

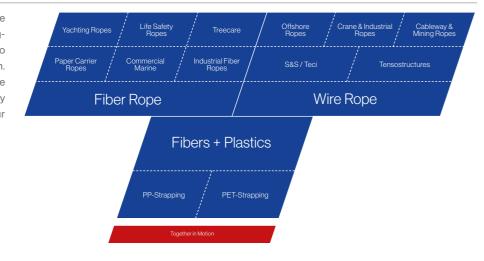
/ TEUFELBERGER CONTENTS

EXPERTISE FROM MORE THAN 225 YEARS OF EXPERIENCE

What started back in 1790 as a simple shop making hemp ropes has since evolved into a globally successful group of enterprises specializing in the development and production of fiber and steel wire ropes as well as strapping.

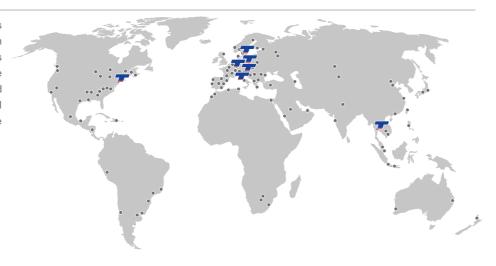
Great diversity

TEUFELBERGER's products and services are destined for a wide variety of applications ranging from cranes and marine applications to packaging and through to personal protection. The continuity and stability of a family enterprise makes us a reliable partner who, competently and effectively, supports you in mastering your day-to-day challenges..



Global presence ensures customer proximity

Manufacturing operations in various countries allow us to meet local quality and certification standards as well as customer requirements without difficulty. From our sites in Austria, the Czech Republic, the U.S., Italy, Sweden, and Thailand, and backed by a close-knit global network of distribution partners, we continue to satisfy the expectations of our customers.



Innovative solutions through synergies

high performance fibers, and the processing of partner right from the project planning phase. and quality assurance. wires into ropes and strapping.

TEUFELBERGER is a leading specialist for fiber Especially fiber and steel wire products have 5% of TEUFELBERGER's employees are active and steel wire ropes as well as strapping. The brought about valuable synergies with regard to in research and development and make sure spectrum of technologies in TEUFELBERGER's both application and manufacturing technologies, that our customers have access to the latest portfolio generates various synergies between which have benefited our customers tremen- innovative rope technologies. 10% of the entire the extrusion of thermoplastics, the braiding of dously. This makes TEUFELBERGER your ideal investment volume is committed to development

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MARNING

Using these products may prove hazardous. Therefore, never use our products for purposes other than those they were designed for. Customers must ensure that all persons using these products are familiar with their correct use and the related necessary safety precautions. Please bear in mind that any of these products may inflict harm when used incorrectly or subjected to excessive loads.

TEUFELBERGER®, 拖飞宝®, PLASTFILL® and SUPERFILL® are internationally registered trademarks of TEUFELBERGER Group. Subject to technical modifications, typesetting and printing errors.

WE OFFER MORE.

In manufacturing, research & development, and marketing & sales, Teufelberger-Redaelli focus exclusively on high quality special purpose steel wire ropes. Breakthrough technologies and top quality products are the base of our success.

Teufelberger-Redaelli Service

Expert advice

Teufelberger-Redaelli's network of experts provides competent support the following advantages: close to you. This allows us to find the best possible solution for your - Long service life due to the permanent lubrication and the reduction needs. 24 h Hotline: +43 (0) 7242 615 388

Customized solutions and products

cooperation with our suppliers ensure that our products satisfy all your re- - Reduced internal abrasion thanks to the exact positioning of strands quirements. Working together with you, the team from Teufelberger-Redaelli will determine the best solution.

Quality and expertise

Top quality

Teufelberger-Redaelli processes only high quality raw materials in its cutting-edge manufacturing facilities. The comprehensive quality testing of primary materials and final products as well as the certification to ISO 9001 guarantee the consistent high quality of our steel wire ropes.

Our special ropes are designed to fulfill the requirements of your application. Worldwide reference projects are a testament to the high quality of our work. We provide test certificates to ABS, DNV, BV, RINA, GL, LR, RS, NKK, CCS – depending on your needs.

Research and development

Innovative products

As customer requirements change, our products must satisfy new, higher demands. Our R&D team drives innovation and continuous product improvement in terms of safety, reliability, and durability.

Successful partnerships

Intensive partnerships with a sizable number of key users in the sparepart market are clear examples of our focus on our customers' needs. Also, the long-standing cooperation with universities and research institutions ensure the lively exchange of ideas toward the development of new and existing products.

