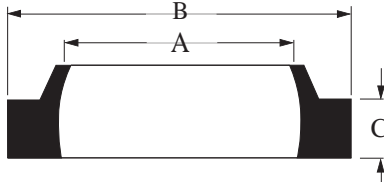
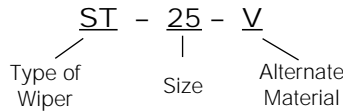


STYLE ST URETHANE WIPER RINGS

Style ST wiper rings are precision molded from 90A durometer urethane. Flexible enough to easily snap into a groove yet tough enough to handle difficult rod wiping applications. "V" tagged wipers are constructed of fluorocarbon.



PART NUMBERS



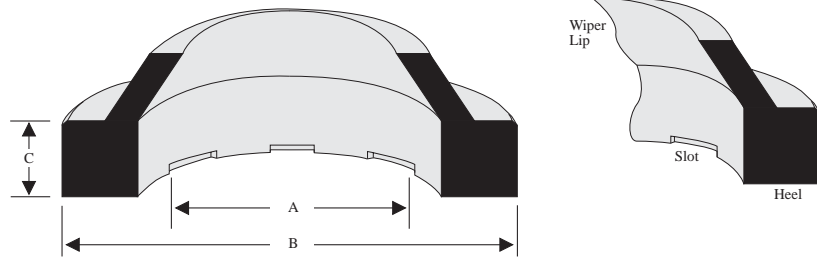
| SEAL INFORMATION | |
|-------------------|--|
| MATERIAL | URETHANE / FLUOROCARBON |
| TEMPERATURE RANGE | URETHANE -65° TO +220° F FLUOROCARBON -20° to +400° F |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| ST-25 | 1/4 | 1/2 | 1/8 | \$ 1.45 |
| ST-37 | 3/8 | 5/8 | 1/8 | 1.45 |
| ST-43 | 7/16 | 11/16 | 1/8 | 1.42 |
| ST-50 | 1/2 | 3/4 | 1/8 | 1.65 |
| ST-56 | 9/16 | 13/16 | 1/8 | 1.65 |
| ST-62 | 5/8 | 7/8 | 1/8 | 1.65 |
| ST-75 | 3/4 | 1-1/8 | 3/16 | 1.65 |
| ST-81 | 13/16 | 1-3/16 | 3/16 | 1.65 |
| ST-87 | 7/8 | 1-1/4 | 3/16 | 1.65 |
| ST-93 | 15/16 | 1-5/16 | 3/16 | 1.49 |
| ST-100 | 1 | 1-3/8 | 3/16 | 1.65 |
| ST-100V | 1 | 1-3/8 | 3/16 | 6.87 |
| ST-112 | 1-1/8 | 1-1/2 | 3/16 | 1.65 |
| ST-112V | 1-1/8 | 1-1/2 | 3/16 | 7.88 |
| ST-118 | 1-3/16 | 1-9/16 | 3/16 | 1.68 |
| ST-125 | 1-1/4 | 1-5/8 | 3/16 | 1.79 |
| ST-125V | 1-1/4 | 1-5/8 | 3/16 | 9.04 |
| ST-131 | 1-5/16 | 1-11/16 | 3/16 | 1.85 |
| ST-137 | 1-3/8 | 1-3/4 | 3/16 | 1.91 |
| ST-137V | 1-3/8 | 1-3/4 | 3/16 | 8.46 |
| ST-143 | 1-7/16 | 1-13/16 | 3/16 | 6.65 |
| ST-150 | 1-1/2 | 1-7/8 | 3/16 | 2.09 |
| ST-156 | 1-9/16 | 1-15/16 | 3/16 | 2.10 |
| ST-162 | 1-5/8 | 2 | 3/16 | 2.18 |
| ST-175 | 1-3/4 | 2-1/8 | 3/16 | 2.36 |
| ST-175V | 1-3/4 | 2-1/8 | 3/16 | 9.57 |
| ST-187 | 1-7/8 | 2-1/4 | 3/16 | 2.43 |
| ST-193 | 1-15/16 | 2-5/16 | 3/16 | 2.53 |
| ST-200 | 2 | 2-1/2 | 1/4 | 2.47 |
| ST-200V | 2 | 2-1/2 | 1/4 | 11.94 |
| ST-212 | 2-1/8 | 2-5/8 | 1/4 | 2.54 |
| ST-212A | 2-1/8 | 2-1/2 | 3/16 | 6.95 |
| ST-225 | 2-1/4 | 2-3/4 | 1/4 | 2.60 |
| ST-237 | 2-3/8 | 2-7/8 | 1/4 | 2.74 |
| ST-250 | 2-1/2 | 3 | 1/4 | 2.90 |
| ST-250V | 2-1/2 | 3 | 1/4 | 18.55 |
| ST-262 | 2-5/8 | 3-1/8 | 1/4 | 2.90 |
| ST-275 | 2-3/4 | 3-1/4 | 1/4 | 3.00 |
| ST-287 | 2-7/8 | 3-3/8 | 1/4 | 3.12 |
| ST-300 | 3 | 3-1/2 | 1/4 | 3.12 |
| ST-300V | 3 | 3-1/2 | 1/4 | 21.35 |
| ST-312 | 3-1/8 | 3-5/8 | 1/4 | 3.45 |
| ST-325 | 3-1/4 | 3-3/4 | 1/4 | 3.45 |
| ST-337 | 3-3/8 | 3-7/8 | 1/4 | 3.56 |

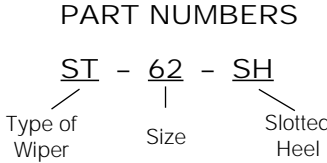
| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| ST-350 | 3-1/2 | 4 | 1/4 | \$ 3.56 |
| ST-350V | 3-1/2 | 4 | 1/4 | 24.50 |
| ST-362 | 3-5/8 | 4-1/8 | 1/4 | 4.12 |
| ST-375 | 3-3/4 | 4-1/4 | 1/4 | 4.12 |
| ST-387 | 3-7/8 | 4-3/8 | 1/4 | 4.65 |
| ST-400 | 4 | 4-1/2 | 1/4 | 4.65 |
| ST-412 | 4-1/8 | 4-5/8 | 1/4 | 4.73 |
| ST-425 | 4-1/4 | 4-3/4 | 1/4 | 4.79 |
| ST-437 | 4-3/8 | 4-7/8 | 1/4 | 5.15 |
| ST-450 | 4-1/2 | 5-1/4 | 3/8 | 5.19 |
| ST-451 | 4-1/2 | 5 | 1/4 | 5.15 |
| ST-475 | 4-3/4 | 5-1/2 | 3/8 | 5.50 |
| ST-487 | 4-7/8 | 5-5/8 | 3/8 | 6.56 |
| ST-500 | 5 | 5-3/4 | 3/8 | 7.26 |
| ST-500V | 5 | 5-3/4 | 3/8 | 51.68 |
| ST-501 | 5 | 5-1/2 | 1/4 | 7.06 |
| ST-525 | 5-1/4 | 6 | 3/8 | 8.97 |
| ST-550 | 5-1/2 | 6-1/4 | 3/8 | 9.02 |
| ST-575 | 5-3/4 | 6-1/2 | 3/8 | 10.15 |
| ST-600 | 6 | 6-3/4 | 3/8 | 10.69 |
| ST-625 | 6-1/4 | 7 | 3/8 | 10.97 |
| ST-650 | 6-1/2 | 7-1/4 | 3/8 | 11.25 |
| ST-660 | 6-1/2 | 7-1/2 | 1/2 | 44.00 |
| ST-675 | 6-3/4 | 7-1/2 | 3/8 | 11.77 |
| ST-700 | 7 | 7-3/4 | 3/8 | 12.67 |
| ST-701 | 7 | 8 | 1/2 | 36.65 |
| ST-702 | 7 | 8 | 400 | 36.81 |
| ST-750 | 7-1/2 | 8-1/4 | 3/8 | 13.14 |
| ST-775 | 7-3/4 | 8-1/2 | 3/8 | 14.09 |
| ST-800 | 8 | 8-3/4 | 3/8 | 15.04 |
| ST-801 | 8 | 8-1/2 | 1/4 | 15.04 |
| ST-825 | 8-1/4 | 9 | 3/8 | 15.25 |
| ST-850 | 8-1/2 | 9-1/4 | 3/8 | 15.25 |
| ST-851 | 8-1/2 | 9 | 1/4 | 28.77 |
| ST-875 | 8-3/4 | 9-1/2 | 3/8 | 16.20 |
| ST-900 | 9 | 9-3/4 | 3/8 | 17.33 |
| ST-950 | 9-1/2 | 10-1/4 | 3/8 | 18.22 |
| ST-975 | 9-3/4 | 10-1/2 | 3/8 | 19.43 |
| ST-1000 | 10 | 11 | 1/2 | 22.26 |
| ST-1100 | 11 | 12 | 1/2 | 24.15 |
| ST-1200 | 12 | 13 | 1/2 | 25.83 |
| ST-1201 | 12 | 13-1/4 | 1/2 | 54.60 |

STYLE ST URETHANE WIPER RINGS WITH SLOTTED HEEL

A wide range of ST wipers are now offered in the slotted heel design. The slots in the heel allow excess hydraulic fluid to bypass the wiper, preventing wiper blowout.



| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | 90 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

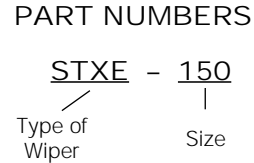
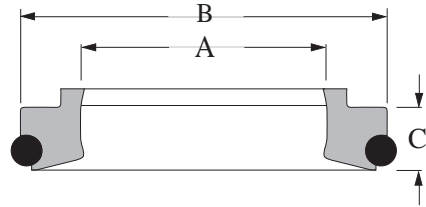


| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| ST-62-SH | 5/8 | 7/8 | 1/8 | \$ 1.65 |
| ST-75-SH | 3/4 | 1-1/8 | 3/16 | 1.65 |
| ST-87-SH | 7/8 | 1-1/4 | 3/16 | 1.65 |
| ST-100-SH | 1 | 1-3/8 | 3/16 | 1.65 |
| ST-112-SH | 1-1/8 | 1-1/2 | 3/16 | 1.65 |
| ST-125-SH | 1-1/4 | 1-5/8 | 3/16 | 1.79 |
| ST-137-SH | 1-3/8 | 1-3/4 | 3/16 | 1.91 |
| ST-150-SH | 1-1/2 | 1-7/8 | 3/16 | 2.09 |
| ST-175-SH | 1-3/4 | 2-1/8 | 3/16 | 2.36 |
| ST-200-SH | 2 | 2-1/2 | 1/4 | 2.47 |
| ST-225-SH | 2-1/4 | 2-3/4 | 1/4 | 2.60 |
| ST-250-SH | 2-1/2 | 3 | 1/4 | 2.60 |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| ST-262-SH | 2-5/8 | 3-1/8 | 1/4 | \$ 2.80 |
| ST-275-SH | 2-3/4 | 3-1/4 | 1/4 | 3.00 |
| ST-300-SH | 3 | 3-1/2 | 1/4 | 3.14 |
| ST-350-SH | 3-1/2 | 4 | 1/4 | 3.56 |
| ST-400-SH | 4 | 4-1/2 | 1/4 | 4.65 |
| ST-425-SH | 4-1/4 | 4-3/4 | 1/4 | 4.79 |
| ST-450-SH | 4-1/2 | 5-1/4 | 3/8 | 5.19 |
| ST-475-SH | 4-3/4 | 5-1/2 | 3/8 | 5.50 |
| ST-500-SH | 5 | 5-3/4 | 3/8 | 7.26 |
| ST-525-SH | 5-1/4 | 6 | 3/8 | 8.97 |
| ST-600-SH | 6 | 6-3/4 | 3/8 | 10.69 |
| ST-700-SH | 7 | 7-3/4 | 3/8 | 12.67 |
| ST-1000A-SH | 10 | 10-1/2 | 1/4 | 93.75 |

STYLE STXE ENERGIZED WIPER RINGS

STXE wipers are designed to retrofit the standard ST wiper groove while providing superior performance. The o-ring energizer limits dirt intrusion around the O.D. of the wiper. The energizer also makes this wiper more effective in applications with severe side deflections.



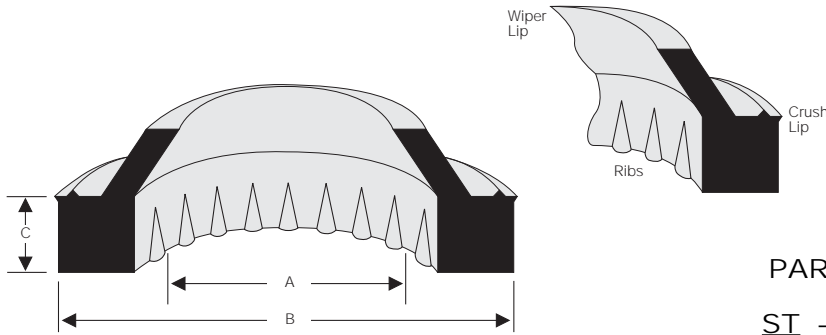
| SEAL INFORMATION | |
|-------------------|------------------------------------|
| MATERIAL | URETHANE WIPER RUBBER ENERGIZER |
| TEMPERATURE RANGE | -65° TO +220° F |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| STXE-150 | 1-1/2 | 1-7/8 | 3/16 | \$ 7.18 |
| STXE-200 | 2 | 2-1/2 | 1/4 | 9.20 |
| STXE-250 | 2-1/2 | 3 | 1/4 | 10.58 |
| STXE-300 | 3 | 3-1/2 | 1/4 | 12.16 |
| STXE-350 | 3-1/2 | 4 | 1/4 | 18.33 |
| STXE-375 | 3-3/4 | 4-1/4 | 1/4 | 18.56 |
| STXE-400 | 4 | 4-1/2 | 1/4 | 18.96 |
| STXE-450 | 4-1/2 | 5-1/4 | 3/8 | 27.15 |



STYLE ST-XL URETHANE WIPER RINGS

Style ST-XL wipers are molded from premium urethane and are direct replacements for style "ST" or "D" wipers. The outside diameter of the ring has a crush lip providing extra interference in the groove. A bead on the shoulder stops contaminants from entering through the groove. The inside diameter is ribbed to prevent pressure traps between the wiper and rod seal.



SEAL INFORMATION

| | |
|-------------------|-----------------|
| MATERIAL | 94 A URETHANE |
| TEMPERATURE RANGE | -40° TO +230° F |

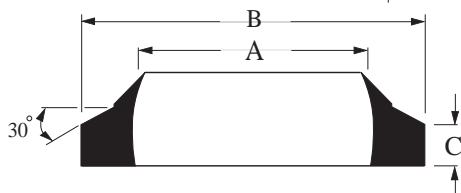
PART NUMBERS

ST - **100** - **XL**
 Type of Wiper Size Extra Lip

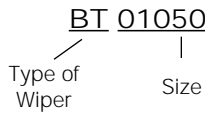
| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| ST-75-XL | 3/4 | 1-1/8 | 3/16 | \$ 1.11 |
| ST-100-XL | 1 | 1-3/8 | 3/16 | 1.82 |
| ST-112-XL | 1-1/8 | 1-1/2 | 3/16 | 1.82 |
| ST-125-XL | 1-1/4 | 1-5/8 | 3/16 | 1.98 |
| ST-137-XL | 1-3/8 | 1-3/4 | 3/16 | 2.10 |
| ST-150-XL | 1-1/2 | 1-7/8 | 3/16 | 2.22 |
| ST-175-XL | 1-3/4 | 2-1/8 | 3/16 | 2.60 |
| ST-200-XL | 2 | 2-1/2 | 1/4 | 2.72 |
| ST-225-XL | 2-1/4 | 2-3/4 | 1/4 | 2.86 |
| ST-250-XL | 2-1/2 | 3 | 1/4 | 3.18 |
| ST-300-XL | 3 | 3-1/2 | 1/4 | 3.44 |
| ST-325-XL | 3-1/4 | 3-3/4 | 1/4 | 3.80 |
| ST-350-XL | 3-1/2 | 4 | 1/4 | 3.92 |
| ST-400-XL | 4 | 4-1/2 | 1/4 | 5.12 |
| ST-450-XL | 4-1/2 | 5-1/4 | 3/8 | 5.72 |
| ST-500-XL | 5 | 5-3/4 | 3/8 | 8.62 |
| ST-525-XL | 5-1/4 | 6 | 3/8 | 9.86 |
| ST-550-XL | 5-1/2 | 6-1/4 | 3/8 | 9.92 |
| ST-600-XL | 6 | 6-3/4 | 3/8 | 11.68 |



