

Connecting to the Future

PREMIUM OCTG CONNECTIONS



Bold. Disruptive. Innovative.

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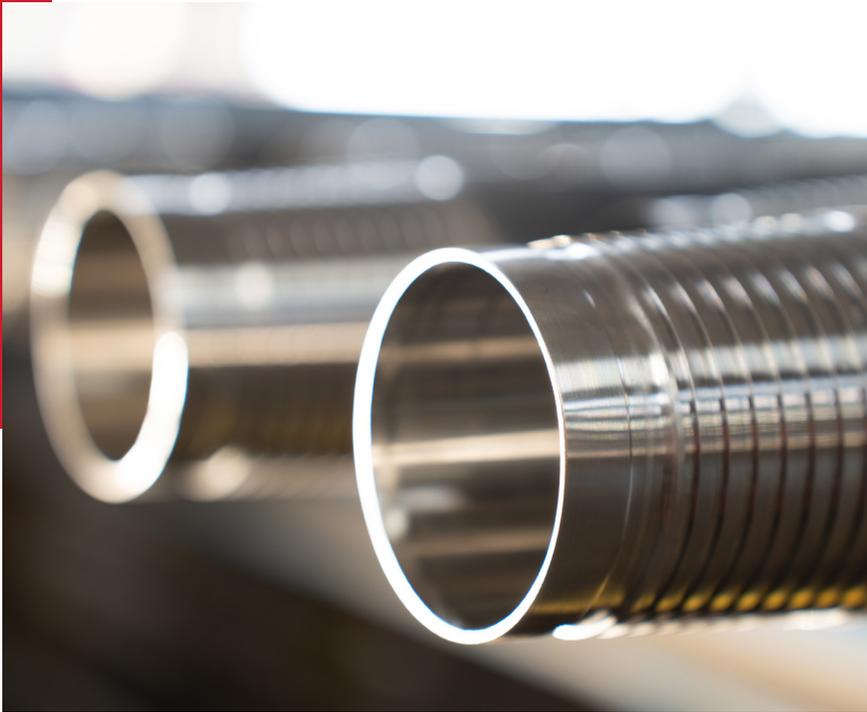
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WHO WE ARE

Fermata is the leading developer of premium OCTG connections. We deliver our customers the best technology, with the highest value, and the greatest service. Through strong global partnerships, we provide a robust supply chain with little waste and the agility for unique and custom solutions.

Our commitment to safety, quality and excellence are the core of our company values. Fermata's products address the most demanding applications for this generation and the next. Quality is at the heart of everything we do, and we continuously challenge ourselves to improve our services to meet and exceed the needs and expectations of our customers.

LICENSEE MAP

Fermata has a licensee network to provide connection technology services across North America. Our focus is to provide the best service possible, which is why we are constantly adding more support for remote regions. This allows us to offer our services to a wider range of customers and ensures that everyone has access to innovative connection technology solutions.



LOCATIONS

OFSI

HOUSTON, TX 77049
ODESSA, TX 79764

WASHITA VALLEY

OKLAHOMA CITY, OK 73129

TEX-ISLE

ROBSTOWN, TX 78380

SEAH

HOUSTON, TX 77049

WELDED TUBE OF CANADA

WELLAND, ONTARIO, L3B 5N7

H&G OCTG SERVICES LLC

CASPER, WY 82604

IOS PCI LLC

STANTON, TX 79782

PTC LIBERTY TUBULARS LLC

LIBERTY, TX 77575

SUPERIOR THREADED PRODUCTS

HOUSTON, TX 77044

TERRATECH

MORGAN, CO 80701

TEXAS PIPE WORKS

NAVASOTA, TX 77868

NOV TUBOSCOPE

HOUSTON, TX 77049

UNITED CASING INC

HOUSTON, TX 77044

K&B INDUSTRIES

HOUSTON, TX 77049
SCHRIEVER, LA 70395

TOP THREADING

CROSBY, TX 77532

LINCOLN MANUFACTURING

MAGNOLIA, TX 77354

The Fermata® Bushmaster®: A threaded and coupled connection delivering peak performance in strength, sealability, and torque with the Constrictor® wedge thread form. Ideal for deep wells, high tortuosity, and rotating while cementing. Tremendous success in oil and gas, geothermal, and gas storage applications. Choose from gas tight (GT), semi-premium (SP), and slim-line (SL) configurations for optimized versatility. Enhance drilling operations with the Fermata® Bushmaster®—the ultimate choice for reliable and adaptable production casing solutions. **The Fermata® Bushmaster® is offered in gas tight (GT), semi-premium (SP), and slim-line (SL) configurations.**

SIZES AVAILABLE

2-3/8" to 13-3/8"

APPLICATIONS

- ▶ Production Casing
- ▶ Intermediate Casing
- ▶ Surface Casing
- ▶ Tubing
- ▶ Re-fracking

KEY FEATURES



Gas Tested



API Coupling Stock



Seamless or ERW



Extreme Torque



High Tensile Strength



Constrictor® Wedge Thread

BUSHMASTER® GT

A high-torque, gas-tight connection with Constrictor® wedge thread. Premium seal, outstanding torque capacity, and cost-effective excellence – the ultimate solution for premium connections.



BUSHMASTER® SP

Redefining connection torque capacity. Outperforming the torque ability of typical top drives, it offers excellent semi-premium performance. Great for rotating, low stress, and improved sealability compared to API connections.



BUSHMASTER® SL

Semi-flush clearance with a coupling. Superb clearance and torque capacity without the need to swage the connection. This allows for improved support in remote regions where repair facilities may not have the ability to stress-relieve.



