



TEKEL
INSTRUMENTS



**ASSOLUTO MULTIGIRO
MULTI TURN ABSOLUTE**

TKM100

CARATTERISTICHE MECCANICHE - MECHANICAL SPECIFICATIONS

Dimensioni - Dimensions: vedi disegni - see drawings
 Albero - Shaft: acciaio inox - stainless steel
 Carico sull'albero - Shaft loading: assiale - axial: 100 N; radiale - radial 100 N
 Numero giri - Shaft rotational speed: 6.000 RPM continui - continuous; 2.000 RPM con asse stagno - with proof shaft
 Vita dei cuscinetti - Bearings life: 5 x 10⁷ giri (minimo) - rev. min.
 Peso - Weight: ~ 1,55 kg

CARATTERISTICHE ELETTRICHE - ELECTRICAL SPECIFICATIONS

Codici STD - STD codes: GRAY - BINARIO - BCD; GRAY - BINARY - BCD
 Frequenza in uscita - output frequency: da 0 a 20 KHz (L.S.B. senza errore); from 0 to 20 KHz (L.S.B. without error)
 Protezione - Protection: contro inversione di polarità (escluso 5Vcc); against inversion of polarity (except 5Vcc)

MATERIALI UTILIZZATI - MATERIALS

Corpo - Flange: in alluminio anticorrosivo - aluminium non corroding
 Custodia - Housing: Alluminio verniciato con trattamento termico a 180° C; Aluminium painted with inhibiting treatment 180° C

CARATTERISTICHE AMBIENTALI - ENVIRONMENTAL SPECIFICATIONS

Temperatura di lavoro - Operating temperature range: -10° C + +70° C
 Temperatura di stoccaggio - Storage temperature range: -30° C + +80° C
 Umidità relativa - Relative humidity: 98% RH senza condensazione - RH without condensing
 Vibrazioni - Vibrations: 10 g (da 10 a 2.000 Hz) - (From 10 up to 2.000 Hz)
 Shock - Shock: 20 g (per 11 ms) - (for 11 ms)
 Tempo di inializzazione - warm up time: 10 s



CODICE DI ORDINAZIONE - ORDERING CODE

TKM100 . XX . XXXX . XXXX . X . XXXXX . XX . XXXX . XXnn . XX . XXXX . Xnnn

MONTAGGIO - ASSEMBLAGE
 SG Servo-Graffe - servo-clip

IMPULSI GIRO - PULSE RATE
 Vedi elenco delle possibili configurazioni
 see the list of the possible configurations

NUMERO GIRI - NUMBER OF TURN

1	1 giri G.B.	turns G.B.
2	2 giri G.B.	turns G.B.
4	4 giri G.B.	turns G.B.
8	8 giri G.B.	turns G.B.
16	16 giri G.B.	turns G.B.
32	32 giri G.B.	turns G.B.
64	64 giri G.B.	turns G.B.
128	128 giri G.B.	turns G.B.
256	256 giri G.B.	turns G.B.
512	512 giri G.B.	turns G.B.
1024	1024 giri G.B.	turns G.B.
2048	2048 giri G.B.	turns G.B.
4096	4096 giri G.B.	turns G.B.

1	1 giri E.D.	turns E.D.
10	10 giri E.D.	turns E.D.
100	100 giri E.D.	turns E.D.
1000	1000 giri E.D.	turns E.D.

CODICE - CODE

B codice Binario naturale Natural Binary code
 G codice Gray naturale Natural Gray code
 D codice BCD (100+7200) BCD code (100+7200)

Alimentazione (Vdc) - Voltage supply

5 +5 V ±5 %
 11/30 +11V ±30 V

Grado di protezione - Protection class

K1 IP 55 (EN60529) K4 IP 64 (EN60529)
 K5 IP 65 (EN60529) K6 IP 66 (EN60529)

