

Liquid Tight Nickel Plated Brass Strain Relief Fittings



Applications

Wherever a metal strain relief fitting is used, this strain relief fitting will give you a greatly increased cable range with superior corrosion protection. Typical applications are: Control cabinets, car washes, hot tubs, instrumentation, carpet cleaning machines, food processing equipment, underground for direct burial or submersed up to 300 ft. (150 PSIG).

Rugged - Attractive

The nickel plated brass Strain Relief Fitting gives superior protection against corrosion and enhances the appearance of your product.

Non-Corrosive

The Strain Relief Fitting is resistant to salt water, weak acids, weak alkalis, alcohol, esters, ketones, ether, gasoline, mineral oil, animal oil, vegetable oil and many other substances.

Flex Nut

The Dome Nut can be substituted with a Flex Nut. The stainless steel spring extension offers superior protection against kinking and caving of the cable.

Easy, Time Saving Installation

Simply push the cable through the installed strain relief fitting and tighten dome flex nut for a liquid tight connection. The integral O-Ring seal between body and housing eliminates the need for extra seals. No disassembly of the fitting is required: **Insert Cable - Tighten Nut - Finished!**

Liquid Tight

Exceeds NEMA 4x or 6 specifications. The O-Ring between body and housing assures a reliable seal. It is particularly suitable for submersed application. Up to 150 PSIG external pressure.

Large Range

10 sizes accommodate diameters from 1/16" to 1-3/4". The flexible spline design results in the largest cable range per size available.

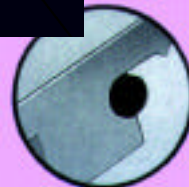


Flexible Overlapping Clamping Splines Press Seal on Cable, Protecting it from Damage



Tapered Nut Compresses Splines

Patented Recessed Seal Edge



Liquid Tight Body O-Ring Seal

Patented High Performance Form Seal Grips Cable Securely

Insulating Splined Nylon Bushing with Unique Anti-Rotation Grooves



Liquid Tight Straight Nickel Plated Brass Strain Relief Fittings with Dome or Flex Nut



SPECIFICATIONS:

Pressure rating:
150 PSIG (10 BAR) NEMA 4X or 6 (submersible) IP68

Materials:
Body, Dome nut & Locking nut: Nickel plated brass
Spring (Flex extension): Stainless Steel
Splined Bushing: Nylon 6/6
Form Seal & O-Ring: Buna-N

Operating Temperature:
-40°F to 212°F (-40°C to 100°C)



Short term e



See page 11 for miniature Strain Relief Fittings

Suggested Clearance Hole for Non-Threaded Mounting



PART NUMBER		Diameter of Cable or Wire accommodated. We recommend the minimum size that will still fit your application (inches).	THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)				
Dome Fitting 	Flex Fitting 			A Clearance Hole +.010" .000	B Body Height Dome Fitting	C Body Height Flex Fitting	D Thread Length Fitting	E ₁ /E Wrenching Flats
CD07AA-BR CD07AR-BR	CF07AA-BR CF07AR-BR	.11 - .26 .08 - .20	PG 7 1/4" NPT	.49	.75	2.16	.20	.55
CD09AA-BR CD09AR-BR	CF09AA-BR CF09AR-BR	.16 - .31 .08 - .24	PG 9	.60	.79	2.60	.24	.67
CD09NA-BR CD09NR-BR	CF09NA-BR CF09NR-BR	.16 - .31 .08 - .24	3/8" NPT	.68	.79	2.60	.59	.67/.74
CD11AA-BR CD11AR-BR	CF11AA-BR CF11AR-BR	.20 - .39 .11 - .28	PG 11	.73	.83	3.03	.24	.79
CD13AA-BR CD13AR-BR	CF13AA-BR CF13AR-BR	.24 - .47 .20 - .35	PG 13.5	.80	.87	3.46	.26	.87
CD13NA-BR CD13NR-BR	CF13NA-BR CF13NR-BR	.24 - .47 .20 - .35	1/2" NPT	.83	.87	3.46	.51	.87/.94
CD16AA-BR CD16AR-BR	CF16AA-BR CF16AR-BR	.39 - .56 .28 - .47	PG 16	.88	.91	3.86	.26	.94
CD21AA-BR CD21AR-BR	CF21AA-BR CF21AR-BR	.51 - .71 .35 - .63	PG 21	1.12	.98	4.37	.28	1.18
CD21NA-BR CD21NR-BR	CF21NA-BR CF21NR-BR	.51 - .71 .35 - .63	3/4" NPT	1.05	.98	4.37	.51	1.18
CD29AA-BR CD29AR-BR		.71 - .98 .51 - .79	PG 29	1.47	1.14		.31	1.57
CD29NA-BR CD29NR-BR		.71 - .98 .51 - .79	1" NPT	1.35	1.14		.75	1.57
CD36AA-BR CD36AR-BR		.86 - 1.26 .79 - 1.02	PG 36	1.85	1.38		.31	1.97
CD42AA-BR CD42AR-BR		1.26 - 1.50 .98 - 1.22	PG 42	2.13	1.46		.35	2.24
CD48AA-BR CD48AR-BR		1.45 - 1.73 1.14 - 1.38	PG 48	2.34	1.50		.39	2.52

Longer thread lengths available in PG sizes.

The PG7 thread fits a 1/4" NPT or 1/2"-20 UNF.

PART NUMBER	THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)		Locking Nuts Nickel Plated Brass	PART NUMBER	THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)	
		G Thickness	H Wrenching Flats				G Thickness	H Wrenching Flats
NP-07-BR NP-09-BR	PG 7/14" NPT PG 9	.11 .11	.59 .71	See page 5 for Nylon Nuts. To specify connector with nut in one part number, add "-N" to the connector number. Example: CD13NA-BR-N or order separately.	NP-21-BR NN-21-BR	PG 21 3/4" NPT	.14 .18	1.26 1.18
NN-09-BR NP-11-BR	3/8" NPT PG 11	.14 .12	.75 .83		NP-29-BR NP-36-BR	PG 29 PG 36	.16 .20	1.61 2.01
NP-13-BR NN-13-BR	PG 13.5 1/2" NPT	.12 .14	.91 .94		NP-42-BR NP-48-BR	PG 42 PG 48	.20 .22	2.36 2.52
NP-16-BR	PG 16	.12	1.02					

EMI-Proof Grounded Nickel Plated Brass Liquid Tight Strain Relief Fittings



These liquid tight EMI-proof grounded strain relief fittings made of nickel plated brass are the perfect answer to stringent requirements for reliable grounding and protection from electromagnetic interference (EMI). Two styles are available: STANDARD and FEED-THROUGH. The STANDARD version has an integral O-ring, which presses the braiding against the inside wall of the body but can only be used with braided shield - the FEED-Through works well with braided or foil shield and provides reliable grounding by means of metal spring fingers. Locking nuts with cutting edges are available (ordered separately). They penetrate the protective coating of the enclosure for a metal-to-metal connection.

PART NUMBER		Locking Nut with cutting edges (Nickel Plated Brass)	Diameter of Cable or Wire accommodated. We recommend the minimum size that will still fit your application (inches).	THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)					
Standard	Feed-Through				A Clearance Hole +.010" .000	B Thread Length Fitting	C Body Height Fitting	D ₁ /D Wrenching Flats Fitting	G Thickness Locking Nut	H Wrenching Flats Locking Nut
CD07AA-BE CD07AR-BE	CD07AA-FE CD07AR-FE	NP-07-BE	.11 - .26 .08 - .20	PG 7 1/4" NPT	.49	.20	.75	.55	.11	.59
CD09AA-BE CD09AR-BE	CD09AA-FE CD09AR-FE	NP-09-BE	.16 - .31 .08 - .24	PG 9	.60	.24	.79	.67	.11	.71
CD09NA-BE CD09NR-BE	CD09NA-FE CD09NR-FE		.16 - .31 .08 - .24	3/8" NPT	.68	.59	.79	.67/.74	.14	.74
CD11AA-BE CD11AR-BE	CD11AA-FE CD11AR-FE	NP-11-BE	.20 - .39 .11 - .28	PG 11	.73	.24	.83	.79	.12	.83
CD13AA-BE CD13AR-BE	CD13AA-FE CD13AR-FE	NP-13-BE	.24 - .47 .20 - .35	PG 13.5	.80	.26	.87	.87	.12	.91
CD13NA-BE CD13NR-BE	CD13NA-FE CD13NR-FE		.24 - .47 .20 - .35	1/2" NPT	.83	.51	.87	.87/.94	.14	.94
CD16AA-BE CD16AR-BE	CD16AA-FE CD16AR-FE	NP-16-BE	.39 - .56 .28 - .47	PG 16	.88	.26	.91	.94	.12	1.02
CD21AA-BE CD21AR-BE	CD21AA-FE CD21AR-FE	NP-21-BE	.51 - .71 .35 - .63	PG 21	1.12	.28	.98	1.18	.14	1.26
CD21NA-BE CD21NR-BE	CD21NA-FE CD21NR-FE		.51 - .71 .35 - .63	3/4" NPT	1.05	.51	.98	1.18	.18	1.18
CD29AA-BE CD29AR-BE	CD29AA-FE CD29AR-FE	NP-29-BE	.71 - .98 .51 - .79	PG 29	1.47	.31	1.14	1.57	.16	1.61
CD36AA-BE CD36AR-BE	CD36AA-FE CD36AR-FE	NP-36-BE	.86 - 1.26 .79 - 1.02	PG 36	1.85	.31	1.38	1.97	.20	2.01
CD42AA-BE CD42AR-BE	CD42AA-FE CD42AR-FE	NP-42-BE	1.26 - 1.50 .98 - 1.22	PG 42	2.13	.35	1.46	2.24	.20	2.36
CD48AA-BE CD48AR-BE	CD48AA-FE CD48AR-FE	NP-48-BE	1.45 - 1.73 1.14 - 1.38	PG48	2.34	.39	1.50	2.52	.22	2.52

