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# MERKEL COMPACT SEAL AIRZET PK



### **PRODUCT DESCRIPTION**

Merkel Compact Seal Airzet PK can be pressurised on both sides with grooves on the front side for pressure activation.

### **PRODUCT ADVANTAGES**

- The compact design permits short piston designs
- The rounded sealing profile and the flexible centre part give good tightness with low friction and maintain an effective lubricating film
- Widely proven design
- Large supply range available
- Very good tribological properties (wear, friction and long service life)

### **APPLICATION**

- Short-stroke cylinders
- Valves and cylinders, especially short-stroke cylinders for high-temperature applications (only FKM)

### **MATERIAL**

Material	Code	Hardness
NBR rubber	80 NBR 186349	80 Shore A
Fluoro elastomer	75 FKM 230553	75 Shore A

## **OPERATING CONDITIONS**

Medium	Prepared, dried and de-oiled com- pressed air (after greasing for fitting)	
Operating pressure p	≤1,2 MPa	
Temperature T (NBR)	−20 +80 °C	
Temperature T (FKM)	−5 +150 °C	
Running speed v	≤1,2 m/s	

### **DESIGN NOTES**

Surface quality

Peak-to-valley heights	R <sub>max</sub>	$R_{\rm p}/R_{\rm z}$
Cylinder barrel	≤4 µm	<0,5 µm
Groove base	≤10 µm	<0,5 µm

tp (25%  $R_{max}$ ) = 50 ... 70%

→ Technical Manual.

### **FITTING & INSTALLATION**

Careful fitting is a prerequisite for the correct function of the seal. → Technical Manual. The Merkel compact seal Airzet PK is snapped over the de-burred housing edge into the housing groove.

