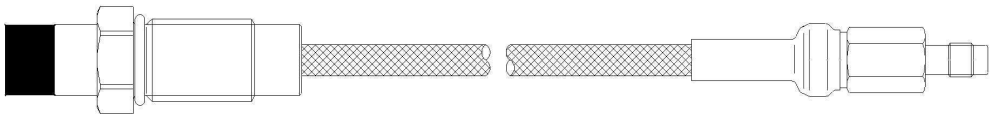
TECHNICAL INFORMATION

PREDICTIVE MAINTENANCE SYSTEMS

SENSONICS LTD

SENTURION EDDY CURRENT PROBES

REVERSE MOUNT TYPE - AECPR04 - ⌀8mm TIP



- Conforms to API 670
- Intrinsically safe to ATEX EEx ia IIC
- Measuring range 2.5 or 4mm
- Non contact measurement of static or dynamic surfaces
- Robust stainless steel threaded case, with integral locknut
- Peek encapsulated tip, impervious to oil or water ingress
- Suitable for reverse mounting in bracketry, or Sensonics probe holder
- 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 reverse mount 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 reverse mount 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.

The reverse mount probe is ideally suited to mounting in a probe housing, supplied by Sensonics or reverse mounted in a suitable bracket.

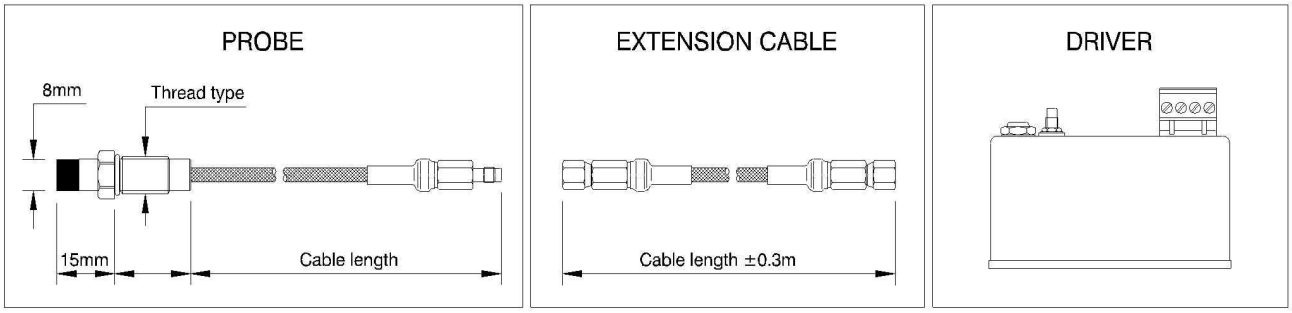
Sensonics can supply a range of ancillary items such as brackets, housing for probes and drivers, glands, as well as offer advice on probe applications and mounting.

SENTURION EDDY CURRENT PROBES
REVERSE MOUNT TYPE – AECPR04

SPECIFICATION

Body material	Stainless steel
Tip material	PEEK with stycast potting
Cable specification	RG179 PTFE insulated
Linear range - ±1% of reading	0.25 to 2.25mm For 2.5mm range
- ±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℃
- Driver	Less than 5% at 90℃
Output impedance	Less than 50Ω
Interchangeability	Less than 5%
Cal pot range	±5% or greater
Operating temperature - Probe	-30℃ to +18 0℃
- Driver	-30℃ to +90℃
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 ø150mm
	+5% for ø25mm
Effect of target magnetism	Less than 1% at 110mT
Certification ATEX - Probe	EEx ia IIC T2 (Tamb = 180℃)
- Driver	EEx ia IIC T4 (Tamb = 80℃)

ORDERING INFORMATION



AECPR04/ [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 standard,
with o-ring seal on rear of hex

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

AEXC/ [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

AD8/ [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: Total system lengths must add up to 2, 5, 7 or 9m (2m systems cannot include extension cables). Probe system length may be up to 0.7m longer than stated.

Sensonics Ltd
Northbridge Road
Berkhamsted
Herts, HP4 1EF
United Kingdom
Tel: +44 (0)1442 876833
Fax: +44 (0)1442 876477
www.sensonics.co.uk