SPECIFICATIONS:

Pressure rating:
150 PSIG (10 BAR) NEMA 4x and 6
(Submersible) IP68

Materials:

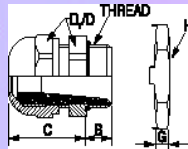
Body & Nut: Nickel Plated Brass

Splined Bushing: Nylon 6/6

Form Seal & O-Ring: Buna-N

Operating Temperature:

-40°F to 212°F (-40°C to 100°C)



Standard

Feed-Through



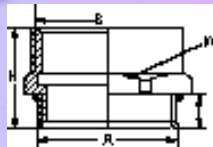
Suggested Clearance Hole for Non-Threaded Mounting



Adapters Pg to NPT

Converts Pg threads to NPT threads.

Note: Call for other bushings and adapters.



SPECIFICATIONS:

Materials:

Body: Nickel Plated Brass

O-Ring: Buna-N

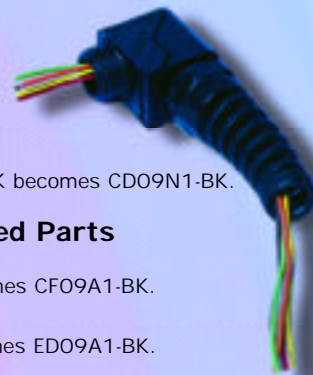
PART NUMBER	MALE THREAD A	FEMALE THREAD B	WRENCHING FLATS W	THREAD LENGTH T	HEIGHT H
AG-1112-BR	PG 11	1/2" NPT	.94	.24	.89
AG-1312-BR	PG 13.5	1/2" NPT	.94	.26	.93
AG-1612-BR	PG 16	1/2" NPT	.94	.26	.91
AG-2112-BR	PG 21	1/2" NPT	1.18	.28	.59
AG-2134-BR	PG 21	3/4" NPT	1.18	.28	.94
AG-2910-BR	PG 29	1" NPT	1.57	.31	.79

Liquid Tight Strain Relief Fittings - Multi Cable

PART NUMBER NYLON DOME FITTING (PG SHOWN) Black	THREAD TYPE AND SIZE For PG thread specs see page 16	SEAL INSERT			
		No. of Holes	Diameter of Holes		Part Number of Insert Only
			mm	Inches	
CD07AP-BK	PG 7 1/4" NPT	Solid Plug			1.089.0799.19
CD09A1-BK	PG 9 3/8" NPT (Note 1)	4	1.4	.06	1.089.0900.19
CD09A2-BK		2	3.0	.12	1.089.0901.19
CD09A3-BK		5	1.6	.06	1.089.0902.19
CD09A4-BK		2	1.7	.07	1.089.0903.19
CD09A5-BK		10	1.4	.06	1.089.0904.19
CD09AP-BK		Solid Plug			1.089.0999.19
CD11A1-BK	PG 11	2	3.0	.12	1.089.1100.19
CD11A2-BK		3	3.0	.12	1.089.1101.19
CD11A3-BK		2	4.0	.16	1.089.1102.19
CD11AP-BK		Solid Plug			1.089.1199.19
CD13A1-BK	PG 13.5 1/2" NPT (Note 1)	3	2.0	.08	1.089.1300.19
CD13A2-BK		6	3.0	.12	1.089.1301.19
CD13A3-BK		3	4.0	.16	1.089.1302.19
CD13A4-BK		2	5.0	.20	1.089.1303.19
CD13A5-BK		3	3.0	.12	1.089.1304.19
CD13A6-BK		2	5.2	.20	1.089.1305.19
CD13A7-BK		2	3.8	.15	1.089.1306.19
CD13A8-BK		2	4.2	.17	1.089.1307.19
CD13AP-BK		Solid Plug			1.089.1399.19
CD16A1-BK		PG 16 1/2" NPT (Note 1)	3	3.0	.12
CD16A2-BK	3		4.0	.16	1.089.1601.19
CD16A3-BK	4		4.0	.16	1.089.1602.19
CD16A4-BK	5		4.0	.16	1.089.1603.19
CD16A5-BK	6		4.0	.16	1.089.1604.19
CD16A6-BK	2		6.0	.24	1.089.1605.19
CD16A7-BK	3		5.6	.22	1.089.1606.19
CD16A8-BK	6		3.0	.12	1.089.1607.19
CD16AP-BK	Solid Plug			1.089.1699.19	
CD21A1-BK	PG 21 3/4" NPT (Note 1)	4	6.0	.24	1.089.2100.19
CD21A2-BK		3	7.0	.28	1.089.2101.19
CD21A3-BK		2	8.0	.31	1.089.2102.19
CD21A4-BK		4	5.0	.20	1.089.2103.19
CD21A5-BK	PG 21 3/4" NPT (Note 1)	1	8.0	.31	1.089.2104.19
CD21A6-BK		4	5.2	.20	1.089.2105.19
CD21A7-BK		3	5.2	.20	1.089.2106.19
CD21A8-BK		4x5.2(.20)/1x3.8(.15)			1.089.2107.19
CD21AP-BK	Solid Plug			1.089.2199.19	
CD29A1-BK	PG 29 1" NPT (Note 1)	6	6.5	.26	1.089.2900.19
CD29A2-BK		4	9.0	.35	1.089.2901.19
CD29A3-BK		4	9.5	.37	1.089.2902.19
CD29AP-BK		Solid Plug			1.089.2999.19
CD36A1-BK	PG 36 1-1/2" NPT (Note 1)	5	9.0	.35	1.089.3600.19
CD36A2-BK		7	9.0	.35	1.089.3601.19
CD36A3-BK		6	8.0	.31	1.089.3602.19
CD36A4-BK		2	15.0	.59	1.089.3603.19
CD36AP-BK		Solid Plug			1.089.3699.19
CD42AP-BK	PG 42	Solid Plug			1.089.4299.19
CD48A1-BK	PG 48	8	10.0	.39	1.089.4800.19
CD48A2-BK		6	12.0	.47	1.089.4801.19
CD48A3-BK		3	18.0	.71	1.089.4802.19
CD48AP-BK		Solid Plug			1.089.4899.19

Design Parameters: Cable diameter should not be less than 80% of hole diameter. The difference between hole and cable diameter should never exceed .04" (1mm).

For specifications and dimensions see pages where the appropriate fittings are shown.



Note 1: Strain Relief Fitting with NPT Threads
Substitute "N" for "A" e.g. CD09A1-BK becomes CDO9N1-BK.

How To Order Non-Listed Parts

- Strain Relief Fitting with Flex Nut
Substitute "F" for "D" e.g. CDO9A1-BK becomes CFO9A1-BK.
- Snap Elbow Fitting with Dome Nut
Substitute "E" for "C" e.g. CDO9A1-BK becomes EDO9A1-BK.
- Snap Elbow Fitting with Flex Nut
Substitute "EF" for "CD" e.g. CDO9A1-BK becomes EFO9A1-BK.
- Nickel Plated Brass Strain Relief Fitting
Substitute "BR" for "BK" e.g. CDO9A1-BK becomes CDO9A1-BR.
- Gray Strain Relief Fitting
Substitute "GY" for "BK" e.g. CD13A2-BK becomes CD13A2-GY.

