

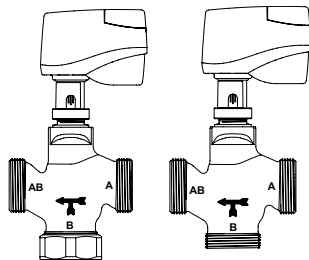
Control valve in 3-way-/straightway form in compact-design for HVAC Applications - Fig. 491 / Fig. 492

Control valve in 3-way-/straightway form for HVAC Applications - Fig. 485/487 / Fig. 486/488

ARI-STEVI® H 491 / 492

Electric actuator

- Enclosure IP 40
- Supply voltage 24 V AC/DC
input signal 0-10 V
feedback 0-10 V
- Supply voltage 24/230 V AC
3-step control
- Handwheel



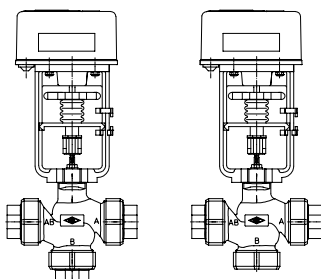
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ARI-STEVI® H 487 / 488

Electric actuator

ARI-PACO 0,85kN

- Supply voltage 24V/50Hz
input signal 0-10 V
feedback 0-10 V
- Supply voltage 24/230V AC
3-step control
- Handwheel
- Travel indicator
- Additional devices available,
e.g. potentiometer



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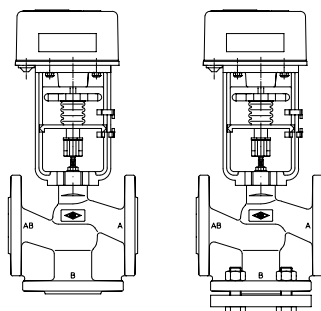
ARI-STEVI® H 485 / 486

Electric actuator

ARI-PACO 0,85kN

ARI-PACO 2G 1,6kN

- Supply voltage 24V/50Hz
input signal 0-10 V
feedback 0-10 V
- Supply voltage 24/230 VAC
3-step control
- Handwheel
- Travel indicator
- Additional devices available,
e.g. potentiometer



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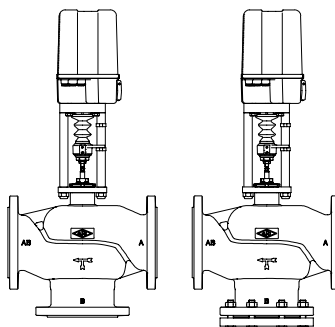
ARI-STEVI® H 485 / 486

Electric actuator

ARI-PREMIO 2,2-15kN

ARI-PREMIO-Plus 2G 2,2-15kN

- Enclosure IP 65
- Supply voltage 24V AC/DC
- Supply voltage 90-264V AC
- optional input signal:
-3-point from 12 to 250VAC/DC
-0-10V
-4-20mA
- 2 torque switches
- Handwheel
- Additional devices available,
e.g. potentiometer, feedback 0-10V/4-20mA



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Fig. 487

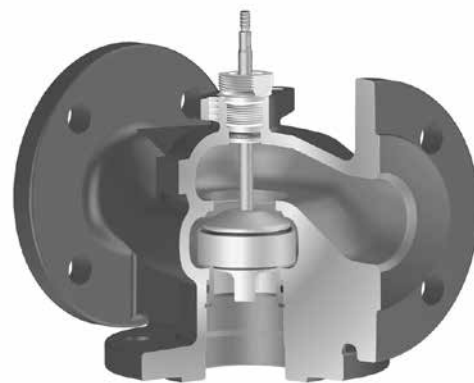
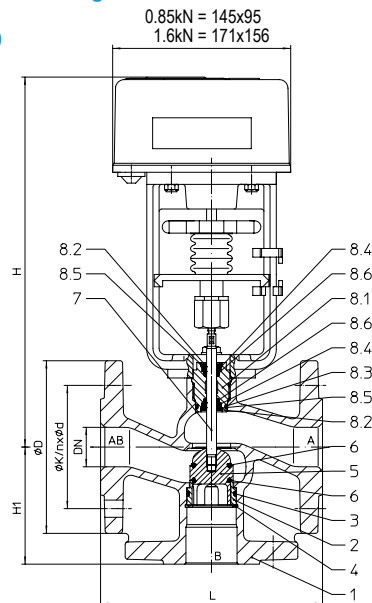
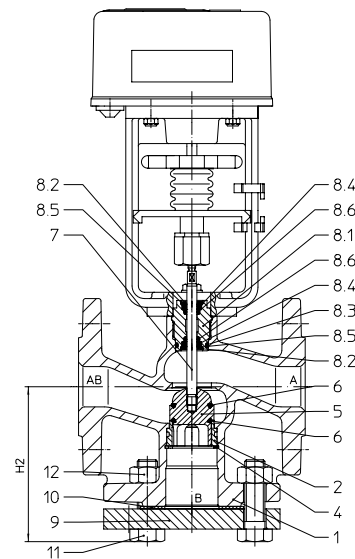
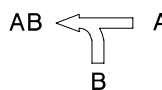
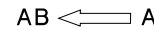


