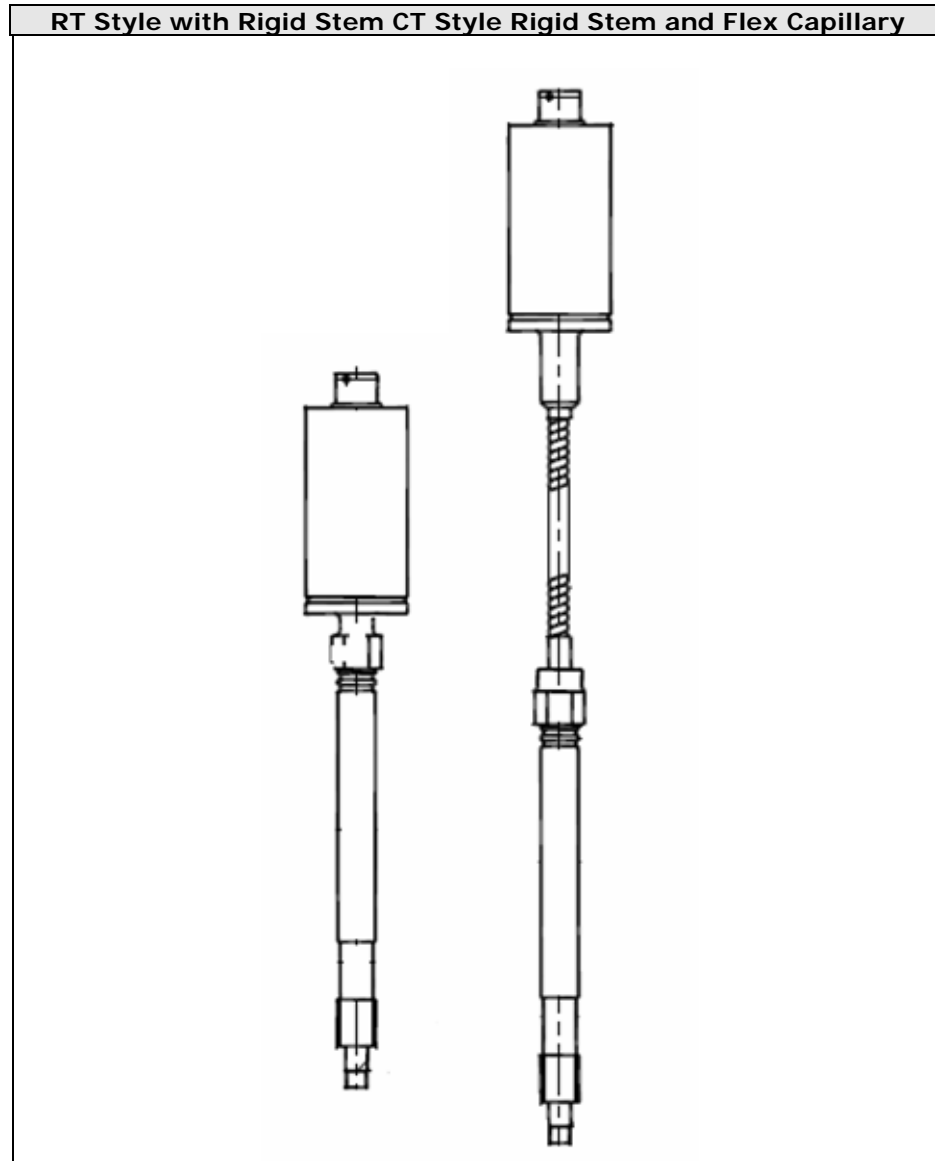


**Melt Pressure Transmitter
Models RT & CT
with M (mA) or V (Vdc) output designation.
Installation & Operating Manual Version 1.00**





Before Proceeding

Check to insure that the model number of the ONEhalf20 Melt Pressure Transmitter is suitable for your application. ONEhalf20 Melt Pressure Transmitters are available in two (2) unique designs. The RT style (first 2 letters of the model number) is a rigid stem only version of the Melt Pressure Transmitter, or the CT style which also has a rigid stem but additionally incorporates 18" of flexible capillary for optimum thermal isolation. The next designation is a numeric number indicating the rigid stem length in inches. This is followed by the output designation:

"MA" (4-20 mA), "V" (0-10 Vdc).

This is then followed by the pressure range designation i.e. (-10M = 0-10,000 psi). If you are unsure please consult www.onehalf20.com.

Quality & Conformity

Your ONEhalf20 Melt Pressure Transmitter comes complete with a certificate of quality and conformity. This certificate includes detailed information regarding the specific accuracy, non-linearity, hysteresis, and repeatability of your Melt Pressure Transmitter. Please refer to this certificate for detailed product information. Your ONEhalf20 Melt Pressure Transmitter is fully compatible with all Melt Pressure Transmitters incorporating the Bendix bayonet style 6 pin or screw type 8 pin connectors. Also included is a Transducer Care Guide. Please refer to this information to insure that your ONEhalf20 Melt Pressure Transmitter provides years of reliable trouble free service.

