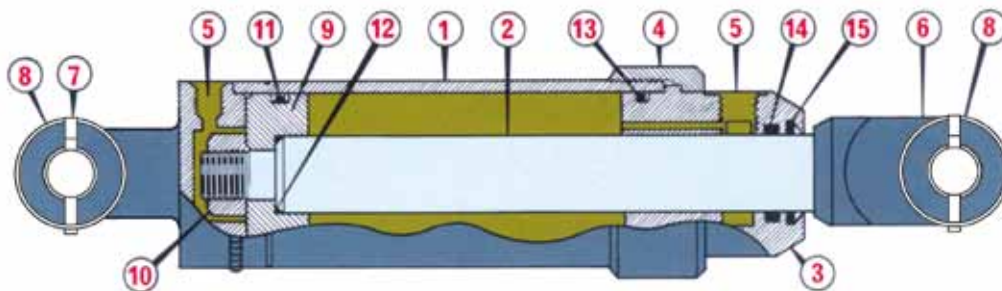




Baker Hydraulic's Apex III Hydraulic Cylinders have been developed as a completely modern design of hydraulic linear actuator. Using the highest quality

materials and the latest computerised manufacturing techniques, these cylinders have been purpose built for any static or mobile machinery application.



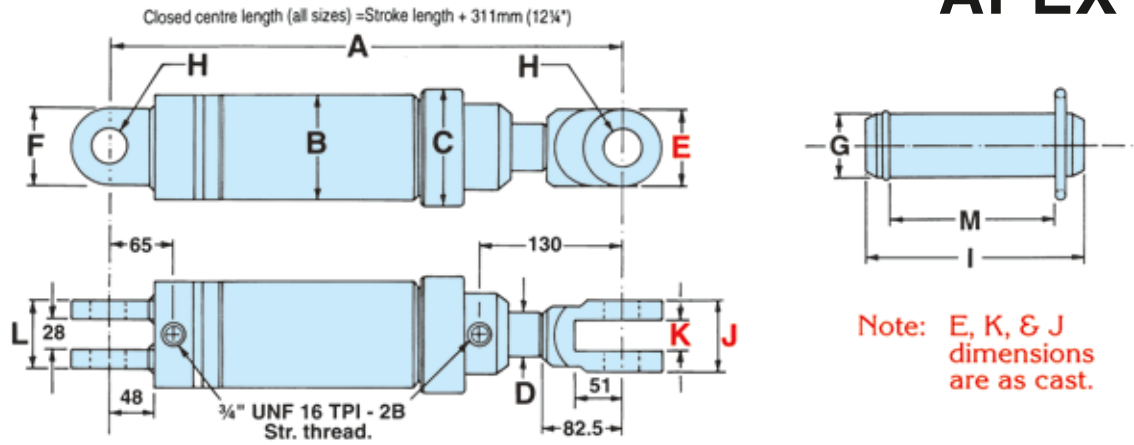
Made in Australia

1. **Cylinder Barrel.** Machined from cold drawn seamless Hydraulic Tube according to ASTM A513, Grade 1026 SRA, stress relieved, precision honed and welded.
2. **Piston Rod.** Machined from hard chrome Steel Bar Grade 1045 (Tensile strength 52 tons - 800 MPa) cold drawn, precision ground and hard chrome plated with a minimum deposit of .025mm (.001").
3. **Gland.** Machined from high strength Ductile Iron Castings up to AS1831 Grade 800 (Tensile strength 52 tons - 800 MPa).
4. **Gland Retaining Nut.** Internally threaded for easy seal access and machined from ASTM A513 Grade 1026 steel (Tensile strength 38 tons - 585 MPa).
5. **Ports.** Standard $\frac{3}{4}$ " UNF o'ring ports machined flush with cylinder barrel. Gland port can be rotated once cylinder is mounted, if required.
6. **Rod Knuckle.** Screw on cast knuckle, material high strength Ductile iron to AS1831 Grade 400 (Tensile strength 26 tons - 400 MPa). Machined for standard clevis pin and clearance for 1" lug.
7. **End Cap Clevis.** ASTM A216 Grade WCB Cast Carbon Steel
8. **Clevis pins and clips.** Pins and clips are supplied with all Apex II cylinders. Pins are machined from AISI Grade 1030 Steel (Tensile strength 36 tons - 555 MPa) and zinc plated to AS1789. Refer to chart for sizes.

