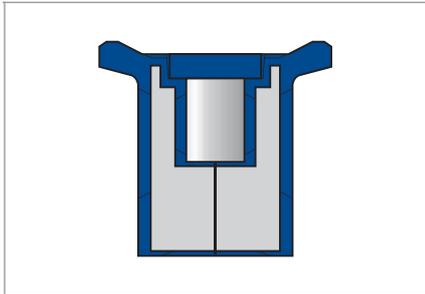


# MERKEL COMPLETE PISTON TDUOPM



## PRODUCT DESCRIPTION

The compact, short, Merkel Complete Piston TDUOP M consists of an aluminium body, a guide strip, a magnet and a sealing element with a special sealing edge on the sealing lip.

## PRODUCT ADVANTAGES

- Broad range of uses, only one complete piston for round cylinders and ISO cylinders
- Long service life
- Low start friction due to optimised sealing lip geometry
- Constant good sealing behaviour over a wide pressure range (to 1,2 MPa)
- Running properties without tendency to tilt due to a guide strip optimised for the application
- Aluminium body brings weight saving and permits high energy absorption
- Easily fastened to the piston rod
- Integrated static seal
- Supplied suitable for storage and fitting in deep-drawn inserts
- Simple provisioning
- Integrated magnet for a position check using a sensor

## APPLICATION

- Pneumatic cylinder with request

## MATERIAL

Material	Code	Hardness
Acrylonitrile-butadiene rubber	72 NBR 708	72 Shore A

## OPERATING CONDITIONS

Medium	Prepared, dried and de-oiled compressed air (after greasing for fitting)
Operating pressure p	≤1,2 MPa
Temperature T	-20 ... +100 °C
Running speed v	≤1,0 m/s

## DESIGN NOTES

Surface quality

Peak-to-valley heights	R <sub>max</sub>	R <sub>p</sub> /R <sub>v</sub>
Cylinder barrel	≤4 µm	<0,5 µm

p (25% R<sub>max</sub>) = 50 ... 75%

→ Technical Manual.

## FITTING & INSTALLATION

Careful fitting is a prerequisite for the correct function of the seal.  
→ Technical Manual. The Merkel Complete Piston TDUOP M is fitted to shouldered end of the piston rod and fastened with washers and a nut. The threaded fitting is to be protected against loosening.