

Appendix F. Flexible cords and cables according to NFPA 70

In the tables below identification letters for coding and types for Flexible cords and cables are specified.

Table F.1. Letters used for Flexible cords and cables coding specified in the Art. 400 of NFPA 70 (NEC)

Letter	Description
E	As first letter: Elevator cable.
E	After first letter: Thermoplastic elastomer insulation.
H	Heater cord.
NI	"Non-integral" used for parallel cords such as Type NISPT-1 to denote insulated conductors and jacket are separate.
O	The jacket is oil resistant.
OO	The jacket and the conductor insulation are oil resistant.
P	Parallel conductor cord.
S	Extra hard usage Flexible Cord.
SJ	Hard usage Flexible Cord.
SV	Not hard usage Flexible Cord.
T	As first letter: Tinsel cord. Single flattened No. 27 AWG conductor wound around insulating core, for very low current, highly flexible application.
T	After first letter: Thermoplastic insulation.
-1, -2, -3	Insulation thickness for parallel cords, thinnest to thickest. Actual insulation thickness varies with cord type and AWG size.
XTW	Parallel cord for decorative lighting strings.
CXTW	Twisted pair cord or single conductor for decorative lighting strings.
W	As last letter: Moisture and sunlight resistant.
W	As the only letter: Portable Power Cable.

Examples

SOOW – Extra hard usage, jacket and conductor insulation are oil resistant, moisture and sunlight resistant

SJTO – Hard usage, thermoplastic insulation, jacket is oil resistant

Table F2. Flexible cords and cables according to Art. 400 of NFPA 70 (NEC) - Ed. 2020 - Table 400.4

Trade name	Type	Family code TEK(MA)	Use	Voltage [V]	Size [AWG/kcmil]	Number of conductors	Insulation	Outer covering
Lamp cord	C	80160	Pendant or portable. Dry locations. Not hard usage.	300 600	18÷16 15÷10	min. 2	Thermoset or thermoplastic	None
Elevator cable	E	80170	Elevator lighting and control. Unclassified locations.	300 o 600	20÷2	min. 2	Thermoset	Three cotton, Outer one flame-retardant & moisture-resistant
Elevator cable	EO	80180	Elevator lighting and control. Unclassified locations.	300 o 600	20÷2	min. 2	Thermoset	Three cotton, Outer one flame-retardant & moisture-resistant
Elevator cable	EO	80190	Elevator lighting and control. Hazardous (classified) locations.	300 o 600	20÷2	min. 2	Thermoset	One cotton and a neoprene jacket.
Elevator cable	ETP	80200	Hazardous (classified) locations.	300 o 600	-	-	-	Thermoplastic
Elevator cable	ETT	80210	Hazardous (classified) locations.	300 o 600	-	-	-	One cotton or equivalent and a thermoplastic jacket
	EV	80220	Electric vehicle charging. Wet location. Extra hard usage.	1000	18÷500	min. 2 plus grounding conductor(s), plus optional hybrid data, signal communications, and optical fiber cables.	Thermoset with optional nylon	Thermoset
	EVJ	80230	Electric vehicle charging. Wet location. Hard usage.	300	18÷12			
Electric vehicle cable	EVE	80240	Electric vehicle charging. Wet location. Extra hard usage.	1000	18÷500	min. 2 plus grounding conductor(s), plus optional hybrid data, signal communications, and optical fiber cables.	Thermoplastic elastomer with optional nylon	Thermoplastic elastomer
	EVJE	80250	Electric vehicle charging. Wet location. Hard usage.	300	18÷12			
	EVT	80260	Electric vehicle charging. Wet location. Extra hard usage.	1000	18÷500	min. 2 plus grounding conductor(s), plus optional hybrid data, signal communications, and optical fiber cables.	Thermoplastic with optional nylon	Thermoplastic
	EVJT	80270	Electric vehicle charging. Wet location. Hard usage.	300	18÷12			
Portable power cable	G	80155	Portable and extra hard usage.	2000	12÷500	2÷6 plus grounding conductor(s)	Thermoset	Oil-resistant thermoset
	G-GC	80150		2000	12÷500	3÷6 plus grounding conductors and 1 ground check conductor	Thermoset	Oil-resistant thermoset
Heater cord	HPD	80280	Portable heaters. Dry locations. Not hard usage.	300	18÷12	2, 3 or 4	Thermoset	Cotton or rayon

