

**Product Data Sheet**

PS-00024, Rev. A

February 2004

# Micro Motion<sup>®</sup> Model RFT9739

## Mass Flow and Density Transmitter



# Micro Motion® Model RFT9739 transmitter

## Precise, multivariable measurement

The RFT9739 transmitter works with Micro Motion sensors to provide precision fluid measurement in a wide variety of fluid applications. The RFT9739 has modular, microprocessor-based electronics, incorporating ASIC digital technology with a choice of digital communication protocols.

Combined with a Micro Motion sensor, the RFT9739 provides accurate mass flow, density, temperature, and volumetric measurements of process fluids. With a pressure transmitter properly installed in the flow loop, the transmitter also indicates pressure.

## Four simultaneous output signals

The RFT9739 simultaneously transmits four output signals. Two independently configured analog outputs can each indicate flow rate, density, temperature, or pressure. A frequency/pulse output indicates flow rate or total. A control output indicates flow direction, a fault, or flowmeter zero in progress.

An integral liquid crystal display (LCD) is standard on the rack-mount model, optional with the field-mount version. Use the display to set communication parameters, read process variables, reset flow totalizers, and view diagnostic messages.

## Field-mount or rack-mount

The RFT9739 is available in field-mount and rack-mount versions. The field-mount transmitter is housed in a NEMA 4X (IP65) explosion-proof enclosure that provides easy access to the electronics module, and allows the transmitter and sensor to be installed in the same hazardous area. The rack-mount transmitter's compact housing is ideal for control room installations.

## Digital communications

The RFT9739 features user-selected Bell 202 or RS-485 serial standard for HART® or Modbus® communication protocol. For configuration in the field, use Micro Motion ProLink® II software, Emerson Process Management AMS software, or a Model 275 or 375 HART Communicator.

## Operates with a variety of sensors

Choose from a wide range of sensors to suit your application. The RFT9739 is compatible with Micro Motion ELITE® sensors, the most accurate Coriolis meters available today. Or choose Micro Motion F-Series sensors, H-Series hygienic sensors, standard or high-pressure Model D sensors, Model DT high-temperature sensors, or Model DL sanitary sensors.

# Mass flow performance

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Accuracy <sup>(1)</sup>	Series	Phase	Accuracy
Accuracy <sup>(1)</sup>	ELITE	Liquid	$\pm 0.10\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.50\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	F-Series	Liquid	$\pm 0.20\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.70\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	H-Series	Liquid	$\pm 0.15\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.70\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	D (except D38), DT, DL	Liquid	$\pm 0.15\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.65\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	D38	Liquid	$\pm 0.15\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.50\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$

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(1) Flow accuracy includes the combined effects of repeatability, linearity, and hysteresis. All specifications are based on reference conditions of water at 68 to 77°F (20 to 25 °C) and 15 to 30 psig (1 to 2 bar) unless otherwise noted. For gas measurement specifications and values of zero stability, refer to product specifications for each sensor.

## Mass flow performance *continued*

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Repeatability	ELITE	Liquid	$\pm 0.05\% \pm \left[ \frac{1}{2} \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.25\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	F-Series	Liquid	$\pm 0.10\% \pm \left[ \frac{1}{2} \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.35\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	H-Series	Liquid	$\pm 0.10\% \pm \left[ \frac{1}{2} \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.35\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	D (except DH38), DT, DL	Liquid	$\pm 0.05\% \pm \left[ \frac{1}{2} \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.30\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
	DH38	Liquid	$\pm 0.05\% \pm \left[ \frac{1}{2} \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$
		Gas	$\pm 0.25\% \pm \left[ \left( \frac{\text{zero stability}}{\text{flow rate}} \right) \times 100 \right] \% \text{ of rate}$

