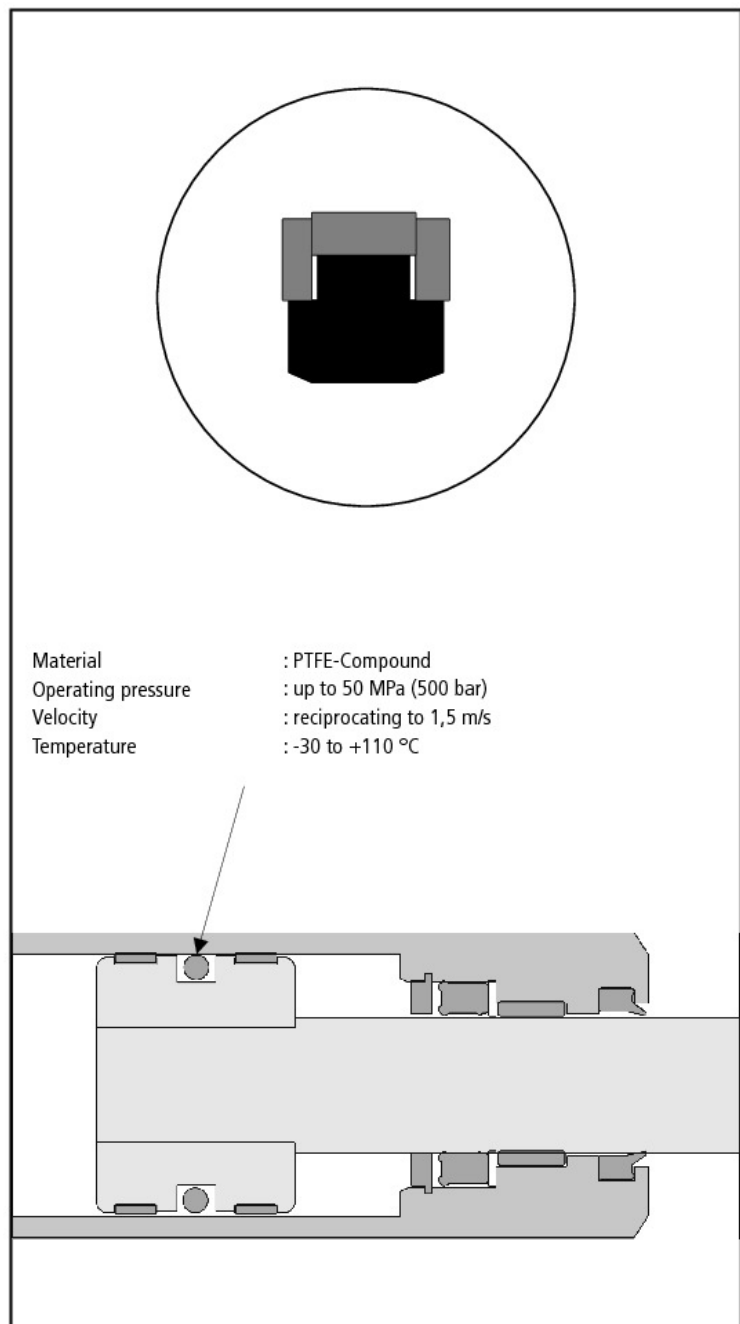


The compact double acting piston seal series of HK 160 was specially developed for using single parted constructions of piston.

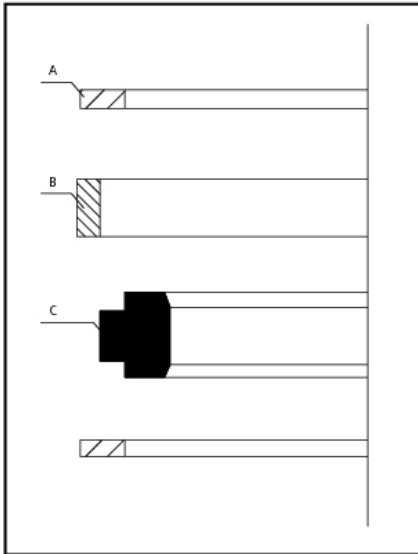
Various combinations of materials guarantee high functional reliability and endurance life render during the totally period of pressure and velocity by low friction, various temperatures and medias.

