



MECHANICAL SPECIFICATIONS

Dimensions: see drawings
Shaft: stainless steel
Shaft loading: axial: 200 N; radial 200 N
Shaft rotational speed: 10.000 RPM to short cycle time; 6.000 RPM continuous; 2000 with protection shaft
Starting torque at 25°C: 0,025 Nm; 0,040 Nm with proof shaft; *(1)
Moment of inertia: 40 g cm²
Bearings life: 5 x 10⁹ rev. min.
Weight: ~0,3 kg

ELECTRICAL SPECIFICATIONS

output frequency: up to 300 kHz
Synchronous index output: on A default - B - A+B optional
Supply current without load: 150 mA max.
Protection: short circuit protection, no limit duration (only output LD2 e PP2); against inversion of polarity (except 5V, 5/28V)

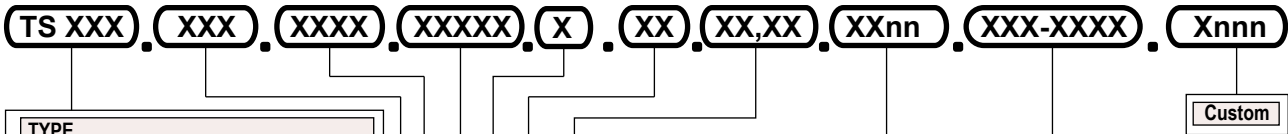
MATERIALS

Flange: aluminium non corroding
Housing: Polyamid 6 (PA6)

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range: -10°C++70°C
Storage temperature range: -30°C++85°C
Relative humidity : 98% RH without condensing
Vibrations: 10 g (From 10 up to 2.000 Hz)
Schock: 20 g (for 11 ms)

ORDERING CODE



TYPE
 TS 580 bidirectional
 TS 581 bidirectional + index

ASSEMBLY
 F1 Square flange (TK40)
 F2 Square flange (TK45)
 F3 Square flange (TK50)
 SG1 Servo-clip (TK50)
 SG2 Servo-clip (TK45)
 SG3 Servo-clip
 S1 Servo Flange
 S2 Servo Flange (TK45)
 FRE REO 444 Flange (Tk50)

PULSE RATE
 4 - 50 - 60 - 100 - 150 - 200 - 250 - 300 - 360 -
 500 - 600 - 720 - 1000 - 1024 - 1200 - 1440 -
 1500 - 1600 - 1800 - 2000 - 2048 - 2500 - 5000

Voltage supply (Vdc)
 5 +5 V ±5 %
 5/28 +5 ÷ 28 V
 11/30 +11 ÷ 30 V
 24/5 +11/30 V supply / 5 V output

Output frequency
 S from 0 up to 100 kHz
 V from 0 up to 300 kHz

Protection class
 K4 IP 64 (EN60529) (F1-F2-F3-SG1-SG2-SG3-S1-S2-FRE)
 K5 IP 65 (EN60529) (F1-F3-SG1-S1-FRE)
 K6 IP 66 (EN60529) (F1-F3-SG1-S1-FRE)

OUTPUT CIRCUITS
 S NPN standard (resistor included)
 OC NPN open collector
 P PNP (resistor included)
 OP PNP open collector

 PP2-5 Push-Pull 5 V output
 PP2-1130 Push-Pull 11/30 Vcc output (only with voltage supply 11/30 V)
 PP2-528 Push-Pull 5/28 Vcc output (only with voltage supply 5/28 V)

 LD Line driver RS422 (26LS31) only 5 V or 24/5 V
 LD2-5 Line driver 5 Vcc output
 LD2-1130 Line driver 11/30 Vcc output (only with voltage supply 11/30 V)
 LD2-528 Line driver 5/28 Vcc output (only with voltage supply 5/28 V)

