

New England Wire Specification
Wire and Cable, Ultra-Flexible, FEP-Fluorocarbon Insulated

<u>Revision:</u>	<u>Date of Revision:</u>	<u>Description:</u>
A	5/7/2009	Initial Release
B	9/9/2015	Conductor Material update: removed NEWaloy 68, added NEWaloy 14 and NEWaloy 23. Added comment in 3.1.1.4 for NEWaloy 14 referencing PSI and elongation difference.
C	11/21/2017	Cabling length of lay from 10 to 18 times to 5 to 18 times. Insulation requirement updated to Type I or II ASTM D2116. Cross reference to MIS-35755 added as Appendix A.

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1. Scope

1.1. Scope. This specification covers ultra-flexible FEP fluorocarbon insulated wire and multi-conductor cable. The conductors are composed of fine wire: bare, tinned or silver plated; copper or high strength copper alloy. Constructions may vary from one conductor to seven, 40 AWG to 16 AWG. These constructions are suitable for continuous use within a temperature range of -65 to 150 degrees Celsius and are rated for 300 volts rms.

1.2. Classification. Wire is of the following material, size, stranding, and insulation color, as specified in 3.1. Single and multi-conductor cables shall be either shielded or unshielded.

1.2.1. Part Number. Part numbers shall be of the following form:

NEW-35755 / 1	-	18E13	-	BJ	-	1
(See 1.2.1.1)		(See 1.2.1.2)		(See 1.2.1.3)		(See 1.2.1.4)

1.2.1.1. Specification Number. The specification number followed by the number of conductors.

1.2.1.2. Conductor Size and Material. Conductor AWG size as specified in table I. Conductor material designated by a single letter and NEWaloy number as follows:

- B = Bare copper
 NEWaloy 10
- C = Tinned copper
 NEWaloy 10
- D = Silver-coated copper
 NEWaloy 21

E = Bare high strength copper alloy

NEWaloy 13
NEWaloy 14
NEWaloy 23
NEWaloy 61
NEWaloy 81

F = Tinned high strength copper alloy

NEWaloy 13
NEWaloy 23
NEWaloy 61
NEWaloy 81

G = Silver-coated high strength copper alloy

NEWaloy 13
NEWaloy 14
NEWaloy 23
NEWaloy 61
NEWaloy 81

1.2.1.3. Cable Construction. Cable may be shielded (braid or spiral) or unshielded, jacketed or unjacketed. Unjacketed requires no designation.

U = Unshielded construction J = Jacketed Cable
B = Braid shielded construction
S = Spiral shielded construction

(NOTE: This use of S for a spiral shield is counter to the S in MIS-35755)

1.2.1.4. Jacket Color. Jacket color corresponding to the following numbers (only applies to jacketed cables):

<u>Color</u>	<u>Number</u>	<u>Designator</u>	<u>Color</u>	<u>Number</u>	<u>Designator</u>
Clear	0		Gray	9	
White	1		Violet	10	
Black	2		Tan	11	
Red	3		Pink	12	
Green	4		Light Green	13	
Yellow	5		Light Blue	14	
Blue	6		Dark Green	15	
Brown	7		Dark Blue	16	
Orange	8				

Note: Colors per NEWT standard color coding.

2. Applicable Documents

2.1. Issues of documents. The following documents form a part of this document to the extent specified herein. The issues of these documents shall be of the issue in effect on the date of request for quotation.

ASTM B3	Standard Specification for Soft or Annealed Copper Wire
ASTM B33	Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes
ASTM B298	Standard Specification for Silver-Coated Soft or Annealed Copper Wire
ASTM D2116	Standard Specification for FEP-Fluorocarbon Molding and Extrusion Materials
MIS-35755	Wire and Cable, Ultra-Flexible, FEP-Fluorocarbon Insulated

2.2. Order of precedence. In the event of a conflict between this document and references cited herein, this document shall take precedence.

3. Requirements

3.1. Material Composition and Construction

3.1.1. Conductors. Conductors shall be stranded as specified in Table I. Conductors shall meet the requirements specified in 3.1.1.1 through 3.1.1.6.

