

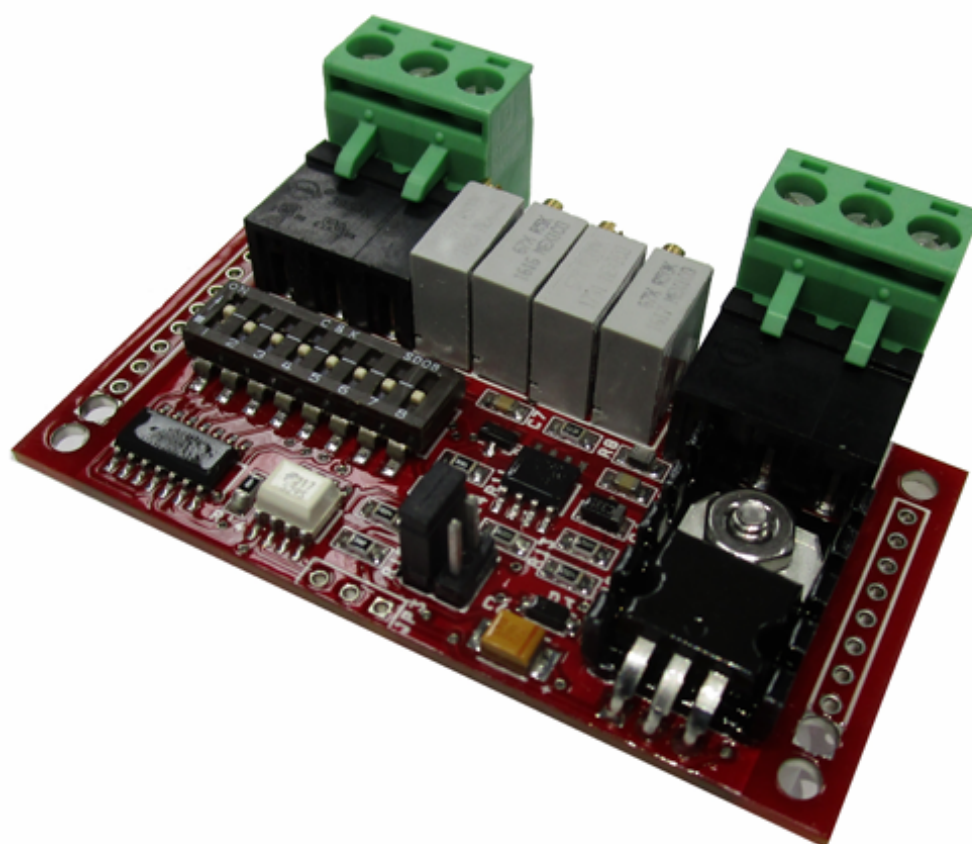
Digital to Analog Converter PCA121 Series

INTRODUCTION

The PCA121 Digital to Analog Converter is a convenient and low cost device that will provide current and/or voltage based analog output from pulsed signals when these are needed to drive plotters, recorders, printers, and other data acquisition equipment.

Its intended use is with sensors, pre-amplifiers, and other devices that produce digital, pulsed output when analog output is also desired.

The PCA121 can be used, for example, with our Digi-Pulse and Magnetic sensors, as well as our PA1001A series of pre-amplifiers. The PCA121 can also be used with or Intrinsically Safe products when it is mounted on the "safe" side of the barrier.



