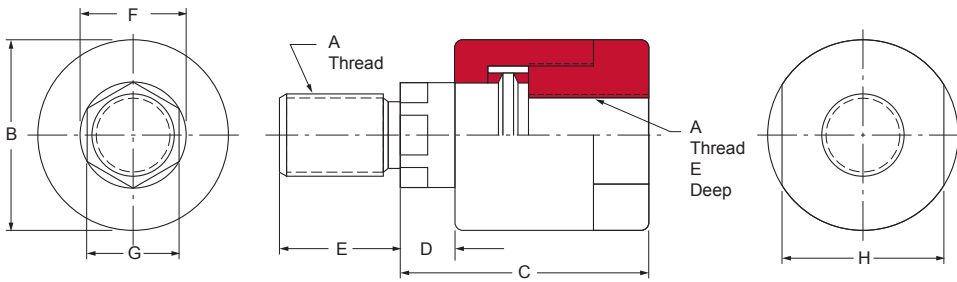


Cylinder Accessories

| | Page |
|--|----------------|
| <i>Linear Alignment Coupler</i> | 135 |
| <i>AMLOK® Rod Clamp</i> | 136-137 |
| <i>Flange Couplers and Weld Plates</i> | 138 |
| <i>Spherical Rod Accessories</i> | 139 |

Milwaukee Cylinder provides various cylinder accessories to maximize your cylinder's potential. **Linear Alignment Couplers** prevent binding and erratic movement caused by misalignment. **Amlok® Rod Clamps** hold position securely after motion has stopped. Additional accessories are detailed in this section, and also on the inside back cover of this catalog.



▼ Linear Alignment Coupler Dimensional Chart

| Model No. | A Thread | B Body Ø | C Body Length | D Shank Length | E Thread Length | F Shank Ø | G Flats | H Flats | Max. Rated Load (lbs) | Max. Load @ Yield (lbs) |
|-----------|----------|----------|---------------|----------------|-----------------|-----------|---------|---------|-----------------------|-------------------------|
| MC-312 | 5/16-24 | 7/8 | 1 1/4 | 1/4 | 5/8 | 5/16 | 1/4 | 3/4 | 2075 | 8300 |
| MC-375 | 3/8-24 | 7/8 | 1 1/4 | 1/4 | 5/8 | 5/16 | 5/16 | 3/4 | 2075 | 8300 |
| MC-437 | 7/16-20 | 1 1/4 | 2 | 1/2 | 3/4 | 5/8 | 1/2 | 1 | 2500 | 10,000 |
| MC-500 | 1/2-20 | 1 1/4 | 2 | 1/2 | 3/4 | 5/8 | 1/2 | 1 | 3500 | 14,000 |
| MC-625 | 5/8-18 | 1 1/4 | 2 | 1/2 | 3/4 | 5/8 | 1/2 | 1 | 4750 | 19,000 |
| MC-750 | 3/4-16 | 1 3/4 | 2 5/16 | 1/2 | 1 1/8 | 3 1/32 | 7/8 | 1 1/2 | 8500 | 34,000 |
| MC-875 | 7/8-14 | 1 3/4 | 2 5/16 | 1/2 | 1 1/8 | 3 1/32 | 7/8 | 1 1/2 | 9750 | 39,000 |
| MC-1000 | 1-14 | 2 1/2 | 2 19/16 | 1/2 | 1 5/8 | 1 3/8 | 1 5/32 | 2 1/4 | 16,000 | 64,000 |
| MC-1250 | 1 1/4-12 | 2 1/2 | 2 19/16 | 1/2 | 1 5/8 | 1 3/8 | 1 5/32 | 2 1/4 | 19,500 | 78,000 |
| MC-1500 | 1 1/2-12 | 3 1/4 | 4 3/8 | 1 3/16 | 2 1/4 | 1 3/4 | 1 1/2 | 3 | 33,500 | 134,000 |
| MC-1750 | 1 3/4-12 | 3 1/4 | 4 3/8 | 1 3/16 | 2 1/4 | 1 3/4 | 1 1/2 | 3 | 33,500 | 134,000 |
| MC-1875 | 1 7/8-12 | 3 3/4 | 5 7/16 | 7/8 | 3 | 2 | 1 7/8 | 3 1/2 | 60,000 | 240,000 |
| MC-2000 | 2-12 | 3 3/4 | 5 7/16 | 7/8 | 3 | 2 | 1 7/8 | 3 1/2 | 60,000 | 240,000 |

NOTES:

All dimensions are subject to change by manufacturer.

