

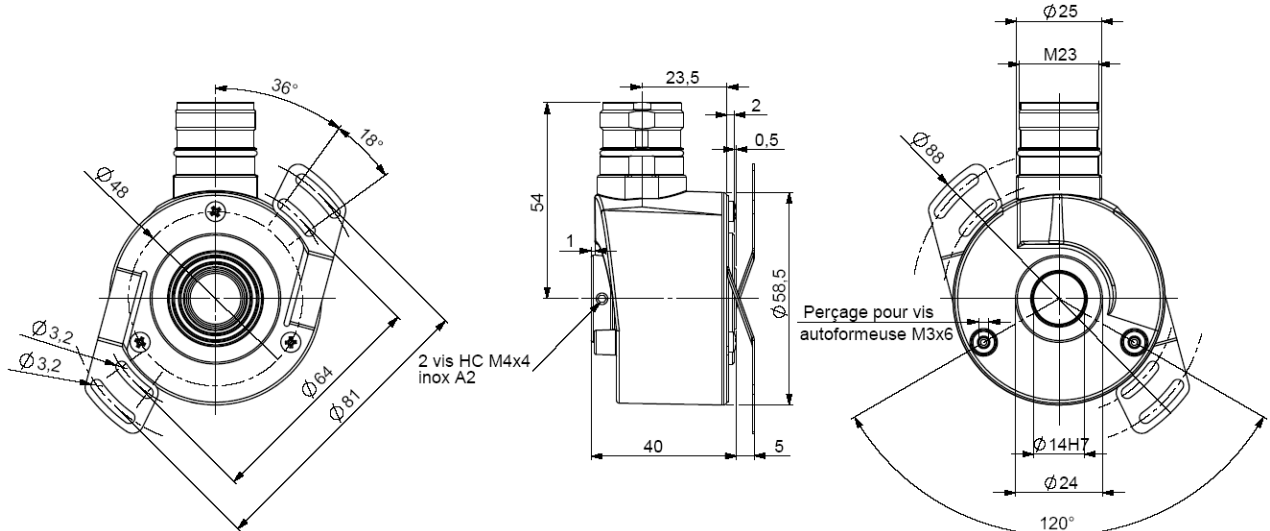
FIXED RESOLUTION INCREMENTAL ENCODERS, DHO5 RANGE, DIGISINE™ 100°C

Universal encoder **DIGISINE** :

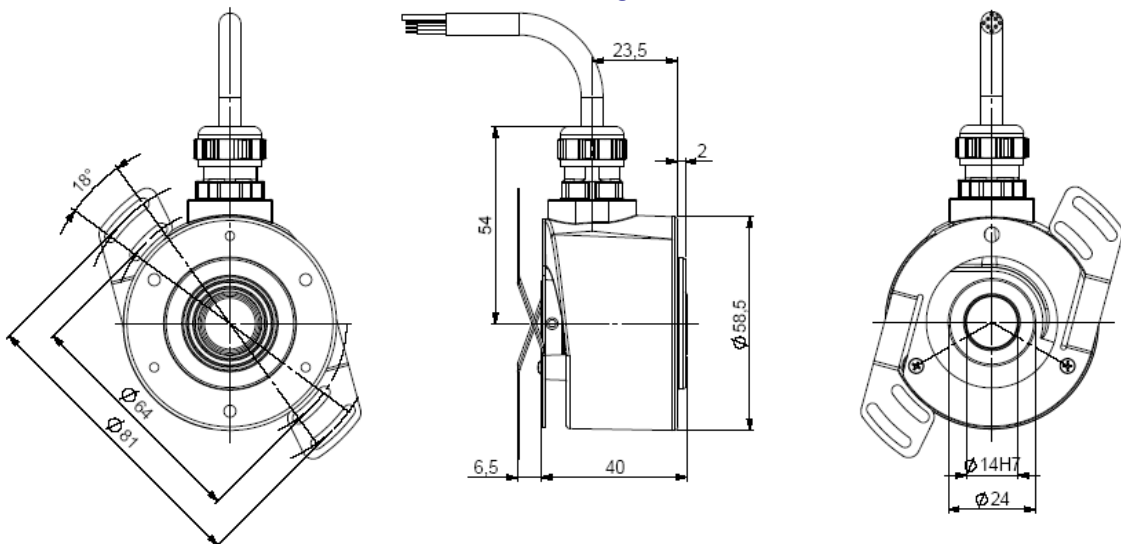
- High performances for operating temperature -30°C to 100°C (option -40°C)
- High performances for frequency response : 300 kHz
- Though hollow shaft version $\varnothing 14\text{mm}$, with reduction hubs in aluminium of 6, 8, 10 and 12 mm
- Universal electronic circuits of 5 to 30Vdc (option 5 to 36Vdc)
- Easy mounting for the hollow shafts thanks to DAC anti-rotation devices
- Robustness and excellent resistance to shocks and vibrations
- High protection level IP65
- High resolutions available up to 80 000 points per turn (optional)



