

Standard Wiring Codes

Option	Description	Standard cable	Standard connector	Submersible cable
Option 2u Unamplified, no shunt cal	no shunt calibration	#1	#2	#3
	with shunt calibration (50 %)*	#4	#5	#6
	with sense leads	#7	#8	#9
Option 2c Voltage amp (vehicle powered) 0 Vdc to 5 Vdc with 11 Vdc to 28 Vdc supply @ 25 mA	with shunt calibration (80 %)*	#14	#15	#16
Option 2t Voltage amp 0 Vdc to 10 Vdc with 15 Vdc to 28 Vdc supply at 40 mA	with shunt calibration (80 %)	#46	#47	#48
Option 2j Current amp three-wire (4 mA to 20 mA) with 22 Vdc to 32 Vdc supply at 65 mA	no shunt calibration	#17	#29	#18
	with shunt calibration (75 %)*	#19	#20	#21
Option 2k Current amp two-wire (4 mA to 20 mA), not FM approved	no shunt calibration	#22	#23	S
Option 2n (2N) Current amp two-wire (4 mA to 20 mA), not FM approved	no shunt calibration**	#22	#23	S

*Interconnecting shunt calibration 1 terminal with shunt calibration 2 terminal (see wiring code) provides 50 % (unamplified units) or 75 % (4 mA to 20 mA, three-wire only), 80 % (voltage amp) of full scale output for quick calibration

** Relay buffered shunt calibration is optional, consult factory

S - special, consult factory

Definitions

Supply: Positive lead of source (power supply) used to drive amplified transducer.

Supply return: Negative lead of source (power supply) used to drive amplified transducer.

+ **Output or Output:** Signal side of output.

- **Output or Output Return:** Reference side of output signal.

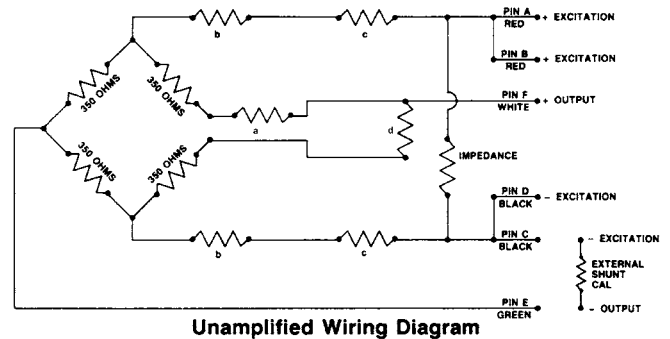
Supply Common: Center terminal if bipolar supplies (i.e. ±15 Vdc) are used.

+ **Excitation:** Positive lead of source (power supply) used to drive unamplified transducer.

- **Excitation:** Negative lead of source (power supply) used to drive unamplified transducer.

+ **Sense:** Positive lead used for sensing bridge excitation with long cables.

- **Sense:** Negative lead used for sensing bridge excitation with long cables.



- a Zero temperature compensation resistor
- b Span temperature compensation resistor
- c Trim resistors for output standardization
- d Zero balance trim resistors

