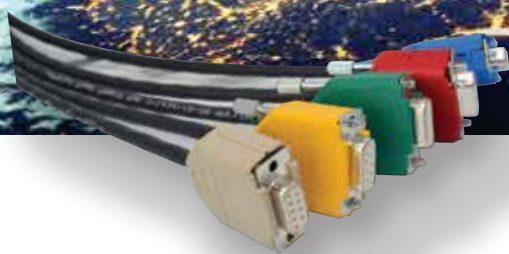


NU-TECH

INDUSTRIAL AND MILITARY WATER-TIGHT SEALS

IP68 & NEMA4X Certified



Cables



Right Angle Boot



Single-Entry Seal

Now Distributing:
Batteries • Fuses • Heat Shrink • Relays • Switches • Terminal Blocks

2021 Product Catalog

A DIVISION OF CROSS TECHNOLOGY INC.

Nu-Tech's broad line of heat-shrinkable molded products provide you with an easy-to-apply vapor and moisture barrier requiring no special molds or fixtures to install. Our shrinkable molded products combine the advantages of quick installation with extreme environmental resistance offering enhanced mechanical protection in the most severe conditions.

Heat-shrinkable molded shapes, high-ratio tubing and bulkhead penetration seals combine the advantages of quick and easy installation with high-electrical resistance, mechanical toughness, moisture resistance, and superior chemical and environmental protection.

Our products are designed to provide important functional benefits making it easier to create complete jacketed - cable and wire-harnessing assemblies. We enhance the integrity of your electrical systems by utilizing our large inventory of hull-penetrating cable entry seals, strain-relieving boots, various and multi-way transitions and high ratio tubing.

Our highly-trained staff can assist you according to your individual system requirements. With shrink ratios as high as 6:1, a minimum number of parts are needed to cover a full range of sizes. Ask us how our parts can provide cost savings to your manufacturing, maintenance or service industry.

Our products are comprised of semi-rigid plastic fittings and flexible Low Smoke Zero Halogen or flame-retardant Polyolefin materials conforming to Military Specification SAE-AS81765/1, combined with a low temperature flexibility rating conforming to Military Specification MIL-I-23053D.

Keep in mind...with an in-house mold design facility, we have the capacity to develop and design new custom-molded heat-shrinkable products to meet your specific requirements.



- Some common customer requests include:
- Low Smoke Zero Halogen LSZH (Add LZ to any part number)
- New part design, prototype, and production
- Over-expansions
- Special geometries and custom lengths
- Hot-melt adhesive coatings
- Drain ports and pressure fittings
- Custom Printing Available

Contact us today at (336) 725-4700
or check us out online at www.Nu-Tech.us



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Specifications

Nu-Tech's large product line has state-of-the-art firewall Feed-Thru products that meet the requirements of the US Department of Defense (DOD-STD-2003) Navsea drawing #803-500127-1313. We have a proven solution to provide a watertight, vapor-proof seal where cables enter connection/junction boxes and bulkheads. Our heat shrinkable material compounds meet the requirements of Mil-I-81765/1A, now SAE AS81756/1 and Mil-I-23053D. Adhesive lined products meet Mil-I-23053/15A requirements, and our heat-resistant body materials exceed the flame retardant requirements of the U.S. Navy.

Ratings

Nu-Tech's cable entry seals and boots are:

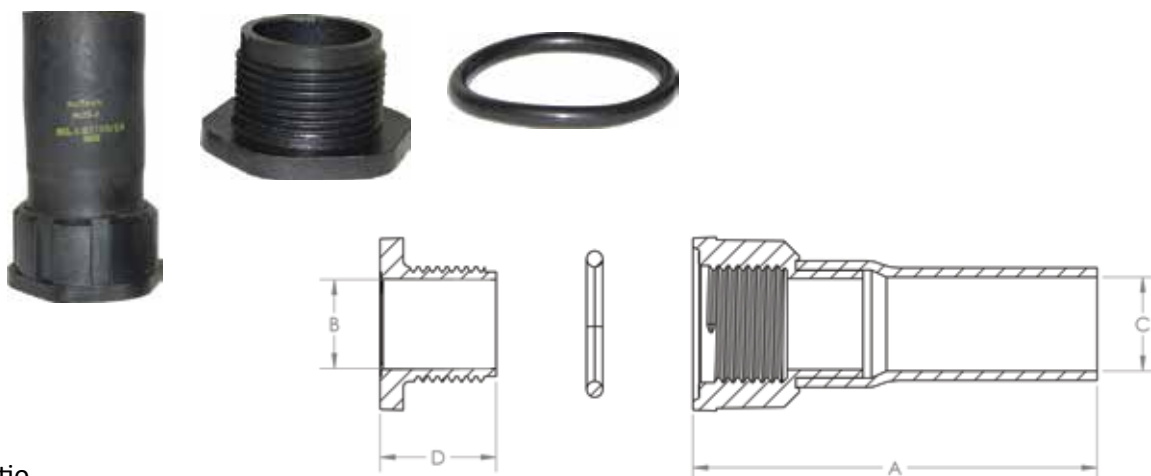
- IP68 Rated
- NEMA4X Rated
- RoHS Compliant

Properties

Nu-Tech heat shrinkable products are manufactured from specially formulated polyolefin cross-linked compounds allowing these materials to exhibit several unique characteristics. The addition of a hot melt adhesive lining provides a secure, creep-resistant waterproof seal that is semi-rigid, but soft enough to allow flexibility during service.

- Fast shrinkage upon application of heat above 120°C
- Continuous operating temperature range from -55°C to 135°C
- Meets or exceeds standard specifications for Cable Entry Seals (ASTM F1837M)
- Flame retardant with a flammability rating of non-burning (ASTM D-635)
- Dielectric strength of 400 minimum, (ASTM D-149) and volume resistivity; Ohm-cm psi (ASTM D-257) 7,880V/mm minimum dielectric performance, (ASTM D-876)
- Resistant to all known types of corrosion (ASTM D-2671 A)
- Fungus-growth resistant with a rating of zero (ASTM G-21)
- Low water absorption percentile maximum 0.1 (ASTM D-570)
- Good low temperature flexibility with no cracking after four hours at -55°C (ASTM D-2671 C)
- Excellent heat resistance with no dripping, flowing or cracking at 225°C (ASTM D-2671)
- Very high tensile strength rubber compound 1,200 to 1,500 psi (ASTM D-412)
- Slightly heavier than water with a specific gravity of 1.4 (ASTM D-792)
- Tough yet very flexible with a hardness Shore D: 45+/-5 (ASTM D-2240)
- High ultimate elongation rating of 250% minimum (ASTM D-412) with more expansion than our competitors
- Extremely durable with a stiffness maximum of 25,000 psi (ASTM D-747)

All effort has been made to ensure specifications stated in this catalog are correct and are in accordance with accepted engineering practices. However, because of the various possible uses of the products mentioned in this catalog, Nu-Tech makes no warranties as to data accuracy or completeness and disclaims all liability in connection with use of the products listed in this catalog. Users of Nu-Tech products should conduct their own tests to determine the suitability of each product for their own particular applications. Nu-Tech shall not be liable for injury, loss, or damage, direct or consequential, arising out of the use of or inability to use any product mentioned herein beyond replacement of defective material. Users of Nu-Tech products, services, or information assume all risks related thereto. Specifications are actual values at time of printing. Nu-Tech reserves the right to make changes and updates without prior notice. Nu-Tech can provide current product specification information upon request.



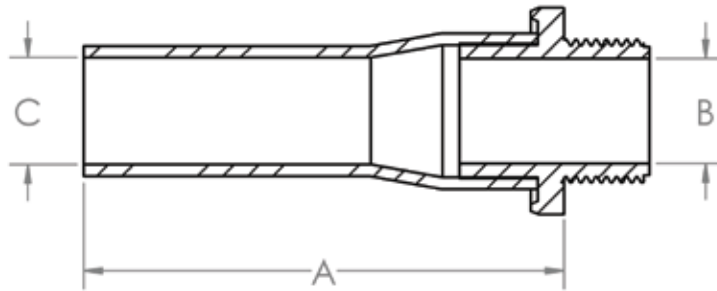
6:1 Ratio

Hot melt adhesive lined

Available in a variety of colors

This seal consists of a three-part assembly: a rigid plastic nut, an O-ring and a heat-shrinkable molded area.

Nu-Tech #	Raychem #	NSN #	A	B Feed Thru	C Supplied	C Recovered	D Nut Length	Drill/Hole Size
NUS-1	CES-1	5975-01-295-9059	3.45 (87.63)	0.5 (12.70)	0.5 (12.70)	0.12 (3.05)	1 (25.40)	1 (25.40)
NUS-2	CES-2	5330-01-359-4316	3.45 (87.63)	0.75 (19.05)	0.75 (19.05)	0.25 (6.35)	1 (25.40)	1 (25.40)
NUS-2X	CES-2S		1.25 (31.75)	0.75 (19.05)	0.75 (19.05)	0.25 (6.35)	0.95 (24.13)	1 (25.40)
NUS-2H			2.25 (57.15)	0.75 (19.05)	0.75 (19.05)	0.25 (6.35)	1 (25.40)	1 (25.40)
NUS-3	CES-3	5975-01-233-6023	3.5 (88.90)	1.07 (27.18)	1.2 (30.48)	0.5 (12.70)	1.1 (27.94)	1.38 (35.05)
NUS-3X	CES-3S		3.75 (95.25)	1.35 (34.29)	1.5 (38.10)	0.5 (12.70)	1.1 (27.94)	1.62 (41.15)
NUS-4	CES-4	5975-01-297-3454	4 (101.60)	1.55 (39.37)	1.7 (43.18)	0.75 (19.05)	1.55 (39.37)	2 (50.80)
NUS-4LN			4 (101.60)	1.55 (39.37)	1.7 (43.18)	0.75 (19.05)	2.85 (72.39)	2 (50.80)
NUS-4X	CES-4S		6 (152.40)	2.04 (51.82)	2.75 (69.85)	0.75 (19.05)	2 (50.80)	2.36 (59.94)
NUS-4X4-5LG			6 (152.40)	2.04 (51.82)	2.75 (69.85)	0.75 (19.05)	2 (50.80)	2.36 (59.94)
NUS-4XLN			6 (152.40)	2.04 (51.82)	2.75 (69.85)	0.75 (19.05)	2.65 (67.31)	2.36 (59.94)
NUS-5	CES-5	5975-01-297-3455	7 (177.80)	2.9 (73.66)	2.9 (73.66)	1.43 (36.32)	2 (50.80)	3.5 (88.90)
NUS-5LN			7 (177.80)	2.85 (72.39)	2.9 (73.66)	1.43 (36.32)	3.3 (83.82)	3.5 (88.90)
NUS-5OE			7 (177.80)	2.95 (74.93)	3.9 (99.06)	1.43 (36.32)	2 (50.80)	3.5 (88.90)
NUS-5-4LN			12 (304.80)	2.85 (72.39)	4 (101.60)	1.43 (36.32)	4.5 (114.30)	3.5 (88.90)
NUS-5-4.8LN			12 (304.80)	2.85 (72.39)	4 (101.60)	1.43 (36.32)	4.8 (121.92)	3.5 (88.90)
NUS-5X			12 (304.80)	2.85 (72.39)	4 (101.60)	1.43 (36.32)	1.63 (41.40)	3.5 (88.90)
NUS-5XLN			12 (304.80)	2.85 (72.39)	4 (101.60)	1.43 (36.32)	3 (76.20)	3.5 (88.90)



6:1 Ratio

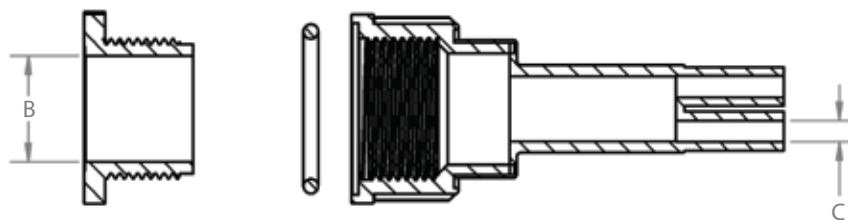
Hot melt adhesive lined

Available in a variety of colors

This seal is a one-part assembly that combines a tapered national pipe threaded (NPT) rigid plastic body with a heat-shrinkable molded tube.

It is recommended to apply RTV or silicone sealant onto the threaded portion of the fitting during assembly.

Part No.	Raychem / Tyco #s	NSN Numbers	A	B Feed Thru	C Supplied	C Recovered	NPT Size
			inches	inches	inches	inches	inches
NUP-01			3.4 (86.36)	0.25 (6.35)	0.43 (10.922)	0.12 (3.048)	0.25
NUP-1			3 (76.2)	0.55 (13.97)	0.5 (12.7)	0.12 (3.048)	0.50
NUP-1A	CES-2-A50	5970-01-288-1059	3.4 (86.36)	0.55 (13.97)	0.75 (19.05)	0.25 (6.35)	0.50
NUP-2	CES-2-A75	5970-01-288-1065	3.4 (86.36)	0.74 (18.796)	0.75 (19.05)	0.25 (6.35)	0.75
NUP-2OE			3.4 (86.36)	0.74 (18.796)	1.25 (31.75)	0.25 (6.35)	0.75
NUP-3	CES-2-A100	5970-01-278-7667	3.5 (88.9)	0.75 (19.05)	0.75 (19.05)	0.25 (6.35)	1.00
NUP-3A	CES-3-A100	5970-01-309-5482	4 (101.6)	1 (25.4)	1.25 (31.75)	0.5 (12.7)	1.00
NUP-4	CES-3-A150	5970-01-309-5483	4.7 (119.38)	1.1 (27.94)	1.4 (35.56)	0.5 (12.7)	1.50
NUP-4A	CES-4-A150		5 (127)	1.5 (38.1)	2.25 (57.15)	0.75 (19.05)	1.50
NUP-4.5			5.6 (142.24)	1.99 (50.546)	2.8 (71.12)	0.75 (19.05)	2.00
NUP-5	CES-5-A250		6 (152.4)	2.38 (60.452)	2.75 (69.85)	0.75 (19.05)	2.50
NUS-6X			11.5 (292.1)	3.6 (91.44)	4.37 (110.998)	1.43 (36.322)	4.44X8 TPI
NUS-7			15 (381)	4.75 (120.65)	6.2 (157.48)	2.25 (57.15)	5.00



6:1 Ratio

Available with 2- 8 legs

Hot melt adhesive lined

This seal consists of a three-part assembly: a rigid plastic nut, an O-ring and a heat-shrinkable multi-leg molded boot.

	Raychem #	NSN #	Number of Legs	B Feed Thru	C Supplied	C Recovered	Drill/Hole Size
			inches	inches	inches	inches	inches
1-NUS-2A			2	0.5 (12.7)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
1-NUS-2AOE			2	0.5 (12.7)	0.6 (15.24)	0.11 (2.794)	1 (25.4)
1-NUS-2B			2	0.5 (12.7)	0.6 (15.24)	0.17 (4.318)	1 (25.4)
1-NUS-3A			3	0.5 (12.7)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
1-NUS-3B			3	0.5 (12.7)	0.6 (15.24)	0.17 (4.318)	1 (25.4)
1-NUS-4A			4	0.5 (12.7)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
1-NUS-4B			4	0.75 (19.05)	0.57 (14.478)	0.19 (4.826)	1 (25.4)
2-NUS-2A	CES-2-D1A		2	0.75 (19.05)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
2-NUS-2AOE			2	0.75 (19.05)	0.57 (14.478)	0.11 (2.794)	1 (25.4)
2-NUS-2B	CES-2-D1		2	0.75 (19.05)	0.57 (14.478)	0.17 (4.318)	1 (25.4)
2-NUS-3A	CES-2-T1	5975-01-295-4166	3	0.75 (19.05)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
2-NUS-3B	CES-2-T1B		3	0.75 (19.05)	0.6 (15.24)	0.17 (4.318)	1 (25.4)
2-NUS-4A	CES-2-F1A		4	0.75 (19.05)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
2-NUS-4B	CES-2-D1		4	0.75 (19.05)	0.57 (14.478)	0.19 (4.826)	1 (25.4)
2X-NUS-2A	CES-2-A-100-11	5975-01-309-5484	2	0.75 (19.05)	0.5 (12.7)	0.11 (2.794)	1 (25.4)
2X-NUS-2AOE			2	0.75 (19.05)	0.57 (14.478)	0.19 (4.826)	1 (25.4)