Special Inserts

For a minimum order of 1,000 pieces any special insert hole configuration is available. For small quantities, we suggest drilling the frozen solid plug insert, using the fitting as a fixture.

SPECIFICATIONS FOR NYLON STRAIN RELIEF FITTINGS:

Pressure rating:

150 PSIG (10 BAR) NEMA 4X or 6 (submersible) IP68

Materials:

Fitting & Nut: Nylon 6/6, flame resistant, halogen free, self extinguishing

Seal: Buna-N

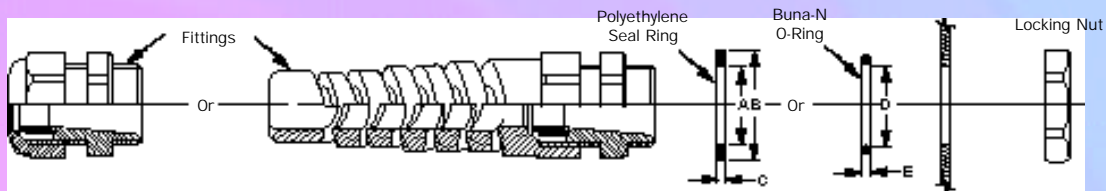
Operating Temperature

EXPOSURE	STATIC	DYNAMIC
CONTINUOUS	-40° to 212°F (-40°C to 100°C)	-4° to 176°F (-20°F to 80°C)
SHORT TERM	248°F (120°)	212°F (100°C)



- *Top Quality*
- *Inexpensive*
- *Saves Installation Time*


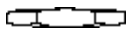
O-Rings and Seal Rings for Threads



If NEMA4x or 6 (European IP 68 - submersible) is required, O-Rings or Seal Rings (ordered separately) should be used when mounting Strain Relief Fittings to a control panel, secured with a locking nut. The Straight Strain Relief fittings feature a molded O-Ring groove. For these fittings, the Buna-N O-Ring is the best solution. The Snap Elbows and some of the Conduit Fittings don't have a recess for an O-Ring. In that case, the Polyethylene Seal Ring would be the best choice, unless the hole can be bevelled to accommodate an O-Ring.

FIT THREAD SIZES	PART NUMBER		DIMENSIONS (INCHES)				
	Seal Ring	O-Ring	A	B	C	D	E
PG 7 / 1/4" NPT	SR-07-NY	OR-07-BN	.49	.65	.06	.39	.06
PG 9	SR-09-NY	OR-09-BN	.60	.75	.06	.47	.06
3/8" NPT	SR-11-NY	OR-38-BN	.73	.89	.06	.55	.06
PG 11	SR-11-NY	OR-11-BN	.73	.89	.06	.63	.06
PG 13.5/1/2" NPT	SR-13-NY	OR-13-BN	.80	.98	.06	.67	.07
PG 16	SR-16-NY	OR-16-BN	.89	1.06	.06	.71	.06
PG 21	SR-21-NY	OR-21-BN	1.11	1.32	.08	1.02	.08
3/4" NPT	SR-21-NY	OR-25-BN	1.11	1.71	.08	.87	.08
PG 29	SR-29-NY	OR-29-BN	1.46	1.71	.08	1.30	.08
1" NPT		OR-32-BN	--	--	--	1.14	.08
1-1/4" NPT		OR-40-BN	--	--	--	1.38	.08
PG 36 / 1-1/2" NPT	SR-36-NY	OR-36-BN	1.85	2.17	.08	1.69	.08
PG 42	SR-42-NY	OR-42-BN	2.13	2.48	.08	1.97	.08
PG 48	SR-48-NY	OR-48-BN	2.33	2.72	.08	2.17	.08

Liquid Tight Nickel Plated Strain Relief Fittings - WADI Mini

PART NUMBER		Diameter of Cable or Wire accommodated. We recommend the minimum size that will still fit your application (inches).	THREAD TYPE AND SIZE	DIMENSIONS (INCHES)					
Strain Relief	Locking Nut			A	B	C	D	E	F
				Clearance Hole +.010" .000	Body Length Fitting	Thread Length Fitting	Wrenching Flats Fitting	Thickness Nut	Wrenching Flats Nut
CD06MW-BR	NM-06-BR	.08 - .12	M6 x 1	.25	.35	.24	.31	.10	.39
CD08MW-BR	NM-08-BR	.12 - .20	M8 x 1.25	.33	.43	.24	.43	.10	.51

SPECIFICATIONS:

Pressure rating:
150 PSIG (10 BAR) NEMA 4x and 6 (Submersible)

Materials:

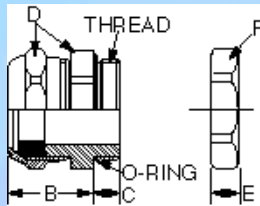
Body: Nickel Plated Brass

Seal & O-Ring: Buna-N

Operating Temperature:

-4°F to 212°F (-20°C to 100°C)

Short term 266°F (130°C)



APPLICATIONS:

The WADI Nickel Plated Brass Strain Relief Fittings solve space restriction problems. This mini component will fit into tight areas, but it maintains the quality of its larger counterparts. The internal construction and attractive nickel plated brass finish with dome nut protect against environmental elements such as salt water, esters, ketones, mineral oil and many other substances. An O-Ring

creates a reliable seal between body and housing. Available with Buna-N seals, these miniature strain relief fittings have many different application possibilities, including: Fiberoptics, sensors, switches and small appliances.

Liquid Tight Strain Relief Fittings for hazardous locations EExe II KEMA (Meets Class I, Zone 1&2)



Strain Relief Fittings available in all sizes with PG, metric or NPT threads. Threaded Dome Plugs available with PG and metric threads only. Made of high performance Nylon or Nickel Plated Brass. Call for a special catalog.



Liquid Tight Strain Relief Fittings for ROMEX Cables



These fittings feature a form seal with flat opening to seal underground feeder (U/F) Romex cable sizes AWG 14/2, 14/3, 12/2, 10/2 and non-metallic (N/M) Romex cable sizes AWG 14/2, 12/2, 12/3 and 10/2. They are made of Nylon with a Buna-N form seal and are resistant to salt water, weak acids, weak alkalis, alcohol, ether, esters, ketones, mineral, animal and vegetable oils. The thread is 1/2" or 3/4" NPT. Non-corrosive and suitable for direct burial installations.

The ROMEX form seals fit strain relief fittings made of other materials (nickel plated brass, PVDF, etc.).

PART NUMBER	COLOR	THREAD	SLOT SIZE	FITS U/F SIZES	FITS N/M SIZES
CD16NS-01	Black	1/2" NPT	.26 x .56	14/2, 12/2, 10/2	14/2, 14/3, 12/2, 12/3
CD16NS-02	Grey				
CD21NS-01	Black	3/4" NPT	.26 x .60	14/3, 12/3	12/2, 12/3, 10/2
CD21NS-02	Grey				



Liquid Tight Strain Relief Fittings – PVDF



For extreme temperature applications and the Chemical Industry

These fittings have outstanding chemical resistance and can tolerate, without problem, high and low temperatures. Use with nylon or nickel plated brass nuts.

