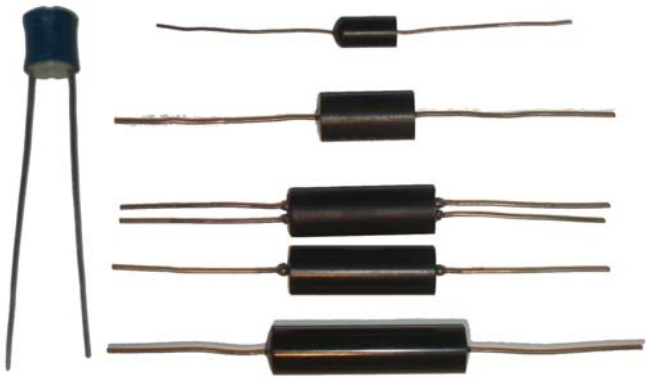
CUSTOM PRECISION WIRE-WOUND RESISTORS

- *HIGH ACCURACY*
- *LOW TEMPERATURE COEFFICIENTS*
- *HIGH IMMUNITY FROM ENVIRONMENTAL EFFECTS*
- *HIGH RELIABILITY*
- *FROM 0.01 Ω TO 10 MΩ*
- *BY SPECIAL ORDER ONLY*



LEEDS & NORTHRUP 'TOP HAT' TYPE

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

Ohm-Labs' can 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 wire wound resistors using these designs and materials.

Ohm-Labs can supply and support all of L&N, Honeywell and Julie Research Labs 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.

Smaller resistors (<34 size) are ½ W. Larger size are 1 W. For higher power, specify –HK Heat Sink construction.

Ohm-Labs can manufacture custom-matched resistor sets for precision ratio applications.

Precision Resistor Part Number Guide: Type and Size Selection

Type	Diameter in 1/8ths	Length in ¼'s	Leads
R = Epoxy	2/8 = ¼"	2/4 = ½"	2 - wire
H = Oil Filled Herm. Sealed	3/8"	¾"	
	4/8 = ½"	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 ½" x 1.5" 2-wire 0.01% 5 ppm TCR 1 Meg
H484AD-1 = Oil filled ½" x 2" 4-wire 0.1% 3 ppm TCR 1 Ohm
T422BB-25.5 = Radial ½" x ½" 2-wire 0.05% 10 ppm TCR 25.5

Stated accuracy is at time of manufacture.
12-month initial stability is typically <20 ppm

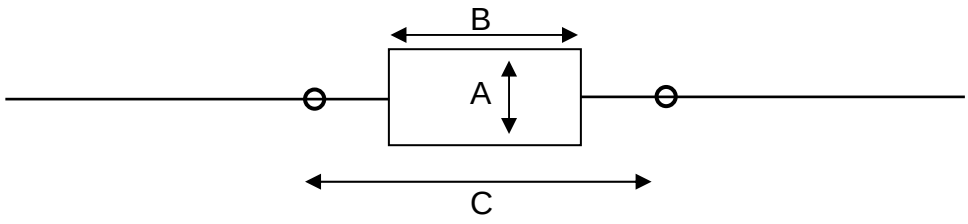
Excellence in Resistance

Ohm-Labs, Inc. 611 E. Carson St. Pittsburgh, PA 15203-1021 Tel. 412-431-0640 www.ohm-labs.com

CUSTOM PRECISION WIRE-WOUND RESISTORS

Dimensions and mounting

2-wire resistors:

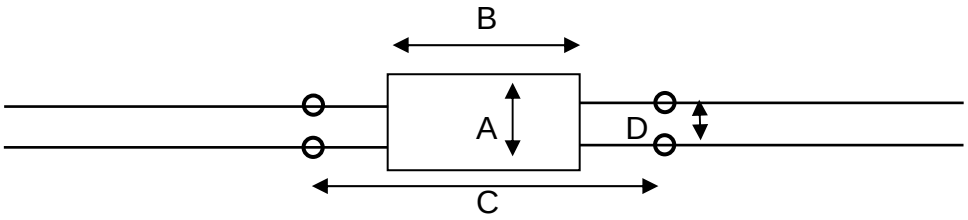


For 2-wire resistors, R or H type, dimensions and recommended hole spacing											
Type R	A mm/"	B mm/"	C mm/"	Type R H T	A	B	C	Type R H T	A	B	C
22	6	12.7	20.3	32	9.5/	12.7	20.3	42	12.7	12.7	20.3
23	6	19.1	25.4	34	9.5	25.4	38.1	44	12.7	25.4	38.1
24	6	25.4	35.6	36	9.5	38.1	50.8	46	12.7	38.1	50.8
								48	12.7	50.8	76.2
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

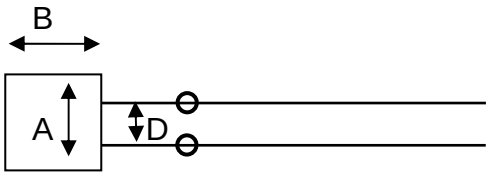
R32, R44 & R48 are recommended sizes

4-wire resistors:



H34, H36 & H48 are recommended sizes

Top hat radial lead resistors:



T32 & T44 are recommended sizes