

# Combination

## Encoder and tachogenerator in combination

### Solid shaft with synchro flange

10...10000 pulses per revolution

#### OG 60 + GT 5



OG 60 + GT 5

#### Features

- Robust aluminium housing
- Flange connector with metal mating connector
- Synchro flange, solid shaft  $\varnothing 6$  mm
- Open circuit voltage 7...10 mV per rpm

#### Technical data - electrical ratings

Interference immunity	EN 61000-6-2
Emitted interference	EN 61000-6-3
Approval	CE

#### Technical data - electrical ratings (tachogenerator)

Reversal tolerance	$\leq 0.1$ %
Linearity tolerance	$\leq 0.15$ %
Temperature coefficient	$\pm 0.005$ %/K (open-circuit)
Isolation class	B
Calibration tolerance	$\pm 5$ %
Climatic test	Humid heat, constant (IEC 60068-2-3, Ca)
Performance	0.075 W (speed $\geq 5000$ rpm)
Armature-circuit time-constant	$< 4.5$ $\mu$ s
Open-circuit voltage	7...10 mV per rpm

#### Technical data - electrical ratings (encoder)

Voltage supply	9...26 VDC 5 VDC $\pm 5$ %
Consumption w/o load	$\leq 100$ mA
Pulses per revolution	10...10000
Phase shift	$90^\circ \pm 8^\circ$
Duty cycle	46...54 %
Reference signal	Zero pulse, width $90^\circ$
Output frequency	$\leq 250$ kHz
Output signals	K1, K2, K0 + inverted
Output stages	HTL TTL/RS422

#### Technical data - mechanical design

Size (flange)	$\varnothing 58$ mm
Shaft type	$\varnothing 6$ mm solid shaft
Admitted shaft load	$\leq 50$ N axial $\leq 60$ N radial
Flange	Synchro flange
Protection DIN EN 60529	IP 54
Operating speed	$\leq 12000$ rpm
Operating torque typ.	1 Ncm
Rotor moment of inertia	22 gcm <sup>2</sup>
Materials	Housing: aluminium die-cast Shaft: stainless steel
Operating temperature	-30...+85 °C
Resistance	IEC 60068-2-6 Vibration 10 g, 10-2000 Hz IEC 60068-2-27 Shock 100 g, 6 ms
Connection	Flange connector M23, 12-pin Screw terminal connector
Weight approx.	350 g



# Combination

## Encoder and tachogenerator in combination

### Solid shaft with synchro flange

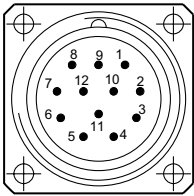
10...10000 pulses per revolution

#### OG 60 + GT 5

##### Terminal assignment

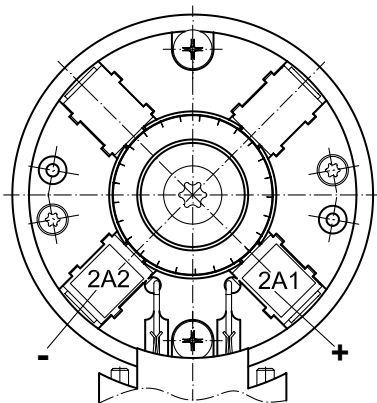
**View A**- Flange connector OG 60, M23, 12-pin, male contacts, clockwise

Pin	Assignment
1	$\overline{K2}$ (K2 inv.)
2	n.c.
3	K0 (zero pulse)
4	$\overline{K0}$ (zero pulse inv.)
5	K1
6	$\overline{K1}$ (K1 inv.)
7	n.c.
8	K2
9	n.c.
10	0 V
11	n.c.
12	+UB



**View B** - Connecting terminal GT 5

Polarity for positive direction of rotation



##### Accessories

Eccentric disks  
(clamping claws)

##### Connectors and cables

HEK 8      Sensor cable for encoders

##### Mounting accessories

K 35      Spring washer coupling  
for solid shaft  $\varnothing 6...12$  mm

##### Diagnostic accessories

11075858      Analyzer for encoders HENQ 1100

# Combination

Encoder and tachogenerator in combination  
 Solid shaft with synchro flange  
 10...10000 pulses per revolution

OG 60 + GT 5

## Dimensions

