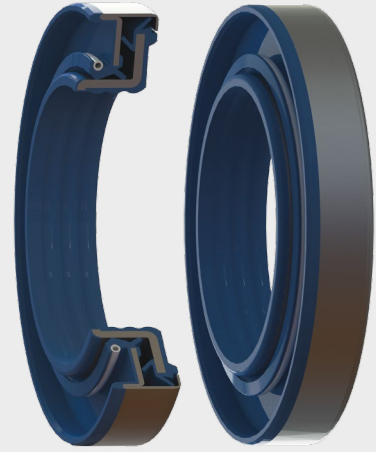


CASSETTE SEALS UA17



DESCRIPTION

The UA16 profile is a cassette seal, where the sealing is through a 2-barrier labyrinth system. The upper part is static with the housing and the lower part is designed to operate in rotation with the shaft.

ADVANTAGES

- Moderate friction coefficient
- Moderate protection against dirt
- Reduced need for maintenance
- Easy to fit with low risk of seal deterioration

APPLICATIONS

- Axles
- Pinions
- Hubs
- Construction
- Agriculture
- Commercial vehicles

MATERIALS

Rubber

- ACM 70 - 75 Shore A
- FKM 70 - 75 Shore A
- HNBR 70 - 75 Shore A
- NBR 70 - 75 Shore A

Metal cage

- Steel - AISI 1010
- Stainless steel - AISI 304
- Stainless steel - AISI 316

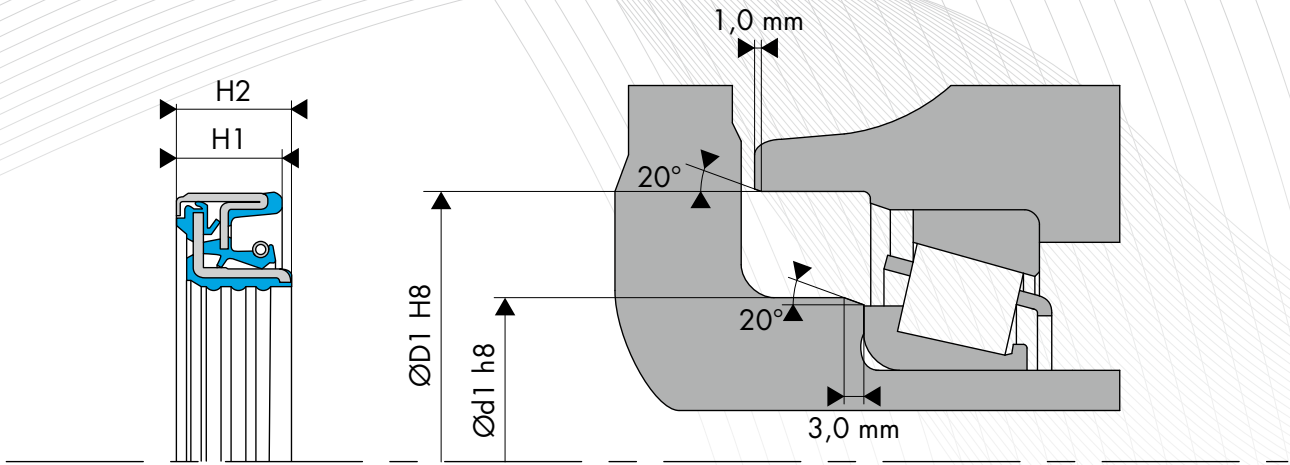
Spring

- Steel - AISI 1070 - 1090
- Stainless steel - AISI 316

TECHNICAL DATA

Technical data	NBR 70 - 75 Shore A	FKM 70 - 75 Shore A	ACM 70 - 75 Shore A	HNBR 70 - 75 Shore A
Temperature	-30°C / +80°C	-20°C/+100°C	-25°C/+90°C	-30°C/+90°C
Speed	5 m/s	7 m/s	6 m/s	6 m/s
Pressure	0.02 - 0.05 MPa	0.02 - 0.05 MPa	0.02 - 0.05 MPa	0.02 - 0.05 MPa
Level of pollution	Moderate	Moderate	Moderate	Moderate

The figures above indicate the maximum values and may not be cumulated. They may be developed, depending on the materials used.