DHO5_14 connection G6R (radial M23), DAC 9445/015 on body



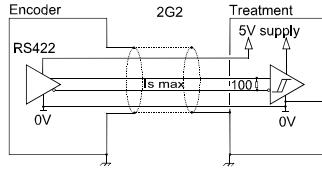
DHO5_14 connection G3R (radial cable gland), DAC 9445/015 on cover



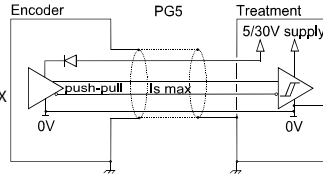
Material	Cover : zinc alloy	Shock (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (durant 6 ms)
	Body: aluminium	Vibration (EN60068-2-6)	$\leq 100 \text{ m.s}^{-2}$ (55 ... 2 000 Hz)
	Shaft : stainless steel	EMC	EN 50081-1, EN 61000-6-2
Bearings	6 803 serie	Isolation	1 000 V eff
Maximal load	Axial : 20 N	Weight (connector)	0,3 kg
	Radial : 50 N	Operating temperature	$-30 \dots +100^{\circ}\text{C}$ (encoder T°)
Shaft inertia moment	$\leq 2,2 \cdot 10^{-6} \text{ kg.m}^2$	Storage temperature	$-40 \dots +100^{\circ}\text{C}$
Torque	$\leq 6 \cdot 10^{-3} \text{ N.m}$	Protection(EN 60529)	IP 65
Permissible max. speed	$9\,000 \text{ min}^{-1}$	Torque (ring pressure screw)	nominal: 1.5N.m, break: 2.0N.m
Continuous max. speed	$6\,000 \text{ min}^{-1}$	Theoretical mechanical lifetime 10^9 turns (F_{axial} / F_{radial})	
Shaft seal	Viton	10N / 25N : 230	20N / 50N : 29

FIXED RESOLUTION INCREMENTAL ENCODERS, DHO5 RANGE, DIGISINE™ 100°C

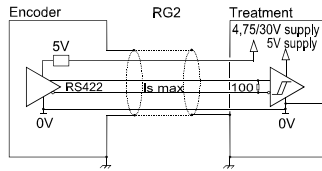
DIGITAL OUTPUT SIGNALS (SQUARE WAVE)



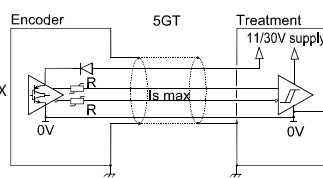
Electronic 2G2 (100°C, 300kHz)
Supply : 5Vdc ± 10%
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (I_s=20mA) : V_{ol} = 0,5Vdc
1 min (I_s=20mA) : V_{oh} = 4Vdc