#1	Cable/Unamplified Red (+) Excitation Black (-) Excitation Green (-) Output White (+) Output			#11	Cable/Voltage (± 5 Vdc Output with ± 15 Vdc supply)/Int. Shunt Cal ± 15 Vdc Supply (+) Supply (+15 Vdc) (-) Supply (-15 Vdc) (-) Output/Supply com. (+) Output (± 5 Vdc) Shunt cal 1* Shunt cal 2*	Wire Red Black Green White Blue Brown
#2	Connector/Unamplified A & B (+) Excitation C & D (-) Excitation E (-) Output F (+) Output			#12	Connector/Voltage (± 5 Vdc Output with ± 15 Vdc)/Int. Shunt Cal ± 15 Vdc Supply (+) Supply (+15 Vdc) (-) Output/Supply com. (-) Supply (-15 Vdc) (+) Output (± 5 Vdc) Shunt cal 1* Shunt cal 2*	Pin A B C D E F
#3	Cable/Unamplified/Submersible Red (+) Excitation Brown (-) Excitation Yellow (-) Output Orange (+) Output			#13	Cable/Voltage (± 5 Vdc Output with ± 15 Vdc)/Int. Shunt Cal/Submersible ± 15 Vdc Supply (+) Supply (+15 Vdc) (-) Supply (-15 Vdc) (-) Output/Supply com. (+) Output (± 5 Vdc) Shunt cal 1* Shunt cal 2*	Wire Red Brown Orange Green Blue Yellow
#4	Cable/Unamplified/Int. Shunt Cal Red (+) Excitation Black (-) Excitation Green (-) Output White (+) Output Blue Shunt Cal 1* Brown Shunt Cal 2*			#14	Cable/Vehicle Voltage 0 Vdc to 5 Vdc Supply/Internal Shunt Cal Red (+) Supply (11 Vdc to 26 Vdc) Black, Green Output Common/Supply Return (Internal Connection) White (+) Output (0 Vdc to 5 Vdc) Blue Shunt Cal 1* Brown Shunt Cal 2*	
#5	Connector/Unamplified/Int. Shunt Cal A (+) Excitation B (-) Excitation C (+) Output D (-) Output E Shunt Cal 1* F Shunt Cal 2*			#15	Connector/Vehicle Voltage 0 Vdc to 5 Vdc w/11 Vdc to 26 Vdc Supply/Internal Shunt Cal A (+) Supply (11 Vdc to 26 Vdc) B, C Output Common/Supply Return (Internal Connection) D (+) Output (0 Vdc to 5 Vdc) E Shunt Cal 1* F Shunt Cal 2*	
#6	Cable/Unamplified/Int. Shunt Cal/Submersible Red (+) Excitation Blue (-) Excitation Orange (+) Output Green (-) Output Brown Shunt Cal 1* Yellow Shunt Cal 2*			#16	Cable/Vehicle Voltage 0 Vdc to 5 Vdc with 11 Vdc to 26 Vdc Supply/Internal Shunt Cal/Submersible Red (+) Supply (11 Vdc to 26 Vdc) Brown, Orange Output Common/Supply Return (Internal Connection) Green (+) Output (0 Vdc to 5 Vdc) Blue Shunt Cal 1* Yellow Shunt Cal 2*	
#7	Cable/Unamplified/Sense Leads Red (+) Excitation Black (-) Excitation Green (-) Output White (+) Output Blue (-) Sense Brown (+) Sense			#17	Cable/three-wire current Red (+) Supply Black Output common/ Green Supply return (Internal Connection) White (+) Output	
#8	Connector/Unamplified/Sense Leads A (+) Excitation B (+) Sense C (-) Excitation D (-) Sense E (-) Output F (+) Output			#18	Cable/three-wire current, 4 mA to 20mA/Submersible Red (+) Supply Brown, Output common/ Yellow Supply return (Internal Connection) Green for outputs Orange (+) Output (4 mA to 20 mA)	
#9	Cable/Unamplified/Sense/Leads/Submersible Red (+) Excitation Blue (-) Excitation Orange (+) Output Green (-) Output Brown (+) Sense Yellow (-) Sense			#19	Cable/three-wire current, 4 mA to 20mA/Shunt Cal Red (+) Supply Black, Output common/ Green Supply return (Internal Connection) White (+) Output (4 mA to 20 mA) Blue Shunt Cal 1* Brown Shunt Cal 2*	
#10	Cable/Voltage (± 5 Vdc Output with ± 15 Vdc supply)/Submersible ± 15 Vdc Supply (+) Supply (+15 Vdc) (-) Supply (-15 Vdc) (+) Output (± 5 Vdc) (-) Output/Supply Com.	Wire Red Orange Yellow Brown				

#20 Connector/three-wire current, 4 mA to 20mA/Shunt Cal

- A (+) Supply
- B, C Output common/Supply return (Internal connection)
- D (+) Output (4 mA to 20 mA)
- E Shunt Cal 1*
- F Shunt Cal 2*

#21 Cable/three-wire current, 4 mA to 20mA/Int. Shunt Cal/Submersible

- Red (+) Supply
- Brown, Output common/
- Green Supply return (Internal Connection)
- Orange (+) Output (4 mA to 20 mA)
- Blue Shunt Cal 1*
- Yellow Shunt Cal 2*

#22 Cable/two-wire current, 4 mA to 20mA

- Red (+) Supply
- Black (+) Output (4 mA to 20 mA)
- White Case Ground

#23 Connector/two-wire current, 4 mA to 20mA

- A (+) Supply
- B, C & F No Connection
- D (+) Output (4 mA to 20 mA)
- E Case Ground

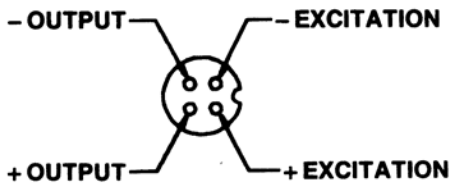
#24 Cable/Frequency Output/Internal Shunt Cal