Bushmaster®

BUSHMASTER® GT

| L80 (80 ksi SMYS) | | | | | | | | | | P110 High Yield (12.5 ksi SMYS) | | | | | |
|-------------------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------|----------------|---------------------------------|---------------------------|---------------------------------|----------------|---------------------------------|---------------------------|
| OD (in) | Weight (lb/ft) | Wall Thickness (in) | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Internal Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) | Minimum Internal Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 2.875 | 6.40 | 0.217 | 3.500 | 2.401 | 3.573 | 100% | 100% | 10570 | 11170 | 145000 | 3100 | 16510 | 16000* | 227000 | 4800 |
| 3.500 | 9.20 | 0.254 | 4.250 | 2.952 | 4.117 | 100% | 100% | 10160 | 10540 | 207000 | 3700 | 15880 | 14890* | 324000 | 5800 |
| 3.500 | 10.20 | 0.289 | 4.250 | 2.882 | 4.117 | 100% | 100% | 11560 | 12120 | 233000 | 3700 | 18060 | 18330* | 364000 | 5800 |
| 4.000 | 11.60 | 0.286 | 4.750 | 3.358 | 5.083 | 100% | 100% | 10010 | 10280 | 267000 | 5500 | 15640 | 14470* | 417000 | 8700 |
| 4.500 | 11.60 | 0.250 | 5.250 | 3.967 | 4.781 | 100% | 100% | 7780 | 6360 | 267000 | 18500 | 12150 | 8720* | 417000 | 29000 |
| 4.500 | 12.60 | 0.271 | 5.250 | 3.888 | 4.781 | 100% | 100% | 8430 | 7500 | 288000 | 18500 | 13170 | 10590* | 450000 | 29000 |
| 4.500 | 13.50 | 0.290 | 5.250 | 3.850 | 4.781 | 100% | 100% | 9020 | 8540 | 307000 | 18500 | 14100 | 12290* | 479000 | 29000 |
| 4.500 | 15.10 | 0.337 | 5.250 | 3.756 | 4.781 | 100% | 100% | 10480 | 11080 | 353000 | 18500 | 16380 | 15780* | 551000 | 29000 |
| 5.000 | 18.00 | 0.362 | 5.800 | 4.206 | 5.325 | 100% | 100% | 10140 | 10500 | 422000 | 17700 | 15840 | 14820* | 659000 | 27600 |
| 5.000 | 21.40 | 0.437 | 5.800 | 4.056 | 5.325 | 100% | 100% | 12240 | 12760 | 501000 | 17700 | 19120 | 19300* | 783000 | 27600 |
| 5.000 | 23.20 | 0.478 | 5.800 | 3.974 | 5.325 | 100% | 100% | 13380 | 13830 | 543000 | 17700 | 20910 | 20920* | 849000 | 27600 |
| 5.000 | 24.10 | 0.500 | 5.800 | 3.930 | 5.325 | 100% | 100% | 14000 | 14400 | 565000 | 17700 | 21880 | 21780* | 884000 | 27600 |
| 5.500 | 17.00 | 0.304 | 6.300 | 4.842 | 4.842 | 100% | 100% | 7740 | 6290 | 397000 | 22900 | 12090 | 8600* | 620000 | 35700 |
| 5.500 | 20.00 | 0.361 | 6.300 | 4.728 | 4.842 | 100% | 100% | 9190 | 8830 | 466000 | 22900 | 14360 | 12770* | 729000 | 35700 |
| 5.500 | 23.00 | 0.415 | 6.300 | 4.620 | 4.842 | 100% | 100% | 10560 | 11160 | 530000 | 22900 | 16510 | 16000* | 829000 | 35700 |
| 5.500 | 26.00 | 0.476 | 6.300 | 4.498 | 4.842 | 100% | 100% | 12120 | 12650 | 601000 | 22900 | 18930 | 19130* | 939000 | 35700 |
| 7.000 | 23.00 | 0.317 | 7.875 | 6.316 | 4.733 | 100% | 100% | 6340 | 3830 | 532000 | 33700 | 9910 | 5110* | 832000 | 52700 |
| 7.000 | 26.00 | 0.362 | 7.875 | 6.226 | 4.733 | 100% | 100% | 7240 | 5410 | 604000 | 33700 | 11310 | 7170* | 944000 | 52700 |
| 7.000 | 29.00 | 0.408 | 7.875 | 6.134 | 4.733 | 100% | 100% | 8160 | 7030 | 676000 | 33700 | 12750 | 9810* | 1056000 | 52700 |
| 7.000 | 32.00 | 0.453 | 7.875 | 6.044 | 4.733 | 100% | 100% | 9060 | 8610 | 745000 | 33700 | 14160 | 12400* | 1165000 | 52700 |
| 7.000 | 35.00 | 0.498 | 7.875 | 5.954 | 4.733 | 100% | 100% | 9960 | 10190 | 814000 | 33700 | 15560 | 14990* | 1272000 | 52700 |
| 7.625 | 26.40 | 0.328 | 8.500 | 6.899 | 4.781 | 100% | 100% | 6020 | 3400 | 602000 | 39200 | 9410 | 4510* | 940000 | 61200 |
| 7.625 | 29.70 | 0.375 | 8.500 | 6.805 | 4.781 | 100% | 100% | 6890 | 4790 | 683000 | 39200 | 10760 | 6150* | 1068000 | 61200 |
| 7.625 | 33.70 | 0.430 | 8.500 | 6.695 | 4.781 | 100% | 100% | 7900 | 6560 | 778000 | 39200 | 12340 | 9050* | 1215000 | 61200 |
| 7.625 | 35.80 | 0.465 | 8.500 | 6.625 | 4.781 | 100% | 100% | 8540 | 7690 | 837000 | 39200 | 13340 | 10900* | 1307000 | 61200 |
| 7.625 | 39.00 | 0.500 | 8.500 | 6.555 | 4.781 | 100% | 100% | 9180 | 8820 | 895000 | 39200 | 14340 | 12750* | 1399000 | 61200 |
| 9.625 | 36.00 | 0.352 | 10.625 | 8.851 | 4.739 | 100% | 100% | 5120 | 2370 | 820000 | 54400 | 8000 | 2850* | 1282000 | 85000 |
| 9.625 | 40.00 | 0.395 | 10.625 | 8.765 | 4.739 | 100% | 100% | 5750 | 3090 | 916000 | 54400 | 8980 | 4000* | 1432000 | 85000 |
| 9.625 | 43.50 | 0.435 | 10.625 | 8.685 | 4.739 | 100% | 100% | 6330 | 3810 | 1005000 | 54400 | 9890 | 5080* | 1570000 | 85000 |
| 9.625 | 47.00 | 0.472 | 10.625 | 8.611 | 4.739 | 100% | 100% | 6870 | 4760 | 1086000 | 54400 | 10730 | 6090* | 1697000 | 85000 |
| 9.625 | 53.50 | 0.545 | 10.625 | 8.465 | 4.739 | 100% | 100% | 7930 | 6620 | 1244000 | 54400 | 12390 | 9140* | 1943000 | 85000 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.

