



| DHM5

PROGRAMMABLE INCREMENTAL ENCODERS



Features

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

- Easy programming without any specific software or hard-ware
- Robustness and excellent resistance to shocks / vibrations
- High protection level IP65, IP67 option with a sealing flange
- High resolutions available : up to 80 000 cpt
- Universal electronic circuits from 5 to 30 Vdc
- High performances in temperature -30°C to $+70^{\circ}\text{C}$ (option -40°C)
- High performances in frequency of output signals : 300 kHz

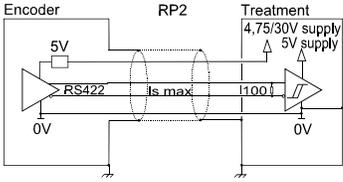
SPECIFICATIONS

Material	Cover: Zinc alloy Body: Aluminium Shaft: Stainless steel
Bearings	6,000 series
Maximum Loads	Axial: 50 N Radial: 100 N
Shaft Inertia	$\leq 1.10^{-6}$ kg.m ²
Torque	4.10^{-3} N.m
Permissible Max. Speed	12 000 min ⁻¹
Continuous Max. Speed	9, 000 min ⁻¹
Shocks (EN60068-2-27)	≤ 500 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.)	0,300 kg
Operating Temperature	- 30 ... + 100°C (encoder T°)
Storage Temperature	- 40 ... + 800°C
Protection (EN 60529)	IP 65 (IP67 with flange option)

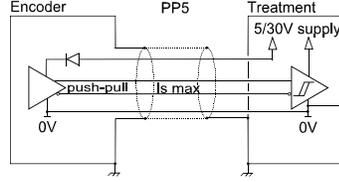
Theoretical Mechanical Lifetime 109 Turns (F_{axial} / F_{radial})	
25 N / 50 N	99
50 N / 100 N	12



DIGITAL OUTPUT SIGNALS (SQUARE WAVE SIGNALS)



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): $V_{oh} = Vcc-2,5Vdc$

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



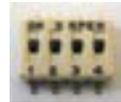
STANDARD CONNECTIONS

		-	+	A or S	B or C	0 or Z	A/ or S/	B/ or C/	0/ or Z/	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

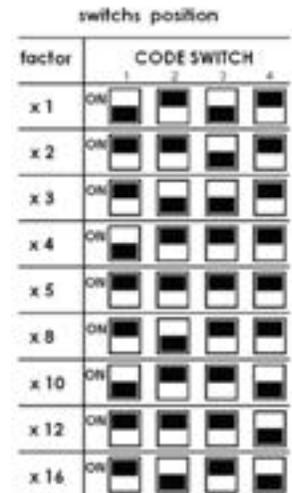


AVAILABLE INTERPOLATED RESOLUTIONS

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	Basic Resolutions										
	250	256	360	500	1024	2500	3000	3600	4000	4096	5000
X 1	250	256	360	500	1024	2500	3000	3600	4000	4096	5000
X 2	500	512	720	1000	2048	5000	6000	7200	8000	8192	10000
X 3	750	768	1080	1500	3072	7500	9000	10800	12000	12288	15000
X 4	1000	1024	1440	2000	4096	10000	12000	14400	16000	16384	20000
X 5	1250	1280	1800	2500	5120	12500	15000	18000	20000	20480	25000
X 8	2000	2048	2880	4000	8192	20000	24000	28800	32000	32768	40000
X 10	2500	2560	3600	5000	10240	25000	30000	36000	40000	40960	50000
X 12	3000	3072	4320	6000	12288	30000	36000	43200	48000	49152	60000
X 16	4000	4096	5760	8000	16384	40000	48000	57600	64000	65536	80000

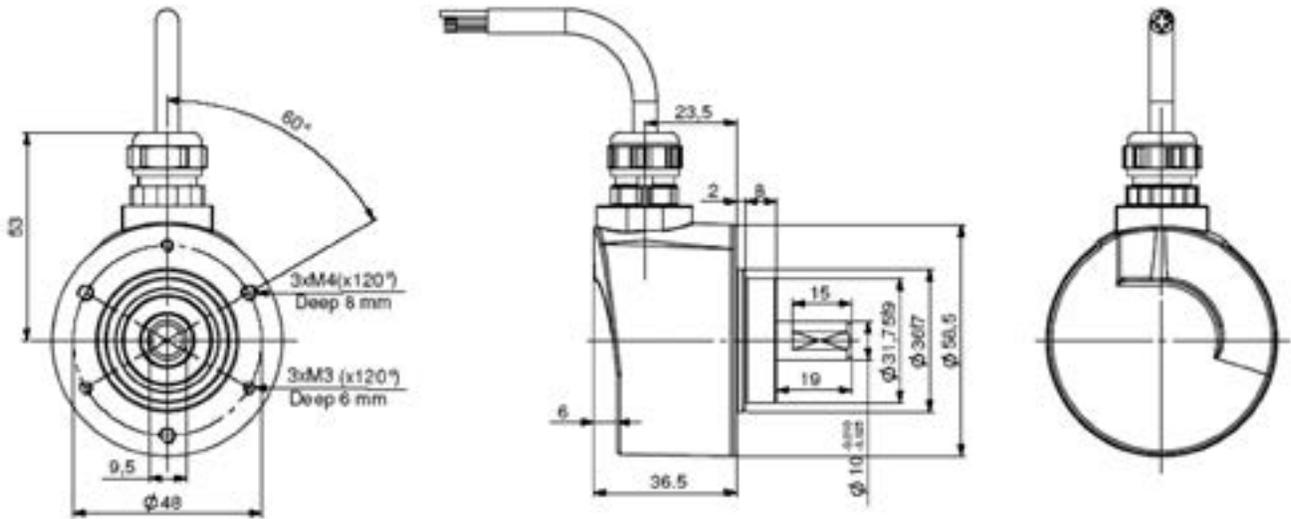




DIMENSIONS

All dimensions are in millimeters.

DHM5_10 Connection G3R (Radial Cable)



DHM5_06 Connection G6R (radial M23), Flange 9500/003* Mounted on the Body

