

WEB CONTROL PRODUCTS

TECHNICAL DATA SHEET

ADVANCED SERIES

Straight & Tapered-Bore Tension Brakes

S450A, S600A, S800A, S1000A,
 T450A, T600A, T800A, T1000A

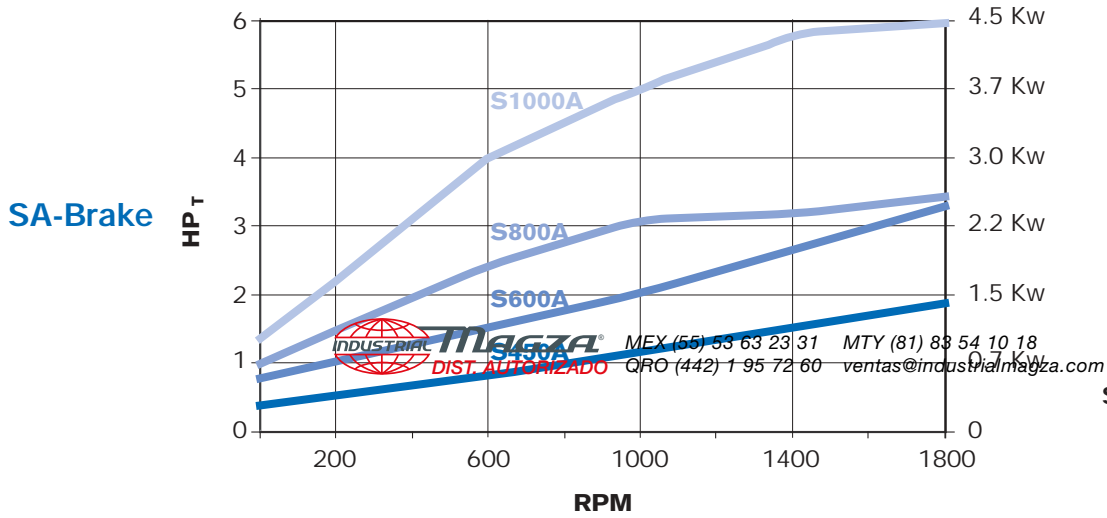
Nexen's new advanced series tension brakes provide dependable, long-lasting torque for your unwind applications. The high thermal output and torque ratings of the advanced series make these units ideal for demanding tension operations. Because every application is different, we offer a full range of sizes to meet all your unique specification requirements.

This advanced line offers both straight bore hubs or tapered bores for QD® mounting. Both models are available with Standard, Low Coefficient (LoCo) or Ultra LoCo friction facings to meet your torque requirements. The facings are split for fast and easy facing replacement, limiting downtime.



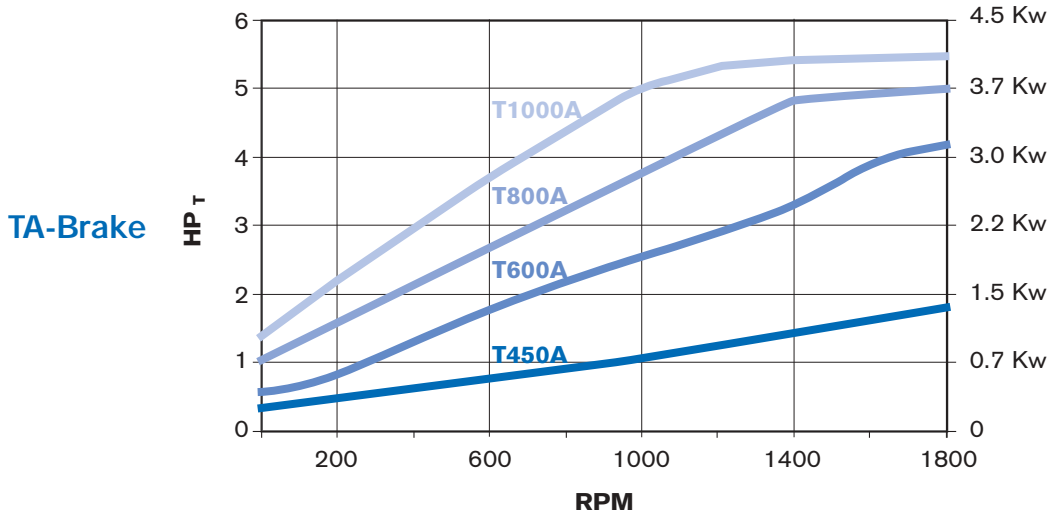
- High Dynamic Torque (at 5.5 bar [80 psi] air pressure)
 - 42.3 – 331.3 Nm [374 – 2932 in-lb] with Standard Facings
 - 25.3 – 198.9 Nm [224 – 1760 in-lb] with LoCo Facings
- High Thermal Capacity
 - SA-Brakes: 1.42 – 4.44 Kw [1.90 – 5.96 HP_r] at 1800 rpm
 - TA-Brakes: 1.28 – 4.12 Kw [1.73 – 5.53 HP_r] at 1800 rpm
- Straight bore hub in both inch and metric sizes for easy mounting (SA only)
 - Bore Range: 25 – 75 mm [1.125 – 2.938 in]
- Tapered-bore hub uses QD bushings for a variety of shaft diameters (TA only)
- Variable mounting configurations
 - Flange mounting or shaft mounting with a torque pin (SA only)
 - Shaft mounting with a torque pin (TA only)
- Split facing for easy replacement and low maintenance costs
- High temperature o-rings
- High temperature bearing
- Brake safety guard for operator safety

