

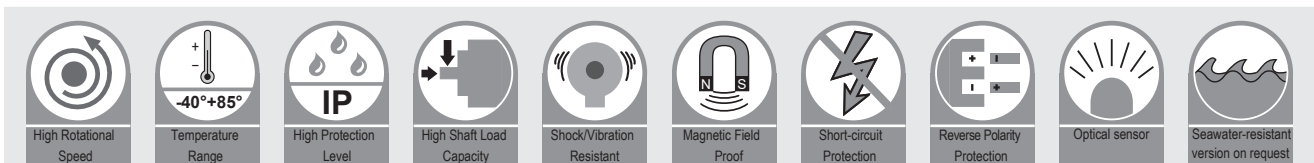
Absolute Encoders — Multiturn

Standard Optical ProfiNET

6E-58SX / 58HX



- Outdiameter 58 mm, standard industrial design
- Optical sensor technology, resolution up to 16 bits
- Mechanical gear multiturn system, revolution up to 14 bits
- Wide working temperature range
- Profinet ethernet interface
- Optional working mode: NRT,RT and IRT



Highlight:

- Outdiameter 58 mm, compact and strong structure, Suitable for industrial field and outdoor.
- Temperature -40°C ... +85°C
- High Protection Level up to IP67

- Blind hollow shaft up to 15mm
- Profinet ethernet interface, according to Profinet 4.0/4,1
- With quick connecting M12 terminal box
- Mechanical gear multiturn system, anti-electromagnetic interference

Mechanical characteristics	
Max. Speed	12000 rpm
Starting torque	≤ 3 Ncm (at 20°C)
Moment of inertia	≤ 30 gcm ²
Shaft load capacity	Axial 40 N; Radial 110 N
Weight	approx. 0.400 kg
Protection acc. to EN 60 529	IP 65 optional IP 67
Explosion protection Ex (optional)	Zone 2, 22
Working temperature range	-40°C ... 85°C
Materials	Shaft: Stainless steel(V2A) Flange: Aluminium Housing: Steel
Shock resistance acc. to EN 60068-2-27	≤ 100 g (6 ms)
Vibration resistance acc. to EN 60068-2-6	≤ 10 g (10 Hz ... 1000Hz)
Mechanical lifetime (Fa/Fr)	40/60 40/80 40/110
	247 110 42

Electrical characteristics	
Power supply	10 ... 30 VDC
Current consumption	typ. 100 mA, Max.230 mA
Output driver	Industrial Ethernet protocol
Start-up time	< 250 ms
Short circuit protection	yes
Reverse polarity protection	yes
UL approval	E468583
CE compliant acc. to	EN 61000-6-4; EN61326-1
RoHS compliant acc. to	guideline 2002/95/EG

Interface characteristics ProfiNET	
Interface	ProfiNET
Output driver	Ethernet
Baud rate	10 / 100 Mbit
Interface Cycle Time	> 1 ms
Code	Binary
Singleturn resolution	Max. 16 bits
Number of revolutions	Max.14 bits
Protocol	acc. to ProfiNET 4.0/4.1 version
	NRT, RT and IRT operating mode
LED indication	Status LEDs and Diagnostic LEDs for indicating the link status and running status, further functions please refer to the manual.
Electrical lifetime	> 10 ⁵ h

EX characteristics	
Standards	EN 60079-0:2012+A11:2013 EN 60079-7:2015 EN 60079-31:2014
Type	Ex II 3G Ex ec IIC T6...T4 Gc Ex II 3D Ex tc IIIC T85°C, T100°C, T135°C Dc

- Profinet protocol acc. to industrial ethernet standard,
 Profinet 4.0/4.1 version functions
 Protocol Features :
- Settable count direction
 - Settable singleturn resolution
 - Settable total resolution
 - Integrated Boot loader for customer firmware upgrades
 - Optional working mode: NRT,RT and IRT
 - Different filters for velocity
 - Neighbouring detection
 - Engineering identification call

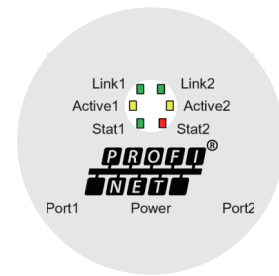
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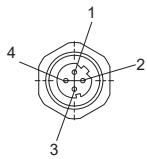
LED Status indication

Encoder has several LEDs for indicating the current working status like the link status, running status, etc. Further information please refer to the manual.