	Raychem #	NSN #	Number of Legs	B Feed Thru inches	C Supplied inches	C Recovered inches	Drill/Hole Size inches
2X-NUS-2B			2	0.5 (12.7)	0.6 (15.24)	0.17 (4.318)	1 (25.4)
2X-NUS-3A			3	0.75 (19.05)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
2X-NUS-3B			3	0.75 (19.05)	0.6 (15.24)	0.17 (4.318)	1 (25.4)
2X-NUS-4A			4	0.75 (19.05)	0.4 (10.16)	0.11 (2.794)	1 (25.4)
2X-NUS-4B			4	0.75 (19.05)	0.6 (15.24)	0.17 (4.318)	1 (25.4)
3-NUS-2AOE			2	1.1 (27.94)	0.4 (10.16)	0.11 (2.794)	1.38 (35.052)
3-NUS-2B	CES-3-D1	5975-01-318-9912	2	1.05 (26.67)	0.6 (15.24)	0.19 (4.826)	1.38 (35.052)
3-NUS-2C			2	1.05 (26.67)	0.9 (22.86)	0.3 (7.62)	1.38 (35.052)
3-NUS-3B	CES-3-T1	5975-01-318-9913	3	1.05 (26.67)	0.6 (15.24)	0.18 (4.572)	1.38 (35.052)
3-NUS-3C			3	1.05 (26.67)	0.9 (22.86)	0.3 (7.62)	1.38 (35.052)
3-NUS-4B	CES-3-F1	5975-01-295-4167	4	1.05 (26.67)	0.57 (14.478)	0.19 (4.826)	1.38 (35.052)
3-NUS-4C			4	1.05 (26.67)	0.9 (22.86)	0.3 (7.62)	1.38 (35.052)
3X-NUS-2C			2	1.35 (34.29)	0.9 (22.86)	0.3 (7.62)	1.65 (41.91)
3X-NUS-3B			3	1.35 (34.29)	0.75 (19.05)	0.17 (4.318)	1.65 (41.91)
3X-NUS-3C			3	1.35 (34.29)	0.9 (22.86)	0.3 (7.62)	1.65 (41.91)
3X-NUS-4B			4	1.35 (34.29)	0.6 (15.24)	0.17 (4.318)	1.65 (41.91)
3X-NUS-4C			4	1.35 (34.29)	0.9 (22.86)	0.3 (7.62)	1.65 (41.91)
4-NUS-2C	CES-4-D3	---	2	1.5 (38.1)	0.9 (22.86)	0.3 (7.62)	2 (50.8)
4-NUS-2D			2	1.5 (38.1)	1.25 (31.75)	0.3 (7.62)	2 (50.8)
4-NUS-3C	CES-4-T1	5970-01-502-4330	3	1.5 (38.1)	0.9 (22.86)	0.3 (7.62)	2 (50.8)
4-NUS-3D			3	1.5 (38.1)	1.25 (31.75)	0.42 (10.668)	2 (50.8)
4-NUS-4B			4	1.5 (38.1)	0.75 (19.05)	0.17 (4.318)	2 (50.8)
4-NUS-4C	CES-4-F1	5970-01-565-5246	4	1.5 (38.1)	0.9 (22.86)	0.28 (7.112)	2 (50.8)
4-NUS-4D			4	1.5 (38.1)	1.25 (31.75)	0.3 (7.62)	2 (50.8)
4X-NUS-2D			2	2.05 (52.07)	1.25 (31.75)	0.3 (7.62)	2.4 (60.96)
4X-NUS-3C			3	2.05 (52.07)	1 (25.4)	0.3 (7.62)	2.4 (60.96)
4X-NUS-3D			3	2.05 (52.07)	1.25 (31.75)	0.43 (10.922)	2.4 (60.96)
4X-NUS-4C			4	2.05 (52.07)	0.9 (22.86)	0.3 (7.62)	2.4 (60.96)
4X-NUS-4D			4	2.05 (52.07)	1.25 (31.75)	0.3 (7.62)	2.4 (60.96)
5-NUS-2D			2	2.9 (73.66)	1.25 (31.75)	0.3 (7.62)	3.5 (88.9)
5-NUS-3D			3	2.9 (73.66)	1.2 (30.48)	0.43 (10.922)	3.5 (88.9)
5-NUS-4E			4	2.9 (73.66)	1.5 (38.1)	0.3 (7.62)	3.5 (88.9)





6:1 Ratio

Available with 2- 8 legs

Hot melt adhesive lined

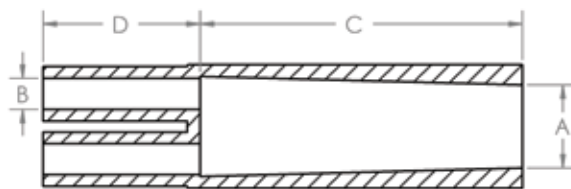
This seal is a one-part assembly that combines a tapered national pipe threaded (NPT) rigid plastic body with a heat-shrinkable multi-leg molded boot.

It is recommended to apply RTV or silicone sealant onto the threaded portion of the fitting during assembly.

Part No.	Raychem #	Number of Legs	B Feed Thru	C Supplied	C Recovered	NPT Size
			inches	inches	inches	inches
1-NUP-2A		2	0.55 (13.97)	0.4 (10.16)	0.12 (3.048)	0.50
1-NUP-2AOE		2	0.55 (13.97)	0.6 (15.24)	0.12 (3.048)	0.50
1-NUP-3A	CES-2A-T1	3	0.55 (13.97)	0.4 (10.16)	0.12 (3.048)	0.50
1-NUP-4A	CES-2A-F1	4	0.55 (13.97)	0.4 (10.16)	0.11 (2.794)	0.50
2-NUP-2A	CES-2A-D1	2	0.7 (17.78)	0.4 (10.16)	0.11 (2.794)	0.75

Part No.	Raychem #	Number of Legs	B Feed Thru inches	C Supplied inches	C Recovered inches	NPT Size inches
2-NUP-2AOE		2	0.7 (17.78)	0.6 (15.24)	0.12 (3.048)	0.75
2-NUP-2B		2	0.7 (17.78)	0.6 (15.24)	0.17 (4.318)	0.75
2-NUP-3A	CES-2A-T2	3	0.7 (17.78)	0.4 (10.16)	0.11 (2.794)	0.75
2-NUP-3B		3	0.7 (17.78)	0.6 (15.24)	0.17 (4.318)	0.75
2-NUP-4A	CES-2A-F2	4	0.7 (17.78)	0.4 (10.16)	0.11 (2.794)	0.75
2-NUP-4B		4	0.7 (17.78)	0.6 (15.24)	0.17 (4.318)	0.75
3-NUP-2A		2	0.7 (17.78)	0.4 (10.16)	0.11 (2.794)	1.00
3-NUP-2B		2	0.7 (17.78)	0.6 (15.24)	0.17 (4.318)	1.00
3-NUP-3A		3	0.7 (17.78)	0.4 (10.16)	0.12 (3.048)	1.00
3-NUP-3B		3	0.7 (17.78)	0.6 (15.24)	0.17 (4.318)	1.00
3-NUP-4A		4	0.7 (17.78)	0.4 (10.16)	0.12 (3.048)	1.00
3-NUP-4B		4	0.7 (17.78)	0.6 (15.24)	0.18 (4.572)	1.00
3A-NUP-2B	CES-3A-D1	2	0.95 (24.13)	0.6 (15.24)	0.17 (4.318)	1.00
3A-NUP-2C	CES-2A-T3	2	0.95 (24.13)	0.95 (24.13)	0.3 (7.62)	1.00
3A-NUP-3B	CES-3A-F1	3	0.95 (24.13)	0.6 (15.24)	0.18 (4.572)	1.00
3A-NUP-3C		3	0.95 (24.13)	0.95 (24.13)	0.3 (7.62)	1.00
3A-NUP-4B		4	0.95 (24.13)	0.6 (15.24)	0.19 (4.826)	1.00
3A-NUP-4C		4	0.95 (24.13)	0.95 (24.13)	0.28 (7.112)	1.00
4-NUP-2B	CES-3A-D2	2	1.6 (40.64)	0.9 (22.86)	0.17 (4.318)	1.50
4-NUP-3B	CES-3A-T2	3	1.13 (28.702)	0.6 (15.24)	0.18 (4.572)	1.50
4-NUP-3C		3	1.13 (28.702)	0.95 (24.13)	0.3 (7.62)	1.50
4-NUP-4B	CES-3A-F2	4	1.13 (28.702)	0.6 (15.24)	0.18 (4.572)	1.50
4-NUP-4C		4	1.13 (28.702)	1 (25.4)	0.28 (7.112)	1.50
4A-NUP-2C	CES-4A-D3	2	1.4 (35.56)	0.9 (22.86)	0.3 (7.62)	1.50
4A-NUP-2D		2	1.4 (35.56)	1.25 (31.75)	0.3 (7.62)	1.50
4A-NUP-3C	CES-4A-T3	3	1.4 (35.56)	0.9 (22.86)	0.28 (7.112)	1.50
4A-NUP-4C	CES-4A-F3	4	1.4 (35.56)	0.9 (22.86)	0.28 (7.112)	1.50
5-NUP-2F		2	2.35 (59.69)	1.6 (40.64)	0.3 (7.62)	2.50
5-NUP-4D		4	2.35 (59.69)	1.12 (28.448)	0.28 (7.112)	2.50

Round Breakout Boots



Available with up to 8 legs
For cable sealing strain relief
and mechanical protection.

	Raychem #	3M	NSN #	Number of Legs	Cable MCM	A Expanded	A Recovered	B Expanded	B Recovered	C Recovered	D Recovered
						inches	inches	inches	inches	inches	inches
NUBB2-1	D3-9 FR		6150-01-644-8892	2	3,4,6,9	0.8 (20.32)	0.37 (9.398)	0.4 (10.16)	0.11 (2.794)	2 (50.8)	0.7 (17.78)
NUBB2-1OE				2	14,23,30	1 (25.4)	0.37 (9.398)	0.65 (16.51)	0.11 (2.794)	2 (50.8)	0.7 (17.78)
NUBB2-2	D14-30 FR	HDBB-210-1-250	5970-01-528-0391	2	14,23,30	1.2 (30.48)	0.6 (15.24)	0.5 (12.7)	0.17 (4.318)	2.5 (63.5)	1 (25.4)
NUBB2-2OE				2	50,75,83,100	1.5 (38.1)	0.6 (15.24)	0.85 (21.59)	0.17 (4.318)	2.5 (63.5)	1 (25.4)
NUBB2-3	D50-100-FR			2	50,75,83,100	1.7 (43.18)	0.9 (22.86)	1 (25.4)	0.3 (7.62)	3.25 (82.55)	1.4 (35.56)
NUBB2-4	D200-400			2	200,250,300,400	2.5 (63.5)	0.9 (22.86)	1.25 (31.75)	0.3 (7.62)	3.25 (82.55)	1.4 (35.56)
NUBB-2-5				2	400+	2.75 (69.85)	0.9 (22.86)	1.4 (35.56)	0.3 (7.62)	3.25 (82.55)	1.4 (35.56)
NUBB-2-6				2	400+	3.4 (86.36)	0.9 (22.86)	1.6 (40.64)	0.3 (7.62)	3.2 (81.28)	1.2 (30.48)
NUBB3-1	T3-9FR	HDBB-310-1-250	5970-01-020-3414	3	3,4,6,9	0.9 (86.36)	0.4 (10.16)	0.4 (10.16)	0.12 (3.048)	1.8 (45.72)	0.7 (17.78)
NUBB3-2	T14-23FR	HDBB-320-1-250	5970-01-202-3415	3	14,23	1.2 (30.48)	0.69 (17.526)	0.55 (13.97)	0.18 (4.572)	2.3 (58.42)	1 (25.4)
NUBB3-3	T42-100-FR	HDBB-325-1-250	5970-01-051-1959	3	42,50,75,100	1.7 (43.18)	0.9 (22.86)	0.9 (22.86)	0.3 (7.62)	2.3 (58.42)	1.2 (30.48)
NUBB3-3OE				3	42,50,75,100	2.9 (73.66)	0.9 (22.86)	1.45 (36.83)	0.3 (7.62)	2.3 (58.42)	1.2 (30.48)
NUBB3-4	T150-300FR	HDBB-335-1-250	5970-01-020-3417	3	150,200,250,300	2.4 (60.96)	1.3 (33.02)	1.25 (31.75)	0.43 (10.922)	3.2 (81.28)	1.6 (40.64)
NUBB3-5			5970-21-894-5633	3	400	2.8 (71.12)	2 (50.8)	1.4 (35.56)	0.75 (19.05)	4.75 (120.65)	2.2 (55.88)
NUBB3-5OE		HDBB-340-1-250		3	400	3.3 (83.82)	2 (50.8)	1.7 (43.18)	0.75 (19.05)	4.75 (120.65)	2.2 (55.88)
NUBB3-6	T500-600FR	HDBB-345-1-250		3	500,600	6 (152.4)	2.3 (58.42)	2.5 (63.5)	0.8 (20.32)	7.5 (190.5)	2.3 (58.42)
NUBB4-1				4	3,4,5,6	1 (25.4)	0.4 (10.16)	0.4 (10.16)	0.11 (2.794)	2 (50.8)	0.75 (19.05)
NUBB4-1SP				4		0.8 (20.32)	0.55 (13.97)	0.4 (10.16)	0.11 (2.794)	0.5 (12.7)	0.75 (19.05)
NUBB4-2	F23FR	HDBB-410-1-250	5940-01-552-0509	4	23	1.4 (35.56)	0.75 (19.05)	0.58 (14.732)	0.17 (4.318)	2.3 (58.42)	1 (25.4)
NUBB4-3	F42-60FR			4	42,50,60	2.1 (53.34)	0.9 (22.86)	1 (25.4)	0.28 (7.112)	2.3 (58.42)	1.2 (30.48)
NUBB4-4	F75-100FR			4	75,100	2.5 (63.5)	0.9 (22.86)	1.2 (30.48)	0.28 (7.112)	3.5 (88.9)	1.2 (30.48)
NUBB4-4OE				4	75,100	3.2 (81.28)	0.9 (22.86)	1.45 (36.83)	0.28 (7.112)	3.5 (88.9)	1.2 (30.48)



	Raychem #	3M	NSN #	Number of Legs	Cable MCM	A Expanded inches	A Recovered inches	B Expanded inches	B Recovered inches	C Recovered inches	D Recovered inches
NUBB4-5	F133-200FR			4	133,150,200	3 (76.2)	0.9 (22.86)	1.3 (33.02)	0.28 (7.112)	3.5 (88.9)	1.2 (30.48)
NUBB4-6				4	500,600	5.25 (133.35)	3 (76.2)	1.25 (31.75)	0.55 (13.97)	6 (152.4)	3 (76.2)
NUBB5-1				5	3,4,5,6	1.4 (35.56)	0.85 (21.59)	0.4 (10.16)	0.13 (3.302)	2.5 (63.5)	1.25 (31.75)
NUBB5-2				5	23	1.7 (43.18)	1.32 (33.528)	0.56 (14.224)	0.19 (4.826)	2.5 (63.5)	1.25 (31.75)
NUBB5-3				5	42,50,60	2.5 (63.5)	1.32 (33.528)	0.87 (22.098)	0.19 (4.826)	2.5 (63.5)	1.25 (31.75)
NUBB5-3LG				5	42,50,60	3.2 (81.28)	1.7 (43.18)	1.25 (31.75)	0.25 (6.35)	4.85 (123.19)	3 (76.2)
NUBB6-1				6	3,4,5,6	1.4 (35.56)	0.75 (19.05)	0.4 (10.16)	0.13 (3.302)	2.7 (68.58)	1.25 (31.75)
NUBB6-1SP				6		1.2 (30.48)	0.75 (19.05)	0.4 (10.16)	0.11 (2.794)	0.75 (19.05)	0.75 (19.05)
NUBB6-2				6	23	1.75 (30.48)	1.25 (31.75)	0.56 (14.224)	0.19 (4.826)	2.7 (68.58)	1.25 (31.75)
NUBB6-3		HDBB-605-1-250		6	42,50,60	2.5 (63.5)	1.32 (33.528)	1 (25.4)	0.19 (4.826)	2.7 (68.58)	1.25 (31.75)
NUBB7-1				7	3,4,5,6	1.4 (35.56)	0.85 (21.59)	0.4 (10.16)	0.13 (3.302)	2 (50.8)	1.25 (31.75)
NUBB7-2				7	23	2 (50.8)	1.32 (33.528)	0.56 (14.224)	0.19 (4.826)	2.5 (63.5)	1.25 (31.75)
NUBB7-3				7	42,50,60	2.8 (71.12)	1.32 (33.528)	0.87 (22.098)	0.19 (4.826)	2.5 (63.5)	1.25 (31.75)
NUBB8-1	8S-23-95FR		5970-01-596-6513	8	23	1.6 (40.64)	0.8 (20.32)	0.4 (10.16)	0.13 (3.302)	2.5 (63.5)	1.25 (31.75)
NUBB8-1OE				8	23-50	2.18 (55.372)	0.8 (20.32)	0.63 (16.002)	0.13 (3.302)	2.5 (63.5)	1.25 (31.75)
NUBB8-2	8514-50FR			8	25-50	2.25 (57.15)	1.32 (33.528)	0.56 (14.224)	0.19 (4.826)	2.5 (63.5)	1.25 (31.75)
NUBB8-3	8542-100FR			8	23-75	2.5 (63.5)	1.32 (33.528)	0.87 (22.098)	0.19 (4.826)	2.5 (63.5)	1.25 (31.75)
NUBB8-3OE				8	23-75	3.12 (79.248)	1.32 (33.528)	0.9 (22.86)	0.19 (4.826)	2.5 (63.5)	1.25 (31.75)

Industrial Round Breakout Boots

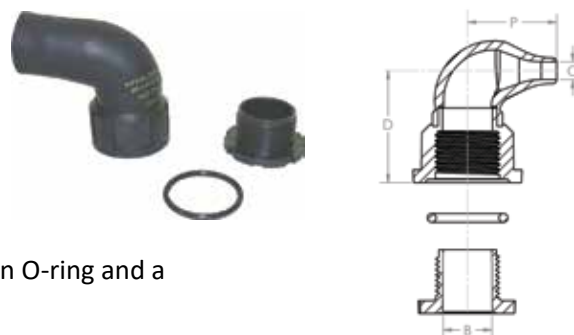


Part No.	Number of Legs	A Expanded inches	A Recovered inches	B Expanded inches	B Recovered inches	Full Length inches	D Recovered inches
NUBB2-48/22	2	1.89 (48.006)	0.87 (22.098)	0.71 (18.034)	0.28 (7.112)	6.69 (169.926)	2.17 (55.118)
NUBB3-70/36	3	2.76 (70.104)	1.42 (36.068)	1.14 (28.956)	0.51 (12.954)	8.27 (210.058)	3.15 (80.01)
NUBB4-70/32	4	2.76 (70.104)	1.26 (32.004)	0.95 (24.13)	0.35 (8.89)	6.89 (175.006)	2.95 (74.93)
NUBB6-13055	6	5.12 (130.048)	2.17 (55.118)	3x 1.81 3x 2.09	3x 0.47 3x 0.67	8.66 (219.964)	2.76 (70.104)

Right Angle Shrinking Seal (NUS)

6:1 Ratio
Hot melt adhesive lined

This seal consists of a three-part assembly: a rigid plastic nut, an O-ring and a heat-shrinkable right angle molded boot.



