BENFIELD
ELECTRIC AND ELEVATOR SUPPLY CORP

240 Washington Street Mount Vernon, NY 10553
(718) 706-8600

Draka Elevator Products Catalog

Draka EHC

A Brand of Prysmian Group

BENFIELD
ELECTRIC AND ELEVATOR SUPPLY CORP

A PARTNER YOU CAN TRUST

For the elevator/escalator business in the NY/NJ area, Benfield Electric Supply and Draka EHC are a supply and service team that can't be beat.

A BROAD AND GROWING RANGE OF ELEVATOR/ESCALATOR PRODUCTS

One-stop shopping for elevator products and accessories is what this team offers—not just cables or electrical supplies, but pendant switches, limit switches, wire rope, hydraulic valves and more… the list of products offered keeps growing.

FAST, ON-TIME DELIVERY TO YOUR OFFICE OR JOBSITE

Pick up today, next-day delivery or even same-day delivery to specified areas.

UNPARALLELED PRODUCT WARRANTIES

For Super-Flex® traveling cable: lifetime warranty*
For Whisper-Flex® compensating cable: lifetime warranty*
For Super-Duct® hoistway cable: lifetime warranty*
For wireway: lifetime warranty*

*Only when following Draka's recommended installation procedures

A LONG HISTORY OF PRODUCT PERFORMANCE

Decades of proven product and field performance are behind every cable provided by Draka EHC through Benfield Electric.

Table of Contents

Internal Components

for Draka EHC cables

SPECIAL CONSTRUCTIONS ARE AVAILABLE!

Draka EHC offers Type EO cables for wet/hazardous locations, halogen-free cables and custom configurations.

Contact your local Draka EHC representative for details.

TRAVELING AND HOISTWAY CABLES

Jacket – Black, 70°C • 158°F polyvinyl chloride specifically compounded for flexibility and abrasion resistance. The finished cable complies with ANSI/ASTM, UL and CSA standards. It also meets EN or JIS requirements as needed and the UL VW-1 or UL-1581 and CSA FT1 flame requirements. Operating temperatures range from -15° to +70°C • -5 to 158°F. Optional rugged polyurethane (PUR) jackets are available upon request. Operating temperatures for PUR cables range from -20° to +70°C • -4 to 158°F. Please contact Draka EHC engineering if you are planning to operate an elevator at temperatures below 0°C • 32°F.

Any traveling cable can be custom-made with halogen-free materials.

Binder – Helically-wound synthetic fiber provides maximum strength.

Braid – A textile braid is applied over the core assembly with 95% coverage.

Stranded Conductors – Bunch-stranded bare soft drawn copper. AWG sizes comply with ANSI/ASTM B174, ANSI/ASTM B3 and with Type ETT requirements of UL 62 and CSA C22.2 No. 49. Metric sizes meet the intent of EN50214, JIS 3408 and AS.

Insulation – 70°C • 158°F, colored, flame-retardant polyvinyl chloride to exceed ETT requirements of UL 62 and CSA C22.2 No. 49. Also complies with EN and JIS requirements for elevator control cables.

Identification – Each insulated conductor and shielded pair is positively identified by an insulation color or a combination of insulation color and numerical markings appearing four times/foot • thirteen times/meter.

Steel Support for Round Traveling Cables – Preformed, flexible, low torsion, zinc-coated, steel wire rope in accordance with applicable portions of Military Specification MIL-W-83420. The steel support is insulated with 70°C • 158°F flame-retardant polyvinyl chloride (Super-Flex® cables have the steel covered with a rayon or cotton braid). Complies with ANSI/ASTM, UL and CSA requirements.

Steel Support for Flat Traveling Cables – Preformed, flexible, low torsion, zinc-coated, steel wire rope in accordance with applicable portions of Military Specification MIL-W-83420. Complies with ANSI/ASTM, UL and CSA requirements.

Shielded Pairs – 20 AWG insulated conductors, paired together with a short lay twist, overall shielded with 36 AWG bare copper braid (85% coverage). Laminated foil shielded pairs are also available. They are jacketed with colored, flame-retardant 70°C • 158°F polyvinyl chloride and comply with international requirements. Available in other gauges.

Jute Filler – Individual core interstice fillers distribute interlayer pressure and reduce conductor friction. All fillers are electrical-grade dry jute.

REGARDING UTP COMMUNICATIONS CABLES

NEC code 620.12 A does not allow any conductor smaller than 20 AWG within traveling cable. Therefore, standard Cat5, Cat5e, and Cat6 UTP are not an option for traveling cable. **Call Draka EHC at 877-372 5237 for our Cat5e-equivalent solution for Ethernet transmission in traveling cable.**

COAXIAL CABLE SPECIFICATIONS

RG6/U Coaxial Cable – Primarily for CCTV applications. 75 ohm, UL listed, CSA certified. Center conductor is 20 AWG stranded copper insulated with cellular polyethylene, wrapped with aluminum tape, braided with tinned copper and jacketed with flame-retardant PVC.

Attenuation is 2.13 dB/100m @ 10 MHz and 5.08 dB/100m @ 50 MHz. Capacitance measures 56.7 pf/m.

RG11/U Coaxial Cable – Optional 75 ohm, UL listed. Center conductor is 14 AWG • 2.0 mm^2 soft drawn stranded copper insulated with cellular polyethylene, braided with bare copper for 97% coverage, and jacketed with flame-retardant PVC.

Attenuation is 2.16 dB/100m @ 10 MHz and 4.26 dB/100m @ 50 MHz. Capacitance measures 56.7 pf/m.

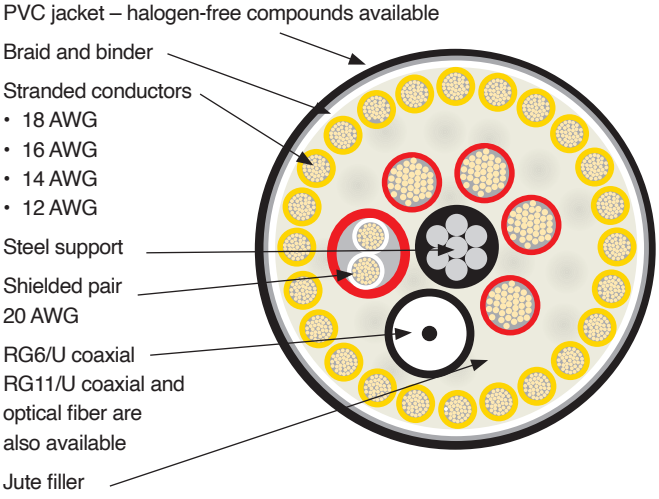
FIBER OPTIC SPECIFICATIONS

62.5/125 micron (OM1) tight-buffered multimode optical fiber, covered with high-strength aramid yarn and jacketed with flame-retardant polyvinyl chloride.

Maximum attenuation is 3.75 dB/km @ 850 nm and 1.5 dB/km @ 1300 nm.
Minimum bandwidth is 160 MHz•km @ 850 nm and 500 MHz•km @ 1300 nm.

Other optical fibers are available including 50/125 micron (OM2) multimode, 50/125 micron (OM3) laser-optimized multimode, and single mode.

SUPER-FLEX ROUND CABLE CROSS-SECTION (TYPICAL)



BENFIELD ELECTRIC AND ELEVATOR SUPPLY CORP

(718) 706 8600

Standards and Insulation Color Key

for Draka EHC cables

STANDARDS AND CERTIFICATIONS

ISO 9001

Draka EHC's Rocky Mount manufacturing and distribution center were assessed and accredited for ISO 9001 Quality Management System by SGS.

ISO 14001

Draka EHC has been accredited for ISO 14001 Environmental Management Systems by by SGS.

UL Listed

Listed cables are approved for use in the US and meet all pertinent requirements of Underwriter's Laboratories.

NEC Compliant

Compliant cables meet all pertinent requirements of the 2011 National Electric Code.

CSA Certified

Certified cables meet all pertinent requirements of the Canadian Standards Association.

US Dept. of Labor Mine Safety

Approved cables meet all pertinent requirements of the US DOL for mine safety.

Bureau Veritas

ETT round traveling cables are certified and approved for marine and offshore applications.

Pennsylvania Bureau of Deep Mine Safety

Approved cables meet all pertinent requirements of the PBDMS.

IEC Compliant

Compliant cables are approved for use in Europe and meet IEC requirements.

JIS (Japanese Standards)

Compliant cables are available upon request.

Please consult all local regulations and codes prior to ordering cables. Some Draka EHC cables are manufactured to meet the specific codes of a country or region and may not be applicable for your application.

COLOR CODES

14 AWG CONDUCTORS

Pair Number(s)	Jacket Color
1*	Black
2*	White
3*	Green
4 to 10	Lavender
11 to 20	Orange
21 to 30	Tan

*No printed numbers.

If the cable has only 4 conductors, the #4 lavender is not numbered.

16 AWG and 18 AWG CONDUCTORS

Pair Number(s)	Jacket Color
1 to 10	Yellow
11 to 20	Orange
21 to 30	Tan
31 to 40	Blue
41 to 50	Red
51 to 60	Grey
61 to 70	Black
71 to 80	Pink
81 to 90	Brown

20 AWG SHIELDED PAIR

Pair Number(s)	Jacket Color	Pair Colors
1	Red	Red/White
2	Black	Red/White
3	Yellow	Red/White
4	Orange	Red/White
5	Tan	Red/White
6	Blue	Red/White
7	Grey	Red/White
8	Pink	Red/White
9	Red	Black/White
10	Black	Black/White
11	Yellow	Black/White
12	Orange	Black/White
13	Tan	Black/White
14	Blue	Black/White
15	Grey	Black/White
16	Pink	Black/White

AWG TO METRIC CONVERSIONS

Pair Number(s)	Jacket Color
12 AWG	3.31 mm^2 - 65 strands
14 AWG	2.08 mm^2 - 41 strands
16 AWG	1.31 mm^2 - 26 strands
18 AWG	0.82 mm^2 - 16 strands
20 AWG	0.52 mm^2 - 10 strands

Super-Flex® Traveling Cable Type ETT/300V

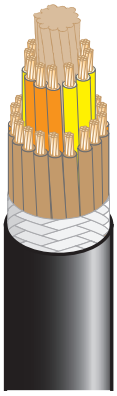
Jute center – UL listed, CSA certified, NEC/CEC compliant – LIFETIME WARRANTY

POWER AND SIGNAL CONDUCTORS

LIFETIME WARRANTY

Part Number	Product Code	Number/Size of Conductors	Max. Hang Length feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-410-01	J 10-18	10 / 18 AWG	200 • 61	0.54 • 13.7	160 • 238
18-420-01	J 20-18	20 / 18 AWG	200 • 61	0.71 • 18.0	266 • 396
18-430-01	J 30-18	30 / 18 AWG	200 • 61	0.82 • 20.8	378 • 562
18-440-01	J 40-18	40 / 18 AWG	200 • 61	0.92 • 23.4	475 • 707

†"SP" denotes special color coding and/or conductor numbering.



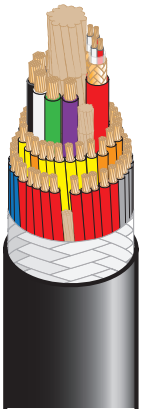
POWER, SIGNAL CONDUCTORS AND SHIELDED PAIRS

LIFETIME WARRANTY

Part Number	Product Code	Number/Size of Conductors	Max. Hang Length feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-027-02	JC 27	3 / 14 AWG 20 / 18 AWG 2 shielded pair / 20 AWG	200 • 61	0.94 • 23.8	466 • 693
18-431-02	JC 37	4 / 14 AWG 31 / 18 AWG 1 shielded pair / 20 AWG	200 • 61	1.00 • 25.4	672 • 1000
18-032-99	JC 45	4 / 14 AWG 39 / 18 AWG 1 shielded pair / 20 AWG	200 • 61	1.00 • 25.4	617 • 918
18-059-02	JC 59	4 / 14 AWG 49 / 18 AWG 3 shielded pair / 20 AWG	200 • 61	1.22 • 30.1	872 • 1298
18-456-02	JC 66	4 / 14 AWG 56 / 18 AWG 3 shielded pair / 20 AWG	200 • 61	1.33 • 33.8	955 • 1421
18-764-05	JC 79 SP†	7 / 14 AWG 64 / 18 AWG 4 shielded pair / 20 AWG NOTE: 14 AWG conductor #7 is dark blue	200 • 61	1.45 • 36.8	1200 • 1786

†"SP" denotes special color coding and/or conductor numbering.

RG11/U coax and multimode optical fiber are available as options. See page 4 for specifics on these cables.



Use these tools to prepare Super-Flex traveling cable. See page 37 for details.

36-060 FlexiPeeler™ round cable stripper

36-146 Super Peeler round cable stripper

36-177 Sock Slicer™

BENFIELD ELECTRIC AND ELEVATOR SUPPLY CORP

(718) 706 8600

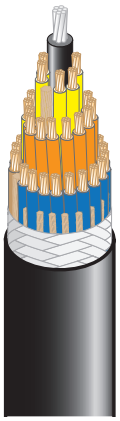
Super-Flex® Traveling Cable Type ETT/300V

Steel center – UL listed, CSA certified, NEC/CEC compliant – LIFETIME WARRANTY

POWER AND SIGNAL CONDUCTORS

LIFETIME WARRANTY

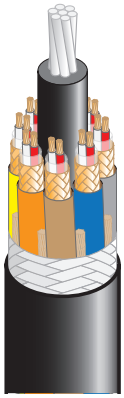
Part Number	Product Code	Number/Size of Conductors	Steel Core Dia. inches • mm	Max. Hang Length† feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-004-11	WS 4-14	4 / 14 AWG	3/32 • 2.4	900 • 275	0.57 • 14.4	166 • 247
18-008-11	WS 8-14	8 / 14 AWG	1/8 • 3.2	900 • 275	0.70 • 17.8	293 • 436
18-015-11	WS 15-14	15 / 14 AWG	1/8 • 3.2	900 • 275	0.93 • 23.6	487 • 725
18-310-11	WS 10-18	10 / 18 AWG	3/32 • 2.4	900 • 275	0.56 • 14.2	175 • 260
18-420-11	WS 20-18	20 / 18 AWG	3/32 • 2.4	804 • 245	0.71 • 18.0	286 • 426
18-430-11	WS 30-18	30 / 18 AWG	1/8 • 3.2	900 • 275	0.82 • 20.8	417 • 620
18-440-11	WS 40-18	40 / 18 AWG	1/8 • 3.2	900 • 275	0.92 • 23.4	509 • 757
18-450-11	WS 50-18	50 / 18 AWG	1/8 • 3.2	795 • 242	1.01 • 25.7	629 • 936



SHIELDED PAIRS ONLY

LIFETIME WARRANTY

Part Number	Product Code	Number/Size of Conductors	Steel Core Dia. inches • mm	Max. Hang Length† feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-002-15	WSCC 4x20 SH	4 shielded pair / 20 AWG	1/8 • 3.2	900 • 275	0.79 • 20.0	330 • 491
18-003-15	WSCC 6x20 SH	6 shielded pair / 20 AWG	1/8 • 3.2	900 • 275	0.85 • 21.6	365 • 543
18-004-15	WSCC 8x20 SH	8 shielded pair / 20 AWG	5/32 • 4.0	900 • 275	1.00 • 25.4	490 • 729
18-403-15	WSCC 6x18 SH	6 shielded pair / 18 AWG	5/32 • 4.0	900 • 275	0.93 • 23.6	418 • 622
18-407-15	WSCC 14x18 SH	14 shielded pair / 18 AWG	5/32 • 4.0	714 • 218	1.44 • 36.6	981 • 1460



†For longer hang length applications, call with your requirements.

RG11/U coax and multimode optical fiber are available as options. See page 4 for specifics on these cables.

Cat5e-equivalent cable is now available,
permitting 1 Gb/s Ethernet to reach the elevator cabin.

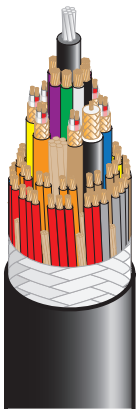
Super-Flex® Traveling Cable Type ETT/300V

Steel center – UL listed, CSA certified, NEC/CEC compliant – LIFETIME WARRANTY

POWER, SIGNAL AND SHIELDED PAIRS

LIFETIME WARRANTY

Part Number	Product Code	Number/Size of Conductors	Steel Core Dia. inches • mm	Max. Hang Length† feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-421-12	CWS 27	4 / 14 AWG 21 / 18 AWG 1 shielded pair / 20 AWG	5/32 • 4.0	900 • 275	0.96 • 24.4	500 • 744
18-648-12	CWS 56	6 / 14 AWG 48 / 18 AWG 1 shielded pair / 20 AWG	5/32 • 4.0	826 • 252	1.20 • 30.5	847 • 1260
18-L58-12	CWS 58 LO	4 / 14 AWG (conductors are numbered 1 to 4) 40 / 18 AWG (conductors are numbered 1 to 40) 7 shielded pair / 20 AWG (red/white pairs in red, black, yellow, orange, tan, blue and gray jackets)	5/32 • 4.0	622 • 190	1.51 • 38.4	1125 • 1674
18-H58-12	CWS 58 HI	4 / 14 AWG (conductors are numbered 5 to 8 [dark blue]) 40 / 18 AWG (conductors are numbered 41 to 80) 7 shielded pair / 20 AWG (black/white pairs in red, black, yellow, orange, tan, blue and gray jackets)	5/32 • 4.0	622 • 190	1.51 • 38.4	1125 • 1674
18-059-12	CWS 59	4 / 14 AWG 49 / 18 AWG 3 shielded pair / 20 AWG	5/32 • 4.0	791 • 241	1.22 • 31.0	885 • 1317
18-661-12	CWS 71	6 / 14 AWG 61 / 18 AWG 2 shielded pair / 20 AWG	5/32 • 4.0	614 • 187	1.39 • 35.3	1140 • 1696
18-881-12	CWS 81	8 / 14 AWG 59 / 18 AWG 7 shielded pair / 20 AWG	5/32 • 4.0	524 • 160	1.60 • 40.6	1336 • 1988
18-X90-12	CWS 90	6 / 14 AWG 80 / 18 AWG 2 shielded pair / 20 AWG	5/32 • 4.0	555 • 169	1.46 • 37.1	1262 • 1878
18-X94-12	CWS 94	12 / 14 AWG 70 / 18 AWG 6 shielded pair / 18 AWG	1/4 • 6.4	900 • 275	1.68 • 42.7	1663 • 2475
18-096-12	CWS 96	86 / 18 AWG 5 shielded pair / 20 AWG	5/32 • 4.0	576 • 176	1.42 • 36.1	1215 • 1808



†For longer hang length applications, call with your requirements.