### Special Features::

- Low friction due to oil groove on sealing geometry
- Excellent shear characteristics
- Good dynamic and static sealing
- Large abrasion resistance, long life period
- Various materials for additional temperatures available
- Best qualification to most heavy operations i.e. machinery for buildings and constructions
- Extensive range of dimensions is aligned to international standard mounting spaces i.e. ISO 5597



Material	: PTFE-Compound
Operating pressure	: up to 50 MPa (500 bar)
Velocity	: reciprocating to 1,5 m/s
Temperature	: -30 to +110 °C

**Back Ring ( Part A)**

The Polyacetal back ring should save the profil gasket against split extrusion and protect the sealing system against eventuality existing dirty pieces.

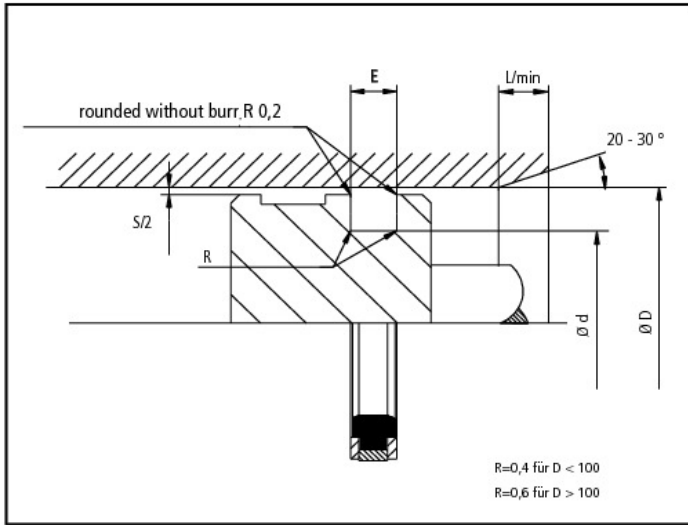
**Profile Gasket (Part B)**

Gasket section is rectangular and the profile gasket is produced since years of PTFE / bronze compound.

The profile gasket shows a absolutely high abrasion resistance, inherent stability and additional good shearing characteristics. These preferences recommending the material to demands of heavy- and construction industry. Additional we are supporting a special profile gasket of standard material Polyurethan for low and middle applications.

**Energizer (Part C)**

During the total period of presse the t-formed NBR energizer guarantees reliable radial pressure to the profile gasket. For applications with additional areas of temperatures there are various materials available.



Limitations on Use	
Operating pressure	: up to 35 MPa (350 bar)
Velocity	: reciprocating up to 20 m/s
Temperature	: -150 to +225 °C

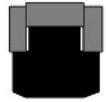
Media for Use	
Mineral oil based hydraulic oils, Bio Oils as well as flame resistant pressure liquids on request	

Surface Finish			
Surfaces	Rmax	Rz	Ra
Faces	2,5 µm	1.6 µm	0,4 µm
Groove root	10,0 µm	6.3 µm	1,6 µm
Groove flanks	16,0 µm	10,0 µm	3,2 µm

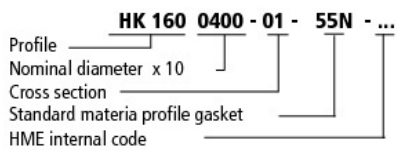
Limitations on Use				Diameter Clearance				
Operating pressure		Velocity	Temperature	Smax.	-200 (mm)	p max.	-55N/55H Smax. (mm)	p max
-55N	bis 50 Mpa (500 bar)	bis 1,5 m/s	-30 bis + 100 °C	1,00	-10 Mpa	1,00	30 MPa	
-55H	bis 50 Mpa (500 bar)	bis 1,5 m/s	-40 bis + 130 °C	0,70	-20 Mpa	0,60	50 MPa	
-200	bis 40 Mpa (400 bar)	bis 0,5 m/s	-40 bis + 110 °C	0,50	-30 Mpa			
				0,30	-40 Mpa			