3.1.1.1. Bare Copper Conductors. Bare copper conductors shall be in accordance with ASTM B3.

3.1.1.2. Tin-coated Copper Conductors. Tin-coated copper conductors shall be in accordance with ASTM B33.

3.1.1.3. Silver-coated Copper Conductors. Silver-coated copper conductors shall be in accordance with ASTM B298.

3.1.1.4. High Strength Copper Alloy Conductors. High strength copper alloy conductors (bare, tinned or silver-coated) shall have a minimum electrical conductivity of 72 percent, minimum tensile strength of 60,000 pounds per square inch and a minimum elongation of 1 percent. Except for NEWaloy 14. NEWaloy 14 shall have a minimum tensile strength of 55,000 pounds per square inch and a minimum elongation of 6 percent.

3.1.1.5. Length of Lay. The length of lay for conductors shall be at the option of the manufacturer. Except for the MIS-3555 compliant parts, See Appendix A. Appendix A parts shall use a .5” lay for a bunch and a .33” lay for all cable operations of bunch conductors.

- 3.1.1.6. Lay Direction The lay direction for conductors (40 to 26 AWG) shall be left hand lay for single bunched member products. The lay direction for conductors (24 to 16 AWG) with multiple bunch members shall be right hand lay for each bunch member and left hand lay for cabling together the bunch members.

Table 1 Copper Conductors (Bare, Tinned and Silver-coated) Stranding

Conductor size, AWG	No. of bunched members	No. of strands per bunch	Strand size, AWG	Diameter of finished conductor, in.
40	1	10	50	.004 ± .0005
38	1	17	50	.005 ± .0005
36	1	11	46	.006 ± .0005
34	1	10	44	.007 ± .0005
32	1	16	44	.009 ± .0005
30	1	25	44	.012 ± .001
28	1	40	44	.015 ± .001
26	1	66	44	.019 ± .001
24	3	35	44	.025 ± .001
22	3	50	44	.030 ± .001
20	7	37	44	.040 ± .001
18	7	59	44	.050 ± .002
16	7	95	44	.064 ± .002

Table 2 High Strength Copper Alloy Conductors (Bare, Tinned and Silver-coated) Stranding

Conductor size, AWG	No. of bunched members	No. of strands per bunch	Strand size, AWG	Diameter of finished conductor, in.
40	1	10	50	.004 ± .0005
38	1	17	50	.005 ± .0005
36	1	11	46	.007 ± .0005
34	1	10	44	.008 ± .0005
32	1	16	44	.010 ± .001
30	1	25	44	.013 ± .001
28	1	40	44	.016 ± .001
26	1	66	44	.021 ± .001
24	3	35	44	.028 ± .001
22	3	50	44	.033 ± .001
20	7	37	44	.044 ± .001
18	7	59	44	.055 ± .002
16	7	95	44	.070 ± .002

- 3.1.2. Insulation. Insulation shall be extruded FEP-fluorocarbon conforming to TYPE I or TYPE II, with an MFR Lower than 40, per ASTM D2116. The wall thickness shall be .005” +/- .001” for 40-18 AWG and .007” +/- .002” for 16 AWG.

3.1.2.1. Insulation color. Insulation color shall be as follows:

Single conductor:	White
Two conductors:	Red and black
Three conductors:	White, red and black
Four conductors:	White, red, black and green
Five conductors:	White, red, black, green and yellow
Six conductors:	White, red, black, green, yellow and blue
Seven conductors:	White, red, black, green, yellow, blue and brown

Note: Colors per NEWT standard color coding.

3.1.3. Cabling. Multi-conductor cables shall be composed of unshielded singles which are cabled together with a uniform, right-hand lay. Winding shall be in a manner that prevents residual twist or strain in finished cables. Lay lengths shall be neither less than 5 nor greater than 18 times the diameter of the cable as specified in table 2 or 3. For Appendix A products the lay lengths shall be .33” for 28 AWG Pair and 26 AWG Pair, .50” for 28 AWG Triad, 26 AWG Triad, 24 AWG Pair and Triad, 22 AWG Pair and Triad, and 20 AWG Pair and .75” for a 20 AWG Triad.