STYLE BT URETHANE WIPER RINGS



PART NUMBERS



| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | 90 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| BT01050 | 5/8 | 7/8 | 5/32 | \$ 1.35 |
| BT01260 | 3/4 | 1-1/8 | 3/16 | 1.35 |
| BT01460 | 7/8 | 1-1/4 | 3/16 | 1.35 |
| BT10060 | 1 | 1-3/8 | 3/16 | 1.49 |
| BT10260 | 1-1/8 | 1-1/2 | 3/16 | 1.50 |
| BT10460 | 1-1/4 | 1-5/8 | 3/16 | 1.50 |
| BT10660 | 1-3/8 | 1-3/4 | 3/16 | 1.51 |
| BT10860 | 1-1/2 | 1-7/8 | 3/16 | 1.55 |
| BT11260 | 1-3/4 | 2-1/8 | 3/16 | 1.62 |
| BT11580 | 1-15/16 | 2-7/16 | 1/4 | 1.67 |
| BT20060 | 2 | 2-3/8 | 3/16 | 1.72 |
| BT20460 | 2-1/4 | 2-5/8 | 3/16 | 1.87 |
| BT20791 | 2-7/16 | 3 | .284 | 1.96 |
| BT20860 | 2-1/2 | 2-7/8 | 3/16 | 2.07 |
| BT20880 | 2-1/2 | 3 | 1/4 | 2.19 |
| BT21080 | 2-5/8 | 3-1/8 | 1/4 | 2.28 |
| BT21260 | 2-3/4 | 3-1/8 | 3/16 | 2.33 |
| BT21280 | 2-3/4 | 3-1/4 | 1/4 | 2.40 |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| BT30060 | 3 | 3-3/8 | 3/16 | \$ 2.52 |
| BT30080 | 3 | 3-1/2 | 1/4 | 2.67 |
| BT30090 | 2.950 | 3-1/2 | .275 | 2.78 |
| BT30391 | 3.165 | 3.734 | .284 | 2.90 |
| BT30480 | 3-1/4 | 3-3/4 | 1/4 | 2.96 |
| BT30860 | 3-1/2 | 3-7/8 | 3/16 | 3.00 |
| BT30880 | 3-1/2 | 4 | 1/4 | 3.00 |
| BT30890 | 3.450 | 4 | .275 | 3.08 |
| BT31080 | 3-5/8 | 4-1/8 | 1/4 | 3.18 |
| BT31280 | 3-3/4 | 4-1/4 | 1/4 | 3.22 |
| BT40080 | 4 | 4-1/2 | 1/4 | 3.34 |
| BT40480 | 4-1/4 | 4-3/4 | 1/4 | 3.56 |
| BT40880 | 4-1/2 | 5 | 1/4 | 3.74 |
| BT41280 | 4-3/4 | 5-1/4 | 1/4 | 3.91 |
| BT41591 | 4-15/16 | 5-31/64 | .284 | 4.05 |
| BT50080 | 5 | 5-1/2 | 1/4 | 4.29 |
| BT50880 | 5-1/2 | 6 | 1/4 | 5.21 |
| BT60080 | 6 | 6-1/2 | 1/4 | 5.50 |

BUNA-N WIPER CORD



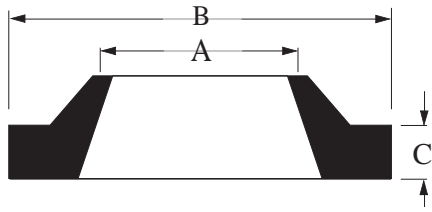
STYLE KW WIPER



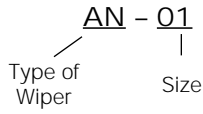
STYLE ST WIPER

| Part Number | Description | List Price |
|-------------|------------------------------|------------|
| 7580C 3/16" | KW Style 3/16" Cross Section | \$ 1.45/ft |
| 7580C 1/4" | KW Style 1/4" Cross Section | 1.59/ft |
| 7581C 3/16" | ST Style 3/16" Cross Section | 1.11/ft |

STYLE AN URETHANE WIPER RINGS



PART NUMBERS



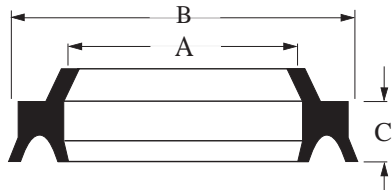
| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | 90 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

NOTE: SH suffix designates slotted heel design. V suffix designates fluorocarbon material. B suffix designates carboxylated nitrile material.

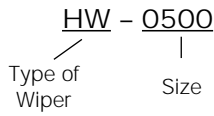
| Part Number | A - Rod Diameter | B - Groove I.D. | C - Base Thickness | List Price |
|-------------|------------------|-----------------|--------------------|------------|
| AN-01 | 1/2 | .760 | .104 | \$.71 |
| AN-01-SH | 1/2 | .760 | .104 | .71 |
| AN-02 | 9/16 | .823 | .104 | .71 |
| AN-03 | 5/8 | .885 | .104 | .71 |
| AN-03-SH | 5/8 | .885 | .104 | .71 |
| AN-04 | 11/16 | .948 | .104 | .71 |
| AN-05 | 3/4 | 1.010 | .104 | .71 |
| AN-05V | 3/4 | 1.010 | .104 | 6.11 |
| AN-05-SH | 3/4 | 1.010 | .104 | .71 |
| AN-06 | 13/16 | 1.084 | .104 | .74 |
| AN-06-SH | 13/16 | 1.084 | .104 | .74 |
| AN-07 | 7/8 | 1.147 | .104 | .74 |
| AN-07-SH | 7/8 | 1.147 | .104 | .74 |
| AN-08 | 15/16 | 1.209 | .104 | .74 |
| AN-09 | 1 | 1.272 | .104 | .74 |
| AN-09B | 1 | 1.272 | .104 | 1.84 |
| AN-09V | 1 | 1.272 | .104 | 9.77 |
| AN-10 | 1-1/16 | 1.334 | .104 | .74 |
| AN-11 | 1-1/8 | 1.397 | .104 | .78 |
| AN-11-SH | 1-1/8 | 1.397 | .104 | .78 |
| AN-12 | 1-3/16 | 1.459 | .104 | .78 |
| AN-13 | 1-1/4 | 1.522 | .104 | .82 |
| AN-13B | 1-1/4 | 1.490 | .104 | 2.89 |
| AN-14 | 1-5/16 | 1.614 | .104 | .82 |
| AN-15 | 1-3/8 | 1.677 | .104 | 1.07 |
| AN-15SH | 1-3/8 | 1.677 | .104 | 1.07 |
| AN-15V | 1-3/8 | 1.677 | .104 | 10.44 |
| AN-16 | 1-7/16 | 1.739 | .104 | 1.18 |
| AN-17 | 1-1/2 | 1.802 | .104 | 1.20 |
| AN-17-SH | 1-1/2 | 1.802 | .104 | 1.20 |
| AN-18 | 1-5/8 | 1.927 | .104 | 1.27 |
| AN-18-SH | 1-5/8 | 1.927 | .104 | 1.27 |
| AN-19 | 1-3/4 | 2.052 | .104 | 1.27 |
| AN-19-SH | 1-3/4 | 2.052 | .104 | 1.27 |
| AN-20 | 1-7/8 | 2.177 | .104 | 1.28 |
| AN-21 | 2 | 2.302 | .104 | 1.28 |
| AN-21-SH | 2 | 2.302 | .104 | 1.28 |
| AN-21V | 2 | 2.302 | .104 | 10.86 |
| AN-22 | 2-1/8 | 2.427 | .104 | 1.31 |
| AN-22-SH | 2-1/8 | 2.427 | .104 | 1.31 |
| AN-23 | 2-1/4 | 2.552 | .104 | 1.38 |
| AN-23-SH | 2-1/4 | 2.552 | .104 | 1.38 |
| AN-23B | 2-1/4 | 2.552 | .104 | 3.02 |
| AN-24 | 2-3/8 | 2.677 | .104 | 1.41 |
| AN-25 | 2-1/2 | 2.802 | .104 | 1.55 |
| AN-25-SH | 2-1/2 | 2.802 | .104 | 1.24 |
| AN-26 | 2-5/8 | 2.989 | .119 | 1.59 |
| AN-27 | 2-3/4 | 3.114 | .119 | 1.63 |
| AN-28 | 2-7/8 | 3.239 | .119 | 1.91 |

