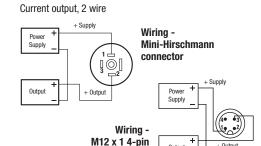
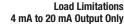
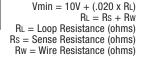
Output

Output

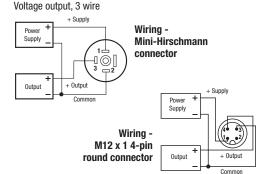


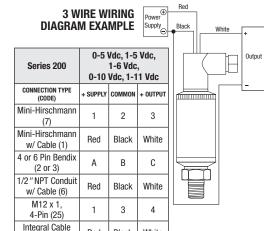
round connector





			,	
	Series 100	4 mA to 20 mA		
	CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPU	
	Mini-Hirschmann (7)	1	2	
	Mini-Hirschmann w/ Cable (1)	Red	Black	
	4 or 6 Pin Bendix (2 or 3)	А	В	
2 WIRE WIRING	1/2" NPT Conduit w/ Cable (6)	Red	Black	
DIAGRAM	M12 x 1, 4-Pin (25)	1	3	
EXAMPLE	Integral Cable (36)	Red	Black	



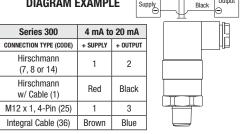


Black

(36)

White

# 2 WIRE WIRING DIAGRAM EXAMPLE



#### Load Limitations 4 mA to 20 mA Output Only

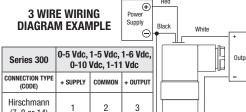
 $Vmin = 10V + (.020 \times RL)$ 

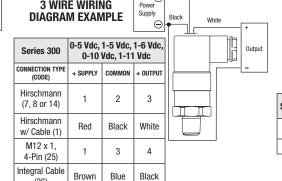
RL = Rs + Rw

RL = Loop Resistance (ohms)

Rs = Sense Resistance (ohms)

Rw = Wire Resistance (ohms)





#### Shield Red Black 2 WIRE WIRING Power Supply **DIAGRAM EXAMPLE** Series 612/613 4 mA to 20 mA + SUPPLY + OUTPUT CASE GROUND CONNECTION TYPE Red Black Shield Cable \ 0 ,

#### Load Limitations 4 mA to 20 mA Output Only

Vmin =  $[10V + (.020 \times RL)] - 0.04354$   $\frac{\Omega}{FL}X$ 

RL = Rs + Rw

cable length

Black

RL = Loop Resistance (ohms) Rs = Sense Resistance (ohms)

Rw = Wire Resistance (ohms)

Power Supply

## **3 WIRE WIRING DIAGRAM EXAMPLE**

Series 612/613	0-5 Vdc, 0-10 Vdc, 0.5 to 2.5 Vdc			
CONNECTION Type	+ SUPPLY	COMMON	+ OUTPUT	CASE GROUND
Cable	Brown	Green	White	Gray

#### 2 WIRE WIRING Power Supply DIAGRAM EXAMPLE Series 615/616 4 mA to 20 mA CONNECTION TYPE (CODE) + SUPPLY + OUTPUT Hirschmann (8 or 14) Hirschmann Red Black w/ Cable (1) 6 Pin Bendix (3) 1/2" NPT Conduit Red Black w/ Cable (6) M12 x 1, 4-Pin (25) **Load Limitations** Integral Cable (36) Red Black

3 WIRE WIRING

**DIAGRAM EXAMPLE** 

Black

Supply

#### 4 mA to 20 mA **Output Only** $Vmin = 10V + (.020 \times RL)$

RL = Rs + Rw

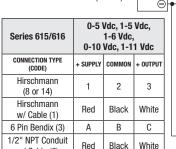
RL = Loop Resistance (ohms)Rs = Sense Resistance (ohms)

w/ Cable (6)

M12 x 1, 4-Pin (25)

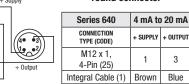
Integral Cable (36) Red

Rw = Wire Resistance (ohms)



