**Description:**

- 2/2-way coaxial valve
- pressure relieved, with spring return, not non-overlapping
- direct force operated
- flange connection EN1092, PN16 / PN40
- 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

**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 **TÜV** approval for connection G1/4" upto G1 1/4", nominal sizes 10-25mm, upto 40bar

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

**Application area:**

- medium temperature -40°C upto +160°C
- ambient temperature -40°C upto +80°C
- operating pressure upto 100bar, 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

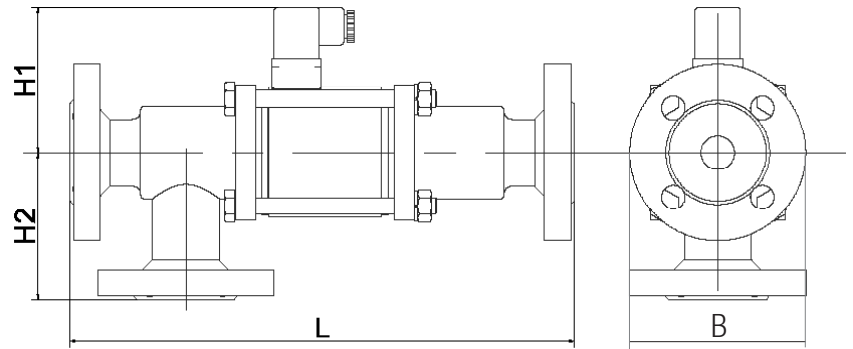
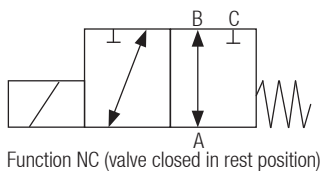
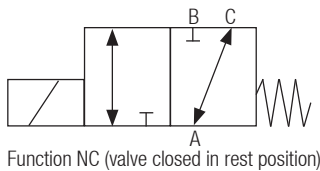
Pos.	Component	Standard	Options
	Body	1. Brass	A 1. Nickel-plated brass E
		2. Steel	J 2. Aluminium Z
		3. Stainless steel	O
	Sealing	depending on media	NBR B PTFE T FKM V EPDM E CR

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

## 3/2-WAY COAXIAL VALVE, DIRECT FORCE OPERATED, FLANGE DESIGN



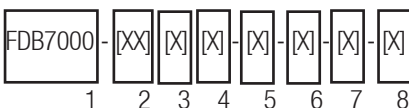
Matchcode	Conne- ction [inch]	Nominal size [mm]	Operating pressure** [bar]		L [mm]	H1 [mm]	H2 [mm]	B [mm]	Switching time [ms]		Weight [kg]	Kv-Value*** [m³/h]		Power con- sumption**** [A]	
			max. 16bar	max. 40bar					open	close		A → B A → C	DC	AC	
FDB7000-52-x x150-x-x	DN15	15*	0	0	265	81	85	95	80	80	5,9	4,3	1,0	0,13	
EDB7000-53-x x200-x-x	DN20	20*	0	0	301	86	88	105	110	110	8,4	6,7	1,6	0,15	
EDB7000-54-x x250-x-x	DN25	25*	0	0	337	92	100	115	130	130	12	11,2	2,66	0,36	
EDB7000-55-x x320-x-x	DN32	32	0	0	394	104,5	70	178,5	440	250	22	14,1	2,07	0,28	
EDB7000-56-1x400-16-x	DN40	40	0	-	394	104,5	57,5	183,5	520	150	23	18,4	2,07	0,28	
EDB7000-57-1x500-16-x	DN50	50	0	-	553	112	82,5	246	400	400	38,5	28,2	2,8	0,32	
EDB7000-58-1x650-16-x	DN65	65	0	-	585	130	60	227,5	600	800	47,6	40	4,4	0,65	
EDB7000-59-1x800-16-x	DN80	80	0	-	633	130	112,5	270	600	800	48,8	55	4,4	0,65	

\* The cases in the nominal sizes DN15, DN20 and DN25 have a downward designed 3. connection.

\*\* 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)!

\*\*\* **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: FDB7000

2: Connection size (see chart):

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

3: Body material

- A = Brass
- E = Nickel-plated brass
- J = Steel
- O = Stainless steel
- Z = Aluminium

4. Nominal size in 1/10mm (see chart)

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!

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.