

ABSOLUTE ENCODER

- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65, IP67 option with a sealing flange
- Isolated SSI interface, clock from 100 to 500 kHz
- Universal electronic circuits from 5 to 30Vdc
- Protection against short-circuits and inversion of polarity
- High resolutions available:18Bits ,Turn counting up tp 18Bits.
- High performances in temperature -40°C to 85°C



ELECTRICAL CHARACTERISTICS

| | |
|---------------------------|---|
| Power supply | 5 – 30Vdc |
| SSI Clock Input | RS-422 Compatible via |
| SSI Date Output | Line-driver according to RS422 |
| Clock Frequency | 100kHz...2MHz |
| Cycle time (single t urn) | < 1 s |
| Turn On Time | < 25 µs |
| Power consumption | Max 1.5Kw |
| Precision | ± 1/2 LSB (up to 12 Bit), ± 2 LSB (at 16 Bit) |
| EMC | EN61000-6-4,emitted interference ,EN 61000-6-2,nosie immunity |

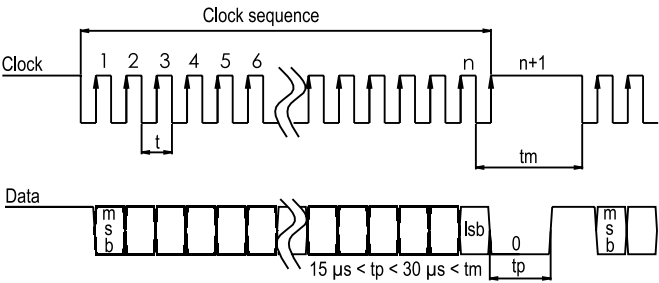
MECHANICAL CHARACTERISTICS

| | |
|--|--------------------------------------|
| Housing | Aluminium |
| Shaft | Stainless Steel |
| Bearings | 6000 series |
| Maximum number of revolutions permitted mechanically | 12000 rpm |
| Shaft inertia | ≤ 30 g.cm ² |
| Starting Torque | ≤ 3 N.cm |
| Maximum load permitted on shaft | Axial 40 N,Radial 100 N |
| Protection | IP 65 |
| Operating Temperature | -40°...+85° C |
| Storage Temperature | -40°...+85° C |
| Shock resistance | ≤ 100 g (during 6 ms) (IEC 68-2-27) |
| Vibration resistance | ≤ 20 g (10... 2 000 Hz) (IEC 68-2-6) |
| Weight | 520g |

CONNECTION AND OUTPUT SIGNALS

| Signal | Cable | CC M12pin |
|------------|-----------|-----------|
| Clock - | Yellow | 1 |
| Clock + | Green | 2 |
| Data + | Grey | 3 |
| Data - | Pink | 4 |
| Direction | Red | 5 |
| +Ub=10-30V | Brown | 8 |
| GND | White | 11 |
| Preset | Black | 12 |
| Shielding | shielding | housing |

