**Description:**

- 2/2 way coaxial valve
  - pressure relieved, with spring reset
  - direct operated
- EDB1100: standard version up to 100 bar  
 EDB1110: High pressure valve up to 130 bar (3/8")  
 EDB1120: High pressure valve up to 400 bar (3/8 - 1/2") and cryogenic temperatures
- female thread acc. to ISO228
  - duty cycle 100% (VDE0580)
  - insulation material class H 180°C
  - any installation position, upright solenoid position recommended
  - vacuum leak rate  $<10^{-6}$  mbar l/s
  - compact size because of integrated actuator
  - back pressure save (on request)
  - bidirectional flow through (on request)

**Range of application:**

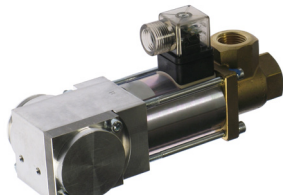
- medium temperature -40°C up to +160°C
- ambient temperature: -40°C up to +80°C
- working pressure up to 100bar (400bar), no pressure difference needed
- IP65 (with a professionally installed connector socket according to DIN40050 --> DIN EN 60529)
- connector socket according to DIN EN 175301-803, Form A, LED
- for gaseous, liquid, gelatinous, highly viscous, pasty, especially contaminated and aggressive media
- for minimum switching times and extremely long life time
- for use with DVGW and TÜV certificate

**Comments:**

**The technical design of the valves depends on your medium and application.** Therefore please ask for your individual specifications on temperature ranges, characteristics and dimensions.

Other voltage, coil power or sealing on request! Voltage tolerance +5% / -10% with maximum pressure and standard ambient temperature. The valves are available in NC (closed in rest position) and NO (opened in rest position). With integrated or separate rectifier for connection to 24V DC or to 230V AC.

Also available with **DVGW** certificate for connection sizes G3/8" up to G1 1/2", nominal sizes 15-25mm. Also with **TÜV** certificate for connection sizes G1/4" up to G1 1/4", nominal sizes 10-25mm, up to 40bar.



The valves can also be ordered as **manifolds from 1-fold up to 8-fold**, and as **module segments**. Please request this options.

**Threads according to EN 228:** It describes the threaded connection of a parallel male thread with a parallel female thread and is marked with "G".

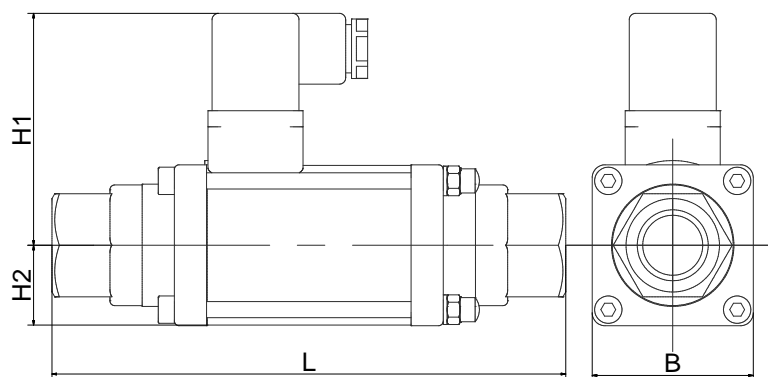
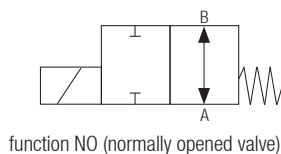
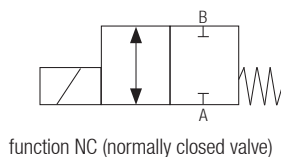
For details about the order code see "Order information". An overview of the complete material code you can find at the beginning of each product section of the product catalogue.

pos.	part	standard		options	
	body	1. brass	A	1. brass nickel plated	E
		2. steel	J	2. alloy	Z
		3. stainless steel	O		
	sealing	media dependent		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: nickel plated chemically
- NPT: thread
- ZG: 3.1, DVGW, TÜV
- RS: adjustable close muting
- OF: free of oil and grease
- VU: vacuum design
- TH: higher medium temperature
- BU: free of non-ferrous metal
- GD: back pressure save
- UN: bidirectional flow-through
- HW: fixing bracket