9. **Piston.** Machined from continuous cast pearlitic Grey Iron Grade AS1830 (Tensile strength 17 tons - 250 MPa).
 10. **Piston Nut.** Machined from High Grade Alloy Steel to AS2465 Grade 8 (Tensile strength 67 tons - 1030 MPa).
 11. **Seal - Piston to Barrel.** High performance double acting seal with single acting capabilities.
 12. **Seal - Piston to Piston Rod.** O'ring positive seal to piston and piston rod.
 13. **Gland Seal - Gland to Barrel.** O'ring with contour shaped back up ring.
 14. **Gland Seal - Gland to Piston Rod.** Double lipped single acting seal.
 15. **Rod Wiper.** Double lipped design.
- Working pressures up to 3000psi (207bar) & can vary according to bore diameter and length of stroke.
 - Apex III Cylinders are available in a wide range of standard bore sizes and strokes. Refer chart over-leaf for details.
 - Non standard stroke Apex III Cylinders to the same exacting standards can also be manufactured on request.
 - Baker Hydraulics' Apex III Cylinders can be easily identified by a part number stamped into the barrel clevis.

INSTALLATION DIMENSIONS

APEX III



| BORE X STROKE inches (mm) | A CLOSED CENTRES inches (mm) | B mm | C mm | D mm | E mm | F mm | G inches | H mm | I mm | J mm | K mm | L mm | M mm | JOURNAL THREAD inches | APPROX MASS kg |
|------------------------------|------------------------------------|---------|---------|---------|---------|---------|--------------------|----------------|---------|-----------|-----------|---------|---------|--------------------------|-------------------|
| 2.5" x 6" (152) | 18.25" (464) | 73 | 80 | 31.75 | | | | | | | | | | | |
| 2.5" x 8" (203) | 20.25" (514) | | | | | | | | | | | | | | |
| 2.5" x 12" (305) | 24.25" (616) | | | | | | | | | | | | | | |
| 2.5" x 16" (406) | 28.25" (718) | | | | | | | | | | | | | | |
| 2.5" x 18" (457) | 30.25" (768) | | | | | | | | | | | | | | |
| 2.5" x 20" (508) | 32.25" (819) | | | | | | | | | | | | | | |
| 2.5" x 24" (610) | 36.25" (921) | | | | | | | | | | | | | | |
| 2.5" x 30" (762) | 42.25" (1073) | | | | | | | | | | | | | | |
| 2.5" x 36" (914) | 48.25" (1226) | | | | | | | | | | | | | | |
| 2.5" x 48" (1219) | 60.25" (1530) | | | | | | | | | | | | | | |
| 3" x 6" (152) | 18.25" (464) | 87 | 95 | 38.10 | 51 | 50.8 | 1" Ø (25.4) | 25.55 25.75 | 95 | 68 max | 27 min | 65 | 69 | 1 1/8 UNF 12TPI | |
| 3" x 8" (203) | 20.25" (514) | | | | | | | | | | | | | | |
| 3" x 12" (305) | 24.25" (616) | | | | | | | | | | | | | | |
| 3" x 16" (406) | 28.25" (718) | | | | | | | | | | | | | | |
| 3" x 18" (457) | 30.25" (768) | | | | | | | | | | | | | | |
| 3" x 24" (610) | 36.25" (921) | | | | | | | | | | | | | | |
| 3" x 30" (762) | 42.25" (1073) | | | | | | | | | | | | | | |
| 3" x 36" (914) | 48.25" (1226) | | | | | | | | | | | | | | |
| 3.5" x 8" (203) | 20.25" (514) | 100 | 106 | | | | | | | | | | | | |
| 3.5" x 12" (305) | 24.25" (616) | | | | | | | | | | | | | | |
| 3.5" x 16" (406) | 28.25" (718) | | | | | | | | | | | | | | |
| 3.5" x 18" (457) | 30.25" (768) | | | | | | | | | | | | | | |
| 3.5" x 24" (610) | 36.25" (921) | | | | | | | | | | | | | | |
| 3.5" x 30" (762) | 42.25" (1073) | | | | | | | | | | | | | | |
| 3.5" x 36" (914) | 48.25" (1226) | | | | | | | | | | | | | | |
| 4" x 8" (203) | 20.25" (514) | 114.3 | 125 | 44.45 | 70 | 70 | 1 1/4 Ø (31.75) | 31.90 32.08 | 115 | 88 max | 27 min | 78 | 89 | 1 1/2 UNF 12TPI | |
| 4" x 12" (305) | 24.25" (616) | | | | | | | | | | | | | | |
| 4" x 16" (406) | 28.25" (718) | | | | | | | | | | | | | | |
| 4" x 18" (457) | 30.25" (768) | | | | | | | | | | | | | | |
| 4" x 24" (610) | 36.25" (921) | | | | | | | | | | | | | | |
| 4" x 30" (762) | 42.25" (1073) | | | | | | | | | | | | | | |
| 4" x 36" (914) | 48.25" (1226) | | | | | | | | | | | | | | |

Note: Due to product improvement specifications can change without notice.



A.B.N. 59 056 424 625

BAKER HYDRAULICS Pty. Ltd.
 18 Deloraine Road, Edwardstown, S.A.
 Postal: PO Box 54, EDWARDSTOWN 5039
 Ph: (08) 8276 3188. Fax: (08) 8277 8862
www.bakerhydraulics.com.au

Available from: