

阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

PART NUMBER: AME

DESCRIPTION: modular incremental encoder

The AME Series are high performance, low cost, 2 channel optical incremental encoders. Each encoder contains a LED source, an integrated circuit with detectors and circuitry, and an optical disc which rotates between the emitter and detector IC. These encoders can be quickly and easily mounted to a motor.



ELECTRICAL SPECIFICATIONS

output waveform	Square wave
output signals	A, B phase
output voltage	H: $\geq 85\% V_{cc}$ L: $\leq 0.3 V$
current consumption	$\leq 25 mA$
output phase difference	$90^\circ \pm 45^\circ$
supply voltage	5 V dc
output resolution (ppr)	100, 200, 256, 360, 400, 500, 512, 1000, 1024
frequency response	20 kHz (voltage output), 50kHz (line driver output)
output current	0~5 mA

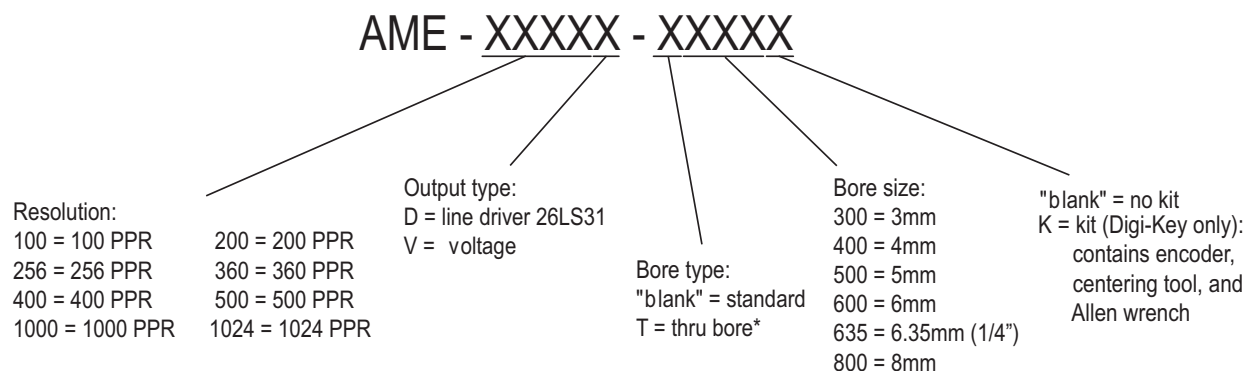
MECHANICAL SPECIFICATIONS

rotor inertia of code-wheel	$6.0 \times 10^{-8} \text{ kgm}^2$
hollow shaft diameter	$\leq \varnothing 8\text{mm}$
shock resistance	980 m/s ² , 6ms, 2 times each on XYZ
vibration proof	50 m/s ² , 10~200 Hz, 2 hours each on XYZ
working life	MTBF $\geq 5000\text{h}$ (+25°C, 2000rpm)
weight	10g (with 0.5 meter cable)

ENVIRONMENTAL SPECIFICATIONS

operating temp	-25° to +85° C
storage temp	-40° to +100° C
humidity	30~85% no condensation
protection	IP50

ORDERING INSTRUCTIONS

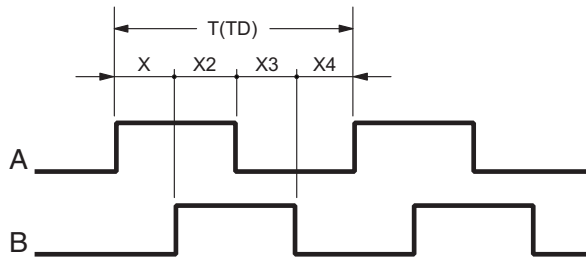


*Removing the cap which covers the bore will turn the Standard style into a Thru Bore style

PART NUMBER: AME

DESCRIPTION: modular incremental encoder

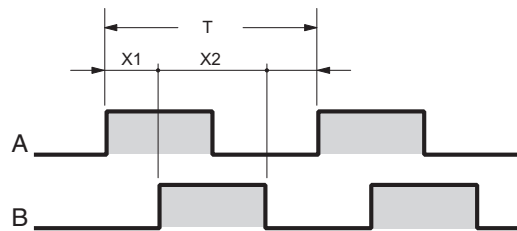
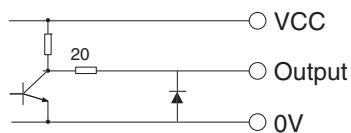
OUTPUT WAVEFORM



