SS 581

Sine-Cosine Solid Shaft Encoder

CHARACTERISTICS

- Industrie Standard Size 58 mm
- Syncro Flange Mounting
- Shaft Diameter from 6 to 10 mm
- Resolution 1024 ppr or 2048 ppr
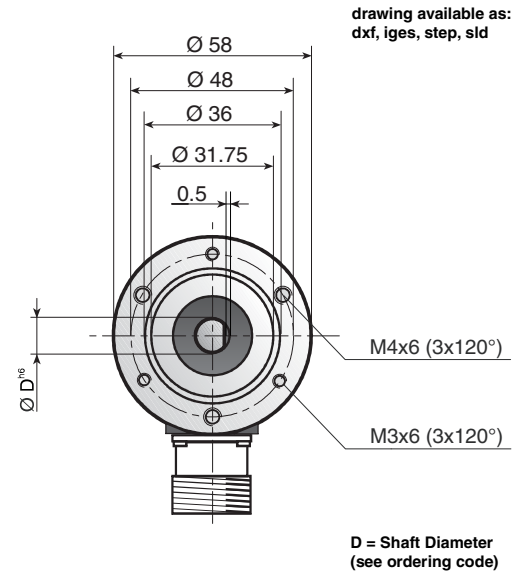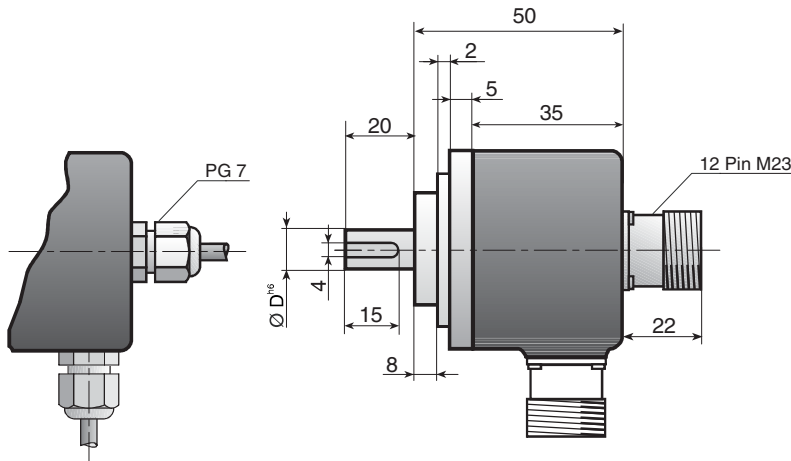- Supply Voltage 5 VDC

MECHANICAL SPECIFICATIONS

Cover & Body	Aluminum
Shaft	Stainless Steel
max. Speed	6000 RPM
Mass moment of inertia	$\leq 2.5 \cdot 10^{-6}$ kgm²
Starting Torque (at 25°C)	> 0.05 Nm
max. Loading on Shaft	Axial 40 N, Radial 30 N
Shock resistance (6 ms)	≤ 2000 m/s²
Vibration resistance (55 - 2000 Hz)	≤ 300 m/s² (Cable)
	≤ 150 m/s² (Plug)
Protection Rate (DIN EN 60529)	IP 65
Operating Temperature	-20° C to +70° C
	+100° C (optional)
Weight	ca. 0.110 kg

RoHS Compliant ✓   CE

DIMENSIONS

Dimensions in mm

PG 7

50
2
5
35
20
$\emptyset \, D^{h6}$
4
15
8
12 Pin M23
22

drawing available as:
dxf, iges, step, sld

Ø 58
Ø 48
Ø 36
Ø 31.75
0.5
$\emptyset \, D^{h6}$

M4x6 (3x120°)

M3x6 (3x120°)

**D = Shaft Diameter
(see ordering code)**

ELECTRICAL SPECIFICATIONS

Supply Voltage	5 VDC
Current Consumption (no load)	max. 40 mA
Output Circuit	Op Amp
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%

SIGNALS

B

A

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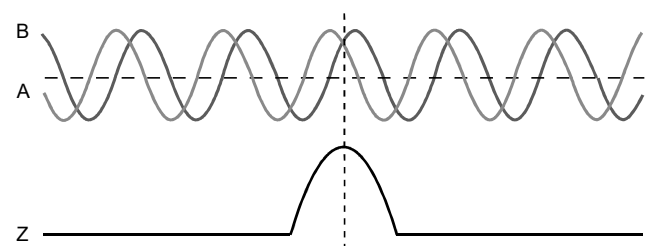
**A leads B in the Clockwise Direction (facing shaft)
Complementary Signals are also available (see ordering code)**

CONNECTIONS

Function	Cable Code	12 Pin M23 Plug
GND	white	01
Vcc	brown	02
A	green	03
B	yellow	04
Z	grey	05
$\overline{A}$	pink	06
$\overline{B}$	blue	07
$\overline{Z}$	red	08

ORDERING CODE

SS	581	-						-						-	Sxxx[*1]
a	b		c	d	e	f	g	h							Resolution 1024 or 2048 ppr available

a Group Function
SS = Sine-Cosine Solid Shaft

b Basic Series Number
581

c Shaft Diameter D
selectable from 6 to 10 mm
08 = 8 mm, 10 = 10 mm

d Mechanical Option
0 = None
4 = Stainless Steal Body & Cover

e Connection Type
0 = 2 m Cable , 7 = 12 Pin M23 Plug

f Connection Location
A = Axial , R = Radial

g Output Signals
I = A + B + Z (Sin/Cos)
C = A + B + Z + $\overline{A}$ + $\overline{B}$ + $\overline{Z}$ (Sin/Cos)

h Output Circuit Type / Supply Voltage
Q = Op-Amp 5 VDC

Notes:
[*1] 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".