



# AC SERIES LOAD CELLS



# AC Series



Cardinal Scale Mfg. Co. Webb City MO. USA  
Model AC-100K S/N 1525465  
CAP: 100k lb Bur-Adc: 0x0001204f  
CCP N/A IIII M = 10  
SafeLoad: 200% CAP Vmic: CAP/20000  
MDL: 0 lb

# SCA Series



# General Load Cell Specs

## SCA Series Cells

- 50K, 100K, 120K, 200K lb capacities available
- NTEP and OIML certification
  - (can be interchanged with each other)
- IP68 protection rating
  - Long-term immersion in water
- 35 ft (10 m) cable

## AC Series Cells

- 50K, 100K lb capacities available
- NTEP and OIML certification
  - (can be interchanged with each other)
- IP69K protection rating
  - High pressure, high temp spray down
- 50 ft (15.2 m) cable



# Physical Load Cell Specs

## SCA Series Cells

- Stainless steel body
- Standard load cups
  - Hardened stainless steel
  - 1/4" thick at load point

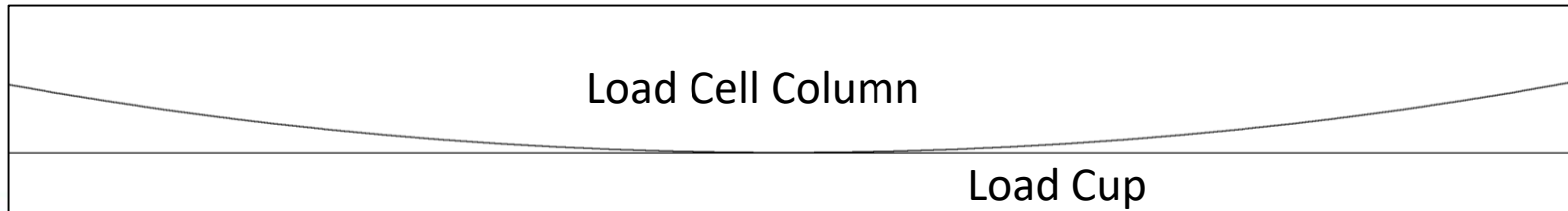
## AC Series Cells

- Stainless steel body
- Extra-robust load cups
  - Plated alloy steel, anti-rotation
  - 7/8"+ thick at load point



# Anti-Rotation

- Notched load cup on bottom
- Point between load cell (convex) and load cup (flat) has potential to rotate
- Bottom of cup does not rotate (cup and mounting surface are both flat)



# Physical Load Cell Specs

## SCA Series Cells

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- Standard load cups
  - Hardened stainless steel
  - 1/4" thick at load point
- Mounting dimensions
  - Load cup – 2 1/2" dia.
  - Height – 7 3/4"

