

## TUFF-SEAL™

### RSR SERIES ALUMINUM CORD GRIPS



#### RSR Series 90° Aluminum Cord Grips

Tuff Seal™ 90° RSR Cord Grips are UL Listed and CSA Certified for use in both indoor and outdoor applications to prevent

cable pullout, control arc of bend, and to provide a tight seal against environmental elements such as dirt, moisture and coolants.

These cord grips with external threads offer the same features as the straight RSR grips described on page 6. 90° grips can be ordered with or without wire mesh attachments, accommodate conduit sizes from 3/8" to 2" and are available in machined aluminum, nylon and Valox®.

For applications known for their severe conditions – such as oil and gas, marine, food & chemical processing – RSR 90° 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.

These Tuff Seal 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

Accessories

Locknuts and O-Rings: Pages G-18

Special Configurations

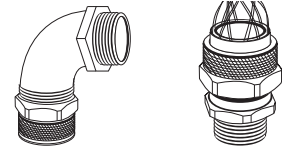
Special configurations and materials are available.

Consult factory.

All wire mesh is stainless steel.

Dimension & certification information on pages G-34 & G-36 in Tuff-Seal Technical Reference.

#### COMPLETE ASSEMBLY PART NUMBERS



| Conduit Size (NPT) | Cable Range   | Cord Grip | Cord Grip With Mesh |
|--------------------|---------------|-----------|---------------------|
| <b>3/8"</b>        |               |           |                     |
|                    | .125 – .188   | RSR-9003  | —                   |
|                    | .188 – .250   | RSR-9004  | RSR-9004-E          |
|                    | .250 – .312   | RSR-9005  | RSR-9005-E          |
|                    | .312 – .375   | RSR-9006  | RSR-9006-E          |
|                    | .375 – .438   | RSR-9007  | RSR-9007-E          |
| <b>1/2"</b>        |               |           |                     |
|                    | .125 – .188   | RSR-9103  | —                   |
|                    | .188 – .250   | RSR-9104  | RSR-9104-E          |
|                    | .250 – .312   | RSR-9105  | RSR-9105-E          |
|                    | .312 – .375   | RSR-9106  | RSR-9106-E          |
|                    | .375 – .438   | RSR-9107  | RSR-9107-E          |
|                    | .438 – .500   | RSR-9108  | RSR-9108-E          |
|                    | .500 – .562   | RSR-9109  | RSR-9109-E          |
|                    | .562 – .625   | RSR-9110  | RSR-9110-E          |
| <b>3/4"</b>        |               |           |                     |
|                    | .438 – .500   | RSR-9208  | RSR-9208-E          |
|                    | .500 – .562   | RSR-9209  | RSR-9209-E          |
|                    | .500 – .625   | RSR-9210  | RSR-9210-E          |
|                    | .562 – .688   | RSR-9211  | RSR-9211-E          |
|                    | .625 – .750   | RSR-9212  | RSR-9212-E          |
|                    | .688 – .812   | RSR-9213  | RSR-9213-E          |
| <b>1"</b>          |               |           |                     |
|                    | .500 – .562   | RSR-9309  | RSR-9309-E          |
|                    | .500 – .625   | RSR-9310  | RSR-9310-E          |
|                    | .562 – .688   | RSR-9311  | RSR-9311-E          |
|                    | .625 – .750   | RSR-9312  | RSR-9312-E          |
|                    | .688 – .812   | RSR-9313  | RSR-9313-E          |
|                    | .750 – .875   | RSR-9314  | RSR-9314-E          |
|                    | .812 – .938   | RSR-9315  | RSR-9315-E          |
|                    | .875 – 1.000  | RSR-9316  | RSR-9316-E          |
| <b>1 1/4"</b>      |               |           |                     |
|                    | .562 – .688   | RSR-9411  | —                   |
|                    | .688 – .812   | RSR-9413  | —                   |
|                    | .750 – .875   | RSR-9414  | —                   |
|                    | .875 – 1.000  | RSR-9416  | RSR-9416-E          |
|                    | 1.000 – 1.125 | RSR-9418  | RSR-9418-E          |
|                    | 1.125 – 1.250 | RSR-9420  | RSR-9420-E          |
|                    | 1.250 – 1.375 | RSR-9422  | RSR-9422-E          |
| <b>1 1/2"</b>      |               |           |                     |
|                    | .562 – .688   | RSR-9511  | —                   |
|                    | .688 – .812   | RSR-9513  | —                   |
|                    | .750 – .875   | RSR-9514  | —                   |
|                    | .875 – 1.000  | RSR-9516  | RSR-9516-E          |
|                    | 1.000 – 1.125 | RSR-9518  | RSR-9518-E          |
|                    | 1.125 – 1.250 | RSR-9520  | RSR-9520-E          |
|                    | 1.250 – 1.375 | RSR-9522  | RSR-9522-E          |
|                    | 1.438 – 1.562 | RSR-9525  | RSR-9525-E          |
|                    | 1.562 – 1.688 | RSR-9527  | RSR-9527-E          |
|                    | 1.688 – 1.812 | RSR-9529  | RSR-9529-E          |
| <b>2"</b>          |               |           |                     |
|                    | 1.250 – 1.375 | RSR-9622  | RSR-9622-E          |
|                    | 1.438 – 1.562 | RSR-9625  | RSR-9625-E          |
|                    | 1.562 – 1.688 | RSR-9627  | RSR-9627-E          |
|                    | 1.688 – 1.812 | RSR-9629  | RSR-9629-E          |

