MOBILTEX

FloPath® PFM1-AC

ADVANCED FLOW MODULATION [FM] PRESSURE CONTROLLER + DATA LOGGER - ENGINEERED FOR EXTREME CONDITIONS

FloPath
a MOBILTEX brand



HIGHLY FLEXIBLE AND COST EFFECTIVE PRV CONTROL WITH DATA LOGGER — WATERPROOF AND SUBMERSIBLE WITH LONG-LIFE BATTERY POWER.

Pressure management and control in water distribution systems is a proven technique for reducing leakage and the frequency of bursts. Normally, a PRV (Pressure Reducing Valve) is set to a fixed outlet pressure to ensure a guaranteed minimum pressure to the critical point in the network during maximum flow conditions.

Pressure management using PRV controllers enables pressure to be optimized with changing demand. Reducing excess pressure during low demand periods lowers background leakage levels & pipe bursts to help extend asset life. The FloPath PFM1-AC is a Full Modulation electronic controller that enables the pressure supplied into a zone to be controlled between two pre-set values ("low"and "high") according to the demand (flow rate) or the time of day. This can achieve immediate water savings and enables the PRV to be controlled reliably and safely.

The data logger stores PRV inlet/outlet pressures and water meter flow in a non-volatile memory organized into configurable data files. Different types of data include Average, Instantaneous, Minimum, Maximum etc. Pressure measurement accuracy is optimized using multi point calibration. Fast sampling pressure data can be used to assess the performance of the PRV and detect the presence of pressure surges.

FEATURES OF FLOPATH PFM1-AC

- Time and/or Flow based operating modes with seasonal variations
- Up to 16 entries each for Time & Flow control table
- Pulse unit failure detection and automatic response
- Summer/Winter time adjustments
- Allows for a main profile plus 3 optional profiles to accommodate weekday/weekend and seasonal conditions.
- Internally powered - typical battery life of > 5 years
- Cellular & Local communication options available - 2G and 4G/5G LTE CAT M1 / NBIoT
- New flexible data logging architecture
- Non-volatile flash memory with data retained for 10 years if power fails



PFM1-AC CONTROL MODES:

- NO CONTROL
- MANUAL CONTROL
- AUTO-TIME CONTROL
- AUTO- FLOW CONTROL
- AUTO-TIME & FLOW CONTROL
- AUTO- FLOW WITH TIME OVERRIDE CONTROL
- AUTO- FLOW/TIME CONTROL BACKUP
- PRESSURE OVERRIDE

PFM1-AC SPECIFICATIONS

CONTROL INPUTS:

Two Pressure Inputs: (PRV Inlet & outlet pressure)	• Internal pressure transducers: 20 Bar std • External transducer optional • Pressure connection: Quick release push fit
One Flow Input:	• Pulse rate up to 80 pulses per second • Compatible with all major meter manufacturers that are equipped with a digital pulse output.
PRV Pilot Actuator	Brass actuator can adapt to most major PRV manufacturers with an M8, M10 or 3/8" sized PRV pilot adjusting screw.

LOGGING | COMMUNICATIONS | DATA:

Memory:	2 M Byte organized into 8 separate data files of 60000 reading each. Block or Cyclic – Start/Stop
Memory Type:	Flash non-volatile memory. Data is retained for 10 years if battery power fails.
Sampling Rate:	Configurable - 1 second to 15 minutes
Logging Rate:	Configurable - 1 min - 24 hrs
Logged Data Types:	Average, Instantaneous, Minimum, Maximum
Flow Logging Modes:	Count, Event, Pulse Interval Timing (MNF)
Communications:	Local - IrDA - 115,200 Baud Rate Cellular - 2G and 4G/5G LTE CAT M1 / NBIoT

PHYSICAL | POWER | ENVIRONMENTAL:

Data Logger Dimensions:	210mm L x 130mm W x 80mm D (Polycarbonate)
Solenoid Box Dimensions:	120mm L x 85mm W x 60mm D (Stainless Steel powder coated, potted)
Weight:	Control Box - 1.6 kg | Solenoid Box - 1.5 kg
Battery:	>5 years depending on model/settings
Operating Temperature:	-20 to 70 °C [-5 to 160 °F]
Ingress Rating:	IP68 Submersible

ORDERING MATRIX:

MODEL PFM1-AC : WITH UP TO 3 PRESSURE / 2 FLOW INPUTS

PARAMETER	OPTIONS	CODE
Enclosure Type	Poly. Logger Box w/ SS Solenoid Box	PFM1-AC
Pressure Sensor [Select one]	2x Internal	PP
	2x External (2m/6ft cable length)	PxPx
	2x Internal + 1x External	PPPx
	3x External	PxPxPx
Flow [all models]	2x bi-directional pluse input	FF
Cellular Connectivity [Select one]	4G LTE	LTE
	LTE-M / CAT-M1	M1
	NBIoT	NB
	None	

EXAMPLES :

PRV Controller, 2x External Pressure Transducers, 4G LTE Comms = PFM1-AC-PxPxFF-LTE

OPTIONAL COMPONENTS	PART #
PRV Pilot Actuator	GA-ACT1
Flow Input Cable	GA1-PFL
PRV Installation Kit	GA-HYD2
Coiled Pressure Hoses	CHP
Female Quick Release	QFF
Programming Cable	COM1-25

Authorized Reseller

MOBILTEX-FloPath-PFM1-AC-BRO-0225



MORE QUESTIONS?
WE'VE GOT ANSWERS!

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