

VF SERIES FLOW SWITCH INSTALLATION AND MAINTENANCE INSTRUCTIONS

Please read all instructional literature carefully and thoroughly before starting. Refer to the listing of Recommended Practices and Liabilities. For functional safety applications please refer to the safety manual which can be downloaded from www.precisionensors.com

GENERAL:

THESE DEVICES SHALL BE USED WITHIN THEIR RATINGS.



BEFORE INSTALLING, CHECK THE SWITCH COMPATIBILITY TO THE PROCESS MEDIA IN CONTACT WITH THE WETTED PARTS. THE VF SERIES MATERIALS ARE LISTED ON THE APPLICABLE PRODUCT DRAWING.

PROOF PRESSURE: CHECK THE PROOF PRESSURE RATING ON THE APPLICABLE PRODUCT DRAWING. THE VF SERIES SWITCHES HAVE INDIVIDUALLY SPECIFIED PROOF PRESSURES AS LISTED ON THE APPLICATION SPECIFIC DRAWING. PROOF PRESSURE IS DEFINED AS THE MAXIMUM PRESSURE TO WHICH THE SWITCH MAY BE SUBJECTED WHICH CAUSES NO PERMANENT DAMAGE.

MAINTENANCE: THE VF SWITCHES HAVE NO FIELD REPLACEABLE PARTS. FACTORY WARRANTY SERVICE IS AVAILABLE.

ELECTRICAL: BEFORE INSTALLATION, DETERMINE THE SWITCHING CURRENT AND VOLTAGE. LOADS IN EXCESS OF THE RATINGS MAY DAMAGE THE INTERNAL SWITCH CONTACTS.

OUTPUT: THE VF SERIES SWITCHES HAVE INDIVIDUALLY SPECIFIED CONTACT ARRANGEMENTS AS LISTED ON THE PRODUCT DRAWING AND MARKED ON THE PRODUCT.

INSTALLATION:



DISCONNECT PRESSURE AND UNPOWER ELECTRICAL CIRCUITS PRIOR TO INSTALLATION.

MOUNTING: MOUNT UNIT WHERE SHOCK, VIBRATION AND TEMPERATURE VARIATIONS ARE MINIMIZED. THE MAXIMUM SERVICE TEMPERATURE LIMITS ARE AS LISTED ON THE APPLICABLE PRODUCT DRAWING, MINIMUM SERVICE TEMPERATURE LIMIT OF 0°C OR AS PER THE MEDIA SERVICE TEMPERATURE.

THESE DEVICES SHALL BE INSTALLED IN AN ENVIRONMENT OF NOT MORE THAN POLLUTION DEGREE 2.

MOUNT USING THE HEX WRENCH FLATS ON THE PROCESS FITTING. USE THE HEX ADJACENT TO THE FITTING BEING INSTALLED.

WHEN MOUNTING THE UNIT OBSERVE THE PROPER INLET AND OUTLET ORIENTATIONS TO MEDIA CONNECTIONS AS TO GRAVITY WHEN APPLICABLE.

The VF series pressure switches are sold with various types of media connections. The media connection arrangement details are as given on the applicable envelope/installation drawing.

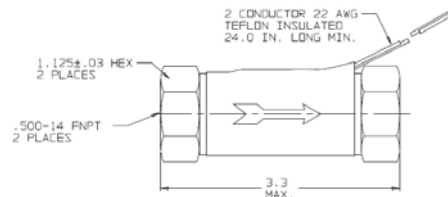
Unless otherwise specified, gaskets and or other seals are not provided by Precision Sensors and shall be used per the requirements of the system into which the device is being installed.

Precision Sensors recommends the use of industry standard and pressure fitting manufacturer recommended tightening torques.