SPECIFICATIONS:

Pressure rating:
150 PSIG (10 BAR) NEMA 4x and 6 (IP 68)

Materials:

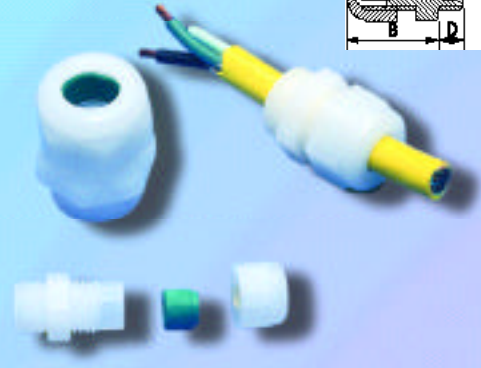
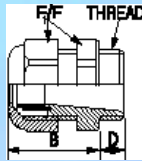
Body & Dome Nut: PVDF

Form Seal & O-Ring: Viton®

Operating Temperature:

-31°F to 302°F (-35°C to 150°C)

Short term 356°F (180°C)



PART NUMBER	Diameter of Cable or Wire accommodated. We recommend the minimum size that will still fit your application (inches).	THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)			
			A Clearance Hole +.010" .000	B Body Length	D Thread Length	F ₁ /F ₂ Wrenching Flats
CD07AA-TE CD07AR-TE	.11 - .26 .08 - .20	PG 7 1/4" NPT	.49	.79	.31	.59
CD09AA-TE CD09AR-TE	.16 - .31 .08 - .24	PG 9	.60	.87	.31	.75
CD09NA-TE CD09NR-TE	.16 - .31 .08 - .24	3/8" NPT	.68	.87	.59	.75/.87
CD11AA-TE CD11AR-TE	.20 - .39 .11 - .28	PG 11	.73	.94	.31	.87
CD13AA-TE CD13AR-TE	.24 - .47 .20 - .35	PG 13.5	.80	1.06	.35	.94
CD13NA-TE CD13NR-TE	.24 - .47 .20 - .35	1/2" NPT	.83	1.06	.51	.94
CD16NA-TE CD16NR-TE	.39 - .56 .28 - .47	1/2" NPT	.83	1.10	.51	1.06
CD16AA-TE CD16AR-TE	.39 - .56 .28 - .47	PG 16	.88	1.10	.39	1.06
CD21AA-TE CD21AR-TE	.51 - .71 .35 - .63	PG 21	1.12	1.18	.43	1.30
CD21NA-TE CD21NR-TE	.51 - .71 .35 - .63	3/4" NPT	1.05	1.18	.51	1.30
CD29AA-TE CD29AR-TE	.71 - .98 .51 - .79	PG 29	1.47	1.50	.43	1.65
CD29NA-TE CD29NR-TE	.71 - .98 .51 - .79	1" NPT	1.35	1.50	.75	1.65
CD29LA-TE CD29LR-TE	.71 - .98 .51 - .79	1-1/4" NPT	1.65	1.50	.63	1.65/1.81
CD36NA-TE CD36NR-TE	.86 - 1.26 .79 - 1.02	1-1/2" NPT	1.92	1.77	.79	2.09

Dome Plugs – Nylon and Nickel Plated Brass

per DIN 46320-FS/PA and DIN 46320/Ms

These dome plugs are designed to fit and seal European PG threads per DIN 46320. They are made of nylon or nickel plated brass. Optional polystyrene plugs available.



See above for thread clearance hole.

SPECIFICATIONS:

Materials:

- Nylon or Nickel plated brass.
- Buna-N O-ring seal optional.
- For elevated temperatures, Nickel plated brass plugs with Viton® seal are available.

Operating Temperature:




-40°F to 212°F (-40°C to 100°C)

PART NUMBER		THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)					
Nylon Plug			H Overall Height	Nylon		Brass		
Black	Gray	D Dome Diameter		E Thread Length	D Dome Diameter	E Thread Length		
DP-07-BK DP-09-BK DP-11-BK DP-13-BK	DP-07-GY DP-09-GY DP-11-GY DP-13-GY	DP-07-BR DP-09-BR DP-11-BR DP-13-BR	PG 7/1/4" NPT PG 9 PG 11 PG 13.5	.31 .35 .35 .37	.59 .75 .87 .98	.24 .24 .24 .24	.55 .67 .79 .87	.20 .24 .24 .26
DP-16-BK DP-21-BK	DP-16-GY DP-21-GY	DP-16-BR DP-21-BR	PG 16 PG 21	.37 .43	1.06 1.30	.24 .31	.94 1.18	.26 .28
DP-29-BK DP-36-BK DP-42-BK DP-48-BK	DP-29-GY DP-36-GY DP-42-GY DP-48-GY	DP-29-BR DP-36-BR DP-42-BR DP-48-BR	PG 29 PG 36 PG 42 PG 48	.47 .59 .63 .63	1.73 2.16 2.44 2.72	.31 .39 .39 .47	1.54 1.97 2.24 2.52	.31 .35 .39 .39

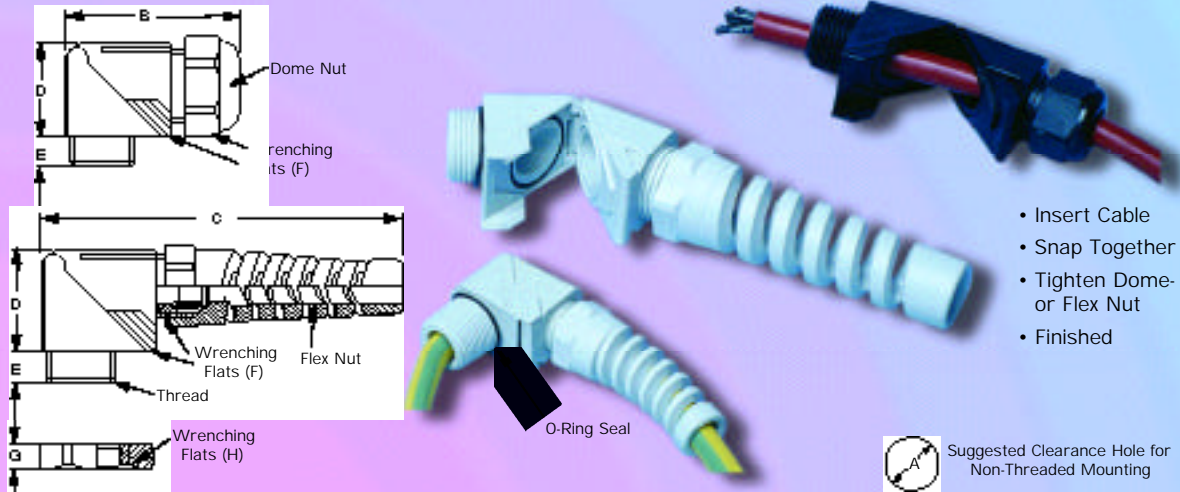


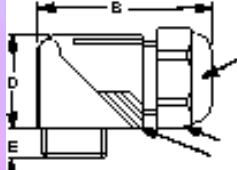
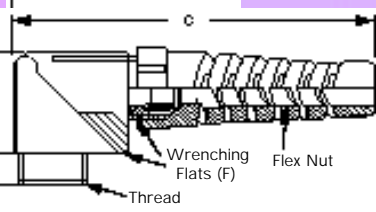
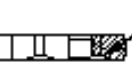

Liquid Tight Strain Relief 90° Snap Elbow Fittings with Dome or Flex Nuts – Nylon



PART NUMBER				Diameter of Cable or Wire accommodated. We recommend the minimum size that will still fit your application (inches).	THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)					
Dome Elbow Fitting 		Flex Elbow Fitting 				A Clearance Hole +.010" .000	B Body Length Dome	C Body Length Flex	D Height	E Thread Length	F Wrenching Flats 
Black	Gray	Black	Gray								
ED09AA-BK ED09AR-BK	ED09AA-GY ED09AR-GY	EF09AA-BK EF09AR-BK	EF09AA-GY EF09AR-GY	.16 - .31 .08 - .24	PG 9	.60	1.79	3.35	.91	.31	.75
ED09NA-BK ED09NR-BK	ED09NA-GY ED09NR-GY	EF09NA-BK EF09NR-BK	EF09NA-GY EF09NR-GY	.16 - .31 .08 - .24	3/8" NPT	.68	1.79	3.35	.91	.59	.75
ED11AA-BK ED11AR-BK	ED11AA-GY ED11AR-GY	EF11AA-BK EF11AR-BK	EF11AA-GY EF11AR-GY	.20 - .39 .11 - .28	PG 11	.73	1.99	3.86	1.06	.31	.87
ED13AA-BK ED13AR-BK	ED13AA-GY ED13AR-GY	EF13AA-BK EF13AR-BK	EF13AA-GY EF13AR-GY	.24 - .47 .20 - .35	PG 13.5	.80	2.24	4.41	1.20	.35	.94
ED13NA-BK ED13NR-BK	ED13NA-GY ED13NR-GY	EF13NA-BK EF13NR-BK	EF13NA-GY EF13NR-GY	.24 - .47 .20 - .35	1/2" NPT	.83	2.24	4.41	1.20	.51	.94
ED16NA-BK ED16NR-BK	ED16NA-GY ED16NR-GY	EF16NA-BK EF16NR-BK	EF16NA-GY EF16NR-GY	.39 - .56 .28 - .47	1/2" NPT	.83	2.58	5.13	1.28	.51	1.06
ED16AA-BK ED16AR-BK	ED16AA-GY ED16AR-GY	EF16AA-BK EF16AR-BK	EF16AA-GY EF16AR-GY	.39 - .56 .28 - .47	PG 16	.88	2.34	4.92	1.28	.39	1.06
ED21AA-BK ED21AR-BK	ED21AA-GY ED21AR-GY	EF21AA-BK EF21AR-BK	EF21AA-GY EF21AR-GY	.51 - .71 .35 - .63	PG 21	1.12	2.87	6.10	1.57	.43	1.30
ED21NA-BK ED21NR-BK	ED21NA-GY ED21NR-GY	EF21NA-BK EF21NR-BK	EF21NA-GY EF21NR-GY	.51 - .71 .35 - .63	3/4" NPT	1.05	2.87	6.10	1.57	.51	1.30
ED29AA-BK ED29AR-BK	ED29AA-GY ED29AR-GY			.71 - .98 .51 - .79	PG 29	1.47	3.58	--	2.01	.43	1.65
ED29NA-BK ED29NR-BK	ED29NA-GY ED29NR-GY			.71 - .98 .51 - .79	1" NPT	1.35	3.58	--	2.01	.75	1.65


