

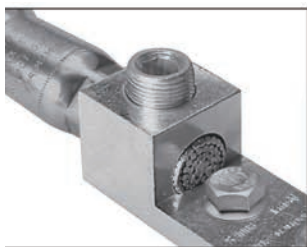


# GREAVES

## TACKLE YOUR CONNECTION CHALLENGES IN THE



The Greaves all-star lineup of products gives you all the coverage you need when you're dealing with new or relocated equipment, spec changes, and/or mismatched parts and cables. You'll find numerous types of adapters, splices, reducers and lugs in many sizes to help you meet a wide variety of applications and challenges such as:



**Terminate** – When you need to terminate a cable into a lug where it does not fit, or is not of the appropriate material or stranding.

- Terminate a copper Class B cable into a mechanical lug, but the cable is oversized and too large to fit
- Terminate an aluminum cable into a copper/bronze lug
- Terminate a copper flex/DLO cable into a mechanical lug
- Terminate a copper cable into a lug which needs a larger wire



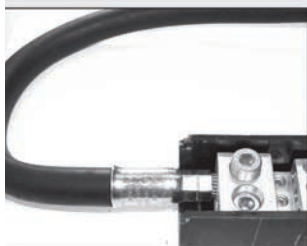
**Splice/reduce** – When you need to splice/reduce cables that are different from each other.

- Splice a copper wire to a smaller copper wire
- If one or both wires are aluminum
- Splice aluminum to a smaller copper wire
- Transition from copper flex/DLO to copper Class B/THHN cable
- Transition from aluminum wire to a copper flex cable



**Multiple cables** – When you need to fit multiple cables into closely-spaced wire-ports on a circuit breaker.

- With copper cable, adapters often will allow spacing close enough
- Use adapters with offset pins to allow the wires to be more closely spaced, so they will fit into the wire-ports.
- Splice smaller jumpers onto the runs and locate the splices away from the lug so the smaller jumpers can be bunched together to fit into the wire-ports.



**Limited space in switchgear cabinet** – In compact switchgear cabinets, often there is not enough space for a bend radius in Class B cable, so flex/DLO is used for the tighter bend capability. Then, an adapter is needed to terminate the flex/DLO into the lug.

**Numerous Greaves connectors can help you:**

- Adapter Series – PT-FX, PT-R, PT, PTA, PTO
- Splice Series – CRK, CRA, ACK, AC-R, PBS, ABS, UPP

**Greaves can also design and fabricate solutions for special situations.**



**GREAVES**

**GREAVES EXCLUSIVE**

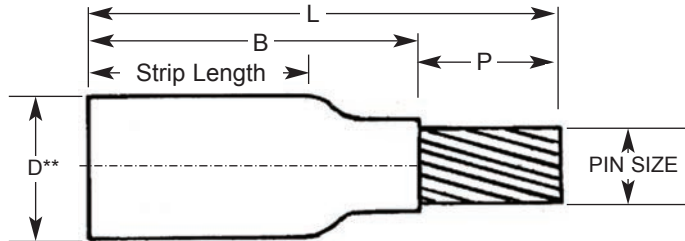
**COMPRESSION**  
**ReduceR™**

For copper cable  
Class B  
600V\*  
105°C



**STEP-DOWN ADAPTERS**

All-copper compression adapters  
For reliable termination of Class B copper conductor  
Use where oversized cable is used to reduce voltage drop on long runs  
Use where neutrals are upsized for power quality  
Narrow profile often allows use in place of offset adapters on multi-wire terminals  
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-R SERIES**