SSI TRANSMISSION



ORDERING CODE

AC150S

-

-

-

-

-

SXX

a

b

d

e

f

g

h

j

Option

- a

Series

Absolute Encoder
- b

Shaft Type/ Flange

2C=Solid shaft, Clamp

2S=Solid shaft, Synchro

5B=Blind Hollow shaft

5H=Hollow shaft
- d

Shaft size

Solid Shaft: 6,8,10 mm

Blind Hollow shaft: 15 mm

Hollow shaft: 8,10,12 mm
- e

Power Supply

5 = 5-30 V
- f

Interface

SG = SSI, Gray

SB = SSI, Binary
- g

Nb of Turns / Resolution

0010 1212 1312

0012 1213 1416

0013 1214 Option

0016 1216
- h

Connector Location

1=Axial

2=Radial
- j

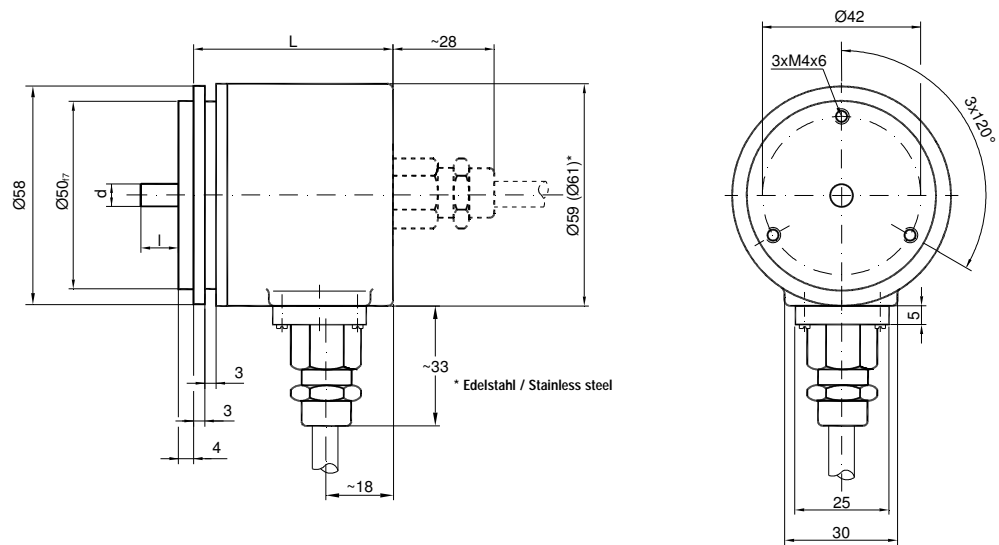
Connection

6= 2m Cable (standard)

8= M23 Connector

MECHANICAL DRAWINGS

Synchro Flang (s) Cable exit 1m (Cable= 8mm)



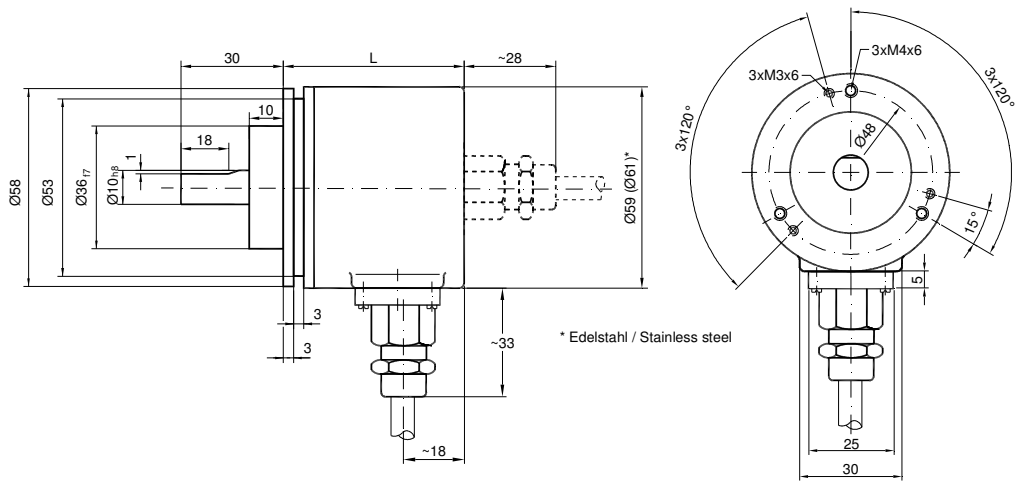
12 pol.Connector (for 6-9mm,
stainless steel drawing on request

| Synchro Flange | d / mm | l / mm |
|----------------|------------------|--------|
| Version S06 | 6 _{f6} | 10 |
| Version S10 | 10 _{h8} | 20 |

