

ControlWave® XFC Explosion-proof Flow Computer Integrates Automation and Measurement



ControlWave XFC provides automation and flow computing in a compact, transmitter-style housing that is quickly installed and started-up.

Features

For users who expect more from their flow computers than simply chart replacement functionality, ControlWave XFC comes through with synergy of automation and measurement. Now, you can install a single instrument without the hassles you face when you try to use separate equipment for automation and measurement operations at remote sites.

The ControlWave XFC package features the following:

- ControlWave family platform that is pre-programmed to meet API 21.1 requirements for a two-run metering and regulating station
- High performance, smart multivariable transducer assembly is a separate component that can be removed and replaced independently of the electronics platform
- Optional, pre-installed RTD assembly
- Extremely low power consumption keeps power systems costs under control
- Open communication with 3 serial ports standard—includes modem/radio control and RS 485 BSAP/Modbus for external, single- or multi-variable transmitters such as the Bristol Babcock 3808 MVT
- I/O complements with up to 3 AI, 1 AO, 2 DI, 2 High-speed Counter Inputs and 4 DO interface with external, process equipment

Unlike a flow computer, ControlWave XFC employs a hardware/firmware platform that readily handles automation tasks:

- Ample processing horsepower and memory subsystem means that users need not worry about running out of resources for demanding applications.
- Multitasking kernel securely manages multiple automation, communication and measurement operations.
- For users wishing to write their own programs, or modify ours, we offer a complete, IEC 61131-3 programming environment and full support from Bristol Babcock is available, every step of the way.

After more than 90 years in process control and 115 years in measurement, Bristol Babcock remains committed to delivering superior life cycle economics to automation and measurement systems, today and tomorrow. We are proud to offer ControlWave XFC, a product that stands up to the tradition.

ControlWave XFC at a Glance

Base Configuration:

- Integral electronics assembly with the following major components:
 - 32-bit, ARM9 CPU platform
 - Choice of 3 I/O selections (see next column)
 - RS 232 Serial Local Port
 - RS 232 Serial Network Port with Full Modem Control—Features DTR control of sleep modes in external radios to minimize system power consumption
 - Third serial port, RS 485, normally used to interface with external transmitters
 - Dc/dc section accepts nominal 6 Vdc, 12 Vdc or 24 Vdc input power
 - Two-line LCD
 - Dedicated interface for smart, smart sensor assembly
 - Three-wire RTD interface
- Pre-loaded application program for a 2-meter run M&R station
- Explosion-proof, transmitter-style enclosure
- Hazardous area approval: Class I, Division 1 Explosion-proof and Class I, Division 2 Non-incendive

Selection Options:

- I/O selections:
 - No I/O
 - 2 DI, 2 High-speed counter inputs, 4 DO
 - 2 DI, 2 High-speed counter inputs, 4 DO plus 3 AI, 1 AO
- Bristol Babcock MVT smart sensor assembly, which provides measurement of either gauge pressure or differential pressure plus static pressure – available in the following ranges:
 - 300 in H₂O pressure
 - 25 psi pressure
 - 100 psi pressure
 - 300 psi pressure
 - 1000 psi pressure
 - 2000 psi pressure
 - 100" DP / 2000 psig pressure
 - 150" DP / 500 psig pressure
 - 150" DP / 1000 psig pressure
 - 150" DP / 2000 psig pressure
 - 300" DP / 1000 psig pressure
 - 300" DP / 2000 psig pressure
 - 300" DP / 4000 psig pressure
 - 25 psi DP / 2000 psig pressure
 - 25 psi DP / 4000 psig pressure
- Wetted parts material, 316 Stainless Steel or Hastelloy C
- With or without Manifold Adapters



For explosion-proof installations, Bristol Babcock's 3808 MVT is a perfect complement to ControlWave XFC. The 3808 MVT is a multivariable transmitter, which can be used for multiple-run stations or monitoring of levels and pressures