



The single-acting profile EK is a complete pneumatic piston with a cup seal and a vulcanized metal disc support. It performs two functions:
Sealing and guiding.

- Due to application-optimized geometry and compounds suitable for use in oiled as well as in oil-free air (after initial lubrication on assembly).
- Immediate response (full pressure load) thanks to incorporated venting channels.
- Good wear resistance.
- Ideal corrosion protection thanks to complete elastomer covering.
- Smooth running due to optimum lubricant-retaining sealing lip geometry.
- Easy attachment to the piston rod without additional sealing elements.
- Easy installation due to integrated static sealing function.
- Excellent media resistance in case of suitable compound selection.
- Also available as double-acting version.
- Low assembly height of the complete piston enables short cylinder designs.
- Versatile complete piston for nearly all cylinder designs.

Range of application

Complete piston for single-acting pneumatic cylinders with and without cushioning, provided that no excessive lateral guidance loads will occur (long strokes and buckling).

Working pressure	≤ 16 bar
Working temperature	-30 °C to +80 °C
Surface speed	≤ 1 m/s
Media	Oiled as well as oil-free compressed air (after initial lubrication during assembly).

Compounds

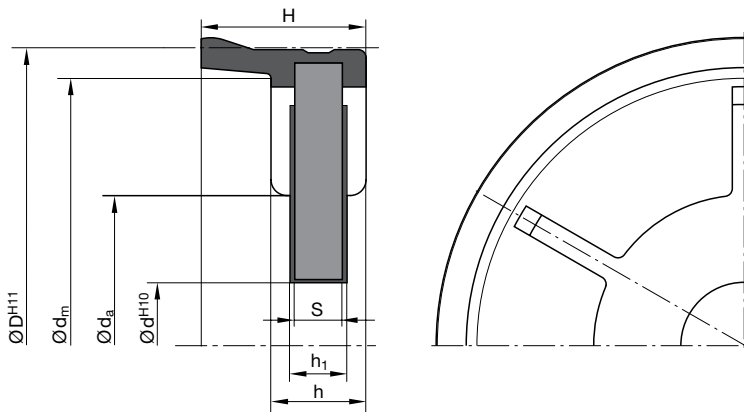
Standard compound is an elastomer (NBR-based) with a hardness of approx. 71 Shore A and vulcanized to a metal disc, resp. 78 Shore A for diameters > 100 mm.

Installation

The profile EK complete piston is fixed to the piston rod with a locknut to avoid loosening. For use with dry and oil-free air, the piston and cylinder tube must be prelubricated with a suitable long-life lubricant.

It must be assured that the sealing lips do not touch the cylinder bottom and the cylinder cap at the limit stops (see also dimension "Ø d_m").

In case of special operating conditions (specific pressure loads, temperature, speed, use in water, HFA, HFB fluids etc.), please contact our consultancy service for a selection of the material and design best suited to your particular application requirements.



$\varnothing d_m = \text{max. } \varnothing \text{ of joining metal parts}$

For surface finish, lead in chamfer and other installation dimensions see "General installation guidelines".

D	d	H	S	h	d _a	h ₁	d _m	Order code
25	8	7.9	3	6	16	3.6	21	EK 2508 Z5051
32	8	10.65	3	6.5	16	4	26.5	EK 3208 Z5051
40	10	12.4	4	7	22	4.6	34	EK 4009 Z5051
40	14	13.4	4	7	22	4	34	EK 4014 Z5051
50	10	12.8	4	7.8	25	4.6	43	EK 5010 Z5051
50	14	13.4	4	7	25	5	43	EK 5014 Z5051
50	16	14	4	7.5	25	5	43	EK 5016 Z5051
63	27	14.1	4	7	40	4.6	57	EK 6332 Z5051
80	12	15.2	5	8	55	5.6	70	EK 8013 Z5051
80	16	15.2	5	8	55	5.6	70	EK 8016 Z5051
80	27	15.35	5	8.5	55	6	72	EK 8027 Z5051
125	20	17.6	5	9.5	90	5.6	114	EK C520 Z5050
140	22	19.6	6	10.5	108	6.6	125	EK E022 Z5050
200	27	24.55	10	14.5	150	10.6	180	EK L027 Z5050

Further sizes on request.