Six conductor cables shall be cabled around a textile or extruded filler suitable for an operating temperature of at least -65 to 150 degrees Celsius.

3.1.4. Shielding. Shielded constructions shall have either a braid or spiral shield.

3.1.4.1. Braids shall be composed of 44 AWG (.002” diameter) silver-coated soft copper strands for constructions with cabled diameters of under .135”.

3.1.4.2. Braids shall be composed of 40 AWG (.0031” diameter) silver-coated soft copper strands for constructions with cabled diameters of .135” and over.

3.1.4.3. Shield strands shall conform to ASTM B298 and be applied over the insulated wires. Shielding coverage shall be not less than 90 percent.

3.1.4.4. Spiral shield material and construction shall be at the option of the manufacturer unless otherwise specified at the time of order (see 6.2). Exceptions are, spiral shielding shall be left hand lay and coverage shall not be less than 90 percent.

3.1.5. Jacket. Jacketed cables shall have an extruded layer of FEP-fluorocarbon conforming to TYPE I or TYPE II, with a max MFR of 40, per ASTM D2116.

3.1.6.

The jacket thickness shall be not less than 6 percent of the cabled diameter per Table 3 or 4 for unshielded constructions and not less than 6 percent of the shielded diameter per table 5 or 6 for shielded constructions, with a recommended average

thickness of 10 percent. Appendix A constructions the wall thickness shall be .005” minimum for 26 and 28 AWG and .007” minimum for 24, 22, 20 AWG.

3.1.7. OD Dimensions. OD Dimensions of the finished wire and cable shall be as specified in Tables 3 through 6. All dimensions are in inches unless otherwise specified. Tolerances shall not exceed those listed in the last column of Tables 3 through 6.

Table 3 Unshielded Copper Conductors (Bare, Tinned and Silver-coated) OD Dimensions

AWG	Single	Pair	Triad	4 Cond.	5 Cond.	6 Cond.	7 Cond.	Tolerance
40	.014	.027	.030	.034	.038	.042	.042	±.003
38	.015	.029	.032	.036	.041	.045	.045	±.003
36	.016	.031	.034	.039	.043	.048	.048	±.003
34	.017	.033	.037	.041	.046	.051	.051	±.003
32	.019	.037	.041	.046	.051	.057	.057	±.003
30	.022	.043	.047	.053	.059	.066	.066	±.003
28	.025	.049	.054	.060	.068	.075	.075	±.003
26	.029	.057	.062	.070	.078	.087	.087	±.004
24	.035	.069	.075	.084	.095	.105	.105	±.005
22	.040	.078	.086	.096	.108	.120	.120	±.005
20	.050	.098	.108	.121	.135	.150	.150	±.005
18	.060	.118	.129	.145	.162	.180	.180	±.006
16	.078	.153	.168	.188	.211	.234	.234	±.008

Table 4 Unshielded High Strength Copper Alloy Conductors (Bare, Tinned and Silver-coated) OD Dimensions

AWG	Single	Pair	Triad	4 Cond.	5 Cond.	6 Cond.	7 Cond.	Tolerance
40	.014	.027	.030	.034	.038	.042	.042	±.003
38	.015	.029	.032	.036	.041	.045	.045	±.003
36	.017	.033	.037	.041	.046	.051	.051	±.003
34	.018	.035	.039	.043	.049	.054	.054	±.003
32	.020	.039	.043	.048	.054	.060	.060	±.003
30	.023	.045	.049	.055	.062	.069	.069	±.003
28	.026	.051	.056	.063	.070	.078	.078	±.004
26	.031	.061	.067	.075	.084	.093	.093	±.004
24	.038	.074	.082	.092	.103	.114	.114	±.005
22	.043	.084	.092	.104	.116	.129	.129	±.005
20	.054	.106	.116	.130	.146	.162	.162	±.006
18	.065	.127	.140	.157	.176	.195	.195	±.006
16	.084	.165	.181	.202	.227	.252	.252	±.008