NAED NUMBER	CATALOG NUMBER	CABLE SIZE	PIN SIZE	NOMINAL DIMENSIONS (IN)				CABLE STRIP LENGTH	U-TYPE DIE*			EST. SHIPPING	
				B	P	L	D**		COLOR CODE	DIE INDEX	# CRIMPS	WEIGHT (lbs)	UNIT
54102	PT10R2	1/0 AWG	2	1.75	1.10	2.85	0.50	1	PINK	12/348	1	0.08	EA
54202	PT20R2	2/0 AWG	2	1.81	1.10	2.93	0.56	1 1/8	BLACK	13	1	0.10	EA
54210	PT20R10	2/0 AWG	1/0	1.94	1.23	3.13	0.56	1 1/4	BLACK	13	1	0.11	EA
54320	PT30R20	3/0 AWG	2/0	1.95	1.19	3.13	0.62	1 1/4	ORANGE	14	1	0.13	EA
54420	PT40R20	4/0 AWG	2/0	1.93	1.19	3.15	0.67	1 1/4	PURPLE	15	2	0.13	EA
54430	PT40R30	4/0 AWG	3/0	2.10	1.30	3.15	0.67	1 1/4	PURPLE	15	2	0.16	EA
54254	PT250R40	250 kcmil	4/0	2.13	1.31	3.50	0.74	1 1/4	YELLOW	16	2	0.24	EA
54305	PT300R250	300 kcmil	250 kcmil	2.38	1.40	3.75	0.80	1 3/8	WHITE	17/298	2	0.25	EA
54355	PT350R250	350 kcmil	250 kcmil	2.40	1.40	3.85	0.85	1 3/8	RED	18/324	2	0.26	EA
54353	PT350R300	350 kcmil	300 kcmil	2.40	1.45	3.85	0.87	1 3/8	RED	18/324	2	0.32	EA
54435	PT400R350	400 kcmil	350 kcmil	2.65	1.51	4.30	0.95	1 1/2	BLUE	19/470	2	0.38	EA
54535	PT500R350	500 kcmil	350 kcmil	2.50	1.50	4.00	0.99	1 3/8	BLUE	19/470	2	0.40	EA
54540	PT500R400	500 kcmil	400 kcmil	2.63	1.65	4.13	1.01	1 3/8	BLUE	19/470	2	0.44	EA
54650	PT600R500	600 kcmil	500 kcmil	2.90	1.75	4.72	1.13	1 1/2	GREEN	22/472	2	0.64	EA
54750	PT750R500	750 kcmil	500 kcmil	3.06	1.75	4.90	1.21	1 5/8	BLACK	24/473	2	0.65	EA
54760	PT750R600	750 kcmil	600 kcmil	3.15	1.90	5.00	1.27	1 3/4	BLACK	24/473	2	0.89	EA
54107	PT1000R750	1000 kcmil	750 kcmil	3.00	2.01	5.00	1.44	1 7/8	YELLOW	936	2	1.09	EA



Consult factory for price and delivery of the following:

- Size combinations not shown
- Custom pin lengths, diameters, and solid pins
- Tin plating (when ordering, add the suffix "P" to Catalog Number)

For aluminum cable, use PT, PTA, PTO (aluminum barrel adapters). See page 41.

\*UL Installation tool: Greenlee HKL 1232.

\*\*Add 1/8" for insulating cover.



## COMPRESSION

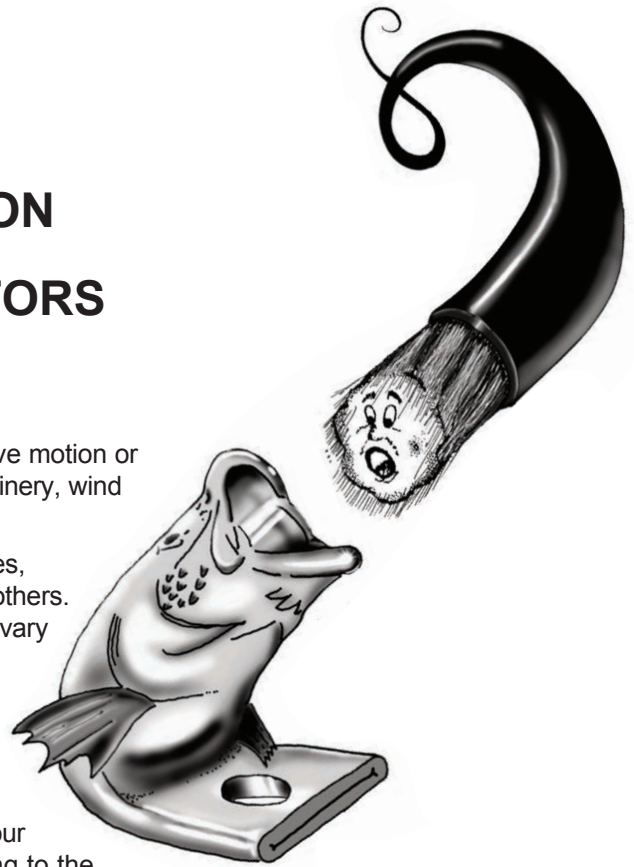
### Shoo-in™ FLEX-CABLE CONNECTORS REFERENCE INFORMATION SIZING GUIDE