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## Density performance

			g/cc	kg/m <sup>3</sup>
<b>Accuracy<sup>(1)</sup></b>	ELITE (except CMF010P)	Liquid	±0.0005	±0.5
		Gas	±0.002	±2.0
	CMF010P	Liquid	±0.002	±2.0
		Gas	±0.008	±8.0
	F-Series	Liquid only	±0.002	±2.0
	H-Series	Liquid only	±0.002	±2.0
	DH100, DH150	Liquid only	±0.002	±2.0
	DH38	Liquid only	±0.004	±4.0
	DL65, DT65, DT100, D150, DT150, DH300	Liquid only	±0.001	±1.0
	D300, D600, DL100, DL200	Liquid only	±0.0005	±0.5
<b>Repeatability</b>	ELITE (except CMF010P)	Liquid	±0.0002	±0.2
		Gas	±0.001	±1.0
	CMF010P	Liquid	±0.001	±1.0
		Gas	±0.004	±4.0
	F-Series	Liquid only	±0.001	±1.0
	H-Series	Liquid only	±0.001	±1.0
	DH100, DH150	Liquid only	±0.001	±1.0
	DH38	Liquid only	±0.002	±2.0
	DL65, DT65, DT100, D150, DT150, DH300	Liquid only	±0.0005	±0.5
	D300, D600, DL100, DL200	Liquid only	±0.002	±2.0

(1) Flow accuracy includes the combined effects of repeatability, linearity, and hysteresis. All specifications are based on reference conditions of water at 68 to 77°F (20 to 25 °C) and 15 to 30 psig (1 to 2 bar) unless otherwise noted. For gas measurement specifications and values of zero stability, refer to product specifications for each sensor.

## Temperature performance

<b>Accuracy</b>	All sensors	±1 °C ±0.5% of reading in °C
<b>Repeatability</b>	All sensors	±0.2 °C

# Output signals

## Analog outputs

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Functional capabilities	Two independently configured analog outputs, designated as primary and secondary, can represent mass or volumetric flow rate, density, temperature, event 1 or event 2. <ul style="list-style-type: none"><li>• With a pressure transmitter, outputs can also provide indication for pressure</li><li>• Internally powered, can be selected as 4-20 mA or 0-20 mA current outputs; cannot be changed from active to passive</li><li>• Galvanically isolated to <math>\pm 50</math> VDC, 1000 ohm load limit</li><li>• Out-of-range capability:<ul style="list-style-type: none"><li>0-22 mA on 0-20 mA output</li><li>3.8-20.5 mA on 4-20 mA output</li></ul></li></ul>			
Milliamp (mA) output rangeability	<i>Flow</i>	<ul style="list-style-type: none"><li>• Maximum span determined by sensor specifications</li><li>• Range limit determined by sensor maximum rate</li><li>• Minimum recommended span (% of nominal flow range):</li></ul>	ELITE sensors	2.5%
			F-Series and H-Series sensors	10%
			D, DT, and DL sensors	10%
			D300 and D600 sensors	5%
			High-pressure (DH) sensors	20% typical
			<i>Density</i>	Range limit
	Minimum span	0.05 g/cc (50 kg/m <sup>3</sup> )		
<i>Temperature</i>	Range limit	-400 to +842 °F (-240 to +450 °C)		
	Minimum span	36 °F (20 °C)		

## Frequency outputs

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One frequency/pulse output can be configured to indicate mass flow rate, volumetric flow rate, mass total (inventory), or volume total (inventory), independent of analog outputs.

- Internally powered, 0-15 V square wave, unloaded; internal 2.2 kohm pull-up resistor to 15 V, galvanically isolated to  $\pm 50$  VDC
- In open collector configuration: sinking capability, 0.1 amps in "on" condition (0 volt level), 30 VDC compliance in "off" condition
- Signal can be scaled up to 10,000 Hz
- Out-of-range capability to 15,000 Hz
- Programmable pulse width for low frequencies

## Dual-channel frequency (rack-mount transmitter only)

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The dual-channel frequency output is approved for custody transfer applications. The two channels are referred to as frequency A and frequency B.

- Phase shift between channels is 90 degrees
  - Output derived from the primary frequency, and represents the same process variable as the frequency/pulse output, but with half the frequency
  - All specifications match frequency/pulse output except:
    - Signal can be scaled up to 5,000 Hz
    - Out-of-range capability to 7500 Hz
  - The output complies with VDE/VDI 2188 when jumper JP1 is installed
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# Output signals *continued*

## Control

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One control output can represent flow direction, fault alarm, zero in progress, event 1 or event 2.