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2.50 DIA

4 1/2" RADIUS FULL CLEARAN

LOAD CUP

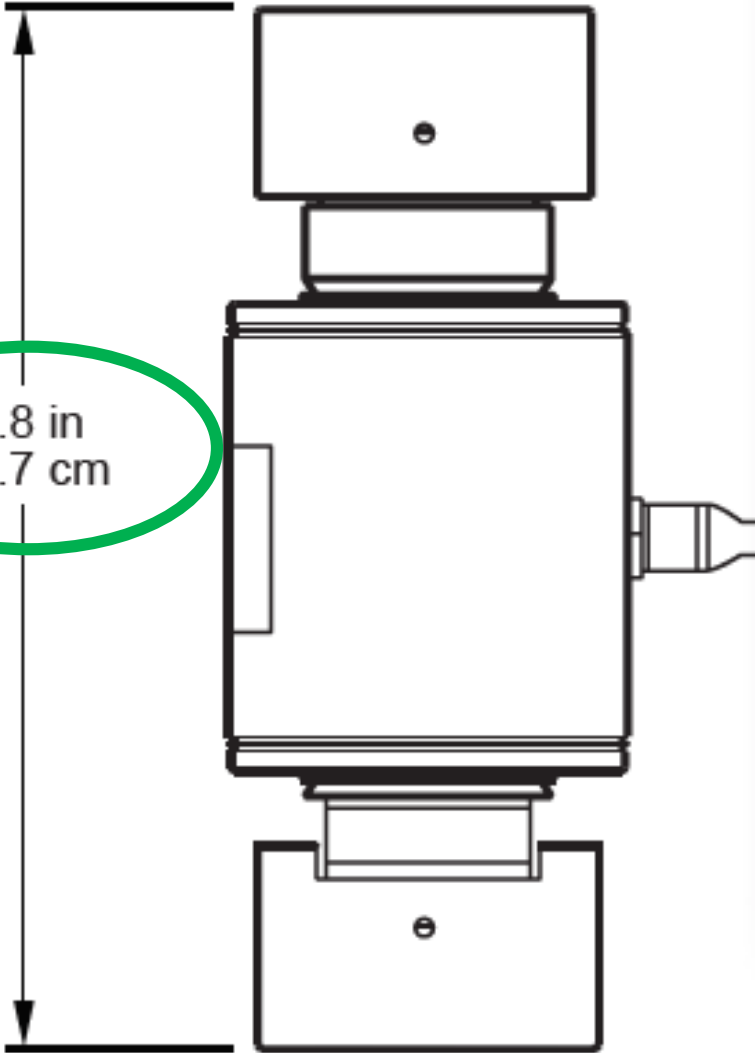
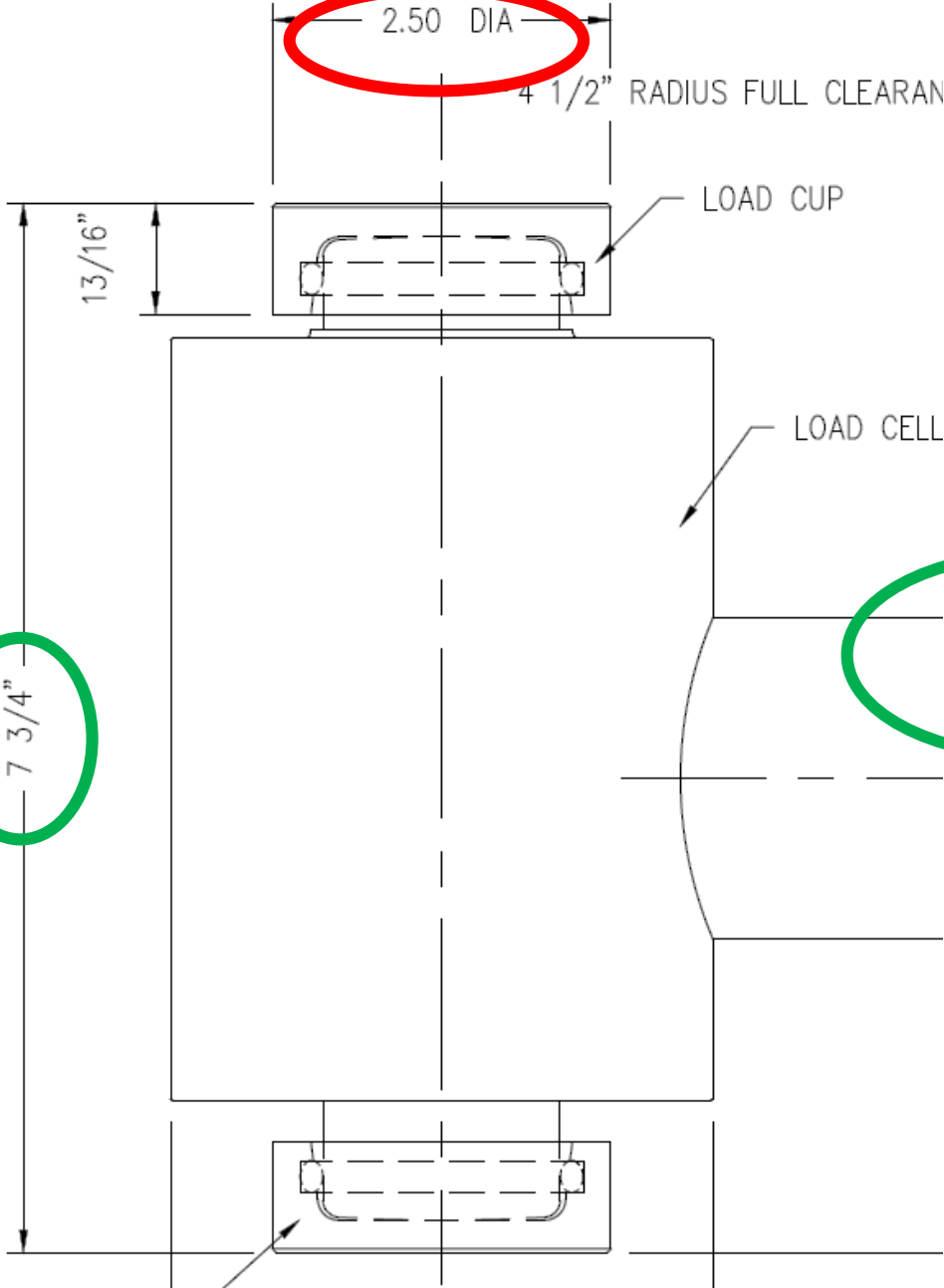
LOAD CELL

