)</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Grey cast iron            SG iron  <b>Fig. 006/306</b> Page 2</p> 	
<p><b>ARI-STOBU® -</b>  <b>Straight through with flanges</b></p> <ul style="list-style-type: none"> <li>• Test approvals TÜ.A/TÜV.AR.187-00</li> <li>• TRB 801 Annex II No. 45</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Cast steel  <b>Fig. 006/306</b> Page 3</p> 	
<p><b>ARI-STOBU® -</b>  <b>Straight through with flanges</b></p> <ul style="list-style-type: none"> <li>• Test approvals TÜ.A/TÜV.AR.187-00</li> <li>• TRB 801 Annex II No. 45</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Forged steel  <b>Fig. 006</b> Page 4</p> 	
<p><b>ARI-STOBU® -</b>  <b>Straight through with flanges</b></p> <ul style="list-style-type: none"> <li>• TRB 801 Annex II No. 45</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Stainless steel  <b>Fig. 006</b> Page 5</p> 	
<p><b>ARI-STOBU® -</b>  <b>Straight through with butt weld ends</b></p> <ul style="list-style-type: none"> <li>• Test approvals TÜ.A/TÜV.AR.187-00</li> <li>• TRB 801 Annex II No. 45</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Forged steel  <b>Fig. 005</b> Page 6</p> 	
<p><b>ARI-STOBU® -</b>  <b>Straight through with butt weld ends</b></p> <ul style="list-style-type: none"> <li>• Test approvals TÜ.A/TÜV.AR.187-00</li> <li>• TRB 801 Annex II No. 45</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Cast steel  <b>Fig. 005</b> Page 7</p> 	
<p><b>ARI-STOBU® -</b>  <b>Y-pattern with flanges</b></p> <ul style="list-style-type: none"> <li>• TRB 801 Annex II No. 45</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Stainless steel  <b>Fig. 009</b> Page 8</p> 	
<p><b>ARI-STOBU® -</b>  <b>Angle pattern with flanges</b></p> <ul style="list-style-type: none"> <li>• TRB 801 Annex II No. 45 (except EN-JL1040)</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Grey cast iron            SG iron  <b>Fig. 007/307</b> Page 9</p> 	
<p><b>ARI-STOBU® -</b>  <b>Angle pattern with flanges</b></p> <ul style="list-style-type: none"> <li>• Test approvals TÜ.A/TÜV.AR.187-00</li> <li>• TRB 801 Annex II No. 45</li> <li>• German TA-Luft TÜV-Test-No. 922-9204866 (optional)</li> </ul>	<p>Cast steel  <b>Fig. 007/307</b> Page 10</p> 	

Fig. 006

- Features:**
- Proven technology
  - Solid plug made of stainless material
  - Solid stem made of stainless material
  - Solid seat made of stainless material
  - Stem with roll hardened thread
  - Burnished stem
  - High-tensile gland packing
  - Favourable zeta-values also for small nominal diameters
- In cast steel, forged steel and stainless steel:
- Bonnet top with threaded bushing
  - Pivot mounted bolts

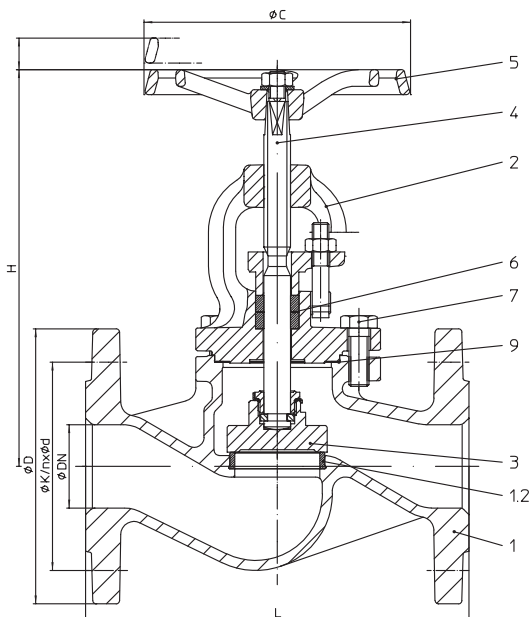
**Stop valve - straight through with flanges and gland seal (Grey cast iron, SG iron)**


Figure	Nominal pressure	Material	Nominal diameter
12.006	PN16	EN-JL1040	DN15-300
12.306	PN16	EN-JL1040	DN15-300
22.006	PN16	EN-JS1049	DN15-350
22.306	PN16	EN-JS1049	DN15-350
23.006	PN25	EN-JS1049	DN15-150
23.306	PN25	EN-JS1049	DN15-150

**Fig. 306: Trim made of RG/MS:**

CuZn35Ni3Mn2AlPb, CW710R code number 02

CuSn10-Cu, CC480K code number 03

(max. operating temperature: 225°C, code number acc. to DIN 86251)

Test:

• DN15-300 optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to page 16)

**At high differential pressures a balancing plug is necessary!**  
 (not possible at Fig. 306, observe max. differential pressure!)  
 (refer to page 13)

**Selection of possible applications**

 Industry, power stations, flue gas purification plant, vapour facilities, recycling facilities, shipbuilding, general plant manufacturing  
 (other applications on request)

**Selection of possible flow media**

 Steam, gases, liquids, etc.  
 (other flow media on request)

**Parts**

Pos.	Description	Fig. 12.006	Fig. 12.306	Fig. 22./23.006	Fig. 22./23.306
1	Body	EN-JL1040, EN-GJL-250		EN-JS1049, EN-GJS-400-18U-LT	
1.2	Seat ring	X20Cr13+QT, 1.4021+QT	CuSn10-Cu, CC480K code number 03	X20Cr13+QT, 1.4021+QT	CuSn10-Cu, CC480K code number 03
2	Bonnet	EN-JL1040, EN-GJL-250		EN-JS1049, EN-GJS-400-18U-LT	
3	Plug	DN ≤200: X20Cr13+QT, 1.4021+QT DN >200: P265 GH, 1.0425	CuZn35Ni3Mn2AlPb, CW710R code number 02 CuSn10-Cu, CC480K code number 03	DN ≤200: X20Cr13+QT, 1.4021+QT DN >200: P265 GH, 1.0425	CuZn35Ni3Mn2AlPb, CW710R code number 02 CuSn10-Cu, CC480K code number 03
4	Stem	X20Cr13+QT, 1.4021+QT (burnished)	CuSn8, CW453K code number 03 (burnished)	X20Cr13+QT, 1.4021+QT (burnished)	CuSn8, CW453K code number 03 (burnished)
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)			
6	Packing ring	Pure graphite			
7	Hexagon bolt	5.6			--
7	Stud	--			25CrMo4, 1.7218
8	Hexagon nut	--			C35E, 1.1181
9	Gasket	Pure graphite (CrNi laminated with graphite)			

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists (acc. to TRB 801 No. 45 EN-JL1040 is not allowed.)

