

CHARACTERISTICS

- Housing 95 mm
- Electrically isolated redundant reading system
- Shaft Bore Diameter from 15 to 30 mm [0.625 to 1.25"]
- Resolutions from 1 to 5000 ppr
- Supply Voltage 4.75 to 30 VDC

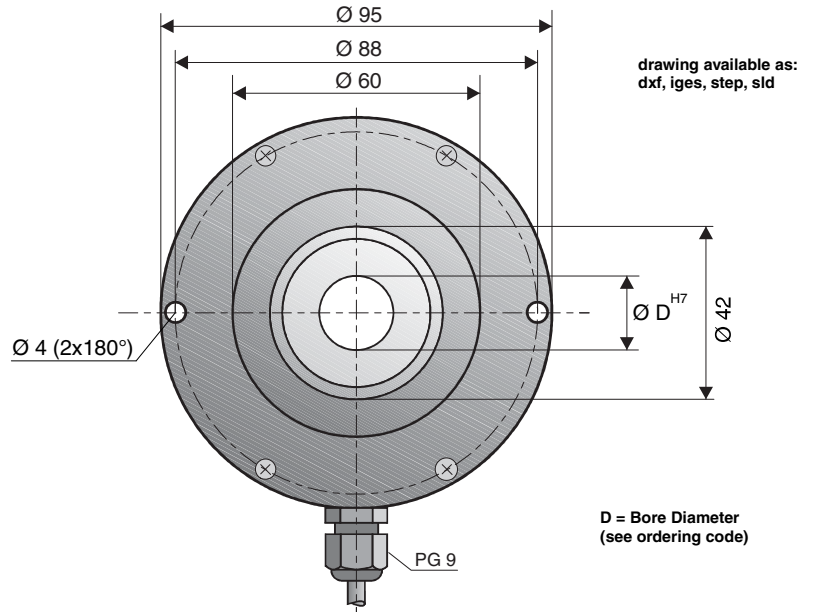
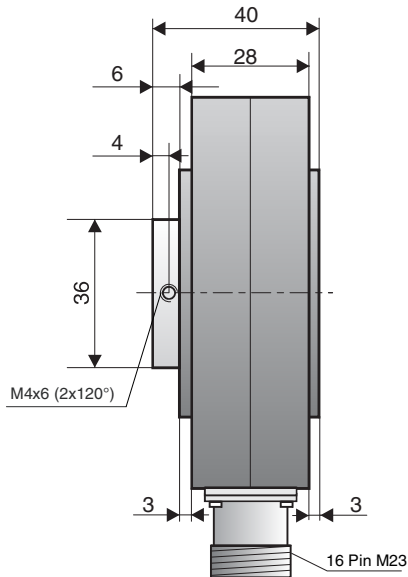
MECHANICAL SPECIFICATIONS

Cover & Body	Aluminum
Shaft	Stainless Steel
max. Speed	6000 RPM
Mass moment of inertia	100 · 10 ⁻⁶ kgm ² (Bore Sizes D= 20mm) 96 · 10 ⁻⁶ kgm ² (Bore Sizes D= 25mm)
Starting Torque (at 25°C)	> 0.04 Nm
max. Loading on Shaft	Axial 50 N, Radial 50 N
Shock resistance (6 ms)	≤ 1000 m/s ²
Vibration resistance (55 - 2000 Hz)	≤ 200 m/s ² (Cable) ≤ 100 m/s ² (Plug)
Protection Rate (DIN EN 60529)	IP 65
Operating Temperature	-20° C to +70° C
Weight	ca. 0.7 kg



DIMENSIONS

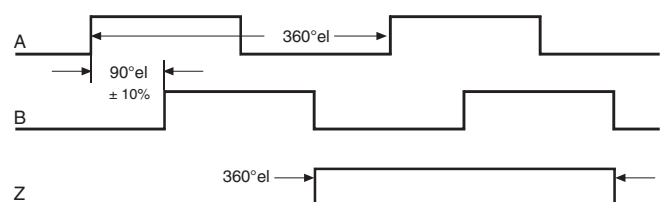
Dimensions in mm



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. 300 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)

CONNECTIONS

Function System 1	Cable Code	16 Pin M23 Plug	Function System 2	Cable Code	16 Pin M23 Plug
GND	white	01	GND	black	09
Vcc	brown	02	Vcc	violet	10
A	green	03	A	grey/pink	11
B	yellow	04	B	red/blue	12
Z	grey	05	Z	white/green	13
\bar{A}	pink	06	\bar{A}	brown/green	14
\bar{B}	blue	07	\bar{B}	white/yellow	15
\bar{Z}	red	08	\bar{Z}	yellow/brown	16

ORDERING CODE

RH
951
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Sxxx*

a b c d e f g h Resolution from 1 to 5.000 ppr available

a Group Function
RH = Redundant Hollow Shaft

b Basic Series Number
951

c Bore Diameter D
selectable from 15 to 30 mm [0.625 to 1.125"]
15 = 15 mm, 18 = 18 mm, 25 = 25 mm
AE = 0.625", AL = 1", AM = 1.25"

d Mechanical Option
0 = None, 1 = Stainless Steel

e Connection Type
0 = 2 m Cable , 1 = 4 m Cable
8 = 16 Pin M23 Plug

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“.