2.5 in  
6.4 cm

7.8 in  
19.7 cm

7 3/4"

13/16"



# Electrical Load Cell Specs

## SCA Series Cells

- 2 mV/V rating
- 10-15 VDC excitation
- 1150 +/- 60 ohms excitation resistance
- 1050 +/- 15 ohms signal resistance
- 4 wire connection capable
- 6 wire connection incapable

## AC Series Cells

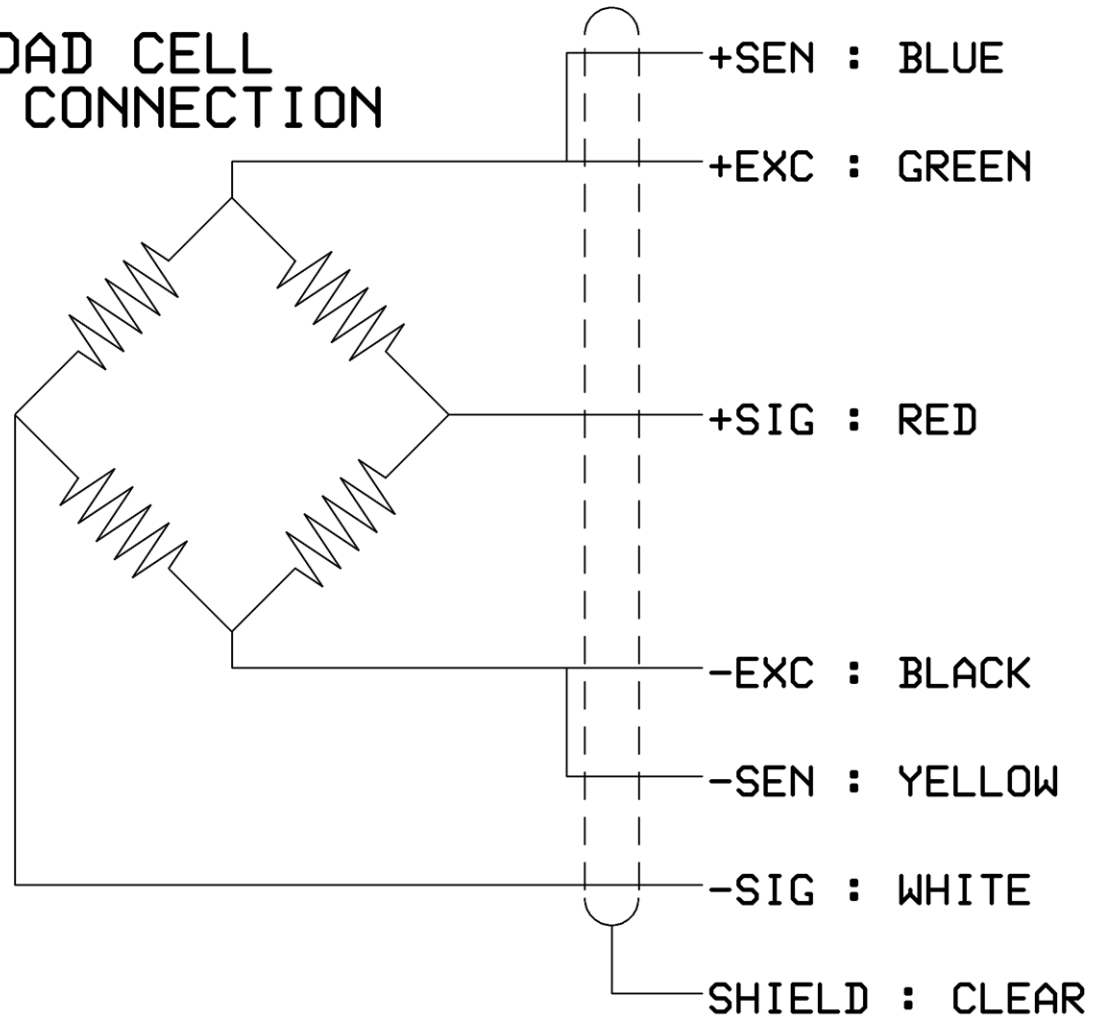
- 2 mV/V rating
- 10-15 VDC excitation
- 1150 +/- 50 ohms excitation resistance
- 1005 +/- 5 ohms signal resistance
- 4 and 6 wire capable



