

Category

- Seal, Double Acting Piston

Construction

- Central ribbed rubber sealing element with two contoured polymer back up washers and two pressure activated acetal wear rings

Housing

- Stepped groove in one or two piece pistons

Duty

- Heavy

Features

- Ribbed sealing element cushions pressure spikes
- Pressure activated contoured back up washer and wear ring design minimise extrusion of the sealing element
- Wear rings eliminate metal to metal contact

Comments

- Designed specifically for mobile hydraulics
- Two part piston designs are preferable for ease of seal installation

Size Range

- Metric and imperial

Metric Specifications

Operating Conditions

| | |
|--------------------|---------------|
| Maximum Speed: | 0.5 m/sec |
| Temperature Range: | -30°C ~ 100°C |
| Maximum Pressure: | 500 bar |

Surface Finish

| | |
|-----------------------|----------------|
| Dynamic Sealing Face: | 0.1 ~ 0.4 µmRa |
| Static Sealing Face: | 1.6 µmRa max |
| Other Faces: | 3.2 µmRa max |

Chamfers

| | |
|-----------------------------|--|
| Minimum $Z = C \times 0.60$ | where $C = (\text{ØD} - \text{Ød}) \div 2$ |
|-----------------------------|--|

Imperial Specifications

Operating Conditions

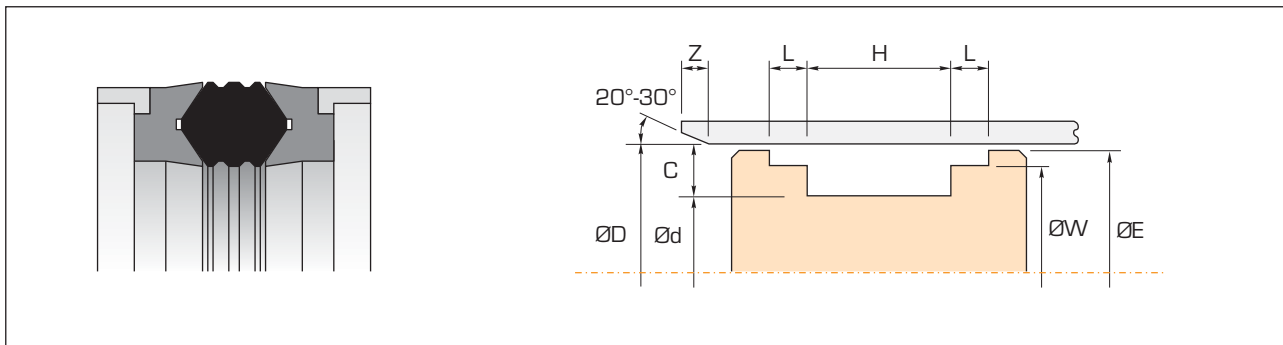
| | |
|--------------------|---------------|
| Maximum Speed: | 1.5 ft/sec |
| Temperature Range: | -22°F ~ 212°F |
| Maximum Pressure: | 7500 psi |

Surface Finish

| | |
|-----------------------|----------------|
| Dynamic Sealing Face: | 4 ~ 16 µinCLA |
| Static Sealing Face: | 63 µinCLA max |
| Other Faces: | 125 µinCLA max |

Chamfers

| | |
|-----------------------------|--|
| Minimum $Z = C \times 0.60$ | where $C = (\text{ØD} - \text{Ød}) \div 2$ |
|-----------------------------|--|



