

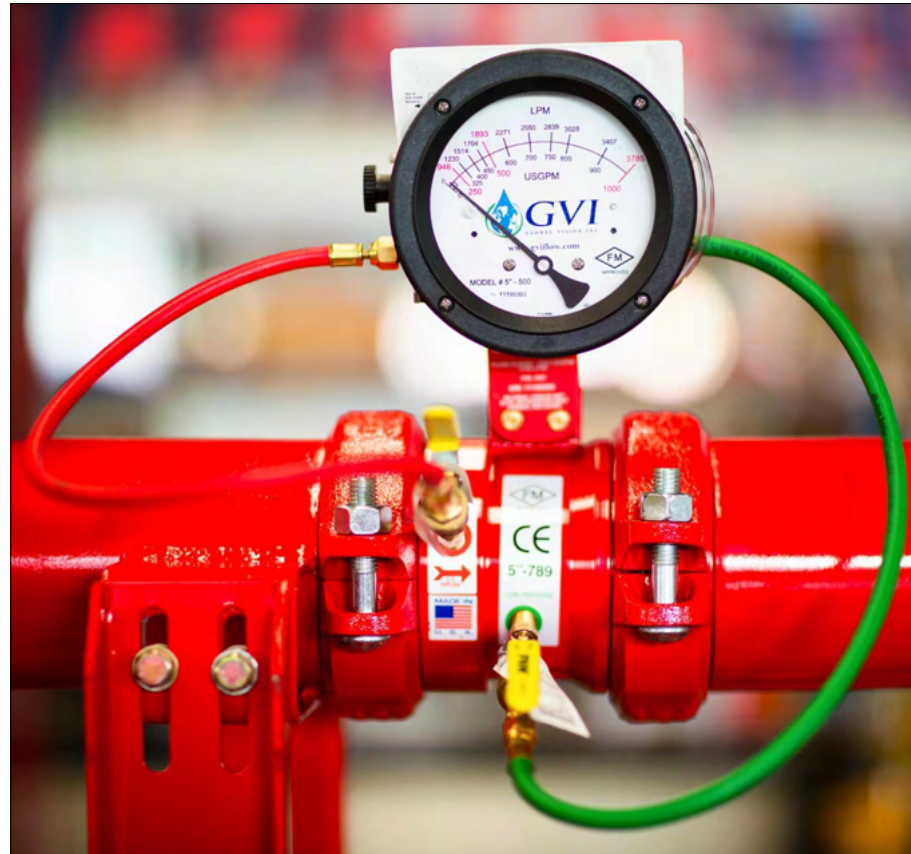


**GVI**

GLOBAL VISION INC

# GVI FIRE PUMP TEST METERS

THE INDUSTRY LEADER IN FLOW METERS



GLOBAL VISION INC 8730 JEFFERSON HIGHWAY  
OSSEO, MINNESOTA 55369 USA TEL: 763-391-0990 FAX: 763-391-7668  
WWW.GVIFLOW.COM INFO@GVIFLOW.COM



# WHY CHOOSE GVI?



- FM APPROVED FLOW METERS
- PATENTED ACCURACY OF 0.5%
- FRICTION LOSS LESS THAN 1 PSI
- FULL 5 YEAR WARRANTY
- FM APPROVED DIGITAL AND GLYCERIN GAUGES
- SUBSTANTIAL INVENTORY FOR QUICK SHIPPING

WITH CONTINUOUS IMPROVEMENTS AND CUTTING EDGE TECHNOLOGY, GVI HAS JUST RELEASED OUR MOST ACCURATE FLOW METER EVER.

THIS IS WHY GVI IS THE MOST REQUESTED AND MOST SPECIFIED FIRE METER IN THE WORLD.

THE GVI GAUGE IS USED IN MORE FIRE TRAINING CENTERS WORLDWIDE THAN ALL FLOW TEST METER COMPETITORS COMBINED.

AFTER USING GVI FLOW METER FOR THE FIRST TIME, YOU WILL UNDERSTAND WHY WE ARE NUMBER 1.



