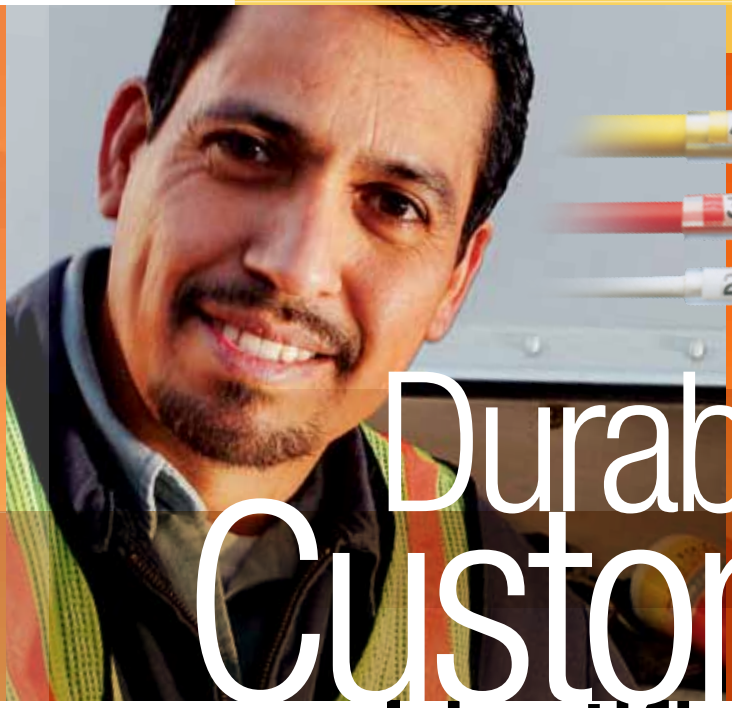
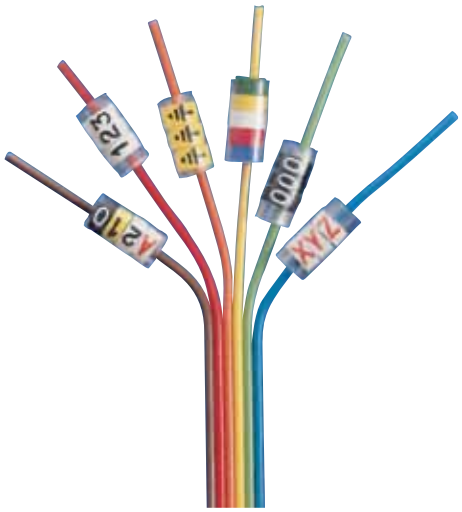
3M™ Grafoplast™ TRASP System



Durable Custom Identification

For years, 3M has provided a variety of reliable solutions for wire marking and identification. Now 3M is introducing a new manual marking and identification system – from Grafoplast, a 3M company – for creating custom labels for components inside and outside of electrical control equipment and data communication equipment.

The 3M™ Grafoplast™ TRASP System is a complete solution for marking and identification that does not require a printer or computer equipment. It consists of pre-printed alphanumeric character elements that are loaded into transparent sleeves of various types and sizes. Theses sleeves can then be attached to wire, cable, cable assemblies or other devices inside of panels.



The advantages of the TRASP system:

- One system for multiple applications
- Quick and easy installation
- Custom labels created on the spot
- Flexibility to change labels over time
- Ability to mark before or after termination
- Durable PVC sleeves protect character elements from wear and degradation

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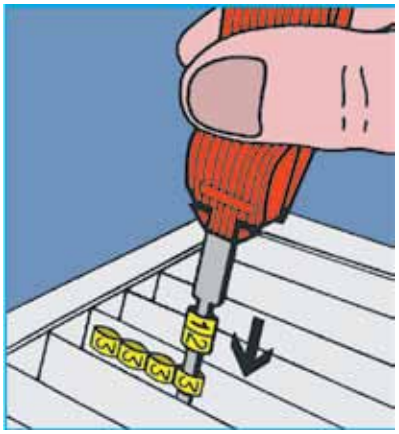
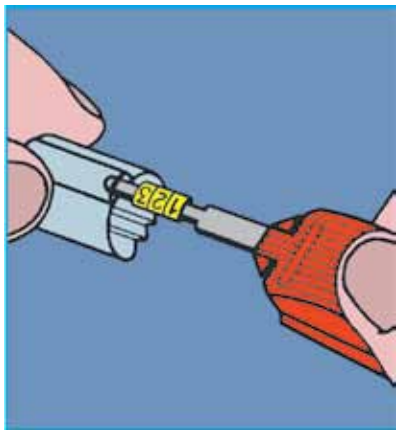
Quick Reference Guide for Sleeve Selection by Wire Type and Size 17-19

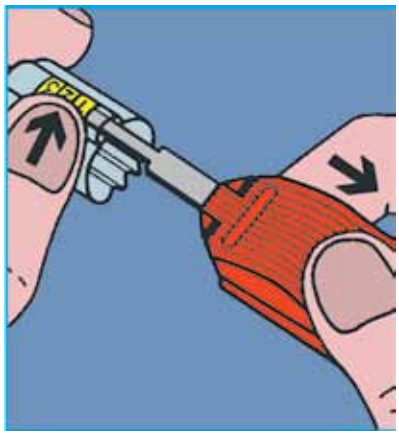
Easy as 1 - 2 - 3

1. 

