

Control valve in straightway form for heating - Fig. 480

Control valve in 3-way-form for heating - Fig. 483

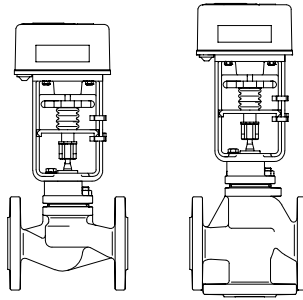
ARI-STEVI® H 480 / 483

Electric actuator

ARI-PACO 0,85kN

ARI-PACO 2G 1,6kN

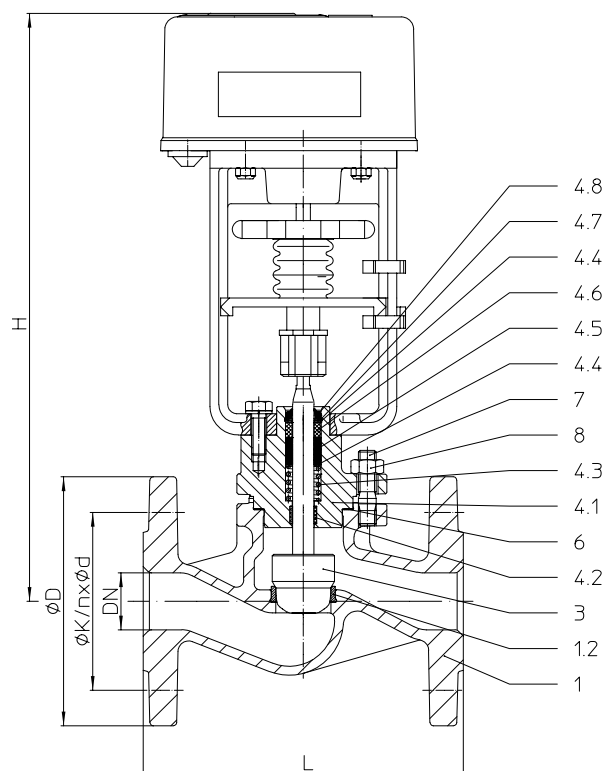
- Motor voltage 24V/50Hz input signal 0-10 V
- Motor voltage 24/230V AC 3-step control
- Handwheel
- Travel indicator
- Additional devices available, e.g. potentiometer



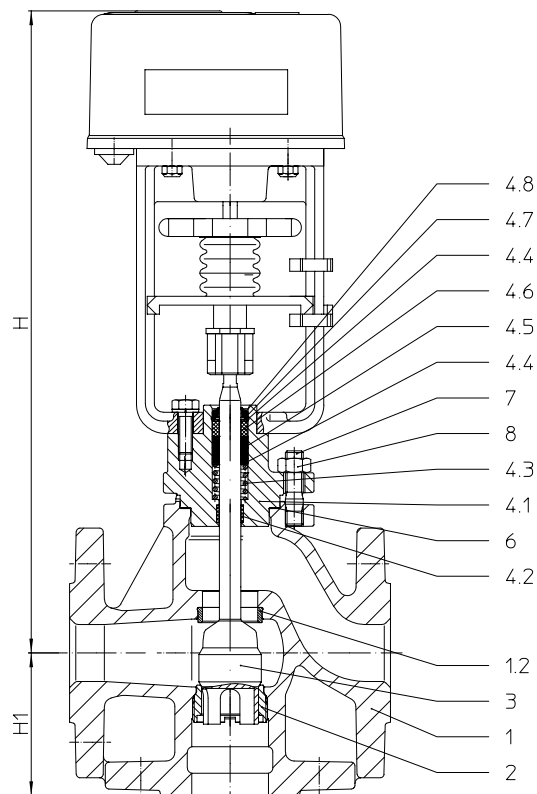
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Control valve for heating, ventilation and air-conditioning - straight through with flanges - Fig. 480

Control valve for heating, ventilation and air-conditioning - 3-way with flanges - Fig. 483


Fig. 480 Straight through function

A → B


Fig. 483 Mixing function

 AB ← A
 B

Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
22.480	PN16	EN-JS1049	DN15-100	I. PTFE-V-ring unit	-10°C to +200 °C
23.480	PN25	EN-JS1049	DN15-100		
22.483	PN16	EN-JS1049	DN15-100	I. PTFE-V-ring unit	-10°C to +200 °C
23.483	PN25	EN-JS1049	DN15-100		

Other materials and versions on request.

Plug design	Guiding	Rangeability
standard:	Stem and seat guiding	Fig. 480: 50 : 1
• Parabolic plug	Port guiding	Fig. 483: 30 : 1
• Fig. 480 from DN80: V-port plug		
Flow characteristic		
standard	• Fig. 480: equal percentage	
	• Fig. 483: A equal percentage / B linear	
Shut off class (seat / plug leakage classes)		
Metal / Metal:	• Leakage class IV acc. to DIN EN 1349 or IEC 60534-4	

Technical data for actuator refer to data sheet.

