

## Brooks® MT3750 Low Flow Armored Flowmeter



*Ar-Mite™ Model MT3750  
Metal Tube Flowmeter*



*Ar-Mite™ Model MT3750  
Metal Tube Flowmeter  
with Transmitter or Inductive Alarm*

### Benefits:

- **Wetted Parts made from Stainless Steel or Monel®**  
Compatible for a wide range of fluids (liquids or gases)
- **Ranges up to 100 l/h or 26 GPH**  
Capable of measuring (very) low flows accurately
- **High Pressure and Temperature Rating**  
Designed to work safely under difficult conditions
- **Miniature Size**  
Compact even with process flanges
- **Local Reading, Integral Control Valve, Needle Valve, Transmitter or Alarms**  
Versatile product offering
- **Certified Ex-proof, Intrinsically safe**  
ATEX, CSA, IECEx and NEPSI Approved

## Brooks® Ar-Mite™ MT3750C

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### Description

The Brooks® Ar-Mite™ is a reliable, low flow metal tube flowmeter with 316L stainless steel wetted parts. The magnetically coupled indicator provides a highly reliable method of indication. This model is a practical and economical approach to low flow rate indication for high pressure and difficult to handle fluids. Optional accessories include 4-20 mA output, Needle Valve, Flow Controllers and Alarms.

### Specifications

#### Performance Specifications

##### Flow

Liquids up to 100 l/h or 26 GPH (Water equiv.)  
Gases up to 3.1 m<sup>3</sup>/h or 120 SCFH (Air equiv.)  
(See Table 1 for more information)

##### Accuracy

±5% Full Scale, Class 4 to VDE/VDI 3513,  
Optional ±3% Full Scale, Class 2.5 to VDE/VDI 3513

##### Repeatability

1% full scale

##### Pressure Ratings

###### Maximum fluid pressure:

All non-flanged meters: 1500 psig (100 bar)  
Flange connections: (Refer to Table 2)  
Optional maximum operating pressure: 4000 psig  
(276 bar) (no valve, 1/4" NPT option only)

##### Scales

Length - 52mm, nominal  
Types - Detachable aluminum direct reading scales in engineering and reference units

##### Operating Fluid Temperature Limits

Indicator: -58°F(-50°C) to 400°F (204°C)  
Alarm: -20°F(-29°C) to 250°F (120°C)  
Transmitter: -20°F(-29°C) to 180°F (82°C)

##### Ambient Temperature:

Indicator: -58°F(-50°C) to 150°F (65°C)  
Alarm: -20°F(-29°C) to 150°F (65°C)  
Transmitter: -20°F(-29°C) to 150°F (65°C)  
Refer to Table 3

##### Materials of Construction:

###### Process Wetted

316L stainless steel (1.4404), Inconel® 625,  
Titanium Grade II (Size 0 float only)  
Optional Monel® K-500 (size 1-6 only)

###### O-rings

Standard: Viton® fluoroelastomers;  
Option: Buna-N, Ethylene Propylene, Kalrez®,  
PTFE Teflon® (without valve)

### Enclosure Ratings

All Housings Epoxy painted die cast aluminum,  
Indicator Housing: Type 4X/ IP65  
Transmitter Enclosure: Type 4X/ IP66/ IP67  
Reed Switch Enclosure: Type 4X  
Inductive Alarm Enclosure: Type 4X/ IP65

### Connections

Fittings Horizontal  
1/4" NPT Female Threaded  
1/4" Tube Compression  
6mm Tube Compression  
1/4" ISO RC  
(Refer to Figures 5 thru 7)

### Flanges

EN1092 DN15 to DN25 PN40 RF  
ANSI B16.5 1/2", 3/4" or 1" - 150#, 300#, 600# RF  
Vertical Inlet and Outlet Only  
(Refer to Figures 5 thru 7)

### Pressure Equipment Directive (PED) 97/23/EC

Flow meter complies under Sound Engineering Practices (SEP).

### Optional Equipment

Cartridge or NRS™ Needle Valves  
The cartridge needle valve can be supplied integrally mounted to the inlet fitting of the instrument. The optional NRS needle valve, also integrally mounted to the inlet fitting, provides a greater number of turns affording precision control.

### Limit Switches

Inductive Alarm Switch  
One or two electronic limit switches type SJ2-N can be installed in the indicator housing to allow initiation of signaling or switching functions on a preset flow value being reached. The SJ2-N limit switch operates as a slot initiator that is inductively actuated by a cam mounted to the pointer. Any flow value can be used for setting the limit value by sliding the switch along the slot in the mounting plate for the initiators. Minimum setting distance between two limit switches is approximately 50 % of the scale range.  
(Refer to Figure 3)

### Power supply

Current consumption	active area clear: > 3 mA
Current consumption	active area obscured: < 1 mA
Self inductance	29 µH
Self capacitance	20 nF
Max Temp	158°F(70°C)

The flow valve can be used for setting the limit value by sliding the switch along the slot in the mounting plate for the initiators. Minimum setting distance between two limit switches is approximately 50% of the scale range. (Refer to Figure 1).

# Data Sheet

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Table 1 Capacities

Meter Size	Flow Range					Viscosity Limit	Pressure Drop	
	Water		Air <sup>(1,2)</sup>					
	GPH	l/h	ln/h	SCFH	m <sup>3</sup> n/h		CP	mBar
0	0.021-0.21	0.08-0.8	3.9-39	0.15-1.5	-	5	12	4.8
1	0.034-0.34	0.13-1.3	5.6-56	0.21-2.1	-	10	12	4.8
2	0.095-0.95	0.36-3.6	13.0-120	0.5-4.9	-	20	12	4.8
3	0.29-2.8	1.0-10	-	1.2-12	0.033-0.33	35	12	4.8
4	0.55-5.5	2.1-21	-	2.5-23	0.063-0.62	70	32	12.8
5	1.1-11	4.2-42	-	5.4-53	0.15-1.3	100	38	15.3
6	2.8-26	11-100	-	12-110	0.31-3.1	130	44	17.7

**Notes:**

1. Air flows in scfm converted to 70°F and 14.7 psia when the meter is operated at 70°F and 14.7 psia.
2. Air flows in m<sup>3</sup>/<sub>n</sub>/h (converted to normal conditions: 0°C and 1.013 bar abs) when the meter is operated at 1.013 bar abs and 20°C.

Table 2 Pressure Ratings in PSIG (Bar G)

FLANGE RATING	-20°F TO 100°F -29°C TO 39°C	200°F 93°C	300°F 149°C	400°F 204°C
150#	275 (19)	240 (16)	215 (15)	195 (13)
300#	720 (49.5)	620 (43)	560 (39)	515 (35)
600#	1440 (99)	1240 (85)	1120 (77)	1030 (71)

Table 3 Fluid Temperature at Ambient Temperature

MAX. AMBIENT TEMPERATURE		MAX. FLUID TEMPERATURE PER OPTION					
		INDICATOR		ALARM		TRANSMITTER	
° F	° C	° F	° C	° F	° C	° F	° C
104	40	400	204	250	120	180	82
110	43	390	199	250	120	175	79
120	49	380	193	250	120	170	76
130	54	370	187	250	120	165	74
140	60	360	182	240	115	155	68
150	65	350	176	235	112	150	65

**Notes:**


1. At ambient temperatures less than 104°F (40°C), the maximum fluid temperature does not increase.
2. Ambient temperature is limited to 150°F (65°C) maximum.

# Brooks® Ar-Mite™ MT3750C


## Inductive Alarm Electrical Classification

### Intrinsic safety:

ATEX: KEMA 02ATEX1126

 II 2 G Ex ia IIC T6  
per EN 60079-0: 2006 EN 60079-11: 2007  
EN 61241-0: 2006 EN 61241-11: 2006  
II 2 D Ex iaD 21 IP65 T 75°C  
IECEX KEM 09.0046  
Ex ia IIC T6 Gb/Ex ia IIIC T 75°C Db IP65  
per IEC 60079-0: 2007-10 IEC 60079-11:  
2006 IEC 61241-11: 2005

CSA: (USA and Canada) 1379260

 Class I, II, III, Div. 1, Groups A thru G, T6  
per CSA -157:1992 ; UL913:2002  
Class I, Zone 0, Zone 1 AEx ia IIC, T6  
per ANSI/ UL 2279: 1996  
Ex ia IIC  
per CSA E79-0:2002; CSA E79-11:2002

NEPSI: (China) GYJ11.1639


 Ex ia IIC T6 Gb  
per GB3836.1-2010; GB3836.4-2010

GOST-R 0813793


Approval POCC NL.006.B01220

### Non Incendive:


ATEX: KEMA 02ATEX1127

 II 3 GD T 75°C  
EEx nA II T6  
per EN60079-15: 2003;  
EN50281-1-1:1998

CSA: (USA and Canada) 1379260

 NI, Class I, II, III, Div. 2, Groups A thru G, T6  
per CSA -213:1987 ; UL1604:1995  
Class I, Zone 2 AEx nA II, T6  
per ANSI/ UL 2279: 1996  
Ex nA II  
per CSA E79-0:2002; CSA E79-15:2002

NEPSI: (China) GYJ13.1315

 Ex nA IIC T6 Gc  
per GB3836.1:2010; GB3836.8:2003

GOST-R 0813793

Approval POCC NL.006.B01220

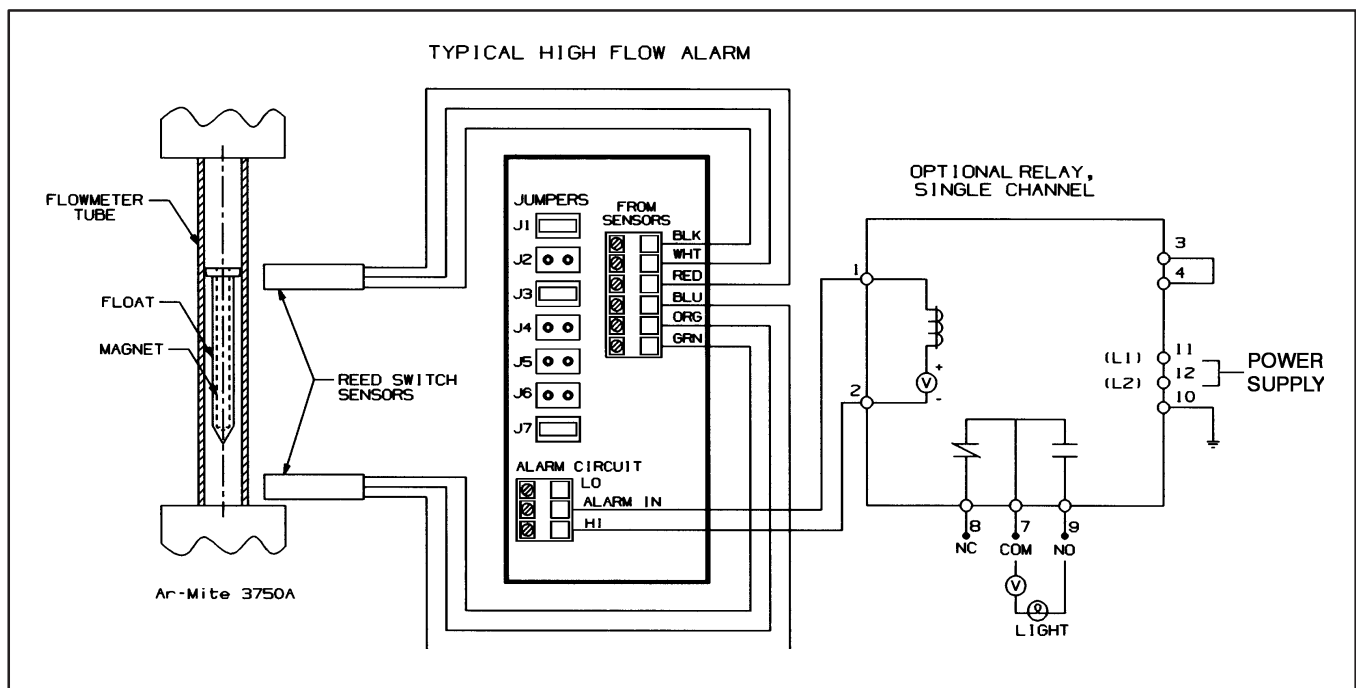


Figure 1 Reed Switch Wiring Diagram

# Data Sheet

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Figure 2 Model MT3750C with Reed Switch Alarm



Figure 3 Model MT3750C with Transmitter / Inductive Alarm

## Reed Switch Alarm

Two reed switches are installed in the alarm housing to provide signaling or switching functions when a preset flow value has been reached. The reed switches provide high, low or dual setpoints and latched output over the full range. The switches are normally adjusted to the desired flow range in the factory. Modifications to the switch settings can be made in the field. Minimum setting distance between two switches is approximately 40% of the scale. (Refer to Figures 1 and 2)

### Data Reed Switch


Maximum Voltage\* 175 Vdc, 124 Vac  
Maximum Current\* 250 mA  
Maximum Contact Rating\* 3 Watts  
(\*Maximum Switch Specifications)

### Electrical Classification

#### Non Incendive:

Maximum Voltage 30 Vdc  
Maximum Current 100 mA  
Maximum Contact Rating 3 Watts

CSA: (US and Canada)


 NI, Class I, Div. 2, Groups A, B, C and D: Class II Groups F and G, T6  
per CSA-213:1987; UL 1604:1995

#### Intrinsic Safety:

Entity parameters

$V_{max} = U_i = 30$  Vdc,  $I_{max} = I_i = 100$  mA,  $C_i = 0$ ,  $L_i = 0$

CSA: (US and Canada)

 IS Class I, II, III, Div. 1, Groups A thru G, T6  
per CSA-157:1992; UL 913:2002

## Transmitter: 3750

The transmitter provides accurate magnet angle detection and conversion to a 4 - 20 mA industry standard output signal, based on the position of a float assembly in the flowmeter. This rugged, compact, microprocessor-driven device is capable of providing accurate flow information to your external support systems. The patented magnetic sensor with automatic gain control enables an extremely high dynamic capture range without sacrificing accuracy. (Refer to Figures 3 and 4)

### Data Certifications:

E.M.C. Directive 2004/108/EC according to EN 61326-1: 2006

Flame-proof/ Explosion-proof:

Power Supply 28 Vdc, 4-20 mA

Ambient Temperature:  $-25^{\circ}\text{C} \leq T_{amb} \leq 65^{\circ}\text{C}$

Flameproof/ Explosion-proof

ATEX: KEMA 01ATEX2174

II 2 G Ex d IIC T6

II 2 D Ex tD A 21 IP66 T 85°C

per EN 60079-0: 2006; EN 60079-1:

2004; EN61241-0: 2006; EN61241:2004

UL: United States and Canada UI Listed, E73889

XP Class I, Div.1, Groups A, B, C, and D, T6

DIP Class II, Div. 1, Groups E, F, and G

per UL 1203: 2000; CSA-30: 1986

Class I, Zone 1 AEx d IIC T6

per UL 2279: 1996

Ex d IIC T6

per CSA E79-0:2002; CSA E79-1:2002

NEPSI: (China) GYJ11.1638X

Ex d IIC T6 Gb

per GB3836.1-2010; GB3836.2-2010

IECEX: KEM 06.0049

EX d IIC T6

per IEC 60079-0: 2004; IEC 60079-1: 2003

GOST-R 0813793

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# Brooks® Ar-Mite™ MT3750C

## Intrinsic Safety:

### Functional parameters

Power Supply 8-28 Vdc, I<sub>max</sub>= 22 mA

### Entity Parameters:

U<sub>i</sub> = 30 V DC, I<sub>i</sub> = 100 mA Pi = 750 mW  
C<sub>i</sub> = 0uF Li = 1.8 mH

Ambient Temperature: -30°C ≤ Tamb ≤ 65°C

ATEX: KEMA 01ATEX1033



II 2 G Ex ia IIC T6  
II 2 D Ex iaD 21 IP66/IP67 T70°C  
II 2 D Ex tD A21 IP66/IP67 T70°C  
per EN 60079-0: 2006 EN 60079-11: 2007  
EN 61241-0: 2006 EN 61241-11: 2006

### CSA: (US and Canada)



IS Class I, II, III, Div.1, Groups A, thru G, T6  
per UL913:2002; CSA -157:1992

Class I, Zone 1 AEx ia IIC T6  
per UL 2279:1996

Ex ia IIC T6  
per CSA E79-0:2002; CSA E79-11: 2002

### NEPSI: (China) GYJ11.1637



Ex ia IIC T6 Gb Ex iaD 21 T70°C  
per GB3836.1/4-2010,  
IEC 61241-0:2004, GB 12476.4-2010

### IECEX: KEM 06.0037

EX ia IIC T6  
per IEC 60079-0: 2004; IEC 60079-11:  
1999

### GOST-R 0813793

Approval POCC NL.06.B01220

## Non Incendive

Power Supply 8-28 Vdc, I<sub>max</sub>= 22 mA

Ambient Temperature: -30°C ≤ Tamb ≤ 65°C

ATEX: KEMA 01ATEX1035



II 3 GD T 70°C  
EEx nA II T6 IP66/67  
per EN 60079-15: 2003; EN 50281-1-1:  
1998

### CSA: (US and Canada)



NI Class I, Div.2, Grps A, B, C, and D; Class II  
Grps F and G, T6  
per UL 1604: 1995; CSA-213: 1987

Class I, Zone 1 AEx nA II T6  
per UL 2279: 1996

Ex nA II T6  
per CSA E79-0:2002; CSA E79-15:2002

### IECEX: KEM 06.0037

Ex nA II T6  
per IEC 60079-0: 2004; IEC 60079-15:  
2005

### GOST-R 0813793

Approval POCC NL.06.B01220

## Flow Controllers

Brooks flow controllers with or without brackets can be integrally mounted on the inlet or outlet of the meter. (Refer to Brooks DS-VA-FC-eng, Data Sheet).

## Material Certification for Pressure Containing

Tube and fittings according to EN10204 Level 3.1  
Valve parts and plugs are according to EN10204 Level 2.2  
Certifications:

NACE MR 01-75

Liquid Dye Penetrant

Positive Material Identification (Pressure bound only)

International Calibration - Certification includes scale check.

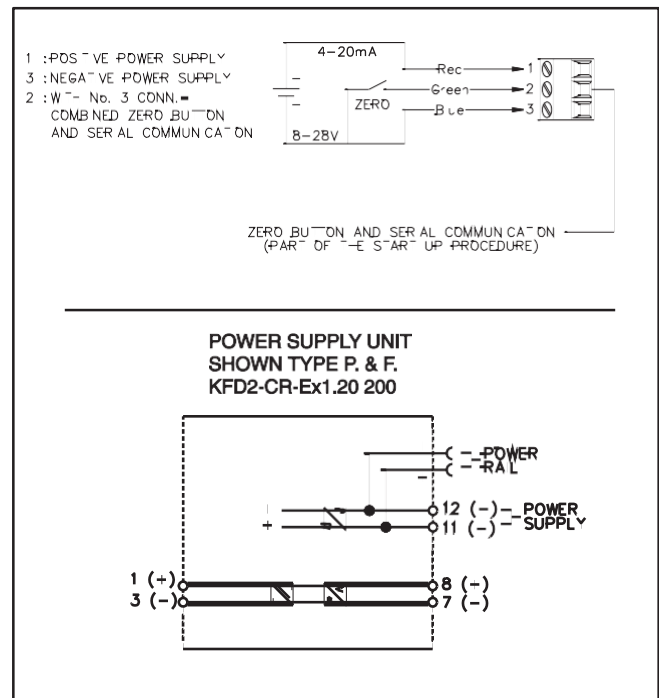


Figure 4 Transmitter Wiring Diagram

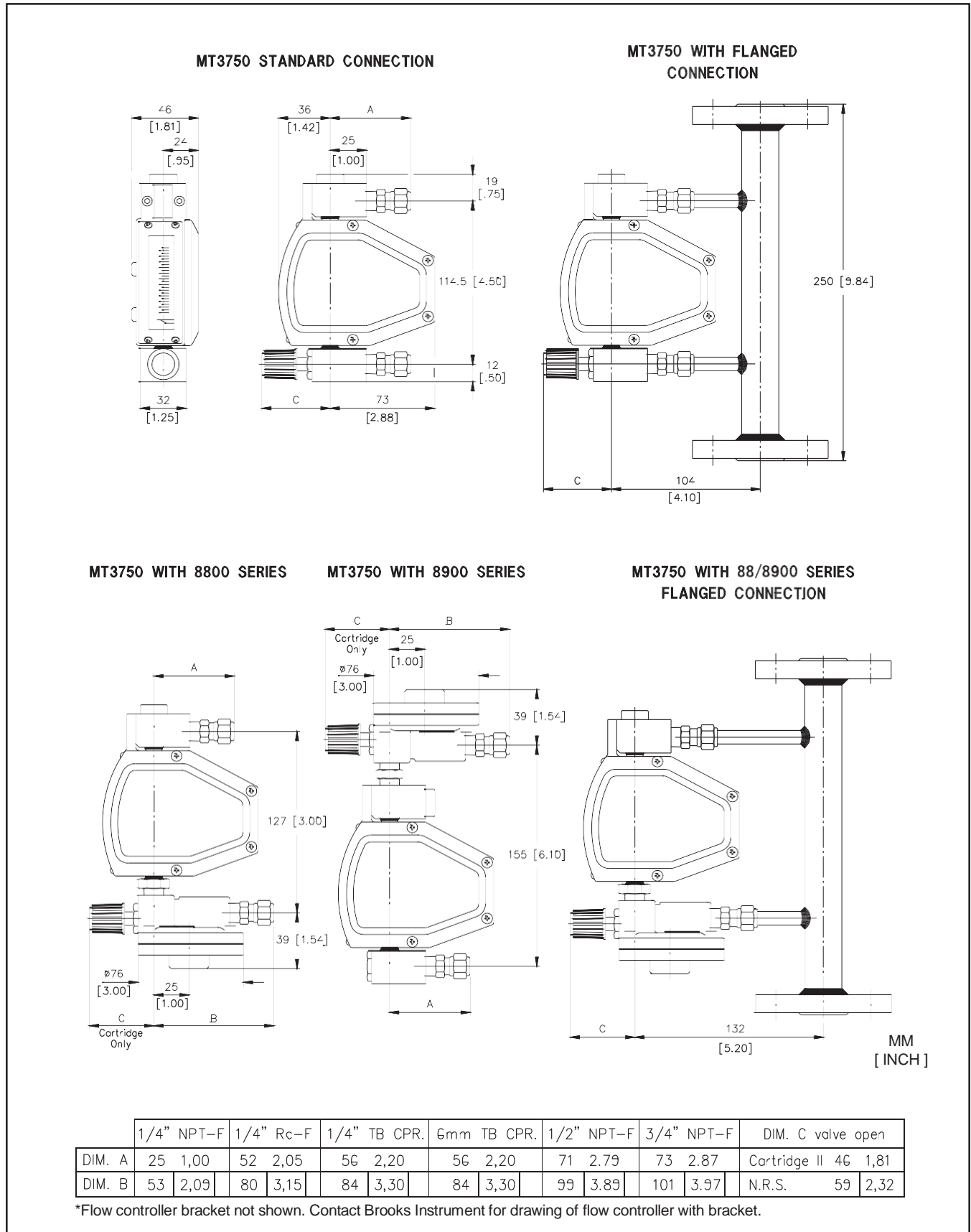
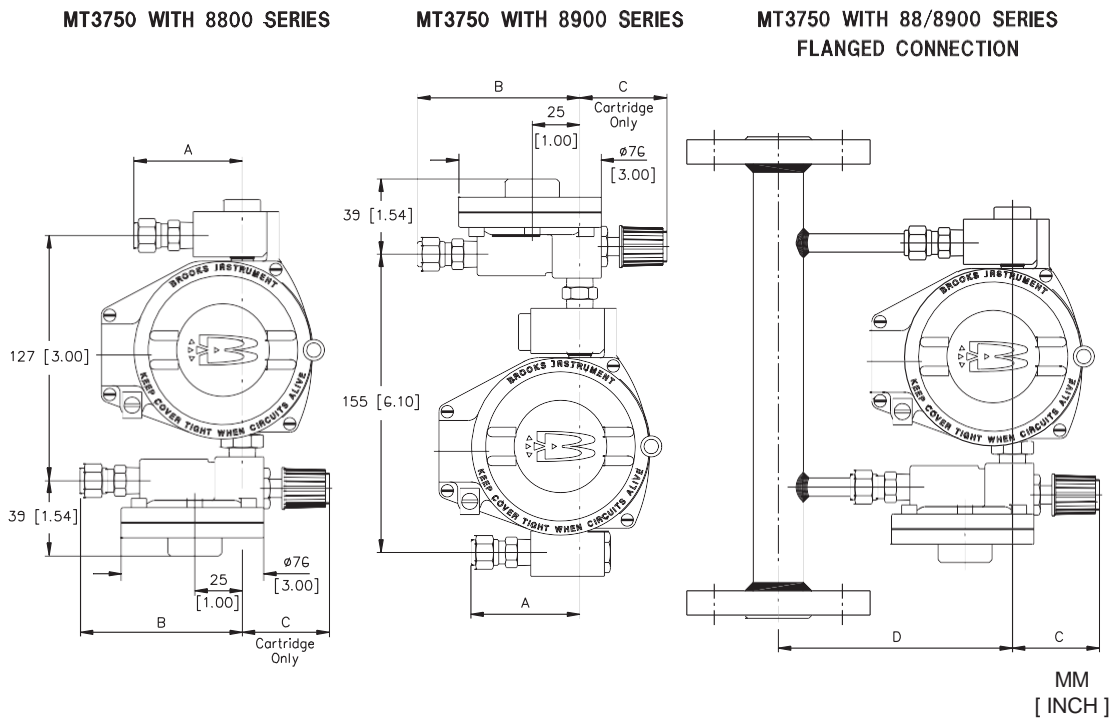
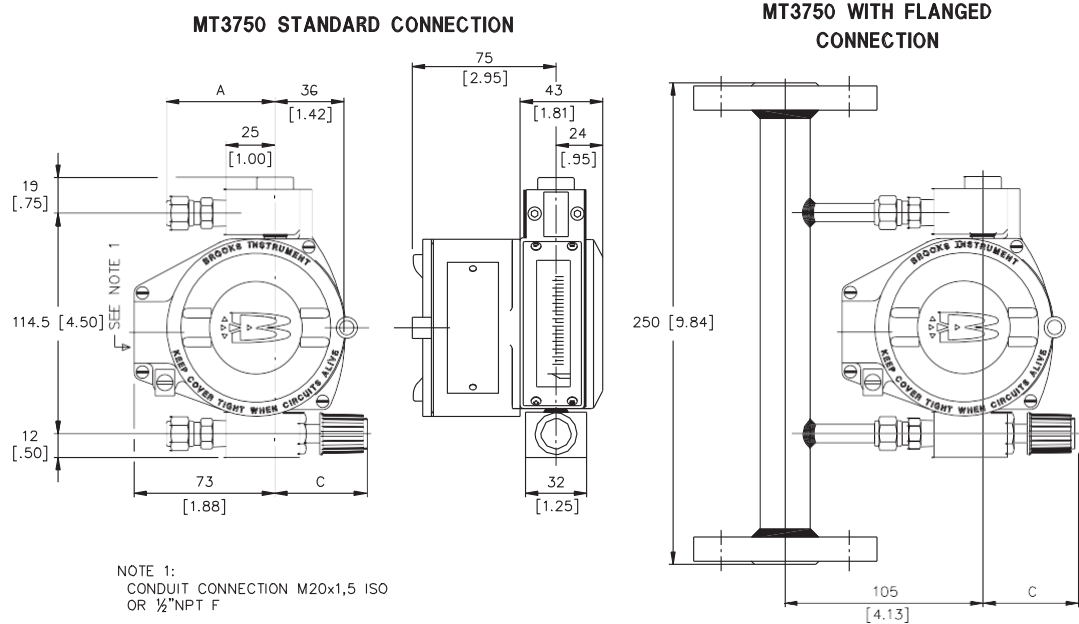


Figure 5 Dimensions for MT3750C Flanged and Threaded Metal Tube Flowmeter with Indicator

**Brooks® Ar-Mite™ MT3750C**



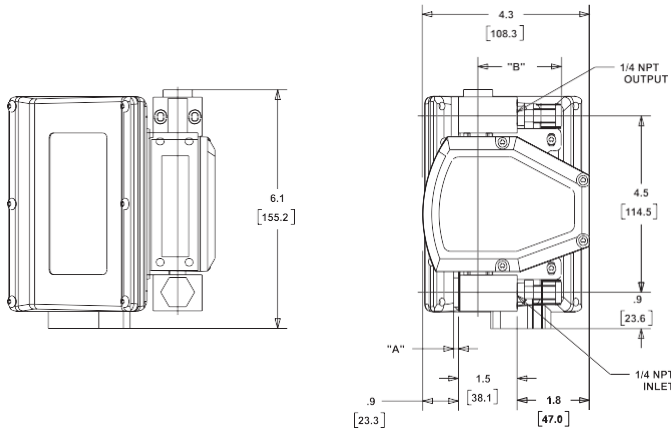
	1/4" NPT-F	1/4" Rc-F	1/4" TB CPR.	6mm TB CPR.	1/2" NPT-F	3/4" NPT-F	DIM. C valve open	Dimension D
DIM. A	25 [1.00]	52 [2.05]	56 [2.20]	56 [2.20]	71 [2.79]	73 [2.87]	Cartridge II 46 [1.81]	8800 series 125 [4.92]
DIM. B	53 [2.09]	80 [3.15]	84 [3.30]	84 [3.30]	99 [3.89]	101 [3.97]	N.R.S.	59 [2.32]
								8900 series 150 [5.90]

\*Flow controller bracket not shown. Contact Brooks Instrument for drawing of flow controller with bracket.