Metric Sizes

| Part No. | ØD | Ød | H | ØW | L | ØE |
|-------------------|------------|------------|---------------|-------------|---------------|-------------|
| <i>Tolerances</i> | <i>H11</i> | <i>h10</i> | <i>+0.2-0</i> | <i>js10</i> | <i>+0.1-0</i> | <i>js11</i> |
| DM4529-32-HD | 45.00 | 29.00 | 32.00 | 38.80 | 6.35 | 42.80 |
| DM5034-32-HD | 50.00 | 34.00 | 32.00 | 43.77 | 6.35 | 47.80 |
| DM5540-32-HD | 55.00 | 40.00 | 32.00 | 48.77 | 6.35 | 52.80 |
| DM6044-32-HD | 60.00 | 44.00 | 32.00 | 53.80 | 6.35 | 57.80 |
| DM6347-32-HD | 63.00 | 47.00 | 32.00 | 56.74 | 6.35 | 60.80 |
| DM6549-32-HD | 65.00 | 49.00 | 32.00 | 58.70 | 6.35 | 62.80 |
| DM7050-35-HD | 70.00 | 50.00 | 35.00 | 62.62 | 9.52 | 67.50 |
| DM7555-35-HD | 75.00 | 55.00 | 35.00 | 67.70 | 9.52 | 72.50 |
| DM8060-35-HD | 80.00 | 60.00 | 35.00 | 72.62 | 9.52 | 77.50 |
| DM8064-32-HD | 80.00 | 64.00 | 32.00 | 72.62 | 9.52 | 77.50 |
| DM8565-35-HD | 85.00 | 65.00 | 35.00 | 77.62 | 9.52 | 82.50 |
| DM9070-35-HD | 90.00 | 70.00 | 35.00 | 82.58 | 9.52 | 87.50 |
| DM9074-32-HD | 90.00 | 74.00 | 32.00 | 82.87 | 9.52 | 87.50 |
| DM9575-35-HD | 95.00 | 75.00 | 35.00 | 87.60 | 9.52 | 92.50 |
| DM10080-35-HD | 100.00 | 80.00 | 35.00 | 92.60 | 9.52 | 97.50 |
| DM10585-35-HD | 105.00 | 85.00 | 35.00 | 97.60 | 9.52 | 102.50 |
| DM11085-45-HD | 110.00 | 85.00 | 45.00 | 101.82 | 12.70 | 107.30 |
| DM11090-35-HD | 110.00 | 90.00 | 35.00 | 102.70 | 9.52 | 107.50 |
| DM11590-45-HD | 115.00 | 90.00 | 45.00 | 106.82 | 12.70 | 112.30 |
| DM12095-45-HD | 120.00 | 95.00 | 45.00 | 111.82 | 12.70 | 117.30 |
| DM120100-35-HD | 120.00 | 100.00 | 35.00 | 112.80 | 9.52 | 117.50 |
| DM125100-45-HD | 125.00 | 100.00 | 45.00 | 116.82 | 12.70 | 122.30 |
| DM130105-45-HD | 130.00 | 105.00 | 45.00 | 121.82 | 12.70 | 127.30 |
| DM130110-35-HD | 130.00 | 110.00 | 35.00 | 122.70 | 9.52 | 127.30 |
| DM135110-45-HD | 135.00 | 110.00 | 45.00 | 126.82 | 12.70 | 132.30 |
| DM140115-45-HD | 140.00 | 115.00 | 45.00 | 131.72 | 12.70 | 137.30 |
| DM140120-35-HD | 140.00 | 120.00 | 35.00 | 132.70 | 9.52 | 137.30 |
| DM145120-45-HD | 145.00 | 120.00 | 45.00 | 136.72 | 12.70 | 142.30 |
| DM150125-45-HD | 150.00 | 125.00 | 45.00 | 141.72 | 12.70 | 147.30 |
| DM160135-45-HD | 160.00 | 135.00 | 45.00 | 151.72 | 12.70 | 157.10 |
| DM165135-45-HD | 165.00 | 135.00 | 45.00 | 158.00 | 12.70 | 162.10 |
| DM170140-45-HD | 170.00 | 140.00 | 45.00 | 163.00 | 12.70 | 167.10 |
| DM180155-45-HD | 180.00 | 155.00 | 45.00 | 171.60 | 12.70 | 177.10 |
| DM185160-45-HD | 185.00 | 160.00 | 45.00 | 176.72 | 12.70 | 182.10 |
| DM190165-45-HD | 190.00 | 165.00 | 45.00 | 181.72 | 12.70 | 187.10 |

Metric Sizes (cont'd)

| Part No. | ØD | Ød | H | ØW | L | ØE |
|----------------|--------|--------|-------|--------|-------|--------|
| DM200175-45-HD | 200.00 | 175.00 | 45.00 | 191.72 | 12.70 | 197.10 |
| DM210185-45-HD | 210.00 | 185.00 | 45.00 | 201.60 | 12.70 | 207.10 |
| DM220195-45-HD | 220.00 | 195.00 | 45.00 | 211.60 | 12.70 | 217.10 |
| DM230205-45-HD | 230.00 | 205.00 | 45.00 | 221.72 | 12.70 | 227.10 |
| DM240215-45-HD | 240.00 | 215.00 | 45.00 | 231.72 | 12.70 | 237.10 |
| DM250225-45-HD | 250.00 | 225.00 | 45.00 | 241.72 | 12.70 | 247.10 |
| DM260235-45-HD | 260.00 | 235.00 | 45.00 | 251.72 | 12.70 | 257.10 |
| DM270245-45-HD | 270.00 | 245.00 | 45.00 | 261.72 | 12.70 | 267.10 |
| DM280255-45-HD | 280.00 | 255.00 | 45.00 | 271.72 | 12.70 | 277.10 |
| DM290265-45-HD | 290.00 | 265.00 | 45.00 | 281.72 | 12.70 | 287.10 |
| DM300275-45-HD | 300.00 | 275.00 | 45.00 | 291.72 | 12.70 | 297.10 |
| DM360335-45-HD | 360.00 | 335.00 | 44.50 | 351.76 | 12.70 | 357.10 |

Imperial Sizes

| Part No. | ØD | Ød | H | ØW | L | ØE |
|-------------------|------------|------------|---------------|-------------|---------------|-------------|
| <i>Tolerances</i> | <i>H11</i> | <i>h10</i> | <i>+0.008</i> | <i>js10</i> | <i>+0.004</i> | <i>js11</i> |
| | | | <i>-0</i> | | <i>-0</i> | |
| D250187-125-HD | 2.500 | 1.875 | 1.265 | 2.254 | 0.250 | 2.414 |
| D362287-137-HD | 3.625 | 2.875 | 1.390 | 3.333 | 0.375 | 3.529 |
| D375300-137-HD | 3.750 | 3.000 | 1.390 | 3.459 | 0.375 | 3.652 |
| D400325-137-HD | 4.000 | 3.250 | 1.390 | 3.709 | 0.375 | 3.902 |
| D450350-175-HD | 4.500 | 3.500 | 1.765 | 4.178 | 0.500 | 4.397 |
| D500400-175-HD | 5.000 | 4.000 | 1.765 | 4.677 | 0.500 | 4.896 |
| D550450-175-HD | 5.500 | 4.500 | 1.750 | 5.176 | 0.500 | 5.395 |
| D600500-175-HD | 6.000 | 5.000 | 1.765 | 5.675 | 0.500 | 5.894 |
| D700600-175-HD | 7.000 | 6.000 | 1.765 | 6.675 | 0.500 | 6.894 |