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
L	(mm)	130	150	160	180	200	230	290	310	350	400	480	600	730	850	980
H	(mm)	185	185	205	205	230	230	270	305	355	395	450	570	685	770	860
ØC	(mm)	120	120	140	140	160	160	180	200	225	250	400	520	520	520	640
Travel	(mm)	9	9	13	13	21	19	28	32	36	52	56	73	80	110	116
Kvs-value	(m³/h)	4,2	7,4	12	19	31	47	77	120	188	288	410	725	1145	1635	2220
Zeta-value	--	4,6	4,7	4,3	4,6	4,3	4,5	4,8	4,5	4,5	4,7	4,8	4,9	4,8	4,8	4,9

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

Standard-flange dimensions refer to page 15

Face-to-face dimension FTF series 1 according to DIN EN 558

**Weights**

Figure-No.	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350
12.006 / 306	(kg)	3,5	4	5	6,8	9,3	12,2	18	24,5	35	55	77	145	243	341	--
22.006 / 306	(kg)	3,9	4,3	5,4	7	9,5	12,9	18,4	24,5	36	56	78	122	247	336	451
23.006 / 306	(kg)	3,9	4,3	5,4	7	9,5	12,9	18,4	24,5	36	56	78	122	--	--	--

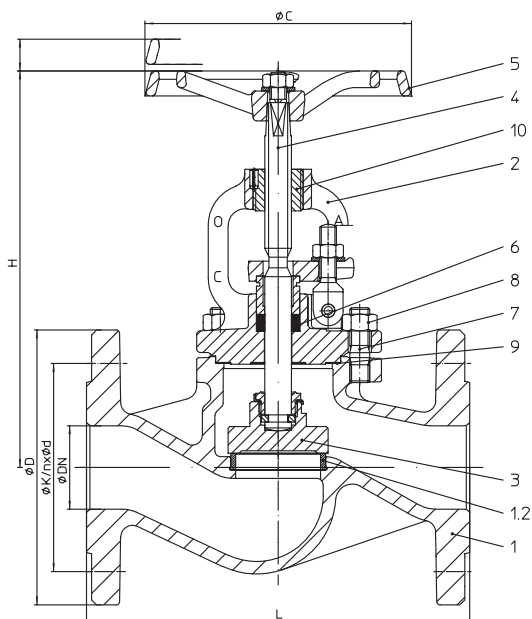
**Stop valve - straight through with flanges and gland seal (Cast steel)**


Figure	Nominal pressure	Material	Nominal diameter
34.006	PN25	1.0619+N	15-500
34.306	PN25	1.0619+N	15-500
35.006	PN40	1.0619+N	15-500
35.306	PN40	1.0619+N	15-500

**Fig. 306: Trim made of RG/MS**

CuZn35Ni3Mn2AlPb, CW710R code number 02

CuSn10-Cu, CC480K code number 03

(max. operating temperature: 225°C, code number acc. to DIN 86251)

**Test:**

- 34.006 DN15-400: Test approvals TÜ.A/TÜV.AR.187-00
- 35.006 DN15-200: Test approvals TÜ.A/TÜV.AR.187-00
- DN15-300 optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to p.16)

**At high differential pressures a balancing plug is necessary!**  
 (not possible at Fig. 306, observe max. differential pressure!)  
 (refer to page 13)

**Selection of possible applications**

 Industry, power stations, flue gas purification plant, vapour facilities, recycling facilities, shipbuilding, general plant manufacturing  
 (other applications on request)

**Selection of possible flow media**

 Steam, gases, liquids, etc.  
 (other flow media on request)

**Parts**

Pos.	Description	Fig. 34./35.006	Fig. 34./35.306
1	Body	GP240GH+N, 1.0619+N	
1.2	Seat ring	DN ≤50: X20Cr13+QT, 1.4021+QT DN >50: G19 9 Nb Si, 1.4551	CuSn10-Cu, CC480K code number 03
2	Bonnet	DN ≤80: P250 GH, 1.0460 DN >80: GP240GH+N, 1.0619+N	
3	Plug	DN ≤200: X20Cr13+QT, 1.4021+QT DN >200: P265 GH, 1.0425	CuZn35Ni3Mn2AlPb, CW710R code number 02 CuSn10-Cu, CC480K code number 03 <sup>2)</sup>
4	Stem	X20Cr13+QT, 1.4021+QT (burnished)	CuSn8, CW453K code number 03 (burnished)
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)	
6	Packing ring	Pure graphite	
7	Stud	25CrMo4, 1.7218	
8	Hexagon nut	C35E, 1.1181	
9	Gasket	Pure graphite (CrNi laminated with graphite)	
10	Insert nuts	11SMn30+C, 1.0715+C	

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
L	(mm)	130	150	160	180	200	230	290	310	350	400	480	600	730	850	980	1100	1350 *
H	(mm)	185	185	205	205	230	230	270	305	355	395	450	570	685	770	860	865	995
ØC	(mm)	120	120	140	140	160	160	180	200	225	250	400	520	520	520	640	640	640
Travel	(mm)	9	9	13	13	21	19	28	32	36	52	56	73	80	110	116	126	181
Kvs-value	(m <sup>3</sup> /h)	4,2	7,4	12	19	31	47	77	120	188	288	410	725	1145	1635	2220	3180	4530
Zeta-value	--	4,6	4,7	4,3	4,6	4,3	4,5	4,8	4,5	4,5	4,7	4,8	4,9	4,8	4,8	4,9	3,4	4,9

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

\* acc. to manufacturers standard

Standard-flange dimensions refer to page 15

Face-to-face dimension FTF series 1 according to DIN EN 558

**Weights**

Figure-No.	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
34.006 / 306	(kg)	4,4	5,4	6,3	7	10,5	13,8	21	27,5	40	61	84	160	265	377	510	780	1095
35.006 / 306	(kg)	4,8	5,4	7,1	8	11,5	13,5	23,5	28	39,5	61	84	170	283	414	557	857	1150

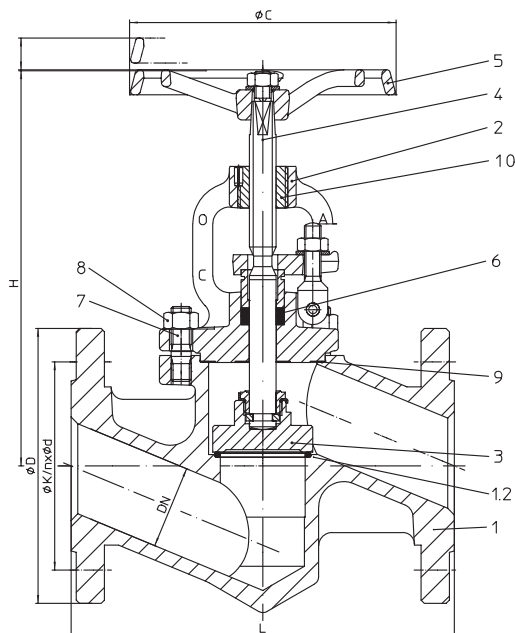
**Stop valve - straight through with flanges and gland seal (Forged steel)**


