



Piston - groove dimensions		+		-	
material	Steel (Ck45 etc.)				
bore diameter (mm)	5.00	0.018	0	H8	
piston diameter (mm)	4.90	-0.01	-0.022	f7	
groove diameter (mm)	4.25	0	-0.03	h9	
groove width (mm)	0.80	0.2	0suggestion		
radius (mm)	0.2				

Application		O-Ring	±		
Sealing principle	Piston	compound	FKM / Viton®		
design	Design. O-Ring & Groove	chemical volume swell (%)	0		
temperature (°C)	21	inner diameter (mm)	4.29	0.15	ISO 3601
		cross section diameter (mm)	0.5	0.08	ISO 3601

Results at Service	min.	nom.	max.
Calculated Values at Central Position of Piston:			
O-Ring Compression (%)	1.63	25.00	35.34
Free Groove Volume (%)	- 1.39	28.10	64.18
O-Ring Inner Diameter Stretch (%)	- 4.95	- 0.93	2.66
Groove Depth incl. Gap (mm)	0.38	0.38	0.40
Sealing Gap (mm)	0.05	0.05	0.07
Calculated Values at Excentrical Position of Piston:			
O-Ring Compression (%)	- 15.63		45.86
Groove Depth incl. Gap (mm)	0.31		0.47
Sealing Gap (mm)	0.00		0.14

#### Comments

##### Results at Service

Caution, excessive compression may result in high compression set and possible splitting of parts

Caution, excessive groove fill may result in decreased part life, extrusion, or part degradation

#### Disclaimer

This information is, to the best of our knowledge, accurate and reliable to the date indicated. The above mentioned data have been obtained by tests we consider as reliable. We don't assure that the same results can be obtained in other laboratories, using different conditions by the preparation and evaluation of the samples.