Specifications

Input Power :	<ul style="list-style-type: none">• Voltage: 8-30 Vdc• Reverse polarity protected
Pulse Input :	<ul style="list-style-type: none">• Frequency range: 0 to 12.8 kHz• Pulse Type: 0 to 5 TTL/CMOS (other types of pulse inputs also available; contact factory for details)• Max. distance from sensor to preamp: 100'
Current Output :	<ul style="list-style-type: none">• Accuracy +/- 0.05% of full-scale +/-200 PPM/°C.• Available range 4 to 20 mA.• Output suitable for driving, floating or grounded loads.• Maximum loop impedance 500 ohms.• Response time 0.3 seconds for 10 to 90 %.
Voltage Output :	<ul style="list-style-type: none">• Accuracy +/- 0.05% of full-scale +/-200 PPM/°C.• Available range 0 to 5Vdc or 0 to 10Vdc, user selectable.• Impedance less than 10 ohms.• Response time 0.3 seconds for 10 to 90 %
Temperature Range :	<ul style="list-style-type: none">• Operating: -40 TO 85°C (-40° to 185°F)• Storage: -40° to 302°F (-40 TO 150°C)
Physical Dimensions	<ul style="list-style-type: none">• 2.58" x 1.5" x 0.41"
Enclosures :	<ul style="list-style-type: none">• Unit is intended for mounting in a conduit box. Custom configuration for other housings available. Enclosure is not required but is recommended to protect unit from moisture, dirt, etc.
Terminal Connections and Type Impulse Pulse and Power :	<div>Terminal Block 2</div> <ul style="list-style-type: none">• Pulse (+): terminal 1• Common (-): terminal 2• Power (+): terminal 3
Analog Output :	<div>Terminal Block 1</div> <ul style="list-style-type: none">• Voltage (+): terminal 1• Common (-): terminal 2• 4-20 mA (+): terminal 3
Type :	<ul style="list-style-type: none">• Screw-down (optional Phoenix type with mating connector also available)
Approvals:	<ul style="list-style-type: none">• CE compliant to EMC Directive 89/336/EEC for use in residential, commercial, light industrial and heavy industrial environments.
Warranty:	<ul style="list-style-type: none">• Unconditional one (1) year warranty if used within specifications

Enclosure:
Q1289PCD, NEMA-4X

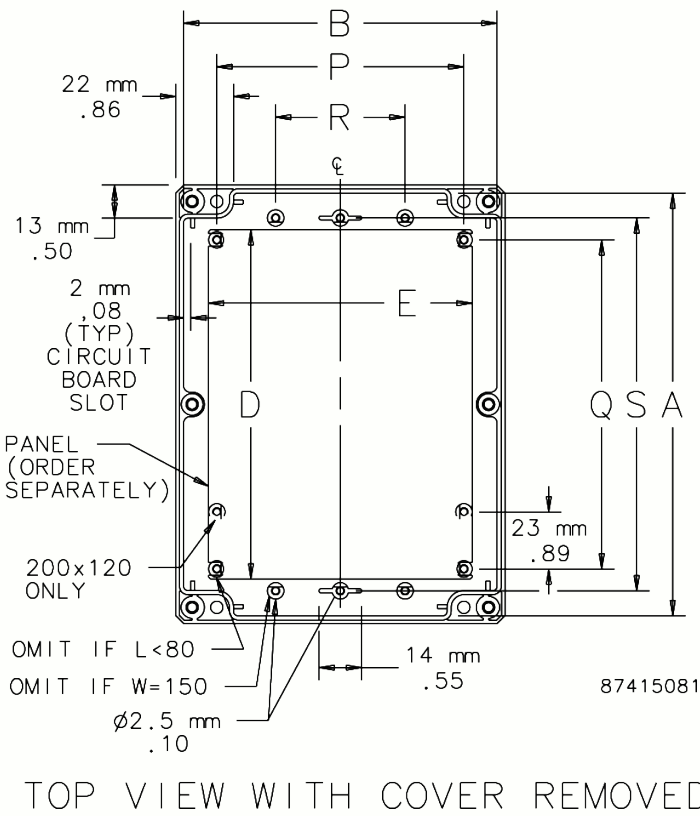
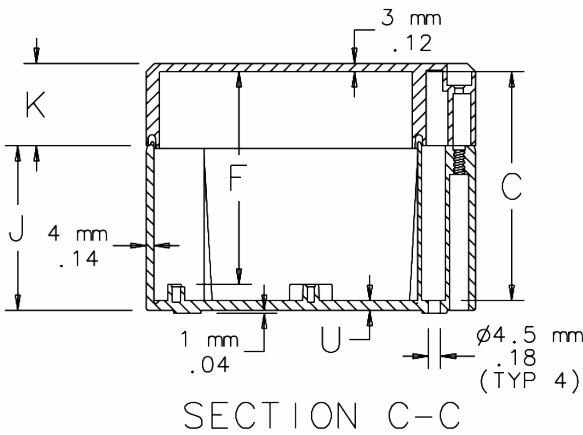
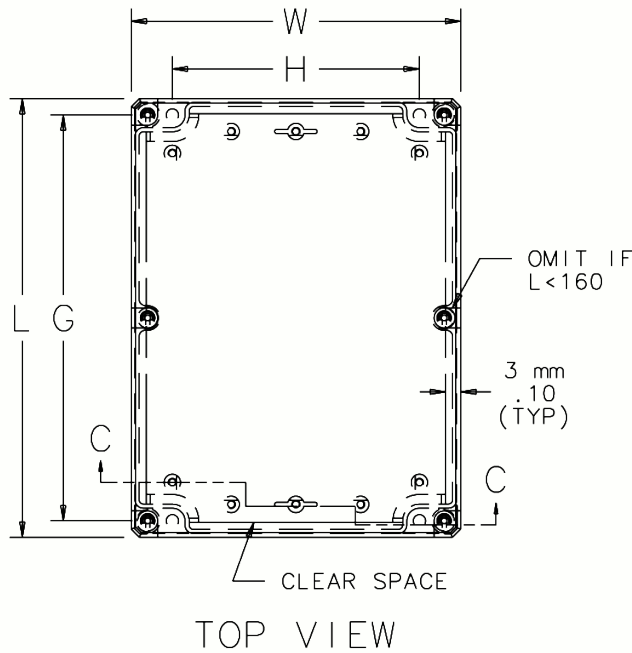
Manufacturer:
Hoffman

