



MAIN FEATURES

ø 49 mm encoder series recommended in feedback control systems on AC servomotors. They include a traditional incremental encoder and commutation signals (Hall effect phases).

- · Easy mechanical mounting
- · Small dimensions
- · Wide range of resolutions available
- · High temperature resistance
- · 6 channels encoder with optical generation of "Hall effect phases" (commutation signals)
- · Signal transmission by bit parallel bus

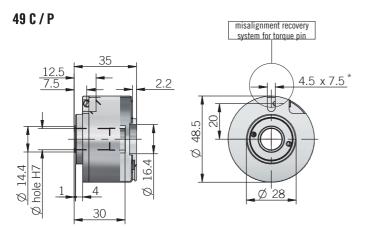




ORDERING CODE	EF	49C	6	L	500	S	5	L	8	X	6	PR	. XXX
incremen	SERIES tal encoder with Hall phases EF												
IIICIEIIICI	tai elicodei witii Hali pilases Li	MODEL											
	blind hollow												
	through hollow	shaft 49P											
			OR POLES										
	4 p 6 n	oles (2 pol oles (3 pol	es pair) 4 es nair) 6										
	8 p	oles (4 pol	es pair) 8										
	ELECTRICAL INTERFACE												
			PN open c ine driver										
				ENTAL RES	OLUTION								
			pp	or from 100	0 to 2048								
			refer to th	ie available									
				v	ZEI vithout zei	RO PULSE							
						o pulse Z							
							SUPPLY						
				OTDICAL I	NTEDEACI		5 V DC 5						
			ELL	ECTRICAL I	NIEKFAGI	E FUK INGI		e driver L					
									DIAMETER				
									mm 6				
								(3/8")	mm 8 mm 9,52				
								(0/0 /	mm 10				
								(1/2")	mm 12 mm 12,7				
									ENCLOSUR				
									LNOLOSOK	IP 40 X			
									MA	X ROTATIO 60	N SPEED 00 rpm 6		
												UT TYPE	
					, ,		15/0//	. / 5 / 10		able (stand			
					preferred (cable length	S 1,5 / Z / 3	3 / 5 / 10 m,	to be added	ı arter UUTP	UI IYPŁ (eg		VARIANT

1985 Eltra

custom version XXX



* ø 4 mm torque pin min 0.5 mm from bottom end for size 19 (version 01 or 14) resolver flange please refer to Accessories

dimensions in mm

ELECTRICAL SPECIFICATIONS				
Incremental resolution	from 100 to 2048 ppr			
Power supply ¹	4,5 5,5 V DC			
Current consumption without load	150 mA max			
Max load current	20 mA / channel			
Electrical interface for incremental signals ²	line driver RS-422 (AELT-5000 or equivalent)			
Electrical interface for Hall phases ²	NPN open collector (pull-up max +30V DC) line driver RS-422 (AELT-5000 or equivalent)			
Max output frequency	150 kHz			
Counting direction	A leads B clockwise (shaft view)			
Electromagnetic compatibility	according to 2014/30/EU directive			
RoHs	according to 2015/863/EU directive			
UL / CSA	certificate n. F212495			

CONNECTIONS	
Function	Cable
+V DC	red
0 V	black
A+	green
B+	yellow
Z+	blue
A-	brown
B-	orange or pink
Z-	white
U+	grey
V+	violet
W+	grey-pink
U-	red-blue
V-	white-green
W-	brown-green
÷	shield

MECHANICAL SPECIFICATIONS			
Bore diameter	ø 6 / 8 / 9,52 (3/8") / 10 / 12 / 12,7 (1/2") mm		
Enclosure rating	g IP 40 (IEC 60529)		
Max rotation speed	6000 rpm		
Shock	50 G, 11 ms (IEC 60068-2-27)		
Vibration	5 G, 10 500 Hz (IEC 60068-2-6)		
Moment of inertia	2 x 10 ⁻⁶ kgm ² (47 x 10 ⁻⁶ lbft ²)		
Starting torque (at +20°C / +68°F)	< 0,01 Nm (1,42 Ozin)		
Bearing stage material	EN-AW 2011 aluminum		
Shaft material	1.4305 / AISI 303 stainless steel		
Housing material	nickel plated brass		
Bearings	n.2 ball bearings		
Bearings life	10 ⁹ revolutions		
Operating temperature ^{3, 4}	-20° +85 °C (-4° +185°F) -10° +100°C (+14° +212°F) on demand		
Storage temperature ⁴	-25° +85°C (-13° +185°F)		
Weight	150 g (5,29 oz)		

¹ as measured at the transducer without cable influences

RESOLUTIONS

100 4 / 6 poles 200 4 / 6 poles 500 4 / 6 / 8 poles 512 4 / 6 / 8 poles 1000 4 / 6 / 8 poles 1024 4 / 6 / 8 poles 2000 4 / 6 / 8 poles 2048 4 / 6 / 8 poles

please directly contact our offices for other pulses





 $^{^{\}rm 2}$ for further details refer to OUTPUT LEVELS on TECHNICAL BASICS section

³ measured on the transducer flange

⁴ condensation not allowed