- Internally powered, digital level 0 or 15 V, 2.2 kohm pull-up, galvanically isolated to  $\pm 50$  VDC
- In open collector configuration: sinking capability, 0.1 amps in "on" condition (0 volt level), 30 VDC compliance in "off" condition

## Communication

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Switch allows selection of Bell 202 and/or RS-485 serial standard

- Bell 202 signal is superimposed on primary variable mA output and is available for host system interface
  - Frequency 1.2 and 2.2 kHz, amplitude 0.8 V peak-to-peak, 1200 baud
  - Requires 250 to 1000 ohms load resistance
- RS-485 signal is a  $\pm 5$  V square wave referenced to transmitter ground. Baud rates between 1200 baud and 38.4 kilobaud can be selected.

## Additional outputs

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Sensor frequency For use with Micro Motion peripheral devices, 8 V peak-to-peak at sensor natural frequency, referenced to sensor ground, 10 kohm output impedance

Sensor temperature For use with Micro Motion peripheral devices, 5 mV/°C, referenced to signal ground, 10 kohm output impedance

API gravity API gravity references to 60 °F (15 °C). Uses correlation based on API equation 2540 for Generalized Petroleum Products  
Minimum 4-20 mA span: 10 °API  
Accuracy of corrected density calculation relative to API-2540 from 0 to +300 °F (-18 to +149 °C):

Process fluid	g/cc	kg/m <sup>3</sup>	°API
Diesel, heater, and fuel oils	$\pm 0.0005$	$\pm 0.5$	$\pm 0.2$
Jet fuels, kerosenes, and solvents	$\pm 0.002$	$\pm 2.0$	$\pm 0.5$
Crude oils and JP4	$\pm 0.004$	$\pm 4.0$	$\pm 1.0$
Lube oils	$\pm 0.01$	$\pm 10$	$\pm 2.0$
Gasoline and naphthenes	$\pm 0.02$	$\pm 20$	$\pm 5.0$

Standard volume Outputs standard volume at 60 °F or 15 °C for Generalized Petroleum Products when °API is selected as density unit of measure

- Accuracy of standard volume measurements depends on accuracies of mass flow rate, density, temperature and temperature-corrected °API calculation, and can be estimated using the root mean square method
  - Standard volume accuracy of  $\pm 0.5\%$  of rate is typically attainable for Generalized Petroleum Products such as fuel oils, jet fuels, and kerosenes
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## Output signals *continued*

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<b>Pressure compensation</b>	The analog input can accept a signal from a pressure transmitter for pressure compensation of flow and density. <ul style="list-style-type: none"><li>• Range 0-25 mA</li><li>• Can be used to power independent pressure or differential pressure transmitter</li><li>• Voltage sourcing capability 15 V</li><li>• Input impedance 100 ohms</li></ul>	
<b>Low-flow cutoff</b>	Flow values below the user-defined low-flow cutoff cause the digital, mA, and frequency outputs to default to zero flow levels. Each mA output may be configured for an additional low-flow cutoff.	
<b>Slow-flow limits</b>	Transmitter senses density outside limits. Flow output remains at last measured value, for a programmed time of 0 to 60 seconds, before defaulting to zero flow.	
<b>Damping</b>	Wide range of programmed filter time constants for damping on flow, density, and temperature. Additional damping may be applied to mA outputs.	
<b>Fault indication</b>	Faults can be indicated by user-selected downscale (0–2 mA, 0 Hz) or upscale (22–24 mA, 15–19 kHz) output levels. The control output can also be configured to indicate a fault condition at 0 V.	
<b>Output testing</b>	Current source	Transmitter can produce a user-specified current between 0 and 22 mA on a 0–20 mA output, or between 2 and 22 mA on a 4–20 mA output.
	Frequency source	Transmitter can produce a user-specified frequency between 0.1 and 15,000 Hz.
<b>Local display (optional)</b>	Optional for field-mount transmitter; standard on rack-mount transmitter. <ul style="list-style-type: none"><li>• Display is a 2-line, 16-character, alphanumeric liquid crystal display (LCD)</li><li>• Using the scroll function, the user can view flow rate, density, temperature, mass and volume totals and inventory levels, and status messages</li><li>• A reset button allows the user to reset the transmitter's flow totalizers and communication parameters, and perform the flowmeter zeroing procedure</li></ul>	

