



TECHNICAL DATA mechanical

- Product certified by an ODVA Testing Institute
- DeviceNet specification 2.0
- Easy installation and configuration using the EDS file
- Resolution up to 14 and 26 bits
- Opto-ASIC
- Microprocessor technology
- Bus terminal box (dual cable gland) used as new terminal design with integrated T-manifold
- Optional stainless steel design (RA 59)

DeviceNet™

Shaft diameter	6 mm (synchro flange), 10 mm (clamping flange)
Absolute max. shaft load (axial/radial)	6 mm shaft: 60 N (13 lbs)/110 N (24 lbs), 9.52/10 mm shaft: 107 N (24 lbs)/160 N (35 lbs)
Speed	10,000 min ⁻¹ (short-term), 6,000 min ⁻¹ (long-term)
Torque	< 0.5 Ncm (IP 64), < 1 Ncm (IP 67)
Moment of inertia	6 mm shaft: 14 gcm ² ; 9.52/10 mm shaft: 20 gcm ²
Protection class (EN 60529)	RA 58: housing IP 65 ¹⁾ , bearings IP 64 ¹⁾
Operating temperature	-25...+85 °C
Storage temperature	-25...+85 °C
Vibration resistance (IEC 68-2-6)	100 m/s ² (10-500 Hz) ²⁾
Shock resistance (IEC 68-2-27)	1000 m/s ² (6ms) ²⁾
Connection	Bus terminal box with dual cable gland
Housing	RA 58: Aluminum
Flange	RA 58: S = synchro flange, K = clamping flange
Weight approx.	Singleturn: RA 58 300 g, Multiturn: RA 58 350 g

¹⁾ IP 67 upon request

²⁾ For applications with higher vibration/shock values, see the section on accessories in the "Encoder" catalog: Encoders with Shock Module

TECHNICAL DATA electrical

General design	as per EN 61010 part 1, protection class III, contamination level 2, overvoltage class II
Supply voltage	10 ... 30 V DC (SELV)
Power consumption	max. 0.2 A
Recommended external fuse	T 0.25 A
EMC	Interference emission acc. to EN 50081-2, immunity acc. to EN 50082-2
Linearity	± ½ LSB (+1 LSB with a resolution of 13, 14, 25, 26 bits)
Encoding	binary
Interface	CAN high-speed according to ISO/DIS 11898, CAN specification 2.0 B (11 and 29 bit identifier)
Protocol	DeviceNet according to specification, version 2.0 for programmable units
Data refresh	Every 5 ms
Baud rate	Adjustable to 125, 250, 500 Kbps via 2 dip switches
MAC ID	Adjustable via 6 dip switches
Physical resolution ¹⁾	1,024 steps (10 bit) singleturn, 4,096 steps (12 bit) singleturn, 8,192 steps (13 bit) singleturn, 16,384 steps (14 bit) singleturn, 4,096 steps/4,096 rev (24 bit) multiturn, 8,192 steps/4,096 rev (25 bit) multiturn, 16,384 steps/4,096 rev (26 bit) multiturn
Programmable functions	
Transmission mode	polling mode (only upon request), bit strobe (synchronous for all units), change of state (automatic upon value change), cyclical with adjustable cycle timer
Encoder parameters	code sequence (direction), resolution per revolution, overall resolution, preset

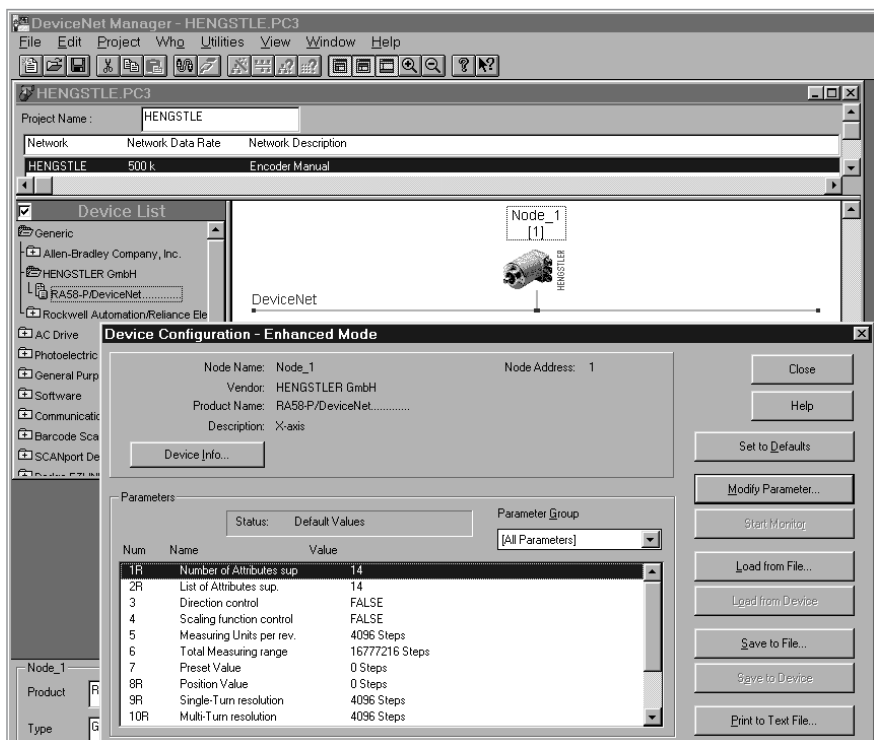
¹⁾ The resolution can be reduced as desired by programming the parameters.

