

Model	DN	Kvs (m3/h)
VFA25	25	27,8
VFA32	32	28,5
VFA40	40	58
VFA50	50	107
VFA65	65	201
VFA80	80	336
VFA100	100	576
VFA125	125	840
VFA150	150	1295
VFA200	200	2470

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 9 of 97/23/CE 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 MDLx4 (20Nm) for valve up to DN100 or AF25 for MDLx6 (30Nm) for valves DN125÷200. Please refer to MDL data sheet (MDL DBL021e) 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

Construction	PN16 (PN6 and PN10 flanges are available on request)
Valve body	Nodular iron (EN-JS1030)
Disk	1.4581 (DN25-80) EN-JS1030 (DN100-200)
Butterfly shaft	O-Ring
Seat	EPDM
Max fluid temper.	-10T100 °C
Sealing leakage test	DIN EN 12266-1 Leakage rate A (Tight close-off) (DIN 3230 T3 Leakage rate 1)
Connections	Flanges
Dimensions	look at the table on page 2

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

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



MDA2./4./5. ACTUATORS TECHNICAL CHARACTERISTICS

Model	Torque Nm	Angular stroke	Timing s	Power supply Vac 50 Hz	Protection DIN 40050
MDA22	20	90°	90	100-230	IP54
MDA24	40		150		
MDA42	20		90	24	
MDA44	40		150		
MDA52	20		90		
MDA54	40		150		

Control signal	Floating (MDA22/42/24/44) Proportional (MDA52/54) / 0(2)-10V
Timing	MDA22/42/52 90s - MDA24/44/54 150s
Shaft	D 4 with 11 key (DN25÷100), 17 key (DN125÷200)
Carter	Die-cast aluminium
Case	Anti-shock plastic material
Room temperature	
Operating	-30T50 °C
Storage	-40T80 °C
Terminal boards	Screw-type for 1.5 to 2.5 mm ² section wires
Weight	1 Kg

In compliance with EMC 89/336 directive according to:
- EN 50081-1 for emission - EN 50082-1 for immunity and LVD for MDA (230 V version).

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.

AUXILIARY CIRCUIT

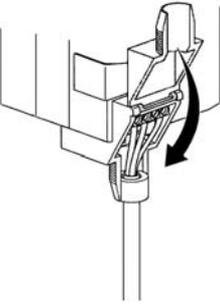
DMDA 2 SPST microswitches (S2A):
 1 NO (closes with valve completely open)
 1 NC (opens with valve completely closed)
 5(1)A - 24 V~

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.

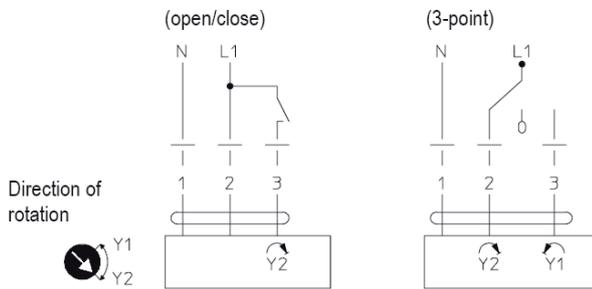
ELECTRIC CONNECTIONS

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).

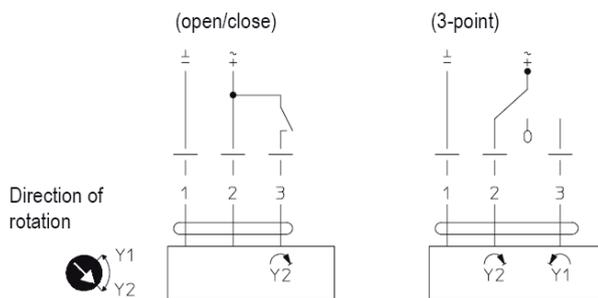


WIRING DIAGRAM

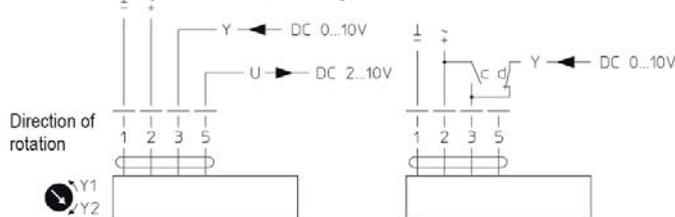
MDA22/24 - 230V - 50/60Hz



MDA42/44 - 24Vac/Vdc



MDA52/44 - 24Vac/Vdc (floating)



CONSUMPTION VALUES

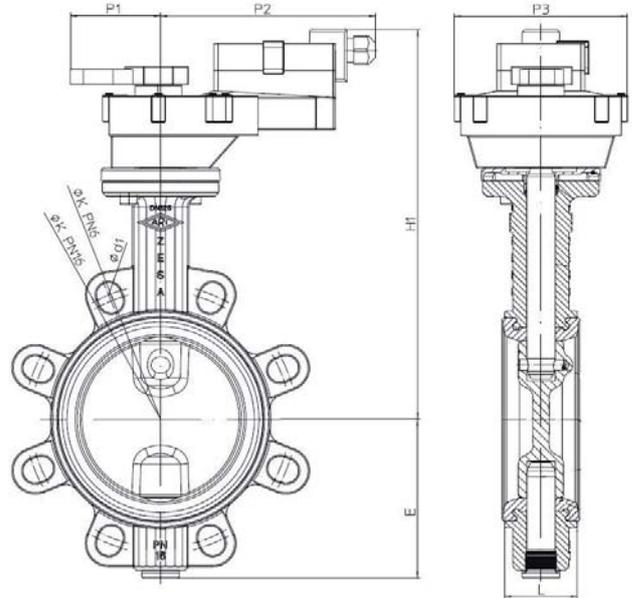
	MDA22	MDA24	MDA42	MDA44	MDA52	MDA54
Operating (nominal torque) W	2,5	4	2	4,5	4	4,5
Holding W	0,4	2	0,2	2	1,25	1,5
Transformer Dimensioning VA	6	7	4	7	6	7

The performances stated in this sheet can be modified without any prior notice due to design improvements

MAX. DIFFERENTIAL PRESSURE (kPa)

Valve	Actuator	Δp
VFA DN 25 ÷ 100	MDA22/42/52 MDLx4	600
VFA DN125	MDA24/44/54	600
VFA DN 150 ÷ 200	MDLx6	300

DIMENSIONS (mm)



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	69	166	134	109	52	4
125	293				124	56	4,6
150	309				140	56	8,6
200	343				167	60	12,6