

CHARACTERISTICS

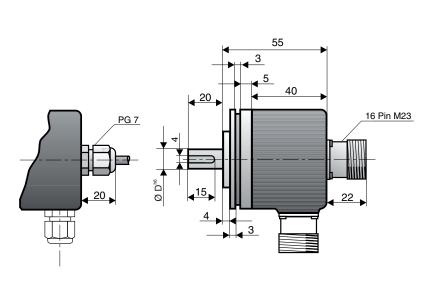
- □ Industrie Standard Size 58 mm
- ☐ Gearless and Battery Free Design
- □ Shaft Diameter from 6 to 12 mm
- □ Resolutions Single-Turn from 1 to 16 Bit
- □ Resolutions Multi-Turn from 1 to 20 Bit
- □ Supply Voltage 5 VDC or 10 to 30 VDC

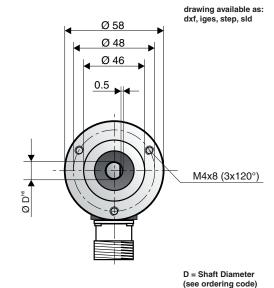
MECHANICAL SPECIFICATIONS	
Cover & Body	Aluminum
Shaft	Stainless Steel
max. Speed	6000 RPM
Mass moment of inertia	≤ 2.5 · 10 ⁻⁶ kgm²
Starting Torque (at 25°C)	> 0.05 Nm
max. Loading on Shaft	Axial 40 N, Radial 30 N
Shock resistance (6 ms)	≤ 2000 m/s²
Vibration resistance (55 - 2000 Hz)	≤ 300 m/s² (Cable)
	≤ 150 m/s² (<i>Plug</i>)
Protection Rate (DIN EN 60529)	IP 65
Operating Temperature	-20° C to +70° C
	+100° C (optional)
Weight	ca. 0.25 kg



DIMENSIONS

Dimensions in mm

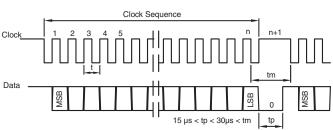




ELECTRICAL SPECIFICATIONS

ELLOTTIONE OF LOW TOATTO	10	
Supply Voltage	5 VDC , 10 - 30 VDC	
Current Consumption (no lo	max. 85 mA@27 VDC	
Output Circuit	RS485/RS422 compatible	
Pulse frequency	max. 500 kHz	
Direction Setting DIR <->	$DIR = GND \rightarrow cw$, $DIR = Vcc \rightarrow ccw$	
Preset/Reset Setting	eset/Reset Setting Set: Preset = Vcc for 2s	
	Reset: Preset = GND	
Short Circuit Protection	100%	
Reverse polarity protection per channel 100%		

SIGNALS



SSI Single Transmission Protocol

Absolute Multi-Turn Solid Shaft Encoder

CONNECTIONS

Function	Cable Code	12 Pin M23 Plug	8 Pin M12 Plug	
GND	white	01	01	
Vcc	brown	02	02	
SSI Clock +	green	03	03	
SSI Clock -	yellow	04	04	
SSI Data +	grey	05	05	
SSI Data -	pink	06	06	
Reset/Preset	blue	07	07	
Direction Setting	red	08	08	

ORDERING CODE

M:	S 580 -	- Sxxx	
а	b c d e	f g h Resolution Single-Turn 1 to 16 Bit available Resolution Multi-Turn 1 to 20 Bit available	
а	Group Function MS = Multiturn Incremental Solid Shaft	e Connection Type $0 = 2 \text{ m Cable }, 7 = 12 \text{ Pin M23 Plug}$ $Q = 8 \text{ Pin M12 Plug}$	
b	Basic Series Number 580	f Connection Location A = Axial , R = Radial	
С	Shaft Diameter D		
selectable from 6 to 12 mm		g Output Signals	
	08 = 8 mm, 10 = 10 mm, 12 = 12 mm	J = Binary Code SSI	
		Y = Gray Code SSI	
d	Mechanical Option		
	0 = None Y = Blind Hole Hollow Shaft	h Output Circuit Type / Supply Voltage F = SSI 5 VDC	
		G = SSI 10 bis 30 VDC	

Notes:

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".



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.