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# Power supply options

<b>Field-mount transmitter</b>	<p>The internal power supply of the field-mount RFT9739 transmitter is one of the following (power codes 4 or 5):</p> <ul style="list-style-type: none"> <li>• 85 to 250 VAC<sup>(1)</sup>, 48 to 62 Hz, 10 watts typical, 15 watts maximum, fused in accordance with IEC 127-3 400mA/250V, time-lag, subminiature</li> <li>• 12 to 30 VDC<sup>(2)</sup>, 7 watts typical, 14 watts maximum, fused in accordance with IEC 127-3 1.6A/125V, time-lag, subminiature</li> </ul>
<b>Rack-mount transmitter</b>	<p>The internal power supply of the rack-mount RFT9739 transmitter is one of the following (power codes 1, 2, or 3):</p> <ul style="list-style-type: none"> <li>• 110/115 VAC <math>\pm</math> 25%<sup>(1)</sup>, 48 to 62 Hz, 10 watts typical, 15 watts maximum, fused in accordance with UL/CSA 250mA/250V, time-lag, 5 x 20 mm</li> <li>• 220/230 VAC <math>\pm</math> 25%<sup>(1)</sup>, 48 to 62 Hz, 10 watts typical, 15 watts maximum, fused in accordance with UL/CSA 250mA/250V, time-lag, 5 x 20 mm</li> <li>• 12 to 30 VDC<sup>(3)</sup>, 7 watts typical, 14 watts maximum, fused in accordance with UL/CSA 2A/125V, medium-lag, 5 x 20mm</li> </ul>

- (1) All AC-powered RFT9739 transmitters comply with low-voltage directive 73/23/EEC per IEC 1010-1 with Amendment 2.
- (2) At startup, transmitter power source must provide a minimum of 1.6 amperes of short-term current at a minimum of 12 volts at the transmitter's power input terminals.
- (3) At startup, transmitter power source must provide a minimum of 2 amperes of short-term current at a minimum of 12 volts at the transmitter's power input terminals.

# Temperature limits

				°F	°C
<b>Ambient temperature</b>	Field-mount transmitter	Without display	Operating	-22 to +131	-30 to +55
			Storage	-40 to +176	-40 to +80
		With display	Operating	+14 to +131	-10 to +55
		Storage	-4 to +158	-20 to +70	
	Rack-mount transmitter	Operating	+32 to +122	0 to +50	
		Storage	-4 to +158	-20 to +70	
<b>Approval temperature</b>	Field-mount transmitter	All models	UL	+131 maximum	+55 maximum
			ATEX	-22 to +113	-30 to +45
	Rack-mount transmitter	UL	+131 maximum	+55 maximum	
		ATEX	-4 to +131	-20 to +55	

# Environmental limits and effects

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<b>Humidity limits</b>		Meets SAMA PMC 31.1-1980
<b>Vibration limits</b>	Field-mount transmitter	Meets SAMA PMC 31.1-1980, Condition 2
	Rack-mount transmitter	Meets SAMA PMC 31.1-1980, Condition 1
<b>EMI effect</b>	Field-mount transmitter	Field-mount RFT9739 transmitters with enhanced EMI immunity meet the requirements of the EMC directive 89/336/EEC per EN 50081-1 (August 1993) and EN 50082-2 (March 1995) when operated at nominal rated flow measurement range. Enhanced EMI immunity is required for transmitters installed in the European Community after 1 January 1996. For specific EMC effects within the EC, the Technical EMC file may be reviewed at Emerson Process Management Veenendaal.
<b>Environmental effects</b>		<p>All RFT9739 transmitters meet the requirements of SAMA PMC 33.1 (October 1978), Class 1, A, B, C (0.6% span) at nominal flow rate. All RFT9739 transmitters meet the recommendations of ANSI/IEEE C62.41 (1991) for surge and EFT.</p> <p>To meet the above specifications, the transmitter must be installed with an approved Micro Motion sensor, and the sensor cable must be either double-shielded with full contact glands, or installed in continuous, fully bonded metallic conduit. The transmitter and sensor must be directly connected to a low-impedance (less than 1 ohm) earth ground. Transmitter outputs must be run in standard twisted-pair, shielded instrument wire.</p>
<b>Ambient temperature effect</b>	On mA outputs	±0.005% of span/°C
	On temperature output	±0.01°C/°C
	On mA input	±0.01% of span/°C

