

**Description:**

- 2/2-way pressure operated seat valve
- seat valve with plunger washer
- direct force operated
- body in gray iron, cast steel or stainless steel
- flange connection EN1092-1 PN16 respectively PN40
- optional installation position

Application area:

- viscosity 600mm²/s
- medium temperature -40°C tp +200°C (PTFE) respectively -10°C to +80°C (NBR)
- ambient temperature -10°C to +35°C
- operating pressure upto 40bar (stainless steel/cast steel) respectively 16bar (gray iron). See chart.
- control pressure 4 upto 10 bar
- for hot and cold water, oil and air, in stainless steel design also for aggressive media
- as special valve also for gaseous fuels according to gas appliance directive EWG 90/396
- control medium air and neutral liquids

Explanation:

During the installation please pay attention to the **flow pattern** (marking with arrow on the body). Optional flow pattern with optional available double-acting piston drive. Other sealings, operating pressures and control cylinder body on request.

As a special valve in gray iron with FKM for gaseous fuels valve group A, valve group 2 please request.

With aluminium cylinders (Type „xxZ“) water must not be used as control medium.

Pos.	Component	Gray iron		Cast steel		Stainless steel	Options		
1	Body	GG-25	L	GS-C25	K	1.4581 (upto DN50) 1.4408 (from DN65)	O		
2	Seat sealing	PTFE	T	PTFE	T	PTFE	T	EPDM NBR FKM	E B V
3	Cylinder	Ø50: Brass Ø80/125: Aluminium	A Z	Ø50: Brass Ø80/125: Aluminium	A Z	Ø50: Brass Ø80/125: Aluminium	A Z	Stainless steel	O
4	Spindle sealing	PTFE	T	PTFE	T	PTFE	T	EPDM NBR FKM	E B V

Differing medium temperature for optional sealings:

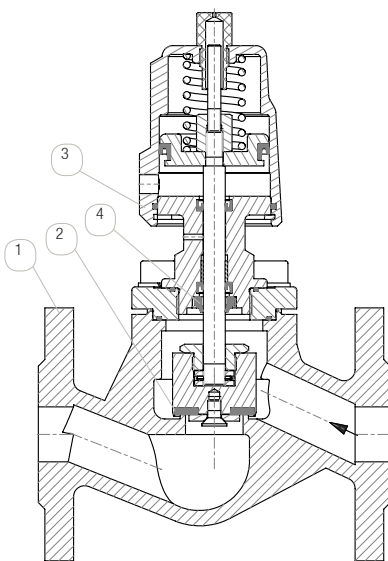
- EPDM, NBR and FKM -10°C upto +80°C

Wear parts:

- Valve disc
- Seat sealing
- Retaining disc
- Mounting nut
- Spindle
- Union nut
- V-Set of collars
- Thrust ring
- Spring
- O-Ring
- Wiper
- Countersunk screw
- Lip seal
- Sliding bush
- Grooved pin

Options:

- PV: Pilot valve GMV3197, GMV3164
- OF: Free of oil and grease
- DW: Actuator double-acting
- PS: Optional position indication (NO and double-acting)
- PS: Electrical position indication (limit switch)
- HA: Manual override
- VU: Vacuum design with soft sealing
- VU: Vacuum design, also for pressure
- Valve with oil break
- Valve with oil break, stroke limitation, protective hood



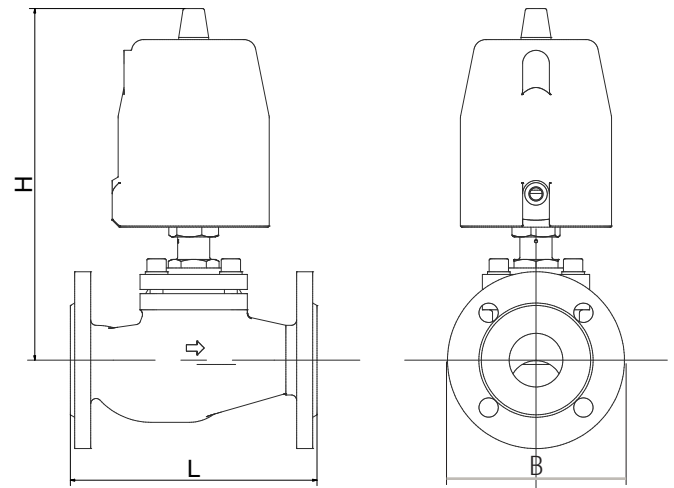
*Depending on valve type, wear parts may vary.

