

Free of maintenance stop valve with bellows seal - metallic sealing

ARI-FABA®-Plus -

Straight through with flanges

- DIN DVGW-Type approval (EN-JS1049)
- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04
- TRB 801 Annex II No. 45 (except EN-JL1040)

Grey cast iron
SG iron
Cast steel
Forged steel
Stainless steel

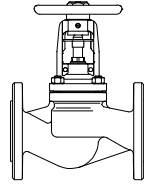


Fig. 046

Page 2-4

ARI-FABA®-Plus -

Straight through with butt weld ends

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04
- TRB 801 Annex II No. 45

Forged steel

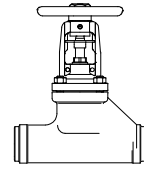


Fig. 040

Page 5

ARI-FABA®-Plus -

Straight through with butt weld ends

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04
- TRB 801 Annex II No. 45

Cast steel

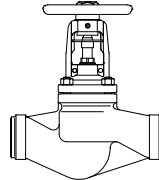


Fig. 040

Page 6

ARI-FABA®-Plus -

Y-pattern with flanges

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04
- TRB 801 Annex II No. 45

Stainless steel

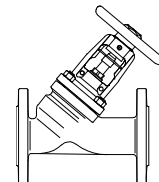


Fig. 069

Page 7

ARI-FABA®-Plus -

Y-pattern with butt weld ends

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04
- TRB 801 Annex II No. 45

Cast steel
Stainless steel

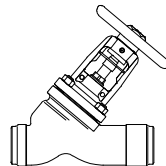


Fig. 066

Page 8+9

ARI-FABA®-Plus -

Angle pattern with flanges

- EN ISO 15848-1 / TA - Luft
TÜV-Test-No. TA 07 2016 C04
- TRB 801 Annex II No. 45 (except EN-JL1040)

Grey cast iron
SG iron
Cast steel

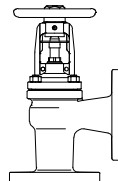


Fig. 047

Page 10



Fig. 046

For ANSI versions
refer to data sheet
„ARI-FABA®-Plus/-Supra ANSI“

Features:

- Double wall bellows seal as standard
- Plug with marginal seat
- Stem with fine thread
- Flat lubricating nipple
- Locking device, countersunk
- Cast iron variations with nodular iron bonnet as standard
- Heat dissipating bonnet
- Bonnet optimised for accessories
- 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

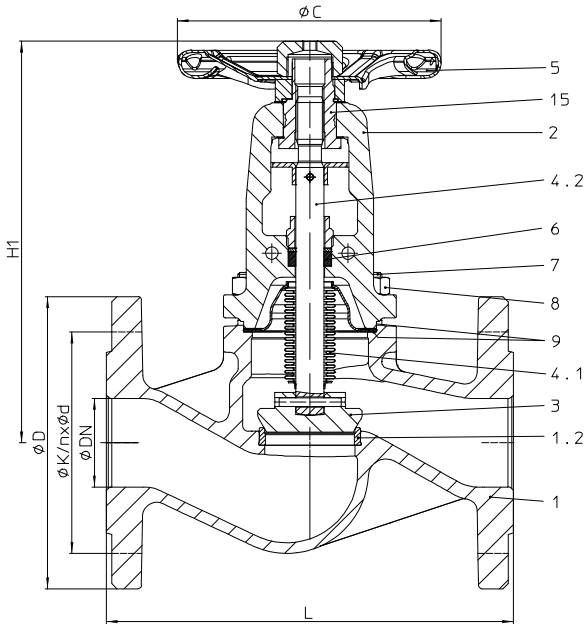
Stop valve - straight through with flanges and bellows seal (Grey cast iron, SG iron, Cast steel)


Figure-No.	Nominal pressure	Material	Nominal diameter
12.046	PN16	EN-JL1040	DN15-300
22.046	PN16	EN-JS1049	DN15-350
	Test: • DIN DVGW-Reg. NG-4313AO 0772		
23.046	PN25	EN-JS1049	DN15-150
34.046	PN25	1.0619+N	DN200-400
35.046	PN40	1.0619+N	DN15-250