## 2/2 WAY COAXIAL VALVE, DIRECT ACTING

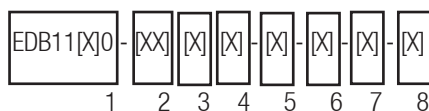


match code	con- nection [inch]	no- minal size [mm]	working pressure*				L [mm]	H1 [mm]	H2 [mm]	B [mm]	switching time		weight [kg]	CV value**			power consump- tion*** [A]	
			max. 16bar	max. 40bar	max. 64bar	max. 100bar					open	close		A → B	DC	AC		
EDB1100-02x100-x-x	G 1/4	10	0	0	-	-	160	72	25	50	25	25	1.5	2.5	1.0	0.13		
EDB1100-03x100-x-x	G 3/8	10	0	0	-	-	160	72	25	50	25	25	1.5	2.5	1.0	0.13		
EDB1100-03x150-x-x	G 3/8	15	0	0	0	0	184	81	35	70	80	80	3.8	4.8	1.6	0.15		
EDB1100-04x100-x-x	G 1/2	10	0	0	-	-	160	72	25	50	25	25	1.5	2.5	1.0	0.13		
EDB1100-04x150-x-x	G 1/2	15	0	0	0	0	184	81	35	70	80	80	3.8	4.8	1.6	0.15		
EDB1100-05x100-x-x	G 3/4	10	0	0	-	-	160	72	25	50	25	25	1.5	2.5	1.0	0.13		
EDB1100-05x150-x-x	G 3/4	15	0	0	0	0	184	81	35	70	80	80	3.8	4.8	1.6	0.15		
EDB1100-05x200-x-x	G 3/4	20	0	0	0	0	215	86	40	80	110	110	5.5	7.4	1.56	0.16		
EDB1100-06x200-x-x	G 1	20	0	0	0	0	215	86	40	80	110	110	5.5	7.4	1.56	0.16		
EDB1100-06x250-x-x	G 1	25	0	0	0	0	246	92	45	90	130	130	8	11.2	2.66	0.36		
EDB1100-07x200-x-x	G 1 1/4	20	0	0	0	0	215	86	40	80	110	110	5.5	7.4	1.56	0.16		
EDB1100-07x250-x-x	G 1 1/4	25	0	0	0	0	246	92	45	90	130	130	8	11.2	2.66	0.36		
EDB1100-07x320-x-x	G 1 1/4	32	0	0	0	0	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	0	0	0	0	246	92	45	90	130	130	8	11.2	2.66	0.36		
EDB1100-08x320-x-x	G 1 1/2	32	0	0	0	0	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	0	0	0	-	258	104.5	57.5	115	520	150	14	18.4	2.07	0.28		
EDB1100-09x400-x-x	G2	40	0	0	0	-	258	104.5	57.5	115	520	150	14	18.4	2.07	0.28		
EDB1100-09x500-x-x	G2	50	0	0	0	-	356	112	65	130	400	400	25.5	28.2	2.8	0.32		

\* Values suitable for flow direction A → B. For B → A the pressure difference for bidirectional valves is max. 16bar (option-UN)!

\*\*CV-value: The nominal flow rate CV according to VDI / VDE 2173 is the water quantity in m³/h for the flow direction A->B with the pressure difference Δp = 1 bar and a medium temperature between +5°C and 30°C.

\*\*\* power consumption: The values are for the standard versions. For special coils (e.g. temperature coils, option -TH) the values may differ.



## Order information:

1: type: EDB1100 / EDB1110 / EDB1120

2: connection size: 02-09 (see table)

## 3: body material

- A = brass
- E = brass nickel plated
- J = steel
- O = stainless steel
- Z = alloy

4: nominal size in 1/10mm (see table)

5: working pressure: specification of max. working pressure (see table)

## 6: voltage:

- 0: 230V AC
- 1: 24V DC
- Other voltage upon request.

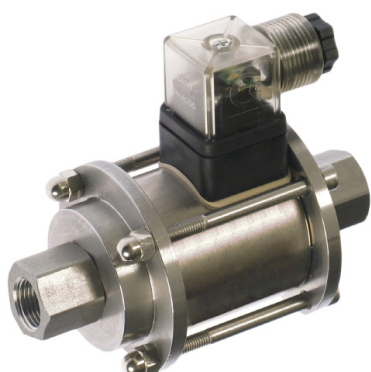
7: options (see "options")

8: medium (please specify when ordering!)

The technical design of the valves depends on your medium and application. Therefore please ask for your individual specifications on temperature ranges, characteristics and dimensions.

Please ask for field specifications that are not listed in this data sheet.

Before installation please consider the installation and maintenance manual, especially the safety indications!

**EDB1110 - high pressure application up to 130bar****Comments:**

The type EDB1110 is designed for **high pressures and small nominal sizes**, for **liquid and gaseous media**. The valve is delivered with a **body of stainless steel**. The **temperature range for medium and surrounding is -10°C up to +80°C**. For EDB1110 **all other options of EDB1100** are valid.

**The technical design of the valves depends on your medium and application.** Therefore please ask for your individual specifications on temperature ranges, characteristics and dimensions.

match code	connec- tion [inch]	nominal size [mm]	working pressu- re* [bar]		L [mm]	H1 [mm]	H2 [mm]	B [mm]	switching time [ms]		weight [kg]	CV value** [m³/h]			power consump- tion [A]	
									open	close		A → B		DC	AC	
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 application up to 400bar / Cryogenic Valve****Comments:**

The type EDB1120 is used for **pressures up to 400bar** designed for liquid and gaseous media. The valve is often used for **cryogenic applications and liquefied gas**.

The valve has a **body made of nickel plated steel or stainless steel**. The valve seat seals with **plastic on metal**. The standard medium **temperature range is -40°C to +100°C**, on request applications **up to -196°C** are possible. For EDB1120 **all other options of EDB1100** are valid.

**The technical design of the valves depends on your medium and application.** Therefore please ask for your individual specifications on temperature ranges, characteristics and dimensions.

match code	con- nection [inch]	no- minal size [mm]	working pressure*		L [mm]	H1 [mm]	H2 [mm]	B [mm]	switching time [ms]		weight [kg]	CV value [m³/h]			power consump- tion** [A]	
			operation with one	operation with two					open	close		A → B		DC	AC	
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 suitable for flow direction A → B. For B → A the pressure difference for bidirectional valves is max. 16bar (option-UN)!

**power consumption:** The values for the 2-coil operating system are slightly different: G3/8 DC 1,58A / AC 0,16A.