

**CARATTERISTICHE MECCANICHE - MECHANICAL SPECIFICATIONS**

**Dimensioni - Dimensions:** vedi disegni - see drawings  
**Albero - Shaft:** acciaio inox - stainless steel  
**Carico sull'albero - Shaft loading:** assiale - axial: 25 N; radiale - radial: 25 N  
**Numero giri - Shaft rotational speed:** 6.000 RPM continui - continuous  
**Vita dei cuscinetti - Bearings life:** 5 x 10<sup>6</sup> giri (minimo) - rev. min.  
**Peso - Weight:** ~1,1 kg Assiale - Axial; 1,3 Kg Radiale (senza flangia) - Radial (without flange)

**CARATTERISTICHE ELETTRICHE - ELECTRICAL SPECIFICATIONS**

**Codici STD - STD codes:** GRAY - BINARIO - BCD - ECCESSO 3 - ANALOGICO; GRAY - BINARIO - BCD - EXCESS 3 - ANALOG  
**Frequenza in uscita - output frequency:** da 0 a 20 kHz (L.S.B. senza errore); from 0 to up 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 anticorrosione anodizzato - aluminium non corroding passived  
**Custodia - Housing:** in alluminio anticorrosione anodizzato - aluminium non corroding passived

**CARATTERISTICHE AMBIENTALI - ENVIRONMENTAL SPECIFICATIONS**

**Temperatura di lavoro - Operating temperature range:** -20°C + +45°C  
**Temperatura di stoccaggio - Storage temperature range:** -40°C + +85°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)  
**Schock - Shock:** 20 g(per 11 ms) - (for 11 ms)



HAZARDOUS LOCATIONS CLASS I,  
DIV. 1, GROUPS C AND D



CE 0539 Ex II 2 G  
EEEx d IIB T6  
05 ATEX 140087 (\*)

(\*) Certificato non ancora aggiornato secondo l'ultima  
revisione della normativa di riferimento.  
(\*) This certificate is not yet referring to the latest standard

**CODICE DI ORDINAZIONE - ORDERING CODE**

TIAEEX70P . XXX . 8192 . XXXX . G . XXXXX . K4 . XX . XXnn . XXXX . XXX . XXXX . Xnnn

**MONTAGGIO - ASSEMBLY**

F Flangia Quadra - Square flange  
S Flangia servo - servo flange  
FRE Flangia REO - Flange REO

**PASSI PER GIRO - STEPS**

8192 programmabile da 2 a 8192 passi/giro  
From 2 to up 8192 steps/turn programmable

**NUMERO GIRI - TURNS**

1 Monogiro - Single turn  
4096 programmabile da 1 a 4096 giri  
From 1 to up 4096 turns programmable

**CODICI - CODE**

G codice Gray naturale - Natural Gray code  
Gray - Binary - BCD Programmabile - Programmable

**Alimentazione (Vdc) - Voltage supply**

5 +5 V ±5 %  
11/30 +11V ±30 V

**Grado di protezione - Protection class**

K4 IP 64 (EN60529)

**Albero - Shaft**

10 Ø 10 mm  
11 Ø 11 mm Solo per flangia FRE - only for FRE flange

**CONNESSIONI ELETTRICHE - ELECTRICAL CONNECTIONS**

**RA**nn raccordo 1/2" GAS maschio assiale con cavo da 1 a 6 m;  
on axial tap nipple 1/2" GAS with cable 1 + 6 m long  
**RL**nn raccordo 1/2" GAS maschio radiale con cavo da 1 a 6 m;  
on radial tap nipple 1/2" GAS with cable 1 + 6 m long  
**GA**nn raccordo 1/2" GAS femmina assiale con cavo da 1 a 6 m;  
on axial female nipple 1/2" GAS with cable 1 + 6 m long  
**GL**nn raccordo 1/2" GAS femmina radiale con cavo da 1 a 6 m;  
on radial female nipple 1/2" GAS with cable 1 + 6 m long  
**nn** Lunghezza cavo - Cable length (es. PL10 = 1 m. ... PL60 = 6 m)

**OPZIONI - OPTIONS**

<b>U</b> Up/Down NPN	Up/Down NPN	<b>M</b> Enable (ingresso)	Enable (input)
<b>W</b> Up/Down PNP	Up/Down PNP	<b>V</b> Segnale di zero	Zero signal
<b>L</b> Latch NPN	Latch NPN	<b>Z</b> Zero Set NPN	Zero Set NPN
<b>P</b> Latch PNP	Latch PNP	<b>T</b> Zero Set PNP	Zero Set PNP
<b>E</b> Parità Even (pari)	Even parity	<b>S</b> Strobe vedi tabella	Strobe see table
<b>O</b> Parità Odd (dispari)	Odd parity		

**VALORI STROBE - STROBE VALUE**

<b>S=</b> Strobe custom	<b>S 501</b> Strobe 500 µs	<b>S 203</b> Strobe 20 ms
<b>S 200</b> Strobe 20 µs	<b>S 102</b> Strobe 1 ms	<b>S 503</b> Strobe 50 ms
<b>S 500</b> Strobe 50 µs	<b>S 202</b> Strobe 2 ms	<b>S 104</b> Strobe 100 ms
<b>S 101</b> Strobe 100 µs	<b>S 502</b> Strobe 5 ms	<b>S 204</b> Strobe 200 ms
<b>S 201</b> Strobe 200 µs	<b>S 103</b> Strobe 10 ms	

