

FLOW RATE ALARMS

Ensures sufficient flows of coolants and lubricants in mobile hydraulic equipment and industrial process control.



TECHNICAL SPECIFICATIONS

Measuring Accuracy

±2.0% of full scale

Repeatability

±1% of full scale

Flow Measuring Range

0.1-150 GPM (0.4-560 LPM) 2.0-1300, SCFM (0.75-610 SLPS)

Maximum Operating Pressure

Aluminum and brass meters: 3500 PSIG (240 Bar)

Stainless steel meters: 6000 PSIG (410 Bar) 600 & 1000 pneumatic

Maximum Operating Temperature

Media: 185°F

Ambient: 185°F

Standard Calibration Fluids

Oil meters: DTE 25® @ 110°F (43°C), 0.873 sg

Water meters: tap water @ 70°F (21°C), 1.0 sg

Air meters: air @ 70°F (21°C), 1.0 sg and 100 PSIG (6.8 Bar)

Alarm Switch Dead-band

4% of full scale

Alarm Switch Contacts

SPDT (dry contact), UL/CSA rating: 10 amps and 1/4 hp, 125 or 250 VAC. 1/2 amp, 125 VDC; 1/4 amp, 250 VDC; 3 amps, 125 VAC "L" (lamp load)

Filtration Requirements

74 micron filter or 200 mesh screen minimum

DTE 25 is a registered trademark of Exxon Mobil.

BENEFITS

Field Adjustable Alarm Setting

Only an allen wrench is required to change the flow alarm setting.

Weather-Tight Construction

Rugged cast aluminum NEMA type 4X enclosure allows installation outdoors and in environments where liquid tight seals are required.

Simple On/Off Logic

Positive alarm points using dry-contact, SPDT switches, reduce the complexity found in standard rotameter OFF/ON/OFF circuits.

Pre-Wired with Cable Disconnect

The standard Hirschmann interconnection provides easy installation and maintenance of the FLOW ALARM and the system it is a part of.

Economical Protection

This monitor rapidly pays for itself as it "sounds the alarm" on incorrect pneumatic, lubrication or cooling volumes, protecting expensive equipment and reducing downtime.

ENCLOSURE MATERIALS OF CONSTRUCTION (NON-WETTED COMPONENTS)

Port/Casing	Aluminum	Brass	Stainless Steel
Enclosure & Cover	Aluminum	Aluminum	Aluminum
Seals	Buna-N®	Buna-N®	Buna-N®
Window	Pyrex®	Pyrex®	Pyrex®
Din Connector	Polyamide	Polyamide	Polyamide

Pyrex is a registered trademark of Corning Incorporated.

FLOW METER MATERIALS OF CONSTRUCTION (WETTED COMPONENTS)

Port/Casing	Aluminum	Brass	Stainless Steel
Casing & End Ports	Anodized Aluminum	Brass	Stainless Steel
Seals	Buna-N® (STD), EPR, FKM or FFKM	Buna-N® (STD), EPR, FKM or FFKM	FKM with PTFE backup (STD), Buna-N®, EPR or FFKM
Transfer Magnet	PTFE coated Alnico	PTFE coated Alnico	PTFE coated Alnico
All other internal parts	Stainless Steel	Stainless Steel	Stainless Steel

Buna-N is a registered trademark of Chemische Werke Huls.

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PART NUMBER GUIDE

METER STYLE

Flow Alarm = *
(1 switch)

Flow Alarm =
(2 switches)

*For units which are to switch in the upper 2/3 of scale, add -A247 to end of M style part number

PORT SIZE RANGE

1/4" - 1/2" =
3/4" - 1" =
1-1/4" - 2" =

MATERIAL

Aluminum =
Brass =
Stainless Steel =

MAX. PRESSURE RATING

600 psig (air & gas, aluminum & brass) =
1000 psig (air & gas, stainless steel) =
3500 psig (liquids, aluminum & brass) =
6000 psig (liquids, stainless steel) =

FLUID MEDIA

Air & Gases =
Oil @ 0.873 specific gravity =
Water @ 1.0 specific gravity =

Note: For special scales consult the Lake factory.