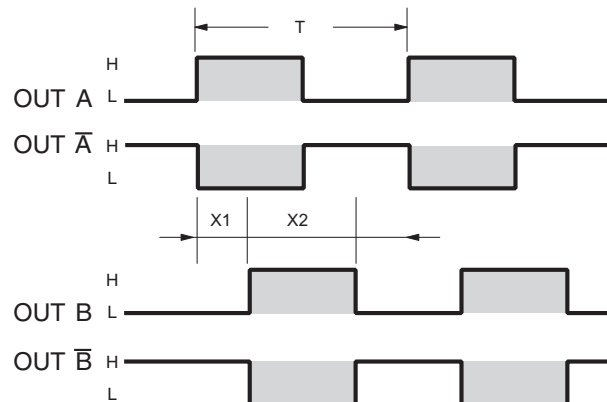
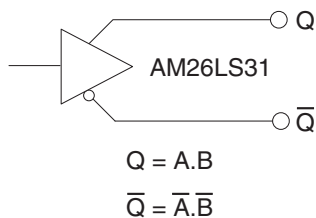
- Square-wave accuracy: $X_1 + X_2 = 1/2T \pm 1/12T$
 $X_3 + X_4 = 1/2T \pm 1/12T$
- Pitch error of period: $\pm 0.01T$
- Pitch error of phase position: $\leq 1/18T$
- Z phase: $T_z = 1/4T$ (1T, 1/2T, 1/4T...)
- Period of pulses: $T = 360^\circ / N$ (N: output pulses)
- Signal accuracy: $X_n = 1/4T \pm 1/12T$ (n=1, 2, 3, 4)

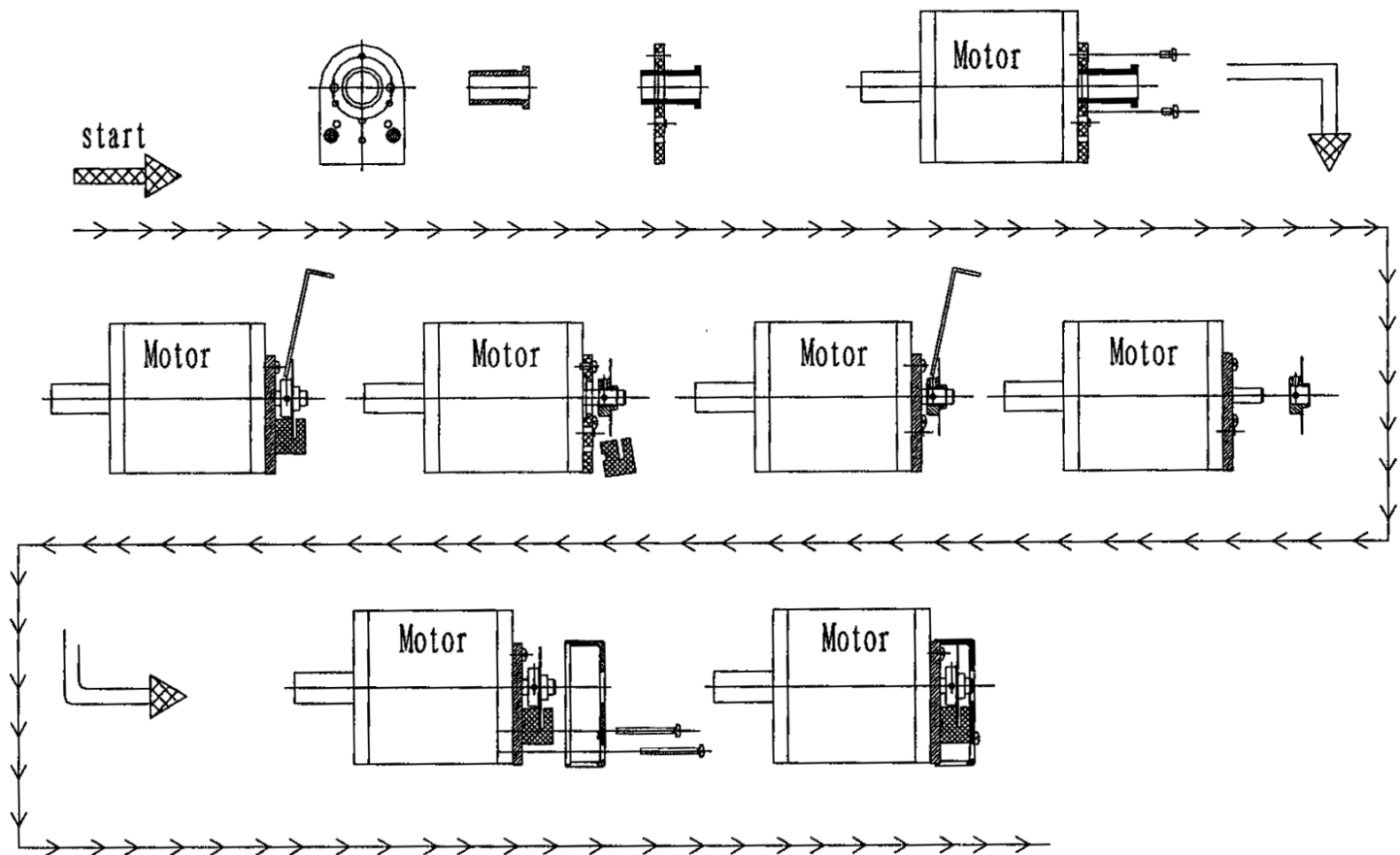
A leads B clockwise when viewing the encoder shaft end.
The position of Z phase against A, B phase is not specified.