ACCUFLOW VENTURI

PATENT

#D764,630S



CUSTOMIZED AND SPECIAL PROJECTS

# FM APPROVED GLYCERIN GAUGE



ADDING GLYCERIN REDUCES THE HARMONIC VIBRATIONS THAT TRANSMIT TO THE NEEDLE DURING A FLOW TEST.

THESE VIBRATIONS CAN MAKE IT DIFFICULT TO READ THE NEEDLE, AND ALSO CREATES STRESS ON THE INTERNAL COMPONENTS AND GEARS.

## THE GVI GLYCERIN METER DELIVERS:

- SUPERIOR ACCURACY
- CONSISTENT NO BOUNCE READINGS
- LESS INTERNAL DAMAGE / STRESS
- LONGER LIFESPAN
- GREATER RELIABILITY

NON-TOXIC, NON-HAZARDOUS  
WORLDWIDE SHIPPING AVAILABLE



**YOU'VE NEVER RUN A PUMP TEST LIKE THIS**



# DIGITAL 4-20MA TRANSMITTER



THE FIRE PUMP FLOW TEST HAS NEVER BEEN EASIER. THE NEW FM APPROVED DIGITAL GAUGE FROM GVI ALLOWS USERS TO EASILY READ THE DISPLAY.

- ◆ TEMP: 32F - 140F
- ◆ POWER: 12-32 VDC
- ◆ 2 WIRE 4-20 MA
- ◆ BACKLIT DISPLAY
- ◆ REVERSE POLARITY PROTECTION
- ◆ OPTIONAL BATTERY PACK AVAILABLE



TRANSMITTING TO A COMPATIBLE CONTROLLER WILL ALSO ALLOW OPTIONS FOR CAPTURING FLOW CURVE AND ADDITIONAL DATA.



## CALIBRATION:

THE UNIT IS FACTORY CALIBRATED AND HAS NO USER ADJUSTMENTS FOR CALIBRATION. THE ASSEMBLY USES A MICROPROCESSOR TO PERFORM AN 11 POINT SQUARE ROOT LINEARIZATION ALGORITHM.

DISPLAY UNITS IN: GPM / LPM / M3H

# PRODUCTION

GVI PRODUCES ALL VENTURIS FROM DOMESTIC U.S. THICK WALL TUBE. THIS HEAVY DUTY STEEL ENSURES OUR VENTURI WILL BE AROUND YEARS LONGER THAN THE THINNER, LIGHTWEIGHT ALTERNATIVES.



## CNC MACHINES

WITH 3 CNC LATHES & A NEW SWISS MACHINE AT GVI, LEAD TIMES ARE IN DAYS, NOT WEEKS OR MONTHS, AND QUALITY CONTROL IS GUARANTEED.



## ROBOTIC WELDING

GVI HAS ADDED ROBOTIC WELDERS TO OUR PRODUCTION LINE. NOT ONLY DOES THIS DECREASE LEAD TIMES, IT ALSO ENSURES FLANGED UNITS HAVE THE PERFECT WELD EVERY TIME.



# TESTING



**WITH TOLERANCES OF .005 THE RESULTS ARE A PERFECT VENTURI EVERY TIME**



**AFTER MACHINING, EVERY VENTURI IS INSPECTED WITH ISO CERTIFIED TEST EQUIPMENT**



## **NIST METER TESTING**

**EVERY GVI GAUGE UNDERGOES ADVANCED COMPUTERIZED TESTING BEFORE LEAVING THE FACTORY. THESE TESTS INCLUDE LEAKAGE, CALIBRATION, AND ACCURACY TESTS.**

**UPON SUCCESSFUL TESTING THE GAUGE IS ISSUED AN NIST CERTIFICATE TIED SPECIFICALLY TO THE SERIAL NUMBER ON THE DIAL FACE.**

