



RSR SERIES ALUMINUM CORD GRIPS



RSR Series Straight Aluminum Cord Grips (CONTINUED FROM PAGES 10-11)

For applications known for their severe conditions – such as oil and gas, marine, food &

chemical processing – RSR Cord Grips are available in nickel-plated aluminum. Providing exceptional corrosion resistance and high wear resistance, nickel-plated connectors also feature an attractive finish similar to that of polished stainless steel.

Tuff Seal RSR Cord Grips protect cable from damage and pull-out and are used in conduit hubs or knock-outs at the point where the electrical cable is to be terminated.

NOTES

Cord Grip Accessories

Locknuts: add "-L" to any part number

O-Rings: add "-R" to any part number

Special Configurations

Special configurations and materials are available.

Consult factory.

All wire mesh is stainless steel.

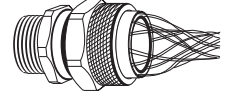
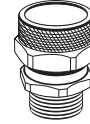
Dimension & certification information on pages 50 & 52 in

Tuff-Seal Technical Reference.



Nickel-plated aluminum: Cord grips available in nickel-plated aluminum. Add "N" to end of prefix. (ex: RSR-309 becomes RSRN-309)

COMPLETE ASSEMBLY PART NUMBERS



| Conduit Size (NPT) | Cable Range | Cord Grip | Cord Grip With Mesh |
|--------------------|---------------|-----------|---------------------|
| 1" | | | |
| | .438 – .562 | RSR-309 | RSR-309-E |
| | .562 – .625 | RSR-310 | RSR-310-E |
| | .562 – .688 | RSR-311 | RSR-311-E |
| | .625 – .750 | RSR-312 | RSR-312-E |
| | .688 – .812 | RSR-313 | RSR-313-E |
| | .750 – .875 | RSR-314 | RSR-314-E |
| | .812 – .938 | RSR-315 | RSR-315-E |
| | .875 – 1.000 | RSR-316 | RSR-316-E |
| | .875 – 1.000 | RSR-3516 | RSR-3516-E |
| | 1.000 – 1.125 | RSR-3518 | RSR-3518-E |
| | 1.125 – 1.250 | RSR-3520* | RSR-3520-E |
| | 1.250 – 1.375 | RSR-3522* | RSR-3522-E |
| 1 1/4" | | | |
| | .562 – .688 | RSR-411 | — |
| | .688 – .812 | RSR-413 | — |
| | .750 – .875 | RSR-414 | — |
| | .875 – 1.000 | RSR-416 | RSR-416-E |
| | 1.000 – 1.125 | RSR-418 | RSR-418-E |
| | 1.125 – 1.250 | RSR-420* | RSR-420-E |
| | 1.250 – 1.375 | RSR-422* | RSR-422-E |
| 1 1/2" | | | |
| | .562 – .688 | RSR-511 | — |
| | .688 – .812 | RSR-513 | — |
| | .750 – .875 | RSR-514 | — |
| | .875 – 1.000 | RSR-516 | RSR-516-E |
| | 1.000 – 1.125 | RSR-518 | RSR-518-E |
| | 1.125 – 1.250 | RSR-520 | RSR-520-E |
| | 1.250 – 1.375 | RSR-522 | RSR-522-E |
| | 1.250 – 1.375 | RSR-5622 | RSR-5622-E |
| | 1.438 – 1.562 | RSR-5625 | RSR-5625-E |
| | 1.562 – 1.688 | RSR-5627* | RSR-5627-E |
| | 1.688 – 1.812 | RSR-5629* | RSR-5629-E |
| 2" | | | |
| | 1.250 – 1.375 | RSR-622 | RSR-622-E |
| | 1.312 – 1.437 | RSR-623 | RSR-623-E |
| | 1.438 – 1.562 | RSR-625 | RSR-625-E |
| | 1.562 – 1.688 | RSR-627 | RSR-627-E |
| | 1.688 – 1.812 | RSR-629 | RSR-629-E |
| | 1.688 – 1.812 | RSR-6729 | RSR-6729-E |
| | 1.812 – 1.938 | RSR-6731 | RSR-6731-E |
| | 1.938 – 2.062 | RSR-6733* | RSR-6733-E |
| | 2.062 – 2.188 | RSR-6735* | RSR-6735-E |
| | 2.188 – 2.312 | RSR-6737* | RSR-6737-E |
| | 2.312 – 2.438 | RSR-6739* | RSR-6739-E |
| 2 1/2" | | | |
| | 1.688 – 1.812 | RSR-729 | RSR-729-E |
| | 1.812 – 1.938 | RSR-731 | RSR-731-E |
| | 1.938 – 2.062 | RSR-733 | RSR-733-E |
| | 2.062 – 2.188 | RSR-735 | RSR-735-E |
| | 2.188 – 2.312 | RSR-737 | RSR-737-E |
| | 2.312 – 2.438 | RSR-739* | RSR-739-E |
| 3" | | | |
| | 1.688 – 1.812 | RSR-8729 | RSR-8729-E |
| | 1.812 – 1.938 | RSR-8731 | RSR-8731-E |
| | 1.938 – 2.062 | RSR-8733 | RSR-8733-E |
| | 2.062 – 2.188 | RSR-8735 | RSR-8735-E |
| | 2.188 – 2.312 | RSR-8737 | RSR-8737-E |
| | 2.312 – 2.438 | RSR-8739* | RSR-8739-E |
| | 2.437 – 2.625 | RSR-901 | RSR-901-E |
| | 2.625 – 2.812 | RSR-902 | RSR-902-E |
| | 2.812 – 3.000 | RSR-903 | RSR-903-E |
| | 3.000 – 3.250 | RSR-904 | RSR-904-E |

