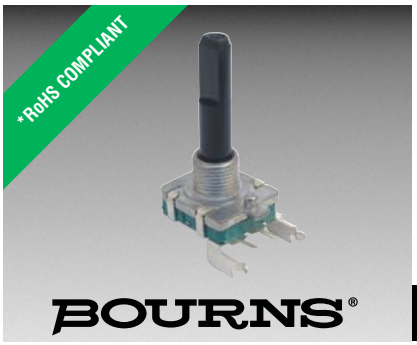


Features

- Compact design, long life and high reliability
- Low cost compared to optical type encoders
- Available in a wide variety of configurations to meet many user requirements

BOURNS® PRO AUDIO

PEC16 - 16 mm Incremental Encoder

Electrical Characteristics

Output	2-bit quadrature code
Closed Circuit Resistance	3 ohms maximum
Contact Rating	1 mA @ 5 VDC
Insulation Resistance	10 megohms @ 50 VDC
Dielectric Withstanding Voltage	
Sea Level	50 VAC minimum
Electrical Travel	Continuous
Contact Bounce (15 RPM)	5.0 ms. maximum**
RPM (Operating)	100 maximum**

Environmental Characteristics

Operating Temperature Range	-30 °C to +70 °C (-22 °F to +158 °F)
Storage Temperature Range	-40 °C to +85 °C (-40 °F to +185 °F)
Humidity	MIL-STD-202, Method 103B, Condition B
Vibration	10~55~10 Hz / 1 min. / Amplitude 1.5 mm
Shock	100 G
Rotational Life	100,000 cycles minimum
Switch Life	20,000 cycles minimum
IP Rating	IP 40

Mechanical Characteristics

Mechanical Angle	360 ° continuous
Torque	
Running	30.6 to 204 g-cm (0.42 to 2.83 oz.-in)
Mounting	10.2 kgf. cm (8.83 lb.-in.) maximum
Shaft Side Load (Static)	3.06 kgf (6.7 lbs.) minimum
Weight	8 gm (0.28 oz.) maximum
Terminals	Printed circuit board terminals
Terminals	Printed circuit board terminals
Soldering Condition	
Wave Soldering	Sn95.5/Ag2.8/Cu0.7 solder with no-clean flux: 260 °C max. for 3-5 seconds
Hand Soldering	Not recommended
Hardware	One flat washer and one mounting nut supplied with each encoder.

Switch Characteristics

Switch Type	Contact Push ON Momentary SPST
Power Rating (Resistive Load)	10 mA at 5 V DC
Switch Travel	0.5 +0.4/-0.3 mm
Switch Actuation Force	360 +153/-102 gf (5 +2.1/-1.4 oz.-in.)

How To Order

PEC16 - 4 0 20 F - S 0012

Model

Terminal Configuration
- 2 = PC Pin Vertical/Down Facing
- 4 = PC Horizontal/Rear Facing

Detent Option
- 0 = No Detents
- 1 = 12 Detents (available with 12 pulses only)
- 2 = 24 Detents (available with 24 pulses only)

Standard Shaft Length
- 15 = 15 mm
- 20 = 20.0 mm
- 25 = 25.0 mm[1]
- 30 = 30.0 mm[1]

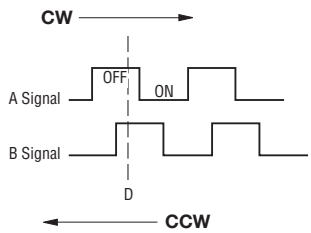
Shaft Style
- F = Insulated Flatted Shaft

Switch Configuration
- S = Push Momentary Switch
- N = No Switch

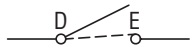
Resolution
- 0012 = 12 Pulses per 360 ° Rotation
- 0024 = 24 Pulses per 360 ° Rotation

[1] Not available with switch

Quadrature Output Table



Switch Circuit



*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

**Devices are tested using standard noise reduction filters. For optimum performance, designers should use noise reduction filters in their circuits.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
Users should verify actual device performance in their specific applications.