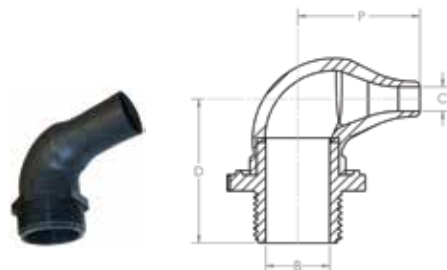
	B Feed Thru	C Expanded	C Recovered	P	D	Drill/Hole Size
	inches	inches	inches	inches	inches	inches
1-NUS-0R	0.5 (12.7)	0.5 (12.7)	0.23 (5.842)	1.26 (32.004)	1.71 (43.434)	1 (25.4)
2-NUS-1R	0.75 (19.05)	0.75 (19.05)	0.28 (7.112)	1.4 (35.56)	1.91 (48.514)	1 (25.4)
2-NUS-2R	0.75 (19.05)	0.75 (19.05)	0.33 (8.382)	1.7 (43.18)	2.21 (56.134)	1 (25.4)
2X-NUS-2R	0.75 (19.05)	0.75 (19.05)	0.33 (8.382)	1.7 (43.18)	1.43 (36.322)	1 (25.4)
3-NUS-3R	1.07 (27.178)	1.07 (27.178)	0.38 (9.652)	2.1 (53.34)	2.51 (63.754)	1.38 (35.052)
3X-NUS-3R	1.35 (34.29)	1.35 (34.29)	0.38 (9.652)	2.1 (53.34)	2.75 (69.85)	1.62 (41.148)
4-NUS-4R	1.55 (39.37)	1.55 (39.37)	0.62 (15.748)	3.1 (78.74)	3.46 (87.884)	2 (50.8)

Right Angle Shrinking Seal (NUP), Pipe Threaded

6:1 Ratio
Hot melt adhesive lined

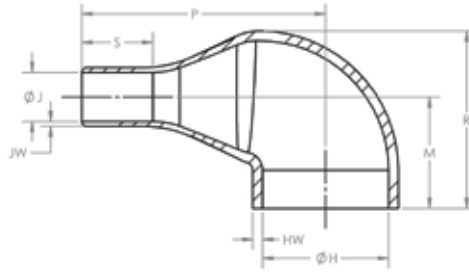
This seal is a one-part assembly that combines a tapered national pipe threaded (NPT) rigid plastic body with a heat-shrinkable right angle molded boot.

It is recommended to apply RTV or silicone sealant onto the threaded portion of the fitting during assembly.



Part No.	B Feed Thru	C Expanded	C Recovered	P	D	NPT Size
	inches	inches	inches	inches	inches	inches
1-NUP-0R	0.55 (13.97)	0.6 (15.24)	0.23 (5.842)	1.26 (32.004)	1.02 (25.908)	0.50
2-NUP-1R	0.74 (18.796)	0.75 (19.05)	0.28 (7.112)	1.4 (35.56)	1.21 (30.734)	0.75
2-NUP-2R	0.74 (18.796)	0.75 (19.05)	0.33 (8.382)	1.7 (43.18)	1.52 (38.608)	0.75
3A-NUP-3R	1 (25.4)	1 (25.4)	0.38 (9.652)	2.1 (53.34)	1.81 (45.974)	1.00
3-NUP-2R	0.75 (19.05)	0.75 (19.05)	0.33 (8.382)	1.7 (43.18)	1.56 (39.624)	1.00
4-NUP-3R	1.1 (27.94)	1.25 (31.75)	0.62 (15.748)	2.1 (53.34)	1.83 (46.482)	1.50

Non-Lipped Right Angle Boots

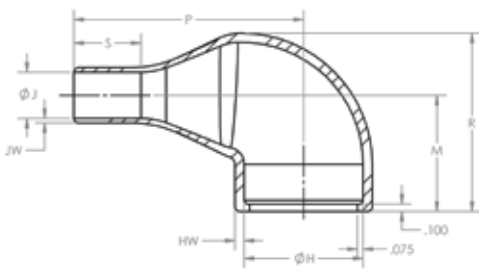


90-degree angle aids in efficient routing of wire harnesses and cables.

Part No.	H & J Expanded	H Recovered	J Recovered	M	P	R	S	HW	JW
	inches	inches	inches	inches	inches	inches	inches	inches	inches
NU0R	1 (25.4)	0.48 (12.192)	0.23 (5.842)	0.79 (20.066)	1.26 (32.004)	1.06 (26.924)	0.38 (9.652)	0.06 (1.524)	0.03 (0.762)
NU1R	1.25 (31.75)	0.75 (19.05)	0.28 (7.112)	1 (25.4)	1.4 (35.56)	1.47 (37.338)	0.25 (6.35)	0.09 (2.286)	0.06 (1.524)
NU1RLG	1.12 (28.448)	0.5 (12.7)	0.2 (5.08)	0.35 (8.89)	3.44 (87.376)	0.68 (17.272)	2 (50.8)	0.06 (1.524)	0.06 (1.524)
NU2R	1.5 (38.1)	0.75 (19.05)	0.33 (8.382)	1.29 (32.766)	1.7 (43.18)	1.71 (43.434)	0.51 (12.954)	0.1 (2.54)	0.07 (1.778)
NU2RLG	1.5 (38.1)	0.75 (19.05)	0.33 (8.382)	1.1 (27.94)	3.2 (81.28)	1.5 (38.1)	1.44 (36.576)	0.07 (1.778)	0.07 (1.778)
NU2.5RLG	1.5 (38.1)	0.8 (20.32)	0.33 (8.382)	0.95 (24.13)	3.49 (88.646)	1.5 (38.1)	1.5 (38.1)	0.07 (1.778)	0.07 (1.778)
NU3R	1.75 (44.45)	1.1 (27.94)	0.38 (9.652)	1.53 (38.862)	2.1 (53.34)	2.13 (54.102)	0.49 (12.446)	0.13 (3.302)	0.07 (1.778)
NU4R	2 (50.8)	1.6 (40.64)	0.62 (15.748)	1.96 (49.784)	3 (76.2)	2.79 (70.866)	0.9 (22.86)	0.13 (3.302)	0.09 (2.286)

Lipped Right Angle Boots

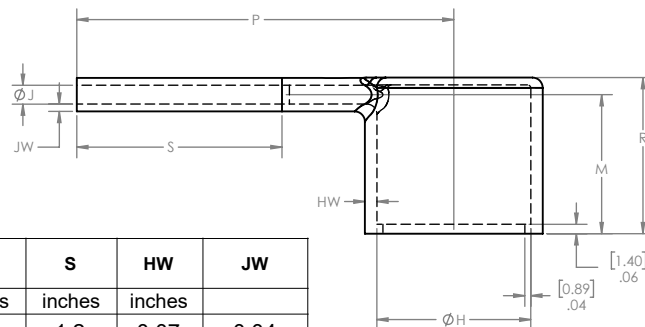
For attachment to standard circular connector adapters. Upon shrinking the boot lip locks into the adapter groove.

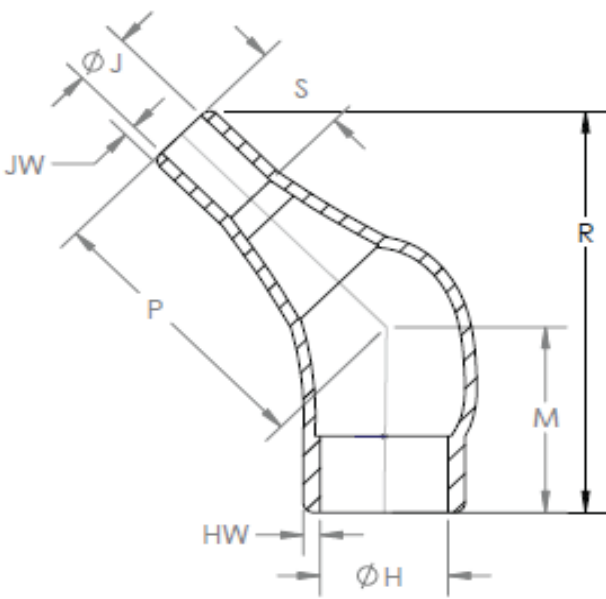


Part No.	H & J Expanded	H Recovered	J Recovered	M	P	R	S	HW	JW
	inches	inches	inches	inches	inches	inches	inches	inches	inches
NU0RL	1 (25.4)	0.48 (12.192)	0.23 (5.842)	0.79 (20.066)	1.26 (32.004)	1.06 (26.924)	0.38 (9.652)	0.06 (1.524)	0.03 (0.762)
NU1RL	1.25 (31.75)	0.75 (19.05)	0.28 (7.112)	1 (25.4)	1.4 (35.56)	1.47 (37.338)	0.25 (6.35)	0.09 (2.286)	0.04 (1.016)
NU2RL	1.5 (38.1)	0.75 (19.05)	0.33 (8.382)	1.29 (32.766)	1.7 (43.18)	1.71 (43.434)	0.51 (12.954)	0.1 (2.54)	0.07 (1.778)
NU3RL	1.75 (44.45)	1.1 (27.94)	0.38 (9.652)	1.53 (38.862)	2.1 (53.34)	2.13 (54.102)	0.49 (12.446)	0.13 (3.302)	0.07 (1.778)
NU4RL	2 (50.8)	1.6 (40.64)	0.62 (15.748)	1.96 (49.784)	3.1 (78.74)	2.79 (70.866)	0.9 (22.86)	0.13 (3.302)	0.09 (2.286)

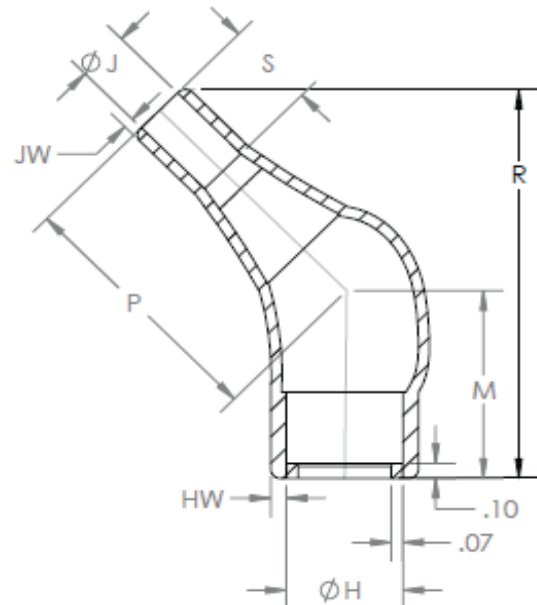
Low Profile 90 Degree Boots

Part No.	H Expanded	J Expanded	H Recovered	J Recovered	M	P	R	S	HW	JW
	inches	inches	inches	inches	inches	inches	inches	inches	inches	inches
NUR-1LP	1 (25.4)	0.04 (1.016)	0.9 (22.86)	0.11 (2.794)	0.81 (20.65)	2.21 (56.01)	0.91 (23.19)	1.2 (30.48)	0.07 (1.778)	0.04 (1.09)



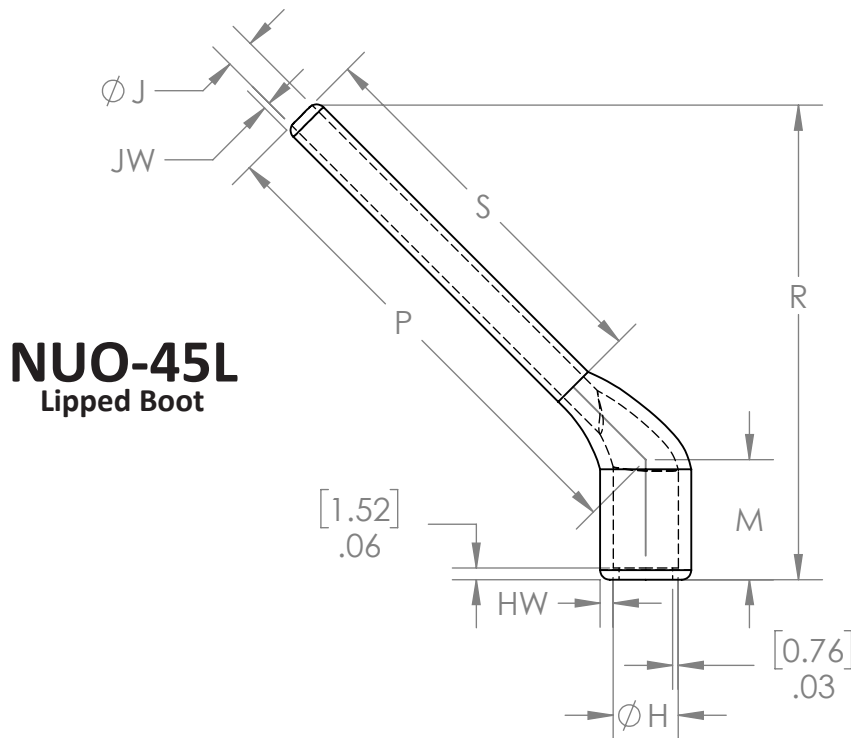


NU2-45
Boot W/O Lip

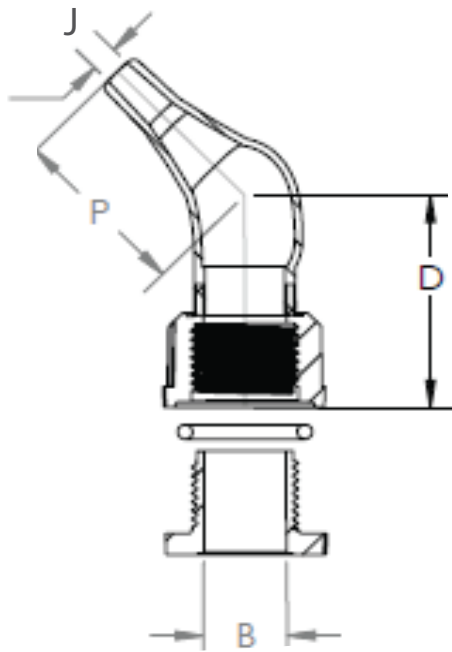


NU2-45L
Lipped Boot

	H & J Supplied	H Recovered	J Recovered	M	P	R	S	HW	JW
	inches	inches	inches	inches	inches	inches	inches	inches	inches
NU2-45	1.5 (38.1)	0.75 (19.05)	0.33 (8.382)	1.16 (29.464)	1.7 (43.18)	2.5 (63.5)	0.57 (14.478)	0.1 (2.54)	0.07 (1.778)
NU2-45L	0.6 (15.24)	n/a	0.33 (8.382)	1.26 (32.004)	1.7 (43.18)	2.6 (66.04)	0.57 (14.478)	0.1 (2.54)	0.07 (1.778)
NUO-45L	0.75 (19.05)	0.28 (7.09)	0.15 (3.81)	0.63 (15.88)	2.54 (64.39)	2.42 (61.4)	2 (50.8)	0.068 (1.73)	0.035 (0.889)
NUO-45	0.75 (19.05)	0.34 (8.636)	0.15 (3.81)	0.5 (12.7)	2.54 (64.516)	2.29 (58.166)	2 (50.8)	0.068 (1.73)	0.035 (0.889)

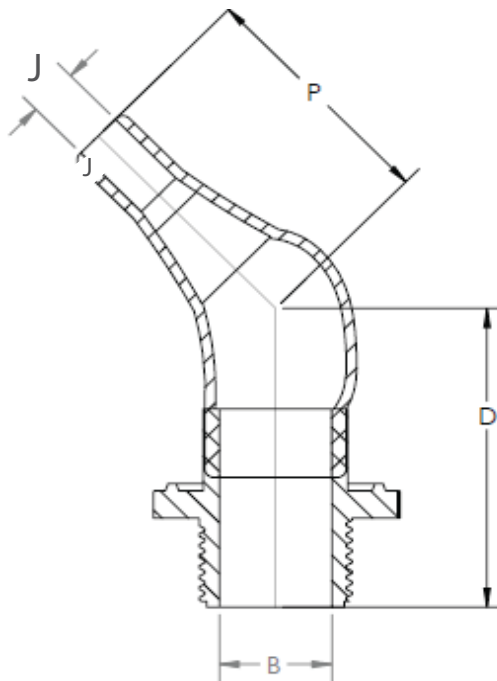


NUO-45L
Lipped Boot



2-NUS-2-45
Cable entry seal female

Part No.	J Supplied	J Recovered	P	D	B	Drill hole size
	inches	inches				
2-NUS-2-45	0.47 (11.938)	0.33 (8.382)	1.7 (43.18)	2.07 (52.578)	0.75 (19.05)	1 (25.4)
2-NUP-2-45	1.5 (38.1)	0.33 (8.382)	1.7 (43.18)	2.06 (52.324)	0.75 (19.05)	.75-NPT

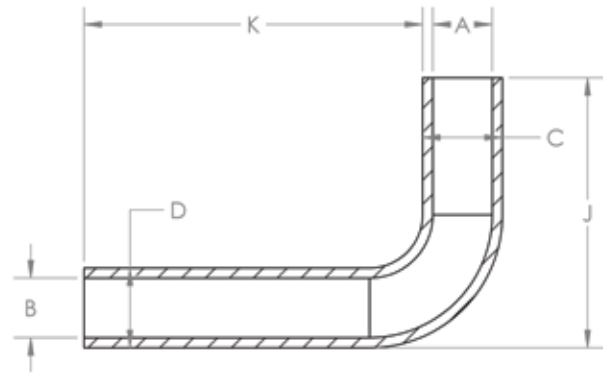
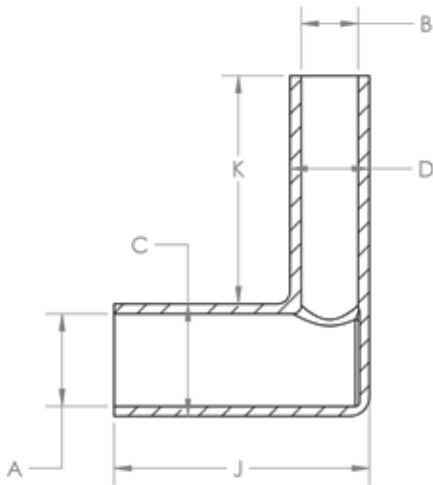


2-NUP-2-45
Cable entry seal male

RAGCS15



RAGCG16



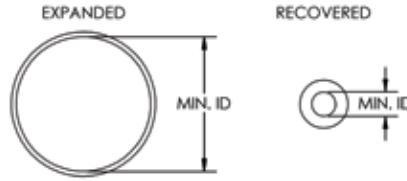
	A Expanded	A Recovered	B Expanded	B Recovered	C	D	J	K
	inches	inches	inches	inches	inches	inches	inches	inches
RAGCS15	3 (76.2)	1.41 (35.814)	3 (76.2)	0.86 (21.844)	1.72 (43.688)	1.2 (30.48)	3.86 (98.044)	3.5 (88.9)
RAGCG16	3 (76.2)	0.88 (22.352)	3 (76.2)	0.88 (22.352)	1.19 (30.226)	1.19 (30.226)	4.06 (103.124)	5.17 (131.318)

High-Ratio Shrink Tubing

Heavy- Wall Crosslinked Polyolefin
6:1 Ratio

Suitable for Direct Burial in all environments

Hot melt adhesive lining flows with heat to fill voids and crevices upon recovery.



