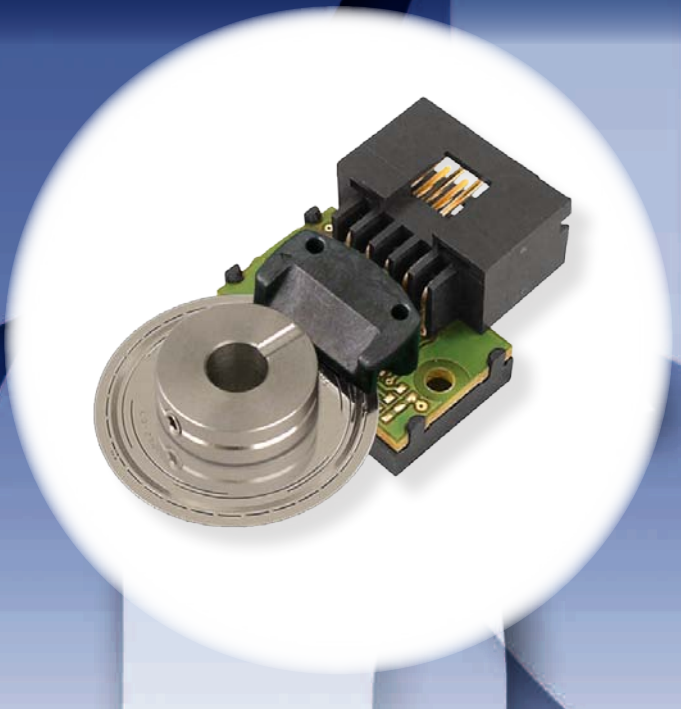




RE202 Kit Incremental Encoder



The RE202 Kit Encoder brings performance and value to your motor applications. The innovative design offers the widest range of resolutions in the industry with a 1" code disk, allowing your motor package to be smaller and lighter. Easy installation makes assembly fast and efficient, saving you money. The 10-pin connector provides industry standard pin-out with integral locking features, giving your assembly greater reliability. Our custom OPTO-ASIC sets the standard for resolution and performance.

Features:

- 1 inch code disk
- Line count up to 5000
- 2 data channels in quadrature
- Once around index pulse
- CMOS ASIC design
- 500 KHz frequency response
- Line Driver outputs • 10 pin radial header.

Environmental:

Operating Temp	-30° to 110°C
Excursion Limits:	
Storage Temp	-30° to 115°C
Shock	100 G's for 6mS duration
Vibration	25–2000 Hz @ 20 G's
Humidity	85%/85°C non-condensing

Mechanical:

Moment of Inertia	2.8g-cm ² [3.97 x 10 ⁻⁵ oz in sec ²] with 8mm hub bore
Weight	12.527g [.442 oz]
Base Material	PET 530
Cover Material	n/a
Disc Material	Metal 0.05 THK TYP
Hub Material	303 SS
Shaft Max End Play	± 0.25mm [±0.01"]
Shaft Run Out	0.025mm [0.001"] TIR
Mounting Hardware	
	Metric hub sizes are supplied with 2 each M2 X 8 screws.
	English hub sizes are supplied with 2 each #2-56 x 5/16" screws.

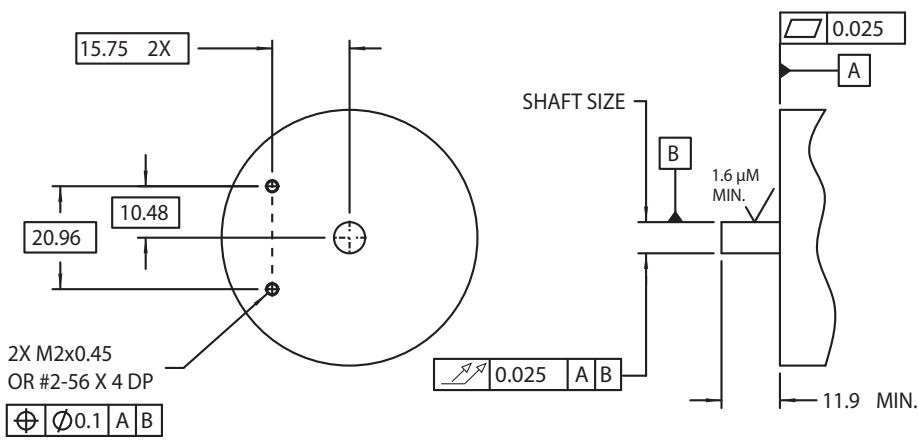
Electrical:

Signals	Incremental
Input Voltage	5.0 VDC ± 10%
Current	107 mA Max with 150 Ohm Termination @ 5.5 volts
Output Format	A/B in phase quadrature. INDEX width & location gated with respect to data
Output Type	Line driver. Logic 0 = 0.5 V Max, Logic 1 = 2.5 V Min.
Operating Frequency	To 500 KHz