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



Nickel-plated aluminum:  
Cord grips available in nickel-plated aluminum. Add "N" to end of prefix.  
(ex: RSR-9003 becomes RSRN-9003)



Tel: (905) 820-6150  
Fax: (905) 820-6142

Toll Free: 1-800-363-1588  
www.techspan.ca

**REMKE**

## TUFF-SEAL™

### 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)  |
| 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 +450°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°)<br>RSP Series (Straight, 90°)<br>RSM Cord Grips<br>RSRS Cord Grips<br>RSRF Series                                      |
| Canadian Standards Association (CSA) | 28985                                                       | RSR Series (Straight, 90°, 45°)<br>RSP Series (Straight, 90°)<br>RSRS Cord Grips<br>RSRF Series<br>RSSS Series<br>RSPV Series<br>Teck Cable Connectors |
| National Electrical Code (NEC)       | Articles 400-10<br>Articles 400-14                          | RSR Series (Straight, 90°, 45°)<br>RSP Series (Straight, 90°)<br>RSM Cord Grips<br>RSRS Cord Grips<br>RSRF Series                                      |
|                                      | Articles 501-4(B)<br>Articles 502-4(A)<br>Articles 503-3(A) | WH Series Watertight Conduit Hubs<br>WH Series Watertight Conduit Hubs<br>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°)<br>WH Series Watertight Conduit Hubs<br>RSP Series (Straight, 90°)<br>RSM Cord Grips, RSRS Cord Grips<br>RSRF Series |

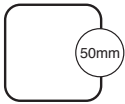
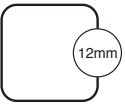
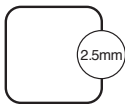
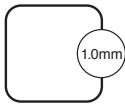
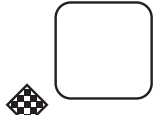
## KNOCKOUT DIMENSIONS

| 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

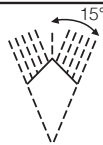
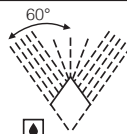
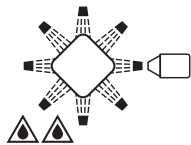
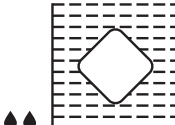
| Material               | IP 54 and NEMA 3 | IP 54 and NEMA 3R | IP 65 and NEMA 4 | IP 56 and NEMA 4X | IP 67 and NEMA 6 | IP 52 and NEMA 12 |
|------------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|
| Aluminum               | 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

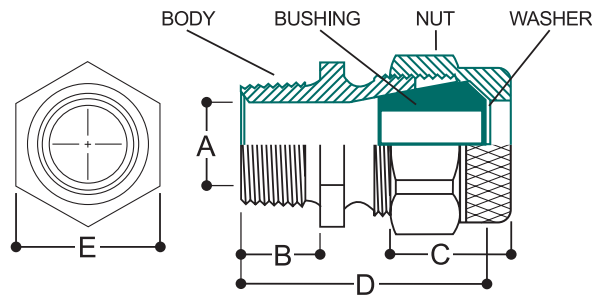
| First Digit | Protection From Solid Objects                                                                                                                                            |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------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

## IP CODE EXAMPLE

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

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

## RSR STRAIGHT CORD GRIP DIMENSIONS



### ALUMINUM AND NICKEL-PLATED ALUMINUM

| Conduit Size | Form Size | A<br>Body Bore | B    | C    | D<br>Body Dia. | E<br>Nut Dia. |
|--------------|-----------|----------------|------|------|----------------|---------------|
| 1/4"         | 1         | 0.34           | 0.44 | 0.59 | 0.88           | 0.96          |
| 3/8"         | 1         | 0.46           | 0.44 | 0.59 | 0.88           | 0.96          |
| 1/2"         | 1         | 0.46           | 0.44 | 0.59 | 0.88           | 0.96          |
| 1/2"         | 2         | 0.62           | 0.56 | 0.72 | 1.00           | 1.26          |
| 1/2"         | 3         | 0.62           | 0.54 | 0.86 | 1.37           | 1.55          |
| 3/4"         | 2         | 0.62           | 0.56 | 0.72 | 1.12           | 1.26          |
| 3/4"         | 3         | 0.81           | 0.57 | 0.86 | 1.25           | 1.55          |
| 3/4"         | 4         | 0.81           | 0.57 | 0.97 | 1.37           | 1.74          |
| 1"           | 4         | 1.00           | 0.62 | 0.97 | 1.44           | 1.74          |
| 1"           | 5         | 1.10           | 0.70 | 1.25 | 2.00           | 2.47          |
| 1 1/4"       | 5         | 1.30           | 0.70 | 1.25 | 2.00           | 2.47          |
| 1 1/2"       | 5         | 1.43           | 0.70 | 1.25 | 2.47           | 2.47          |
| 1 1/2"       | 6         | 1.50           | 1.00 | 1.72 | 2.90           | 2.97          |
| 2"           | 6         | 1.90           | 0.81 | 1.72 | 2.83           | 2.97          |
| 2"           | 7         | 2.00           | 1.31 | 3.50 | 4.00           | 4.30          |
| 2 1/2"       | 7         | 2.36           | 1.31 | 3.50 | 4.00           | 4.30          |
| 3"           | 7         | 2.36           | 1.31 | 3.50 | 4.00           | 4.30          |