BUSHMASTER® SP

| L80 (80 ksi SMYS) | | | | | | | | | | | P110 High Yield (12.5 ksi SMYS) | | | | |
|-------------------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------|----------------|---------------------------------|---------------------------------|---------------------------------|----------------|---------------------------------|---------------------------|
| OD (in) | Weight (lb/ft) | Wall Thickness (in) | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Internal Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) | Minimum Internal Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 4.500 | 10.50 | 0.224 | 5.250 | 4.052 | 3.959 | 100% | 100% | 6970 | 4940 | 241000 | 12800 | 10890 | 6390* | 376000 | 20000 |
| 4.500 | 11.60 | 0.250 | 5.250 | 4.000 | 3.959 | 100% | 100% | 7780 | 6360 | 267000 | 14300 | 12150 | 8720* | 417000 | 22400 |
| 4.500 | 12.60 | 0.271 | 5.250 | 3.958 | 3.959 | 100% | 100% | 8430 | 7500 | 288000 | 14900 | 13170 | 10590* | 450000 | 23200 |
| 4.500 | 13.50 | 0.290 | 5.250 | 3.920 | 3.959 | 100% | 100% | 9020 | 8540 | 307000 | 15400 | 14100 | 12290* | 479000 | 24000 |
| 4.500 | 15.10 | 0.337 | 5.250 | 3.826 | 3.959 | 100% | 100% | 10480 | 11080 | 353000 | 17400 | 16380 | 15780* | 551000 | 27200 |
| 5.000 | 15.00 | 0.296 | 5.800 | 4.408 | 3.834 | 100% | 100% | 8290 | 7250 | 350000 | 22000 | 12950 | 10180* | 547000 | 34400 |
| 5.000 | 18.00 | 0.362 | 5.800 | 4.276 | 3.834 | 100% | 100% | 10140 | 10500 | 422000 | 24100 | 15840 | 14820* | 659000 | 37600 |
| 5.000 | 21.40 | 0.437 | 5.800 | 4.126 | 3.834 | 100% | 100% | 12240 | 12760 | 501000 | 24300 | 19120 | 19300* | 783000 | 38000 |
| 5.000 | 23.20 | 0.478 | 5.800 | 4.044 | 3.834 | 100% | 100% | 13380 | 13830 | 543000 | 24600 | 20910 | 20920* | 849000 | 38400 |
| 5.000 | 24.10 | 0.500 | 5.800 | 4.000 | 3.834 | 100% | 100% | 14000 | 14400 | 565000 | 24800 | 21880 | 21780* | 884000 | 38800 |
| 5.500 | 15.50 | 0.275 | 6.300 | 4.950 | 4.209 | 100% | 100% | 7000 | 4990 | 361000 | 24600 | 10940 | 6480* | 564000 | 38400 |
| 5.500 | 17.00 | 0.304 | 6.300 | 4.892 | 4.209 | 100% | 100% | 7740 | 6290 | 397000 | 27100 | 12090 | 8600* | 620000 | 42400 |
| 5.500 | 20.00 | 0.361 | 6.300 | 4.778 | 4.209 | 100% | 100% | 9190 | 8830 | 466000 | 29000 | 14360 | 12770* | 729000 | 45300 |
| 5.500 | 23.00 | 0.415 | 6.300 | 4.670 | 4.209 | 100% | 100% | 10560 | 11160 | 530000 | 29400 | 16510 | 16000* | 829000 | 46000 |
| 5.500 | 26.00 | 0.476 | 6.300 | 4.548 | 4.209 | 100% | 100% | 12120 | 12650 | 601000 | 30700 | 18930 | 19130* | 939000 | 48000 |
| 6.000 | 24.50 | 0.400 | 6.875 | 5.200 | 4.084 | 100% | 100% | 9330 | 9090 | 563000 | 32100 | 14580 | 13190* | 880000 | 50100 |
| 7.000 | 20.00 | 0.272 | 7.875 | 6.456 | 4.334 | 100% | 100% | 5440 | 2740 | 460000 | 32200 | 8500 | 3430* | 719000 | 50400 |
| 7.000 | 23.00 | 0.317 | 7.875 | 6.366 | 4.334 | 100% | 100% | 6340 | 3830 | 532000 | 33300 | 9910 | 5110* | 832000 | 52000 |
| 7.000 | 26.00 | 0.362 | 7.875 | 6.276 | 4.334 | 100% | 100% | 7240 | 5410 | 604000 | 35400 | 11310 | 7170* | 944000 | 55200 |
| 7.000 | 29.00 | 0.408 | 7.875 | 6.184 | 4.334 | 100% | 100% | 8160 | 7030 | 676000 | 38900 | 12750 | 9810* | 1056000 | 60800 |
| 7.000 | 32.00 | 0.453 | 7.875 | 6.094 | 4.334 | 100% | 100% | 9060 | 8610 | 745000 | 42000 | 14160 | 12400* | 1165000 | 65600 |
| 7.000 | 35.00 | 0.498 | 7.875 | 6.004 | 4.334 | 100% | 100% | 9960 | 10190 | 814000 | 43500 | 15560 | 14990* | 1272000 | 68000 |
| 7.000 | 38.00 | 0.540 | 7.875 | 5.920 | 4.334 | 100% | 100% | 10800 | 11390 | 877000 | 50100 | 16880 | 17400* | 1370000 | 78300 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.

The Fermata® Anaconda™ is a semi-flush connection that balances strength, clearance, and torque with the Constrictor® wedge thread form. It's ideal for use in tortuous well profiles and offers quick make-up and easy running for efficient installation. The connection is built to withstand high torque requirements and offers exceptional strength, making it a dependable choice for demanding applications in the oil and gas industry. Anaconda™ has a proven track record of reliability and performance, with nearly 10 million feet of run history in some of the most challenging environments. **The Fermata® Anaconda™ is offered in gas tight (GT), semi-premium (SP), and extreme torque (XT) configurations.**

KEY FEATURES



Gas Tested



No Coupling Stock



Seamless or ERW



Extreme Torque



High Tensile Strength



Constrictor® Wedge Thread

SIZES AVAILABLE

3-1/2" to 13-3/8"

APPLICATIONS

- ▶ Production Casing
- ▶ Intermediate Casing
- ▶ Surface Casing
- ▶ Re-fracking

ANACONDA™ GT

Anaconda™ GT is a high performance semi-flush connection that offers excellent sealability with burst and collapse ratings equal to pipe body. Its Constrictor® wedge thread form provides high operating torque without a traditional shoulder, making it ideal for demanding applications.



ANACONDA™ SP

Anaconda™ SP disrupts the market by offering a cost-effective solution with excellent semi-premium sealability and more torque capacity than conventional semi-flush connections. Its Constrictor® wedge thread form provides faster running speed and improved resistance to galling.



ANACONDA™ XT

Anaconda™ XT is an innovative connection technology providing superior torque capacity and sealability. It leverages the Constrictor® wedge thread form and was developed for the most demanding applications.