Larger sizes, special designs and metric versions are available. Consult factory.

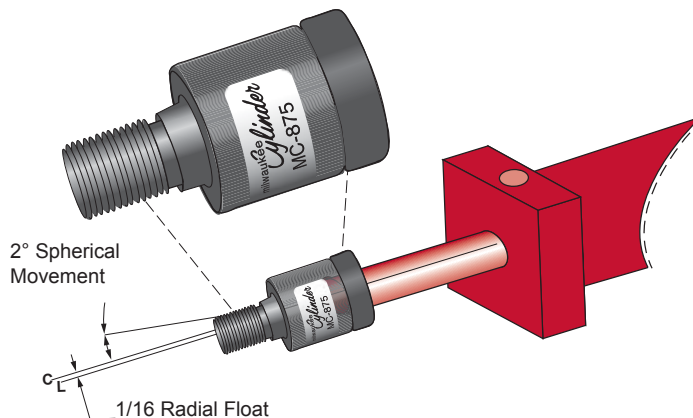
Use jam nut to lock coupler to rod when used with full diameter threads.

Use "Max. Rated Load" for 4:1 safety factor.

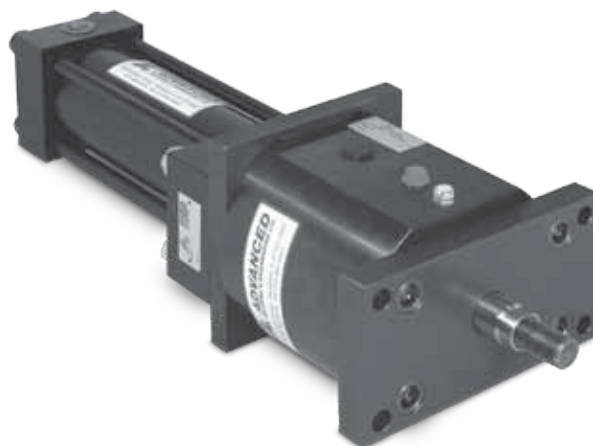
Eliminate Alignment Problems. Install a Linear Alignment Coupler.

Features...

- Reduces rod seal and bearing wear
- Prevents binding and erratic movement caused by misalignment
- Permits a greater tolerance between cylinder centerline and mating member
- Works equally well in "push" or "pull" applications



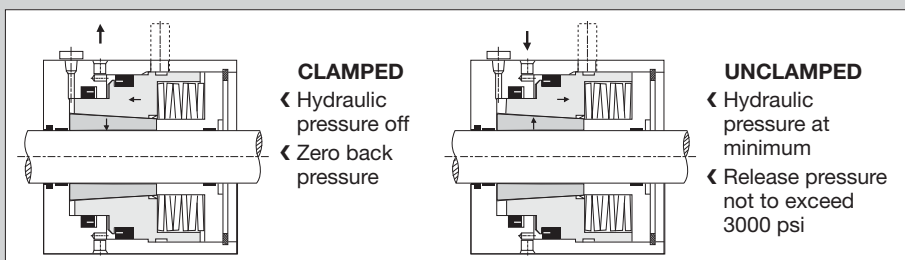
Contact your Milwaukee Cylinder representative for product selection assistance.



AMLOK® TYPE RCH ROD CLAMP

- Provides power-off clamping of rods and shafts
- Clamps are actuated by a spring/collet mechanism and unclamped by hydraulic pressure
- Designed to clamp components after the motion has stopped and to hold the position securely as long as the forces do not exceed the table values

▼ HOW AMLOK® TYPE RCH ROD CLAMP WORKS



Optional Accessories

- **Proximity Switch** – to indicate an “unlocked” condition.
- **Air Bleed** - It is important that all the air be bled from the AMLOK® piston area. It is recommended to install an automatic air bleed valve between the AMLOK® and the oil reservoir.

▼ HOW TO ORDER

Example: **RCH - XXX - XXX - 075** **X** Example: RCH - 100 250 - 150 N

Rod Size - X.XX (inches) _____

Cylinder Bore Size - X.XX (inches) _____

Release Pressure - (psi divided by 10) _____

Select Options:

P - Proximity Switch (indicates unclamped position)

N - No Proximity Switch

Movement in Load A direction is zero.

