



## RSP SERIES NYLON CORD GRIPS



### RSP Series Nylon Corrosion-Resistant Cord Connectors

The Tuff Seal RSP Series of Non-Metallic Cord Connectors are constructed of a durable, nylon material which

offers excellent corrosion resistance, is lightweight, durable and ideal for use in damp environments. RSP Cord Connectors are ideally suited for use in applications with moisture or washdowns and they provide an environmental seal against dirt, coolants, fumes and the like.

RSP Corrosion-Resistant Connectors can be ordered with or without wire mesh attachments. The straight-body style accommodates 3/8", 1/2" and 3/4" conduit sizes while the 90° body fits 1/2" and 3/4" conduit. These connectors also feature a compression bushing made of high-quality, oil resistant Neoprene rubber with an anti-friction washer made of nylon.

RSP Connectors are suitable for use in both indoor and outdoor applications to prevent cable pullout and control arc of bend.

#### NOTES

Cord Grip Accessories

Locknuts: add "-L" to any part number

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

Also available in yellow. Add "-Y" to part number.

Special Configurations

Special configurations and materials are available.

Consult factory.

All wire mesh is stainless steel.

Dimension & certification information on pages 50 & 54 in Tuff-Seal Technical Reference.



## RSP SERIES-STRAIGHT

### COMPLETE ASSEMBLY PART NUMBERS

Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
<b>3/8"</b>			
	.125 - .188	RSP-003	RSP-003-E
	.188 - .250	RSP-004	RSP-004-E
	.250 - .312	RSP-005	RSP-005-E
	.312 - .375	RSP-006	RSP-006-E
	.375 - .438	RSP-007	RSP-007-E
<b>1/2"</b>			
	.125 - .188	RSP-103	RSP-103-E
	.188 - .250	RSP-104	RSP-104-E
	.250 - .312	RSP-105	RSP-105-E
	.312 - .375	RSP-106	RSP-106-E
	.375 - .438	RSP-107	RSP-107-E
	.438 - .500	RSP-108	RSP-108-E
	.500 - .562	RSP-109	RSP-109-E
	.562 - .625	RSP-110	RSP-110-E
<b>3/4"</b>			
	.438 - .500	RSP-208	RSP-208-E
	.500 - .562	RSP-209	RSP-209-E
	.500 - .625	RSP-210	RSP-210-E
	.562 - .688	RSP-211	RSP-211-E
	.625 - .750	RSP-212	RSP-212-E
	.688 - .812	RSP-213	RSP-213-E

## RSP SERIES-90°

### COMPLETE ASSEMBLY PART NUMBERS

Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
<b>1/2"</b>			
	.125 - .188	RSP-9103	RSP-9103-E
	.188 - .250	RSP-9104	RSP-9104-E
	.250 - .312	RSP-9105	RSP-9105-E
	.312 - .375	RSP-9106	RSP-9106-E
	.375 - .438	RSP-9107	RSP-9107-E
	.438 - .500	RSP-9108	RSP-9108-E
	.500 - .562	RSP-9109	RSP-9109-E
	.562 - .625	RSP-9110	RSP-9110-E
<b>3/4"</b>			
	.500 - .562	RSP-9209	RSP-9209-E
	.500 - .625	RSP-9210	RSP-9210-E
	.562 - .688	RSP-9211	RSP-9211-E
	.625 - .750	RSP-9212	RSP-9212-E
	.688 - .812	RSP-9213	RSP-9213-E

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

CORD CONNECTORS

WIRE MESH GRIPS

PICO-LINK

MICRO-LINK

MINI-LINK

MULTI-PORT BOXES

BUS SYSTEM PRODUCTS



# 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°)
				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

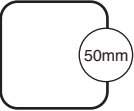
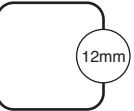
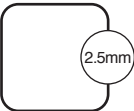
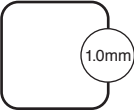
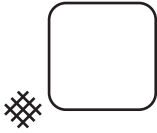
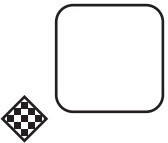
## KNOCKOUT DIMENSIONS