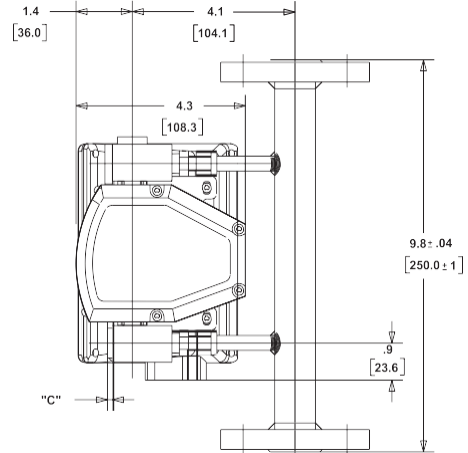
Figure 6 Dimensions for MT3750C Flanged and Threaded Connections with Transmitter or Inductive Alarm



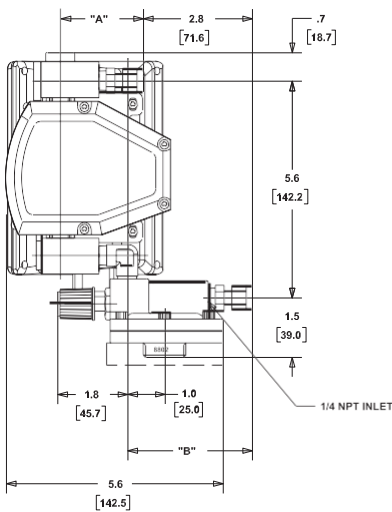
**MT3750 STANDARD CONNECTION**



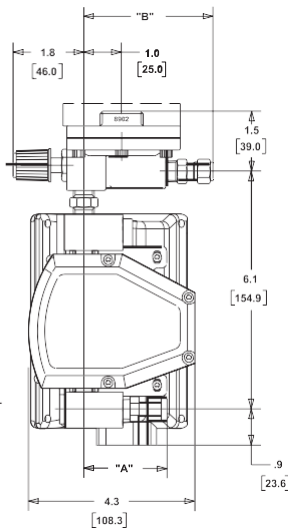
**MT3750 WITH FLANGE CONNECTION**



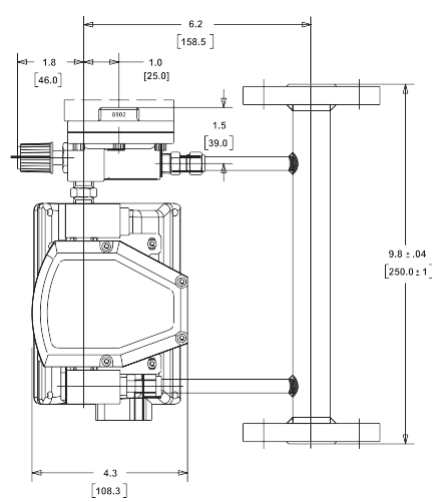
**MT3750 WITH 8800 SERIES**



**MT3750 WITH 8900 SERIES**



**MT3750 WITH 88/8900 SERIES FLANGED CONNECTION**



INCH  
[MM]

	1/4" NPT-F	1/4" Rc-F	1/4" TB CMPR.	1/2" NPT-F	3/4" NPT-F	6mm TB CMPRS.	DIM C Valve open	
DIM A	1.0 [25.0]	2.0 [50.8]	2.2 [55.9]	2.8 [71.1]	2.9 [73.7]	2.2 [55.9]	CARTRIDGE 1.3 [3.3]	PLUG .1 [3.0]
DIM B	2.1 [53.3]	3.2 [81.3]	3.3 [83.8]	3.9 [99.1]	4.0 [101.6]	3.3 [83.8]	NRS 2.2 [55.9]	

\*Flow controller bracket not shown. Contact Brooks Instrument for drawing of flow controller with bracket.

Figure 7 Dimensions for MT3750C Flanged and Threaded Connections with Reed Switch Alarm

