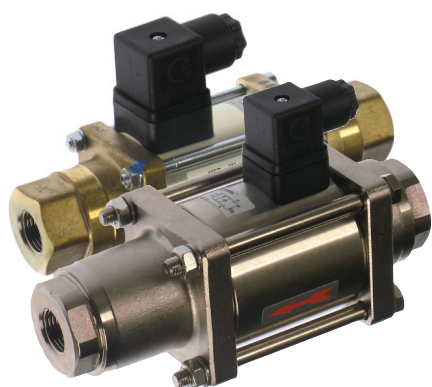


2/2-WAY COAXIAL VALVE, DIRECT FORCE OPERATED



Description:

- 2/2-way coaxial valve
 - pressure relieved, with spring return
 - direct force operated
- EDB1100: standard version upto 100 bar
 EDB1110: high pressure valve upto 130 bar (3/8")
 EDB1120: high pressure valve upto 400 bar (3/8 - 1/2")
 and for low temperatures
- female thread ISO228
 - duty cycle 100% (VDE0580)
 - insulation material class H 180°C
 - optional installation position, preferable standing magnet
 - vacuum leak rate $<10^{-6}$ mbar l/s
 - compact size by integrated actuator
 - on request **gegendruckdicht**
 - on request it can be reciprocally flown through

Application area:

- medium temperature -40°C upto max. +160°C
- ambient temperature -40°C upto max. +160°C
- operating pressure upto 100bar (400bar), no difference pressure necessary
- IP65 (with professional installed connector plug) DIN40050 --> DIN EN 60529
- connector plug DIN EN 175301-803, form A, LED
- for gaseous, liquid, gelatinous, highly viscous, pasty, particularly also contaminated and aggressive media
- for shortest switching times, very high life time
- for application with TÜV approval

Explanation:

The **technical design of the valves is based on media and application requirements**. Therefore please request your individual design for exact information about temperature ranges, feature sizes and dimensions.

Other tensions and coil powers as well as other sealings on request. Tension tolerance +5% / -10% at max. pressure and ambient temperature. Version in NC (rest position closed) and NO (rest position opened) available. For the connection to 24VDC or 230VAC by integrated or separated rectifier.

Also available with approval **DVGW** for connection of G3/8" upto G1 1/2", nominal sizes 15-25mm. As well as with approval **TÜV** for connection G1/4" upto G1 1/4", nominal sizes 10-25mm, upto 40bar.

Besides the valves can also be ordered as **module blocks in 1-fold upto 8-fold version** and as **module segments**. Please request these.

Thread ISO 228: The norm describes the thread connection of a parallel male thread with a parallel female thread and is marked with „G“.



You find information about the appointment code under „Appointment details“. An overview of the complete material code is in the catalog at the beginning of the chapter of the respective product group.

Pos.	Component	Standard		Options	
	Body	1. Brass	A	1. Nickel-plated brass	E
		2. Steel	J	2. Aluminium	Z
		3. Stainless steel	O		
	Sealings	depending on media		NBR	B
				PTFE	T
				FKM	V
				EPDM	E
				CR	

Options:

- NO: opened in rest position
- HA: manual override
- EX: EXII 2G EEX me II T4 and II D IP65 T 130°C
PTB03 ATEX 2120x
- CV: chemical nickel-plated
- NPT: thread
- ZG: 3.1, DVGW, TÜV
- RS: adjustable close muting
- OF: free of oil and grease
- VU: vacuum design
- TH: higher media temperatures
- BU: non-ferrous metals
- GD: **gegendruckdicht**
- UN: reciprocally flown through

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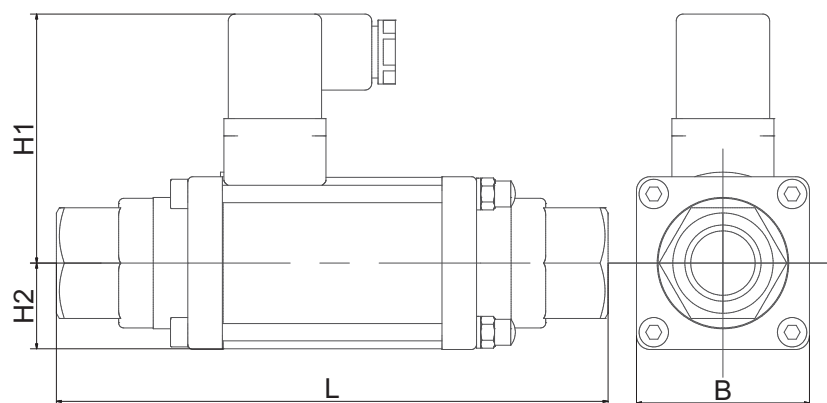
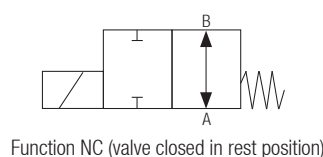
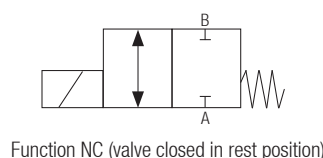
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2/2-WAY COAXIAL VALVE, DIRECT FORCE OPERATED