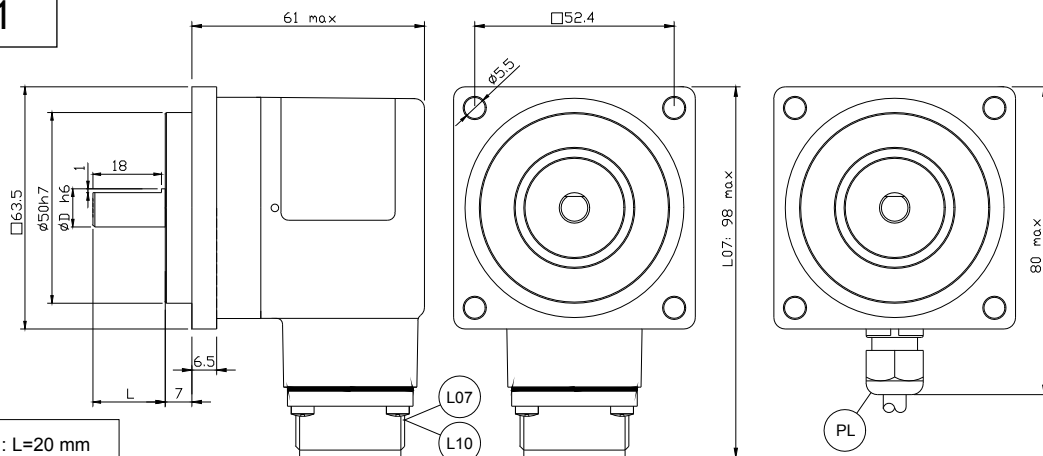
ELECTRICAL CONNECTIONS
OUTPUT: S ; P ; OC ; OP ; PP2 ; LD ; LD2
PLnn radial cable gland with cable 1 ÷ 6 m long;
L 07 on 7 pins radial MIL connector (Type "A", "B");
L 10 on 10 pins radial MIL connector (Type "C");
R1 on 12 pins radial "contact" connector (Type "D" - CCW);

 nn Cable length (es. PL10 = 1 m. ... PL60 = 6 m)
 Note: L10: only for TS581 with LD, LD2 electronic output

Shaft
 6 Ø 6 mm (Flange F1- F2 - F3 - SG1 - SG2 - SG3 - S1 - S2)
 8 Ø 8 mm (Flange F1- F2 - F3 - SG1 - SG2 - S1 - S2)
 9,52 Ø 9,52 mm (Flange F1- F2 - F3 - SG1 - SG2 - S1 - S2)
 10 Ø 10 mm (Flange F1- F2 - F3 - SG1 - SG2 - S1 - S2)
 11 Ø 11 mm (Flange FRE - SG1)
 11R Ø 11 mm (Flange FRE - SG1)

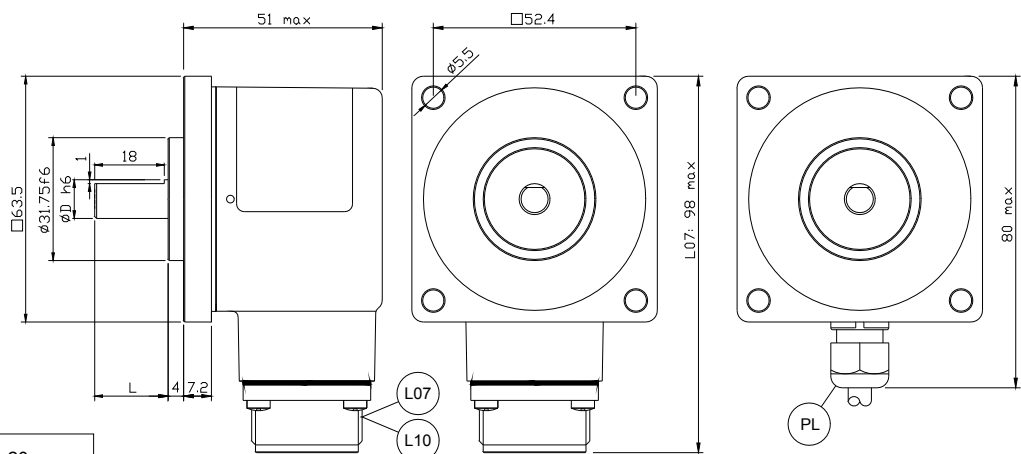
*(1) Not a test parameter, information only

Flangia F1



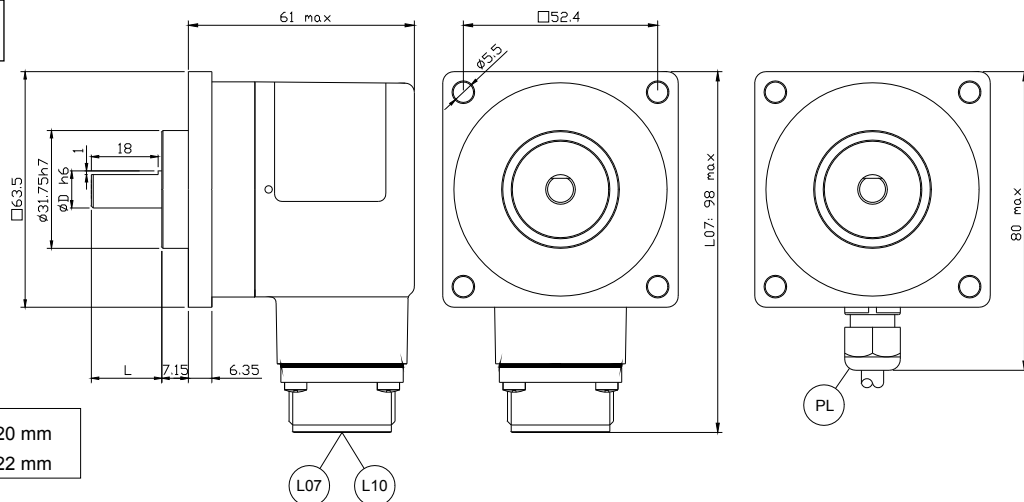
Albero ϕ 6,8,10 : L=20 mm
Albero ϕ 9,52 : L=22 mm