DN	15	25	32	40	50	65	80	100			
Kvs-value * only Fig. 480											
Kvs-value	Parabolic plug / V-port plug	Standard	(m³/h)	4	10	16	25	40	63	100	160
		Reduced	(m³/h)	0,63* / 0,4*	2,5 / 1,6* / 1*	6,3					
Seat-Ø		(mm)	5	21	27	31	41	51	66	81	101
Travel		(mm)		15					30		

Face-to-face dimension FTF series 1 according to DIN EN 558										
L	(mm)	130	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	100	120	130	140	160	190	210	
	PN16	(mm)	95	115	140	150	165	185	200	220	
ØK	PN6	(mm)	55	75	90	100	110	130	150	170	
	PN16	(mm)	65	85	100	110	125	145	160	180	
n x Ød	PN6	(mm)	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 18	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18	

Heights										
BR480	H	(mm)	327	335	335	346	541	557	573	591
BR483	H	(mm)	335	339	365	375	562	600	616	635
	H1	(mm)	65	75	80	90	100	120	130	150

Weights										
BR480	ARI-PACO 0,85 kN	(kg)	4,5	6,1	7,6	10	--	--	--	--
	ARI-PACO 2G 1,6 kN	(kg)	--	--	--	--	18,3	23,6	28,4	39,7
BR483	ARI-PACO 0,85 kN	(kg)	5	6,7	8,7	12,3	--	--	--	--
	ARI-PACO 2G 1,6 kN	(kg)	--	--	--	--	21,1	27,1	32,7	48,1

Closing pressures			max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below.									
Max. allowable differential pressure at flow			(bar)	25	25	25	25	25	20	8	25	25
ARI-PACO 0,85 kN	Closing pressure	(bar)	25	16,4	9,3	6,7	3,3	--	--	--	--	
	Operating time	(s)	136					--				
	Operating speed	(mm/s)	0,11									
ARI-PACO 2G 1,6 kN	Closing pressure	(bar)	--	--	--	--	--	5,3	2,9	1,7	0,9	
	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			150°C		200°C	
EN-JS1049	PN16	(bar)	16			15,5		14,7	
EN-JS1049	PN25	(bar)	25			24,3		23	

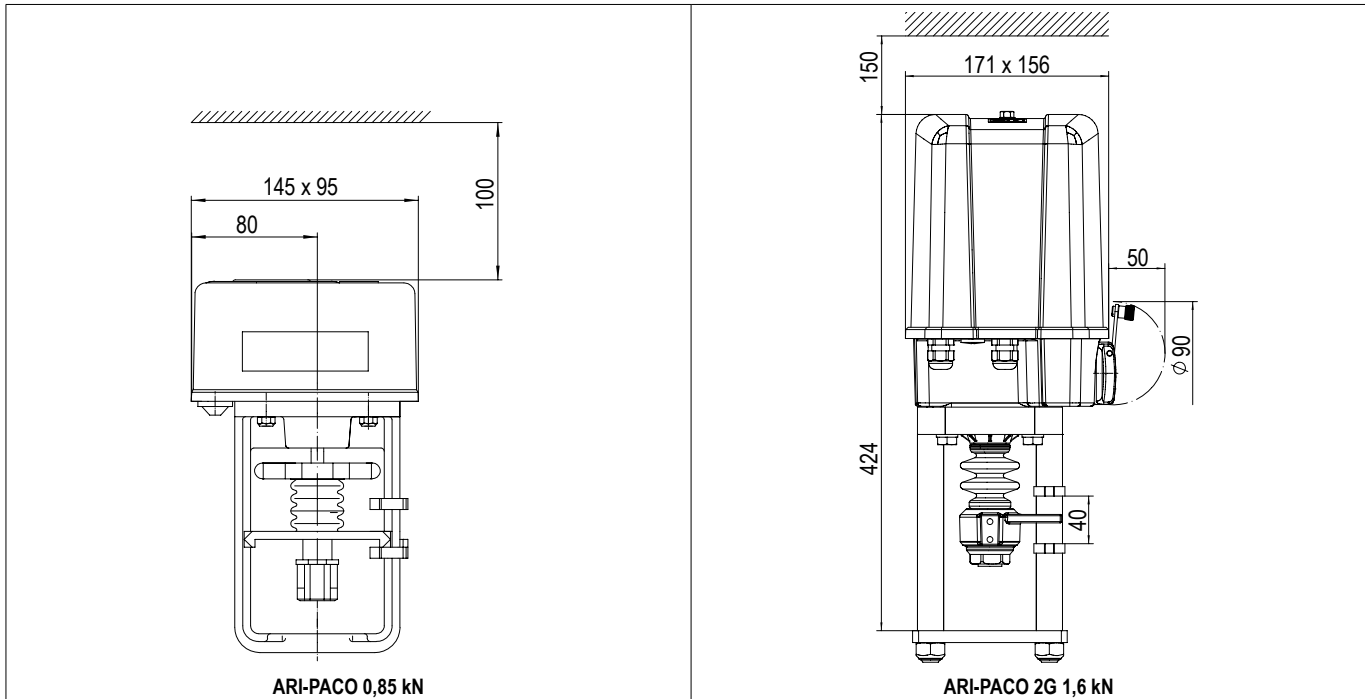
Parts										
Pos.	Sp.p.	Description	Fig. 22.480 / 23.480				Fig. 22.483 / 23.483			
1		Body	EN-GJS-400-18U-LT, EN-JS1049							
1.2		Seat ring	X20Cr13+QT, 1.4021+QT							
2	x	Seat ring	--				X20Cr13+QT, 1.4021+QT			
3	x	Plug / Stem	X6CrNiMoTi17-12-2, 1.4571							
4.1	x (opt. unit)	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049							
4.2		Guide bush	PTFE +25%C							
4.3		Compression spring	X10CrNi18-8, 1.4310							
4.4		Washer	X5CrNi18-10, 1.4301							
4.5		V-ring unit	PTFE							
4.6		Bush	PTFE +25%C							
4.7		Retaining ring	F St							
4.8		Scraper	FPM							
6	x	Gasket	Pure graphite (CrNi laminated with graphite)							
7		Stud	25CrMo4, 1.7218							
8		Hexagon nuts	C35E, 1.1181							
L Spare parts (Pos. 4.1 - 4.8 werden als Unit with Hilfsspindel geliefert)										