Black

#### Current output, 2 wire Wiring - M12 x 1 4-pin round connector Power + Supply



Voltage output, 3 wire		out, 3 wire	<b>Load Limitations</b>
Power	+	Supply	4 mA to 20 mA 0
Supply	_L	+ Output	Vmin = 10V + (.02)
	_		RL = Rs + Rw
		\(\begin{pmatrix} 4 & & 3 \\ 1 & & 2 \end{pmatrix}\) \\ \	RL = Loop Resista
	┰┤		Rs = Sense Resis

4 mA to 20 mA Output Only  $Vmin = 10V + (.020 \times RL)$ 

RL = Loop Resistance (ohms)

Rs = Sense Resistance (ohms)

Rw = Wire Resistance (ohms)

0-5 Vdc, 0-10 Vdc, 0-20 mA Series 640 CONNECTION TYPE (CODE) + SUPPLY COMMON + OUTPUT M12 x 1, 4-Pin (25) Integral Cable (1) Brown Blue Black



Output

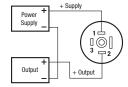
SERIES 660

**Load Limitations** 

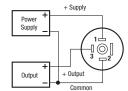
# SERIES 800

#### Wiring - Mini-Hirschmann connector

Current output, 2 wire

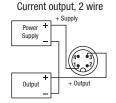


#### Voltage output, 3 wire



Series 660	4 mA to 20 mA		
CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPUT	
Mini-Hirschmann (7)	1	2	
Mini-Hirschmann w/ Cable (1)	Red	Black	
M12 x 1, 4-Pin (25)	1	3	
Integral Cable (36)	Brown	Green	

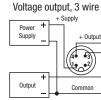
#### Wiring - M12 x 1 4-pin round connector



Vmin = 10V + (.020 x RL)RL = Rs + RwRL = Loop Resistance (ohms) Rs = Sense Resistance (ohms)

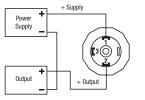
4 mA to 20 mA Output Only

Rw = Wire Resistance (ohms)



Series 660	1-5 Vdc, 0.1-10 Vdc		
CONNECTION TYPE (CODE)	+ SUPPLY	COMMON	+ OUTPUT
Mini-Hirschmann (7)	1	2	3
Mini-Hirschmann w/ Cable (1)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Brown	Green	White

#### 4 mA to 20 mA, 2 wire



Series 800

CONNECTION TYPE (CODE)

Hirschmann (8 or 14)

Hirschmann w/ Cable (1)

M12 x 1, 4-Pin (25)

**Load Limitations** 4 mA to 20 mA Output Only Vmin = 10V + (.020 x RL)

RL = Rs + Rw

RL = Loop Resistance (ohms) Rs = Sense Resistance (ohms)

Rw = Wire Resistance (ohms)

# 4 mA to 20 mA + OUTPUT Black

Series 800	0-10 Vdc		
CONNECTION TYPE (CODE)	+ SUPPLY	COMMON	+ OUTPUT
Hirschmann (8 or 14)	1	2	3
Hirschmann w/ Cable (1)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4

0 Vdc to 10 Vdc, 3 wire

Power

Supply

### Installation:

NOSHOK pressure transmitters/transducers may be mounted in any plane with negligible effect on performance. Although these units are designed and manufactured to withstand substantial shock and vibration, it is recommended that they be mounted in an area of minimal vibration. Always use a wrench on the wrench flats when installing. NEVER use a pipe wrench on the housing or in the area of the electrical connection.

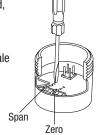
#### Maintenance/Calibration:

NOSHOK pressure transmitters/transducers require no maintenance. Recalibration is dependent on the users Quality Assurance Program. If no program is in place, NOSHOK recommends a 1 year cycle.

# Alignment Procedure (applies only to 100, 200, 615/616, and 640 series):

Using a pressure source and meter with adequate accuracy, perform the following steps:

- Open sensor
- With no pressure applied, adjust the "Z" potentiometer for the correct Zero output
- Apply the correct full scale pressure to the unit
- Adjust the "S" potentiometer for the correct Span output



# **NOSHOK TRANSMITTERS TRANSDUCERS**



# Wiring Diagrams & Electrical **Connections for:**

100, 200, 300, 612, 613, 615/616, 640, 660, and 800 Series



+ SUPPLY

Red