Test: • EN ISO 15848-1 / TA - Luft TÜV-Test-No. TA 07 2016 C04

 Considered standards: • EN 13709 (1.0619+N)
• EN 13789 (EN-JL1040, EN-JS1049)

Plug design: • Plug with marginal seat standard

At high differential pressures a balancing plug is necessary! (refer to page 12)

Parts		Fig. 12.046	Fig. 22. / 23.046	Fig. 34. / 35. 046
1	Body	EN-JL1040, EN-GJL-250	EN-JS1049, EN-GJS-400-18U-LT	GP240GH+N, 1.0619+N
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		≤DN50: X20Cr13+QT, 1.4021+QT / ≥DN65: G19 9 NbSi, 1.4551
2	Bonnet	EN-JS1049, EN-GJS-400-18U-LT		GP240GH+N, 1.0619+N
3	x Plug	≤ DN200: X20Cr13+QT, 1.4021+QT (hardened) / ≥ DN250: P265GH, 1.0425 / Stellite 21		
4	Spindle unit	--		
4.1	x Bellows seal	X6CrNiMoTi17 12 2, 1.4571		
4.2	Stem	X20Cr13+QT, 1.4021+QT		
5	Handwheel	≤DN125: St (cataphoretic coating) / ≥DN150: EN-JL1040, EN-GJL-250 (epoxy-coating)		
6	x Packing ring	Pure graphite		
7	Hexagon bolt	5.6	--	
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
----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----

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

Dimensions		Standard-flange dimensions refer to page 14															
H1	(mm)	205	205	210	210	225	230	245	265	365	395	430	550	720	775	975	1015
ØC	PN16 (mm)	125	125	125	125	150	150	175	175	225	300	400	520	520	520	640	640
	PN25 (mm)	125	125	125	125	150	150	175	175	300	300	400	520	520	520	640	640
	PN40 (mm)	125	125	125	125	150	150	175	225	300	300	400	520	520	--	--	--
Travel	(mm)	6	6	8	8	13	13	16	20	25	32	40	50	70	80	90	100
Kvs-value	(m³/h)	5,3	7,2	12	16	28,5	43	75	105	170	270	405	675	1090	1460	2010	2640
Zeta-value	--	2,9	4,9	4,3	6,5	5	5,4	5,1	5,9	5,5	5,3	4,9	5,6	5,2	6,1	5,9	5,9
Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173																	

Weights																	
12. / 22. / 23.046	(kg)	3,7	4,5	5,6	6,9	8,9	11	15,3	21,1	32,4	51,6	74	147	247	404	524	--
34.046	(kg)	--	--	--	--	--	--	--	--	--	--	--	168	268	395	629	865
35.046	(kg)	4,1	5,1	6,2	7,3	10,6	12,6	19,1	26,1	35	60,3	88	160	310	--	--	--

Information / restriction of technical rules need to be observed!

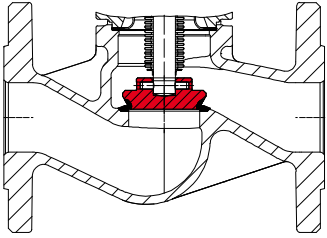
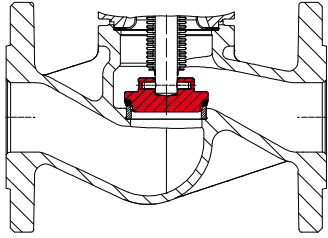
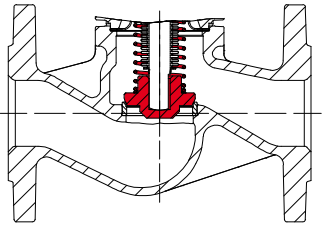
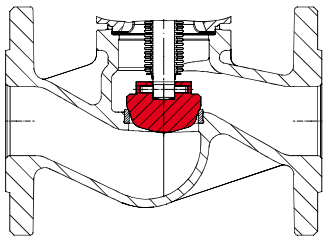
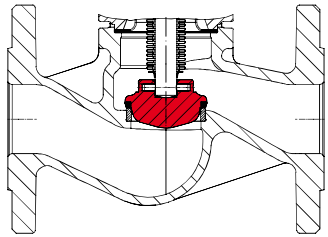
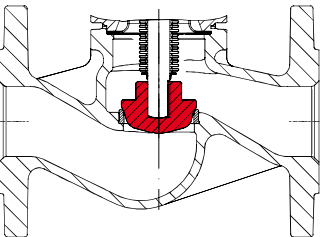
 Operating and installation instructions can be downloaded at www.ari-armaturen.com.