Flangia F2



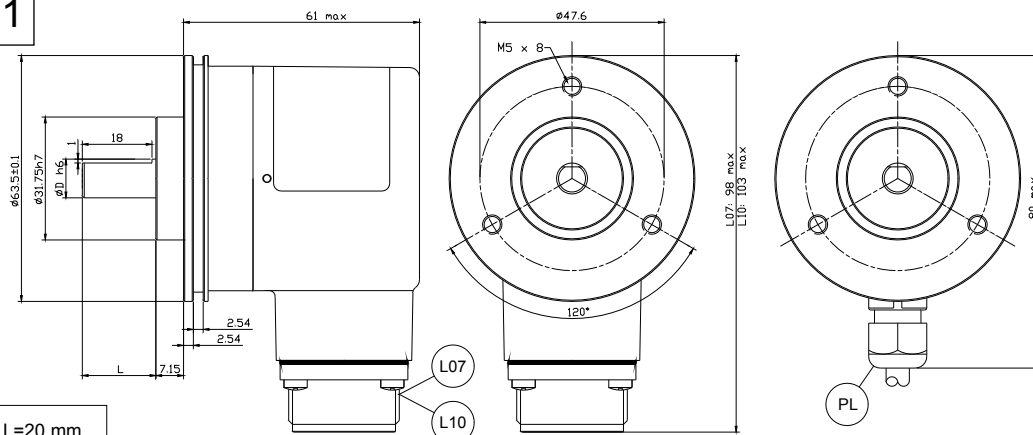
Albero ϕ 6,8,9,52,10 : L=20 mm

Flangia F3



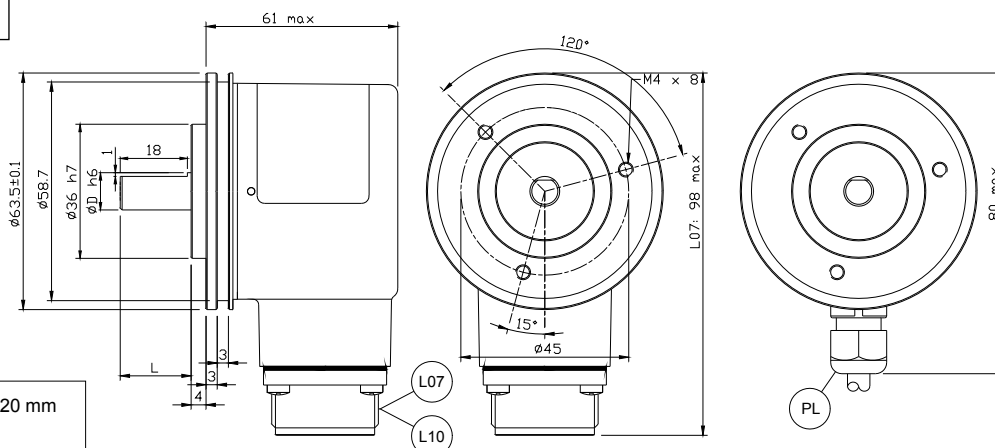
Albero ϕ 6,8,10 : L=20 mm
Albero ϕ 9,52 : L=22 mm

Flangia SG1



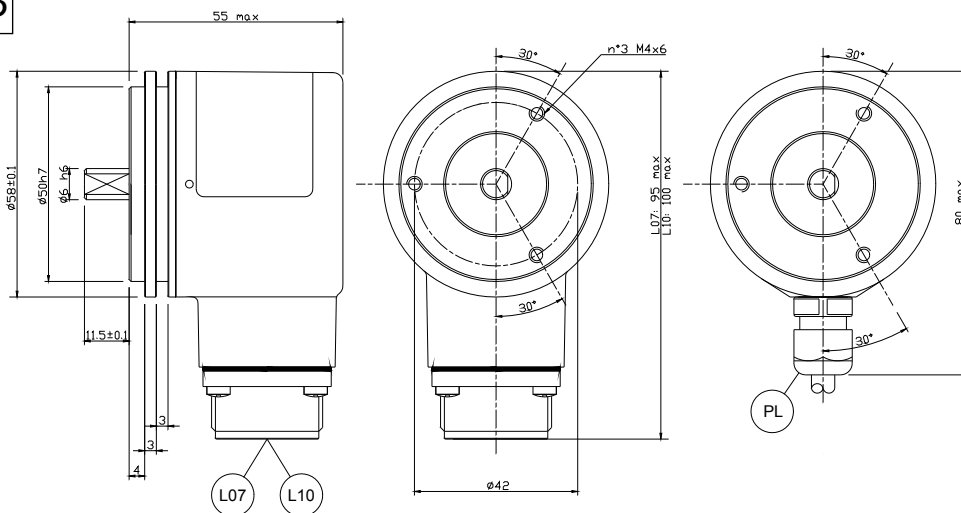
Albero ϕ 6,8,10 : L=20 mm
Albero ϕ 9,52 : L=22 mm
Albero ϕ 11 cod. 11R : L=20 mm