Applications

Level control, tuning and timer settings in:

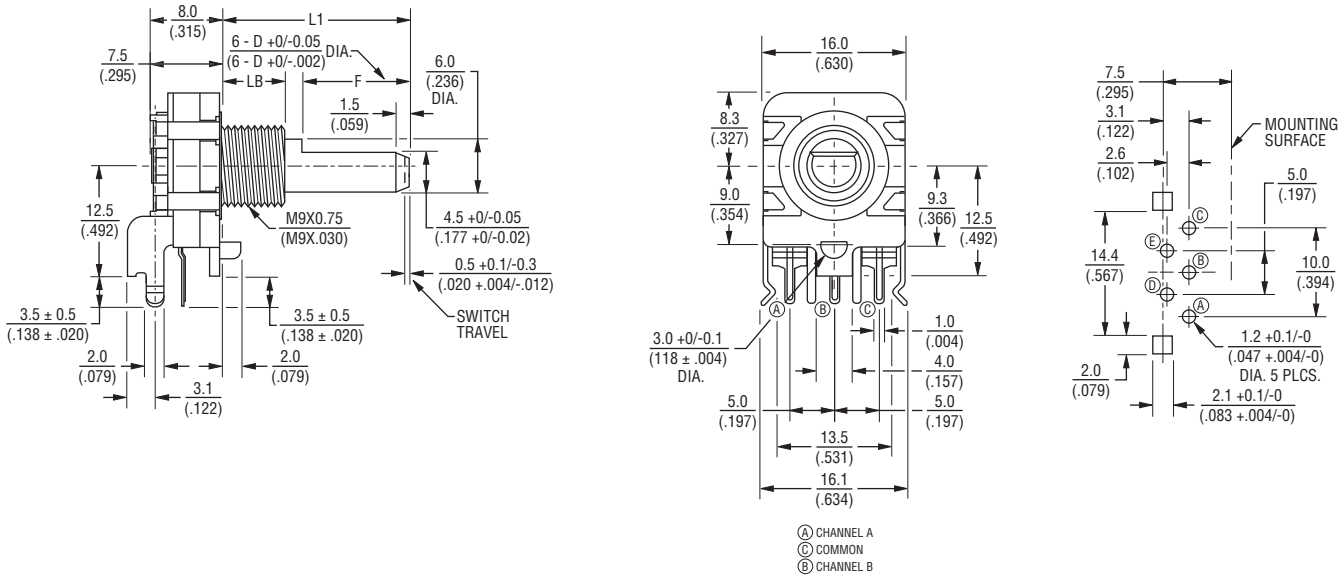
- Audio-visual equipment
- Consumer electric appliances
- Radios
- Musical instrumentation
- Communications equipment

PEC16 - 16 mm Incremental Encoder

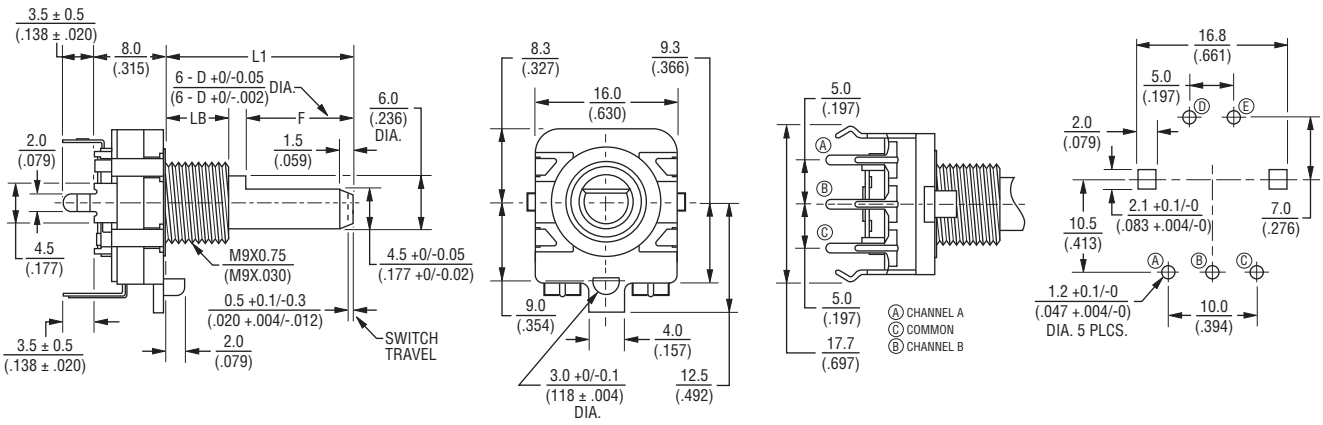
BOURNS®

Product Dimensions

PEC16-2xxxF-Sxxxx



PEC16-4xxxF-Sxxxx



L1	15.0 (.591)	20.0 (.787)
LB	5.0 (.197)	7.0 (.276)
F	7.0 (.276)	12.0 (.472)

DIMENSIONS: MM (INCHES)