Movement in Load B direction is .012" maximum when clamp is fully locked

| Rod Dia. ¹ | Rod Dia. Tolerance ² | Cyl Bore | AMLOK® Part No. RCH - | Mln. Release Pressure psi ³ | Max. Holding Force ⁴ | D ± .03 | L ± .03 | E ± .015 | R ± .005 | TF ± .005 | FB ± .015 | B ± .015 | A ± .015 | K ± .015 | C ± .03 | F ± .03 | G ± .03 | J ± .03 | M ± .03 | Port |
|-----------------------|---------------------------------|----------|---|--|---------------------------------|---------|---------|----------|----------|-----------|-----------|----------|----------|----------|---------|---------|---------|---------|---------|--------|
| .625 | +.000 -.003 | 1.50 | 062 150-075 062 150-100 062 150-150 | 750 1000 1500 | 1100 1800 2250 | 4.37 | 3.55 | 1.63 | 1.625 | 3.437 | .44 | 1.25 | 2.48 | .23 | .38 | 2.13 | .75 | .79 | .78 | SAE 4 |
| 1.000 | +.000 -.003 | 1.50 | 100 150-075 100 150-100 100 150-150 | 750 1000 1500 | 1200 2000 2300 | 4.37 | 3.45 | 1.75 | 1.625 | 3.437 | .44 | 1.63 | 2.76 | .23 | .50 | 1.88 | .87 | .79 | .78 | SAE 4 |
| 1.000 | +.000 -.003 | 2.00 | 100 200-075 100 200-100 100 200-150 | 750 1000 1500 | 2900 5200 5600 | 5.37 | 4.37 | 2.25 | 2.050 | 4.125 | .56 | 1.63 | 3.74 | .23 | .35 | 2.90 | .85 | 1.00 | 0 | SAE 4 |
| 1.000 | +.000 -.003 | 2.50 | 100 250-075 100 250-100 100 250-150 | 750 1000 1500 | 2900 5200 6000 | 5.98 | 5.12 | 2.50 | 2.550 | 4.625 | .56 | 1.63 | 4.13 | .23 | .50 | 3.40 | 1.00 | 1.50 | 0 | SAE 4 |
| 1.375 | +.000 -.003 | 2.00 | 137 200-075 137 200-100 137 200-150 | 750 1000 1500 | 2700 2700 5200 | 5.37 | 4.65 | 2.25 | 2.050 | 4.125 | .56 | 2.13 | 3.74 | .23 | .50 | 3.00 | 1.00 | 1.50 | 0 | SAE 4 |
| 1.375 | +.000 -.003 | 2.50 | 137 250-075 137 250-100 137 250-150 | 750 1000 1500 | 2700 5200 6000 | 5.98 | 5.12 | 2.50 | 2.550 | 4.625 | .56 | 2.13 | 4.13 | .23 | .50 | 3.50 | .90 | 1.50 | 0 | SAE 4 |
| 1.375 | +.000 -.003 | 3.25 | 137 325-075 137 325-100 137 325-150 | 750 1000 1500 | 8200 11500 16000 | 7.75 | 6.50 | 3.25 | 3.250 | 5.875 | .69 | 2.13 | 5.70 | .28 | .45 | 4.50 | 1.10 | 2.60 | 0 | SAE 4 |
| 1.750 | +.000 -.003 | 2.50 | 175 250-075 175 250-100 175 250-150 | 750 1200 2000 | 3500 5700 7500 | 6.00 | 5.91 | 2.50 | 2.55 | 4.630 | .56 | 2.38 | 4.33 | .32 | .70 | 3.90 | .96 | 2.44 | .78 | SAE 4 |
| 1.750 | +.000 -.003 | 3.25 | 175 325-075 175 325-100 175 325-150 | 750 1000 1500 | 8200 11500 16000 | 7.75 | 6.50 | 3.25 | 3.250 | 5.875 | .69 | 2.50 | 5.70 | .30 | .63 | 4.67 | .93 | 2.60 | 0 | SAE 4 |
| 1.750 | +.000 -.003 | 4.00 | 175 400-075 175 400-100 175 400-150 | 750 1000 1500 | 8200 12000 17000 | 8.38 | 6.50 | 3.50 | 3.820 | 6.375 | .69 | 2.50 | 6.10 | .34 | .50 | 4.375 | 1.225 | 2.20 | 0 | SAE 4 |
| 2.000 | +.000 -.003 | 3.25 | 200 325-075 200 325-100 200 325-150 | 750 1000 1500 | 8200 11500 16000 | 7.75 | 6.50 | 3.25 | 3.250 | 5.875 | .69 | 2.68 | 5.70 | .29 | .58 | 4.50 | 1.10 | 2.60 | 0 | SAE 4 |
| 2.000 | +.000 -.003 | 5.00 | 200 500-075 200 500-100 200 500-150 | 750 1000 1500 | 8200 12000 17000 | 11.25 | 6.50 | 3.50 | 4.950 | 8.187 | .94 | 2.75 | 6.10 | .34 | .50 | 4.375 | 1.225 | 2.20 | 0 | SAE 4 |
| 2.500 | +.000 -.003 | 4.00 | 250 400-075 250 400-100 250 400-150 | 750 1000 1500 | 6000 8000 15000 | 7.68 | 7.10 | 3.50 | 3.813 | 6.375 | .69 | 3.14 | 6.10 | .35 | .56 | 4.77 | 1.23 | 3.00 | .91 | SAE 4 |
| 2.500 | +.000 -.003 | 6.00 | 250 600-075 250 600-100 250 600-150 | 750 1000 1500 | 30000 36000 50000 | 12.75 | 9.00 | 5.00 | 5.730 | 9.437 | 1.06 | 3.25 | 8.85 | .38 | .75 | 3.625 | 1.125 | 3.00 | 0 | SAE 4 |
| 3.000 | +.000 -.003 | 6.00 | 300 600-075 300 600-100 | 750 1000 | 17000 22500 | 12.75 | 9.00 | 5.00 | 5.730 | 9.437 | 1.06 | 3.88 | - | - | .38 | 4.88 | 1.1 | 3.11 | 0 | SAE 8 |
| 3.000 | +.000 -.003 | 7.00 | 300 700-075 300 700-100 300 700-150 | 750 1000 1500 | 30000 36000 50000 | 14.75 | 10.00 | 6.50 | 6.580 | 10.625 | 1.19 | 3.88 | - | - | .75 | 7.325 | 1.375 | 4.73 | 0 | SAE 8 |
| 3.500 | +.000 -.003 | 8.00 | 350 800-075 350 800-100 350 800-150 | 750 1000 1500 | 40000 55000 80000 | 16.14 | 11.50 | 7.00 | 7.500 | 11.812 | 1.31 | 4.38 | - | - | .90 | 8.93 | 1.32 | 5.35 | 0 | SAE 10 |
| 4.000 | +.000 -.005 | 8.00 | 400 800-075 400 800-100 400 800-150 | 750 1000 1500 | 40000 55000 80000 | 16.14 | 11.50 | 7.00 | 7.500 | 11.812 | 1.31 | 4.88 | - | - | .90 | 8.875 | 1.365 | 5.35 | 0 | SAE 10 |

