



RSRF SERIES ALUMINUM CORD GRIPS



RSRF SERIES STRAIGHT ALUMINUM CORD GRIPS

Tuff-Seal™ RSRF Cord Grips with internal conduit threads are UL Recognized 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.

Made from machined aluminum, these cord grips offer the same features as the RSR grips described on page 14 and can be ordered with or without wire mesh attachments and accommodate conduit sizes from 3/8" to 1 1/4".

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

SPECIAL CONFIGURATIONS

Special configurations and materials are available. Consult factory.

All wire mesh is stainless steel.

Dimension & certification information on pages 62 & 66 in Tuff-Seal Technical Reference.

COMPLETE ASSEMBLY PART NUMBERS

RSRF SERIES ALUMINUM CORD GRIPS			
Conduit Size (NPT)	Cable Range	Cord Grip	Cord Grip With Mesh
3/8"	.125 – .188	RSRF-003	**
	.188 – .250	RSRF-004	RSRF-004-E
	.250 – .312	RSRF-005	RSRF-005-E
	.312 – .375	RSRF-006	RSRF-006-E
	.375 – .438	RSRF-007	RSRF-007-E
1/2"	.125 – .188	RSRF-103	**
	.188 – .250	RSRF-104	RSRF-104-E
	.250 – .312	RSRF-105	RSRF-105-E
	.312 – .375	RSRF-106	RSRF-106-E
	.375 – .438	RSRF-107	RSRF-107-E
	.438 – .500	RSRF-108	RSRF-108-E
	.500 – .562	RSRF-109	RSRF-109-E
	.562 – .625	RSRF-110	RSRF-110-E
3/4"	.125 – .188	RSRF-2103	**
	.188 – .250	RSRF-2104	RSRF-2104-E
	.250 – .312	RSRF-2105	RSRF-2105-E
	.312 – .375	RSRF-2106	RSRF-2106-E
	.375 – .438	RSRF-2107	RSRF-2107-E
	.438 – .500	RSRF-2108	RSRF-2108-E
	.500 – .562	RSRF-2109	RSRF-2109-E
	.562 – .625	RSRF-2110	RSRF-2110-E
1"	.500 – .562	RSRF-309	RSRF-309-E
	.562 – .625	RSRF-310	RSRF-310-E
	.562 – .688	RSRF-311	RSRF-311-E
	.625 – .750	RSRF-312	RSRF-312-E
	.688 – .812	RSRF-313	RSRF-313-E
	.750 – .875	RSRF-314	RSRF-314-E
	.812 – .938	RSRF-315	RSRF-315-E
	.875 – 1.000	RSRF-316	RSRF-316-E
1 1/4"	.562 – .688	RSRF-411	**
	.688 – .812	RSRF-413	**
	.750 – .875	RSRF-414	RSRF-414-E
	.875 – 1.000	RSRF-416	RSRF-416-E
	1.000 – 1.125	RSRF-418	RSRF-418-E
	1.125 – 1.250	RSRF-420	RSRF-420-E
	1.250 – 1.375	RSRF-422	RSRF-422-E

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

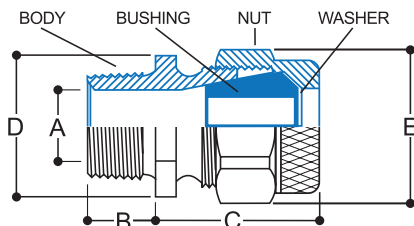
Larger sizes are available-Minimum quantities may apply. Consult factory.

**Contact Remke for mesh availability of this part number



Nickel-plated aluminum:
Cord grips available in nickel-plated aluminum. Add "N" to end of prefix.
(ex: RSRF-0003 becomes RSRFN-0003)

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
1/4"	0000	1	0.34	0.44	0.96	0.88	0.96
3/8"	000	1	0.47	0.44	0.96	0.88	0.96
1/2"	1000	1	0.47	0.44	0.95	0.88	0.96
1/2"	100	2	0.61	0.56	1.12	1.00	1.25
1/2"	1200	3	0.62	0.54	1.40	1.25	1.53
3/4"	2100	2	0.61	0.56	1.20	1.12	1.25
3/4"	200	3	0.80	0.57	1.42	1.25	1.53
3/4"	2300	4	0.81	0.57	1.49	1.37	1.72
1"	300	4	0.99	0.62	1.46	1.44	1.72
1"	3500	5	1.06	0.69	1.91	2.00	2.47
1 1/4"	400	5	1.32	0.69	1.80	2.00	2.00
1 1/2"	500	5	1.43	0.69	1.84	2.25	2.47
1 1/2"	5600	6	1.50	0.80	2.39	2.62	2.97
2"	600	6	2.00	0.80	2.39	2.83	2.97
2"	6700	7	1.90	0.80	3.32	4.00	4.20
2 1/2"	700	7	2.36	1.28	3.19	4.00	4.20
3"	8700	7	2.35	1.31	3.07	4.00	4.20
3"	900	9	3.05	1.39	3.14	4.75	4.00
3 1/2"	1150	8	3.25	1.47	4.65	5.36	6.22
4"	1250	9	3.60	1.47	4.86	5.82	6.66

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

Dimension E is cross corners of the nut.

