



Features:

Optical absolute multiturn encoder **TSMW60P- PRDP-PRDNET with PROFIBUS and DEVICENET output interfaces** is an ideal solution for use in harsh environmental conditions thanks to its robust design, high resolution and high protection degree.

- resolution singleturn: 2,...,8192 ppr (13 bit);
- number of turn: max. 4096 ppr (12 bit);
- total resolution: 25 bit
- protection degree IP 65;
- programmable GRAY - BINARY;
- output interfaces: PROFIBUS; DEVICENET



MECHANICAL SPECIFICATIONS/ CARATTERISTICHE MECCANICHE

Dimensions/ <i>Dimensioni</i>	see drawings / vedi disegni
Moment of inertia/ <i>Momento di inerzia</i>	typically $2,5 \cdot 10^{-6}$ kg m ²
Shaft Rotation Speed/ <i>Numero giri</i>	6.000 RPM continuous/ continui
Bearings life/ <i>Vita dei cuscinetti</i>	$\geq 3.9 \times 10^{10}$ turns/giri (min) - rev. min. @ ≤ 3000 RPM, ≤ 60 °C
Permissible angular acceleration/ <i>Accelerazione angolare massima</i>	10^4 rad/s ²
Startup torque/ <i>Coppia di partenza</i>	2 Ncm
Weight/ <i>Peso</i>	~ 0,7 kg

ELECTRICAL SPECIFICATIONS/ CARATTERISTICHE ELETTRICHE

Power supply/ <i>Alimentazione</i>	11±27 V
STD codes/ <i>Codici STD</i>	programmable GRAY - BINARY/ programmabile GRAY - BINARIO
Option/ <i>Opzioni</i>	programmable count direction and position preset/ up/down e preset posizione programmabili
Protection/ <i>Protezione</i>	against inversion of polarity/ contro inversione di polarità
Current consumption (without load)/ <i>Corrente assorbita (senza carico)</i>	< 350 mA

MATERIALS/ MATERIALI UTILIZZATI

Flange/ <i>Flangia</i>	aluminum non corroding/ in alluminio anticorrosivo
Housing/ <i>Corpo</i>	black painted aluminum / alluminio verniciato nero
Shaft/ <i>Albero</i>	stainless steel/ acciaio inossidabile

ENVIRONMENTAL SPECIFICATIONS/ CARATTERISTICHE AMBIENTALI

Operating temperature range/ <i>Temperatura di lavoro</i>	-20 °C ÷ +70 °C
Storage temperature range/ <i>Temperatura di stoccaggio</i>	-30 °C ÷ +80 °C
Protection degree/ <i>Grado di protezione</i> (EN 60529)	IP65
Relative humidity/ <i>Umidità relativa</i>	98% RH without condensing/ senza condensazione
Vibrations/ <i>Vibrazioni</i> (EN 60068-2-6: 1996)	≤ 100 m/s ² , sine 50-2000 Hz
Shock resistance/ <i>Resistenza a shock</i> (EN 60068-2-27:1995)	≤ 1000 m/s ² , half-sine 11ms

ORDER CODE

TSMW60P . = . 8192 . 4096 . G . 11/27 . K5 . XX . PL= . XXXXX

a b c d e f g h i j

a MODEL/ MODELLO

TSMW60P

b ASSEMBLY/ MONTAGGIO

= standard

c STEPS/ PASSI PER GIRO

8192 from 2 up to 8192 steps/turn programmable (13 bit)
da 2 a 8192 passi/ giro programmabile

d TURNS/ NUMERO GIRI

4096 from 1 to 4096 revolutions programmable (12 bit)
da 1 a 4096 giri programmabili

e CODE/ CODE

G Natural Gray code/ codice Gray naturale
Programmable/ programmabile Gray-Binary

f POWER SUPPLY/ ALIMENTAZIONE

11/27 +11±27 V

g PROTECTION DEGREE/ GRADO DI PROTEZIONE

K5 IP65 (EN 60529: 1991)

h SHAFT/ ALBERO

14 Ø14 mm (standard)

3A160010 Ø12 mm (H7)
3A160020 Ø11 mm (H7)
3A160030 Ø10 mm (H7)
3A160040 Ø 8 mm (H7)