Trade name	Type	Family code TEKIMA	Use	Voltage [V]	Size [AWG/kcmil]	Number of conductors	Insulation	Outer covering
Parallel heater cord	HPN	80290	Portable. Damp locations. Not hard usage.	300	18÷12	2 or 3	Oil-resistant thermoset	Oil-resistant thermoset
	HSJ	80300		300	18÷12		Thermoset	Cotton and thermoset
	HSJO	80310	Portable or portable heater. Damp locations. Hard usage.	300	18÷12	2, 3 or 4	Thermoset	Cotton and oil-resistant thermoset
	HSJOO	80320		300	18÷12		Oil-resistant thermoset	
Nonintegral parallel cords	NISP-1	80330		300	20÷18		Thermoset	Thermoset
	NISP-2	80340		300	18÷16			
	NISPE-1	80350	Pendant or portable. Damp locations.	300	20÷18	2 or 3	Thermoplastic elastomer	Thermoplastic elastomer
	NISPE-2	80360	Not hard usage.	300	18÷16			
	NISPT-1	80370		300	20÷18		Thermoplastic	Thermoplastic
	NISPT-2	80380		300	18÷16			
Twisted porta- ble cord	PD	80390	Pendant or portable. Dry locations. Not hard usage.	300	18÷16	min. 2	Thermoset or thermoplastic	Cotton or rayon
				600	14÷10			
Portable power cable	PPE	80400	Portable, extra hard usage.	2000	12÷500	1÷6 plus optional grounding conductor(s)	Thermoplastic elastomer	Oil-resistant thermoplastic elastomer
Hard service cord	S	80010	Pendant or portable. Damp locations. Extra hard usage.	600	18÷12	min. 2	Thermoset	Thermoset
	SC	80410		600			Thermoset	Thermoset
	SCE	80420	Portable, extra hard usage.	600	8÷250	min. 1	Thermoplastic elastomer	Thermoplastic elastomer
	SCT	80430		600			Thermoplastic	Thermoplastic
Flexible stage and lighting power cable	SE	80440	Pendant or portable. Damp locations. Extra hard usage.	600				Thermoplastic elastomer
	SEW	80450	Pendant or portable. Damp locations and wet locations. Extra hard usage.	600			Thermoplastic elastomer	
	SEO	80460	Pendant or portable. Damp locations. Extra hard usage.	600		min. 2		Oil-resistant thermoplastic elastomer
	SEOW	80470	Pendant or portable. Damp locations and wet locations. Extra hard usage.	600				
	SEOO	80480	Pendant or portable. Damp locations. Extra hard usage.	600			Oil-resistant thermoplastic elastomer	
	SEOOW	80490	Pendant or portable. Damp locations and wet locations. Extra hard usage.	600				

Trade name	Type	Family code TEKIMA	Use	Voltage [V]	Size [AWG/kcmil]	Number of conductors	Insulation	Outer covering
Junior hard service cord	SJ	80020	Pendant or portable. Damp locations. Hard usage.	300			Thermoset	Thermoset
	SJE	80500		300				
	SJEW	80510	Pendant or portable. Damp and wet locations. Hard usage.	300			Thermoplastic elastomer	Thermoplastic elastomer
	SJEO	80520	Pendant or portable. Damp locations. Hard usage.	300				
	SJEOW	80530	Pendant or portable. Damp and wet locations. Hard usage.	300				
	SJEOO	80540	Pendant or portable. Damp locations. Hard usage.	300			Oil-resistant thermoplastic elastomer	Oil-resistant thermoplastic elastomer
	SJEOOW	80550	Pendant or portable. Damp and wet locations. Hard usage.	300				
	SJO	80030	Pendant or portable. Damp locations. Hard usage.	300			Thermoset	
	SJOW	80560	Pendant or portable. Damp and wet locations. Hard usage.	300	18÷10	2÷6		Oil-resistant thermoset
	SJOO	80570	Pendant or portable. Damp locations. Hard usage.	300			Oil-resistant thermoset	
Hard service cord	SJOOW	80140	Pendant or portable. Damp and wet locations. Hard usage.	300				
	SJT	80050	Pendant or portable. Damp locations. Hard usage.	300				Thermoplastic
	SJTW	80580	Pendant or portable. Damp and wet locations. Hard usage.	300				
	SJTO	80590	Pendant or portable. Damp locations. Hard usage.	300				
	SJTOW	80060	Pendant or portable. Damp and wet locations. Hard usage.	300				
	SJTOO	80600	Pendant or portable. Damp locations. Hard usage.	300			Oil-resistant thermoplastic	
	SJTOOW	80610	Pendant or portable. Damp and wet locations. Hard usage.	300			Oil-resistant thermoplastic	
	SO	80070	Pendant or portable. Damp locations. Extra hard usage.	600			Thermoset	
	SOW	80620	Pendant or portable. Damp and wet locations. Extra hard usage.	600	18÷2	min. 2		Oil-resistant thermoset
	SOO	80630	Pendant or portable. Damp locations. Extra hard usage.	600			Oil-resistant thermoset	
All thermoset parallel cord	SOOW	80120	Pendant or portable. Damp and wet loca- tions. Extra hard usage.	600				
	SP-1	80640	Pendant or portable. Damp locations.	300	20÷18			
	SP-2	80650	Not hard usage. Refrigerators, room air conditioners, and as permitted in 422.16(B). Damp locations. Not hard usage.	300	18÷16	2 or 3	Thermoset	None
	SP-3	80660		300	18÷10			