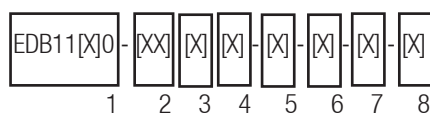


Matchcode	Con- nection [inch]	No- minal size [mm]	Operating pressure*				L [mm]	H1 [mm]	H2 [mm]	B [mm]	Switching time		Weight [kg]	Kv-Value**	Power consump-	
			[bar]								open	close		A → B	DC	AC
			max. 16bar	max. 40bar	max. 64bar	max. 100bar										
EDB1100-02x100-x-x	G 1/4	10	o	o	-	-	160	72	25	50	25	25	1,5	2,5	1,0	0,13
EDB1100-03x100-x-x	G 3/8	10	o	o	-	-	160	72	25	50	25	25	1,5	2,5	1,0	0,13
EDB1100-03x150-x-x	G 3/8	15	o	o	o	o	184	81	35	70	80	80	3,8	4,8	1,6	0,15
EDB1100-04x100-x-x	G 1/2	10	o	o	-	-	160	72	25	50	25	25	1,5	2,5	1,0	0,13
EDB1100-04x150-x-x	G 1/2	15	o	o	o	o	184	81	35	70	80	80	3,8	4,8	1,6	0,15
EDB1100-04x100-x-x	G 3/4	10	o	o	-	-	160	72	25	50	25	25	1,5	2,5	1,0	0,13
EDB1100-05x150-x-x	G 3/4	15	o	o	o	o	184	81	35	70	80	80	3,8	4,8	1,6	0,15
EDB1100-05x200-x-x	G 3/4	20	o	o	o	o	215	86	40	80	110	110	5,5	7,4	1,56	0,16
EDB1100-06x200-x-x	G 1	20	o	o	o	o	215	86	40	80	110	110	5,5	7,4	1,56	0,16
EDB1100-06x250-x-x	G 1	25	o	o	o	o	246	92	45	90	130	130	8	11,2	2,66	0,36
EDB1100-07x200-x-x	G 1 1/4	20	o	o	o	o	215	86	40	80	110	110	5,5	7,4	1,56	0,16
EDB1100-07x250-x-x	G 1 1/4	25	o	o	o	o	246	92	45	90	130	130	8	11,2	2,66	0,36
EDB1100-07x320-x-x	G 1 1/4	32	o	o	o	o	258	104,5	57,5	115	440	250	13,5	14,1	2,07	0,28
EDB1100-08x250-x-x	G 1 1/2	25	o	o	o	o	246	92	45	90	130	130	8	11,2	2,66	0,36
EDB1100-08x320-x-x	G 1 1/2	32	o	o	o	o	258	104,5	57,5	115	440	250	13,5	14,1	2,07	0,28
EDB1100-08x400-x-x	G 1 1/2	40	o	o	o	-	258	104,5	57,5	115	520	150	14	18,4	2,07	0,28
EDB1100-09x400-x-x	G2	40	o	o	o	-	258	104,5	57,5	115	520	150	14	18,4	2,07	0,28
EDB1100-09x500-x-x	G2	50	o	o	o	-	356	112	65	130	400	400	25,5	28,2	2,8	0,32

* Values apply to flow pattern A → B and A → C. For B → A the difference pressure for reciprocity flow through valves can only amount max. 16bar (Option -UN)!

**KV-Value: The nominal flow of KV to VDI/VDE 2173 indicates the water amount in cubic metres per hour, at 100% opened armature, Δp=1 bar and at a water temperature from 5 to 30°C.

*** Power consumption: The values apply to the standard designs. For special coils (e.g. temperature coils, option -TH) the values can vary.



Appointment details:

1: Basistype: EDB1100 / EDB1110 / EDB1120

2: Connection size: 02-09 (see chart)

3: Body material

- A = Brass
- E = Nickel-plated brass
- J = Steel
- O = Stainless steel
- Z = Aluminium
- 4. Nominal size in 1/10mm (see chart)

5: Operating pressure: Information about the max. operating pressure (see chart)

6. Tension:

- 0: 230V AC
- 1: 24V DC
- Other tensions on request.