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# Field-mount RFT9739 hazardous area classifications

When properly installed with an approved sensor, the RFT9739 field-mount transmitter can be installed in the areas described below. UL is a U.S.A. approvals agency. CSA is a Canadian approvals agency that provides approvals accepted both in the U.S.A. and in Canada. SAA is an Australian approvals agency. ATEX is a European directive.

<b>UL and CSA</b>	Transmitter without display	Transmitter: Class I, Div. 1, Groups C and D. Class II, Div. 1, Groups E, F, and G explosion proof when installed with approved conduit seals. Otherwise, Class I, Div. 2, Groups A, B, C, and D.  Outputs: Provides nonincendive sensor outputs for use in Class I, Div. 2, Groups A, B, C, and D; or intrinsically safe sensor outputs for use in Class I, Div. 1, Groups C and D, or Class II, Div. 1, Groups E, F, and G.
	Transmitter with display	Transmitter: Class I, Div. 2, Groups A, B, C, and D.  Outputs: Provides nonincendive sensor outputs for use in Class I, Div. 2, Groups A, B, C, and D; or intrinsically safe sensor outputs for use in Class I, Div. 1, Groups C and D, or Class II, Div. 1, Groups E, F, and G.

## UL Division 2 nonincendive parameters

Parameter	Analog output (Terminals 17-18, 19-20)	Frequency/pulse output (Terminals 14-16)
V <sub>OC</sub>	36.5 V	16 V
I <sub>SC</sub>	22 mA	51 mA
C <sub>a</sub>	0.135 µf	1.5 µf
L <sub>a</sub>	100 mH	37 mH

<b>SAA</b>	Transmitter without display	Exd [ib] IIC T4 IP66	
	Transmitter with display	Ex [ib] IIC IP66	
<b>ATEX</b>	Transmitter without display	II2G EExd[ib] IIC T6	Flameproof transmitter
		II(2)G [EExib] IIC	Safe area transmitter
	Transmitter with display	II(2)G [EExib] IIC	

# Rack-mount RFT9739 hazardous area classifications

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When properly installed with an approved sensor, the RFT9739 rack-mount transmitter can be installed in the areas described below. UL is a U.S.A. approvals agency. CSA is a Canadian approvals agency that provides approvals accepted both in the U.S.A. and in Canada. ATEX is a European directive.

**UL** Non-hazardous locations. Provides nonincendive sensor outputs for use in Class I, Div. 2, Groups A, B, C, and D; or intrinsically safe sensor outputs for use in Class I, Div. 1, Groups C and D, or Class II, Groups E, F, and G.

**CSA** Non-hazardous locations. Connections to sensor are intrinsically safe for use in Class I, Div. 1, Groups C, D, and Class II, Groups E, F, and G.