PLASTFILL® INSERT

The lubricated steel core is covered in a tight synthetic coat. This provides

- of friction between the rope's core and its outer strands
- Resistance to compression and lateral pressure as well as to environmental influences and the ingress of dirt
- Joint development efforts with crane and equipment manufacturers and close Higher breaking forces due to reduced surface pressures in the rope
 - with consistent clearances between them

COMPACTION TECHNOLOGY

Each rope strand is compacted by a special process, which significantly improves the rope's properties:

- Up to 30 % greater breaking forces than non-compacted ropes
- Prolonged service life due to lower specific loading
- Less abrasion on the rope and on reels and drums due to the rope's
- Resistance against crushing in multilayer operations

GALVANIZED WIRES

Our steel wires are galvanized before they are drawn in order to achieve high wire precision. This ensures optimal stability and service life. In combination with the PLASTFILL® technology, this galvanization ensures exceptional corrosion resistance.

PRO ACTIVE CORE LUBRICATION

Temperature resistant special grease with significantly improved lubrication properties especially for high temperature application (AHC).

- Higher resistance against corrosion of the core
- Improved service life due to optimal lubrication and the reduction of

Our technology. Your benefit. Flexibility, quality, perfect spooling, rotation resistance, breaking force, life time, safe and reliable in use. PLASTFILL® GALVANIZED WIRE

ROPES FOR OFFSHORE CRANES & WINCHES

Continuous use in extreme environmental conditions places high demands on offshore cranes and winches. Meeting high standards in terms of reliability and safety is of crucial importance for the use of steel wire ropes, also in offshore environments. Teufelberger-Redaelli ropes live up to these standards day after day on countless cranes operating on offshore platforms throughout the world.

Ropes

EVOLUTION TK16 & EVOLUTION TK18

Features a revolutionary design, extremely high suited as a hoisting rope in multilayer or single- multilayer spooling configurations. layer spooling.

- Extremely resistant to corrosion and external environmental influences due to the PLASTFILL® insert (between the core and outer strands)
- Excellent spooling results for multilayer spoo Long service life due to PLASTFILL® insert ling due to its flexibility make it suitable for extremely challenging lifting operations.
- Longer service life for best return on investment, and highest breaking forces thanks to its rope structure featuring the innovative PLASTFILL® and SUPERFILL® technologies. -
- High rotation resistance due to its advanced balanced design, suitable for use for great lifting heights and in deep water.
- Special lubrication solutions on demand for high temperature application (AHC).

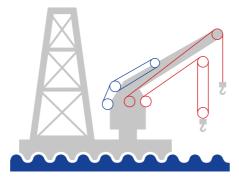
QS 816 V(G)

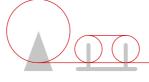
Rotation resistant ordinary lay or lang's lay rope. Extremely resistant 8-strand ordinary lay or those of the ropes in the illustrations. lang's lay rope with PLASTFILL® insert. Especially breaking force, and high flexibility. Perfectly suited as a boom hoist rope in single-layer and Other types of construction on request.

- Reliable and safe in use as a result of its Offshore cranes extremely high breaking forces, achieved primarily by SUPERFILL® compaction technology provided throughout the rope's entire whole cross-section
- and reduced rope abrasion resulting from the rope's smooth surface
- Ideal spooling characteristics due to the rope's high dimensional stability against lateral
- Trouble-free operation due to the rope's excellent resistance to shocks and vibrations.

Applications

The colors of the headlines coordinate with





ROPES FOR MARINE RISER TENSIONERS

Riser tensioners are important installations on floating oil platforms in order to compensate for ocean currents and waves. Their permanent exposure to tensile loads and high bending cycles in harsh ambient conditions puts these ropes to the test. Teufelberger-Redaelli riser tensioner ropes meet all requirements to perfection and demonstrate this on numerous offshore platforms all over the world.

Extremely high resistance to corrosion due to

tion provided by the PLASTFILL® insert.

Less fatigue on sheaves due to the better

distribution of pressure of the 8-strand con-

galvanized wires and the permanent lubrica-

Ropes

PERFECTION M8 (QS 814 VG)

Galvanized 8-strand lang's lay rope, featuring SUPERFILL® compaction technology, developed specifically for use as a riser tensioner rope.

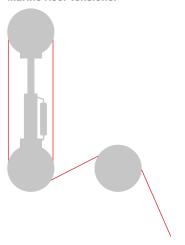
- Reliable and safe in use as a result of its extremely high breaking forces achieved by SUPERFILL® technology.
- Excellent bending fatigue performance and high flexibility due to the rope's 8-strand construction and the high number of wires in the outer strands.
- Longer service life due to reduced rope abrasion as a result of the rope's smooth surface.

Applications

The colors of the headlines coordinate with the those of the ropes in the illustrations.

Other types of construction on request.

Marine riser tensioner













ROPES FOR DRILLING **OPERATIONS**

Extreme environmental conditions and bending over sheaves at high loads present challenging application scenarios for drilling lines on platforms around the world. The use of Teufelberger-Redaelli high performance steel wire ropes with PLASTFILL® insert significantly contributes to the high reliability of the platform.

Ropes

EXECUTION D6s

6-strand ordinary lay rope with SUPERFILL® compaction technology and PLASTFILL® insert, suited as a drill line.

