

CMSS 62/ CMSS 620 Series

19 mm Eddy Current Probe System

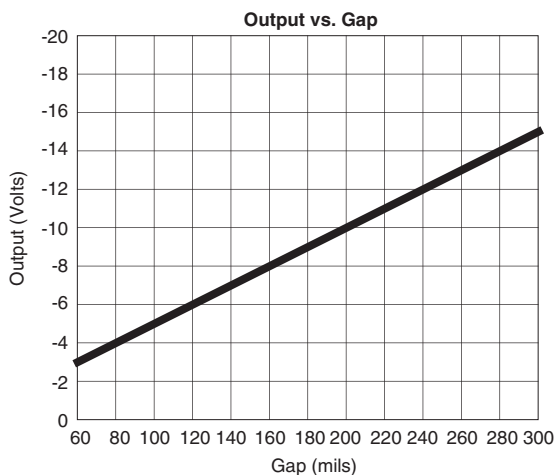
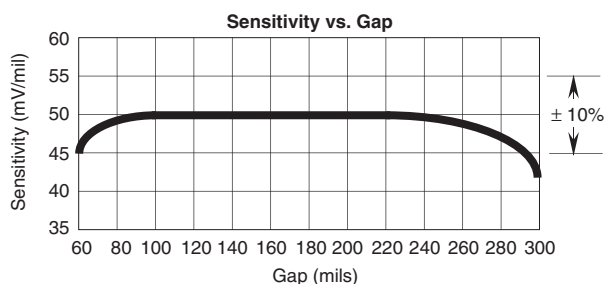


For long range (wide gap) measurements

- 60 mils to 300 mils usable range at 50 mV/mil (1.96 V/mm) sensitivity
- 10.8 meter overall cable lengths
- Dependable eddy current operation
- Readily interchangeable on-site
- Durable, high-temperature probe tip
- Rugged long life connectors



Typical CMSS 62/CMSS 620-2 Performance



– NOTE –

Performance specifications are based on a 4140 steel target. Consult sales representative for calibration requirements on other materials.

INTRODUCTION

The CMSS 62 Eddy Probe, when used with a CMSS 620-2 Driver, has a usable range that is typically 60 mils to 300 mils. The standard output sensitivity of the system is 50 mV/mil (1.96 V/mm).

The CMSS 62 packs a long range into a rugged industrial probe. It is used extensively in those applications involving large position measurement.

Differential expansion measurement is an ideal application for the CMSS 62.

The CMSS 62 is available in several probe case configurations and environmental options to meet a wide range of installation requirements.

SPECIFICATIONS

The following specifications apply to a system including the CMSS 62 Eddy Probe, CMSS 620-2 Driver and CMSS 900 Extension Cable.

SPECIFICATIONS (continued)**ELECTRICAL**

Usable Range: 60 mils to 300 mils

Sensitivity: 50 mV/mil, $\pm 10\%$ (1.96 V/mm) (-24 VDC supply) at +73°F (+23°C)

Linearity: ± 2 mil of best straight line from 80 mils to 280 mils gap, $\pm 10\%$ of 50 mV/mil sensitivity from 80 mils to 280 mils absolute gap at +73°F (+23°C)

Frequency Range: Static to 600,000 CPM; down to 3 dB at 600,000 CPM

Driver Signal Output:

Impedance: 30 Ω

Current: 4 mA maximum

Voltage: Nominal: 50 mV/mil

Maximum Output: -15 VDC with -24 VDC supply

Power: -24 VDC

CMSS 620-2 DRIVER

Operating Temperature Range: -30°F to +150°F (-35°C to +65°C)

Calibration Probe Temperature: +73°F (+23°C)

Connections (Power, Output, Common): Three terminal barrier strip (accepts #6 spade lugs)

Mounting Holes: Four #10 clearance holes in a square on 2.5" (63 mm) centers

Interchangeability: Probes and Drivers may be interchanged with 10% or less performance change without calibration. All units factory calibrated. Trim calibration adjustment on Driver allows duplication of replacement.

ENVIRONMENTAL AND MECHANICAL**CMSS 62 PROBE**

Operating Temperature Range: -30°F to +350°F (-34°C to +177°C)

Case Material: 300 Stainless Steel

Connections: Stainless Steel. Weather-proof, sealable.

Cable: Coaxial with Teflon® insulation. High tensile and flexural strength.

Mounting: Any position

CMSS 900 EXTENSION CABLE

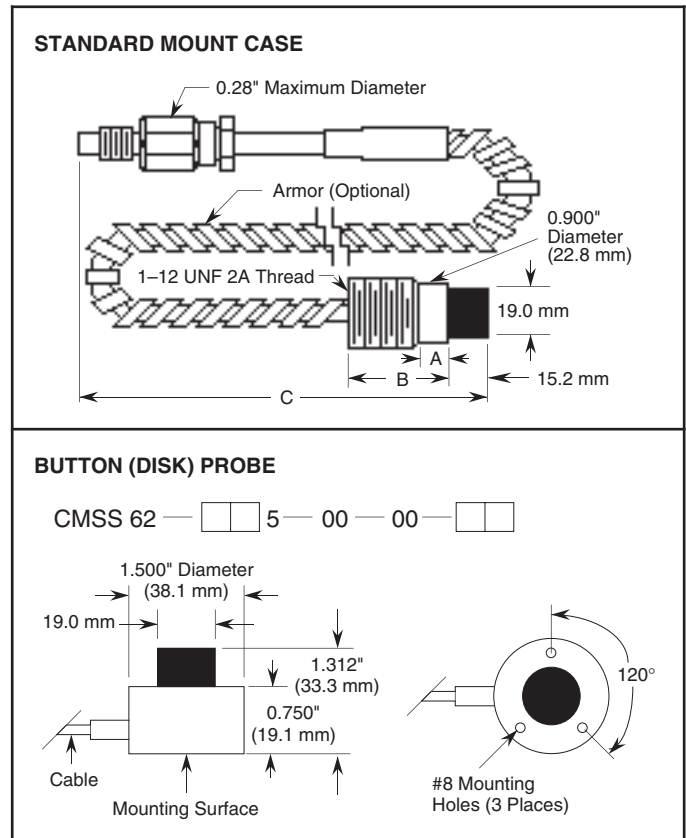
Operating Temperature Range: -30°F to +250°F (-35°C to +120°C)