Table 5 Braided Shield Copper Conductors (Bare, Tinned and Silver-coated) OD Dimensions

AWG	Single	Pair	Triad	4 Cond.	5 Cond.	6 Cond.	7 Cond.	Tolerance
40	.023	.036	.039	.043	.047	.051	.051	±.003

38	.024	.038	.041	.045	.050	.054	.054	±.003
36	.025	.040	.043	.048	.052	.057	.057	±.003
34	.026	.042	.046	.050	.055	.060	.060	±.003
32	.028	.046	.050	.055	.060	.066	.066	±.003
30	.031	.052	.056	.062	.068	.075	.075	±.004
28	.034	.058	.063	.069	.077	.084	.084	±.004
26	.038	.066	.071	.079	.087	.096	.096	±.004
24	.043	.078	.084	.093	.104	.114	.114	±.005
22	.049	.087	.095	.105	.117	.129	.129	±.005
20	.059	.107	.117	.130	.149	.164	.164	±.006
18	.069	.127	.138	.159	.176	.194	.194	±.006
16	.087	.167	.182	.202	.225	.248	.248	±.008

**Table 6 Braided Shield High Strength Copper Alloy Conductors (Bare, Tinned and Silver-coated)
OD Dimensions**

AWG	Single	Pair	Triad	4 Cond.	5 Cond.	6 Cond.	7 Cond.	Tolerance
40	.023	.036	.039	.043	.047	.051	.051	±.003
38	.024	.038	.041	.045	.050	.054	.054	±.003
36	.026	.042	.046	.050	.055	.060	.060	±.003
34	.027	.044	.048	.052	.058	.063	.063	±.003
32	.029	.048	.052	.057	.063	.069	.069	±.003
30	.032	.054	.058	.064	.071	.078	.078	±.004
28	.035	.060	.065	.072	.079	.087	.087	±.004
26	.040	.070	.076	.084	.093	.102	.102	±.005
24	.047	.083	.091	.101	.112	.123	.123	±.005
22	.052	.093	.101	.113	.125	.139	.139	±.005
20	.063	.115	.125	.139	.160	.176	.176	±.006
18	.074	.136	.154	.171	.190	.209	.209	±.007
16	.093	.179	.195	.216	.241	.265	.266	±.008

3.2. Performance properties

3.2.1. Conductor elongation. Elongation of copper conductors (bare, tinned and silver-coated) shall be per ASTM B3, ASTM B33 and ASTM B298. Elongation of high strength copper alloys shall be per 3.1.1.4.

Insulation flaws. One hundred percent of all primary wire shall be spark tested for insulation flaws after extrusion of insulation. Unshielded multi-conductor cables shall also be spark tested after cabling component wires. Appendix A products have an insulation specific spark test voltage of 2.5 KVAC.

3.2.2. Dielectric withstanding voltage. Shielded constructions shall be free of breakdowns when tested for dielectric withstanding voltage. Appendix A products

have a dielectric withstand test voltage of 1.5 KVDC between each primary conductor and shield tied to the other conductors.

3.2.3. Insulation resistance. Insulation resistance of primary wires shall be not less than 1000 megohms per 1000 feet.

3.3. Workmanship. The wire or cable shall be free of kinks and abraded, cracked, or peeled surfaces, shall be a uniform and consistent product and shall be free from any defects which will adversely affect the serviceability of the product.

4. Quality Assurance Provisions

4.1. Responsibility for inspection. Unless otherwise specified in the purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein.

4.2. Classification of inspections. The inspection requirements specified herein are classified as follows:

- a. First article inspection (see 4.3)
- b. Quality conformance inspection (see 4.4)

4.3. First article inspection. First article inspection shall consist of all the tests and examinations of customer designated specification. Customer can elect to use this specification. First article inspections shall be performed upon request.

4.4. Quality conformance inspection. Quality conformance inspection consists of all the tests performed on individual lots which have been submitted for shipment. The tests are described in the following subparagraphs.