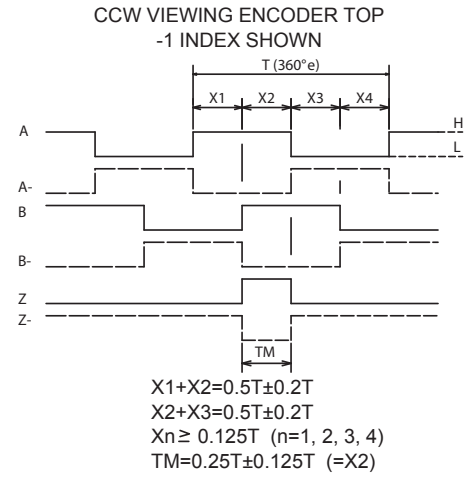
Resolution:

Line Count	100, 200, 250, 256, 400, 500, 512, 625, 800, 1000, 1024, 1250, 2000, 2048, 2500, 4000, 4096, 5000
Index Gating	1 = Index Gated with A & B, Index width 90°e ± 45°e 6 = Index Gated with A- & B-, Index width 90°e ± 45°e 7 = Centered on A & B, Index width 270°e ± 45°e 8 = Centered on A- & B-, Index width 270°e ± 45°e

Mounting Requirements

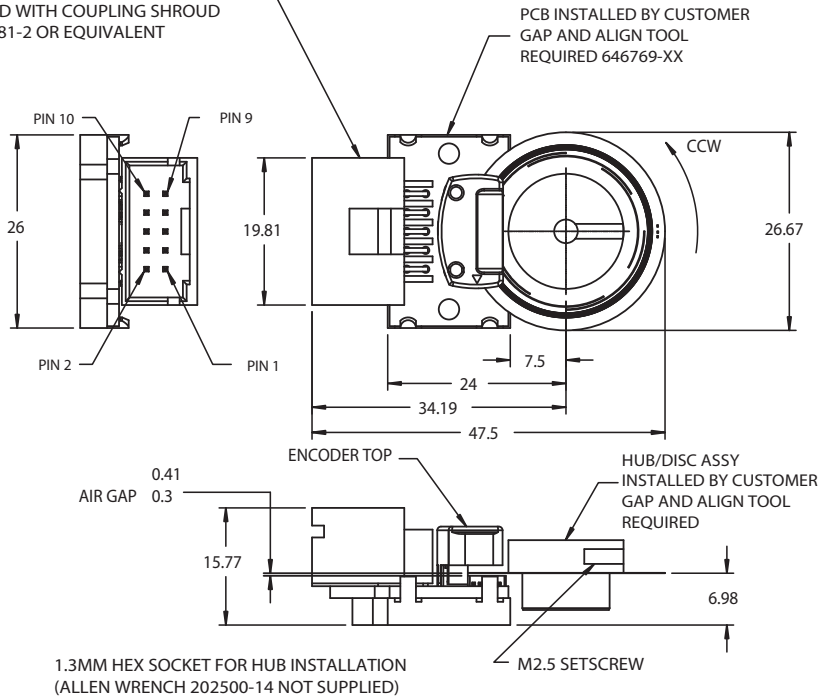


Phase Quadrature



Mechanical Dimensions

CONNECTOR AMP 5-102570-3 RECOMMENDED
MATING CONNECTOR AMP 5-103971-4
QTY 2 USED WITH COUPLING SHROUD
AMP 103681-2 OR EQUIVALENT



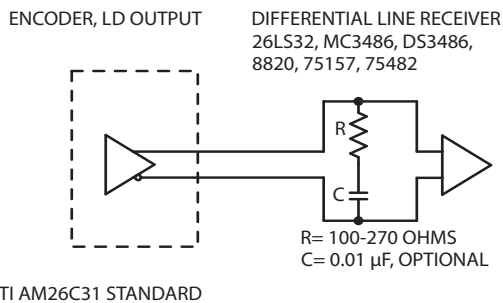
Hub Size

SPECIFY	HUB SIZE +0.01 -0	SHAFT SIZE +0 -0.013	GAP & ALIGN TOOL PART #
1/8+	3.178	3.175	646769-01
3/16+	4.765	4.762	646769-03
1/4+	6.353	6.350	646769-06
5/16+	7.940	7.937	646769-07
3/8+	9.528	9.525	646769-10
4mm	4	3.997	646769-02
5mm	5	4.997	646769-04
6mm	6	5.997	646769-05
8mm	8	7.997	646769-08
9mm	9	8.997	646769-09
10mm	10	9.997	646769-11

Pin Functions

PIN NO.	FUNCTION
1	N/C
2	+5V
3	GND
4	N/C
5	A-
6	A
7	B-
8	B
9	Z-
10	Z

Recommended Termination



Ordering Information

RE202 - _____ - _____ - _____
RESOLUTION See Front Page HUB SIZE GATING OPTION See Front Page