Voltage output

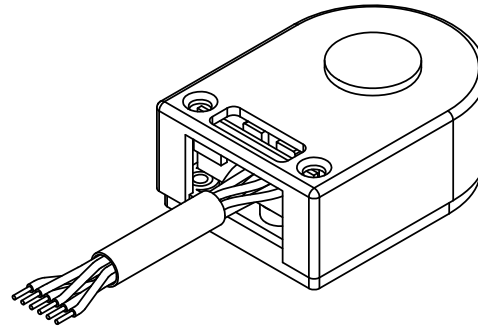
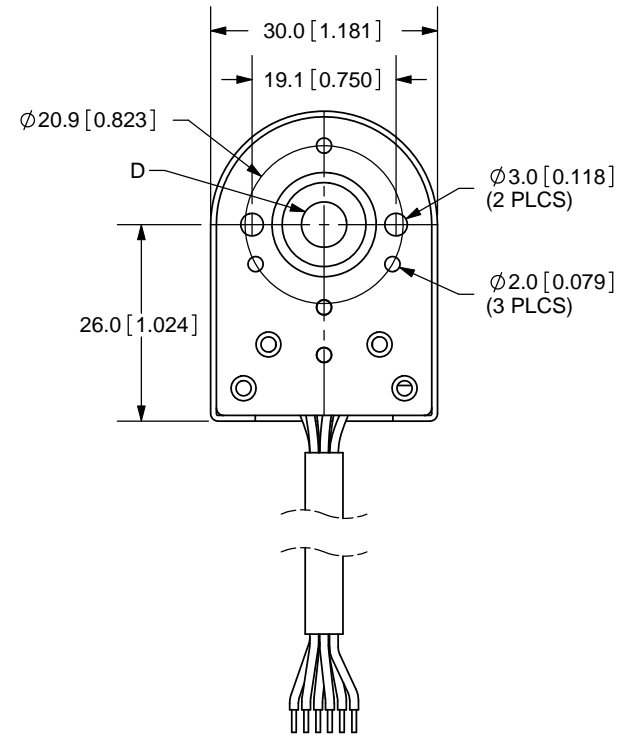
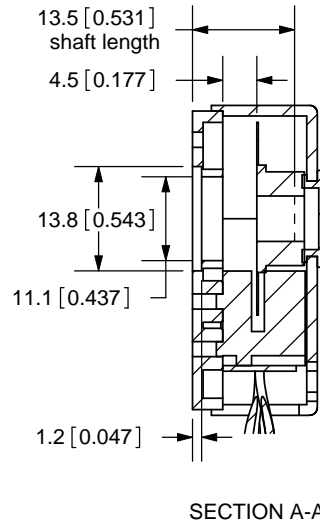
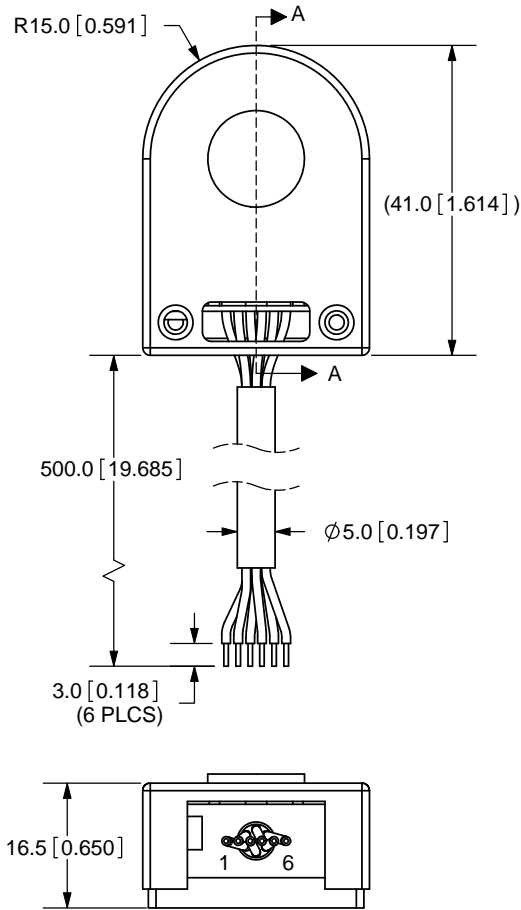