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

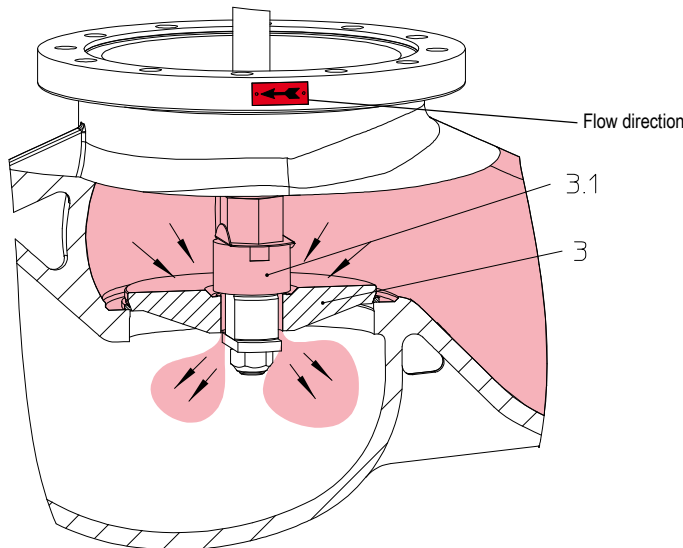
A production allowance acc. to TRB 801 No. 45 exists (acc. to TRB 801 No. 45 EN-JL1040 is not allowed.)

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

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

 <p>Isolation plug with marginal seat; stellite seat and plug ¹⁾</p>	 <p>Plug with Soft seal Max. operating temperature 200°C at PTFE + 25% carbon</p>	 <p>Screw down non-return plug with re-setting spring (Set pressure refer to annex: Flow diagram)</p>
 <p>Regulating plug with marginal seat ¹⁾</p>	 <p>Regulating plug with soft seal ¹⁾ Max. operating temperature 200°C at PTFE + 25% carbon</p>	 <p>Screw down non-return regulating plug with marginal seat ¹⁾ (Set pressure refer to annex: Flow diagram)</p>

¹⁾ for max. permissible ΔP in throttling function, refer to annex: Flow diagram



Balancing plug
(Standard: DN15 - 300 with marginal seat, from DN350 with flat 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.

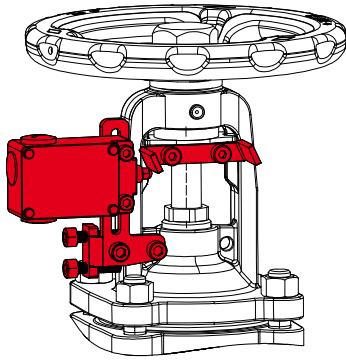
Balancing plugs are fully effective only in closed systems.

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

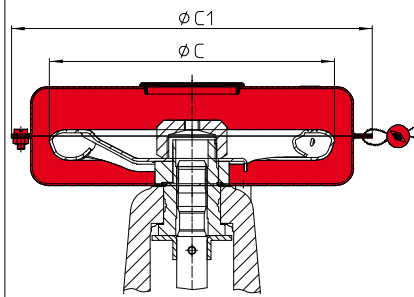
A bypass line or some other arrangement is necessary if too much time is required for pressure equalization owing to the volume in the piping system.