Dimension A is the minimum Body Bore. Other dimensions are nominal.

Dimension D is with the Nut snug but Bushing uncompressed.

Dimension E is across the Body Hex. corners.

G

### NYLON AND VALOX

| Conduit Size | Form Size | A<br>Body Bore | B    | C    | D<br>Body Hex | E<br>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          |               |
| 3/4"         | 3         | 0.56           | 0.88 | 1.38 | 1.50          |               |

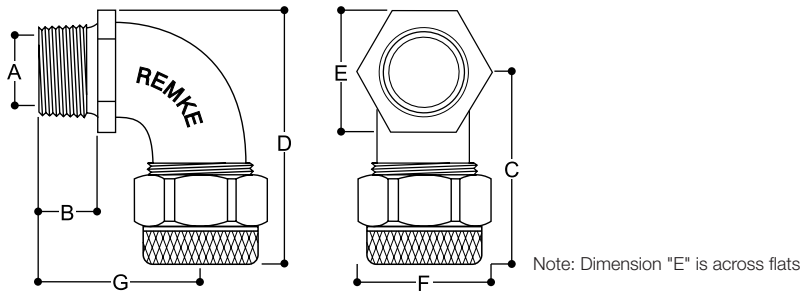
### STEEL

| Conduit Size | Form Size | A<br>Body Bore | B    | C    | D<br>Body Hex | E<br>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          | 0.12          |
| 3/4"         | 3         | 0.81           | 0.56 | 0.85 | 1.25          | 1.37          |
| 1"           | 4         | 1.00           | 0.63 | 0.94 | 1.43          | 1.56          |

### STAINLESS STEEL

| Conduit Size | Form Size | A<br>Body Bore | B    | C    | D<br>Body Hex | E<br>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          | 0.12          |
| 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          |

## RSR SERIES 90° CORD GRIP DIMENSIONS

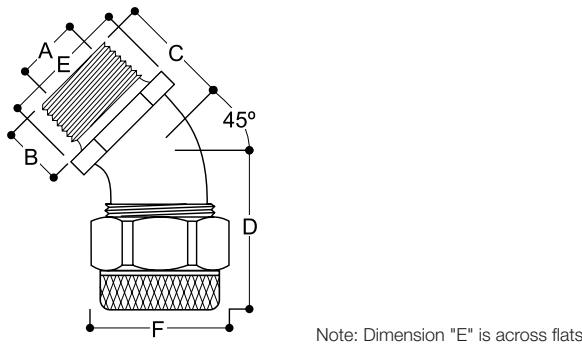


### ALUMINUM AND NICKEL-PLATED ALUMINUM

| Conduit Size | A Body Bore | B    | C    | D    | E Body Hex | F Nut Dia. | G    |
|--------------|-------------|------|------|------|------------|------------|------|
| 3/8"         | 0.45        | 0.44 | 1.51 | 2.00 | 0.98       | 0.96       | 1.31 |
| 1/2"         | 0.58        | 0.56 | 1.88 | 2.39 | 1.03       | 1.26       | 1.50 |
| 3/4"         | 0.76        | 0.63 | 2.25 | 2.88 | 1.25       | 1.55       | 1.99 |
| 1"           | 0.99        | 0.63 | 2.41 | 3.13 | 1.44       | 1.74       | 2.00 |
| 1 1/4"       | 1.28        | 0.69 | 3.19 | 4.41 | 2.13       | 2.47       | 2.69 |
| 1 1/2"       | 1.40        | 0.69 | 3.19 | 4.41 | 2.13       | 2.47       | 2.69 |
| 2"           | 1.90        | 0.81 | 4.03 | 5.56 | 2.81       | 2.97       | 3.19 |

**NOTE:** 1 1/4" and 1 1/2" size grips have hex positioned per right view above. All other sizes have hex positioned per left view below.