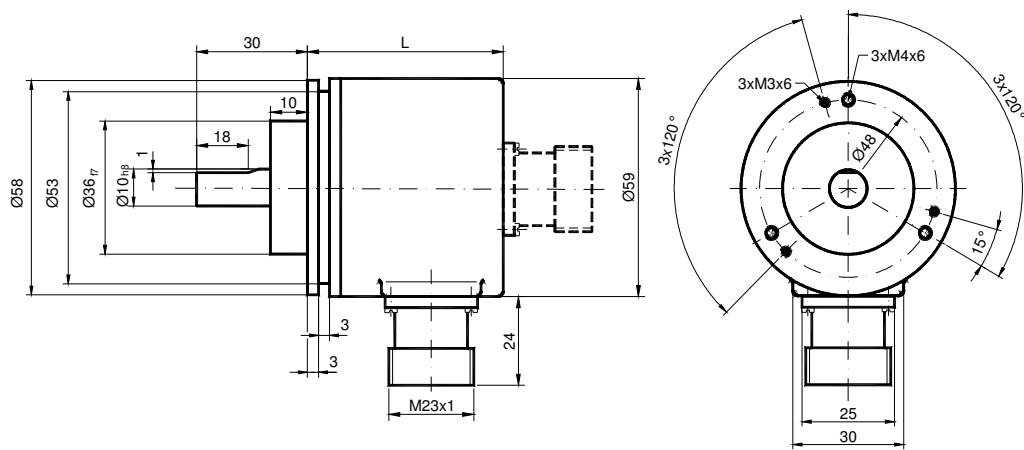
| | | L (mm) |
|-------------|-----------------|--------|
| Single-Turn | Axial | 42 |
| | Radial / Axial* | 53 |
| Multi-Turn | Axial | 53 |
| | Radial | 53 |

MECHANICAL DRAWINGS

Clamp Flang (s) Cable exit 1m (Cable= 8mm)



Clamp Flang 12 pol.Connector

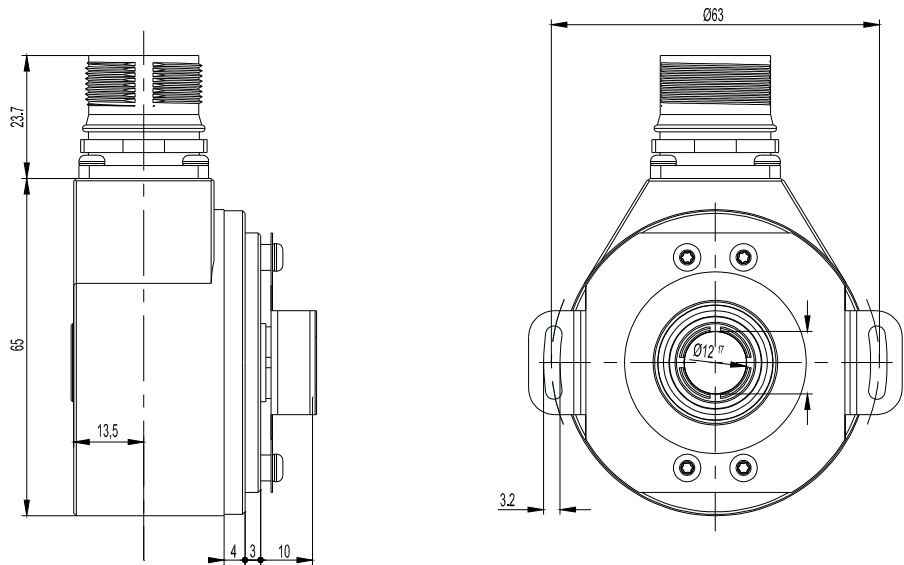


| Synchro Flange | d / mm | l / mm |
|----------------|------------------|--------|
| Version S06 | 6 _{f6} | 10 |
| Version S10 | 10 _{h8} | 20 |