- High breaking force for excellent operational reliability and safety due to SUPERFILL® - Perfect spooling results due to the rope's Drilling operatrions compaction technology.
- Extremely robust and outstanding resistance
 Non-compacted and cost-effective high perto wear and tear thanks to PLASTFILL® insert.
- Optimum spooling results and to great ease of handling due to the flexibility of
- Longer service life due to reduced rope abrasion as a result of the rope's smooth surface.
- Permanent lubrication of the core due to PLASTFILL® insert.

EXECUTION Q6

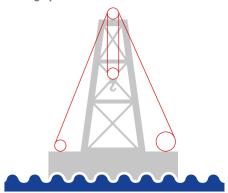
6-strand ordinary lay rope with PLASTFILL® insert, suited as a drill line.

- thanks to PLASTFILL® insert.
- flexibility.
- formance rope for drilling operations.

Applications

The colors of the headlines coordinate with the those of the ropes in the illustrations.

- Resistant to wear and extremely robust Other types of construction on request.

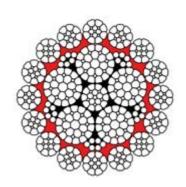


ROTATION RESISTANT EVOLUTION RESISTANT EVOLUTION

EVOLUTION TK18

EVOLUTION TK18 is our high performance rope for large cranes and winches, mainly for the offshore industry in brutally harsh conditions. This rope offers excellent dimensional stability, high resistance to corrosion, and ideal lubrication, especially due to its Pro Active Core Lubrication in combination with a PLASTFILL® insert. EVOLUTION TK18 is the best choice for cranes in combination with active heave compensation.





Specifications

- Ordinary lay or lang's lay, right or left lay
- 16 x K17F EPIWRC (K), RCN 27
- Pro Active Core Lubrication

- ✓ MULTILAYER SPOOLING
- ✓ SUPERFILL®
- ✓ PLASTFILL®

Technical data

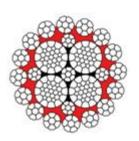
| Nominal Ø | | Weight | | | Minimum breaking force at rope grade | | | |
|-----------|-------|--------|--------|-----------|--------------------------------------|-----------|-----------|-----------|
| | | In air | | submerged | 1770 N/mn | n² | 1960 N/mr | n² |
| mm | inch | kg/m | lbs/ft | kg/m | kN | lbs | kN | lbs |
| 44.45 | 1 3/4 | 9.48 | 6.36 | 7.89 | 1,641 | 368,911 | 1,817 | 408,478 |
| 46 | | 10.24 | 6.87 | 8.54 | 1,758 | 395,214 | 1,960 | 440,626 |
| 48 | | 11.12 | 7.46 | 9.27 | 1,914 | 430,284 | 2,119 | 476,370 |
| 50 | | 12.40 | 8.32 | 10.39 | 2,076 | 466,703 | 2,299 | 516,836 |
| 50.8 | 2 | 12.98 | 8.71 | 10.90 | 2,143 | 481,766 | 2,374 | 533,696 |
| 52 | | 13.61 | 9.13 | 11.43 | 2,246 | 504,921 | 2,487 | 559,100 |
| 54 | 2 1/8 | 14.48 | 9.72 | 12.13 | 2,422 | 544,487 | 2,682 | 602,938 |
| 56 | | 15.28 | 10.25 | 12.75 | 2,605 | 585,627 | 2,884 | 648,349 |
| 58 | | 16.80 | 11.27 | 14.09 | 2,794 | 628,116 | 3,094 | 695,559 |
| 60 | 2 3/8 | 17.92 | 12.02 | 15.02 | 2,990 | 672,179 | 3,311 | 744,342 |
| 62 | | 18.90 | 12.68 | 15.81 | 3,193 | 717,815 | 3,536 | 794,924 |
| 64 | | 20.43 | 13.71 | 17.13 | 3,402 | 764,800 | 3,767 | 846,855 |
| 66 | | 21.14 | 14.18 | 17.63 | 3,618 | 813,359 | 4,006 | 900,585 |
| 68 | | 22.44 | 15.06 | 18.72 | 3,841 | 863,491 | 4,253 | 956,112 |
| 70 | 2 3/4 | 23.91 | 16.04 | 19.97 | 4,070 | 914,972 | 4,507 | 1,013,214 |
| 72 | | 25.40 | 17.04 | 21.23 | 4,306 | 968,027 | 4,768 | 1,071,889 |
| 74 | | 26.90 | 18.05 | 22.49 | 4,548 | 1,022,431 | 5,037 | 1,132,363 |
| 76 | 3 | 28.07 | 18.83 | 23.42 | 4,798 | 1,078,633 | 5,313 | 1,194,410 |
| 78 | | 29.80 | 20.00 | 24.90 | 5,053 | 1,135,960 | 5,596 | 1,258,031 |
| 80 | | 31.40 | 21.07 | 26.25 | 5,316 | 1,195,084 | 5,887 | 1,323,450 |

Other rope diameters are available on request.

EVOLUTION TK16

The result of a revolutionary design, high quality materials, and perfectly harmonized production processes, EVOLUTION TK16 combines all the characteristics a rotation resistant rope needs for your application: excellent durability and best flexibility!





Specifications

- Ordinary lay or lang's lay, right or left lay
- 8-30 mm: 16 x K6-EPIWRC (K), RCN 23-1
- 32-42 mm: 16 x K7-EPIWRC (K), RCN 23-2
- ✓ MULTILAYER SPOOLING
- ✓ SUPERFILL®
- ✓ PLASTFILL®

Technical data

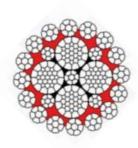
| Nominal Ø | | Weight | Weight | | breaking force | at rope grade | е | | |
|-----------|-----------------------|----------------|--------|-------|----------------|---------------|---------|----------|---------|
| | | | | | m² | 1960 N/m | nm² | 2160 N/r | nm² |
| mm | inch | kg/m | lbs/ft | kN | lbs | kN | lbs | kN | lbs |
| 8 | 5/16 | 0.34 | 0.23 | 54 | 12,140 | 59 | 13,264 | 64 | 14,388 |
| 9 | | 0.41 | 0.27 | 67 | 15,062 | 74 | 16,636 | 78 | 17,535 |
| 10 | | 0.50 | 0.33 | 82 | 18,434 | 91 | 20,458 | 98 | 22,031 |
| 11 | | 0.61 | 0.41 | 100 | 22,481 | 111 | 24,954 | 118 | 26,527 |
| 12 | | 0.74 | 0.50 | 120 | 26,977 | 133 | 29,900 | 144 | 32,372 |
| 13 | | 0.86 | 0.58 | 141 | 31,698 | 156 | 35,070 | 170 | 38,218 |
| 14 | 9/16 | 1.01 | 0.68 | 163 | 36,644 | 181 | 40,690 | 197 | 44,287 |
| 15 | | 1.16 | 0.78 | 194 | 43,613 | 215 | 48,334 | 231 | 51,931 |
| 16 | 5/8 | 1.32 | 0.88 | 221 | 49,683 | 244 | 54,853 | 263 | 59,125 |
| 17 | | 1.50 | 1.01 | 241 | 54,179 | 267 | 60,024 | 290 | 65,195 |
| 18 | | 1.64 | 1.10 | 279 | 62,722 | 309 | 69,466 | 333 | 74,861 |
| 19 | 3/4 | 1.85 | 1.24 | 312 | 70,140 | 345 | 77,559 | 371 | 83,404 |
| 20 | | 2.08 | 1.39 | 338 | 75,985 | 374 | 84,079 | 401 | 90,148 |
| 21 | | 2.26 | 1.52 | 373 | 83,854 | 413 | 92,846 | 444 | 99,815 |
| 22 | 7/8 | 2.51 | 1.68 | 408 | 91,722 | 452 | 101,614 | 487 | 109,482 |
| 24 | | 2.94 | 1.97 | 483 | 108,583 | 535 | 120,273 | 580 | 130,389 |
| 25 | 1 | 3.15 | 2.11 | 537 | 120,722 | 595 | 133,761 | 639 | 143,653 |
| 26 | | 3.49 | 2.34 | 567 | 127,467 | 627 | 140,955 | 675 | 151,746 |
| 27 | | 3.74 | 2.51 | 609 | 136,909 | 674 | 151,521 | 725 | 162,986 |
| 28 | | 4.05 | 2.71 | 655 | 147,250 | 725 | 162,986 | 780 | 175,351 |
| 28.57 | 1 1/8 | 4.14 | 2.78 | 668 | 150,172 | 744 | 167,258 | 814 | 182,994 |
| 29 | | 4.27 | 2.87 | 701 | 157,591 | 777 | 174,677 | 835 | 187,715 |
| 30 | | 4.62 | 3.10 | 749 | 168,382 | 830 | 186,591 | 893 | 200,754 |
| 32 | 1 1/4 | 5.24 | 3.52 | 853 | 191,762 | 944 | 212,220 | 1.035 | 232,677 |
| 34 | | 5.90 | 3.96 | 958 | 215,367 | 1,061 | 238,522 | 1.141 | 256,507 |
| 36 | | 6.65 | 4.46 | 1,072 | 240,995 | 1,187 | 266,848 | 1.277 | 287,081 |
| 38 | 1 1/2 | 7.35 | 4.93 | 1,237 | 278,089 | 1,369 | 307,763 | 1.472 | 330,919 |
| 40 | | 8.13 | 5.46 | 1,317 | 296,073 | 1,458 | 327,771 | 1.568 | 352,500 |
| 42 | | 8.97 | 6.02 | 1,452 | 326,423 | 1,608 | 361,493 | 1.729 | 388,695 |
| 041 | liamatore are availab | ala an raquaat | | | | | | | |

Other rope diameters are available on request.