# Brooks® Ar-Mite™ MT3750C

Table 4 Ordering Information and Model Code

<b>Model: 3750C</b>	
<b>AR-MITE ARMORED PURGE FLOWMETER</b>	
<b>BASE MODEL NUMBER</b>	<b>ARMORED PURGE FLOWMETER</b>
3750C	55 MM
<b>MATERIAL SPECIFICATION</b>	
1	316L STN. STL. & CRN CERTIFICATION
2	316L STN. STL., CRN CERTIFICATION & CERTIFIED MATERIAL TO EN 2.2
3	316L STN. STL., CRN CERTIFICATION & CERTIFIED MATERIAL TO EN 3.1
4	316L STN. STL., CRN CERTIFICATION & SECTION IX WELDING
5	316L STN. STL., CRN CERTIFICATION & CERTIFIED MATERIAL TO EN 2.2 / SECTION IX WELDING
6	316L STN. STL., CRN CERTIFICATION & CERTIFIED MATERIAL TO EN 3.1 / SECTION IX WELDING
A	316L STN. STL.
B	316L STN. STL. CERTIFIED MATERIAL TO EN 2.2
C	316L STN. STL. CERTIFIED MATERIAL TO EN 3.1
D	316L STN. STL. WITH SECTION IX WELDING
E	316L STN. STL. CERTIFIED MATERIAL TO EN 2.2 / SECTION IX WELDING
F	316L STN. STL. CERTIFIED MATERIAL TO EN 3.1 / SECTION IX WELDING
G	MONEL K500
H	MONEL K500, Material Certification Acc to EN 3.1
<b>METER SIZE</b>	
0	SIZE 0
1	SIZE 1
2	SIZE 2
3	SIZE 3
4	SIZE 4
5	SIZE 5
6	SIZE 6
<b>CONSTRUCTION</b>	
A	STANDARD DESIGN
B	STANDARD DESIGN
C	STANDARD DESIGN
D	STANDARD DESIGN
D	STANDARD DESIGN
E	STANDARD DESIGN
F	STANDARD DESIGN
G	ALL WELDED / HIGH PRESSURE
<b>SEALS</b>	
	VITON O-RINGS
	TEFLON O-RINGS (NO VALVE ONLY)
	BUNA O-RINGS
	KALREZ O-RINGS (WITH VALVE)
	KALREZ O-RINGS (WITHOUT VALVE)
	EPM O-RINGS
	TEFLON IN METER AND KALREZ IN VALVE
	NO ELASTOMER - NO VALVE CAVITY
<b>CONNECTION SIZE AND TYPE</b>	
1	1/4" NPT (F) - INTEGRAL
2	1/4" TUBE COMPRESSION - WITH ADAPTER
3	6mm TUBE COMPRESSION - WITH ADAPTER
4	1/4" BSP (F) - WITH ADAPTER
5	1/2" NPT (F) - WITH ADAPTER
6	3/4" NPT (F) - WITH ADAPTER
A	1/2" ANSI 150# RF FLANGE - VERTICAL ONLY
B	1/2" ANSI 300# RF FLANGE - VERTICAL ONLY
C	1/2" ANSI 600# RF FLANGE - VERTICAL ONLY
D	3/4" ANSI 150# RF FLANGE - VERTICAL ONLY
E	3/4" ANSI 300# RF FLANGE - VERTICAL ONLY
F	3/4" ANSI 600# RF FLANGE - VERTICAL ONLY
G	1" ANSI 150# RF FLANGE - VERTICAL ONLY
H	1" ANSI 300# RF FLANGE - VERTICAL ONLY
J	1" ANSI 600# RF FLANGE - VERTICAL ONLY
K	DIN DN 15 PN40 RF FLANGE - VERTICAL ONLY
L	DIN DN 20 PN40 RF FLANGE - VERTICAL ONLY
M	DIN DN 25 PN40 RF FLANGE - VERTICAL ONLY
<b>CONNECTION ORIENTATION</b>	
1	HORIZONTAL INLET AND OUTLET (THREADED CONNECTIONS ONLY)
2	VERTICAL INLET & OUTLET (FLANGED CONNECTIONS ONLY)
<b>VALVE CONFIGURATION</b>	
A	NO VALVE (STANDARD FITTING WITH PLUG)
B	LOW FLOW VALVE ON INLET TYPICAL FOR SIZES 0, 1, 2
C	MEDIUM FLOW VALVE ON INLET TYPICAL FOR SIZES 3 & 4
D	HIGH FLOW VALVE ON INLET TYPICAL FOR SIZES 5 & 6
E	NO VALVE CAVITY ALL WELDED / HIGH PRESSURE ONLY
K	NRS VALVE - SIZE 3 ON INLET TYPICAL FOR SIZES 0 & 1
L	NRS VALVE - SIZE 4 ON INLET TYPICAL FOR SIZE 2
M	NRS VALVE - SIZE 5 ON INLET TYPICAL FOR SIZE 3
N	NRS VALVE - SIZE 6 ON INLET TYPICAL FOR SIZES 4 & 5
P	NRS VALVE - SIZE 7 ON INLET TYPICAL FOR SIZE 6
T	MOUNTED TO 316L SS 8802 FLOW CONTROLLER WITH VITON DIAPHRAGM
U	MOUNTED TO 316L SS 8805 FLOW CONTROLLER WITH TEFLON DIAPHRAGM
V	MOUNTED TO 316L SS 8902 FLOW CONTROLLER WITH VITON DIAPHRAGM
W	MOUNTED TO 316L SS 8905 FLOW CONTROLLER WITH TEFLON DIAPHRAGM
1	MOUNTED TO 316L SS 8802 FLOW CONTROLLER WITH TEFLON DIAPHRAGM
3	MOUNTED TO 316L SS 8902 FLOW CONTROLLER WITH TEFLON DIAPHRAGM

Table 4 Ordering Information and Model Code (continued)

