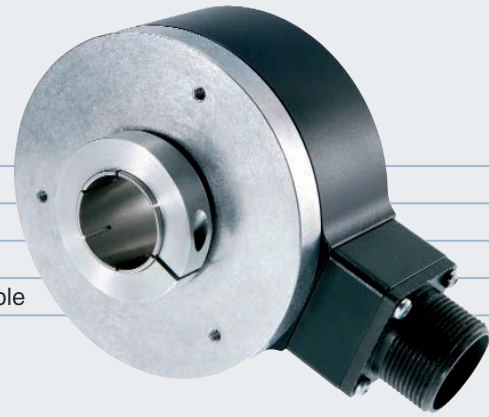


IH 965

INCREMENTAL
HOLLOW SHAFT ENCODER

Industry Standard Size 3.8"
Shaft Mounted
Range of shaft bores ½" to 1.0"
5000 PPR Maximum
4.75 to 30 Volts, RS 422 Compatible
300 kHz Maximum Frequency



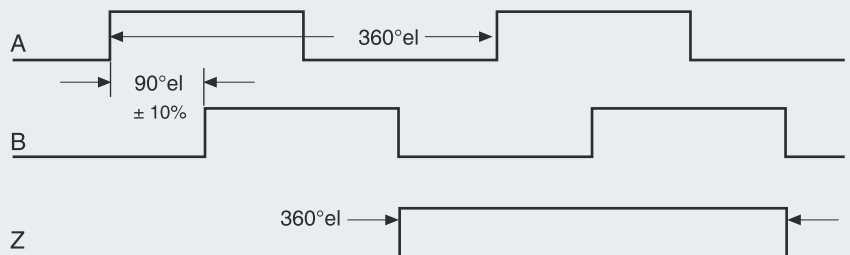
ELECTRICAL SPECIFICATIONS

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%

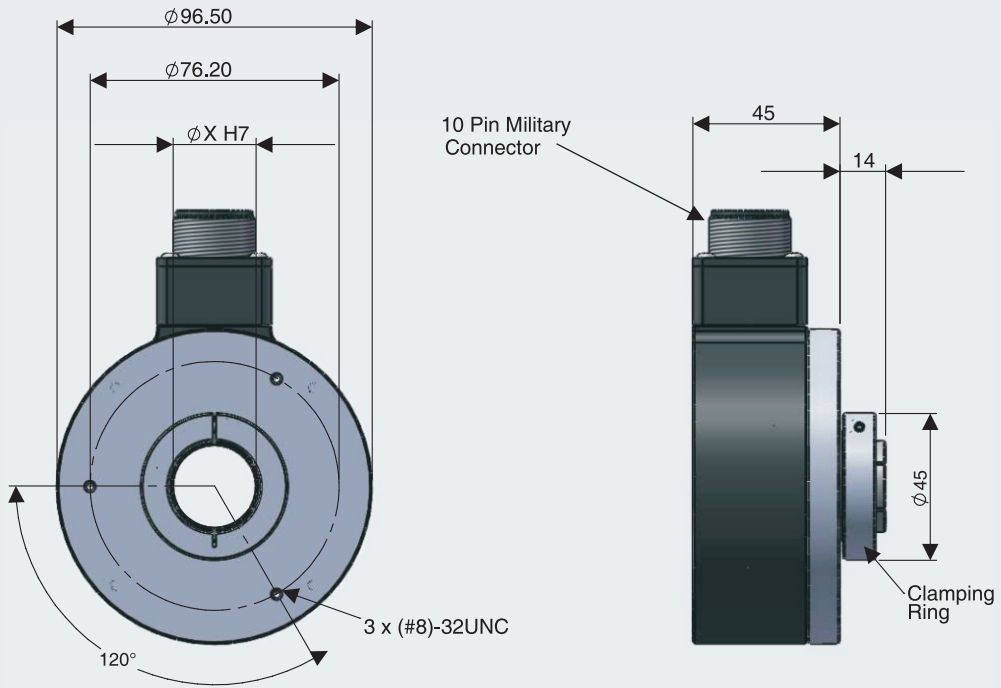
MECHANICAL SPECIFICATIONS

Cover	Aluminum
Body	Aluminum
Shaft	Stainless Steel
Speed	6000 RPM Max.
Torque	> 0.04 Nm
Loading	Axial 120 N, Radial 100 N
Protection	IP 65
Temperature	-20° ...+70° C (-4° ...+158° F) +100° C (+212° F) Optional
Weight	730 g (1.95 lb)

OUTPUT SIGNALS



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



ORDERING CODE

IH
965
-

-

a b c d e f g h Pulses Per Revolution

- a Group Function**
 IH=Incremental Hollow Shaft
- b Basic Series Number**
 965
- c Shaft Size**
 AC=1/2", AG=3/4", AL=1.0"
- d Mechanical Options**
 0=None, 5=Shaft Seal

- e Connection Type**
 5=7 Pin, 9=10 Pin
- 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
 4=NPN O.C. 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 2500 PPR uses interpolation circuitry
 Please specify supply voltage 5Vdc or 8 to 30Vdc

CONNECTIONS

Function	7 Pin CR3102A16S-1P	10 Pin CR3102R18-1P
0 Volt	F	F
+ Volt	D	D
A	A	A
B	B	B
Z	C	C
\bar{A}	G	H
\bar{B}	E	I
\bar{Z}	-	J