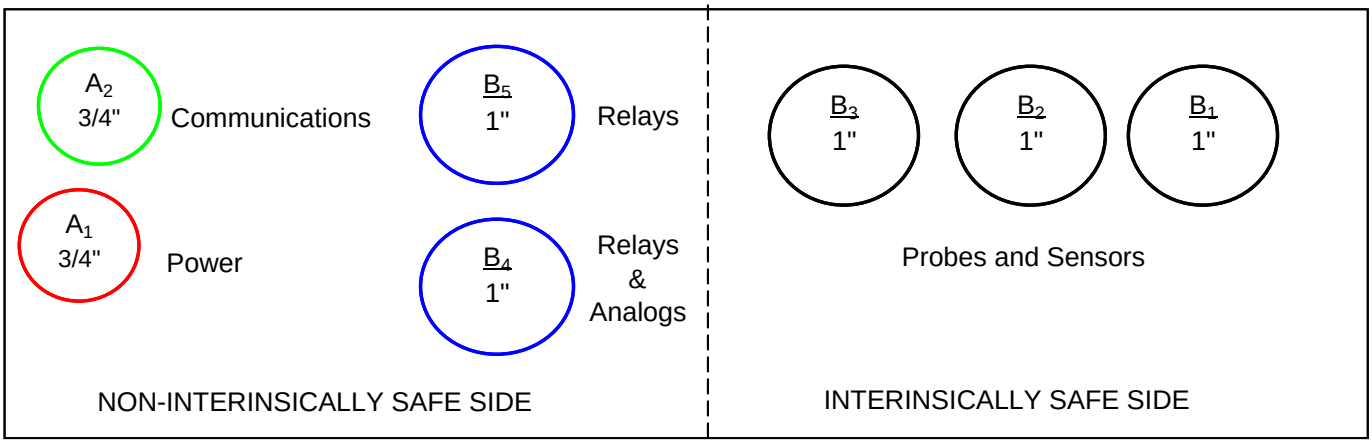
TMS 3000 CONDUIT and FIELD WIRING REQUIREMENTS

(Note: This Summary Sheet is NOT a substitute for reading the Installation Manual.)



All Non-intrinsically safe wires must have their own separate conduits. COMMUNICATION wires can not run with other wires. RELAYS and ANALOG wires can run in the same conduit.

PROBE and SENSOR Wires must have their own separate conduits from Non-intrinsically safe wires. Probe and Sensor wires can run in the same conduit(s).

Conduit Openings and Designated Uses:

B4 = 1 Inch I.P.S. Opening for Relays and Analog
B5 = 1 Inch I.P.S. Opening for Relays

A1 = 3/4 Inch I.P.S. Opening for 120 / 240 VAC
Power and 2 Intrinsically Safe (I.S.) Earth Grounds

A2 = 3/4 Inch I.P.S. Opening for Communications

Field Wiring Types:

Relays: (B4 & B5)
2 Conductor, Unshielded
18 AWG

Analog: (B4)
2 Conductor, Shielded
22 AWG,
Beldon 8761

Power and I.S. Grounds: (A1)
5 Conductor, Unshielded
12 or 14 AWG

Communications: (A2)
*RS 485: (for ETD 1000)
*MODBUS RTD:
2 Conductor, Shielded
24 AWG,
Beldon 9841

*Ether Net:
Standard CAT 5 Network Cable
w/ RJ 45 End Connector for Pneumercator End
8 Conductor

*Modems: (2,400 and 14,400 Baud)
Standard Telephone Cable
w/ RJ 11 End Connector for Pneumercator End
4 Conductor

Conduit Openings and Designated Uses:

B1 = 1 Inch I.P.S. Opening for Probes and Sensors
B2 = 1 Inch I.P.S. Opening for Probes and Sensors
B3 = 1 Inch I.P.S. Opening for Probes and Sensors

Field Wiring Types:

Probes:
*MP 450 & 460 Series -
2 Conductor, Shielded, Twisted Pair,
22 AWG,
Beldon 8441, Alpha 1736C (or equivalent)

Sensors:
*RSU 800 (Discriminating)
*ES 825 100F & 200F
*HS 100D (Discriminating)
3 Conductor, Unshieded
22 AWG
Beldon 8443

*RSU 800 (Non-Discriminating)
*LS 600 (Level Switches)
*LS 600 LDXX (Leak Switches)
*LS 610
*HS 100ND (Non-Discriminating)
2 (or 3 Conductor), Unshieded
22 AWG
Beldon 8442 (or 8443)

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