DHO5S

INCREMENTAL ENCODERS, HEAVY-DUTY RANGE, 120°C

DHO5S encoders are specially designed for hoisting motors application

- Through hollow shaft version Ø14mm
- Robustness and excellent resistance to shocks / vibrations ''long life system''
- High protection level IP65
- Electronics: 5Vdc - RS422 – TTL circuits
- High performances in temperature –30°C to 120°C
- Resolution: 1024 ppr
- Connection: cable output with M23 connector
- Easy mounting thanks to adapted DAC (Anti-Coupling Device)
- High performances in frequency of output signals : 300 kHz

SPECIFICATIONS

Mechanical

Material	Cover : zinc alloy
	Body : aluminum
	Shaft : stainless steel
Bearings	Sealed ball bearings
	High temperature grease
Maximum loads	Axial : 20 N
	Radial : 50 N
Shaft inertia	≤ $2{,}2.10^{-6}$ kg.m^2
Torque	≤ 6.10^{-3} N.m
Protection (EN 60529)	IP 65
Permissible max. speed	6 000 min^{-1}
Continuous max. speed	4 000 min^{-1}
Shocks (EN60068-2-27)	≤ 2 000 m.s^{-2} (during 6 ms)
Vibrations (EN60068-2-6)	≤ 100 m.s^{-2} (55 … 2 000 Hz)
EMC	EN 50081-1, EN 61000-6-2
Isolation	1 000 V eff
Encoder weight (approx.)	0,500 kg
Operating temperature	- 30 ... + 120°C (encoder T°)
Storage temperature	- 40 ... + 100°C
Torque (ring pressure screw)	0.7 ... 0.9 N.m

OUTPUT SIGNALS

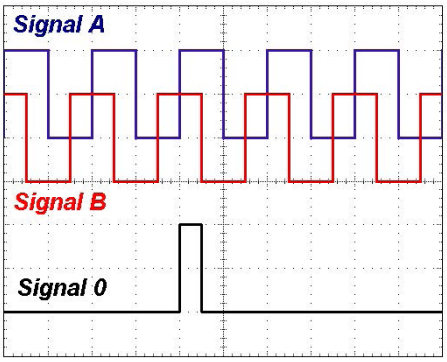
Signals A, B, 0

The channel B (mounting front) arrives before A clockwise seen from the bearings housing - DAC side.

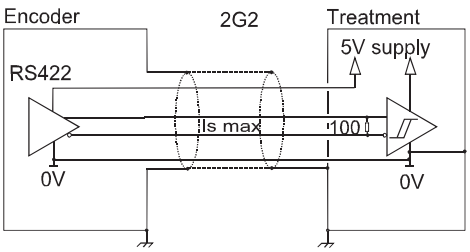
Period : 360° - Cycle ratio : 180°
The shift a between each fronts is given by the formula a > 135/F (a in time in microsecond, F frequency in kHz, ex:100kHz, a > 1,35µs)

The 90° electrical phase-shift between A and B signals determines the rotation direction:

- clockwise (seen from DAC side) during the mounting front of A, B signal is ''1'',
- counter clockwise, during mounting front of A, B channel is ''0''.



DIGITAL OUTPUT SIGNALS



Electronic 2G2 – 150kHz
Supply : 5Vdc ± 10%
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (Is=20mA) : Vol = 0,5Vdc
1 min (Is=20mA) : Voh = 4Vdc

