

Greaves Information on Code FLEX Wire Adapters

Compression Lugs

Cable manufacturers recommend compression connectors for terminating flexible, highstrand cables because they impart equal radial pressure around the wire and help to form a dense joint. Also, a flared opening gathers the strands (which 'blossom' when cut) during insertion, which helps to assure that every strand is gathered into the barrel.

Greaves Shoo-in[™] Flex Cable Compression Lugs and Splices provide effective termination of high-strand flex cables as recommended by cable manufacturers. The smooth funnel shape of the flare assures that every strand slides easily into place.

Size selection is important, as there are several different classes of "flex cable" stranding with different dimensions, which can vary among manufacturers. A SIZING GUIDE and REFERENCE INFORMATION chart for most of these flex cables is shown on a table in the Greaves catalog. Shoo-in[™] connectors are available in several styles; short-barrel lugs with one-hole mount, long-barrel lugs with one-hole or two-hole mount, and short barrel splices. All are fabricated of seamless tin-plated copper. Sizes range from the 50FX size for #4AWG Class H rope/Class M weld/50.5MCM DLO (Diesel Locomotive) cable, through the 1111FX size for 1250MCM Class H/1000MCM Class M/1111.1MCM DLO cable. Custom configurations can also be fabricated.

Applications - Flex cable applications include:

Vibration, motion, flexing such as pull-out drawers Temporary wiring/hookups Confined cabinet spaces where tight bends are needed.

Markets - Flex cable markets include:

Marine and docking facilities - temporary hookups
Offshore oil equipment / shipyards / military - skid mounted power systems
Machinery - mining, welding, robotics - auto assembly plants
Material handling - cranes and conveyors
Locomotive / railroad - manufacturing and rework shops
Amusement park rides



COMPRESSION

Shoo-in™ FLEX-CABLE CONNECTORS REFERENCE INFORMATION SIZING GUIDE

High-strand flexible cables are often utilized in environments that involve motion or vibration. Applications include locomotive, mining, marine, welding machinery, wind power turbines, temporary power generators, and transformers.

High-strand flexible cables are available in a variety of classes and styles, such as welding cable, rope cable, diesel-locomotive cable (DLO) and others. Each style has a different nominal cable/conductor diameter which can vary from manufacturer to manufacturer, from lot to lot, and even within a manufacturing lot.

This chart can assist in selection of connectors for use on highstrand, flexible cables. Locate your cable across the top, move down to your cable size, and move to the lefthand column for your "FX GUIDE." Then for a lug or splice series, use your FX GUIDE to select your specific lug or splice. An alternative is to select your FX GUIDE according to the

conductor O.D. information on the chart; when measuring your cable diameter, include only the bundle of conductors (not the jacket). This will help select an FX lug or spice with appropriate barrel size and flare.

For example, 535kcmil DLO cable (1325/24 stranding) indicates an FX GUIDE of "535FX"; for a long-barrel 2-hole NEMA lug, select Cat. No. L535NFX.

SIZING GUIDE for FX COMPRESSION LUGS for DLO and FLEX CABLE CABLE DIMENSIONS – REFERENCE INFORMATION											
FX CAT. NO. GUIDE		CLASS I-MODIFIED EL-LOCOMOTIVE C STRANDS (#/AWG)	_	CLA (RC	SS H PE) O.D.	CLAS (WE	SS M ELD) O.D.	REFERENCE CLASS B (COMM'L) AWG O.D.			
	, ,										
25FX	(6)26	61/24	.207	#7	.188	#7	.196	#6	.184		
42FX	(4)42	91/24-105/24	.263	#5	.237	#5	.240	#4	.232		
50FX	(3)50.5	125/24	.288	#4	.266	#4	.269	#2	.292		
60FX	(2)60.6	150/24	.313	#2	.336	#2	.337	#1	.332		
90FX	(1)90.9	225/24	.380	#1	.378	#1	.376	1/0	.373		
111FX	(1/0)111.1	275/24	.409	1/0	.424	1/0	.423	2/0	.418		
131FX	(2/0)131.3	325/24	.449	2/0	.477			3/0	.470		
181FX	(3/0)181.8	450/24	.540	3/0	.536	2/0	.508	4/0	.528		
222FX	(4/0)222.2	550/24	.573	4/0	.602	3/0	.576	250	.575		
250FX	250	637/24	.682	250	.653	250	.713	350	.681		
262FX	262.6	650/24	.620	250	.653	4/0	.645	300	.630		
313FX	313.1	775/24	.688	300	.716	250	.713	350	.681		
373FX	373.7	925/24	.774	350	.773	300	.768	500	.814		
444FX	444.4	1100/24	.840	400	.909	350	.825	600	.893		
535FX	535.3	1325/24	.908	500	.923	400	.901	700	.964		
646FX	646.4	1600/24	1.034	700	1.106	600	1.084	800	1.031		
777FX	777.7	1925/24	1.123	800	1.180	700	1.183	1000	1.152		
929FX	929.2	2299/24	1.230	1000	1.320	900	1.331	1250	1.289		
1111FX	1111.1	2745/24	1.360	1250	1.477	1000	1.404	1500	1.412		