Figure	Nominal pressure	Material	Nominal diameter
45.006	PN40	1.0460	15-50

**Test:**

- Test approvals TÜ.A/TÜV.AR.187-00
- optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to page 16)

**Selection of possible applications**

Industry, power stations, flue gas purification plant, vapour facilities, recycling facilities, shipbuilding, general plant manufacturing (other applications on request)

**Selection of possible flow media**

Steam, gases, liquids, etc. (other flow media on request)

**Parts**

Pos.	Description	Fig. 45.006
1	Body	P250 GH, 1.0460
1.2	Seat ring	G19 9 Nb Si, 1.4551
2	Bonnet	P250 GH, 1.0460
3	Plug	X20Cr13+QT, 1.4021+QT
4	Stem	X20Cr13+QT, 1.4021+QT (burnished)
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)
6	Packing ring	Pure graphite
7	Stud	25CrMo4, 1.7218
8	Hexagon nut	C35E, 1.1181
9	Gasket	Pure graphite (CrNi laminated with graphite)
10	Insert nuts	11SMn30+C, 1.0715+C

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50
L	(mm)	130	150	160	180	200	230
H	(mm)	201	203	223	229	236	237
ØC	(mm)	120	120	140	140	160	160
Travel	(mm)	9	9	13	13	21	19
Kvs-value	(m³/h)	3,3	5,8	9,2	15	23,3	36
Zeta-value	--	7,4	7,6	7,4	7,4	7,5	7,7

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

Standard-flange dimensions refer to page 15

Face-to-face dimension FTF series 1 according to DIN EN 558

**Weights**

Figure-No.	DN	15	20	25	32	40	50
45.006	(kg)	4,3	5	6	7	10	13

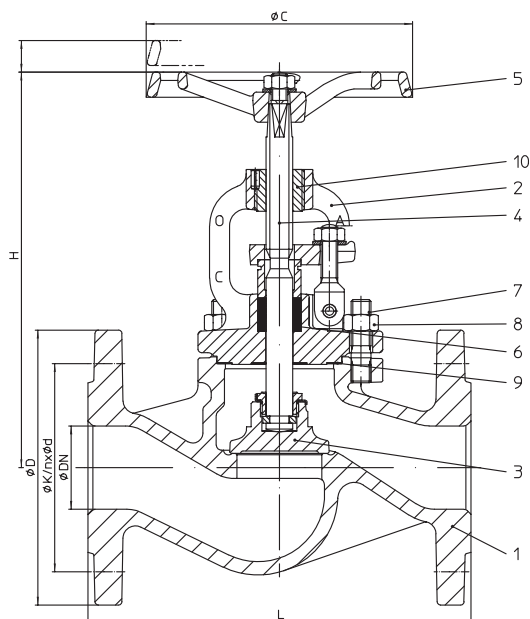
**Stop valve - straight through with flanges and gland seal (Stainless steel)**


Figure	Nominal pressure	Material	Nominal diameter
52.006	PN16	1.4408	15-200
54.006	PN25	1.4408	200
55.006	PN40	1.4408	15-150

Test:

• optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to page 16)

**At high differential pressures a balancing plug is necessary!**  
 (refer to page 13)

**Selection of possible applications**

Recycling facilities, chemical industry, hospital technology, process water installations, installations with aggressive media (other applications on request)

**Selection of possible flow media**

Process water, aggressive media, etc. (other flow media on request)

**Parts**

Pos.	Description	Fig. 52./54./55.006
1	Body	GX5CrNiMo19-11-2, 1.4408
2	Bonnet	DN ≤80: X2CrNiMo17-12-2, 1.4404 DN >80: GX5CrNiMo19-11-2, 1.4408
3	Plug	X6CrNiMoTi17-12-2, 1.4571
4	Stem	X6CrNiMoTi17-12-2, 1.4571
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)
6	Packing ring	Pure graphite
7	Stud	A4-70
8	Hexagon nut	A4
9	Gasket	Pure graphite (CrNi laminated with graphite)
10	Insert nuts	X5CrNiMo17-12-2, 1.4401

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50	65	80	100	125	150	200
L	(mm)	130	150	160	180	200	230	290	310	350	400	480	600
H	(mm)	185	185	205	205	230	230	270	305	355	395	450	570
ØC	(mm)	120	120	140	140	160	160	180	200	225	250	400	520
Travel	(mm)	9	9	13	13	21	19	28	32	36	52	56	73
Kvs-value	(m³/h)	4,2	7,4	12	19	31	47	77	120	188	288	410	725
Zeta-value	--	4,6	4,7	4,3	4,6	4,3	4,5	4,8	4,5	4,5	4,7	4,8	4,9

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

Standard-flange dimensions refer to page 15

Face-to-face dimension FTF series 1 according to DIN EN 558

**Weights**

Figure-No.	DN	15	20	25	32	40	50	65	80	100	125	150	200
52./54./55.006	(kg)	4,8	5,4	7,1	8	11,5	13,5	23,5	28	39,5	61	84	170

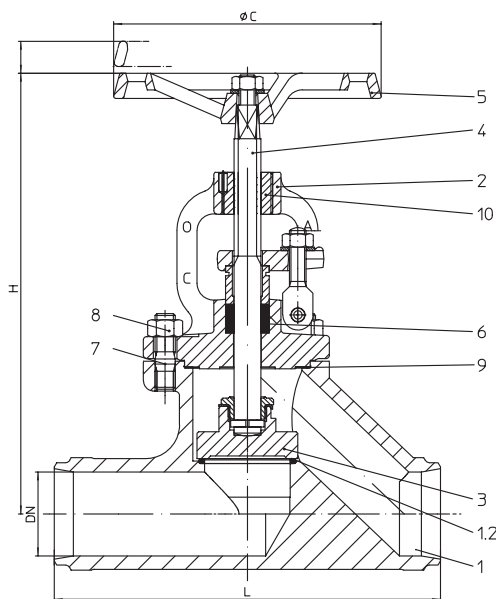
**Stop valve - straight through with butt weld ends and gland seal (Forged steel)**


Figure	Nominal pressure	Material	Nominal diameter
45.005	PN40	1.0460	15-50
DN65-300 refer to Fig. 35.005 (1.0619+N)			
<b>Butt weld ends according to DIN EN 12627 - 4 (refer to page 12)</b>			
Test:			
• Test approvals TÜ.A/TÜV.AR.187-00			
• optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to page 16)			

**Selection of possible applications**

Industry, power stations, flue gas purification plant, vapour facilities, recycling facilities, shipbuilding, general plant manufacturing (other applications on request)

**Selection of possible flow media**

Steam, gases, liquids, etc. (other flow media on request)