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 high-strand, 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 splice 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 (DIESEL-LOCOMOTIVE CABLE)			CLASS H (ROPE)		CLASS M (WELD)		REFERENCE CLASS B (COMM'L)	
	APPROX (AWG)KCMIL	STRANDS (#/AWG)	COND. O.D.	AWG	O.D.	AWG	O.D.	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**

**GREAVES ExCLUSIVE**

# COMPRESSION Shoo-pin™

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

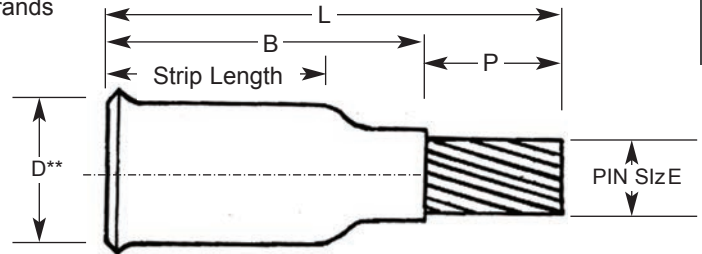
Features flared Shoo-in™ barrel-opening for easy insertion of fine strands

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

NAED NUMBER	CATALOG NUMBER	FLEX CABLE OR CODE AWG CONDUCTOR	PIN SIZE	NOMINAL DIMENSIONS (IN)				CABLE STRIP LENGTH	U-TYPE DIE*			EST. SHIPPING WEIGHT	
		DLO CABLE FLEX CABLE		B	P	L	D**		COLOR	INDEX	# CRIMPS	(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	1 1/8	PINK	12/348	1	0.10	EA
55131	PT131Fx20	325/24 (2/0)	2/0 AWG	2.06	1.19	3.25	0.61	1 1/4	BLACK	13	1	0.13	EA
55181	PT181Fx30	450/24 (3/0)	3/0 AWG	2.19	1.30	3.50	0.67	1 1/4	ORANGE	14	1	0.16	EA
55222	PT222Fx40	550/24 (4/0)	4/0 AWG	2.19	1.31	3.50	0.74	1 1/4	PURPLE	15	1	0.22	EA



NAED NUMBER	CATALOG NUMBER	FLEX CABLE	PIN SIZE	DIMENSIONS (IN)				CABLE STRIP LENGTH	U-TYPE DIE*			EST. SHIPPING WEIGHT	
				B	P	L	D**		COLOR	INDEX	# CRIMPS	(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	PT262Fx250	262.6 kcmil FLEX 250 FLEX CLASS I, K, M	250 kcmil	2.20	1.40	3.80	0.81	1 3/8	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	1 3/8	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	1 3/8	BLUE	19/470	2	0.41	EA
55444	PT444Fx500	444.4 kcmil (1100/24) (450 kcmil NOM)	500 kcmil	3.00	1.75	4.70	1.14	1 3/8	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 3/8	GREEN	22/472	2	0.66	EA
55646	PT646Fx600	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.