¹ Other sizes available upon request.

² Rod tolerances that exceed these limits will affect the holding force.

³ Maximum Hydraulic Release Pressure: 3000 psi

⁴ Holding forces are based on dry or mineral-oil lubricated shafts.

Dimensions are subject to change without notice.

H-Heavy Duty Hyd

LH-Low Press. Hyd

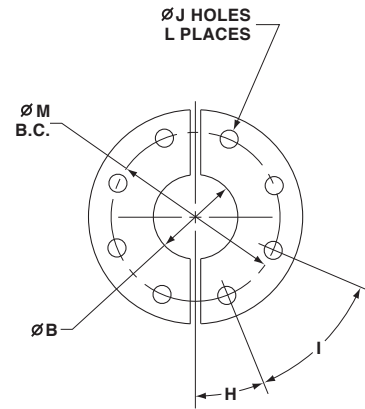
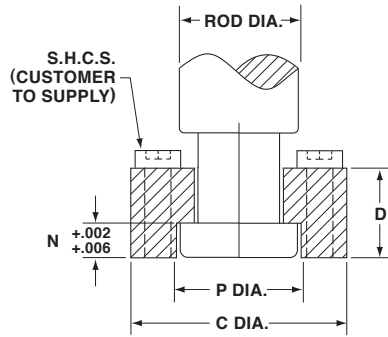
A-Pneumatic