TABLE 1: CONNECTION TYPE 0L

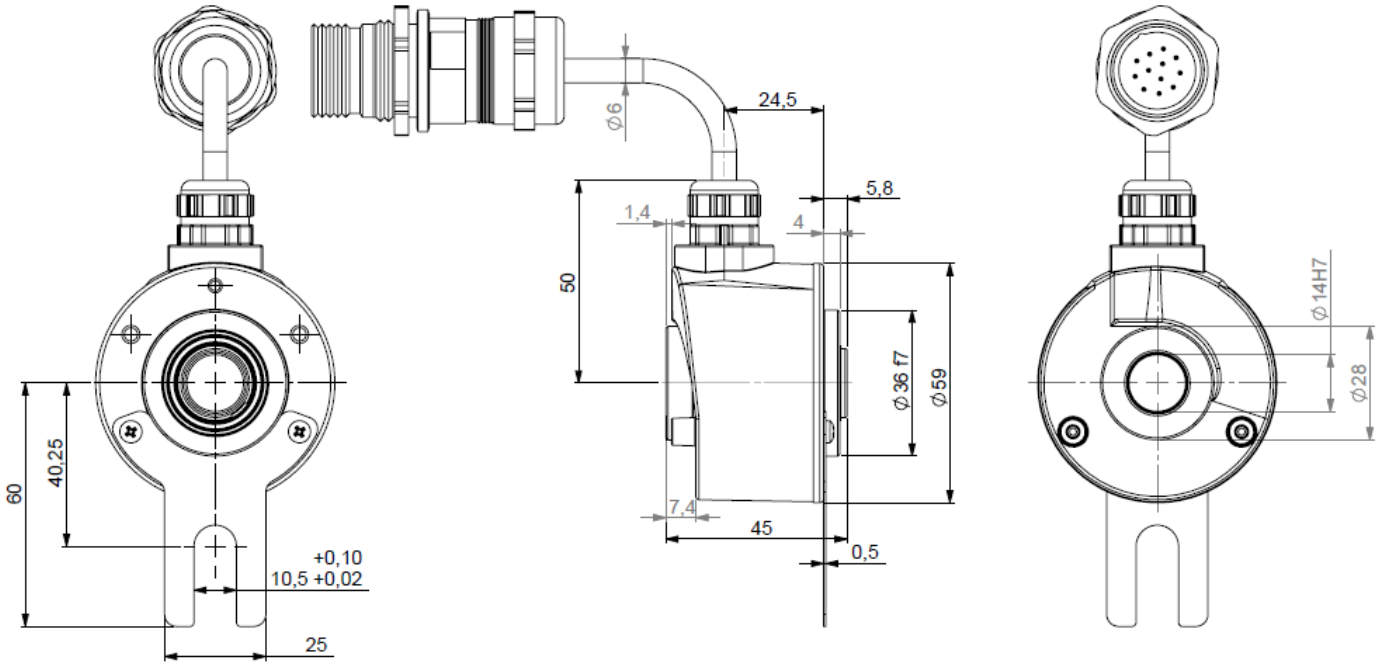
Pinout 1 White	Pinout 2 Brown	Pinout 3 Green	Pinout 4 Yellow	Pinout 5 Grey	Pinout 6 Pink	Pinout 7 Blue	Pinout 8 Red	Pinout 9 NC	Pinout 10 Shield	Pinout 11 Shield	Pinout 12 Shield
0V	+Vcc	A	B	0	A/	B/	0/	NC	Shield	Not Connected	Not Connected

DH05 has a cable output with at the end a welded M23 connector.

DIMENSIONS

All dimensions are in: mm

DH05S



AVAILABLE RESOLUTIONS

50 60 100 120 125 127 150 180 200 240 250 256 300 314 360 375 400 500 512 600 720 750 768 800 927 1000 1024

ORDERING OPTIONS

Ex: DHO5S 14/HT/2G29 /HT/01024//G3R004/0L/**DG**

(Contact the factory for special versions, ex: electronics, special flanges, connections…)

DHO5S	14	/	HT	/	2	G2	9	/	HT	/	01 024	//	G3R004/OL	/	**DG**

Type

DHO5S

Shaft Ø

14 = 14mm

Mechanics

HT: Shocksproof & High temperature mechanics

Supply

2: 5Vdc

Output

G2: driver 5Vdc RS422/TTL

Signals

9: A,A/, B,B/, 0,0/ (0 gated A & B)

Electronics

HT: High temperature electronics

Resolution

1 024 max

Connection

G3R004/0L/ 40cm cable & M23 connector Cf table 1

DAC system

****DG**** 9445/036 DAC system

AGENCY APPROVALS & CERTIFICATIONS

CE

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