RH0920

Hall Effect rotary sensor dual output

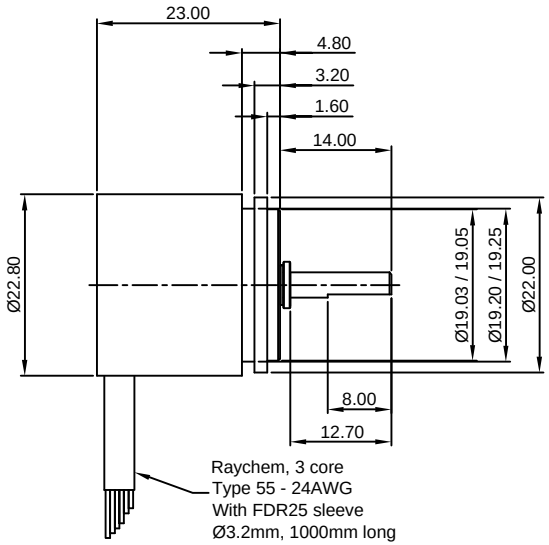
The RH0920 compact dual output rotary position sensor utilises non-contact Hall Effect technology. It operates from either a 5Vdc regulated or 6 to 30Vdc unregulated supply and is available with up to 360° of electrical angle. Output is analogue (0-5V). The sensor has a 10-bit resolution (0.352°) over the measuring angle and an impressive update time of <2mS, making it ideal for dynamic control and measurement systems. The electrical angle and output signal direction (clockwise or anticlockwise) are specified by the customer.

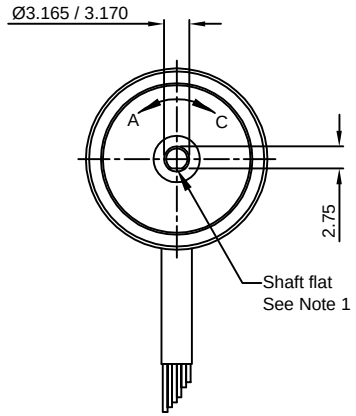
The sensor is housed in an aluminium casing and has a stainless steel operating shaft set within 'twin' stainless steel ball-race bearings. Every RH0920 sensor is heat cycled prior to final calibration to ensure survival when operated at elevated temperatures.

Other models in this range

RH0510 - Miniature flange mount
RH0520 - Miniature servo mount
RH0910 - Servo mount
RH5210 - Sprung shaft
RH5220 - Round shaft
RH5230 - Blade shaft
RH5240 - Dual output
RH5310 - Triangular flange, sprung shaft
RH5320 - Triangular flange, round shaft
RH5330 - Triangular flange, blade shaft
RH5340 - Triangular flange, dual output

Not to Scale
Dims: mm



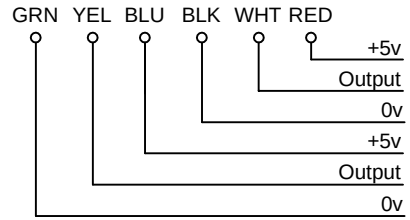


Electrical & Mechanical Information - both channels

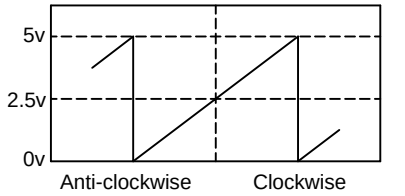
Electrical Angle	90 / 180 / 360		Degrees
Supply Voltage (+Vs)	4.5-5.5	6-30	Volts
Operating Temp Range	-40 to +150	See graph	°C
Phasing channel to channel	<1.0		%
Output	0.0 to Vs	0.0 to 4.096	Volts
Independent linearity	0.25		%
Power consumption	80		mW
Minimum output load	2000		Ohms
Temp. coefficient of output voltage	<20		ppm of span/°C
Starting torque (approx)	60		gf-cm
Mechanical Travel	Continuous		
Sealing	IP65		
Weight. (approx.)	42		grams

Note1: When shaft marking is facing cable exit, instrument is mid-travel. Note 2: Incorrect wiring may cause internal damage.

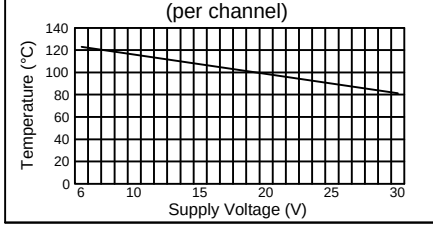
Electrical connections



Sensor output viewed on shaft
(Clockwise)



Operating temp. Vs Supply voltage
(per channel)



Ordering Information

RH0920-XA-XXX-X

L = 5Vdc input
H = 6 to 30Vdc input

Electrical angle in degrees

C = Clockwise
A = Anticlockwise

Active sensors
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