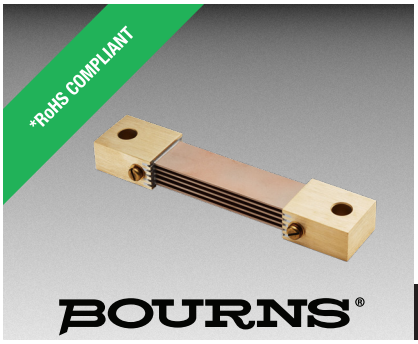


Features

- Formerly a Riedon™ product
- Current rating: 15 to 600 A
- 0.083 to 3.33 mΩ resistance @ 50 mV output
- Non-inductive metal element
- Manganin™ resistive element
- 0.25 % tolerance
- RoHS compliant*

Applications

- Frequency converters
- Current sensing

RSH Series – Riedon™ DC Ammeter Shunts / Busbar Shunts by Bourns

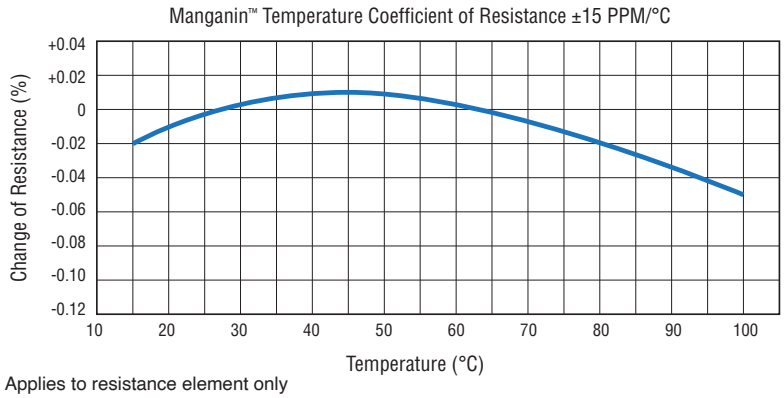
Electrical Characteristics

Model	Rated Current (A)	Operating Current (A)	Resistance (mΩ)	
			50 mV Output	100 mV Output
RSH-15	15	10	3.333	—
RSH-20	20	13.4	2.500	—
RSH-50	50	33.4	1.000	2.00
RSH-75	75	50	0.667	1.333
RSH-100	100	66.7	0.500	1.00
RSH-125	125	83.4	0.400	—
RSH-150	150	100	0.333	0.667
RSH-175	175	116.7	0.286	—
RSH-200	200	133.4	0.250	0.500
RSH-250	250	166.7	0.200	0.400
RSH-300	300	200	0.167	0.333
RSH-375	375	250	0.133	0.267
RSH-400	400	266.7	0.125	0.250
RSH-500	500	333.4	0.100	0.200
RSH-600	600	400	0.083	0.167

Operating Current Derating

For continuous operation, it is recommended that shunts are not operated at more than two thirds (2/3) the rated current under normal conditions per IEEE standards for DC instrument shunts. At ambient temperatures above 40 °C, the current must be further derated to prevent damage.

TCR Curve



Note: Applies to resistance element only

CALIFORNIA WARNING Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

Additional Information

Click these links for more information:

PRODUCT | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

General Specifications

Rated Output .....50 mV, 100 mV, Custom Available
Voltage Tolerance ..... ±0.25 % Standard
Operating Temperature
..... -40 °C to +70 °C
Storage Temperature
..... -55 °C to +80 °C

Materials

Construction .....Flame resistant all-metal
Resistance Element..... Manganin™
Terminal Block .....Brass

How to Order

RSH - 100 - 50 - S

Model

Rated Current (see table)
100 = 100 A

Voltage Output (mV)
50 = 50 mV
100 = 100 mV

Packaging Option
(blank) = Standard Bulk Packaging
-S = Individual Box Packaging

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

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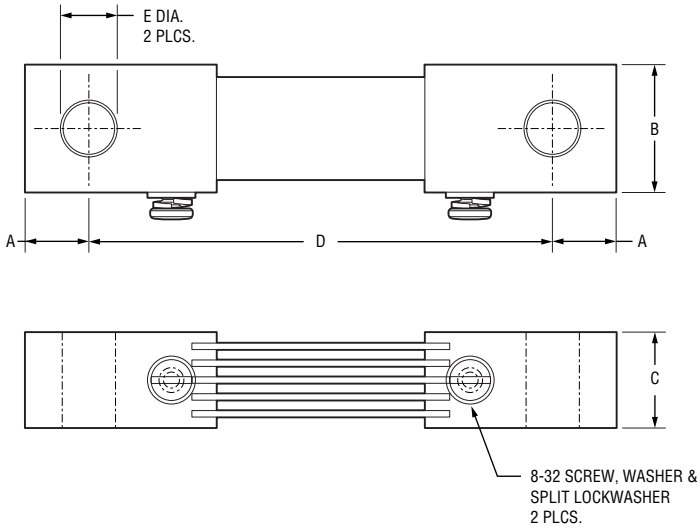
"Manganin" is a trademark of Isabellenhütte Heusler GmbH & Co.

