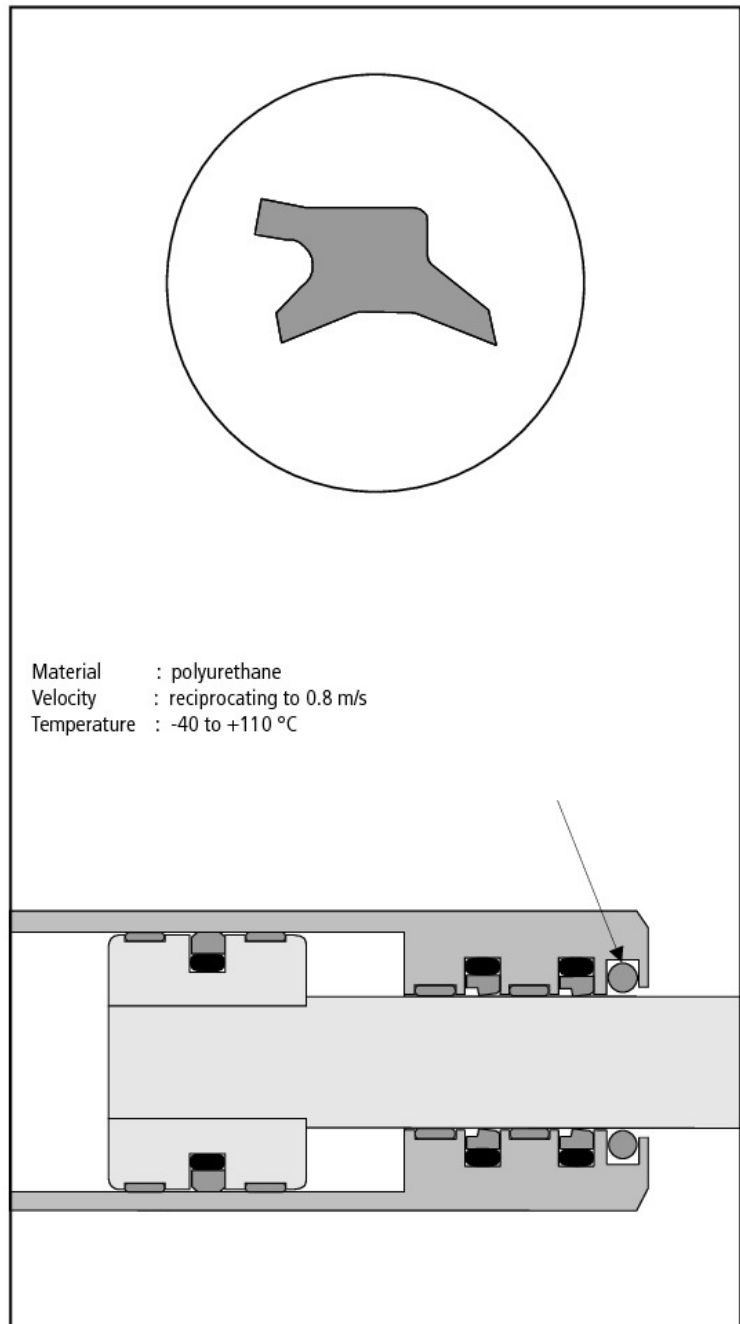


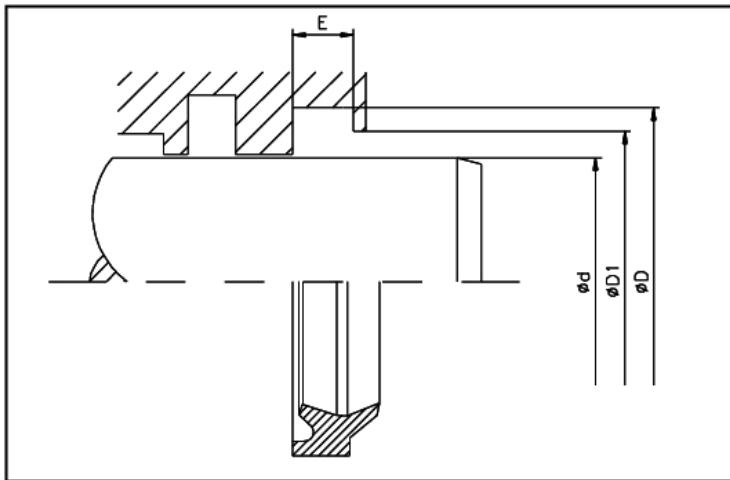


Double acting wiper HA 335 reliably prevents entry of water and dirt particles into the hydraulic cylinder. The special profile - wiper lip on the one side and a groove ring on the other side - achieve special sealing at the side under pressure.

