

Incremental Encoder

IH360

Incremental Miniature Hollow Shaft Encoder

- Miniature Size 36 mm
- Shaft Mounted
- Shaft Bore Diameter from 4 to 10 mm
[1/4" to 3/8"]
- Resolution from 1 to 3600 ppr
- Supply Voltage 5VDC, 4.75-30 VDC, 8-30 VDC



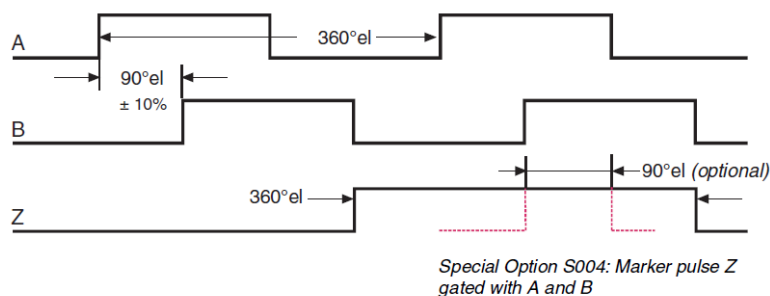
Electrical Specification

Supply Voltage V_{cc}	5 VDC, 4.75 – 30 VDC, 8-30 VDC
Current Consumption (<i>no load</i>)	Max. 40 mA
Output Circuit	Push-Pull, TTL, RS422A compatible
Pulse Frequency	Max. 100 kHz
Signal Level (High)	$V_{cc} - 0.7 V$
Signal Level (Low)	Max. 0.25 V
Short Circuit Protection	100 %
Reverse Polarity Protection per Channel	100 %
ESD (DIN EN61000-4-2)	8 kV
Burst (DIN EN61000-4-4)	2 kV

Mechanical Specification

Material Body & Cover	Aluminum
Material Shaft	Stainless Steel
Max. Speed	6000 RPM
Mass Moment of Inertia	$95 \cdot 10^{-6} \text{ kgm}^2$
Starting Torque (<i>at 25°C</i>)	> 0.04 Nm
Max. Loading on Shaft	Axial 25 N, Radial 25 N
Shock Resistance (<i>6ms</i>)	$\leq 1000 \text{ m/s}^2$
Vibration Resistance (<i>55-2000 Hz</i>)	$\leq 100 \text{ m/s}^2$
Protection Class (<i>DIN EN 60529</i>)	IP65
Operating Temperature	-20° ... +70° C [-4° ... +158°F] +100°C [+212°F] (Optional: Special Option SHT0)
Weight	ca. 0.15 kg [0.33 lb]

Output Signals



A leads B in the Clockwise Direction (facing shaft)
Complementary Signals are also available (see ordering code)

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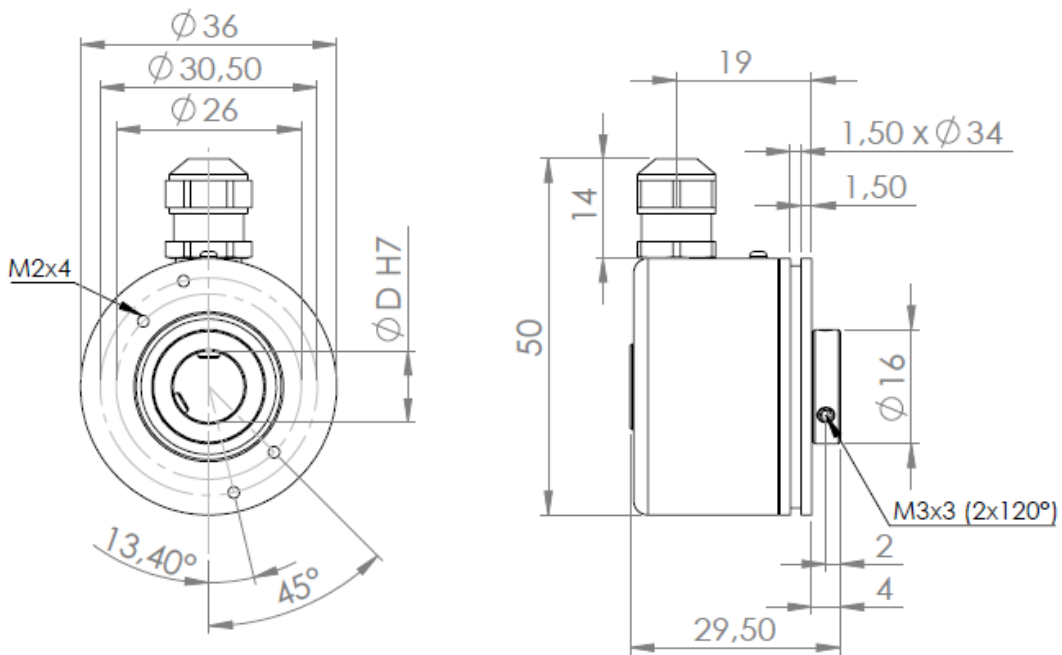
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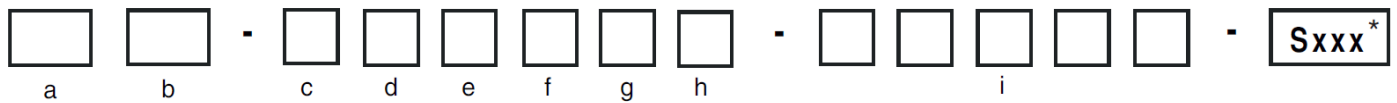
Geometry

Dimension in mm (drawing available as: dxf-,iges-, step-,sld-file)

Bore Size Diameter D see ordering code



Ordering Code



a. = Group Function
IH = Incremental Encoder

b. = Basic Series Number
360

c. = Shaft Size
Selectable from 4 to 10 mm [1/4" to 3/8"]
05 = 5 mm, 09 = 9mm, AA = 1/4", AB = 3/8"

d. = Mechanical Option
0 = none
9 = Rubber Grommet Cable Gland

e. = Connection Type
0 = 2 m Cable [6']
B = 5 m Cable [16.5']
C = 10 m Cable [33']
N = 3 m Cable [10']

f. = Connector Location
R = Radial

g. = Output Signals
3 = A + B + Z
6 = A + B + Z + A\ + B\ + Z\

h. = Output, Supply Voltage
1 = TTL, 5 VDC
3 = Push-Pull, 4.75 - 30 VDC
5 = Push-Pull, 8 - 30 VDC

i. = Resolution
Selectable from 1 to 3600 ppr
00063 = 63 ppr, 1024 = 1024 ppr
from 1025 ppr (only possible with 5VDC or 8-30 VDC)

* Any special functions and design will be designated by a code (Sxxx) at the end of the part number. Consult our Office for your region for further details. If this encoder does not fit your needs, please also consult us for help.



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Connection

<u>Function</u>	<u>Cable Color Code</u>
GND	white
V _{cc}	brown
A	green
B	yellow
Z	grey
A\	pink
B\	blue
Z\	red

Accessories IH 360

Reduction Sleeve

- B360-8/4 – Reduction Sleeve Series 360 from 8 mm to 4 mm
- B360-8/6 – Reduction Sleeve Series 360 from 8 mm to 6 mm
- B360-10/4 – Reduction Sleeve Series 360 from 10 mm to 4 mm
- B360-10/8 – Reduction Sleeve Series 360 from 10 mm to 8 mm

Tether

- DR360-003 – Tether Series 360 (Set 2-piece)
- DR360-004 – Tether Series 360
- DR360-005 – Tether Series 360