Flangia SG2

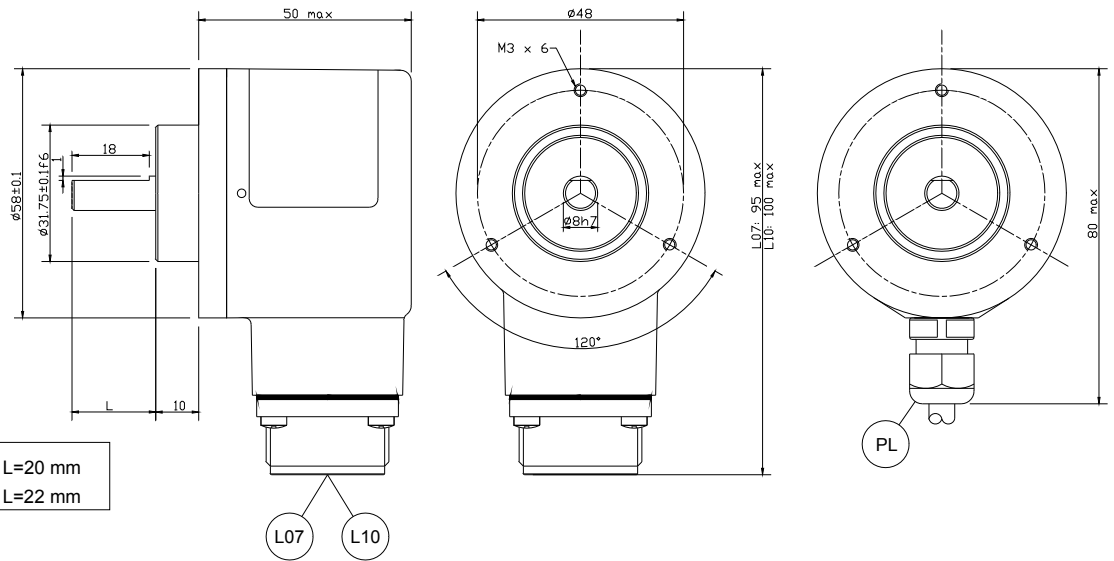


Albero ϕ 6,8,9,52,10 : L=20 mm

Flangia SG3

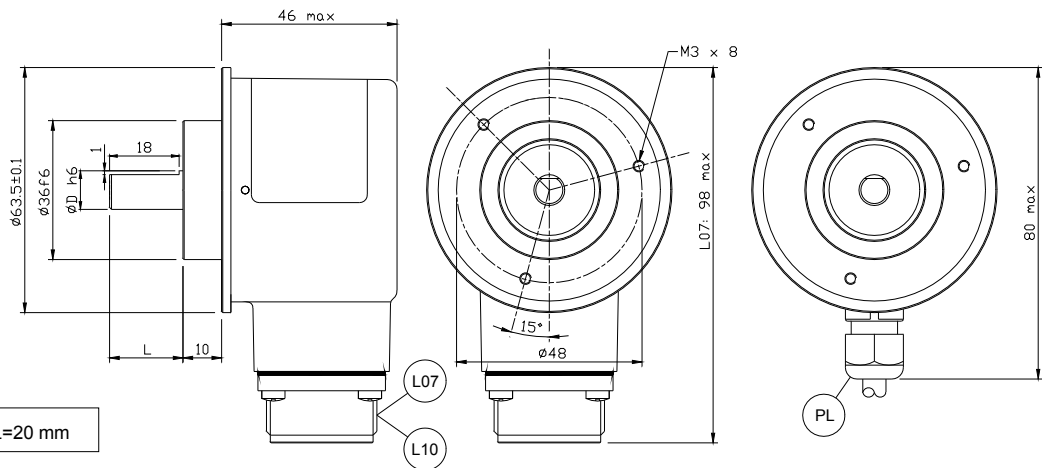


Flangia S1



Albero ϕ 6,8,10 : L=20 mm
Albero ϕ 9,52 : L=22 mm

Flangia S2



Albero ϕ 6,8,9,52,10 : L=20 mm

Flangia FRE