Fig. 485

Control valve for heating, ventilation and air-conditioning - 3-way with flanges - Fig. 485

Control valve for heating, ventilation and air-conditioning - straight through with flanges - Fig. 486

with ARI-PACO


Fig. 485 Mixing function

Fig. 486 Straight through function


with ARI-PACO 2G

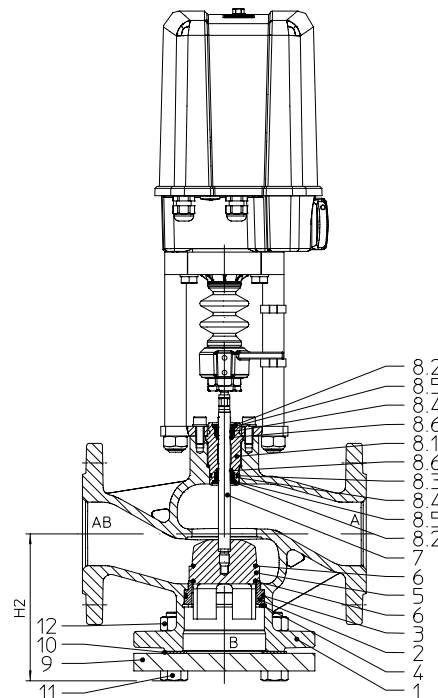
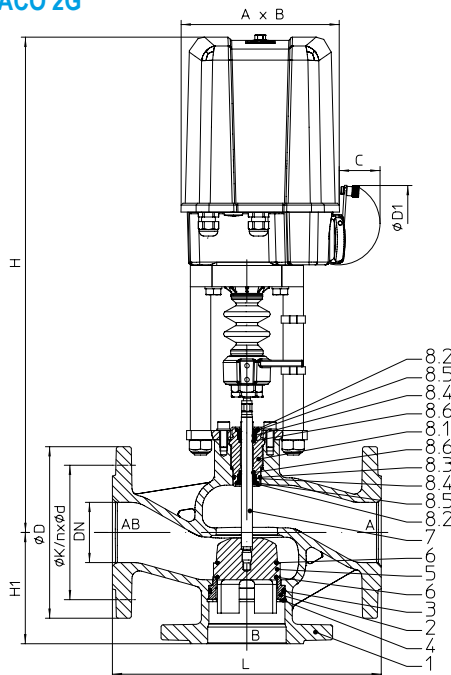


Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
10.485	PN6	EN-JL1040	DN15-100	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
12.485	PN16	EN-JL1040	DN15-100		
10.486	PN6	EN-JL1040	DN15-100	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
12.486	PN16	EN-JL1040	DN15-100		
Other materials and versions on request.					
Plug design				Guiding	Rangeability
standard:	• A Parabolic plug with EPDM-O-ring • B V-port plug with EPDM-O-ring			Stem and seat guiding	30 : 1
Flow characteristic					
standard:	• A equal percentage • B linear				
Shut off class (seat / plug leakage classes)					
Metal / Soft seal:	DIN EN 12266-1 Leakage rate A (DIN 3230 T3 Leakage rate 1)				
Technical data for actuator refer to data sheet.					