Anaconda™

ANACONDA™ GT

| OD (in) | Weight (lb/ft) | Wall Thickness (in) | L80 (80 ksi SMYS) | | | | | | | P110 High Yield (12.5 ksi SMYS) | | | | | |
|---------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------------|----------------|---------------------------------|---------------------------|---------------------------------------|----------------|---------------------------------|---------------------------|
| | | | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Internal Yield Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) | Minimum Internal Yield Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 2.875 | 6.40 | 0.217 | 2.984 | 2.361 | 3.733 | 80% | 80% | 10570 | 11170 | 116000 | 2400 | 16510 | 16000* | 181000 | 3700 |
| 3.500 | 9.20 | 0.254 | 3.633 | 2.912 | 3.936 | 80% | 80% | 10160 | 10540 | 166000 | 3700 | 15880 | 14890* | 259000 | 5800 |
| 3.500 | 10.20 | 0.289 | 3.633 | 2.842 | 4.372 | 80% | 80% | 11560 | 12120 | 187000 | 4300 | 18060 | 18330* | 292000 | 6800 |
| 4.000 | 11.60 | 0.286 | 4.152 | 3.348 | 4.750 | 85% | 85% | 10010 | 10280 | 227000 | 8200 | 15640 | 14470* | 355000 | 12800 |
| 4.500 | 11.60 | 0.250 | 4.703 | 3.920 | 4.172 | 90% | 90% | 7780 | 6360 | 240000 | 8300 | 12150 | 8720* | 376000 | 13000 |
| 4.500 | 12.60 | 0.271 | 4.703 | 3.878 | 4.524 | 90% | 90% | 8430 | 7500 | 259000 | 10200 | 13170 | 10590* | 405000 | 15800 |
| 4.500 | 13.50 | 0.290 | 4.703 | 3.840 | 4.841 | 90% | 90% | 9020 | 8540 | 276000 | 12000 | 14100 | 12290* | 432000 | 18700 |
| 4.500 | 15.10 | 0.337 | 4.714 | 3.746 | 5.614 | 90% | 90% | 10480 | 11080 | 317000 | 12800 | 16380 | 15780* | 496000 | 20000 |
| 5.000 | 15.00 | 0.296 | 5.238 | 4.328 | 4.541 | 90% | 90% | 8290 | 7250 | 315000 | 10000 | 12950 | 10180* | 492000 | 15600 |
| 5.000 | 18.00 | 0.362 | 5.238 | 4.196 | 5.765 | 90% | 90% | 10140 | 10500 | 380000 | 19200 | 15840 | 14820* | 593000 | 25800 |
| 5.000 | 23.20 | 0.478 | 5.238 | 3.964 | 5.680 | 90% | 90% | 13380 | 13830 | 489000 | 19400 | 20910 | 20920* | 764000 | 30400 |
| 5.500 | 17.00 | 0.304 | 5.748 | 4.812 | 4.749 | 90% | 90% | 7740 | 6290 | 357000 | 17300 | 12090 | 8600* | 558000 | 27000 |
| 5.500 | 20.00 | 0.361 | 5.748 | 4.698 | 5.690 | 90% | 90% | 9190 | 8830 | 420000 | 22900 | 14360 | 12770* | 656000 | 35700 |
| 5.500 | 23.00 | 0.415 | 5.748 | 4.590 | 5.592 | 90% | 90% | 10560 | 11160 | 477000 | 22600 | 16510 | 16000* | 746000 | 35200 |
| 5.500 | 26.00 | 0.476 | 5.748 | 4.468 | 5.609 | 90% | 90% | 12120 | 12650 | 541000 | 23000 | 18930 | 19130* | 845000 | 36000 |
| 6.000 | 24.50 | 0.400 | 6.270 | 5.120 | 5.201 | 90% | 90% | 9330 | 9090 | 507000 | 24400 | 14580 | 13190* | 792000 | 38200 |
| 7.000 | 26.00 | 0.362 | 7.315 | 6.196 | 4.969 | 90% | 90% | 7240 | 5410 | 544000 | 29100 | 11310 | 7170* | 849000 | 45400 |
| 7.000 | 29.00 | 0.408 | 7.315 | 6.104 | 4.921 | 90% | 90% | 8160 | 7030 | 608000 | 30200 | 12750 | 9810* | 951000 | 47300 |
| 7.000 | 32.00 | 0.453 | 7.315 | 6.014 | 4.877 | 90% | 90% | 9060 | 8610 | 671000 | 31800 | 14160 | 12400* | 1048000 | 49600 |
| 7.000 | 35.00 | 0.498 | 7.315 | 5.924 | 5.370 | 90% | 90% | 9960 | 10190 | 732000 | 34600 | 15560 | 14990* | 1144000 | 54000 |
| 7.625 | 26.40 | 0.328 | 7.968 | 6.889 | 4.123 | 90% | 90% | 6020 | 3400 | 541000 | 36000 | 9410 | 4510* | 846000 | 56200 |
| 7.625 | 29.70 | 0.375 | 7.968 | 6.795 | 4.881 | 90% | 90% | 6890 | 4790 | 615000 | 40000 | 10760 | 6150* | 961000 | 62500 |
| 7.625 | 33.70 | 0.430 | 7.976 | 6.685 | 4.360 | 90% | 90% | 7900 | 6560 | 700000 | 36000 | 12340 | 9050* | 1093000 | 56200 |
| 7.625 | 35.80 | 0.465 | 7.976 | 6.615 | 4.744 | 90% | 90% | 8540 | 7690 | 753000 | 40300 | 13340 | 10900* | 1177000 | 63000 |
| 7.625 | 39.00 | 0.500 | 7.976 | 6.545 | 5.128 | 90% | 90% | 9180 | 8820 | 806000 | 44600 | 14340 | 12750* | 1259000 | 69700 |
| 7.625 | 42.80 | 0.562 | 7.976 | 6.421 | 5.806 | 90% | 90% | 10320 | 10820 | 898000 | 35800 | 16120 | 16020* | 1403000 | 56000 |
| 8.625 | 32.00 | 0.352 | 8.936 | 7.841 | 4.922 | 90% | 90% | 5710 | 3050 | 659000 | 44000 | 8930 | 3940* | 1029000 | 68800 |
| 8.625 | 36.00 | 0.400 | 8.936 | 7.745 | 4.918 | 90% | 90% | 6490 | 4100 | 744000 | 44000 | 10140 | 5390* | 1163000 | 68800 |
| 8.625 | 40.00 | 0.450 | 8.936 | 7.645 | 4.937 | 90% | 90% | 7300 | 5530 | 832000 | 44000 | 11410 | 7350* | 1300000 | 68800 |
| 9.625 | 40.00 | 0.395 | 9.972 | 8.755 | 4.542 | 90% | 90% | 5750 | 3090 | 825000 | 51200 | 8980 | 4000* | 1289000 | 80000 |
| 9.625 | 47.00 | 0.472 | 9.972 | 8.601 | 4.922 | 90% | 90% | 6870 | 4760 | 977000 | 51200 | 10730 | 6090* | 1527000 | 80000 |
| 9.625 | 53.50 | 0.545 | 9.972 | 8.455 | 5.735 | 90% | 90% | 7930 | 6620 | 1119000 | 51200 | 12390 | 9140* | 1749000 | 80000 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.