Electronic PG5 (100°C, 300kHz)
Supply : 5 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (I_s=20mA) : V_{ol} = 0,5Vdc
1 min (I_s=20mA) : V_{oh} = V_{cc}-2,5Vdc

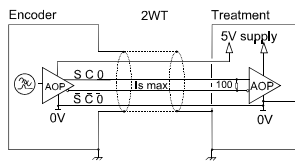


Electronic RG2 (100°C, 300kHz)
Supply : 4,75 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (I_s=20mA) : V_{ol} = 0,5Vdc
1 min (I_s=20mA) : V_{oh} = 4Vdc



Electronic 5GT (70°C, 120kHz)
Supply : 11 to 30Vdc
Cons. without load : 75mA max
Current per channel : 40mA max
0 max (I_s=20mA) : V_{ol} = 1,5Vdc
1 min (I_s=20mA) : V_{oh} = V_{cc}-2,5Vdc

SINE WAVE OUTPUT SIGNALS



Electronic 2WT (100°C)
Supply : 5Vdc ± 10%
Cons. without load : 75mA max
Output signals :
1Vpp (peak to peak)

ELECTRONIC PROTECTIONS

Protection against short circuits of the electronics: 2G2, RG2, PG5, 5GT and 2WT
Protection against inversion of polarity for all the electronics except 2G2 et 2WT

Contact the factory for special electronics, ex:100mA ...

STANDARD CONNECTION

		-	+	A	B	0	A/	B/	0/	Ground
G6	12 pins CW	1	2	3	4	5	6	7	8	Connector body
G8	12 pins CCW	10 + 11	2 + 12	8	5	3	1	6	4	Connector Body
G3	PVC cable 8 wires 8230/020	WH white	BN brown	GN green	YE yellow	GY grey	PK pink	BU blue	RD red	General shielding
GP	PUR cable 12 wires 8230/050	WH white + WH/GN white / green	BU blue + BN/GN brown / green	GY grey	BN brown	RD red	PK pink	GN green	BK black	General shielding

ORDERING REFERENCE (Contact the factory for special versions, ex: special flanges, connections...)

DHO5	Ø shaft 14 : 14mm Nota: reduction hubs available	Digital signals			Connection		Connection
		Electronic : 2G2, PG5, RG2 , 5GT		Output signals	Resolution	G6 : M23 12 pins CW G5 : M23 12 pins CW G8 : M23 12 pins CCW G1 : solenoid valve 4 pins	
		Supply	Output stage	9 : A,A/,B,B/,0,0/ (0 gated A & B)	80 000 max		
		2 : 5Vdc 5 : 11 to 30Vdc P : 5 to 30Vdc R : 4.75 to 30Vdc	G2 : driver 5Vdc RS422 G5 : push-pull 11-30Vdc GT : push-pull 11-30Vdc transistorized				
Sine-wave signals					G3 : PVC cable 8 wires GP : PUR cable 12 wires		
2 : 5Vdc	WT: sinus 1Vpp	9 : S/,C,C/,Z,Z/	2500 max	Example : R020 : radial cable 2m			
Ex: DHO5 _	14 //	P	G5	9 //	80 000 //	GP	R050

Available resolutions (100°C electronic) : 5 10 20 25 30 50 60 100 120 125 127 150 180 200 240 250 256 300 314 360 375 400 500 512 600 720 750 762 768 800 927 1000 1024 1200 1250 1280 1440 1500 1800 2000 2048 2400 2500 3000 3600 4000 4096 5000 6000 7200 8000 8192 10000

Interpolated available resolutions (70°C electronic) : 1080 2560 2880 3072 4320 5120 7500 5760 9000 10240 10800 12000 12500 12288 14400 15000 16000 16384 18000 20000 20480 24000 25000 28800 30000 32000 32768 36000 40000 40960 43200 48000 49152 50000 57600 60000 64000 65536 72000 80000

Available resolutions sine-wave signals (100°C electronic) : 250 256 360 500 1024 2500