GREAVES EXCLUSIVE

Shoo-pinTM

For copper flex-cable 105°C

FLEx-CABLE COPPER COMPRESSION ADAPTERS

All-copper compression adapters

Designed for reliable termination of highly stranded flexible copper cable into mechanical lugs

Uses include locomotive, mining, marine, and machinery applications

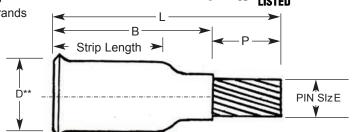
Features flared Shoo-in™ barrel-opening for easy insertion of fine strands

Fits into mechanical set-screw type connectors

Amperage rating is per the incoming conductor

Fabricated of wrought copper with pin of Class B stranded copper conductor

Insulating covers are included



PT-Fx SERIES

		FLEX CABLE OR CODE AWG CONDUCTOR		NOMINAL DIMENSIONS (IN)				U-TYPE DIE*			EST. SHIPPING		
NAED NUMBER	CATALOG NUMBER	DLO CABLE FLEx CABLE	PIN SIZE	В	Р	L	D**	CABLE STRIP LENGTH	COLOR	INDEx	# CRIMPS	WEIGHT (lbs)	UNIT
54236	PT25Fx6†	61/24 (#6)	#6 AWG	1.50	1.06	2.50	0.29	7/8	BLUE	7/374	1	0.05	EA
55424	PT42Fx4	91/24-105/24 (#4)	#4 AWG	1.56	1.07	2.63	0.40	1	GRAY	8/346	1	0.06	EA
55602	PT60Fx2	125/24-150/24 (#2)	#2 AWG	1.65	1.10	2.75	0.47	1	BROWN	10	1	0.08	EA
55901	PT90Fx1	175/24-225/24 (#1)	#1 AWG	1.70	1.14	2.75	0.50	1	GREEN	11/375	1	0.10	EA
55111	PT111Fx10	275/24 (1/0)	1/0 AWG	1.81	1.23	3.00	0.55	1¹/s	PINK	12/348	1	0.10	EA
55131	PT131Fx20	325/24 (2/0)	2/0 AWG	2.06	1.19	3.25	0.61	11/4	BLACK	13	1	0.13	EA
55181	PT181Fx30	450/24 (3/0)	3/0 AWG	2.19	1.30	3.50	0.67	11/4	ORANGE	14	1	0.16	EA
55222	PT222Fx40	550/24 (4/0)	4/0 AWG	2.19	1.31	3.50	0.74	1¹/₄	PURPLE	15	1	0.22	EA

				DIMENSIONS (IN)			CABLE	U-TYPE DIE*			EST. SHIPPING		
NAED NUMBER	CATALOG NUMBER	FLEx CABLE	PIN SIZE	В	Р	L	D**	STRIP LENGTH	COLOR	INDEx	# CRIMPS	WEIGHT (lbs)	UNIT
55250	PT250Fx250	250 kcmil FLEX CLASS G 259 CLASS H 427	250 kcmil	2.25	1.40	3.25	0.78	1 ³ / ₈	YELLOW	16	2	0.26	EA
55262	PT262Fx 250	262.6 kcmil FLEX 250 FLEX CLASS I, K, M	250 kcmil	2.20	1.40	3.80	0.81	13/8	WHITE	17/298	2	0.26	EA
55313	PT313Fx350	313.1 kcmil (775/24) (300 kcmil NOM)	350 kcmil	2.40	1.51	4.00	0.87	1³/s	RED	18/324	2	0.38	EA
55373	PT373Fx350	373.7 kcmil (925/24) (350 kcmil NOM)	350 kcmil	2.75	1.51	4.40	0.99	1³/ ₈	BLUE	19/470	2	0.41	EA
55444	PT444Fx 500	444.4 kcmil (1100/24) (450 kcmil NOM)	500 kcmil	3.00	1.75	4.70	1.14	15/8	BROWN	20/299	2	0.65	EA
55535	PT535Fx500	535.3 kcmil (1325/24) (500 kcmil NOM)	500 kcmil	3.00	1.75	4.85	1.19	1 2/3	GREEN	22/472	2	0.66	EA
55646	PT646Fx 600	646 kcmil (1600/24) (600 kcmil NOM)	600 kcmil	3.45	1.90	5.50	1.32	2	BLACK	24/473	2	0.83	EA
55777	PT777Fx750	777.7 kcmil (1925/24) (750 kcmil NOM)	750 kcmil	3.30	2.01	5.50	1.43	2	YELLOW	936	2	1.21	EA

May be used for up to 35KV applications when proper installation and insulation procedures are employed. Consult factory for price and delivery of the following:

- DLO sizes 929.2, 1111.1 and larger
- · Custom pin lengths, diameters, and solid pins
- Tin plating (when ordering, add the suffix "P" to Catalog Number)
- * UL Installation tool: Greenlee HKL 1232.
- ** Add 1/8" for insulating cover.
- † Size not CSA certified.



