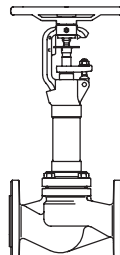


Free of maintenance stop valve with bellow seal - metallic sealing - long construction

**ARI-FABA® LA -**

**Straight through with flanges**

- EN ISO 15848-1 / TA - Luft  
TÜV-Test-No. 973-10675245-10 B
- TRB 801 Annex II No. 45



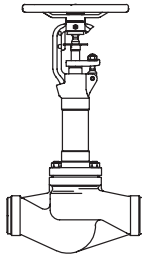
Cast steel  
**Fig. 044**

Page 2

**ARI-FABA® LA -**

**Straight through with butt weld ends**

- EN ISO 15848-1 / TA - Luft  
TÜV-Test-No. 973-10675245-10 B
- TRB 801 Annex II No. 45



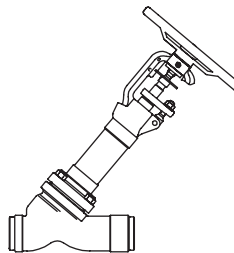
Cast steel  
Forged steel  
**Fig. 067**

Page 3+4

**ARI-FABA® LA -**

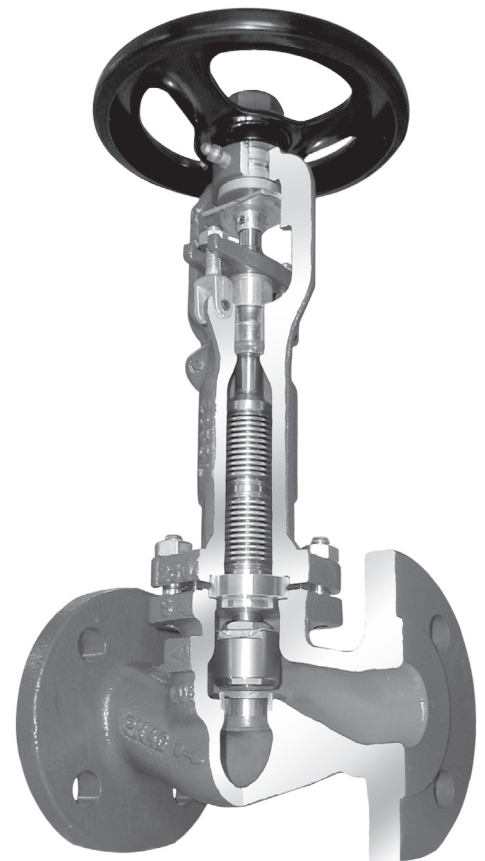
**Y-pattern with butt weld ends**

- EN ISO 15848-1 / TA - Luft  
TÜV-Test-No. 973-10675245-10 B
- TRB 801 Annex II No. 45



Cast steel  
**Fig. 068**

Page 5



**Fig. 044**

**Features:**

- Bellows seal out of media flow path
- Double wall bellows seal as standard
- DN 15-300: Plug with marginal seat
- Lubricating nipple as locking device as standard
- Stem with bellows seal
- Secondary sealing: gland packing
- Position indicator as standard
- Non-rising handwheel
- Non-rotation lock for each nominal diameter
- External stem thread
- Stem with roll hardened thread
- Favourable zeta-values also for small nominal diameters
- Gland packing sleeve with pivot mounted bolts

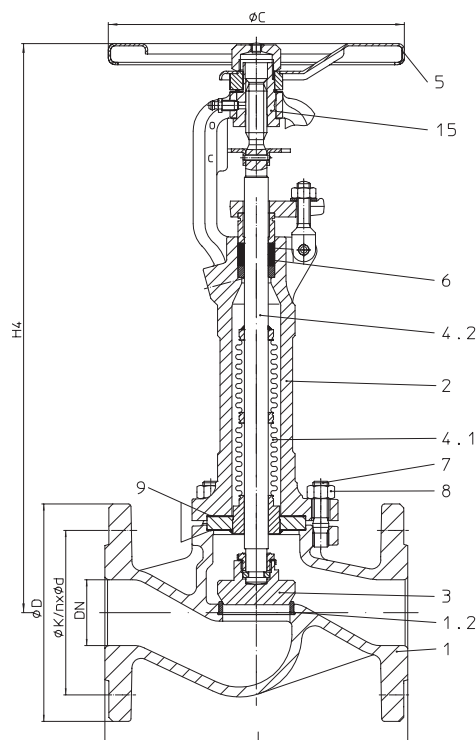
**Stop valve - straight through with long bellows and flanges - long construction (Cast steel)**