**Parts**

Pos.	Description	Fig. 45.005
1	Body	P250 GH, 1.0460
1.2	Seat ring	G19 9 Nb Si, 1.4551
2	Bonnet	P250 GH, 1.0460
3	Plug	X20Cr13+QT, 1.4021+QT
4	Stem	X20Cr13+QT, 1.4021+QT (burnished)
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)
6	Packing ring	Pure graphite
7	Stud	25CrMo4, 1.7218
8	Hexagon nut	C35E, 1.1181
9	Gasket	Pure graphite (CrNi laminated with graphite)
10	Insert nuts	11SMn30+C, 1.0715+C

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50
L	(mm)	130	150	160	180	200	230
H	(mm)	205	205	225	230	235	235
ØC	(mm)	120	120	140	140	160	160
Travel	(mm)	9	9	13	13	21	19
Kvs-value	(m³/h)	3,3	5,8	9,2	15	23,3	36
Zeta-value	--	7,4	7,6	7,4	7,4	7,5	7,7

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

Face-to-face dimension ETE series 1 according to DIN EN 12982

**Weights**

Figure-No.	DN	15	20	25	32	40	50
45.005	(kg)	2,9	3	3,5	3,5	6,2	7,8

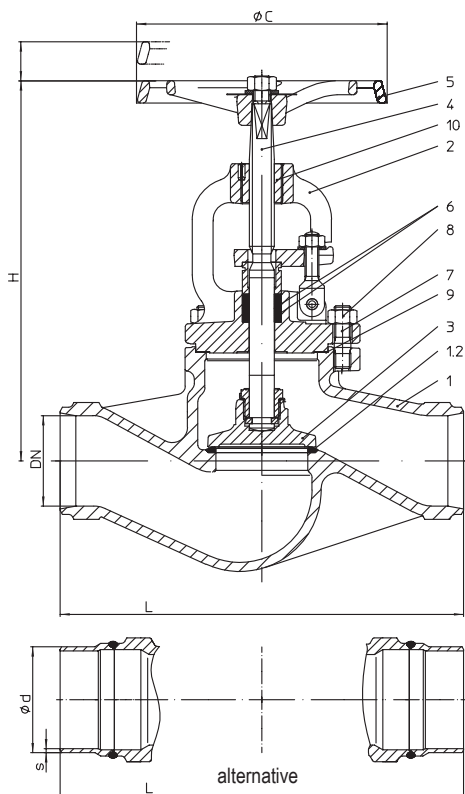
**Stop valve - straight through with butt weld ends and gland seal (Cast steel)**


Figure	Nominal pressure	Material	Nominal diameter
35.005	PN40	1.0619+N	65-300
DN15-50 refer to Fig. 45.005 (1.0460)			
<b>Butt weld ends according to DIN EN 12627 - 4 (refer to page 12)</b>			
alternative: DN 65-200 with shoed ends of P235GH			
Test:			
• Test approvals TÜ.A/TÜV.AR.187-00			
• optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to page 16)			
<b>At high differential pressures a balancing plug is necessary!</b> (refer to page 13)			

**Selection of possible applications**

Industry, power stations, flue gas purification plant, vapour facilities, recycling facilities, shipbuilding, general plant manufacturing  
(other applications on request)

**Selection of possible flow media**

Steam, gases, liquids, etc.  
(other flow media on request)

**Parts**

Pos.	Description	Fig. 35.005
1	Body	GP240GH+N, 1.0619+N
1.2	Seat ring	G19 9 Nb Si, 1.4551
2	Bonnet	DN ≤80: P250 GH, 1.0460 DN >80: GP240GH+N, 1.0619+N
3	Plug	DN ≤200: X20Cr13+QT, 1.4021+QT DN >200: P265 GH, 1.0425
4	Stem	X20Cr13+QT, 1.4021+QT (burnished)
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)
6	Packing ring	Pure graphite
7	Stud	25CrMo4, 1.7218
8	Hexagon nut	C35E, 1.1181
9	Gasket	Pure graphite (CrNi laminated with graphite)
10	Insert nuts	11SMn30+C, 1.0715+C

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	65	80	100	125	150	200	250	300
L	(mm)	290	310	350	400	480	600	730	850
H	(mm)	270	305	355	395	450	570	685	770
ØC	(mm)	180	200	225	250	400	520	520	520
Travel	(mm)	28	32	36	52	56	73	80	110
Kvs-value	(m <sup>3</sup> /h)	77	120	188	288	410	725	1145	1635
Zeta-value	--	4,8	4,5	4,5	4,7	4,8	4,9	4,8	4,8

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

Face-to-face dimension ETE series 1 according to DIN EN 12982

**Weights**

Figure-No.	DN	65	80	100	125	150	200	250	300
35.005	(kg)	16	21	28	45	66	143	228	345

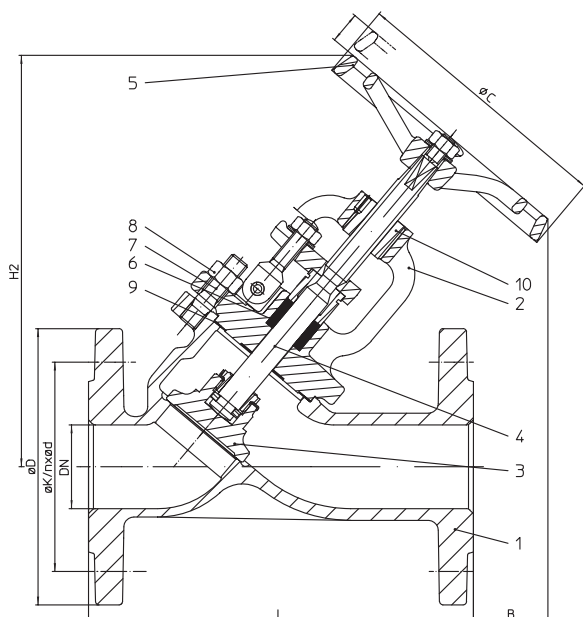
**Stop valve - Y-pattern with flanges and gland seal (Stainless steel)**


Figure	Nominal pressure	Material	Nominal diameter
52.009	PN16	1.4408	15-200
54.009	PN25	1.4408	15-200
55.009	PN40	1.4408	15-200

Test:

- optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to page 16)

**At high differential pressures a balancing plug is necessary!**  
(refer to page 13)

**Selection of possible applications**

Recycling facilities, chemical industry, hospital technology, process water installations, installations with aggressive media (other applications on request)

**Selection of possible flow media**

Process water, aggressive media, etc. (other flow media on request)

**Parts**

Pos.	Description	Fig. 52./54./55.009
1	Body	GX5CrNiMo19-11-2, 1.4408
2	Bonnet	DN ≤80: X2CrNiMo17-12-2, 1.4404 DN >80: GX5CrNiMo19-11-2, 1.4408
3	Plug	X6CrNiMoTi17-12-2, 1.4571
4	Stem	X6CrNiMoTi17-12-2, 1.4571
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)
6	Packing ring	Pure graphite
7	Stud	A4-70
8	Hexagon nut	A4
9	Gasket	Pure graphite (CrNi laminated with graphite)
10	Insert nuts	X5CrNiMo17-12-2, 1.4401