Information / restriction of technical rules need to be observed!

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

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).


Please indicate when ordering:

- Figure-No.
- Nominal diameter
- Nominal pressure
- Body material
- Plug design
- Kvs-value
- Stem sealing
- Actuator

Example:

Figure 23.483, Nominal diameter DN 50, Nominal pressure PN25, Body material EN-JS1049, Mixing function, Kvs 40, Stem sealing V-ring unit, Actuator ARI-PACO 0,85 kN, Y 24V AC.

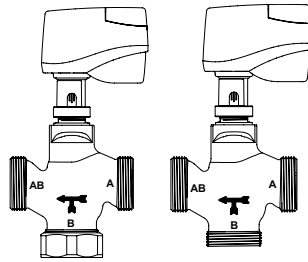
Control valve in 3-way-/straightway form in compact-design for HVAC Applications - Fig. 491 / Fig. 492

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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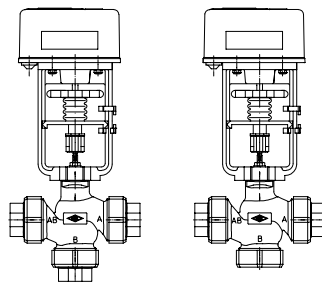
Fig. 487

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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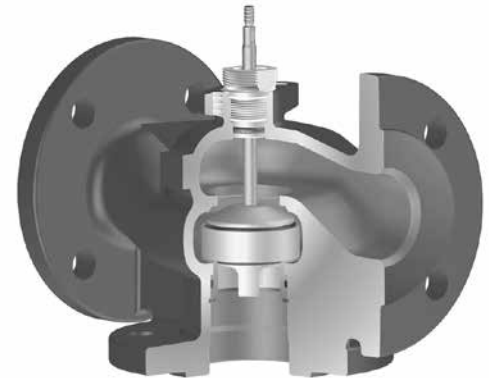


Fig. 485

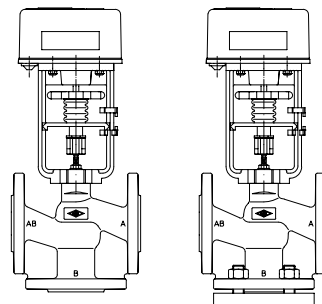
ARI-STEVI® H 485 / 486

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 V AC
3-step control
- Handwheel
- Travel indicator
- Additional devices available,
e.g. potentiometer



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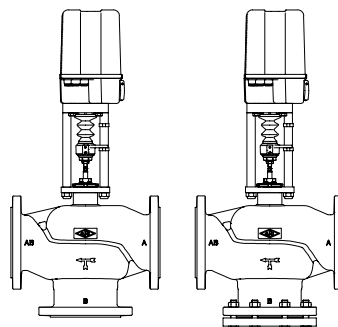
ARI-STEVI® H 485 / 486

Electric actuator

ARI-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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Control valve in compact-design for heating, ventilation and air-conditioning - 3-way with threaded joint - Fig. 491

Control valve in compact-design for heating, ventilation and air-conditioning - straight through with threaded joint - Fig. 492

