

MF20 Butterfly Valve Actuator



The MF20 is a robust, reliable rotary actuator for the control of the VF208W 25-100 butterfly valves. These actuators mount to the VF208W series valves without linkage kits and connect using electrical terminal blocks to simplify and reduce installation time.

Features:

- Models for Floating/Proportional and On/Off control
- Latching Manual override
- Direct Hand Lever / position indicator
- No Linkage kits required

Technical Data

Product	MF20-24F	MF20-24M	MF20-24L	MF20-230F
Description	3-Point Floating, 24V	2-10 V Modulating	LON	3-Point Floating, 230V
Torque (nominal)	Min. 20 Nm at nominal voltage			
Motor Voltage	24Vac±20% 50/60 Hz or 24 Vdc±20%			230 VA -60%/+15%, 50/60 Hz
Power Consumption: Operation	2.5 W	2.5 W	3.5 W	3 W
Power Consumption: At Rest	0.2 W	0.4 W	1.25 W	0.4 W
Power Consumption: For wire sizing	5.5 Vac	5 Vac	6 Vac	7 Vac
Electrical Connection	Terminals 4 mm ² (Cable ø 6... 8 mm, three-core)	Terminals 4 mm ² (Cable ø 6... 8 mm, four-core)	Cable 1 m, 6 x 0.75 mm ²	Terminals 4 mm ² (Cable ø 6... 8 mm, three-core)
Control: Signal	Open/Close or 3-Point,	DC 0 ... 10 V, typical input impedance 100 kΩ		Open/Close or 3-Point,
Control: Operating Range	–	DC 2 ... 10 V		–
Position Feedback (Measuring voltage U)	–	DC 2 ... 10 V, max. 1 mA	DC 2 ... 10 V, max. 0.5 mA	–
Position Accuracy	–	±5%		–
Sound power level	Max. 45 dB (A)			
Operating Time	90 s/90°			
EMC	CE according to 89/336/EEC			CE according to 89/336/EEC Low voltage directive CE according to 73/23/EWG
Rated impulse voltage	0.8 kV (to EN 60730-1)			4 kV (to EN 60730-1)
Enclosure	IP 54			
Protection Class	III Extra Low Voltage			II Total Insulated
Max Ambient Temp.	0 to 50°C			

Ordering Information

Voltage	Control	Torque	Part Number	Type Designation	Suitable VF208W Valve Sizes
24V AC/DC	Floating & On/Off	20Nm	MF20-24F	MF20-24F-T54 00	DN25-100
230V AC	Floating & On/Off	20Nm	MF20-230F	MF20-230F-T54 00	DN25-100
24V AC/DC	0(2)-10V Proportional	20Nm	MF20-24M	MF20-24M T54 00	DN25-100
24V AC/DC	LON	20Nm	MF20-24L	MF20-24M 1M54 00	DN25-100

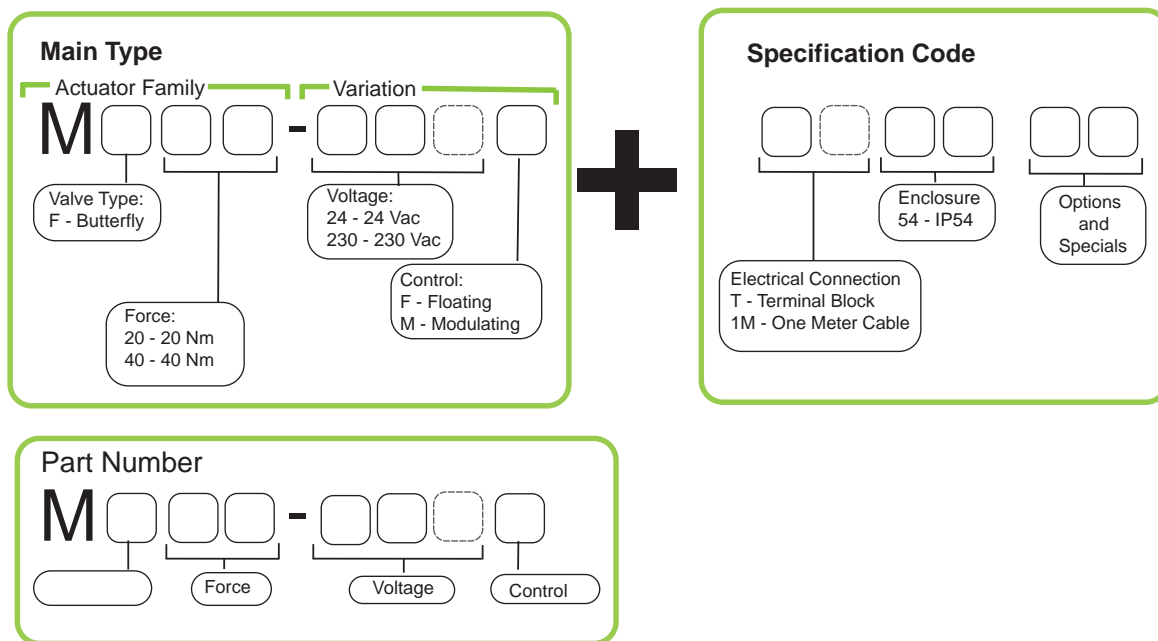
Shaded items are stocked products.