PORTING/THREAD TYPE

(all female)

1/4" NPTF, dry seal	3 only	=	<input type="text" value="S"/>
3/8" NPTF, dry seal	3 only	=	<input type="text" value="A"/>
1/2" NPTF, dry seal	3 only	=	<input type="text" value="B"/>
3/4" NPTF, dry seal	4 only	=	<input type="text" value="C"/>
1" NPTF, dry seal	4 only	=	<input type="text" value="D"/>
#6 SAE, O-ring seal	3 only	=	<input type="text" value="E"/>
#8 SAE, O-ring seal	3 only	=	<input type="text" value="F"/>
#10 SAE, O-ring seal	3 only	=	<input type="text" value="G"/>
#12 SAE, O-ring seal	4 only	=	<input type="text" value="H"/>
#16 SAE, O-ring seal	4 only	=	<input type="text" value="J"/>
1-1/4" NPTF, dry seal	5 only	=	<input type="text" value="K"/>
1-1/2" NPTF, dry seal	5 only	=	<input type="text" value="L"/>
2" NPTF, dry seal	5 only	=	<input type="text" value="M"/>
#20 SAE, O-ring seal	5 only	=	<input type="text" value="N"/>
#24 SAE, O-ring seal	5 only	=	<input type="text" value="P"/>
#32 SAE, O-ring seal	5 only	=	<input type="text" value="Q"/>
1/4" BSPP	3 only	=	<input type="text" value="R"/>
3/8" BSPP	3 only	=	<input type="text" value="R"/>
1/2" BSPP	3 only	=	<input type="text" value="T"/>
3/4" BSPP	4 only	=	<input type="text" value="U"/>
1" BSPP	4 only	=	<input type="text" value="V"/>
1-1/4" BSPP	5 only	=	<input type="text" value="W"/>
1-1/2" BSPP	5 only	=	<input type="text" value="Y"/>
2" BSPP	5 only	=	<input type="text" value="X"/>

Note: SAE porting not available in Brass.

SPECIAL SCALE/CUSTOM PRODUCT

OPTIONAL FLOW DIRECTIONS

Standard Flow, Uni-Directional =
Reverse Flow =

FLOW RANGES

Liquid	Air	Size	=	<input type="text" value=""/>	<input type="text" value=""/>
0.1-1.0 GPM	2.0-12 SCFM	3 only	=	<input type="text" value="0"/>	<input type="text" value="1"/>
0.2-2.0 GPM	4-23 SCFM	3 & 4	=	<input type="text" value="0"/>	<input type="text" value="2"/>
0.5-5.0 GPM	5-50 SCFM	3 & 4	=	<input type="text" value="0"/>	<input type="text" value="5"/>
1-10 GPM	10-100 SCFM	3 & 4	=	<input type="text" value="1"/>	<input type="text" value="0"/>
1-15 GPM	25-150 SCFM	3 & 4	=	<input type="text" value="1"/>	<input type="text" value="5"/>
2-20 GPM	20-215 SCFM	4 only	=	<input type="text" value="2"/>	<input type="text" value="0"/>
2-25 GPM	20-250 SCFM	4 & 5	=	<input type="text" value="2"/>	<input type="text" value="5"/>
3-30 GPM	30-330 SCFM	4 only	=	<input type="text" value="3"/>	<input type="text" value="0"/>
4-40 GPM	30-400 SCFM	4 only	=	<input type="text" value="4"/>	<input type="text" value="0"/>
5-50 GPM	40-500 SCFM	4 only	=	<input type="text" value="5"/>	<input type="text" value="0"/>
5-50 GPM	30-470 SCFM	5 only	=	<input type="text" value="5"/>	<input type="text" value="0"/>
8-75 GPM	30-750 SCFM	5 only	=	<input type="text" value="7"/>	<input type="text" value="5"/>
10-100 GPM	150-900 SCFM	5 only	=	<input type="text" value="8"/>	<input type="text" value="8"/>
20-150 GPM	150-1300 SCFM	5 only	=	<input type="text" value="9"/>	<input type="text" value="9"/>

MECHANICAL - SIZE CODE

DIM	Series 3	Series 4	Series 5	Series 5 (2" port only)
A	6-9/16" (167mm)	7-5/32" (182mm)	10-1/8" (258mm)	12-5/8" (322mm)
B	2-3/16" (56mm)	2-15/16" (75mm)	3-13/16" (97mm)	3-13/16" (97mm)
C	4" (101mm)	4-1/2" (114mm)	5-5/16" (135mm)	5-5/16" (135mm)
D	1-7/8" (47mm)	1-7/8" (47mm)	1-7/8" (47mm)	1-7/8" (47mm)
E	4-7/8" (128mm)	5" (127mm)	6-3/4" (172mm)	6-3/4" (172mm)
F	2-1/4" (57mm)	2-7/8" (73mm)	3-3/4" (95mm)	3-3/4" (95mm)