Common Part No.	Nu-Tech Part No.	Nominal Length	Supplied I.D.	Recovered I.D.
		inches	inches	inches
91385-1	NUHRT 0.75	0.5-6.0 (12.7-152.4)	0.75 (19.05)	0.12 (3.048)
91385-2	NUHRT 1.5	0.5-12.0 (12.7-304.8)	1.5 (38.1)	0.23 (5.842)
91385-3	NUHRT 2	0.5-12.0 (12.7-304.8)	2 (50.8)	0.34 (8.636)
91385-4	NUHRT 3	0.5-12.0 (12.7-304.8)	3 (76.2)	0.5 (12.7)
91385-5	NUHRT 3.5	0.5-12.0 (12.7-304.8)	3.5 (88.9)	0.75 (19.05)
-	NUHRT 4.5	0.5-12.0 (12.7-304.8)	4.5 (114.3)	1.5 (38.1)
91385-6	NUHRT 6	0.5-10.0 (12.7-254.0)	6 (152.4)	1.5 (38.1)
-	NUHRT .240-1.25	6 (152.4)	1.25 (31.75)	0.24 (6.096)
-	NUHRT .185x2.5 LG	2.5 (63.5)	1.09 (27.686)	0.19 (4.826)
-	NUHRT .317-1.5X6	6 (152.4)	1.5 (38.1)	0.317 (8.0518)

Sonar Cable Overboot Kit

Utilized worldwide in deep sea environments, our sonar overboots survive the harshest conditions while providing a waterproof seal when needed the most.

Shielded hydrophone cables for both naval and oceanographic applications that sprawl the ocean floors need protection where cables are joined and tethered.

Nu-Tech's watertight and flexible seals are ideally suited for this underwater use. Utilized in submerged and vertical hydrophone arrays the world over.

Kit Contains:

- 1-High Ratio Tubing with Sealant 10" Long
- 1-Installation Instruction Sheet
- 1-Abrasive Emery Cloth
- 1-Cleaning Solvent Wipe



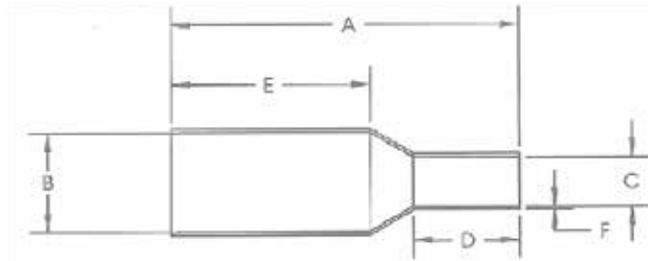
Materials Conform to:

SAE-AS81765/1

Mil -I-23053D

Adhesive lining meets requirements specified in Section 1, Group A, Sheet 6 NAVSEA Code 56234

Nu-Tech Part No.	Cable Range	Maximum Connector OD	Minimum Connector OD
		inches	inches
NU-SK-2	Cable Set #56 Cable Set #23	1.75 (44.45)	0.25 (6.35)
NU-SK-3	Cable Set #26 Cable Set #53	2 (50.8)	0.34 (8.636)



Non - Lipped

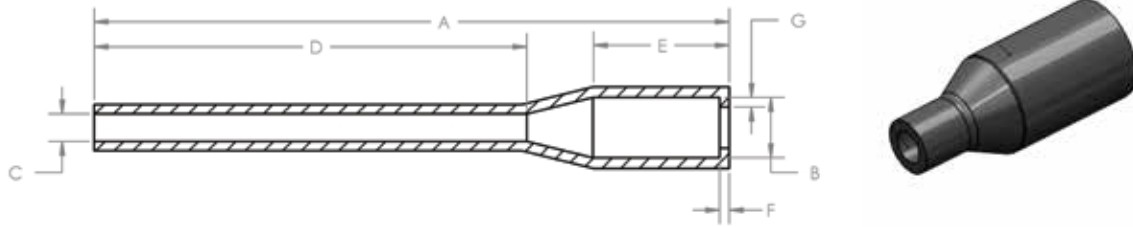
Designed to protect the integrity of your equipment's connectivity and better fit odd geometric shapes.

This product is designed to meet the requirements of DOD-2003-1. All materials conform to SAE-AS81765/1

Features

- Superior crush resistance ideally suited for shipboard and communications cabling
- Build-up or shim cable diameters for a better fit for components in cable harnesses
- Very robust — used for strain relief and re resistant mechanical protection
- Low- temperature flexibility — can be installed on connector body, rear thread, or plain cable shaft
- Heat resistant—no dripping, flowing or cracking at 225° C (ASTM D-2671)

Part No.	Raychem/Tyco	NSN	A ± 20%	B	B	C	C	D ± 10%	E ± 10%	F ± 20%	MIL C-5015 Rotating	MIL C-26482 Solid
			inches	Expanded	Recovered	Expanded	Recovered	inches	inches	inches		
43211/OLD#91347	202A121-3-0	5970-00-828-3457	1.5 (38.1)	0.97 (24.638)	0.38 (9.652)	0.97 (24.638)	0.21 (5.334)	0.36 (9.144)	0.86 (21.844)	0.05 (1.27)	8S,10S	8
43212/OLD#91348	202A132-3-0	5970-00-989-6238	2.16 (54.864)	1.12 (28.448)	0.56 (14.224)	1.12 (28.448)	0.26 (6.604)	0.51 (12.954)	1.1 (27.94)	0.04 (1.016)	10,12S,12	10
43213/OLD#91348	202A142-3-0	5970-01-373-5691	2.63 (66.802)	1.22 (30.988)	0.7 (17.78)	1.22 (30.988)	0.29 (7.366)	0.7 (17.78)	1.4 (35.56)	0.07 (1.778)	14S,14	12,14
43214/OLD#91350	202A153-3-0	5970-00-828-3452	2.9 (73.66)	1.42 (36.068)	0.84 (21.336)	1.42 (36.068)	0.34 (8.636)	0.63 (16.002)	1.63 (41.402)	0.07 (1.778)	16S,16,18	16
43215/OLD#91351	202A163-3-0	5970-00-828-3451	3.9 (99.06)	1.68 (42.672)	1.07 (27.178)	1.68 (42.672)	0.37 (9.398)	0.71 (18.034)	2.47 (62.738)	0.08 (2.032)	20,22	18,20
43216/OLD#91352	202A174-3-0	5970-00-989-6939	5.13 (130.302)	2.04 (51.816)	1.36 (34.544)	2.04 (51.816)	0.63 (16.002)	1.5 (38.1)	2.56 (65.024)	0.13 (3.302)	24,28	22,24
476317			4 (101.6)	1 (25.4)	0.8 (21.59)	0.97 (24.638)	0.24 (6.096)	1 (25.4)	0.7 (17.78)	0.07 (1.778)	---	---



Lipped

For added physical retention from slippage during service.

Used in conjunction with a circular grooved adapter. The rib is located in the outside diameter groove provided on typical back shells.

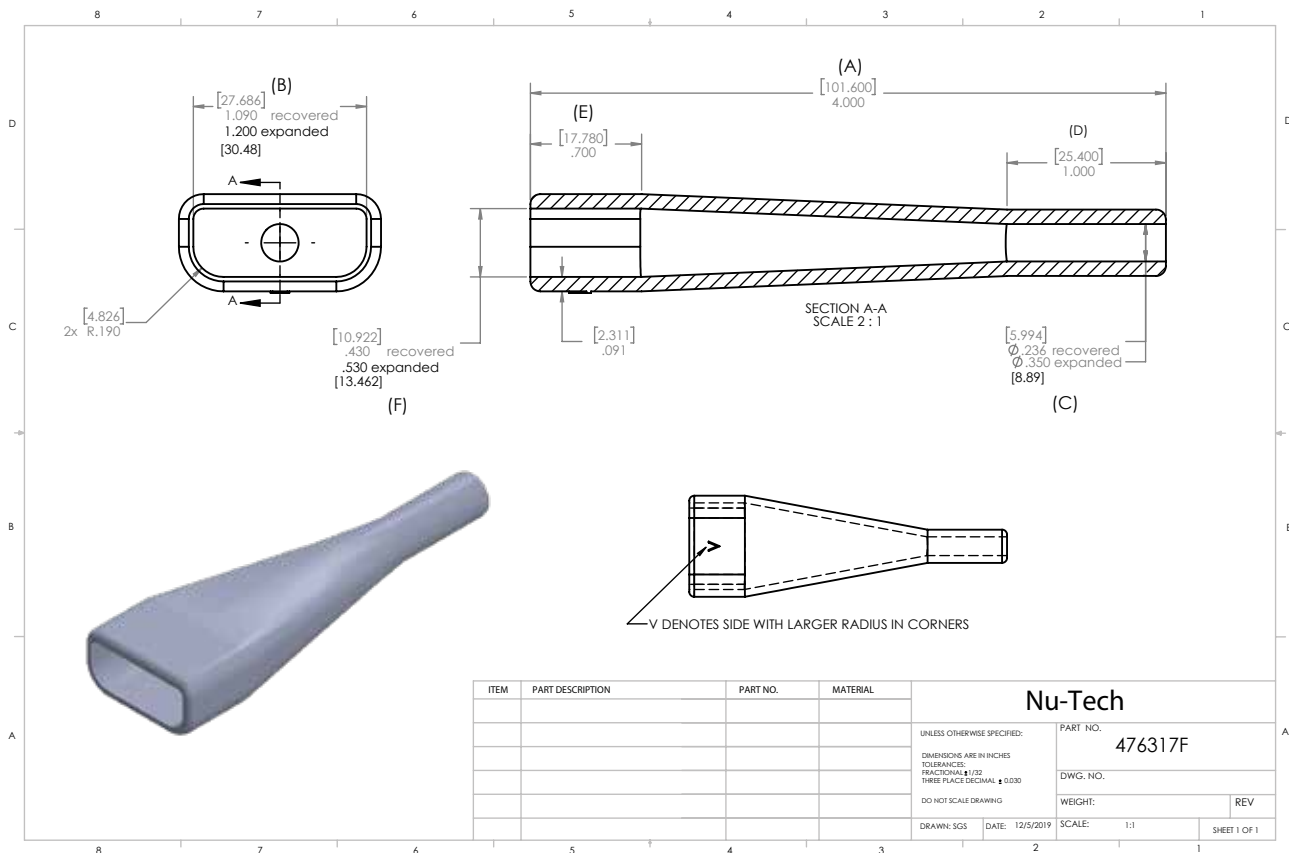
This product is designed to meet the requirements of DOD-2003-1. All materials conform to SAE-AS81765/1

Part No.	Raychem/Tyco	NSN	A ± 20%	B Expanded	B Recovered	C Expanded	C Recovered	D ± 10%	E ± 10%	F ± 20%	G ± 20%
			inches	inches	inches	inches	inches	inches	inches	inches	inches
432L11/OLD#913L47	202A121-3-0		1.5 (38.1)	0.97 (24.638)	0.38 (9.652)	0.97 (24.638)	0.21 (5.334)	0.36 (9.144)	0.86 (21.844)	0.05 (1.27)	0.04 (1.016)
NUCS425A	202A132-3-0		1.5 (38.1)	0.97 (24.638)	0.49 (12.446)	0.97 (24.638)	0.21 (5.334)	0.36 (9.144)	0.86 (21.844)	0.07 (1.778)	0.06 (1.524)
NUCS424A	202A142-3-0		4 (101.6)	0.97 (24.638)	0.38 (9.652)	0.97 (24.638)	0.156 (3.9624)	2.7 (68.58)	0.86 (21.844)	0.07 (1.778)	0.06 (1.524)
NUCS424AVG	202A153-3-0		3.75 (95.25)	0.83 (21.082)	0.38 (9.652)	0.83 (21.082)	0.07 (1.778)	2.5 (63.5)	1.04 (26.416)	0.07 (1.778)	0.05 (1.27)
NUCS424-2.65			2.65 (67.31)	0.875 (22.225)	0.375 (9.525)	0.875 (22.225)	0.156 (3.9624)	1.5 (38.1)	0.95 (24.13)	--	0.06 (1.524)
432L12/OLD#913L48	202A163-3-0		2.16 (54.864)	1.12 (28.448)	0.56 (14.224)	1.12 (28.448)	0.26 (6.604)	0.51 (12.954)	1.1 (27.94)	0.06 (1.524)	0.04 (1.016)
432L13/OLD#913L49	202A174-3-0	5970-01-071-8874	2.63 (66.802)	1.22 (30.988)	0.7 (17.78)	1.22 (30.988)	0.29 (7.366)	0.7 (17.78)	1.4 (35.56)	0.07 (1.778)	0.04 (1.016)
432L14/OLD#913L50	202A174-3-0		2.9 (73.66)	1.42 (36.068)	0.84 (21.336)	1.42 (36.068)	0.34 (8.636)	0.63 (16.002)	1.63 (41.402)	0.07 (1.778)	0.07 (1.778)
432L15/OLD#913L51	202A174-3-0	5970-00-923-0757	3.9 (99.06)	1.68 (42.672)	1.07 (27.178)	1.68 (42.672)	0.37 (9.398)	0.71 (18.034)	2.47 (62.738)	0.08 (2.032)	0.07 (1.778)
432L16/OLD#913L52	202A174-3-0		5.13 (130.302)	2.04 (51.816)	1.36 (34.544)	2.04 (51.816)	0.63 (16.002)	1.5 (38.1)	2.56 (65.024)	0.13 (3.302)	0.07 (1.778)
NUCS-D921	202D163-3-0	5970-00-923-0757	2.38 (60.452)	0.76 (19.304)	0.48 (12.192)	0.25 (6.35)	0.07 (1.778)	1.48 (37.592)	0.46 (11.684)	0.12 (3.048)	0.4 (10.16)

Commonly used in conjunction with Delphi and Weather Pack single row connectors

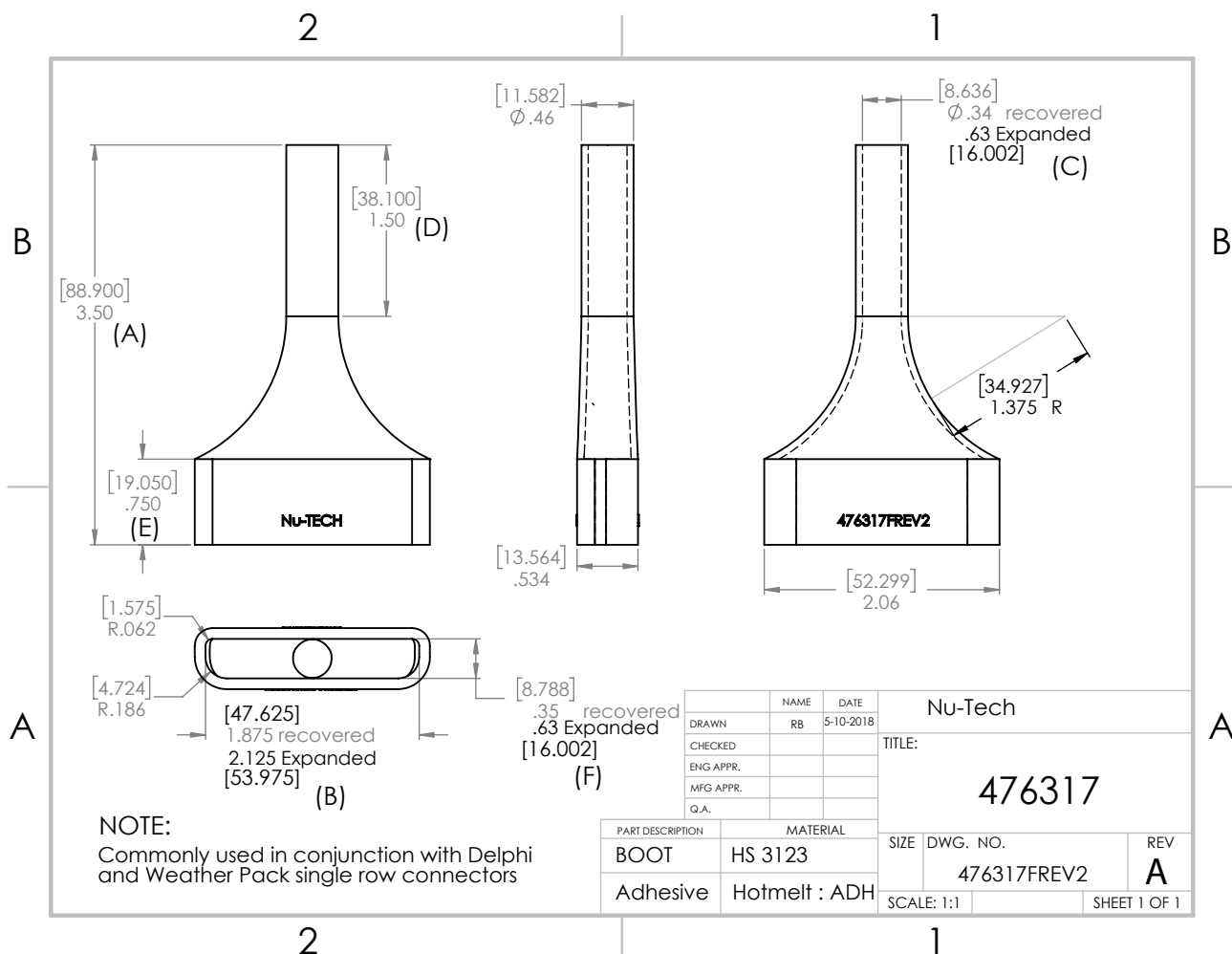
Part No.	A +/- 20%	B Expanded	B Recovered	C Expanded	C Recovered	D	E	F Expanded	F Recovered
	inches	inches	inches	inches	inches	inches	inches	inches	inches
476317F	4 (101.6)	1.2 (30.48)	1.09 (27.686)	0.35 (8.89)	0.24 (6.096)	1 (25.4)	0.7 (17.78)	0.53 (13.462)	0.43 (10.922)
476317F-.078	5 (127)	1.2 (30.48)	1.09 (27.686)	0.23 (5.842)	0.078 (1.9812)	1 (25.4)	0.69 (17.526)	0.53 (13.462)	0.43 (10.922)

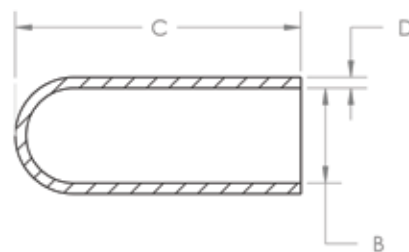
Call us today about additional sizes. The expanded sizes shown can be over expanded to fit your custom project.