APPLICATION

- QLINE D polycarbonate and ABS enclosures have contoured bodies with flush cover screws for an attractive, contemporary appearance.
- Tough as well as stylish, they are functional in corrosive environments and can withstand occasional submersion.
- The ABS series shared the same features and similar physical properties as the polycarbonate but is a more economical, non-UL rated alternative.

Standard Product Polycarbonate

Catalog Number	AxBxC mm/in.	Cover Style	External Dimensions L x W mm/in.	Panel	Panel Size D x E mm/in.	Mounting G x H mm/in.	F mm/in.	J mm/in.	K mm/in.	P mm/in.	Q mm/in.	R mm/in.	S mm/in.	U mm/in.
Q1289PCD	113 x 73 x 79 4.45 x 2.87 x 3.11	Opaque	120 x 80 4.72 x 3.15	Q128PD	91 x 65 3.58 x 2.56	108 x 50 4.25 x 1.97	72 2.83	70 2.76	15 0.59	58 2.28	82 3.23		96 3.78	3 0.12



Enclosure:
HKB/HFC Explosion Proof

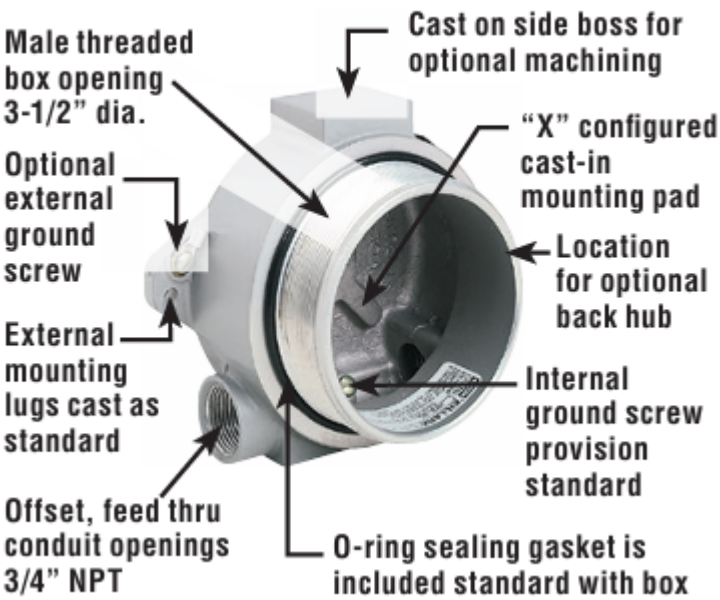
Manufacturer:
Hubbell Killark

APPLICATION

- Instrumentation housed in HK Series enclosures typically used to measure, transmit and control industrial processes and systems
- HK Series enclosures are suitable for a broad range of applications, meeting both domestic and international code requirements.
- Enclosures are explosion proof, dust/ignition proof, weather proof and tamper resistant
- HK Series boxes covers are cast from a copper-free aluminum alloy.