NYLON AND VALOX

Conduit Size	Form Size	A Inside Body Dia.	B	C	D Body Hex	E Nut
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
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	RSSS SERIES	Form Size	A Inside Body Dia.	B	C	D Body Hex	E Nut
3/8"	000	1	0.47	0.44	0.88	0.94	0.96
1/2"	100	2	0.61	0.56	1.18	1.12	1.25
3/4"	200	3	0.81	0.57	1.44	1.37	1.50
1"	300	4	0.99	0.62	1.49	1.56	1.72
1 1/4"	400	5	1.32	0.69	2.04	2.00	2.48
1 1/2"	500	5	1.44	0.69	1.93	2.25	2.48
2"	600	6	2.00	0.80	2.43	2.83	2.97
2 1/2"	700	7	2.36	1.25	2.96	3.75	3.95
3"	900	9	3.05	1.39	3.01	4.75	5.00
3 1/2"	1150	11	3.00	1.47	4.41	5.36	6.22
4"	1250	12	3.60	1.47	4.53	5.82	6.66



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 2011/65/EU 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.



ISO CERTIFICATION

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

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
3 1/2"	3.570 TO 4.040
4"	4.550 TO 4.630

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 (-101°C to +199°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 RTK 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	

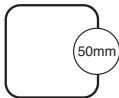

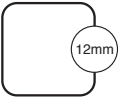
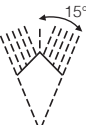
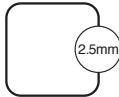
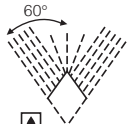
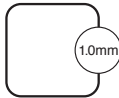


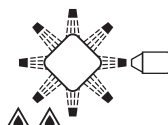


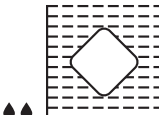
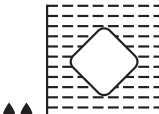
HAZARDOUS LOCATIONS

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

RATINGS/MATERIAL OF CONSTRUCTION

MATERIAL	IP 54 AND NEMA 3	IP 54 AND NEMA 3R	IP65 AND NEMA 4	IP 56 AND NEMA 4X	IP67 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	Second Digit	Protection From Moisture
0	Non-Protected	0	Non-Protected
1	 Protected against solid objects over 50mm e.g hands, large tools	1	 Protection against vertically falling drops of water
2	 Protected against solid objects over 12mm e.g hands, large tools	2	 Protection against direct sprays of water up to a 15° angle
3	 Protection from entry by solid objects over 2.5mm e.g. wire or small tools	3	 Protection against direct sprays of water up to a 60° angle
4	 Protection from entry by solid objects over 1.0mm e.g. wires or tools	4	 Protection against water sprayed from any direction. Limited ingress permitted.
5	 Protection against deposits of dust e.g. against equipment damage due to deposits	5	 Protection against low pressure water jets from any direction. Limited ingress permitted
6	 Total protection against dust ingress e.g. Dust-Tight	6	 Protection against high pressure water jets from any direction. Limited ingress permitted.
IP CODE EXAMPLE		7	 Protection against immersion between 15cm and 1M
IP54 = IP (IP LETTER CODE), 5 (1st Digit), 4 (2nd Digit)		8	 Protection against complete and continuous immersion in water under pressure e.g. Water-Tight

THREAD SPECIFICATIONS

PG THREAD SPECIFICATIONS

Thread Size	Major Diameter (mm)	Pitch (mm)
Pg 7	12.5	1.27
Pg 9	15.2	1.41
Pg 11	18.6	1.41
Pg 13.5	20.4	1.41
Pg 16	22.5	1.41
Pg 21	28.3	1.56
Pg 29	37.0	1.56
Pg 36	47.0	1.56
Pg 42	54.0	1.56
Pg 48	59.3	1.56

NPT THREAD SPECIFICATIONS

Thread Size	Major 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	Major Diameter (mm)	Pitch (mm)
M12 X 1.5	12	1.50
M16 X 1.5	16	1.50
M20 X 1.5	20	1.50
M25 X 1.5	25	1.50
M32 X 1.5	32	1.50
M40 X 1.5	40	1.50
M50 X 1.5	50	1.50
M63 X 1.5	63	1.50