THERMAL CAPACITY

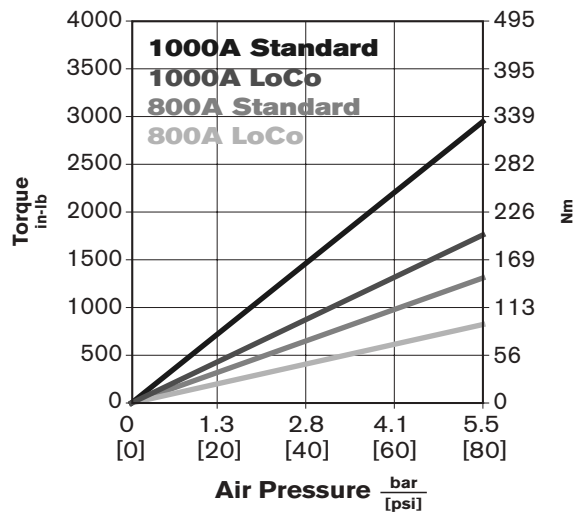
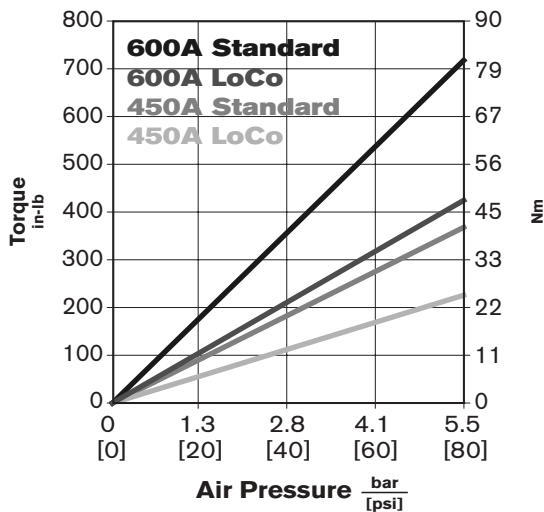


SA & TA Maximum RPM

| Size | Max RPM |
|------|---------|
| 450 | 4500 |
| 600 | 4000 |
| 800 | 3500 |
| 1000 | 3000 |