- Red (+) Supply
- Black, Output common/
- Green Supply return (Internal Connection)
- White (+) Output
- Blue Shunt Cal 1*
- Brown Shunt Cal 2*

#25 Connector/Frequency Output/Internal Shunt Cal

- A (+) Supply
- B, C Output common/Supply return (Internal Connection)
- D (+) Output
- E Shunt Cal 1*
- F Shunt Cal 2*

#27 Microtech Connector



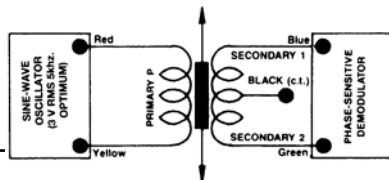
#28 Consult factory

#29 Connector/three-wire current, 4 mA to 20mA/22 Vdc to 32 Vdc Supply

- A (+) Supply (22 Vdc to 32 Vdc)
- B, C Output common/Supply return (Internal Connection)
- D (+) Output (4 mA to 20 mA)
- E & F No Connection

#30 ac/ac Displacement transducer

- Red Supply (Calibrated @ 3 V RMS 5 kHz)
 - Yellow Supply return
 - Blue Output
 - Green Output return
 - Black Secondary Center Tap (normally not connected)
- Cable shield is not connected to transducer.



#31 dc/dc Displacement transducer (single power supply) Reverse polarity protected with voltage regulator

- Dual Supply**
- Red 12 V to 20 V input
 - Blue -12 V to -20 V input
 - Black 0 V common

- Single Supply**
- Red 24 V to 40 V input
 - Blue Supply negative

- Outputs**
- Yellow 0 V to 5 V to 10 V
 - Green ±5 Vdc

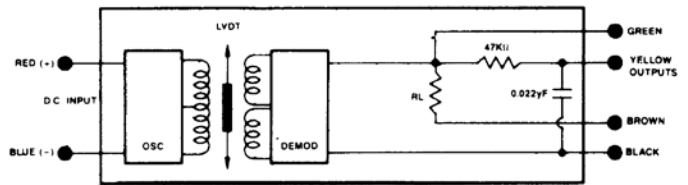
* Must be floating output common = 1/2 supply voltage

#32 dc/dc displacement transducer (single power supply) without reverse polarity protection or voltage regulation

- Red (+) Supply (6 Vdc to 12 Vdc)
- Blue Supply return
- Yellow Note: See below
- Green for outputs
- Black
- Brown

- Short Black and Brown for internal 10000 ohm load
- Filtered output - Yellow and Black/Brown
- Unfiltered output - Green and Black/Brown

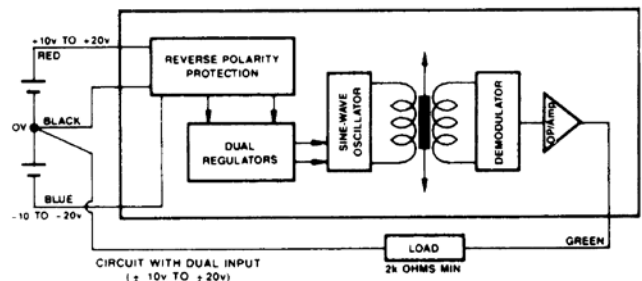
Cable shield is not connected to transducer.



#35 dc/dc displacement transducer (single power supply) reverse polarity protected with voltage regulator

- Yellow 5 V, Regulated Input
- Brown 5 V, Regulated Output
- Red 6 V to 18 V, Unregulated
- Blue 0 V, supply common/ground
- Black Output (lo)
- Green Output (hi)
- Shield Connect to instrument ground

Link the Yellow and Brown wires together when using the 6 V/18 V. Input Option. Ensure the Red and Brown wires are disconnected when using the 5 V. The dc output signal is electrically isolated from the Input voltage.