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50	65	80	100	125	150	200
L	(mm)	130	150	160	180	200	230	290	310	350	400	480	600
H2	(mm)	200	200	225	225	245	250	285	320	415	435	505	640
B	(mm)	80	70	85	70	70	45	30	65	75	80	75	130
ØC	(mm)	120	120	140	140	160	160	180	200	225	250	400	520
Travel	(mm)	9	9	13	13	21	19	28	32	36	52	56	73
Kvs-value	(m³/h)	5,8	8,6	13	20	42	59	90	127	205	310	445	800
Zeta-value	--	2,4	3,5	3,7	4,2	2,3	2,9	3,5	4,1	3,8	4,1	4,1	4

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

Standard-flange dimensions refer to page 15

Face-to-face dimension FTF series 1 according to DIN EN 558

**Weights**

Figure-No.	DN	15	20	25	32	40	50	65	80	100	125	150	200
52./54./55.009	(kg)	4	4,6	6	7,6	9,4	11,6	16,5	23,2	35	43	72	141



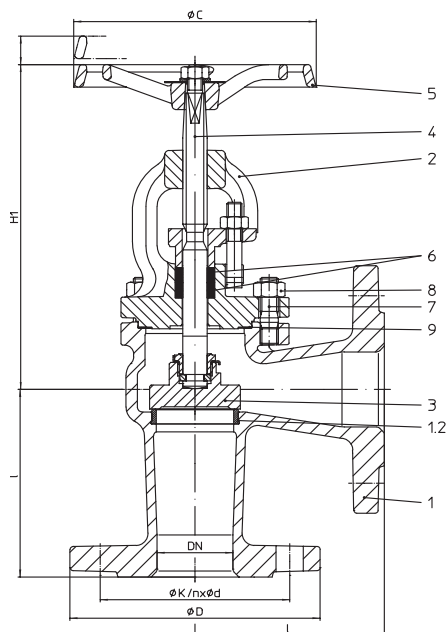
**Stop valve - angle pattern with flanges and gland seal (Grey cast iron, SG iron)**


Figure	Nominal pressure	Material	Nominal diameter
12.007	PN16	EN-JL1040	DN15-300
12.307	PN16	EN-JL1040	DN15-300
22.007	PN16	EN-JS1049	DN15-500
22.307	PN16	EN-JS1049	DN15-500

**Fig. 307: Trim made of RG/MS**

CuZn35Ni3Mn2AlPb, CW710R code number 02

CuSn10-Cu, CC480K code number 03

(max. operating temperature: 225°C, code number acc. to DIN 86251)

Test:

• DN15-300 optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to page 16)

**At high differential pressures a balancing plug is necessary!**  
**(not possible at Fig. 307, observe max. differential pressure!)**  
 (refer to page 13)

**Selection of possible applications**

 Industry, power stations, flue gas purification plant, vapour facilities, recycling facilities, shipbuilding, general plant manufacturing  
 (other applications on request)

**Selection of possible flow media**

 Steam, gases, liquids, etc.  
 (other flow media on request)

**Parts**

Pos.	Description	Fig. 12.007	Fig. 12.307	Fig. 22.007	Fig. 22.307
1	Body	EN-JL1040, EN-GJL-250		EN-JS1049, EN-GJS-400-18U-LT	
1.2	Seat ring	X20Cr13+QT, 1.4021+QT	CuSn10-Cu, CC480K code number 03	X20Cr13+QT, 1.4021+QT	CuSn10-Cu, CC480K code number 03
2	Bonnet	EN-JL1040, EN-GJL-250		EN-JS1049, EN-GJS-400-18U-LT	
3	Plug	DN ≤200: X20Cr13+QT, 1.4021+QT DN >200: P265 GH, 1.0425	CuZn35Ni3Mn2AlPb, CW710R code number 02 CuSn10-Cu, CC480K code number 03	DN ≤200: X20Cr13+QT, 1.4021+QT DN >200: P265 GH, 1.0425	CuZn35Ni3Mn2AlPb, CW710R code number 02 CuSn10-Cu, CC480K code number 03
4	Stem	X20Cr13+QT, 1.4021+QT (burnished)	CuSn8, CW453K code number 03 (burnished)	X20Cr13+QT, 1.4021+QT (burnished)	CuSn8, CW453K code number 03 (burnished)
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)			
6	Packing ring	Pure graphite			
7	Hexagon bolt	5.6		--	
7	Stud	--		25CrMo4, 1.7218	
8	Hexagon nut	--		C35E, 1.1181	
9	Gasket	Pure graphite (CrNi laminated with graphite)			

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists (acc. to TRB 801 No. 45 EN-JL1040 is not allowed.)

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
I	(mm)	90	95	100	105	115	125	145	155	175	200	225	275	325	375	425	475	525 *
H1	(mm)	185	185	200	200	215	215	245	280	320	360	415	495	575	655	735	740	840
ØC	(mm)	120	120	140	140	160	160	180	200	225	250	400	520	520	520	640	640	640
Travel	(mm)	9	9	13	13	21	19	28	32	36	52	56	73	80	110	116	126	181
Kvs-value	(m³/h)	5,2	9,2	15	24	37	58	96	150	235	360	510	905	1430	2040	2775	3975	5660
Zeta-value	--	3	3	2,8	2,9	3	3	3,1	2,9	2,9	3	3,1	3,1	3,1	3,1	3,1	2,6	3,1

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

\* acc. to manufacturers standard

Standard-flange dimensions refer to page 15

Face-to-face dimension CTF series 8 according to DIN EN 558

**Weights**

Figure-No.	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
12.007 / 307	(kg)	3,9	4,5	5,5	6,6	9,1	11,5	17,1	22,4	32	46	67	126	184	270	--	--	--
22.007 / 307	(kg)	4	4,5	5,6	6,6	9,2	11,6	17	22,6	33	46	68	100	204	270	398	570	885

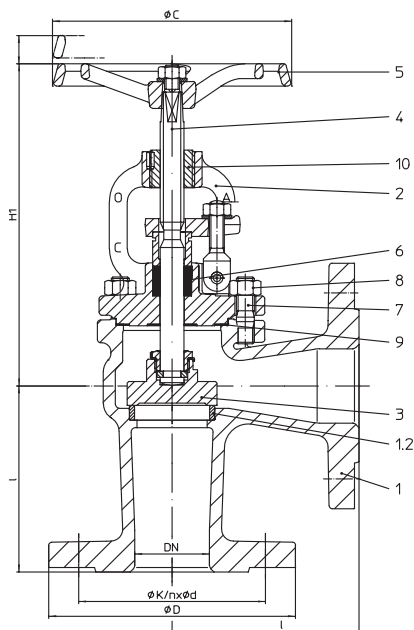
**Stop valve - angle pattern with flanges and gland seal (Cast steel)**