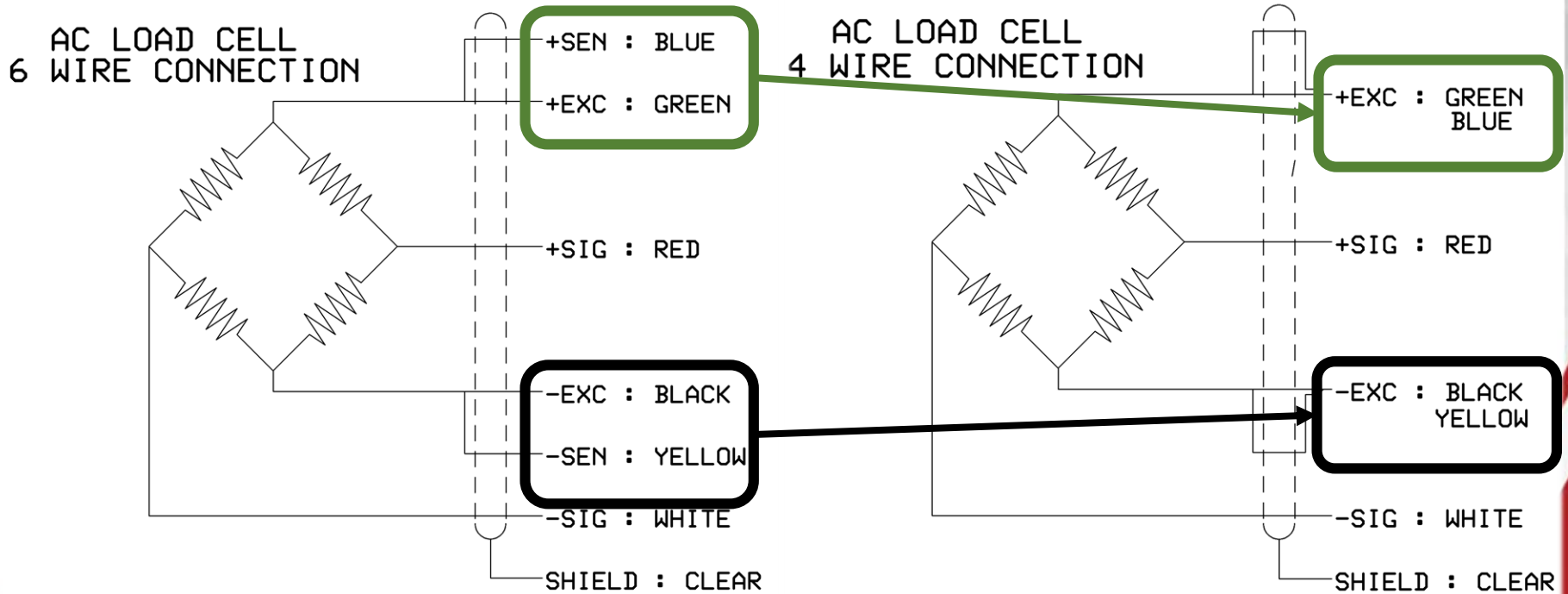


AC LOAD CELL  
6 WIRE CONNECTION

# 6-WIRE CONNECTIONS

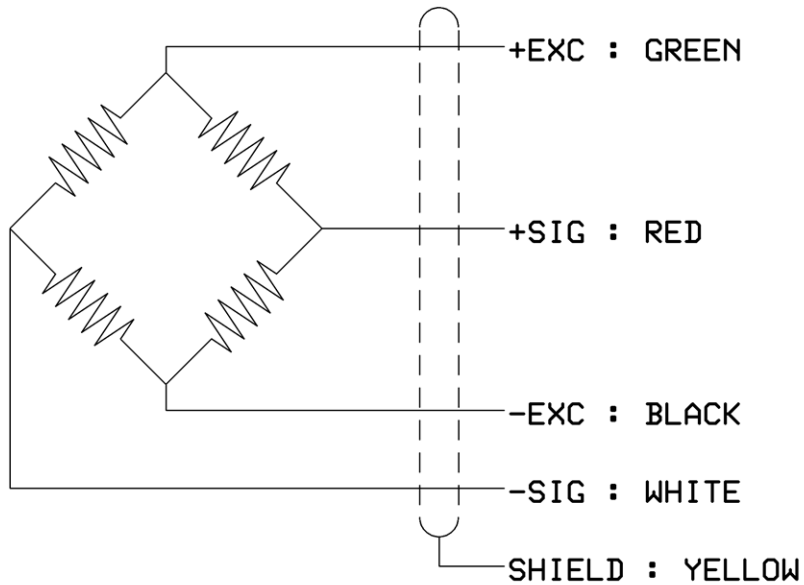


# 6- to 4-Wire Connection