Part No.	A +/- 20%	B Expanded	B Recovered	C Expanded	C Recovered	D	E	F Expanded	F Recovered
	inches	inches	inches	inches	inches	inches	inches	inches	inches
476317FREV2	3.5 (88.9)	2.12 (53.848)	1.87 (47.498)	0.63 (16.002)	0.34 (8.636)	1.5 (38.1)	0.75 (19.05)	0.63 (16.002)	0.35 (8.89)





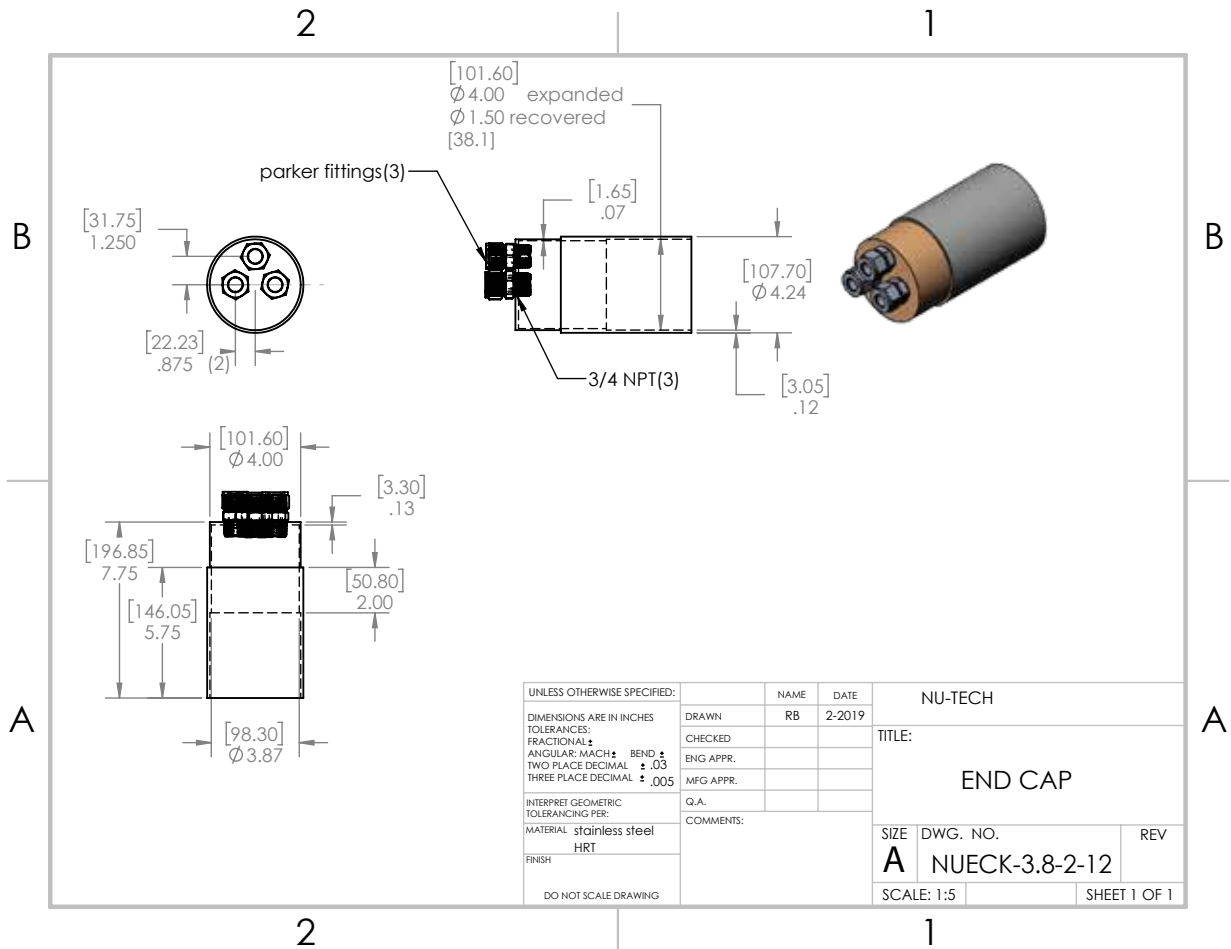
Heat-shrinkable end caps provide a simple yet effective method for sealing cable ends, pipe conduit or other similar objects where maximum flame retardancy and moisture resistance is required.

Part No.	Recommended Cable Range	B Supplied	B Recovered	C	D	Adhesive Coating Thickness
	inches	inches	inches	inches	inches	inches
NU050X016	.15 thru .50 (3.56 thru 12.70)	0.5 (12.7)	0.14 (3.556)	1.5 (38.1)	0.11 (2.794)	0.02 (0.508)
NU039X016	.15 thru .40 (3.56 thru 10.92)	0.43 (10.922)	0.14 (3.556)	1.16 (29.464)	0.09 (2.286)	0.02 (0.508)
NU080X025	.25 thru .75 (6.35 thru 19.05)	0.8 (20.32)	0.24 (6.096)	3 (76.2)	0.13 (3.302)	0.02 (0.508)
NU137X050	.50 thru 1.35 (12.70 thru 34.29)	1.37 (34.798)	0.47 (11.938)	3.5 (88.9)	0.13 (3.302)	0.02 (0.508)
NU200X075	.75 thru 2.00 (19.05 thru 50.80)	2.1 (53.34)	0.7 (17.78)	3.5 (88.9)	0.15 (3.81)	0.02 (0.508)
NU380X150	1.60 thru 3.75 (40.64 thru 95.25)	3.8 (96.52)	1.5 (38.1)	4.5 (114.3)	0.17 (4.318)	0.02 (0.508)

Stainless Steel End Cap Kit

NUECK3.8

Includes a stainless steel cap, water resistant entry seals and grommets, fiberglass grafoil rope, along with a rugged high ratio adhesive lined heat shrink sleeve. These kits are easy to install and resistant to hot steamy environments.



Fittings supplied in different sizes and materials

Part number	Cable entry seals
NUECK3.8-1-4	(1) 12MTC12N-316, (1)4MTC8N-316
NUECK3.8-2-4	(1) 12MTC12N-316, (2)4MTC8N-316
NUECK3.8-1-6	(1) 12MTC12N-316, (1)6MTC8N-316
NUECK3.8-2-6	(1) 12MTC12N-316, (2)6MTC8N-316
NUECK3.8-1-8	(1) 12MTC12N-316, (1)8MTC8N-316
NUECK3.8-2-8	(1) 12MTC12N-316, (2)8MTC8N-316
NUECK3.8-1-10	(1) 12MTC12N-316, (1)10MTC12N-316
NUECK3.8-2-10	(1) 12MTC12N-316, (2)10MTC12N-316
NUECK3.8-1-12	(1) 12MTC12N-316, (1)12MTC12N-316
NUECK3.8-2-12	(1) 12MTC12N-316, (2)10MTC12N-316



Call or go online @www.nu-tech for details Other sizes can also be provided.

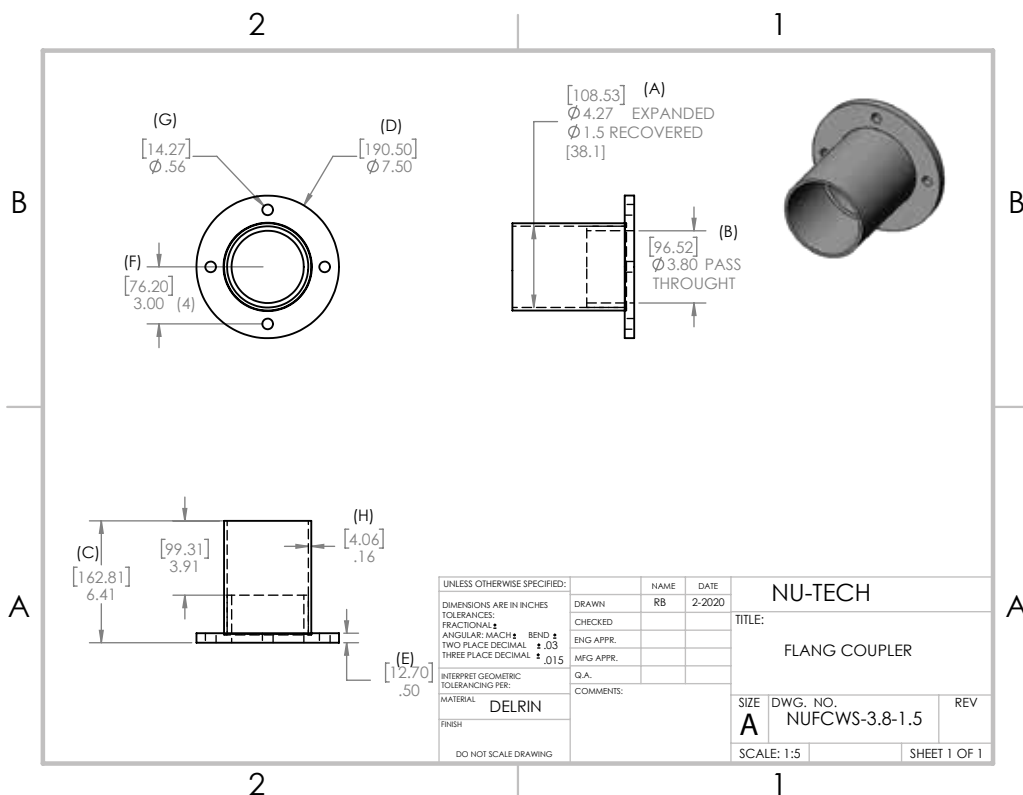
Flanged Cable Entry Seal

NUFCW

Flange Mount Cable Entry Seals are available in other sizes including multi leg break out boots
 Call or email today for assistance with selecting the best seal for your specific project.



Part No.	A Expanded	A Recovered	B	C	D	E	F	G	H
	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches	Inches
NUFCWS-3.8-1.5	4.27 (108.458)	1.5 (38.1)	3.8 (96.52)	6.41 (162.814)	7.5 (190.5)	0.5 (12.7)	3 (76.2)	0.56 (14.224)	0.16 (4.064)
NUFCWS-2.0-.75	4.27 (108.458)	0.75 (19.05)	2 (50.8)	4.75 (120.65)	5 (127)	0.5 (12.7)	2 (50.8)	0.41 (10.414)	0.09 (2.286)
NUFCWS-2.8-1.5	4.27 (108.458)	1.5 (38.1)	2.85 (72.39)	5.5 (139.7)	6 (152.4)	0.5 (12.7)	2.5 (63.5)	0.41 (10.414)	0.13 (3.302)



Polyethylene Terephthalate (PET) Sleeve
 A Versatile Bundling Solution



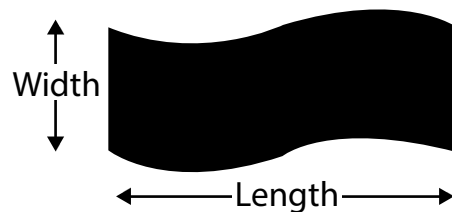
Standard		
Nu-Tech Part No.	Standard Spool Length	Standard Spool Length
	feet	meters
P-1/8-Black	1000	304.8
P-1/4-Black	1000	304.8
P-3/8-Black	500	152.4
P-1/2-Black	500	152.4
P-3/4-Black	250	76.2
P-1-Black	250	76.2
P-1 1/2-Black	250	76.2
P-2-Black	100	30.48
P-2 1/2-Black	100	30.48

Flame Retardant		
Nu-Tech Part No.	Standard Spool Length	Standard Spool Length
	feet	meters
FR-1/8-Black/White	1000	304.8
FR-1/4-Black/White	1000	304.8
FR-3/8-Black/White	500	152.4
FR-1/2-Black/White	500	152.4
FR-3/4-Black/White	250	76.2
FR-1-Black/White	250	76.2
FR-1 1/2-Black/White	250	76.2
FR-2-Black/White	100	30.48
FR-2 1/2-Black/White	100	30.48

Closed cell with an integral surface skin offering very low water absorption.

Temperature Range: -60° F to 400° F continuous usage, -100° F to 500° F intermittent exposure. Higher temperature ranges available for special uses.

Good electrical thermal and acoustic insulating properties. Custom shapes with tooling. Alternative colors and short runs are available.



Designed to repair and seal damaged wire jackets that have been chafed, have radial ricks, or cuts on the insulation anywhere cable jacketing has become compromised. Used as a side entry repair kit, Nu-Tech's wrap kit consists of an outer tubing provided with a hot melt adhesive inner layer and supplied with welding adhesive in a low profile construction that provides easy access for repairing damaged wires.

Part No.	Texture	As Supplied		
		Length	Width	Wall Thickness
		inches	inches	inches
NUWS080X025	Smooth	2.3 (58.42)	3 (76.2)	0.04 (1.016)
NUWS137X050	Smooth	4 (101.6)	4.3 (109.22)	0.04 (1.016)
NUWS200X075	Smooth	3.75 (95.25)	6.5 (165.1)	0.05 (1.27)
NUWS380X150	Smooth	12 (304.8)	5 (127)	0.05 (1.27)
NUWS.75	Smooth	3 (76.2)	2.3 (58.42)	0.08 (2.032)
NUWS1.50	Ribbed	6 (152.4)	11 (279.4)	0.05 (1.27)
NUWS2.00	Ribbed	6.5 (165.1)	10.75 (273.05)	0.05 (1.27)
NUWS3.00	Ribbed	11 (279.4)	9 (228.6)	0.05 (1.27)
NUWS4.50	Ribbed	14 (355.6)	10.75 (273.05)	0.1 (2.54)
NUWS6.00	Ribbed	19 (482.6)	10.5 (266.7)	0.08 (2.032)
NUWS424A	Smooth	3 (76.2)	3 (76.2)	0.02 (0.508)

Supplied Expanded
Unfurled



A wrap-around heat-shrinkable cable jacket can be easily applied in the field without having to split the cable line. Wrap is a simple alternative for effective insulation repairs.

For a Watertight Seal

Hot melt adhesive flows during heating. The constricting layers drive the molten sealant into any voids or gaps in the joint.

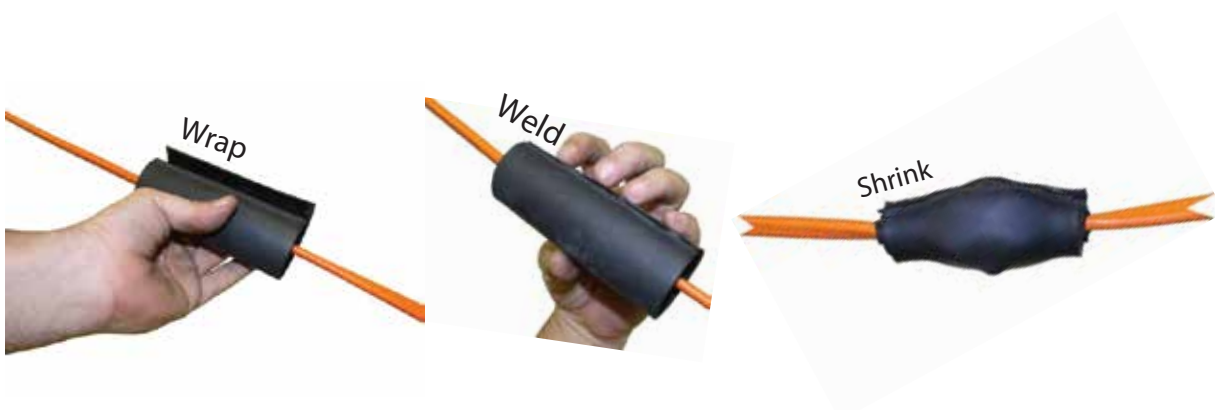
Easy to Install

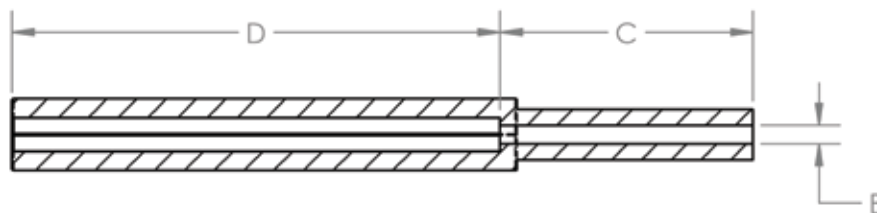
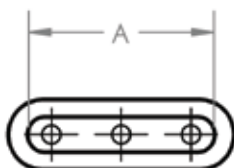
Save money by saving time and manpower. One size fits all solution kit for a variety of cable and connector sizes.

