

Activa™ Sensor Array

Simultaneously Measures Flow, Pressure and Temperature



- Four flow ranges
- Turbine flow measurement
- IFC converter with 4-20 mA or 0-5 VDC output for flow rate
- 4-20 mA output for temperature and pressure
- Pressures up to 5800 PSI (400 Bar)
- Temperatures up to 300 °F (150 °C)
- Available with SAE or BSPP ports
- Flow accuracy $\pm 1\%$ of reading @ 32 cSt
- Repeatability $\pm 0.2\%$

The Activa Sensor Array provides flow, temperature and pressure signals in a compact unit that requires only one hydraulic line break. Each sensor transmits an output signal that is easily integrated with PCs, PLCs, recorders or panel displays. Signals can also be transmitted to Flo-tech's F6700/F6750 Series digital displays.

Typical applications include fluid characteristic measurement on test stands, stationary hydraulic system monitoring, feedback for hydraulic system control, advance warning of impending component failure and mobile hydraulic system diagnosis.

SPECIFICATIONS

Performance

Forward Flow Accuracy: $\pm 1\%$ of reading @ 32 cSt

Repeatability: $\pm 0.2\%$

Temperature¹:

Fluid -4 to +300 °F (-20 to +150 °C)

Ambient -4 to +131 °F (-20 to +55 °C)

Operating Pressure:

up to 5800 PSI (400 Bar) maximum

Pressure Drop:

See ΔP charts on page 24

Readout Accuracy: ± 1 digit

IFC Signal Converter:

Power:

F to I

Loop powered, 6V
insertion loss max
10 to 30 VDC supply range

F to V

10 to 26 VDC

Inputs:

Frequency

Magnetic Pick-up

0 to 3500 Hz

Trigger Sensitivity

30 mV p-p

Frequency Measurement

Magnetic Pick-up

0 to 3500 Hz

Accuracy

$\pm 1\%$

$\pm 1\%$

Analog Output:

Resolution

4-20 mA current loop

0-5 VDC

Temperature Drift

1:4000

1:4000

Response

50 ppm / °C max

50 ppm / °C max

1.6 seconds min

1.6 seconds min

Environmental:

Ambient Temperature

-22 to +158 °F

-22 to +158 °F

(-30 to +70 °C)

(-30 to +70 °C)

Humidity

0-90%,

0-90%,

non-condensing

non-condensing

Pressure Sensor:
(optional)

See page 26 for complete specifications

Temperature Sensor:
(optional)

See page 27 for complete specifications

Material

Housing:

6013-T651 Aluminum; anodized

Turbine Rotor:

T416 Stainless steel

Ball Bearings:

440C Stainless steel

Rotor Shaft:

T303 Stainless steel

Rotor Supports:

F6202 & F6222

6061-T6 Aluminum alloy

Hub Cones:

F6204, F6206, F6208,

F6224, F6226 & F6228 only

CA360 Brass

6061-T6 Aluminum alloy

Adapters:

6061-T6 Aluminum; anodized

Retaining Rings:

6061-T6 Aluminum alloy

Seals:

Buna N standard;

Viton® and EPR optional

IFC (includes magnetic pick-up):

Pick-up Body

12L14 Steel; electroless nickel plate

Pick-up Nut

12L14 Steel; electroless nickel plate

IFC Case

6061-T6 Aluminum; nickel-plated

IFC Connector

Brass; nickel-plated

Ports:

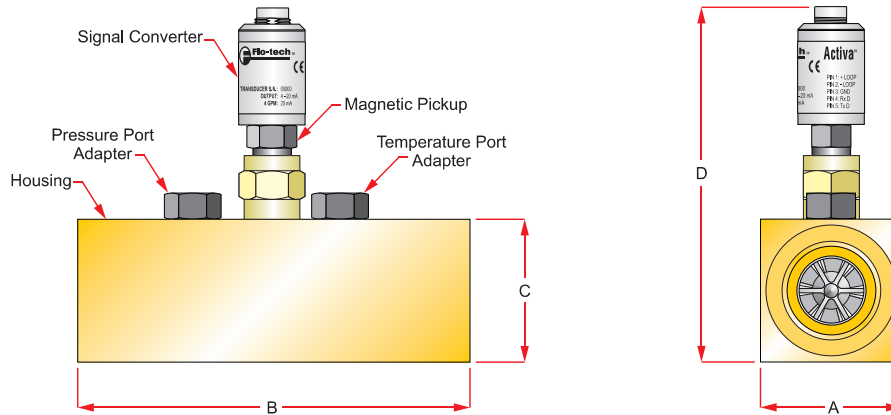
SAE J1926/1; ISO1179 (BSPP)

¹ When an optional pressure sensor is installed, the temperature range will be limited to the specifications for that device.

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DIMENSIONS



MODEL	A WIDTH IN (mm)	B LENGTH IN (mm)	C HEIGHT IN (mm)	D w/IFC IN (mm)	WEIGHT LBS (KG)
F6202-A / F6222-A	1.23 (31.2)	4.72 (120.0)	1.47 (37.3)	5.18 (131.5)	1.60 (0.73)
F6204-A / F6224-A	1.48 (37.6)	5.08 (129.0)	1.80 (45.7)	5.46 (138.7)	1.90 (0.86)
F6206-A / F6226-A	1.98 (50.3)	5.87 (149.0)	2.20 (56.0)	6.07 (154.2)	2.80 (1.27)
F6208-A / F6228-A	2.46 (62.5)	6.81 (173.0)	2.48 (63.0)	6.37 (161.8)	4.20 (1.91)

ORDERING INFORMATION

NOMINAL PORT SIZE	FLOW RANGE	MODEL NUMBER	FLOW TRANSDUCER	SEALS	TEMPERATURE	PRESSURE
SAE 8	0.4 - 7 GPM	F6202-A	I 4-20 mA Out (IFC) V 0-5 VDC Out (IFC)	B Buna N V Viton® E EPR	T with Sensor N 1/4 NPTF (F) Plugged S SAE 2 (J514) Plugged G G 1/4 (F) Plugged D SAE 4 Plugged	1 1000 PSI (69 Bar) Sensor 3 3000 PSI (207 Bar) Sensor 5 5000 PSI (345 Bar) Sensor 6 6000 PSI (414 Bar) Sensor ² N 1/4 NPTF (F) Plugged S SAE 2 (J514) Plugged F G 1/4 (F) Plugged
SAE 12	2 - 40 GPM	F6204-A				
SAE 16	4 - 80 GPM	F6206-A				
SAE 20	8 - 160 GPM	F6208-A				
G 1/4	1.5 - 26 LPM	F6222-A				
G 3/4	7.5 - 151 LPM	F6224-A				
G 1	15 - 302 LPM	F6226-A				
G 1-1/4	30 - 605 LPM	F6228-A				
						² Not available with Models F6208 or F6228

Examples:

F6204-AIB-T6 = SAE 12 ports
2 - 40 GPM flow range
4-20 mA output
Buna N seals
Temperature sensor
6000 PSI (414 Bar) pressure sensor

F6228-AVV-G5 = G 1-1/4 ports
30 - 605 LPM flow range
0-5 VDC output
Viton® seals
G 1/4 (F) plugged temp port
5000 PSI (345 Bar) pressure sensor

ACCESSORIES

MODEL NUMBER	DESCRIPTION
F001109	5-Point Calibration Certificate ³
F001110	10-Point Calibration Certificate ³

³ Certificates are traceable to NIST, ISO 9001.

For information about	Refer to
Digital Displays	Form No. 549
Pressure Sensors	Page 26
Temperature Sensor	Page 27
Cables	Pages 28 & 29

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DEPENDABLE CUSTOMER SERVICE

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