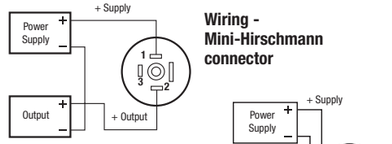
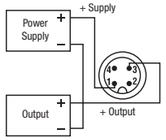
SERIES 100

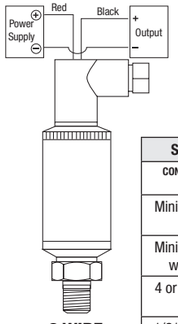
Current output, 2 wire



Wiring - Mini-Hirschmann connector



Wiring - M12 x 1 4-pin round connector



2 WIRE WIRING DIAGRAM EXAMPLE

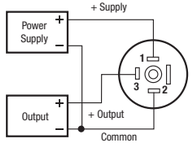
Load Limitations
4 mA to 20 mA Output Only

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

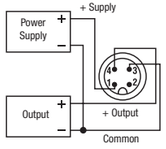
Series 100	4 mA to 20 mA	
CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPUT
Mini-Hirschmann (7)	1	2
Mini-Hirschmann w/ Cable (1)	Red	Black
4 or 6 Pin Bendix (2 or 3)	A	B
1/2" NPT Conduit w/ Cable (6)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Red	Black

SERIES 200

Voltage output, 3 wire

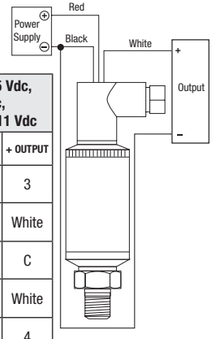


Wiring - Mini-Hirschmann connector



Wiring - M12 x 1 4-pin round connector

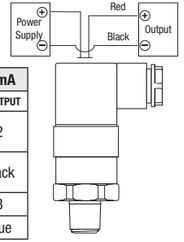
3 WIRE WIRING DIAGRAM EXAMPLE



Series 200	0-5 Vdc, 1-5 Vdc, 1-6 Vdc, 0-10 Vdc, 1-11 Vdc		
CONNECTION TYPE (CODE)	+ SUPPLY	COMMON	+ OUTPUT
Mini-Hirschmann (7)	1	2	3
Mini-Hirschmann w/ Cable (1)	Red	Black	White
4 or 6 Pin Bendix (2 or 3)	A	B	C
1/2" NPT Conduit w/ Cable (6)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Red	Black	White

SERIES 300

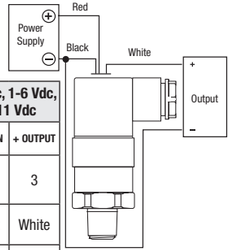
2 WIRE WIRING DIAGRAM EXAMPLE



Series 300	4 mA to 20 mA	
CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPUT
Hirschmann (7, 8 or 14)	1	2
Hirschmann w/ Cable (1)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Brown	Blue

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)

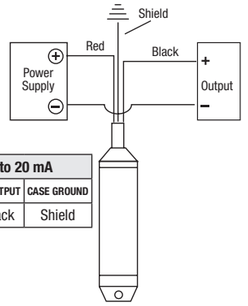
3 WIRE WIRING DIAGRAM EXAMPLE



Series 300	0-5 Vdc, 1-5 Vdc, 1-6 Vdc, 0-10 Vdc, 1-11 Vdc		
CONNECTION TYPE (CODE)	+ SUPPLY	COMMON	+ OUTPUT
Hirschmann (7, 8 or 14)	1	2	3
Hirschmann w/ Cable (1)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Brown	Blue	Black

SERIES 612 & 613

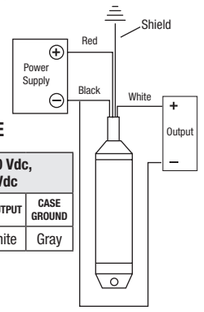
2 WIRE WIRING DIAGRAM EXAMPLE



Series 612/613	4 mA to 20 mA		
CONNECTION TYPE	+ SUPPLY	+ OUTPUT	CASE GROUND
Cable	Red	Black	Shield

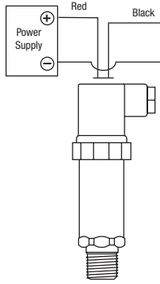
Load Limitations
4 mA to 20 mA Output Only
Vmin = [10V + (.020 x RL)] - 0.04354 $\frac{\Omega}{ft}$ x cable length
RL = Rs + Rw
RL = Loop Resistance (ohms)
Rs = Sense Resistance (ohms)
Rw = Wire Resistance (ohms)