Connections: Stainless Steel. Weather-proof, sealable.

Cable: Coaxial with Teflon® insulation. High tensile and flexural strength.

ORDERING INFORMATION

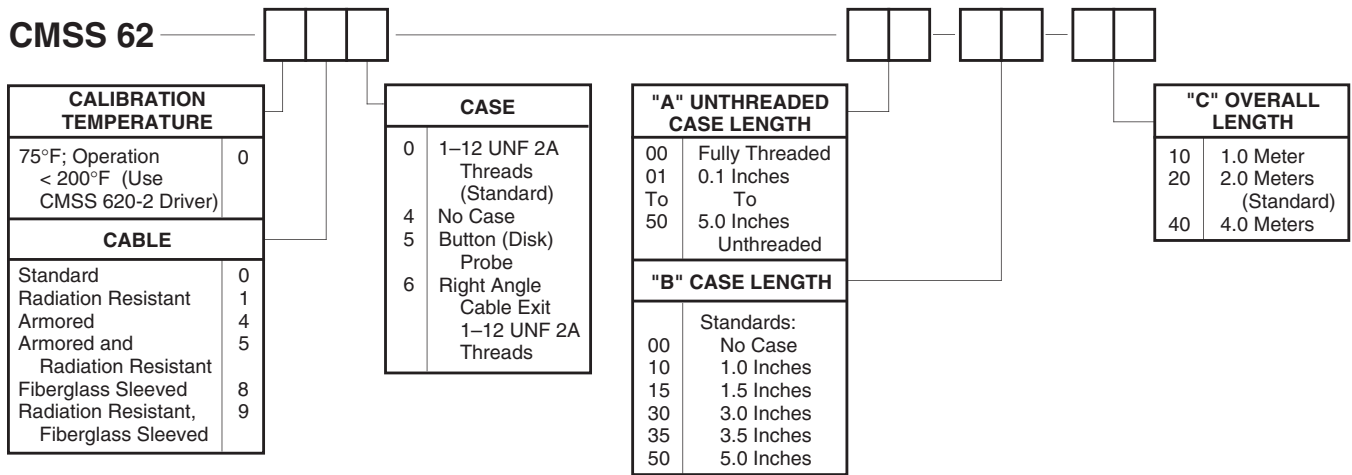
DIMENSIONS IN INCHES, EXCEPT AS NOTED



ORDERING INFORMATION

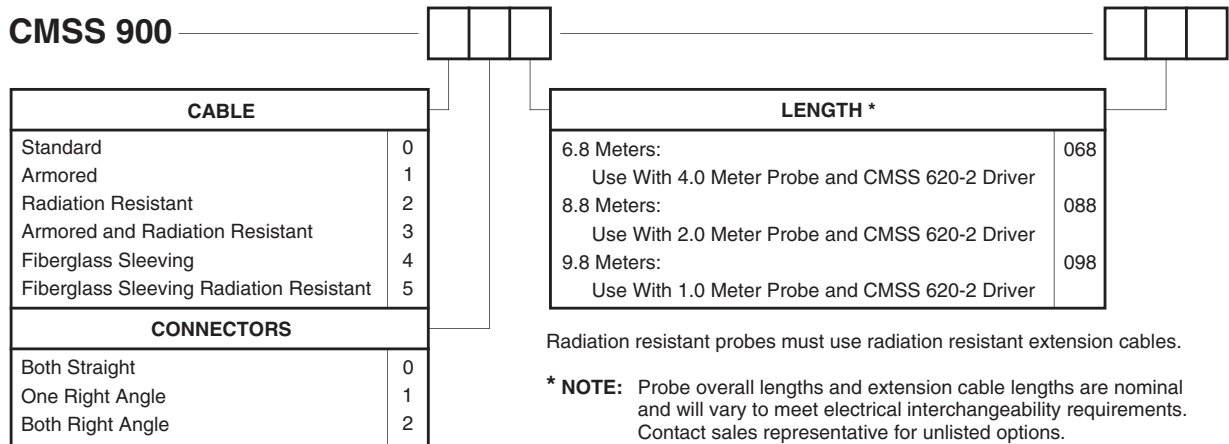
Part 1: Eddy Current Probe (SKF Standard: CMSS 62-000-00-30-20)

CMSS 62



Part 2: Extension Cable (SKF Standard: CMSS 900-00-088)

CMSS 900



Radiation resistant probes must use radiation resistant extension cables.

*** NOTE:** Probe overall lengths and extension cable lengths are nominal and will vary to meet electrical interchangeability requirements. Contact sales representative for unlisted options.

Part 3: Driver (SKF Standard: CMSS 620-2)

Use with:

- 1 m Probe and 9.8 m Extension Cable
- 2 m Probe and 8.8 m Extension Cable
- 4 m Probe and 6.8 m Extension Cable

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