**ATEX** Safe area only. Connections to sensor are intrinsically safe in [EEx ib] IIC areas.

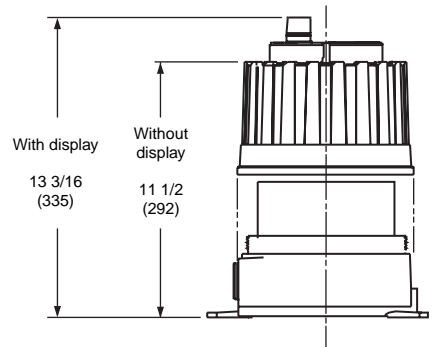
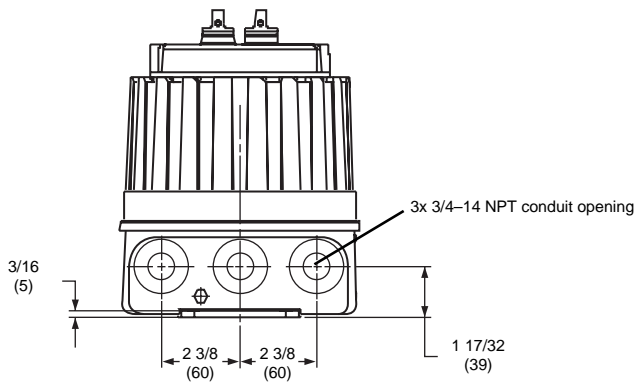
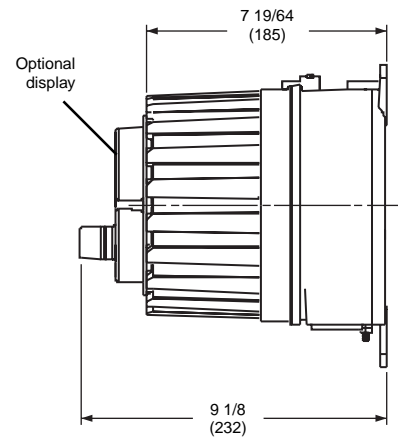
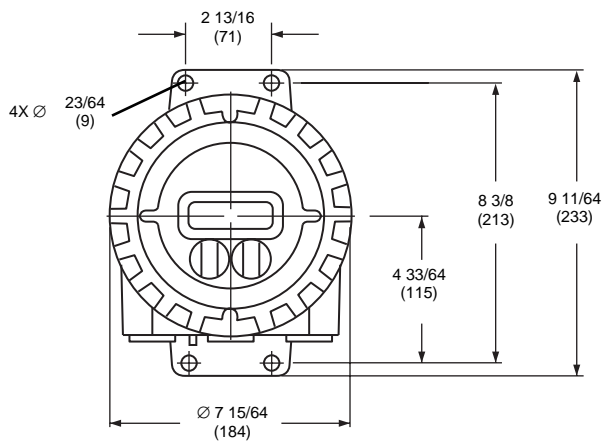
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# RFT9739 field-mount physical specifications

<b>Weight (without display)</b>	12.5 lb (5.7 kg)
<b>Housing</b>	NEMA 4X (IP65) epoxy polyester painted cast aluminum
<b>Cable gland entrances</b>	Three 3/4"–14 NPT on transmitter base
<b>Electrical connections</b>	<ul style="list-style-type: none"> <li>• Screw terminal blocks for all signal wiring can be unplugged</li> <li>• Fixed screw terminals for power connections</li> <li>• Screw terminal on housing for chassis ground</li> <li>• Studs for intrinsic safety ground</li> </ul>

## Dimensions

Dimensions in inches (mm)



**Minimum clearance for cover removal**

# RFT9739 rack-mount physical specifications

**Weight (without display)**

4.4 lb (2.0 kg)

**Housing**

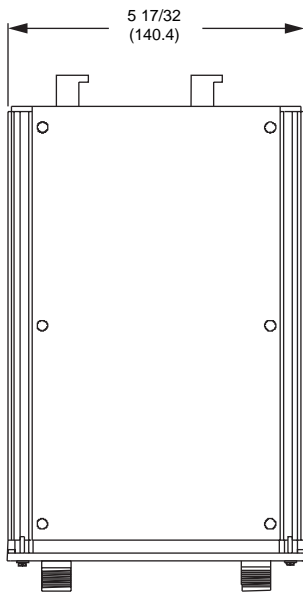
19-inch rack, European standard DIN 41494  
 128 mm (3HE) high x 142 mm (28TE) wide x 231.9 mm deep

