

### DIMENSIONED DRAWINGS

see section "Absolute Encoders – dimensioned drawings"

### TECHNICAL DATA electrical

General design	as per EN 61010-1, protection class III contamination level 2, overvoltage class II
Supply voltage	10...30 V DC (SELV)
Power consumption	max 0,23 A
Recom. external fuse	T 0.25 A
EMC	noise emission as per EN 50081-2 noise immunity as per EN 50082-2
Linearity	$\pm 1/2$ bit ( $\pm 1$ bit with 13, 14, 25, 26 bit)
Type of code	binary
Interface	RS 485
Protocol	Profibus DP with encoder profile class C2 (parameterizable)
Baud rate	max. 12 Mbits/s
Device number	settable with DIP switches
Resolution <sup>1)</sup> physical	1024 pulses (10 Bit) singleturn 4096 pulses (12 Bit) singleturn 8192 pulses (13 Bit) singleturn 16384 pulses (14 Bit) singleturn 4096 pulses / 4096 revolutions (24 Bit) multiturn 8192 pulses / 4096 revolutions (25 Bit) multiturn 16384 pulses / 4096 revolutions (26 Bit) multiturn
Programmable functions	code sequence (Direction) resolution per revolution, total resolution, Preset

<sup>1)</sup> the resolution can be changed as required by programming the parameters

## PROFIBUS DP

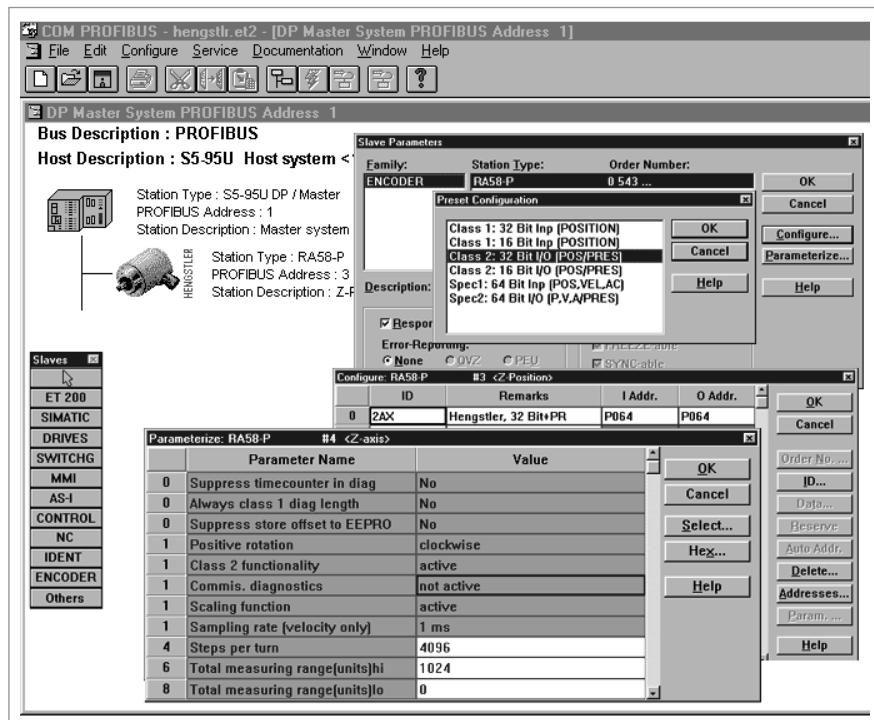
CONNECTION DIAGRAM  
 PROFIBUS  
 Connector 2-fold 12 pole  
 (integrated T-manifold)

Pin	Connector, 2-fold (I)		Description
	IN (pins)	OUT (socket)	
1		GND1	Data Ground (M5V) <sup>1)</sup>
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) <sup>1)</sup>
7	10...30 VDC	10...30 VDC	supply voltage +U <sub>B</sub> (P24)
8	0 V	0 V	supply voltage ground (M24)
9			
10			
11			
12			
screen	screen	screen	screen connected with encoder housing

