

Butterfly Valves

CODE	DN	Kvs [m³/h]
VFA25	25	26
VFA32	32	26,5
VFA40	40	49,6
VFA50	50	116
VFA65	65	259
VFA80	80	377
VFA100	100	763
VFA125	125	1030
VFA150	150	1790
VFA200	200	3460



APPLICATION AND USE

VFA series butterfly motorized valves are used in heating, refrigerating, hydraulic plants for fluids belonging to group 2 according to the article 13 of 2014/68/UE directive (PED), therefore, they cannot be used as safety valves.

Group 2 regards water, overheated water, steam. For different fluids belonging to group 2, please contact our Sales Support.

In particular, when actuated by MDA2./5., they can be employed in boiler sequence programming systems.

VFA valves can also be actuated by MDL actuators with AF24 linkage for MDL.4 (20 Nm) for valve up to DN100 or AF25 for MDL.6 (30 Nm) for valves DN125÷200. Please refer to MDL data sheet for further information about these actuators.

VALVE MANUFACTURING CHARACTERISTICS

They consist of valve body, linkage kit for MDA2./5. actuator assembly, Manual knob with position indicator. If the valve has to be mounted on other manufacturer actuators, it is advisable to realise a specific linkage.

VALVE TECHNICAL CHARACTERISTICS

CHARACTERISTIC	DESCRIPTION
Construction	PN16 (it is also possible to connect to VFA valves with PN6 and PN10 flanges)
Valve body	Nodular iron (EN-JS1030)
Disk	1.4581 (DN25-80), EN-JS1030 (DN100-200)
Butterfly shaft	O-Ring
Seat	EPDM
Fluid	Water or water-glycol (50% max)
Max fluid temperature	-10°C to 100°C
Sealing leakage test	DIN EN 12266-1 Leakage rate A (Tight close-off) DIN 3230 T3 Leakage rate 1
Connections	Flanges

Valves are supplied already fitted with coupling elements for MDA2./4./5. actuators.

ATTENTION: If the valves are assembled with MVB+spacer (MVBHT) the max. operating temperature is 140 °C, while without spacer is 120 °C.

The performances stated in this sheet can be modified without any prior notice.

Model	Torque [Nm]	Angular stroke	Timing [s]	Power supply	VALVE
MDA22	20	90°	90	230 V 50/60 Hz	VFA DN25÷100
MDA24	40		150		VFA DN125÷200
MDA42	20		90	24 Vac/dc	VFA DN25÷100
MDA44	40		150		VFA DN125÷200
MDA52	20		90		VFA DN25÷100
MDA54	40		150		VFA DN125÷200

CHARACTERISTIC	MDA22	MDA24	MDA42	MDA44	MDA52	MDA54
Protection	DIN 40050 IP54					
Control signal	Floating				Proportional	
Timing [s]	90	150	90	150	90	150
Shaft	D 4 with 11 key (DN25÷100), 17 key (DN125÷200)					
Carter	Die-cast aluminium					
Case	Anti-shock plastic material					
Room temperature	Operating -30°C to 50°C, Storage -40°C to 80°C					
Terminal boards	Screw-type for 1,5 to 2,5 mm ² sectionwires					
Compliance	EMC 89/336 directive according to EN 50081-1 for emission and EN 50082-1 for immunity					
	LVD		-			

INSTALLATION

VFA butterfly valves can be installed in any position, ensuring that the actuator is oriented so as to avoid direct exposure of the hot air current coming from pipes. The valve body must be locked between the flanges of the piping by bolts or ties. Leave a 30 cm room in order to allow the disassembling of the actuator from the valve for maintenance operations. Avoid the valve installation in plants which are considered aggressive and/or corrosive for valve materials. Please contact our Sales Support in order to determine which potentially aggressive or polluting substances can be used. We disclaim all responsibility in case of valve failure due to external fortuitous events (fire, earthquakes etc.).

ACCESSORIES

AF24 Linkage kit for MDLx4 (20 Nm) only for DN25÷100

AF25 Linkage kit for MDLx6 (30 Nm) only for DN125÷200

The valve with MDL actuator assembled has the following code: actuator part number (ex. MDL24 + AF24) + MDLAV.