RG11/U coax and multimode optical fiber are available as options. See page 4 for specifics on these cables.

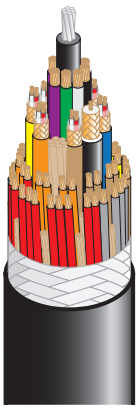
Super-Flex® Traveling Cable Type ETT/300V

Steel center – UL listed, CSA certified, NEC/CEC compliant – LIFETIME WARRANTY

POWER, SIGNAL, SHIELDED PAIRS AND COAX

LIFETIME WARRANTY

Part Number	Product Code	Number/Size of Conductors	Steel Core Dia. inches • mm	Max. Hang Length† feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-X05-13	CSX 5	3 / 14 AWG 2 coax / RG6/U	5/32 • 4.0	900 • 275	1.13 • 28.7	500 • 742
18-309-13	CSX 9	4 / 14 AWG 2 shielded pairs / 20 AWG 1 coax / RG6/U	5/32 • 4.0	900 • 275	0.87 • 22.1	370 • 550
18-214-13	CSX 14	6 shielded pairs / 20 AWG 2 coax / RG6/U	5/32 • 4.0	900 • 275	1.06 • 26.9	570 • 848
18-X18-13	CSX 18-6	8 shielded pair / 20 AWG 2 RG6/U coax	5/32 • 4.0	900 • 275	1.24 • 31.5	710 • 1056
18-X36-13	CSX 36	17 / 14 AWG 8 shielded pairs / 20 AWG 3 coax / RG6/U	1/4 • 6.4	900 • 275	1.61 • 40.9	1271 • 1891
18-X47-13	CSX 47	4 / 14 AWG 30 / 18 AWG 6 shielded pairs / 20 AWG 1 coax / RG6/U	5/32 • 4.0	740 • 226	1.35 • 34.3	946 • 1408
18-247-13	CSX 47 O	8 / 14 AWG 30 / 18 AWG 4 shielded pair / 20 AWG 1 coax / RG6/U	5/32 • 4.0	642 • 196	1.41 • 35.8	1090 • 1622
18-X53-13	CSX 53	4 / 14 AWG 45 / 18 AWG 1 shielded pair / 20 AWG 2 coax / RG6/U	5/32 • 4.0	711 • 217	1.34 • 34.0	985 • 1466
18-X55-13	CSX 55	4 / 14 AWG 46 / 18 AWG 2 shielded pair / 20 AWG 1 RG59/U coax	5/32 • 4.0	792 • 241	1.21 • 30.7	883 • 1314
18-X57-13	CSX 57	4 / 14 AWG 40 / 18 AWG 6 shielded pair / 20 AWG 1 coax / RG6/U	5/32 • 4.0	612 • 187	1.53 • 38.9	1144 • 1702
18-X61-13	CSX 61	7 / 14 AWG 27 / 18 AWG 13 shielded pair / 20 AWG 1 coax / RG6/U	1/4 • 6.4	900 • 275	1.65 • 41.9	1373 • 2043



†For longer hang length applications, call with your requirements.

RG6/U is the standard coaxial cable used in CSX-series Super-Flex cables and the preferred cable for CCTV purposes.

RG11/U coax and multimode optical fiber are available as options. See page 4 for specifics on these cables.

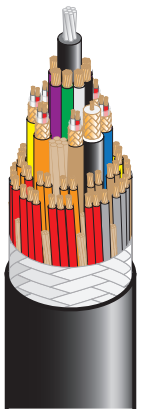
Super-Flex® Traveling Cable Type ETT/300V

Steel center – UL listed, CSA certified, NEC/CEC compliant – LIFETIME WARRANTY

POWER, SIGNAL, SHIELDED PAIRS AND COAX

LIFETIME WARRANTY

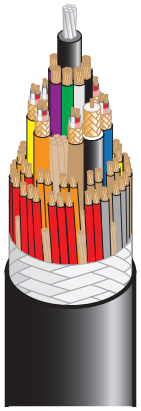
Part Number	Product Code	Number/Size of Conductors	Steel Core Dia. inches • mm	Max. Hang Length† feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-X62-13	CSX 62 SP††	12 / 14 AWG 29 / 18 AWG 10 shielded pair / 20 AWG 1 coax / RG6/U	5/32 • 4.0	525 • 160	1.59 • 40.4	1334 • 1985
18-X69-13	CSX 69	5 / 14 AWG 40 / 18 AWG 11 shielded pair / 20 AWG 2 RG6/U coax	1/4 • 6.4	900 • 275	1.57 • 39.9	1340 • 1994
18-175-13	CSX 75 O	20 / 14 AWG 38 / 18 AWG 8 shielded pair / 20 AWG 1 coax / RG6/U	1/4 • 6.4	900 • 275	1.58 • 40.1	1472 • 2190
18-875-13	CSX 75 T	8 / 14 AWG 54 / 18 AWG 6 shielded pair / 20 AWG 1 RG6/U coax	5/32 • 4.0	542 • 165	1.58 • 40.1	1290 • 1920
18-377-13	CSX 77	4 / 14 AWG 69 / 18 AWG 1 shielded pair / 20 AWG 2 coax / RG6/U	5/32 • 4.0	532 • 162	1.64 • 41.6	1315 • 1957
18-X77-13	CSX 77 S	4 / 14 AWG 60 / 18 AWG 6 shielded pair / 20 AWG 1 coax / RG6/U	1/4 • 6.4	900 • 275	1.52 • 38.6	1269 • 1888
18-083-13	CSX 83	20 / 14 AWG 35 / 18 AWG 13 shielded pair / 20 AWG 2 coax / RG6/U	1/4 • 6.4	900 • 275	1.92 • 48.8	1808 • 2690



POWER, SIGNAL, SHIELDED PAIRS AND FIBER OPTICS

LIFETIME WARRANTY

Part Number	Product Code	Number/Size of Conductors	Steel Core Dia. inches • mm	Max. Hang Length† feet • meters	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-005-16	CSF 5	3 / 14 AWG 2 optical fibers / 62.5μm (OM1)	3/32 • 2.4	900 • 275	0.87 • 22.1	370 • 550
18-061-16	CWSF 61	4 / 14 AWG 49 / 18 AWG 3 shielded pair / 20 AWG 2 optical fibers / 62.5μm (OM1)	1/4 • 6.4	900 • 275	1.36 • 34.5	1125 • 1674



†For longer hang length applications, call with your requirements.

††"SP" denotes special color coding and/or conductor numbering.

RG6/U is the standard coaxial cable used in CSX-series Super-Flex cables and the preferred cable for CCTV purposes. RG11/U coax and multimode optical fiber are available as options. See page 4 for specifics on these cables.

Round Cable Hanging Accessories

For jute and steel center traveling cable installation

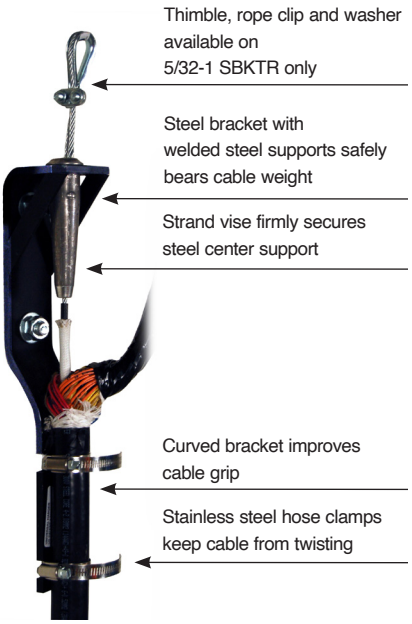
UNIVERSAL HANGING SYSTEM - US PATENT 5,080,199

Part Number	For Steel Core Dia. inches • mm	Number of Cables Held	Max. Load per Cable lbs • kg
3/32-1 SBKT	3/32 • 2.4	1 cable	500 • 227
1/8-1 SBKT	1/8 • 3.2	1 cable	500 • 227
5/32-1 SBKT-R	5/32 • 4.0	1 cable	700 • 318
1/4-1 SBKT	1/4 • 6.4	1 cable	1750 • 794

The Universal Hanging System is based around our patented Steel-Core Hanging Device which is designed to solidly grip and support the steel wire support member. It also safely secures the cable to the welded steel bracket thus preventing rotation.

The Universal Hanging System is a safe and effective unit that saves time and labor. It also has the added benefit of not having to bend (and possibly compromise) the steel support as required in other termination methods.

The Universal Hanging System is available in one and two cable configurations and comes as a kit with all installation hardware. Order two kits per cable, one for the car and one for the hoistway.



UNIVERSAL HANGING SYSTEM FOR TWO CABLES

Part Number	For Steel Core Dia. inches • mm	Number of Cables Held	Max. Load per Cable lbs • kg
5/32-2 SBKT-R	5/32 • 4.0	2 cables	700 • 318
1/4-2 SBKT	1/4 • 6.4	2 cables	1250 • 568

These are two-cable versions of the Universal Hanging System.

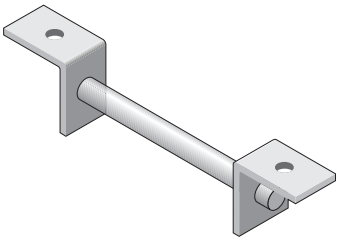
REPLACEMENT STRAND VISES

Part Number	Description
3/32 PINS-A	Replacement strand vise for 3/32 in. rope
1/8 PINS-A	Replacement strand vise for 1/8 in. rope
5/32 PINS-A	Replacement strand vise for 5/32 in. rope
1/4 PINS-A	Replacement strand vise for 1/4 in. rope

Replacement strand vises are for use ONLY in Universal Hanging Systems in both one and two cable configurations.

JUTE CORE TRAVELING CABLE HANGER FOR MESH GRIPS

Part Number	Description
HGRJC-8	Bracket used to hold/support grips that hold jute core cables - 8 in. • 20 cm clear between brackets



BEAM PADS

Part Number	Description
22-022	Scotch® 2200 beam pads, 6-1/2 x 4-1/2 x 1/8 in. • 165 x 114 x 6 mm

Draka EHC recommends beam pads be applied to surfaces where there may be occasional contact by the traveling cable.

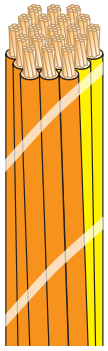
Super-Duct® Hoistway Cable/600V

Jacketed and unjacketed – UL listed, CSA certified, NEC/CEC compliant

UNJACKETED – POWER AND SIGNAL CONDUCTORS

LIFETIME WARRANTY

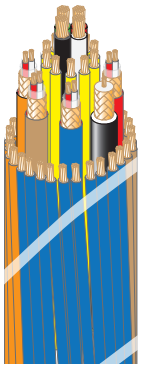
Part Number	Product Code	Number/Size of Conductors	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km
18-003-41	WOJ 3-14	3 / 14 AWG	0.31 • 7.9	59 • 88
18-604-47	WOJ 4-14	4 / 14 AWG (insulation colors are red, white, black and green)	0.35 • 9.0	79 • 118
18-008-47	WOJ 8-14 SP†	8 / 14 AWG (Conductors colors are #1 / green, #2 to 4 / white, #5 to 8 / black)	0.50 • 12.7	158 • 235
18-014-41	WOJ 14-14	14 / 14 AWG	0.63 • 16.0	276 • 411
18-404-41	WOJ 4-18	4 / 18 AWG	0.27 • 6.9	41 • 61
18-407-41	WOJ 7-18	7 / 18 AWG	0.34 • 8.6	72 • 107
18-410-41	WOJ 10-18	10 / 18 AWG	0.43 • 10.9	103 • 153
18-414-41	WOJ 14-18	14 / 18 AWG	0.49 • 12.4	144 • 214
18-419-41	WOJ 19-18	19 / 18 AWG	0.56 • 14.2	195 • 290
18-424-41	WOJ 24-18	24 / 18 AWG	0.66 • 16.8	234 • 349
18-430-41	WOJ 30-18	30 / 18 AWG	0.72 • 18.3	307 • 457
18-437-41	WOJ 37-18	37 / 18 AWG	0.78 • 19.8	380 • 566
18-437-47	WOJ 37-18 SP†	37 / 18 AWG (conductors are numbered 38 to 74)	0.78 • 19.8	380 • 566
18-442-41	WOJ 42-18	42 / 18 AWG	0.84 • 21.3	432 • 64
18-461-41	WOJ 61-18	61 / 18 AWG	0.98 • 24.9	625 • 930



UNJACKETED – POWER, SIGNAL, SHIELDED PAIRS AND COAX / 300V AND 600V

LIFETIME WARRANTY

Part Number	Product Code	Number/Size of Conductors	Cable Nom. OD inches • mm	Cable Net Weight lbs/kft • kg/km	Rated Voltage
18-449-42	CWOJ 49	4 / 14 AWG 45 /18 AWG	0.98 • 24.9	530 • 789	600V
18-57X-42	CWOJ 57	4 / 14 AWG 40 / 18 AWG 6 shielded pair / 20 AWG 1 coax / RG6/U	1.13 • 28.7	612 • 913	300V
18-661-42	CWOJ 71	6 / 14 AWG 61 / 18 AWG 2 shielded pair / 20 AWG	1.18 • 30.0	816 • 1214	600V
18-X77-42	CWOJ 77	4 / 14 AWG 60 / 18 AWG 6 shielded pair / 20 AWG 1 coax / RG6/U	1.22 • 31.0	831 • 1237	300V



90° C-rated conductors are available upon request.

†"SP" denotes special color coding and/or conductor numbering.

Metal Wireway

UL 870 and CSA C22.2 No. 26, meets elevator industry standards

GALVANIZED STEEL WIREWAY

LIFETIME WARRANTY

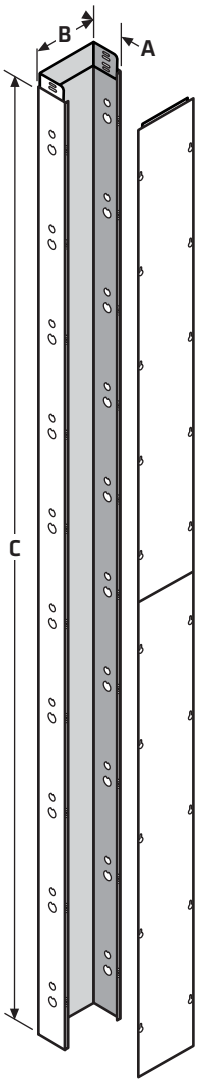
Part Number	Dimension A inches	Dimension B inches	Dimension C inches
UGTR 2525120CSA	2-1/2	2-1/2	120
UGTR 254120CSA	2-1/2	4	120
UGTR 256120CSA	2-1/2	6	120
UGTR 258120CSA	2-1/2	8	120
UGTR 44120CSA	4	4	120
UGTR 46120CSA	4	6	120
UGTR 48120CSA	4	8	120
UGTR 66120CSA	6	6	120
UGTR 88120CSA	8	8	120

Wireway comes with two five-foot covers, #10-5/16 hexhead screws, screw protection and spot-welded coupling on one end.

Tolerances: Inside dimensions from 0 to + 1/16 in.; joints, corners and adjoining edges to + 1/32 in.; screw and hole placement to + 1/32 in.

Materials: Hot-dipped, mill-galvanized steel

General: Uniform knockouts 1/2 in. and 3/4 in. every 12 in. EXCEPT FOR UGTR 254120CSA which has knockouts 1/2 in., 3/4 in. and 1 in. every 12 in.



COVERS AND SCREWS

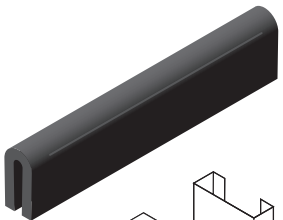
Part Number	Description	Dimension B inches	Dimension C inches
C U25	Cover	2-1/2	60
C U44	Cover	4	60
C U66	Cover	6	60
C U88	Cover	8	60
59-020	Cover screw #10-32 x 5/16		

WIREWAY NUTS & BOLTS – USED TO ATTACH FITTINGS TO WIREWAY

Part Number	Description and Size inches	Standard Packaging
26-006A	1/4 x 1/2 nut and round-headed machine screw	25
26-006B	1/4 x 1/2 nut and round-headed machine screw	50
26-006C	1/4 x 1/2 nut and round-headed machine screw	100

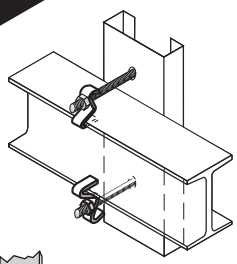
PLASTIC U-CHANNEL EDGE PROTECTION

Part Number	Description
19-003	Edge protection, plastic U-channel, available in 100 ft. rolls



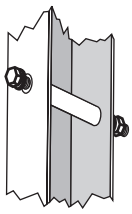
WIREWAY MOUNTING BRACKET KIT USED TO ATTACH WIREWAY TO I-BEAMS

Part Number	Description
TR-MTG-KIT	Bracket, with 5 in. mounting bolt, nut and two washers



STRAIN BARS

Part Number	For wireway width inches
STB 25	2-1/2
STB 4	4
STB 6	6
STB 8	8



The NEC requires supports, like strain bars, to be used every 100 ft. in wireway.