Special Features:

- Outstanding wiper action
- Anti wear polyurethane material
- Excellent wiper action in case of oils on pressure side (medium recycling to be ensured)
- Easy snap assembly in groove.





| Limitations on Use | |
|--------------------|----------------------------|
| Velocity | : reciprocating to 0.8 m/s |
| Temperature | : -40 bis +110 °C |

| Media for Use | |
|--|--|
| Mineral oil based hydraulic oils, Bio Oils and flame resistant pressure fluids on request. | |

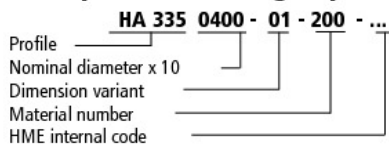
| Surface Finish | | | |
|----------------------|---------|---------|--------|
| | Rmax | Rz | Ra |
| Faces | 2,5 µm | 1,6 µm | 0,4 µm |
| Diameter/groove root | 16,0 µm | 10,0 µm | 3,2 µm |
| Groove flanks | 16,0 µm | 10,0 µm | 3,2 µm |

| d f8/h9 | D H11 | E +0,2 | D1 H11 | Part N°. |
|---------------|---------------|-------------|---------------|--------------------------|
| 12,00 | 18,60 | 3,80 | 15,00 | HA335 0120-01-200 |
| 14,00 | 20,60 | 3,80 | 17,00 | HA335 0140-01-200 |
| 18,00 | 24,60 | 3,80 | 21,00 | HA335 0180-01-200 |
| 20,00 | 28,60 | 5,30 | 23,00 | HA335 0200-01-200 |
| 22,00 | 30,60 | 5,30 | 25,00 | HA335 0220-01-200 |
| 24,00 | 32,60 | 5,30 | 27,00 | HA335 0240-01-200 |
| 25,00 | 33,60 | 5,30 | 28,00 | HA335 0250-01-200 |
| 28,00 | 36,60 | 5,30 | 31,00 | HA335 0280-01-200 |
| 30,00 | 38,60 | 5,30 | 33,00 | HA335 0300-01-200 |
| 32,00 | 40,60 | 5,30 | 35,00 | HA335 0320-01-200 |
| 35,00 | 43,60 | 5,30 | 38,00 | HA335 0350-01-200 |
| 36,00 | 44,60 | 5,30 | 39,00 | HA335 0360-01-200 |
| 40,00 | 48,60 | 5,30 | 43,00 | HA335 0400-01-200 |
| 45,00 | 53,60 | 5,30 | 48,00 | HA335 0450-01-200 |
| 50,00 | 58,60 | 5,30 | 53,00 | HA335 0500-01-200 |
| 55,00 | 63,60 | 5,30 | 58,00 | HA335 0550-01-200 |
| 56,00 | 64,60 | 5,30 | 59,00 | HA335 0560-01-200 |
| 60,00 | 68,60 | 5,30 | 63,00 | HA335 0600-01-200 |
| 63,00 | 71,60 | 5,30 | 66,00 | HA335 0630-01-200 |
| 65,00 | 73,60 | 5,30 | 68,00 | HA335 0650-01-200 |
| 70,00 | 78,60 | 5,30 | 73,00 | HA335 0700-01-200 |
| 75,00 | 83,60 | 5,30 | 78,00 | HA335 0750-01-200 |
| 80,00 | 88,60 | 5,30 | 83,00 | HA335 0800-01-200 |
| 85,00 | 97,20 | 7,10 | 91,00 | HA335 0850-01-200 |
| 90,00 | 102,20 | 7,10 | 96,00 | HA335 0900-01-200 |
| 100,00 | 112,20 | 7,10 | 106,00 | HA335 1000-01-200 |
| 110,00 | 122,20 | 7,10 | 116,00 | HA335 1100-01-200 |

Further sizes and an extensive range of inch measurement diagrams available on request.
Bold figures correspond to rod diameters as per ISO 3320.



Example for ordering Wipers:



Issue

| | |
|----|----|
| 01 | 05 |
|----|----|

WARNING: Limits of application stated herein are standard values. They could be individually transgressed with due consideration to respective service conditions. In the event of a large duty cycle, pulsating operation and other complex operational conditions, simultaneous transgression of these values is not recommended. Due to a large variety of service conditions that may arise in course of actual use, the company does not take responsibility of or guarantee the functional accuracy of the individual components. Rights for changes are reserved.