

# Rosemount™ 644 Temperature Transmitter



## The most versatile temperature transmitter

Reduce complexity and simplify the day-to-day operations of your diverse temperature applications with the versatile Rosemount 644 family of temperature transmitters. Make better decisions for your process with the new and easy-to-use Rosemount 644 Transmitter capabilities including: diagnostics, safety certification, integral transient protection, and display options.

**Table 10: Materials of Construction**

Electronics housing and terminal block	
Rosemount 644 head/ field mount	GE polyphenylene oxide glass reinforced GFN -2 or -3
Enclosure (Options J1, J2, J5, J6, R1, R2, D1, and D2)	
Housing	Low-copper aluminum
Paint	Polyurethane
Cover O-ring	Buna-N

**Materials of construction (stainless steel housing for biotechnology, pharmaceutical industries, and sanitary applications)**

Housing and standard meter cover

- 316 SST

Cover O-ring

- Buna-N

**Mounting**

The Rosemount 644R attaches directly to a wall or a DIN rail. The Rosemount 644H installs in a connection head or universal head mounted directly on a sensor assembly, apart from a sensor assembly using a universal head, or to a DIN rail using an optional mounting clip.

**Special mounting considerations**

See mounting kits for Rosemount 644H for the special hardware that is available to:

- Mount a Rosemount 644H to a DIN rail (see [Dimensional drawings](#)).
- Retrofit a new Rosemount 644H to replace an existing Rosemount 644H Transmitter in an existing threaded sensor connection head (see [Table 3](#)).

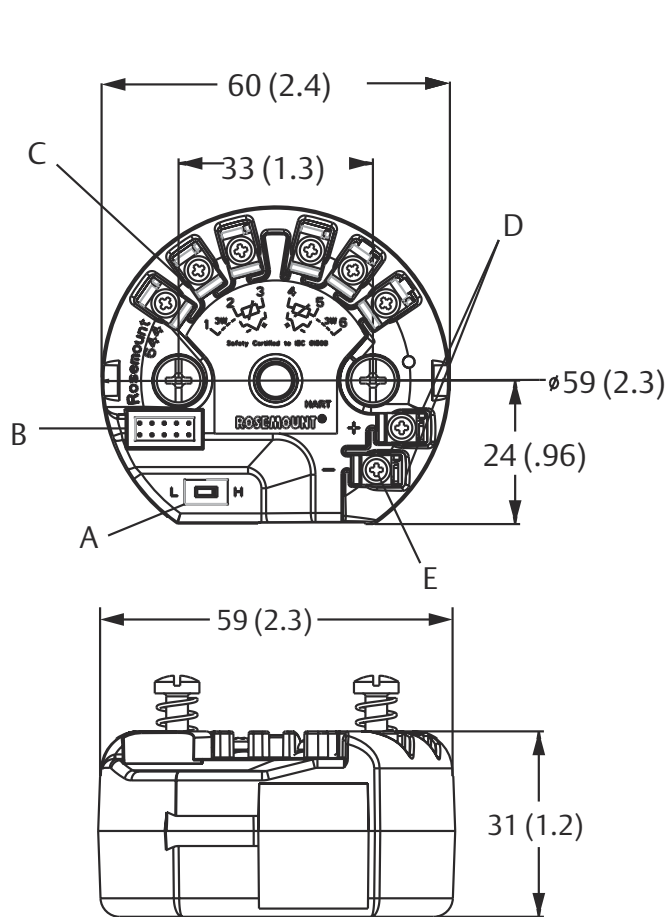
**Table 11: Weight**

Code	Options	Weight
644H	HART, head mount transmitter	78 g (2.75 oz)
644H	FOUNDATION Fieldbus, head mount transmitter	92 g (3.25 oz)
644H	PROFIBUS PA, head mount transmitter	92 g (3.25 oz)
M5	LCD display	34 g (1.2 oz)
M4	LCD display with local operator interface	34 g (1.2 oz)
J1, J2	Universal head, 3-conduits, standard cover	718 g (25.33 oz)
J1, J2	Universal head, 3-conduits, meter cover	826 g (29.14 oz)
J3, J4	Cast SST universal head, 3-conduits, standard cover	2073 g (73.12 oz)
J3, J4	Cast SST universal head, 3-conduits, meter cover	2148 g (75.77 oz)
J5, J6	Aluminum 2-conduits, universal head, standard cover	520g (18.43 oz)
J5, J6	Aluminum 2-conduits, universal head, meter cover	604 g (21.27 oz)
J7, J8	Cast SST universal head, 2-conduits, standard, cover	1673 g (59.0 oz)
J7, J8	Cast SST universal head, 2-conduits, meter cover	1835 g (64.73 oz)
R1, R2	Aluminum connection head, standard cover	523 g (18.45 oz)
R1, R2	Aluminum connection head, meter cover	618 g (21.79 oz)

# Dimensional drawings

**Figure 3: Rosemount 644H (DIN A Head Mount)**

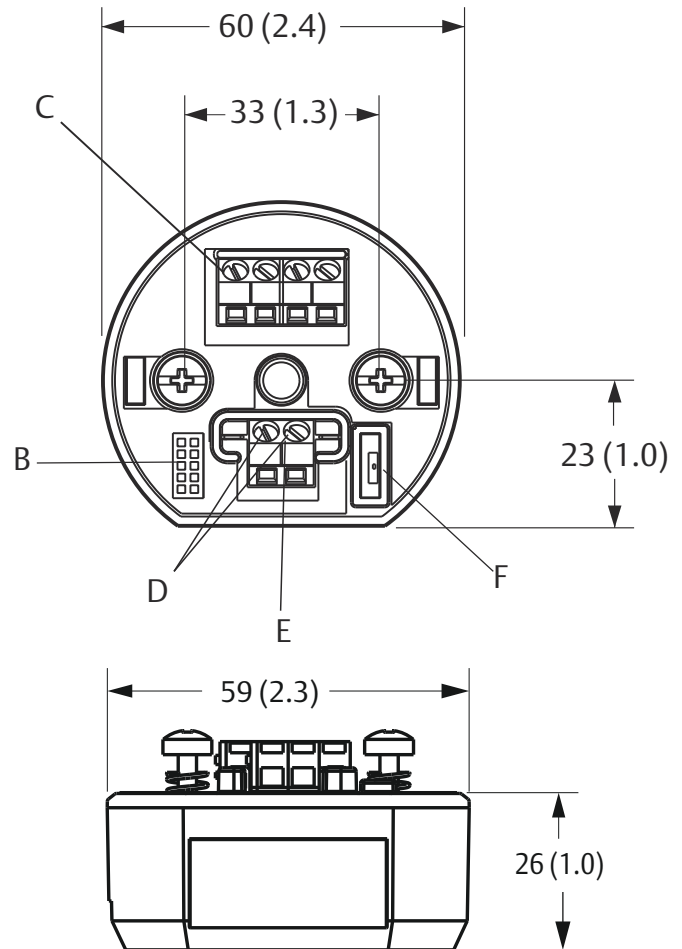
HART® device shown with captivated screw terminals



- A. Failure mode switch
- B. Meter connector
- C. Sensor terminals

Dimensions are in millimeters (inches).

FOUNDATION Fieldbus and PROFIBUS® device shown with standard compression screw terminals



- D. Communication terminals
- E. Power terminals
- F. Simulation switch