**THE CERTIFICATION IS STORED IN A PLASTIC POUCH CONNECTED TO THE GAUGE. THIS POUCH ALSO ILLUSTRATES THE TYPICAL INSTALLATION AND THE OPERATING INSTRUCTIONS FOR THE FIRE PUMP FLOW TEST.**

**CONTACT YOUR GVI REP FOR DUPLICATE SHEETS OR UPDATED CERTIFICATIONS.**



Line Size	Pump GPM	Meter Range Min. & Max. GPM	Meter Range Min. & Max. LPM	Model Number Grooved	Model Number Butt Weld	Model Number 150# Flanged	Model Number <Threaded> *300# FLANGED*
**1-1/4"	25	12.5 – 50	47 - 189	* 1.25"-25-G	1.25"-25-B	* 1.25"-25-F	1.25"-25-T
**2"	50	25 – 100	95 - 379	* 2"-50-G	2"-50-B	* 2"-50-F	2"-50-T
**2-1/2"	100	50 - 200	189 - 757	2.5"-100-G	2.5"-100-B	2.5"-100-F	*2.5"-100-F3
3"	150	75 – 300	284 - 1136	3"-150-G	3"-150-B	3"-150-F	*3"-150-F3
3"	200	100 – 400	379 - 1514	3"-200-G	3"-200-B	3"-200-F	*3"-150-F3
4"	250	125 – 500	473 - 1893	4"-250-G	4"-250-B	4"-250-F	*4"-250-F3
4"	300	150 – 600	568 - 2271	4"-300-G	4"-300-B	4"-300-F	*4"-300-F3
4"	400	200 – 800	757 - 3028	4"-400-G	4"-400-B	4"-400-F	*4"-400-F3
4"	450	225 – 900	852 - 3407	4"-450-G	4"-450-B	4"-450-F	*4"-450-F3
5"	450	225 – 900	852 - 3407	5"-450-G	5"-450-B	5"-450-F	*5"-450-F3
5"	500	250 – 1000	946 - 3785	5"-500-G	5"-500-B	5"-500-F	*5"-500-F3
5"	750	375 – 1500	1420 - 5678	5"-750-G	5"-750-B	5"-750-F	*5"-750-F3
6"	500	250 – 1000	946 - 3785	6"-500-G	6"-500-B	6"-500-F	6"-500-F3
6"	750	375 – 1500	1420 - 5678	6"-750-G	6"-750-B	6"-750-F	6"-750-F3
6"	1000	500 – 2000	1893 - 7570	6"-1000-G	6"-1000-B	6"-1000-F	6"-1000-F3
6"	1250	625- 2500	2366 - 9462	6"-1250-G	6"-1250-B	6"-1250-F	6"-1250-F3



# STANDARD MODEL LIST



Line Size	Pump GPM	Meter Range Min. & Max. GPM	Meter Range Min. & Max. LPM	Model Number Grooved	Model Number Butt Weld	Model Number Flanged
8"	1000	500 – 2000	1893 - 7570	8"-1000-G	8"-1000-B	8"-1000-F
8"	1250	625 – 2500	2366 - 9462	8"-1250-G	8"-1250-B	8"-1250-F
8"	1500	750 – 3000	2839 - 11356	8"-1500-G	8"-1500-B	8"-1500-F
8"	2000	1000 – 4000	3785 - 15142	8"-2000-G	8"-2000-B	8"-2000-F
8"	2500	1250 – 5000	4731 - 18925	8"-2500-G	8"-2500-B	8"-2500-F
8"	3000	1500 – 6000	5678 - 22712	8"-3000-G	8"-3000-B	8"-3000-F
10"	1500	750 – 3000	2839 - 11356	10"-1500-G	10"-1500-B	10"-1500-F
10"	2000	1000 – 4000	3785 - 15142	10"-2000-G	10"-2000-B	10"-2000-F
10"	2500	1250 – 5000	4731 - 18925	10"-2500-G	10"-2500-B	10"-2500-F
10"	3000	1500 – 6000	5678 - 22712	10"-3000-G	10"-3000-B	10"-3000-F
10"	3500	1750 – 7000	6624 - 26495	10"-3500-G	10"-3500-B	10"-3500-F
10"	4000	2000 – 8000	7570 - 30283	10"-4000-G	10"-4000-B	10"-4000-F
10"	4500	2250 – 9000	8518 - 34068	10"-4500-G	10"-4500-B	10"-4500-F
12"	2500	1250 – 5000	4731 - 18925	* 12"-2500-G	* 12"-2500-B	* 12"-2500-F
12"	3000	1500 – 6000	5678 - 22712	* 12"-3000-G	* 12"-3000-B	* 12"-3000-F
12"	3500	1750 – 7000	6624 - 26495	* 12"-3500-G	* 12"-3500-B	* 12"-3500-F
12"	4000	2000 – 8000	7570 - 30283	* 12"-4000-G	* 12"-4000-B	* 12"-4000-F
12"	4500	2250 – 9000	8518 - 34068	* 12"-4500-G	* 12"-4500-B	* 12"-4500-F
12"	5000	2500 - 10000	9464 - 37854	12"-5000-G	12"-5000-B	12"-5000-F