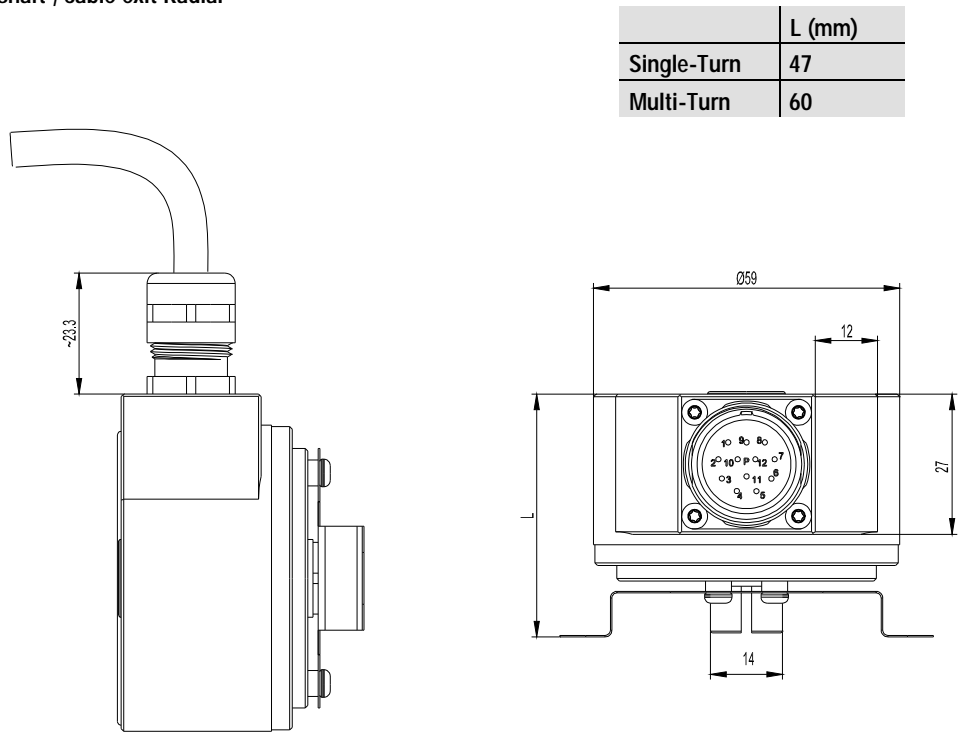
| | | L (mm) |
|-------------|-----------------|--------|
| Single-Turn | Axial | 42 |
| | Radial / Axial* | 53 |
| Multi-Turn | Axial | 53 |
| | Radial | 53 |

MECHANICAL DRAWINGS

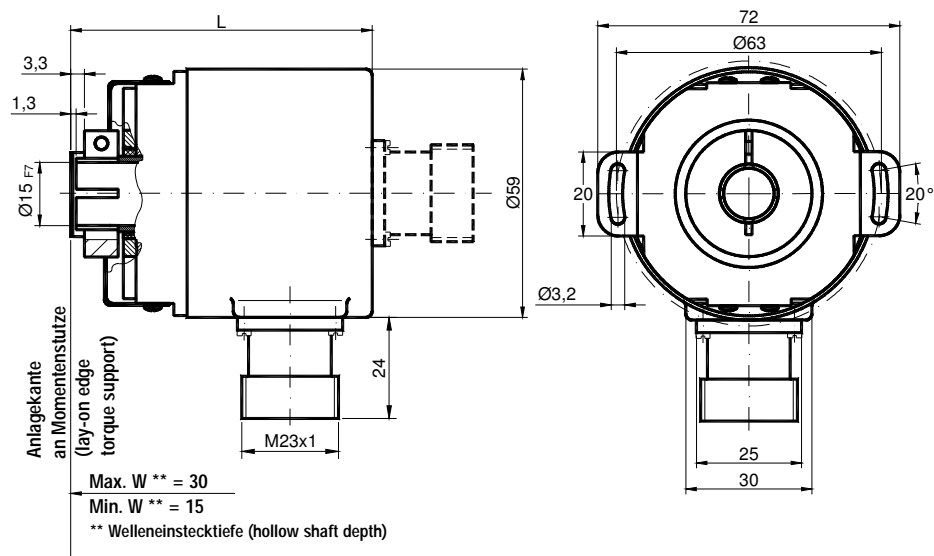
Hollow shaft , M23 connector Radial



Hollow shaft , cable exit Radial



Blind hollow shaft , M23 connector Radial



| | | L (mm) |
|-------------|-----------------|--------|
| Single-Turn | Axial | 42 |
| | Radial / Axial* | 53 |
| Multi-Turn | Axial | 53 |
| | Radial | 53 |