| Part Number | A - Rod Diameter | B - Groove I.D. | C - Base Thickness | List Price |
|-------------|------------------|-----------------|--------------------|------------|
| AN-29 | 3 | 3.364 | .119 | \$ 1.91 |
| AN-29-SH | 3 | 3.364 | .119 | 1.91 |
| AN-30 | 3-1/8 | 3.489 | .119 | 1.91 |
| AN-31 | 3-1/4 | 3.614 | .119 | 2.23 |
| AN-32 | 3-3/8 | 3.729 | .119 | 2.25 |
| AN-33 | 3-1/2 | 3.864 | .119 | 2.29 |
| AN-33-SH | 3-1/2 | 3.864 | .119 | 2.29 |
| AN-34 | 3-5/8 | 3.989 | .119 | 2.34 |
| AN-35 | 3-3/4 | 4.114 | .119 | 2.43 |
| AN-36 | 3-7/8 | 4.239 | .119 | 2.49 |
| AN-37 | 4 | 4.427 | .135 | 2.54 |
| AN-38 | 4-1/8 | 4.552 | .135 | 2.63 |
| AN-39 | 4-1/4 | 4.677 | .135 | 2.70 |
| AN-40 | 4-3/8 | 4.802 | .135 | 2.74 |
| AN-41 | 4-1/2 | 4.927 | .135 | 2.76 |
| AN-41-SH | 4-1/2 | 4.927 | .135 | 3.86 |
| AN-42 | 4-5/8 | 5.052 | .135 | 2.80 |
| AN-43 | 4-3/4 | 5.177 | .135 | 2.87 |
| AN-44 | 4-7/8 | 5.302 | .135 | 2.94 |
| AN-45 | 5 | 5.427 | .135 | 3.41 |
| AN-45-SH | 5 | 5.427 | .135 | 3.41 |
| AN-46 | 5-1/8 | 5.552 | .135 | 3.44 |
| AN-47 | 5-1/4 | 5.677 | .135 | 3.44 |
| AN-48 | 5-3/8 | 5.802 | .135 | 3.48 |
| AN-49 | 5-1/2 | 5.927 | .135 | 3.56 |
| AN-50 | 5-5/8 | 6.114 | .151 | 3.90 |
| AN-51 | 5-3/4 | 6.239 | .151 | 4.12 |
| AN-52 | 5-7/8 | 6.364 | .151 | 4.20 |
| AN-53 | 6 | 6.489 | .151 | 4.32 |
| AN-54 | 6-1/4 | 6.739 | .151 | 4.48 |
| AN-55 | 6-1/2 | 6.989 | .151 | 4.56 |
| AN-56 | 6-3/4 | 7.239 | .151 | 4.65 |
| AN-57 | 7 | 7.484 | .151 | 4.78 |
| AN-58 | 7-1/4 | 7.739 | .151 | 5.46 |
| AN-59 | 7-1/2 | 7.989 | .151 | 6.59 |
| AN-60 | 7-3/4 | 8.247 | .151 | 6.99 |
| AN-61 | 8 | 8.484 | .151 | 6.62 |
| AN-62 | 8-1/2 | 8.989 | .151 | 6.62 |
| AN-63 | 9 | 9.497 | .151 | 7.88 |
| AN-64 | 9-1/2 | 9.989 | .151 | 8.00 |
| AN-65 | 10 | 10.497 | .151 | 8.17 |
| AN-66 | 10-1/2 | 10.997 | .151 | 9.26 |
| AN-67 | 11 | 11.497 | .151 | 10.50 |
| AN-E9-1/4 | 9-1/4 | 9.739 | .135 | 15.49 |

STYLE HW URETHANE WIPER RINGS



PART NUMBERS



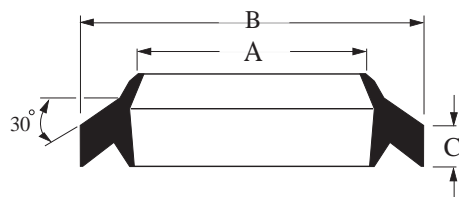
| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | 90 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

NOTE: V suffix designates fluorocarbon material. N suffix designates nitrile material.

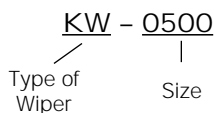
| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| HW-0500 | 1/2 | 13/16 | .194 | \$ 1.88 |
| HW-0500N | 1/2 | 13/16 | .194 | 1.75 |
| HW-0500V | 1/2 | 13/16 | .194 | 6.50 |
| HW-0625 | 5/8 | 15/16 | .194 | 2.11 |
| HW-0625-1 | 5/8 | 1 | .203 | 2.11 |
| HW-0625-1N | 5/8 | 1 | .203 | 2.11 |
| HW-0625-2N | 5/8 | 15/16 | .194 | 2.11 |
| HW-0625N | 5/8 | 15/16 | .194 | 2.11 |
| HW-0625V | 5/8 | 15/16 | .194 | 7.17 |
| HW-0750 | 3/4 | 1-1/16 | .194 | 2.11 |
| HW-0750N | 3/4 | 1-1/16 | .194 | 2.11 |
| HW-0875 | 7/8 | 1-1/4 | .212 | 2.15 |
| HW-1000 | 1 | 1-3/8 | .212 | 2.19 |
| HW-1000N | 1 | 1-3/8 | .212 | 2.19 |
| HW-1000V | 1 | 1-3/8 | .212 | 7.72 |
| HW-1125 | 1-1/8 | 1-1/2 | .212 | 2.27 |
| HW-1250 | 1-1/4 | 1-5/8 | .212 | 2.44 |
| HW-1250N | 1-1/4 | 1-5/8 | .212 | 2.44 |
| HW-1375 | 1-3/8 | 1-3/4 | .212 | 2.64 |
| HW-1375N | 1-3/8 | 1-3/4 | .212 | 2.50 |
| HW-1375V | 1-3/8 | 1-3/4 | .212 | 14.09 |
| HW-1500 | 1-1/2 | 1-7/8 | .212 | 2.80 |
| HW-1500N | 1-1/2 | 1-7/8 | .212 | 2.80 |
| HW-1501 | 1-3/4 | 2-1/8 | .168 | 6.15 |
| HW-1625 | 1-5/8 | 2 | .212 | 2.87 |
| HW-1750 | 1-3/4 | 2-1/8 | .212 | 2.98 |
| HW-1750N | 1-3/4 | 2-1/8 | .212 | 2.98 |
| HW-1750V | 1-3/4 | 2-1/8 | .212 | 21.07 |
| HW-1875 | 1-7/8 | 2-1/4 | .212 | 1.79 |
| HW-2000 | 2 | 2-3/8 | .212 | 3.40 |
| HW-2000N | 2 | 2-3/8 | .212 | 3.40 |
| HW-2000V | 2 | 2-3/8 | .212 | 10.90 |
| HW-2125 | 2-1/8 | 2-1/2 | .212 | 3.53 |
| HW-2250 | 2-1/4 | 2-3/4 | .275 | 3.58 |
| HW-2375N | 2-3/8 | 2-7/8 | .275 | 3.21 |
| HW-2500 | 2-1/2 | 3 | .275 | 3.77 |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| HW-2500N | 2-1/2 | 3 | .275 | \$ 2.97 |
| HW-2500V | 2-1/2 | 3 | .275 | 12.06 |
| HW-2625 | 2-5/8 | 3-1/8 | .275 | 4.01 |
| HW-2750 | 2-3/4 | 3-1/4 | .275 | 4.31 |
| HW-3000 | 3 | 3-1/2 | .275 | 4.84 |
| HW-3000N | 3 | 3-1/2 | .275 | 4.84 |
| HW-3000V | 3 | 3-1/2 | .275 | 15.31 |
| HW-3250 | 3-1/4 | 3-3/4 | .275 | 5.45 |
| HW-3500 | 3-1/2 | 4 | .275 | 5.73 |
| HW-3500N | 3-1/2 | 4 | .275 | 5.79 |
| HW-3500V | 3-1/2 | 4 | .275 | 19.30 |
| HW-3750 | 3-3/4 | 4-1/4 | .275 | 6.15 |
| HW-4000 | 4 | 4-1/2 | .275 | 6.34 |
| HW-4000N | 4 | 4-1/2 | .275 | 6.35 |
| HW-4000V | 4 | 4-1/2 | .275 | 21.32 |
| HW-4250 | 4-1/4 | 4-3/4 | .275 | 6.51 |
| HW-4430 | 4-7/16 | 4-15/16 | .275 | 6.60 |
| HW-4500 | 4-1/2 | 5 | .275 | 7.04 |
| HW-4500N | 4-1/2 | 5 | .275 | 5.11 |
| HW-4500V | 4-1/2 | 5 | .275 | 21.92 |
| HW-4750 | 4-3/4 | 5-1/4 | .275 | 16.68 |
| HW-5000 | 5 | 5-1/2 | .275 | 8.32 |
| HW-5000N | 5 | 5-1/2 | .275 | 6.71 |
| HW-5000V | 5 | 5-1/2 | .275 | 23.15 |
| HW-5500 | 5-1/2 | 6 | .275 | 11.56 |
| HW-5500N | 5-1/2 | 6 | .275 | 5.81 |
| HW-5500V | 5-1/2 | 6 | .275 | 25.36 |
| HW-6000V | 6 | 6-1/2 | .275 | 27.56 |
| HW-7000 | 7 | 7-1/2 | .275 | 14.94 |
| HW-8000 | 8 | 8-1/2 | .275 | 26.11 |

