

INCREMENTAL ENCODERS WITH COMMUTATION CHANNELS

DIGISINE™ encoder with commutation channels output :

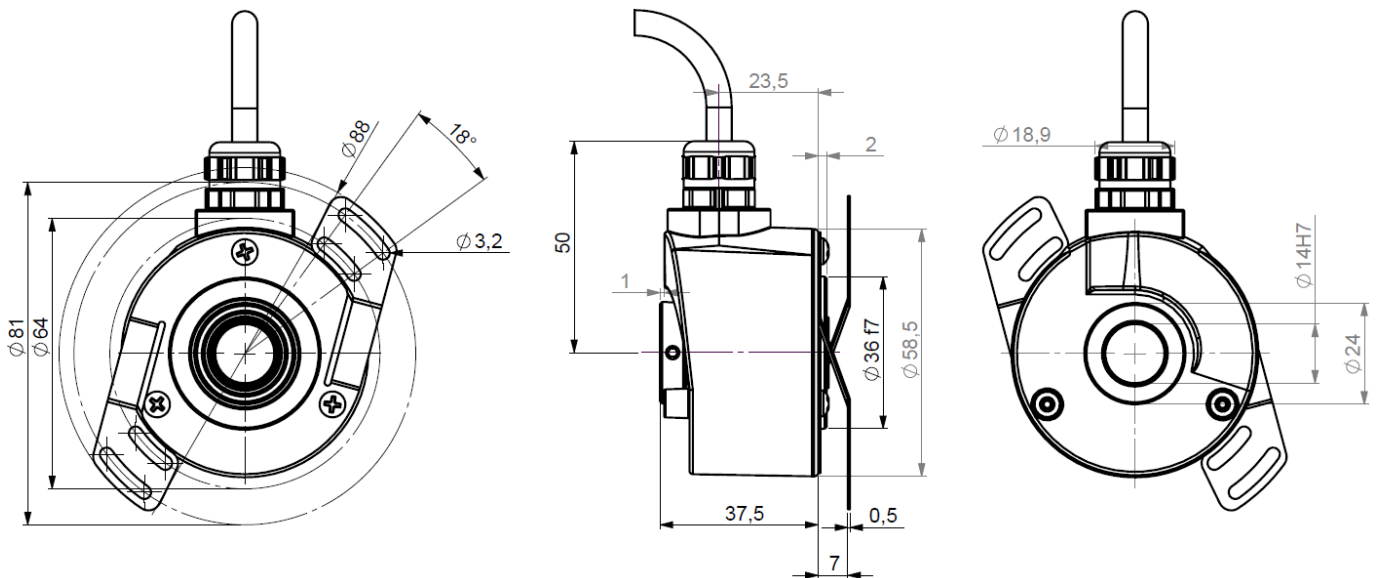
- KHO5 encoders are specially designed for motorist applications
- Compact encoder
- Robustness and excellent resistance to shocks / vibrations
- Through hollow shaft version Ø14mm (6, 8, 10 and 12 mm reduction hub available)
- High protection level IP65
- High performances in temperature -30°C to 80°C (option -40°C)
- Universal electronic circuits from 4.75 to 30 Vdc
- High performances in frequency of output signals : 300 kHz
- Resolution up to 5000 ppr
- Commutation channels up to 16 poles pair
- Cable output
- Easy mounting with DAC (Anti Coupling Device)



Proc. Cont. Eq.
E477663

2004/108/CE

KHO5 dimensions



58mm KHO5S14 encoders are designed to accept shaft sizes up to 14mm and can be mounted without fixation flange. Immobilization is achieved by a controlled deformation "DAC" with 2 fixation points which allows an axial misalignment (± 2 mm), angular ($\pm 3^\circ$) and radial ($\pm 0,2$ mm). The "DAC" also allows for $\pm 10^\circ$ of rotational adjustment for the alignment of the marker pulse, with the two "DAC" oblong holes at 180° . The final mounting is realised with 2 CHC M3 screws

Mechanical Characteristics:

Material	Cover : zinc alloy	Shocks (EN60068-2-27)	$\leq 500 \text{ m.s}^{-2}$ (during 6 ms)
	Body : aluminum	Vibrations (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
Maximum loads	Axial : 20 N	Encoder weight (approx.)	0,300 kg
	Radial : 50 N	Operating temperature	-30 ... + 80°C (encoder T°)
Shaft inertia	$\leq 2,2 \cdot 10^{-6} \text{ kg.m}^2$	Storage temperature	-40 ... + 80°C
Torque	$\leq 6 \cdot 10^{-3} \text{ N.m}$	Protection(EN 60529)	IP 65
Permissible max. speed	9 000 min ⁻¹	Torque (ring pressure screw)	0,7...0,9 Nm
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

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Electrical Characteristics:

Version	Output signals	Resolution	Operating Voltage Vcl	Supply current (no loads)	Current per channel pair	Output Levels (Is=20mA)	Frequency capability	Short circuits proof	Reverse polarity tolerant	Temperature range
RG5	HTL	Up to 5000ppr	4.75-30V --- 250mA	75mA	40mA	High min: Vcl - 0.5V Low max: 0.5V	Up to 300kHz	Yes	Yes	-30°C +80°C (1)
2G2	TTL RS422		5V+/-5% --- 250mA			High min : 4.5V Low max: 0.5V				

(1) UL listed: -20°C +80°C. Device must be supplied by a Class 2, LPS or SELV limited energy source.

Connections:

		-	+	A	B	Z	A/	B/	Z/	U	V	W	U/	V/	W/
KN	PVC cable 16 wires	White	Brown	Green	Yellow	Grey	Orange	Blue	Red	White-Green	White-Yellow	White-Black	White-Orange	White-Red	White-Brown

Ordering Options:

Use this diagram, working from left to right to construct your model number (Ex : **KHO5_14//RG59//01024K4//KNR020//**DD****)

KHO5	--	//	---	-	//	-----	--	//	---	---	//	**	__	**
TYPE:	SHAFT BORE:		VOLTAGE/ OUTPUT:	CHANNELS:		CYCLES/ TURN:	POLES:		OUTPUT TERMINATION:	CABLE LENGTH:		ANTI-ROTATION:		
KHO5 = Through shaft encoder	14 = 14mm reduction hubs available up to 6mm		2G2 = 5V voltage and RS422 output RG5 = 4.75-30V voltage and push-pull output	P = AA/ BB/ 00/ & UU/ VV/ WW/ 0 gated A&B - B bef.A		(Enter Cycles) Up to 5000ppr	Up to 16ppr Example: K4 = 4 ppr (8 poles motor)		KNR = Cable output	xxx = cable length ex. 020 = 2meters		**DD** = 9445/015 anti-rotation		

Made in France