Accessories

Type	Description	Rating	Part Number
MD-S1	1xSPDT auxiliary switch	AC1: 1mA to 3A, 250V (AC3: Max 0.5A)	914-1060-000
MD-S2	2xSPDT auxiliary switch	AC1: 1mA to 3A, 250V (AC3: Max 0.5A)	914-1061-000

Type Designation and Part Number

Type Designation

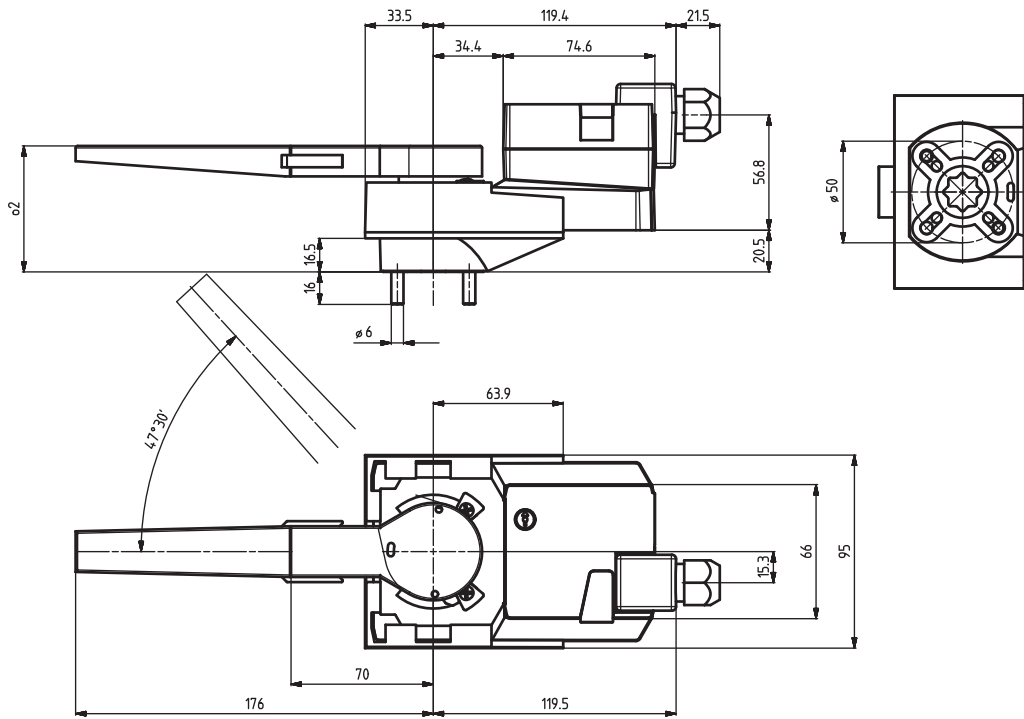


Literature Directory

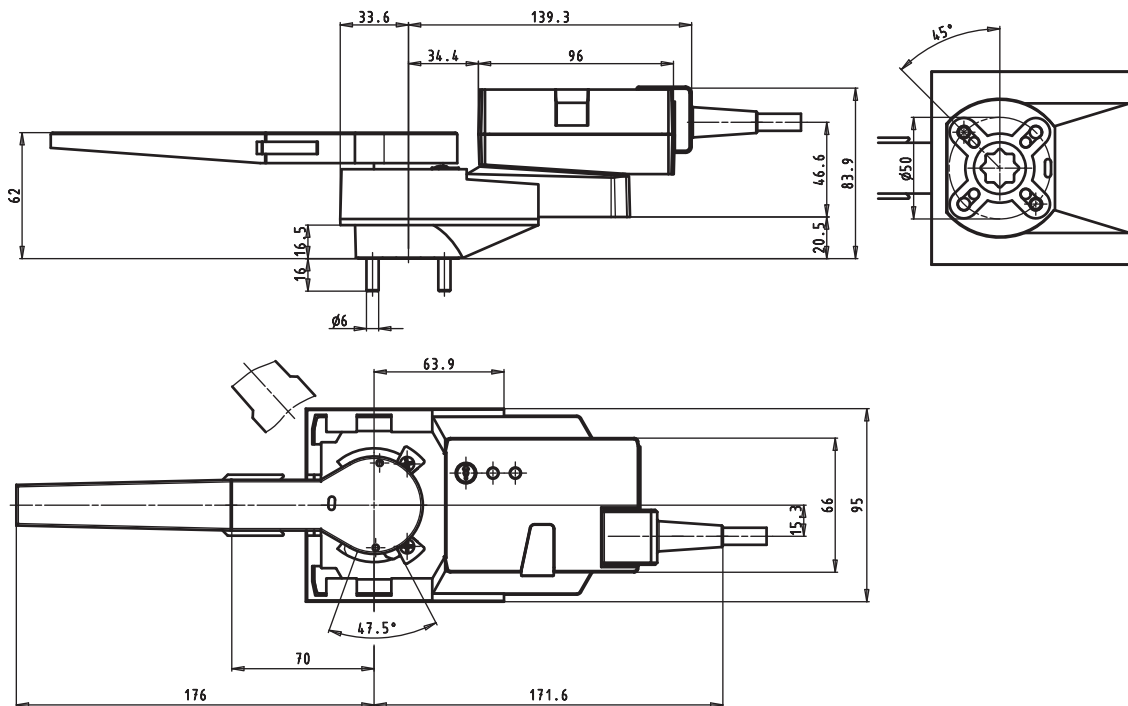
Product	Description	Document Number
VF208W 25-200 DN	DN 25-200 Butterfly valve datasheet	F-27638
VF208W 200-500 DN	DN 200-500 Butterfly valve datasheet	In Development
MF40 Actuator	MF40 Datasheet	F-27640
MF20/MF40	Installation Instruction	OFL-4413-000

Actuator Dimensions