Collect the elements on the marking tool

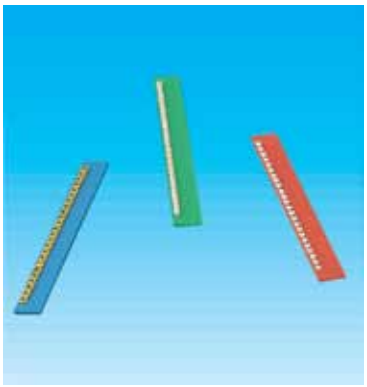
2. 

Insert elements into the sleeve

3. 

Apply slight pressure to the sleeve with thumb and remove the marking tool

Note: If changes need to be made, characters can easily be added or removed using the removal hook and the process can be repeated.

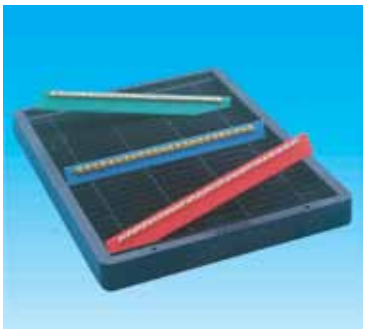


3M™ Grafoplast™ Alphanumeric Strips 117

The TRASP system includes a variety of alphanumeric strips that allow users to mix and match characters and colors to create custom labels. The strips hold 24 equally marked elements attached vertically on a plastic holder.
The elements available include the 26 letters of the alphabet (uppercase), numbers (from 0 to 9), 5 commonly used symbols, and 7 background colors.
Specifications: These strips meet UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Part Number	Element Width		Quantity per Box
	in.	mm	Strips (Elements)
BL117M	0.09	2.3	10 (240)

Part Number	UPC (013166-)	Character (Black)	Background Color	Part Number	UPC (013166-)	Character (Black)	Background Color
BL117M00BW	25570	0	White	BL117MJJBW	26485	J	White
BL117M01BW	25594	1	White	BL117MKKBW	26497	K	White
BL117M02BW	25618	2	White	BL117MLLBW	26512	L	White
BL117M03BW	25639	3	White	BL117MMMBW	26527	M	White
BL117M04BW	25663	4	White	BL117MNNBW	26542	N	White
BL117M05BW	25687	5	White	BL117MOOBW	26560	O	White
BL117M06BW	25708	6	White	BL117MPPBW	26575	P	White
BL117M07BW	25726	7	White	BL117MQQBW	26593	Q	White
BL117M08BW	25753	8	White	BL117MRRBW	26611	R	White
BL117M09BW	25774	9	White	BL117MSSBW	26629	S	White
BL117M10BW	26026	+	White	BL117MTTBW	26644	T	White
BL117M11BW	26050	-	White	BL117MUUBW	26662	U	White
BL117M12BW	26065	⏚	White	BL117MVVBW	26677	V	White
BL117M13BW	26077	/	White	BL117MWWBW	26692	W	White
BL117M33BW	26224	:	White	BL117MXXBW	26707	X	White
BL117MAABW	26314	A	White	BL117MYYBW	26722	Y	White
BL117MBBBW	26335	B	White	BL117MZZBW	26737	Z	White
BL117MCCBW	26353	C	White	BL117M999B	26278	Blank	Black
BL117MDDBW	26374	D	White	BL117M999G	26284	Blank	Green
BL117MEEBW	26392	E	White	BL117M9990	26290	Blank	Orange
BL117MFFBW	26410	F	White	BL117M999R	26296	Blank	Red
BL117MGGBW	26428	G	White	BL117M999U	26299	Blank	Blue
BL117MHHBW	26446	H	White	BL117M999W	26305	Blank	White
BL117MIIBW	26464	I	White	BL117M999Y	26308	Blank	Yellow



3M™ Grafoplast™ Strip Tray 118

The strip tray is an essential component for the correct use of the TRASP system. Alphanumeric strips are loaded into the angled slots of the strip tray to allow easy extraction of the marking elements. The strip tray holds 25 strips of any type of character (letters, numbers, symbols, or colors).

Part Number	UPC (013166-)	Material	Length		Color	Qty.
			in.	mm		
118	18380	Polypropylene	5.79 x 7.48 x 0.71	147 x 190 x 18	Black	1

3M Grafoplast Marking Tools 119M

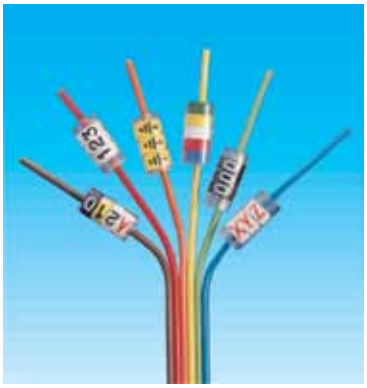
The marking tool is used to select elements from the strip tray and insert them into the plastic sleeves. Two sizes are available: the 15 mm (holds 6 elements) and the 30 mm (holds 13 elements).