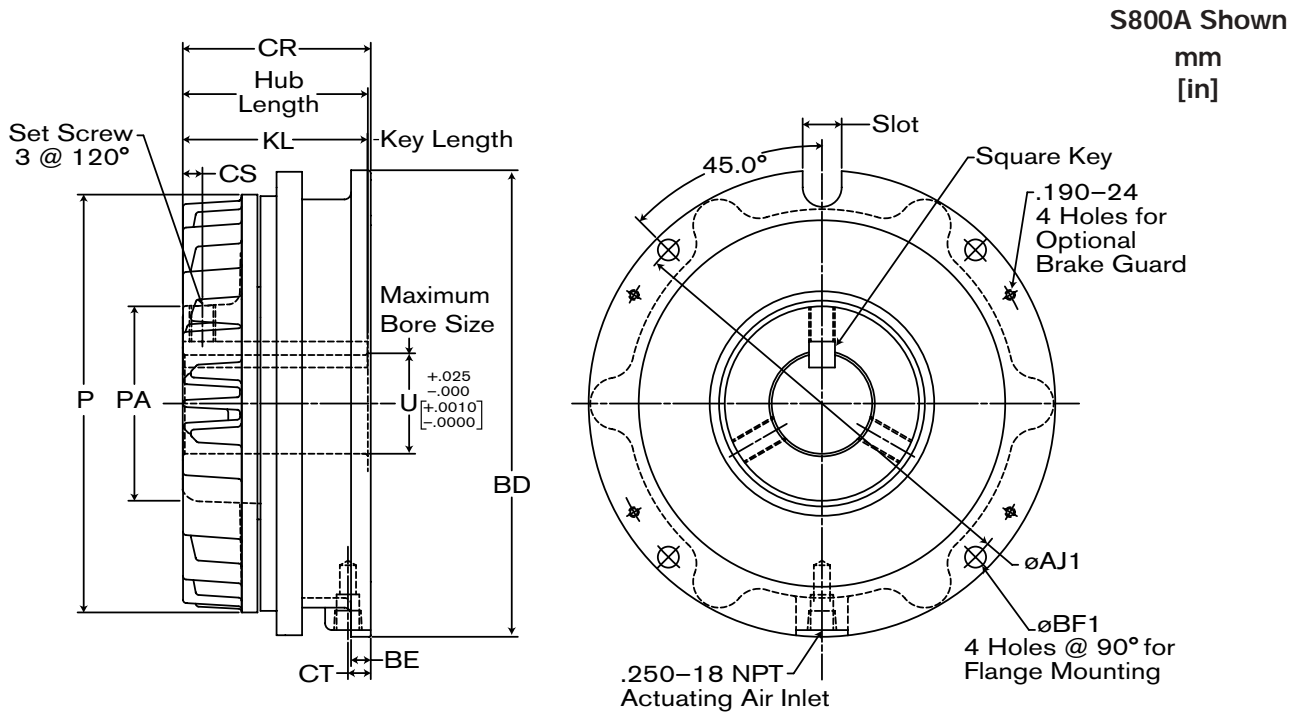


SA and TA Dynamic Brake Torque vs. Air Pressure



Ultra LoCo (low torque) friction facings are available on request.

Advanced Series Straight-Bore Brake (SA), Approximate Dimensions



| Model | øAJ1* | BD | BE | øBF1 | CR | CS | CT | Key (SQ.) | KL | P | PA | Set Screws | U | Slot | | Hub Length |
|--------|-------------------|------------------|----------------|------------------|-----------------|---------------|----------------|------------------|-----------------|------------------|-----------------|------------|--------------------|-----------------|----------------|-----------------|
| | | | | | | | | | | | | | | WD | DP | |
| S450A | 134.87 [5.310] | 150.9 [5.94] | 6.3 [0.25] | 7.14 [0.281] | 63.8 [2.51] | 4.6 [0.18] | 11.2 [0.44] | 6.35 [0.250] | 22.35 [0.88] | 115.8 [4.56] | 47.8 [1.88] | .250-20 | 28.575 [1.1250] | 9.6 [0.38] | 16.5 [0.65] | 63.5 [2.50] |
| S600A | 165.10 [6.500] | 182.6 [7.19] | 9.7 [0.38] | 9.12 [0.359] | 81.2 [3.19] | 6.4 [0.25] | 10.4 [0.41] | 7.963 [0.312] | 78.7 [3.10] | 153.9 [6.06] | 65.57 [2.58] | .375-16 | 34.925 [1.3750] | 15.93 [0.63] | 16.8 [0.66] | 79.4 [3.13] |
| S800A | 212.9 [8.38] | 228.6 [9.00] | 9.7 [0.38] | 10.31 [0.406] | 92.1 [3.63] | 9.7 [0.38] | 11.2 [0.44] | 12.73 [0.500] | 90.5 [3.56] | 204.7 [8.06] | 95.2 [3.75] | .500 | 49.212 [1.9375] | 19.10 [0.75] | 17.5 [0.69] | 90.7 [3.57] |
| S1000A | 277.8 [10.94] | 301.8 [11.88] | 12.7 [0.50] | 13.49 [0.531] | 103.1 [4.06] | 9.7 [0.38] | 18.3 [0.72] | 19.08 [0.750] | 100.0 [3.94] | 255.5 [10.06] | 127.0 [5.00] | .500 | 74.612 [2.9375] | 22.3 [0.88] | 23.1 [0.91] | 100.8 [3.97] |

* Four additional holes @ 90° apart and 15° from the centerline are present on the S1000A models.