EVOLUTION TK16^{plus}

Higher breaking forces for special customer needs. The consistent and systematic further development and improvement of the production processes involved facilitate particularly narrow manufacturing tolerances.





Specifications

- Ordinary lay or lang's lay, right or left lay
- 8-30 mm: 16 x K6-EPIWRC (K), RCN 23-1
- 32-42 mm: 16 x K7-EPIWRC (K), RCN 23-2
- ✓ MULTILAYER SPOOLING
- ✓ SUPERFILL®
- ✓ PLASTFILL®

Technical data

| Nominal Ø | | | | aking force at rope grade |
|-----------|-------------------------------------|--|--------|---------------------------|
| | In air | | | |
| inch | kg/m | lbs/ft | kN | lbs |
| 5/16 | 0.34 | 0.23 | 62 | 13,938 |
| | 0.41 | 0.27 | 79 | 17,760 |
| | 0.50 | 0.33 | 97 | 21,806 |
| | 0.61 | 0.41 | 117 | 26,303 |
| | 0.74 | 0.50 | 140 | 31,473 |
| | 0.86 | 0.58 | 164 | 36,869 |
| 9/16 | 1.01 | 0.68 | 190 | 42,714 |
| | 1.16 | 0.78 | 218 | 49,008 |
| 5/8 | 1.32 | 0.88 | 248 | 55,753 |
| | 1.50 | 1.01 | 280 | 62,947 |
| | 1.64 | 1.10 | 314 | 70,590 |
| 3/4 | 1.85 | 1.24 | 350 | 78,683 |
| | 2.08 | 1.39 | 388 | 87,226 |
| | 2.26 | 1.52 | 428 | 96,218 |
| 7/8 | 2.51 | 1.68 | 469 | 105,435 |
| | 2.94 | 1.97 | 559 | 125,668 |
| 1 | 3.15 | 2.11 | 623 | 140,056 |
| | 3.49 | 2.34 | 656 | 147,475 |
| | 3.74 | 2.51 | 707 | 158,940 |
| | 4.05 | 2.71 | 760 | 170,855 |
| 1 1/8 | 4.14 | 2.78 | 792 | 178,049 |
| | 4.27 | 2.87 | 816 | 183,444 |
| | 4.62 | 3.10 | 873 | 196,258 |
| 1 1/4 | 5.24 | 3.52 | 993 | 223,235 |
| | 5.90 | 3.96 | 1,121 | 252,011 |
| | 6.65 | 4.46 | 1,257 | 282,585 |
| 1 1/2 | 7.35 | 4.93 | 1,369 | 307,763 |
| | 8.13 | 5.46 | 1,517 | 341,035 |
| | 8.97 | 6.02 | 1,672 | 375,881 |
| | 5/16 9/16 5/8 3/4 7/8 1 1 1/8 | inch kg/m 0.34 0.41 0.50 0.61 0.74 0.86 0.94 1.01 1.16 1.16 1.32 1.50 1.64 3/4 1.85 2.08 2.26 7/8 2.51 2.94 1 3.15 3.49 3.74 4.05 1.1/4 4.27 4.62 1.1/4 5.24 5.90 6.65 1.1/2 7.35 8.13 | In air | In air |

Other rope diameters are available on request. There is a minimum quantity requirement for customized products.

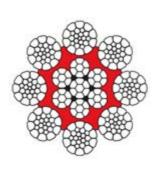


NON-ROTATION RESISTANT **EVOLUTION** NON-ROTATION RESISTANT **EVOLUTION**

QS 816 V(G)

Extreme resistance to negative external influences distinguishes this rope from others. SUPERFILL® compaction technology developed by Teufelberger-Redaelli provides high breaking forces and highest safety in use. Compaction in the core and a PLASTFILL® insert ensure stability against lateral pressure.





Specifications

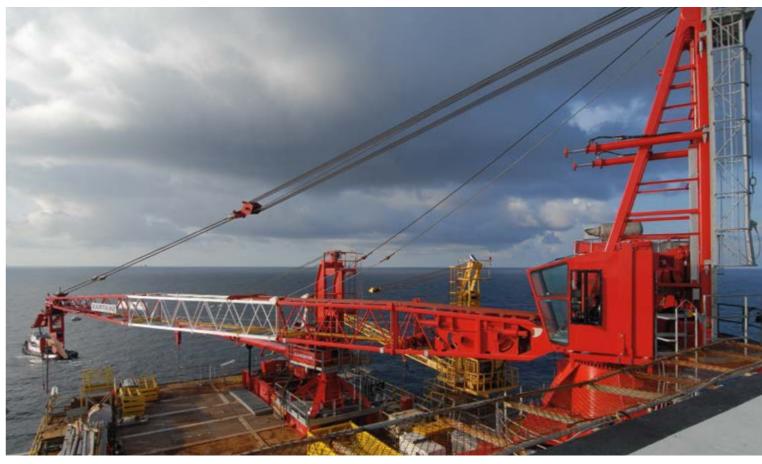
- QS 816 V in ordinary lay configuration, QS 816VG in ✓ MULTILAYER SPOOLING lang's lay configuration, right or left lay
- 10-42 mm: 8 x K26WS EPIWRC (K), RCN 09
- 44-50 mm: 8 x K31WS EPIWRC (K), RCN 11
- 52-70 mm: 8 x K42WS EPIWRC (K), RCN >13
- Use without rope swivel