D H9	d h10	E +0,2	Lmin.	Part N°.
40,00	30,00	8,00	5,00	<b>HK160 0400-01-55N</b>
50,00	36,00	9,00	5,00	HK160 0500-01-55N
<b>50,00</b>	<b>40,00</b>	<b>8,00</b>	<b>5,00</b>	<b>HK160 0500-02-55N</b>
55,00	41,00	9,00	5,00	HK160 0550-01-55N
60,00	46,00	9,00	5,00	HK160 0600-01-55N
60,00	50,00	8,00	5,00	HK160 0600-02-55N
63,00	48,00	11,00	5,00	HK160 0630-01-55N
<b>63,00</b>	<b>53,00</b>	<b>8,00</b>	<b>5,00</b>	<b>HK160 0630-02-55N</b>
65,00	50,00	11,00	5,00	HK160 0650-01-55N
70,00	55,00	11,00	5,00	HK160 0700-01-55N
70,00	60,00	8,00	5,00	HK160 0700-02-55N
75,00	60,00	11,00	5,00	HK160 0750-01-55N
<b>80,00</b>	<b>65,00</b>	<b>11,00</b>	<b>5,00</b>	<b>HK160 0800-01-55N</b>
80,00	65,00	12,50	5,00	HK160 0800-02-55N
85,00	70,00	11,00	5,00	HK160 0850-01-55N
90,00	75,00	11,00	5,00	HK160 0900-01-55N
90,00	75,00	12,50	5,00	HK160 0900-02-55N
95,00	80,00	11,00	5,00	HK160 0950-01-55N
<b>100,00</b>	<b>85,00</b>	<b>12,50</b>	<b>5,00</b>	<b>HK160 1000-01-55N</b>
105,00	90,00	12,50	5,00	HK160 1050-01-55N
110,00	95,00	12,50	5,00	HK160 1100-01-55N
115,00	100,00	12,50	5,00	HK160 1150-01-55N
120,00	105,00	12,50	6,50	HK160 1200-01-55N
125,00	102,00	16,00	6,50	HK160 1250-01-55N
125,00	110,00	12,50	6,50	HK160 1250-02-55N
130,00	107,00	16,00	6,50	HK160 1300-01-55N

D H9	d h 10	E +0,2	Lmin.	Part N°.
130,00	115,00	12,50	6,50	HK160 1300-02-55N
135,00	112,00	16,00	6,50	HK160 1350-01-55N
140,00	117,00	16,00	6,50	HK160 1400-01-55N
140,00	125,00	12,50	6,50	HK160 1400-02-55N
145,00	122,00	16,00	6,50	HK160 1450-01-55N
150,00	127,00	16,00	6,50	HK160 1500-01-55N
150,00	135,00	12,50	6,50	HK160 1500-02-55N
160,00	137,00	16,00	6,50	HK160 1600-01-55N
160,00	145,00	12,50	6,50	HK160 1600-02-55N
165,00	142,00	16,00	6,50	HK160 1650-01-55N
170,00	147,00	16,00	6,50	HK160 1700-01-55N
170,00	155,00	16,00	6,50	HK160 1700-02-55N
180,00	157,00	16,00	6,50	HK160 1800-01-55N
180,00	165,00	12,50	6,50	HK160 1800-02-55N
190,00	167,00	16,00	6,50	HK160 1900-01-55N
190,00	175,00	12,50	6,50	HK160 1900-02-55N
200,00	177,00	16,00	6,50	HK160 2000-01-55N
200,00	180,00	16,00	6,50	HK160 2000-02-55N
220,00	200,00	16,00	8,00	HK160 2200-01-55N
225,00	202,00	16,00	8,00	HK160 2250-01-55N
230,00	210,00	16,00	8,00	HK160 2300-01-55N
250,00	230,00	16,00	8,00	HK160 2500-02-55N



### Example for ordering Piston Seal:



### Material Key:

**Gasket**  
 55N - PTFE Bronze + NBR  
 55H - PTFE Bronze + HNBR  
 200 - PU + NBR

Issue

01	05
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**WARNING:** Limits of application stated herein are standard values. They could be individually transgressed with due consideration to respective service conditions. In the event of a large duty cycle, pulsating operation and other complex operational conditions, simultaneous transgression of these values is not recommended. Due to a large variety of service conditions that may arise in course of actual use, the company does not take responsibility of or guarantee the functional accuracy of the individual components. Rights for changes are reserved.