Installs in either clearance or threaded holes

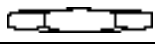

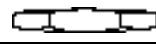


 Dome Nut
 Flex Nut
 Thread
 Wrenching Flats (H)

- Insert Cable
- Snap Together
- Tighten Dome or Flex Nut
- Finished

O-Ring Seal

 Suggested Clearance Hole for Non-Threaded Mounting

PART NUMBER		THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)		Locking Nuts Nylon	PART NUMBER		THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)	
Locking Nut 			G Thickness	H Wrenching Flats 		See page 9 for Nickel Plated Brass Nuts. To specify connector with nut in one part number add "-N" to the connector number. Example: CD13NA-BK-N or order separately. The PG7 thread fits a 1/4" NPT or 1/2"-20 UNF.			Locking Nut 	
Black	Gray					Black	Gray			
NP-07-BK NP-09-BK	NP-07-GY NP-09-GY	PG 7/1/4" NPT PG 9	.20 .20	.75 .87		NP-21-BK NN-21-BK	NP-21-GY	PG 21 3/4" NPT	.27 .27	1.41 1.26
NN-09-BK NP-11-BK	NP-09-BK NP-11-GY	3/8" NPT PG 11	.27 .20	.94 .94		NP-29-BK NN-29-BK	NP-29-GY	PG 29 1" NPT	.27 .27	1.81 1.57
NP-13-BK NN-13-BK	NP-13-GY NP-13-GY	PG 13.5 1/2" NPT	.24 .27	1.06 1.06		NP-36-BK NP-42-BK	NP-36-GY NP-42-GY	PG 36 PG 42	.31 .31	2.36 2.56
NP-16-BK	NP-16-GY	PG 16	.24	1.18		NP-48-BK	NP-48-GY	PG48	.31	2.75

Liquid Tight Straight Strain Relief Fittings with Dome or Flex Nuts - Nylon

UL/CSA E103997
 VDE 074032
 CAGE 71339
 PATENT ZERO UE11
 4145075

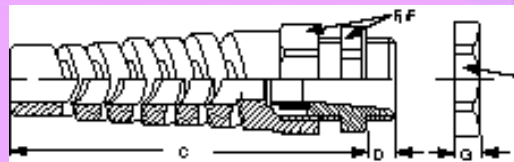
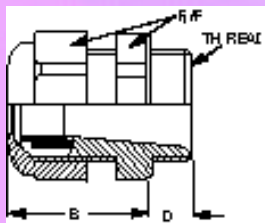


PART NUMBER				Diameter of Cable or Wire accommodated. We recommend the minimum size that will still fit your application (inches).	THREAD TYPE AND SIZE For PG thread specs see page 16	DIMENSIONS (INCHES)				
Dome Fitting		Flex Fitting				A	B	C	D	F ₁ /F
Black	Gray	Black	Gray			Clearance Hole +.010" .000	Body Length Dome	Body Length Flex	Thread Length	Wrenching Flats
CD07AA-BK	CD07AA-GY	CF07AA-BK	CF07AA-GY	.11 - .26	PG 7	.49	.79	1.93	.31	.59
CD07AR-BK	CD07AR-GY	CF07AR-BK	CF07AR-GY	.08 - .20	1/4" NPT					
CD09AA-BK	CD09AA-GY	CF09AA-BK	CF09AA-GY	.16 - .31		.60	.87	2.32	.31	.75
CD09AR-BK	CD09AR-GY	CF09AR-BK	CF09AR-GY	.08 - .24	PG 9					
CD09NA-BK	CD09NA-GY	CF09NA-BK	CF09NA-GY	.16 - .31		.68	.87	2.32	.59	.75/.87
CD09NR-BK	CD09NR-GY	CF09NR-BK	CF09NR-GY	.08 - .24	3/8" NPT					
CD11AA-BK	CD11AA-GY	CF11AA-BK	CF11AA-GY	.20 - .39		.73	.94	2.80	.31	.87
CD11AR-BK	CD11AR-GY	CF11AR-BK	CF11AR-GY	.11 - .28	PG 11					
CD13AA-BK	CD13AA-GY	CF13AA-BK	CF13AA-GY	.24 - .47		.80	1.06	3.19	.35	.94
CD13AR-BK	CD13AR-GY	CF13AR-BK	CF13AR-GY	.20 - .35	PG 13.5					
CD13NA-BK	CD13NA-GY	CF13NA-BK	CF13NA-GY	.24 - .47		.83	1.06	3.19	.51	.94
CD13NR-BK	CD13NR-GY	CF13NR-BK	CF13NR-GY	.20 - .35	1/2" NPT					
CD16NA-BK	CD16NA-GY	CF16NA-BK	CF16NA-GY	.39 - .56		.83	1.10	3.66	.51	1.06
CD16NR-BK	CD16NR-GY	CF16NR-BK	CF16NR-GY	.28 - .47	1/2" NPT					
CD16AA-BK	CD16AA-GY	CF16AA-BK	CF16AA-GY	.39 - .56		.88	1.10	3.66	.39	1.06
CD16AR-BK	CD16AR-GY	CF16AR-BK	CF16AR-GY	.28 - .47	PG 16					
CD21AA-BK	CD21AA-GY	CF21AA-BK	CF21AA-GY	.51 - .71		1.12	1.18	4.37	.43	1.30
CD21AR-BK	CD21AR-GY	CF21AR-BK	CF21AR-GY	.35 - .63	PG 21					
CD21NA-BK	CD21NA-GY	CF21NA-BK	CF21NA-GY	.51 - .71		1.05	1.18	4.37	.51	1.30
CD21NR-BK	CD21NR-GY	CF21NR-BK	CF21NR-GY	.35 - .63	3/4" NPT					
CD29AA-BK	CD29AA-GY			.71 - .98		1.47	1.50	--	.43	1.65
CD29AR-BK	CD29AR-GY			.51 - .79	PG 29					
CD29NA-BK	CD29NA-GY			.71 - .98		1.35	1.50	--	.75	1.65
CD29NR-BK	CD29NR-GY			.51 - .79	1" NPT					
CD29LA-BK	CD29LA-GY			.71 - .98		1.65	1.50	--	.63	1.65/1.81
CD29LR-BK	CD29LR-GY			.51 - .79	1-1/4" NPT					
CD36AA-BK	CD36AA-GY			.86 - 1.26		1.85	1.77	--	.51	2.09
CD36AR-BK	CD36AR-GY			.79 - 1.02	PG 36					
CD36NA-BK	CD36NA-GY			.86 - 1.26		1.92	1.77	--	.79	2.09
CD36NR-BK	CD36NR-GY			.79 - 1.02	1-1/2" NPT					
CD42AA-BK	CD42AA-GY			1.26 - 1.50		2.13	1.85	--	.51	2.36
CD42AR-BK	CD42AR-GY			.98 - 1.22	PG 42					
CD48AA-BK	CD48AA-GY			1.45 - 1.73		2.34	1.85	--	.55	2.56
CD48AR-BK	CD48AR-GY			1.14 - 1.38	PG48					

Longer thread lengths available in PG sizes.

The PG7 thread fits a 1/4" NPT or 1/2"-20 UNF .