<sup>1)</sup> Used as power supply for an external bus termination resistor

## STARTUP

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



## CERTIFICATION



**CERTIFICATE**

Die PROFIBUS Nutzerorganisation e.V. erteilt der

**Hengstler GmbH**  
**Uhlandstraße 49, D-78554 Aldingen**  
 das Zertifikat Nr.: **Z00381**  
 für folgendes Produkt:

**Name: RA 58-P**  
**Modell: Drehgeber an PROFIBUS-DP**  
**Version: HW: 1.0**  
**SW: 1.0**

Das Zertifikat bestätigt, daß das oben genannte Produkt die Prüfungen auf Konformität für PROFIBUS-DP Slave-Geräte erfolgreich bestanden hat.

Die Prüfungen erfolgten in dem von der PNO autorisierten Prüflabor beim Forschungszentrum Informatik in Karlsruhe. Prüfumfang und Prüfergebnis sind im Prüfbericht Nr. FZI/DP-Slave 49/1/1 protokolliert.

Dieses Zertifikat wird erteilt aufgrund der PNO-Richtlinie für Prüfen und Zertifizieren (PRZ) vom 1.1.1993 und ist gültig für einen Zeitraum von 3 Jahren bis zum 29.07.2001.

Karlsruhe, den 30.07.1998

  
 Der Vorstand der PROFIBUS Nutzerorganisation:

  
 (Bearbeiter)

  
 (E. Küster)

  
 (K.-P. Lindner)

## ACCESSORIES

	Ordering code
Clamping eccentric	0 070 655
Diaphragm coupling (hub diam. 6/6 mm)	3 520 081
Diaphragm coupling (hub diam. 10/10 mm)	3 520 088
Mating connector (12 pole, socket, clockwise) for bus input <sup>1)</sup>	3 539 202
Mating connector (12 pole, pins, clockwise) for bus output <sup>1)</sup>	3 539 186
Technical Manual Profibus, German	2 543 037
Technical Manual Profibus, English	2 543 045
Disc with GSD-file for Profibus DP	1 543 062

<sup>1)</sup> matching with connection I (twin flange connector with integrated T-manifold) with Profibus DP

### ORDERING DATA PROFIBUS DP

**Note for first ordering:**

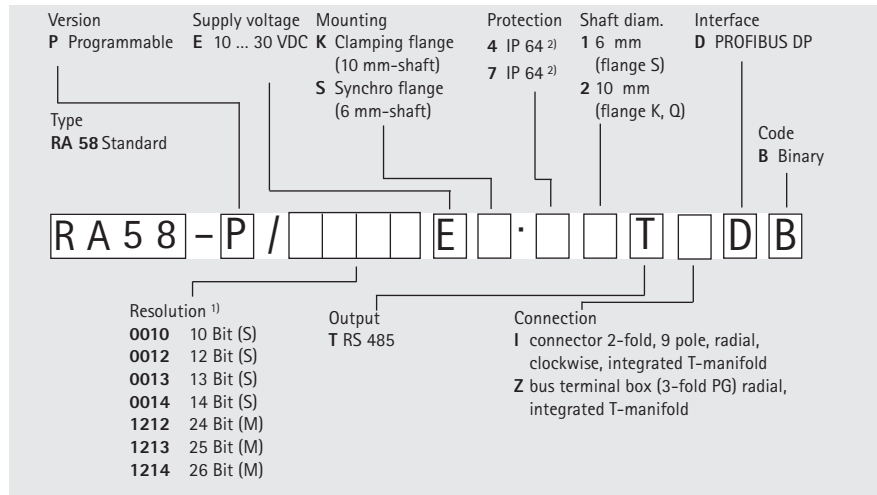
Please include in your order

- Technical Manual German or

English ordering code 2 543 037  
or 2 543 045

- Disc with GSD file,  
ordering code 1 543 062

Or download from  
[www.hengstler.com](http://www.hengstler.com)



<sup>1)</sup> S=Singleturn

M=Multiturn with 4096 (12 Bit) revolutions

<sup>2)</sup> IP 67 on request