MDAV1 MDA-VFA assembling

MDAV2 MDA-Micro DMDA assembling

The valve with actuator assembled has the following code: actuator part number (ex. MDA22) + MDAV1.

AUXILIARY CIRCUIT

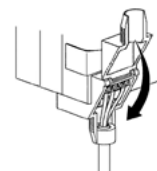
DMDA 2 SPST microswitches (S2A): 1 NO (closes with valve completely open) and 1 NC (opens with valve completely closed) 5(1)A - 24 V~

This circuit is mounted in our factory only, therefore, it cannot be supplied as a spare part.

The products with DMDA micro assembled have the following codes: actuator part number (ex. MDA22) + DMDA + MDAV2.

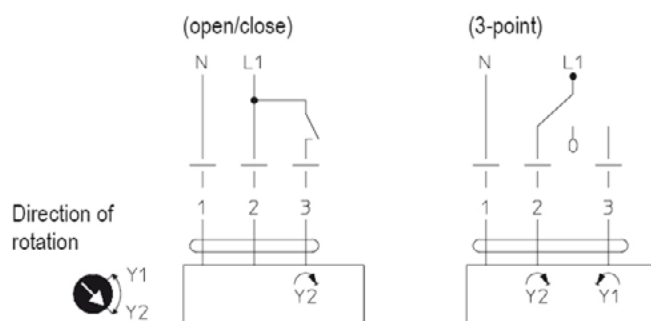
ELECTRIC CONNECTIONS

Unscrew the fixing nut of the conduit and raise the upper part; route the cables into the gasket supplied and make the connections with the terminal boards (see illustration).

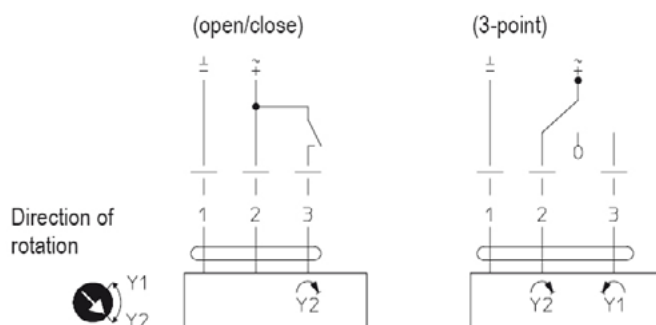


WIRING DIAGRAM

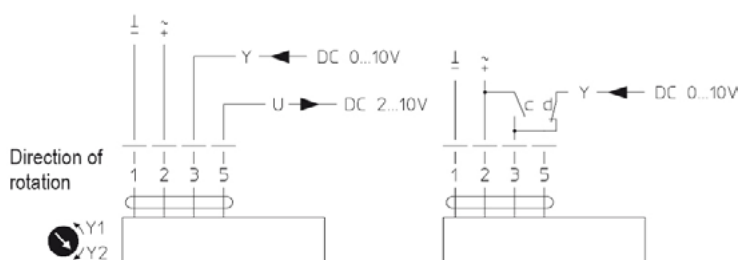
MDA22/24 - 230V - 50/60Hz



MDA42/44 - 24Vac/dc



MDA52/54 - 24Vac/dc (proportional)



CONSUMPTION VALUES

DESCRIPTION	MDA22	MDA24	MDA42	MDA44	MDA52	MDA54
Operating (nominal torque) [W]	2,5	4	2	4,5	4	4,5
Holding [W]	0,4	2	0,2	2	1,25	1,5
Transformer Dimensioning [VA]	6	7	4	7	6	7

MAX. DIFFERENTIAL PRESSURE [kPa]

VALVE	ACTUATOR	Δp
VFA DN 25 ÷ 100	MDA22/42/52 MDL.4	600
VFA DN125	MDA24/44/54 MDL.6	600
VFA DN 150 ÷ 200		300

DN	H1	P1	P2	P3	E	L	Weight VFA (Kg)
25	212	70*	142	95	58	33	1,4
32	212				58	33	1,4
40	218				66	33	1,6
50	224				69	43	2
65	234				81	46	2,6
80	242				100	46	3,2
100	263				109	52	4
125	293	69	166	134	124	56	4,6
150	309				140	56	8,6
200	343				167	60	12,6