STYLE KW URETHANE WIPER RINGS



PART NUMBERS



SEAL INFORMATION

| | |
|-------------------|-----------------|
| MATERIAL | 90 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

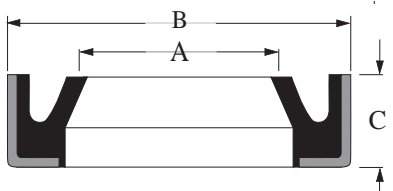
NOTE: N suffix designates nitrile material.

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| KW-0500 | 1/2 | 3/4 | .156 | \$ 2.01 |
| KW-0625 | 5/8 | 7/8 | .156 | 2.01 |
| KW-0750 | 3/4 | 1-1/8 | .190 | 2.01 |
| KW-0875 | 7/8 | 1-1/4 | .190 | 2.05 |
| KW-1000 | 1 | 1-3/8 | .190 | 2.09 |
| KW-1125 | 1-1/8 | 1-1/2 | .190 | 2.18 |
| KW-1250 | 1-1/4 | 1-5/8 | .190 | 2.32 |
| KW-1375 | 1-3/8 | 1-3/4 | .190 | 2.51 |
| KW-1500 | 1-1/2 | 1-7/8 | .190 | 2.67 |
| KW-1625 | 1-5/8 | 2 | .190 | 2.73 |
| KW-1750 | 1-3/4 | 2-1/8 | .190 | 2.84 |
| KW-2000 | 2 | 2-3/8 | .190 | 3.24 |
| KW-2125 | 2-1/8 | 2-1/2 | .190 | 4.35 |
| KW-2210 | 2-7/32 | 2-23/32 | .250 | 14.70 |
| KW-2250 | 2-1/4 | 2-3/4 | .250 | 3.41 |
| KW-2450N | 2.450 | 3 | .281 | 2.89 |
| KW-2500 | 2-1/2 | 3 | .250 | 3.59 |
| KW-2500-1 | 2-1/2 | 2-7/8 | .190 | 9.75 |
| KW-2625 | 2-5/8 | 3-1/8 | .250 | 3.82 |
| KW-2750 | 2-3/4 | 3-1/4 | .250 | 4.10 |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C - Base Thickness | List Price |
|-------------|------------------|----------------|--------------------|------------|
| KW-3000 | 3 | 3-1/2 | .250 | \$ 4.61 |
| KW-3125N | 3-1/8 | 3-5/8 | .250 | 4.95 |
| KW-3250 | 3-1/4 | 3-3/4 | .250 | 4.95 |
| KW-3375 | 3-3/8 | 3-7/8 | .250 | 5.46 |
| KW-3500 | 3-1/2 | 4 | .250 | 5.46 |
| KW-3500-2 | 3-1/2 | 3-7/8 | .190 | 6.72 |
| KW-3450N | 3.450 | 4 | .243 | 5.56 |
| KW-3750 | 3-3/4 | 4-1/4 | .250 | 5.91 |
| KW-4000 | 4 | 4-1/2 | .250 | 7.13 |
| KW-4060 | 4-1/16 | 4-9/16 | .250 | 7.48 |
| KW-4500 | 4-1/2 | 5 | .250 | 8.30 |
| KW-4875 | 4-7/8 | 5-3/8 | .250 | 8.40 |
| KW-5000 | 5 | 5-1/2 | .250 | 9.30 |
| KW-5250N | 5-1/4 | 5-3/4 | .250 | 5.61 |
| KW-5375 | 5-3/8 | 5-7/8 | .250 | 10.56 |
| KW-6000 | 6 | 6-1/2 | .250 | 10.40 |
| KW-7000 | 7 | 7-1/2 | .250 | 11.26 |
| KW-8000N | 8 | 8-1/2 | .255 | 24.74 |
| KW-8125 | 8-1/8 | 8.63 | .0255 | 21.39 |
| KW-9125 | 9-1/8 | 9.63 | .0255 | 37.26 |
| KW-9375 | 9-3/8 | 9.89 | .0255 | 39.67 |

HEAVY DUTY STYLE MCU METAL CLAD WIPER RINGS

Utilizing a sturdy metal case, these wipers are molded from the same high performance urethane used in our Heavy Duty U-seals. Built for severe service, these wipers are capable of surviving hostile environments.



PART NUMBERS
MCU - 0750 - D
 Type of Wiper Size

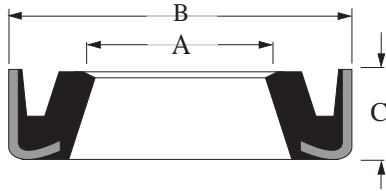
| SEAL INFORMATION | |
|--------------------------|-----------------|
| MATERIAL | 92 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C Height | List Price |
|-------------|------------------|----------------|----------|------------|
| MCU-0750-D | 3/4 | 1-1/4 | 5/16 | \$ 4.03 |
| MCU-1000-D | 1 | 1-1/2 | 5/16 | 6.08 |
| MCU-1120-D | 1-1/8 | 1-5/8 | 5/16 | 6.54 |
| MCU-1250-D | 1-1/4 | 1-3/4 | 5/16 | 7.87 |
| MCU-1254-D | 1-1/4 | 1-3/4 | 1/4 | 9.11 |
| MCU-1375-D | 1-3/8 | 1-7/8 | 5/16 | 7.97 |
| MCU-1500-D | 1-1/2 | 2 | 5/16 | 8.04 |
| MCU-1502-D | 1-1/2 | 2 | 1/4 | 8.26 |
| MCU-1506-D | 1-1/2 | 2-1/4 | 3/8 | 8.40 |
| MCU-1750-D | 1-3/4 | 2-1/4 | 5/16 | 8.70 |
| MCU-1751-D | 1-3/4 | 2-1/4 | 1/4 | 8.70 |
| MCU-1755-D | 1-3/4 | 2-7/16 | 3/8 | 8.84 |
| MCU-2000-D | 2 | 2-1/2 | 5/16 | 9.02 |
| MCU-2002-D | 2 | 2-1/2 | 1/4 | 10.03 |
| MCU-2004-D | 2 | 2-5/8 | 1/4 | 10.65 |
| MCU-2006-D | 2 | 2-11/16 | 3/8 | 11.39 |
| MCU-2188-D | 2-3/16 | 2-11/16 | 3/8 | 11.84 |
| MCU-2250-D | 2-1/4 | 2-3/4 | 5/16 | 9.65 |
| MCU-2251-D | 2-1/4 | 2-3/4 | 1/4 | 9.65 |
| MCU-2253-D | 2-1/4 | 3 | 3/8 | 10.11 |
| MCU-2500-D | 2-1/2 | 3 | 5/16 | 10.92 |
| MCU-2502-D | 2-1/2 | 3-1/4 | 3/8 | 11.10 |
| MCU-2750-D | 2-3/4 | 3-1/4 | 5/16 | 12.38 |
| MCU-2755-D | 2-3/4 | 3-3/4 | 1/2 | 13.49 |
| MCU-2758-D | 2-3/4 | 3-1/2 | 1/2 | 16.23 |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C Height | List Price |
|-------------|------------------|----------------|----------|------------|
| MCU-3000-D | 3 | 3-1/2 | 5/16 | \$ 12.73 |
| MCU-3002-D | 3 | 3-3/4 | 1/4 | 12.73 |
| MCU-3008-D | 3 | 4 | 1/2 | 14.78 |
| MCU-3250-D | 3-1/4 | 4-1/4 | 1/2 | 15.09 |
| MCU-3504-D | 3-1/2 | 4-1/4 | 1/4 | 17.29 |
| MCU-3506-D | 3-1/2 | 4-1/8 | 5/16 | 16.97 |
| MCU-3508-D | 3-1/2 | 4-1/2 | 1/2 | 17.58 |
| MCU-3750-D | 3-3/4 | 4-1/4 | 5/16 | 20.25 |
| MCU-3754-D | 3-3/4 | 4-3/8 | 5/16 | 20.43 |
| MCU-4002-D | 4 | 4-3/4 | 5/16 | 24.57 |
| MCU-4005-D | 4 | 4-5/8 | 5/16 | 23.90 |
| MCU-4375-D | 4-3/8 | 5 | 5/16 | 29.35 |
| MCU-4508-D | 4-1/2 | 5-1/2 | 1/2 | 33.14 |
| MCU-5002-D | 5 | 6 | 1/2 | 35.87 |
| MCU-5250-D | 5-1/4 | 6 | 5/16 | 38.14 |
| MCU-5251-D | 5-1/4 | 5-3/4 | 5/16 | 43.07 |
| MCU-6002-D | 6 | 7 | 1/2 | 48.79 |
| MCU-6250-D | 6-1/4 | 6-3/4 | 5/16 | 57.34 |
| MCU-6751-D | 6-3/4 | 7-1/4 | 5/16 | 47.93 |
| MCU-7002-D | 7 | 8 | 1/2 | 85.48 |
| MCU-8120-D | 8-1/8 | 8-5/8 | 5/16 | 108.71 |
| MCU-9750-D | 9-3/4 | 10-1/4 | 5/16 | 129.03 |

