

MINI ELECTRICAL ACTUATOR

Two Position (MEA-I)

AFP's MEA-I is a compact and portable electric actuator that works with any AFP rotary valve. The MEA-I automatically detects the number of ports in a two-position valve. It also eliminates the need for multiple actuators as the same device can operate in fast actuation or high torque. The actuator is energy friendly and allows firmware updates via serial communication.

CHARACTERISTICS

- 30% Smaller footprint vs previous model (4.20" x 2.125" x 2.75").
- Intelligent – Detects and adapts to the number of ports in a two-position valve by initialization process. Easy switching from 4 ports to 14 ports with an auto configuration.
- No need for multiple actuator models for the different types of valves: Compatible for MRV and RVP rotary valves.
- Two modes – fast actuation or high torque set by serial command.
- CE approved.
- Compatibility of OEM protocols on request.
- Direct replacement of 2-position electrical actuators in the market.
- MEA utility software for easy operation and development of the actuator.
- Multiple run time information: track the number of boots, configurations, actuations, etc.
- Energy friendly: low standby power for portable applications*.

*on demand.

SERIAL COMMUNICATION FEATURES

- Multiuser
- Compatibility between AFP product family
- Easy to use text command (ASCII)
- Return parameter to confirm command execution

GENERAL SPECIFICATIONS

SPECIFICATION	DESCRIPTION	
8-bit Microcontroller and configuration Memory		
USB 2.0	Full Duplex	9600 Bauds
RS-232	Full Duplex	9600 Bauds
RS-485 (2 wires)	Half Duplex	9600 Bauds
Operating temperature	Fahrenheit (°F) Celsius (°C)	32°F to 140°F 0°C to 60°C
CE Conform, RoHS		

ELECTRICAL SPECIFICATIONS

General application

SPECIFICATION		
Supply voltage input (Transient and Reverse polarity protection)	Typical	24 Volts DC / 1.5 Amp.
Standby power consumption	Typical	480mW

Portable or battery operated application

SPECIFICATION		
Supply voltage input (Transient and Reverse polarity protection)	Typical	16 to 24 Volts DC
Standby power consumption	Typical	24mW

Digital input specifications

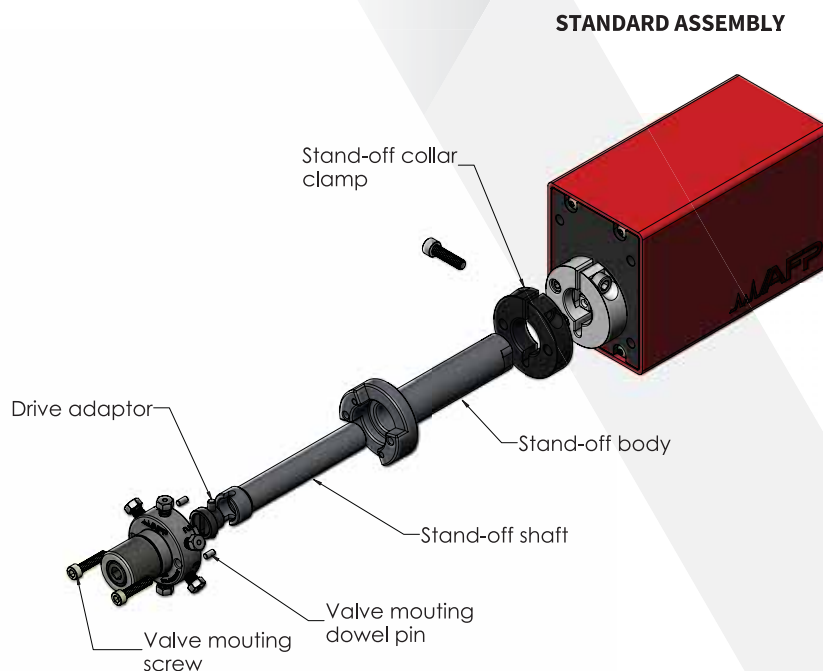
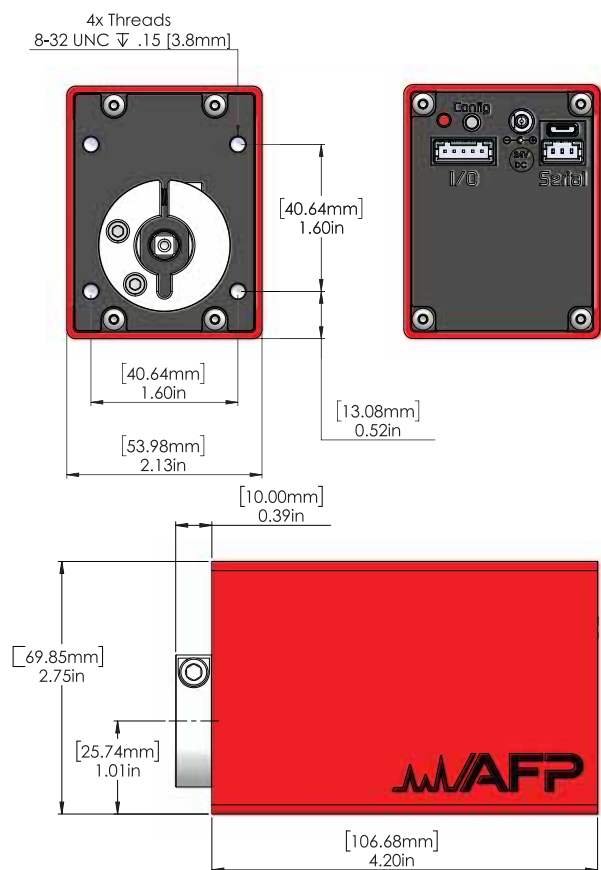
ALL DIGITAL INPUTS	OPTO ISOLATED	
Open collector input	5V / 1.0kΩ = 5 mATypical	
Dry contact (switch to GND)	Internal pull-up	

Digital output specifications

ALL DIGITAL OUTPUTS	OPTO ISOLATED	
Opto isolated output	Internal pull-up 5V / 1.0kΩ = 5 mA	
Output Voltage	TTL level +5 Volts	
Output Current	5 mA	

Mechanical information

DIMENSIONS



PRODUCT DESCRIPTION	AFP SKU	COMPETITION SKU
Rotary Valve, 6-ports, 225°C, Nitronic 60, 400 psi, assembled on an electronic actuator with a 4" standoff	MRV06-16R2-0007-4I	EUD-4C6UWE
Rotary Valve, 6-ports, 350°C, Nitronic 60, 325 psi, assembled on an electronic actuator with a 4" standoff	MRV06-16R3-0001-4I	EUD-4C6UWT
Rotary Valve, 10-ports, 225°C, Nitronic 60, 400 psi, assembled on an electronic actuator with a 4" standoff	MRV10-16R2-0007-4I	EUD-4C10UWE
Rotary Valve, 10-ports, 350°C, Nitronic 60, 325 psi, assembled on an electronic actuator with a 4" standoff	MRV10-16R3-0001-4I	EUD-4C10UWT
Purged Rotary Valve, 6-ports, 225°C, Nitronic 60, 400 psi, assembled on an electronic actuator with a 4" standoff	RVP06-16R2-0001-4I	EUDA-4C6UWEPI
Purged Rotary Valve, 10-ports, 225°C, Nitronic 60, 400 psi, assembled on an electronic actuator with a 4" standoff	RVP10-16R2-0001-4I	EUDA-4C10UWEPI

COMPANY INFORMATION

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ANALYTICAL FLOW PRODUCTS