**1026  
Carbon Steel**

**316 stainless**

**Duplex S.S.**

**Super Duplex**

**Monel**

**NiAlumBrz**

**90-10 Cu-Ni**

**Aluminum**

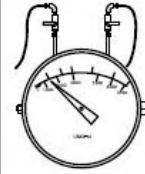
**Brass**

**Epoxy**

**CONSTRUCTION & SPECIFICATIONS**

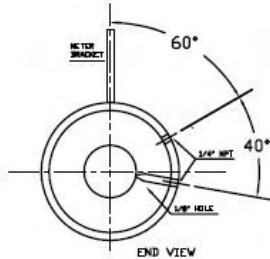
MATERIALS: 1026 MACHINED CARBON STEEL  
 VALVES: 1/4" BRASS BALL  
 FLANGE OPT: 150# ANSI B 16.5  
 300# ANSI B 16.5  
 ID TAG: ALUMINUM

**METER DATA**

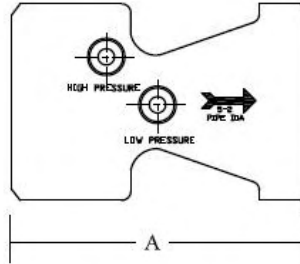


CONSTRUCTION: ALUMINUM BODY  
 OPERATION: DIAPHRAGM (BUNA CONVOLUTED)  
 TEMPERATURE: 180°F / 80°C  
 PRESSURE: 500 PSIG - 3450 KPA  
 APPROX. WEIGHT: 3.75 LBS (1.7 KGS)