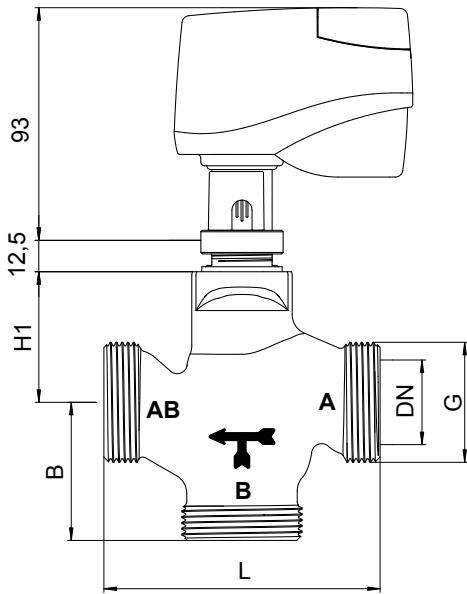


Fig. 491 Mixing function

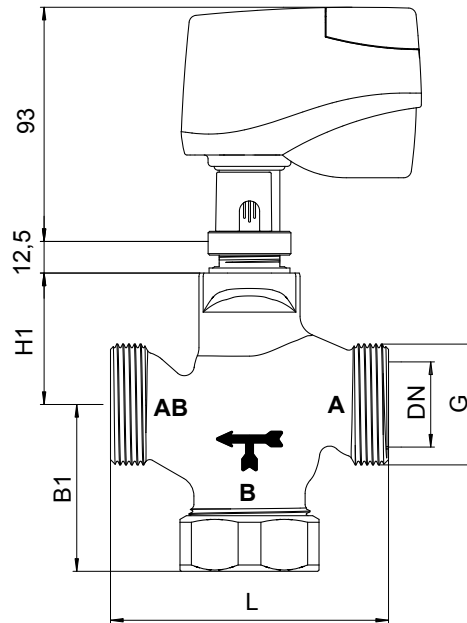
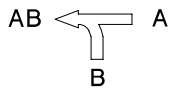


Fig. 492 Straight through function

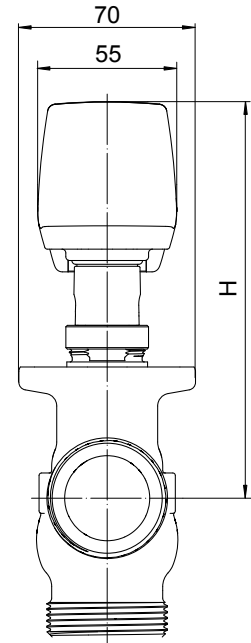
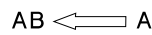


Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
72.491	PN16	CC499K	DN15-50	EPDM-O-ring	0°C to +120°C
72.492	PN16	CC499K	DN15-50	EPDM-O-ring	0°C to +120°C
Other materials and versions on request.					
Plug design		Guiding		Rangeability	
standard:	<ul style="list-style-type: none"> A Parabolic plug, Metal-seated B V-port plug, Metal-seated 	Stem and seat guiding		30 : 1	
Flow characteristic					
standard:	<ul style="list-style-type: none"> A equal percentage to DN32 / A linear DN40 and DN50 B linear 				
Shut off class (seat / plug leakage classes)					
Metal:	<ul style="list-style-type: none"> DIN EN 60534-4 0,05% of the Kvs 				
Technical data for actuator refer to data sheet.					

DN		15	20	25	32	40	50		
Kvs-value									
Kvs-value	Parabolic plug / V-port plug	Standard	(m³/h)	2,5	6,3	10	16	25	35
		Reduced	(m³/h)	1,6 / 1,0 / 0,63	4	8,0 / 6,3	10	--	--
Seat-Ø		(mm)	18	21	27	31	41	51	
Travel		(mm)	10						
Face-to-face dimension FTF series 1 according to DIN EN 558									
L		(mm)	80	90	110	120	130	150	
Connections									
Ø G		PN16	(inch)	G 1 1/8	G 1 1/4	G 1 1/2	G 2	G 2 1/4	G 2 3/4
Heights									
H		(mm)	152	152	158	162	171	171	
H1		(mm)	46	46	52	56	65	65	
H3		(mm)	65	65	66	67	72	77	
B		(mm)	55	55	55	55	60	65	
B1		(mm)	65	65	66	67	72	77	
Weights									
BR491		PN16	(kg)	1,3	1,4	1,6	2,2	2,6	3,7
BR492		PN16	(kg)	1,4	1,5	1,8	2,4	2,9	4,2
Closing pressures			max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below.						
Max. allowable differential pressure at flow		(bar)	1	1	1	1	1	0,7	
0,5 kN	Closing pressure		(bar)	12,1	9,2	5,0	3,5	1,5	0,7
	Operating time		(s)	220					
	Operating speed		(mm/s)	0,045					
Pressure-temperature-ratings									
acc. to DIN EN 1092-3			0°C to 120°C						
CC499K		PN16	(bar)	16					