Properly applied, the glue line is stronger than that of the actual material and conforms upon shrinkage to accommodate the geometry of what it is covering.

Flat Wrap Kits of 10 Include Weld Adhesive & Abrasive Cloth

Part No.	Recovered		
	Suggested Max Repair Diameter	Suggested Max. Repair Width	Wall Thickness
	inches	inches	inches
NUWS080X025	0.38 (9.652)	2 (50.8)	0.13 (3.302)
NUWS137X050	1 (25.4)	3.5 (88.9)	0.13 (3.302)
NUWS200X075	0.75 (19.05)	5.5 (139.7)	0.15 (3.81)
NUWS380X150	3 (76.2)	4 (101.6)	0.17 (4.318)
NUWS.75	0.5 (12.7)	1 (25.4)	0.16 (4.064)
NUWS1.50	4 (101.6)	10 (254)	0.16 (4.064)
NUWS2.00	5 (127)	9.5 (241.3)	0.16 (4.064)
NUWS3.00	2.5 (63.5)	7 (177.8)	0.16 (4.064)
NUWS4.50	3.5 (88.9)	9.5 (241.3)	0.16 (4.064)
NUWS6.00	4.5 (114.3)	8.5 (215.9)	0.19 (4.826)
NUWS424A	0.38 (9.652)	2 (50.8)	0.07 (1.778)





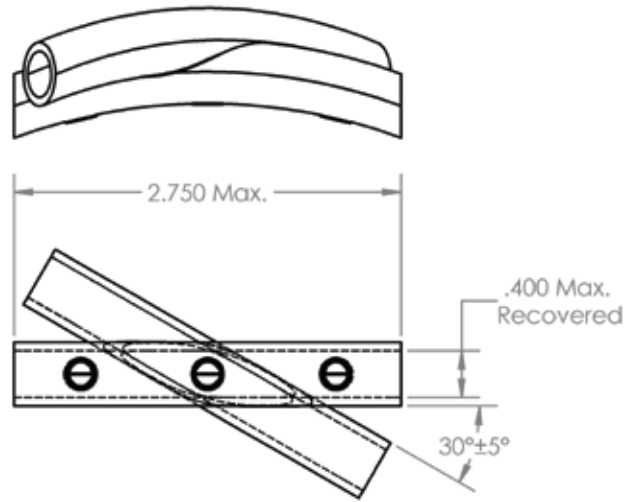
6:1 Ratio
3 or 4 legs available

For cable-sealing strain relief and mechanical protection.

This product is designed to meet the requirements of DOD-2003-1. Materials conform to SAE-AS81765/1.

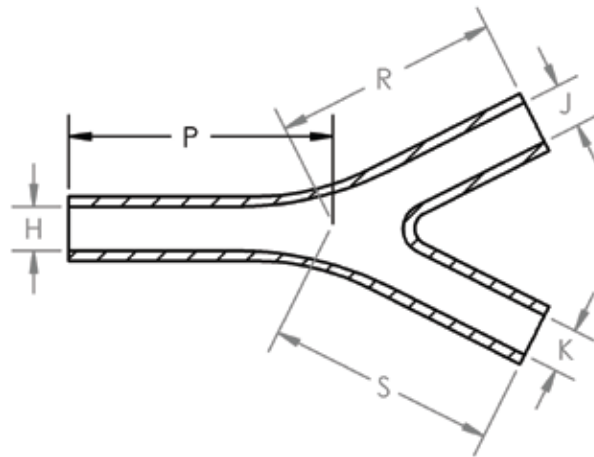
Part No.	Number of legs	A	A	B	B	C	D
		Expanded	Recovered	Expanded	Recovered	Recovered	Recovered
		inches	inches	inches	inches	inches	inches
NUBB3-1FOE	3	2 (50.8)	1.1 (27.94)	0.63 (16.002)	0.11 (2.794)	1.4 (35.56)	3 (76.2)
NUBB3-1FOE/3	3	3 (76.2)	1.1 (27.94)	0.85 (21.59)	0.11 (2.794)	1.4 (35.56)	3 (76.2)
NUBB4-0F	4	1.88 (47.752)	1 (25.4)	0.4 (10.16)	0.1 (2.54)	1.4 (35.56)	3 (76.2)
NUBB4-1FOE	4	2.7 (68.58)	1.7 (43.18)	0.63 (16.002)	0.11 (2.794)	1.4 (35.56)	3 (76.2)
NUBB4-1FOE/3	4	3.61 (91.694)	1.7 (43.18)	0.85 (21.59)	0.11 (2.794)	1.4 (35.56)	3 (76.2)

Crossover Boot 91344 2x2



Mold impressions indicate the direction of the arc upon recovery.

Y Boots



Part No.	H Expanded inches	H Recovered inches	P Recovered inches	R & S Recovered inches	J & K Expanded inches	J & K Recovered inches	Material Thickness inches
432Y12	1 (25.4)	0.26 (6.604)	1.5 (38.1)	1.4 (35.56)	0.55 (13.97)	0.16 (4.064)	0.06 (4.064)
432Y13	1 (25.4)	0.26 (6.604)	1.5 (38.1)	1.4 (35.56)	0.55 (13.97)	0.26 (6.604)	0.06 (6.604)
432Y13OE	1.3 (33.02)	0.26 (6.604)	1.5 (38.1)	1.4 (35.56)	0.75 (19.05)	0.26 (6.604)	0.06 (6.604)
432Y14	1.6 (40.64)	0.45 (11.43)	2.35 (59.69)	2 (50.8)	0.9 (22.86)	0.45 (11.43)	0.05 (11.43)
432Y14OE	2.2 (55.88)	0.45 (11.43)	2.35 (59.69)	2 (50.8)	1.25 (31.75)	0.45 (11.43)	0.05 (11.43)

Rigid/IMC Conduit Fittings
T&B Catalog Number:

LN 110
78599142470
Active

UPC Number:
Status:
Description:

4 in. Steel Locknut-Zinc Plated. For use with Rigid/IMC Conduit.

Application

For use with rigid/IMC conduits

General

Material: Steel
Finish: Zinc Plated

Dimension Information

Size (inches): 4
Diameter_A (inches): 0.438
Diameter_B (inches): 5.402

Packaging

Package in Units: 25
T&B Sold in UOM: Each
T&B Weight Per UOM: 52.8 lbs. per 100

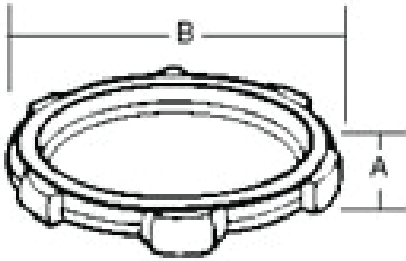
Certifications

RoHS Compliance: Yes

Certifications

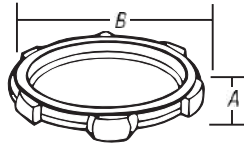


File Nbr:
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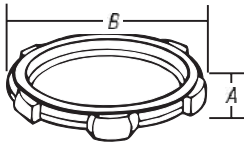
Rigid Conduit/IMC Fittings

Locknuts — Steel/Zinc Plated



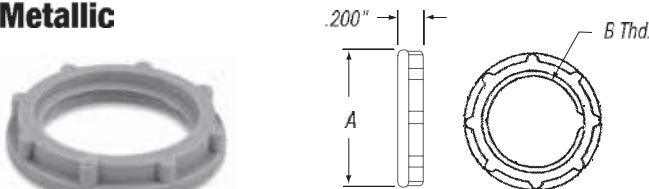
CAT. NO.	CONDUIT SIZE (IN.)	DIMENSIONS (IN.)		STD. CTN.
		A	B	
LN-100-SC	3/8	—	—	1,000
LN-101-SC	1/2	.125	1.140	1,000
LN-102	3/4	.140	1.420	1,000
LN-103	1	.170	1.770	500
LN-104	1 1/4	.170	2.281	200
LN-105	1 1/2	.170	2.598	100
LN-106	2	.187	3.175	50
LN-107	2 1/2	.375	3.562	30
LN-108	3	.375	4.250	25
LN-109	3 1/2	.438	4.803	25
LN-110	4	.438	5.402	25
LN-111	5	.500	6.674	10
LN-112	6	.561	7.934	10

Sealing Locknuts — Steel/Zinc Plated



CAT. NO.	CONDUIT SIZE (IN.)	DIMENSIONS (IN.)		STD. CTN.
		A (MIN.)	B (MAX.)	
LS 101	1/2	.26	1.12	1,000
LS-102	3/4	.27	1.37	1,000
LS-103	1	.28	1.75	500
LS-104	1 1/4	.32	2.06	200
LS-105	1 1/2	.32	2.37	100
LS-106	2	.32	2.87	50
LS-107	2 1/2	.32	3.43	50
LS-108	3	.32	4.12	50
LS-109	3 1/2	.32	4.62	50
LS-110	4	.32	5.18	25

Locknuts — Non-Metallic

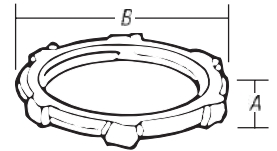



CAT. NO.	TRADE SIZE (IN.)	A DIA. (IN.)	B THD. (IN.)	STD. CTN.
LN-501	1/2	1.3	1/2-14	100
LN-502	3/4	1.4	3/4-14	100
LN-503	1	1.7	1-11 1/2	50

Material: Nylon 6/6.

Color: Gray.

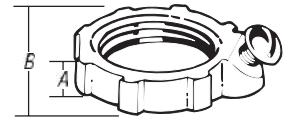
Locknuts Die-Cast Zinc

CAT. NO.	CONDUIT SIZE (IN.)	DIMENSIONS (IN.)		STD. CTN.
		A	B	
LN-201	1/2	.125	1.140	2,000
LN-202	3/4	.140	1.420	1,000
LN-203	1	.170	1.770	1,000
LN-204	1 1/4	.170	2.281	500
LN-205	1 1/2	.170	2.598	500
LN-206	2	.187	3.175	200
LN-207	2 1/2	.375	3.562	100
LN-208	3	.375	4.250	100
LN-209	3 1/2	.438	4.803	40
LN-210	4	.438	5.402	40

CSA File No. LR-12798.

Grounding Locknuts — Malleable Iron/Zinc Plated



CAT. NO.	CONDUIT SIZE (IN.)	DIMENSIONS (IN.)		STD. CTN.
		A (MIN.)	B (MAX.)	
LG-401	1/2	.125	1.140	100
LG-402	3/4	.140	1.420	100
LG-403	1	.170	1.770	50
LG-404	1 1/4	.170	2.281	50
LG-405	1 1/2	.170	2.598	50
LG-406	2	.187	3.175	25
LG-407	2 1/2	.375	3.562	10
LG-408	3	.375	4.250	10
LG-409	3 1/2	.438	4.803	50
LG 410	4	.438	5.402	5

Thin Construction Locknuts — Steel/Zinc Plated



CAT. NO.	CONDUIT SIZE (IN.)	UNIT QTY	STD. CTN.
SPLN-107	2 1/2	30	30
SPLN-108	3	25	25
SPLN-109	3 1/2	25	25
SPLN-110	4	25	25

Heat Shrink

Heat shrink is a great solution for a lot of applications: it protects wires and cables from abrasion, chemicals, and weather, and it's also useful for bundling, strain relief and color coding for wire identification purposes. We stock a wide variety of different heat shrink tubing styles to meet all of these needs and more. Whether you need standard economical Polyolefin tubing, flame retardant, EMI shielded or conductive cloth heat shrink, we've got it. In addition to standard 2:1 and 3:1 ratio heat shrink, we also feature specialty tubing including larger ratios like 6:1. You can even get your own custom heat shrink labels printed on your tubing for easy bundling of cable bundles. A variety of colors and styles are available, including crystal clear.



Custom Printed Heat Shrink

Drive your brand, color-code cables or label pipes and parts with customizable heat shrink, available with company logos in a choice of tubing colors.



Wrap-Around Heat Shrink Tubing

Perfect for repairing and insulating in-use cables that can't be unplugged. Shrink tubing is split down the side to wrap easily around wires and connectors, avoiding downtime.

Seals and protects large, awkward or oddly shaped connectors. Product can be easily terminated. Ideal for use in hazardous and heat sensitive applications.

Our 3:1 heat shrink tubing is an effective way to professionally finish the ends of a wire harness as it easily fits over the end of a connector and shrinks down to 33% of its original diameter.



Heavy Wall Flame Retardant Self-Adhesive Heat Shrink

We specialize in M23053/15 in red, white, black. Fully stocked, ready to ship! Superior protection for sealing low-voltage power connections up to 600 volts. Great for when your application requires heat shrink that is flame retardant, waterproof and holds up to direct burial.



Diesel-Resistant Heat Shrink Tubing

Perfect for protecting wires, solder joints and connectors from fuels, lubricating oils and corrosive fluids, this tubing can be used in operating temperatures up to 248°F, and meets MIL-I-23053/16 specs.



Cold Shrink Tubing

Designed to create tight, heat shrink-like seals around low voltage splices and wire connection points without the need for heat guns, this tubing contracts to wires when its internal core is removed.



Adhesive Heat Shrinkable Tape

Available in standard and heavy wall, this heat shrink tape allows you to waterproof, splice or repair cables without the need to disconnect them.



Military Grade Heat Shrink

We carry many common grades of military heat shrink in a variety of sizes, lengths and colors. See our Military Heat Shrink section for a full line up.

Cross | Technology Inc.



Nu-Tech

305 Junia Avenue
Winston-Salem, NC 27127
(336) 725-4700



Thin Wall Heat Shrink (2:1)

Thin Wall Heat Shrink Tubing is a high performance, multi-purposed, professional grade, flexible, flame retardant, polyolefin based heat-shrinkable tubing with excellent electrical, chemical and physical properties. This tubing is used extensively in industrial and military applications for cable and wire harnessing, strain relief, insulation, color coding, identification and protection against fluids.

Specifications:

MIL-DTL-23053/5, Class 1 and 3, CSA C22.2 No 198.1

UL 224, 125 C, VW1 (Except Clear)

Features:

2:1 Shrink ratio

Available in Black, Blue, Red, Green, Yellow, White, Clear, Brown, Grey, Orange and Violet

Also available in assorted packages

SKU #					Size (in)	I.D. (mm)		Rec. Wall Thickness (mm)
6"	48"	25' Spool	50' Spool	100' Spool		Exp.	Rec.	
47-20006-XX	47-20048-XX	-	47-10050-XX	47-100100-XX	3/64	1.2	0.6	0.43
47-20106-XX	47-20148-XX	-	47-10150-XX	47-101100-XX	1/16	1.6	0.8	0.43
47-20206-XX	47-20248-XX	-	47-10250-XX	47-102100-XX	3/32	2.4	1.2	0.51
47-20306-XX	47-20348-XX	-	47-10350-XX	47-103100-XX	1/8	3.2	1.6	0.51
47-20406-XX	47-20448-XX	-	47-10450-XX	47-104100-XX	3/16	4.8	2.4	0.52
47-20506-XX	47-20548-XX	-	47-10550-XX	47-105100-XX	1/4	6.4	3.2	0.65
47-20606-XX	47-20648-XX	-	47-10650-XX	47-106100-XX	5/16	7.6	4	0.65
47-20706-XX	47-20748-XX	-	47-10750-XX	47-107100-XX	3/8	9.5	4.7	0.65
47-20806-XX	47-20848-XX	-	47-10850-XX	47-108100-XX	1/2	12.7	6.4	0.65
47-20906-XX	47-20948-XX	47-10925-XX	47-10950-XX	47-109100-XX	3/4	19.1	9.5	0.77
47-21006-XX	47-21048-XX	47-11025-XX	47-11050-XX	47-110100-XX	1	25.4	12.7	0.89
47-21106-XX	47-21148-XX	47-11125-XX	47-11150-XX	47-111100-XX	1-1/2	38.1	19.1	1
47-21206-XX	47-21248-XX	47-11225-XX	47-11250-XX	47-112100-XX	2	50.8	25.4	1.1
-	47-21348-XX	-	-	-	3	77	39	1.2
Note 1.	Replace XX with: BK = Black, BL = Blue, R = Red, G = Green, Y = Yellow, W = White, CL = Clear, BR = Brown, GR = Grey, OR = Orange and VT = Violet							
Note 2.	Premium colors (Brown, Grey, Orange and Violet) are only available in 48" lengths and in sizes from 3/64" up to 1".							

Medium Wall Heat Shrink (3:1)

Medium Wall Heat Shrink Tubing is polyolefin based heat-shrinkable tubing suitable for a wide range of telecom and power applications like joints and cable repair. This tubing is ideally suited for aerial, underground and direct burial installation.

- Features:
 3:1 Shrink ratio
 Adhesive inner liner
 Available in Black only

SKU #	Size (in)	Ratio	I.D. (mm)		Rec. Wall Thickness (mm)
			Exp.	Rec.	
48"					
47-300124-BK	0.47	3:01	12	3	1.5
47-300206-BK	0.79	3.33:1	20	6	2.5
47-300278-BK	1.06	3.37:1	27	8	2.5
47-304013-BK	1.57	3.07:1	40	13	2.5
47-305117-BK	2	3:01	50	17	2.5
47-307222-BK	2.83	3.27:1	72	22	2.5
47-309029-BK	3.54	3.1:1	90	29	2.5
47-312040-BK	4.72	3:01	120	40	2.5



Thick Wall Heat Shrink (3:1)

Thick Wall Heat Shrink Tubing is polyolefin based heat-shrinkable tubing suitable for a wide range of telecom and power applications like joints and cable repair. This tough, durable tubing provides protection for electrical connections in the most adverse conditions including direct burial, URD, and submersible installations.

