



The pages in this document have been extracted from a larger document and as such any page numbers are relevant only to the original document.

HENGSTLER

Rotary Encoder Solutions Limited
Dutton Road
Redwither Business Park
Wrexham
LL13 9UL

tel: +44(0) 1978 664722
fax: +44(0) 1978 664733
email: sales@rotaryencodersolutions.com
web: www.rotaryencodersolutions.com

Rotary Encoder Solutions is part of the Industrial Encoders Direct Ltd. Group of Companies and is trading as Industrial Encoders Direct Ltd

The information shown in this document is for reference purposes only and forms no contractual obligation. Any detail in this document may be changed without prior notice. No liability is accepted for any information contained in this document.



HENGSTLER

Absolute Shaft Encoders Type AC 58

ACURO industry DeviceNet



TECHNICAL DATA mechanical

- Programmable: Resolution, Preset, Direction
- Allen Bradley compatible
- Scaleable
- Preset-Funktion
- Diagnostic LED
- Option: display „tico“

Housing diameter	58 mm
Protection class shaft input	IP64 or IP67
Protection class housing	IP67
Flange	Synchro flange, clamping flange, hubshaft with tether, square flange
Shaft diameter	Solid shaft 6 mm, 10 mm; hub shaft 10 mm, 12mm
Max. speed	12 000 min ⁻¹ (short term), 10 000 min ⁻¹ (continuous)
Starting torque	≤ 0.5 Ncm
Moment of inertia	3.8 · 10 ⁻⁶ kgm ²
Spring tether (hollow shaft)	
Tolerance axial	± 1.5 mm
Tolerance radial	± 0.2 mm
Max. shaft load	axial 40 N / radial 60 N
Vibration resistance (IEC 68-2-6)	100 m/s ² (10 - 500 Hz)
Shock resistance (IEC 68-2-27)	1000 m/s ² (6 ms)
Operating temperature	-40...+85 °C
Storage temperature	-40...+85 °C
Material shaft	Stainless steel
Material housing	Aluminium
Weight approx.	350 g (ST), 400 g (MT)

TECHNICAL DATA electrical

Supply voltage	DC 10 - 30 V
Max. current w/o load ST/MT	220 mA/ 250 mA
EMC	Interference emission according to EN 50081-2 Interference resistance according to EN 50082-2
Interface	CAN High-Speed according to ISO/DIS 11898 CAN-Specification 2.0 A (11 Bit Identifier)
General design	as per EN 61010-Part 1, protection class III, contamination level 2, overvoltage class II
Protocol	DeviceNet according to Rev. 2.0, programmable encoder
Resolution singleturn	10 to 14 Bit
Resolution multiturn	12 Bit
Programmable	Resolution, Preset, Direction
Linearity	± ½ LSB (± 1 LSB for resolution 13, 14, 25, 26 Bit)
Output code	Binary
Updating of values	every 5 Milliseconds
MAC-ID	set via DIP switches
Baud rate	set via DIP switches to 125, 250, 500 Kbaud
Bus termination resistor	set via DIP switches
Connection	Bus cover with · 2 sealed cable exits · 4 pole M12 f. "tico" display + 2 cable screw connections · M12, 5 pole