4.4.1. Lot formation. A lot shall consist of all the completed wire or cable manufactured under the same Work Order.

4.4.2. Inspection. Inspection of the finished wire or cable shall be as specified in Table 7 in accordance with the corresponding test and inspection paragraphs.

Table 7 Quality Conformance Inspection

Test	Requirement Source	Test and inspection paragraph
Composition and construction	3.1	4.5.1
Dimensions	3.1.6	4.5.2
Conductor elongation	3.2.1	4.5.3.2
Spark test	3.2.2	4.6.1
Dielectric withstand	3.2.3	4.6.2
Workmanship	3.3	4.7

Packaging and packing	5.1	4.7
Marking	5.2	4.7

4.5. Tests

4.5.1. Composition and construction. The construction shall be visually inspected to establish conformance to the requirements of 3.1.

4.5.2. Dimensions. Finished wire and cable dimensions shall be measured to establish conformance to the requirements of 3.1.6.

4.5.3. Conductor elongation.

4.5.3.1. First article inspection. Conductor elongation shall be tested on a section of whole conductor removed from the finished wire. A tensile machine with jaw separation of 1 to 12 inches per minute shall be used. The net increase in conductor length shall be measured at the time of tensile rupture. The break shall be in the conductor itself and away from the machine jaws. Results shall conform to the requirements of 3.2.1.

4.5.3.2. Quality conformance inspection. Conductor elongation shall be tested on single end strands of each lot per manufacturer standard procedure in accordance with the requirements of 3.2.1.

4.6. Electrical tests. One hundred percent of the completed wire and cable shall be subjected to the applicable electrical tests, except insulation resistance testing may be performed on a sampling basis. When specified (see 6.2), the manufacturer shall certify performance of the tests and conformance to the requirements. Results shall conform to the requirements of 3.2.

4.6.1. Insulation flaws (spark test). The wire, after extrusion of the primary insulation, shall be passed through a bead chain electrode spark test device that makes intimate metallic contact with practically all the insulation surface. Electrode potential shall be at minimum 2500 volts rms, 3000 Hz, while the wire conductor is maintained at ground potential. The rate of passage of the wire through the electrode shall be such that the insulation is subjected to not less than 50 potential cycles at any given point. Any portion showing insulation breakdown shall be cut out of the wire including not less than 2 inches on each side of the failure. Unshielded multi-conductor constructions shall also be spark tested after cabling component wires.

4.6.2. Dielectric withstanding voltage. Shielded constructions shall be tested for dielectric withstanding voltage. A potential of either 1500 volts DC or 750 volts, 60 Hz, shall be applied between the conductors and shield. Voltage shall be maintained for not less than 1 minute.

- 4.6.3. Insulation resistance. Completed wire and cable shall be tested for insulation resistance during first article inspections. Insulation resistance shall be measured between each primary conductor and other primary conductors and shield tied together after a charging potential of 500 volts dc has been maintained for not less than 1 minute.
- 4.7. Visual inspection and examination. All wires and cables shall be visually examined for conformance to the workmanship requirements in 3.3 and packaging, packing and marking requirements in 5.1 and 5.2.
5. Packaging
- 5.1. Packaging and packing. Wire and cable shall be furnished in not less than 25 foot lengths on reels or spools of appropriate diameter to accommodate the specific wire or cables; or as otherwise specified on the purchase order. Reels and spools shall be shipped in containers that will assure protection of the contents during normal handling relative to shipping, receiving and storage.
- 5.2. Marking. Interior and exterior container markings shall include, but not be limited to, the following information:
- a) Manufacturer's name and address
 - b) Manufacturer's designation (see 1.2.1)
 - c) Lot or batch number
 - d) Date of manufacturing
 - e) Number of this specification
 - f) Type
 - g) Length in feet
 - h) Wire or cable size (AWG) and description
6. Notes
- 6.1. Intended use. The wire and cable in accordance with this specification is primarily intended for use as component wires of cast urethane flat cables where extreme flexibility is required. This design is not preferred for hook-up or harnessing applications due to the limited cut-through and abrasion resistance afforded by FEP-fluorocarbon insulation material.
- 6.2. Ordering data. Procurement documents should specify the following:
- a) Title, number, and date of this specification
 - b) Type required
 - c) Applicable wire or cable designation (see 1.2.1)
 - d) Quantity
 - e) Special preparation for delivery requirements, if applicable
 - f) Requirement for first article testing
 - g) Requirement for certification of composition and performance of electrical testing.

