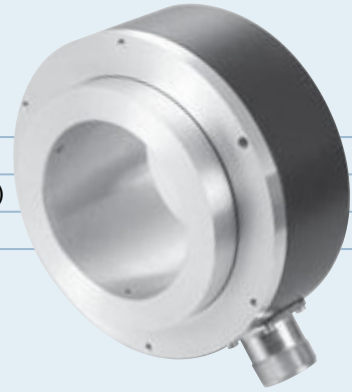


# IH 120

INCREMENTAL  
HOLLOW SHAFT ENCODER



Heavy Duty Construction

Shaft Mounted

Range of shaft bores 1.625" to 2.5" (40 -65 mm)

4.75 to 30 Volts, RS 422 Compatible

300 kHz Maximum Frequency

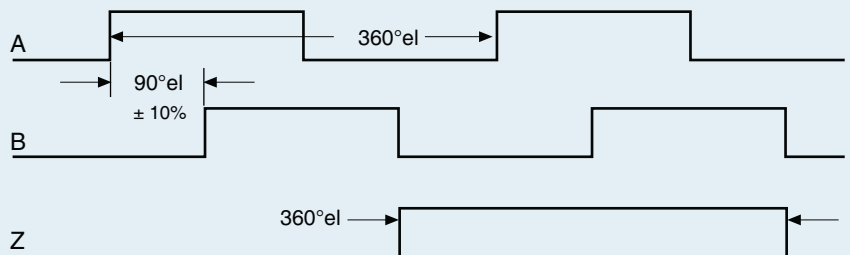
## ELECTRICAL SPECIFICATIONS

Supply Voltage	4.75-30Vdc
Current Consumption	max. 40 mA
Output Circuit	Push-Pull, RS 422A
Impulse Frequency	300 kHz (max)
Signal Level (high)	Vcc - 0.7 Volt
Signal Level (low)	0.3 Volt (max)
Short Circuit Protection	100%

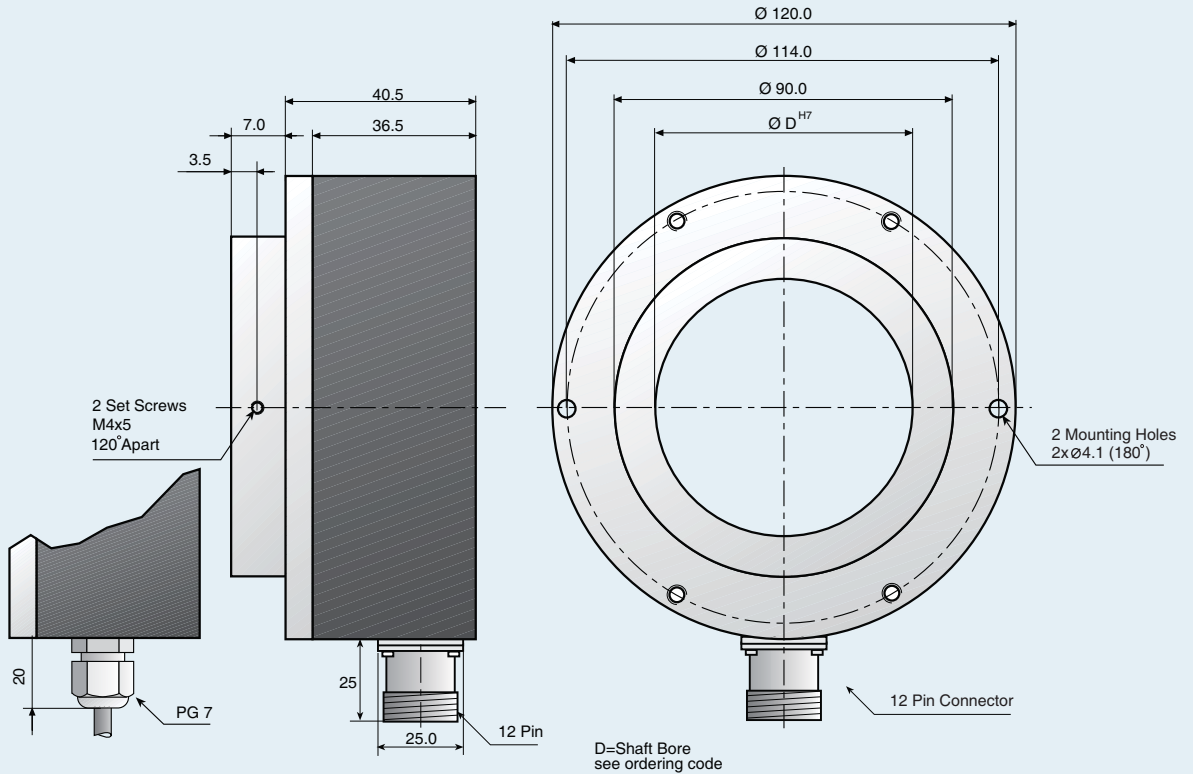
## MECHANICAL SPECIFICATIONS

Cover	Aluminum
Body	Aluminum
Shaft	Stainless Steel
Speed	4000 RPM Max.
Torque	> 0.04 Nm
Loading	Axial 50 N, Radial 30 N
Protection	IP 65
Temperature	-20°...+70° C (-4°...+158° F) +100° C (+212° F) Optional
Weight	720 g (1.584 lb)

## OUTPUT SIGNALS



A leads B in the Clockwise Direction (facing shaft set screw side)  
Complementary Signals are also available



**ORDERING CODE**

IH
120
-





-

a    b    c    d    e    f    g    h    Pulses Per Revolution

- a Group Function**  
 IH=Incremental Hollow Shaft
- b Basic Series Number**  
 120
- c Shaft Size**  
 AU=2.0", AY=2.5"  
 40=40 mm, 65=65 mm
- d Mechanical Options**  
 0=None, 5=Shaft Seals

- e Connection Type**  
 0=6' (2Mtr) Cable, 6=9 Pin Sub-D  
 7=12 Pin, 9=10 Pin CR3102E18-1P
- f Connection Location**  
 R=Radial
- g Output Signals**  
 3=A+B+Z  
 6=A+B+Z+Complementary
- h Output Circuit Type**  
 1=Push-Pull 5 Vdc  
 3=Push-Pull 4,75 to 30 Vdc  
 5=Push-Pull 8 to 30 Vdc

**Notes:**  
 Special functions and designs will be designated by a 4 digit code at the end of the part number. Consult factory for further details  
 Resolution over 5000 PPR uses interpolation circuitry  
 Please specify supply voltage 5Vdc or 8 to 30Vdc

**CONNECTIONS**

Function	Cable Colour Code	9 Pin Connector	12 Pin Connector	10 Pin CR3102R18-1P
0 Volt	white	1	1	F
+ Volt	brown	2	2	D
A	green	3	3	A
B	yellow	4	4	B
Z	grey	5	5	C
$\bar{A}$	pink	6	6	H
$\bar{B}$	blue	7	7	I
$\bar{Z}$	red	8	8	J