

MPV / M3P - Motorized valve actuators



The motorized valve actuators are designed for applications that need short response time for the valve control. The actuators are equipped with removable cable (1 m) and they are available for 3-point control and 0...10 V control. An adapter between the valve and the actuator is always needed.

Actuators have an indicator light for status indication. MPV models have also a display that can view the current stroke, the control voltage, the operating mode (open/close), and error codes.

The actuators can be installed in any position and they are equipped with protection against unauthorized removal.

Technical specifications

Property	Value
Supply	24 Vac (22...28 V) / 24 Vdc (20...28 V)
Power consumption	< 2.6 VA / 1.4 W
Operating current	
Operation	AC: <100 mA, DC: <60 mA
Stand-by	<10 mA
Stroke	8.5 mm
Actuating force	200 N (160...280 N)
Actuating speed	
MPV	15 s/mm
M3P	30 s/mm
Minimum running time (M3P models)	≥2 s
Cable	
Type	3 x 0.22 m ² , PVC, removable
Colour	White
Length	1 m, other lengths also available
Control signal	
MPV	0...10 Vdc, input impedance 100 kΩ
M3P	2-point or 3-point
Display (only in MPV models)	LCD, 10 x 20 mm
Indicator light	Multicolour LED
Operating conditions	

Property	Value
Temperature	0...50 °C
Storage temperature	-20...70 °C
Protection class	IP54
Dimensions (w x h x d)	65 x 45 x 90 mm
Weight (with cable)	155 g

Wiring



CAUTION: Device wiring and commissioning can only be carried out by qualified professionals. Always make the wirings while the power is switched off.



Important: A safety isolating transformer according to EN 61558-2-6 (for AC supply) or a switching power supply according to EN 61558-2-16 (for DC supply) must always be used.

Wiring MPV models

Wire colour	Description
Red	Control signal.
Black	24 Vac/dc
Blue	0 V

Wiring M3P models


3-point control









Function	Description
Red wire energized.	Actuator piston retracts.
Black wire energized.	Actuator piston extracts.
Red and black wires unenergized.	Actuator piston remains in current position.
Blue wire	0 V

2-point control

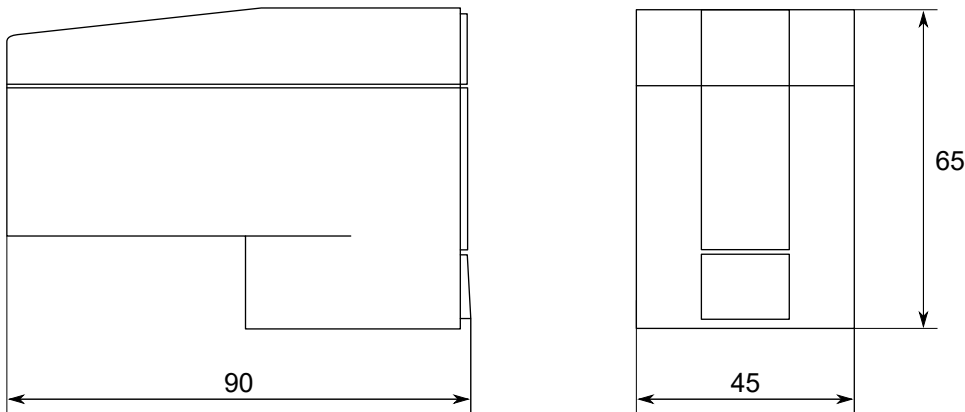
Function	Description
Red wire energized.	Actuator piston retracts until it reaches the end limit.
Red wire unenergized.	Actuator piston extracts until it reaches the end limit.
Black wire	Continuous supply voltage.
Blue wire	0 V

Ordering information

Type	Product number	Description
 MPV-46845-30N00-1S	1210111	Motorized valve actuator, 0...10 V control

Type	Product number	Description
 M3P-46845-20N00-1S	1210120	Motorized valve actuator, 3-point control
 BA-ALL.5.3.01	1220031	Removable cable, 1 m
 BA-ALL.5.3.02	1220032	Removable cable, 2 m
 BA-ALL.5.3.03	1220033	Removable cable, 3 m
 BA-ALL.5.3.05	1220035	Removable cable, 5 m
 BA-ALL.5.3.10	1220036	Removable cable, 10 m
 BA-ALL.5.3.15	1220037	Removable cable, 15 m
 BA-ALL.5.3.20	1220038	Removable cable, 20 m

Dimensions



Supported standards and directives

Standard	Description
2014/30/EU	Electromagnetic Compatibility (EMC).
2014/35/EU	Low Voltage Directive (LVD).
2011/65/EU	Restriction of Hazardous Substances (RoHS2) Directive.
(EU) 2015/863	Commission Delegated Directive, amending Annex II to Directive 2011/65/EU.
EN 60730-1:2011	Automatic electrical controls - Part 1: General requirements.
EN 60730-2-14:1997 + A1:2001 + A11:2005 + A2:2008	Automatic electrical controls - Part 2-14: Particular requirements for electric actuators
EN 50419:2006	Marking of electrical and electronic equipment in accordance with Article 11(2) of Directive 2002/96/EC (WEEE)