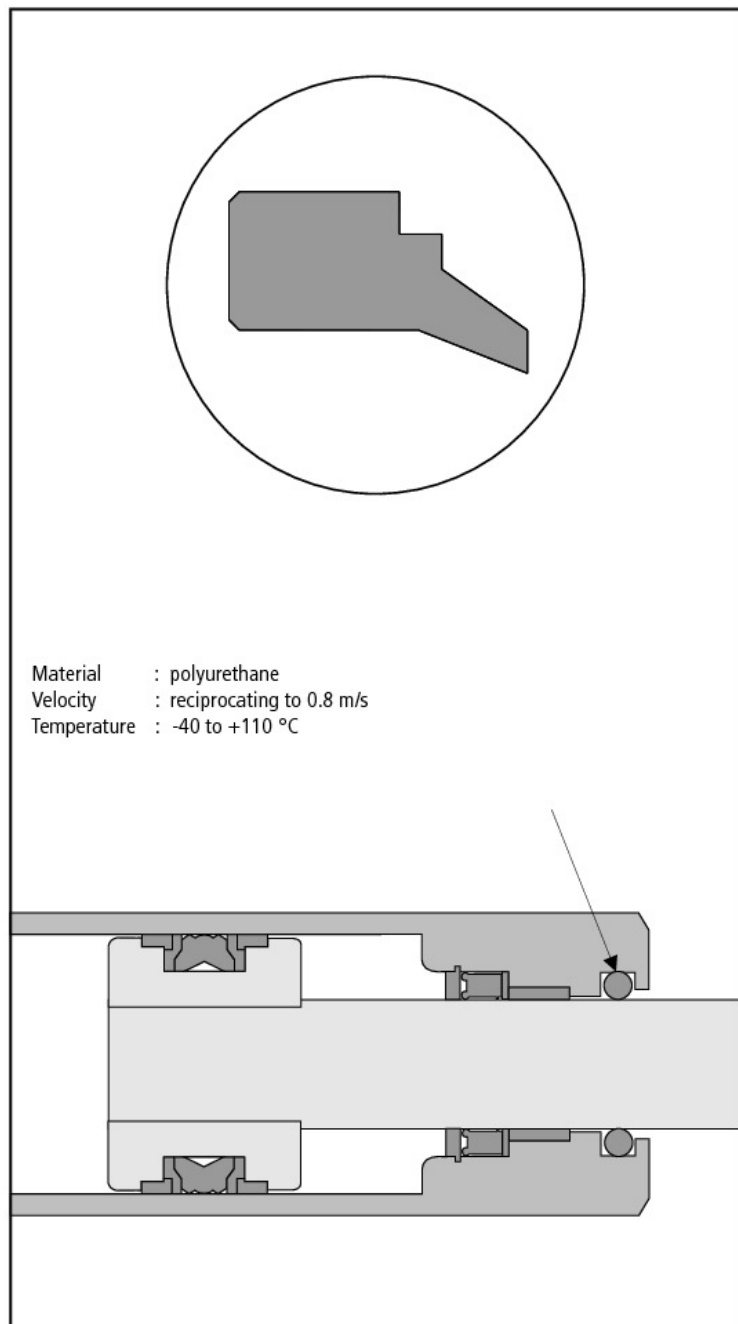


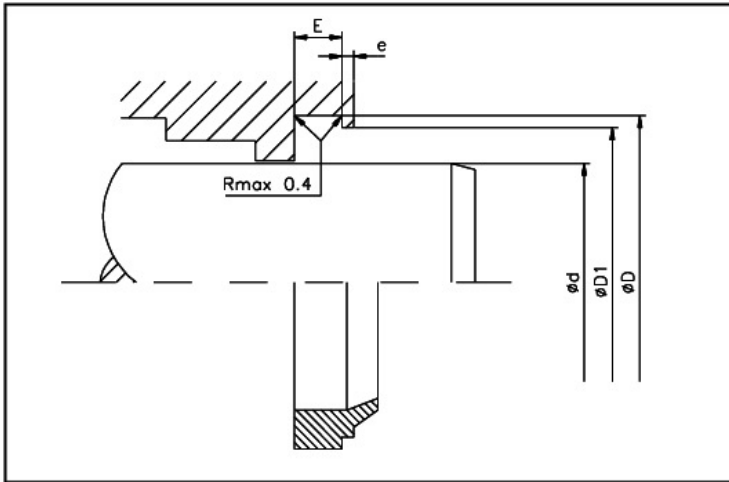


Single acting wiper HA 330 reliably prevents entry of dirt and water in hydraulic cylinder and can be used in hydraulics as well as in pneumatics.

Special Features:

- Very good wiper action
- Anti-wear polyurethane material
- Long life
- Special form closing on housing due to step on external diameter
- Easy snap assembly in groove
- Sealing edge on external diameter prevents entry of dirt over groove base.





Limitations on Use

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

Media for Use

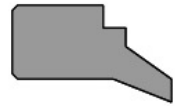
Mineral oil based hydraulic oils, Bio Oils and flame resistant pressure fluids on request.

Surface Finish

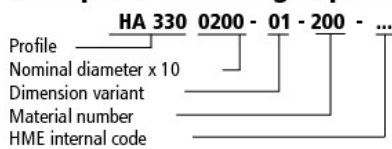
	Rmax	Rz	Ra
Faces	2,5 µm	1,6 µm	0,4 µm
Diameter/groove root	16,0 µm	10,0 µm	3,2 µm
Groove flanks	16,0 µm	10,0 µm	3,2 µm

d f8/h9	D H11	E +0,2	D1 H11	e	Part N°.
16,00	24,00	4,00	22,00	1,00	HA330 0160-01-200
20,00	28,00	4,00	26,00	1,00	HA330 0200-01-200
22,00	30,00	4,00	28,00	1,00	HA330 0220-01-200
25,00	33,00	4,00	31,00	1,00	HA330 0250-01-200
28,00	36,00	4,00	34,00	1,00	HA330 0280-01-200
30,00	38,00	4,00	36,00	1,00	HA330 0300-01-200