Product Numbers

| Model | Bore** | P/N | Bore | P/N |
|--------------|----------|--------|-------|--------|
| S450A, Std. | 1.125 in | 827818 | 25 mm | 827820 |
| S450A, LoCo | | 827819 | | 827821 |
| S600A, Std. | 1.375 in | 827904 | 35 mm | 827907 |
| S600A, LoCo | | 827905 | | 827908 |
| S800A, Std. | 1.938 in | 828006 | 50 mm | 828008 |
| S800A, LoCo | | 828007 | | 828023 |
| S1000A, Std. | 2.938 in | 828108 | 75 mm | 828121 |
| S1000A, LoCo | | 828109 | | 828122 |

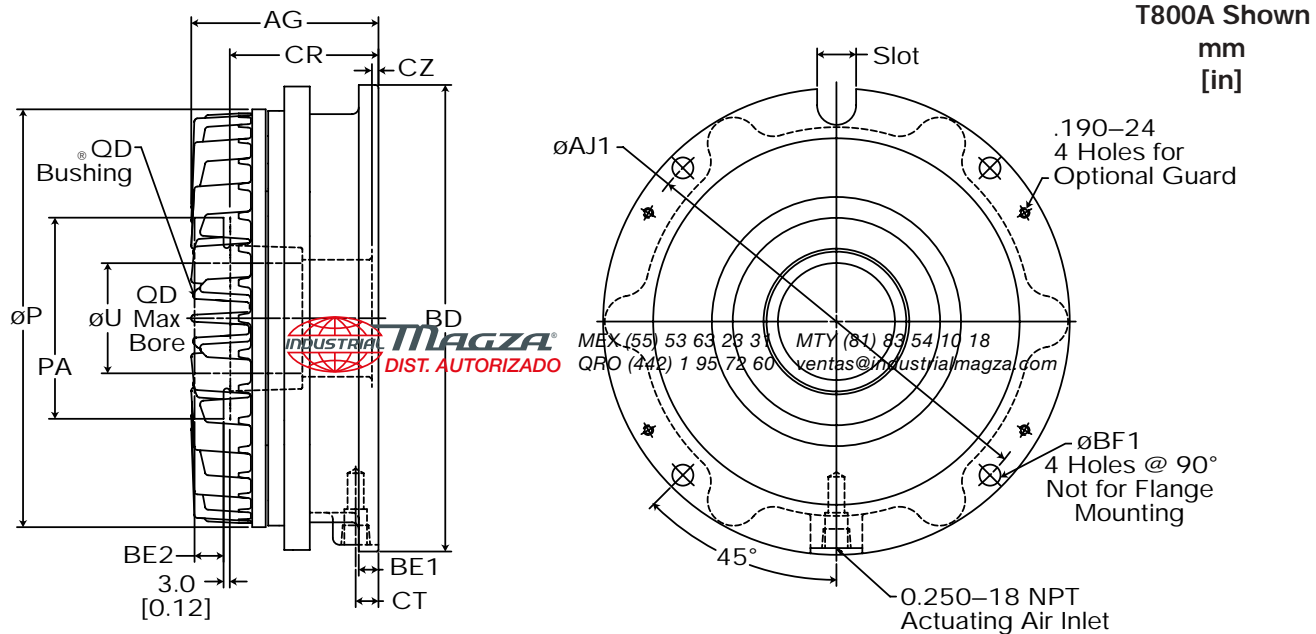
SA-Brake Accessories

| Model | Component | P/N | Shipping Weight |
|--------|--------------------|--------|-----------------|
| S450A | Torque Pin Bracket | 819900 | 0.5 kg [1 lbs] |
| | Brake Safety Guard | 817700 | 0.9 kg [2 lbs] |
| S600A | Torque Pin Bracket | 821400 | 0.9 kg [2 lbs] |
| | Brake Safety Guard | 818300 | 0.9 kg [2 lbs] |
| S800A | Torque Pin Bracket | 823400 | 0.9 kg [2 lbs] |
| | Brake Safety Guard | 826300 | 1.4 kg [3 lbs] |
| S1000A | Torque Pin Bracket | 825500 | 1.8 kg [4 lbs] |
| | Brake Safety Guard | 828200 | 1.8 kg [4 lbs] |

These accessories have the same dimensions as standard S-brakes. Please consult the Nexen Product Catalog or www.nexengroup.com for dimensional drawings.