ANACONDA™ SP

| ANACONDA™ SP | | | | | | | | | | | |
|---------------------------------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------------|----------------|---------------------------------|---------------------------|
| L80 (80 ksi SMYS) | | | | | | | | | | | |
| P110 High Yield (12.5 ksi SMYS) | | | | | | | | | | | |
| OD (in) | Weight (lb/ft) | Wall Thickness (in) | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Internal Yield Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 3.500 | 9.20 | 0.254 | 3.633 | 2.992 | 3.036 | 80% | 80% | 10160 | 10540 | 166000 | 3500 |
| 4.000 | 11.60 | 0.286 | 4.152 | 3.428 | 3.850 | 85% | 85% | 10010 | 10280 | 227000 | 7700 |
| 4.500 | 11.60 | 0.250 | 4.680 | 4.000 | 3.004 | 85% | 85% | 7780 | 6360 | 227000 | 8300 |
| 4.500 | 12.60 | 0.271 | 4.703 | 3.958 | 3.624 | 90% | 90% | 8430 | 7500 | 259000 | 10200 |
| 4.500 | 13.50 | 0.290 | 4.703 | 3.920 | 3.941 | 90% | 90% | 9020 | 8540 | 276000 | 12000 |
| 4.500 | 15.10 | 0.337 | 4.714 | 3.826 | 4.714 | 90% | 90% | 10480 | 11080 | 317000 | 12800 |
| 5.000 | 15.00 | 0.296 | 5.238 | 4.408 | 3.527 | 90% | 90% | 8290 | 7250 | 315000 | 11000 |
| 5.000 | 18.00 | 0.362 | 5.238 | 4.276 | 4.891 | 90% | 90% | 10140 | 10500 | 380000 | 19200 |
| 5.000 | 21.40 | 0.437 | 5.238 | 4.126 | 4.585 | 92% | 92% | 12240 | 12760 | 461000 | 17400 |
| 5.000 | 23.20 | 0.478 | 5.238 | 4.044 | 5.052 | 92% | 92% | 13380 | 13830 | 500000 | 20700 |
| 5.500 | 17.00 | 0.304 | 5.748 | 4.892 | 3.849 | 90% | 90% | 7740 | 6290 | 357000 | 17300 |
| 5.500 | 20.00 | 0.361 | 5.748 | 4.778 | 4.765 | 90% | 90% | 9190 | 8830 | 420000 | 21500 |
| 5.500 | 23.00 | 0.415 | 5.748 | 4.670 | 4.692 | 90% | 90% | 10560 | 11160 | 477000 | 22600 |
| 5.500 | 26.00 | 0.476 | 5.748 | 4.548 | 4.709 | 90% | 90% | 12120 | 12650 | 541000 | 23000 |
| 5.500 | 26.80 | 0.500 | 5.748 | 4.500 | 4.970 | 90% | 90% | 12730 | 13220 | 565000 | 23500 |
| 7.000 | 26.00 | 0.362 | 7.315 | 6.276 | 4.069 | 90% | 90% | 7240 | 5410 | 544000 | 29100 |
| 7.000 | 29.00 | 0.408 | 7.315 | 6.184 | 4.021 | 90% | 90% | 8160 | 7030 | 608000 | 30200 |
| 7.000 | 32.00 | 0.453 | 7.315 | 6.094 | 3.977 | 90% | 90% | 9060 | 8610 | 671000 | 31800 |
| 7.000 | 35.00 | 0.498 | 7.315 | 6.004 | 4.470 | 90% | 90% | 9960 | 10190 | 732000 | 34600 |
| 7.625 | 26.40 | 0.328 | 7.930 | 6.969 | 3.662 | 90% | 90% | 6020 | 3400 | 541000 | 44000 |
| 7.625 | 29.70 | 0.375 | 7.968 | 6.875 | 4.002 | 90% | 90% | 6890 | 4790 | 615000 | 40000 |
| 7.625 | 33.70 | 0.430 | 7.976 | 6.765 | 3.460 | 90% | 90% | 7900 | 6560 | 700000 | 36000 |
| 7.625 | 35.80 | 0.465 | 7.976 | 6.695 | 3.844 | 90% | 90% | 8540 | 7690 | 753000 | 40300 |
| 7.625 | 39.00 | 0.500 | 7.976 | 6.625 | 4.228 | 90% | 90% | 9180 | 8820 | 806000 | 50100 |
| 8.625 | 32.00 | 0.352 | 8.936 | 7.921 | 4.022 | 90% | 90% | 5710 | 3050 | 659000 | 43200 |
| 8.625 | 36.00 | 0.400 | 8.936 | 7.825 | 4.018 | 90% | 90% | 6490 | 4100 | 744000 | 43200 |
| 9.625 | 36.00 | 0.352 | 9.972 | 8.921 | 3.640 | 90% | 90% | 5120 | 2370 | 738000 | 57600 |
| 9.625 | 40.00 | 0.395 | 9.972 | 8.835 | 3.642 | 90% | 90% | 5750 | 3090 | 825000 | 57600 |
| 9.625 | 43.50 | 0.435 | 9.972 | 8.755 | 3.609 | 90% | 90% | 6330 | 3810 | 904000 | 57600 |
| 9.625 | 47.00 | 0.472 | 9.972 | 8.681 | 4.022 | 90% | 90% | 6870 | 4760 | 977000 | 57600 |
| 9.625 | 53.50 | 0.545 | 9.972 | 8.535 | 4.835 | 90% | 90% | 7930 | 6620 | 1119000 | 57600 |
| 10.750 | 51.00 | 0.450 | 11.137 | 9.850 | 3.483 | 90% | 90% | 5860 | 3220 | 1048000 | 57600 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.

The Fermata® Cobra® is an exceptional flush connection for OCTG applications, offering superior torque, strength, and sealability while maximizing clearance. With the innovative Constrictor® wedge thread form, this connection eliminates the need for a torque shoulder, addressing a common point of failure in flush connections. Field-proven across a wide range of applications, including challenging shale sections, it enables efficient drilling and casing in a single trip. Select from gas tight (GT), semi-premium (SP), or performance clearance configurations to meet specific application needs. Make the Fermata® Cobra® your top choice for reliable and versatile flush connections. **The Fermata® Cobra® is offered in gas tight (GT) and semi-premium (SP) configurations.**

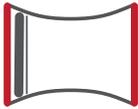
SIZES AVAILABLE

2-3/8" to 13-3/8"

APPLICATIONS

- ▶ Production Casing
- ▶ Intermediate Casing
- ▶ Surface Casing
- ▶ Tubing
- ▶ Re-fracking

KEY FEATURES



True Flush OD



No Coupling Stock



Seamless or ERW



Extreme Torque



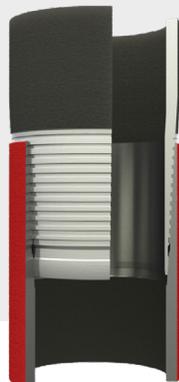
High Tensile Strength



Constrictor® Wedge Thread

COBRA® GT

Cobra® GT is a true premium, metal-to-metal seal, gas-tight connection. It's been heavily utilized as in re-fracking, liners, and intermediate casing applications. With high tensile strength, torque, and sealability, it is ideal for demanding applications that require maximum clearance.



COBRA® SP

Cobra® SP is a semi-premium, flush joint connection which balances performance and economics. Ideal for a wide range of applications that require maximum clearance and semi-premium sealability. Its Constrictor® wedge thread form provides excellent torque and run-ability.



KING COBRA®

King Cobra® maximizes tension performance and clearance, excelling in applications such as refracking and deep wells with clearance requirements set by the BLM. It's the go-to solution when other flush connections aren't strong enough.



