

Code ST05	Project E06-A	Release C	TECHNICAL DATASHEET
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ABSOLUTE OPTICAL ENCODER AEN500 (Serial)

GENERAL FEATURES

- Absolute optical encoder (singleturn or multiturn).
- Output protocol: **SSI-BISS**.
- Aluminium flange and housing.
- Radial or axial output with connector M23 12 Pin or M12 8 Pin.



MECHANICAL AND ELECTRICAL CHARACTERISTICS

MECHANICAL <ul style="list-style-type: none"> • Round flange, with centering \varnothing 50 mm. • Aluminium housing. • Stainless steel shaft. • Ball bearings with special high-sealed screens. • High protection even in harsh environmental conditions. ELECTRICAL <ul style="list-style-type: none"> • Input (direction). • Option: 1 Vpp analog signal. 	Cod. AEN500	
	Resolution 360 / 720 cpr 10-17 Bit Singleturn 12 Bit Multiturn	
Max. rotating speed momentary 12000 rpm continuous 10000 rpm		
Centering (mm) \varnothing 50		
Max. shaft load 40 N (axial) - 60 N (radial)		
Shaft diameter (mm) \varnothing 6 others on request		
Operating temperature $0^{\circ}\text{C} \div 70^{\circ}\text{C}$ others on request		
Storage temperature $-25^{\circ}\text{C} \div 85^{\circ}\text{C}$		
Vibration resistance (EN 60068-2-6) $100 \text{ m/s}^2 (10 \div 2000 \text{ Hz})$		
Shock resistance (EN 60068-2-27) $1000 \text{ m/s}^2 (6 \text{ ms})$		
Protection class (EN 60529) IP 64 standard IP 67 optional		
Torque $\leq 0.01 \text{ Nm}$		
Moment of inertia $3.8 \times 10^{-6} \text{ kgm}^2$		
Power supply $10 \div 30 \text{ V}$ or $5 \text{ V} \pm 10\%$		
Current consumption 100 mA (ST), 150 mA (MT), 250 mA (SP)		
Protocol BiSS, SSI (with or without SinCos 1 Vpp)		
Output code Binary, Gray		
Electrical connections see related table		
Weight 260 g (ST), 310 g (MT)		

ORDERING CODE

MODEL	TYPE / OUTPUT	RESOL. Bit (MT)	RESOL. Bit (ST)	POWER SUPPLY	\varnothing SHAFT	CONNECTOR	SIGNAL	CONNECTION	OPTIONS
AEN500	M R	12	12	1030	D06	CG	SG	11	V2

S = singleturn **00** = if ST **10** = 10 Bit * **1030** = 10÷30 V **D06** = \varnothing 6 mm **CG** = M23 12 Pin **BE** = BiSS
M = multiturn **12** = 12 Bit **12** = 12 Bit **05V** = 5 V ** **CT** = M12 8 Pin ** **BV** = BiSS+1Vpp **n** = connection number **No cod.** = standard
R = radial **13** = 13 Bit **13** = 13 Bit **14** = 14 Bit **SG** = SSI Gray **V2** = IP 67
A = axial **14** = 14 Bit **14** = 14 Bit **17** = 17 Bit **SC** = SSI Gray+1Vpp **SP** = SSI program.
 17 = 17 Bit **0360** = 360 **SR** = SSI Binary+ **SH** = SSI Gray+ Preset active high
 increment ST * **0720** = 720 Preset active high
 increment ST *

* Only singleturn version
 ** Not available for SP version

Example  **ABSOLUTE OPTICAL ENCODER AEN500 MR 1212 1030 D06 CG SG 11 V2**