Figure-No.	Nominal pressure	Material	Nominal diameter
34.044	PN25	1.0619+N	DN15-400
35.044	PN40	1.0619+N	DN15-400
DN500 on request			

Test: • EN ISO 15848-1 / TA - Luft TÜV-Test-No. 973-10675245-10 B

Plug design: • DN15-300: Plug with marginal seat standard

**At high differential pressures a balancing plug is necessary!** (refer to page 7)

**Bellows seal out of media flow path.**  
**Especially for pulsating, turbulent flow directly behind pumps, elbows, junctions, etc.**

Parts			
Pos.	Sp.p.	Description	Fig. 34.044 / 35.044
1		Body	GP240GH+N, 1.0619+N
1.2		Seat ring / Seat	≤DN50: X20Cr13+QT, 1.4021+QT / >DN50: G19 9 NbSi, 1.4551
2		Bellows housing	GP240GH+N, 1.0619+N
3	x	Plug	X20Cr13+QT, 1.4021+QT (hardened)
4		Stem unit	
4.1	x	Bellows seal	X6CrNiMoTi17 12 2, 1.4571
4.2		Stem	X5CrNi18-10, 1.4301
5		Handwheel	≤DN125: St (epoxy-coating) / >DN125: EN-JL1040, EN-GJL-250 (epoxy-coating)
6	x	Packing ring	Pure graphite
7		Stud	25CrMo4, 1.7218
8		Hexagon nut	C35E, 1.1181
9	x	Gasket	Pure graphite (CrNi laminated with graphite)
15	x	Insert nuts	11SMn30+C, 1.0715+C
L Spare parts			

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
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Face-to-face dimension FTF Series 1 acc. to DIN EN 558																		
L	(mm)	130	150	160	180	200	230	290	310	350	400	480	600	730	850	980	1100	a.A.

Dimensions																		Standard-flange dimensions refer to page 6	
H4	(mm)	325	325	335	335	430	435	450	460	620	645	680	830	915	955	1255	1270	on request	
ØC	(mm)	175	175	175	175	225	225	225	225	300	300	400	520	520	520	640	640		
Travel	(mm)	7	7	10	10	17	17	20	20	36	40	40	50	65	75	90	100		
Kvs-value	(m³/h)	4,2	7,4	12	19	31	45	76	107	173	288	410	725	1145	1635	2220	3180		
Zeta-value	--	4,6	4,7	4,3	4,6	4,3	4,9	4,9	5,7	5,3	4,7	4,8	4,9	4,8	4,8	4,9	4		
Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173																			

Weights																		
34./35.044	(kg)	6,1	7	8	10	13,3	16	24	28	42	65	90	170	300	360	410	600	a.A.

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

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.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

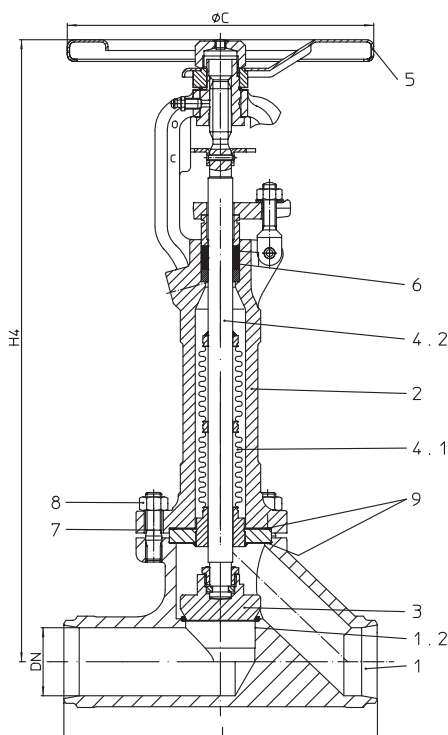
**Stop valve - straight through with long bellow and butt weld ends - long construction (Forged steel)**


