

Wire Rope Ordering Information

WIRE ROPE MANUFACTURED BY GUSTAV WOLF

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 (refer to the rope cross-sections shown in this catalog).

Look at the rope tag to determine breaking strength and then refer to the information in this catalog or contact your Draka 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 and these are available on page 62 of this catalog.

Loose rope ends should always be seized or secured with cable bands to prevent untwisting. Cable bands are available on page 62 of this catalog.

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.

Use these tools to cut and measure wire rope. See page 88 for details.

#WR-IMPACT
Impact cutter



#WR-HYDRAULIC
Hydraulic cutter



#WR-RATCHET
Ratchet cutter



#WR-MT
Rope gauge



#WR-QBTM-2
Tension meter



#WR-CALIPER-C
Digital caliper



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. Tension measuring devices are available on pages 64, 65 and 88 of this catalog.

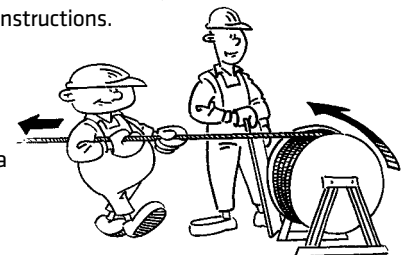
Field lubrication policy

Draka strongly recommends an annual lubrication application every spring, if the ropes become dry or at 250,000 cycles, whichever occurs first.

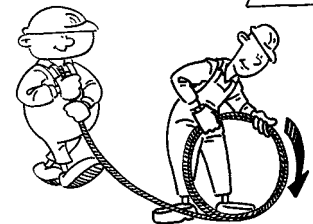
Ropes should be lubricated prior to summer and the increased temperature and humidity it brings. Condensation caused by the combination of an air conditioned machine room and a humid hoistway must be kept from entering the rope core.

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 Tech Tip #6 for detailed lubrication instructions.

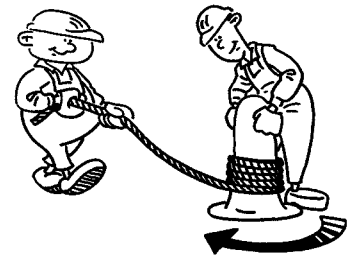
Wire rope may be paid off a reel supported by jack stands with a helper using a board as a brake...



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



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



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

Other imperial diameters are available. Refer to pages 53-54 of this catalog or contact Draka for additional information.

The goal of the suggested hoist rope guidelines is to achieve maximum rope service life and minimum rope elongation. The guidelines for hoist rope are based on Rise/Travel and apply to standard 1:1 overhead machine installations only unless otherwise indicated. Other machine arrangements should be discussed with your Gustav Wolf representative prior to ordering.

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.

To insure maximum rope and sheave life a program of regular re-lubrication should be adopted. Refer to page 51 of this catalog for information on field re-lubrication. DrakaLube™ is available (see page 63).

Rope and sheave life will be maximized if hoist rope tension is equalized (within a 10% range) at the time of rope installation and at regular intervals thereafter (see page 51 for more information). The use of the portable RTS Rope Tensioning System (available on page 64 of this catalog) is recommended.

† 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).

Range of acceptable traction sheave hardness based on rope grade/tensile strength:

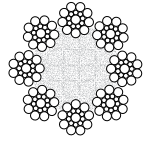
| Wire Rope Type (see table above and other ropes in this catalog) | Minimum Tensile Strength of Outer Wires (N/mm ² • psi) | Hardness of Traction Sheave (Brinell) |
|--|---|---------------------------------------|
| F 819 W-FC DT Iron & F 819 F-FC DT Iron | 680 • 100,000 (iron grade) | For governor/comp. 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 (see page 55) | 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

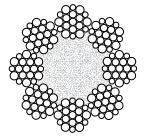
| Part Number | Application | Diameter inches | Grade | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|---------------|--------------|-----------------|----------|-----------|-----------------------------|--------------------------|
| 80-000-A | Hoist / Gov. | 1/4 | Traction | Regular | 3600 • 16025 | 0.09 • 0.14 |
| 80-001-A | 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-A | 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-A | 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

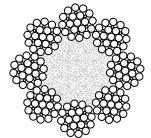
| Part Number | Application | Diameter inches | Grade | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|-------------|-----------------|----------|-----------|-----------------------------|--------------------------|
| 80-001W | Governor | 3/8 | Traction | Regular | 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.