## RSR SERIES 45° CORD GRIP DIMENSIONS



### ALUMINUM AND NICKEL-PLATED ALUMINUM

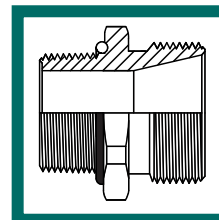
| Conduit Size | A Body Bore | B    | C    | D    | E Body Hex | F Nut Dia. |
|--------------|-------------|------|------|------|------------|------------|
| 3/8"         | 0.45        | 0.44 | 1.51 | 2.00 | 0.98       | 0.96       |
| 1/2"         | 0.58        | 0.56 | 1.88 | 2.39 | 1.03       | 1.26       |
| 3/4"         | 0.76        | 0.63 | 2.25 | 2.88 | 1.25       | 1.55       |
| 1"           | 0.99        | 0.63 | 2.41 | 3.13 | 1.44       | 1.74       |
| 1 1/4"       | 1.28        | 0.69 | 3.19 | 4.41 | 2.13       | 2.47       |
| 1 1/2"       | 1.40        | 0.69 | 3.19 | 4.41 | 2.13       | 2.47       |
| 2"           | 1.90        | 0.81 | 4.03 | 5.56 | 2.81       | 2.97       |

**NOTE:** 1 1/4" and 1 1/2" size grips have hex positioned per right view above. All other sizes have hex positioned per left view below.

### CONDUIT SEALS AND LOCKNUTS

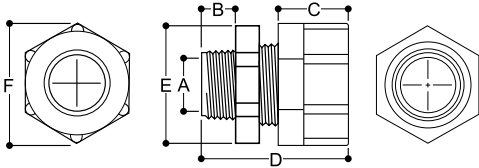
| Conduit Seals | Size   | Locknuts |
|---------------|--------|----------|
| SOR-38        | 3/8"   | LN-38    |
| SOR-1-VNT     | 1/2"   | LN-50    |
| SOR-2         | 3/4"   | LN-75    |
| SOR-3         | 1"     | LN-100   |
| SOR-4         | 1 1/4" | LN-125   |
| SOR-51        | 1 1/2" | LN-150   |
| SOR-16        | 2"     | LN-200   |
| —             | 2 1/2" | LN-250   |
| —             | 3"     | LN-300   |

### RSR SERIES CORD GRIPS WITH O-RINGS



These Tuff-Seal RSR grips feature an O-ring that creates a watertight seal when they are used in a taper tapped conduit hub. In these applications gaskets must be used in either the knockouts or clearance drilled holes. To ensure a more reliable seal an embedded O-ring should be utilized. Many of the standard Tuff-Seal cord grips listed in this catalog feature a body hex large enough to permit machining a groove for the embedded O-ring.

## RSP AND RSPV STRAIGHT CORD GRIPS DIMENSIONS



| Conduit Size | A<br>Body Bore | B    | C    | D    | E<br>Body Hex. | F<br>Nut Dia. |
|--------------|----------------|------|------|------|----------------|---------------|
| 3/8"         | 0.44           | 0.49 | 0.70 | 1.63 | 0.94           | 0.94          |
| 1/2"         | 0.57           | 0.50 | 0.88 | 2.01 | 1.12           | 1.25          |
| 3/4"         | 0.76           | 0.56 | 0.88 | 2.10 | 1.38           | 1.50          |

Dimension A is the minimum Body Bore. Other dimensions are nominal.

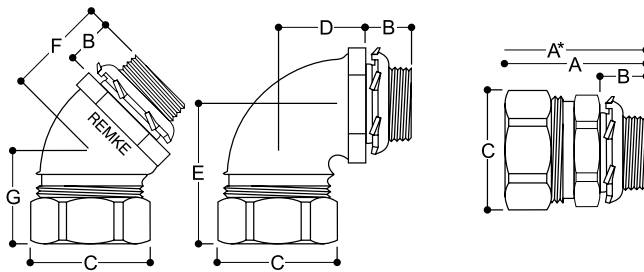
Dimension D is with the Nut snug but bushing uncompressed.

Dimension E is across the Straight Body hex. flats.

Dimension F is across Nut hex. flats.

Dimensions are approximate.

## LIQUA-SEAL CONNECTOR DIMENSIONS



| Conduit Size | Hub Size | A    | A*    | B    | C<br>Flats | C<br>Corners | D    | E    | F    | G    |
|--------------|----------|------|-------|------|------------|--------------|------|------|------|------|
| 3/8"         | 1/2"     | 1.47 | 4.47  | 0.50 | 1.00       | 1.10         | 1.37 | 1.58 | 0.84 | 1.26 |
| 1/2"         | 1/2"     | 1.47 | 4.97  | 0.50 | 1.13       | 1.23         | 1.37 | 1.75 | 0.87 | 1.47 |
| 3/4"         | 3/4"     | 1.54 | 5.54  | 0.56 | 1.38       | 1.52         | 1.53 | 1.91 | 0.95 | 1.55 |
| 1"           | 1"       | 1.96 | 6.96  | 0.64 | 1.63       | 1.80         | 1.81 | 2.23 | 1.10 | 1.81 |
| 1 1/4"       | 1 1/4"   | 2.09 | 8.09  | 0.72 | 2.25       | 2.41         | 2.05 | 2.33 | 1.35 | 1.84 |
| 1 1/2"       | 1 1/2"   | 2.09 | 8.84  | 0.72 | 2.50       | 2.68         | 2.18 | 2.46 | 1.43 | 1.90 |
| 2"           | 2"       | 2.16 | 10.16 | 0.78 | 3.00       | 3.21         | 2.51 | 2.73 | 1.53 | 2.00 |

**NOTE:** Nominal Dimensions in Inches. A\* Dimension is overall length of connector with wire mesh grip. Larger sizes are available. Contact factory.