Part Number	UPC (013166-)	Material	Length		Color	Qty.
			in.	mm		
119 M/15	18405	Stainless Steel/ Polypropylene	0.59	15	Orange	1
119 M/30	18415	Stainless Steel/ Polypropylene	1.18	30	Orange	1

3M Grafoplast Removal Hook 120

The removal hook allows users to easily remove and replace elements in seconds, providing the flexibility needed to make quick changes on site.

Part Number	UPC (013166-)	Material	Color	Qty.
120	18425	Stainless Steel	Metal	5



3M Grafoplast Sleeves for Fine Wire 190

This transparent PVC sleeve is designed for marking fine wires in a clear and legible manner. Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Refer to pages 17-19 for a quick reference guide by wire type and conductor size.

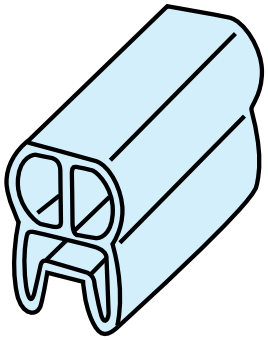
Part Number	UPC (013166-)	Min. OD		Max. OD		Length		No. of Elements	Qty.
		in.	mm	in.	mm	in.	mm		
190/10	19385	0.024	0.6	0.047	1.2	0.39	10	4	1,000
190/15	19390	0.024	0.6	0.047	1.2	0.59	15	6	1,000

3M™ Grafoplast™ Standard Sleeves 200 Series

These standard transparent PVC sleeves are designed to cater to a wider range of cables and wires and are particularly useful for jobs that encounter a variety of diameter ranges. They are more pliable than the 100 series to cover a broader diameter range. Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Refer to pages 17-19 for a quick reference guide by wire type and conductor size.

Part Number	UPC (013166-)	Min. OD		Max. OD		Length		No. of Elements	Qty.
		in.	mm	in.	mm	in.	mm		
201/10	19505	0.059	1.5	0.098	2.5	0.39	10	4	1,000
201/15	19510	0.059	1.5	0.098	2.5	0.59	15	6	1,000
201/23	19535	0.059	1.5	0.098	2.5	0.91	23	10	1,000
201/30	19545	0.059	1.5	0.098	2.5	1.18	30	13	500
202/10	19590	0.079	2.0	0.157	4.0	0.39	10	4	1,000
202/15	19600	0.079	2.0	0.157	4.0	0.59	15	6	1,000
202/23	19630	0.079	2.0	0.157	4.0	0.91	23	10	500
202/30	19655	0.079	2.0	0.157	4.0	1.18	30	13	500
203/10	19700	0.157	4.0	0.276	7.0	0.39	10	4	500
203/15	19710	0.157	4.0	0.276	7.0	0.59	15	6	500
203/23	19740	0.157	4.0	0.276	7.0	0.91	23	10	500
203/30	19760	0.157	4.0	0.276	7.0	1.18	30	13	200
204/10	19800	0.236	6.0	0.394	10.0	0.39	10	4	500
204/15	19805	0.236	6.0	0.394	10.0	0.59	15	6	500
204/23	19825	0.236	6.0	0.394	10.0	0.91	23	10	200
204/30	19835	0.236	6.0	0.394	10.0	1.18	30	13	200
205/10	19875	0.394	10.0	0.551	14.0	0.39	10	4	200
205/15	19880	0.394	10.0	0.551	14.0	0.59	15	6	200
205/23	19900	0.394	10.0	0.551	14.0	0.91	23	10	200
205/30	19910	0.394	10.0	0.551	14.0	1.18	30	13	200
206/10	19950	0.551	14.0	0.866	22.0	0.39	10	4	200
206/15	19955	0.551	14.0	0.866	22.0	0.59	15	6	200
206/23	19975	0.551	14.0	0.866	22.0	0.91	23	10	100
206/30	19985	0.551	14.0	0.866	22.0	1.18	30	13	100
207/10	20025	0.866	22.0	1.181	30.0	0.39	10	4	50
207/15	20030	0.866	22.0	1.181	30.0	0.59	15	6	50
207/23	20045	0.866	22.0	1.181	30.0	0.91	23	10	50
207/30	20055	0.866	22.0	1.181	30.0	1.18	30	13	50
208/10	20090	1.181	30.0	1.378	35.0	0.39	10	4	50
208/15	20095	1.181	30.0	1.378	35.0	0.59	15	6	50
208/23	20105	1.181	30.0	1.378	35.0	0.91	23	10	50
208/30	20115	1.181	30.0	1.378	35.0	1.18	30	13	50
209/10	20150	1.378	35.0	1.575	40.0	0.39	10	4	50
209/15	20155	1.378	35.0	1.575	40.0	0.59	15	6	50
209/23	20165	1.378	35.0	1.575	40.0	0.91	23	10	50
209/30	20175	1.378	35.0	1.575	40.0	1.18	30	13	50



3M™ Grafoplast™ Vertical Dual Sleeves 802

The vertical dual transparent PVC sleeve has two rows that are vertically stacked side-by-side making it possible to read markers clearly from either side of the cable.

Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

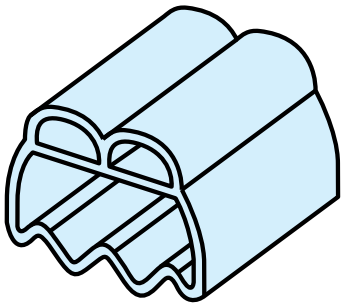
Part Number	UPC (013166-)	Min. OD		Max. OD		Length		No. of Elements per Row	Qty.
		in.	mm	in.	mm	in.	mm		
802/15	22240	0.079	2.0	0.157	4.0	0.59	15	6	500
802/30	22260	0.079	2.0	0.157	4.0	1.18	30	13	200

3M Grafoplast Standard Dual Sleeves 808-811

The standard dual transparent PVC sleeve has two rows for elements and is particularly useful for source and destination marking.

Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Part Number	UPC (013166-)	Min. OD		Max. OD		Length		No. of Elements per Row	Qty.
		in.	mm	in.	mm	in.	mm		
808/10	22270	0.315	8.0	0.394	10.0	0.39	10	4	100
808/15	22275	0.315	8.0	0.394	10.0	0.59	15	6	100
808/23	22280	0.315	8.0	0.394	10.0	0.91	23	10	50
808/30	22285	0.315	8.0	0.394	10.0	1.18	30	13	50
809/10	22295	0.394	10.0	0.472	12.0	0.39	10	4	100
809/15	22300	0.394	10.0	0.472	12.0	0.59	15	6	100
809/23	22305	0.394	10.0	0.472	12.0	0.91	23	10	50
809/30	22310	0.394	10.0	0.472	12.0	1.18	30	13	50
810/10	22320	0.472	12.0	0.551	14.0	0.39	10	4	100
810/15	22325	0.472	12.0	0.551	14.0	0.59	15	6	100
810/23	22330	0.472	12.0	0.551	14.0	0.91	23	10	50
810/30	22335	0.472	12.0	0.551	14.0	1.18	30	13	50
811/10	22345	0.551	14.0	0.630	16.0	0.39	10	4	50
811/15	22350	0.551	14.0	0.630	16.0	0.59	15	6	50
811/23	22355	0.551	14.0	0.630	16.0	0.91	23	10	20
811/30	22360	0.551	14.0	0.630	16.0	1.18	30	13	20



Refer to pages 17-19 for a quick reference guide by wire type and conductor size.

3M™ Grafoplast™ Halogen-Free* Sleeves 901-903 HF

The halogen free transparent sleeve is ideal for high risk installations. Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -40ºF to 176ºF (-40ºC to 80ºC)

Part Number	UPC (013166-)	Min.OD		Max. OD		Length		No. of Elements	Qty.
		in.	mm	in.	mm	in.	mm		
901 HF/15	22450	0.035	0.9	0.063	1.6	0.59	15	6	1,000
901 HF/30	22460	0.035	0.9	0.063	1.6	1.18	30	13	500
902 HF/15	22470	0.055	1.4	0.197	5.0	0.59	15	6	1,000
902 HF/30	22480	0.055	1.4	0.197	5.0	1.18	30	13	500
903 HF/15	22490	0.197	5.0	0.433	11.0	0.59	15	6	500
903 HF/30	22500	0.197	5.0	0.433	11.0	1.18	30	13	200

3M Grafoplast Snap-on Sleeves 301-304

The snap-on sleeve is ideal for marking cable after the electrical connection has already been made. The bottom of the snap-on sleeve is made of a rigid base that snaps onto the cable and the top of the sleeve is made of a soft, transparent PVC sleeve that is designed to hold marking elements. Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Part Number	UPC (013166-)	Min. OD		Max. OD		Length		No. of Elements	Qty.
		in.	mm	in.	mm	in.	mm		
301/10	21765	0.079	2.0	0.138	3.5	0.39	10	4	1,000
301/15	21770	0.079	2.0	0.138	3.5	0.59	15	6	1,000
301/23	21790	0.079	2.0	0.138	3.5	0.91	23	10	500
301/30	21795	0.079	2.0	0.138	3.5	1.18	30	13	500
302/10	21805	0.110	2.8	0.197	5.0	0.39	10	4	1,000
302/15	21810	0.110	2.8	0.197	5.0	0.59	15	6	1,000
302/23	21825	0.110	2.8	0.197	5.0	0.91	23	10	500
302/30	21830	0.110	2.8	0.197	5.0	1.18	30	13	500
303/10	21845	0.197	5.0	0.315	8.0	0.39	10	4	500
303/15	21850	0.197	5.0	0.315	8.0	0.59	15	6	500
303/23	21865	0.197	5.0	0.315	8.0	0.91	23	10	200
303/30	21870	0.197	5.0	0.315	8.0	1.18	30	13	200
304/10	21885	0.315	8.0	0.394	10.0	0.39	10	4	500
304/15	21890	0.315	8.0	0.394	10.0	0.59	15	6	500
304/23	21905	0.315	8.0	0.394	10.0	0.91	23	10	200
304/30	21910	0.315	8.0	0.394	10.0	1.18	30	13	200

*Halogen Free is defined as having less than 900 ppm bromine, less than 900 ppm chlorine, and less than 1500 ppm total bromine and chlorine; other halogens are excluded from this definition. These are the levels set forth in certain industry standards, such as the International Electrotechnical Commission (IEC) 61249-2-21 standard.

