



The double-acting profile DK is a complete pneumatic piston with a double 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 adjustment of the functional lips.
- 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.
- 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 double-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

DK NBR Z5051

-30 °C to +80 °C

DK PUR Z5071

-35 °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.

For high and/or low temperature applications special compounds are available.

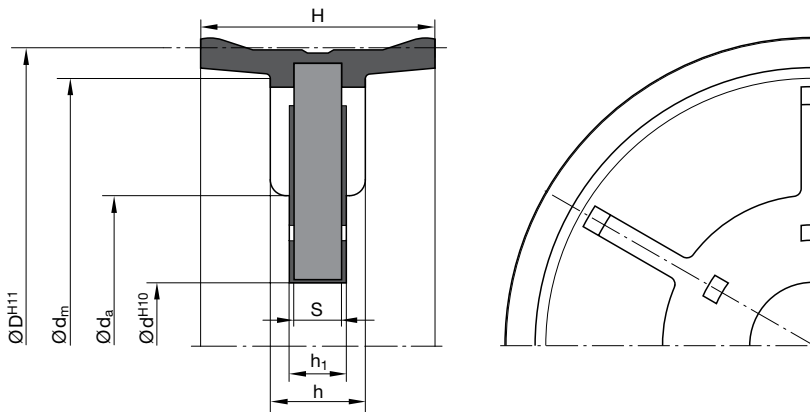
Available sizes in the polyurethane compound P5008 are listed separately.

Installation

The profile DK pneumatic 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 " $\varnothing d_m$ ").

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.

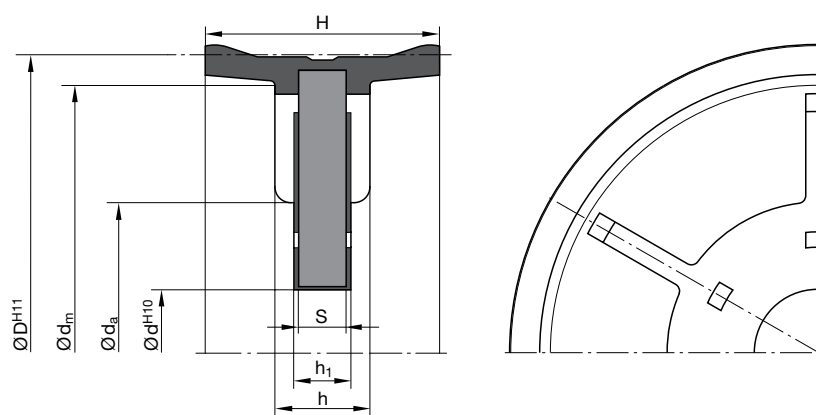


$\varnothing d_m = \text{max. } \varnothing \text{ of joining metal parts}$

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
DK NBR Z5051								
16	5	12	3	6	9	3.6	12	DK 1631 Z5051
20	5	12	3	6	10	3.6	16	DK 2030 Z5051
20	6	12	3	6	10	3.6	16	DK 2031 Z5051
25	6	12	3	6	13.5	3.6	21	DK 2506 Z5051
25	8	12	3	4	16	3.6	21	DK 2508 Z5051
25	8	12	3	6	16	3.6	21	DK 2509 Z5051
32	5	18	3	6	16	3.6	26.5	DK 3205 Z5051
32	6	15	3	6	16	3.6	26.5	DK 3206 Z5051
32	8	15	3	6	16	3.6	26.5	DK 3207 Z5051
32	8	15	3	6.5	16	4	26.5	DK 3210 Z5051
35	8	15	3	6	16	3.6	29.5	DK 3508 Z5051
40	8	18	4	7	22	4.6	34	DK 4007 Z5051
40	8	20	4	6.5	22	4.6	34	DK 4008 Z5051
40	10	18	4	7	22	4.6	34	DK 4009 Z5051
50	8	20	4	6.5	25	4.6	43	DK 5008 Z5051
50	10	18	4	7.8	25	4.6	43	DK 5010 Z5051
50	16	20.5	4	7	25	4.6	43	DK 5016 Z5051
60	12	21	4	6.5	37	4.6	52	DK 6012 Z5051
60	18	21	4	6.5	37	4.6	52	DK 6018 Z5051
63	12	22	5	8	40	5.6	55	DK 6312 Z5051
63	16	21.5	4	7	40	4.6	55	DK 6316 Z5051
70	12	22	5	8	44	5.6	62	DK 7012 Z5051
70	33	22	5	8	44	5.6	62	DK 7033 Z5051
80	12	22.5	5	8	55	5.6	70	DK 8013 Z5051
80	16	22.5	5	8	55	5.6	70	DK 8016 Z5051
80	20	22.5	5	8	55	5.6	70	DK 8020 Z5051
100	12	25	6	10	72	6.6	90	DK A012 Z5051
100	16	25	6	10	72	6.6	90	DK A016 Z5051
100	20	26	6	10	72	6.6	90	DK A019 Z5051
125	20	26	5	9.5	90	5.6	114	DK C520 Z5050
125	20	28	7	12	90	8.2	114	DK C522 Z5050
130	20	29	8	13	98	8.6	123	DK D020 Z5050
140	22	29	6	10.5	108	6.6	125	DK E022 Z5050

Further sizes on request.



$\varnothing d_m$ = max. \varnothing 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
150	20	29	10	13	100	10.6	143	DK F020 Z5050
160	27	29	6	10.5	110	6.6	145	DK G027 Z5050
160	30	29	6	10.5	110	6.6	145	DK G030 Z5050
200	27	35	10	14.5	150	10.6	180	DK L027 Z5050
200	30	35	10	13	150	10.6	180	DK L030 Z5050
250	30	40	12	15	180	12.6	240.6	DK N131 Z5050
250	30	40	15	18	180	15.6	240.6	DK N130 Z5050
DK PUR Z5071								
32	8	15	3	6	16	4.4	26.5	DK 3207 Z5071
40	10	18	4	7	22	5.4	34	DK 4009 Z5071
50	10	18	4	7.5	25	5.4	43	DK 5010 Z5071
63	16	21.5	4	7	40	5.4	55	DK 6316 Z5071
63.5	11.12	22	5	8	40.5	7	56	DK 6323 Z5071

Further sizes on request.