Trade name	Type	Family code TEKIMA	Use	Voltage [V]	Size [AWG/kcmil]	Number of conductors	Insulation	Outer covering
All elastomer (thermoplastic) parallel cord	SPE-1	80670	Pendant or portable. Damp locations. Not hard usage.	300	20÷18			
	SPE-2	80680		300	18÷16	2 or 3	Thermoplastic elastomer	None
	SPE-3	80690	Refrigerators, room air conditioners, and as permitted in 422.16(B). Damp locations. Not hard usage.	300	18÷10			
All plastic parallel cord	SPT-1	80700	Pendant or portable. Damp locations. Not hard usage.	300		2 or 3		
	SPT-1W	80710	Pendant or portable. Damp and wet loca- tions. Not hard usage.	300	20÷18	2		
	SPT-2	80720	Pendant or portable. Damp locations. Not hard usage.	300		2 or 3	Thermoplastic	None
	SPT-2W	80730	Pendant or portable. Damp and wet loca- tions. Not hard usage.	300	18÷16	2		
	SPT-3	80740	Refrigerators, room air conditioners, and as permitted in 422.16(B). Damp locations. Not hard usage.	300	18÷10	2 or 3		
	SRD	80750		300	10÷4	3 or 4	Thermoset	Thermoset
Range, dryer cable	SRDE	80760	Portable. Damp locations. Ranges, dryers.	300	10÷4	3 or 4	Thermoplastic elastomer	Thermoplastic elastomer
	SRDT	80770		300	10÷4	3 or 4	Thermoplastic	Thermoplastic
	ST	80780	Pendant or portable. Damp locations. Extra hard usage.	600				
Hard service cord	STW	80790	Pendant or portable. Damp and wet loca- tions. Extra hard usage.	600			Thermoplastic	Thermoplastic
	STO	80800	Pendant or portable. Damp locations. Extra hard usage.	600	18÷2	min. 2		
	STOW	80080	Pendant or portable. Damp and wet loca- tions. Extra hard usage.	600				Oil-resistant thermoplastic
	STOO	80810	Pendant or portable. Damp locations. Extra hard usage.	600				
	STOOW	80820	Pendant or portable. Damp and wet locations. Extra hard usage.	600			Oil-resistant thermoplastic	

Trade name	Type	Family code TEKIMA	Use	Voltage [V]	Size [AWG/kcmil]	Number of conductors	Insulation	Outer covering
Vacuum cleaner cord	SV	80090	Pendant or portable. Damp locations. Not hard usage.	300	18÷16	2 o 3	Thermoset	Thermoset
	SVE	80830		300			Thermoplastic elastomer	Thermoplastic elastomer
	SVEO	80840		300			Oil-resistant thermoplastic elastomer	Oil-resistant thermoplastic elastomer
	SVO	80850		300			Thermoset	Oil-resistant thermoset
	SVEOO	80860		300			Oil-resistant thermoset	Oil-resistant thermoset
	SVOO	80870		300			Thermoplastic	Thermoplastic
	SVT	80100		300			Thermoplastic	Thermoplastic
	SVTO	80880		300			Thermoplastic	Thermoplastic
	SVTOO	80890		300			Oil-resistant thermoplastic	Oil-resistant thermoplastic
Parallel tinsel cord	TPT	80900	Attached to an appliance. Damp locations. Not hard usage.	300	27	2	Thermoplastic	Thermoplastic
Jacketed tinsel cord	TST	80910	Attached to an appliance. Damp locations. Not hard usage.	300	27	2	Thermoplastic	Thermoplastic
Portable power- cable	W	80130	Portable, extra hard usage.	2000	12÷500	1÷6	Thermoset	Oil-resistant thermoset
					501÷1000	1	Thermoset	Oil-resistant thermoset