Figure-No.	Nominal pressure	Material	Nominal diameter
45.067	PN40	1.0460	DN15-50
Butt weld ends according to DIN EN 12627 - 4 (refer to page 6)			

Test:	• EN ISO 15848-1 / TA - Luft TÜV-Test-No. 973-10675245-10 B
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Plug design:	• Plug with marginal seat standard
--------------	------------------------------------

**At high differential pressures a balancing plug is necessary!** (refer to page 7)

**Bellows seal out of media flow path.**  
**Especially for pulsating, turbulent flow directly behind pumps, elbows, junctions, etc.**

Parts			
Pos.	Sp.p.	Description	Fig. 45.067
1		Body	P250 GH, 1.0460
1.2		Seat	G19 9 NbSi, 1.4551
2		Bellows housing	GP240GH+N, 1.0619+N
3	x	Plug	X20Cr13+QT, 1.4021+QT (hardened)
4		Stem unit	
4.1	x	Bellows seal	X6CrNiMoTi17 12 2, 1.4571
4.2		Stem	X5CrNi18-10, 1.4301
5		Handwheel	Fe P01, 1.0330 (epoxy-coating)
6	x	Packing ring	Pure graphite
7		Stud	25CrMo4, 1.7218
8		Hexagon nut	C35E, 1.1181
9	x	Gasket	Pure graphite (CrNi laminated with graphite)
L Spare parts			

DN	15	20	25	32	40	50
----	----	----	----	----	----	----

Face-to-face dimension ETE series 1 according to DIN EN 12982							
L	(mm)	130	150	160	180	200	230

Dimensions		Butt weld ends according to DIN EN 12627 - 4 (refer to page 6)					
H4	(mm)	325	325	335	335	430	435
ØC	(mm)	175	175	175	175	225	225
Travel	(mm)	7	7	10	10	17	17
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							

Weights							
45.067	(kg)	4,7	5,1	6	7	9	11,5

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

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.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

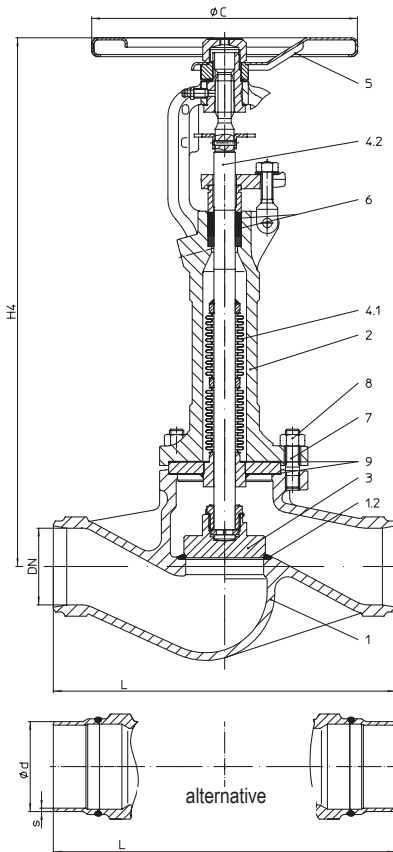
**Stop valve - straight through with long bellows and butt weld ends - long construction (Cast steel)**


Figure-No.	Nominal pressure	Material	Nominal diameter
35.067	PN40	1.0619+N	DN65-300

Butt weld ends according to DIN EN 12627 - 4 (refer to page 6)  
alternative: DN 65-200 with shoed ends of P235GH

Test:	• EN ISO 15848-1 / TA - Luft TÜV-Test-No. 973-10675245-10 B
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Plug design:	• Plug with marginal seat standard
--------------	------------------------------------

**At high differential pressures a balancing plug is necessary!** (refer to page 7)

**Bellows seal out of media flow path.**  
Especially for pulsating, turbulent flow directly behind pumps, elbows, junctions, etc.

