ROTECH SYSTEMS

Monitoring the world since 1983

ROTECH FOR RELIABILITY!

Why Accept Anything Less?

Product Information

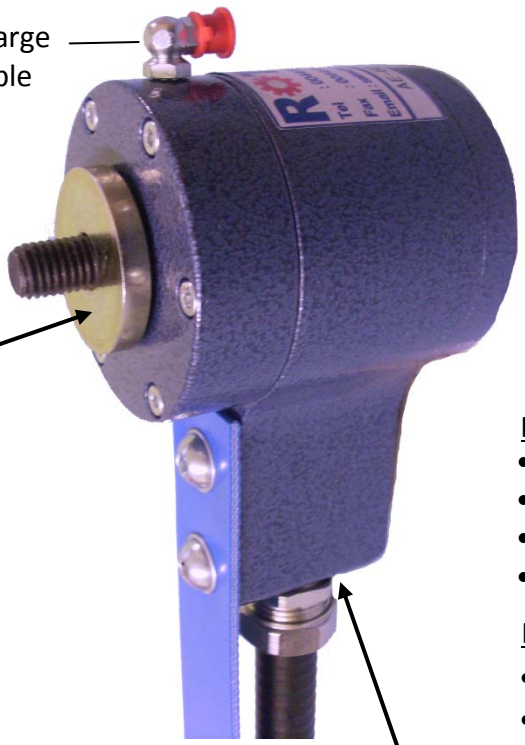
AE 3000 Series

Aluminium Body

Extra Heavy Duty – End of Shaft

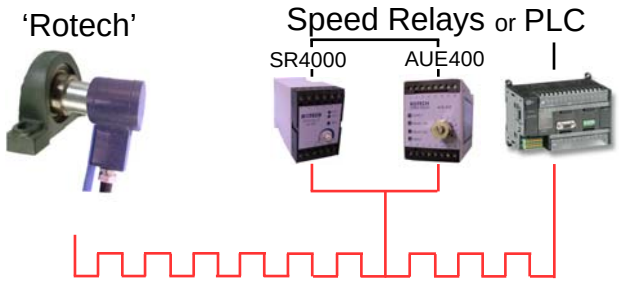
The AE 3000 series of Rotech shaft mounted sensors & encoders are manufactured in an extremely tough and durable aluminium casting with an industrial powder coated hammer blue finish.
Designed for areas subject to extreme operating conditions, constant water spray, high pressure washing, severe dust or material contamination. This unit also has the added benefit of a rechargeable grease chamber that can be reloaded via the recharge nipple.
Installation is simple and easy, just one 12mm threaded hole in the end of the shaft being monitored or fitted using the unique "Mag-con" magnetic connector for speeds below 300 RPM (see below).
A wide range of number of pulses per revolution are available together with AC and DC electrical outputs.

Recharge Nipple



SPRING LOADED SHAFT SEAL
+
RE-CHARGEABLE GREASE CHAMBER
+
SPRING LOADED SHAFT SEAL
+
SEALS PROTECTOR
=
IP67
TOTAL PROTECTION

APPLICATION EXAMPLE:



FOR MONITORING:

- Speed
- Distance
- Direction
- Belt slip
- Shaft stopped
- Underspeed
- Overspeed
- Safety guards interlocking

FEATURES:

- Totally self contained (no guards required)
- Maintenance free for maximum reliability
- 1 to 1000 pulses per revolution
- **Environment ingress-IP67**
- -25 to +70, 100, 125, 150 deg Celsius versions available

CE ATEX c SP us FM APPROVED c UL us LISTED

NEW!

Also available with Brad® Quick Connect/Disconnect range of receptacles

MAG-CON

MAGNETIC SHAFT CONNECTOR

For Quick and Easy Installation of Rotech Shaft Mounted Sensors & Encoders.

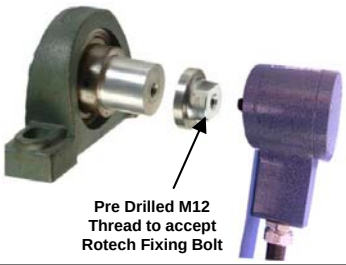
Simply attaches to existing shafts

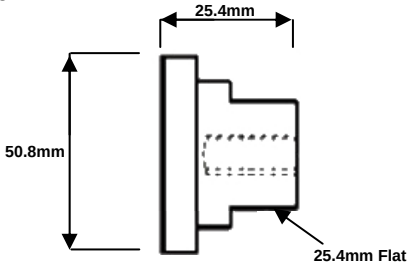
IMPORTANT NOTE:

MAXIMUM OPERATING SPEED IS 300RPM

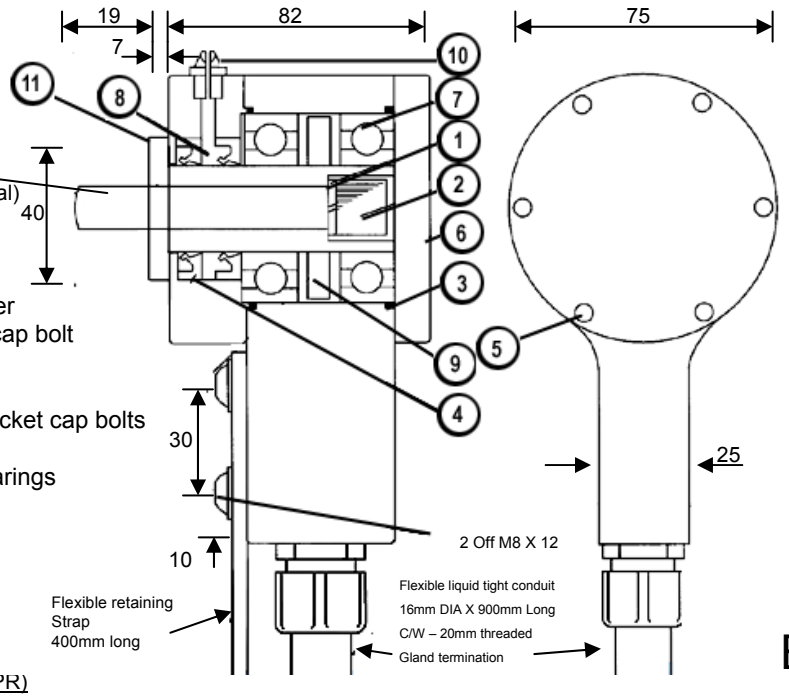
RECOMMENDED MINIMUM

SHAFT DIAMETER FOR FITTING=35MM





Dimensions and Installation Information

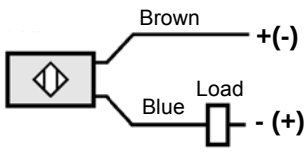


1 12mm Spring washer
2 12mm x 65 socket cap bolt
3 2 off '0' ring seals
4 2 off grease seals
5 6 off M4 x 16mm socket cap bolts
6 Rear end cap
7 2 off heavy duty bearings
8 Grease chamber
9 Rotor Disc
10 Grease nipple
11 Seals protector

Available Pulse Rates (PPR)
1,2,4,5,6,8,10,12,16,20,30,32,40,50,60,100,120,180,240,250,300,360,500,1000 (Dependent Upon Output Type)

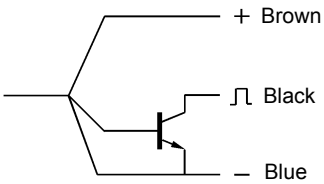
Electrical Outputs

Type Z (2 Wire Non Polarized)
10-30Vdc



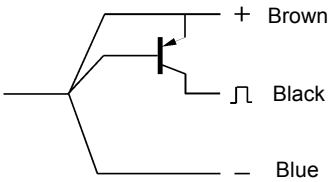
Max frequency = 1500Hz

Type E (N.P.N) 10-30Vdc
Current sink



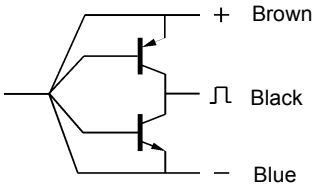
Max frequency = 600Hz

Type E2 (P.N.P) 10-30Vdc
Current source



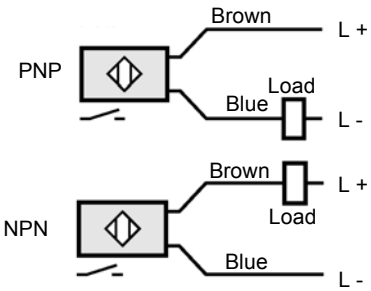
Max frequency = 600Hz

Type E3 (N.P.N + P.N.P – 3 wire)
10-30Vdc
Bi-polar – Current sink/source



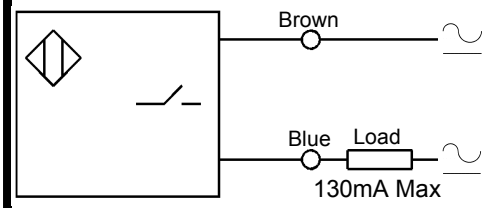
Max frequency = 1000Hz

Type E4 (N.P.N + P.N.P.- 2 Wire) 10-30Vdc
Bi-polar – Current sink/source



Max frequency = 1300Hz

Type W 20-240V AC/DC 50/60Hz
(1 to 30 PPR only)

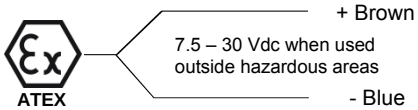


Note
Minimum operating current = 5mA

Max frequency = 25Hz (AC) 1000Hz (DC)

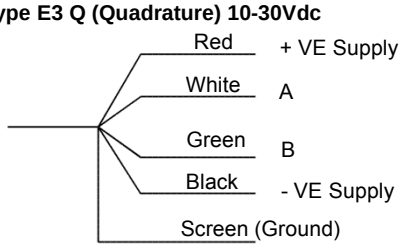
Type N (Namur) 8-2 Vdc (1KΩ)
Intrinsically safe circuits

The voltage and current characteristics of NAMUR sensor outputs are so low that they can be safely used in explosive environments.
The power limitation is implemented in the corresponding equipment. This means that the circuit containing a NAMUR proximity sensor Is only intrinsically safe if it is supplied via a corresponding isolating amplifier.
Contact Rotech Systems for details of amplifiers available.

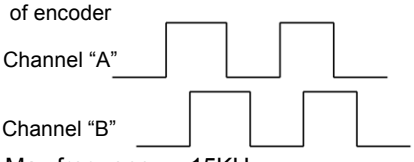


Max frequency = 2000Hz

Type E3 Q (Quadrature) 10-30Vdc

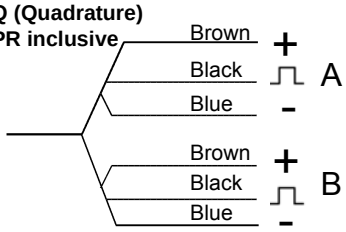


CH "A" Leads CH "B"
for clockwise rotation
viewed from shaft end
of encoder



Max frequency = 15KHz

Type E2 Q (Quadrature)
1 to 40 PPR inclusive



Max frequency = 600Hz

ROTECH SYSTEMS
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since 1983