- ✓ SUPERFILL®
- ✓ PLASTFILL®

Technical data

| Nominal | Ø | Weight | | Minimur | n breaking force | e at rope grad | le | | |
|---------|-------|--------|--------|----------|------------------|----------------|---------|----------|---------|
| | | | | 1770 N/ı | mm² | 1960 N/r | mm² | 2160 N/n | nm² |
| mm | inch | kg/m | lbs/ft | kN | lbs | kN | lbs | kN | lbs |
| 10 | | 0.46 | 0.31 | 81 | 18,210 | 89 | 20,008 | 98 | 22,031 |
| 11 | 7/16 | 0.55 | 0.37 | 97 | 21,806 | 107 | 24,055 | 118 | 26,527 |
| 12 | | 0.69 | 0.46 | 117 | 26,303 | 129 | 29,000 | 143 | 32,148 |
| 13 | | 0.81 | 0.54 | 141 | 31,698 | 156 | 35,070 | 172 | 38,667 |
| 14 | 9/16 | 0.93 | 0.62 | 162 | 36,419 | 179 | 40,241 | 198 | 44,512 |
| 15 | | 1.06 | 0.71 | 185 | 41,590 | 205 | 46,086 | 226 | 50,807 |
| 16 | 5/8 | 1.20 | 0.81 | 210 | 47,210 | 232 | 52,156 | 256 | 57,551 |
| 17 | | 1.35 | 0.91 | 235 | 52,830 | 261 | 58,675 | 287 | 64,520 |
| 18 | | 1.55 | 1.04 | 263 | 59,125 | 291 | 65,419 | 321 | 72,164 |
| 19 | 3/4 | 1.71 | 1.15 | 302 | 67,892 | 335 | 75,311 | 369 | 82,954 |
| 20 | | 1.89 | 1.27 | 330 | 74,187 | 365 | 82,055 | 402 | 90,373 |
| 21 | | 2.15 | 1.44 | 374 | 84,079 | 414 | 93,071 | 457 | 102,738 |
| 22 | 7/8 | 2.34 | 1.57 | 408 | 91,722 | 451 | 101,389 | 497 | 111,730 |
| 23 | | 2.54 | 1.70 | 445 | 100,040 | 492 | 110,606 | 543 | 122,071 |
| 24 | | 2.75 | 1.85 | 467 | 104,986 | 517 | 116,226 | 570 | 128,141 |
| 25 | 1 | 2.97 | 1.99 | 518 | 116,451 | 574 | 129,040 | 633 | 142,304 |
| 26 | | 3.19 | 2.14 | 555 | 124,769 | 615 | 138,257 | 678 | 152,420 |
| 27 | | 3.51 | 2.36 | 595 | 133,761 | 659 | 148,149 | 727 | 163,436 |
| 28 | | 3.76 | 2.52 | 656 | 147,475 | 726 | 163,211 | 800 | 179,847 |
| 28.57 | 1 1/8 | 4.04 | 2.71 | 672 | 151,072 | 745 | 167,483 | 820 | 184,343 |
| 29 | | 3.98 | 2.67 | 694 | 156,017 | 768 | 172,653 | 847 | 190,413 |

Other rope diameters are available on request.