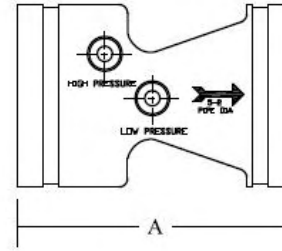
4" DIAL STANDARD - 6" DIAL AVAILABLE



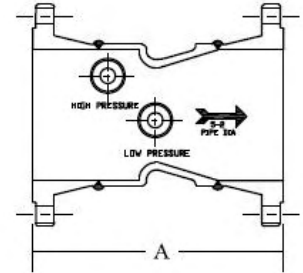
BUTT WELD / GROOVED



BUTT WELD



GROOVED

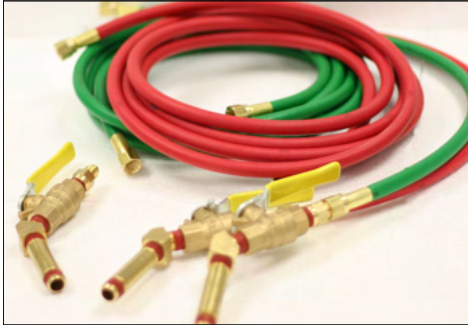


FLANGED

SIZE	BUTT WELD & GROOVED		150 # FLANGED		300# FLANGED	
	"A" DIM	APPROX. WEIGHT	"A" DIM	APPROX. WEIGHT	"A" DIM	APPROX. WEIGHT
1-1/4"	4.875	10 lbs.	—	—	—	—
2"	5.000	11 lbs.	—	25 lbs.	—	—
2-1/2"	4.000	11 lbs.	9.250	25 lbs.	10.000	35 lbs.
3"	4.000	13 lbs.	9.375	40 lbs.	10.250	50 lbs.
4"	5.375	15 lbs.	11.375	50 lbs.	12.125	65 lbs.
5"	6.000	20 lbs.	13.000	60 lbs.	13.750	80 lbs.
6"	7.000	25 lbs.	14.000	75 lbs.	14.750	115 lbs.
8"	7.250	35 lbs.	15.250	120 lbs.	16.000	175 lbs.
10"	8.000	60 lbs.	16.000	170 lbs.	17.250	225 lbs.
12"	10.000	65 lbs.	19.000	225 lbs.	20.250	345 lbs.



# REPLACEMENT HOSES



## Replacement Hoses with Full Brass Fittings

### GREEN HOSE

24-FPH-F-GRN	2' Green fire pump hose with brass fittings
36-FPH-F-GRN	3' Green fire pump hose with brass fittings
60-FPH-F-GRN	5' Green fire pump hose with brass fittings
120-FPH-F-GRN	10' Green fire pump hose with brass fittings
180-FPH-F-GRN	15' Green fire pump hose with brass fittings

### RED HOSE

24-FPH-F-RED	2' Red fire pump hose with brass fittings
36-FPH-F-RED	3' Red fire pump hose with brass fittings
60-FPH-F-RED	5' Red fire pump hose with brass fittings
120-FPH-F-RED	10' Red fire pump hose with brass fittings
180-FPH-F-RED	15' Red fire pump hose with brass fittings



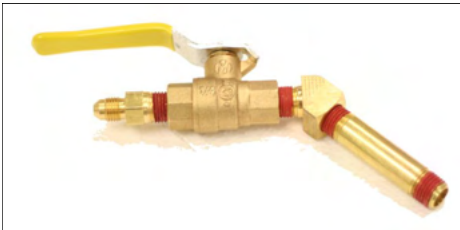
## Replacement Hoses WITHOUT Brass Fittings

### GREEN HOSE

24-FPH-GRN	2' Green fire pump hose only
36-FPH-GRN	3' Green fire pump hose only
60-FPH-GRN	5' Green fire pump hose only
120-FPH-GRN	10' Green fire pump hose only
180-FPH-GRN	15' Green fire pump hose only

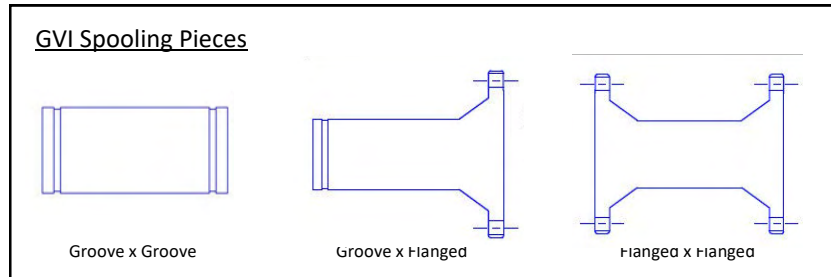
### RED HOSE

24-FPH-RED	2' Red fire pump hose only
36-FPH-RED	3' Red fire pump hose only
60-FPH-RED	5' Red fire pump hose only
120-FPH-RED	10' Red fire pump hose only
180-FPH-RED	15' Red fire pump hose only