MN-Aluminum Hyd

Hyd-Pneu Devices

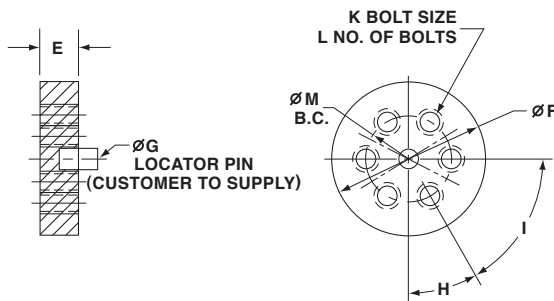
Cyl Accessories

▼ FLANGE COUPLERS



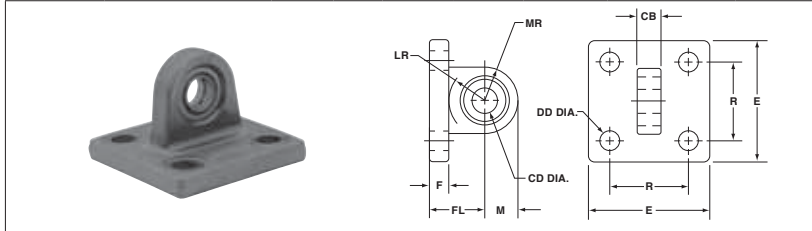
| PART# | ROD DIA. | B | C | D | H | I | J | L | M | N | P | MATERIAL |
|----------|----------|-------|-------|-------|-------|-----|------|----|-------|-------|-------|--------------|
| ACFC-062 | .625 | .406 | 1.500 | .562 | 45° | 90° | .218 | 4 | 1.125 | .250 | .656 | AISI 1144 CD |
| ACFC-100 | 1.000 | .750 | 2.000 | .875 | 30° | 60° | .281 | 6 | 1.500 | .375 | 1.063 | AISI 1144 CD |
| ACFC-137 | 1.375 | .938 | 2.500 | 1.000 | 30° | 60° | .343 | 6 | 2.000 | .375 | 1.438 | AISI 1018 CD |
| ACFC-175 | 1.750 | 1.187 | 3.000 | 1.250 | 22.5° | 45° | .343 | 8 | 2.375 | .500 | 1.813 | AISI 1018 CD |
| ACFC-200 | 2.000 | 1.438 | 3.500 | 1.625 | 15° | 30° | .406 | 12 | 2.688 | .625 | 2.063 | AISI 1018 CD |
| ACFC-250 | 2.500 | 1.875 | 4.000 | 1.875 | 15° | 30° | .406 | 12 | 3.188 | .750 | 2.625 | AISI 1018 CD |
| ACFC-300 | 3.000 | 2.375 | 5.000 | 2.375 | 15° | 30° | .531 | 12 | 4.000 | .875 | 3.125 | AISI 1018 CD |
| ACFC-350 | 3.500 | 2.625 | 5.875 | 2.625 | 15° | 30° | .656 | 12 | 4.688 | 1.000 | 3.625 | C1119 MOD |
| ACFC-400 | 4.000 | 3.125 | 6.375 | 2.625 | 15° | 30° | .656 | 12 | 5.188 | 1.000 | 4.125 | C1119 MOD |
| ACFC-450 | 4.500 | 3.625 | 6.875 | 3.125 | 15° | 30° | .656 | 12 | 5.688 | 1.500 | 4.625 | C1119 MOD |
| ACFC-500 | 5.000 | 4.000 | 7.375 | 3.125 | 15° | 30° | .656 | 12 | 6.188 | 1.500 | 5.125 | C1119 MOD |
| ACFC-550 | 5.500 | 4.500 | 8.250 | 3.875 | 15° | 30° | .781 | 12 | 6.875 | 1.875 | 5.625 | C1119 MOD |