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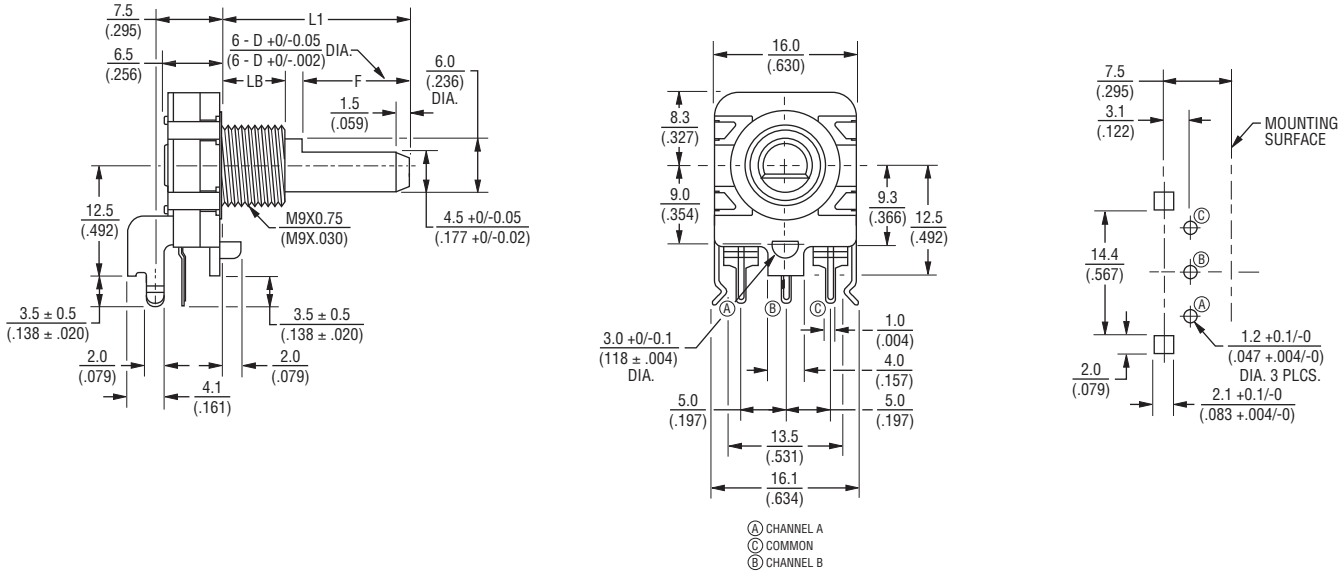
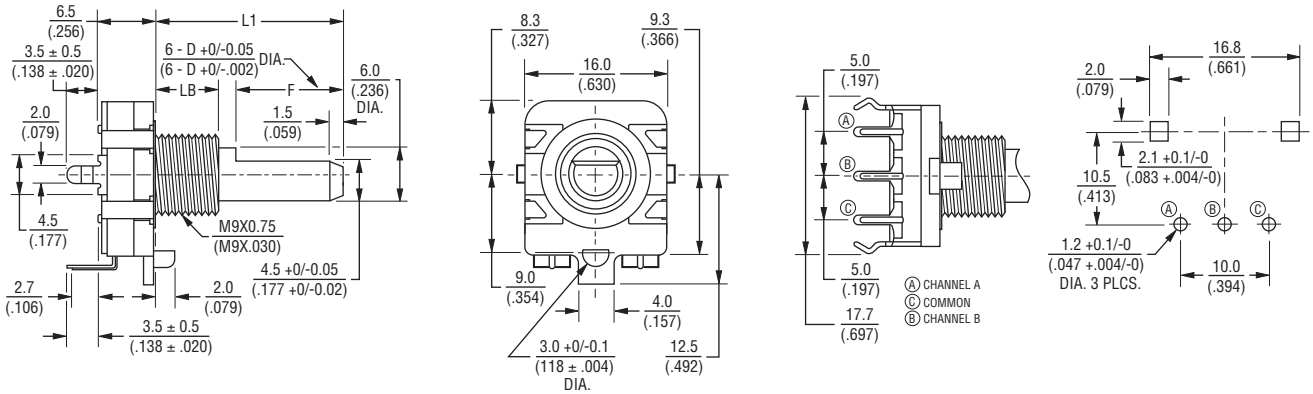
Product Dimensions

PEC16-2xxxF-Nxxxx



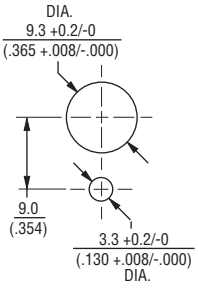
PEC16-4xxxF-Nxxxx



L1	15.0 (.591)	20.0 (.787)	25.0 (.984)	30.0 (1.181)
LB	5.0 (.197)	7.0 (.276)	7.0 (.276)	7.0 (.276)
F	7.0 (.276)	12.0 (.472)	12.0 (.472)	12.0 (.472)

DIMENSIONS: MM (INCHES)

Panel Hole Detail



REV. 03/13

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Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

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