32,00	40,00	4,00	38,00	1,00	HA330 0320-01-200
35,00	43,00	4,00	41,00	1,00	HA330 0350-01-200
36,00	44,00	4,00	42,00	1,00	HA330 0360-01-200
40,00	48,00	4,00	46,00	1,00	HA330 0400-01-200
42,00	50,00	4,00	48,00	1,00	HA330 0420-01-200
45,00	53,00	4,00	51,00	1,00	HA330 0450-01-200
50,00	58,00	4,00	56,00	1,00	HA330 0500-01-200
55,00	63,00	4,00	61,00	1,00	HA330 0550-01-200
56,00	64,00	4,00	62,00	1,00	HA330 0560-01-200
60,00	68,00	4,00	66,00	1,00	HA330 0600-01-200
63,00	71,00	4,00	69,00	1,00	HA330 0630-01-200
65,00	73,00	4,00	71,00	1,00	HA330 0650-01-200
70,00	78,00	4,00	76,00	1,00	HA330 0700-01-200
75,00	83,00	4,00	81,00	1,00	HA330 0750-01-200
80,00	88,00	4,00	86,00	1,00	HA330 0800-01-200
85,00	93,00	4,00	91,00	1,00	HA330 0850-01-200
90,00	98,00	4,00	96,00	1,00	HA330 0900-01-200
100,00	108,00	4,00	106,00	1,00	HA330 1000-01-200
106,00	118,00	5,50	115,00	1,50	HA330 1060-01-200
110,00	122,00	5,50	119,00	1,50	HA330 1100-01-200
117,00	129,00	5,50	126,00	1,50	HA330 1170-01-200
125,00	137,00	5,50	134,00	1,50	HA330 1250-01-200

Sizes also available in FPM. 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
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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.