DESIGN RECOMMENDATIONS

Shaft hardness

Rotation speed	Hardness in HRC
$s \leq 4.0$ m/sec	45 HRC
$4.0 < s \leq 10.0$ m/s	55 HRC
$s > 10.0$ m/sec	60 HRC

Shaft tolerance

Shaft diameter Ød1 (mm)	Tolerance h8 (mm)
$\text{Ød1} \leq 3.0$	-0.014 / 0
$3.0 < \text{Ød1} \leq 6.0$	-0.018 / 0
$6.0 < \text{Ød1} \leq 10.0$	-0.022 / 0
$10.0 < \text{Ød1} \leq 18.0$	-0.027 / 0
$18.0 < \text{Ød1} \leq 30.0$	-0.033 / 0
$30.0 < \text{Ød1} \leq 50.0$	-0.039 / 0
$50.0 < \text{Ød1} \leq 80.0$	-0.046 / 0
$80.0 < \text{Ød1} \leq 120.0$	-0.054 / 0
$120.0 < \text{Ød1} \leq 180.0$	-0.063 / 0
$180.0 < \text{Ød1} \leq 250.0$	-0.072 / 0
$250.0 < \text{Ød1} \leq 315.0$	-0.081 / 0
$315.0 < \text{Ød1} \leq 400.0$	-0.089 / 0
$400.0 < \text{Ød1} \leq 500.0$	-0.097 / 0

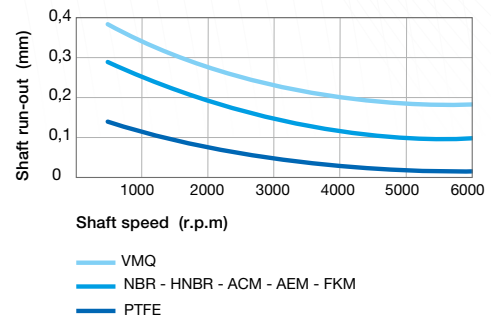
Housing tolerance

Bore diameter ØD1 (mm)	Tolerance H8 (mm)
$3.0 < \text{ØD1} \leq 6.0$	0 / +0.018
$6.0 < \text{ØD1} \leq 10.0$	0 / +0.022
$10.0 < \text{ØD1} \leq 18.0$	0 / +0.027
$18.0 < \text{ØD1} \leq 30.0$	0 / +0.033
$30.0 < \text{ØD1} \leq 50.0$	0 / +0.039
$50.0 < \text{ØD1} \leq 80.0$	0 / +0.046
$80.0 < \text{ØD1} \leq 120.0$	0 / +0.054
$120.0 < \text{ØD1} \leq 180.0$	0 / +0.063
$180.0 < \text{ØD1} \leq 250.0$	0 / +0.072
$250.0 < \text{ØD1} \leq 315.0$	0 / +0.081
$315.0 < \text{ØD1} \leq 400.0$	0 / +0.089
$400.0 < \text{ØD1} \leq 500.0$	0 / +0.097
$500.0 < \text{ØD1} \leq 630.0$	0 / +0.110

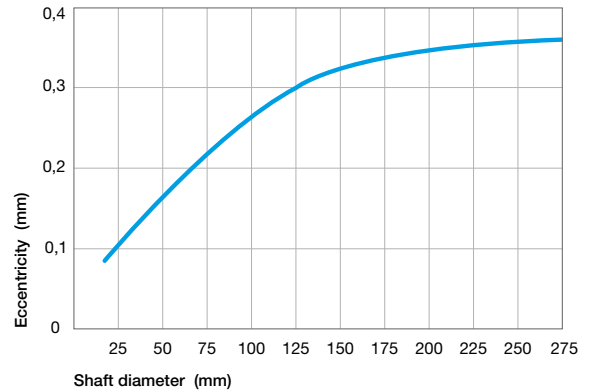
Surface roughness

Ra	0.8 to 3.2 µm
Rmax	10.0 to 16.0 µm

Shaft run out



Eccentricity



Axial movement

The cassette seals can tolerate axial movements greater than +/- 0.1 mm. However, this can lead to premature wear in the system.

Chamfers and radius

Shaft	20° (+/-5°) x 3 mm
Housing	20° (+/-5°) x 1 mm