Absolute Shaft Encoders Type AC 58

ACURO industry DeviceNet

DIMENSIONAL DRAWINGS

see chapter "Dimensional drawings ACURO industry", starting page 146

**RECOMMENDED
DATA TRANSFER
Lead type A**

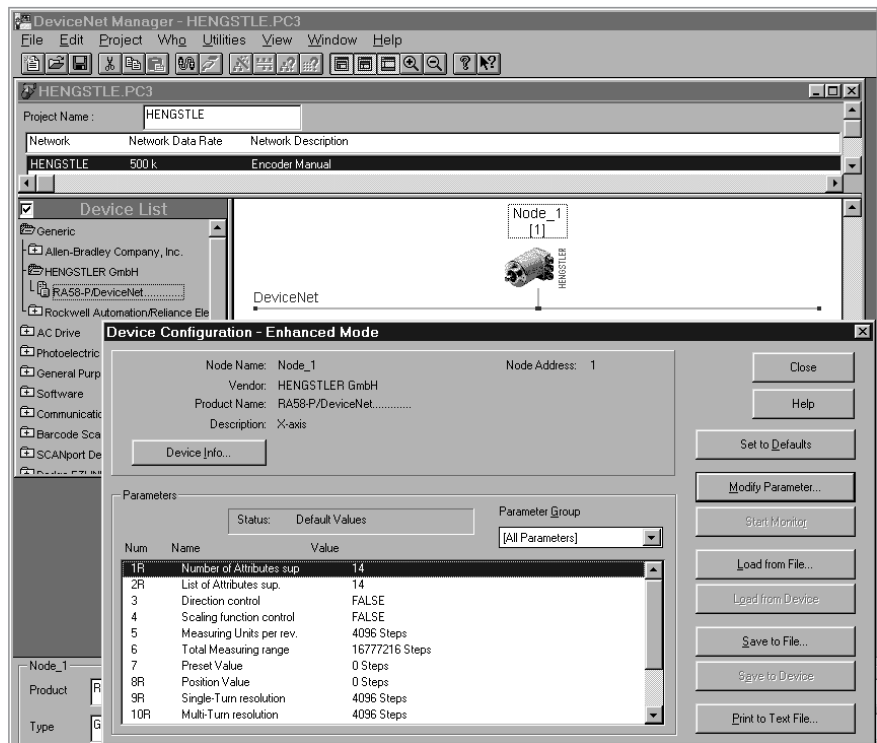
Shaft resistance	135...165 Ω (3...20MHz)
Operating capacity	< 30pF/m
Loop impedance	< 110 Ω/km
Strand diameter	> 0.64 mm
Strand cross section	> 0.34 mm ²

TRANSFER SPEEDS

Segment length	kBit/s
500 m	125
250 m	250
100 m	500

STARTUP

The encoder can be easily and quickly installed and programmed with the EDS file.



PIN ASSIGNMENT

Bus cover with 2 sealed cable exits

Terminals	
No.	Signal name
1	UB in (DC 10 - 30V)
2	0 V in
3	CAN-L
4	CAN-H
5	DRAIN
6	DRAIN
7	CAN-H
8	CAN-L
9	0 V out
10	UB out (DC 10 - 30V)

Absolute Shaft Encoders Type AC 58

ACURO industry DeviceNet

PIN ASSIGNMENT

Bus cover with M12, 5 pole

Pin	Connector	Colour
1	UB in (DC 10 - 30V)	white
2	0 V in	blue
3	CAN-L	green/yellow
4	CAN-H	black
5	DRAIN	brown

ACCESSORIES

	Ordering code
EDS-file as download from our homepage	www.hengstler.com
Technical manual, German	2 565 094 (Web)
Technical manual, English	2 565 256 (Web)
Clamping eccentric for synchro flange	0 070 655
Diaphragm coupling (hub 6/6 mm)	3 520 081
Diaphragm coupling (hub 10/10 mm)	3 520 088
“Tico” display for connection T	0 731 205
Connection cable bus cover (connection T) to “tico”	3 539 575

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"/>
AC58	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	S.41 Synchro, IP64, 6x10mm S.71 Synchro, IP67, 6x10mm K.42 Clamping, IP64, 10x19.5mm K.72 Clamping, IP67, 10x19.5mm K.46 Clamping, IP64, 9.52x19.5mm K.76 Clamping, IP67, 9.52x19.5mm F.42 Hubshaft with tether, IP64, 10x19.5mm hollow shaft F.47 Hubshaft with tether, IP64, 12x19.5mm hollow shaft F.46 Hubshaft with tether, IP64, 9.52x19.5mm hollow shaft Q.42 Square, IP64, 10x19.5mm Q.72 Square, IP67, 10x19.5mm Q.46 Square, IP64, 9.52x19.5mm Q.76 Square, IP67, 9.52x19.5mm	VD DeviceNet	S Bus cover with M12, 5 pole radial T Bus cover with 4 pole M12 for “tico” display + 2 sealed cable exits Z Bus cover with 2 sealed cable exits
Preferably available versions are printed in bold type.					