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



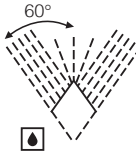

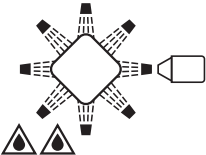
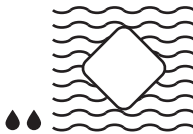
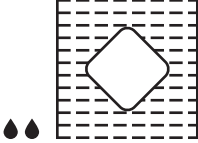
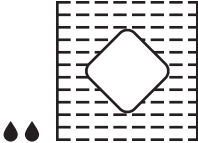
Material	IP 54 and NEMA 3	IP 54 and NEMA 3R	IP 65 and NEMA 4	IP 56 and NEMA 4X	IP 67 and NEMA 6	IP 52 and NEMA 12
Aluminum	X	X	X	—	X	X
Nickel-Plated Aluminum	X	X	X	X	X	X
Steel	X	X	X	—	X	X
Stainless Steel	X	X	X	X	X	X
Nylon	X	X	X	—	X	X
Valox	X	X	X	X	X	X

## IP RATINGS DEFINITION

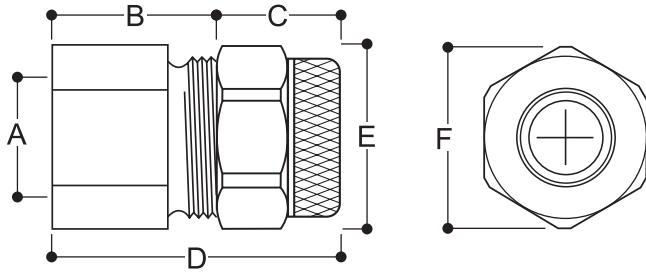
First Digit		Protection From Solid Objects
<b>0</b>		Non-Protected
<b>1</b>		Protected against solid objects over 50mm e.g. hands, large tools
<b>2</b>		Protected against solid objects over 12mm e.g. hands, large tools
<b>3</b>		Protection from entry by solid objects over 2.5mm e.g. wire or small tools
<b>4</b>		Protection from entry by solid objects over 1.0mm e.g. wires or tools
<b>5</b>		Protection against deposits of dust e.g. against equipment damage due to deposits
<b>6</b>		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
<b>0</b>		Non-Protected
<b>1</b>		Protection against vertically falling drops of water
<b>2</b>		Protection against direct sprays of water up to a 15° angle
<b>3</b>		Protection against direct sprays of water up to a 60° angle
<b>4</b>		Protection against water sprayed from any direction. Limited ingress permitted.
<b>5</b>		Protection against low pressure water jets from any direction. Limited ingress permitted
<b>6</b>		Protection against high pressure water jets from any direction. Limited ingress permitted.
<b>7</b>		Protection against immersion between 15cm and 1M
<b>8</b>		Protection against complete and continuous immersion in water under pressure e.g. Water-Tight

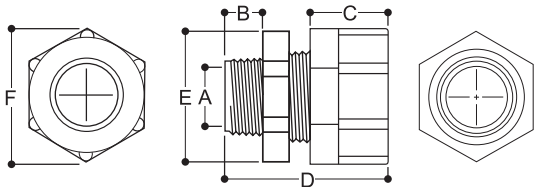
## RSRF SERIES CORD GRIP DIMENSIONS



Conduit Size	A Body Bore	B	C	D	E Body Hex	F Nut Dia.
3/8"	0.44	0.62	0.75	1.38	0.88	0.99
1/2"	0.62	0.69	1.06	1.75	1.12	1.33
3/4"	0.63	0.81	1.00	1.81	1.31	1.33
1"	0.94	0.94	1.31	2.25	1.63	1.70
1 1/4"	1.44	1.06	1.69	2.75	2.25	2.55
1 1/2"	1.44	1.06	1.69	2.75	2.25	2.55
2"	1.88	1.25	2.38	3.63	2.75	3.25

**NOTE:** Dimensions for the RSRH Hub Style Cord Grips are the same as above except for the addition of the nipple.

## RSP AND RSPV STRAIGHT CORD GRIPS DIMENSIONS



Conduit Size	A Body Bore	B	C	D	E Body Hex	F 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.

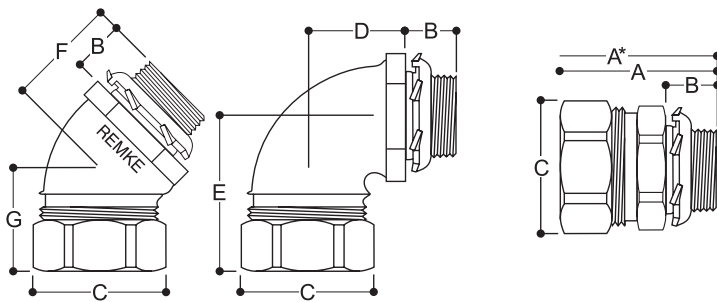
Dimension D is with the Nut snug but bushing uncompressed.

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 Flats	C 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.