Service-Set: valve disc, spindle, sealing set, spring

Sealing-Set: includes all sealings

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.

2/2-WAY PRESSURE OPERATED VALVE, DIRECT FORCE OPERATED, FLANGE DESIGN



* declared is the maximal pressure range at a control pressure of 6bar

**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.

*** higher maximal operating pressure for bodies in stainless steel!

Matchcode	Size			Operating pressure*						Measures [mm]			Weight [kg]	Kv-Value*** [m³/h]
				closing with medium		closing against medium								
	NC		NO		NC		L	H	B					
	Con- nec- tion [inch]	Nominal size [mm]	Control cylinder [mm]	Type	Pres- sure [bar]	Type				Pres- sure [bar]	Type	Pressure [bar]		
Body gray iron (PN16)														
FDV2200-52-1LTT200-xxx	DN15	20	50	12A	0-16	42A	0-16	32A	0-13	130	220	95	3,5	6,8
FDV2200-53-1LTT200-xxx	DN20	20	50	12A	0-16	42A	0-16	32A	0-13	150	220	105	5	6,8
FDV2200-54-1LTT250-xxx	DN25	25	50	12A	0-12	42A	0-12	32A	0-8	160	230	115	6	11
FDV2200-54-1LTT250-xxx	DN25	25	80	14Z	0-16	44Z	0-16	34Z	0-15	160	250	115	7	11
FDV2200-55-1LTT320-xxx	DN32	32	50	12A	0-8	42A	0-8	32A	0-5	180	240	140	8	18
FDV2200-55-1LTT320-xxx	DN32	32	80	14Z	0-16	44Z	0-16	34Z	0-9	180	270	140	10	18
FDV2200-56-1LTT400-xxx	DN40	40	80	14Z	0-14	44Z	0-15	34Z	0-6	200	290	150	11	27
FDV2200-56-1LTT400-xxx	DN40	40	125	15Z	0-16	45Z	0-16	35Z	0-16	200		150		27
FDV2200-57-1LTT500-xxx	DN50	50	80	14Z	0-9	44Z	0-9	34Z	0-4	230	310	165	15	43
FDV2200-57-1LTT500-xxx	DN50	50	125	15Z	0-16	45Z	0-16	35Z	0-16	230	370	165	49	43
FDV2200-58-1LTT650-xxx	DN65	65	125	15Z	0-13	45Z	0-13	35Z	0-10	290	380	185	29	71
FDV2200-59-1LTT800-xxx	DN80	80	125	15Z	0-9	45Z	0-9	35Z	0-5	310	390	200	35	111
FDV2200-60-1LTT1000-xxx	DN100	100	125	15Z	0-6	45Z	0-6	35Z	0-3	350	400	220	50	173
Body cast steel / stainless steel (PN40)														
FDV2200-52-3xTT200-xxx	DN15	20	50	12A	0-25	42A	0-16	32A	0-13 (20)***	130	220	95	3,5	6,8
FDV2200-52-3xTT200-xxx	DN15	20	80	14Z	0-40	44Z	0-40	34Z	0-40	130		95		6,8
FDV2200-53-3xTT200-xxx	DN20	20	50	12A	0-25	42A	0-16	32A	0-13	150	220	105	5	6,8
FDV2200-53-3xTT200-xxx	DN20	20	80	14Z	0-40	44Z	0-40	34Z	0-23	150		105		6,8
FDV2200-54-3xTT250-xxx	DN25	25	50	12A	0-12	42A	0-12	32A	0-8	160	230	115	6	11
FDV2200-54-3xTT250-xxx	DN25	25	80	14Z	0-25	44Z	0-30	34Z	0-15	160	250	115	7	11
FDV2200-55-3xTT320-xxx	DN32	32	50	12A	0-8	42A	0-8	32A	0-5	180	240	140	8	18
FDV2200-55-3xTT320-xxx	DN32	32	80	14Z	0-20	44Z	0-22	34Z	0-9	180	270	140	10	18
FDV2200-55-3xTT320-xxx	DN32	32	125	15Z	0-40	45Z	0-40	35Z	0-40	180		140		18
FDV2200-56-3xTT400-xxx	DN40	40	80	14Z	0-14	44Z	0-15	34Z	0-6	200	290	150	11	27
FDV2200-56-3xTT400-xxx	DN40	40	125	15Z	0-31	45Z	0-32	35Z	0-25	200		150		27
FDV2200-57-3xTT500-xxx	DN50	50	80	14Z	0-9	44Z	0-9	34Z	0-4	230	310	165	15	43
FDV2200-57-3xTT500-xxx	DN50	50	125	15Z	0-21	45Z	0-22	35Z	0-16	230	370	165	49	43
FDV2200-58-3xTT650-xxx	DN65	65	80	14Z	0-6	44Z	0-5	34Z	0-1	290	320	185	25	71
FDV2200-58-3xTT650-xxx	DN65	65	125	15Z	0-13	45Z	0-13	35Z	0-10	290	380	185	29	71
FDV2200-59-3xTT800-xxx	DN80	80	125	15Z	0-9	45Z	0-9	35Z	0-5	310	390	200	35	111
FDV2200-60-3xTT1000-xxx	DN100	100	125	15Z	0-6	45Z	0-6	35Z	0-3	350	400	220	50	173