HK COMPONENT PARTS	
CATALOG NUMBER	DESCRIPTION
HKB	Single cover box only
HFC	Flat cover

HK Design Features



Standard Flat Cover



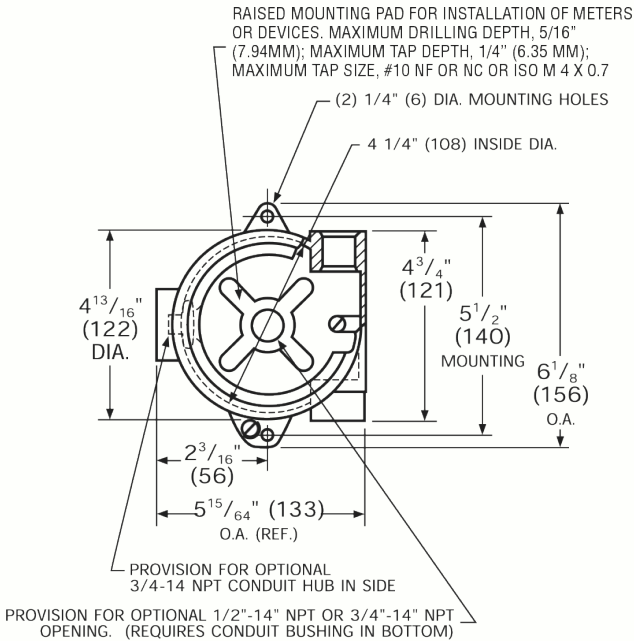
ATEX/IECEX Certified

IECEX UL 14.0071U
DEMKO 01 ATEX 15742U

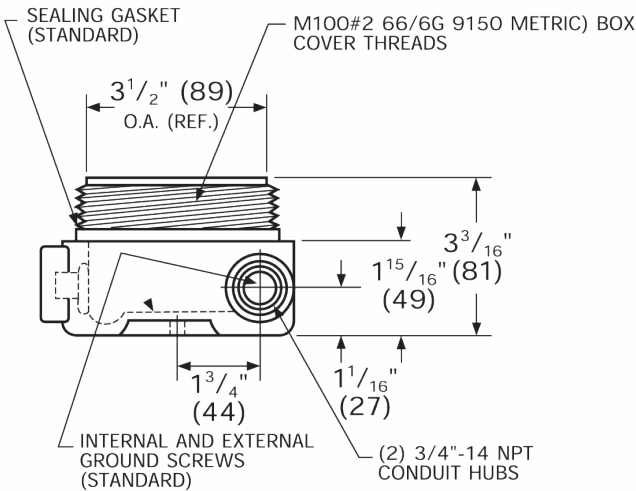
II 2 G / D

Ex db IIC Gb, Ex tb IIIC Db IP66
Ta = -60°C to +70°C for GL (glass) lenses
Ta = -60°C to +70°C for blank covers

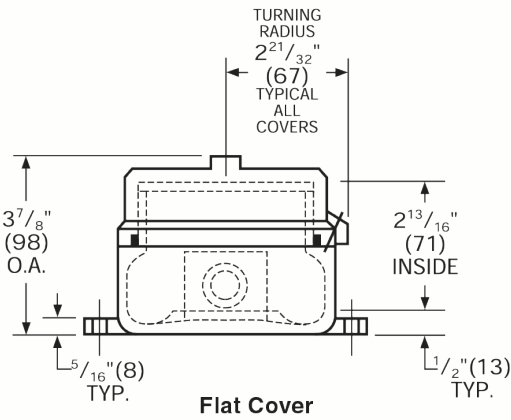
Class I, Div. 1 & 2, Groups A*, B, C, D†
Class I, Zones 1 & 2, Groups IIB + H2, IIA
Class II, Div. 1 & 2, Groups E, F, G
Class III, Type 3, 4, 4X



