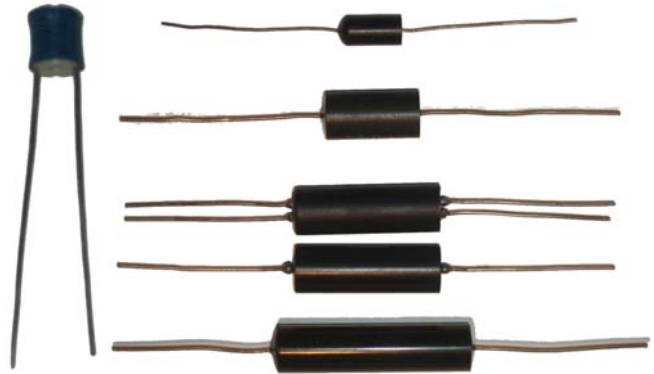


## PRECISION WIRE-WOUND RESISTORS

- *HIGH ACCURACY*
- *LOW TEMPERATURE COEFFICIENTS*
- *GOOD IMMUNITY FROM ENVIRONMENTAL EFFECTS*
- *HIGH RELIABILITY*
- *FROM 0.01  $\Omega$  TO 10 M $\Omega$*



LEEDS & NORTHRUP  
'TOP HAT' TYPE

R22 & R34 EPOXY TYPES  
4-WIRE & 2-WIRE OIL FILLED TYPES  
R48 TYPE

Ohm-Labs' personnel began manufacturing high precision, wire-wound resistors in the 1970's, for use in industrial control and test & measurement applications. We continue to supply critical resistor components to customers who require the highest quality and reliability.

Our acquisition of Leeds & Northrup's, Honeywell's and Julie Research Labs' resistor manufacturing materials and wire allows us to continue to offer these products. We supply and support all of L&N's, Honeywell's and JRL's resistor products. Please provide us with their OEM part number for a quotation.

To specify precision resistors, please refer to the chart to the right. First, select the type: either 'R' (epoxy encapsulated), 'H' (hermetically sealed and oil filled), or 'T' (top hat, or radial lead). Then, select the desired size (diameter and length). Specify 2-wire or 4-wire construction (4-wire is recommended below 10 ohms). Specify your desired accuracy and TCR (Temperature Coefficient of Resistance). Finally, specify the resistance.

Please note that due to wire size restrictions, not all resistance values are available in all sizes.

We also offer custom-matched resistor sets for precision ratio applications.

### Precision Resistor Part Number Guide: Type and Size Selection

Type	Diameter in 1/8 <sup>th</sup> s	Length in 1/4's	Leads
R = Epoxy	2/8 = 1/4"	2/4 = 1/2"	2 - wire
H = Oil Filled Herm. Sealed	3/8"	3/4"	
	4/8 = 1/2"	4/4 = 1"	4 - wire
T = Top Hat (Radial)		6/4 = 1.5"	
			8/4 = 2"

### Tolerance and Resistance Selection:

Accuracy	TCR ppm/°C	Resistance
A = 0.1%	A = <20	Specify resistance
B = 0.05%	B = <10	
C = 0.025%	C = <5	
D = 0.01%	D = <3	
E = 0.005%	E = <1	
F = 0.0025%		
G = 0.001%		

#### Examples:

R462DC-1M = Epoxy 1/2" x 1.5" 2-wire 0.01% 5 ppm TCR 1 Meg  
H484AD-1 = Oil filled 1/2" x 2" 4-wire 0.1% 3 ppm TCR 1 Ohm  
T422BB-25.5 = Radial 1/2" x 1/2" 2-wire 0.05% 10 ppm TCR 25.5

Stated accuracy is at time of manufacture.

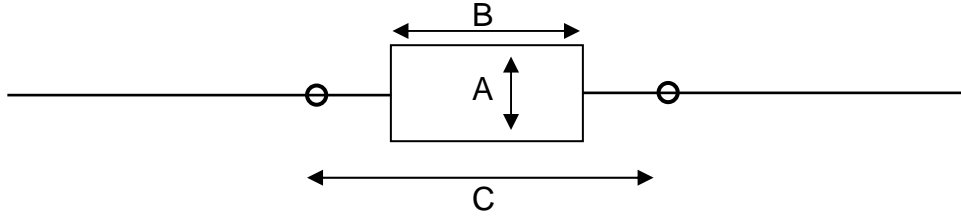
12-month initial stability is typically <20 ppm



# PRECISION WIRE-WOUND RESISTORS

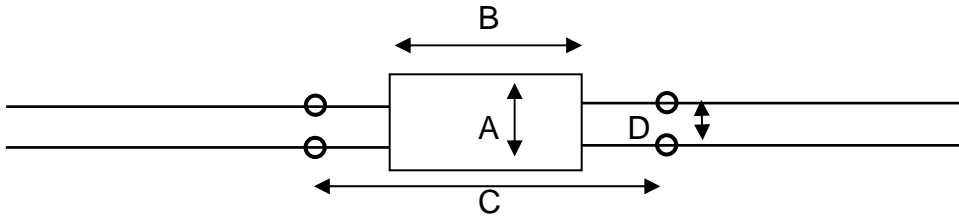
## Dimensions and mounting

2-wire resistors:



For 2-wire resistors, R or H type, dimensions and recommended hole spacing											
Type R	A	B	C	Type R H T	A	B	C	Type R H T	A	B	C
22	6.3	12.7	20.3	32	9.5	12.7	20.3	42	12.7	12.7	20.3
23	6.3	19.1	25.4	34	9.5	25.4	38.1	44	12.7	25.4	38.1
24	6.3	25.4	35.6	36	9.5	38.1	50.8	46	12.7	38.1	50.8
Wire	50 x 0.65 (22 AWG)			Wire	50 x 0.82 (20 AWG)			Wire	50 x 1.03 (18 AWG)		
For 4-wire resistors, R or H type, recommended 'D' lead wire spacing											
Type	D hole spacing			Type	D hole spacing			Type	D hole spacing		
2x	(Not available in 4-wire)			3x	5.1			4x	7.6		

4-wire resistors:



Top hat radial lead resistors:

