

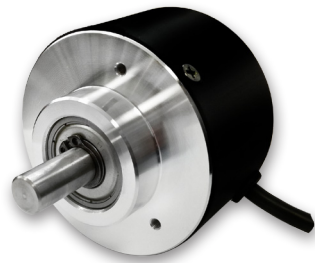
TKE45

solid shaft

Ø 63,5



Italsensor Quality System certified according to the UNI EN ISO 9001



Features:

TKE45 - robust absolute singleturn encoder suitable for various industrial applications.

- Robust encoder for various applications;
- high reliability and long service life;
- resolution: 12 bit standard/ 13 bit on request;
- protection degree up to IP64;
- STD codes: GRAY/ BINARY/ BCD;
- cable and connector outputs;



MECHANICAL SPECIFICATIONS/ CARATTERISTICHE MECCANICHE

Dimensions/ *Dimensioni*

Shaft loading/ *Carico sull'albero*

Shaft Rotation Speed/ *Numero giri*

Bearing life/ *Vita dei cuscinetti*

Weight/ *Peso*

see drawings/ *vedi disegni*
 axial/ *assiale* 200 N; radial/ *radiale* 200 N
 10.000 RPM (short cycle time/ *brevi periodi*) 6.000 RPM (continuous/ *continui*)
 5 x 10⁹ rev. min./ *giri (minimo)*
 ~ 0,5 kg

ELECTRICAL SPECIFICATIONS/ CARATTERISTICHE ELETTRICHE

Power supply/ *Alimentazione*

STD codes

Output frequency/ *Frequenza in uscita*

Protection/ *Protezione*

5 V; 11÷30 V
 GRAY/ BINARY/ BCD
 from 0 to 20 kHz (L.S.B. without error/ *senza errore*)
 against inversion of polarity (except 5V)/ *contro inversione di polarità (escluso 5V)*

MATERIALS/ MATERIALI UTILIZZATI

Flange/ *Flangia*

Housing/ *Corpo*

Shaft/ *Albero*

aluminum non corroding/ *in alluminio anticorrosivo*
 Aluminum painted with inhibiting treatment 180 °C/ *Alluminio verniciato con trattamento termico a 180 °C*
 stainless steel/ *acciaio inossidabile*

ENVIRONMENTAL SPECIFICATIONS/ CARATTERISTICHE AMBIENTALI

Operating temperature range/ *Temperatura di lavoro*

Storage temperature range/ *Temperatura di stoccaggio*

Protection degree/ *Grado di protezione (EN 60529)*

Relative humidity/ *Umidità relativa*

Vibrations/ *Vibrazioni (EN 60068-2-6)*

Shock resistance/ *Resistenza a shock (EN 60068-2-27)*

-10°C ÷ +70 °C
 -30°C ÷ +80 °C
 up to IP64
 98% RH without condensing/ *senza condensazione*
 10 g (from 10 up to 2.000 Hz) / *(da 10 a 2.000 Hz)*
 20 g (for 11 ms) / *(per 11 ms)*

ORDER CODE

TKE45. XX . XXXX . XXXX . XXXXX . XX . 10 . XXnn . XX . X . Xnnn

a b c d e f g h i j k

a MODEL/ MODELLO

TKE45

b ASSEMBLY/ MONTAGGIO

F Square flange / flangia quadra
H Servo flange/ flangia servo
SG Servo-clip / servo-graffe