Operating Principle

ONEhalf20 Melt Pressure Transmitters (output designation "MA", or "V") are used to make pressure measurements of molten polymers up to 750 degrees F (400C). These Melt Pressure Transmitters incorporate a four-arm, 350-Ohm, bonded foil Wheatstone bridge strain gage. An amplifier is added to this proven technology to provide a high-level output signal, (0 - 10 VDC, or 4 - 20 mA). The transmitter is designed to provide an output which is proportional to the melt pressure. These models include an internal shunt calibration feature ("R-Cal") that is used to simulate a signal of 80% of full scale output. This eliminates the need for a calibrated pressure source when scaling associated instrumentation.

Installation

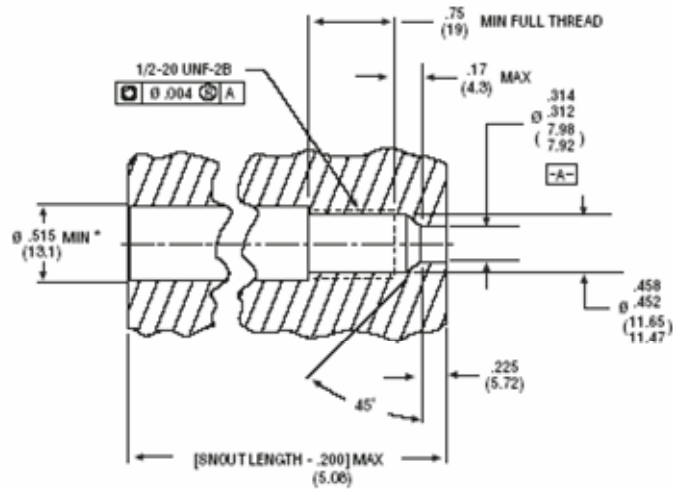
Do not remove protective cap covering transmitter threads until ready to install. Prior to initial installation, verify correct machining of the 1/2-20UNF mounting hole. Detailed mounting hole information is available at www.onehalf20.com (under the technical section). When reinstalling make sure that the mounting hole is clear of material. A ONEhalf20 Cleaning Tool Kit, (CLEANKIT-1/2-20), should be used. To prevent galling, lightly coat transmitter threads with a high temperature anti-seize material. An adequate seal, in a properly machined and maintained mounting well, is obtained with 100 in-lbs (8.3 ft-lbs) mounting torque. Maximum recommended torque is 500 in-lbs (41.6 ft-lbs). The electronics housing should be secured, in an area where the ambient temperature will not exceed 160 F (70C).

www.onehalf20.com

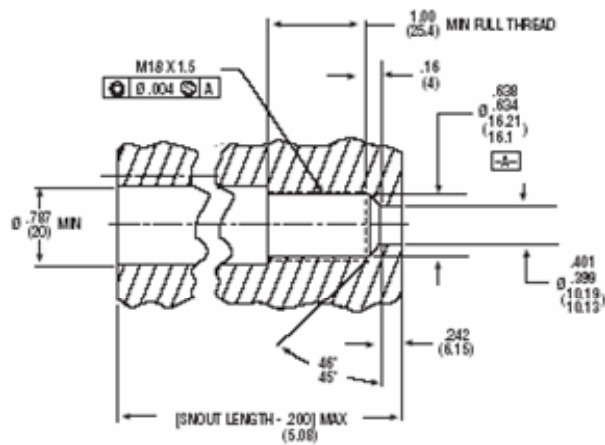
Tel: (416) 781-1881

Fax: (416) 781-0940

Mounting Hole (1/2-20 UNF 2B)



Mounting Hole (M18 X 1.5)

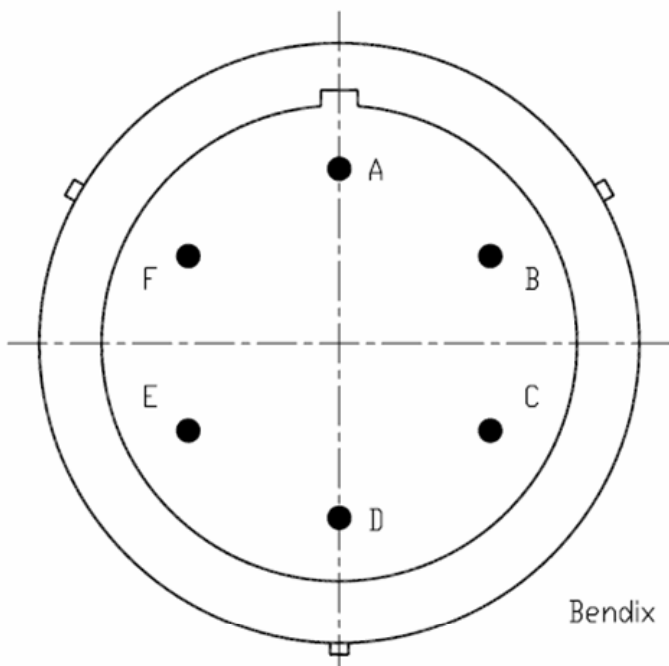


Wiring

The standard electrical termination on this series is a 6-pin connector, Bendix PT02A-10-6P (or equivalent). A mating plug, Bendix PT06A-10-6S (SR) (or equivalent), is required or can be part of the appropriate ONEhalf20 cable assembly. Some units may incorporate the optional 8 pin screw type connector. Connector wiring details are as below. Models with output designation "MA" provide an output of 4-20 mA.