Parts		
Description	Fig. 72.487	Fig. 72.488
Body	CuSn5Zn5Pb5-C, CC499K	
Seat ring	X20Cr13+QT, 1.4021+QT	
O-ring	EPDM	
Retaining ring	FSt	
Plug	CuZn39Pb3, CW614N	
O-ring	EPDM	
Stem	X20Cr13+QT, 1.4021+QT	
Screw joint	CuZn39Pb3, CW614N	
Retaining ring	CuSn6, CW452K	
O-ring	EPDM	
Bush	PTFE	
Washer	CuZn37, CW508L	
O-ring	EPDM	
Gasket	Centellen	
Sleeve nut	TMP / chrom.	
Blind plate	--	S235JR, 1.0037

Information / restriction of technical rules need to be observed!

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 threaded joint - Fig. 487

Control valve for heating, ventilation and air-conditioning - straight through with threaded joint - Fig. 488

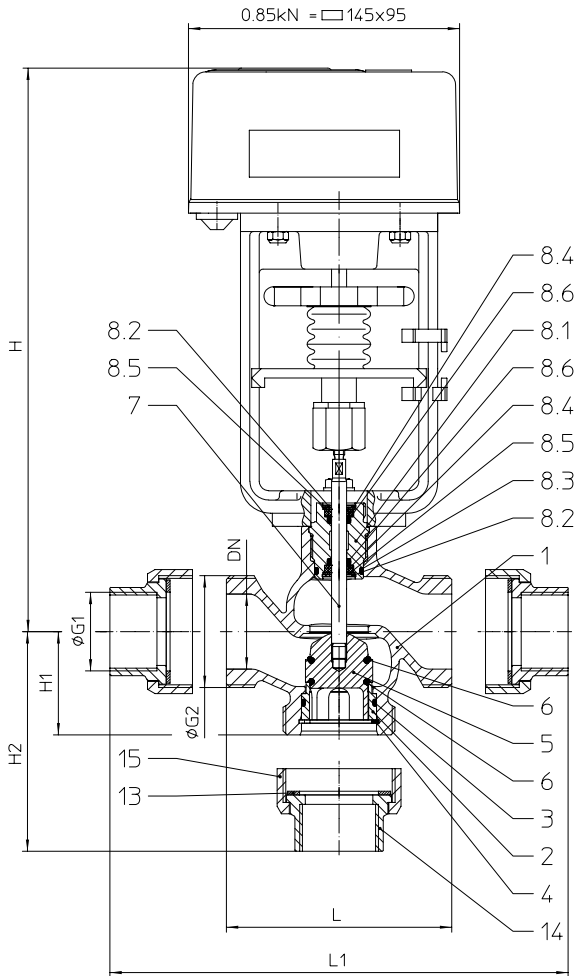
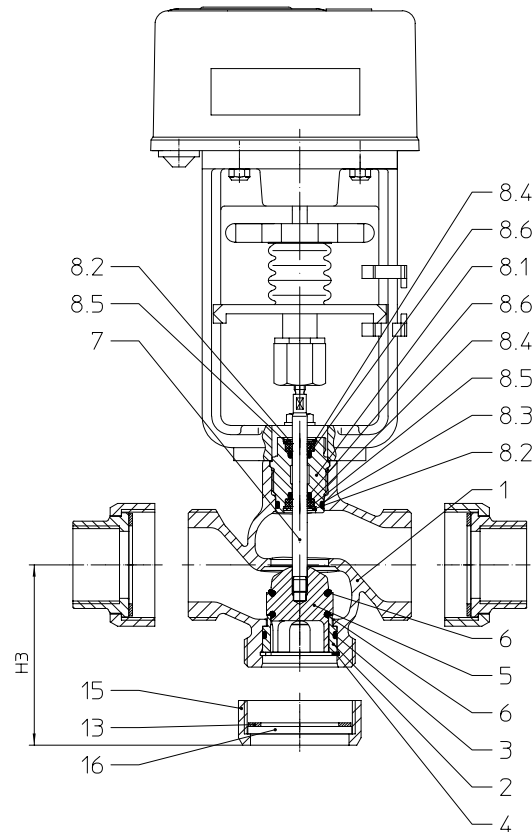
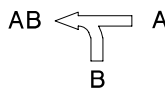
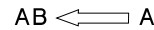