# GREAVES

## Dual-Rated


 600 V  
90° C

## COMPRESSION PIN TERMINAL ADAPTERS

Use to adapt oversized wire into lug  
Rated for full ampacity of incoming conductor  
Pre-filled with oxide-inhibitor, caps keep barrel clean  
Supplied with insulating cover

Aluminum barrels marked with wire size and die color code  
Install with die-type compression tools only  
Do not use dieless tools

## BI-METALLIC PIN ADAPTERS

Aluminum barrel with copper stranded pin, tin-plated  
For termination of aluminum or copper conductors into lugs made for copper or aluminum wire

### PT SERIES Concentric Copper Pin

NAED NUMBER	CATALOG NUMBER	BARREL		PIN		U-TYPE DIE		CTN QTY	EST. SHIPPING	
		WIRE	O.D.	STR	CU LENGTH	COLOR	INDEX		WEIGHT (lbs)	UNIT
51906	PT 6	#6		#8	7/8			25	1.8	CTN
51904	PT 4	#4	.66	#6	7/8			25	1.8	CTN
51902	PT 2	#2		#4	7/8	TAN	296	25	1.8	CTN
51900	PT 1	#1		#3	1			10	.9	CTN
51908	PT 10	1/0		#2	1¼				1.7	CTN
51910	PT 20	2/0		#1	1¼	RED	18/324	10	1.7	CTN
51912	PT 30	3/0	.91	1/0	1½				1.8	CTN
51914	PT 40	4/0		2/0	1½				1.9	CTN
51916	PT 250	250		3/0	1½				3.0	CTN
51918	PT 300	300	1.16	4/0	1¾	BROWN	20/299	10	3.3	CTN
51920	PT 350	350		4/0	1¾				3.3	CTN
51922	PT 400	400	1.38	250	1¾	PINK	300	10	9.4	CTN
51924	PT 500	500		350	1¾				5.7	CTN
51926	PT 600	600		350	1¾				2.0	CTN
51928	PT 750	700-750	1.5	500	2	YELLOW	936	3	2.5	CTN



### ALUMINUM PIN ADAPTERS

For termination of aluminum or copper conductors into aluminum lugs only. Solid aluminum barrel and pin.

### PTA SERIES Concentric Aluminum Pin

NAED NUMBER	CATALOG NUMBER	BARREL		PIN		U-TYPE DIE		CTN QTY	EST. SHIPPING	
		WIRE	O.D.	SOL ALUM	LENGTH	COLOR	INDEX		WEIGHT (lbs)	UNIT
51960	PTA 6	#6		#4	.68					CTN
51961	PTA 4	#4	.60	#4	.68				.7	CTN
51962	PTA 2	#2		#4	.68	TAN	296	10		CTN
51963	PTA 1	#1		#3	.84					CTN
51964	PTA 10	1/0		#2	27/32					CTN
51965	PTA 20	2/0	.86	#1	27/32	WHITE	17/298	10	1.1	CTN
51966	PTA 30	3/0		1/0	1½					CTN
51967	PTA 40	4/0		2/0	1½					CTN
51968	PTA 250	250		3/0	1½					CTN
51969	PTA 300	300	1.11	4/0	1½	BROWN	20/299	10	1.9	CTN
51970	PTA 350	350		250	1½					CTN
51971	PTA 400	400	1.33	300	1½	PINK	300	10	3.5	CTN
51972	PTA 500	500		350	1½					CTN
51973	PTA 600	600		400	1¾					CTN
51974	PTA 750	700-750	1.47	500	1¾	YELLOW	936	3	1.3	CTN



### PTO SERIES Offset Aluminum Pin

NAED NUMBER	CATALOG NUMBER	BARREL		PIN		U-TYPE DIE		CTN QTY	EST. SHIPPING	
		WIRE	O.D.	SOL ALUM	LENGTH	COLOR	INDEX		WEIGHT (lbs)	UNIT
51940	PTO 20	2/0		#1	27/32					CTN
51942	PTO 30	3/0	.86	1/0	1½	WHITE	17/298	10	1.10	CTN
51944	PTO 40	4/0		2/0	1½					CTN
51946	PTO 250	250		3/0	1½					CTN
51948	PTO 300	300	1.11	4/0	1½	BROWN	20/299	10	1.90	CTN
51950	PTO 350	350		250	1½					CTN
51954	PTO 500	500	1.33	350	1½	PINK	300	10	3.50	CTN
51956	PTO 600	600		400	1¾					CTN
51958	PTO 750	700-750	1.47	500	1¾	YELLOW	936	3	1.30	CTN



Offset pin allows rotation to accommodate close wire spacings.