



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 Profibus



- Diagnostic LED
- Cable or M12-plug connector
- Output of speed, acceleration
- Programmable: Resolution, Preset, Direction
- Option: Display „tico“
- Address via interface parameterizable (optional)

TECHNICAL DATA mechanical

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	220mA/ 250mA
EMC	EN 61326: Class A
Interface	RS 485
Protocol	Profibus DP with encoder profile class C2 (parameterizable)
General design	as per EN 61010-Part 1, protection class III, contamination level 2, overvoltage class II
Linearity	± ½ LSB (± 1 LSB for resolution 13, 14, 25, 26 Bit)
Output code	Binary
Resolution singleturn	10 to 14 Bit
Resolution multiturn	12 Bit
Baud rate	is automatically set within a range of 9.6 KBaud through 12 MBaud
Device address	adjustable with DIP switches, via fieldbus (optional)
Programmable	Resolution, Preset, Direction

Absolute Shaft Encoders Type AC 58

ACURO industry Profibus

TECHNICAL DATA electrical (continued)

Integrated special functions	Speed, acceleration, on time
Bus termination resistor	set via DIP switches
Connection	Bus cover with: <ul style="list-style-type: none"> · 3 sealed cable exits · double conin 12 pole, cw, radial · 3 M12 · 4 pole M12 f. "tico" display + 2 sealed cable exits

DIMENSIONAL DRAWINGS

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

PIN ASSIGNMENT Bus cover with double conin

Pin	Bus cover with double conin		Description
	IN (pins)	OUT (socket)	
1		GND1	Data Ground (M5V) ¹
2	A	A	Receive/Transmit Data-Negative (A)
3			
4	B	B	Receive/Transmit Data-Positive (B)
5			
6		VCC1	+5 V signal output (P5V) ¹
7	DC 10 - 30 V	DC 10 - 30 V	Supply voltage +U _B (P24)
8	0 V	0 V	Supply voltage Ground (M24)
9			
10			
11			
12			
screen	screen	screen	screen connected with encoder housing

¹ can be used as power supply for an external bus termination resistor

PIN ASSIGNMENT Bus cover with 3 M12

Pin	Connector 1	Connector 2	Socket
1		UB in	+5 V signal output (P5V) ¹
2	A in		A out
3		0 V in	Data Ground (M5V) ¹
4	B in		B out
5	screen	screen	screen

¹ can be used as power supply for an external bus termination resistor

PIN ASSIGNMENT Bus cover with 3 sealed cable exits

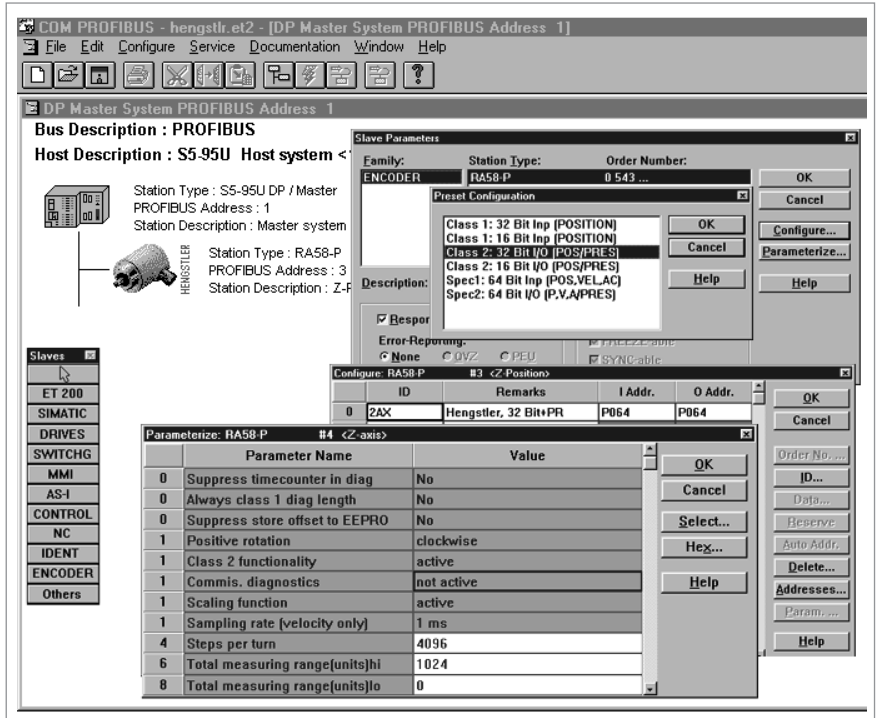
Pin	Signal
1	UB in (DC 10 - 30V)
2	0 V in
3	UB out
4	0 V out
5	B in
6	A in
7	B out
8	A out

Absolute Shaft Encoders Type AC 58

ACURO industry Profibus

STARTUP

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



ACCESSORIES



	Ordering code
GSD-file	www.hengstler.com
Technical manual, German	2 565 090 (Web)
Technical manual, English	2 565 255 (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
Mating connector for connection I (Bus input, 12 pole, bushing, cw)	3 539 202
Mating connector for connection I (Bus output, 12 pole, pins, cw)	3 539 186
“Tico” display for connection T	0 731 205
Connection cable bus cover (connection T) to “tico” display, 1.5m	3 539 575

Absolute Shaft Encoders **Type AC 58**
ACURO industry **Profibus**

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	DP Profibus	I Bus cover with double conin 12 pole cw radial R Bus cover with 3 M12 T Bus cover with 4 pole M12 f. "tico" display + 2 sealed cable exits Z Bus cover with 3 sealed cable exits
Preferably available versions are printed in bold type.					