c STEPS/ PASSI PER GIRO

16	16 steps/turn G;B	16 passi/giro G;B
32	32 steps/turn G;B	32 passi/giro G;B
64	64 steps/turn G;B	64 passi/giro G;B
128	128 steps/turn G;B	128 passi/giro G;B
256	256 steps/turn G;B	256 passi/giro G;B
512	512 steps/turn G;B	512 passi/giro G;B
1024	1024 steps/turn G;B	1024 passi/giro G;B
250	250 steps/turn E;D	250 passi/giro E;D
360	360 steps/turn E;D	360 passi/giro E;D
500	500 steps/turn E;D	500 passi/giro E;D
720	720 steps/turn E;D	720 passi/giro E;D
1000	1000 steps/turn E;D	1000 passi/giro E;D
90	90 steps/turn G/0;B/0	90 passi/giro G/0;B/0
180	180 steps/turn G/0;B/0	180 passi/giro G/0;B/0
250	250 steps/turn G/0;B/0	250 passi/giro G/0;B/0
360	360 steps/turn G/0;B/0	360 passi/giro G/0;B/0
500	500 steps/turn G/0;B/0	500 passi/giro G/0;B/0
720	720 steps/turn G/0;B/0	720 passi/giro G/0;B/0
1000	1000 steps/turn G/0;B/0	1000 passi/giro G/0;B/0
90	90 steps/turn G/19;B/19	90 passi/giro G/19;B/19
180	180 steps/turn G/38;B/38	180 passi/giro G/38;B/38
360	360 steps/turn G/76;B/76	360 passi/giro G/76;B/76
720	720 steps/turn G/152;B/152	720 passi/giro G/152;B/152
90	90 steps/turn D	90 passi/giro D
180	180 steps/turn D	180 passi/giro D

others on demand/ altri a richiesta

d CODE/ CODICE

B Natural Binary code/ codice Binario naturale
B/0 Binary code centrally cutted/ codice Binario troncato centr.
B/19 Binary code - exc (90)/ codice Binario - eccesso (90)
B/38 Binary code - exc (180)/ codice Binario - eccesso (180)
B/76 Binary code - exc (360)/ codice Binario- eccesso (360)
B/152 Binary code - exc (720)/ codice Binario- eccesso (720)

D BCD code (100÷720) - codice BCD (100÷720)
E Excess 3 Gray code (100÷720) - codice Gray exc. 3 (100÷720)

G Natural Gray code/ codice Gray naturale
G/0 Gray code centrally cutted/ codice Gray troncato centr.
G/19 Gray code - exc (90)/ codice Gray - eccesso (90)
G/38 Gray code - exc (180)/ codice Gray - eccesso (180)
G/76 Gray code - exc (360)/ codice Gray - eccesso (360)
G/152 Gray code - exc (720)/ codice Gray - eccesso (720)

e POWER SUPPLY/ ALIMENTAZIONE

5 +5 V ±5 %
11/30 +11÷30 V

f PROTECTION DEGREE/ GRADO DI PROTEZIONE

K1 IP 55 (EN60529) with D25 only / solo con D25
K4 IP 64 (EN60529)

g SHAFT/ ALBERO

10 Ø 10 mm

h ELECTRICAL CONNECTIONS/ CONNESSIONI ELETTRICHE

Pnn on axial cable gland with cable 1 ÷ 6 m long /pressacavo assiale con cavo da 1 a 6 m;
PLnn radial cable gland with cable 1 ÷ 6 m long /pressacavo radiale con cavo da 1 a 6 m;
S07 on 7 pins axial MIL connector /conn. circolare militare assiale a 7 poli
S10 on 10 pins axial MIL connector /conn. circolare militare assiale a 10 poli
S26 on 26 pins axial MIL connector /conn. circolare militare assiale a 26 poli
D25 on 25 pins axial DB25 connector /conn. circolare submin assiale a 25 poli
SL07 on 7 pins radial MIL connector /conn. circolare militare radiale a 7 poli
SL10 on 10 pins radial MIL connector /conn. circolare militare radiale a 10 poli
SL26 on 26 pins radial MIL connector /conn. circolare militare radiale a 26 poli

nn cable length/ lunghezza cavo (es. PL10 = 1 m. ...PL60 = 6 m)

i OUTPUT CIRCUITS/ CIRCUITI DI USCITA

20 PNP 100 mA open collector (positive logic / logica positiva);
21 PNP 100 mA pull-down (positive logic/ logica positiva) (only with/ solo con 11/30V);
22 NPN 100 mA open collector (negative logic/ logica negativa);
23 NPN 100 mA pull-up (negative logic/ logica negativa) (only with/ solo con 11/30V);
S13D SSI 13 bit right alignment/ allineamento a destra (only with / solo con 11/30V)

j OPTIONS/ OPZIONI

U Up/Down NPN
Z Zero signal (except output S13D)/ Segnale di zero (esclusa elettronica S13D)
V Displayed Index signal (except output S13D)/ Segnale di index visualizzato (except output S13D)