Refer to pages 17-19 for a quick reference guide by wire type and conductor size.

Note: Cable tie not included

3M™ Grafoplast™ Standard Longitudinal Sleeves 130

The transparent longitudinal PVC sleeve is secured with a cable tie and creates a label with text that runs parallel to the cable. It is ideal for marking bundles of cables that require marking at regular intervals. Specifications: This sleeve meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

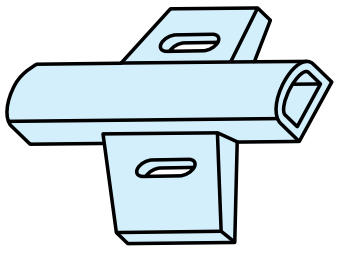
Part Number	UPC (013166-)	Length		No. of Elements	Qty.
		in.	mm		
130/23	18600	0.91	23	10	200
130/30	18605	1.18	30	13	200

Note: Cable tie not included

3M Grafoplast Dual Longitudinal Sleeve 830

The dual transparent longitudinal sleeve has the same features as the 130 and includes dual sleeves for a second row of identification. Specifications: This sleeve meets UL-94 Class V0 standards and can be used in temperatures ranging from -58°F to 176°F (-50°C to 80°C)

Part Number	UPC (013166-)	Length		No. of Elements per Row	Qty.
		in.	mm		
830/30	22370	1.18	30	13	200



*Halogen Free is defined as having less than 900 ppm bromine, less than 900 ppm chlorine, and less than 1500 ppm total bromine and chlorine; other halogens are excluded from this definition. These are the levels set forth in certain industry standards, such as the International Electrotechnical Commission (IEC) 61249-2-21 standard.

3M Grafoplast Halogen-Free* Longitudinal Sleeve 930 HF

The halogen free transparent longitudinal sleeve is ideal for high risk installations. This sleeve must be paired with a cable tie for proper installation. Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -40ºF to 176ºF (-40ºC to 80ºC)

Part Number	UPC (013166-)	Length		No. of Elements	Qty.
		in.	mm		
930HF/30	22530	1.18	30	13	200

3M™ Grafoplast™ Polyamide Cable Ties 124

The polyamide cable tie comes with a fitted transparent PVC sleeve and is suitable for identifying cables or bundles of cables up to 1.97 in. (50 mm) in diameter. Specifications: Meet UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Part Number	UPC (013166-)	Min.OD		Max. OD		Length		No. of Elements	Qty.
		in.	mm	in.	mm	in.	mm		
124/15	18585	0.39	10.0	2.0	50.0	0.59	15	6	200
124/23	18595	0.39	10.0	2.0	50.0	0.91	23	10	200

3M Grafoplast Channel Sleeves 150

The channel sleeve holds the marking elements and is snapped into the channel by applying minimal pressure.

Part Number	UPC (013166-)	Material	Length		No. of Elements	Qty.
			in.	mm		
150/15	18750	Polyvinylchloride	0.59	15	6	500
150/23	18760	Polyvinylchloride	0.91	23	10	200

3M Grafoplast Adhesive Channels 161/MT

The channel has an adhesive base that provides an alternative method for labeling non-traditional surfaces and is paired with a channel sleeve.

Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Part Number	UPC (013166-)	Material	Length		Color	Qty.
			in.	mm		
161/MT	19180	Polyvinylchloride/ Adhesive Acrylic	19.69	500	Gray	20
161/MT1	19185	Polyvinylchloride/ Adhesive Acrylic	39.37	1000	Gray	10

3M™ Grafoplast™ Pin Terminals 710 & 711

The crimpable pin terminal has a swiveling transparent PVC sleeve on the end that can be turned, offering superior visibility. This piece is excellent for marking in areas where space is limited, such as PLC boxes. Specifications: Meets UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

Part Number	UPC (013166-)	Wire Conductor Size		Length		Color	Qty.
		AWG	mm2	in.	mm		
710/05	21965	22-26	0.50	0.35	9	Orange	200
710/07	21970	20	0.75	0.35	9	Neutral	200
710/10	21975	18	1.0	0.35	9	Yellow	200
710/15	21985	16	1.5	0.35	9	Red	200
710/25	21990	14	2.5	0.47	12	Blue	200
710/40	21995	12	4.0	0.47	12	Neutral	100
710/60	22000	10	6.0	0.47	12	Green	100
710/100	21980	8	10.0	0.47	12	Brown	100
710 Holder Length: 10mm, 0.39 in., holds 4 elements							
711/05	22005	22-26	0.50	0.55	14	Orange	200
711/07	22010	20	0.75	0.55	14	Neutral	200
711/10	22015	18	1.0	0.55	14	Yellow	200
711/15	22025	16	1.5	0.55	14	Red	200
711/25	22030	14	2.5	0.67	17	Blue	200
711/40	22035	12	4.0	0.67	17	Neutral	100
711/60	22040	10	6.0	0.67	17	Green	100
711/100	22020	8	10.0	0.67	17	Brown	100
711 Holder Length: 15mm, 0.59 in., holds 6 elements							

3M Grafoplast Crimping Tool 774

This crimping tool is used to attach the pin terminals to the wires and includes a ratchet that makes the application less tedious for the operator.