Figure	Nominal pressure	Material	Nominal diameter
34.007	PN25	1.0619+N	15-500
34.307	PN25	1.0619+N	15-500
35.007	PN40	1.0619+N	15-500
35.307	PN40	1.0619+N	15-500

**Fig. 307: Trim made of RG/MS**

CuZn35Ni3Mn2AlPb, CW710R code number 02

CuSn10-Cu, CC480K code number 03

(max. operating temperature: 225°C, code number acc. to DIN 86251)

Test:

- 34.007 DN15-400: Test approvals TÜ.A/TÜV.AR.187-00
- 35.007 DN15-150: Test approvals TÜ.A/TÜV.AR.187-00
- DN15-300 optional: German TA-Luft TÜV-Test-No. 922-9204866 (refer to p.16)

**At high differential pressures a balancing plug is necessary!**  
 (not possible at Fig. 307, observe max. differential pressure!)  
 (refer to page 13)

**Selection of possible applications**

 Industry, power stations, flue gas purification plant, vapour facilities, recycling facilities, shipbuilding, general plant manufacturing  
 (other applications on request)

**Selection of possible flow media**

 Steam, gases, liquids, etc.  
 (other flow media on request)

**Parts**

Pos.	Description	Fig. 34./35.007	Fig. 34./35.307
1	Body	GP240GH+N, 1.0619+N	
1.2	Seat ring	DN ≤50: X20Cr13+QT, 1.4021+QT DN >50: G19 9 Nb Si, 1.4551	CuSn10-Cu, CC480K code number 03
2	Bonnet	DN ≤80: P250 GH, 1.0460 DN >80: GP240GH+N, 1.0619+N	
3	Plug	DN ≤200: X20Cr13+QT, 1.4021+QT DN >200: P265 GH, 1.0425	CuZn35Ni3Mn2AlPb, CW710R code number 02 CuSn10-Cu, CC480K code number 03
4	Stem	X20Cr13+QT, 1.4021+QT (burnished)	CuSn8, CW453K code number 03 (burnished)
5	Handwheel	EN-JL1040, EN-GJL-250 (FE 13 epoxy-coating)	
6	Packing ring	Pure graphite	
7	Stud	25CrMo4, 1.7218	
8	Hexagon nut	C35E, 1.1181	
9	Gasket	Pure graphite (CrNi laminated with graphite)	
10	Insert nuts	11SMn30+C, 1.0715+C	

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

**Dimensions**

	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
I	(mm)	90	95	100	105	115	125	145	155	175	200	225	275	325	375	425	475	525 *
H1	(mm)	185	185	200	200	215	215	245	280	320	360	415	495	575	655	735	740	840
ØC	(mm)	120	120	140	140	160	160	180	200	225	250	400	520	520	520	640	640	640
Travel	(mm)	9	9	13	13	21	19	28	32	36	52	56	73	80	110	116	126	181
Kvs-value	(m³/h)	5,2	9,2	15	24	37	58	96	150	235	360	510	905	1430	2040	2775	3975	5660
Zeta-value	--	3	3	2,8	2,9	3	3	3,1	2,9	2,9	3	3,1	3,1	3,1	3,1	3,1	2,6	3,1

Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173

\* acc. to manufacturers standard

Standard-flange dimensions refer to page 15

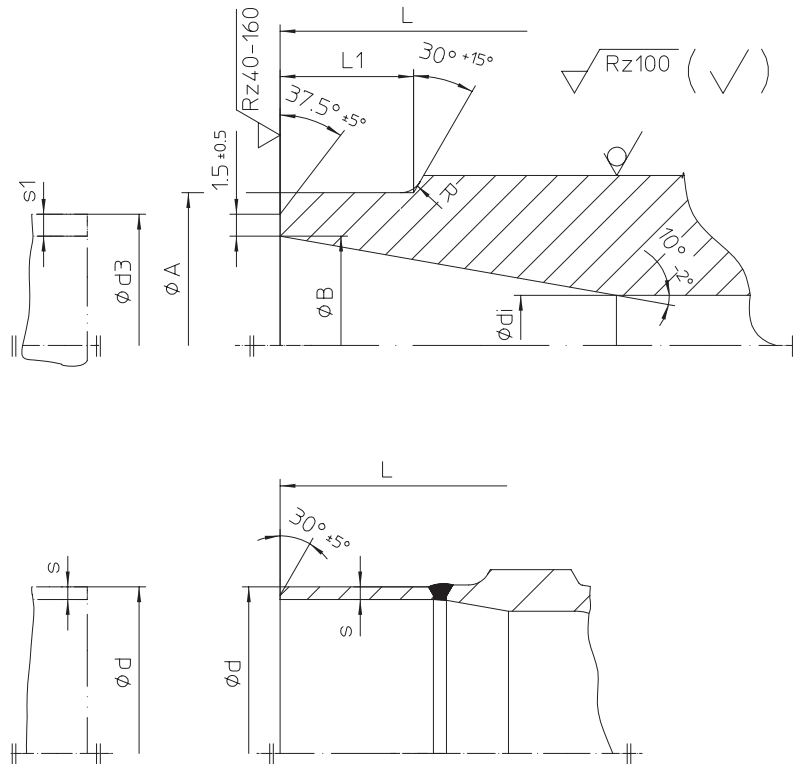
Face-to-face dimension CTF series 8 according to DIN EN 558

**Weights**

Figure-No.	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
34.007 / 307	(kg)	5,2	7,2	7,4	8,4	12,4	13,6	20	25	34	53	70	138	170	290	383	690	963
35.007 / 307	(kg)	5,2	7,2	7,4	8,4	12,4	13,6	20	25	34	53	70	148	188	327	430	767	1018



L = Face-to-face dimension  
 Edge shaping acc. to DIN EN 25817


**Butt weld ends according to DIN EN 12627 - 4**

	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L	(mm)	130	150	160	180	200	230	290	310	350	400	480	600	730	850	980	1100
ØA	(mm)	22	28	35	44	50	62	77	91	117	144	172	223	278	329	362	413
ØB	(mm)	17,3	22,3	28,5	37,2	43,1	53,9	68,9	80,9	104,3	130,7	157,1	204,9	257	307,9	338	384,4
Ødi	(mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300	330	375
R	(mm)	3	3	3	3	3	3	3	3	3	3	3	5	5	5	5	5
L1	(mm)	10	10	10	10	10	10	10	12	14	18	20	20	25	33	45	45
Ød3	(mm)	21,3	26,9	33,7	42,4	48,3	60,3	76,1	88,9	114,3	139,7	168,3	219,1	273,0	323,9	355,6	406,4
s1	(mm)	2	2,3	2,6	2,6	2,6	3,2	3,6	4	5	4,5	5,6	7,1	8	8	8,8	11

**Shoed ends made of P235GH (Pipe connection  $\Delta$  welding neck flanges)**

	DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
Ød	(mm)	--	--	--	--	--	--	76,1	88,9	114,3	139,7	168,3	219,1	--	--	--	--
Øs	(mm)	--	--	--	--	--	--	2,9	3,2	3,6	4,0	4,5	6,3	--	--	--	--

Face-to-face dimension ETE series 1 according to DIN EN 12982.