ACCESSORIES

	Ordering Code
Synchro flange-clamping eccentric	0 070 655
Spring washer adapter coupling (hub 6/6 mm)	3 520 081
Spring washer adapter coupling (hub 10/10 mm)	3 520 088
Technical manual DeviceNet German	2 543 069
Technical manual DeviceNet English	2 543 070
Disc with EDS file for DeviceNet	1 543 083

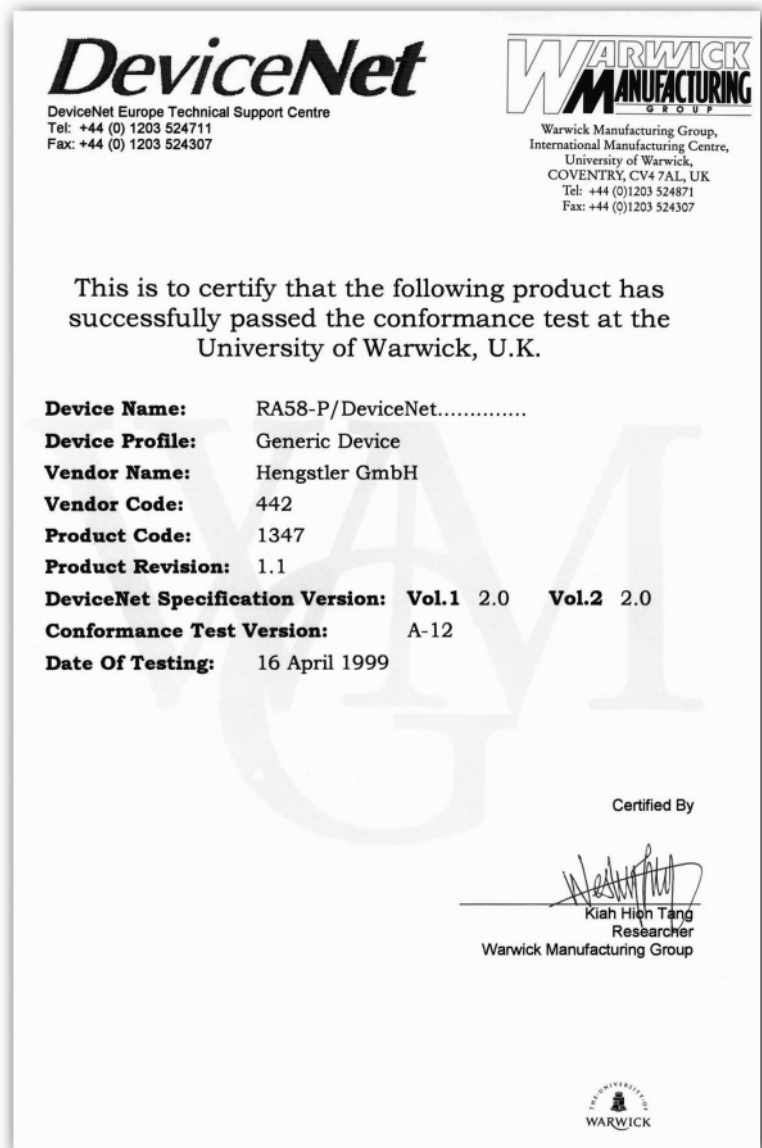
START-UP

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



CERTIFICATION

The encoder has been tested and certified for DeviceNet conformity and interoperability by the ODVA Testing Institute.
Or download from www.hengstler.com



Note for first-time orders:
Please also order the following:
- Technical manual:
 ordering code 2 543 069
 (German)
 ordering code 2 543 070
 (English)
- Disk with EDS file
 ordering code 1 543 083
Or download from www.hengstler.com

- 1) S=singleturn
 M=multiturn with 4096 (12 bit) revolutions
- 2) Bearing IP 64, housing IP 65