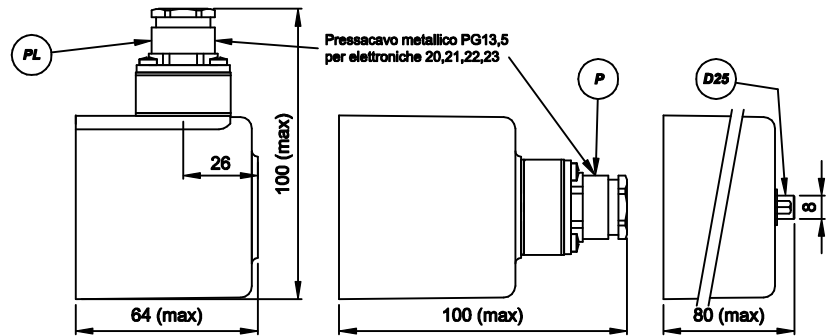
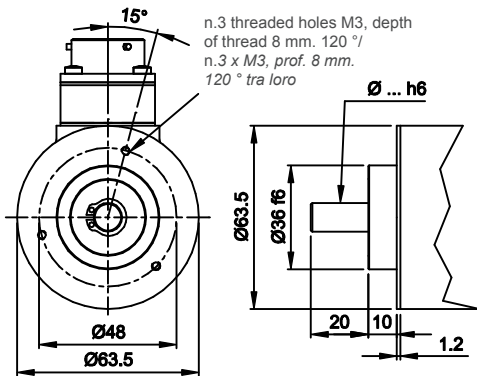
k CUSTOM

CUSTOM custom execution/ esecuzione custom

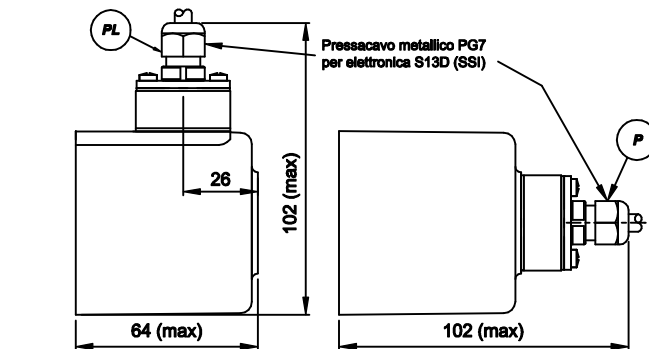
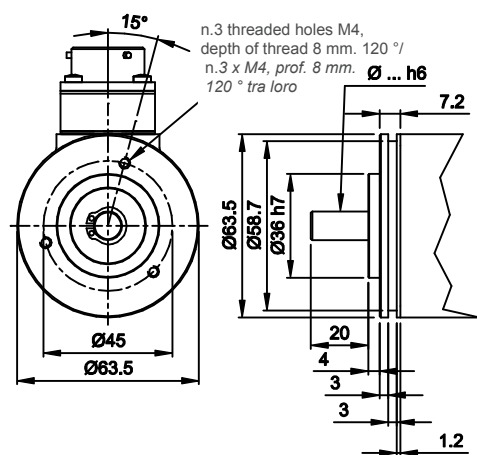
Mechanical assembly/ montaggio meccanico

Electrical connections/ connessioni elettriche

H Servo flange



SG Servo-clip



F Square Flange