Parts			
Pos.	Sp.p.	Description	Fig. 35.067
1		Body	GP240GH+N, 1.0619+N
1.2		Seat	G19 9 NbSi, 1.4551
2		Bellows housing	GP240GH+N, 1.0619+N
3	x	Plug	X20Cr13+QT, 1.4021+QT (hardened)
4		Stem unit	
4.1	x	Bellows seal	X6CrNiMoTi17 12 2, 1.4571
4.2		Stem	X5CrNi18-10, 1.4301
5		Handwheel	≤DN125: St (epoxy-coating) / >DN125: EN-JL1040, EN-GJL-250 (epoxy-coating)
6	x	Packing ring	Pure graphite
7		Stud	25CrMo4, 1.7218
8		Hexagon nut	C35E, 1.1181
9	x	Gasket	Pure graphite (CrNi laminated with graphite)
L Spare parts			

DN	65	80	100	125	150	200	250	300
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Face-to-face dimension ETE series 1 according to DIN EN 12982									
L	(mm)	290	310	350	400	480	600	730	850

Dimensions		Butt weld ends according to DIN EN 12627 - 4 (refer to page 6)							
H4	(mm)	450	460	620	645	680	830	915	955
ØC	(mm)	225	225	300	300	400	520	520	520
Travel	(mm)	20	20	36	40	40	50	65	75
Kvs-value	(m³/h)	76	107	173	288	410	725	1145	1635
Zeta-value	--	4,9	5,7	5,3	4,7	4,8	4,9	4,8	4,8
Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173									

Weights									
35.067	(kg)	18,	22	32	50	70	130	245	290

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

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.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

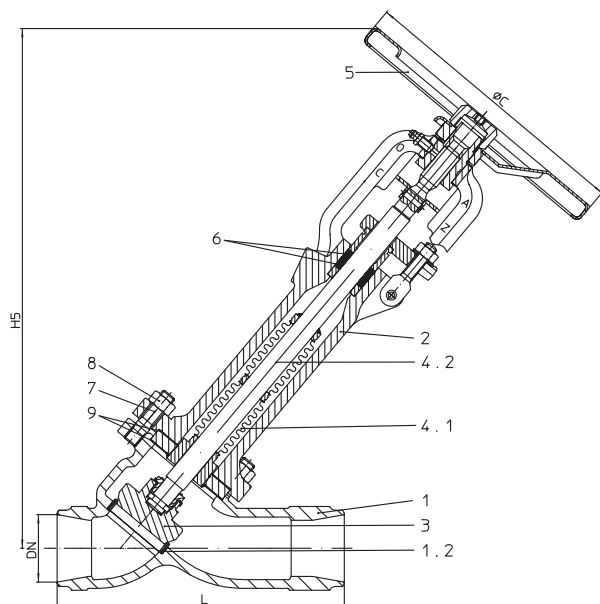
**Stop valve - Y-pattern with long bellow and butt weld ends - long construction (Cast steel)**


Figure-No.	Nominal pressure	Material	Nominal diameter
35.068	PN40	1.0619+N	DN200-300
Butt weld ends according to DIN EN 12627 - 4 (refer to page 6)			

Test:	• EN ISO 15848-1 / TA - Luft TÜV-Test-No. 973-10675245-10 B
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Plug design:	• Plug with marginal seat standard
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**At high differential pressures a balancing plug is necessary!** (refer to page 7)

**Bellows seal out of media flow path.**  
Especially for pulsating, turbulent flow directly behind pumps, elbows, junctions, etc.

Parts			
Pos.	Sp.p.	Description	Fig. 35.068
1		Body	GP240GH+N, 1.0619+N
1.2		Seat	G19 9 NbSi, 1.4551
2		Bellows housing	GP240GH+N, 1.0619+N
3	x	Plug	X20Cr13+QT, 1.4021+QT (hardened)
4		Stem unit	
4.1	x	Bellows seal	X6CrNiMoTi17 12 2, 1.4571
4.2		Stem	X6CrNiTi18-10, 1.4541
5		Handwheel	EN-JL1040, EN-GJL-250 (epoxy-coating)
6	x	Packing ring	Pure graphite
7		Stud	25CrMo4, 1.7218
8		Hexagon nut	C35E, 1.1181
9	x	Gasket	Pure graphite (CrNi laminated with graphite)
L Spare parts			

DN	200	250	300
----	-----	-----	-----

Face-to-face dimension ETE series 1 according to DIN EN 12982			
L	(mm)	600	730
		600	850

Dimensions		Butt weld ends according to DIN EN 12627 - 4 (refer to page 6)		
H5	(mm)	830	890	935
ØC	(mm)	520	520	520
Travel	(mm)	50	65	75
Kvs-value	(m³/h)	709	1253	1655
Zeta-value	--	5,1	4	4,7
Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173				

Weights			
35.068	(kg)	110	245
		110	290

Information / restriction of technical rules need to be observed!