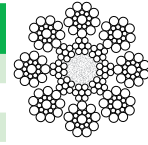
Wire Rope, Compensation and Accessories

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

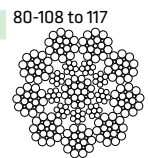
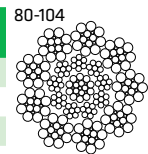
| Part Number | Application | Diameter inches | Tensile Strength N/mm ² | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|-------------|-----------------|------------------------------------|-----------|-----------------------------|--------------------------|
| 80-016-A | 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/mm ² | 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 |



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

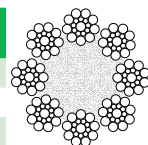
| Part Number | Application | Diameter inches | Grade | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|--------------|-------------|-----------------|----------|-----------|-----------------------------|--------------------------|
| 80-001CSLL-A | Hoist | 3/8 | Traction | Lang | 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

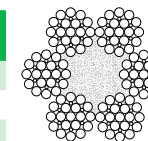
| Part Number | Application | Diameter inches | Grade | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|--------------|-----------------|----------|-----------|-----------------------------|--------------------------|
| 80-001G-K | Hoist / Gov. | 3/8 | Traction | Regular | 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 |
| 80-075EH5FW | 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.

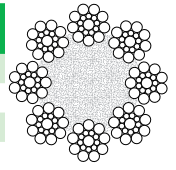
Wire Rope, Compensation and Accessories

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

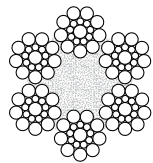
| Part Number | Application | Diameter mm | Tensile Strength N/mm ² | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|-------------|-------------|------------------------------------|-----------|-----------------------------|--------------------------|
| 80-005-A | 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 |



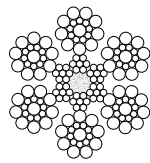
A popular metric rope design used in many standard hoist and compensating applications. Eight-strand/Seale construction with its larger outer wires better resists abrasion and wear. Dual-tensile design provides high-breaking strength without damage to sheaves with lower Brinell hardness.

Metric governor – refer to specifications below

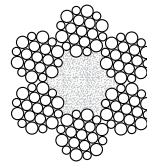
| Part Number | Construction | Application | Diameter mm | Tensile Strength N/mm ² | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|-------------------------------|-------------|-------------|------------------------------------|-----------|-----------------------------|--------------------------|
| 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 |



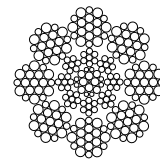
80-074 and 80-080-S are 6 x 19 Seale with synthetic fiber core. 80-080-S is galvanized.



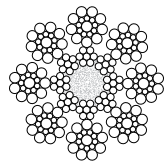
80-086 and 80-043-A are 6 x 19 PAWO F3 Seale with steel-reinforced natural fiber core.



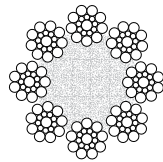
80-084 is 6 x 19 Warrington with natural fiber core.



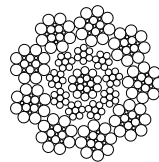
80-094 is 8 x 19 PAWO 819W Warrington with full steel core (IWRC).



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).

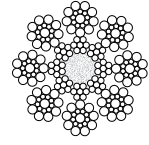
All listed Gustav Wolf wire rope is preformed, right lay with a bright (uncoated) finish (EXCEPT FOR 80-080-S and 80-077 above which are galvanized). All popular items are in stock for immediate delivery. Less popular items and other diameters, strandings, constructions, grades, coatings, etc. are available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

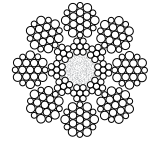
| Part Number | Application | Diameter mm | Tensile Strength N/mm ² | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|-------------|-------------|------------------------------------|-----------|-----------------------------|--------------------------|
| 80-045-A | 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

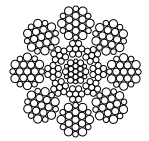
| Part Number | Application | Diameter mm | Tensile Strength N/mm ² | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|-------------|-------------|------------------------------------|-----------|-----------------------------|--------------------------|
| 80-056-A | 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/mm ² | 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.

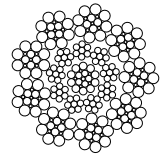
Wire Rope, Compensation and Accessories

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

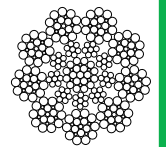
| Part Number | Application | Diameter mm | Tensile Strength N/mm ² | Right Lay | Min. Breaking Force lbf • N | Net Weight lbs/ft • kg/m |
|-------------|-------------|-------------|------------------------------------|-----------|-----------------------------|--------------------------|
| 80-102 | Hoist | 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/mm ² | 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 |

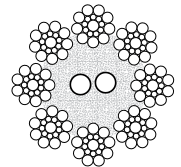


Wire Rope, Compensation and Accessories

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.

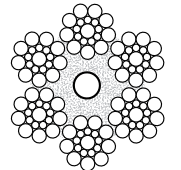
Metric hoist PAWO F4e – 8 x 19 Seale with synthetic fiber core and two 0.96 mm² (>18 AWG) conductors

| Part Number | Construction | Application | Diameter mm | Tensile Strength N/mm ² | 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/mm ² | 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.