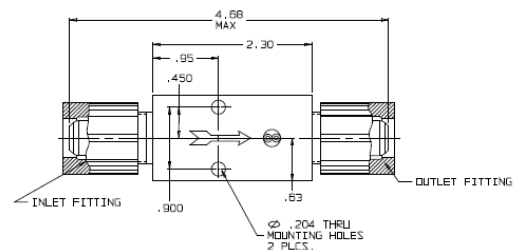
TYPICAL DIMENSIONS:

(Dimensions for individual parts are available on the application specific envelope drawing)

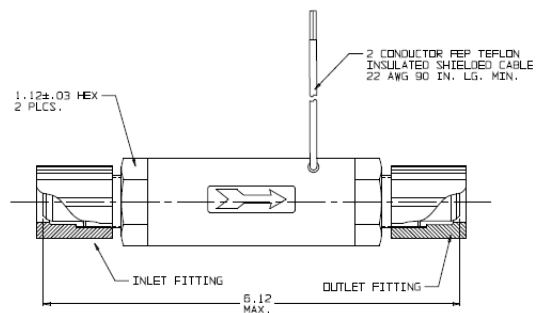
V12F TYPES:



V8F LIQUID TYPES:

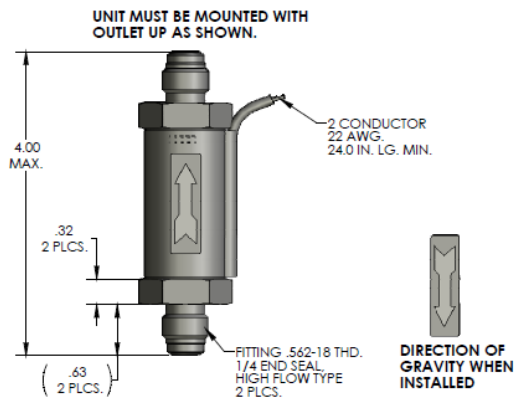


V13F LIQUID TYPES



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V8F GAS TYPES:



ELECTRICAL WIRING:

The suitability of the terminals for use as field wiring connections shall be determined in the end-use application.

FREE LEAD WIRE TYPES:

The unit is supplied with wire leads as indicated on the applicable product drawing. The end-user may install crimp type connectors, use terminal blocks or solder the wires as required by the installation.

INTERMATING CONNECTOR TYPES:

The unit is supplied with a pre-installed connector per the envelope/installation drawing. The end-user shall install the mating connector per the manufacturer requirements.

VERIFICATION:



PRECISION SENSORS RECOMMENDS THAT AFTER INSTALLATION THE OPERATION OF THE UNIT BE VERIFIED.

The pressure connection and electrical connections shall be verified via test to ensure the connections and installations are correct.

Periodic inspection of the unit is recommended to ensure continued operation. Inspection intervals shall be determined by the used based on the system requirements. The unit has no internally serviceable parts. Refer to the VF series safety manual for further information.

RECOMMENDED PRACTICES AND WARNINGS:

Precision Sensors recommends careful consideration of the following factors when specifying and installing pressure switches:

- To avoid damaging unit, proof pressure and maximum temperature of 80°C based on ambient temperature of 55°C. Minimum service temperature of 0°C. Operation of the unit up to maximum pressure or temperature is acceptable on a limited basis (e.g., start-up, testing) but continuous operation must be restricted to the designated adjustable range. Excessive cycling at maximum pressure or temperature limits could reduce switch life.
- Install unit where shock, vibration and ambient temperature fluctuations will not damage unit or affect operation.
- Unit must not be altered or modified after shipment. Consult Precision Sensors if modification is necessary.
- A back-up unit may be necessary for applications where damage to a primary unit could endanger life, limb or property. A high or low limit switch is necessary for applications where a dangerous runaway condition could result. Consult the VF series safety manual for further information
- Monitor operation to observe warning signs of possible damage to unit. Check unit immediately.
- Preventative maintenance and periodic proof testing is necessary for critical applications where damage could endanger property or personnel. Consult the VF series safety manual for further information.
- Electrical ratings stated in literature and on nameplate must not be exceeded. Wire unit according to local and national electrical codes.
- Do not mount unit in ambient temperatures exceeding published limits.

LIMITATION OF SELLER'S LIABILITY:

Seller's liability to Buyer for any loss or claim, including liability incurred in connection with (i) breach of any warranty whatsoever, expressed or implied, (ii) a breach of contract, (ii) a negligent act or acts (or negligent failure to act) committed by Seller, or (iv) an act for which strict liability will be inputted to seller, is limited to the "limited warranty" of repair and /or replacement as so stated in our warranty of product. In no event shall the Seller be liable for any special, indirect, consequential or other damages of a like general nature, including, without limitation, loss of profits or production, or loss or expenses of any nature incurred by the buyer or any third party.