STYLE MCU METAL CLAD WIPERS - URETHANE LIP

MCU wipers utilize a 90A durometer urethane lip securely bonded to a heavy duty metal case. Non-abrasive and highly effective in removing dirt and contaminants from the rod.



PART NUMBERS

MCU - 0625 - G
 Type of Wiper Size

SEAL INFORMATION

| | |
|-------------------|-----------------|
| MATERIAL | 92 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

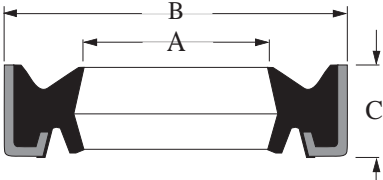
| Part Number | A - Rod Diameter | B - O.D. Wiper | C Height | List Price |
|-------------|------------------|----------------|----------|------------|
| MCU-0625-G | 5/8 | 1-1/8 | 5/16 | \$ 4.37 |
| MCU-0750-G | 3/4 | 1-1/4 | 5/16 | 5.40 |
| MCU-0875-G | 7/8 | 1-3/8 | 5/16 | 4.74 |
| MCU-1000-G | 1 | 1-1/2 | 5/16 | 4.77 |
| MCU-1120-G | 1-1/8 | 1-5/8 | 5/16 | 5.14 |
| MCU-1187-G | 1-3/16 | 1-5/8 | 1/4 | 6.19 |
| MCU-1250-G | 1-1/4 | 1-3/4 | 5/16 | 6.19 |
| MCU-1254-G | 1-1/4 | 1-3/4 | 1/4 | 7.16 |
| MCU-1255-G | 1-1/4 | 2-1/16 | 3/8 | 7.16 |
| MCU-1375-G | 1-3/8 | 1-7/8 | 5/16 | 6.25 |
| MCU-1500-G | 1-1/2 | 2 | 5/16 | 6.31 |
| MCU-1505-G | 1-1/2 | 2-1/8 | 5/16 | 6.49 |
| MCU-1506-G | 1-1/2 | 2-1/4 | 3/8 | 6.60 |
| MCU-1625-G | 1-5/8 | 2-1/8 | 5/16 | 6.43 |
| MCU-1750-G | 1-3/4 | 2-1/4 | 5/16 | 6.84 |
| MCU-1751-G | 1-3/4 | 2-1/4 | 1/4 | 5.74 |
| MCU-1755-G | 1-3/4 | 2-7/16 | 3/8 | 6.95 |
| MCU-1756-G | 1-3/4 | 2-1/2 | 3/8 | 6.95 |
| MCU-1875-G | 1-7/8 | 2-3/8 | 5/16 | 7.01 |
| MCU-1876-G | 1-7/8 | 2-9/16 | 3/8 | 8.75 |
| MCU-2000-G | 2 | 2-1/2 | 5/16 | 7.08 |
| MCU-2001-G | 2 | 2-3/8 | 1/4 | 8.28 |
| MCU-2003-G | 2 | 2-3/4 | 3/8 | 9.48 |
| MCU-2006-G | 2 | 2-11/16 | 3/8 | 7.13 |
| MCU-2125-G | 2-1/8 | 2-7/8 | 3/8 | 6.79 |
| MCU-2126-G | 2-1/8 | 2-1/2 | 1/8 | 12.35 |
| MCU-2250-G | 2-1/4 | 2-3/4 | 5/16 | 7.58 |
| MCU-2252-G | 2-1/4 | 3 | 1/4 | 7.96 |
| MCU-2253-G | 2-1/4 | 3 | 3/8 | 7.96 |
| MCU-2375-G | 2-3/8 | 2-7/8 | 5/16 | 8.29 |
| MCU-2376-G | 2-3/8 | 3-1/8 | 3/8 | 8.34 |
| MCU-2500-G | 2-1/2 | 3 | 5/16 | 8.58 |
| MCU-2501-G | 2-1/2 | 3-1/4 | 1/4 | 8.69 |
| MCU-2502-G | 2-1/2 | 3-1/4 | 3/8 | 10.47 |
| MCU-2503-G | 2-1/2 | 3 | 3/16 | 9.80 |
| MCU-2504-G | 2-1/2 | 3-3/16 | 3/8 | 19.43 |
| MCU-2625-G | 2-5/8 | 3-1/8 | 1/4 | 8.79 |
| MCU-2626-G | 2-5/8 | 3-3/8 | 3/8 | 15.24 |
| MCU-2750-G | 2-3/4 | 3-1/4 | 5/16 | 9.73 |
| MCU-2755-G | 2-3/4 | 3-3/4 | 1/2 | 10.61 |
| MCU-2756-G | 2-3/4 | 3-1/2 | 3/8 | 11.85 |