7: Options (see „Options“)

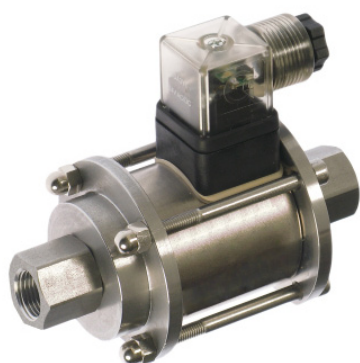
8: Medium (please indicate in your appointment!)

The technical design of the valves is based on media and application requirements. Therefore please request your individual design for exact information about temperature ranges, feature sizes and dimensions.

Demands on your application conditions that are not listed on the data sheet, can be requested!

The guide book and the maintenance guidelines, particularly the given safety instructions have to be paid attention to before the installation!

More information about our products on the internet: www.systemarmaturen.de

**EDB1110 - High pressure version upto 130bar****Explanation:**

The version EDB1110 is designed for the application with **higher pressures at smaller nominal sizes for liquid and gaseous media**. The valve is only available with a **body made of stainless steel**. The **temperature range for media and surrounding is at -10°C to +80°C**. For the EDB1110 there apply **all further options of the EDB1100**.

The technical design of the valves is based on media and application requirements. Therefore please request your individual design for exact information about temperature ranges, feature sizes and dimensions.

Matchcode	Connec- tion [inch]	Nomi- nal size [mm]	Ope- rating pressu- re* [bar]	L [mm]	H1 [mm]	H2 [mm]	B [mm]	Switching time [ms]		Weight [kg]	Kv-Value** [m³/h]	Power consumpti- on [A]	
								open	close			A → B	DC
EDB1110-03020-130-x	G 3/8	2	0 - 130	113	71,5	32,25	64,5	20	45	1,2	1,3	1,33	0,17
EDB1110-03040-40-x	G 3/8	4	0 - 40	113	71,5	32,25	64,5	20	45	1,2	5,3	1,33	0,17
EDB1110-03060-10-x	G 3/8	6	0 - 10	113	71,5	32,25	64,5	20	45	1,2	9,8	1,33	0,17

**EDB1120 - High pressure version upto 400bar / low temperature valve****Explanation:**

The version EDB1120 is designed for the application for **pressures upto 400 bar for liquid and gaseous media**. The valve is often used for applications with **low temperatures** and **liquid gas**.

The valve is available with a **body made of nickel-plated metal or stainless steel**. The valve seat seals with **plastic on metal**. The **media temperature in the standard version can only amount -40°C upto +100°C**, but on request it can also be designed for **applications upto -196°C**. For the EDB1120 there apply **all further options of the EDB1100**.

The technical design of the valves is based on media and application requirements. Therefore please request your individual design for exact information about temperature ranges, feature sizes and dimensions.

Matchcode	Con- nection [inch]	No- minal size [mm]	Operating pressu- re* [bar]		L [mm]	H1 [mm]	H2 [mm]	B [mm]	Switching time [ms]		Weight [kg]	Kv-Value [m³/h]	Power consump- tion** [A]	
			1-Coil- operation	2-Coil- operation					open	close			A → B	DC
EDB1120-03x20-x-x	G 3/8	2	0 - 300	0 - 400	135	81	34	68	60	170	2,5	1,7	1,6	0,15
EDB1120-03x30-x-x	G 3/8	3	0 - 250	0 - 300	135	81	34	68	60	170	2,5	4,1	1,6	0,15
EDB1120-03x40-x-x	G 3/8	4	0 - 120	0 - 150	135	81	34	68	60	170	2,5	11,0	1,6	0,15
EDB1120-03x50-x-x	G 3/8	5	0 - 80	0 - 100	135	81	34	68	60	170	2,5	13,5	1,6	0,15
EDB1120-03x60-x-x	G 3/8	6	0 - 50	0 - 70	135	81	34	68	60	170	2,5	17,4	1,6	0,15
EDB1120-03x80-x-x	G 3/8	8	0 - 30	0 - 40	135	81	34	68	60	170	2,5	24,0	1,6	0,15
EDB1120-04x80-x-x	G 1/2	8	0 - 50	-	160	86	39	78	120	270	3,5	1,8	2,64	0,3
EDB1120-04x100-x-x	G 1/2	10	0 - 35	-	160	86	39	78	120	270	3,5	2,5	2,64	0,3
EDB1120-04x120-x-x	G 1/2	12	0 - 25	-	160	86	39	78	120	270	3,5	2,8	2,64	0,3
EDB1120-04x140-x-x	G 1/2	14	0 - 15	-	160	86	39	78	120	270	3,5	3,2	2,64	0,3

* Values apply to flow pattern A → B and A → C. For B → A the difference pressure for reciprocally flown through valves can only amount max. 16bar (Option -UN)!

**Power consumption: The values for the 2-coil-operation deviate slightly from: G3/8 DC 1,58A / AC 0,16A.