COBRA® GT

| P110 High Yield (12.5 ksi SMYS) | | | | | | | | | | | |
|---------------------------------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------------|----------------|---------------------------------|---------------------------|
| L80 (80 ksi SMYS) | | | | | | | | | | | |
| OD (in) | Weight (lb/ft) | Wall Thickness (in) | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Internal Yield Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 2.875 | 6.40 | 0.217 | 2.875 | 2.361 | 2.801 | 65% | 65% | 10570 | 11170 | 94000 | 2400 |
| 3.500 | 9.20 | 0.254 | 3.500 | 2.912 | 3.076 | 67% | 67% | 10160 | 10540 | 139000 | 4200 |
| 3.500 | 10.20 | 0.289 | 3.500 | 2.842 | 3.352 | 67% | 67% | 11560 | 12120 | 156000 | 4800 |
| 4.000 | 11.60 | 0.286 | 4.000 | 3.348 | 3.309 | 65% | 65% | 10010 | 10280 | 174000 | 5500 |
| 4.500 | 11.60 | 0.250 | 4.500 | 3.920 | 2.960 | 67% | 67% | 7780 | 6360 | 179000 | 8100 |
| 4.500 | 12.60 | 0.271 | 4.500 | 3.878 | 3.140 | 67% | 67% | 8430 | 7500 | 193000 | 8800 |
| 4.500 | 13.50 | 0.290 | 4.500 | 3.840 | 3.302 | 67% | 67% | 9020 | 8540 | 206000 | 9600 |
| 4.500 | 15.10 | 0.337 | 4.500 | 3.746 | 3.964 | 67% | 67% | 10480 | 11080 | 236000 | 11500 |
| 5.000 | 18.00 | 0.362 | 5.000 | 4.196 | 3.797 | 67% | 67% | 10140 | 10500 | 283000 | 17000 |
| 5.000 | 21.40 | 0.437 | 5.000 | 4.046 | 4.294 | 67% | 67% | 12240 | 12760 | 336000 | 20100 |
| 5.000 | 23.20 | 0.478 | 5.000 | 3.964 | 4.564 | 67% | 67% | 13380 | 13830 | 364000 | 14100 |
| 5.500 | 17.00 | 0.304 | 5.500 | 4.812 | 3.612 | 67% | 67% | 7740 | 6290 | 266000 | 12000 |
| 5.500 | 20.00 | 0.361 | 5.500 | 4.698 | 3.762 | 67% | 67% | 9190 | 8830 | 312000 | 12800 |
| 5.500 | 23.00 | 0.415 | 5.500 | 4.590 | 4.120 | 67% | 67% | 10560 | 11160 | 355000 | 15400 |
| 5.500 | 26.00 | 0.476 | 5.500 | 4.468 | 4.523 | 67% | 67% | 12120 | 12650 | 403000 | 17300 |
| 7.000 | 23.00 | 0.317 | 7.000 | 6.286 | 3.128 | 65% | 65% | 6340 | 3830 | 346000 | 17000 |
| 7.000 | 26.00 | 0.362 | 7.000 | 6.196 | 3.250 | 65% | 65% | 7240 | 5410 | 393000 | 22300 |
| 7.000 | 29.00 | 0.408 | 7.000 | 6.104 | 3.784 | 67% | 67% | 8160 | 7030 | 453000 | 28000 |
| 7.000 | 32.00 | 0.453 | 7.000 | 6.014 | 4.058 | 67% | 67% | 9060 | 8610 | 499000 | 30900 |
| 7.000 | 35.00 | 0.498 | 7.000 | 5.924 | 4.332 | 67% | 67% | 9960 | 10190 | 545000 | 33700 |
| 7.625 | 26.40 | 0.328 | 7.625 | 6.889 | 3.459 | 67% | 67% | 6020 | 3400 | 403000 | 23000 |
| 7.625 | 29.70 | 0.375 | 7.625 | 6.795 | 4.004 | 67% | 67% | 6890 | 4790 | 458000 | 34300 |
| 7.625 | 33.70 | 0.430 | 7.625 | 6.685 | 3.886 | 67% | 67% | 7900 | 6560 | 521000 | 33500 |
| 7.625 | 35.80 | 0.465 | 7.625 | 6.615 | 4.099 | 67% | 67% | 8540 | 7690 | 561000 | 36000 |
| 7.625 | 39.00 | 0.500 | 7.625 | 6.545 | 4.311 | 67% | 67% | 9180 | 8820 | 600000 | 31500 |
| 8.625 | 32.00 | 0.352 | 8.625 | 7.841 | 3.362 | 67% | 67% | 5710 | 3050 | 490000 | 27800 |
| 8.625 | 36.00 | 0.400 | 8.625 | 7.745 | 3.654 | 67% | 67% | 6490 | 4100 | 554000 | 29700 |
| 9.625 | 36.00 | 0.352 | 9.625 | 8.841 | 3.315 | 67% | 67% | 5120 | 2370 | 550000 | 61800 |
| 9.625 | 40.00 | 0.395 | 9.625 | 8.755 | 3.576 | 67% | 67% | 5750 | 3090 | 614000 | 61800 |
| 9.625 | 43.50 | 0.435 | 9.625 | 8.675 | 3.818 | 67% | 67% | 6330 | 3810 | 673000 | 61800 |
| 9.625 | 47.00 | 0.472 | 9.625 | 8.601 | 4.042 | 67% | 67% | 6870 | 4760 | 727000 | 61800 |
| 9.625 | 53.50 | 0.545 | 9.625 | 8.455 | 4.484 | 67% | 67% | 7930 | 6620 | 833000 | 61800 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.