	ACCURACY	INSCRIPTION	FLUID
9	N/A	NO SCALE	N/A
A	N/A	BLANK SCALE	N/A
B	4 VDI / 5% FS	% SCALE	LIQUID
C	4 VDI / 5% FS	DIRECT READING	LIQUID
D	4 VDI / 5% FS	% SCALE	GAS
E	4 VDI / 5% FS	DIRECT READING	GAS
F	4 VDI / 5% FS	% SCALE	LIQUID - HIGH VISCOSITY
G	4 VDI / 5% FS	DIRECT READING	LIQUID - HIGH VISCOSITY
H	2.5 VDI / 3% FS	% SCALE	LIQUID
J	2.5 VDI / 3% FS	DIRECT READING	LIQUID
K	2.5 VDI / 3% FS	% SCALE	GAS
L	2.5 VDI / 3% FS	DIRECT READING	GAS
M	2.5 VDI / 3% FS	% SCALE	LIQUID - HIGH VISCOSITY
N	2.5 VDI / 3% FS	DIRECT READING	LIQUID - HIGH VISCOSITY
<b>ELECTRICAL OUTPUT</b>			
A	NONE		
B	REED SWITCH ALARM, METER MOUNTED		
E	SINGLE INDUCTIVE ALARM WITH M20 x 1.5 ELECTRICAL CONNECTION		
F	SINGLE INDUCTIVE ALARM WITH 1/2" NPT (F) ELECTRICAL CONNECTION		
G	DOUBL INDUCTIVE ALARM WITH M20 x 1.5 ELECTRICAL CONNECTION		
H	DOUBLE INDUCTIVE ALARM WITH 1/2" NPT (F) ELECTRICAL CONNECTION		
J	MAT TRANSMITTER WITH M20 x 1.5 ELECTRICAL CONNECTION		
K	MAT TRANSMITTER WITH 1/2" NPT (F) ELECTRICAL CONNECTION		
<b>ALARM RELAY / TRANSMITTER POWER SUPPLY</b>			
A	NONE		
B	POWER SUPPLY 24 VDC WITH IS BARRIER		
C	POWER SUPPLY 120 VAC WITH IS BARRIER		
D	POWER SUPPLY 240 VAC WITH IS BARRIER		
E	24 VDC 1 CHANNEL		
F	24 VDC 2 CHANNEL		
G	120 VAC 1 CHANNEL		
H	120 VAC 2 CHANNEL		
J	240 VAC 1 CHANNEL		
K	240 VAC 2 CHANNEL		
<b>CERTIFICATIONS / APPROVALS</b>			
A	NONE		
B	ZONE 2, Non-incendive - ATEX		
C	ZONE 1, Intrinsically Safe - ATEX		
D	ZONE 1, Flame-proof - ATEX		
E	Division 2/ Zone 2, Non-incendive CSA - USA and Canada		
F	Division 1/ Zone 1, Intrinsically CSA - USA and Canada		
G	Division 1/ Zone 1, Explosion proof/Flame-proof UL listed - USA and Canada		
H	Zone 1 Intrinsically Safe NEPSI (China) (1/2" NPT and M20 Elec. Conn.)		
J	Zone 2 Non-Sparking NEPSI (China) (1/2" NPT and M20 Elec. Conn.)		
K	Zone 1 Flame-proof NEPSI - TRANSMITTER ONLY (China) (M20 Elec. Conn. Only)		
L	Zone 1 Intrinsically Safe IECEX (World) (1/2" NPT and M20 Elec. Conn.)		
M	Zone 2 Non-Sparking IECEX (World) - TRANSMITTER ONLY (1/2" NPT and M20 Elec. Conn.)		
N	Zone 1 Flameproof IECEX (World) - TRANSMITTER ONLY (M20 Elec. Conn.)		
<b>MATERIAL INSPECTION</b>			
A	NONE		
1	MATERIAL CERTIFICATE -3.1 & NACE MR 01-75 CERTIFICATE 2.1 (316L SS Construction Only)		
2	LIQUID PENETRATION (WELDS ONLY) - (316L SS Construction Only)		
3	CERTIFIED ACCORDING TO NACE MR 01-75 & LIQUID PENETRATION (316L SS Only)		
4	INTERNATIONAL CALIBRATION CERTIFICATE - Includes SCALE CHECK		
5	CALIBRATE FOR ICC & NACE MR 01-75 - (316L SS Const. Only)		
6	Positive Material Identification - 2.3 - (316L SS Const. Only)		
7	PMI & LDP - (316L SS Const. Only)		
8	ICC & PMI - (316L SS Const. Only)		
9	ICC & PMI & LDP - (316L SS Const. Only)		
B	LDP, ICC - (316L SS Const. Only)		
C	NACE MR 01-75, PMI - (316L SS Const. Only)		
D	LDP, NACE MR 01-75, PMI - (316L SS Const. Only)		
E	LDP, NACE MR 01-75, PMI, ICC - (316L SS Const. Only)		
F	ICC, PMI, NACE - (316L SS Const. Only)		
H	LDP, ICC, NACE - (316L SS Const. Only)		
<b>ACCESSORY (Group 1)</b>			
A	NONE		
B	FLUSH PANEL MOUNTING (Indicator and Threaded Connections Only)		
C	NO BROOKS IDENTIFICATION (Indicator Only)		
D	DEGREASE FOR OXYGEN SERVICE		
E	SPECIAL IN-HOUSE CLEANING		
S	FLUSH PANEL MOUNTING MOUNTING & DEGREASE FOR OXYGEN SERVICE (Same as B)		
T	FLUSH PANEL MOUNTING & SPECIAL CLEANING (Same as Option B)		
<b>ACCESSORY (Group 2)</b>			
0	NOT APPLICABLE		
B	Bracket FCA, Standard		
C	Bracket FCA, Stainless Steel		

## Brooks® Ar-Mite™ MT3750C

### **BROOKS SERVICE AND SUPPORT**

Brooks is committed to assuring all of our customers receive the ideal flow solution for their application, along with outstanding service and support to back it up. We operate first class repair facilities located around the world to provide rapid response and support. Each location utilizes primary standard calibration equipment to ensure accuracy and reliability for repairs and recalibration. The primary standard calibration equipment to calibrate our flow products is certified by our local Weights and Measures Authorities and traceable to the relevant International Standards.

Visit [www.BrooksInstrument.com](http://www.BrooksInstrument.com) to locate the service location nearest to you.

### **START-UP SERVICE AND IN-SITU CALIBRATION**

Brooks Instrument can provide start-up service prior to operation when required. For some process applications, where ISO-9001 Quality Certification is important, it is mandatory to verify and/or (re)calibrate the products periodically. In many cases this service can be provided under in-situ conditions, and the results will be traceable to the relevant international quality standards.

### **CUSTOMER SEMINARS AND TRAINING**

Brooks Instrument can provide customer seminars and dedicated training to engineers, end users and maintenance persons. Please contact your nearest sales representative for more details.

### **HELP DESK**

In case you need technical assistance:

Americas ☎ 1 888 554 FLOW  
Europe ☎ +31 (0) 318 549 290  
Asia ☎ +81 (0) 3 5633 7100

Due to Brooks Instrument's commitment to continuous improvement of our products, all specifications are subject to change without notice.

#### **TRADEMARKS**

Ar-Mite ..... Brooks Instrument, LLC  
Brooks ..... Brooks Instrument, LLC  
Inconel ..... Inco Alloys International, Inc.  
Kalrez ..... DuPont Dow Elastomers  
Monel ..... Inco Alloys International, Inc.  
NRS ..... Brooks Instrument, LLC  
Teflon ..... E.I. DuPont de Nemours & Co.  
Viton ..... DuPont Performance Elastomers



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