DN	15	20	25	32	40	50	65	80	100
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Kvs-Werte												
Kvs-value	Parabolic plug / V-port plug	Standard	(m³/h)	4	6,3	10	16	25	40	63	100	160
		Reduced	(m³/h)	2,5 / 1,6 / 1,0 / 0,63	4	6,3	10	16	25	40	63	100
Seat-Ø			(mm)	18	21	27	31	41	51	66	81	101
Travel			(mm)	14						30		

Face-to-face dimension FTF series 1 according to DIN EN 558											
L	(mm)	130	150	160	180	200	230	290	310	350	

Flanges acc. to DIN EN 1092-2			Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545									
ØD	PN6	(mm)	80	90	100	120	130	140	160	190	210	
	PN16	(mm)	95	105	115	140	150	165	185	200	220	
ØK	PN6	(mm)	55	65	75	90	100	110	130	150	170	
	PN16	(mm)	65	75	85	100	110	125	145	160	180	
n x Ød	PN6	(mm)	4 x 11	4 x 11	4 x 11	4 x 14	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	
	PN16	(mm)	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18	

Heights											
H (with ARI-PACO)		(mm)	283	283	289	293	301	301	534	544	559
H (with ARI-PACO 2G)		(mm)	--	--	--	--	--	--	537	547	562
H1		(mm)	65	70	75	95	100	100	120	130	150
H2	PN6	(mm)	86	93	98	119	124	124	144	158	178
	PN16	(mm)	89	96	101	123	128	130	150	162	182

Weights											
BR485	PN6	(kg)	3,3	4,3	5	6,8	8,8	10	21,6	28,6	38,6
	PN16	(kg)	4,1	5	6	8,5	11	14	26,6	31,6	41,6
BR486	PN6/16	(kg)	3,9	5,2	6,1	8,3	11	12	25,6	32,6	44,6
	PN6/16	(kg)	6,1	6,3	7,6	11	13	17	30,6	37,6	48,6

Closing pressures			max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below.									
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Max. allowable differential pressure at flow			(bar)	2		1,5			1	0,8	0,6	
ARI-PACO 0,85 kN	Closing pressure	(bar)	16	16	11,3	8,3	4,4	2,6	--	--	--	
	Operating time	(s)	127						--			
	Operating speed	(mm/s)	0,11									
ARI-PACO 2G 1,6 kN	Closing pressure	(bar)	--	--	--	--	--	--	3,2	2	1,2	
	Operating time	(s)	--						120			
	Operating speed	(mm/s)	0,25									

Pressure-temperature-ratings			Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.									
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acc. to DIN EN 1092-2			-10°C to 120°C			120°C			130°C		
EN-JL1040	PN6	(bar)	6			6			5,8		
EN-JL1040	PN16	(bar)	16			16			15,5		

Parts				
Pos.	Sp.p.	Description	Fig. 10.485 / 12.485	Fig. 10.486 / 12.486
1		Body	EN-GJL-250 , EN-JL1040	
2		Seat ring	X20Cr13+QT, 1.4021+QT	
3		O-ring	EPDM	
4		Retaining ring	FSt	
5		Plug	CuZn39Pb3, CW614N	
6		O-ring	EPDM	
7		Stem	X6CrNiMoTi17-12-2, 1.4571	
8.1	x (opt. unit)	Screw joint	CuZn39Pb3, CW614N	
8.2		Retaining ring	CuSn6, CW452K	
8.3		O-ring	EPDM	
8.4		Bush	PTFE	
8.5		Washer	CuZn37, CW508L	
8.6		O-ring	EPDM	
9		Flange	--	S235JR, 1.0037
10		Gasket	--	Centellen
11		Hexagon screws	--	5.6 - A2B
12		Hexagon nut	--	C35E - A2B
	L Spare parts			

Information / restriction of technical rules need to be observed!

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

A production permission acc. to TRB 801 No. 45 is available (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).

Control valve for heating, ventilation and air-conditioning - 3-way with flanges - Fig. 485

Control valve for heating, ventilation and air-conditioning - straight through with flanges - Fig. 486