## THREAD SPECIFICATIONS

### PG THREAD SPECIFICATIONS

| Thread Size | Thread Diameter (mm) | Pitch (mm) | Outside Diameter(mm) |
|-------------|----------------------|------------|----------------------|
| Pg 7        | 12.5                 | 1.27       | 11.3                 |
| Pg 9        | 15.2                 | 1.41       | 13.9                 |
| Pg 11       | 18.6                 | 1.41       | 17.3                 |
| Pg 13.5     | 20.4                 | 1.41       | 19.1                 |
| Pg 16       | 22.5                 | 1.41       | 21.2                 |
| Pg 21       | 28.3                 | 1.56       | 26.8                 |
| Pg 29       | 37.0                 | 1.56       | 35.5                 |
| Pg 36       | 47.0                 | 1.56       | 45.5                 |
| Pg 42       | 54.0                 | 1.56       | 52.5                 |
| Pg 48       | 59.3                 | 1.56       | 57.8                 |

### NPT THREAD SPECIFICATIONS

| Thread Size | Thread Diameter (mm) | Pitch (mm) |
|-------------|----------------------|------------|
| NPT 1/4"    | 13.7                 | 1.41       |
| NPT 3/8"    | 17.1                 | 1.41       |
| NPT 1/2"    | 21.3                 | 1.81       |
| NPT 3/4"    | 26.7                 | 1.81       |
| NPT 1"      | 33.4                 | 2.21       |
| NPT 1-1/4"  | 48.3                 | 2.21       |
| NPT 1-1/2"  | 47.0                 | 2.21       |
| NPT 2"      | 60.3                 | 2.21       |

### METRIC THREAD SPECIFICATIONS

| Thread Size | Thread Diameter (mm) | Pitch (mm) | Outside Diameter(mm) |
|-------------|----------------------|------------|----------------------|
| M12 x 1.5   | 12                   | 1.50       | 10.6                 |
| M16 x 1.5   | 16                   | 1.50       | 14.6                 |
| M20 x 1.5   | 20                   | 1.50       | 18.6                 |
| M25 x 1.5   | 25                   | 1.50       | 23.6                 |
| M32 x 1.5   | 32                   | 1.50       | 30.6                 |
| M40 x 1.5   | 40                   | 1.50       | 38.6                 |
| M50 x 1.5   | 50                   | 1.50       | 48.6                 |
| M63 x 1.5   | 63                   | 1.50       | 61.6                 |



Tel: (905) 820-6150 Toll Free: 1-800-363-1588  
Fax: (905) 820-6142 www.techspan.ca

**REMKE**

## SELECTED CORD & CABLE DIAMETERS

| Type of Cord       | AWG Size of Conductors | Number of Conductors-Approximate O.D. in Inches |             |             |
|--------------------|------------------------|-------------------------------------------------|-------------|-------------|
|                    |                        | 2 Conductor                                     | 3 Conductor | 4 Conductor |
| SVO, SVTO          |                        |                                                 |             |             |
|                    | 18                     | .235                                            | .255        | —           |
| SJ, SJO, SJT, SJTO |                        |                                                 |             |             |
|                    | 18                     | .290                                            | .320        | .335        |
|                    | 16                     | .320                                            | .340        | .385        |
|                    | 14                     | .350                                            | .375        | .415        |
|                    | 12                     | .430                                            | .445        | .500        |
|                    | 10                     | .560                                            | .600        | .680        |
| S, SO, ST, STO     |                        |                                                 |             |             |
|                    | 18                     | .345                                            | .365        | .390        |
|                    | 16                     | .370                                            | .390        | .415        |
|                    | 14                     | .500                                            | .530        | .570        |
|                    | 12                     | .575                                            | .600        | .650        |
|                    | 10                     | .625                                            | .660        | .710        |
|                    | 8                      | .675                                            | .725        | .780        |
|                    | 6                      | .795                                            | .865        | .900        |
|                    | 4                      | .900                                            | .975        | 1.100       |
|                    | 2                      | 1.105                                           | 1.170       | 1.290       |
| W                  |                        |                                                 |             |             |
|                    | 6                      | .930                                            | 1.010       | 1.100       |
|                    | 4                      | 1.080                                           | 1.170       | 1.270       |
|                    | 3                      | 1.170                                           | 1.240       | 1.340       |
|                    | 2                      | 1.270                                           | 1.340       | 1.480       |
|                    | 1                      | 1.440                                           | 1.510       | 1.680       |
|                    | 1 / 0                  | 1.520                                           | 1.650       | 1.790       |
|                    | 2 / 0                  | 1.650                                           | 1.750       | 1.930       |
|                    | 3 / 0                  | 1.770                                           | 1.890       | 2.070       |
|                    | 4 / 0                  | 1.920                                           | 2.040       | 2.260       |
|                    | 250                    | —                                               | 2.390       | —           |
| Bus Drop Cable     |                        |                                                 |             |             |
|                    | 14                     | —                                               | .400        | —           |
|                    | 12                     | —                                               | .440        | —           |
|                    | 10                     | —                                               | .500        | —           |
|                    | 8                      | —                                               | .665        | —           |
|                    | 6                      | —                                               | .815        | —           |
|                    | 4                      | —                                               | .955        | —           |
|                    | 2                      | —                                               | 1.175       | —           |