Butt weld ends according to DIN EN 12627 - 4.

Weld joint according to DIN EN 29692 code number 1.3.3.

The material used for ARI valves with butt weld ends are:

GP240GH+N, 1.0619+N acc. to DIN EN 10213-2,

P250GH, 1.0460 acc. to DIN EN 10222-2.

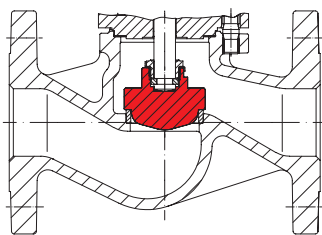
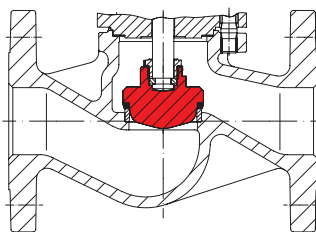
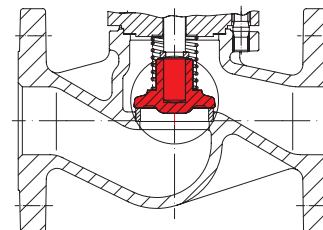
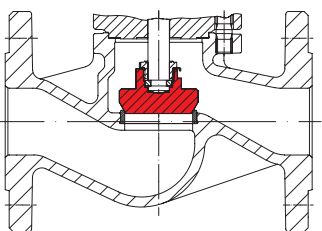
The material used for ARI valves with shoed ends (DN 65-200) P235GH according to DIN EN 10216-2.

Based on our experience we recommend electric welding process for connecting valves or strainers with tubes or with each other

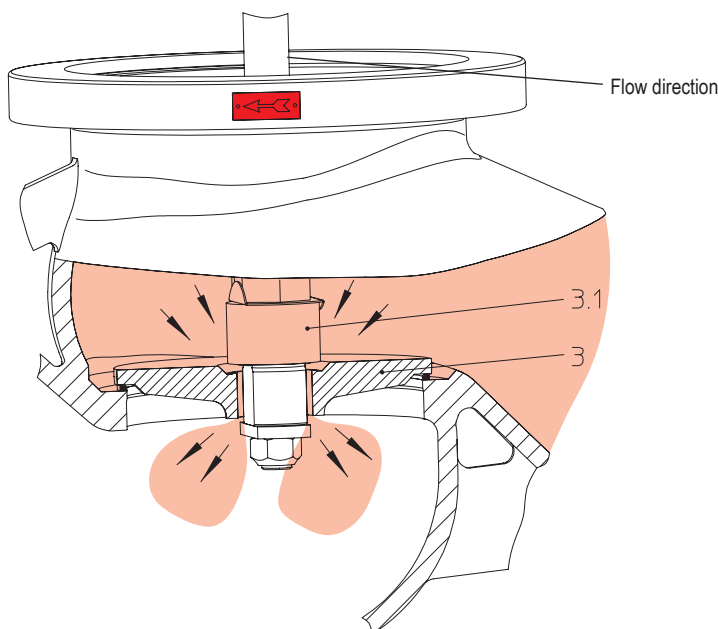
Lime based electrodes with an appropriate composite material should be used as filler material for welding.

Gas welding should be avoided.

Because of the different material compositions and wall thickness of the steam traps and the pipe gas welding shall not be applied. Quenching cracks and coarse grain structure may develop..


 Regulating plug  
 (for max. permissible  $\Delta P$  refer to: Flow diagram)

 Regulating plug with soft seal  
 Max. operating temperature 200°C at PTFE + 25% carbon  
 (for max. permissible  $\Delta P$  refer to: Flow diagram)

 Screw down non-return plug with re-setting spring -  
 max. differential pressure, refer to table of pressure  
 balancing plugs,  
 Set pressure 0,1 bar  
 (Design for special applications refer to page 14)  
 Flow values (Kvs and Zeta) refer to data sheet „Check  
 valves“.


Plug with marginal seat



Valves with balancing plugs have to be installed with medium **flowing over the plug (3) as indicated by flow** direction arrow on valve body.

Working principles:

When the valve is closed, anticlockwise rotation of the hand wheel lifts the pilot plug (3.1) off the larger balancing plug (3).

This allows the medium to pass through the plug and equalizes the pressure of the medium under the plug (3). After the pressures have been equalized within the values stated in the table, the valve can be opened by turning the valve further with normal manual force.

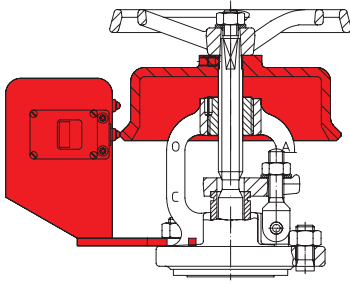
Balancing plugs are fully effective only in closed systems.

The pressures of the medium on either side of the plug can not be equalized if the medium is discharged into open air.

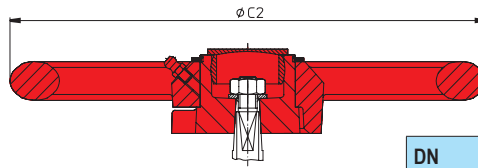
A bypass line or some other arrangement is necessary if too much time is required for pressure equalization owing to the volume in the piping system.

**ARI-stop valves with differential pressures exceeding the following pressures, have to be fitted with pressure balancing plugs**

	DN	125	150	200	250	300	350	400	500
max. differential pressure ( $\Delta P$ )	(bar)	25	21	14	9	6	4,5	3,5	1,5

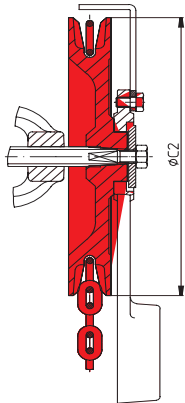


Limit switch



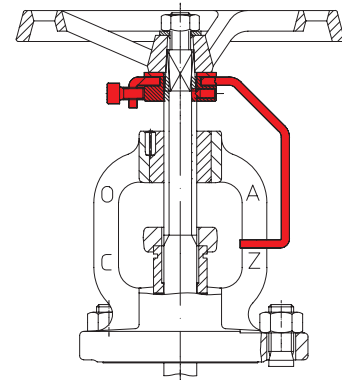
Handwheel operated by impact force

DN (mm)	ØC2 (mm)	Weight (kg)
15-32	180	1,5
40-100	250	3
125-200	365	5
250-500	520	13