h) Spiral shielding material and AWG size (if applicable)

6.3. Braid construction. The braid constructions in tables 8 and 9 are recommended constructions that will provide acceptable shielding coverage and braid angle. The braid construction will be designated by:

Number of carriers – Number of ends per carrier – AWG of single end , Picks per inch

Table 8 Copper Conductor Braid Constructions

AWG	Single	Pair	Triad	4 Cond.	5 Cond.	6 Cond.	7 Cond.
40	12-3-44,60	12-5-44,48	16-5-44,45	16-5-44,45	16-5-44,43	16-6-44,38	16-6-44,38
38	12-3-44,60	12-5-44,48	16-5-44,45	16-5-44,45	16-5-44,43	16-6-44,38	16-6-44,38
36	12-4-44,55	16-4-44,50	16-5-44,45	16-5-44,43	16-6-44,38	16-6-44,38	16-6-44,38
34	12-4-44,55	16-4-44,50	16-5-44,45	16-5-44,43	16-6-44,36	16-7-44,32	16-7-44,32
32	12-4-44,55	16-5-44,43	16-6-44,38	16-6-44,35	16-7-44,32	16-8-44,28	16-8-44,28
30	12-4-44,50	16-5-44,43	16-6-44,38	16-7-44,32	16-8-44,28	24-6-44,38	24-6-44,38
28	12-5-44,42.6	16-6-44,34.9	16-7-44,29.1	16-8-44,28	24-6-44,38	24-7-44,32	24-7-44,32
26	12-6-44,35.5	16-8-44,25	16-8-44,25	24-6-44,35	24-7-44,32	24-7-44,32	24-7-44,32
24	12-7-44,35.5	24-6-44,42.6	24-7-44,36.8	24-7-44,32	24-8-44,29	24-9-44,25	24-9-44,25
22	16-6-44,25	24-7-44,38.8	24-8-44,31.8	24-8-44,29	24-9-44,25	24-10-44,22	24-10-44,22
20	16-8-44,33.2	24-8-44,31.8	24-10-44,21.9	24-10-44,22	24-7-40,21	24-8-40,18	24-8-40,18
18	16-8-44,27	24-9-44,25	24-10-44,23	24-8-40,18	24-8-40,18	24-9-40,16	24-9-40,16
16	24-7-44,36	24-7-40,21	24-9-40,16	24-9-40,16	48-6-40,22	48-6-40,22	48-6-40,22

Table 9 High Strength Copper Alloy Conductor Braid Constructions

AWG	Single	Pair	Triad	4 Cond.	5 Cond.	6 Cond.	7 Cond.
40	12-3-44,60	12-5-44,48	16-5-44,45	16-5-44,45	16-5-44,43	16-6-44,38	16-6-44,38
38	12-3-44,60	12-5-44,48	16-5-44,45	16-5-44,45	16-5-44,43	16-6-44,38	16-6-44,38
36	12-4-44,55	16-4-44,50	16-5-44,45	16-5-44,43	16-6-44,38	16-6-44,38	16-6-44,38
34	12-4-44,55	16-4-44,50	16-5-44,45	16-5-44,43	16-6-44,36	16-7-44,32	16-7-44,32
32	12-4-44,55	16-5-44,43	16-6-44,38	16-6-44,35	16-7-44,32	16-8-44,28	16-8-44,28
30	12-4-44,50	16-5-44,43	16-6-44,38	16-7-44,32	16-8-44,28	24-6-44,38	24-6-44,38
28	12-5-44,42.6	16-6-44,34.9	16-7-44,29.1	16-8-44,28	24-6-44,38	24-7-44,32	24-7-44,32
26	12-6-44,35.5	16-8-44,25	16-8-44,25	24-6-44,35	24-7-44,32	24-7-44,32	24-7-44,32
24	12-7-44,35.5	24-6-44,42.6	24-7-44,36.8	24-7-44,32	24-8-44,29	24-9-44,25	24-9-44,25
22	16-6-44,25	24-7-44,38.8	24-8-44,31.8	24-8-44,29	24-9-44,25	24-10-44,22	24-10-44,22
20	16-8-44,33.2	24-8-44,31.8	24-10-44,21.9	24-10-44,22	24-8-40,18	24-8-40,18	24-8-40-18
18	16-8-44,27	24-9-44,25	24-8-40,18	24-8-40,18	24-9-40,15	24-10-40,15	24-10-40,15
16	24-7-44,32	24-8-40,18	24-9-40,16	24-10-40,14	48-6-40,22	48-7-40,20	48-7-40,20