### Brass Fitting Assembly

- BFA1 - Single assembly
- BFA2 - Brass fitting pair



# FLOW METER ACCESSORIES



**STANDARD DRY  
ANALOG GAUGE**



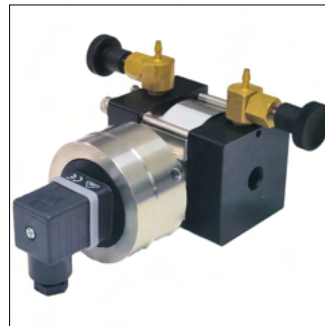
**GLYCERIN FILLED  
GAUGE**



**HARD STORAGE CASE**



**DIGITAL GAUGE  
LOCAL DISPLAY & 4-20 MA  
TRANSMITTER**



**DIGITAL GAUGE  
4-20 MA TRANSMITTER ONLY  
TO PUMP CONTROLLER**

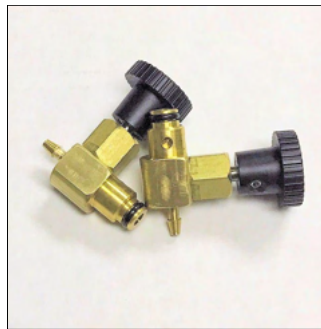


**DIGITAL BATTERY PACK**

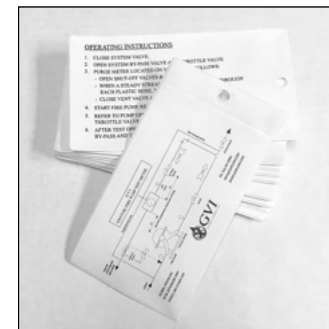
**CONTACT YOUR GVI REPRESENTATIVE FOR ADDITIONAL INFORMATION ON REPLACEMENT PARTS AND ACCESSORIES.**