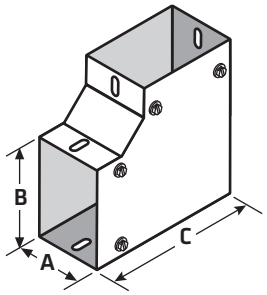
Metal Wireway

UL 870 and CSA C22.2 No. 26

90° ELBOWS/TYPE C

LIFETIME WARRANTY

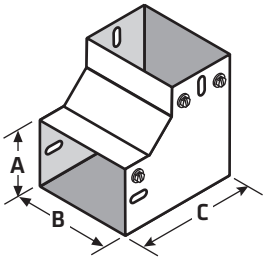
Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UL90 2525CSA	2-1/2	2-1/2	6-1/4	UGTR 2525120CSA
UL90 254CSA	2-1/2	4	7-3/4	UGTR 254120CSA
UL90 256CSA	2-1/2	6	9-3/4	UGTR 256120CSA
UL90 258CSA	2-1/2	8	11-3/4	UGTR 258120CSA
UL90 44CSA	4	4	7-3/4	UGTR 44120CSA
UL90 46CSA	4	6	9-3/4	UGTR 46120CSA
UL90 48CSA	4	8	11-3/4	UGTR 48120CSA
UL90 66CSA	6	6	9-3/4	UGTR 66120CSA
UL90 88CSA	8	8	11-3/4	UGTR 88120CSA



90° ELBOWS/TYPE D

LIFETIME WARRANTY

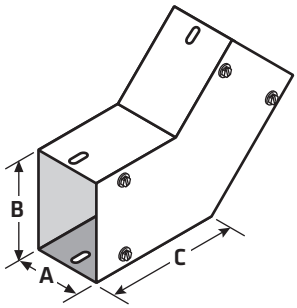
Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UL90 425CSA	2-1/2	4	6-1/4	UGTR 254120CSA
UL90 625CSA	2-1/2	6	6-1/4	UGTR 256120CSA
UL90 825CSA	2-1/2	8	6-1/4	UGTR 258120CSA
UL90 64CSA	4	6	7-3/4	UGTR 46120CSA
UL90 84CSA	4	8	7-3/4	UGTR 48120CSA



45° ELBOWS/TYPE C

LIFETIME WARRANTY

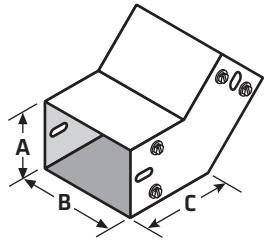
Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UL45 2525CSA	2-1/2	2-1/2	4-9/16	UGTR 2525120CSA
UL45 254CSA	2-1/2	4	5-1/4	UGTR 254120CSA
UL45 256CSA	2-1/2	6	6	UGTR 256120CSA
UL45 258CSA	2-1/2	8	6-1/2	UGTR 258120CSA
UL45 44CSA	4	4	5-1/4	UGTR 44120CSA
UL45 46CSA	4	6	6	UGTR 46120CSA
UL45 48CSA	4	8	6-1/2	UGTR 48120CSA
UL45 66CSA	6	6	6	UGTR 66120CSA
UL45 88CSA	8	8	6-1/2	UGTR 88120CSA



45° ELBOWS/TYPE D

LIFETIME WARRANTY

Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UL45 425CSA	2-1/2	4	4-9/16	UGTR 254120CSA
UL45 625CSA	2-1/2	6	4-9/16	UGTR 256120CSA
UL45 825CSA	2-1/2	8	4-9/16	UGTR 258120CSA
UL45 64CSA	4	6	5-1/4	UGTR 46120CSA
UL45 84CSA	4	8	5-1/4	UGTR 48120CSA



Elbows come with #10-5/16 hexhead screws & screw protection.

Special size wireway and wireway without knockouts are available with short lead times.

Tolerances: Inside dimensions from 0 to + 1/16 in.;
joints, corners and adjoining edges to + 1/32 in.;
screw and hole placement to + 1/32 in.;

Materials: Hot-dipped, mill-galvanized steel

General: Connector slots 3/4 x 1/4 in.

Metal Wireway

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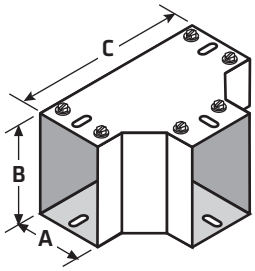
TEES/TYPE C

LIFETIME WARRANTY

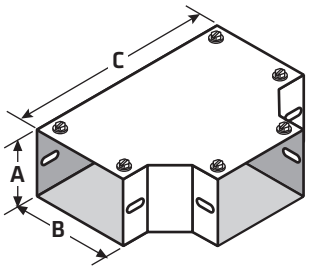
Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UTEE 2525CSA	2-1/2	2-1/2	9-7/8	UGTR 2525120CSA
UTEE 254CSA	2-1/2	4	9-7/8	UGTR 254120CSA
UTEE 256CSA	2-1/2	6	9-7/8	UGTR 256120CSA
UTEE 258CSA	2-1/2	8	9-7/8	UGTR 258120CSA
UTEE 44CSA	4	4	11-3/8	UGTR 44120CSA
UTEE 46CSA	4	6	11-3/8	UGTR 46120CSA
UTEE 48CSA	4	8	11-3/8	UGTR 48120CSA
UTEE 66CSA	6	6	13-3/8	UGTR 66120CSA
UTEE 88CSA	8	8	15-3/8	UGTR 88120CSA



TEES/TYPE D

LIFETIME WARRANTY

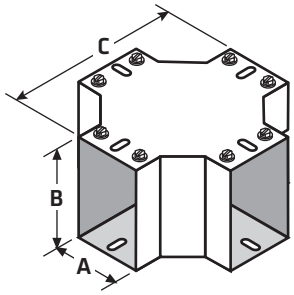
Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UTEE 425CSA	2-1/2	4	11-3/8	UGTR 254120CSA
UTEE 625CSA	2-1/2	6	13-3/8	UGTR 256120CSA
UTEE 825CSA	2-1/2	8	15-3/8	UGTR 258120CSA
UTEE 64CSA	4	6	13-3/8	UGTR 46120CSA
UTEE 84CSA	4	8	15-3/8	UGTR 48120CSA



CROSSOVERS/TYPE C

LIFETIME WARRANTY

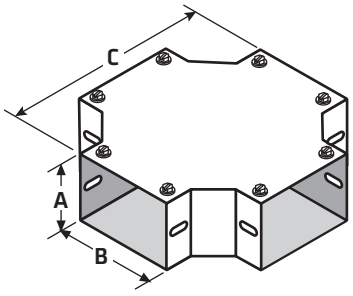
Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UCRS 2525CSA	2-1/2	2-1/2	9-7/8	UGTR 2525120CSA
UCRS 254CSA	2-1/2	4	9-7/8	UGTR 254120CSA
UCRS 256CSA	2-1/2	6	9-7/8	UGTR 256120CSA
UCRS 258CSA	2-1/2	8	9-7/8	UGTR 258120CSA
UCRS 44CSA	4	4	11-3/8	UGTR 44120CSA
UCRS 46CSA	4	6	11-3/8	UGTR 46120CSA
UCRS 48CSA	4	8	11-3/8	UGTR 48120CSA
UCRS 66CSA	6	6	13-3/8	UGTR 66120CSA
UCRS 88CSA	8	8	15-3/8	UGTR 88120CSA



CROSSOVERS/TYPE D

LIFETIME WARRANTY

Part Number	Dimension A inches	Dimension B inches	Dimension C inches	For use with Wireway P/N
UCRS 425CSA	2-1/2	4	11-3/8	UGTR 254120CSA
UCRS 625CSA	2-1/2	6	13-3/8	UGTR 256120CSA
UCRS 825CSA	2-1/2	8	15-3/8	UGTR 258120CSA
UCRS 64CSA	4	6	13-3/8	UGTR 46120CSA
UCRS 84CSA	4	8	15-3/8	UGTR 48120CSA



Tees and crossovers come with #10-5/16 hexhead screws and screw protection.

Special size wireway and wireway without knockouts are available with short lead times.

Tolerances: Inside dimensions from 0 to + 1/16 in.; joints, corners and adjoining edges to + 1/32 in.; screw and hole placement to + 1/32 in.

Materials: Hot-dipped, mill-galvanized steel

General: Connector slots 3/4 x 1/4 in.

BENFIELD ELECTRIC AND ELEVATOR SUPPLY CORP

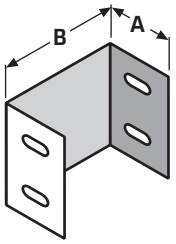
Metal Wireway

UL 870 and CSA C22.2 No. 26

COUPLINGS

LIFETIME WARRANTY

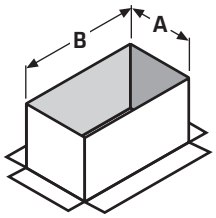
Part Number	Dimension A inches	Dimension B inches
UCON 2525CSA	2-1/8	2-7/16
UCON 254CSA	2-1/8	3-15/16
UCON 256CSA	2-1/8	5-15/16
UCON 258CSA	2-1/8	7-15/16
UCON 44CSA	3-5/8	3-15/16
UCON 46CSA	3-5/8	5-15/16
UCON 48CSA	3-5/8	7-15/16
UCON 66CSA	5-5/8	5-15/16
UCON 88CSA	7-5/8	7-15/16



PANEL CONNECTORS

LIFETIME WARRANTY

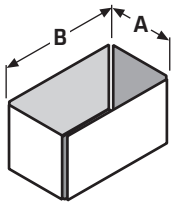
Part Number	Dimension A inches	Dimension B inches
UPCN 2525CSA	2-1/8	2-7/16
UPCN 254CSA	2-1/8	3-15/16
UPCN 256CSA	2-1/8	5-15/16
UPCN 258CSA	2-1/8	7-15/16
UPCN 44CSA	3-5/8	3-15/16
UPCN 46CSA	3-5/8	5-15/16
UPCN 48CSA	3-5/8	7-15/16
UPCN 66CSA	5-5/8	5-15/16
UPCN 88CSA	7-5/8	7-15/16



END PLATES

LIFETIME WARRANTY

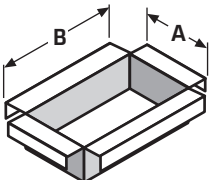
Part Number	Dimension A inches	Dimension B inches
UEPT 2525CSA	2-1/8	2-7/16
UEPT 254CSA	2-1/8	3-15/16
UEPT 256CSA	2-1/8	5-15/16
UEPT 258CSA	2-1/8	7-15/16
UEPT 44CSA	3-5/8	3-15/16
UEPT 46CSA	3-5/8	5-15/16
UEPT 48CSA	3-5/8	7-15/16
UEPT 66CSA	5-5/8	5-15/16
UEPT 88CSA	7-5/8	7-15/16



INSULATED BUSHINGS

LIFETIME WARRANTY

Part Number	Dimension A inches	Dimension B inches
UISB 2525CSA	2-1/8	2-7/16
UISB 254CSA	2-1/8	3-15/16
UISB 256CSA	2-1/8	5-15/16
UISB 258CSA	2-1/8	7-15/16
UISB 44CSA	3-5/8	3-15/16
UISB 46CSA	3-5/8	5-15/16
UISB 48CSA	3-5/8	7-15/16
UISB 66CSA	5-5/8	5-15/16
UISB 88CSA	7-5/8	7-15/16



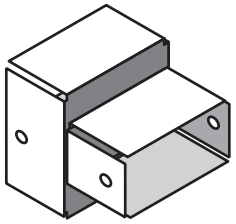
Special size wireway and wireway without knockouts are available with short lead times.

See page 17 for tolerances and materials.

Metal Wireway

UL 870 and CSA C22.2 No. 26

REDUCERS		
Part Number	**Adapts from this size... inches**	**to this size inches**
URED 2542525CSA	2-1/2 x 4	2-1/2 x 2-1/2
URED 254256CSA	2-1/2 x 4	2-1/2 x 6
URED 25666CSA	2-1/2 x 6	6 x 6
URED 25888CSA	2-1/2 x 8	8 x 8
URED 442525CSA	4 x 4	2-1/2 x 2-1/2
URED 44254CSA	4 x 4	2-1/2 x 4
URED 44256CSA	4 x 4	2-1/2 x 6
URED 4446CSA	4 x 4	4 x 6
URED 4448CSA	4 x 4	4 x 8
URED 46254CSA	4 x 6	2-1/2 x 4
URED 48254CSA	4 x 8	2-1/2 x 4
URED 6644CSA	6 x 6	4 x 4
URED 6664CSA	6 x 6	6 x 4
URED 8844CSA	8 x 8	4 x 4
URED 25844CSA	2-1/2 x 8	4 x 4
URED 48256CSA	4 x 8	2-1/2 X 6
URED 8848CSA	8 x 8	4 x 8
URED 8866CSA	8 x 8	6 x 6



Special size wireway and wireway without knockouts are available with short lead times.

Tolerances: Inside dimensions from 0 to + 1/16 in.;
joints, corners and adjoining edges to + 1/32 in.;
screw and hole placement to + 1/32 in.

Materials: Hot-dipped, mill-galvanized steel

Wire Rope Ordering Information

WIRE ROPE MANUFACTURED BY GUSTAV WOLF

IMPORTANT NOTE:
NEW WIRE ROPES AND EXISTING SHEAVES

IT IS STRONGLY RECOMMENDED that the sheaves of existing elevators be carefully checked and re-grooved or replaced as necessary prior to rope replacement.

The diameter of the new ropes is greater than that of the old ropes and failure to bring the sheave grooves into the machine manufacturer's specified tolerances can lead to vibration, metal shavings and other problems.

ORDERING HOIST ROPES

The information needed to order hoist ropes is the number (quantity), length and diameter of the ropes; the stranding, construction and lay; the grade or tensile strength; and the breaking force (load or strength). While this information may be provided on the wire rope tag, it should be noted that the tag information may not always be accurate; it is not uncommon to find that the wrong tag has been applied. Use the following procedure for ordering hoist ropes for a traction elevator:

1) Count the number of ropes on the elevator.

2) Determine the length of each rope. The length can often be found on the installation layout.

3) Measure the diameter of the rope. If you don't have a measuring tool, the crosshead data plate on top of the car should show the diameter or the diameter may be stamped on the existing shackles.

4) Determine the stranding and construction of the rope. Stranding is the number of strands per rope and the number of wires per strand (e.g. an 8-strand rope with 19 wires per strand has 8 x 19 stranding). Determine whether the rope has 6, 8 or 9 strands by looking at the shackles where the stranding is more easily seen. The rope construction (Seale, Warrington, Filler Wire, etc.) can be found by matching up the rope cross-section with the cross-sections shown in this catalog.

If there is not a crosshead data plate and the building is over 50 years old, the ropes used are usually 6 x 25 Filler Wire with Right Regular lay (most 6-strand hoist ropes are of this construction). An 8-strand hoist rope is usually 8 x 19 Seale. Lay can vary (see Step 5 below).

5) Determine the lay of the rope. Compare a Right Regular lay rope to a Right Lang lay rope:

Right Regular

Right Lang

Note that the orientation of the individual wires is parallel to the centerline in a Right Regular lay rope. Right Regular lay is assumed if the lay is not indicated on your order.

6) Determine the grade or tensile strength of the rope. In North America, grades are commonly expressed as Iron, Traction or Extra High Strength Traction (EHST).

Iron rope is normally used for governor and compensation ropes.

Traction rope can be used for hoist, governor and compensation applications.

Extra High Strength Traction (EHST) rope is frequently specified for high-rise/high-speed hoisting conditions.

Grade is sometimes expressed as tensile strength in Newtons/square millimeter (N/mm^2) or pounds/square inch (psi).

7) Determine the breaking force, which can aid in confirming the grade and is usually indicated on the crosshead data plate.

OTHER CONSIDERATIONS

Core: The purpose of the core is to provide support for the strands. Natural fiber is the most common core used in elevator ropes in North America. However, in some high-rise/high-speed, most MRL and certain hydraulic applications, the use of steel-reinforced or full steel core (IWRC) ropes is becoming more common.

Preforming: In the preforming process, the strands are formed into a helix (spiral) prior to closing. Preformed rope is the industry standard and provides longer service life while being easier to handle. All the ropes in this catalog are preformed.

Coating: Bright (uncoated) is the industry standard and comes without any coating on the rope other than lubrication. For protection from weather and corrosion (e.g. outdoor and mine elevators), the use of a galvanized coating is often recommended.

Compacted strands: A rope design with flattened wires/strands to increase contact area, reduce surface pressure and help to extend rope service life associated with rope fatigue due to reverse bends (e.g. basement machines).

Stretch/Elongation: Elevator wire rope stretch results from two main factors. Elastic stretch is an increase in rope length due to increase in load (as load increases, the rope becomes longer and narrower and vice versa). Constructional stretch is an increase in rope length due to the settling/compression of the core and strands when a load is applied (most occurs shortly after the rope is put into service). Ropes made by different manufacturers and ropes of different strandings, constructions, grades, etc. exhibit different stretch characteristics.

