



Dresser Series 3 Meter with Electronic Transmitter (ICEX)

Application and Operation

The Dresser Natural Gas Solutions (NGS) Meter with Electronic Transmitter (ICEX), is a single-channel, transistor output device that provides a non-compensated, high-frequency pulse output (four pulses per impeller shaft revolution) for applications requiring gas flow rate and totalization information.

A two-wire output from the ICEX is used to provide uncorrected flow rate or totalization data to accessory instruments or other totalizer devices. Loop power for the ICEX is supplied by the totalizer instrument. An optional cable for connecting to the MSC circular connector is available.

Ordering Information

When ordering a Series B3 CTR (counter) meter, a 'transmitter ready' option can be specified for future installation of the Electronic Transmitter (conversion kit #399¹). Existing Series B2 meters can be easily converted to the ICEX option using a complete accessory unit, Assembly #400, which includes a non-compensated counter and the transmitter for a specific meter size.

With Meter Specify:

Meter model with ICEX (Example: 3M175 ICEX)

As Complete Accessory Unit Specify:

Repair Assembly #400 Counter w/Electronic Xmtr (ICEX) and meter model

As Conversion Kit¹ Specify:

Repair Assembly #399 CTR to ICEX and meter model

¹Conversion Kit #399 may be used only on Series 3 Counters. Series B2 (TQM) Meters require a complete Accessory Unit Assembly #400.

Features

- Provides a non-compensated, high-frequency pulse output
- Mounts on all Series B meter bodies
- Available factory installed or as a field installable conversion kit
- Enhances reliability by using Solid State components to eliminate mechanical switches
- Helps minimize maintenance
- Available in three connections styles: MS-style circular connector; 1/2-inch liquid tight type conduit fitting; or cable gland with 4-ft. cable.

Specifications

Applicable Sizes	Series B Dresser meters 8C through 56M
Loop Voltage	3 - 30 VDC (Typ.)
Supply Current	10 mA (max.)
Pulse Width	2 milli-seconds (Typ.)
Duty Cycle	Flow rate dependent
Rise/Fall Time	20 μ s (Typ.)
Connection Styles	Circular connector, 1/2-inch liquid tight type conduit fitting, or cable gland with 4-ft. cable



Circular Connector



Conduit



Cable Gland

Reference Data

Meter Type	Frequency	Volume Per Pulse		Pulses Per Volume		Flow Rate	Dimensional Drawings with ICEX	
	(Hz)	(CF)	(m ³)	(CF)	(m ³)	(ACFH)		
8C175	120.00	0.00185185	0.0000524386	540	19070	800	B3 8/11/15C	D056899-000
11C175	146.67	0.00208333	0.0000589934	480	16951	1,100	B3 2/3/5M	D056900-000
15C175	166.67	0.00250000	0.0000707921	400	14126	1,500	B3 23/38/56M	D057701-000
2M175	111.11	0.00500000	0.0001415843	200	7063	2,000	1M/3M 300	D058612-000
3M175	133.33	0.00625000	0.0001769803	160	5650	3,000	1M/3M 740/1480	D057373-000
5M175	150.00	0.00925926	0.0002621931	108	3814	5,000	23M232 4"	D057745-000
7M175	124.45	0.01562500	0.0004424508	64	2260	7,000	2M NPLD	D059081-000
11M175	122.22	0.02500000	0.0007079213	40	1413	11,000	5M/7M 1480	D057442-000
16M175	120.00	0.03703704	0.0010487722	27	953	16,000	8/11/15C NPLD	D057415-000
23M232	127.78	0.05000000	0.0014158425	20	706	23,000	11M 1480	DO59535-000
23M175	69.00	0.09259259	0.0026219306	11	381	23,000		
38M175	76.00	0.13888889	0.0039328958	7	254	38,000		
56M175	89.60	0.17361111	0.0049161198	6	203	56,000		
1M300	55.55	0.00500000	0.0001415843	200	7063	1,000		
3M300	133.33	0.00625000	0.0001769803	160	5650	3,000		
1M740	75.00	0.00370370	0.0001048772	270	9535	1,000		
1M1480	75.00	0.00370370	0.0001048772	270	9535	1,000		
3M740	166.67	0.00500000	0.0001415843	200	7063	3,000		
3M1480	166.67	0.00500000	0.0001415843	200	7063	3,000		
5M1480	100.00	0.01388889	0.0003932896	72	2543	5,000		
7M1480	124.45	0.01562500	0.0004424508	64	2260	7,000		
11M1480	97.78	0.03125	0.000884902	32	1130	11,000		

The following ratings apply to the ICEX:

- Electrical Rating: 3-28Vdc, 0-10mA
- Class I, Zone 0, AEx ia IIC T4 Ga
- Class I, Zone 0, Ex ia IIC T4 Ga

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Dresser ICEX Meter Fact Sheet NGS.MI.0045

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