- #36 Connector/two-wire current, 4 mA to 20 mA**
 1 + Supply
 2 + Output
 3 N/C
 Case Ground
- #37 Connector/Unamplified**
 1 + Excitation
 2 + Output
 3 - Output
 - Excitation
- #38 Connector/Voltage**
 1 + Supply
 2 + Output
 3 Supply/Output Common
 N/C to Case
- #39 Connector/Unamplified**
 A + Excitation
 B + Output
 C - Output
 D - Excitation
- #40 Unamplified, 6-pin Connector with Signature Module**
 A (+) Excitation
 B (+) Signature
 C (-) Excitation
 D (-) Signature
 E (-) Output
 F (+) Output
- #41 Unamplified, 6 Conductor for Signature Module**
 Red (+) Excitation
 Black (-) Excitation
 Green (-) Output
 White (+) Output
 Blue (-) Signature (Memory -)
 Brown (+) Signature (Memory +)
- #44 Cable, 4 mA to 20mA out**
 Red (+) Supply
 Black (+) Output (4 mA to 20 mA)
 White Case Ground
- #45 Unamplified, 6-pin header for coil connections on displacement transducer**
 1 & 6 Primary Coil
 2 & 5 Secondary Coils
 3 or 4 Secondary Centre Tap (whichever is longer)
- #46 Vehicle amplifier 0 Vdc to 10 Vdc**
 Red (+) Supply
 Black Supply return
 Green (-) Output
 White (+) Output (0 Vdc to 10 Vdc)
 Blue Shunt Cal 1
 Brown Shunt Cal 2
- #47 Vehicle amplifier 0 Vdc to 10 Vdc**
 A (+) Supply
 B (-) Output
 C Supply return
 D (+) Output (0 Vdc to 10 Vdc)
 E Shunt Cal 1
 F Shunt Cal 2
- #48 Vehicle amplifier 0 Vdc to 10 Vdc/Submersible Cable**
 Red (+) Supply
 Brown (-) Output
 Orange Supply return
 Green (+) Output (0 Vdc to 10 Vdc)
 Blue Shunt Cal 1
 Yellow Shunt Cal 2
- #49 FP2000, current output, Bendix connector**
 A (+) Supply 9 Vdc to 28 Vdc (red)
 B N/C
 C N/C
 D (+) Output 4 mA to 20 mA (black)
 E N/C
 F N/C
- #50 FP2000, voltage output, Bendix connector**
 A (+) Supply 9 Vdc to 28 Vdc (red)
 B (-) Supply return (black)
 C (-) Output (green)
 D (+) Output 0 Vdc to 5 Vdc (white)
 E N/C
 F N/C
- #51 FP2000, current output, cable exit**
 (+) Supply 9 Vdc to 28 Vdc (red)
 (-) Output 4 mA to 20 mA (black)
- #52 FP2000, voltage output, cable exit**
 (+) Supply 9 Vdc to 28 Vdc (red)
 Supply return (black)
 (-) output (green)
 (+) output (0 Vdc to 5 Vdc) (white)
- #53 FP2000, current output, I.S., DIN connector, opt 2N**
 1 (+) Supply
 2 (+) Output
 3 Case ground
- #54 FP2000 current output DIN connector, option 2p**
 1 + supply
 2 + output 4 mA to 20 mA
 3 No connection
 GND No connection
- #55 FP2000 current output DIN connector, option 2y with shunt cal.**
 1 + supply
 2 + output 4 mA to 20 mA
 3 N/C
 GND Shunt Cal
- #56 FP2000 voltage output pin conn opt. 2e/2f with shunt calibration**
 1 + supply
 2 + output
 3 Supply ret/-output
 GND Shunt Cal
- #57 FP2000 Millivolt output Bendix conn opt. 2u**
 A + excitation
 B - excitation
 C + output
 D - output
 E N/C
 F Shunt Cal
- #58 FP2000 current output Bendix conn opt. 2y**
 A + supply
 B N/C
 C N/C
 D + output (4 mA to 20 mA)
 E N/C
 F Shunt Cal
- #59 FP2000 current output Bendix connector shunt cal opt. 2N IS**
 A + supply
 B N/C
 C N/C
 D + output (4 mA to 20 mA)
 E Case ground
 F Shunt Cal

#60 Voltage output with shunt cal Bendix conn. opts. 2e/2f

- A + supply
- B - supply return
- C - output
- D + output
- E N/C
- F Shunt Cal

#61 Current output w/ shunt cal & integral cable opt. 2y/6r/6q

- Red + supply
- Black + output
- Green Shunt Cal

#62 Current output with shunt cal & integral cable opt. 2N IS/6r/6q

- Red + supply
- Black + output (4 mA to 20mA IS)
- Green Shunt
- White Case ground

#63 Voltage output with shunt cal & integral cable opt. 2e/2f/6r/6q

- Red + supply
- Black - supply return
- Green Shunt Cal
- White + output

#64 Current output 2N is with shunt cal & DIN connector

- 1 + supply
- 2 + output (4 mA to 20 mA)
- 3 Case ground
- GND Shunt Cal