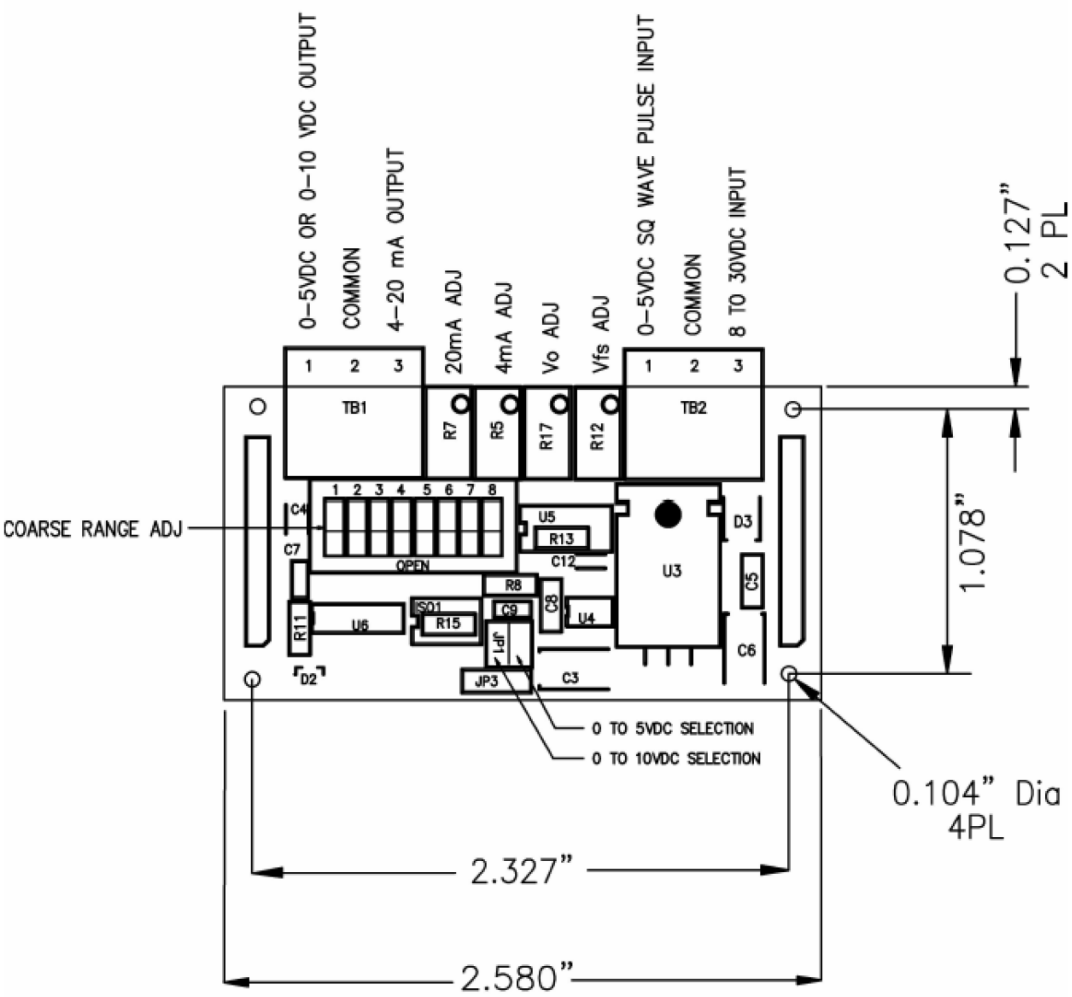
HKB Volume: 31 cu. in.



HKB box and blank cover



Wiring for Analog Converters
with Digi-Pulse Pickup



Ordering Information

PCA-121

B

I

W

Series:

Mounting:

Operating Voltage:

Electrical Interference:

C = Explosion Proof Enclosure

B = NEMA-4X Enclosure

P = Panel Mount

1 = 24 VDC (8 to 30VDC)

2 = 110 VAC 50/60 Hz

3 = 220 VAC 50/60 Hz

W = Mounted Integral to Flowmeter

X = 10 feet cable attached to mating connector