Fig. 487 Mixing function

Fig. 488 Straight through function


Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
72.487	PN16	CC499K	DN15-50	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
72.488	PN16	CC499K	DN15-50	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:	<ul style="list-style-type: none"> A Parabolic plug with EPDM-O-ring B V-port plug with EPDM-O-ring 		Stem and seat guiding	30 : 1	
Flow characteristic					
standard:	<ul style="list-style-type: none"> 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		
Kvs-value									
Kvs-value	Parabolic plug / V-port plug	Standard	(m³/h)	4	6,3	10	16	25	40
		Reduced	(m³/h)	2,5 / 1,6 / 1,0 / 0,63	4	6,3	10	16	25
Seat-Ø		(mm)	18	21	27	31	41	51	
Travel		(mm)	14						
Face-to-face dimension FTF series 1 according to DIN EN 558									
L		(mm)	80	90	110	120	130	150	
Connections									
Ø G1	PN16	(inch)	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2	
Ø G2	PN16	(inch)	G 1 1/8	G 1 1/4	G 1 1/2	G 2	G 2 1/4	G 2 3/4	
Dimensions									
L1	(mm)	128	138	166	186	199	223		
H	(mm)	283	283	289	293	302	302		
H1	(mm)	55	55	55	55	60	65		
H2	(mm)	79	79	83	88	95	102		
H3	(mm)	65	65	66	67	72	77		
Weights									
BR487	PN16	(kg)	2,9	3,1	3,7	4,6	5,2	6,8	
BR488	PN16	(kg)	2,9	3,1	3,7	4,6	5,2	6,8	
Closing pressures			max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below.						
Max. allowable differential pressure at flow		(bar)	2	2	1,5	1,5	1,5	1,5	
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					
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 1092-3			-10°C to 20°C		100°C		130°C		
CC499K	PN16	(bar)	16		16		16		

Parts			Fig. 72.487	Fig. 72.488
Pos.	Sp.p.	Description		
1		Body	CuSn5Zn5Pb5-C, CC499K	
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 (cpl. 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	
13		Gasket	Centellen	
14		Sleeve	TMP / chrom.	--
15		Sleeve nut	TMP / chrom.	
16		Blind plate	--	S235JR, 1.0037
	L Spare parts			

Information / restriction of technical rules need to be observed!

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

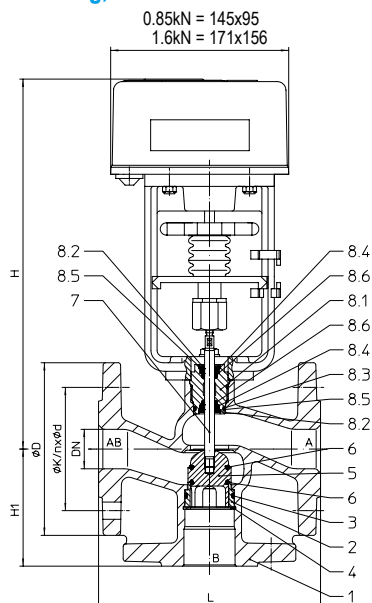
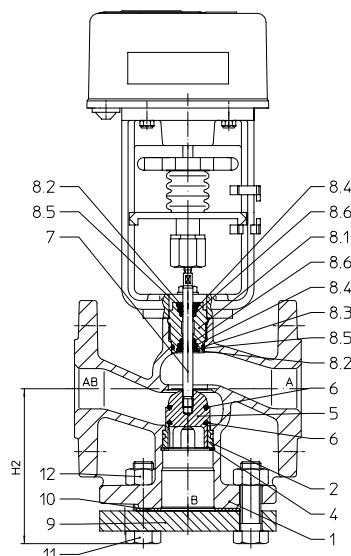
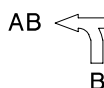
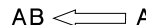
The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

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

with ARI-PACO


Fig. 485 Mixing function

Fig. 486 Straight through function


with ARI-PACO 2G

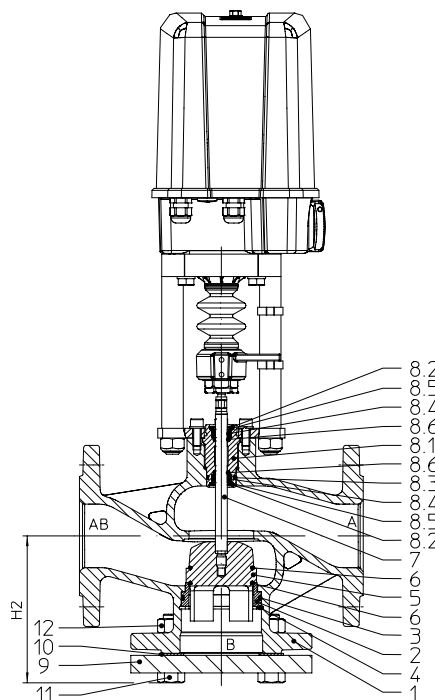
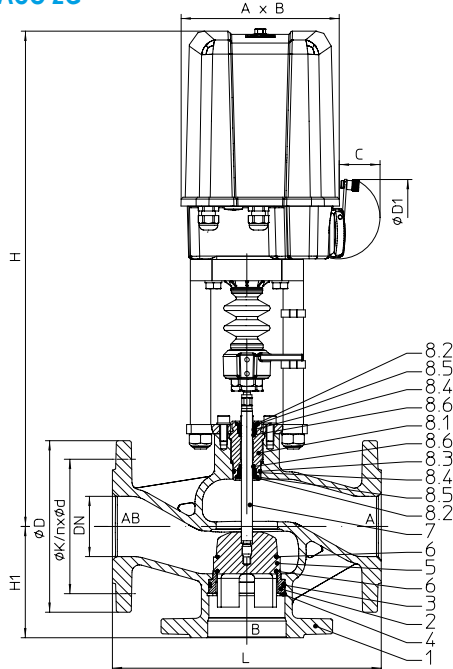


Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
10.485	PN6	EN-JL1040	DN15-100	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
12.485	PN16	EN-JL1040	DN15-100		
10.486	PN6	EN-JL1040	DN15-100	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
12.486	PN16	EN-JL1040	DN15-100		

Other materials and versions on request.

Plug design		Guiding	Rangeability
standard:	<ul style="list-style-type: none"> A Parabolic plug with EPDM-O-ring B V-port plug with EPDM-O-ring 	Stem and seat guiding	30 : 1
Flow characteristic			
standard:	<ul style="list-style-type: none"> 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		
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.									
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.									
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

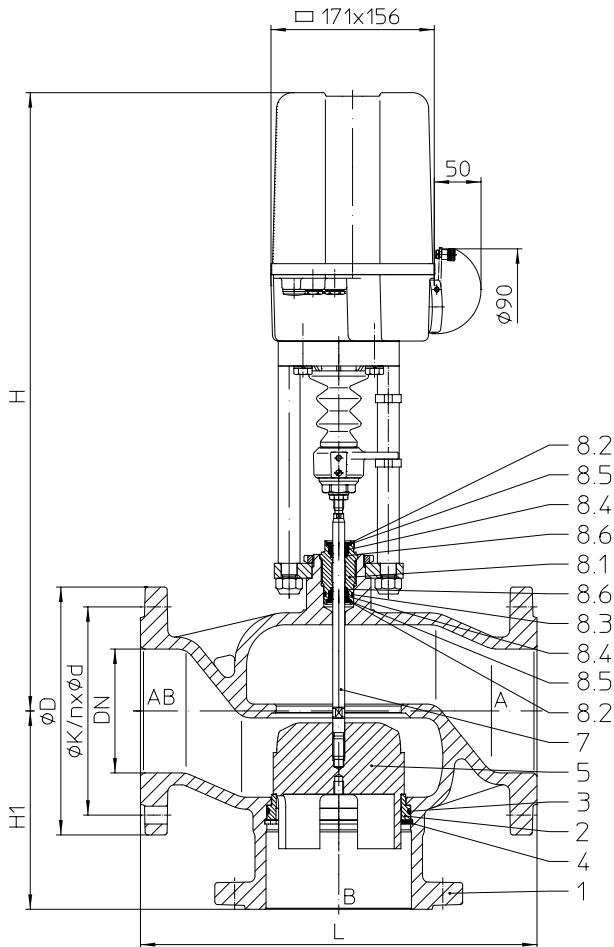
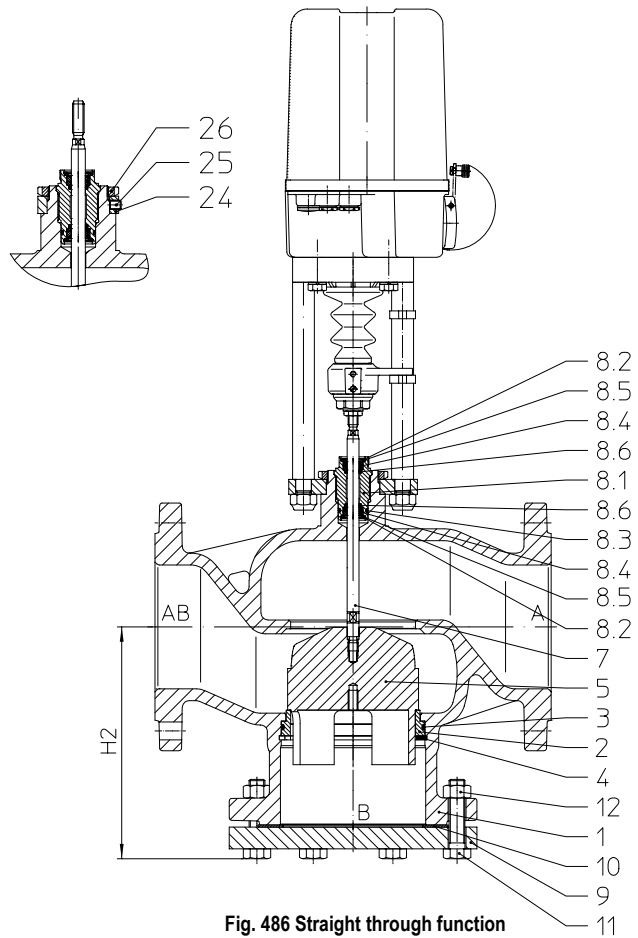
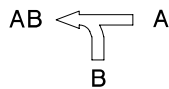
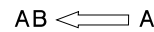