**ULTRASONIC  
FLOW METER**



**BLEEDER VALVES**



**INSTRUCTION POUCH**



**ENGRAVED I.D. TAG**



**AUTO AIR VENT**

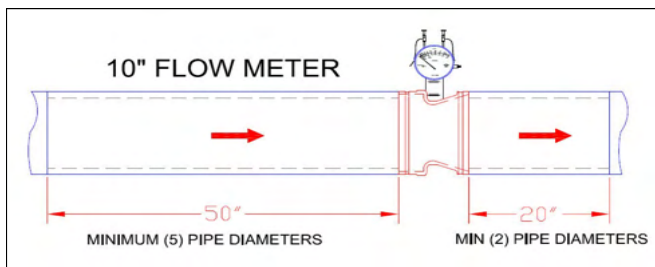


**CLEAR BLEED HOSE**

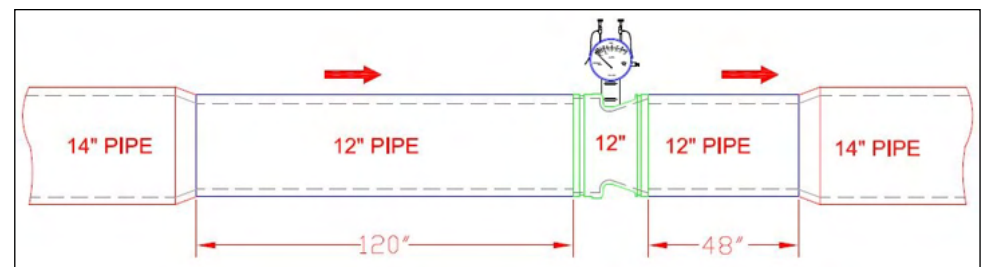
# INSTALLATION / OPERATION



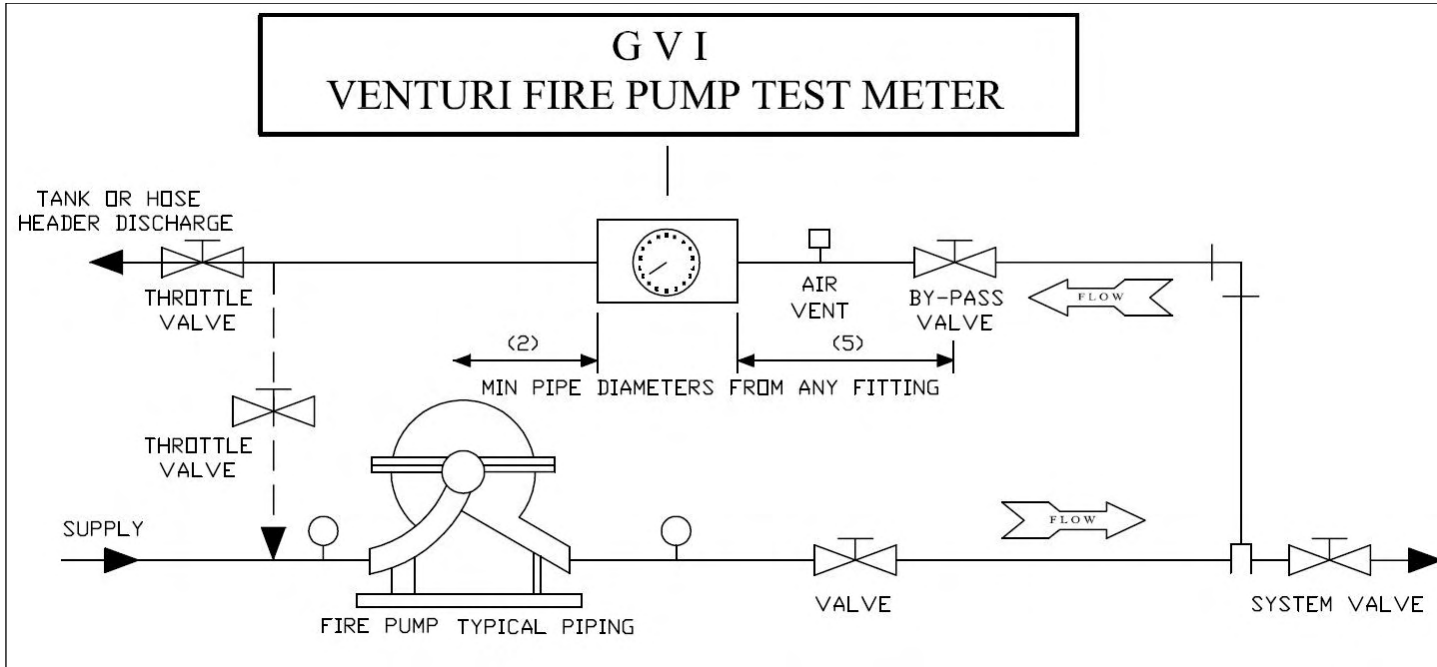
1. CLOSE THE SYSTEM VALVE
2. OPEN THE BY-PASS VALVE AND THROTTLE VALVE
3. PURGE AIR FROM METER AS FOLLOWS:
  - OPEN BALL VALVE ON RED AND GREEN HOSES
  - OPEN THE HIGH SIDE BLEEDER KNOB UNTIL A STEADY STREAM OF WATER IS COMING FROM THE CLEAR HOSE
  - CLOSE HIGH PRESSURE BLEEDER KNOB
  - REPEAT FOR LOW PRESSURE SIDE
  - ENSURE BOTH BLEEDER KNOBS ARE CLOSED
4. START FIRE PUMP, READ METER IN GPM/LPM/M3H
5. REFER TO PUMP REQUIREMENTS AND ADJUST THROTTLE VALVE FOR THIS REQUIREMENT
6. AFTER TEST, OPEN SYSTEM VALVE AND CLOSE THE BY-PASS AND THROTTLE VALVES



TYP. INSTALL WITH 5/2 PIPE DIAMETERS.  
CLEAR OF OBSTRUCTIONS, VALVES, OR BENDS.



IF REDUCERS ARE USED, LENGTHEN THE MIN PIPE DIA.  
TO 10/4 TO ENSURE ACCURACY IS MAINTAINED.



**TYPICAL FLOW LOOP CONFIGURATION**

**CAN BE INSTALLED VERTICALLY OR HORIZONTALLY**

FACEBOOK



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