COBRA® SP

| OD (in) | Weight (lb/ft) | Wall Thickness (in) | L80 (80 ksi SMYS) | | | | | | P110 High Yield (12.5 ksi SMYS) | | | | | | |
|---------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------------|---------------------------------|---------------------------------|---------------------------|---------------------------------------|----------------|---------------------------------|---------------------------|
| | | | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Internal Yield Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) | Minimum Internal Yield Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 2.875 | 6.40 | 0.217 | 2.875 | 2.441 | 2.152 | 60% | 60% | 10570 | 11170 | 88000 | 1800 | 16510 | 16000* | 137000 | 2900 |
| 3.500 | 9.20 | 0.254 | 3.500 | 2.992 | 2.316 | 60% | 60% | 10160 | 10540 | 125000 | 3500 | 15880 | 14890* | 195000 | 5400 |
| 3.500 | 10.20 | 0.289 | 3.500 | 2.922 | 2.473 | 60% | 60% | 11560 | 12120 | 141000 | 3800 | 18060 | 18330* | 220000 | 5800 |
| 4.000 | 11.60 | 0.286 | 4.000 | 3.428 | 2.458 | 60% | 60% | 10010 | 10280 | 161000 | 4600 | 15640 | 14470* | 252000 | 7300 |
| 4.500 | 11.60 | 0.250 | 4.500 | 4.000 | 2.296 | 60% | 60% | 7780 | 6360 | 161000 | 6200 | 12150 | 8720* | 251000 | 9600 |
| 4.500 | 12.60 | 0.271 | 4.500 | 3.958 | 2.390 | 60% | 60% | 8430 | 7500 | 173000 | 6400 | 13170 | 10590* | 271000 | 10000 |
| 4.500 | 13.50 | 0.290 | 4.500 | 3.920 | 3.120 | 65% | 65% | 9020 | 8540 | 200000 | 8500 | 14100 | 12290* | 313000 | 13200 |
| 4.500 | 15.10 | 0.337 | 4.500 | 3.826 | 2.932 | 60% | 60% | 10480 | 11080 | 212000 | 10000 | 16380 | 15780* | 332000 | 15700 |
| 5.000 | 18.00 | 0.362 | 5.000 | 4.276 | 3.083 | 63% | 63% | 10140 | 10500 | 267000 | 11300 | 15840 | 14820* | 417000 | 17700 |
| 5.000 | 21.40 | 0.437 | 5.000 | 4.126 | 2.966 | 60% | 60% | 12240 | 12760 | 302000 | 10700 | 19120 | 19300* | 471000 | 16700 |
| 5.000 | 23.20 | 0.478 | 5.000 | 4.044 | 3.108 | 60% | 60% | 13380 | 13830 | 327000 | 10200 | 20910 | 20920* | 511000 | 17400 |
| 5.500 | 17.00 | 0.304 | 5.500 | 4.892 | 2.783 | 60% | 60% | 7740 | 6290 | 239000 | 13800 | 12090 | 8600* | 373000 | 21500 |
| 5.500 | 20.00 | 0.361 | 5.500 | 4.778 | 3.329 | 65% | 65% | 9190 | 8830 | 304000 | 20200 | 14360 | 12770* | 475000 | 31500 |
| 5.500 | 23.00 | 0.415 | 5.500 | 4.670 | 2.890 | 60% | 60% | 10560 | 11160 | 319000 | 17200 | 16510 | 16000* | 499000 | 26900 |
| 5.500 | 26.00 | 0.476 | 5.500 | 4.548 | 3.101 | 60% | 60% | 12120 | 12650 | 362000 | 16900 | 18930 | 19130* | 565000 | 26400 |
| 7.000 | 23.00 | 0.317 | 7.000 | 6.366 | 2.840 | 60% | 60% | 6340 | 3830 | 321000 | 23000 | 9910 | 5110* | 501000 | 35900 |
| 7.000 | 26.00 | 0.362 | 7.000 | 6.276 | 2.704 | 60% | 60% | 7240 | 5410 | 363000 | 26400 | 11310 | 7170* | 568000 | 41300 |
| 7.000 | 29.00 | 0.408 | 7.000 | 6.184 | 2.864 | 60% | 60% | 8160 | 7030 | 407000 | 23500 | 12750 | 9810* | 636000 | 36700 |
| 7.000 | 32.00 | 0.453 | 7.000 | 6.094 | 3.493 | 63% | 63% | 9060 | 8610 | 471000 | 28800 | 14160 | 12400* | 735000 | 45100 |
| 7.000 | 35.00 | 0.498 | 7.000 | 6.004 | 4.041 | 65% | 65% | 9960 | 10190 | 530000 | 33400 | 15560 | 14990* | 828000 | 52200 |
| 7.625 | 26.40 | 0.328 | 7.625 | 6.969 | 2.888 | 60% | 60% | 6020 | 3400 | 362000 | 28900 | 9410 | 4510* | 566000 | 45100 |
| 7.625 | 29.70 | 0.375 | 7.625 | 6.875 | 3.009 | 62% | 62% | 6890 | 4790 | 425000 | 32000 | 10760 | 6150* | 663000 | 50100 |
| 7.625 | 33.70 | 0.430 | 7.625 | 6.765 | 3.687 | 65% | 65% | 7900 | 6560 | 506000 | 39400 | 12340 | 9050* | 791000 | 61600 |
| 7.625 | 35.80 | 0.465 | 7.625 | 6.695 | 3.869 | 65% | 65% | 8540 | 7690 | 545000 | 41300 | 13340 | 10900* | 852000 | 64500 |
| 7.625 | 39.00 | 0.500 | 7.625 | 6.625 | 4.052 | 65% | 65% | 9180 | 8820 | 584000 | 43200 | 14340 | 12750* | 912000 | 67400 |
| 8.625 | 32.00 | 0.352 | 8.625 | 7.921 | 3.778 | 65% | 65% | 5710 | 3050 | 476000 | 34600 | 8930 | 3940* | 744000 | 54100 |
| 8.625 | 36.00 | 0.400 | 8.625 | 7.825 | 3.530 | 65% | 65% | 6490 | 4100 | 539000 | 34900 | 10140 | 5390* | 842000 | 54500 |
| 9.625 | 36.00 | 0.352 | 9.625 | 8.921 | 3.150 | 61% | 61% | 5120 | 2370 | 502000 | 36400 | 8000 | 2850* | 784000 | 56900 |
| 9.625 | 40.00 | 0.395 | 9.625 | 8.835 | 2.954 | 61% | 61% | 5750 | 3090 | 560000 | 38300 | 8980 | 4000* | 875000 | 59800 |
| 9.625 | 43.50 | 0.435 | 9.625 | 8.755 | 3.108 | 61% | 61% | 6330 | 3810 | 614000 | 40000 | 9890 | 5080* | 959000 | 62400 |
| 9.625 | 47.00 | 0.472 | 9.625 | 8.681 | 3.249 | 61% | 61% | 6870 | 4760 | 663000 | 43300 | 10730 | 6090* | 1036000 | 67600 |
| 9.625 | 53.50 | 0.545 | 9.625 | 8.535 | 3.528 | 61% | 61% | 7930 | 6620 | 760000 | 46800 | 12390 | 9140* | 1187000 | 73200 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.

KING COBRA®

| OD (in) | Weight (lb/ft) | Wall Thickness (in) | L80 (80 ksi SMYS) | | | | | | P110 High Yield (112.5 ksi SMYS) | | | | | | |
|---------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------------|----------------------------------|---------------------------------|---------------------------|---------------------------------------|----------------|---------------------------------|---------------------------|
| | | | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Yield Internal Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) | Minimum Yield Internal Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 3.500 | 9.20 | 0.254 | 3.572 | 2.992 | 3.645 | 85% | 85% | 10160 | 10540 | 176,000 | 3600 | 15880 | 14890* | 275000 | 5400 |
| 4.000 | 11.60 | 0.286 | 4.080 | 3.428 | 4.419 | 88% | 88% | 10010 | 10280 | 235000 | 4500 | 15640 | 14470* | 367000 | 6000 |
| 7.625 | 23.70 | 0.375 | 7.760 | 6.875 | 4.474 | 81% | 81% | 6890 | 4790 | 553000 | 30900 | 10760 | 6150* | 865000 | 48300 |
| 8.625 | 32.00 | 0.352 | 8.760 | 7.921 | 4.231 | 80% | 80% | 5710 | 3050 | 586000 | 34600 | 8930 | 3940* | 915000 | 54100 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.