Wire Rope Ordering Information

ORDERING GOVERNOR AND/OR COMPENSATION ROPES

The ordering procedure is similar to hoist ropes but you may have to rely on the rope tag to a greater degree because there is no crosshead data plate for governor or compensation ropes. However:

1) Measure the diameter of the rope. Use a caliper, micrometer or Go/No Go gauge.

2) Go to the shackles and confirm the stranding (6 or 8) of the ropes. Almost all compensation and governor ropes have 8 strands.

Look at the rope tag to determine breaking strength and then refer to the information in this catalog or contact your Draka EHC representative for the correct grade (Iron or Traction).

3) Consider the rope grade or tensile strength. Governor and compensation ropes are either Iron or Traction – never Extra High Strength Traction (EHST).

4) Confirm the lay of the rope. Governor and compensation ropes are always Right Regular lay and never Right Lang lay.

OTHER CONSIDERATIONS

Preformed rope is always preferred for its longer life and ease of installation. Replace all governor and compensation ropes with preformed ropes.

HANDLING OF WIRE ROPES PRIOR TO AND DURING INSTALLATION

Reels are best transported on the job site by rolling on a clean flat surface or by lifting from a pipe in the reel center hole.

Wire rope should be stored indoors, off the ground and covered to protect it from moisture, dirt, dust, sunlight, etc.

Care must be taken to unroll and not laterally pull wire rope when paying it off the reel. Kinking and dragging ropes over sharp edges must be avoided.

Ropes must be prevented from rotating during installation since free-hanging ropes will untwist under their own weight. The use of reeving splices is recommended..

Loose rope ends should always be seized or secured with cable bands to prevent untwisting.

The installers should continually inspect wire rope during installation to identify any areas which may have been damaged in shipment or while in storage on the job site. Per ASME A17.1b-2009/CSA B44b-09 8.6.3.2 and ASME A17.6-2010 1.10.5, where one suspension rope has been damaged during installation or acceptance testing prior to being subjected to elevator service, it shall be permissible to replace a single damaged rope with a new rope, provided that the requirements of 8.6.3.2.1 through 8.6.3.2.6 and 1.10.4.4 and 1.10.5.1 through 1.10.5.6 respectively are met.

TENSIONING

It is important to equally tension all the hoist ropes immediately after installation and during subsequent inspections in order to avoid differential wear of sheave grooves and ropes and to extend rope service life.

Ropes are considered to be equally tensioned when the smallest tension measured is within 10% of the highest tension measured. Ropes with greater tension/load will press harder into the sheave grooves resulting in increased overall rope wear while ropes with lesser tension/load will slide through the sheave grooves causing increased crown and sheave wear.

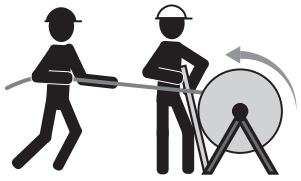
Highly accurate rope tension measuring devices are available which allow the quick and accurate checking of tension.

FIELD LUBRICATION POLICY

Draka EHC strongly recommends the use of a continuous lubrication device such as our Acculube™ automatic lubricator (see page 27). If the ropes are manually lubricated, they should be lubricated prior to summer and the increased temperature and humidity it brings. Condensation caused by the combination of an air conditioned machine room and a humid hoistway must be kept from entering the rope core.

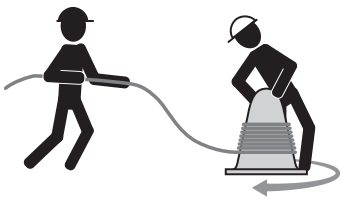
The practice of re-lubrication based on time interval alone is no longer valid. As already mentioned, ropes on modern elevators are subject to greater stress which requires that cycle counts also be considered when deciding the right time to re-lubricate. Studies show that following the 250,000 cycle guideline will contribute to extended rope service life. Never field lubricate governor ropes. See Draka EHC Tech Tip #6 for detailed lubrication instructions.

Wire rope may be paid off a reel supported by jack stands with a helper using a board as a brake...



...or by paying it off a coil as the helper rotates it...

...or by paying it off a bollard as the helper rotates it.



Gustav Wolf Wire Rope Selection Guide

Imperial diameters with part numbers, E-Module and elongation values

Application	Recommended Rope and Rope Part Number	Rope Description	E-Module† n/mm²	Stretch†† per 100' • 30 m of Hoist Rope (Elastic) + (Constructional) = Total in. (Elastic) + (Constructional) = Total mm
Hoist for Low/Mid-rise (up to 200' • 60 m)	F 819 S-FE DT 3/8" = 80-001-A 1/2" = 80-002-A 5/8" = 80-003-A 11/16" = 80-039-A	8x19 Seale traction grade fiber core	65000 - 70000	(2 - 3) + (2 - 4) = 4 - 7 in. (51 - 76) + (51 - 102) = 102 - 178 mm
Hoist for Mid/High-rise (> 200' • 60 m)	F 819 S-FE DT EHS 3/8" = 80-001EHS-A 1/2" = 80-002EHS-A 5/8" = 80-003EHS-A 11/16" = 80-039EHS-A	8x19 Seale EHS traction grade fiber core	65000 - 70000	(2 ½ - 3) + (2 - 4 ½) = 4 ½ - 7 ½ in. (63 - 76) + (51 - 114) = 114 - 190 mm
	PAWO F3 3/8" = 80-016-A 1/2" = 80-020-A 5/8" = 80-024-A 11/16" = 80-047-A	8x19 Seale EHS traction grade* steel reinforced fiber core (lower-stretch alternative to F 819 S-FE DT EHS above)	75000 - 80000	(1 ½ - 2) + (1 ½ - 2) = 3 - 4 in. (38 - 51) + (38 - 51) = 76 - 102 mm
Hoist for High-rise (> 300' • 90 m)	PAWO F10 3/8" = 80-104 1/2" = 80-108 5/8" = 80-113 11/16" = 80-115	9x17 or 9x21 Filler Wire EHS traction grade* full steel core	80000 -85000	(1 ½ - 2) + (½ - 1) = 2 - 3 in. (38 - 51) + (13 - 25) = 51 - 76 mm
Hoist for Installations with Reverse Bends (e.g. Basement Machines)	CompactTrac™ 3/8" = 80-001CSLL-A 1/2" = 80-002CSLL-A 5/8" = 80-003CSLL-A	8x19 Seale/compacted strands traction grade natural fiber core	65000 - 70000	(2 - 3) + (2 - 4) = 4 - 7 in. (51 - 76) + (51 - 102) = 102 - 178 mm (these are estimated dimensions)
Governor (select Seale in Traction or Warrington in Traction or Iron)	F 819 S-FE DT 1/4" = 80-000-A 3/8" = 80-001-A 1/2" = 80-002-A 5/8" = 80-003-A	8x19 Seale traction grade fiber core	n/a	n/a n/a
	F 819 W-FE DT 3/8" = 80-001W	8x19 Warrington traction grade fiber core	n/a	n/a n/a
	F 819 W-FE DT Iron 3/8" = 80-010IRONW 7/16" = 80-007IRON-K (Seale)	8x19 Warrington iron grade fiber core	n/a	n/a n/a
Compensation/Governor (select Traction or Iron)	F 819 F-FE DT 1/2" = 80-002FW 5/8" = 80-003FW 3/4" = 80-013FW	8x25 Filler Wire traction grade fiber core	n/a	n/a n/a
	F 819 F-FE DT Iron 1/2" = 80-011IRONFW 5/8" = 80-012IRONFW 3/4" = 80-013IRONFW-K	8x25 Filler Wire iron grade fiber core	n/a	n/a n/a

† Modulus of elasticity is calculated per VDI 2358-1984. †† Elongation is calculated at 10% of Minimum Breaking Force (MBF).

* Actual minimum tensile strength of outer wires is 1570 N/mm² (227,800 psi).

It is strongly recommended that the sheaves be checked and re-grooved or replaced as necessary prior to rope replacement. The diameter of the new ropes is greater than that of the old ropes and failure to bring the sheave into the manufacturer's specified tolerances can lead to vibration, metal shavings, etc.

To insure maximum rope/sheave life, regular re-lubrication with DrakaLube™ (see page 27) should be adopted. Refer to page 19 of this catalog for information on field re-lubrication. Rope and sheave life will be maximized if hoist rope tension is equalized (within a 10% range) during installation and at regular intervals (see page 19 for more information).

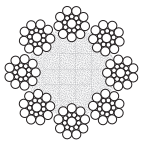
RANGE OF ACCEPTABLE TRACTION SHEAVE HARDNESS BASED ON ROPE GRADE/TENSILE STRENGTH:

Wire Rope Type (see table above and other ropes in this catalog)	Minimum Tensile Strength of Outer Wires (N/mm² • psi)	Hardness of Traction Sheave (Brinell)
F 819 W-FC DT Iron & F 819 F-FC DT Iron	680 • 100,000 (iron grade)	Governor/comp. only
F 819 S-FC DT, CompactTrac™, F 819 W-FC DT & F 819 F-FC DT	1180 • 170,000 (traction grade)	180 - 200
Metric F 819 S-FC DT	1370 • 198,800	200 - 230
PAWO F3, F7, F7S & F10	1570 • 227,800	220 - 240
F 819 S-FC DT EHS	1670 • 245,000 (EHS traction grade)	230 - 250

Wire Rope by Gustav Wolf

Imperial diameters to meet ASME A17.1 / CSA B44 and A17.6 for standard applications

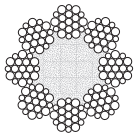
HOIST, HOIST / GOVERNOR AND GOVERNOR – 8 X 19 SEALE WITH NATURAL FIBER CORE



Part Number	Application	Diameter inches	Grade	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-000-A	Hoist / Gov.	1/4	Traction	Regular	3600 • 16025	0.09 • 0.14
80-001-R	Hoist / Gov.	3/8	Traction	Regular	8200 • 36475	0.21 • 0.31
80-001EHS-A	Hoist	3/8	EHST	Regular	9900 • 44050	0.21 • 0.31
80-001EHSLL-A	Hoist	3/8	EHST	Lang	9900 • 44050	0.21 • 0.31
80-007IRON-K	Governor	7/16	Iron	Regular	5600 • 24900	0.28 • 0.42
80-002-R	Hoist / Gov.	1/2	Traction	Regular	14500 • 64500	0.36 • 0.54
80-002LL-A	Hoist	1/2	Traction	Lang	14500 • 64500	0.36 • 0.54
80-002EHS-A	Hoist	1/2	EHST	Regular	17500 • 77850	0.36 • 0.54
80-002EHSLL-A	Hoist	1/2	EHST	Lang	17500 • 77850	0.36 • 0.54
80-038-A	Hoist	9/16	Traction	Regular	18500 • 82300	0.46 • 0.68
80-038EHS-A	Hoist	9/16	EHST	Regular	22100 • 98300	0.46 • 0.68
80-003-R	Hoist / Gov.	5/8	Traction	Regular	23000 • 102300	0.58 • 0.86
80-003LL-A	Hoist	5/8	Traction	Lang	23000 • 102300	0.58 • 0.86
80-003EHS-A	Hoist	5/8	EHST	Regular	27200 • 121000	0.58 • 0.86
80-003EHSLL-A	Hoist	5/8	EHST	Lang	27200 • 121000	0.58 • 0.86
80-039-A	Hoist	11/16	Traction	Regular	27000 • 120100	0.69 • 1.03
80-039LL-A	Hoist	11/16	Traction	Lang	27000 • 120100	0.69 • 1.03
80-039EHS-A	Hoist	11/16	EHST	Regular	32800 • 145900	0.69 • 1.03
80-039EHSLL-A	Hoist	11/16	EHST	Lang	32800 • 145900	0.69 • 1.03
80-013-A	Hoist	3/4	Traction	Regular	32000 • 142350	0.82 • 1.22
80-013EHS-A	Hoist	3/4	EHST	Regular	38900 • 173025	0.82 • 1.22
80-013EHSLL-A	Hoist	3/4	EHST	Lang	38900 • 173025	0.82 • 1.22
80-040-A	Hoist	13/16	Traction	Regular	37000 • 164575	0.96 • 1.43
80-014-A	Hoist	7/8	Traction	Regular	42000 • 186825	1.11 • 1.65
80-042-A	Hoist	1	Traction	Regular	54000 • 240200	1.45 • 2.16

The most popular rope design in North America. Eight-strand/Seale construction with its larger outer wires better resists abrasion and wear. Dual-tensile design provides high-breaking strength without damage to sheaves with lower Brinell hardness. Available in Traction or Extra High Strength Traction (EHST) grade and Right Regular or Right Lang lay.

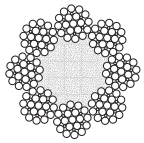
GOVERNOR – 8 X 19 WARRINGTON WITH NATURAL FIBER CORE



Part Number	Application	Diameter inches	Grade	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-001W	Governor	3/8	Traction	Regular	8200 • 36475	0.20 • 0.30
80-010IRONW	Governor	3/8	Iron	Regular	4200 • 18675	0.20 • 0.30

Eight-strand/Warrington construction is more flexible and makes this rope well-suited for governor applications. Available in Traction or Iron grade.

COMPENSATION / GOVERNOR AND COMPENSATION – 8 X 25 FILLER WIRE WITH NATURAL FIBER CORE



Part Number	Application	Diameter inches	Grade	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-002FW	Comp./Gov.	1/2	Traction	Regular	14500 • 64500	0.36 • 0.54
80-011IRONFW	Comp./Gov.	1/2	Iron	Regular	7200 • 32025	0.36 • 0.54
80-003FW	Comp./Gov.	5/8	Traction	Regular	23000 • 102300	0.62 • 0.92
80-012IRONFW	Comp./Gov.	5/8	Iron	Regular	11200 • 49825	0.62 • 0.92
80-013FW	Compensation	3/4	Traction	Regular	32000 • 142350	0.82 • 1.22
80-013IRONFW-K	Compensation	3/4	Iron	Regular	16000 • 71175	0.82 • 1.22

Eight-strand/Filler Wire construction with its higher wire count provides greater flexibility and makes this rope a good match for compensating applications. Available in Traction or Iron grade.

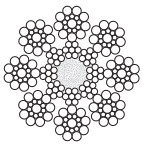
All listed Gustav Wolf wire rope is preformed, right lay with a bright (uncoated) finish. All popular items are in stock for immediate delivery. Less popular items and other diameters, strandings, constructions, grades, coatings, etc. are available by special order.

Wire Rope by Gustav Wolf

Imperial diameters to meet ASME A17.1 / CSA B44 and A17.6 for special hoist applications

HOIST PAWO F3 – 8 X 19 SEALE WITH STEEL-REINFORCED NATURAL FIBER CORE

Part Number	Application	Diameter inches	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-016-A	Hoist	3/8	1570	Regular	12225 • 54400	0.24 • 0.35
80-020-A	Hoist	1/2	1570	Regular	22100 • 98300	0.42 • 0.62
80-024-A	Hoist	5/8	1570	Regular	34800 • 154800	0.66 • 0.98
80-047-A	Hoist	11/16	1570	Regular	42050 • 187000	0.81 • 1.20
80-048-A	Hoist	3/4	1570	Regular	48925 • 217600	0.93 • 1.38

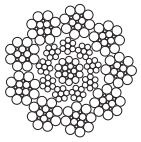


Steel-reinforced natural fiber core provides reduced stretch and cross-section deformation with higher breaking strength. Eight-strand/Seale construction with its larger outer wires increases wear resistance. Recommended for use on mid/high-rise elevators wherever Extra High Strength Traction (EHST) grade wire rope is specified to extend rope service life and reduce or eliminate the labor cost of repeated rope shortenings. PAWO F3 comes with a green surface line.

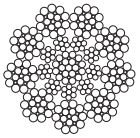
HOIST PAWO F10 – 9 X 17 OR 9 X 21 FILLER WIRE WITH INDEPENDENT WIRE ROPE CORE

Part Number	Construction	Application	Diameter inches	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-104	9 x 17 Filler Wire	Hoist	3/8	1570	Regular	13600 • 60500	0.26 • 0.38
80-108	9 x 21 Filler Wire	Hoist	1/2	1570	Regular	24625 • 109500	0.46 • 0.68
80-113	9 x 21 Filler Wire	Hoist	5/8	1570	Regular	39125 • 174000	0.73 • 1.08
80-115	9 x 21 Filler Wire	Hoist	11/16	1570	Regular	46750 • 208000	0.88 • 1.30
80-117	9 x 21 Filler Wire	Hoist	3/4	1570	Regular	55050 • 244900	1.02 • 1.51

80-104



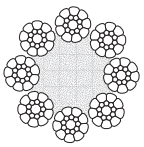
80-108 to 117



Designed specifically for demanding high-rise/high-speed applications. Full steel core (IWRC) and nine-strand/Filler Wire construction work together to achieve minimal stretch, a round cross-section, excellent flexibility, increased resistance to rope fatigue due to bending and maximized breaking strength. Recommended for use on high-rise/high-speed elevators wherever Extra High Strength Traction (EHST) grade wire rope is specified to achieve the ultimate in wire rope performance. PAWO F10 comes with a white surface line.