*Cable may have to be stripped to pass through the bore of the body



TUFF-SEAL TECHNICAL REFERENCE SECTION

RoHS STATEMENT

Remke Industries supports the European Union's efforts to remove harmful chemicals from electrical products. In compliance with Directive 2002/95/EC of the European Parliament and the Council of the European Union regarding the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), Remke Industries certifies either:

1. The maximum concentration values of weight in homogenous materials for the substances referred to in Article 4(1) of directive 2002/95/EC that are contained in the products do not exceed the maximum concentration values of 0.1% in respect of lead, mercury, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers, and 0.01% in respect of cadmium. OR
2. The product supplied is exempt from this directive.

Remke Industries certifies that all products of our manufacture are fully compliant to the current RoHS Directive.



REMKE INDUSTRIES
REGISTERED TO ISO 9001 : 2000
FILE NUMBER A9208

ISO CERTIFICATION

On July 1st, 2003 Remke Industries received ISO 9001 : 2000 certification which certifies that Remke is compliant with current ISO standards.

OPERATING TEMPERATURES

| Material | Temperature range |
|----------------------|------------------------------------|
| Aluminum | -40°F to +300°F (-40°C to +149°C) |
| Buna-N | -40°F to +250°F (-40°C to +121°C) |
| Nylon | -40°F to +225°F (-40°C to +107°C) |
| Steel | -60°F to +1000°F (-51°C to +537°C) |
| Stainless Steel | -60°F to +1000°F (-51°C to +537°C) |
| Neoprene (bushings) | -40°F to +250°F (-40°C to +121°C) |
| Silicone (bushings) | -150°F to +390°F (-65°C to +232°C) |
| Valox | -40°F to +250°F (-40°C to +121°C) |
| Dome-Cap Connectors: | |
| Non-Metallic | -22°F to +176°F (-30°C to +80°C) |
| Metallic | -40°F to +212°F (-40°C to +100°C) |

FLAMMABILITY

| Component | Rating |
|-----------|----------|
| Mesh Grip | UL 94HB |
| Fitting | UL 94V-2 |

Note: Non-metallic cord connectors will not support combustion.

APPROVALS, CERTIFICATION & COMPLIANCES

| Agency | File Number | Product or Component | | |
|--------------------------------------|--|-----------------------------------|-----------------|---------------------------------|
| Underwriters Laboratories Inc. (UL) | E53599 | RSR Series (Straight, 90°, 45°) | | |
| | | RSP Series (Straight, 90°) | | |
| | | RSM Cord Grips | | |
| | | RSRS Cord Grips | | |
| | | RSRF Series | | |
| | E52002 | Liqua-Seal Connectors | | |
| | E52002(N) | WH Series Watertight Conduit Hubs | | |
| | E157356(N) | WH Series Watertight Conduit Hubs | | |
| Canadian Standards Association (CSA) | 28985 | RSR Series (Straight, 90°, 45°) | | |
| | | RSP Series (Straight, 90°) | | |
| | | RSRS Cord Grips | | |
| | | RSRF Series | | |
| | | RSSS Series | | |
| | | RSPV Series | | |
| | | MC Cable Connectors | | |
| | | Watertight Conduit Hubs | | |
| | | National Electrical Code (NEC) | Articles 400-10 | RSR Series (Straight, 90°, 45°) |
| | | | Articles 400-14 | RSP Series (Straight, 90°) |
| | | RSM Cord Grips | | |
| | | RSRS Cord Grips | | |
| | | RSRF Series | | |
| | Articles 501-4(B) | WH Series Watertight Conduit Hubs | | |
| | Articles 502-4(A) | WH Series Watertight Conduit Hubs | | |
| | Articles 503-3(A) | WH Series Watertight Conduit Hubs | | |
| ROHS & WEE | All Tuff-Seal and Tuff-Link Products are Compliant | | | |

HAZARDOUS LOCATIONS

| Definition | Remke Products |
|---|--|
| The Remke products listed are suitable for use in hazardous locations per Class I, Div. 2, Class II, Div 1 & 2, and Class III, Div. 1 & 2 | RSR Series (Straight, 90°, 45°) WH Series Watertight Conduit Hubs RSP Series (Straight, 90°) RSM Cord Grips, RSRS Cord Grips RSRF Series |

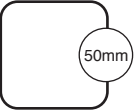
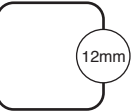
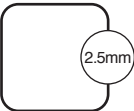
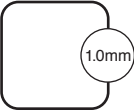
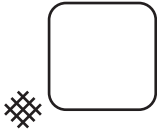
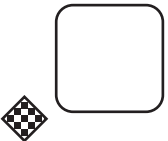
KNOCKOUT DIMENSIONS

| N.P.T. Hub Size | Knockout Hole Recommended (Min to Max /Inches) |
|-----------------|--|
| 1/4" | .540 to .570 |
| 3/8" | .671 to .701 |
| 1/2" | .859 to .906 |
| 3/4" | 1.094 to 1.141 |
| 1" | 1.359 to 1.406 |
| 1 1/4" | 1.719 to 1.766 |
| 1 1/2" | 1.969 to 2.016 |
| 2" | 2.453 to 2.500 |
| 2 1/2" | 2.953 to 3.000 |
| 3" | 3.578 to 3.625 |

RATINGS/MATERIAL OF CONSTRUCTION



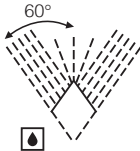

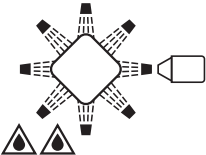
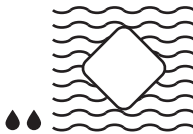
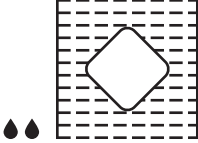
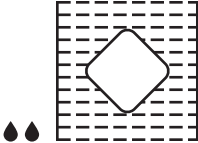
| Material | IP 54 and NEMA 3 | IP 54 and NEMA 3R | IP 65 and NEMA 4 | IP 56 and NEMA 4X | IP 67 and NEMA 6 | IP 52 and NEMA 12 |
|------------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|
| Aluminum | X | X | X | — | X | X |
| Nickel-Plated Aluminum | X | X | X | X | X | X |
| Steel | X | X | X | — | X | X |
| Stainless Steel | X | X | X | X | X | X |
| Nylon | X | X | X | — | X | X |
| Valox | X | X | X | X | X | X |

IP RATINGS DEFINITION

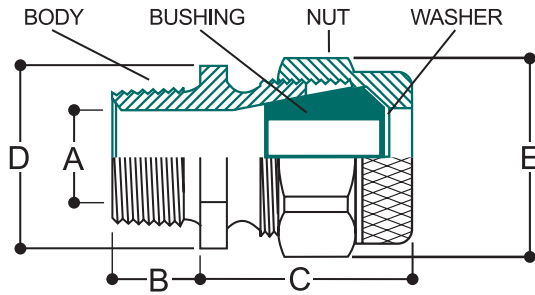
| First Digit | | Protection From Solid Objects |
|-------------|---|---|
| 0 | | Non-Protected |
| 1 |  | Protected against solid objects over 50mm e.g. hands, large tools |
| 2 |  | Protected against solid objects over 12mm e.g. hands, large tools |
| 3 |  | Protection from entry by solid objects over 2.5mm e.g. wire or small tools |
| 4 |  | Protection from entry by solid objects over 1.0mm e.g. wires or tools |
| 5 |  | Protection against deposits of dust e.g. against equipment damage due to deposits |
| 6 |  | Total protection against dust ingress e.g. Dust-Tight |

IP CODE EXAMPLE

IP54 = IP (IP LETTER CODE), 5 (1st Digit), 4 (2nd Digit)

| Second Digit | | Protection From Moisture |
|--------------|--|---|
| 0 | | Non-Protected |
| 1 |  | Protection against vertically falling drops of water |
| 2 |  | Protection against direct sprays of water up to a 15° angle |
| 3 |  | Protection against direct sprays of water up to a 60° angle |
| 4 |  | Protection against water sprayed from any direction. Limited ingress permitted. |
| 5 |  | Protection against low pressure water jets from any direction. Limited ingress permitted |
| 6 |  | Protection against high pressure water jets from any direction. Limited ingress permitted. |
| 7 |  | Protection against immersion between 15cm and 1M |
| 8 |  | Protection against complete and continuous immersion in water under pressure e.g. Water-Tight |

