

Absolute
Bearingless
Compact
Hysteresis-Free
High-Resolution
High Dynamic
Non-Contact
Easy-to-Mount
Status LED
Multi-Protocol
Vibration Resistant
Shock Resistant
Customizable

			
Model	HED022 HEM022	HED029 HEM029	HED039 HEM039
Specification			
Angular resolution	17~18 bit	17~18 bit	17~19 bit
Max Static Error	±0.1°	±0.1°	±0.1°
Repeatability Error	±2 LSB	±2 LSB	±2 LSB
Max Travel Speed	6000 rpm	6000 rpm	6000 rpm
Measuring Range	Single-turn, Multi-turn	Single-turn, Multi-turn	Single-turn, Multi-turn
Rotation Direction	Default CW(Adjustable)	Default CW(Adjustable)	Default CW(Adjustable)
Mechanical Dimensions and Installation			
OD \ ID \ Thickness	A: 28.5\6\7.6 mm	A: 38\10\8 mm	54\20\8 mm
Max. Eccentricity	±0.3 mm	±0.3 mm	±0.3 mm
Stator-Rotor Air Gap	1.3±0.1 mm	1.3±0.1 mm	1.3±0.1 mm
Rotor Inertia	0.29 kg·mm²	0.69 kg·mm²	2.58 kg·mm2
Weight (Approx.)	8 g	11 g	15 g
Rotor and Stator Material	FR-4	FR-4	FR-4
Environment			
EMC	IEC 61000-6-2、IEC 61000-6-4		
Operating Temperature	-30℃ - +85℃		
Relative Humidity	0 - 99%		
Shock	100 g / 11 ms		
Vibration	20 g (10 - 2000 Hz)		
Electrical & Interface			
Voltage	5 - 30V		
Current	< 100 mA		
Interface Type	RS-422/RS-485		
Output Protocol	SSI、BiSS-C、UART、SPI、ABZ		

				
Model	HED049 HEM049	HED055 HEM055	HED064 HEM064	HED084 HEM084
Specification				
Angular resolution	17~19 bit	17~20 bit	17~20 bit	17~20 bit
Max Static Error	±0.1°	±0.1°	±0.1°	±0.1°
Repeatability Error	±2 LSB	±2 LSB	±2 LSB	±2 LSB
Max Travel Speed	6000 rpm	3000 rpm	3000 rpm	3000 rpm
Measuring Range	Single-turn, Multi-turn	Single-turn, Multi-turn	Single-turn, Multi-turn	Single-turn, Multi-turn
Rotation Direction	Default CW(Adjustable)	Default CW(Adjustable)	Default CW(Adjustable)	Default CW(Adjustable)
Mechanical Dimensions and Installation				
OD \ ID \ Thickness	59\25\8 mm	67\35\8.6 mm	75\45\8.6 mm	96\65\8.6 mm
Max. Eccentricity	±0.3 mm	±0.3 mm	±0.3 mm	±0.3 mm
Stator-Rotor Air Gap	1.3±0.1 mm	1.3±0.1 mm	1.3±0.1 mm	1.3±0.1 mm
Rotor Inertia	5.45 kg·mm²	11.39 kg·mm²	18.88 kg·mm²	46.48 kg·mm²
Weight (Approx.)	18 g	22 g	25 g	30 g
Rotor and Stator Material	FR-4	FR-4	FR-4	FR-4
Environment				
EMC	IEC 61000-6-2、IEC 61000-6-4			
Operating Temperature	-30℃ - +85℃			
Relative Humidity	0 - 99%			
Shock	100 g / 11 ms			
Vibration	20 g (10 - 2000 Hz)			
Electrical & Interface				
Voltage	5 - 30V			
Current	< 100 mA			
Interface Type	RS-422/RS-485			
Output Protocol	SSI、BiSS-C、UART、SPI、ABZ			