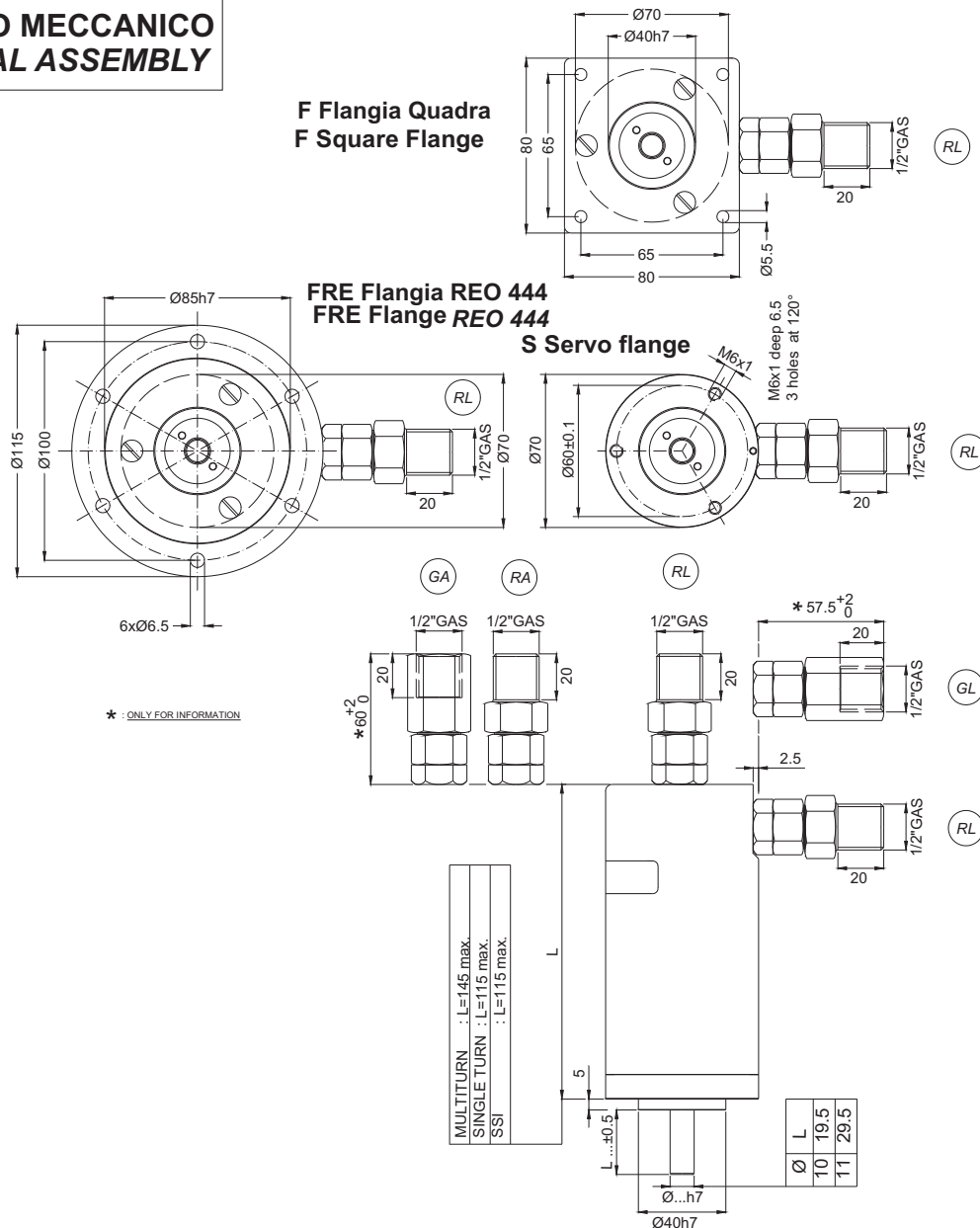
**INTERFACCIA DI PROGRAMMAZIONE - SERIAL INTERFACE**

**232** Interfaccia programmazione RS232 Program interface RS 232  
**485** Interfaccia programmazione RS485 Program interface RS 485

**CIRCUITI DI USCITA - OUTPUT CIRCUITS**

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

**MONTAGGIO MECCANICO**  
**MECHANICAL ASSEMBLY**



Execution according to:

**ATEX CEI EN 60079-0/60079-1**  
**UL1203**  
**C22.2 N°. 30-M1986**

Certification code **EEx-d IIB T6** means:

- **EEx** : means that the device has been certified according to the ATEX and UL/CSA safety rules;
- **d** : flame proof case
- **II** : Device certified for operation in potentially explosive areas except the mines in which grisou gas is present; (hazardous locations)
- **B** : Suited for the use in environments containing gases/fumes of Ethylene, Propane
- **T6** : Maximum body surface temperature 85 °C.