Option: DN125-DN150-DN200 in spheroidal cast iron available!

Functions:**closed in rest position (NC):**

Type1xx: closing with the medium, single-acting. With liquids there can occur closing and opening strokes.

Type3xx: closing against the medium, single-acting. With liquids prevention of closing and opening strokes.

opened in rest position (NO):

Type4xx: closing against the medium, single-acting

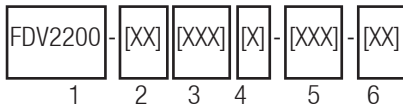
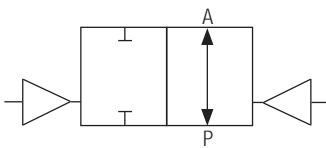
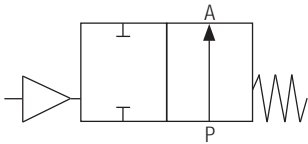
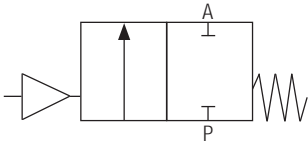
optional flow pattern:

Type5xx/Type6xx: for optional flow pattern

Optional available:

The GMV3197 as 3/2-way-pilot valve, direct force operated, for control of the compressed air cylinder. If necessary for big nominal sizes we advise the GMV3164 for faster closing times.

You find detailed information in the product group „Solenoid valve“.

**Appointment details :****1: Basistype: FDV2200****2: Connection size:**

- 52-60 (see chart)
- 82-90 (ANSI-Flanges)
- attached is the pressure stage:
 - 1: PN16
 - 3: PN40

3: Material:

- 1. Body material
 - L=Gray iron
 - K=Cast steel
 - M= spheroidal cast iron
 - O=Stainless steel
- 2. Spindle sealings and
- 3. Seat sealings
 - E=EPDM
 - T=PTFE
 - B=NBR
 - V=FKM

4. Nominal size in 1/10mm (s. chart)**5: Type of the pressure cylinder (other types on request):**

- 1. Information about the function
 - 1=closing with medium, NC, single-acting
 - 3=closing against medium, NC, single-acting
 - 4=closing against medium, NO, single-acting
- 2. Information about the cylinder diameter:
 - 2: Ø50
 - 4: Ø80
 - 5: Ø125
- 3. Material of the cylinder
 - A=Brass (blank)
 - Z=Aluminium
 - O=Stainless steel

6: Options (see „Options“)

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!