| Part Number | A - Rod Diameter | B - O.D. Wiper | C Height | List Price |
|-------------|------------------|----------------|----------|------------|
| MCU-3000-G | 3 | 3-1/2 | 5/16 | \$ 10.01 |
| MCU-3006-G | 3 | 3-3/4 | 3/8 | 11.57 |
| MCU-3008-G | 3 | 4 | 1/2 | 11.62 |
| MCU-3125-G | 3-1/8 | 3-3/4 | 3/8 | 11.69 |
| MCU-3250-G | 3-1/4 | 4-1/4 | 1/2 | 11.86 |
| MCU-3254-G | 3-1/4 | 3-3/4 | 5/16 | 12.31 |
| MCU-3256-G | 3-1/4 | 3-7/8 | 5/16 | 12.31 |
| MCU-3375-G | 3-3/8 | 4 | 5/16 | 12.38 |
| MCU-3500-G | 3-1/2 | 4 | 5/16 | 12.38 |
| MCU-3506-G | 3-1/2 | 4-1/8 | 5/16 | 13.34 |
| MCU-3508-G | 3-1/2 | 4-1/2 | 1/2 | 13.81 |
| MCU-3751-G | 3-3/4 | 4-3/4 | 1/2 | 15.51 |
| MCU-3754-G | 3-3/4 | 4-3/8 | 5/16 | 14.41 |
| MCU-3755-G | 3-3/4 | 4-1/2 | 5/16 | 16.03 |
| MCU-4000-G | 4 | 5 | 1/2 | 19.32 |
| MCU-4002-G | 4 | 4-3/4 | 5/16 | 19.32 |
| MCU-4005-G | 4 | 4-5/8 | 5/16 | 18.77 |
| MCU-4250-G | 4-1/4 | 5-1/4 | 1/2 | 24.79 |
| MCU-4251-G | 4-1/4 | 4-3/4 | 3/16 | 19.31 |
| MCU-4252-G | 4-1/4 | 4-3/4 | 5/16 | 20.33 |
| MCU-4375-G | 4-3/8 | 5 | 5/16 | 23.07 |
| MCU-4505-G | 4-1/2 | 5-1/8 | 5/16 | 24.64 |
| MCU-4508-G | 4-1/2 | 5-1/2 | 1/2 | 26.05 |
| MCU-4750-G | 4-3/4 | 5-3/4 | 1/2 | 27.03 |
| MCU-5000-G | 5 | 5-3/4 | 5/16 | 27.77 |
| MCU-5001-G | 5 | 5-5/8 | 5/16 | 26.66 |
| MCU-5002-G | 5 | 6 | 1/2 | 28.20 |
| MCU-5250-G | 5-1/4 | 6 | 5/16 | 29.99 |
| MCU-5500-G | 5-1/2 | 6-1/8 | 3/8 | 29.68 |
| MCU-5502-G | 5-1/2 | 6-1/4 | 5/16 | 31.58 |
| MCU-5750-G | 5-3/4 | 6-3/8 | 3/8 | 40.27 |
| MCU-5751-G | 5-3/4 | 6-3/4 | 1/2 | 40.27 |
| MCU-6000-G | 6 | 6-3/4 | 3/8 | 40.27 |
| MCU-6002-G | 6 | 7 | 1/2 | 38.36 |
| MCU-6500-G | 6-1/2 | 7-1/2 | 5/8 | 38.83 |
| MCU-6503-G | 6-1/2 | 7-1/4 | 5/16 | 38.36 |
| MCU-6750-G | 6-3/4 | 7-3/8 | 3/8 | 52.02 |
| MCU-6735-G | 6-3/4 | 7-3/4 | 1/2 | 40.58 |
| MCU-7000-G | 7 | 7-3/4 | 5/16 | 52.88 |
| MCU-7002-G | 7 | 8 | 1/2 | 67.20 |
| MCU-8000-G | 8 | 8-3/4 | 3/8 | 64.94 |

WIPER RINGS

HEAVY DUTY STYLE MCHD METAL CLAD WIPERS

MCHD wipers employ a double lip construction for severe duty service and are found in late model Caterpillar construction equipment. These wipers are molded from the same high performance urethane used in our heavy duty u-seals and are bonded to a heavy duty metal case.



PART NUMBERS

MCHD - 1506 - D
 Type of Wiper Size

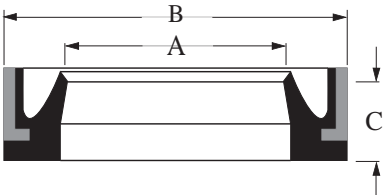
| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | 92 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

| Part Number | A - Rod Diameter | B - O.D. Wiper NOMINAL | C Height | List Price |
|-------------|------------------|---------------------------|----------|------------|
| MCHD-1506-D | 1-1/2 | 2-1/4 | .433 | \$ 16.98 |
| MCHD-1755-D | 1-3/4 | 2-7/16 | .433 | 17.30 |
| MCHD-2006-D | 2 | 2-11/16 | .433 | 18.13 |
| MCHD-2253-D | 2-1/4 | 3 | .433 | 18.89 |
| MCHD-2502-D | 2-1/2 | 3-1/4 | .415 | 20.35 |
| MCHD-2755-D | 2-3/4 | 3-3/4 | .555 | 21.56 |
| MCHD-3008-D | 3 | 4 | .555 | 22.26 |

| Part Number | A - Rod Diameter | B - O.D. Wiper NOMINAL | C Height | List Price |
|-------------|------------------|---------------------------|----------|------------|
| MCHD-3250-D | 3-1/4 | 4-1/4 | .555 | \$ 22.90 |
| MCHD-3508-D | 3-1/2 | 4-1/2 | .555 | 23.47 |
| MCHD-3751-D | 3-3/4 | 4-3/4 | .555 | 23.87 |
| MCHD-4000-D | 4 | 5 | .555 | 24.04 |
| MCHD-5002-D | 5 | 6 | .555 | 40.51 |
| MCHD-6753-D | 6-3/4 | 7-3/4 | .555 | 49.67 |
| MCHD-7002-D | 7 | 8 | .555 | 50.05 |

NON-METALLIC CANNED WIPERS

This unique wiper utilizes a tough 90A durometer urethane lip in a molded through non-metallic casing. The thermoplastic case provides a rigid base and is entirely rust-proof. Replaces metal clad wipers of the same dimensions.



PART NUMBERS

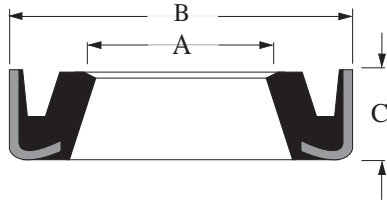
PCU - 1000
 Type of Wiper Size

| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | 90 A URETHANE |
| TEMPERATURE RANGE | -65° TO +220° F |

| Part Number | A - Rod Diameter | B - O.D. Wiper NOMINAL | C Height | List Price |
|-------------|------------------|---------------------------|----------|------------|
| PCU-1000 | 1 | 1-1/2 | 5/16 | \$ 3.36 |
| PCU-1250 | 1-1/4 | 1-3/4 | 5/16 | 4.05 |
| PCU-1375 | 1-3/8 | 1-7/8 | 5/16 | 4.40 |
| PCU-1500 | 1-1/2 | 2 | 5/16 | 4.74 |
| PCU-1750 | 1-3/4 | 2-1/4 | 5/16 | 5.18 |
| PCU-2000 | 2 | 2-1/2 | 5/16 | 5.57 |
| PCU-2250 | 2-1/4 | 2-3/4 | 5/16 | 6.24 |
| PCU-2500 | 2-1/2 | 3 | 5/16 | 6.46 |
| PCU-2750 | 2-3/4 | 3-1/4 | 5/16 | 7.01 |
| PCU-3000 | 3 | 3-1/2 | 5/16 | 7.52 |
| PCU-3250 | 3-1/4 | 3-3/4 | 5/16 | 8.43 |
| PCU-3500 | 3-1/2 | 4 | 5/16 | 8.96 |

"Ask for a FREE sample"! Next time you order an MCU!

STYLE MCN METAL CLAD WIPERS - RUBBER LIP



| SEAL INFORMATION | |
|-------------------|-----------------|
| MATERIAL | RUBBER |
| TEMPERATURE RANGE | -40° TO +240° F |

