



R type Encoder

RoHS

- Two channel quadrature outputs
- Resolution 200 counts per revolution
- TTL compatible
- Single 5VDC supply
- HEDR serie encoders from Broadcom Limited

Encoder features

Parameter	R220
Supply voltage [VDC]	5 ± 0.5
Max. Supply current [mA]	33
Output voltage [VDC]	$V_{OH} = 2.4 \text{ min}, V_{OL} = 0.4 \text{ max}$
Output channels	2 (A, B)
Maximum frequency [kHz]	16

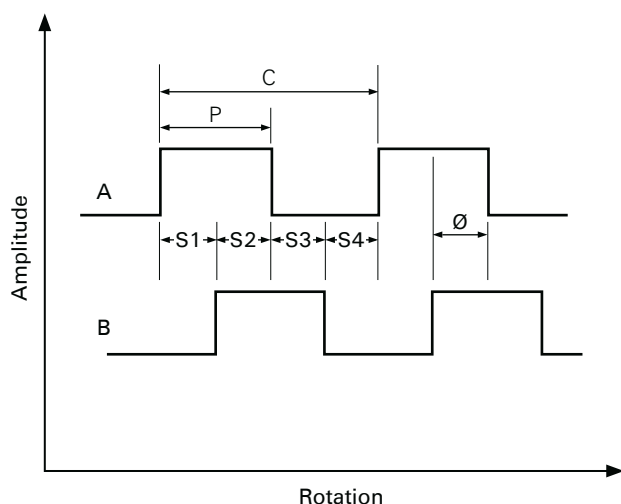
Encoder pin-outs

Pins	R220 35, 42mm sq.	R220 56, 86mm sq.
Pin 1	Channel B	GND
Pin 2	5 VDC	NC
Pin 3	Channel A	Channel A
Pin 4	NC	5 VDC
Pin 5	GND	Channel B

Encoder P/N

R220: 2 channels, 200CPR

Output waveforms

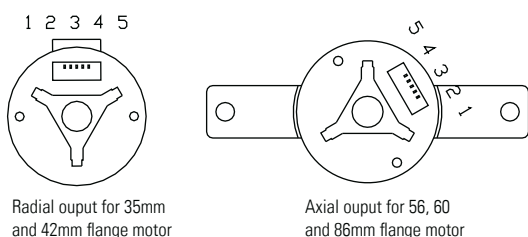


Encoding characteristics

Parameter	Symbol	R220	
		Typ.*	Max.
Pulse width error [°e]	ΔP	7	75
Logic width error [°e]	ΔS	15	60
Phase error [°e]	$\Delta \emptyset$	15	60
Position error [arcmin.]	$\Delta \Theta$	50	120
Cycle error [°e]	ΔC	10	45

*Typical values specified at supply voltage = 5.0 V and 25°C

Electrical interface



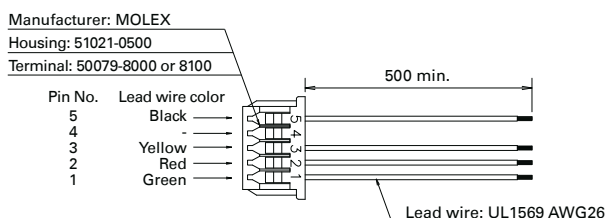
Pull-up resistors on output pins have already been integrated. Each of the three encoder outputs can drive a single TTL load in this configuration.

Suitable connectors

Manufacturer	Part number	
	Housing	Contact
Molex	51021-0500	50079-8000

Encoder cables

R220 Encoder, 35 & 42mm flange Motor, Cable P/N: **CRP12500**



R220 Encoder, 56, 60 & 86mm flange Motor, Cable P/N: CRS22500

