

Absolute

Profibus



Version AC 61 with bus cover

- Compact design
- Protection class IP67
- High corrosion resistance
- Robust design
- Resolution up to 26 Bit (14 Bit ST, 12 Bit MT)
- Bus cover
- Programmable: Resolution, Preset, Direction
- Output of speed, acceleration
- Applications: packaging machine for food and beverage, ship equipment (e.g. cranes, winches, cable laying ships), offshore applications



GENERAL INFORMATION

The absolute stainless steel encoders are available in the Versions AC 59 and AC 61.

- AC 59: drawn stainless steel housing, only together with cable outlet, no access to control elements
- AC 61: machined housing, possible with cable or bus cover, access to control elements (DIP switch, Reset switch)

TECHNICAL DATA

mechanical

Housing diameter	61.5 mm
Shaft diameter	9.52 mm / 10 mm (Solid shaft)
Flange (Mounting of housing)	Square flange 63.5 mm
Protection class shaft input (EN 60529)	IP67
Protection class housing (EN 60529)	IP67
Shaft load axial / radial	40 N / 60 N
Max. speed	max. 6000 rpm (continuous), max. 10 000 rpm (short term)
Starting torque typ.	≤ 1 Ncm
Moment of inertia	approx. 20 gcm ²
Vibration resistance (DIN EN 60068-2-6)	100 m/s ² (10 ... 500 Hz)
Shock resistance (DIN EN 60068-2-27)	1000 m/s ² (6 ms)
Operating temperature	-40 °C ... +85 °C
Storage temperature	-40 °C ... +85 °C
Material shaft	Stainless Steel
Material housing	Stainless Steel
Weight	approx. 1180 g
Connection	Bus cover with 3 sealed cable exits

TECHNICAL DATA

electrical

General design	as per DIN EN 61010-1, protection class III, contamination level 2, overvoltage class II
Supply voltage	DC 10-30 V
Current w/o load typ.	220 mA (ST), 250 mA (MT)
EMC	EN 61326: Class A
Resolution singleturn	10 - 14 Bit
Resolution multiturn	12 Bit

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TECHNICAL DATA electrical (continued)

Output code	Binary
Drives	RS 485
Linearity	$\pm \frac{1}{2}$ LSB (± 1 LSB for resolution 13, 14, 25, 26 Bit)
Profile/ protocol	Profibus DP with encoder profile class C2 (parameterizable)
Programmable	Resolution, Preset, Direction
Integrated special functions	Speed, Acceleration, Operating time
Baud rate	is automatically set within a range of 9.6 Kbaud through 12 Mbaud
Device address	adjustable with DIP switches, via fieldbus (optional)
Bus termination resistor	set via DIP switches

STARTUP (The encoder can be easily and quickly installed and programmed with the GSD file.)

Parameter Name	Value
0 Suppress timecounter in diag	No
0 Always class 1 diag length	No
0 Suppress store offset to EEPROM	No
1 Positive rotation	clockwise
1 Class 2 functionality	active
1 Commis. diagnostics	not active
1 Scaling function	active
1 Sampling rate (velocity only)	1 ms
4 Steps per turn	4096
6 Total measuring range(units)hi	1024
8 Total measuring range(units)lo	0

ELECTRICAL CONNECTIONS Bus cover with 3 sealed cable exits

Connecting Terminal	Signal
1	UB in (DC 10 - 30V)
2	0 V in
3	UB out
4	0 V out
5	B in
6	A in
7	B out
8	A out

DIMENSIONED DRAWINGS

see chapter "Dimensioned drawings AC 61, starting page 226

ORDERING INFORMATION

Type	Resolution	Supply voltage	Flange, Protection, Shaft	Interface	Connection
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AC61	0010 10 Bit ST 0012 12 Bit ST 0013 13 Bit ST 0014 14 Bit ST 1212 12 Bit MT + 12 Bit ST 1213 12 Bit MT + 13 Bit ST 1214 12 Bit MT + 14 Bit ST	E DC 10 - 30 V	0.76 Square, IP67, 9.52 mm 0.72 Square, IP67, 10 mm	DP Profibus	Z Bus cover with 3 sealed cable exits

ACCESSORIES

see chapter "Accessories"