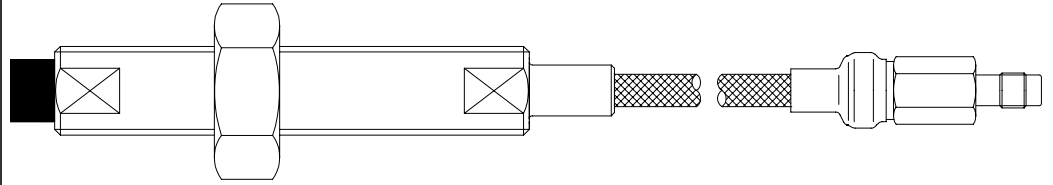




SENTURION EDDY CURRENT PROBES

STRAIGHT MOUNT TYPE - BECP04 - Ø8mm TIP



- Conforms to API 670
- Intrinsically safe to EEx ia IIC
- Measuring range 2.5 or 4mm
- Non contact measurement of static or dynamic surfaces
- Robust stainless steel threaded case, in various sizes
- Peek encapsulated tip, impervious to oil or water ingress
- Suitable for forward or reverse mounting in suitable bracketry
- Supplied with free running locknut
- Choice of cable lengths with or without armouring
- Connection directly to driver or via an extension cable
- Operating temperature range -30°C to +180°C

Sensonics range of SENTURION intrinsically safe eddy current probes are designed to be the most robust and reliable units available, and are ideally suited to potentially hazardous industrial areas.

The SENTURION intrinsically safe eddy current probes are intended for use within a system comprising of the probe, an extension cable (if required) and a driver unit. The probes are supplied in tuned lengths, and can be linked directly to the driver or via the afore mentioned extension cable. However the system is connected the total lengths must add up to 5, 7 or 9 metres.

A free running locknut is supplied with the straight mount probes, which is used to lock the unit in position when mounted in a bracket.

Sensonics can supply a range of ancillary items such as brackets, housing for probes and drivers, glands, as well as offer advice on probe applications and mounting.

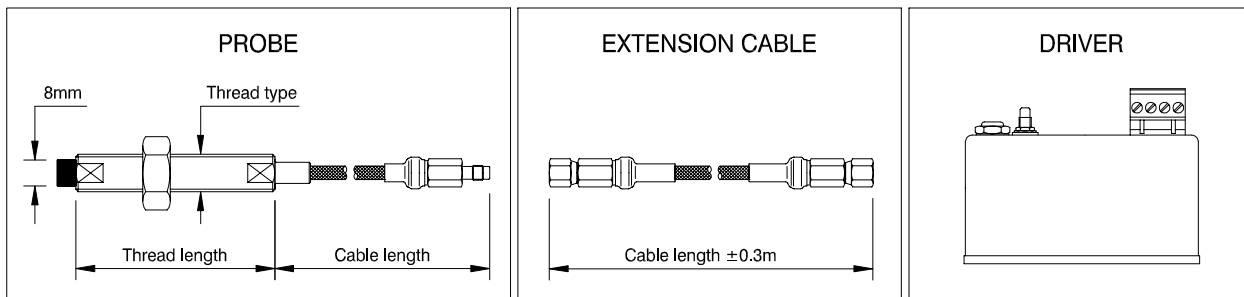
SENTURION EDDY CURRENT PROBES

STRAIGHT MOUNT TYPE – BECP04

SPECIFICATION

Body material	Stainless steel
Tip material	PEEK with stycast potting
Cable specification	RG179 PTFE insulated
Linear range - $\pm 1\%$ of reading	0.25 to 2.25mm, for 2.5mm range
- $\pm 1\%$ of full scale	0.125 to 2.5mm, for 2.5mm range
Sensitivity	8mV/ μm or (4mV/ μm for 0-4mm range)
Temperature sensitivity - Probe	Less than 5% at 150°C
- Driver	Less than 5% at 90°C
Output impedance	Less than 50 Ω
Interchangeability	Less than 5%
Cal pot range	$\pm 5\%$ or greater
Operating temperature - Probe	-30°C to +180°C
- Driver	-30°C to +90°C
Survival temperature	As operating temperature
Power supply	-24Vdc at 4mA maximum
Power supply tolerance	-18Vdc to -30Vdc (linear range will be affected)
Frequency range	DC to 10khz
Resolution (restricted by noise, drift & stability)	0.002mm
Effect of target curvature	+2% for $\phi 150\text{mm}$
.....	+5% for $\phi 25\text{mm}$
Effect of target magnetism	Less than 1% at 110mT
Certification BASEEFA - Probe	EEx ia IIC T2 (Tamb = 180°C)
- Driver	EEx ia IIC T4

ORDERING INFORMATION



BECP04/ **1.0** **U** **1** **0** **0**

Cable length
 0.5 – 0.5m
 1.0 – 1m
 5.0 – 5m
 7.0 – 7m
 9.0 – 9m (not 4mm range)

Cable protection
 U – Unarmoured (standard)
 A – Armoured

Connector gender
 0 – Female SMC (for direct driver connection)
 1 – Male LEMO (f.u.w. extension cable)
 2 – Male SMC coaxial jack (f.u.w. extension)

Thread type
 0 – 3/8"UNF (standard)
 1 – M10x1.0

Thread length is 50mm on standard units, but can be between 25mm and 150mm Please specify separately.

Range (sensitivity)
 0 – 2.5mm (8mV/ μm) (API 670)
 1 – 4mm (4mV/ μm)

BEXC/ **4.0** **A** **0**

Cable length
 4.0 – 4m
 4.5 – 4.5m
 6.0 – 6m
 6.5 – 6.5m
 8.0 – 8m
 8.5 – 8.5m

Cable protection
 A – Armoured
 U – Unarmoured

Connector type
 0 – SMC plug
 1 – Lemo 00

BD8/ **5** **0**

Total system cable length
 5 – 5m
 7 – 7m
 9 – 9m (not 4mm range)

Range (Sensitivity)
 0 – 2.5mm (8mV/ μm) (API 670)
 1 – 4mm (4mV/ μm)

Note: Remember that total system lengths must add up to 5, 7 or 9m. Probe cables may be up to 0.7m longer than stated.

*Due to 'Sensonics' policy of constant improvement, designs may be subject to alteration without notice.

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