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

SERIES 615/616

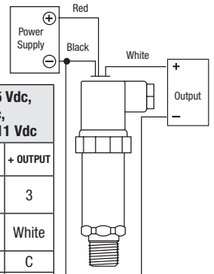


2 WIRE WIRING DIAGRAM EXAMPLE

Series 615/616	4 mA to 20 mA	
CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPUT
Hirschmann (8 or 14)	1	2
Hirschmann w/ Cable (1)	Red	Black
6 Pin Bendix (3)	A	B
1/2" NPT Conduit w/ Cable (6)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Red	Black

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)

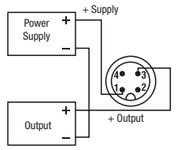
3 WIRE WIRING DIAGRAM EXAMPLE



Series 615/616	0-5 Vdc, 1-5 Vdc, 1-6 Vdc, 0-10 Vdc, 1-11 Vdc		
CONNECTION TYPE (CODE)	+ SUPPLY	COMMON	+ OUTPUT
Hirschmann (8 or 14)	1	2	3
Hirschmann w/ Cable (1)	Red	Black	White
6 Pin Bendix (3)	A	B	C
1/2" NPT Conduit w/ Cable (6)	Red	Black	White
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (36)	Red	Black	White

SERIES 640

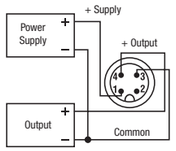
Current output, 2 wire



Wiring - M12 x 1 4-pin round connector

Series 640	4 mA to 20 mA	
CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPUT
M12 x 1, 4-Pin (25)	1	3
Integral Cable (1)	Brown	Blue

Voltage output, 3 wire



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)

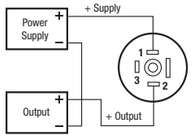
Series 640	0-5 Vdc, 0-10 Vdc, 0-20 mA		
CONNECTION TYPE (CODE)	+ SUPPLY	COMMON	+ OUTPUT
M12 x 1, 4-Pin (25)	1	3	4
Integral Cable (1)	Brown	Blue	Black

NOSHOK
www.noshok.com

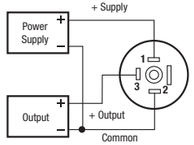
SERIES 660

Wiring - Mini-Hirschmann connector

Current output, 2 wire



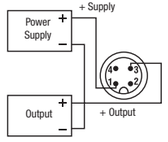
Voltage output, 3 wire



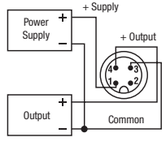
Load Limitations
4 mA to 20 mA Output Only
Vmin = 10V + (.020 x RL)
RL = Rs + Rw
RL = Loop Resistance (ohms)
Rs = Sense Resistance (ohms)
Rw = Wire Resistance (ohms)

Wiring - M12 x 1 4-pin round connector

Current output, 2 wire



Voltage output, 3 wire

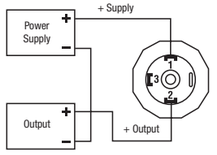


Series 660	4 mA to 20 mA	
CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPUT
Mini-Hirschmann (7)	1	2
Mini-Hirschmann w/ Cable (1)	Red	Black
M12 x 1, 4-Pin (25)	1	3
Integral Cable (36)	Brown	Green

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

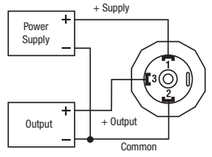
SERIES 800

4 mA to 20 mA, 2 wire



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)

0 Vdc to 10 Vdc, 3 wire



Series 800	4 mA to 20 mA	
CONNECTION TYPE (CODE)	+ SUPPLY	+ OUTPUT
Hirschmann (8 or 14)	1	2
Hirschmann w/ Cable (1)	Red	Black
M12 x 1, 4-Pin (25)	1	3

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

1.888.610.7664 www.calcert.com sales@calcert.com

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.

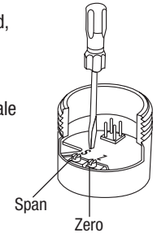
Maintenance/Calibration:

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):

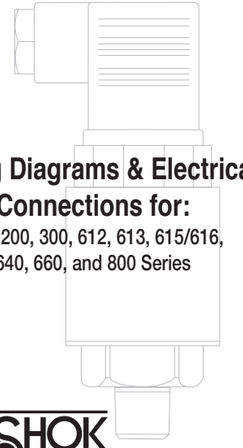
Using a pressure source and meter with adequate accuracy, perform the following steps:

- 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



NWD 08-7

NOSHOK TRANSMITTERS TRANSDUCERS



Wiring Diagrams & Electrical Connections for:

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

NOSHOK