- Features:
 3:1 Shrink ratio
 Available in Black only

SKU #	Size (in)	I.D. (mm)		Rec. Wall Thickness (mm)
		Exp.	Rec.	
48"				
47-400124-BK	0.47	12	3	2.5
47-400206-BK	0.79	20	6	2.7
47-400328-BK	1.06	27	8	4
47-404013-BK	1.57	40	13	4
47-405517-BK	2	55	18	4.1
47-407222-BK	2.83	72	22	4.2
47-409029-BK	3.54	90	29	4.3
47-412040-BK	4.72	120	40	4.6

Dual Wall Heat Shrink (3:1)

Dual Wall Heat Shrink Tubing is flexible, polyolefin based heat-shrinkable tubing with a thermoplastic adhesive inner liner which flows when heated. After shrinkage and upon cooling, it provides a permanent flexible water proof barrier. This tubing is suitable for a wide range of applications, such as encapsulation cables, wires, electrical components and splices. The choice of high shrink ratios means more flexibility of usage such as in the covering of irregular shaped objects.

Specifications:

MIL-DTL-23053/4, Class 3

Features:

3:1 Shrink ratio

Adhesive inner liner

Available in Black, Blue, Red, Green, Yellow, White and Clear

SKU #		Size (in)	I.D. (mm)		Rec. Wall Thickness (mm)
6"	48"		Exp.	Rec.	
47-25006-XX	47-23048-XX	1/8	3	1	0.5
47-25106-XX	47-23148-XX	3/16	4.8	1.5	0.5
47-25206-XX	47-23248-XX	1/4	6	2	0.5
47-25306-XX	47-23348-XX	3/8	9	3	0.6
47-25406-XX	47-23448-XX	1/2	12	4	0.7
47-25506-XX	47-23548-XX	3/4	18	6	0.8
47-25606-XX	47-23648-XX	1	24	8	1
47-25706-XX	47-23748-XX	1.25	30.5	10	1
47-25806-XX	47-23848-XX	1.5	39	13	1
Note 1.	BK designates Black. For alternate colors, replace BK with: BL = Blue, R = Red, G = Green, Y = Yellow, W = White, CL = Clear.				



Heat Shrink Assortment Packs

Available in 2:1 thin wall and 3:1 dual wall (HS-ASST-13).

SKU#	Length	Description
HS-ASST-1	6"	Contains 4 pieces each of Black Heat Shrink Tubing in: 3/32", 1/8", 3/16", 1/4", 3/8", and 1/2" diameters
HS-ASST-2	2-1/2"	Contains Black Heat Shrink Tubing in: 1/16" dia. (60 pieces), 1/8" dia. (40 pieces), 3/16" dia. (20 pieces), 1/4" dia. (18 pieces), 3/8" dia. (10 pieces), and 1/2" dia. (10 pieces)
HS-ASST-3	2-1/2"	Contains Red Heat Shrink Tubing in: 1/16" dia. (60 pieces), 1/8" dia. (40 pieces), 3/16" dia. (20 pieces), 1/4" dia. (18 pieces), 3/8" dia. (10 pieces), and 1/2" dia. (10 pieces)
HS-ASST-4	4"	Contains 4 pieces each of Black Heat Shrink Tubing in: 1/16", 3/32", 1/8", 3/16", 3/8", and 1/2" diameters
HS-ASST-5	6"	Contains 1/8" diameter Heat Shrink Tubing in: Black (2 pieces), Red (2 pieces), Clear (2 pieces), Green (1 piece), Blue (1 piece), Yellow (1 piece), and White (1 piece)
HS-ASST-6	6"	Contains 3/16" diameter Heat Shrink Tubing in: Black (2 pieces), Red (2 pieces), Clear (2 pieces), Green (1 piece), Blue (1 piece), Yellow (1 piece), and White (1 piece)
HS-ASST-7	6"	Contains 1/4" diameter Heat Shrink Tubing in: Black (2 pieces), Red (2 pieces), Clear (2 pieces), Green (1 piece), Blue (1 piece), Yellow (1 piece), and White (1 piece)
HS-ASST-8	6"	Contains 3/8" diameter Heat Shrink Tubing in: Black (2 pieces), Red (2 pieces), Clear (2 pieces), Green (1 piece), Blue (1 piece), Yellow (1 piece), and White (1 piece)
HS-ASST-9	4"	Contains: 1/16" dia. (60 pieces), 3/32" dia. (35 pieces), 1/8" dia. (25 pieces), 3/16" dia. (20 pieces), 1/4" dia. (10 pieces) and 3/8" dia. (10 pieces) in assorted colors (Black, Red, Clear, Green, Blue, Yellow, and White)
HS-ASST-10	6"	Contains 1/16" diameter Heat Shrink Tubing in: Black (2 pieces), Red (2 pieces), Clear (2 pieces), Green (1 piece), Blue (1 piece), Yellow (1 piece), and White (1 piece)
HS-ASST-11	6"	Contains 3/32" diameter Heat Shrink Tubing in: Black (2 pieces), Red (2 pieces), Clear (2 pieces), Green (1 piece), Blue (1 piece), Yellow (1 piece), and White (1 piece)
HS-ASST-12	6"	Contains 1/2" diameter Heat Shrink Tubing in: Black (2 pieces), Red (2 pieces), Clear (2 pieces), Green (1 piece), Blue (1 piece), Yellow (1 piece), and White (1 piece)
HS-ASST-13	6"	Contains Black Heat Shrink Tubing in: 1/8" dia. (20 pieces), 3/16" dia. (16 pieces), 1/4" dia. (12 pieces), 3/8" dia. (10 pieces), 1/2" dia. (8 pieces), and 3/4" dia. (6 pieces)

Military Heat Shrink

Mil-spec part number break down



Mil-Spec Type		Class	Color	Length
NU-M23053/	*	_***	_*	_***

Color	0	1	2	3	4	5	6	7	8	9	C
Color Code	Black	Brown	Red	Orange	Yellow	Green	Blue	Purple	Grey	White	Clear

M23053/1 Class 1 & 2

2:1 Neoprene (Modified Chlorinated Polyolefin) Heat Shrink Tubing

Black

Length: 50, 100, or 200 (dependent on size)

Other sizes and lengths may be available upon request

Operating Temperature: -70°C (-94°F) to 121°C (250°F)

Shrink Temperature: 135°C

MIL-R-46846, Type I, Class 1; MIL-DTL-23053/1, Class 1, 2; AMS-3623

SAE-AMS-DTL-23053/1, Class 1 Formerly MIL-I-23053/1



Mil-Spec	Class 1	Size
M23053/1-		inches
	101-0	0.25 (6.35)
	102-0	0.375 (9.525)
	103-0	0.5 (12.7)
	104-0	0.625 (15.875)
	105-0	0.75 (19.05)
	106-0	0.875 (22.225)
	107-0	1 (25.4)
	108-0	1.25 (31.75)
	109-0	1.5 (38.1)
	110-0	1.75 (44.45)
	111-0	2 (50.8)
	112-0	3 (76.2)
	113-0	4 (101.6)

Mil-Spec	Class 2	Size
M23053/1-		inches
	201-0	0.25 (6.35)
	202-0	0.375 (9.525)
	203-0	0.5 (12.7)
	204-0	0.625 (15.875)
	205-0	0.75 (19.05)
	206-0	0.875 (22.225)
	207-0	1 (25.4)
	208-0	1.25 (31.75)
	209-0	1.5 (38.1)
	210-0	1.75 (44.45)
	211-0	2 (50.8)
	212-0	3 (76.2)
	213-0	4 (101.6)

Military Heat Shrink

M23053/2 Class 1

2:1 PVC Heat Shrink Tubing

Black (2:1 shrink ratio except longitudinal shrinkage)

25 or 100 foot lengths

Operating Temperature: -20°C (-4°F) to 105°C (221°F)

Shrink Temperature: 100°C

Other sizes may be available upon request

Formerly MIL-I-23053/2

Mil-Spec	Class 1	Size
M23053/2-		inches
	101-0	0.046875 (1.190625)
	102-0	0.0625
	103-0	0.09375 (2.38125)
	104-0	0.125 (3.175)
	105-0	0.1875 (4.7625)
	106-0	0.25 (6.35)
	107-0	0.375 (9.525)
	108-0	0.5 (12.7)
	109-0	0.75 (19.05)
	110-0	1 (25.4)
	111-0	1.5 (38.1)

M23053/4 Class 2

2:1 Polyolefin Heat Shrink Tubing

Black

4Ft. Length

Operating Temperature: -55°C (-67°F) to 110°C (230°F)

Shrink Temperature: 120°C

Formerly MIL-I-23053/4

Mil-Spec	Class 2	Size
M23053/4-		inches
	201-0	0.25 (6.35)
	202-0	0.375 (9.525)
	203-0	0.5 (12.7)
	204-0	0.75 (19.05)
	205-0	1 (25.4)
	206-0	1.5 (38.1)



M23053/4 Class 1

2.5:1 Polyolefin Heat Shrink Tubing

Black

4Ft. Length

Operating Temperature: -55°C (-67°F) to 110°C (230°F)

Shrink Temperature: 125°C

MIL-DTL-23053/4, Class 1, AMS-3634

Formerly MIL-I-23053/4

Mil-Spec	Class 1	Size
M23053/4-		inches
	101-0	0.125 (3.175)
	102-0	0.1875 (4.7625)
	103-0	0.25 (6.35)
	104-0	0.375 (9.525)
	105-0	0.5 (12.7)
	106-0	0.75 (19.05)
	107-0	1 (25.4)

M23053/4 Class 3

3:1 Polyolefin Heat Shrink Tubing

Black, Red

4Ft. Length

Operating Temperature: -55°C to 110°C

Shrink Temperature: 120°C

Formerly MIL-I-23053/4

Mil-Spec	Class 3	Size	Dash	Color
M23053/4-		inches		
	301-*	0.125 (3.175)	0	Black
	302-*	0.25 (6.35)	2	Red
	303-*	0.5 (12.7)		
	304-*	1 (25.4)		
	305-*	1.5 (38.1)		
	307-*	0.375 (9.525)		

Military Heat Shrink

M23053/5 Class 1 & 2

2:1 Polyolefin Heat Shrink Tubing

RoHS compliant and UL Listed

Available in an array of colors

Operating Temperature: -55°C(-67°F) to 135°C (275°F)

Shrink Temperature: 90°C

Sizes from 3/64" to 4"

Other lengths may be available upon request

Class 2 is Clear Only

Formerly MIL-I-23053/5



Mil-Spec	Class 1	Size
M23053/5-		inches
	101-*	0.046875 (1.190625)
	102-*	0.0625 (1.5875)
	103-*	0.09375 (2.38125)
	104-*	0.125 (3.175)
	105-*	0.1875 (4.7625)
	106-*	0.25 (6.35)
	107-*	0.375 (9.525)
	108-*	0.5 (12.7)
	109-*	0.75 (19.05)
	110-*	1 (25.4)
	111-*	1.5 (38.1)
	112-*	2 (50.8)
	113-*	3 (76.2)
	114-*	4 (101.6)

Mil-Spec	Class 2	Size
M23053/5-		inches
	201-C	0.046875 (1.190625)
	202-C	0.0625 (1.5875)
	203-C	0.09375 (2.38125)
	204-C	0.125 (3.175)
	205-C	0.1875 (4.7625)
	206-C	0.25 (6.35)
	207-C	0.375 (9.525)
	208-C	0.5 (12.7)
	209-C	0.75 (19.05)
	210-C	1 (25.4)
	211-C	1.5 (38.1)
	212-C	2 (50.8)
	213-C	3 (76.2)
	214-C	4 (101.6)

Dash	Color
0	Black
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Purple
8	Grey
9	White
C	Clear



M23053/5 Class 3

2:1 Polyolefin Heat Shrink Tubing

Black

Available in 4Ft. Lengths

Operating Temperature: -55°C (-67°F) to 135°C (275°F)

Shrink Temperature: 100°C

Flame Retardant

RoHS compliant and UL listed

Available in diameters from 3/64" to 2"

Other lengths may be available upon request

Formerly MIL-I-23053/5



Mil-Spec	Class 3	Size
M23053/5-		inches
	301-0	0.046875 (1.190625)
	302-0	0.0625 (1.5875)
	303-0	0.09375 (2.38125)
	304-0	0.125 (3.175)
	305-0	0.1875 (4.7625)
	306-0	0.25 (6.35)
	307-0	0.375 (9.525)
	308-0	0.5 (12.7)
	309-0	0.75 (19.05)
	310-0	1 (25.4)
	311-0	1.5 (38.1)
	312-0	2 (50.8)

M23053/8 Class 1

2:1 Modified Polyvinylidene Fluoride Heat Shrink Tubing

Clear

4Ft. Length

Other sizes or lengths may be available upon request

Operating Temperature: - 55°C (-67°F) to 175°C (347°F)

Shrink Temperature: 175°C

Formerly MIL-I-23053/8

Mil-Spec	Clear	Size
M23053/8-		inches
	001-C	0.046875 (1.190625)
	002-C	0.0625 (1.5875)
	003-C	0.09375 (2.38125)
	004-C	0.125 (3.175)
	005-C	0.1875 (4.7625)
	006-C	0.25 (6.35)
	007-C	0.375 (9.525)
	008-C	0.5 (12.7)
	009-C	0.75 (19.05)
	010-C	1 (25.4)
	011-C	1.5 (38.1)

M23053/13

2:1 Viton Heat Shrink Tubing

Black

100 Ft. Lengths

Operating Temperature: -40°C (-40°F) to 200°C (392°F)

Shrink Temperature: 100°C

Other lengths may be available upon request

Formerly MIL-I-23053/13

Mil-Spec	Black	Size
M23053/13-		inches
	001-0	0.19 (4.826)
	002-0	0.25 (6.35)
	003-0	0.375 (9.525)
	004-0	0.5 (12.7)
	005-0	0.625 (15.875)
	006-0	0.75 (19.05)
	007-0	0.875 (22.225)
	008-0	1 (25.4)
	009-0	1.25 (31.75)
	010-0	1.5 (38.1)
	011-0	2 (50.8)

M23053/15 Class 1

3:1 Adhesive Lined Heavy Wall Heat Shrink Tubing with Hot Melt Adhesive

Black, Red, or White (Red available in 3/8", 3/4", 1", 1-1/2", white available in 1-1/2" only)

4Ft. Length

Operating Temperature: -55C to +110C

Shrink Temperature: 120C

SAE-AMS-DTL-23053/15, Class 1 Formerly MIL-I-23053/15 and MIL-DTL-23053/15

Mil-Spec	Class 1	Size	Dash	Color
M23053/15-		inches		
	101-*	0.8 (20.32)	0	Black
	102-*	1.1 (27.94)	2	Red
	103-*	1.5 (38.1)		
	104-*	2 (50.8)		
	105-*	3 (76.2)		
	106-*	4.5 (114.3)		
	107-*	0.3 (7.62)		
	108-*	0.4 (10.16)		
	111-*	2.7 (68.58)		
	112-*	4.5 (114.3)		
	113-*	6 (152.4)		
	114-*	7 (177.8)		



M23053/15 Class 2

3:1 Adhesive Lined Medium Wall Heat Shrink Tubing

Black or Red (Red available in .4", .8", 1.3")

4Ft. Length

Operating Temperature: -55°C (-67°F) to 125°C (230°F)

Shrink Temperature: 120°C

SAE-AMS-DTL-23053/15, Class 2 Formerly
MIL-I-23053/15 and MIL-DTL-23053/15

Mil-Spec	Class 2	Size	Dash	Color
M23053/15-		inches		
	201-*	0.4 (10.16)	0	Black
	202-*	0.8 (20.32)	2	Red
	203-*	1.1 (27.94)		
	204-*	1.3 (33.02)		
	205-*	1.5 (38.1)		
	206-*	1.7 (43.18)		
	207-*	3 (76.2)		
	208-*	2 (50.8)		



M23053/18 Class 1

2:1 PVDF Clear Heat Shrink Tubing

Clear

50 or 100 foot lengths dependent on size

Operating Temperature: -20°C (-4°F) to 105°C (221°F)

Shrink Temperature: 100°C

Formerly MIL-I-23053/18

Mil-Spec	Class 1	Size
M23053/18-		inches
	101-C	0.046875 (1.190625)
	102-C	0.0625 (1.5875)
	103-C	0.09375 (2.38125)
	104-C	0.125 (3.175)
	105-C	0.1875 (4.7625)
	106-C	0.25 (6.35)
	107-C	0.375 (9.525)
	108-C	0.5 (12.7)
	109-C	0.75 (19.05)
	110-C	1 (25.4)
	111-C	1.5 (38.1)
	112-C	2 (50.8)



THE NTE[®] BRAND



AC to DC Adapters



- Regulated
- 100 - 240VAC
- 50/60 Hz
- Wall Mount & Desk Top
- C(UL) US Listed
- Folding Plug USB Type
- 4 Port USB Type
- 2.1mm, 2.5mm, & 3.5mm tips
- 5VDC through 24VDC
- 500mA through 6A
- Power Banks
- Polarity Reversal Plugs
- New 12V 8A & 10A Types

Binding Post and Banana Sockets



- Single and Dual Types
- 4mm Sockets
- Red/Black
- Dual Binding Post
- Nickel Plated Brass

Cable Ties + Bundle Management



- Standard Cable Ties
- Specialty Cable Ties
- Stainless Steel Cable Ties
- Cable Tie Tension Tools
- Cable Tie Accessories
- Convenience Packs
- Split Loom
- Assorted Sizes and Colors
- Spiral Wrap
- Twist Locks
- Cable Clamps
- Expandable Sleeving

Electroluminescent (EL) Wire



- Red, Blue, Transparent Blue, Green, Transparent White, Yellow Green, Orange
- 2.3mm and 3.2mm Diameters
- 9.84 Foot Length (3M) with Pre-Wired Connector
- Environmentally Friendly and Energy Saving—Uses 50-70% less energy than LED lamps, 20-40% less than Rope Lighting, and 1-10% less than Neon Lighting

