



IH 580



Incremental Hollow Shaft Encoder

CHARACTERISTICS

- Housing 58 mm
- Shaft Mounted
- Shaft Bore Diameter from 6 to 14 mm
- all Resolutions from 1 to 10.000 ppr
- Supply Voltage 4.75 to 30 VDC

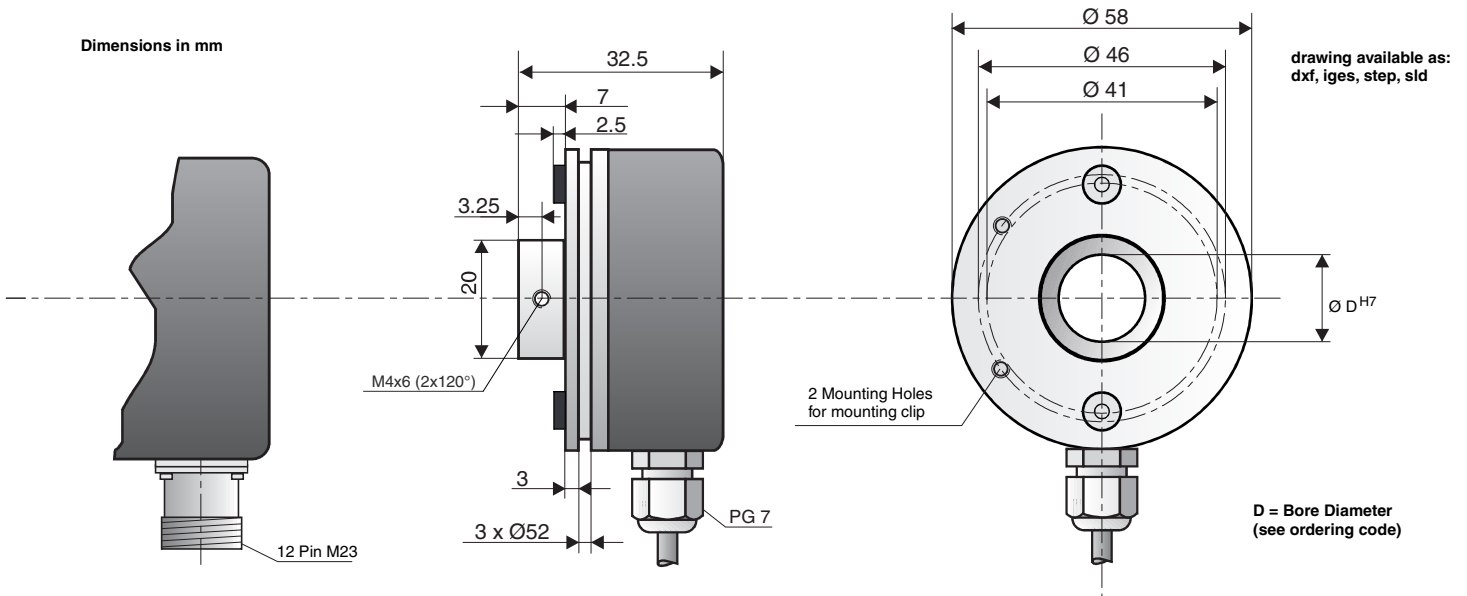
MECHANICAL SPECIFICATIONS

Cover & Body	Aluminum
Shaft	Stainless Steel
max. Speed	6000 RPM
Mass moment of inertia	$95 \cdot 10^{-6} \text{ kgm}^2$ (Bore Size $D=10\text{mm}$) $85 \cdot 10^{-6} \text{ kgm}^2$ (Bore Size $D=12\text{mm}$)
Starting Torque (at 25°C)	> 0.04 Nm
max. Loading on Shaft	Axial 20 N, Radial 15 N
Shock resistance (6 ms)	$\leq 1000 \text{ m/s}^2$
Vibration resistance (55 - 2000 Hz)	$\leq 200 \text{ m/s}^2$ (Cable) $\leq 100 \text{ m/s}^2$ (Plug)
Protection Rate (DIN EN 60529)	IP 65
Operating Temperature	-20° C to +70° C
Weight	ca. 0.5 kg



DIMENSIONS

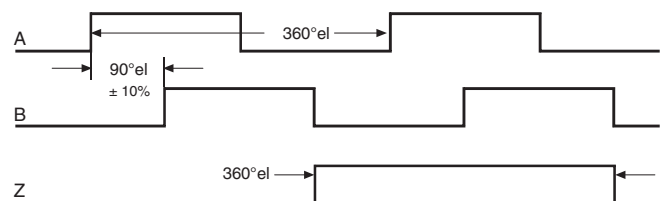
Dimensions in mm



ELECTRICAL SPECIFICATIONS

Supply Voltage	4.75 -30 VDC
Current Consumption (no load)	max. 40 mA
Output Circuit	Push-Pull, TTL, RS 422A compatible
Pulse frequency	max. 100 kHz
Signal Level (high)	Vcc - 0.7 Volt
Signal Level (low)	max. 0.25 Volt
Short Circuit Protection	100%
Reverse polarity protection per channel	100%
ESD (DIN EN 61000-4-2)	8kV
Burst (DIN EN 61000-4-4)	2 kV

SIGNALS



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



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CONNECTIONS

Function	Cable Code
GND	white
Vcc	brown
A	green
B	yellow
Z	grey
\bar{A}	pink
\bar{B}	blue
\bar{Z}	red

ORDERING CODE

IH
580
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Sxxx*

a b c d e f g h

Resolution from 1 to 10.000 ppr available

a Group Function
IH = Incremental Hollow Shaft

b Basic Series Number
580

c Bore Diameter D
selectable from 6 to 14 mm
06 = 6 mm, 09 = 9 mm, 12 = 12 mm

d Mechanical Option
0 = None

e Connection Type
0 = 2 m Cable , 1 = 4 m Cable

f Connection Location
R = Radial

g Output Signals
3 = A + B + Z
6 = A + B + Z + \bar{A} + \bar{B} + \bar{Z}

h Output Circuit Type / Supply Voltage
1 = TTL 5 VDC
3 = Push-Pull 4.75 to 30 VDC
5 = Push-Pull 8 to 30 VDC

* Notes:

Any special functions and design will be designated by a 4 digit 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 need please also consult us for help.

FURTHER INFORMATION

Accessories:

Corresponding accessories, such as couplings, measuring wheels, display modules, extension cables etc., for this encoder can be found on our homepage www.globalencoder.com under „Accessories“.