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
Gauge press. (ΔP) (bar)	25	21	14	9	6	4,5	3,5	1,5



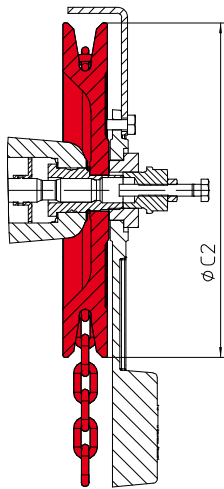
Limit switch



Hood valve acc. to DIN EN 12828
(tamper resistant handwheel cover)

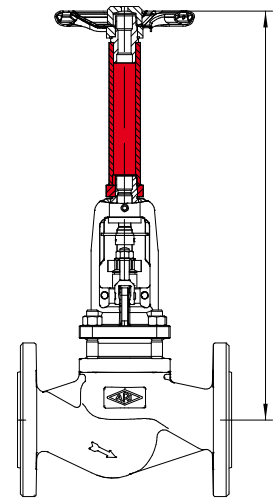
Size	DN (mm)	Ø C (mm)	Ø C1 (mm)
I	15-50	125	170
II	65-80	150	190
III	100-150	225	330

Handwheel-Ø from DN 65 reduced!

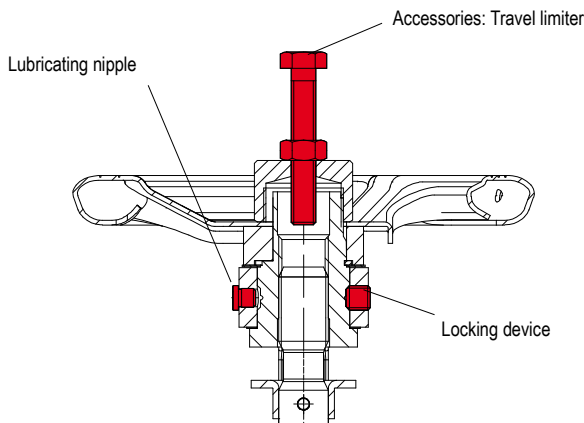


Chain wheel

DN (mm)	Ø C2 (mm)	Weight (kg)
15-32	180	2,5
40-80	220	7
100-150	260	8,9
200-400	300	11



Stem extension (please specify height in your order)



Lubricating nipple / Locking device / Travel limiter

Travel limiter
(Accessories are not included !)

DN (mm)	Hexagon bolt (mm 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

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400	500		
Standard-flange dimensions acc. to DIN EN 1092-1/-2																			
Flange holes / -thickness tol. acc. to DIN 2533/2544/2545																			
PN6	ØD	(mm)	80	90	100	120	130	140	160	190	210	240	265	320	--	--	--	--	
	ØK	(mm)	55	65	75	90	100	110	130	150	170	200	225	280	--	--	--	--	
	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
	ØK	(mm)	65	75	85	100	110	125	145	160	180	210	240	295	355	410	470	525	650
	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	4x18 ¹⁾	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
	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

¹⁾ also with 8 bore holes acc. to DIN EN 1092-1/-2 possible.

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

acc. to DIN EN 1092-2			-60°C to <-10°C ¹⁾	-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	--	--
EN-JS1049	40	(bar)	on request	40	38,8	36,8	34,8	32	28	--	--

acc. to manufacturers standard			-60°C to <-10°C ¹⁾	-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	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

acc. to DIN EN 1092-1			-60°C to <-10°C ¹⁾	-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	--
1.4581	16	(bar)	8	16	15,6	14,9	14,1	13,3	12,8	12,4	--
1.4581	25	(bar)	12,5	25	24,5	23,3	22,1	20,8	20,1	19,5	--
1.4581	40	(bar)	20	40	39,2	37,3	35,4	33,3	32,1	31,2	--

¹⁾ 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 35.046; nominal pressure PN40; nominal diameter DN100.



Technology for the Future.
GERMAN QUALITY VALVES

ARI-Armaturen Albert Richter GmbH & Co. KG, D-33750 Schloß Holte-Stukenbrock,
Tel. +49 52 07 / 994-0, Telefax +49 52 07 / 994-158 or 159 Internet: <http://www.ari-armaturen.com> E-mail: info.vertrieb@ari-armaturen.com