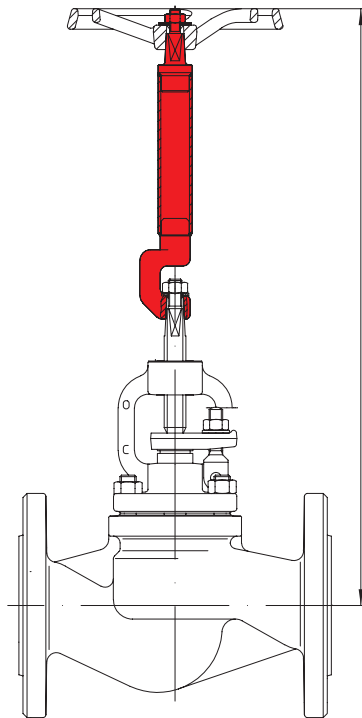


Chain wheel

DN (mm)	ØC2 (mm)	Weight (kg)
15-32	180	2,5
40-80	220	7
100-150	260	8,9
200-400	300	11

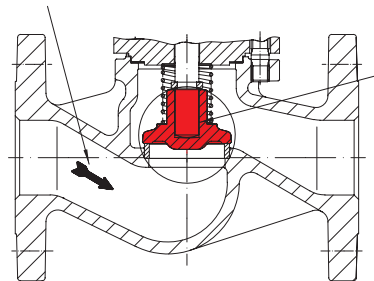


Position indicator with locking device



Stem extension (please specify height in your order)

Flow direction



Hole and stem with a precise tolerance

**Screw down non-return plug with re-setting spring and plug damper**

In special applications, like high flow turbulences, stuffing box valves with damper should be used with execution „screw down non-return plug“:

- if stuffing box valves with loose plug are mounted directly by centrifuged pumps;
- behind pressure reduction stations;
- behind pipe elbows;
- in compact plants;
- if expansion joints are missing;
- if the pump is not mounted on a damper;
- if there is no flow stabilizing pipe dimension;
- if there is no start-up bypass line;
- when chosen valve diameter to large.

**Working principle**

The precise tolerance between stem and plug hole prevents an abrupt displacement of medium out of the plug.

**Standard-flange dimensions**

Flanges acc. to DIN EN 1092-1/2 (Flangeholes / -thickness tol. acc. to DIN 2533/2544/2545)

DN		(mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
PN6	ØD	(mm)	80	90	100	120	130	140	160	190	210	240	265	320	--	--	--	--	--
PN6	ØK	(mm)	55	65	75	90	100	110	130	150	170	200	225	280	--	--	--	--	--
PN6	n x Ød	(mm)	4x11	4x11	4x11	4x14	4x14	4x14	4x14	4x18	4x18	8x18	8x18	8x18	--	--	--	--	--
PN16	ØD	(mm)	95	105	115	140	150	165	185	200	220	250	285	340	405	460	520	580	715
PN16	ØK	(mm)	65	75	85	100	110	125	145	160	180	210	240	295	355	410	470	525	650
PN16	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	4x18	8x18	8x18	8x18	8x22	12x22	12x26	12x26	16x26	16x30	20x33
PN25	ØD	(mm)	95	105	115	140	150	165	185	200	235	270	300	360	425	485	555	620	730
PN25	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250	310	370	430	490	550	660
PN25	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26	12x26	12x30	16x30	16x33	16x36	20x36
PN40	ØD	(mm)	95	105	115	140	150	165	185	200	235	270	300	375	450	515	580	660	755
PN40	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250	320	385	480	510	585	670
PN40	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26	12x30	12x33	16x33	16x36	16x39	20x42

**Pressure-temperature-ratings acc. to DIN EN 1092-2**

Material			-60°C to <-10°C*	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
EN-JL1040	16	(bar)	--	16	14,4	12,8	11,2	9,6	--	--	--
EN-JS1049	16	(bar)	on request	16	15,5	14,7	13,9	12,8	11,2	--	--
EN-JS1049	25	(bar)	on request	25	24,3	23	21,8	20	17,5	--	--

**Pressure-temperature-ratings acc. to manufacturers standard**

Material			-60°C to <-10°C*	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
1.0619+N	25	(bar)	18,7	25	23,9	22	20	17,2	16	14,8	13,9
1.0619+N	40	(bar)	30	40	38,1	35	32	28	25,7	23,8	22,2
1.0460	25	(bar)	18,7	25	23,9	22	20	17,2	16	14,8	10
1.0460	40	(bar)	30	40	38,1	35	32	28	25,7	23,8	16

**Pressure-temperature-ratings acc. to DIN EN 1092-1**

Material			-60°C to <-10°C*	-10°C to 100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
1.4408	16	(bar)	16	16	14,5	13,4	12,7	11,8	11,4	10,9	--
1.4408	25	(bar)	25	25	22,7	21	19,8	18,5	17,8	17,1	--
1.4408	40	(bar)	40	40	36,3	33,7	31,8	29,7	28,5	27,4	--

Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

\* Studs and nuts made of A4-70 (at temperatures below -10°C)

**Please indicate when ordering**

- Figure-No.
- Nominal pressure
- Nominal diameter
- Special design / accessories

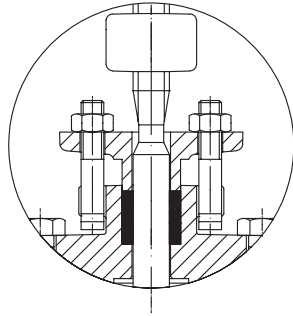
**Example:**

Figure 35.006; nominal pressure PN40; nominal diameter DN100; with throttling plug, position indicator with locking device..

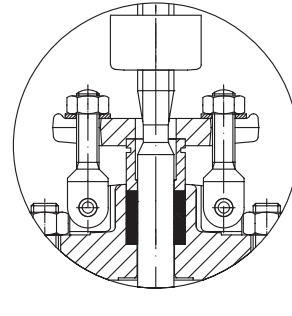
 Dimensions in mm  
 Weights in kg  
 1 bar  $\hat{=}$  10<sup>5</sup> Pa  $\hat{=}$  0,1 MPa  
 Kvs in m<sup>3</sup>/h

Testing German „TA-Luft“ optional at DN15-300 (TÜV-Test-No. 922-9204866)

with not spring-loaded stuffing box

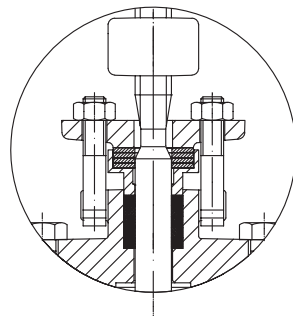


Grey cast iron and SG iron

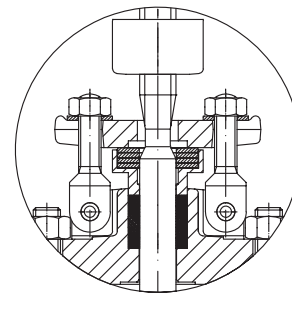


Cast steel, Forged steel, Stainless steel

with spring-loaded stuffing box



Grey cast iron and SG iron



Cast steel, Forged steel, Stainless steel