**Electrical connections**

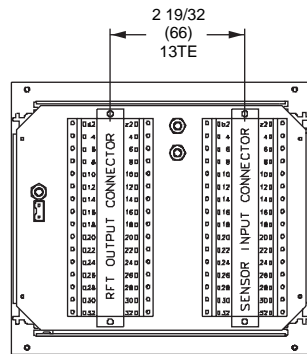
Two connectors per DIN 41612, type F  
 Choose either fast-on (wire-pin) solder connectors (standard) or Y-shaped screw-terminal connectors (optional)  
 Sensor connectors and output connectors are not interchangeable

**Dimensions**

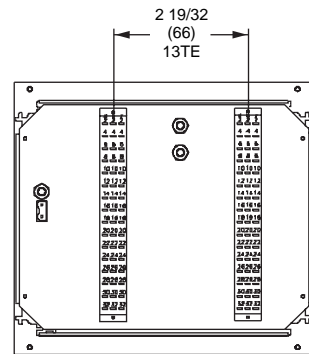
Dimensions in inches (mm)



Back panel with DIN 41612 male Y-shaped screw terminals

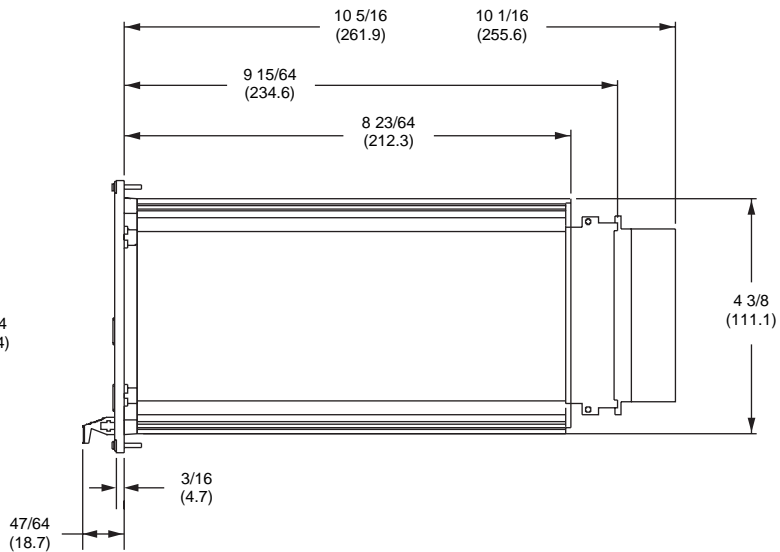
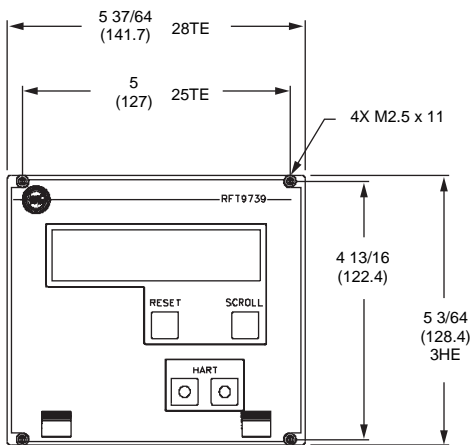


Back panel with DIN 41612 male fast-on/solder terminals



With Y-shaped screw terminals

With fast-on/solder terminals



# Ordering information — RFT9739 field-mount with display

Code	Product description
RFT9739D	RFT9739 multivariable transmitter; remote field-mount; with display; NEMA 4X
Code	Power
4	85–205 VAC
5	12–30 VDC
Code	Configuration
S <sup>(1)</sup>	Standard configuration (not CE compliant)
E	Enhanced EMI immunity (CE compliant)
Code	Approvals
M	Micro Motion standard (no approvals)
U	UL
C	CSA
Y	ATEX intrinsically safe sensor outputs
S <sup>(2)</sup>	SAA
Code	Conduit connections
A	No fittings or glands (for approval codes M, U, C, and Y)
B	1 gland; nickel-plated brass (for ATEX approval code Y only)
C	3 glands; nickel-plated brass (for ATEX approval code Y only)
Code	Language
A	Danish quick reference and English manual
D	Dutch quick reference and English manual
E	English quick reference and English manual
F	French quick reference and French manual
G	German quick reference and German manual
H	Finnish quick reference and English manual
I	Italian quick reference and English manual
N	Norwegian quick reference and English manual
O	Polish quick reference and English manual
P	Portuguese quick reference and English manual
S	Spanish quick reference and Spanish manual
W	Swedish quick reference and English manual
Code	Factory options
Z	Standard product
X	CEQ product
R	Restocked product (if available)
<b>Typical model number: RFT9739D 4 S C A E Z</b>	

(1) Not valid with approval code Y.

(2) Not valid with the DL065S, DS600S, or DT sensors.

# Ordering information — RFT9739 field-mount without display

Code	Product description
RFT9739E	RFT9739 multivariable transmitter; remote field-mount; NEMA 4X; explosion-proof
Code	Power
4	85–205 VAC
5	12–30 VDC
Code	Configuration
S <sup>(1)</sup>	Standard configuration (not CE compliant)
E	Enhanced EMI immunity (CE compliant)
Code	Approvals
M	Micro Motion standard (no approvals)
U	UL
C	CSA
Y	ATEX intrinsically safe sensor outputs
W	ATEX intrinsically safe sensor outputs; flameproof transmitter
S <sup>(2)</sup>	SAA
Code	Conduit connections
	<b>For approval code M (MMI standard):</b>
A	No fittings or glands
B	1 gland; nickel-plated brass
C	3 glands; nickel-plated brass
	<b>For approval code U (UL):</b>
J	1 explosion-proof seal fitting
K	1 explosion-proof seal fittings
	<b>For approval code C (CSA):</b>
A	No fittings or glands
	<b>For approval code Y (ATEX intrinsically safe sensor outputs):</b>
A	No fittings or glands
B	1 gland; nickel-plated brass
C	3 glands; nickel-plated brass
	<b>For approval code W (ATEX intrinsically safe sensor outputs; flameproof transmitter):</b>
A	No fittings or glands
D	1 gland; nickel-plated brass
E	1 gland; stainless steel
F	3 glands; nickel-plated brass
G	3 glands; stainless steel
	<b>For approval code S (SAA):</b>
A	No fittings or glands
Continued on next page.	

(1) Not valid with approval codes Y and W.

(2) Not valid with the DL065S, DS600S, or DT sensors.



## Ordering information — RFT9739 field-mount without display *continued*

Code	Language
A	Danish quick reference and English manual
D	Dutch quick reference and English manual
E	English quick reference and English manual
F	French quick reference and French manual
G	German quick reference and German manual
H	Finnish quick reference and English manual
I	Italian quick reference and English manual
N	Norwegian quick reference and English manual
O	Polish quick reference and English manual
P	Portuguese quick reference and English manual
S	Spanish quick reference and Spanish manual
W	Swedish quick reference and English manual
Code	Factory options
Z	Standard product
X	CEQ product
R	Restocked product (if available)
<b>Typical model number: RFT9739E 4 S U J E Z</b>	

## Ordering information — RFT9739 rack-mount

Code	Product description
RFT9739R	RFT9739 multivariable transmitter; remote rack/panel mount
Code	Power
1	110/115 VAC
2	220/230 VAC
3	12–30 VDC
Code	Configuration
E	Enhanced EMI immunity (CE compliant)
Code	Approvals
M	Micro Motion standard (no approvals)
U	UL
C	CSA
Y	ATEX intrinsically safe sensor outputs
Code	Terminal connections
F	Fast-on/solder connections
S	Y-shaped screw terminals
Code	Language
A	Danish quick reference and English manual
D	Dutch quick reference and English manual
E	English quick reference and English manual
F	French quick reference and French manual
G	German quick reference and German manual
H	Finnish quick reference and English manual
I	Italian quick reference and English manual
N	Norwegian quick reference and English manual
O	Polish quick reference and English manual
P	Portuguese quick reference and English manual
S	Spanish quick reference and Spanish manual
W	Swedish quick reference and English manual
Code	Factory options
Z	Standard product
X	CEQ product
R	Restocked product (if available)
<b>Typical model number: RFT9739R 1 E U F E Z</b>	



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