Technical data

| Nominal | Ø | Weight | | Minimum | breaking force | at rope grad | e | | |
|---------|-------|--------|--------|----------|----------------|--------------|---------|----------|---------|
| | | | | 1770 N/m | m² | 1960 N/m | nm² | 2160 N/m | ım² |
| mm | inch | kg/m | lbs/ft | kN | lbs | kN | lbs | kN | lbs |
| 30 | | 4.37 | 2.93 | 764 | 171,754 | 846 | 190,188 | 897 | 201,654 |
| 32 | 1 1/4 | 4.90 | 3.29 | 864 | 194,235 | 957 | 215,142 | 1,072 | 240,995 |
| 34 | | 5.59 | 3.75 | 945 | 212,444 | 1,046 | 235,150 | 1,153 | 259,205 |
| 36 | | 6.36 | 4.27 | 1,071 | 240,770 | 1,186 | 266,623 | 1,284 | 288,655 |
| 38 | 1 1/2 | 7.03 | 4.72 | 1,222 | 274,717 | 1,354 | 304,391 | 1,431 | 321,702 |
| 40 | | 7.81 | 5.24 | 1,342 | 301,694 | 1,486 | 334,066 | 1,545 | 347,330 |
| 42 | | 8.60 | 5.77 | 1,482 | 333,167 | 1,641 | 368,911 | 1,736 | 390,268 |
| 44 | 1 3/4 | 9.27 | 6.22 | 1,596 | 358,795 | 1,768 | 397,462 | | |
| 46 | | 10.30 | 6.91 | 1,760 | 395,664 | 1,949 | 438,153 | | |
| 48 | | 10.78 | 7.23 | 1,848 | 415,447 | 2,050 | 460,858 | | |
| 50 | 2 | 11.60 | 7.78 | 2,016 | 453,215 | 2,232 | 501,774 | | |
| 52 | | 12.50 | 8.39 | 2,180 | 490,083 | 2,414 | 542,689 | | |
| 54 | 2 1/8 | 13.91 | 9.33 | 2,287 | 514,138 | 2,532 | 569,216 | | |
| 56 | | 14.50 | 9.73 | 2,529 | 568,542 | 2,850 | 640,705 | | |
| 58 | | 15.60 | 10.47 | 2,712 | 609,682 | 3,004 | 675,326 | | |
| 60 | 2 3/8 | 16.70 | 11.21 | 2,903 | 652,620 | 3,214 | 722,536 | | |
| 62 | | 17.80 | 11.94 | 3,099 | 696,683 | 3,432 | 771,544 | | |
| 64 | | 19.74 | 13.25 | 3,303 | 742,544 | 3,657 | 822,126 | | |
| 66 | 2 5/8 | 20.63 | 13.84 | 3,495 | 785,707 | 3,870 | 870,011 | | |
| 68 | | 21.40 | 14.36 | 3,728 | 838,088 | 4,128 | 928,011 | | |
| 70 | 2 3/4 | 22.70 | 15.23 | 3,951 | 888,220 | 4,375 | 983,539 | | |

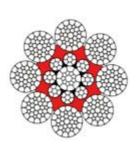
Other rope diameters are available on request.

NON-ROTATION RESISTANT PERFECTION

PERFECTION M8

Galvanized lang's lay rope used for marine riser tensioners. The strong point of this rope is its excellent performance under extreme bending fatigue loads. SUPERFILL® compaction technology ensures highest breaking forces and thus maximum safety levels during operation. The application of this technology — even in the core — gives this rope optimum dimensional stability to lateral pressure and high bending fatigue life.





Specifications

- lang's lay, right or left lay
- 8 x K36WS EPIWRC, RCN 13
- Use without rope swivel

- **X** MULTILAYER SPOOLING
- ✓ SUPERFILL®
- ✓ PLASTFILL®

Technical data

| Nominal Ø | | Weight | | Minimum b | Minimum breaking force at rope grade | | | | |
|-----------|-------|--------|--------|-----------|--------------------------------------|-----------|---------|--|--|
| | | In air | | 1770 N/mm | 2 | 1960 N/mm | 12 | | |
| mm | inch | kg/m | lbs/ft | kN | lbs | kN | lbs | | |
| 38.1 | 1 1/2 | 6.50 | 4.36 | 1,064 | 239,197 | 1,178 | 264,825 | | |
| 44.45 | 1 3/4 | 9.14 | 6.13 | 1,600 | 359,694 | 1,770 | 397,912 | | |
| 50.8 | 2 | 11.90 | 7.98 | 1,805 | 405,780 | 1,998 | 449,168 | | |
| 54.0 | 2 1/8 | 13.41 | 9.00 | 2,135 | 479,967 | 2,348 | 527,851 | | |
| 57.15 | 2 1/4 | 14.50 | 9.73 | 2,452 | 551,187 | 2,916 | 655,543 | | |
| 63.5 | 2 1/2 | 19.48 | 13.07 | 3,250 | 730,629 | 3,600 | 809,312 | | |
| 64.0 | | 19.48 | 13.07 | 3,250 | 730,629 | 3,600 | 809,312 | | |
| 69.85 | 2 3/4 | 23.12 | 15.51 | 3,798 | 853,824 | 3,960 | 890,243 | | |
| 73.02 | 2 7/8 | 24.15 | 16.20 | 3,971 | 892,716 | 4,326 | 972,523 | | |

Other rope diameters are available on request.

EXECUTION D6s

Flexibility, resistance to mechanical wear and high breaking force: these are the qualities a drill line must possess. This 6-strand rope with SUPERFILL® compaction technology and a PLASTFILL® insert combines all these characteristics for perfect drilling operations.