Fig. 485 Mixing function

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:	<ul style="list-style-type: none"> A Parabolic plug, metal seat B V-port plug, metal seat 		Stem and seat guiding	30 : 1	
Flow characteristic					
standard:	<ul style="list-style-type: none"> 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) 220
		Reduced	(m³/h) --
Seat-Ø		(mm) 126	151
Travel		(mm)	40

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	285
ØK	PN16	(mm)	210	240
n x Ød	PN16	(mm)	8 x 18	8 x 22

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

Weights					
BR485	PN16	2,2 kN	(kg)	58	82
	PN16	5 kN	(kg)	58,5	82,5
BR486	PN16	2,2 kN	(kg)	67,5	94,5
	PN16	5 kN	(kg)	68	95

Closing pressures	max. permissible closing pressures on flow-to-open P2 = 0. Observe pressure-temperature-limits, see below.			
--------------------------	--	--	--	--

Max. allowable differential pressure at flow		(bar)	0,6	
2,2 kN	Closing pressure	(bar)	1,1	0,7
	Operating time	(s)	105	
	Operating speed	(mm/s)	0,38	
5 kN	Closing pressure	(bar)	3,3	2,2
	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.			
-------------------------------------	---	--	--	--

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	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		Stem	X6CrNiMoTi17-12-2, 1.4571		
8.1	x (cpt. 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	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

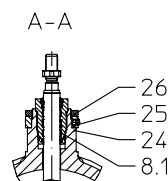
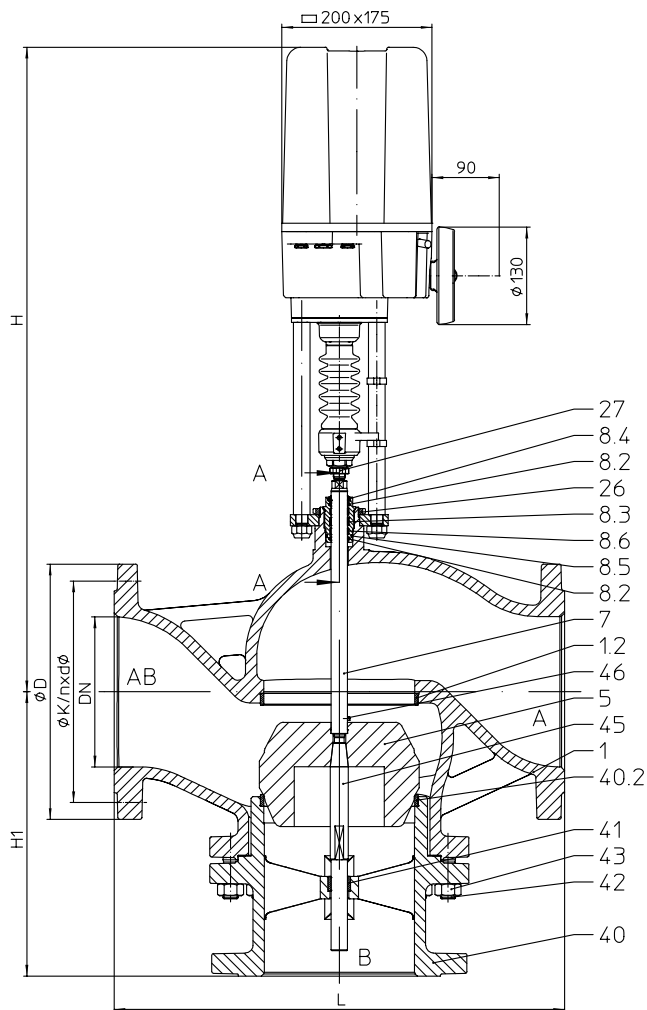


Fig. 485 Mixing function

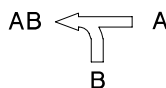


Figure	Nominal pressure	Material	Nominal diameter	Stem sealing	Temperature range
12.485	PN16	EN-JL1040	DN200-250	EPDM-O-ring	0°C to +130°C; with stem heating to -10°C
Other materials and versions on request.					
Plug design			Guiding	Rangeability	
standard:	<ul style="list-style-type: none"> • A Parabolic plug, metal seat • B Parabolic plug, metal seat 		double plug guiding	30 : 1	
Flow characteristic					
standard:	<ul style="list-style-type: none"> • 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.		
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.		
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).

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- 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.
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