

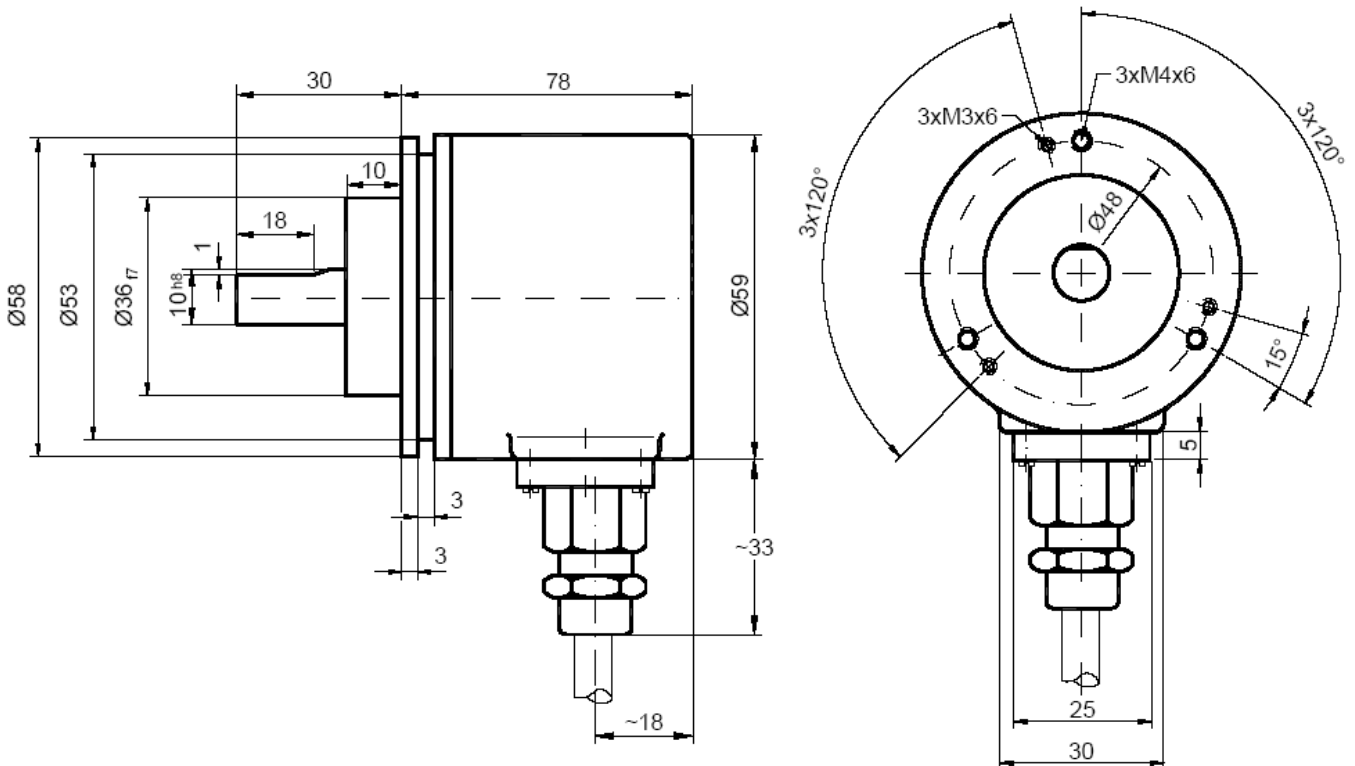
## PARALLEL ABSOLUTE MULTI-TURN ENCODER, MHM510-PROF RANGE



- MHM510-PARA, Ø58mm encoder with parallel interface:
- Robust and compact conception
- Solid shaft version Ø 10 mm (06 mm available upon request)
- Precision ball bearings with sealing flange
- High temperatures performances -40°C ... +85°C
- Code disc made of unbreakable and durable
- Mechanical memorisation of the number of turns by gears
- GRAY code (Binary option)
- Resolution : 13 bits = 8192 steps/turn (max 16 bits)
- Number of turns : 12 bits = 4096 turns (max 14 bits)
- Polarity inversion and short circuit protection
- Highly integrated circuit in SMD-technology



MHM510-PARA (radial cable output)



### MECHANICAL DATA

Material	Cover : aluminum	Vibrations (EN 60068-2-6)	≤ 10 g (10Hz... 1 000Hz)		
	Body : aluminum	Weight	600 g		
	Shaft: stainless steel	Operating temperature	- 40 ... + 85°C		
Max. shaft loading	Axial : 40 N	Storage temperature	- 40 ... + 85°C		
	Radial : 110 N	Humidity	98 % sans condensation		
Shaft Inertia	≤ 30 g.cm <sup>2</sup>	Protection class (EN 60529)	IP65: cover		
Torque	≤ 3 N.cm		IP64: shaft		
RPM (continuous operation))	6 000 rpm	Lifetime in 10 <sup>8</sup> revolutions with F <sub>a</sub> / F <sub>r</sub> (axial/radial)			
Shock (EN 60068-2-27))	≤ 100 g (halfsinus, 6 ms)	40 N / 60 N	40 N / 80 N	40 N / 110 N	
Shock (EN 60028-2-29)	≤ 10 g (half-sinus, 16ms)	25	10	4	

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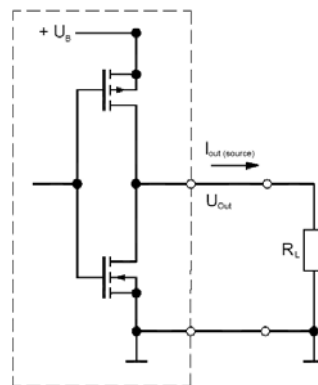


### CARACTERISTIQUES ELECTRIQUES

Sorties	Parallèles, push-pull	Précision	+ 1/2 LSB
Niveau haut	~ tension d'alimentation (suivant charge)	CEM	EN 61000-6-4 EN 61000-6-2
Courant de sortie	Max 20mA / voie	Alimentation	10 – 30Vdc
Temps de cycle	< 150 µs	Consommation	180 mA (24Vdc)
Mise en service	< 1s	Durée de vie électrique	> 10 <sup>5</sup> h

### INTERFACE PUSH-PULL

Transmission	Par 2 transistors en circuit push-pull
Cable length	Up to 50m
Type de câble	A blindage général afin d'obtenir la meilleur immunité possible face aux parasites éventuels
Connexion	Sur toute entrée d'automate ( I/O)
Option	Code Binaire également disponible



### CONNECTIQUE

Signal	Couleur de fil
Bit 1	blanc – WH
Bit 2	brun – BN
Bit 3	vert – GN
Bit 4	jaune - YE
Bit 5	gris –GY
Bit 6	rose - PK
Bit 7	bleu – BU
Bit 8	rouge – RD
Bit 9	noir – BK
Bit 10	violet – VT
Bit 11	gris / rose – GY / PK
Bit 12	bleu / rouge – BU / RD
Bit 13	blanc / vert – WH / GN
Bit 14	brun / vert – BN / GN
Bit 15	blanc / jaune WH / YE

Signal	Couleur de fil
Bit 16	jaune / brun – YE / BN
Bit 17	blanc / gris – WH / GY
Bit 18	gris / brun – GY / BN
Bit 19	blanc / rose – WH / PK
Bit 20	rose / brun – PK / BN
Bit 21	blanc / bleu – WH / BU
Bit 22	brun / bleu – BN / BU
Bit 23	blanc / rouge - WH / RD
Bit 24	brun / rouge - BN / RD
Bit 25	blanc / noir – WH / BK
Reset	brun / noir – BN / BK
Latch	gris / vert – GY / GN
Sens	jaune / gris – YE / GY
+Ub = 10 – 30 V	rose / vert – PK / GN
GND	jaune / rose – YE / PK

### ENTREES

Sens : Comptage lorsque l'axe du codeur est tourné en sens horaire (vu côté embase)		Entrée reset : Remise à zéro de la valeur émise		Entrée Latch	
0 (entrée = NC ou GND)	Comptage croissant	0 (entrée = NC ou GND)	Position émise	0 (entrée = NC ou GND)	Position émise
1 (entrée = +Ub ou ≥ 4,5V)	Comptage décroissant	1 (entrée = +Ub ou ≥ 4,5V)	Reset sur front descendant (100ms)	1 (entrée = +Ub ou ≥ 4,5V)	Valeur figée

### REFERENCE ( Exécution spécifique sur demande, ex: bride/électronique/connectique spécifique...)

MHM5	P1	00	G	12	13	C	10	0	CRW	2M
Codeur absolu multitour	Fonction Reset	Version	Code : Gray	Nombre de tours : 2 <sup>12</sup> (4 096)	Résolution dans le tour : 2 <sup>13</sup> (8 192)	Bride à vis et synchro	Diamètre de l'axe : 10mm	Sans option mécanique	Sortie câble radiale	2m de câble

CODE DE COMMANDE : **MHM510-PARA-001** = MHM5 P1 00 G 12 13 C 10 0 CRW 2M (ancienne référence : NEG001544)

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