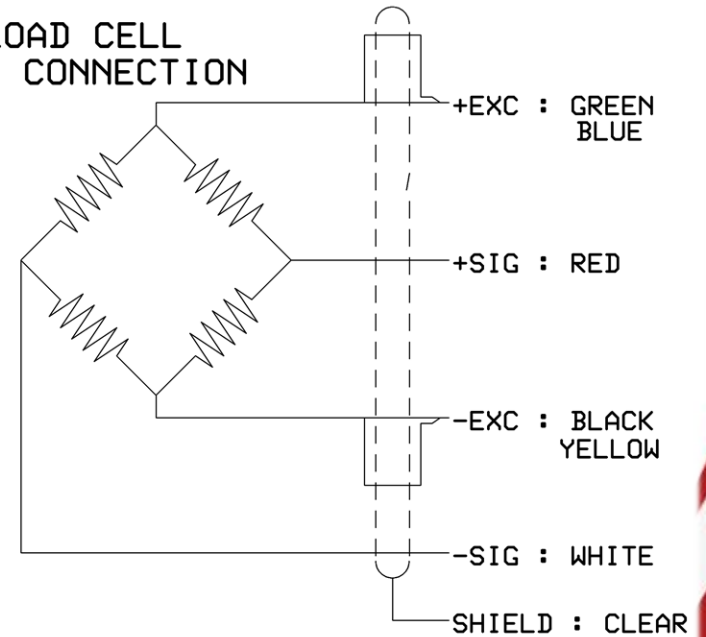


# 4-Wire Connections

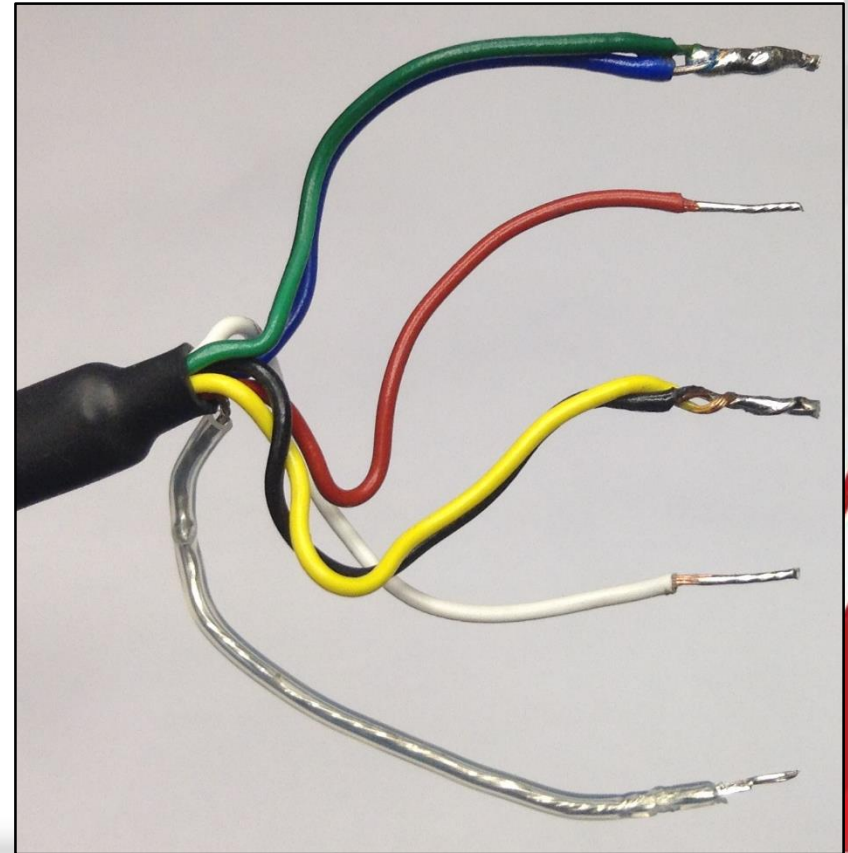
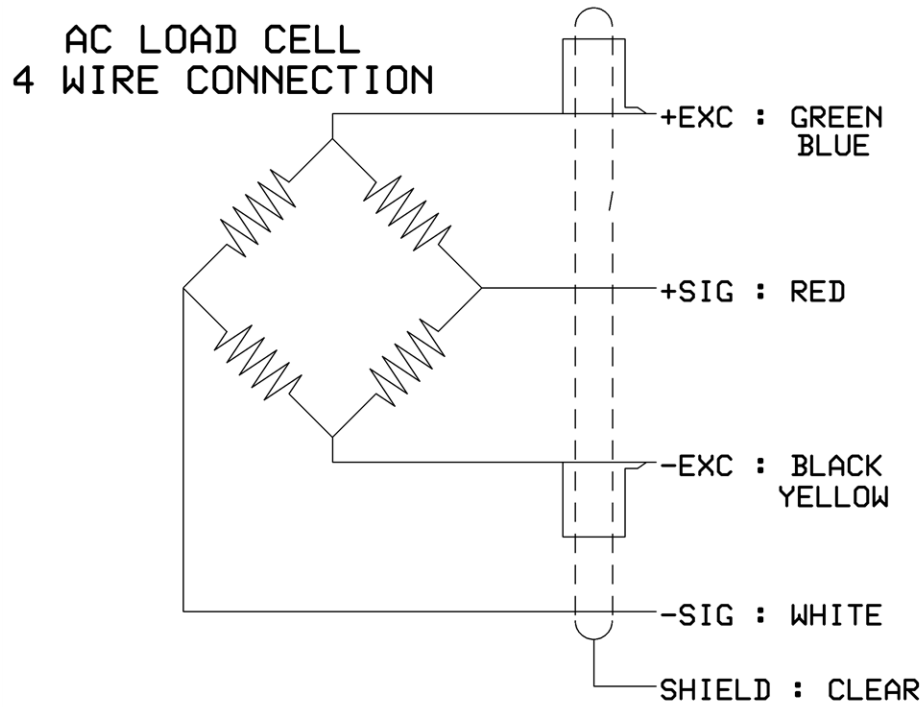
SCA LOAD CELL



AC LOAD CELL  
4 WIRE CONNECTION



# 4-Wire Connections





**Cardinal**<sup>®</sup>  
Cardinal Scale Manufacturing Co.



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LOAD CELLS**