

**TKC38**

**solid shaft**

**∅ 38**



Italsensor Quality System certified according to the UNI EN ISO 9001



### Features:

Compact magnetic single-turn absolute encoder with 4-20mA analog output interface and 10 bit resolution over a full mechanical turn developed for current-loop based control systems (industrial control and process monitoring over long distances). Precision mechanics with ball bearings unit designed to replace the most used models of resistive potentiometers, allows to increase performance and reliability of the whole control system (absence of mechanical wear).

- resolution: 10 bit;
- protection degree IP 55;
- analog output 4-20 mA



## MECHANICAL SPECIFICATIONS/ CARATTERISTICHE MECCANICHE

Dimensions/ *Dimensioni*

Shaft loading/ *Carico sull'albero*

Shaft Rotation Speed/ *Numero giri*

Starting torque at 25°C/ *Coppia di partenza a 25 °C*

Moment of inertial/ *Momento di inerzia*

Bearings life/ *Vita dei cuscinetti*

Weight/ *Peso*

see drawings / vedi disegni  
axial/ assiale 40 N; radial/ radiale 40 N  
10.000 RPM to short cycle time/per brevi periodi  
6.000 RPM continuous/ continui  
0,005 Nm  
6 g cm<sup>2</sup>  
5x 10<sup>9</sup> turns/giri (min) - rev. min.  
~ 0,1 kg

## ELECTRICAL SPECIFICATIONS/ CARATTERISTICHE ELETTRICHE

Power supply/ *Alimentazione*

Output interface/ *Elettronica in uscita*

Supply current without load/ *Assorbimento in corrente a vuoto*

Protection/ *Protezione*

19÷30 V  
current loop 4-20 mA  
30 mA max.  
against inversion of polarity; short circuit protection/  
contro inversione di polarità; contro il cortocircuito

## MATERIALS/ MATERIALI UTILIZZATI

Flange/ *Flangia*

Housing/ *Corpo*

Shaft/ *Albero*

aluminum S11/ in alluminio S11  
Polyamid 6 (PA6)/ Poliammide 6 (PA6)  
stainless steel AISI303/ acciaio inossidabile AISI303

## 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: 1996)*

Shock resistance/ *Resistenza a shock (EN 60068-2-27:1995)*

-10 °C ÷ +70 °C  
-30 °C ÷ +80 °C  
IP55  
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)

### ORDER CODE

**TKC38 . SG . 1024/360 . A . 19/30 . K1 . 6 . PSnn . 31 . Xnnn**

**a      b      c      d      e      f      g      h      i      j**

#### **a** MODEL/ MODELLO

TKC38

#### **b** ASSEMBLY/ MONTAGGIO

SG Servo-clip / servo-graffe

#### **c** STEPS FOR TURN/ PASSI PER GIRO

1024/360

#### **d** CODE/ OUTPUT CODE

A analog output 4+20 mA/ uscita analogica 4+20 mA

#### **e** POWER SUPPLY/ ALIMENTAZIONE

19/30 +19 +30 V (cc - dc)

#### **f** PROTECTION DEGREE/ GRADO DI PROTEZIONE

K1 IP55 (EN 60529)

#### **g** SHAFT/ ALBERO

6 Ø6 mm

#### **h** ELECTRICAL CONNECTIONS/ CONNESSIONI ELETTRICHE

PSnn only cap radial cable gland with cable 1 + 6 m long/ solo gommino passacavo radiale con cavo da 1 a 6 m;

nn Lunghezza cavo - Cable length (es. PS10 = 1 m. ... PS60 = 6 m)

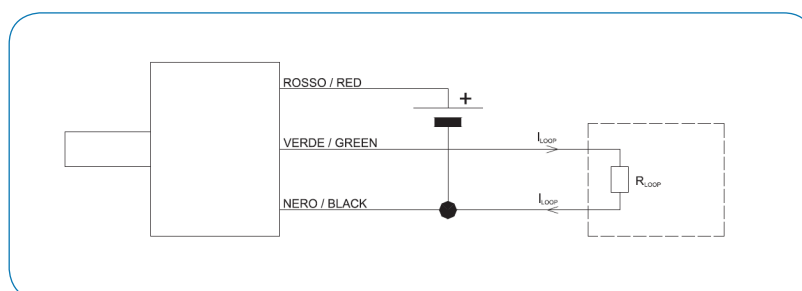
#### **i** OUTPUT CIRCUITS/ CIRCUITI DI USCITA

31 analog output 4+20 mA/ uscita analogica 4+20 mA

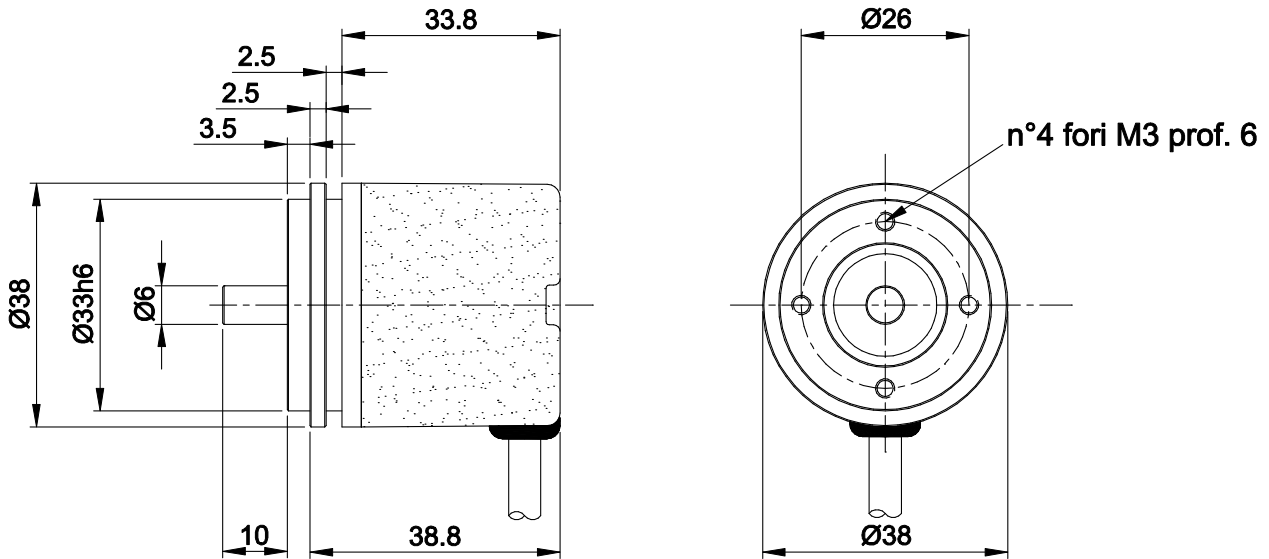
#### **j** CUSTOM

CUSTOM custom execution/ esecuzione custom

### Electrical wiring/ Schema di collegamento



SG Flange



Transfer function/ Funzione di trasferimento