Models with output designation "V" provide an output of 0-10 Vdc. The recommended excitation voltage for ONEhalf20 Melt Pressure Transmitters is 24 Vdc.

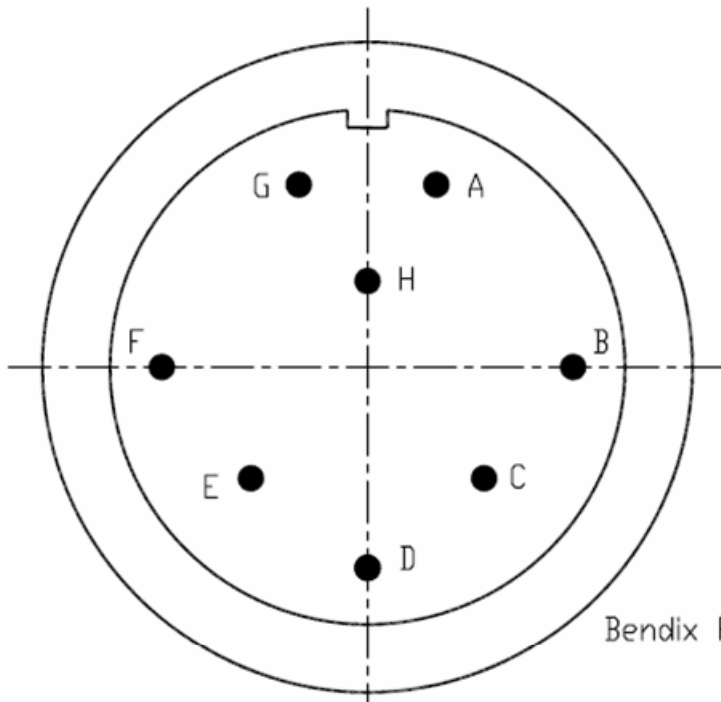
6 Pin Connector Details



Bendix PT02-10-6P or Equivalent

	mA Output (Excitation-24Vdc)	Volt Output (Excitation-24Vdc)
Pin A/Red	Input/Signal(+)	Signal(+)
Pin B/Black	Input/Signal(-)	Signal(-)
Pin C/White	No Connection	Excitation(+)
Pin D/Green	No Connection	Excitation(-)
Pin E/Blue	Calibration 1	Calibration 1
Pin F/Orange	Calibration 2	Calibration 2

8 Pin Connector Details



Bendix PC02E-12-8P or Equivalent

	mA Output (Excitation-24Vdc)	Volt Output (Excitation-24Vdc)
Pin A/Red	Input/Signal(+)	Signal(+)
Pin B/Black	Input/Signal(-)	Signal(-)
Pin C/White	No Connection	Excitation(+)
Pin D/Green	No Connection	Excitation(-)
Pin E/Blue	Calibration 1	Calibration 1
Pin F/Orange	Calibration 2	Calibration 2
Pin G	No Connection	No Connection
Pin H	No Connection	No Connection



Start-Up

Bring system to operating temperature and, with no pressure, adjust the ZERO balance potentiometer, located under the seal screw on amplifier housing until output is 0 Vdc or 4 mA, depending on model. Next, short the leads from the "R-Cal", pins E and F, and adjust the SPAN potentiometer until the output is 80% of full scale, i.e. (8 Vdc for "V" output transmitters or 16.8 mA for "MA" output transmitters). Allow sufficient "soak time" to assure that any material at the transmitter tip is molten before extruder drive is started.

Removal

Transmitter should only be removed when polymer is hot and liquid. Wipe tip with a soft cloth immediately. The melt pressure transmitter must be removed before using an abrasive material or wire brush to clean the extruder barrel. Clean mounting hole completely before reinstalling transmitter by using the ONEhalf20 Cleaning Tool Kit, (CLEANKIT-1/2-20).

Thermocouple Option

ONEhalf20 Melt Pressure Transmitters might also incorporate a thermocouple in the rigid stem (designation -TCJ or -TCK). The standard (-TCJ), Type J (iron-constantan) T/C junction is located just behind the flush diaphragm at the tip of the transmitter.

This senses the temperature at that point.

For thermocouple replacement please contact ONEhalf20.

Transmitter Repair

Questions concerning warranty, repair cost, delivery, and requests for an RMA# should be directed to the ONEhalf20 Service Department, (416)-781-1881 or by email: service@onehalf20.com. Please call for a return authorization number (RMA#) before returning any product. Damaged transducers should be returned to:

ONEhalf20 Inc.
Attn: Service Department
RMA# _____
352 Bedford Park Avenue
Toronto, Ontario M5M 1J8
Canada

www.onehalf20.com

Tel: (416) 781-1881

Fax: (416) 781-0940