Product Dimensions



50 mV Output Models

Model	A	B	C	D ± 0.89 (0.035)	E
RSH-15	10.31 (0.406)	15.88 (0.625)	9.53 (0.375)	84.14 (3.313)	8.73 (0.344)
RSH-20		15.88 (0.625)	9.53 (0.375)	84.14 (3.313)	8.73 (0.344)
RSH-50		15.88 (0.625)	9.53 (0.375)	84.14 (3.313)	8.73 (0.344)
RSH-75		15.88 (0.625)	9.53 (0.375)	84.14 (3.313)	8.73 (0.344)
RSH-100		19.05 (0.750)	9.53 (0.375)	84.14 (3.313)	8.73 (0.344)
RSH-125		25.40 (1.000)	9.53 (0.375)	84.14 (3.313)	8.73 (0.344)
RSH-150		25.40 (1.000)	9.53 (0.375)	84.14 (3.313)	8.73 (0.344)
RSH-175		19.05 (0.750)	12.70 (0.500)	84.14 (3.313)	8.73 (0.344)
RSH-200		25.40 (1.000)	12.70 (0.500)	84.14 (3.313)	8.73 (0.344)
RSH-250		25.40 (1.000)	12.70 (0.500)	84.14 (3.313)	8.73 (0.344)
RSH-300		31.75 (1.250)	12.70 (0.500)	84.14 (3.313)	8.73 (0.344)
RSH-375	12.70 (0.500)	25.40 (1.000)	19.05 (0.750)	84.14 (3.313)	8.73 (0.344)
RSH-400		25.40 (1.000)	19.05 (0.750)	92.08 (3.625)	10.32 (0.406)
RSH-500		31.75 (1.250)	19.05 (0.750)	92.08 (3.625)	10.32 (0.406)
RSH-600		38.10 (1.500)	19.05 (0.750)	92.08 (3.625)	10.32 (0.406)

100 mV Output Models

Model	A	B	C	D ± 0.89 (0.035)	E
RSH-50	10.31 (0.406)	15.88 (0.625)	9.53 (0.375)	125.41 (4.937)	8.73 (0.344)
RSH-75		15.88 (0.625)	9.53 (0.375)	125.41 (4.937)	8.73 (0.344)
RSH-100		19.05 (0.750)	9.53 (0.375)	125.41 (4.937)	8.73 (0.344)
RSH-150		25.40 (1.000)	9.53 (0.375)	125.41 (4.937)	8.73 (0.344)
RSH-200		25.40 (1.000)	12.70 (0.500)	125.41 (4.937)	8.73 (0.344)
RSH-250		25.40 (1.000)	12.70 (0.500)	125.41 (4.937)	8.73 (0.344)
RSH-300		31.75 (1.250)	12.70 (0.500)	125.41 (4.937)	8.73 (0.344)
RSH-375	12.00 (0.473)	25.40 (1.000)	19.05 (0.750)	134.94 (5.313)	10.32 (0.406)
RSH-400		25.40 (1.000)	19.05 (0.750)	134.94 (5.313)	10.32 (0.406)
RSH-500		31.75 (1.250)	19.05 (0.750)	134.94 (5.313)	10.32 (0.406)
RSH-600		38.10 (1.500)	19.05 (0.750)	134.94 (5.313)	10.32 (0.406)

DIMENSIONS: MM / (INCHES)

Dimension tolerances: ±0.381 mm (±0.015 in.) for hole diameters. All other dimensions have a ±0.762 mm (±0.030 in.) tolerance

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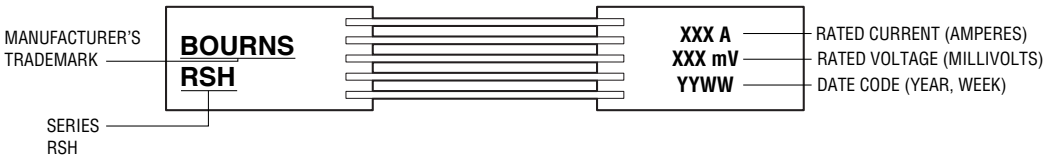
Typical Part Marking



Packaging Specifications

Standard Package Type

Model	Qty. per Package	Packaging
RSH	3	Wrapped in cellulose wadding

Individual Package Type

Model	Qty. per Package	Packaging (WxLxH)
RSH	1	Individual box (7.1 x 1.88 x 1.13 in.)

BOURNS®

Americas: Tel: +1 951-781-5500 • Email: americus@bourns.com
Mexico: Tel: +52-614-478-0400 • Email: mexicus@bourns.com
Asia: Tel: +886-2-2562-4117 • Email: asiacus@bourns.com
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