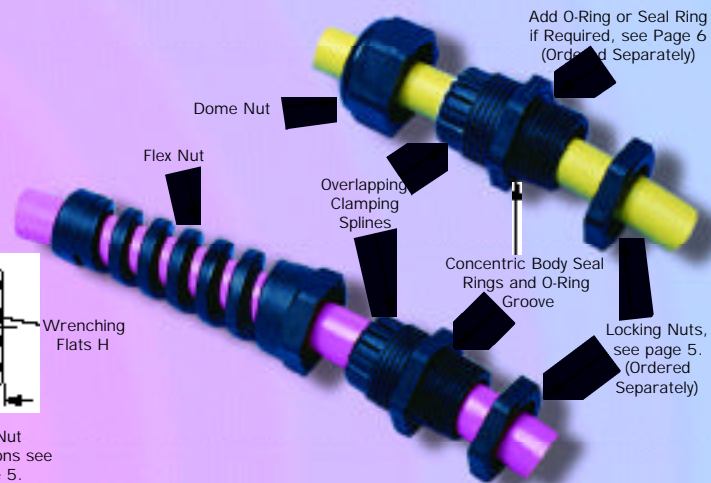
Installs in either clearance or threaded holes



Suggested Clearance Hole for Non-Threaded Mounting



For Nut Dimensions see page 5.



Liquid Tight Flexible Conduit System for Robotics and Stationary Installations

We offer two unique systems:
The SM Push-in Fittings and
the ST Turn to Seal Fittings.

Push-in
Fitting



90° Snap
Elbow

Snap-in Mounting
Bracket

90° Turn to
Seal Elbow

Flange
(call for special
catalog sheet)

Turn to Seal
Fittings



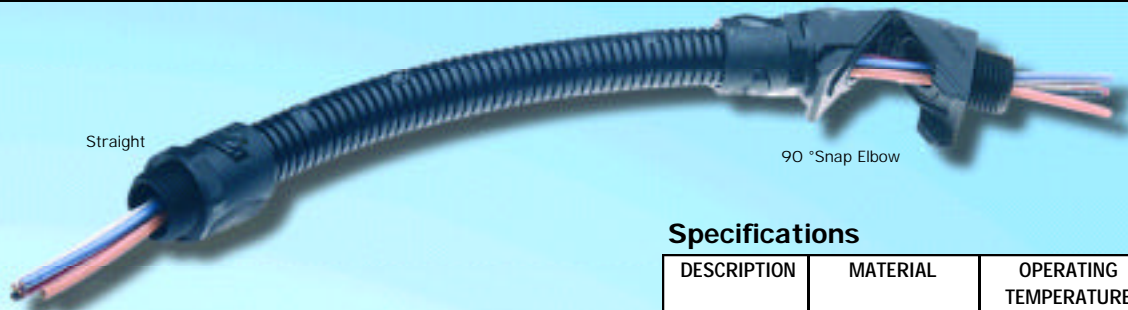
Two conduit materials are
available: **STANDARD** and
SUPER-FLEX.

The perfect solution for
machinery, robotics and
mobile equipment.

SM - Liquid Tight Straight and 90° Snap Elbow Push-In Fittings



E157010



- Fastest installation of flexible NYLON conduit
- Liquid tight - will meet NEMA 4x.
- O-Ring Thread seal.
- No tools required! Simply push flexible conduit into the fitting. The locking hook retains it securely in position.
- To remove conduit, lift outside recessed tab with screwdriver.

Specifications

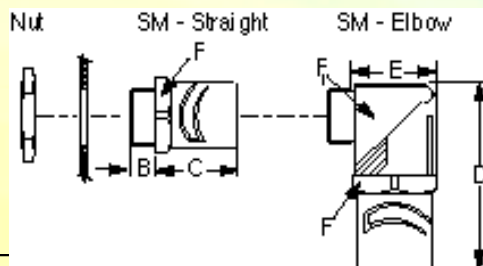
DESCRIPTION	MATERIAL	OPERATING TEMPERATURE
FITTINGS	Nylon 6/6	-4° to 176°F (-20°F to 80°C)
STANDARD CONDUIT	Nylon 6	-40° to 230°F (-40° to 110°C)
SUPER FLEX CONDUIT	Modified Polyester Elastomer	-58° to 266°F (-50° to 130°C)

SM - Straight

The fastest and most labor saving method to connect flexible nylon conduit to a push-in fitting. The nylon conduit is inserted into the fitting until the hook snaps over the ridge of the corrugated tubing. The conduit can be mounted rigid for liquid tight (NEMA 4x) or turnable for non-liquid tight (NEMA 2).

SM - 90° Snap Elbows

Combines the unique 90° snap elbow and straight push-in fitting for easy installation of wires into an elbow fitting. The "straight" elbow is snapped together after the wires have been installed, resulting in a liquid tight 90° elbow.



For Nut Information, see page 5



Suggested Clearance Hole for Non-Threaded Mounting

STANDARD and SUPER FLEX Conduit

This **STANDARD** corrugated conduit is made of flame retardant Nylon. The conduit is suitable for fixed and moderate flexing installations.

The **SUPER-FLEX** conduit, made of a special plastic blend, greatly increasing the flex-life of the conduit. It is the perfect solution for drag chain and robotics applications, with high cycle life expectancy, UV and impact resistant at low temperatures, tough and abrasion resistant. Nominal conduit sizes 23, 37 and 50 fit the ST or ET fittings only (see page 15). Size 14 is not available in this material.

PART NUMBER		THREAD TYPE AND SIZE For PG thread specs see page 16	FITTING DIMENSIONS (INCHES)						CORRUGATED CONDUIT			
SM - Straight	SM - Elbow		A Clearance Hole +.010" .000	B Thread Length Nipple & Elbow	C Height Nipple	D Length Elbow	E Height Elbow	F ₁ /F Wrenching Flats Nipple & Elbow	Nominal Conduit Size	Roll Length Feet	PART NUMBER	
											STANDARD Nylon	SUPER FLEX Modified Polyester Elastomer
SM09AA-BK	EM09AA-BK	PG 9	.60	.31	.91	2.03	.91	.75/.67	10	164	SM-1013-BK	SM-1013-HY
SM09NA-BK	EM09NA-BK	3/8" NPT	.68	.59	.91	2.03	.91	.75/.67	10	164	SM-1013-BK	SM-1013-HY
SM11AA-BK	EM11AA-BK	PG 11	.73	.31	.98	2.22	1.06	.87	12	164	SM-1216-BK	SM-1216-HY
SM13AA-BK	EM13AA-BK	PG 13.5	.80	.35	1.10	2.48	1.20	.94	14	164	SM-1419-BK	
SM16AA-BK	EM16AA-BK	PG 16	.88	.39	1.14	2.62	1.28	1.06	17	164	SM-1721-BK	SM-1721-HY
SM16NA-BK	EM16NA-BK	1/2" NPT	.83	.51	1.14	2.62	1.28	1.06	17	164	SM-1721-BK	SM-1721-HY
SM21AA-BK	EM21AA-BK	PG 21	1.12	.43	1.26	3.19	1.57	1.30/1.38	23	164	SM-2328-BK	
SM21NA-BK	EM21NA-BK	3/4" NPT	1.05	.51	1.26	3.19	1.57	1.30/1.38	23	164	SM-2328-BK	
SM29AA-BK	EM29AA-BK	PG 29	1.47	.43	1.38	3.86	2.03	1.65	29	82	SM-2934-BK	SM-2934-HY
SM29NA-BK	EM29NA-BK	1" NPT	1.35	.75	1.38	3.86	2.03	1.65	29	82	SM-2934-BK	SM-2934-HY
SM36AA-BK		PG 36	1.85	.51	1.61	--	--	1.97	37	82	SM-3642-BK	
SM48AA-BK		PG 48	2.34	.55	1.81	--	--	2.52	50	82	SM-4854-BK	

Liquid Tight Nylon Strain Relief Fittings



Applications

Wherever a metal strain relief fitting is used, this Nylon Strain Relief fitting can be substituted to save you money without sacrificing performance. Typical applications are: Control cabinets, car washes, hot tubs, instrumentation, carpet cleaning machines, food processing equipment, underground for direct burial, underwater to 300 ft. (150 PSIG).

Flex Nut

The Dome Nut can be substituted with a Flex Nut. Kinking and caving of the cable is eliminated with use of the Flex Nut.



Large Range

10 sizes and 4 styles (Straight fittings and Snap-Elbows with dome- and flex nuts) accommodate cable diameters from 1/16" to 1-3/4".

Time Saving Installation

Simply push the cable through the installed strain relief fitting and tighten dome- or flex nut.

If a snap elbow is used, push the cable through the straightened elbow, snap 90° and then tighten the dome- or flex nut for a liquid tight connection. No disassembly of the fitting is required: **Insert Cable - Tighten Nut - Finished!**

Liquid Tight

Exceeds NEMA 4x or 6 specifications. For submersed applications, use an O-Ring or Seal Ring between body and housing. Either tap the housing or secure in panel hole with lock nut.