Part Number	UPC (013166-)	Description	Wire Conductor Size	Compatibility	Qty.
774	22225	Racheted Crimper for Pin Terminals	26-8 AWG or 0.5-16mm^2	710/711	1

3M Grafoplast Wire Stripper 780

Part Number	UPC (013166-)	Description	Wire Conductor Size	Compatibility	Qty.
780	22215	Wire Stripper	10 AWG or up to 4mm^2	N/A	1

3M™ Grafoplast™ Standard Self-Adhesive Sleeves 140

The transparent self-adhesive PVC sleeve is attached to an adhesive base that provides an alternative method for labeling non-traditional surfaces.

Part Number	UPC (013166-)	Length in.	Length mm	No. of Elements	Qty.
140/15	18665	0.59	15	6	500
140/30	18690	1.18	30	13	200

3M Grafoplast Self-Adhesive Sleeves with Holes 142

The transparent self-adhesive PVC sleeve is combined with the same adhesive base as the 140 sleeve and features holes so that it can be attached using screws or rivets.

Part Number	UPC (013166-)	Length in.	Length mm	No. of Elements	Qty.
142/15	18735	0.59	15	6	500
142/30	18740	1.18	30	13	200

3M Grafoplast Dual Self-Adhesive Sleeves 840

The dual transparent self-adhesive PVC sleeve is combined with the same adhesive base as the 140 sleeve and features dual sleeves for additional marking and identification.

Part Number	UPC (013166-)	Length in.	Length mm	No. of Elements per Row	Qty.
840/10	22375	0.39	10	4	200
840/15	22380	0.59	15	6	200
840/23	22385	0.91	23	10	100
840/30	22390	1.18	30	13	100

Specifications: All Self-Adhesive Sleeves meet UL-94 Class V0 standards and can be used in temperatures ranging from -58ºF to 176ºF (-50ºC to 80ºC)

3M™ Grafoplast™ TRASP Case 050C/03

The TRASP Case is a convenient, portable kit that includes the products needed to create custom labels quickly and accurately. The TRASP Case is one of the best choices for field work because it includes alphanumeric strips with letters, numbers and a variety of symbols. Dimensions: 13.78 x 3.15 x 9.84 in. (350 x 80 x 250 mm)

UPC 013166-13440

CONTENTS:

Part Number	Quantity	Description
118	2	Strip Tray
119M/15U	1	Marking Applicator Tool with Handle
119M/30U	1	Marking Applicator Tool with Handle
120	1	Removal Hook

ELEMENT STRIPS INCLUDED:

Part Number	Character	Quantity
117M00BW	0	4
117M01BW	1	4
117M02BW	2	4
117M03BW	3	2
117M04BW	4	2
117M05BW	5	2
117M06BW	6	2
117M07BW	7	2
117M08BW	8	2
117M09BW	9	2
117MAABW	A	2
117MBBBW	B	2
117MCCBW	C	2
117MDDBW	D	2
117MEEBW	E	2
117MFFBW	F	2
117MGGBW	G	2
117MHHBW	H	2
117MIIBW	I	2
117MJJBW	J	2
117MKKBW	K	2

Part Number	Character	Quantity
117MLLBW	L	2
117MMMBW	M	2
117MNNBW	N	2
117MOOBW	O	2
117MPPBW	P	2
117MQQBW	Q	2
117MRRBW	R	2
117MSSBW	S	2
117MTTBW	T	2
117MUUBW	U	2
117MVVBW	V	2
117MWWBW	W	2
117MXXBW	X	2
117MYYBW	Y	2
117MZZBW	Z	2
117M10BW	+	2
117M11BW	-	2
117M12BW	⏚	2
117M13BW	/	2
117M14BW	.	1
117M29BW	Ø	2
117M33BW	:	1
117M999B	Blank	2
117M999G	Blank	2
117M999O	Blank	1
117M999R	Blank	2
117M999U	Blank	2
117M999W	Blank	2
117M999Y	Blank	2

SLEEVES INCLUDED

Part Number	Quantity
101/15*	160
102/15*	80
103/15*	90
108/15*	40
121/23*	2
122/30*	2
124/15	2
140/15	20
140/30	20
160/25*	1
161/25*	1
190/05	50
190/10	30
190/15	30
301/15	30
302/15	30
303/30	15
304/30	15
710/07	50
710/15	50
710/25	50

*Special order parts. For refills, allow additional shipping time.

3M™ Grafoplast™ TRASP Box 012C/03

The TRASP Box is a convenient, portable kit that includes a complete set of numeric strips and a sample of letters and symbols. An accessory for wall mounting is also included for easy storage and accessibility.