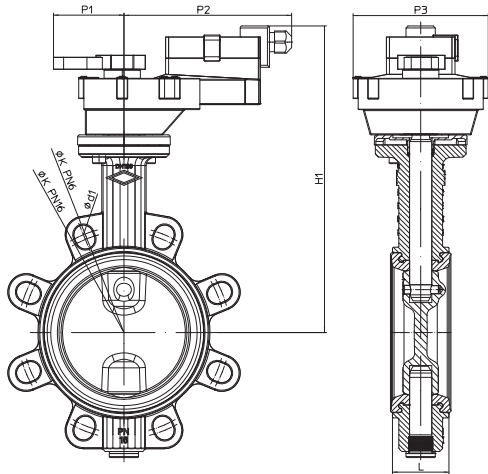
MF20-24F, MF20-24M, and MF20-230F



MF20-24L



Assembly Dimensions



DN	25	32	40	50	65	80	100
H1	212	212	218	224	234	242	263
P1	70						
P2	142*						
P3	95						

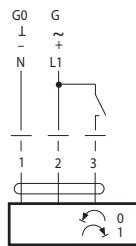
Dimensions in mm.

* MF20-24L - 172mm

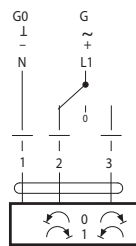
Wiring Diagrams



AC 24 V / DC 24 V

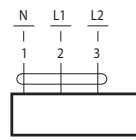
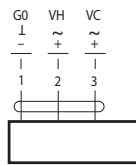


MF20-24F

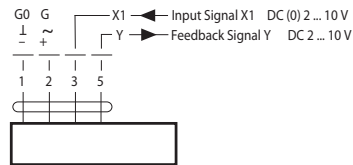


MF20-230F

AC 100 ... 240 V

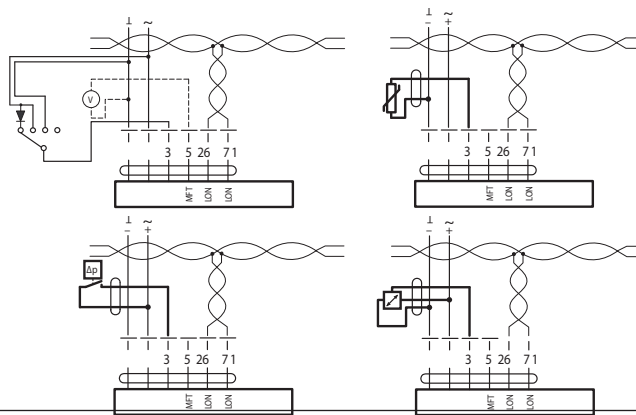


AC 24 V / DC 24 V



MF20-24M

LONWORKS[®] AC 24 V / DC 24 V



MF20-24L