

QUANTUM FS 190

Excess Flow Shut-off Valve



VERIFLO

technological

leadership

by design

ISO 9001 Certified

Veriflo's FS 190 "FloSentry" is a non-attitude sensitive, excess flow shut-off valve designed to operate with a wide range of inlet pressures. The capability of operating from 10 to 3500 psig allows it to be used either between a high pressure source at the inlet to the pressure regulator, or in the low pressure delivery line to a process. In both applications, this control valve will automatically shut off the delivery of gas if the flow exceeds a preset limit.

The functional components of the FloSentry are incorporated within the body style of a 1/4 inch Quantum valve. An actuating knob has been designed to manually operate the valve and clearly indicate the relative operating position — either "Open (Reset)" or "Auto (Shut Off)." A pneumatic actuator may be substituted for the knob, which makes it possible to reset the valve by sending a pressure signal from a remote source.

The FloSentry is offered with six different pressure/flow limits: A,B,C,D,E, and F (see flow curve). The nominal differential pressure created at the flow limit is 5 psig for limit values A,B,C, and D. For limit values E and F, the differential pressure is 12 psig. The differential pressure that is created is not affected by mounting orientation (non-attitude- sensitive).



Parker
Instrumentation

► materials of construction

Wetted

Body "VeriClean," Veriflo's custom high purity type 316L Stainless Steel
Compression member 316L Stainless Steel
Seat PCTFE (formerly Kel-F81®)
Diaphragm Elgiloy® or equivalent
Spring Hastelloy C-22®
Poppet 316L Stainless Steel
Orifice 316L Stainless Steel

Non-wetted

Knob Anodized Aluminum
Stem 416 stainless steel (lubricated)
Cap 316L stainless steel

► operating conditions

Supply Pressure 10 psig to 3,500 psig
(.7 barg to 241 barg)
Differential Pressure 5 or 12 psig
(.3 barg to .8 barg)
Flow Limit Settings 6 available
Temperature -10 F° to 150 °F
(-23° C to 66° C)

► functional performance

Design Leak Rate:
Outboard 2×10^{-9} cc/sec. He
Inboard 2×10^{-10} cc/sec. He

► standard configurations

1/4" NPT female, 1/4" face seals or 1/4 tube stubs

► internal volume

1.86 cc (including face seal fittings)

► surface finishes

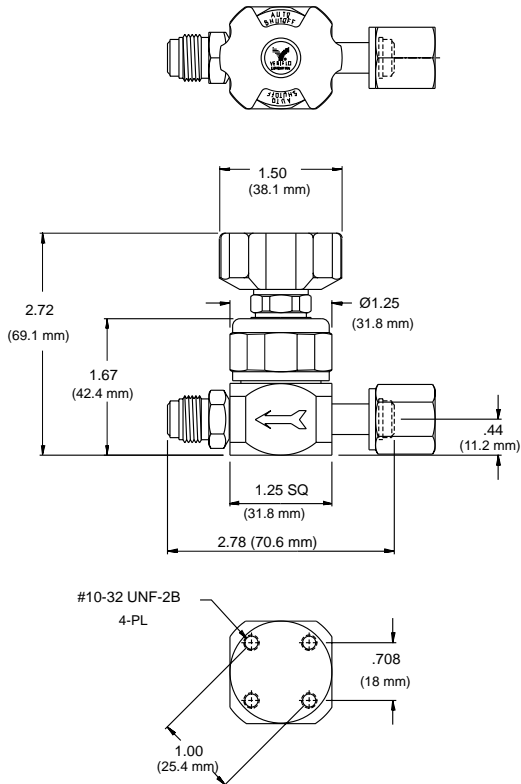
Standard Ra 15-20 micro in
(.38 to .5 micrometer) or less
Optional Ra 10 micro in
(.25 micrometer) or less

► approximate weight

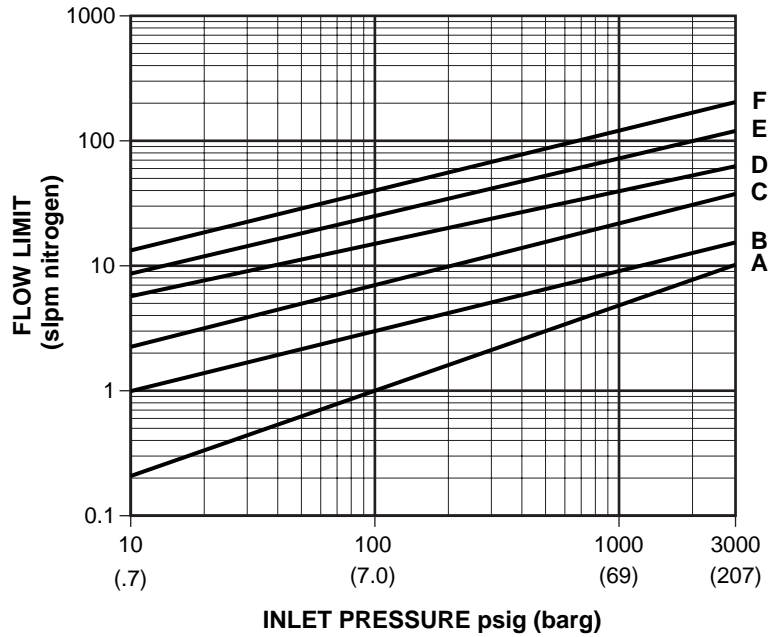
12.5 oz. (.32 kg)

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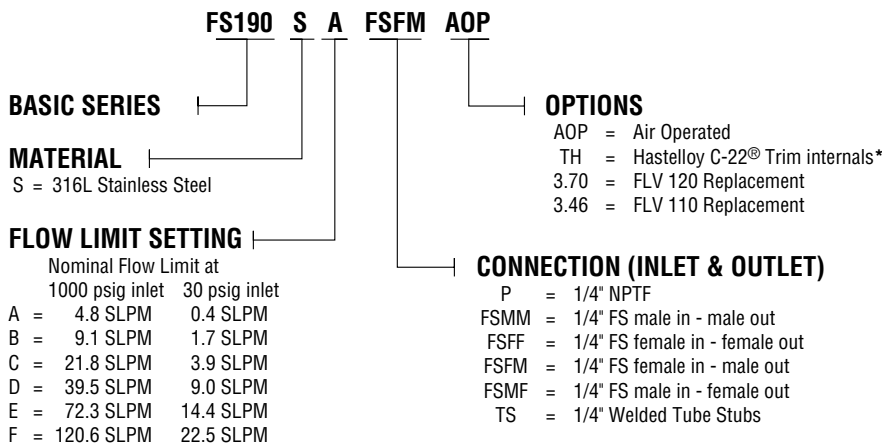
Dimensional Drawings



Flow Curve



Ordering Information



* Includes: Compression member, poppet, spring and orifice

Elgiloy® is a registered trademark of Elgiloy Company.
 Hastelloy C-22® is a registered trademark of Haynes International, Inc.
 Kel-F81® is a registered trademark of 3M Company.

Parker Hannifin Corporation

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