Non-Corrosive

The Nylon strain relief fittings are resistant to salt water, weak acids, weak alkalis, alcohol, esters, ketones, ether, gasoline, mineral, animal and vegetable oil.

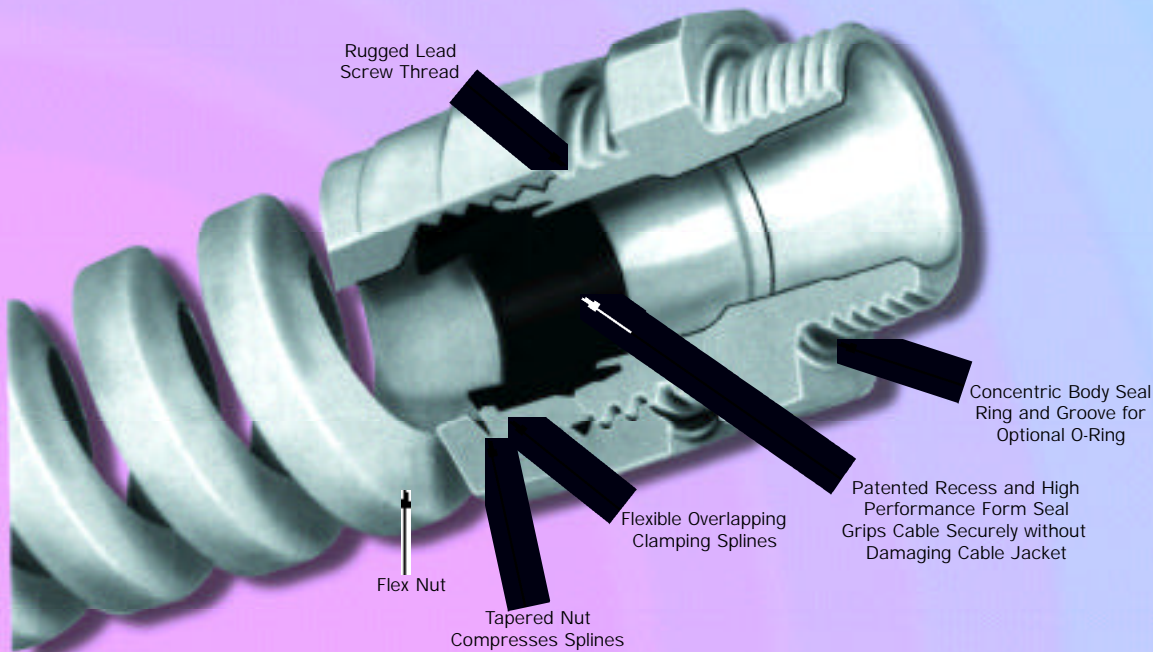
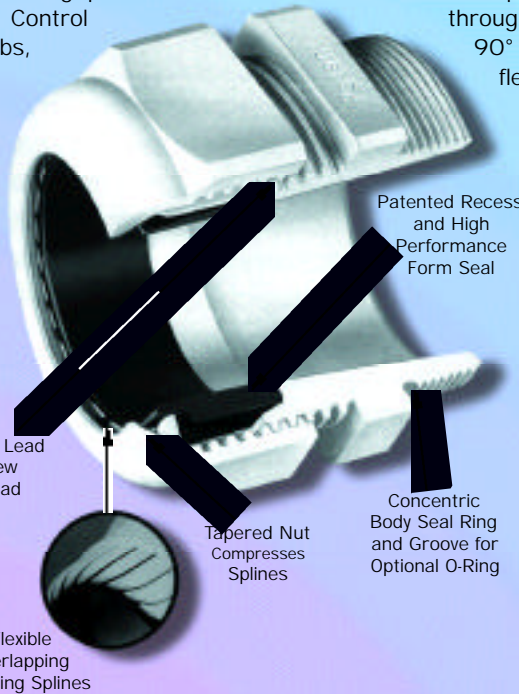


Table of Contents

Page	Description	Page	Description
3	Strain Relief Fittings - Nylon	11	Strain Relief Fittings - EEx (Hazardous Location)
4	Straight Dome or Flex Nuts	11	Strain Relief Fittings - Romex Cable
5	90° Snap Elbows (Dome or Flex Nuts)	12	Strain Relief Fittings - PVDF
5	Locking Nuts	12	Dome Plugs - Nylon & Nickel Plated Brass
6	Specifications	13	Flexible Conduit System
6	O-Rings & Seal Rings	14	SM Straight & 90° Snap Elbows (Push-in)
7	Multi Cable	15	ST Straight & 90° Elbows (Turn to Seal)
8	Strain Relief Fittings - Nickel Plated Brass	15	Conduit (Standard & Super-Flex)
9	Straight Dome or Flex Nuts	15	Snap-in Mounting Brackets
9	Locking Nuts	16	Deep Socket W rrench
10	EMI Proof Grounded	16	International Flexible Control Cable
10	Adapters Pg to NPT	16	Helpful Technical Information
11	Mini		

As special agents for Hummel Corporation of Germany, we are pleased to introduce you to their line of Liquid Tight Strain Relief Fittings and Accessories. Hummel is an ISO 9001 Certified company and a world leader in their field. They have and are continuously developing leading edge technology solutions for cable management. All of the products which you see in the enclosed catalog are UL, CSA, and European VDE standards approved.

For over thirty years, ESTCO has been supplying quality products at competitive prices to the OEM marketplace. You can rely on our technical staff to assist you with your product development and the proper material selection for your specific application.

We look forward to having the opportunity of being able to serve you and your company in the near future so please give us a call.

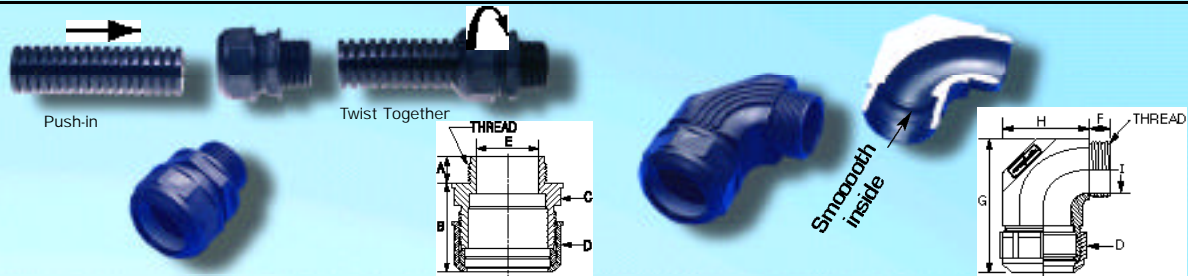


Quality Policy Statement

The goal of ESTCO Enterprises is to commit to fulfilling our customers' current and future expectations for quality, on time deliveries, customer service and cost efficiencies. To support this goal, all ESTCO Enterprises employees have adopted a company-wide philosophy of open communication, continuous improvement of the entrepreneurial processes and a dedication to achieve the highest quality system without compromise.

A Certified ISO 9002 Company

ST - Liquid Tight Straight and 90° Elbow Turn to Seal Fittings



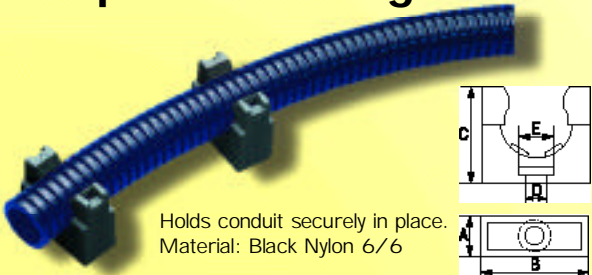
These turn to seal fittings fit the same conduit as the SM Push-in fittings. They offer an economical solution for machine builders. The elbow has a smooth inside transition, making installation of cable and wires easy.