The Next Generation of Connection Technology

The Fermata® Rattler® is the next generation of buttress compatible connections. For those applications where operating torque is equally as imperative as drilling economically, Rattler® is the solution. Until now, the industry has reached the limits of what a buttress compatible connection is capable of. Rattler's® unique barrel nose design allows for a significantly larger torque stop. The threads are offset from the pin face, protecting them from damage during stabbing and providing easy repair in the field. This innovative design also provides for an 8% increase in makeup speed compared to typical API BTC compatible connections. Its thread form and thread interference have been optimized to provide maximum torque and sealability while remaining compatible with API BTC float equipment. The coupling anti-rotation feature prevents spinning couplings in the field, reducing uncertainty and non-productive time. Rattler® is built to save operators money and time.

SIZES AVAILABLE

4-1/2" to 13-3/8"

APPLICATIONS

- ▶ Production Casing
- ▶ Intermediate Casing
- ▶ Surface Casing
- ▶ Rotating while Cementing

Rattler®



RATTLER®



API BTC
Compatible



Patent Pending
Barrel-nose



High Torque



Optimized
Hoop Stress



Coupling
Anti-rotation



Enhanced
Sealability

| P110 High Yield (12.5 ksi SMYS) | | | | | | | | | | | |
|---------------------------------|----------------|---------------------|--------------------|--------------------|-------------------|------------------------|----------------------------|---------------------------------|----------------|---------------------------------|---------------------------|
| L80 (80 ksi SMYS) | | | | | | | | | | | |
| OD (in) | Weight (lb/ft) | Wall Thickness (in) | Connection OD (in) | Connection ID (in) | Make-Up Loss (in) | Tension Efficiency (%) | Compression Efficiency (%) | Minimum Internal Pressure (psi) | Collapse (psi) | Yield Strength in Tension (lbf) | Operating Torque (ft-lbs) |
| 4.500 | 11.60 | 0.250 | 5.250 | 4.000 | 3.988 | 100% | 100% | 7780 | 6360 | 267000 | 6800 |
| 4.500 | 13.50 | 0.290 | 5.250 | 3.920 | 3.988 | 100% | 100% | 9020 | 8540 | 307000 | 10600 |
| 4.500 | 15.10 | 0.337 | 5.250 | 3.826 | 3.988 | 100% | 100% | 10480 | 11080 | 353000 | 9900 |
| 5.000 | 18.00 | 0.362 | 5.800 | 4.276 | 4.113 | 100% | 100% | 10140 | 10500 | 422000 | 13300 |
| 5.000 | 21.40 | 0.437 | 5.800 | 4.126 | 4.113 | 100% | 100% | 12240 | 12760 | 501000 | 15900 |
| 5.000 | 23.20 | 0.478 | 5.800 | 4.044 | 4.113 | 100% | 100% | 13380 | 13830 | 543000 | 17600 |
| 5.000 | 24.10 | 0.500 | 5.800 | 4.000 | 4.113 | 100% | 100% | 14000 | 14400 | 565000 | 17600 |
| 5.500 | 15.50 | 0.275 | 6.300 | 4.950 | 4.175 | 100% | 100% | 7000 | 4990 | 361000 | 14500 |
| 5.500 | 17.00 | 0.304 | 6.300 | 4.892 | 4.175 | 100% | 100% | 7740 | 6290 | 397000 | 17000 |
| 5.500 | 20.00 | 0.361 | 6.300 | 4.778 | 4.175 | 100% | 100% | 9190 | 8830 | 466000 | 22300 |
| 5.500 | 23.00 | 0.415 | 6.300 | 4.670 | 4.175 | 100% | 100% | 10560 | 11160 | 530000 | 26400 |
| 5.500 | 26.00 | 0.476 | 6.300 | 4.548 | 4.175 | 100% | 100% | 12120 | 12650 | 601000 | 26600 |
| 6.000 | 24.50 | 0.400 | 6.875 | 5.200 | 4.363 | 100% | 100% | 9330 | 9090 | 563000 | 22900 |
| 7.000 | 23.00 | 0.317 | 7.875 | 6.366 | 4.550 | 100% | 100% | 6340 | 3830 | 532000 | 26300 |
| 7.000 | 26.00 | 0.362 | 7.875 | 6.276 | 4.550 | 100% | 100% | 7240 | 5410 | 604000 | 29100 |
| 7.000 | 29.00 | 0.408 | 7.875 | 6.184 | 4.550 | 100% | 100% | 8160 | 7030 | 676000 | 40200 |
| 7.000 | 32.00 | 0.453 | 7.875 | 6.094 | 4.550 | 100% | 100% | 9060 | 8610 | 745000 | 41400 |
| 7.625 | 26.40 | 0.328 | 8.500 | 6.969 | 4.738 | 100% | 100% | 6020 | 3400 | 602000 | 25100 |
| 7.625 | 29.70 | 0.375 | 8.500 | 6.875 | 4.738 | 100% | 100% | 6890 | 4790 | 683000 | 38300 |
| 7.625 | 33.70 | 0.430 | 8.500 | 6.765 | 4.738 | 100% | 100% | 7900 | 6560 | 778000 | 38900 |
| 7.625 | 39.00 | 0.500 | 8.500 | 6.625 | 4.738 | 100% | 100% | 9180 | 8820 | 895000 | 45100 |
| 8.625 | 32.00 | 0.352 | 9.625 | 7.921 | 4.863 | 100% | 100% | 5710 | 3050 | 732000 | 48200 |
| 9.625 | 36.00 | 0.352 | 10.625 | 8.921 | 4.863 | 100% | 100% | 5120 | 2370 | 820000 | 48200 |
| 9.625 | 40.00 | 0.395 | 10.625 | 8.835 | 4.863 | 100% | 100% | 5750 | 3090 | 916000 | 49500 |
| 9.625 | 43.50 | 0.435 | 10.625 | 8.755 | 4.863 | 100% | 100% | 6330 | 3810 | 1005000 | 61800 |
| 9.625 | 47.00 | 0.472 | 10.625 | 8.681 | 4.863 | 100% | 100% | 6870 | 4760 | 1086000 | 61800 |
| 9.625 | 53.50 | 0.545 | 10.625 | 8.535 | 4.863 | 100% | 100% | 7930 | 6620 | 1244000 | 61800 |
| 9.625 | 58.40 | 0.595 | 10.625 | 8.435 | 4.863 | 100% | 100% | 8650 | 7900 | 1350000 | 61800 |

*Connection collapse rating is equal to pipe body. The collapse rating may vary depending upon the tube manufacturer.



LEARN MORE TODAY!



www.fermata-tech.com

(281) 941-5257

For Sales Inquiries
sales@fermata-tech.com

For Technical Support
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For Field Services
24/7 Operations
(855) 322-7104