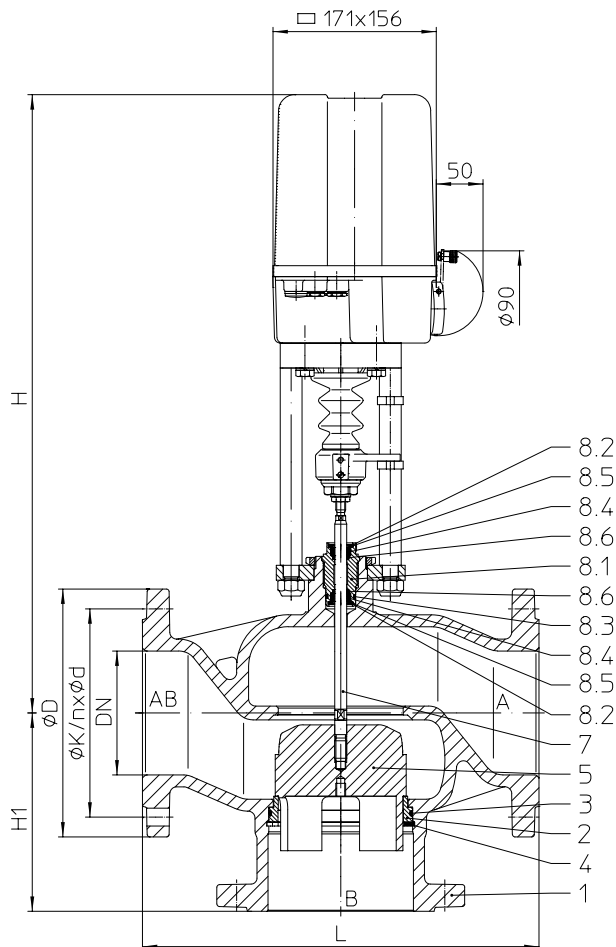
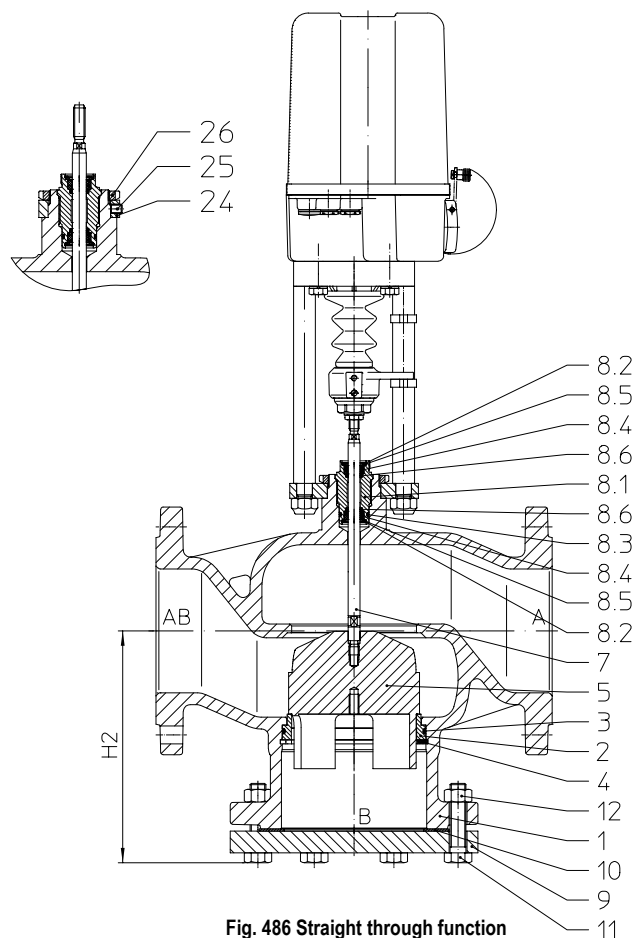
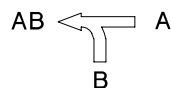
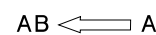

Fig. 485 Mixing function

Fig. 486 Straight through function


Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
12.485	PN16	EN-JL1040	DN125-150	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
12.486	PN16	EN-JL1040	DN125-150	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
Other materials and versions on request.					
Plug design				Guiding	Rangeability
standard:	• A Parabolic plug, metal seat • B V-port plug, metal seat			Stem and seat guiding	30 : 1
Flow characteristic					
standard:	• A equal percentage • B linear				
Shut off class (seat / plug leakage classes)					
Metal / Metal:	• 0,05% vom Kvs				
Technical data for actuator refer to data sheet.					

DN		125	150
Kvs-value			
Kvs-value	Parabolic plug / V-port plug	Standard	(m³/h)
		Reduced	(m³/h)
Seat-Ø			
Travel			

Face-to-face dimension FTF series 1 according to DIN EN 558			
L	(mm)	400	480

Flanges acc. to DIN EN 1092-2		Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545	
ØD	PN16	(mm)	250
ØK	PN16	(mm)	210
n x Ød	PN16	(mm)	8 x 18

Heights			
H	(mm)	617	638
H1	(mm)	200	210
H2	(mm)	234	247

Weights			
BR485	PN16	2,2 kN	(kg)
	PN16	5 kN	(kg)
BR486	PN16	2,2 kN	(kg)
	PN16	5 kN	(kg)

Closing pressures		max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below.	
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Max. allowable differential pressure at flow		(bar)	0,6
2,2 kN	Closing pressure	(bar)	1,1
	Operating time	(s)	105
	Operating speed	(mm/s)	0,38
5 kN	Closing pressure	(bar)	3,3
	Operating time	(s)	105
	Operating speed	(mm/s)	0,38

