

Materials:

Cylinder body:

Material: St. 52 WS 1.0580
 Tolerance: H8
 Yield point: 470 N/mm²
 Yield point: Ra-value 0.4 mm (honed)

Piston rod:

Material (standard) : 20MnV6
 Tolerance: f7
 Yield point: 390 N/mm²
 Chrome layer thickness: min. 20 mm
 Surface roughness: Ra-value 0.2 mm
 Surface hardness: 66-70 HRc

Material (optional): stainless steel type AISI-431

Tolerance: f7
 Yield point: 600 N/mm²
 Chrome layer thickness: min. 20 mm
 Surface roughness: Ra-value 0.2 mm
 Surface hardness: > 70 HRc

		Pushing force (kN)		Pulling force (kN)	
Bore	Rod	16 MPa	25 MPa	16 MPa	25 MPa
32	16	13	20	10	15
40	25	20	31	12	19
50	30	31	49	20	31
63	40	50	78	29	46
80	50	80	125	49	76
	60			35	55
100	60	125	196	80	125
	70			64	100
125	70	196	306	134	210
	90			94	147
140	80	246	384	165	259
	100			120	188
160	90	321	502	220	343
	110			170	265
180	110	407	636	255	398
	125			210	329
200	125	502	785	306	478
	140			256	400
220	140	608	950	362	565
	160			286	447
250	160	785	1227	463	724
	180			378	591

GRAFIEK VOOR HET BEPALEN VAN DE ZUIGERSTANGDIAMETER OP KNIK
 Veiligheidsfactor tegen zuivere knik is 3
 GRAPH TO DETERMINE THE PISTONROD - DIAMETER ON BUCKLING
 Safety factor against pure buckling is 3