Fans



- AC and DC Types: 12 and 24VDC 100-125VAC
- Sizes Include: 40x40mm 60x60mm 80x80mm 92x92mm 120x120mm
- Ball Bearings
- Locked Rotor Protection
- All are RoHS Compliant
- Most are UL Recognized
- Metal Fan Guards
- Fan Cords
- Fan Filters

Flexible LED Strips



- Flexible LED Strips
- Red, Amber, Blue, Green, White, Warm White, Pink, Purple and Red/Green/Blue
- 2835, 3528 & 5050 LEDs
- Non-Water Resistant (IP20), Water Resistant (IP65) and Water Proof (IP68) Available
- 120 Degree View Angle
- Adhesive Back Tape
- Soft Touch Remote Control
- 16.4 Foot Reels (5M)
- 20' Lengths Available

- Pre-Packaged Kits

Fuses



- Cartridge Case Sizes: - 3.6 x 10mm/5 x 20mm/ (3AG and 3AB Equivalent) 6 x 30mm, and 10 x 38mm
- Glass and Ceramic
- Fast Acting and Slow Blow
- Standard, Mini, and Max Automotive
- Fuse Clips
- Panel Mount Holders
- Fuse Blocks
- PICO Fuse Equivalent
- 2 AG Type Equivalent
- In Line Fuse Holders
- Fuse Kits
- Axial Lead 5 x 20mm and 2AG Equivalent
- Photovoltaic/Solar Panel Power
- LED Indicator Types
- Circuit Taps

Heat Shrink Tubing



- Thin Wall Cross-Linked Polyolefin
- Available in 11 colors
- Shrink Temperature: 120°C
- Dual Wall Cross-Linked Polyolefin with Adhesive
- Shrink Ratio: 2:1
- Thin/3:1 Dual
- Medium and Thick Wall
- Assortment Packs

Hook-Up Wire



- Automotive Wire
- Teflon Coated Wire
- Speaker Wire Clear
- 10 Colors and Gauges from 10 to 26
- Audio Speaker Cable
- 300V and 600V Solid and Stranded Wire
- Black/Red Bonded Speaker Wire
- High Performance Home Audio Speaker Cable
- Magnet Wire
- Test Lead Wire
- Multi-Conductor Cable
- Pre-Loaded Wire Dispensers

LED Lamps + Halogen Bulbs

NEW



- Square Interior 12/24 VDC
- Round Interior 12/24 VDC
- 12 V and 120V Halogen
- Long Life
- Dimmable
- Rotating Swivel 12/24 VDC
- Waterproof Light Bar 12 VDC

Potentiometers and Trimmers



- Carbon Potentiometers
- Cermet Potentiometers
- Wirewound Potentiometers
- Military Potentiometers
- Cermet Trimmers
- Dials
- Knobs

Relays



- Electromechanical
- Automotive Type
- Time Delay
- Thermal Circuit Breakers
- Accessories
- Replacements for Over 90,000 Types
- Solid State
- Reed
- I/O Modules
- Surface Mount Types
- Magnetic Latching
- DIN Rail
- Full Featured
- Weatherproof
- Contactors

Nu-Tech Electronics

THE NTE® BRAND (Continued)

Resistors, Capacitors and Thermistors



- Flameproof 1/8W to 3W
- Metal Film/Oxide
- Fusible Power Oxide
- Carbon Composition
- Vitreous Wirewound/Edgewound
- Power Wirewound
- Surface Mount Types
- Aluminum Electrolytic
- Tantalum
- Round & Oval Motor Start/Run
- Snap-in Mount
- Multilayer Ceramic
- Mylar/Polyester Film
- Prepackaged Kits
- Dual Capacitance
- Ceiling Fan
- NTC
- PTC
- Radial Lead
- 1 Ohm through 200k Ohm

Semiconductors



- Power Block/Hybrid Mod.
- Small Signal/Power Transistors
- Transient Suppressors
- Thyristors
- Integrated Circuits
- Industrial Rectifiers/Bridges
- Robotic Components
- Replacements for Almost 400,000 Industry Types
- Voltage Regulators
- Thermal Cutoffs
- Zener Diodes
- Surface Mount Types
- Full Optoelectronic Line

Switches



- Bat Handle Toggle
- Paddle Toggle
- Metal and Nylon Pushbutton
- Sealed Automotive/Marine Types
- Rocker
- Snap Action
- Pull Chain
- Illuminated
- Anti-vandal and Security Types
- Complete Cross Reference
- PC Mount
- Waterproof
- Economy
- Slide
- Pushbutton Canopy

Terminal Blocks



- Barrier
- Euro-style
- 2 through 24 Pole
- 3.5mm through 11mm Pitch
- Single & Dual Row
- PC & Solder Terminals
- Pluggable
- Euro-Style Barrier Strips

Terminals and Connectors



- Ring Terminals
- Spade Terminals
- Pin Terminals
- Flag Terminals
- Waterproof Heat Shrink Terminals
- Butt Connectors
- Male and Female Disconnects
- Piggy Back Disconnects
- Bullet and Receptacle Disconnects
- Twist-On Wire Connectors, Close End Connectors, Stripping Quick Splices
- Heat Shrink Insulated Butt Connectors with Internal Fluxed Solder Ring
- Multi-Function Crimp Tool

Test Leads and Clips



- Alligator, Crocodile, Plier, and Spring Type Clips
- Probes, Sprung Hooks, and Cable Piercers
- Panel Sockets
- Self Assembly Plugs, Sockets, and Cables
- Cable Assemblies
- OEM Safety Test Lead Sets
- OEM Fused Probe Sets
- Modular Test Lead Sets
- Multi-Pin Connector Test Lead Sets
- Automotive Kits and Accessories

THE ECG® BRAND

ECG®

Butane/Electric Soldering and Heat Products



- Butane Torches

- Variable Wattage Electric Soldering Iron
- Butane Soldering Irons
- Electric De-soldering Irons
- Electric Corded Soldering Irons
- Tips and Accessories
- Soldering Iron Kits
- Butane Powered Glue Gun
- Industrial and Economy Electric Heat Guns
- Miniature Soldering Irons
- Dual Heat Soldering Station
- Mini Heat Gun
- Mechanical De-Soldering Pumps

Wireless Security and Inspection Cameras



- WIC-1™ Standard Version

- WIC-100™ Deluxe Version
- 2.4" and 3.5" Removable Color LCD Monitors
- Video Out or Removable SD Card for Recording
- 4.5 mm, 9 mm and 15.9 mm Camera Heads
- Waterproof Camera and Shaft (IP67)
- Mirror, Hook and Magnetic Tips
- Magnetic Monitor Base
- Many Accessories
- WSS-1 Digital Pan and Tilt Surveillance System
- Real-Time, High Quality Video and Audio Monitoring

Aerosol Chemicals



- Hydroentangled Cellulose/Polyester C-Fold Wipes
- Electronics Washes

- Electronics Contact Cleaners, Degreasers and Washes
- Electronics Contact Cleaners with Lubes
- Heavy-Duty Flux Removers
- Heavy-Duty Cleaning Solvents
- Jet Air Dusters (Both HFC-134a and HFC-152a Formulas)
- 141b Formula Replacements
- Silicone Lubricants
- Computer Glass and Plastic Cleaner
- Label and Adhesive Removers
- Antistatic Circuit Refrigerants
- Straw Holders
- Electronics Degreasers and Washes
- Butane
- CARB Compliant Types

Surge Protectors



- Multi-Outlet Combinations
- Metal or Plastic Case

- Plug-in Protection For Office, Industrial, Institutional and Residential Applications
- Optional Phone-Line Protection
- General Purpose Protector
- Optional EMF/RFI Noise Filter
- Single and 3 Mode Protection
- 90° Rotated Outlets to Accommodate External Power Supplies
- High Joule Ratings
- Safety Slide Covers
- 3 Outlets with 2 USB Chargers
- Energy Saving Power Center
- Digital Timer

Test Equipment



- Digital Infrared Thermometer
- Analog Multimeters
- Digital Multimeters
- AC Clamp-On Digital Meters
- AC Clamp-On Current Adapter
- Digital Capacitance Meter
- Handheld Digital Thermometer
- Logic Probes
- Oscilloscope Probes
- Test Leads

Fuses



Glass

- 2AG Equivalent (3.6 x 10mm) Micro Glass
 - Fast Acting
 - Slow Blow
- 2 x 20mm Miniature Glass
 - Fast Acting
 - Slow Blow
- 3AG Equivalent (6 x 30mm) Miniature Glass
 - Fast Acting
 - Slow Blow

Ceramic

- 5 x 20mm miniature Ceramic
 - Fast Acting
 - Slow Blow
- 3AB Equivalent (6 x 30mm) Miniature Ceramic
 - Fast Acting
 - Slow Blow

- Automotive, Low Voltage, Fast Acting
 - ATM Equivalent Miniature Blade Type
 - ATC Equivalent Clip Type

Other Circuit Protection Devices

- Thermal Circuit Breakers
 - R58 Series Types
 - R59 Series Types
- Thermal Cut Off (TCO)
- Metal Oxide Varistor (MOV)
- IC Protector (ICP)
- Overvoltage Transient Suppressor
 - Unidirectional (DC)
 - Bidirectional (AC)
- Polymeric PTC Resettable Fuses
- Surge Arrestors, Gas filled
- SIDAC – Bidirectional Thyristor Diode



Hook-Up Wire

- ◆ Automotive Wire
- ◆ Teflon® Wire
- ◆ 300V Solid Wire
- ◆ 300V Stranded Wire
- ◆ 600V Stranded Wire
- ◆ Speaker Wire
- ◆ Black/Red Bonded Speaker Wire
- ◆ Magnet Wire



Features:

- ***Broad Line – Over 500 Types***
- ***Packaged in a variety of lengths, gauges and colors***
- ***Shrink wrapped spools***
- ***Small quantity packages available***

Switches



Industrial, Consumer, Commercial, MRO Applications

Hundreds of switches to select from:

- Toggle
- Rocker
- Paddle
- Pull Chain
- Illuminated Rocker
- Sealed
- Automotive/Marine
- Bat Handle
- Pushbutton
- Snap Action
- Round Hole Rocker
- Anti-Vandal
- PC Mount
- Waterproof
- Slide
- Economy
- Hardware & Accessories

Terminals



Industrial, Consumer, Commercial, MRO Applications

Barrier Type

9.5mm Pitch

Solder Lug

PC Mount

Tri-Barrier PC Mount

Dual Row Panel Mount

11mm Pitch

Eurostyle Type

3.5mm Pitch

PC Mount

5mm Pitch

PC Mount

PC Mount Wire Protector

PC Mount Socket for Pluggable Types

Plug for Pluggable Types

Wire Protector

5.08mm Pitch

PC Mount

PC Mount Socket for Pluggable Types

Plug for Pluggable Types

6.35mm Pitch

PC Mount

9.52mm Pitch

PC Mount

Relays



Accessories/Sockets

AC Buzzer

Automotive

Cube Timers

Contactors

General Purpose

Hermetically Sealed Types

Impulse/Latching

Input/Output Modules

PC Mount

Power

Reed

Solid State

Special Function Devices

Thermal Circuit Breakers

Time Delay

Batteries



Batteries from Dantona Industries are quality manufactured batteries. For batteries of all types, including Power Tool Batteries, Digital Camera Batteries, Barcode Scanner Batteries, Laptop Batteries, Cordless Phone Batteries, Cellular Phone Batteries, Video Game Batteries, Remote Control Batteries, Life04 Batteries, Life04 Solar Batteries, Solar Light Batteries, Power Tool Chargers, Ultralast Batteries, Battery Chargers, SAFT Batteries, Alkaline Batteries, Panasonic Batteries, Lead Acid Batteries, Emergency Lighting Batteries, PLC Batteries, Lithium Ion Batteries, Lithium Polymer Batteries, Energys Batteries, NABC, Cellular Batteries, Custom Made Battery Packs, Alkaline Batteries, Dog Collar Batteries, Headset Batteries and Vacuum Batteries you can rely on Dantona!



Precision Machining Manufacturing & Assembly



- † Design and Build Production Injection Molds
- † Fully Automated Machine Building and Assembly
- † EDM Technology w/ Four Axis Contouring
- † Milling Center to Meet High -Volume CNC Requirements



- † Machining of Complex and General Tooling from Materials such as Toolsteels, Aircraft Alloy Aluminum, Acetal, Phenolic's, etc.
- † Welding and Fabrication Structural and Sheet Metal





Cross Technology realizes the importance of increasingly shorter lead times and ongoing commitment to quality that is common to our industry. Our sole mission is to remain the recognized leader and provider of quality precision components to the customers and industries we serve. Capable of around-the-clock operations, we provide our customers with a broad range of services.

Modern alternatives made available by converging technologies

Online at www.crosstech.us
Machine Quote: bhester@crosstech.us



Cross | Technology Inc.



Nu-Tech

305 Junia Avenue
Winston-Salem, NC 27127
(336) 725-4700

Cables & Wiring Harnesses

Cross Technology is a leading provider of electromechanical sub assemblies, custom cables and wiring harnesses. Our experienced team of technicians can manufacture quality wiring assemblies to your spec or print. Our expertise ranges from single wire assemblies to turnkey, ready-to-ship, fully tested systems. We are experts at providing assemblies ranging from small gauge, 28 AWG thru 1 AWG and everything between. Our experience in working with these materials and components can save you time, improving your time to market while at the same time allowing you time to spend on other areas of your project. Our team has the experience and attention to detail necessary to supply you with all your custom manufactured needs. With in-house tooling capabilities, as well as state-of-the-art processing equipment and high speed terminal crimping, we can supply your prototype as well as production assemblies. With these capabilities we can offer you very short lead times, often days rather than weeks or months. We will always assemble your cables to spec accurately and on time.

Cross Technology can process and terminate many types of wire and cable, including:

- Teflon as well as PVC jacketed
- Multi-conductor cable
- Discrete wire
- Mil-Spec wire
- Coax
- Fiber
- Ribbon
- Over-molded



Our team can cut and strip discrete wire using Komax cut and strip equipment. This reduces our labor by two-thirds for this process and allows each wire to be cut and stripped to the same spec. Our team has extensive experience in working with a broad range of connector types and manufacturers. Our production floor is equipped with high-quality automated wire processing equipment as well as crimping equipment. With our distribution agreements in place we stock and sell a wide variety of wire and connectors as well as wire covering materials. We can build distributor cost versus having to procure outside, saving you money. We can support you with competitive pricing on spare parts as well as long-range requirements. Oftentimes we can improve your design by adding our Nu-Tech product line. This will provide you with sealing and strength without impacting our pricing to you.

We utilize a SumiMark IV wire labeling system. This system allows us to significantly reduce our labeling cost and still provide you with a clear and crisp identification with our automated labeling system. In addition, our high-performance, high-speed thermal transfer marking system allows us to custom print on continuous spools of a wide variety of tubing.

All our products are fully tested to your specifications before shipping. Your cable and wire assemblies are tested point to point to determine if any shorts and opens are detected. We complete a point-to-point test for continuity, resistance, voltage, diodes and amperage. If required we can fully test on our Cami Research, Cable Eye test system and provide you a detailed report.

We are only a phone call away!

Value added services include:

- Panel build
- Electromechanical assemblies
- Wire cut, strip, and label
- Custom printed heat shrink labels



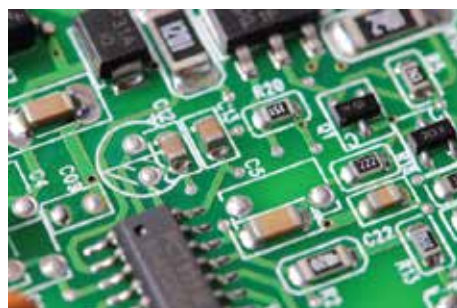
Printed Circuit Boards

Cross Technology offers printed circuit board (PCB) services through our contract manufacturing services as well as our strategic business partnerships. We specialize in both thru-hole as well as surface mount placement and multi-layer, rigid or flexible circuits. We will supply you with quality-quick-turn PCB's at a competitive price. We use your Gerber files as well as board documents to manufacture to your specifications including design, layout, and manual or automated placement. We can accommodate both your prototype and small quantity requirements with quality inspection being performed visually using magnified, optical instrumentation. Volume and large production runs are checked for quality using automated optical inspection (AOI). This inspection is performed either in-line or off-line, depending on the specific requirements and the components to be placed. Depending on your project requirements our boards can be 100% tested before leaving our facility. We offer State-of-the-art pick and place equipment that will place your components at speeds of up to 21,000 components per hour. With this high speed automation capability, we can offer you the most competitive pricing in the industry! We can accommodate boards from .015" thick to 2.00" x 1.60", and up to 18.10" x 15.75". This highly efficient equipment allows us to offer you competitive pricing, optimizing your profit margins as well as improving your time to market. We offer automated solder paste and wave soldering. Conformal coating equipment give us the ability to precisely place material. This allows us to eliminate wasted material and provide you with a consistent end product.

Our United States procurement department and partners always perform their due diligence to prevent the purchase and/or use of counterfeit electronic parts in the manufacturing of your product.

We strive first and foremost for quality, on-time deliveries as well as personal customer service. At Cross Technology we offer you complete turnkey printed circuit board assemblies for a number of industries including:

Military - Commercial - Aviation - Automotive



Production Molding Services



Cross Technology Inc. provides advanced tool design and manufacturing for the plastic and rubber molding industries.

We perform custom mold design and fabrication services that include everything from conceptual injection mold design to complete, in-house fabrication.

We have an onsite custom machine shop with state-of-the-art CNC equipment to meet quick-turn mold repair and rapid prototypes.

Cross Technology Inc. has molding capacity measuring from 15 up to 225 tons to meet your sampling or production requirements.

From one-off prototypes to long-run, high-volume production, our quality custom mold design and fabrication operations have satisfied the needs of multiple industries.

- Compression Molds
- Hot or Cold Runner Injection Molds