Pressure-temperature-ratings		Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.		
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acc. to DIN EN 1092-2		-10°C to 120°C	120°C	130°C
EN-JL1040	PN16	(bar)	16	15,5

Parts				
Pos.	Sp.p.	Description	Fig. 12.485	Fig. 12.486
1		Body	EN-GJL-250 , EN-JL1040	
2	x	Seat ring	X20Cr13+QT, 1.4021+QT	
3	x	O-ring	EPDM	
4	x	Retaining ring	FSt	
5	x	Plug	X20Cr13+QT, 1.4021+QT	
6	x	O-ring	EPDM	
7	x (cpl. unit)	Stem	X6CrNiMoTi17-12-2, 1.4571	
8.1		Screw joint	CuZn39Pb3, CW614N	
8.2		Retaining ring	CuSn6, CW452K	
8.3		O-ring	EPDM	
8.4		Bush	PTFE	
8.5		Washer	CuZn37, CW508L	
8.6		O-ring	EPDM	
9	x	Flange	--	S235JR, 1.0037
10	x	Gasket	--	Centellen
11		Hexagon screws	--	5.6 - A2B
12		Hexagon nut	--	C35E - A2B
24		Traverse	S235JR, 1.0037	
25		Grub screw	St-A2G	
26		Groove nut	St-A4G	
	L Spare parts			

Information / restriction of technical rules need to be observed!

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

A production permission acc. to TRB 801 No. 45 is available (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).

Control valve for heating, ventilation and air-conditioning - 3-way with flanges - Fig. 485

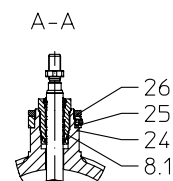
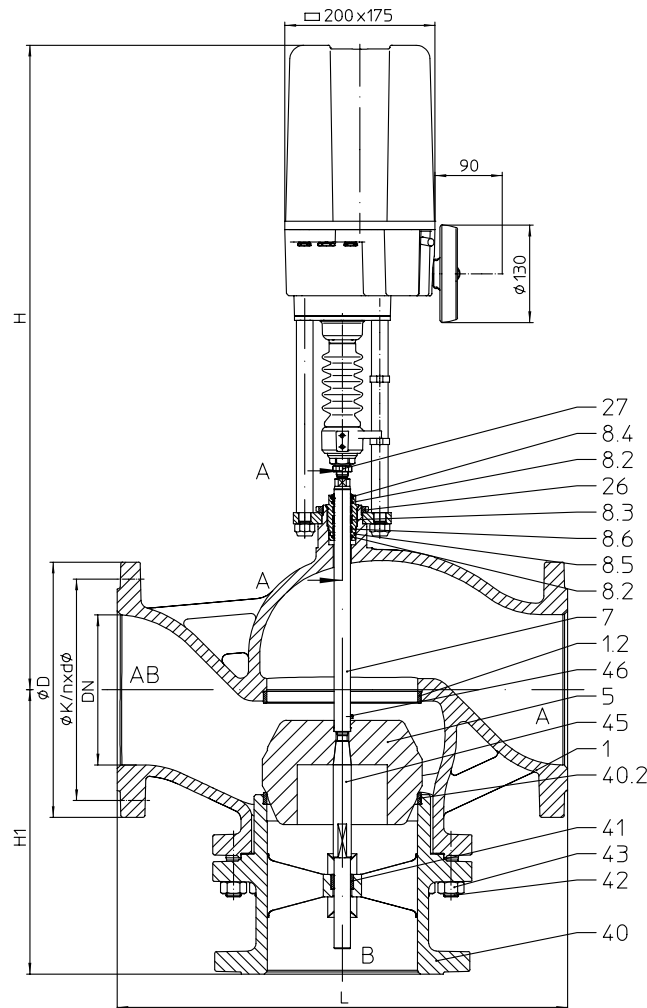


Fig. 485 Mixing function

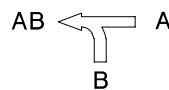


Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
12.485	PN16	EN-JL1040	DN200-250	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
Other materials and versions on request.					
Plug design				Guiding	Rangeability
standard:	• A Parabolic plug, metal seat • B Parabolic plug, metal seat			double plug guiding	30 : 1
Flow characteristic					
standard:	• A linear • B linear				
Shut off class (seat / plug leakage classes)					
Metal / Metal:	• 0,05% vom Kvs				
Technical data for actuator refer to data sheet.					

