

### HALLTRON MAGNETIC FIELD PROBE

#### FEATURES

With high accuracy and low noise, the HR series Hall-Effect Probes are designed into end-user applications where a reliable measurement of magnetic field strength is a requirement. When a specified control current is applied to the probe, the listed output reflects a field strength of 10kGauss.



#### APPLICATIONS

Our HR series probes have been manufactured for 50 years and are used as a key system component in a diverse array of industry projects. Applications include medical devices, cryogenics, and military aerospace, as well as many industry and university research projects with a requirement for measuring a fixed or changing magnetic field.

### MODEL SELECTION

MODEL NUMBER	OUTPUT B=10kG (mV, ±25%)	CONTROL CURRENT I <sub>c</sub> (mA)	OHMIC RESIDUAL (mV)		TEMPERATURE COEFFICIENT (%/°C, typical)	DIMENSIONS (INCHES)			LEAD WIRES (AWG)
			B=0 I <sub>c</sub> =10mA	B=0 I <sub>c</sub> =100mA		A	B	C	
HR36	1225	350		<±0.15	-0.10	0.375	0.50	0.035	32
HR38	200	25	<±0.15		-0.25	0.375	0.63	0.035	32
HR66	500	200		<±0.50	-0.20	0.250	0.20	0.028	34
HR70	340	200		<±0.50	-0.10	0.250	0.20	0.028	32
HR72	700	100, max		<±2.0	-0.25	0.250	0.20	0.025	34
HR77	550	100	<±0.20		-0.25	0.250	0.20	0.028	34
HR88	400	300		<±1.4	-0.15	0.375	0.34	0.023	30
HR120	75	100		<±0.50	-0.05	0.250	0.20	0.028	34
HR125A	100	100		<±0.50	-0.05	0.250	0.20	0.028	34
HR170	20	200		<±0.03	-0.005	0.250	0.20	0.028	34

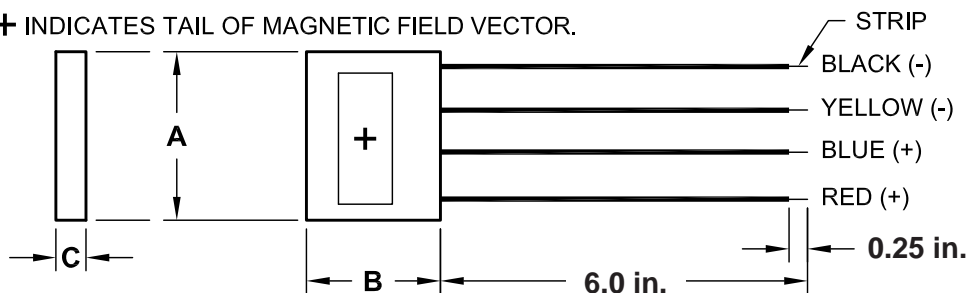
B = magnetic field strength, in Gauss    I<sub>c</sub> = control current (excitation current)

For full specifications on each model, visit our website at [www.ohiosemitronics.com](http://www.ohiosemitronics.com)

Other sizes and configurations are available. Consult factory for details.

### DIMENSIONS

† INDICATES TAIL OF MAGNETIC FIELD VECTOR.



WIRE COLOR	SIGNAL	
Red	+	Control Current
Black	-	
Blue	+	Output
Yellow	-	

Dwg# 0902-00859-B Rev A (mod.)

See model selection table for length, width, and thickness dimensions.

NOTE: For HR36 and HR38 probes, the wire color order is (top to bottom) Blue, Red, Yellow, Black. For HR88, both input leads are red and both output leads are green.