Other diameters trough reduction bushing /Per diametri differenti richiedere le boccole di riduzione

i ELECTRICAL CONNECTIONS/ CONNESSIONI ELETTRICHE

PL= radial output with a cable gland (3 x PG9)/ uscita su pressacavo radiale (3 x PG9)

j OUTPUT CIRCUITS/ CIRCUITI DI USCITA

PRDP Profibus (PNO profile class 2)
PDNET DeviceNET (CAN-Bus-Interface ISO/DIS 11898)

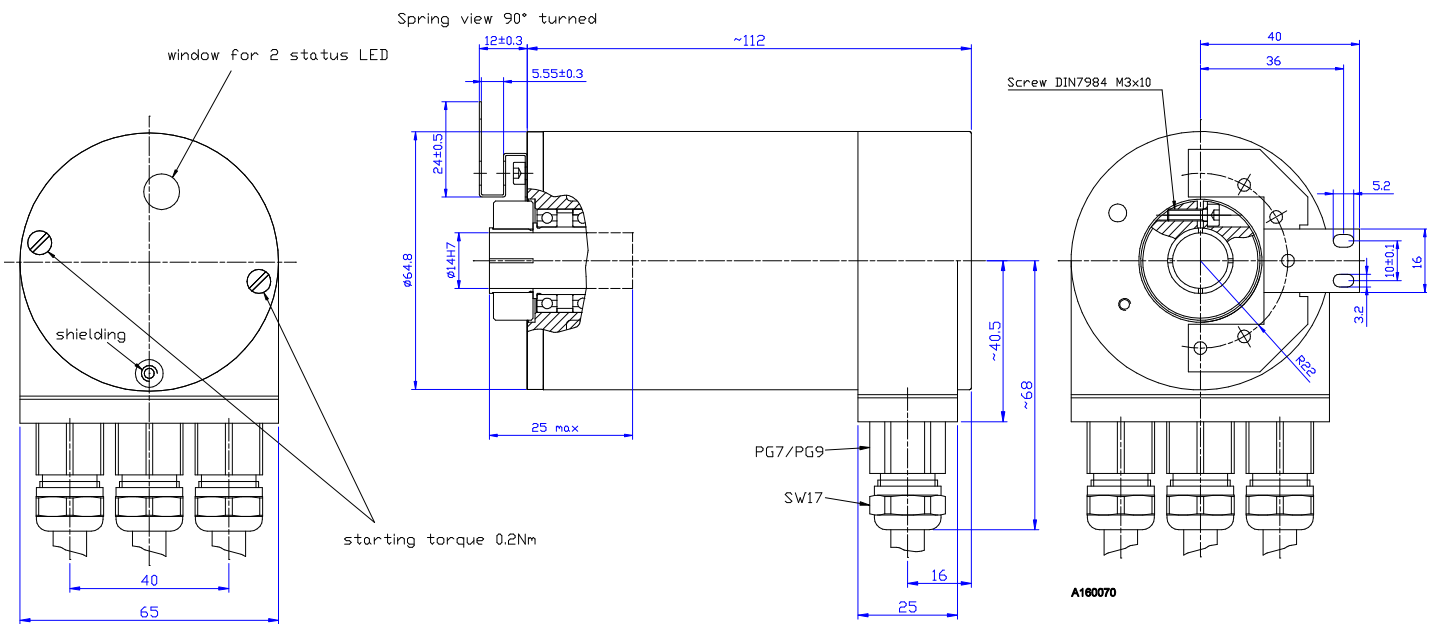
PROFIBUS

Addressing / indirizzamento: 0 ÷99 (adjustable by dip-switches/ tramite dip-switches)
Baud Rate 9.6 kbit/s ÷ 12 Mbit/s

DeviceNET

Addressing / indirizzamento: 0 to 63 (adjustable by dip-switches/ tramite dip-switches)
Baud Rate (adjustable by dip-switches / impostabile tramite dip-switches)
125 kbaud, line length up to 500 m
250 kbaud, line length up to 250 m
500 kbaud, line length up to 100 m

= standard



For shielding use metric screw M4x8 with forked terminal.
 For good contact to housing use a studded disc DIN6797-A 4.3-Fst.