DN				200	250
Kvs-value					
Kvs-value	Parabolic plug	Standard	(m³/h)	630	1000
		Reduced	(m³/h)	--	--
Seat-Ø			(mm)	201	251
Travel			(mm)	65	

Face-to-face dimension FTF series 1 according to DIN EN 558					
L			(mm)	600	730

Flanges acc. to DIN EN 1092-2			Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545		
ØD	PN6	(mm)	340	405	
ØK	PN6	(mm)	295	355	
n x Ød	PN6	(mm)	12 x 22	12 x 26	

Heights					
H			(mm)	873	919
H1			(mm)	379	439

Weights					
BR485	PN16	12/15 kN	(kg)	173	283

Closing pressures			max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below.		
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Max. allowable differential pressure at flow			(bar)	0,6	
12 kN	Closing pressure		(bar)	3,3	2,1
	Operating time		(s)	171	
	Operating speed		(mm/s)	0,38	
15 kN	Closing pressure		(bar)	4,2	2,7
	Operating time		(s)	171	
	Operating speed		(mm/s)	0,38	

Pressure-temperature-ratings			Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.		
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acc. to DIN EN 1092-2			-10°C to 120°C	120°C	130°C
EN-JL1040	PN16	(bar)	16	16	15,5

Parts			
Pos.	Sp.p.	Description	Fig. 12.485
1		Body	EN-GJL-250 , EN-JL1040
1.2	x	Seat ring	X20Cr13+QT, 1.4021+QT
3	x	O-ring	EPDM
4	x	Retaining ring	FSt
5	x	Plug	X20Cr13+QT, 1.4021+QT
6	x	O-ring	EPDM
7	x	Stem	X6CrNiMoTi17-12-2, 1.4571
8.1	x (cpl. unit)	Screw joint	CuZn39Pb3, CW614N
8.2		O-ring	EPDM
8.3		Guide bush	PTFE
8.4		Scraper	Polyurethan
8.5		O-ring	EPDM
8.6		Lubricant	
24		Traverse	S235JR, 1.0037
25		Grub screw	St-A2G
26		Groove nut	St-A4G
40		Bottom flange	EN-GJS-400-18U-LT, EN-JS1049
40.1		Seat ring	X20Cr13+QT, 1.4021+QT
41		Guide bushing	X20Cr13+QT, 1.4021+QT
42		Stud	25CrMo4, 1.7218
43		Hexagon nut	C35E, 1.1181
44		Gasket	Graphite
45		Plug shaft	X20Cr13+QT, 1.4021+QT
46		Grub screw	A2
L Spare parts (Pos. 8.1 - 8.6 will be supplied as unit)			

Information / restriction of technical rules need to be observed!

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

A production permission acc. to TRB 801 No. 45 is available (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).

myValve®GBT - Your Valve Sizing-Program.

"myValve® HVAC", the ARI valve sizing program, provides direct access to all information which is relevant for planning and engineering your individual application. In addition to the industrial version, you can now also benefit from a new version that was created especially for HVAC applications and is optimised for heating, cold water, air conditioning, ventilation and cooling. With myValve® HVAC you not only calculate your ARI system components. You also have access to all other data about the selected product, such as order information, tender specifications, spare parts drawings, operating instructions, data sheets, 3D CAD data, etc., whenever you need it.



- Product guidance:**
- Preselection of different HVAC systems to guide you to the ideal products
- Product sizing:**
- CONTROL (including selection of the electric actuators), ISOLATION-valves, ISOLATION-butterfly valves (including actuators), FLOW REGULATION and SAFETY
- Media:**
- Integrated media database for the media used in HVAC applications:**
- Glycols
 - Water mixtures
- Special features:**
- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number.
 - Direct output or calculation and product data in PDF format.
 - Product data could be taken for a direct order.
 - Settings with over pressure or absolute pressure.
 - All ARI valves for HVAC applications are integrated in a data bank.
 - Direct access concerning to the product on data sheets, operating instructions, pressure-temperature-diagram, spare part drawings, CAD symbols and tender specifications.
 - CAD-Dateien im BIM-REVIT-Format geplant
 - Tender specifications also possible in GAEB format.
 - Operation in company networks possible (no complex installations on individually PC's necessary).
 - Extensive catalogue extending over several product groups.
- System Requirements:**
- Windows operating systems, Linux, etc.

Have we sparked your interest? Please contact us at info.vertrieb@ari-armaturen.com or register for a free download link at www.ari-armaturen.com/myvalve-gbt