▼ WELD PLATES



| PART# | SIZE | E | F | G | H | I | K | L | M | MATERIAL |
|----------|-------|-------|-------|------|-------|-----|-----------|----|-------|----------|
| ACWP-062 | .625 | .500 | 2.000 | .250 | 45° | 90° | 10 - 24 | 4 | 1.125 | CD 1018 |
| ACWP-100 | 1.000 | .500 | 2.500 | .250 | 30° | 60° | 1/4 - 20 | 6 | 1.500 | CD 1018 |
| ACWP-137 | 1.375 | .625 | 3.000 | .250 | 30° | 60° | 5/16 - 18 | 6 | 2.000 | CD 1018 |
| ACWP-175 | 1.750 | .625 | 4.000 | .250 | 22.5° | 45° | 5/16 - 18 | 8 | 2.375 | CD 1018 |
| ACWP-200 | 2.000 | .750 | 4.000 | .375 | 15° | 30° | 3/8 - 16 | 12 | 2.688 | CD 1018 |
| ACWP-250 | 2.500 | .750 | 4.500 | .375 | 15° | 30° | 3/8 - 16 | 12 | 3.188 | CD 1018 |
| ACWP-300 | 3.000 | 1.000 | 5.500 | .375 | 15° | 30° | 1/2 - 13 | 12 | 4.000 | CD 1018 |
| ACWP-350 | 3.500 | 1.000 | 7.000 | .375 | 15° | 30° | 5/8 - 11 | 12 | 4.688 | A 36 HRS |
| ACWP-400 | 4.000 | 1.000 | 7.000 | .375 | 15° | 30° | 5/8 - 11 | 12 | 5.188 | A 36 HRS |
| ACWP-450 | 4.500 | 1.000 | 8.000 | .375 | 15° | 30° | 5/8 - 11 | 12 | 5.688 | A 36 HRS |
| ACWP-500 | 5.000 | 1.000 | 8.000 | .375 | 15° | 30° | 5/8 - 11 | 12 | 6.188 | A 36 HRS |
| ACWP-550 | 5.500 | 1.250 | 9.000 | .375 | 15° | 30° | 3/4 - 10 | 12 | 6.875 | A 36 HRS |

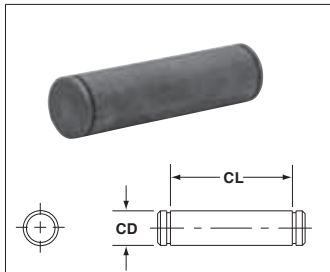
▼ SPHERICAL EYE BRACKETS



| PART# | CB | CD -.0005 | DD | E | F | FL | LR | M | MR | R |
|---------|-------|-----------|--------|-------|-----|-------|-------|--------|--------|------|
| ACEB-05 | 1/2 | .5000 | 1 3/32 | 2 1/2 | 3/8 | 1 1/8 | 3/4 | 1 1/16 | 1 1/16 | 1.62 |
| ACEB-07 | 3/4 | .7500 | 1 7/32 | 3 1/2 | 5/8 | 1 7/8 | 1 1/4 | 1 3/16 | 1 3/16 | 2.56 |
| ACEB-10 | 1 | 1.0000 | 2 1/32 | 4 1/2 | 3/4 | 2 1/4 | 1 1/2 | 1 3/8 | 1 3/8 | 3.25 |
| ACEB-13 | 1 1/8 | 1.3750 | 2 1/32 | 5 | 7/8 | 3 | 2 1/8 | 2 | 2 | 3.81 |
| ACEB-17 | 1 1/2 | 1.7500 | 2 9/32 | 6 1/2 | 7/8 | 3 3/8 | 2 1/4 | 2 1/8 | 2 1/8 | 4.94 |
| ACEB-20 | 1 3/4 | 2.0000 | 1 1/32 | 7 1/2 | 1 | 3 1/2 | 2 1/2 | 2 3/8 | 2 3/8 | 5.75 |