HOIST COMPACTTRAC™ COMPACTED STRAND – 8 X 19 SEALE WITH NATURAL FIBER CORE

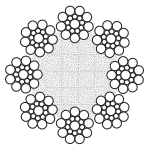
Part Number	Application	Diameter inches	Grade	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-001CSLL-A	Hoist	3/8	Traction	Lang	9400 • 41800	0.22 • 0.32
80-002CSLL-A	Hoist	1/2	Traction	Lang	17050 • 75800	0.39 • 0.58
80-003CSLL-A	Hoist	5/8	Traction	Lang	26925 • 119800	0.62 • 0.92



Compacted strand design of this eight-strand/Seale rope increases bending resistance. The larger contact area between ropes and sheaves reduces surface pressure and helps extend short rope service life associated with rope fatigue due to reverse bends e.g. basement machines. This is a Right Lang lay rope in Traction grade.

HOIST/GOVERNOR GALVANIZED – 8 X 19 SEALE WITH FIBER CORE

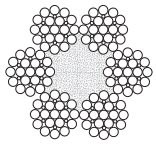
Part Number	Application	Diameter inches	Grade	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-001G-K	Hoist / Gov.	3/8	Traction	Regular	8200 • 36475	0.21 • 0.31
80-002G-A	Hoist / Gov.	1/2	Traction	Regular	14500 • 64500	0.36 • 0.54
80-003G-A	Hoist / Gov.	5/8	Traction	Regular	23000 • 102300	0.58 • 0.86



Galvanized coating on wires helps protect ropes from weather and corrosion associated with outdoor and mine elevators. This is an eight-strand/Seale construction rope in Traction grade.

HOIST AND COMPENSATION / GOVERNOR – 6 X 25 FILLER WIRE WITH NATURAL FIBER CORE

Part Number	Application	Diameter inches	Grade	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-075FW	Hoist	1/2	Traction	Regular	14500 • 64500	0.40 • 0.60
80-075EHSFW	Hoist	1/2	EHST	Regular	20400 • 90750	0.40 • 0.60
80-076FW-K	Hoist	5/8	Traction	Regular	23000 • 102300	0.63 • 0.94
80-076IRONFW	Comp./Gov.	5/8	Iron	Regular	12800 • 56925	0.63 • 0.94



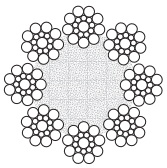
Six-strand/Filler Wire rope is less flexible than eight-strand/Filler Wire rope but it is used in a limited number of older hoist, compensating and governor applications. Available in Traction, Extra High Strength Traction (EHST) or Iron grade.

All listed Gustav Wolf wire rope is preformed, right lay with a bright (uncoated) finish (EXCEPT FOR 80-001G-K, 80-002G-A, and 80-003G-A above which are galvanized). Other diameters, strandings, constructions, grades, coatings, etc. are available by special order.

Wire Rope by Gustav Wolf

Metric diameters to meet DIN EN 12385, ISO 4344, ASME A17.1 / CSA B44 and A17.6

METRIC HOIST AND COMPENSATION F 819 S-FC DT – 8 X 19 SEALE WITH NATURAL FIBER CORE

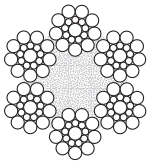


Part Number	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-005-A	Hoist	8.0	1370/1770	Regular	6850 • 30500	0.15 • 0.22
80-090-A	Hoist	9.0	1370/1770	Regular	8625 • 38400	0.19 • 0.28
80-006-A	Hoist	10.0	1370/1770	Regular	10825 • 48200	0.24 • 0.35
80-007-S	Hoist	11.0	1370/1770	Regular	13125 • 58400	0.29 • 0.43
80-008-A	Hoist	12.0	1370/1770	Regular	15550 • 69200	0.34 • 0.50
80-009-A	Hoist	13.0	1370/1770	Regular	18150 • 80700	0.40 • 0.59
80-096-A	Hoist	14.0	1370/1770	Regular	20900 • 93000	0.46 • 0.68
80-097-A	Hoist/Comp.	15.0	1370/1770	Regular	24275 • 108000	0.52 • 0.78
80-098-A	Hoist/Comp.	16.0	1370/1770	Regular	27200 • 121000	0.60 • 0.89
80-099-A	Hoist/Comp.	18.0	1370/1770	Regular	34625 • 154000	0.75 • 1.11
80-091-A	Hoist/Comp.	19.0	1370/1770	Regular	38450 • 171000	0.85 • 1.26

A popular metric rope design used in many standard hoist and compensating applications. Eight-strand/Seale construction with its larger outer wires better resists abrasion and wear. Dual-tensile design provides high-breaking strength without damage to sheaves with lower Brinell hardness.

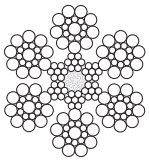
METRIC GOVERNOR – REFER TO SPECIFICATIONS BELOW

Part Number	Construction	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-074	6 x 19 Seale	Governor	6.0	1770	Regular	4725 • 21000	0.09 • 0.13
80-080-S	6 x 19 Seale	Governor	6.0	1770	Regular	4725 • 21000	0.09 • 0.13
80-086	6 x 19 Seale - PAWO F3	Governor	6.0	1960	Regular	6175 • 27500	0.10 • 0.15
80-084	6 x 19 Warrington	Governor	6.5	1770	Regular	5800 • 25800	0.11 • 0.16
80-043-A	6 x 19 Seale - PAWO F3	Governor	6.5	1570	Regular	5825 • 25900	0.11 • 0.16
80-094	8 x 19 Warrington - PAWO 819W	Governor	6.5	1770	Regular	6675 • 29700	0.12 • 0.17
80-045-A	8 x 19 Seale - PAWO F3	Governor	8.0	1570	Regular	8550 • 38000	0.16 • 0.24
80-102	9 x 17 Filler Wire - PAWO F10	Governor	8.0	1570	Regular	9700 • 43200	0.18 • 0.27
80-077	8 x 19 Seale	Governor	9.5	1770	Regular	10525 • 46800	0.21 • 0.31
80-016-A	8 x 19 Seale - PAWO F3	Governor	9.5	1570	Regular	12225 • 54400	0.24 • 0.35
80-104	9 x 17 Filler Wire - PAWO F10	Governor	9.5	1570	Regular	13600 • 60500	0.26 • 0.38
80-105	9 x 17 Filler Wire - PAWO F10	Governor	10.0	1570	Regular	15100 • 67200	0.28 • 0.42

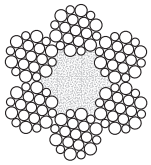


80-074 and 80-080-S are 6 x 19 Seale with synthetic fiber core.

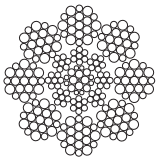
80-080-S is galvanized.



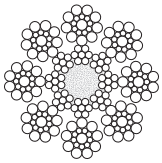
80-086 and 80-043-A are 6 x 19 PAWO F3 Seale with steel-reinforced natural fiber core.



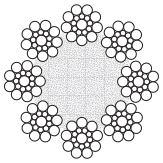
80-084 is 6 x 19 Warrington with natural fiber core.



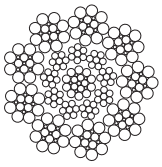
80-094 is 8 x 19 PAWO 819W Warrington with full steel core (IWRC).



80-045-A and 80-016-A are 8 x 19 PAWO F3 Seale with steel-reinforced natural fiber core.



80-077 is 8 x 19 Seale with synthetic fiber core, galvanized.



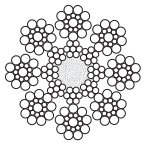
80-102, 80-104 and 80-105 are 9 x 17 PAWO F10 Filler Wire with full steel core (IWRC).

All listed Gustav Wolf wire rope is preformed, right lay with a bright (uncoated) finish (EXCEPT FOR 80-080-S and 80-077 above which are galvanized). All popular items are in stock for immediate delivery. Less popular items and other diameters, strandings, constructions, grades, coatings, etc. are available by special order.

Wire Rope by Gustav Wolf

Metric diameters to meet DIN EN 12385, ISO 4344, ASME A17.1 / CSA B44 and A17.6

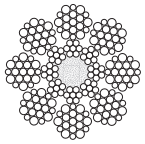
METRIC HOIST AND COMPENSATION PAWO F3 – 8 X 19 SEALE WITH STEEL-REINFORCED NATURAL FIBER CORE



Part Number	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-045-A	Hoist	8.0	1570	Regular	8550 • 38000	0.16 • 0.24
80-015-A	Hoist	9.0	1570	Regular	10850 • 48300	0.21 • 0.31
80-017-A	Hoist	10.0	1570	Regular	13600 • 60500	0.26 • 0.39
80-018-A	Hoist	11.0	1570	Regular	16500 • 73400	0.32 • 0.47
80-019-A	Hoist	12.0	1570	Regular	19525 • 86800	0.37 • 0.55
80-021-A	Hoist	13.0	1570	Regular	23175 • 103100	0.44 • 0.65
80-022-A	Hoist	14.0	1570	Regular	26825 • 119300	0.51 • 0.75
80-023-A	Hoist/Comp.	15.0	1570	Regular	30925 • 137600	0.59 • 0.87
80-024-A	Hoist/Comp.	16.0	1570	Regular	34800 • 154800	0.66 • 0.98
80-026-A	Hoist/Comp.	18.0	1570	Regular	43525 • 193600	0.83 • 1.23
80-048-A	Hoist/Comp.	19.0	1570	Regular	48925 • 217600	0.93 • 1.38

Steel-reinforced natural fiber core provides reduced stretch and cross-section deformation with higher breaking strength. Eight-strand/Seale construction with its larger outer wires increases wear resistance. PAWO F3 comes with a green surface line.

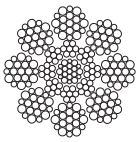
METRIC HOIST PAWO F7 – 8 X 19 WARRINGTON WITH STEEL-REINFORCED NATURAL FIBER CORE



Part Number	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-056-A	Hoist	8.0	1570	Regular	9125 • 40600	0.18 • 0.26
80-027-A	Hoist	9.0	1570	Regular	11650 • 51800	0.22 • 0.33
80-029-A	Hoist	10.0	1570	Regular	14250 • 63400	0.27 • 0.40
80-030-A	Hoist	11.0	1570	Regular	17275 • 76800	0.33 • 0.49
80-031-A	Hoist	12.0	1570	Regular	20400 • 90700	0.38 • 0.57
80-033-A	Hoist	13.0	1570	Regular	23600 • 105000	0.45 • 0.67
80-034-A	Hoist	14.0	1570	Regular	27950 • 124300	0.53 • 0.78
80-035-A	Hoist	15.0	1570	Regular	31450 • 139900	0.60 • 0.89
80-036-A	Hoist	16.0	1570	Regular	36050 • 160400	0.69 • 1.02
80-059-A	Hoist	19.0	1570	Regular	50725 • 225600	0.96 • 1.42

Steel-reinforced natural fiber core provides reduced stretch and cross-section deformation with higher breaking strength. More flexible eight-strand/Warrington construction resists rope fatigue due to bending in installations with numerous rope bends. PAWO F7 comes with a green surface line.

METRIC HOIST PAWO F7S – 8 X 19 WARRINGTON WITH INDEPENDENT WIRE ROPE CORE



Part Number	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-056SC	Hoist	8.0	1570	Regular	10025 • 44600	0.19 • 0.28
80-027SC	Hoist	9.0	1570	Regular	12600 • 56000	0.24 • 0.36
80-029SC-S	Hoist	10.0	1570	Regular	15625 • 69500	0.30 • 0.44
80-030SC	Hoist	11.0	1570	Regular	18675 • 83100	0.35 • 0.52
80-031SC	Hoist	12.0	1570	Regular	22225 • 98900	0.42 • 0.62
80-033SC	Hoist	13.0	1570	Regular	26075 • 116000	0.49 • 0.73
80-034SC	Hoist	14.0	1570	Regular	30300 • 134800	0.58 • 0.86
80-035SC	Hoist	15.0	1570	Regular	34350 • 152800	0.65 • 0.96
80-036SC	Hoist	16.0	1570	Regular	39600 • 176100	0.74 • 1.10
80-004SC	Hoist	18.0	1570	Regular	49150 • 218600	0.93 • 1.38
80-059SC	Hoist	19.0	1570	Regular	55125 • 245200	1.04 • 1.54

Full steel core (IWRC) reduces stretch and cross-section deformation to a minimum while maximizing breaking strength. More flexible eight-strand/Warrington construction resists rope fatigue due to bending in installations with numerous rope bends and smaller sheaves. PAWO F7S comes with a green surface line.

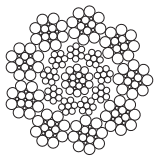
All listed Gustav Wolf wire rope is preformed, right lay with a bright (uncoated) finish. All popular items are in stock for immediate delivery. Less popular items and other diameters, strandings, constructions, grades, coatings, etc. are available by special order.

Wire Rope by Gustav Wolf

Metric diameters to meet DIN EN 12385, ISO 4344, ASME A17.1 / CSA B44 and A17.6

METRIC HOIST PAWO F10 – 9 X 17 FILLER WIRE WITH INDEPENDENT WIRE ROPE CORE

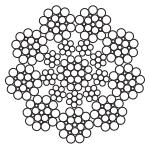
Part Number	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-102	Hoist	8.0	1570	Regular	9700 • 43200	0.18 • 0.27
80-103	Hoist	9.0	1570	Regular	12300 • 54800	0.23 • 0.34
80-105	Hoist	10.0	1570	Regular	15100 • 67200	0.28 • 0.42
80-106	Hoist	11.0	1570	Regular	18000 • 80200	0.34 • 0.51
80-107	Hoist	12.0	1570	Regular	21500 • 95600	0.40 • 0.60



Designed specifically for demanding high-rise/high-speed applications using rope diameters of 8.0 to 12.0 mm. Full steel core (IWRC) and nine-strand/Filler Wire construction work together to achieve minimal stretch, a round cross-section, excellent flexibility, increased resistance to rope fatigue due to bending and maximized breaking strength. PAWO F10 comes with a white surface line.

METRIC HOIST AND COMPENSATION PAWO F10 – 9 X 21 FILLER WIRE WITH INDEPENDENT WIRE ROPE CORE

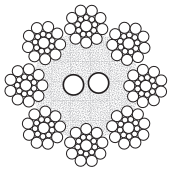
Part Number	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-109	Hoist	13.0	1570	Regular	25500 • 113400	0.48 • 0.71
80-110	Hoist	14.0	1570	Regular	30500 • 135700	0.57 • 0.85
80-112	Hoist/Comp.	15.0	1570	Regular	34350 • 152800	0.64 • 0.95
80-113	Hoist/Comp.	16.0	1570	Regular	39125 • 174000	0.73 • 1.08
80-116	Hoist/Comp.	18.0	1570	Regular	49400 • 219700	0.92 • 1.37
80-117	Hoist/Comp.	19.0	1570	Regular	55050 • 244900	1.02 • 1.51



Designed specifically for demanding high-rise/high-speed applications using rope diameters of 13.0 mm and larger. Full steel core (IWRC) and nine-strand/Filler Wire construction work together to achieve minimal stretch, a round cross-section, excellent flexibility, increased resistance to rope fatigue due to bending and maximized breaking strength. PAWO F10 comes with a white surface line.

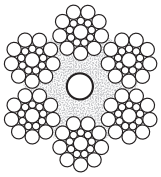
METRIC HOIST PAWO F4E – 8 X 19 SEALE WITH SYNTHETIC FIBER CORE AND TWO 0.96 MM² (>18 AWG) CONDUCTORS

Part Number	Construction	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-081	8 x 19 Seale (PAWO F4e)	Hoist	8.0	1770	Regular	7450 • 33200	0.17 • 0.25



METRIC HOIST PAWO F5E – 6 X 19 SEALE WITH SYNTHETIC FIBER CORE AND ONE 0.96 MM² (>18 AWG) CONDUCTORS

Part Number	Construction	Application	Diameter mm	Tensile Strength N/mm²	Right Lay	Min. Breaking Force lbf • N	Net Weight lbs/ft • kg/m
80-067	6 x 19 Seale (PAWO F5e)	Hoist	8.0	1770	Regular	8600 • 38200	0.16 • 0.23



Galvanized coating on wires and 0.96 mm² (>18 AWG) electrical conductors make these six- or eight-strand/Seale ropes suitable for use on outdoor maintenance platforms and similar applications. Diameters in addition to 8.0 mm are available.

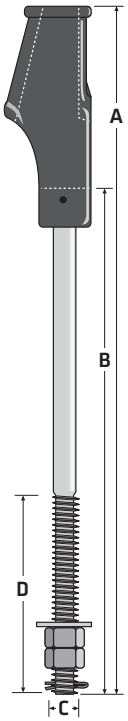
All listed Gustav Wolf wire rope is preformed, right lay with a bright (uncoated) finish (EXCEPT FOR 80-081 and 80-067 above which are galvanized). All popular items are in stock for immediate delivery. Less popular items and other diameters, strandings, constructions, grades, coatings, etc.are available by special order.

Wire Rope Wedge Sockets

To meet ASME A17.1 / CSA B44 • New York MEA approval #410-03-M

WIRE ROPE WEDGE SOCKETS

Part Number	Rope size inches • mm	Dim (A) nom inches • mm (± 3/16 • 5)	Dim (B) nom inches • mm (± 3/16 • 5)	Dim (C) Thread and Diameter	Usable Thread min inches • mm	Dim (D) nom inches • mm (± 3/8 • 10)
WSY-516-12	5/16 • 8	17-1/2 • 445	12-19/32 • 320	M12	7-7/8 • 200	8-27/32 • 225
WSY-516-18	5/16 • 8	23-3/4 • 603	18-7/8 • 480	M12	9-13/16 • 250	10-13/16 • 275
WSY-516-24	5/16 • 8	30-1/8 • 765	24-3/16 • 640	M12	15-3/4 • 400	16-23/32 • 425
WSY-38-12	3/8 • 9 to 10	17-1/2 • 445	12-19/32 • 320	M12	7-7/8 • 200	8-27/32 • 225
WSY-38-18	3/8 • 9 to 10	23-3/4 • 603	18-7/8 • 480	M12	9-13/16 • 250	10-13/16 • 275
WSY-38-24	3/8 • 9 to 10	30-1/8 • 765	24-3/16 • 640	M12	15-3/4 • 400	16-23/32 • 425
WSY-12-12-A	7/16 to 1/2 • 11 to 13	18 • 457	12-19/32 • 320	M20	7-7/8 • 200	8-27/32 • 225
WSY-12-18-B	7/16 to 1/2 • 11 to 13	24-3/8 • 619	18-7/8 • 480	M20	9-13/16 • 250	10-13/16 • 275
WSY-12-24-B	7/16 to 1/2 • 11 to 13	30-5/8 • 778	24-3/16 • 640	M20	15-3/4 • 400	16-23/32 • 425
WSY-12-30-B	7/16 to 1/2 • 11 to 13	36-7/8 • 937	30-1/2 • 800	M20	15-3/4 • 400	16-23/32 • 425
WSY-12-36-B	7/16 to 1/2 • 11 to 13	43-1/4 • 1099	36-13/16 • 960	M20	15-3/4 • 400	16-23/32 • 425
WSY-58-12	9/16 to 5/8 • 14 to 16	19-3/4 • 502	12-19/32 • 320	M20	7-7/8 • 200	8-27/32 • 225
WSY-58-18	9/16 to 5/8 • 14 to 16	26-1/8 • 664	18-7/8 • 480	M20	9-13/16 • 250	10-13/16 • 275
WSY-58-24	9/16 to 5/8 • 14 to 16	32-3/8 • 822	24-3/16 • 640	M20	15-3/4 • 400	16-23/32 • 425
WSY-58-30	9/16 to 5/8 • 14 to 16	38-3/4 • 984	30-1/2 • 800	M20	15-3/4 • 400	16-23/32 • 425
WSY-58-36	9/16 to 5/8 • 14 to 16	45 • 1143	36-13/16 • 960	M20	15-3/4 • 400	16-23/32 • 425
WSY-34-12	11/16 to 3/4 • 17.5 to 19	21-1/4 • 540	12-19/32 • 320	M24	7-7/8 • 200	8-27/32 • 225
WSY-34-18	11/16 to 3/4 • 17.5 to 19	27-1/2 • 699	18-7/8 • 480	M24	9-13/16 • 250	10-13/16 • 275
WSY-34-24	11/16 to 3/4 • 17.5 to 19	33-3/4 • 857	24-3/16 • 640	M24	15-3/4 • 400	16-23/32 • 425
WSY-34-30	11/16 to 3/4 • 17.5 to 19	39-3/4 • 1010	30-1/2 • 800	M24	15-3/4 • 400	16-23/32 • 425
WSY-34-36	11/16 to 3/4 • 17.5 to 19	46-1/4 • 1175	36-13/16 • 960	M24	15-3/4 • 400	16-23/32 • 425



Each wedge socket consists of the socket, rod, wedge, 2 nuts, 1 washer, 1 cotter pin and 2 retaining clips.

Draka EHC wedge sockets are tested with steel core (IWRC) wire rope and exceed ASME A17.1 Rule 2.20.9 and all other applicable safety codes.

Component Specifications:

Socket: Cast steel ASTM-A27, Grade 60-30 stress relieved

Rod: Rolled or forged steel ASTM 668

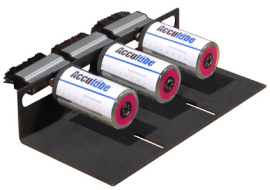
Wedge: Cast steel ASTM-A27, Grade 60-30

GOVERNOR ROPE WEDGE SOCKETS

Part Number	Description
WSY-38-GOV	3/8 • 10 mm governor rope wedge socket, includes socket, wedge and 2 retaining clips, 0.55 in • 14 mm mounting hole
WSY-12-GOV	1/2 • 13 mm governor rope wedge socket, includes socket, wedge and 2 retaining clips, 0.69 in • 17.5 mm mounting hole

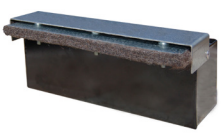
Use these items to maintain wire rope - details are on page 27.

#ACCULUBE 200 or 300
Acculube rope lubricator and cleaner



#WR-DRAKALUBE
DrakaLube rope treatment

#MIS-100 or 101
Automatic rope oiler



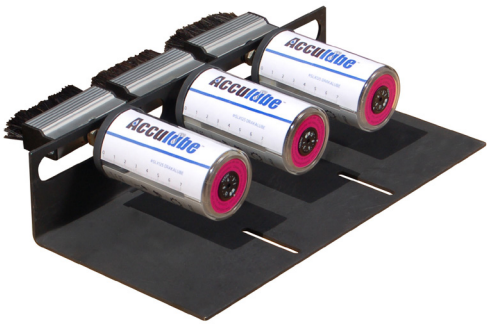
BENFIELD
ELECTRIC AND ELEVATOR SUPPLY CORP

(718) 706 8600

Wire Rope Lubrication

ACCULUBE™ AUTOMATIC ROPE LUBRICATOR AND CLEANER KIT

Part Number	Description
ACCULUBE 200	Automatic rope lubricator/cleaner kit, with two brushes (210 mm • 8.25 inch span), bracket and three (3) 125ml lubricator cartridges filled wire rope treatment
ACCULUBE 300	Automatic rope lubricator/cleaner kit, with three brushes (300 mm • 11.8 inch span), bracket and three (3) 125ml lubricator cartridges filled wire rope treatment
SLX125 DRAKALUBE	Replacement lubricator canister, filled with DrakaLube
2036	One replacement 70 mm • 2.75 inch brush for Acculube 200
2037	One replacement 100 mm • 3.94 inch brush for Acculube 300
98-02-87	One steel mounting bracket
1015	One reservoir attachment nipple



The Acculube automatic rope lubricator/cleaner is a set-and-forget way of efficiently lubricating traction ropes for up to a year.

The unit is quickly and easily assembled in the machine room. Simply install it so that the brushes are in contact with the ropes, set the canisters to the proper time setting for your application (one year for standard indoor elevators, six months for exterior or high-contaminant environments) and walk away knowing that your hoist ropes are being consistently treated and cleaned as the elevator operates.

The lubricator canisters come pre-filled with our specially-formulated DrakaLube™ rope treatment. Please note that if your ropes are dirty, there will be greasy residue at the unit for a short while as the Acculube unit does its job. DO NOT attempt to refill the canisters. Contact Draka for new canisters once depleted.

FEATURES

- Labor and time-saving way to keep ropes lubricated
- No oil spills or splashes in the machine room or the car
- Easy installation
- Constant, reliable lubricant application
- Ropes are continually cleaned by the brushes

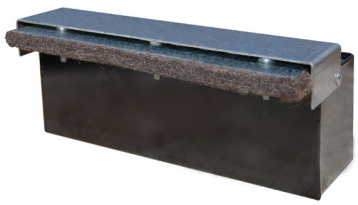
DRAKALUBE™ WIRE ROPE TREATMENT / LUBRICANT

Part Number	Description
WR-DRAKALUBE	DrakaLube wire rope treatment / lubricant, one gallon jug

DrakaLube wire rope treatment / lubricant has been specifically formulated to fight bending stresses, high groove pressures and moisture. DrakaLube has additives that protect against corrosion, wear and most importantly, it can also displace moisture in the rope core.

ROPE OILERS FOR ELEVATOR HOIST ROPES, ESCALATOR CHAINS AND SELECTOR TAPES

Part Number	Description
MIS-100	Automatic oiler, with 9” wick
MIS-102	Automatic oiler, with 12” wick
MIS-103	Extension bracket, for rope oiler
MIS-103A	Replacement wick, for all size rope oilers
MIS-103B	Replacement wick, 1/2” x 6 1/2” x 12”



The rope oiler lubricates by electrostatic attraction and requiring only minimal wick adjustment after installation.

FEATURES

- Automatically lubricates rope for increased rope and sheave life
- Has an adjustable oiling rate-wick lock and wick length
- Features a top-fill external oil level indicator

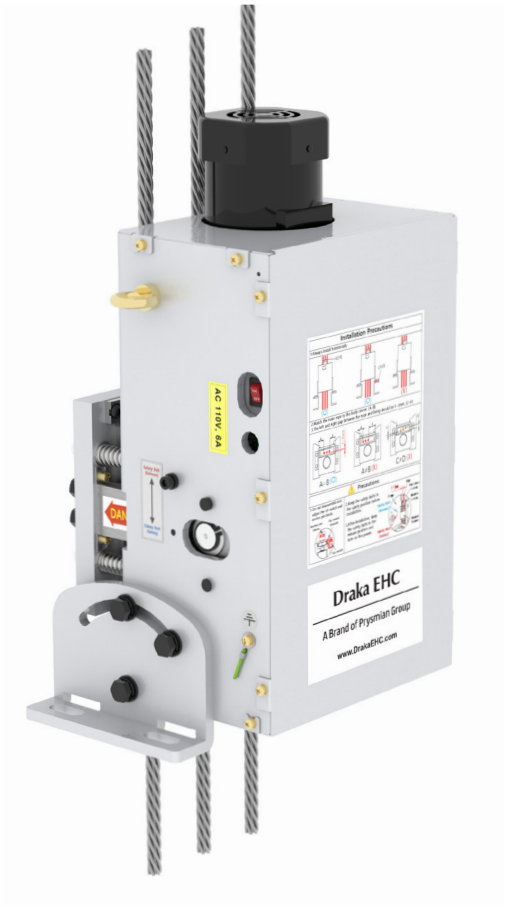
Elevator Rope Brakes (ERB) ERB10 / ERB20 / ERB35

To meet ASME A17.1 2019, EN 81-20:2020 and EN-50:2020 standards - CSA, KC, Japanese certificates

PROTECTION AGAINST OVERSPEED AND UNINTENDED CAR MOVEMENT

Introducing the Draka EHC series of Elevator Rope Brakes (ERBs). Draka EHC's new Elevator Rope Brake (ERB) series delivers enhanced safety for passengers and technicians by protecting against ascending car overspeed, unintended car movement, and exceeding rated buffer striking speed.

Consisting of three models (ERB10 / ERB20 / ERB35) to accommodate a wide range of operating parameters, configurations, rope diameters and spreads, the ERB's electromechanical design offers numerous value-added benefits over hydraulic rope brakes.



FEATURES

- Electromechanical design
- No hydraulic pump or fluid required
- Compact design and small footprint
- Quick and simple installation
- Pads do not require grooving
- Easy to maintain
- LED operating and warning indicators
- Remote customer support
- Lower cost of ownership

The ERB10 and ERB20 can accommodate rope diameters from 3/8 to 5/8 inches (9.5 to 16 mm) while the ERB35 can accommodate rope diameters from 7/16 to 3/4 inches (11 to 18 mm).

ELEVATOR ROPE BRAKE (ERB) ERB10 / ERB20 / ERB35

Part Number	Description	ERB10	ERB20	ERB35
ELH-RB-ERB10	ERB10 brake for 3/8 to 5/8 in • 9.5 to 16 mm ropes			
ELH-DRAKA-ERB10	ERB10 brake kit for 3/8 to 5/8 in • 9.5 to 16 mm ropes (includes power cable and manual)			
ELH-DRAKA-ERB10-O	ERB10 brake kit with larger/optional clamp/lining (includes power cable and manual)			
ELH-RB-ERB20	ERB20 rope brake for 3/8 to 5/8 in • 9.5 to 16 mm ropes			
ELH-DRAKA-ERB20	ERB20 rope brake kit for 3/8 to 5/8 in • 9.5 to 16 mm ropes (includes power cable and manual)			
ELH-DRAKA-ERB20-O	ERB20 brake kit with larger/optional clamp/lining (includes power cable and manual)			
ELH-RB-ERB35	ERB35 rope brake for 7/16 to 11/16 in • 11 to 17.5 mm ropes			
ELH-DRAKA-ERB35	ERB35 rope brake kit for 7/16 to 11/16 in • 11 to 17.5 mm ropes (includes power cable and manual)			
ELH-DRAKA-ERB35-O	ERB35 brake kit with larger/optional clamp/lining (includes power cable and manual)			
ELH-ERB35-EXTKIT	ERB35 extension kit to accommodate 18 mm and 3/4 in ropes			
ELH-RB-ERB-CABLE	Power cable for all ERB units	•	•	•
ELH-RB-ERB-MANUAL	Installation manual for all ERB units •	•	•	
ELH-RB-ERB1020-PAD	Replacement brake lining (one) for ERB10 and ERB20	•	•	
ELH-ERB1020-PAD-O	Replacement brake lining (one) for larger ERB10-0 and ERB20-0	•	•	
ELH-RB-ERB35-PAD	Replacement brake lining (one) for ERB35			•
ELH-ERB35-PAD-O	Replacement brake lining (one) for larger ERB35-0			•
ELH-RB-ERB-PCB	Replacement 110V printed circuit board for all ERB units	•	•	•
ELH-RB-ERB-SOL	Replacement solenoid for all ERB units	•	•	•
ELH-RB-ERB-MS	Replacement short button microswitch for all ERB units	•	•	•
ELH-RB-ERB-LMS	Replacement short roller lever microswitch for all ERB units	•	•	•
ELH-RB-LD	Replacement locking device for all ERBs	•	•	•
ELH-ERB1020-GB	Replacement gearbox for ERB10 and ERB20	•	•	
ELH-ERB35-GB	Replacement gearbox for ERB35			•
ELH-ERB10-MOTOR	Replacement 60w motor for ERB10	•		
ELH-ERB20-MOTOR	Replacement 60w motor for ERB20		•	
ELH-ERB35-MOTOR	Replacement 60w motor for ERB35			•

BENFIELD ELECTRIC AND ELEVATOR SUPPLY CORP

Whisper-Flex® Compensation Cable

Lifetime warranty – Patent number 4716989

US PATENT 4,716,989						LIFETIME WARRANTY
Part Number	Product Code	Cable Weight lbs/ft • kg/m	Chain Trade Size inches • mm	Cable Nom. OD inches • mm	Max. Hang Length feet • meters	Nom. Loop Width inches • mm
18-075-97	WF 075	0.75 • 1.1	3/16 • 5.5	1.05 • 27	600 • 183	22 • 540
18-010-97	WF 10	1.0 • 1.5	3/16 • 5.5	1.15 • 29	600 • 183	24 • 610
18-015-97	WF 15	1.5 • 2.2	1/4 • 7	1.36 • 35	600 • 183	24 • 610
18-020-97	WF 20	2.0 • 3.0	1/4 • 7	1.50 • 38	520 • 158	26 • 660
18-025-97	WF 25	2.5 • 3.7	5/16 • 8	1.63 • 41	600 • 183	26 • 660
18-030-97	WF 30	3.0 • 4.5	5/16 • 8	1.77 • 45	505 • 154	26 • 660
18-035-97	WF 35	3.5 • 5.2	3/8 • 10	1.91 • 49	600 • 183	27 • 690
18-040-97	WF 40	4.0 • 6.0	3/8 • 10	2.03 • 52	530 • 162	27 • 690

Whisper-Flex compensation cable provides smooth operation at temperatures of 5° F to 140° F • -15° C to +60° C and, in the US, can be used for elevators with rated speeds of no greater than 700 ft/min • 3.56 m/sec (per ASME A17.1 - 2013, Rule 2.21.4.2 Compensating Rope Tie-Down).

Support brackets, U-bolts, S-hooks, and heavy duty stainless steel grips specifically designed for Whisper-Flex cable must be used to ensure safe installations. See pages 31 – 32 for details on this hardware.

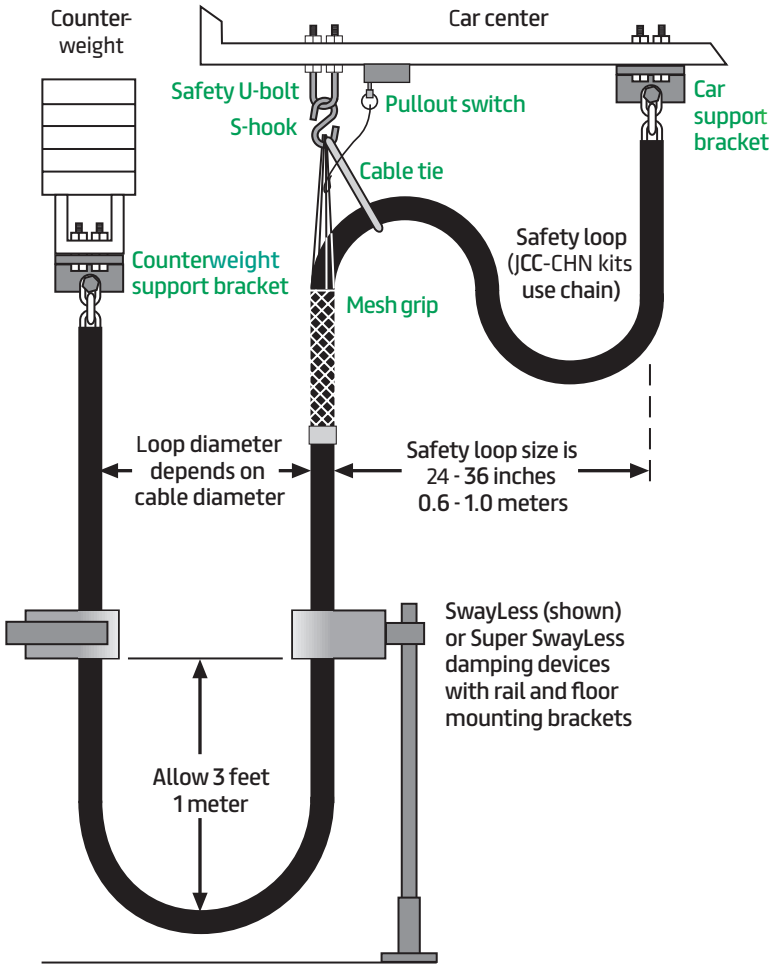
Draka EHC damping devices are recommended to minimize cable sway for car speeds above 350 ft/min • 1.8 m/sec. See pages 33 – 34 for information on these devices.

This diagram shows the approximate placement of components for a Whisper-Flex cable installation. Refer to the Compensation Cable Installation Guide for exact instructions on installation procedures.

Draka EHC can help you determine which size of Whisper-Flex or Steadi-Flex cable to use.

Call 1-877-372-5237 or +1-252-984-5100 and have the following information ready:

- Number of hoist ropes per car
- Outer diameter of the hoist ropes
- Stranding and core of the hoist ropes (i.e. 8x19, 8x25...)
- Car roping (i.e. 1:1, 2:1, other...)
- Number of Whisper-Flex or Steadi-Flex cables per car,
- Length of Whisper-Flex or Steadi-Flex cable needed.



STRIPPING SERVICE 1-½ OR 3-½ LINKS EXPOSED	
Part Number	Description
WFSTRIP1.5L	Cable with 1-1/2 links stripped at one end
WFSTRIP3L	Cable with 3-1/2 links stripped at one end

Steadi-Flex® Compensation Cable

Lifetime warranty – use with side counterweights and long (> 400 ft • 122 m) hang lengths

US PATENT 7610944 • EUROPEAN PATENT 1721859 LIFETIME WARRANTY

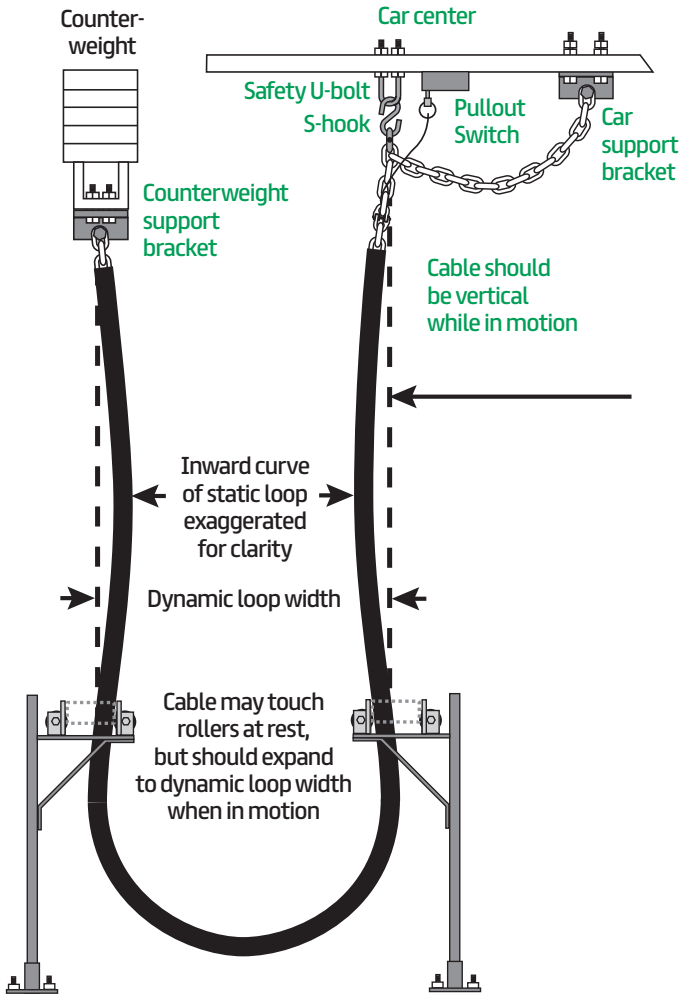
Part Number	Product Code	Cable Weight lbs/ft • kg/m	Chain Trade Size inches • mm	Cable Nom. OD inches • mm	Max. Hang Length feet • meters	Dynamic Loop Width* inches • mm
18-L15-97	SFC 15	1.5 • 2.2	1/4 • 7	1.39 • 35	600 • 183	46 • 1170
18-L20-97	SFC 20	2.0 • 3.0	1/4 • 7	1.56 • 40	520 • 158	47 • 1200
18-L25-97	SFC 25	2.5 • 3.7	5/16 • 8	1.67 • 42	600 • 183	48 • 1220
18-L30-97	SFC 30	3.0 • 4.5	5/16 • 8	1.82 • 46	505 • 154	49 • 1250
18-L35-97	SFC 35	3.5 • 5.2	3/8 • 10	1.91 • 49	600 • 183	50 • 1270
18-L40-97	SFC 40	4.0 • 6.0	3/8 • 10	2.04 • 52	530 • 162	50 • 1270

Steadi-Flex compensation cable is a wide-loop version of our standard Whisper-Flex compensation cable. Because of its wider natural loop, Steadi-Flex cable can be positioned closer to the car's centerline. This improves car balance and ride quality for installations with side counterweights and long hang lengths (over 400 ft • 122 m).

It provides smooth operation at temperatures of 23° F to 140° F • -5° C to +60° C and can be used for elevators with rated speeds up to 700 ft/min • 3.56 m/sec (per ASME A17.1 - 2013, Rule 2.21.4.2 Compensating Rope Tie-Down).

Support brackets, U-bolts, S-hooks and heavy duty couplings specifically designed for Steadi-Flex cable must be used to ensure safe installations. Installation hardware (JCC-XX-CHN) is recommended for use with Steadi-Flex. See pages 31 – 32 for details on this hardware.

Draka EHC's Super SwayLess (p/n WF-RDD4) damping device is recommended for use with Steadi-Flex to minimize cable sway for car speeds above 350 ft/min (1.8 m/sec). See page 34.



STEADI-FLEX INSTALLATION AND THE DYNAMIC LOOP WIDTH

When choosing Steadi-Flex, give special consideration to the dynamic loop width. The dynamic loop width is the width of the loop when the cable is in motion and will vary with car speed, distance between support points and other factors. The static loop width will be up to 10" smaller. Position the attachment points and damping devices per the dynamic loop width in the above table. At rest, the cable should touch the damping device inside rollers; in motion, the loop will expand.

Steadi-Flex is NOT a one-for-one replacement for Whisper-Flex. Pit dimension and possible obstructions should be considered when specifying Steadi-Flex. Counterweight and car attachment points should be spaced to match the dynamic loop width.

Refer to the Draka EHC Compensation Cable Installation Guide for exact instructions on installation procedures.

STRIPPING SERVICE 1-½ OR 3-½ LINKS EXPOSED

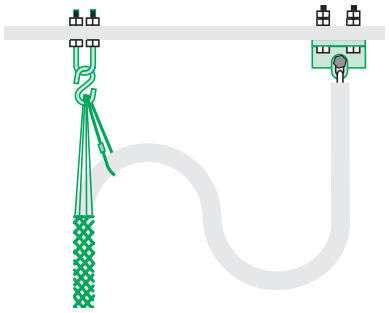
Part Number	Description
WFSTRIP1.5L	Cable with 1-1/2 links stripped at one end
WFSTRIP3L	Cable with 3-1/2 links stripped at one end

Compensation Cable Installation Kits

Installation kits for Whisper-Flex and Steadi-Flex

JCC KITS FOR WHISPER-FLEX IN STANDARD PITS (IMPERIAL COMPONENTS)

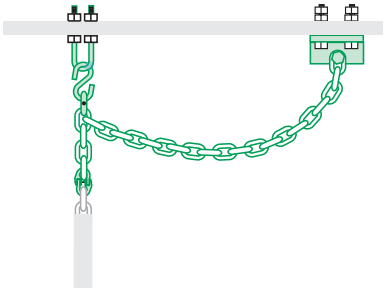
Part Number	For Use on Cables	U-bolt Size	S-hook Part No.	Mesh grip Part No.	Electrical Tape Part No.
JCC-10	WF 075 and WF 10	3/8 in.	79-011	024-20-1504	16-005
JCC-15	WF 15	3/8 in.	79-013	024-20-1470	16-005
JCC-20	WF 20	3/8 in.	79-013	024-20-1510	16-005
JCC-25	WF 25	3/8 in.	79-016	024-20-1510	16-005
JCC-30	WF 30	3/8 in.	79-016	024-20-1499	16-005
JCC-35	WF 35	3/8 in.	79-016	024-20-1499	16-005
JCC-40	WF 40	3/8 in.	79-016	024-20-1542	16-005



JCC installation kits contain two Support Brackets (includes grade 8 nuts, bolts, lockwashers and hardened washers), one U-bolt (includes nuts and washers), one S-hook, one mesh grip, electrical tape and one cable tie.

JCC-CHN KITS FOR STEADI-FLEX (AND WHISPER-FLEX IN SHALLOW PITS)

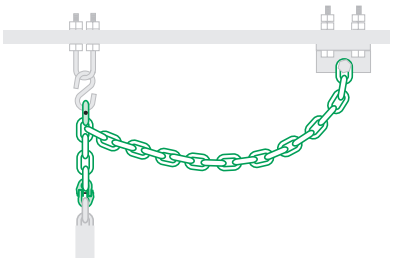
Part Number	For Use on Cables	U-bolt Size	S-hook Part No.	Coupling Quantity/Size	Chain Size
JCC-10-CHN	WF 075 WF 10	3/8 in.	79-011	(1) 9/32 in.	5/16 in.
JCC-20-CHN	WF 15 & 20 SFC 15 & 20	3/8 in.	79-013	(1) 9/32 in.	5/16 in.
JCC-30-CHN	WF 25 & 30 SFC 25 & 30	3/8 in.	79-016	(2) 9/32 in.	3/8 in.
JCC-40-CHN	WF 35 & 40 SFC 35 & 40	3/8 in.	79-016	(1) 9/32 in., (1) 3/8 in.	3/8 in.



JCC-CHN installation kits contain two Support Brackets (includes grade 8 nuts, bolts, lock-washers and hardened washers), one U-bolt (includes nuts and washers) and one S-hook. JCC-CHN kits also include one or two couplings and a 4 ft. length of chain to form the safety/adjustment loop.

COUPLING KITS FOR SHALLOW PITS

Part Number	For Use on Compensation Cable	Chain Size	Coupling Quantity and Size
WF-20-CPLG	WF 075/SFC 15 & 20	5/16 in.	(1) 9/32 in.
WF-30-CPLG	WF/SFC 25 & 30	3/8 in.	(2) 9/32 in.
WF-40-CPLG	WF/SFC 35 & 40	3/8 in.	(1) 9/32 in., (1) 3/8 in.



Coupling kits consist of the chain and coupling(s) from the JCC-CHN installation kits. They DO NOT include mounting brackets, U-bolts or S-hooks.

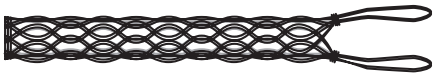
IMPORTANT NOTE ON SAFETY AND WARRANTY FOR WHISPER-FLEX AND STEADI-FLEX:
These components are specifically designed for the installation of Whisper-Flex/Steadi-Flex cables. ONLY THE S-HOOK, MESH GRIP AND COUPLINGS ARE AVAILABLE SEPARATELY. USE OF OTHER HARDWARE (non-Draka EHC components) COULD SERIOUSLY JEOPARDIZE THE SAFETY OF THE WHISPER-FLEX OR STEADI-FLEX CABLE INSTALLATION AND WILL VOID ANY WARRANTY.

Compensation Cable Installation Hardware

Used in Whisper-Flex and Steadi-Flex installation kits

STAINLESS STEEL MESH GRIP – DOUBLE EYE/DOUBLE WEAVE/CLOSED MESH

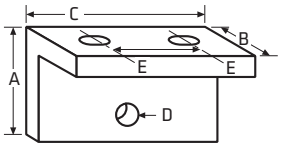
Part Number	For use on Cables	Eye Length inches • mm	Nom. Mesh Length inches • mm	Maximum Load lbs • kg
024-20-1504	WF 075, WF 10	12.0 • 305	14.0 • 356	1200 • 545
024-20-1470	WF 15	12.0 • 305	15.0 • 381	1640 • 745
024-20-1510	WF 20, WF 25	12.0 • 305	17.0 • 432	1660 • 755
024-20-1499	WF 30, WF 35	12.0 • 305	19.0 • 483	1800 • 818
024-20-1542	WF 40	12.0 • 305	21.0 • 533	1800 • 818



Maximum load is based on minimum breaking strength with a 5:1 safety factor.

SUPPORT BRACKET – TWO REQUIRED

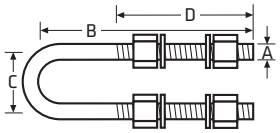
Part Number	For use on Cables	Overall Size (AxBxC) in • mm	Hole D Dia. in • mm	Slot Size in • mm	Slot E to E in • mm
n/a	WF 075 WF 10	3 x 3 x 5 • 76 x 76 x 127	3/8 • 9.5	1/2 x 7/8 • 13 x 22	2-5/8 • 66.7
n/a	WF/SFC 15 to WF/SFC 30	3 x 3 x 5 • 76 x 76 x 127	7/16 • 11	1/2 x 7/8 • 13 x 22	2-5/8 • 66.7
n/a	WF/SFC 35 to WF/SFC 40	3 x 3 x 5 • 76 x 76 x 127	1/2 • 13	1/2 x 7/8 • 13 x 22	2-5/8 • 66.7



Support brackets are sold as part of the JCC kits and cannot be ordered separately.

STEEL U-BOLT – ONE REQUIRED

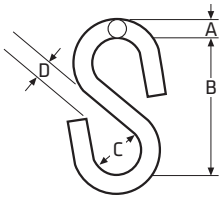
Part Number	For use on Cables	Dim. A in • mm	Dim. B in • mm	Dim. C in • mm	Dim. T in• mm	Maximum Load* lbs • kg
n/a	WF 075, WF 10 WF/SFC 15 to WF/SFC 40	3/8 • 9.5	4-3/4 • 121	2-7/8 • 73	3 • 76	2200 • 998



U-bolts are sold as part of the JCC kits and cannot be ordered separately.
*Maximum Load is based on minimum breaking strength with a 5:1 safety factor.

STEEL S-HOOK – ONE REQUIRED – AVAILABLE FOR INDIVIDUAL REPLACEMENT

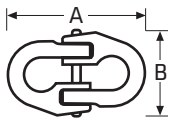
Part Number	For use on Cables	Dim. A in • mm	Dim. B in • mm	Dim. C in • mm	Dim. D in • mm	Yield Strength lbs • kg
79-011	WF 075, WF 10	3/8 • 9.5	2-3/8 • 60	3/4 • 19	17/32 • 14	1200 • 544
79-013	WF/SFC 15 to WF/SFC 20	3/8 • 9.5	2-3/4 • 70	3/4 • 19	1/2 • 13	2400 • 1088
79-016	WF/SFC 25 to WF/SFC 40	17/32 • 13.5	3 • 76	1 • 25	19/32 • 15	4800 • 2177



Since the S-Hook is designed to yield in order to alleviate possible damage in the event of obstruction, this item is available for replacement purposes as shown in the Draka EHC Compensation Cable Installation Guide.

COUPLING – ONE OR TWO REQUIRED FOR JCC-CHN INSTALLATION – SEE PAGE 31

Part Number	For use on Cables	For Chain Size in • mm	Dim. A in • mm	Dim. B in • mm	Working Load Limit lbs • kg
79-116	WF 075 to 30	9/32 • 7	2-17/32 • 64	15/16 • 23	4300 • 1950
79-117	WF/SFC 35 to 40	3/8 • 10	3-7/16 • 87	2-3/8 • 60	8800 • 4000



IMPORTANT NOTE ON SAFETY AND WARRANTY FOR WHISPER-FLEX AND STEADI-FLEX:
These components are specifically designed for the installation of Whisper-Flex/Steadi-Flex cables. ONLY THE S-HOOK, MESH GRIP AND COUPLINGS ARE AVAILABLE SEPARATELY. USE OF OTHER HARDWARE (non-Draka EHC components) COULD SERIOUSLY JEOPARDIZE THE SAFETY OF THE WHISPER-FLEX OR STEADI-FLEX CABLE INSTALLATION AND WILL VOID ANY WARRANTY.

Compensation Cable Accessories

SwayLess® damping device for whisper-Flex with speeds up to 500 ft/min • 2.54 m/sec

US PATENT 6234277, EURO PATENT 1177150

Part Number	Overall Dimensions	Center opening	Quantity
WF-SRD	6-1/4 x 3-15/16 x 2-3/4 in.	2-3/4 in.	2
WF-SRD-1	6-1/4 x 3-15/16 x 2-3/4 in.	2-3/4 in.	1
WF-SRD-M	158 x 100 x 70 mm	70 mm	2
WF-SRD-BR	brass ring replacement	2-3/4 in. • 70 mm	1

Two SwayLess devices are required per installation. The WF-SRD-M metric version uses metric nuts and bolts for closure and attachment. Mounting brackets are sold separately (below). Use only with Whisper-Flex cables. DO NOT USE WITH STEADI-FLEX CABLES.

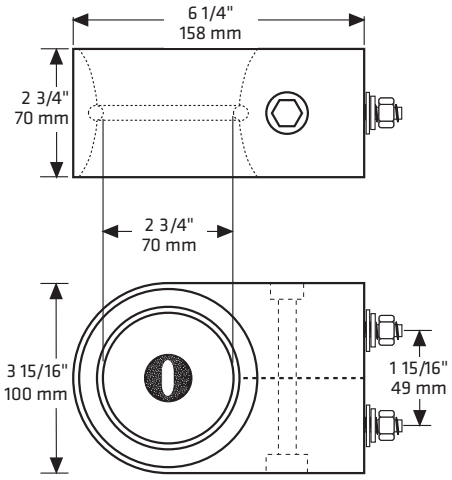
WF-SRD SwayLess damping devices are recommended for maintaining smooth operation of Whisper-Flex compensation cables for speeds of up to 500 feet/min • 2.54 m/sec.

The purpose of the WF-SRD is to dampen any oscillation or cable sway that may be generated by cable motion at higher speeds. The damping device is not usually required but can be used for speeds less than 350 feet/min • 1.78 m/sec. Proper installation requires that compensation cable should not contact the ring of the damping device when the cable is stationary. Cable must be centered within the holes.

As the car and counterweight move, the damping device keeps the compensation cable in position for optimum operation.

The WF-SRD can be used for Whisper-Flex sizes WF075 to WF30. Draka EHC offers mounting brackets for easy installation in the elevator pit. Consult the Draka EHC Compensation Cable Installation Guide for the installation of damping devices.

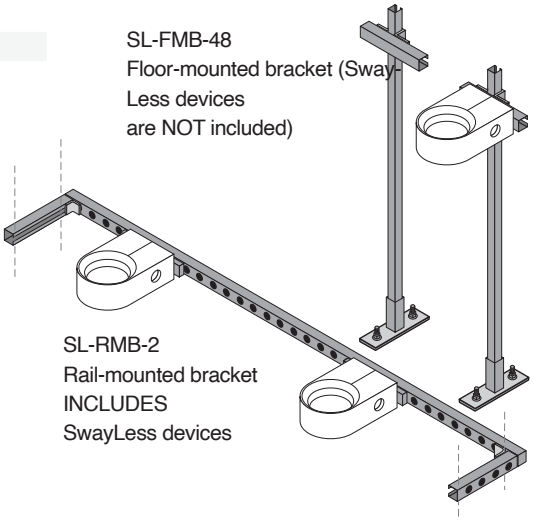
For shallow pits not allowing three feet height above cable loop, please call Draka EHC for engineering assistance.



SWAYLESS MOUNTING BRACKETS

Part Number	Description
SL-FMB-48	(2) floor-mounted brackets, adjustable to 48 in. • 1.2 m height
SL-FMB-2	(2) floor-mounted brackets, adjustable to 48 in. • 1.2 m height, includes (2) SwayLess devices
SL-RMB-60	Counterweight rail-mounted bracket, adjustable to 60 in. • 1.5 m width
SL-RMB-2	Counterweight rail-mounted bracket, adjustable to 60 in. • 1.5 m width, includes (2) SwayLess devices

These brackets are specially designed to help you to quickly and easily install SwayLess devices off the counterweight guide rails and off the pit floor. They come with all the necessary hardware, including nuts, bolts and anchors.



BENFIELD
ELECTRIC AND ELEVATOR SUPPLY CORP

(718) 706 8600

Compensation Cable Accessories

Super SwayLess® damping device for speeds up to 700 ft/min • 3.56 m/sec

SUPER SWAYLESS WITH LARGER ROLLERS

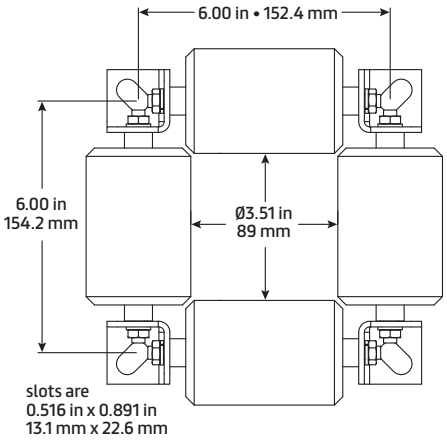
Part Number	Application	Overall Dimensions in • mm	Mounting Hole Dia. in • mm	Quantity
WF-RDD4	Whisper-Flex, Steadi-Flex	8 x 8 x 3.1 • 203 x 203 x 79	1/2 • 13	1
ISOLATION PADS	Replacement pads	1.5 X 1.5 • 38.1 X 38.1	1/2 • 13	4

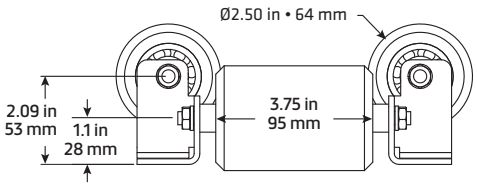
The new Super SwayLess WF-RDD4 is designed for use on any size Whisper-Flex® or Steadi-Flex® compensating cable. It is recommended for smooth compensating cable operation for speeds up to 700 feet/min • 3.56 m/sec.

Larger free-turning nylon rollers have been engineered with a bigger shaft for increased durability. The increased size of the rollers also permits quieter operation. Grease-filled high-strength bearings are built to handle the higher pressures and impact of Steadi-Flex cables.

This enhanced design uses the formed steel mounting brackets from the earlier version of the Super SwayLess for simpler installation and cushioned isolation pads to reduce vibration noise.

Two Super SwayLess devices are required per cable. Mounting brackets are sold separately (below).

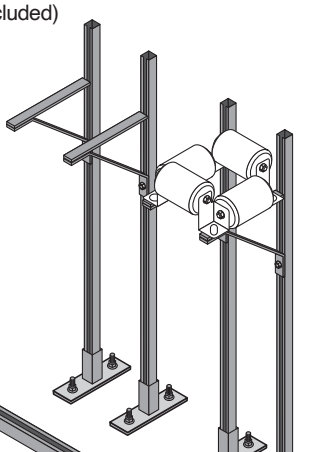




SUPER SWAYLESS MOUNTING BRACKETS

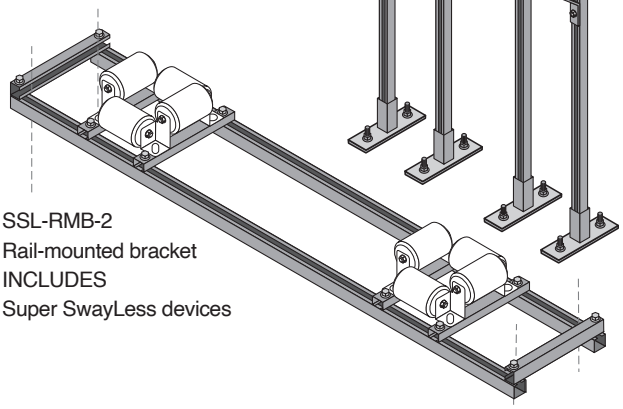
Part Number	Description
SSL-FMB-48	(2) floor-mounted brackets, adjustable to 48 in. • 1.2 m height, order WF-RDD4 separately
SSL-RMB-72	Counterweight rail-mounted bracket, adjustable to 72 in. • 1.8 m width, order WF-RDD4 separately
SSL-RMB-2	Counterweight rail-mounted bracket, adjustable to 72 in. • 1.8 m width, includes (2) WF-RDD4 devices

SSL-FMB-48
Floor-mounted bracket
(Super SwayLess devices
are NOT included)



These brackets are specially designed to help you to quickly and easily install Super SwayLess devices off the counterweight guide rails and off the pit floor. They come with all the necessary hardware, including nuts, bolts and anchors.

Two Super SwayLess damping devices are required per installation. These devices are sold separately (above).



SSL-RMB-2
Rail-mounted bracket
INCLUDES
Super SwayLess devices

BENFIELD
ELECTRIC AND ELEVATOR SUPPLY CORP

Compensation Cable Accessories

ShallowSwayless® for speeds up to 700 ft/min • 3.56 m/sec and pullout switch kit

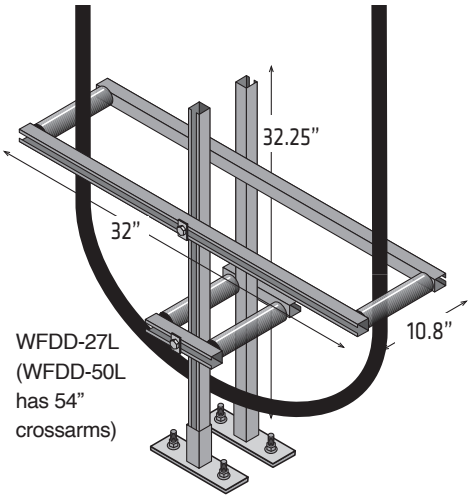
SHALLOWSWAYLESS DAMPING DEVICE

Part Number	Description
WFDD-27L	ShallowSwayless kit, for Whisper-Flex cable with maximum loop of 27 inches
WFDD-50L	ShallowSwayless kit, for Steadi-Flex cable with maximum loop of 50 inches

The ShallowSwayless is a sway reduction device for shallow pit applications where there is insufficient pit depth for SwayLess or Super SwayLess devices. It reduces compensation cable sway and oscillation in installations up to 700 ft/min • 3.56 m/sec. Two sizes are available; the 27L version is for Whisper-Flex and the 50L version is for Steadi-Flex.

NOTE: The ShallowSwayless is ONLY for shallow pit applications. To determine if a ShallowSwayless is required, note that compensating cable must remain vertical as it passes through the SwayLess or Super SwayLess damping devices. If this is not possible, even when the damping device is mounted at the compressed buffer height and the cable loop is within 6 inches of the pit floor, there is insufficient pit depth and the ShallowSwayless should be used.

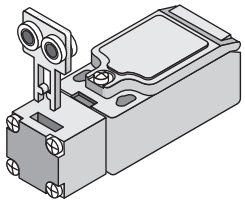
The kit includes all components shown, including mounting bolts, washers and anchors.

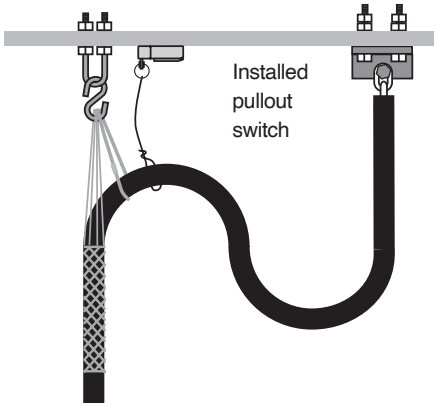


PULLOUT SWITCH AND INSTALLATION KIT

Part Number	Description
36-207A	Pullout switch, with flat key actuator, rotating head and M16 to 1/2 inch NPT adapter
WF-POSK	Pullout switch installation kit, which includes one pullout switch (#36-207A), two split O-rings, two cable ties, two 4 x 40 mm pan-head screws, two 4 mm hex nuts, four 4 mm flat washers and two 4 mm lock washers

The pullout switch is UL and C-UL listed and conforms to EN60947-5-1 and EN50047. The switch enclosure meets IP65.





BENFIELD ELECTRIC AND ELEVATOR SUPPLY CORP

Rail Mounting Hardware

RAIL BRACKETS

Part Number	Description	Adjustable Range Distance from Wall
9743A-1	Small (1/4 in.) rail bracket assembly, with rail clips	2-1/4 to 3-1/4 in.
9743A-2	Small (1/4 in.) rail bracket assembly, with rail clips	3 to 4-3/4 in.
9750A-1	Small (1/4 in.) rail bracket assembly, without rail clips	2-1/4 to 3-1/4 in.
9750A-2	Small (1/4 in.) rail bracket assembly, without rail clips	3 to 4-3/4 in.
9745A-1	Large (5/16 in.) rail bracket assembly, with rail clips	4 to 6-3/4 in.
9745A-2	Large (5/16 in.) rail bracket assembly, with rail clips	5-3/4 to 8-1/8 in.
9745A-3	Large (5/16 in.) rail bracket assembly, with rail clips	7-1/2 to 10-1/4 in.
9749A-1	Large (5/16 in.) rail bracket assembly, without rail clips	4 to 6-3/4 in.
9749A-2	Large (5/16 in.) rail bracket assembly, without rail clips	5-3/4 to 8-1/8 in.
9749A-3	Large (5/16 in.) rail bracket assembly, without rail clips	7-1/2 to 10-1/4 in.

Rail brackets with rail clips also include locking plates for seismic areas.

Rail brackets without rail clips do not include rail clip fasteners.

Neither bracket includes wall fasteners.

12 and 15 lb. brackets use 5/8 in. fasteners.

Assemblies with rail clips for 8 lb. rail are a special order and include a correctly-sized locking plate and 1/2 in. fasteners.

RAIL CLIPS

Part Number	Description
55-012	Forged rail clip, for 8 lb. rail, uses 1/2 in. fasteners
55-013	Forged rail clip, for 12 lb. rail, uses 5/8 in. fasteners
55-014	Forged rail clip, for 15 lb. rail, uses 5/8 in. fasteners

RAIL BRACKET SHIMS

Part Number	Size	Thickness	Cutout(s)
55-020	8 x 2 in.	.030 in.	11/16 in.
55-021	8 x 2 in.	.060 in.	11/16 in.
55-022	8 x 2 in.	.105 in.	11/16 in.
55-023	9-3/8 x 2 in.	.030 in.	13/16 in.
55-024	9-3/8 x 2 in.	.060 in.	13/16 in.
55-025	9-3/8 x 2 in.	.105 in.	13/16 in.
55-026	3 x 2 in.	.015 in.	13/16 in.

Tools

Jacket strippers

FLEXIPEELER™ ROUND CABLE STRIPPER

Part Number	Description
36-060	FlexiPeeler, for cable dia. 0.2 to 1.5 in. • 4.5 to 40 mm, one replacement blade included
36-061	Replacement blade

The FlexiPeeler precisely cuts a jacket with rotary, straight lengthwise and spiral cuts. Two quickly switched hooks permit its use on cables from 0.2 in. to 1.5 in. • 4.5 to 40 mm in diameter. Cut depth is adjustable. A replacement blade is included in the handle.

SUPER PEELER ROUND CABLE STRIPPER

Part Number	Description
36-146	Super Peeler, for cable dia. 3/4 to 1-1/4 in. • 19 to 32 mm
36-147	Super Peeler, for cable dia. 1-1/4 to 2 in. • 32 to 51 mm
36-148	Replacement blade, for both versions

Easy to calibrate and use, these unique cable 'peelers' allow you to precisely score round traveling cable jackets for fast removal without nicking the conductors underneath. By turning the dial, the spring-loaded blade on either stripper can be adjusted to a scoring depth of 0.05 to 0.14 in • 1.27 to 3.56 mm.

FCJ FLAT CABLE STRIPPER

Part Number	Description
36-135-M1	FCJ Stripper
36-138	Replacement blades, package of six
36-139-M1	Replacement blade guide

Faster and safer than the utility knife it replaces, the FCJ stripper makes easy work of stripping jackets from flat cables. A rigid, ergonomic handle fits the worker's hand and protects it from cuts and skinned knuckles. The blade is housed in an L-shaped hardened steel guide that eases the stripping operation while keeping the blade and fingers from touching. Two extra blades are included in the handle.

SOCK SLICER™

Part Number	Description
36-177	Sock Slicer braid cutter

The Sock Slicer braid cutter is specially designed for fast, easy braid removal. The protected blade cannot nick conductors and can be repositioned / rotated for optimum sharpness should it ever get dull.

Draka EHC

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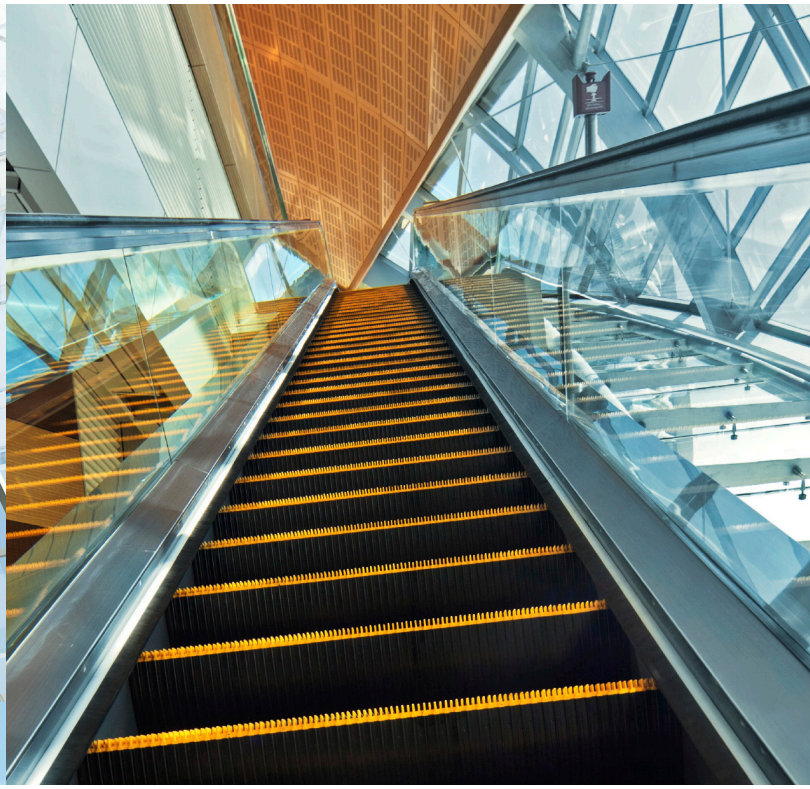
ROPES • SAFETY PRODUCTS



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