G

## FRACTION/DECIMAL/METRIC CONVERSION

| Fraction | Decimal | MM     |
|----------|---------|--------|
| 1/64     | 0.0156  | 0.397  |
| 1/32     | 0.0312  | 0.794  |
| 3/64     | 0.0469  | 1.191  |
| 1/16     | 0.0625  | 1.588  |
| 5/64     | 0.0781  | 1.984  |
| 3/32     | 0.0938  | 2.381  |
| 7/64     | 0.1094  | 2.778  |
| 1/8      | 0.1250  | 3.175  |
| 9/64     | 0.1406  | 3.572  |
| 5/32     | 0.1562  | 3.969  |
| 11/64    | 0.1719  | 4.366  |
| 3/16     | 0.1875  | 4.762  |
| 13/64    | 0.2031  | 5.159  |
| 7/32     | 0.2188  | 5.556  |
| 15/64    | 0.2344  | 5.953  |
| 1/4      | 0.2500  | 6.350  |
| 17/64    | 0.2656  | 6.747  |
| 7/32     | 0.2812  | 7.144  |
| 19/64    | 0.2969  | 7.541  |
| 5/16     | 0.3125  | 7.938  |
| 21/64    | 0.3281  | 8.334  |
| 11/32    | 0.3438  | 8.731  |
| 23/64    | 0.3594  | 9.128  |
| 3/8      | 0.3750  | 9.525  |
| 25/64    | 0.3906  | 9.922  |
| 13/32    | 0.4062  | 10.319 |
| 27/64    | 0.4219  | 10.716 |
| 7/16     | 0.4375  | 11.112 |
| 29/64    | 0.4531  | 11.509 |
| 15/32    | 0.4688  | 11.906 |
| 31/64    | 0.4844  | 12.303 |
| 1/2      | 0.5000  | 12.700 |

| Fraction | Decimal | MM     |
|----------|---------|--------|
| 33/64    | 0.5156  | 13.097 |
| 17/32    | 0.5312  | 13.494 |
| 35/64    | 0.5469  | 13.891 |
| 9/16     | 0.5625  | 14.288 |
| 37/64    | 0.5781  | 14.684 |
| 19/32    | 0.5938  | 15.081 |
| 39/64    | 0.6094  | 15.478 |
| 5/8      | 0.6250  | 15.875 |
| 41/64    | 0.6406  | 16.272 |
| 21/32    | 0.6562  | 16.669 |
| 43/64    | 0.6719  | 17.066 |
| 11/16    | 0.6875  | 17.462 |
| 45/64    | 0.7031  | 17.859 |
| 23/32    | 0.7188  | 18.256 |
| 47/64    | 0.7344  | 18.653 |
| 3/4      | 0.7500  | 19.050 |
| 49/64    | 0.7656  | 19.447 |
| 25/32    | 0.7812  | 19.844 |
| 51/64    | 0.7969  | 20.241 |
| 53/64    | 0.8281  | 21.034 |
| 27/32    | 0.8438  | 21.431 |
| 55/64    | 0.8594  | 21.828 |
| 7/8      | 0.8750  | 22.225 |
| 57/64    | 0.8906  | 22.622 |
| 29/32    | 0.9062  | 23.019 |
| 59/64    | 0.9219  | 23.416 |
| 15/16    | 0.9375  | 23.812 |
| 61/64    | 0.9531  | 24.209 |
| 31/32    | 0.9688  | 24.606 |
| 63/64    | 0.9844  | 25.003 |



### FLEXIBLE ELECTRICAL CORD OR CABLE TO CORD GRIP SELECTION TABLE

| Cord Type<br>SJ-SJTO SJO | Cord<br>OD | Hub<br>Size | Straight<br>Cord Grip | Alternate<br>Straight | 90 Degree<br>Cord Grip | 45 Degree<br>Cord Grip |
|--------------------------|------------|-------------|-----------------------|-----------------------|------------------------|------------------------|
| —                        | .125-.188  | 1/2"        | RSR-1003              | RSR-103               | RSR-9103               | RSR-45103              |
| —                        | .125-.188  | 3/4"        | RSR-2103              | —                     | —                      | —                      |
| —                        | .188-.250  | 1/2"        | RSR-1004              | RSR-104               | RSR-9104               | RSR-45104              |
| —                        | .188-.250  | 3/4"        | RSR-2104              | —                     | —                      | —                      |
| 18/2                     | .290       | 1/2"        | RSR-1005              | RSR-105               | RSR-9105               | RSR-45105              |
| 18/2                     | .290       | 3/4"        | RSR-2105              | —                     | —                      | —                      |
| 18/3                     | .320       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 18/3                     | .320       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 18/4                     | .335       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 18/4                     | .335       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 16/2                     | .320       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 16/2                     | .320       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 16/3                     | .340       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 16/3                     | .340       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 16/4                     | .385       | 1/2"        | RSR-1007              | RSR-107               | RSR-9107               | RSR-45107              |
| 16/4                     | .385       | 3/4"        | RSR-2107              | —                     | —                      | —                      |
| 14/2                     | .350       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 14/2                     | .350       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 14/3                     | .375       | 1/2"        | RSR-1007              | RSR-107               | RSR-9107               | RSR-45107              |
| 14/3                     | .375       | 3/4"        | RSR-2107              | —                     | —                      | —                      |
| 14/4                     | .415       | 1/2"        | RSR-1007              | RSR-107               | RSR-9107               | RSR-45107              |
| 14/4                     | .415       | 3/4"        | RSR-2107              | —                     | —                      | —                      |

