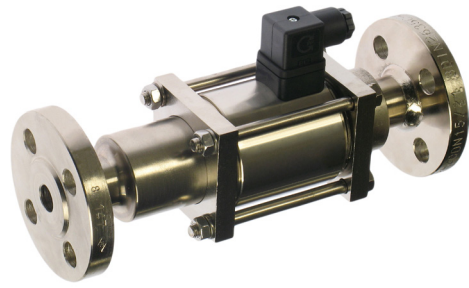


## 2/2-WAY COAXIAL VALVE, DIRECT FORCE OPERATED, FLANGE DESIGN

**Description:**

- 2/2-way axial valve
- pressure relieved, with spring return
- direct force operated
- flange connection EN1092, PN16 / PN40 / PN100
- compressed air supply NAMUR / ISO 1
- 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 back pressure save
- on request it can be reciprocally flown through

**Application area:**

- medium temperature -40°C upto max. +160°C
- ambient temperature -40°C upto max. + 80°C
- operating pressure upto 100bar, no difference pressure necessary
- control pressure 4-10bar, switching speed by throttle, infinitely variable
- 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 DVGW- or 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 **DVGW approval** for connection of G3/8" upto G1 1/2", nominal sizes 15-25mm. Also with **TÜV approval** for connection G1/4" upto G1 1/4", nominal sizes 10-25mm, upto 40bar

**Flange with other norms (e.g. ANSI) on request.**

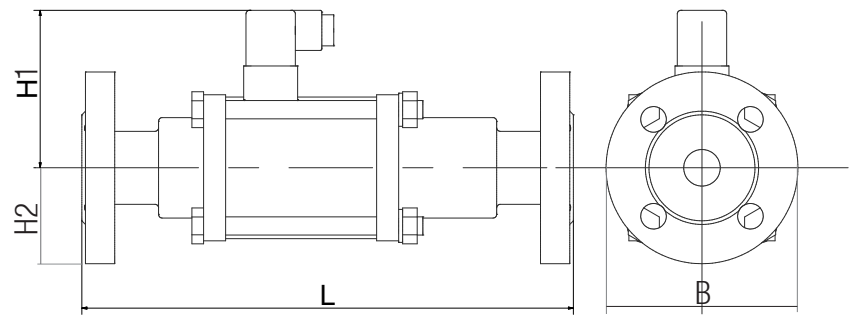
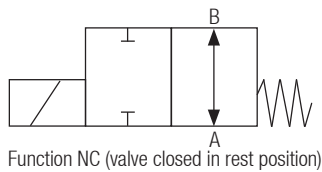
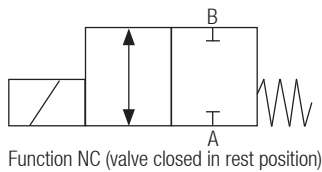
Pos.	Component	Standard		Options	
	Body	1. Brass	A	1. Nickel-plated brass	E
		2. Steel	J	2. Aluminium	Z
		3. Stainless steel	O		
	Sealings	depending on media		NBR	B
				PTFE	T
				FKM	V
				EPDM	E
				CR	

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.

**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
- 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: back pressure save
- UN: reciprocally flown through

## 2/2-WAY COAXIAL VALVE, DIRECT FORCE OPERATED, FLANGE DESIGN



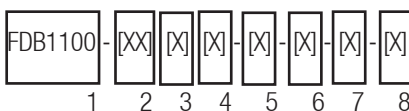
Matchcode	Con- nection [inch]	Nominal size [mm]	Operating pressure*				L [mm]	H1 [mm]	H2** [mm]	B** [mm]	Switching time [ms]		Weight [kg]	Kv-Value*** [m³/h]			Power consump- tion**** [A]	
			max. 16bar	max. 40bar	max. 64bar	max. 100bar					open	close		A → B	DC	AC		
																	0	0
FDB1100-52-xx150-x-x	DN15	15	0	0	0	0	241	72		EN1092	80	80	5	4,8	1,0	0,13		
EDB1100-53-xx200-x-x	DN20	20	0	0	0	0	269	81		EN1092	110	110	7,5	7,4	1,6	0,15		
EDB1100-54-xx250-x-x	DN25	25	0	0	0	0	302	86		EN1092	130	130	10,5	11,2	2,66	0,36		
EDB1100-55-xx320-x-x	DN32	32	0	0	0	0	324	92		EN1092	440	250	17,5	14,1	2,07	0,28		
EDB1100-56-xx400-x-x	DN40	40	0	0	0	-	324	104,5		EN1092	520	150	18	18,4	2,07	0,28		
EDB1100-57-1x500-16-x	DN50	50	0	-	-	-	438	112	82,5	165	400	400	31	28,2	2,8	0,32		
EDB1100-58-1x650-16-x	DN65	65	0	-	-	-	551	130	105	185	600	800	35	45	4,4	0,65		
EDB1100-59-1x800-16-x	DN80	80	0	-	-	-	573	130	112,5	200	600	800	38	70	4,4	0,65		

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

\*\* Wide B and height H1 for the valves are defined by the dimensions of the flanges depending on the pressure stages.

\*\*\* **KV-Value:** The nominal flow of KV to VDI/VDE 2173 indicates the water amount in cubic metres per hour, at 100% opened armature,  $\Delta p=1$  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: FDB1100

2: Connection size (see chart):

- 52-59 DIN EN1092  
82-89 ANSI
- attached is the pressure stage of the flange:  
1 = PN16  
3 = PN40  
5 = PN100

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!