Dimensions: 9.21 x 7.07 x 3.54 in. (234 x 180 x 90mm)

UPC 013166-13475

CONTENTS:

Part Number	Quantity	Description
118	1	Strip Tray
119/15U	1	Marking Applicator Tool
119/30U	1	Marking Applicator Tool
120	1	Removal Hook

ELEMENT STRIPS INCLUDED:

Part Number	Character	Quantity
117M00BW	0	3
117M01BW	1	3
117M02BW	2	3
117M03BW	3	2
117M04BW	4	2
117M05BW	5	1
117M06BW	6	1
117M07BW	7	1
117M08BW	8	1
117M09BW	9	1
117M10BW	+	1
117M11BW	-	1
117M13BW	/	1
117MAABW	A	1
117MBBBW	B	1
117MCCBW	C	1
117MDDBW	D	1

SLEEVES INCLUDED:

Part Number	Quantity
101/15*	70
101/30*	25
102/15*	70
102/30*	30
103/15*	60
103/30*	30
104/15*	60
104/30*	30
140/15	1
140/30	1
142/15	1
142/30	1
175L/15*	3
301/15	10
302/15	10
303/30	5
304/30	5
840/15	1
840/30	1

*Special order parts. For refills, allow additional shipping time.

3M™ Grafoplast™ Starter Kit 001SK/02

The Starter Kit includes the tools and sleeves needed to start using the TRASP System. Dimensions: 11.02 x 12.60 x 6.69 in. (280 x 320 x 170 mm)

UPC 013166-13315

CONTENTS:

Part Number	Quantity	Description
118	1	Strip Tray
119M/15U	1	Marking Applicator Tool
119M/30U	1	Marking Applicator Tool
120	1	Removal Hook

ELEMENT STRIPS INCLUDED:

Part Number	Character	Quantity
117M00BW	0	10
117M01BW	1	10
117M02BW	2	10
117M03BW	3	10
117M04BW	4	10
117M05BW	5	10
117M06BW	6	10
117M07BW	7	10
117M08BW	8	10
117M09BW	9	10
117MAABW	A	10
117MBBBW	B	10
117MCCBW	C	10
117MDDBW	D	10
117MEEBW	E	10
117MFFBW	F	10
117MGGBW	G	10
117MHHBW	H	10
117MIIBW	I	10
117MJJBW	J	10
117MKKBW	K	10
117MLLBW	L	10
117MMMBW	M	10
117MNNBW	N	10
117MOOBW	O	10
117MPPBW	P	10
117MQQBW	Q	10
117MRRBW	R	10
117MSSBW	S	10
117MTTBW	T	10
117MUUBW	U	10
117MVVBW	V	10
117MWWBW	W	10
117MXXBW	X	10
117MYYBW	Y	10
117MZZBW	Z	10
117M10BW	+	10
117M11BW	-	10
117M12BW	⏚	10
117M13BW	/	10
117M999B	Blank	10
117M999R	Blank	10
117M999G	Blank	10
117M999Y	Blank	10
117M999U	Blank	10

SLEEVES INCLUDED:

Part Number	Quantity
202/15	1,000

Quick Reference Guide for 3M™ Grafoplast™ Sleeve Selection

size AWG MCM	Types of Wire RFH-2, RH, RHH*** SF-2, RHW***			Types of Wire TF, THW*, TW		
	Outside Diameter		3M Sleeve	Outside Diameter		3M Sleeve
	in.	mm	size	in.	mm	size
	in.	mm	size	in.	mm	size
18	.146	3.71	202, 302, 802, 902	.106	2.69	202, 301, 802, 902
16	.158	4.01	203, 302, 902	.118	3.00	202, 301, 302, 802, 902
14	.171	4.34	203, 302, 902	.131	3.33	202, 301, 302, 802, 902
14	.204*	5.18	203, 303, 903	-	-	-
14	-	-	-	.162*	4.11	203, 302, 902
12	.188	4.78	203, 302, 902	.148	3.76	202, 302, 802, 902
12	.221*	5.61	203, 303, 903	-	-	-
12	-		-	.179*	4.55	203, 302, 902
10	.242	6.15	203, 204, 303, 903	.168	4.27	203, 302, 902
10	-		-	.199*	5.05	203, 303, 903
8	.328	8.33	204, 304, 808, 903	.245	6.22	203, 204, 303, 903
8	-		-	.276*	7.01	204, 303, 903
6	.397	10.08	205, 809, 903	.323	8.20	204, 304, 808, 903
4	.452	11.48	205, 809	.372	9.45	204, 304, 808, 903
3	.481	12.22	205, 810	.401	10.19	205, 809, 903
2	.513	13.03	205, 810	.433	11.00	205, 809, 903
1	.588	14.94	206, 811	.508	12.90	205, 810
1/0	.629	15.98	206	.549	13.94	205, 810
2/0	.675	17.14	206	.595	15.11	206, 811
3/0	.727	18.67	206	.647	16.43	206
4/0	.785	19.94	206	.705	17.91	206
250	.868	22.05	207	.788	20.02	206
300	.933	23.7	207	.843	21.41	206
350	.985	25.02	207	.895	22.73	207
400	1.032	26.21	207	.942	23.93	207
500	1.119	28.42	207	1.029	26.14	207
600	1.233	31.32	208	1.143	29.03	207
700	1.304	33.12	208	1.214	30.84	208
750	1.339	34.01	208	1.249	31.72	208
800	1.372	34.85	208	1.282	32.56	208
900	1.435	36.45	209	1.345	34.16	208
1000	1.494	37.95	209	1.404	35.66	209

*The dimensions of types RHH and RHW.
*Dimensions of THW in sizes No. 14 - No. 8. No. 6 THW and larger are same dimension as TW.
***Dimensions of RHH and RHW without outer covering are same as THW No. 18 - No. 10, Solid; No. 8 and larger stranded.

Quick Reference Guide for 3M™ Grafoplast™ Sleeve Selection

size AWG MCM	Types of Wire TFN, THHN, THWN			Types of Wire XHHW, ZW**		
	Outside Diameter		3M Sleeve	Outside Diameter		3M Sleeve
	in.	mm	size	in.	mm	size
18	.089	2.26	201, 202, 301, 802, 902			
16	.100	2.54	202, 301, 802, 902			
14	.105	2.67	202, 301, 802, 902	.129	3.28	202, 301, 302, 802, 902
14	-	-	-			
14	-	-	-			
12	.122	3.10	202, 301, 302, 802, 902	.146	3.71	202, 302, 802, 902
12	-	-	-			
12	-	-	-			
10	.153	3.89	202, 302, 802, 902	.166	4.22	203, 302, 902
10	-	-	-			
8	.218	5.54	203, 303, 903	.241	6.12	203, 204, 303, 903
8	-	-	-			
6	.257	6.53	204, 303, 903	.282	7.16	204, 303, 903
4	.328	8.33	204, 304, 808, 903	.328	8.33	204, 304, 808, 903
3	.356	9.04	204, 304, 808, 903	.356	9.04	204, 304, 808, 903
2	.388	9.86	204, 304, 808, 903	.388	9.86	204, 304, 808, 903
1	.450	11.43	205, 809	.450	11.43	205, 809
1/0	.491	12.47	205, 810	.491	12.47	205, 810
2/0	.537	13.64	205, 810	.537	13.64	205, 810
3/0	.588	14.94	206, 811	.588	14.94	206, 811
4/0	.646	16.41	206	.646	16.41	206
250	.716	18.19	206	.716	18.19	206
300	.771	19.58	206	.771	19.58	206
350	.822	20.88	206	.822	20.88	206
400	.869	22.07	207	.869	22.07	207
500	.955	24.26	207	.955	24.26	207
600	1.038	26.87	207	1.073	27.25	207
700	1.129	28.68	207	1.145	29.08	207
750	1.163	29.54	207	1.180	29.97	207
800	1.196	30.38	208	1.210	30.73	208
900	1.259	31.98	208	1.270	32.26	208
1000	1.317	33.45	208	1.330	33.78	208
1250	-	-	-	1.500	38.10	209

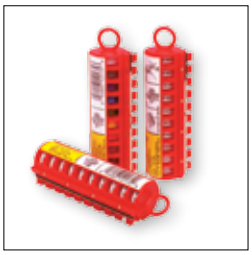
** No. 14 - No. 2.

Quick Reference Guide for 3M™ Grafoplast™ Sleeve Selection

size AWG MCM	Types of Wire FEP, FEPB, FEPW, TFE, PF, PFA PFAH, PGF, PTF, Z, ZF, ZFF			Types of Wire KF-1, KF-2, KFF-1, KFF-2		
	Outside Diameter		3M Sleeve	Outside Diameter		3M Sleeve
	in.	mm	size	in.	mm	size
18	.081	2.06	201, 202, 301, 802, 902	.065	1.65	201, 902
16	.092	2.34	201, 202, 301, 802, 902	.070	1.78	201, 902
14	.105	2.67	202, 301, 802, 902	.083	2.11	201, 202, 301, 802, 902
12	.121	3.07	202, 301, 302, 802, 902	.102	2.59	202, 301, 802, 902
10	.142	3.61	202, 302, 802, 902	.124	3.15	202, 301, 302, 802, 902
8	.206	5.23	203, 303, 903			
	(.186)	(4.72)	(203, 302, 902)			
6	.244	6.20	203, 204, 303, 903			
	(.302)	(7.67)	(204, 303, 903)			
4	.292	7.42	204, 303, 903			
	(.350)	(8.89)	(204, 304, 808, 903)			
3	.320	8.13	204, 304, 808, 903			
	(.378)	(9.60)	(204, 304, 808, 903)			
2	.352	8.94	204, 304, 808, 903			
	(.410)	(10.41)	(205, 809, 903)			
1	.420	10.67	205, 809, 903			
1/0	.462	11.73	205, 809			
2/0	.498	12.65	205, 810			
3/0	.560	14.22	206, 811			
4/0	.618	15.70	206, 811			

( ) The values in parenthesis are for FEPB, Z, ZF and ZFF only.

Ask about these additional identification systems from 3M.



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3M™ Grafoplast™ Si2K Identification System

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ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

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