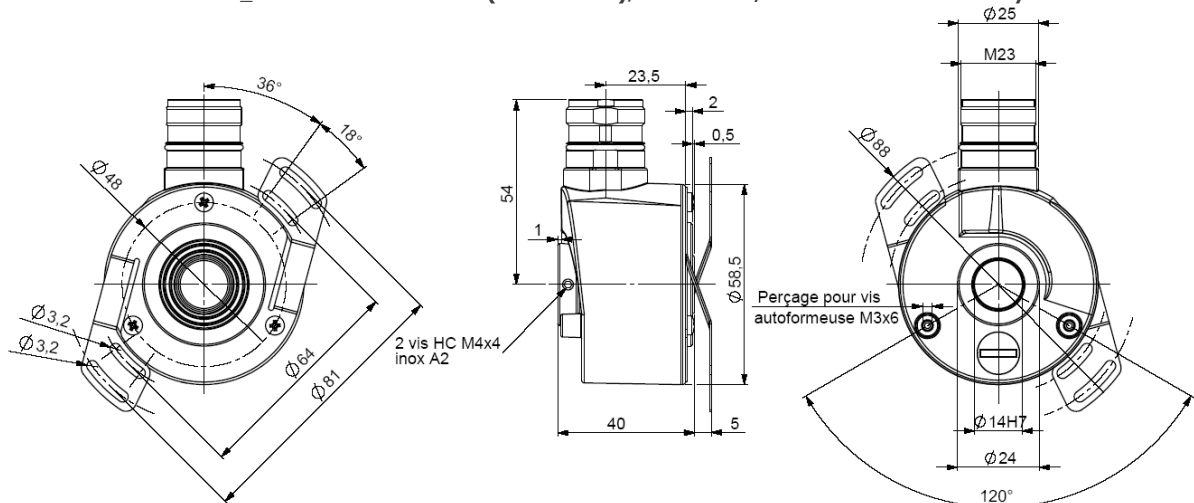


The programmable encoder: **DIGISINE™**, unique combination of performance and flexibility

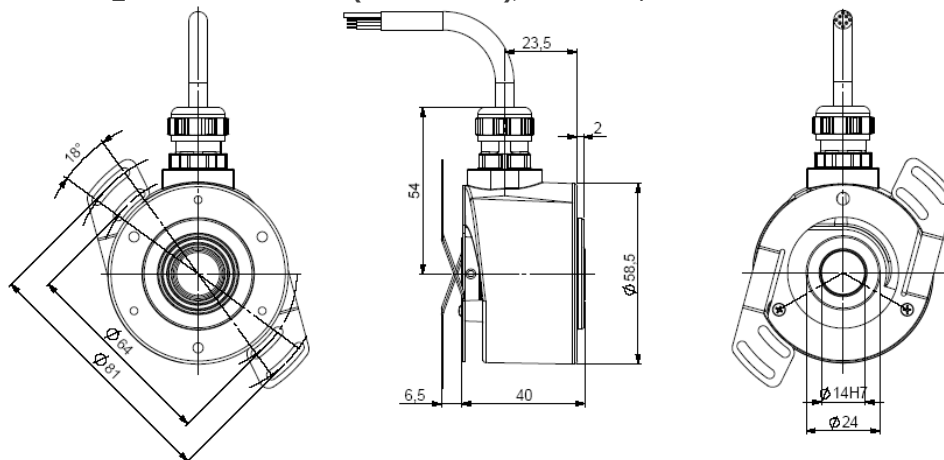
- Easy programming without any specific software or hard-ware
- High resolutions available : up to 80 000 cpt
- Through hollow shaft version Ø14mm, with reduction hubs in aluminium of 6, 8, 10 and 12 mm
- Easy mounting for the hollow shafts thanks to DAC (Anti-Coupling Device)
- Robustness and excellent resistance to shocks / vibrations
- High protection level: standard IP65
- Universal electronic circuits from 5 to 30 Vdc
- High performances in temperature -30°C to +70°C (option -40°C)
- High performances in frequency of output signals : 300 kHz



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



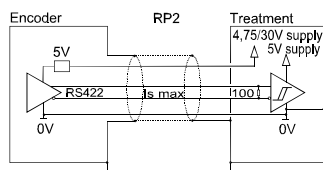
DHO5_14 connection G3R (radial cable), DAC 9445/015* mounted on cover



* Accessory to be ordered separately

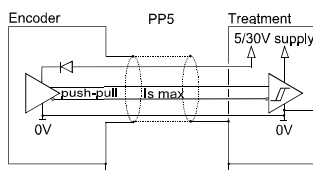
Material	Cover : zinc alloy	Shocks (EN60068-2-27)	≤ 500 m.s ⁻² (during 6 ms)
	Body : aluminium	Vibrations (EN60068-2-6)	≤ 100 m.s ⁻² (55 ... 2 000 Hz)
	Shaft : stainless steel	EMC	EN 50081-1, EN 61000-6-2
Bearings	6 803 serie	Isolation	1 000 V eff
Maximum loads	Axial : 20 N	Encoder weight (approx.)	0,300 kg
	Radial : 50 N	Operating temperature	- 30 ... + 70°C (encoder T°)
Shaft inertia	≤ 2,2.10 ⁻⁶ kg.m ²	Storage temperature	- 40 ... + 80°C
Torque	≤ 6.10 ⁻³ N.m	Protection(EN 60529)	IP 65
Permissible max. speed	9 000 min ⁻¹	Torque (ring pressure screw)	nominal: 1.5 N.m, break: 2.0 N.m
Continuous max. speed	6 000 min ⁻¹	Theoretical mechanical lifetime 10 ⁹ turns (F _{axial} / F _{radial})	
Shaft seal	Viton	10N / 25N : 230	20N / 50N : 29

DIGITAL OUTPUT SIGNALS (SQUARE WAVE)



RP2 electronic (300kHz)

Supply: 4,75 to 30Vdc
 Cons. without load: 75mA max
 Current per channel: 40mA max
 0 max (Is=20mA) : $V_{ol} = 0,5Vdc$
 1 min (Is=20mA): $V_{oh} = 4Vdc$



PP5 electronic (300kHz)

Supply: 5 to 30Vdc
 Cons. without load: 75mA max
 Current per channel: 40mA max
 0 max (Is=20mA): $V_{ol} = 0,5Vdc$
 1 min (Is=20mA): $V_{oh} = V_{cc} - 2,5Vdc$

Protection against short circuits and against reverse polarity for all the electronics

STANDARD CONNECTION

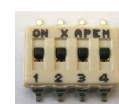
		-	+	A	B	0	A/	B/	0/	Ground
G6	M23 - 12 pins CW	1	2	3	4	5	6	7	8	Connector body
G8	M23 - 12 pins CCW	10 + 11	2 + 12	8	5	3	1	6	4	Connector body
G3	PVC cable 8 wires 8230/020	WH white	BN brown	GN green	YE yellow	GY grey	PK pink	BU blue	RD red	General shielding
GP	PUR cable 12 wires 8230/050	WH white + WH/GN 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 electronics, flanges, connections...)

Shaft Ø		Digital signals (Square wave)				Connection	Connection orientation				
DHO5	14 : 14mm reduction hubs available up to 6mm	Electronic : PP5, RP2		Output signals	Resolution	G6: M23 12 pins CW G5 : M23 12 pins CW G8 : M23 12 pins CCW G2 : DIN 5 pins GD: DIN 8 pins	R : radial				
		Supply	Output stage	9 : A,A/,B,B/,0,0/ (0 gated A & B)	5 000 max basic resolution						
		R : 4.75 to 30Vdc P : 5 to 30Vdc	P2 : driver 5Vdc RS422 P5:push-pull								
		Ex: DHO5 _		14	//	P	P5	9	//	5 000	//

AVAILABLE INTERPOLATED RESOLUTIONS

Easy multiplication of the basis resolution of the disk: 1, 2, 3, 4, 5, 8, 10, 12 and 16 times per dip-switch without specific software nor hardware



Interpolation factor	Basis resolution										
	250	256	360	500	1 024	2 500	3 000	3 600	4 000	4 096	5 000
X 1	250	256	360	500	1 024	2 500	3 000	3 600	4 000	4 096	5 000
X 2	500	512	720	1 000	2 048	5 000	6 000	7 200	8 000	8 192	10 000
X 3	750	768	1 080	1 500	3 072	7 500	9 000	10 800	12 000	12 288	15 000
X 4	1 000	1 024	1 440	2 000	4 096	10 000	12 000	14 400	16 000	16 384	20 000
X 5	1 250	1 280	1 800	2 500	5 120	12 500	15 000	18 000	20 000	20 480	25 000
X 8	2 000	2 048	2 880	4 000	8 192	20 000	24 000	28 800	32 000	32 768	40 000
X 10	2 500	2 560	3 600	5 000	10 240	25 000	30 000	36 000	40 000	40 960	50 000
X 12	3 000	3 072	4 320	6 000	12 288	30 000	36 000	43 200	48 000	49 152	60 000
X 16	4 000	4 096	5 760	8 000	16 384	40 000	48 000	57 600	64 000	65 536	80 000

switchs position		CODE SWITCH			
factor		1	2	3	4
x 1	ON	☐	☐	☐	☐
x 2	ON	☐	☐	☐	☐
x 3	ON	☐	☐	☐	☐
x 4	ON	☐	☐	☐	☐
x 5	ON	☐	☐	☐	☐
x 8	ON	☐	☐	☐	☐
x 10	ON	☐	☐	☐	☐
x 12	ON	☐	☐	☐	☐
x 16	ON	☐	☐	☐	☐