** For additional bore sizes, available bushings or Ultra LoCo friction facings, contact Nexen Technical Support at 800-843-7445.

Advanced Series Tapered-Bore Brake (TA), Approximate Dimensions



| Model | AG | øAJ1 | øAJ2* | BD | BE1 | BE2 | øBF1 | CR | CT | CZ | P | PA | øU | Slot | |
|--------|-----------------|--------------------|--------------------|------------------|----------------|----------------|------------------|----------------|-----------------|---------------|------------------|-----------------|------------------|-----------------|----------------|
| | | | | | | | | | | | | | | WD | DP |
| T450A | 63.4 [2.50] | 134.87 [5.310] | -- | 150.9 [5.94] | 7.1 [0.28] | 7.9 [0.31] | 7.14 [0.281] | 52.6 [2.07] | 11.2 [0.44] | 7.1 [0.28] | 115.8 [4.56] | 50.8 [2.00] | 25.4 [1.000] | 9.6 [0.38] | 16.5 [0.65] |
| T600A | 81.5 [3.21] | 165.10 [6.500] | -- | 182.63 [7.19] | 9.65 [0.38] | 11.2 [0.44] | 9.12 [0.359] | 61.5 [2.42] | 10.41 [0.41] | 1.8 [0.07] | 153.92 [6.06] | 66.5 [2.62] | 34.93 [1.375] | 15.93 [0.63] | 16.8 [0.66] |
| T800A | 91.7 [3.61] | 212.85 [8.380] | -- | 228.6 [9.00] | 9.7 [0.38] | 14.2 [0.56] | 10.31 [0.406] | 72.8 [2.87] | 11.2 [0.44] | 3.5 [0.14] | 204.7 [8.06] | 98.6 [3.88] | 53.98 [2.125] | 19.1 [0.75] | 17.5 [0.69] |
| T1000A | 106.4 [4.19] | 277.80 [10.937] | 279.40 [11.000] | 301.8 [11.88] | 12.7 [0.50] | 22.4 [0.88] | 13.49 [0.531] | 86.5 [3.40] | 18.3 [0.72] | 1.4 [0.06] | 255.5 [10.06] | 152.4 [6.00] | 73.02 [2.875] | 22.3 [0.88] | 23.1 [0.91] |

* Four additional holes @ 90° apart and 15° from the centerline are present on the T1000A models.

Product Numbers

| Model | P/N** | QD® Bushing Type* |
|--------------|--------|-------------------|
| T450A, Std. | 819003 | JA |
| T450A, LoCo | 819004 | JA |
| T600A, Std. | 820604 | SH |
| T600A, LoCo | 820605 | SH |
| T800A, Std. | 824202 | SK |
| T800A, LoCo | 824203 | SK |
| T1000A, Std. | 824305 | E |
| T1000A, LoCo | 824306 | E |

TA-Brake Accessories

| Model | Component | P/N | Shipping Weight |
|--------|--------------------|--------|-----------------|
| T450A | Torque Pin Bracket | 819900 | 0.5 kg [1 lbs] |
| | Brake Safety Guard | 817700 | 0.9 kg [2 lbs] |
| T600A | Torque Pin Bracket | 821400 | 0.9 kg [2 lbs] |
| | Brake Safety Guard | 818300 | 0.9 kg [2 lbs] |
| T800A | Torque Pin Bracket | 823400 | 0.9 kg [2 lbs] |
| | Brake Safety Guard | 826300 | 1.4 kg [3 lbs] |
| T1000A | Torque Pin Bracket | 825500 | 1.8 kg [4 lbs] |
| | Brake Safety Guard | 828200 | 1.8 kg [4 lbs] |

These accessories have the same dimensions as standard T-brakes. Please consult the Nexen Product Catalog or www.nexengroup.com for dimensional drawings.

* QD bushings are customer furnished. ®QD is a Registered Trademark of Emerson Electric Company.

**For Ultra LoCo Friction Facings, contact Nexen Technical Support at the number listed below.

In accordance with Nexen's established policy of constant product improvement, the specifications contained in this document are subject to change without notice. Technical data listed in this document are based on the latest information available at the time of printing and are also subject to change without notice. For current information, please consult: www.nexengroup.com



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