M12 Connector terminal

Port 1, 2



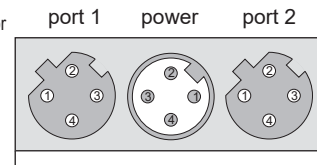
Port	Port 1				Port 2			
	TxD+	RxD+	TxD-	RxD-	TxD+	RxD+	TxD-	RxD
M12 Connector	1	2	3	4	1	2	3	4

Power supply (female)



信号	+V	--	0V	--
针号	1	2	3	4

Top view of connector



Abs. Encoder - MT

Order Code Shaft version	6E-58SX-X X X X-B XX XX X-XX										
	Type	h	a	b	c	d	e	f	g	i	i
a Flange 1 = Clamping flange, IP65 2 = Clamping flange, IP67 3 = Synchro flange, IP65 4 = Synchro flange, IP67	c Interface / Power supply 3 = ProfiNET / 10 ... 30 VDC	f Singleturn resolution 13 = 13 bit 16 = 16 bit	h Function 1 = No additional function		d Type of connection 2 = Bus terminal cover, radial 3X M12 connector 6 = Radial cable, 1m			g Number of revolutions 12 = 12 bit 14 = 14 bit		i Certification Type BIank = CE/UL EX = 2/22 Zone *	
b Shaft 2 = $\varnothing 6 \times 10$ mm 5 = $\varnothing 10 \times 20$ mm	e Code B = Binary										

* If you like EX, Only for cable radial 1m

Order Code Blind hollow version	6E-58HX-X X X X-B XX XX X-XX										
	Type	h	a	b	c	d	e	f	g	i	i
a Flange 8 = With D-wing spring coupling, IP65 9 = With D-wing spring coupling, IP67	c Interface / Power supply 3 = ProfiNET / 10 ... 30 VDC	f Singleturn resolution 13 = 13 bit 16 = 16 bit	h Function 1 = No additional function		d Type of connection 2 = Bus terminal cover, radial 3X M12 connector 6 = Radial cable, 1m			g Number of revolutions 12 = 12 bit 14 = 14 bit		i Certification Type BIank = CE/UL EX = 2/22 Zone *	
b Hollow shaft (Blind) 3 = $\varnothing 6$ mm 4 = $\varnothing 8$ mm 5 = $\varnothing 10$ mm 6 = $\varnothing 12$ mm 7 = $\varnothing 14$ mm 8 = $\varnothing 15$ mm	e Code B = Binary										

* If you like EX, Only for cable radial 1m

Absolute Encoders — Multiturn

Standard Optical ProfiNET

6E-58SX / 58HX

Accessories

Connection technology:

Connector, self-assembly

M12 self-assembly connector (Power supply)

E1-1204-0001

M12 self-assembly connector

E1-1104-0113

Mounting accessory for shaft version:

Coupling

Bellows coupling (aluminium alloy) \varnothing 25mm for shaft 6 mm T1-6000-3025-0606

Bellows coupling (spring steel) \varnothing 25mm for shaft 10 mm T1-2000-5025-1010

Mounting accessory for hollow shaft version:

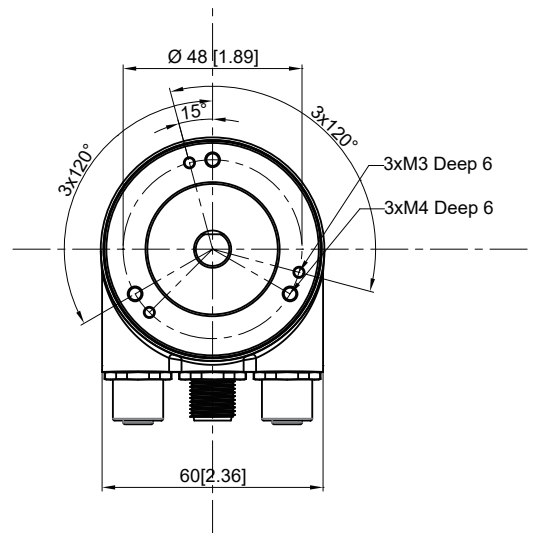
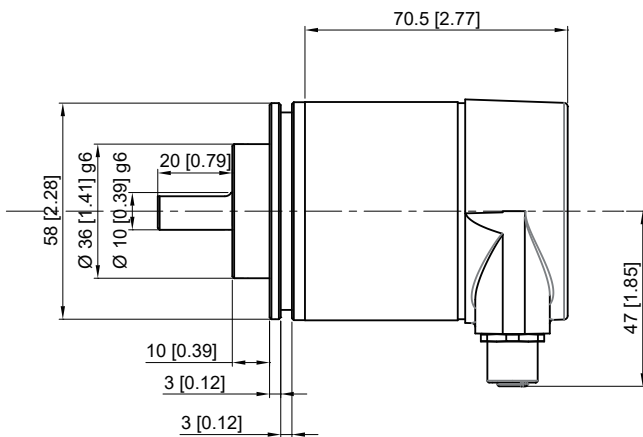
Stator coupling

Further accessories and exact order code please refer to the accessories section.

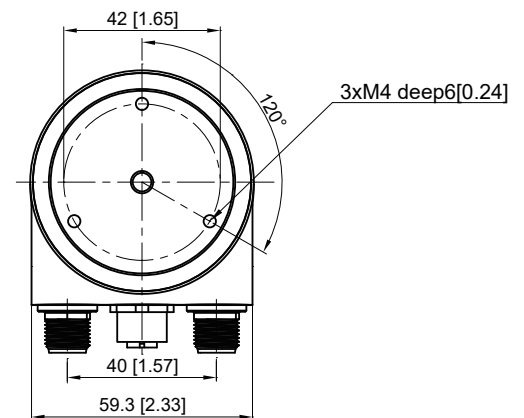
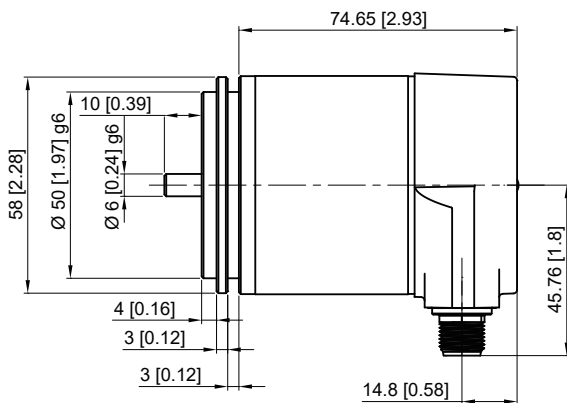
Dimensions

Shaft encoder:

type of flange1 or 2 , type of shaft 5, type of connection 2



type of flange3 or 4 , type of shaft 2, type of connection 2

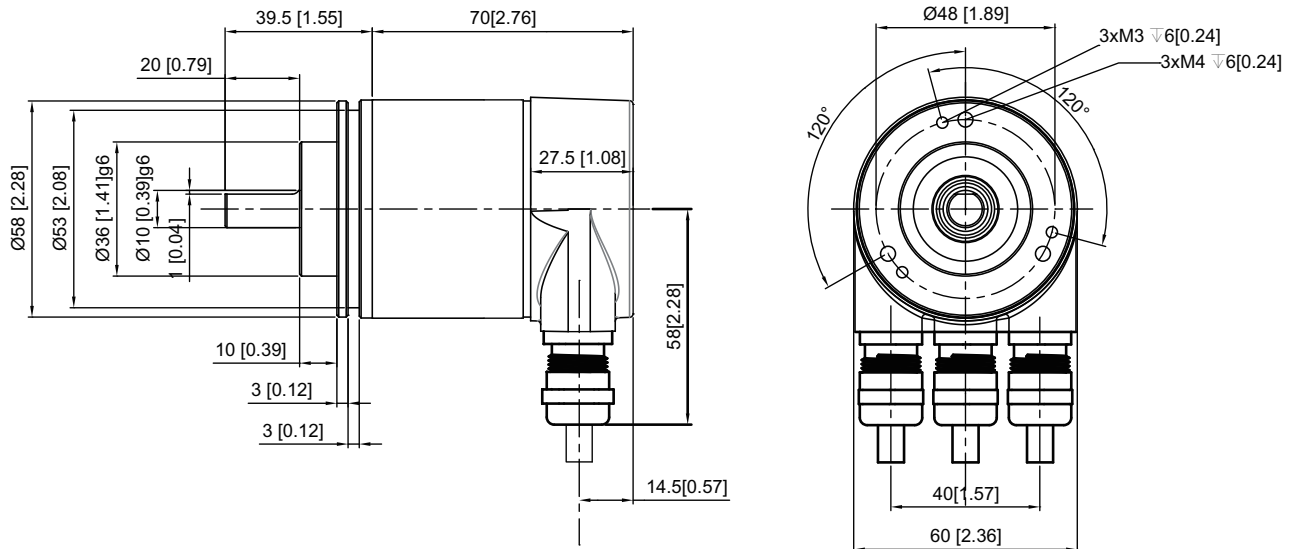


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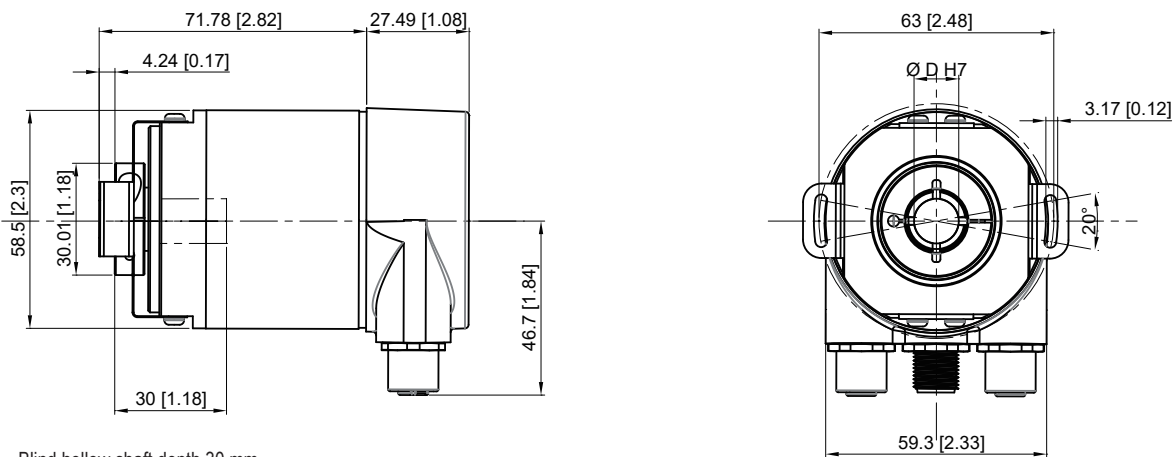
Standard Optical ProfiNET

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Shaft encoder:
type of flange1 or 2 , type of shaft 5, type of connection 6



Hollow encoder:
type of flange 8 or 9 , Blind hollow shaft, type of connection 2



Blind hollow shaft depth 30 mm

Other mounting types and accessories on your request,
please send us an email: sales@heinlanz.com