PART NUMBER		THREAD TYPE AND SIZE For PG thread specs see page 16	FITS NOMINAL CONDUIT SIZE	DIMENSIONS (INCHES)								
Straight	Elbow			A	B	C	D	E	F	G	H	I
Black	Black			Thread Length	Body Length	Hex Body	Hex Dome Nut	Inside Diameter	Thread Length	Elbow Length	Elbow Height	Inside Diameter
ST07AA-BK		PG7, 1/4" NPT	8	.31	1.02	.75	.87	.33	--	--	--	--
ST09AA-BK	ET09AA-BK	PG 9	10	.31	1.02	.75	.87	.43	.31	2.24	.94	.39
ST11AA-BK	ET11AA-BK	PG 11	12	.31	1.06	.87	.94	.55	.31	2.51	1.14	.51
ST11NA-BK	ET11NA-BK	3/8" NPT	12	.59	1.06	.87	.94	.40	.32	2.51	1.14	.40
ST16AA-BK	ET16AA-BK	PG 16	17	.31	1.10	1.06	1.18	.67	.31	2.68	1.30	.63
ST16NA-BK	ET16NA-BK	1/2" NPT	17	.51	1.10	1.06	1.18	.58	.40	2.68	1.30	.58
ST21AA-BK	ET21AA-BK	PG 21	23	.39	1.34	1.46	1.50	.91	.39	3.11	1.61	.87
ST21NA-BK	ET21NA-BK	3/4" NPT	23	.51	1.34	1.46	1.50	.79	.43	3.11	1.61	.79
ST29AA-BK	ET29AA-BK	PG 29	29	.39	1.34	1.81	1.81	1.22	.39	3.74	2.16	1.10
ST29NA-BK	ET29NA-BK	1" NPT	29	.75	1.34	1.81	1.81	1.05	.43	3.74	2.16	1.05
ST36AA-BK		PG 36	37	.59	1.77	2.16	2.44	1.57	--	--	--	--
ST48AA-BK		PG 48	50	.59	2.09	2.56	2.87	2.01	--	--	--	--

Corrugated Conduit

PART NUMBER		NOMINAL CONDUIT SIZE	ROLL LENGTH	CONDUIT ID X OD INCHES (MM)	FIT TURN TO SEAL FITTINGS	SPECIFICATIONS:
STANDARD	SUPER FLEX					
Nylon	Modified Polyester Elastomer		Feet		ST & ET	Liquid tight per NEMA 4x (IP 65) Materials (Black): Conduit (STANDARD) Nylon 6 Conduit (SUPER FLEX) Modified Polyester Elastomer Other conduit materials are available. Fittings & Brackets Nylon 6/6 Operating Temperature: Nylon 6 & 6/6 -40°F to 230°F (-40°C to 110°C) Modified Polyester -58°F to 266°F (-50°C to 130°C) Elastomer
SM-0811-BK		8	164	.33 x .44 (8.5 x11.2)	PG 7, 1/4" NPT	Note 1*: This size fits SM and EM push-in fittings only. (See page 14.)
SM-1013-BK	SM-1013-HY	10	164	.39 x .51(10.0 x13.0)	PG 9	
SM-1216-BK	SM-1216-HY	12	164	.47 x .61(12.0 x15.5)	PG 11, 3/8" NPT	
SM-1419-BK		14	164	.55 x .73 (14.0 x18.5)	PG 13.5 (Note1*)	
SM-1721-BK	SM-1721-HY	17	164	.65 x .83(16.5 x21.0)	PG 16, 1/2" NPT	
SM-2328-BK	SM-2328-HY	23	164	.89 x1.12(22.5 x28.5)	PG 21, 3/4" NPT	
SM-2934-BK	SM-2934-HY	29	82	1.12 x1.36(28.5 x34.5)	PG 29, 1" NPT	
SM-3642-BK	SM-3642-HY	37	82	1.42 x1.65(36.0 x42.0)	PG 36	
SM-4854-BK	SM-4854-HY	50	82	1.87 x2.13(47.5 x54.0)	PG 48	

Snap-in Mounting Brackets



Holds conduit securely in place.
Material: Black Nylon 6/6

PART NUMBER BRACKET	FITS NOMINAL CONDUIT SIZE	DIMENSIONS (INCHES)				
		A Width	B Length	C Height	D Mtg Hole ø	E Mtg Hole Recess ø
Black						
MB-09-BK	10	.49	1.18	.91	.18	.30
MB-11-BK	12	.49	1.18	.91	.18	.30
MB-16-BK	17	.59	1.38	1.18	.22	.37
MB-21-BK	23	.63	1.65	1.50	.26	.46
MB-29-BK	29	.63	2.00	1.69	.26	.46
MB-36-BK	37	.71	2.40	2.01	.26	.46
MB-48-BK	50	.75	2.91	2.52	.26	.46

Deep Socket Wrench for Liquid Tight Strain Relief Fittings with Dome Nut

PART NUMBER	WRENCHING FLATS MM (INCHES)	USED WITH SIZES	
		PLASTIC DOME NUT	METAL DOME NUT
1.500.1400.04	14 (.55)		PG7, M12
1.500.1500.04	15 (.59)	PG7, M12	
1.500.1700.04	17 (.67)		PG9, M16
1.500.1900.04	19 (.75)	PG9, M16	3/8" NPT
1.500.2000.04	20 (.79)	M20	PG11
1.500.2200.04	22 (.87)	PG11	PG13, M20
1.500.2400.04	24 (.94)	PG13.5, 1/2" NPT	PG16, 1/2" NPT
1.500.2700.04	27 (1.06)	PG16, 1/2" NPT-E	
1.500.3000.04	30 (1.18)		PG21, M25, 3/4" NPT
1.500.3300.04	33 (1.30)	PG21, M25, 3/4" NPT	
1.500.4000.04	40 (1.57)		PG29, M32, 1" NPT
1.500.4200.04	42 (1.65)	PG29, M32, 1" NPT	
1.500.5000.04	50 (1.97)		PG36, M40
1.500.5300.04	53 (2.09)	PG36, M40, 1-1/2" NPT	
1.500.5700.01	57 (2.24)		PG42, M50
1.500.6000.01	60 (2.36)	PG42, M50	
1.500.6400.01	64 (2.52)		PG 48

This handy light weight deep socket wrench, manufactured from alloy steel, is slit open along the full length to accommodate the installed cable during tightening of the dome nut. The wrench encloses the dome nut on five sides, giving the nut additional rigidity during tightening. This is especially important if a stiff cable is used. Does not work with all Flex fittings.



International Flexible Control Cable

Call 800-696-7826 for our free catalog featuring cables for domestic and export use. Control, drag chain and robotics applications.



All cables with nominal voltage between 50V and 1,000V have CE approval.

Helpful Technical Information

PG Thread Specifications

THREAD SIZE	PG 7*	PG 9	PG 11	PG 13.5**	PG 16	PG 21	PG 29	PG 36	PG 42	PG 48
MAJOR DIA. (MM)	12.5	15.2	18.6	20.4	22.5	28.3	37.0	47.0	54.0	59.3
PITCH (MM)	1.27	1.41	1.41	1.41	1.41	1.59	1.59	1.59	1.59	1.59

* PG 7 thread fits 1/4" NPT or 1/2"-20 UNF.

** PG 13.5 is also known as PG 13.

Taps are readily available. Call for sources and more detailed PG thread specifications.

Torque Recommendations for Strain Relief Fittings

Torque in inlb (Nm)

SIZES	METAL STRAIN RELIEF FITTINGS		PLASTIC STRAIN RELIEF FITTINGS	
	DOME NUTS	THREAD AND LOCK NUTS	DOME NUTS	THREAD AND LOCK NUTS
PG7, M12x1.5	36.9 (4.17)	55.3 (6.25)	14.4 (1.62)	22.1 (2.50)
PG9, PG11, M16, PG13.5, 3/8" NPT, 1/2" NPT, M16x1.6, M20x1.5	36.9 (4.17)	55.3 (6.25)	22.1 (2.50)	33.2 (3.75)
PG16, 1/2" NPT-E	44.2 (5.00)	66.4 (7.50)	29.5 (3.33)	44.2 (5.00)
PG21, PG29, PG36, PG42, PG 48, 3/4" NPT, 1" NPT, 1-1/4 NPT, 1-1/2" NPT, M25x1.5, M32x1.5, M40x1.5, M50x1.5, M63x1.5	59.0 (6.67)	88.5 (10.00)	44.2 (5.00)	66.4 (7.50)

Note: Torque for dome nuts was determined using a metal rod. It may vary for cable, depending on the crush resistance of the cable. We recommend to determine the actual torque empirically, using the actual cable used. The values shown above are for reference only.

ESTCO

ESTCO Enterprises, Inc.

*Liquid Tight Strain
Relief Fittings and
Flexible Conduit
System for Cable
and Wire*



1549 Simpson Way
Escondido, CA 92029

Phone: 760-489-8745, 760-489-8746, 760-489-8782

FAX: 760-489-9117

800-696-7826



**"Engineered
Solutions
Through
Quality Products"**