MATERIAL: 05 thru 10, 1144 Steel Forging; 13 thru 20, Steel Weldment

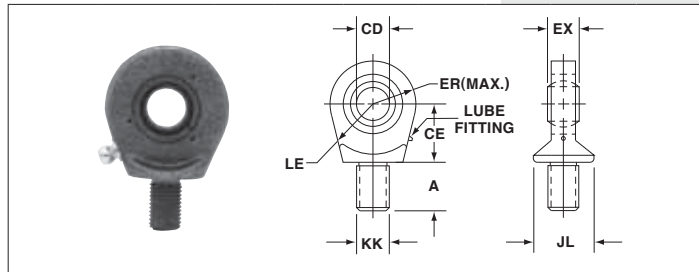
▼ PIVOT PINS FOR SPHERICAL CLEVIS BRACKETS



| PART# | CD | CL |
|---------|--------------|---------|
| ACPP-05 | .4997-.0004 | 1 1/16 |
| ACPP-07 | .7497-.0005 | 2 1/32 |
| ACPP-10 | .9997-.0005 | 2 1/2 |
| ACPP-13 | 1.3746-.0006 | 3 5/16 |
| ACPP-17 | 1.7496-.0006 | 4 7/32 |
| ACPP-20 | 1.9996-.0007 | 4 15/16 |

MATERIAL: CD1144 HEAT TREATMENT: Nitrotec

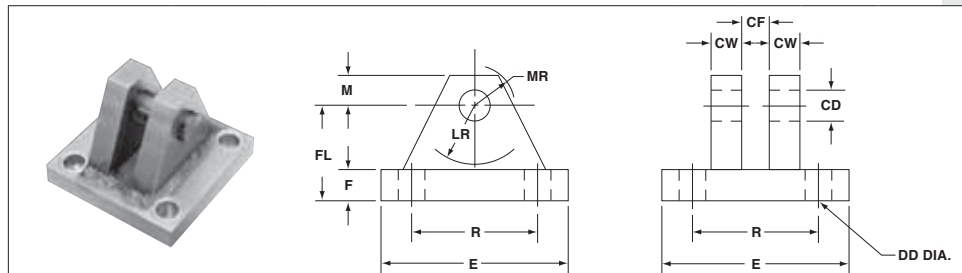
▼ SPHERICAL ROD EYES



| PART# | CD -.0005 | A | CE | EX | ER | LE | KK | JL |
|---------|-----------|--------|-------|---------|---------|--------|------------|--------|
| ACRE-05 | .5000 | 1 1/16 | 7/8 | 7/16 | 7/8 | 3/4 | 7/16 - 20 | 7/8 |
| ACRE-07 | .7500 | 1 | 1 1/4 | 2 1/32 | 1 1/4 | 1 1/16 | 3/4 - 16 | 1 5/16 |
| ACRE-10 | 1.0000 | 1 1/2 | 1 7/8 | 7/8 | 1 3/8 | 1 7/16 | 1 - 14 | 1 1/2 |
| ACRE-13 | 1.3750 | 2 | 2 1/8 | 1 3/16 | 1 13/16 | 1 7/8 | 1 1/4 - 12 | 2 |
| ACRE-17 | 1.7500 | 2 1/8 | 2 1/2 | 1 17/32 | 2 3/16 | 2 1/8 | 1 1/2 - 12 | 2 1/4 |
| ACRE-20 | 2.0000 | 2 7/8 | 2 3/4 | 1 3/4 | 2 5/8 | 2 1/2 | 1 7/8 - 12 | 2 3/4 |

MATERIAL: Ductile Iron Casting

▼ SPHERICAL CLEVIS BRACKETS



| PART# | E | F | M | R | CD | CF | CW | DD | FL | LR | MR |
|---------|-------|------|------|------|-------|------|------|-----|------|------|------|
| ACCB-05 | 3.00 | .50 | .50 | 2.05 | .500 | .44 | .50 | .41 | 1.50 | .94 | .62 |
| ACCB-07 | 3.75 | .62 | .88 | 2.76 | .750 | .66 | .62 | .53 | 2.00 | 1.38 | 1.00 |
| ACCB-10 | 5.50 | .75 | 1.00 | 4.10 | 1.000 | .88 | .75 | .53 | 2.50 | 1.69 | 1.19 |
| ACCB-13 | 6.50 | .88 | 1.38 | 4.95 | 1.375 | 1.19 | 1.00 | .66 | 3.50 | 2.44 | 1.62 |
| ACCB-17 | 8.50 | 1.25 | 1.75 | 6.58 | 1.750 | 1.53 | 1.25 | .91 | 4.50 | 2.88 | 2.06 |
| ACCB-20 | 10.62 | 1.50 | 2.00 | 7.92 | 2.000 | 1.75 | 1.50 | .91 | 5.00 | 3.31 | 2.38 |

MATERIAL: Steel Weldment