| Cord Type<br>S-STO-SO | Cord<br>OD | Hub<br>Size | Straight<br>Cord Grip | Alternate<br>Straight | 90 Degree<br>Cord Grip | 45 Degree<br>Cord Grip |
|-----------------------|------------|-------------|-----------------------|-----------------------|------------------------|------------------------|
| 18/2                  | .345       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 18/2                  | .345       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 18/3                  | .365       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 18/3                  | .365       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 18/4                  | .390       | 1/2"        | RSR-1007              | RSR-107               | RSR-9107               | RSR-45107              |
| 18/4                  | .390       | 3/4"        | RSR-2107              | —                     | —                      | —                      |
| 16/2                  | .370       | 1/2"        | RSR-1006              | RSR-106               | RSR-9106               | RSR-45106              |
| 16/2                  | .370       | 3/4"        | RSR-2106              | —                     | —                      | —                      |
| 16/3                  | .390       | 1/2"        | RSR-1007              | RSR-107               | RSR-9107               | RSR-45107              |
| 16/3                  | .390       | 3/4"        | RSR-2107              | —                     | —                      | —                      |
| 16/4                  | .415       | 1/2"        | RSR-107               | RSR-1207              | RSR-9107               | RSR-45107              |
| 16/4                  | .415       | 3/4"        | RSR-2107              | —                     | —                      | —                      |
| 14/2                  | .500       | 1/2"        | RSR-109               | RSR-1209              | RSR-9109               | RSR-45109              |
| 14/2                  | .500       | 3/4"        | RSR-2109              | RSR-209               | RSR-9209               | RSR-45209              |
| 14/2                  | .500       | 1"          | RSR-309               | —                     | RSR-9309               | RSR-45309              |
| 14/3                  | .530       | 1/2"        | RSR-109               | RSR-1209              | RSR-9109               | RSR-45109              |
| 14/3                  | .530       | 3/4"        | RSR-2109              | RSR-209               | RSR-9209               | RSR-45209              |
| 14/3                  | .530       | 3/4"        | RSR-209               | —                     | RSR-9210               | RSR-45210              |
| 14/3                  | .530       | 1"          | RSR-309               | RSR-310               | RSR-9309               | RSR-45309              |
| 14/4                  | .570       | 1/2"        | RSR-110               | RSR-1211              | RSR-9110               | RSR-45110              |
| 14/4                  | .570       | 3/4"        | RSR-2110              | RSR-211               | RSR-9210               | RSR-45210              |
| 14/4                  | .570       | 1"          | RSR-310               | RSR-311               | RSR-9310               | RSR-45310              |
| 12/2                  | .575       | 1/2"        | RSR-110               | RSR-1210              | RSR-9110               | RSR-45110              |
| 12/2                  | .575       | 3/4"        | RSR-2110              | RSR-210               | RSR-9210               | RSR-45210              |
| 12/2                  | .575       | 1"          | RSR-310               | —                     | RSR-9310               | RSR-45310              |
| 12/3                  | .600       | 1/2"        | RSR-110               | RSR-1210              | RSR-9110               | RSR-45110              |

## FLEXIBLE ELECTRICAL CORD OR CABLE TO CORD GRIP SELECTION TABLE

| Cord Type<br>S-STO-SO | Cord<br>OD | Hub<br>Size | Straight<br>Cord Grip | Alternate<br>Straight | 90 Degree<br>Cord Grip | 45 Degree<br>Cord Grip |
|-----------------------|------------|-------------|-----------------------|-----------------------|------------------------|------------------------|
| 12/3                  | .600       | 3/4"        | RSR-2110              | RSR-210               | RSR-9210               | RSR-45210              |
| 12/3                  | .600       | 1"          | RSR-310               | RSR-310               | RSR-9310               | RSR-45310              |
| 12/4                  | .650       | 1/2"        | RSR-1211              | —                     | —                      | —                      |
| 12/4                  | .650       | 3/4"        | RSR-211               | RSR-2311              | RSR-9211               | RSR-45211              |
| 12/4                  | .650       | 1"          | RSR-311               | —                     | RSR-9311               | RSR-45311              |
| 10/2                  | .625       | 1/2"        | RSR-1211              | —                     | —                      | —                      |
| 10/2                  | .625       | 3/4"        | RSR-211               | RSR-2311              | RSR-9211               | RSR-45211              |
| 10/2                  | .625       | 1"          | RSR-311               | —                     | RSR-9311               | RSR-45311              |
| 10/3                  | .660       | 1/2"        | RSR-1211              | —                     | —                      | —                      |
| 10/3                  | .660       | 3/4"        | RSR-211               | RSR-2311              | RSR-9211               | RSR-45211              |
| 10/3                  | .660       | 1"          | RSR-311               | —                     | RSR-9311               | RSR-45311              |
| 10/4                  | .710       | 1/2"        | RSR-1212              | —                     | —                      | —                      |
| 10/4                  | .710       | 3/4"        | RSR-212               | RSR-2312              | RSR-9212               | RSR-45212              |
| 10/4                  | .710       | 1"          | RSR-312               | —                     | RSR-9312               | RSR-45312              |
| 8/2                   | .675       | 1/2"        | RSR-1211              | —                     | —                      | —                      |
| 8/2                   | .675       | 3/4"        | RSR-211               | RSR-2311              | RSR-9211               | RSR-45211              |
| 8/2                   | .675       | 1"          | RSR-311               | —                     | RSR-9311               | RSR-45311              |
| 8/3                   | .725       | 1/2"        | RSR-1212              | —                     | —                      | —                      |
| 8/3                   | .725       | 3/4"        | RSR-212               | RSR-2312              | RSR-9212               | RSR-45212              |
| 8/3                   | .725       | 1"          | RSR-312               | —                     | RSR-9312               | RSR-45312              |
| 8/4                   | .780       | 1/2"        | RSR-1213              | —                     | —                      | —                      |
| 8/4                   | .780       | 3/4"        | RSR-213               | RSR-2313              | RSR-9213               | RSR-45213              |
| 8/4                   | .780       | 1"          | RSR-313               | RSR-3514              | RSR-9313               | RSR-45313              |
| 8/4                   | .780       | 1 1/4"      | RSR-414               | —                     | RSR-9414               | RSR-45414              |
| 8/4                   | .780       | 1 1/2"      | RSR-514               | —                     | RSR-9514               | RSR-45514              |
| 6/2                   | .795       | 1"          | RSR-313               | RSR-3514              | RSR-9313               | RSR-45313              |
| 6/2                   | .795       | 1 1/4"      | RSR-414               | —                     | RSR-9414               | RSR-45414              |
| 6/2                   | .795       | 1 1/2"      | RSR-514               | —                     | RSR-9514               | RSR-45514              |
| 6/3                   | .865       | 1"          | RSR-314               | RSR-3514              | RSR-9314               | RSR-45314              |
| 6/3                   | .865       | 1 1/4"      | RSR-414               | —                     | RSR-9414               | RSR-45414              |
| 6/3                   | .865       | 1 1/2"      | RSR-514               | —                     | RSR-9514               | RSR-45514              |
| 6/4                   | .900       | 1"          | RSR-315               | RSR-3516              | RSR-9315               | RSR-45315              |
| 6/4                   | .900       | 1 1/4"      | RSR-416               | —                     | RSR-9416               | RSR-45416              |
| 6/4                   | .900       | 1 1/2"      | RSR-516               | —                     | RSR-9516               | RSR-45516              |
| 4/3                   | .975       | 1"          | RSR-3516              | —                     | —                      | —                      |
| 4/3                   | .975       | 1 1/4"      | RSR-416               | —                     | RSR-9416               | RSR-45416              |
| 4/3                   | .975       | 1 1/2"      | RSR-516               | —                     | RSR-9516               | RSR-45516              |
| 4/4                   | 1.100      | 1"          | RSR-3518              | —                     | —                      | —                      |
| 4/4                   | 1.100      | 1 1/4"      | RSR-418               | —                     | RSR-9418               | RSR-45418              |
| 4/4                   | 1.100      | 1 1/2"      | RSR-518               | —                     | RSR-9518               | RSR-45518              |
| 2/3                   | 1.170      | 1"          | RSR-3520              | —                     | —                      | —                      |
| 2/3                   | 1.170      | 1 1/4"      | RSR-420               | —                     | RSR-9420               | RSR-45420              |
| 2/3                   | 1.170      | 1 1/2"      | RSR-520               | —                     | RSR-9520               | RSR-45520              |
| 2/4                   | 1.290      | 1"          | RSR-3522              | —                     | —                      | —                      |
| 2/4                   | 1.290      | 1 1/4"      | RSR-422               | —                     | RSR-9422               | RSR-45422              |
| 2/4                   | 1.290      | 1 1/2"      | RSR-522               | —                     | RSR-9522               | RSR-45522              |

**NOTE:** If a Mesh Grip is required, add letter 'E' to end of Remke part number. This chart is based on the cable diameters shown.

The actual diameter of the cable being used may require the next larger or smaller cord grip bushing.

Cable diameters vary between manufacturers and because cable manufacturers must allow tolerance, their published data should be checked.

The bushing I.D. should be larger than, but as close as possible to, the cable O.D.