Operating and installation instructions can be downloaded at [www.ari-armaturen.com](http://www.ari-armaturen.com).

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.

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

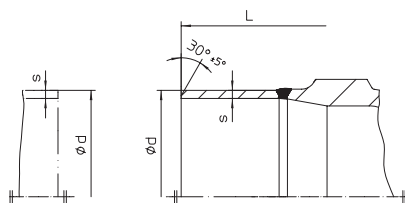
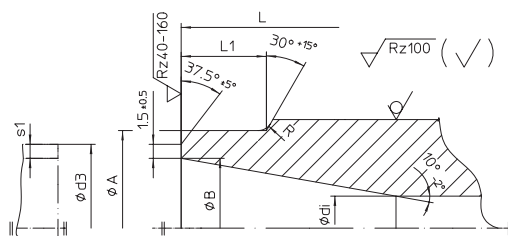
<b>Pressure-temperature-ratings</b>	Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.
-------------------------------------	---

acc. to manufacturers standard			-60°C to <-10°C <sup>1)</sup>	-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	8,2
1.0619+N	40	(bar)	30	40	38,1	35	32	28	25,7	23,8	13,1
1.0460	40	(bar)	30	40	38,1	35	32	28	25,7	23,8	16

<sup>1)</sup> Studs and nuts made of A4-70 (at temperatures below -10°C)

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500
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Standard-flange dimensions acc. to DIN EN 1092-1/-2			Flange holes / -thickness tol. acc. to DIN 2533/2544/2545																
PN25	ØD	(mm)	95	105	115	140	150	165	185	200	235	270	300	360	425	485	555	620	730
	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250	310	370	430	490	550	660
	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
	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250	320	385	450	510	585	670
	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26	12x30	12x33	16x33	16x36	16x39	20x42



L = Face-to-face dimension

Edge shaping acc. to DIN EN ISO 5817

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300
----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----

Butt weld ends according to DIN EN 12627															
L	(mm)	130	150	160	180	200	230	290	310	350	400	480	600	730	850
ØA	(mm)	22	28	35	44	50	62	77	91	117	144	172	223	278	329
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
Ødi	(mm)	15	20	25	32	40	50	65	80	100	125	150	200	250	300
R	(mm)	3	3	3	3	3	3	3	3	3	3	3	5	5	5
L1 (similar)	(mm)	10	10	10	10	10	10	10	12	14	18	20	20	25	33
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	323,9
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

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

Butt weld ends according to DIN EN 12627 Fig. 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,

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300
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Shoed ends of P235GH (Pipe connection $\hat{=}$ welding neck flanges)															
Ød	(mm)	--	--	--	--	--	--	76,1	88,9	114,3	139,7	168,3	219,1	--	--
Øs	(mm)	--	--	--	--	--	--	2,9	3,2	3,6	4	4,5	6,3	--	--

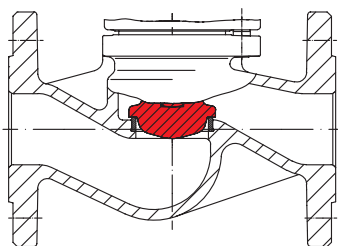
The material used for ARI valves with shoed ends (DN 65-200) P235GH according to DIN EN 10216-2.

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

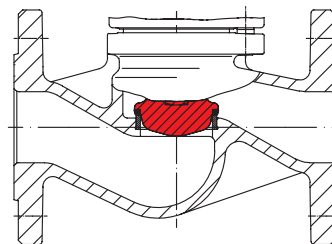
Lime based electrodes with an appropriate composite material should be used as filler material for welding.

Gas welding should be avoided.

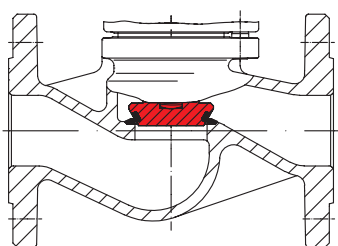
Due to the different material composition and material thickness of valves and tubes, gas welding is more susceptible to produce faults than electric welding (hardness cracks, coarse-grained structure).



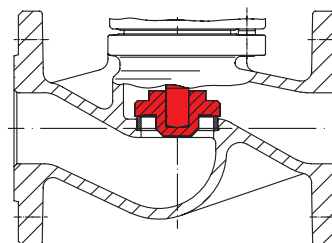
Regulating plug <sup>1)</sup>



Regulating plug with soft seal <sup>1)</sup>  
Max. operating temperature 200°C at PTFE + 25% carbon

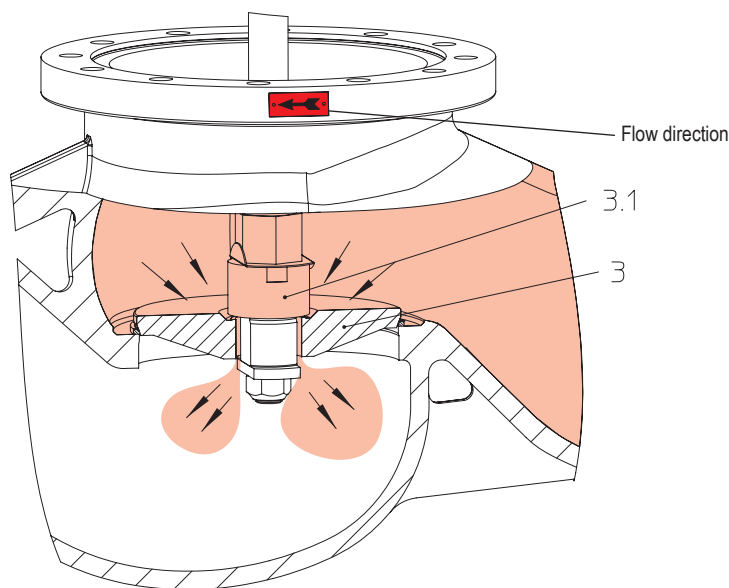


Isolation plug with marginal seat; stellited seat and plug <sup>1)</sup>



Screw down non-return plug  
max. differential pressure, refer to table of pressure balancing plugs.  
Set pressure 0,05 bar  
Important: Installation of the valve only in horizontal pipe runs with vertical stem.

<sup>1)</sup> for max. permissible  $\Delta P$  in throttling function, refer to annex: Flow diagram



Balancing plug

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

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.

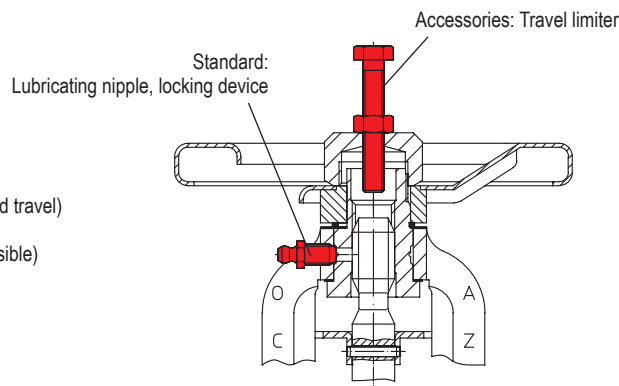
A bypass line or some other arrangement is necessary if too much time is required for pressure equalization owing to the volume in the piping system. .

**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
Gauge press. ( $\Delta P$ )	(bar)	25	21	14	9	6	4,5	3,5	1,5

**Application of lubricating nipples**
**Functions:**

1. Lubrication  
(prevents the handwheel jamming)
2. Locking screw  
(allows valve to be locked-off at desired travel)
3. Lubrication an locking  
(lubrication with locked handwheel possible)



Lubricating nipple / locking device / travel limiter

**Travel limiter**

(Accessories are not included !)

DN	Hexagon bolt
	(M x mm)
15-80	M8 x 55
100	M12 x 70
125-150	M12 x 80
200	M12 x 100
250-300	M12 x 120
350-400	M16 x 160

**Please indicate when ordering**

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

**Example:**

Figure 35.044; Nominal pressure PN40; Nominal diameter DN100.


**Technology for the Future.**  
 GERMAN QUALITY VALVES

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