Line driver output



PART NUMBER: AME**DESCRIPTION:** modular incremental encoder**INSTALLATION DRAWING**

REV.	DESCRIPTION	DATE
A	NEW DRAWING	4/22/2008



TOLERANCE:
±0.3mm UNLESS OTHERWISE
SPECIFIED



ØD (bore size)
3mm
4mm
5mm
6mm
6.35mm
8mm

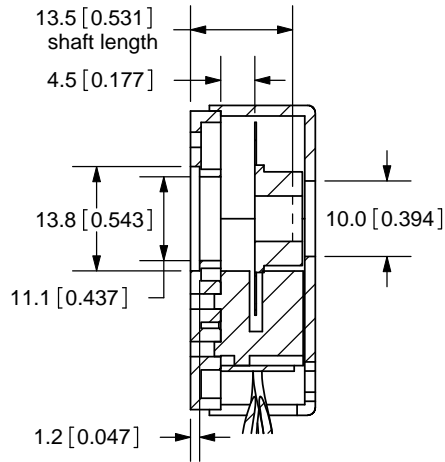
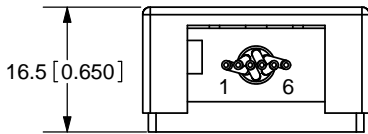
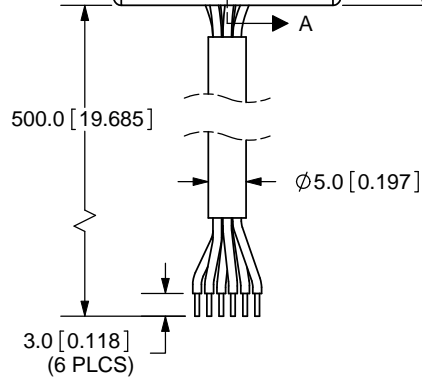
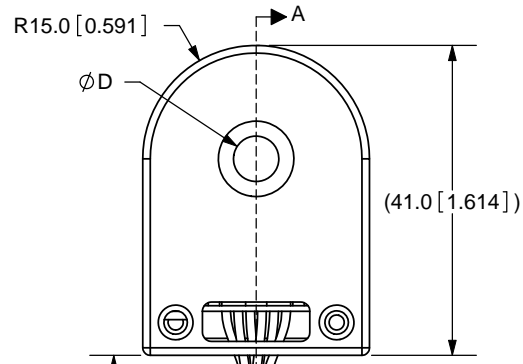
Cable Code	1	2	3	4	5	6
Cable Color	Black	Red	Green	Brown	White	Grey
Line Driver Output	0V	Vcc	A	A̅	B	B̅
Cable Code	1	2	3	4	5	-
Cable Color	Black	Green	Red	White	-	-
Voltage Output	0V	A	Vcc	B	N.C.	-