Albero - Shaft

6 Ø 6 mm 9,52 Ø 9,52 mm
 8 Ø 8 mm 10 Ø 10 mm

IMPULSI GIRO - PULSE RATE

2	2 passigiro G.B.	steps/turn G.B.	144	144 passigiro G.B.	steps/turn G.B.
4	4 passigiro G.B.	steps/turn G.B.	256	256 passigiro G.B.	steps/turn G.B.
8	8 passigiro G.B.	steps/turn G.B.	288	288 passigiro G.B.	steps/turn G.B.
16	16 passigiro G.B.	steps/turn G.B.	512	512 passigiro G.B.	steps/turn G.B.
32	32 passigiro G.B.	steps/turn G.B.	1024	1024 passigiro G.B.	steps/turn G.B.
36	36 passigiro G.B.	steps/turn G.B.	2048	2048 passigiro G.B.	steps/turn G.B.
64	64 passigiro G.B.	steps/turn G.B.	4096	4096 passigiro G.B.	steps/turn G.B.
72	72 passigiro G.B.	steps/turn G.B.	8192	8192 passigiro G.B.	steps/turn G.B.
128	128 passigiro G.B.	steps/turn G.B.			

CIRCUITI DI USCITA - OUTPUT CIRCUITS

20	PNP 100 mA Open Collector log+	PNP 100 mA Open Collector log+
21	PNP 100 mA pull-down log+ (solo 11/30V)	PNP 100 mA pull-down log+ (11/30V only)
22	NPN 100 mA Open Collector log-	NPN 100 mA Open Collector log-
23	NPN 100 mA pull-up log- (solo 11/30V)	NPN 100 mA pull-up log- (11/30V only)
30	Push Pull protetto cc (solo 11/30V)	Push Pull cc protect (11/30V only)
141	RS422 Protocollo MOD0 1 (solo 11/30)	RS422 Protocol MOD0 1 (11/30V only)
S13C	SSI 13 bit allin centro (solo 11/30V)	SSI 13 bit center alignment (11/30V only)
S21C	SSI 21 bit allin centro (solo 11/30V)	SSI 21 bit center alignment (11/30V only)
S21D	SSI 21 bit allin destra (solo 11/30V)	SSI 21 bit right alignment (11/30V only)
S25C	SSI 25 bit allin centro (solo 11/30V)	SSI 25 bit center alignment (11/30V only)
S25D	SSI 25 bit allin destra (solo 11/30V)	SSI 25 bit right alignment (11/30V only)

CONNESSIONI ELETTRICHE - ELECTRICAL CONNECTIONS

P	pressacavo assiale con cavo da 1 a 6 m	on axial cable gland with cable 1 + 6 m long
S 07	connettore circolare militare assiale a 7 poli	on 7 pins axial MIL connector
S 10	connettore circolare militare assiale a 10 poli	on 10 pins axial MIL connector
S 26	connettore circolare militare assiale a 26 poli	on 26 pins axial MIL connector
S 32	connettore circolare militare assiale a 32 poli	on 32 pins axial MIL connector
D 25	Conn. submin. maschio assiale a 25 poli	on 25 pins conn. submin. axial male
D 37	Conn. submin. maschio assiale a 37 poli	on 25 pins conn. submin. axial male

nn Lunghezza cavo - Cable length (es. P10 = 1 m ... P60 = 6 m)

72	72 passigiro E.D.	steps/turn E.D.	10	10 passigiro D	steps/turn D
100	100 passigiro E.D.	steps/turn E.D.	20	20 passigiro D	steps/turn D
250	250 passigiro E.D.	steps/turn E.D.	90	90 passigiro D	steps/turn D
360	360 passigiro E.D.	steps/turn E.D.	180	180 passigiro D	steps/turn D
400	400 passigiro E.D.	steps/turn E.D.	200	200 passigiro D	steps/turn D
500	500 passigiro E.D.	steps/turn E.D.	1800	1800 passigiro D	steps/turn D
720	720 passigiro E.D.	steps/turn E.D.	2880	2880 passigiro D	steps/turn D
900	900 passigiro E.D.	steps/turn E.D.			
1000	1000 passigiro E.D.	steps/turn E.D.			
1440	1440 passigiro E.D.	steps/turn E.D.			
2000	2000 passigiro E.D.	steps/turn E.D.			
3600	3600 passigiro E.D.	steps/turn E.D.			
4000	4000 passigiro E.D.	steps/turn E.D.			

**MONTAGGIO MECCANICO
MECHANICAL ASSEMBLY**

**CONNESSIONI ELETTRICHE
ELECTRICAL CONNECTIONS**

SG Servo-graffe
SG Servo-clip

N. 3 threaded holes M6
depth of thread 13 mm. 120°
n° 3 fori M6 prof. 13 mm
a 120° tra loro