RSR STRAIGHT CORD GRIP DIMENSIONS



ALUMINUM AND NICKEL-PLATED ALUMINUM

| Conduit Size | RSR Series | Form Size | A Inside Body Dia. | B | C | D Body Hex | E Nut Dia. |
|--------------|------------|-----------|-----------------------|------|------|---------------|---------------|
| 1/4" | 000 | 1 | 0.34 | 0.44 | 0.59 | 0.88 | 0.96 |
| 3/8" | 00 | 1 | 0.46 | 0.44 | 0.59 | 0.88 | 0.96 |
| 1/2" | 1000 | 1 | 0.46 | 0.44 | 0.59 | 0.88 | 0.96 |
| 1/2" | 100 | 2 | 0.62 | 0.56 | 0.72 | 1.00 | 1.26 |
| 1/2" | 1200 | 3 | 0.62 | 0.54 | 0.86 | 1.37 | 1.55 |
| 3/4" | 2100 | 2 | 0.62 | 0.56 | 0.72 | 1.12 | 1.26 |
| 3/4" | 200 | 3 | 0.81 | 0.57 | 0.86 | 1.25 | 1.55 |
| 3/4" | 2300 | 4 | 0.81 | 0.57 | 0.97 | 1.37 | 1.74 |
| 1" | 300 | 4 | 1.00 | 0.62 | 0.97 | 1.44 | 1.74 |
| 1" | 3500 | 5 | 1.10 | 0.70 | 1.25 | 2.00 | 2.47 |
| 1 1/4" | 400 | 5 | 1.30 | 0.70 | 1.25 | 2.00 | 2.47 |
| 1 1/2" | 500 | 5 | 1.43 | 0.70 | 1.25 | 2.47 | 2.47 |
| 1 1/2" | 5600 | 6 | 1.44 | 1.00 | 1.72 | 2.90 | 2.97 |
| 2" | 600 | 6 | 2.03 | 0.80 | 1.72 | 2.46 | 2.97 |
| 2" | 6700 | 7 | 1.90 | 1.31 | 3.50 | 4.00 | 4.30 |
| 2 1/2" | 700 | 7 | 2.36 | 1.31 | 3.50 | 4.00 | 4.30 |
| 3" | 8700 | 7 | 2.36 | 1.31 | 3.50 | 4.00 | 4.30 |
| 3" | 900 | 9 | 3.05 | 1.39 | 3.35 | 5.00 | 5.00 |

Dimension A is the minimum Inside Body Diameter. Other dimensions are nominal.

Dimension D is with the Nut snug but Bushing uncompressed.

Dimension E is across the flats.

NYLON AND VALOX

| Conduit Size | Form Size | A Inside Body Dia. | B | C | D Body Hex | E Nut Dia. |
|--------------|-----------|-----------------------|------|------|---------------|---------------|
| 3/8" | 1 | 0.44 | 0.49 | 0.70 | 0.94 | 0.94 |
| 1/2" | 2 | 0.50 | 0.88 | 1.12 | 1.25 | 1.25 |
| 3/4" | 3 | 0.56 | 0.88 | 1.38 | 1.50 | 1.50 |

STEEL

| Conduit Size | Form Size | A Inside Body Dia. | B | C | D Body Hex | E Nut Dia. |
|--------------|-----------|-----------------------|------|------|---------------|---------------|
| 3/8" | 1 | 0.47 | 0.44 | 0.56 | 0.88 | 0.88 |
| 1/2" | 2 | 0.62 | 0.56 | 0.69 | 1.00 | 1.26 |
| 3/4" | 3 | 0.81 | 0.56 | 0.85 | 1.25 | 1.37 |
| 1" | 4 | 0.99 | 0.63 | 0.94 | 1.43 | 1.56 |

STAINLESS STEEL

| Conduit Size | Form Size | A Inside Body Dia. | B | C | D Body Hex | E Nut Dia. |
|--------------|-----------|-----------------------|------|------|---------------|---------------|
| 3/8" | 1 | 0.47 | 0.44 | 0.56 | 0.94 | 0.88 |
| 1/2" | 2 | 0.62 | 0.56 | 0.69 | 1.12 | 1.26 |
| 3/4" | 3 | 0.81 | 0.56 | 0.85 | 1.37 | 1.37 |
| 1" | 4 | 1.00 | 0.63 | 0.94 | 1.56 | 1.56 |