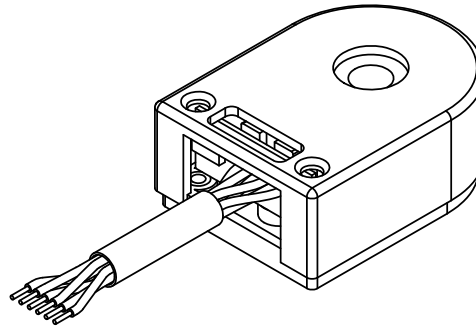
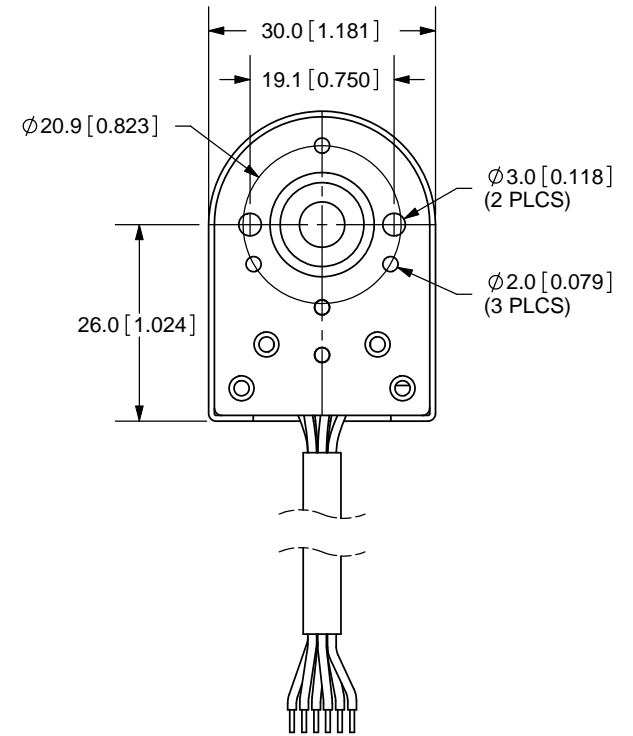
20050 SW 112th Ave.
Tualatin, OR 97062
Phone: 503-612-2300
800-275-4899
Fax: 503-612-2383
Website: www.cui.com

TITLE: AME - MODULAR INCREMENTAL ENCODER		REV: A
PART NO. AME - STANDARD BORE		UNITS: MM [INCHES]
DRAWN BY: ZRJ	APPROVED BY:	SCALE: 1:1

REV.	DESCRIPTION	DATE
A	NEW DRAWING	4/22/2008



SECTION A-A



TOLERANCE:
±0.3mm UNLESS OTHERWISE
SPECIFIED



ØD (bore size)
3mm
4mm
5mm
6mm
6.35mm
8mm

Cable Code	1	2	3	4	5	6
Cable Color	Black	Red	Green	Brown	White	Grey
Line Driver Output	0V	Vcc	A	A̅	B	B̅
Cable Code	1	2	3	4	5	-
Cable Color	Black	Green	Red	White	-	-
Voltage Output	0V	A	Vcc	B	N.C.	-



20050 SW 112th Ave.
Tualatin, OR 97062
Phone: 503-612-2300
800-275-4899
Fax: 503-612-2383
Website: www.cui.com

TITLE: AME - MODULAR INCREMENTAL ENCODER		REV: A
PART NO. AME - THROUGH BORE		UNITS: MM [INCHES]
DRAWN BY: ZRJ	APPROVED BY:	SCALE: 1:1