Specifications

- Ordinary lay, right or left lay
- 30-50 mm: 6 x K26WS-EPIWRC, RCN 06
- 50-56 mm: 6 x K31WS-EPIWRC, RCN 08
- Use without rope swivel

- ✓ MULTILAYER SPOOLING
- ✓ SUPERFILL®
- ✓ PLASTFILL®



Technical data

| Nominal Ø | | Weight | | Minimum b | Minimum breaking force at rope grade | | | |
|-----------|-------|--------|--------|-----------|--------------------------------------|-----------|---------|--|
| | | In air | | 1960 N/mm | 2 | 2160 N/mm | 2 | |
| mm | inch | kg/m | lbs/ft | kN | Ibs | kN | lbs | |
| 34.9 | 1 3/8 | 5.40 | 3.62 | 1,024 | 230,146 | 1,106 | 248,706 | |
| 38.1 | 1 1/2 | 6.40 | 4.29 | 1,220 | 274,285 | 1,318 | 296,405 | |
| 41.27 | 1 5/8 | 7.54 | 5.06 | 1,432 | 321,926 | 1,547 | 347,779 | |
| 44.45 | 1 3/4 | 8.95 | 6.01 | 1,661 | 373,332 | 1,795 | 403,440 | |
| 47.6 | 1 7/8 | 9.98 | 6.70 | 1,904 | 428,121 | 2,058 | 462,647 | |
| 50.8 | 2 | 11.50 | 7.72 | 2,197 | 493,869 | 2,344 | 526,942 | |
| 54.0 | 2 1/8 | 13.00 | 8.72 | 2,451 | 550,985 | 2,649 | 595,420 | |
| 56.0 | | 13.87 | 9.31 | 2,636 | 592,554 | 2,848 | 640,341 | |

Other rope diameters are available on request.

EXECUTION D6

Highest reliability of the platform is the main target! This Teufelberger-Redaelli high performance steel wire rope with PLASTFILL® insert for permanent lubrication of the core delivers into high resistance to wear.

Specifications

- Ordinary lay, right or left lay
- 6 x 26WS EPIWRC, RCN 06
- Use without rope swivel

- ✓ MULTILAYER SPOOLING
- **✗** SUPERFILL®
- ✓ PLASTFILL®



Technical data

| Nominal Ø | | Weight | Weight | | Minimum breaking force at rope grade | | | | |
|-----------|-------|--------|--------|-----------|--------------------------------------|-----------|---------|--|--|
| | | In air | | 1960 N/mr | m² | 2160 N/mr | m² | | |
| mm | linch | lkg/m | lbs/ft | IkN | lbs | kN | lbs | | |
| 34.9 | 1 3/8 | 5.00 | 3.36 | 881 | 198,057 | 920 | 206,824 | | |
| 38.1 | 1 1/2 | 5.90 | 3.96 | 1,048 | 235,600 | 1,096 | 246,391 | | |
| 44.45 | 1 3/4 | 8.70 | 5.84 | 1,426 | 320,578 | 1,492 | 335,415 | | |
| 47.6 | 1 7/8 | 9.22 | 6.19 | 1,636 | 367,787 | 1,710 | 384,423 | | |
| 50.8 | 2 | 10.72 | 7.19 | 1,862 | 418,594 | 1,948 | 437,928 | | |

Other rope diameters are available on request.



Highest Standards

Comprehensive quality testing of primary materials and final products as well as the certification to ISO 9001 guarantee the consistent high quality of our steel wire ropes.



DISCARD CRITERIA

The discard criteria for Teufelberger-Redaelli special steel wire ropes are defined according to:

- ISO 4309
- API 2D FIFTH EDITION

This includes: reduction of rope diameter, corrosion and wire breaks. For assesing the discard condition based on wire breaks, the rope category number (RCN) is used. For Teufelberger-Redaelli special steel wire ropes, this number is listed in the following tables. For further details regarding the discard criteria and general handling for wire ropes to ISO 4309 or API 2D FIFTH EDITION, see the "Application Handbook – High Performance Offshore Ropes" at www.teufelberger-redaelli.com

Rotation resistant ropes

| Type of design | Diameter range mm | RCN* | n** |
|--------------------------------|-------------------|------|-----|
| EVOLUTION TK16 | 9-30 | 23-1 | 96 |
| | 32-42 | 23-2 | 112 |
| EVOLUTION TK16 ^{plus} | 9-30 | 23-1 | 96 |
| | 32-42 | 23-2 | 112 |
| EVOLUTION TK18 | 44-80 | 27 | 272 |

Non-rotation resistant ropes

| Type of design | Diameter range mm | RCN* | n** |
|----------------|-------------------|------|-----|
| QS 816 V(G) | 10-42 | 9 | 208 |
| | 44-50 | 11 | 248 |
| | 50.8-70 | >13 | 336 |
| PERFECTION M8 | 38-74 | 13 | 288 |
| EXECUTION D6s | 30-50 | 6 | 156 |
| | 50-56 | 8 | 186 |
| EXECUTION D6 | 30-52 | 6 | 156 |

^{*} RCN = Rope Category Number **n = Number of outer strands and total number of load-bearing wires in the outer layer of strands in the rope



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