Appendix A - Part cross reference MIS-35755 to NEWT-35755 to NEWT part

Singles and Twisted Pairs (No Shield, No Jacket)

Part Number		
MIS-35755	NEWT-35755	NEWT
/1-28U	/1-28B10-U	N12-44B-400
/2-28U	/2-28B10-U	N13-44B-402
/3-28U	/3-28B10-U	N13-44B-404
/1-26U	/1-26B10-U	N12-44B-450
/2-26U	/2-26B10-U	N13-44B-452
/3-26U	/3-26B10-U	N13-44B-453
/1-24U	/1-24B10-U	N12-44B-503-1
/2-24U	/2-24B10-U	N13-44B-507
/3-24U	/3-24B10-U	N13-44B-500
/1-22U	/1-22B10-U	N12-44B-505
/2-22U	/2-22B10-U	N13-44B-501
/3-22U	/3-22B10-U	N13-44B-502
/1-20U	/1-20B10-U	N12-44B-600
/2-20U	/2-20B10-U	N13-44B-608
/3-20U	/3-20B10-U	N13-44B-606

Parts with Braided Shields

Part Number		
MIS-35755	NEWT-35755	NEWT
/1-28S	/1-28B10-B	N12-44B-401-1
/2-28S	/2-28B10-B	N13-44B-403
/3-28S	/3-28B10-B	N13-44B-401
/1-26S	/1-26B10-B	N12-44B-451
/2-26S	/2-26B10-B	N13-44B-451
/3-26S	/3-26B10-B	N13-44B-462
/1-24S	/1-24B10-B	N12-44B-504
/2-24S	/2-24B10-B	N13-44B-514
/3-24S	/3-24B10-B	N13-44B-515
/1-22S	/1-22B10-B	N12-44B-506
/2-22S	/2-22B10-B	N13-44B-536
/3-22S	/3-22B10-B	N13-44B-517
/1-20S	/1-20B10-B	N12-44B-601
/2-20S	/2-20B10-B	N13-44B-603
/3-20S	/3-20B10-B	N13-44B-609

Parts with Braided Shield and Jacket

Part Number		NEWT
MIS-35755	NEWT-35755	Part Number
/1-28SJ	/1-28B10-BJ-0	N12-44B-413
/2-28SJ	/2-28B10-BJ-0	N13-44B-439
/3-28SJ	/3-28B10-BJ-0	N13-44B-440
/1-26SJ	/1-26B10-BJ-0	N12-44B-480
/2-26SJ	/2-26B10-BJ-0	N13-44B-4536
/3-26SJ	/3-26B10-BJ-0	N13-44B-4537
/1-24SJ	/1-24B10-BJ-0	N12-44B-527
/2-24SJ	/2-24B10-BJ-0	N13-44B-5027
/3-24SJ	/3-24B10-BJ-0	N13-44B-5028
/1-22SJ	/1-22B10-BJ-0	N12-44B-524
/2-22SJ	/2-22B10-BJ-0	N13-44B-5022
/3-22SJ	/3-22B10-BJ-0	N13-44B-5029
/1-20SJ	/1-20B10-BJ-0	N12-44B-605
/2-20SJ	/2-20B10-BJ-0	N13-44B-628
/3-20SJ	/3-20B10-BJ-0	N13-44B-629