PART NUMBERS

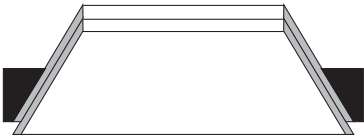
MCN - 0500
 /
 Type of Wiper |
 Size

| Part Number | A - Rod Diameter | B - O.D. Wiper | C Height | List Price |
|-------------|------------------|----------------|----------|------------|
| NOMINAL | | | | |
| MCN-0500 | 1/2 | 11/16 | 3/32 | \$ 1.43 |
| MCN-0501 | 1/2 | 3/4 | 1/8 | 2.12 |
| MCN-0625 | 5/8 | 15/16 | 3/16 | 1.64 |
| MCN-0626 | 5/8 | 7/8 | 1/8 | 1.64 |
| MCN-0750 | 3/4 | 1-1/4 | 1/4 | 1.66 |
| MCN-0751 | 3/4 | 1 | 1/8 | 1.79 |
| MCN-0873 | 7/8 | 1-1/8 | 1/8 | 1.72 |
| MCN-0875 | 7/8 | 1-1/4 | 3/16 | 1.81 |
| MCN-1001 | 1 | 1-1/4 | 1/8 | 1.72 |
| MCN-1003 | 1 | 1-3/8 | 3/16 | 1.99 |
| MCN-1004 | 1 | 1-7/16 | 1/4 | 2.32 |
| MCN-1005 | 1 | 1-1/2 | 3/16 | 1.67 |
| MCN-1006 | 1 | 1-5/16 | 1/8 | 3.39 |
| MCN-1060 | 1-1/16 | 1-1/2 | 3/16 | 2.24 |
| MCN-1125 | 1-1/8 | 1-1/2 | 3/16 | 1.67 |
| MCN-1126 | 1-1/8 | 1-3/8 | 1/8 | 1.67 |
| MCN-1127 | 1-1/8 | 1-9/16 | 1/4 | 1.80 |
| MCN-1129 | 1-1/8 | 1-5/8 | 1/4 | 1.67 |
| MCN-1251 | 1-1/4 | 1-1/2 | 1/8 | 1.67 |
| MCN-1253 | 1-1/4 | 1-11/16 | 3/16 | 1.80 |
| MCN-1254 | 1-1/4 | 1-3/4 | 1/4 | 2.30 |
| MCN-1255 | 1-1/4 | 1-7/8 | 1/4 | 2.63 |
| MCN-1256 | 1-1/4 | 1-5/8 | 1/4 | 6.50 |
| MCN-1375 | 1-3/8 | 1-3/4 | 3/16 | 1.80 |
| MCN-1376 | 1-3/8 | 1-7/8 | 1/4 | 2.60 |
| MCN-1377 | 1-3/8 | 1-5/8 | 1/8 | 2.83 |
| MCN-1502 | 1-1/2 | 1-7/8 | 1/4 | 1.95 |
| MCN-1503 | 1-1/2 | 1-7/8 | 3/16 | 1.80 |
| MCN-1504 | 1-1/2 | 2 | 1/4 | 2.02 |
| MCN-1625 | 1-5/8 | 2-1/8 | 1/4 | 2.75 |

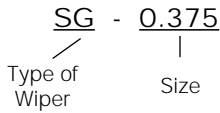
| Part Number | A - Rod Diameter | B - O.D. Wiper | C Height | List Price |
|-------------|------------------|----------------|----------|------------|
| NOMINAL | | | | |
| MCN-1626 | 1-5/8 | 2-5/8 | 1/4 | \$ 3.70 |
| MCN-1753 | 1-3/4 | 2-1/8 | 3/16 | 2.78 |
| MCN-1754 | 1-3/4 | 2-1/4 | 1/4 | 2.92 |
| MCN-1755 | 1-3/4 | 2-3/8 | 1/4 | 2.99 |
| MCN-1756 | 1-3/4 | 2-5/8 | 1/4 | 3.06 |
| MCN-1877 | 1-7/8 | 2-1/4 | 3/16 | 3.17 |
| MCN-1879 | 1-7/8 | 2-1/2 | 1/4 | 3.17 |
| MCN-2001 | 2 | 2-3/8 | 3/16 | 3.17 |
| MCN-2002 | 2 | 2-5/8 | 1/4 | 3.26 |
| MCN-2003 | 2 | 2-1/2 | 1/4 | 3.11 |
| MCN-2006 | 2 | 2-3/4 | 1/4 | 4.21 |
| MCN-2007 | 2 | 2-7/8 | 15/32 | 4.64 |
| MCN-2125 | 2-1/8 | 2-1/2 | 3/16 | 3.73 |
| MCN-2251 | 2-1/4 | 2-5/8 | 1/4 | 3.73 |
| MCN-2253 | 2-1/4 | 2-3/4 | 1/4 | 3.73 |
| MCN-2255 | 2-1/4 | 2-7/8 | 1/4 | 3.73 |
| MCN-2371 | 2-3/8 | 3 | 1/4 | 3.85 |
| MCN-2501 | 2-1/2 | 3 | 1/4 | 3.82 |
| MCN-2504 | 2-1/2 | 3-1/8 | 1/4 | 5.02 |
| MCN-2660 | 2.66 | 3-1/4 | 3/8 | 3.47 |
| MCN-2750 | 2-3/4 | 3-1/4 | 1/4 | 4.38 |
| MCN-2751 | 2-3/4 | 3-1/8 | 3/16 | 3.72 |
| MCN-2756 | 2-3/4 | 3-3/4 | 3/8 | 5.50 |
| MCN-3001 | 3 | 3-1/2 | 1/4 | 4.16 |
| MCN-3003 | 3 | 3-3/4 | 1/4 | 4.60 |
| MCN-3504 | 3-1/2 | 4 | 1/4 | 5.87 |

STYLE SG - "SEAL-GUARD" METALLIC ROD WIPERS

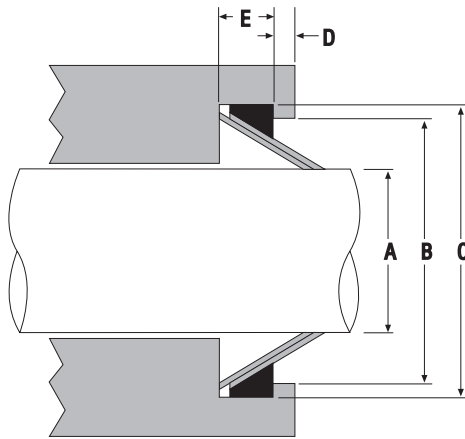
Each Seal Guard Wiper consists of two flexible bronze rings which are held in place by a nitrile cushion ring. The cushion ring absorbs side loads and energizes the wiper to maintain close contact with the rod. While particularly suited for hostile environments, seal guard wipers shave off sand, grit, slag, flux, paint, moisture, chips and slivers. Seal Guard Wipers are long lasting, self adjusting, and offer low friction. Seal Guard Wipers can be installed in standard "ST" or "D" Style grooves by increasing the "B" gland dimension to the "B" diameter shown.



PART NUMBERS



| SEAL INFORMATION | |
|-------------------|---------------------------|
| MATERIAL | 660 BRONZE 70A NITRILE |
| TEMPERATURE RANGE | -40° TO +240° F |



| Part Number | A - Rod Diameter | B - Throat Diameter | C - Groove Diameter | D | E - Groove Width | List Price |
|-------------|-------------------|---------------------|---------------------|------------------|-------------------|------------|
| SG-0.500 | .500 +.001/-.002 | .714 +.000/-.010 | .750 ±.003 | .018 +.015/-.000 | .125 +.003/-.0001 | \$ 11.72 |
| SG-0.750 | .750 +.001/-.002 | 1.082 +.000/-.010 | 1.125 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 11.94 |
| SG-0.875 | .875 +.001/-.002 | 1.207 +.000/-.010 | 1.250 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 12.44 |
| SG-1.000 | 1.000 +.001/-.002 | 1.332 +.000/-.010 | 1.375 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 13.06 |
| SG-1.125 | 1.125 +.001/-.002 | 1.457 +.000/-.010 | 1.500 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 14.68 |
| SG-1.250 | 1.250 +.001/-.002 | 1.582 +.000/-.010 | 1.625 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 16.28 |
| SG-1.375 | 1.375 +.001/-.002 | 1.707 +.000/-.010 | 1.750 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 17.90 |
| SG-1.500 | 1.500 +.001/-.002 | 1.832 +.000/-.010 | 1.875 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 19.56 |
| SG-1.750 | 1.750 +.001/-.002 | 2.082 +.000/-.010 | 2.125 ±.003 | .022 +.015/-.000 | .188 +.003/-.0001 | 22.78 |
| SG-2.000 | 2.000 +.001/-.002 | 2.440 +.000/-.010 | 2.500 ±.003 | .030 +.015/-.000 | .250 +.003/-.0001 | 26.56 |
| SG-2.250 | 2.250 +.001/-.002 | 2.690 +.000/-.010 | 2.750 ±.003 | .030 +.015/-.000 | .250 +.003/-.0001 | 29.76 |
| SG-2.500 | 2.500 +.001/-.002 | 2.940 +.000/-.010 | 3.000 ±.003 | .030 +.015/-.000 | .250 +.003/-.0001 | 33.06 |
| SG-3.000 | 3.000 +.001/-.002 | 3.440 +.000/-.010 | 3.500 ±.003 | .030 +.015/-.000 | .250 +.003/-.0001 | 40.00 |
| SG-3.500 | 3.500 +.001/-.002 | 3.940 +.000/-.010 | 4.000 ±.003 | .030 +.015/-.000 | .250 +.003/-.0001 | 66.68 |