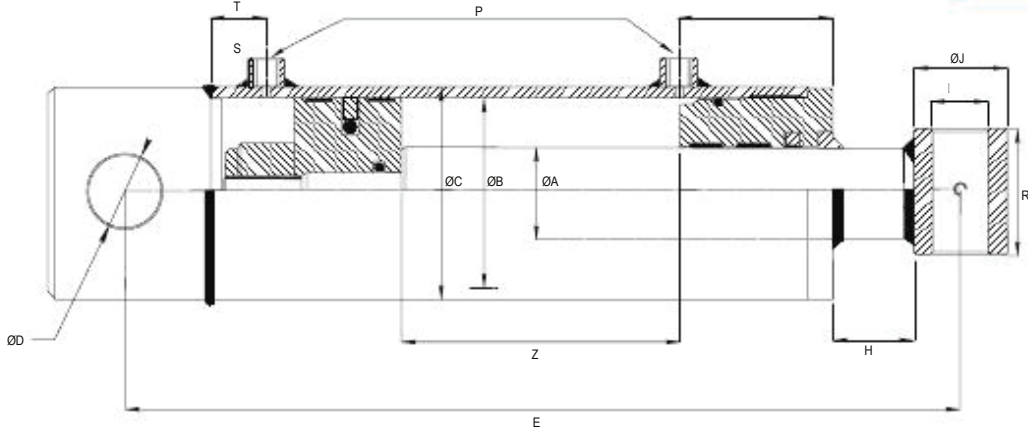


SERIES 200 - DOUBLE ACTING HYDRAULIC CYLINDER

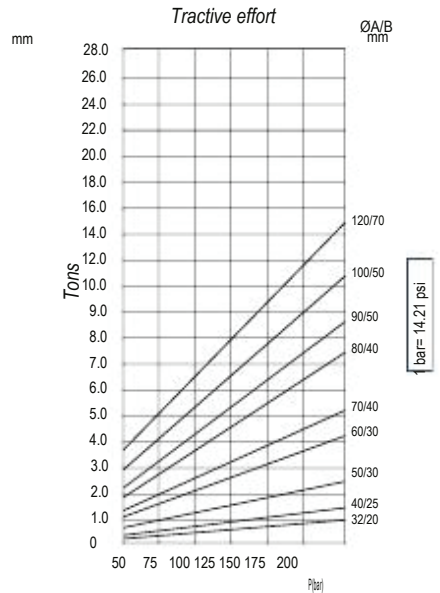
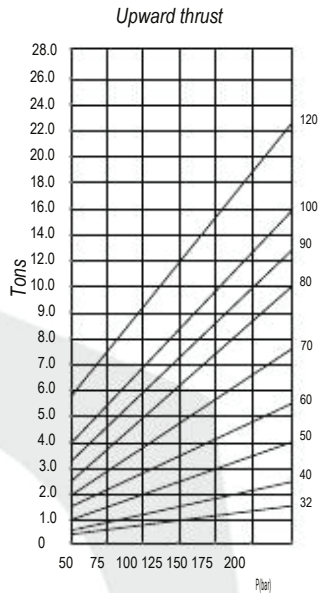
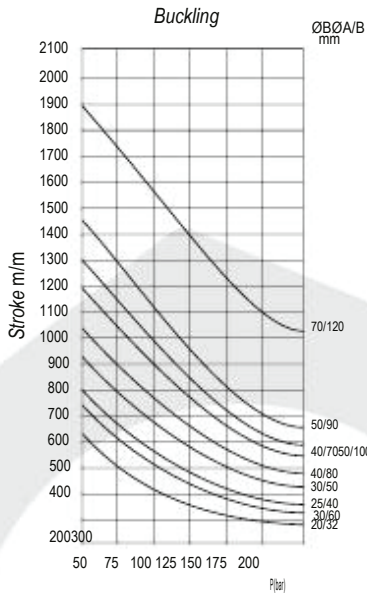


Working pressure: 180 bars.
 Speed: 0.5 m/s.
 Working temperature: -25°C - +80°C.
 Oil: Mineral oil.
 Rod: C45 f7 25 microns.
 Tube: St52.3 Din2393 Iso H9

Volume = $\pi r^2 \times \hat{h}$ (height)
 Example = Cylinder 40-70/80-400 (mm)
 $3.5 \times 3.14 \times 0.04$ (m.)
 Total 1.5386 litres

Push Force = $\pi r^2 \times$ pressure (bar)
 Example = Cylinder 40-70/80
 $3.5 \times 3.14 \times 150$ (bar)
 Total 5.769.75 Kgs

Push Force = $\pi r^2 \times$ pressure (bar)
 Example = Cylinder 40-70/80
 Calculate Rod Area: $3.14 \times 2.0^2 = 12.56$
 Calculate Tube Area: $3.14 \times 3.5^2 = 38.465$
 Subtract Areas: $38.465 - 12.56 = 25.905$
 Strength: 25.905×150 (bar) = 3885.79



ORDER CODE	ROD A	Z STROKE	E CLOSED CENTRE	B BORE	C OD	D PIN HOLE	H	T	J	R	S	P	VOL	WEIGHT
200/005	20	50	205	32	40	16.25	46	10	30	35	33	1/4 BSP	0.04	1.7
200/010		100	255									1/4 BSP	0.10	2.00
200/015		150	305									1/4 BSP	0.12	2.30
200/020		200	355									1/4 BSP	0.17	2.60
200/025		250	405									1/4 BSP	0.20	2.90
200/030		300	455									1/4 BSP	0.25	3.20
200/035		350	505									1/4 BSP	0.28	3.30
200/040		400	555									1/4 BSP	0.32	3.40
200/050		500	655									1/4 BSP	0.40	3.50
200/060		600	755									1/4 BSP	0.48	3.80
200/070		700	855									1/4 BSP	0.56	4.10
200/080		800	955									1/4 BSP	0.64	4.40
200/090		900	1055									1/4 BSP	0.72	4.70
200/100		1000	1155									1/4 BSP	0.80	5.00
200/110		1100	1255									1/4 BSP	0.85	5.30
200/120	1200	1355	1/4 BSP	0.96	5.60									
200/130	1300	1455	1/4 BSP	1.04	5.90									
200/140	1400	1555	1/4 BSP	1.12	6.20									
200/150	1500	1655	1/4 BSP	1.20	6.50									
201/010	25	100	270	40	50	20.5	30	16	35	40	42	3/8 BSP	0.12	2.80
201/015		150	320									3/8 BSP	0.18	3.50
201/020		200	370									3/8 BSP	0.25	3.80
201/025		250	420									3/8 BSP	0.31	4.20
201/030		300	470									3/8 BSP	0.40	4.80
201/035		350	520									3/8 BSP	0.44	5.20
201/040		400	570									3/8 BSP	0.55	5.80
201/050		500	670									3/8 BSP	0.60	6.80
201/060		600	770									3/8 BSP	0.75	7.80
201/070		700	870									3/8 BSP	0.90	8.80
201/080		800	970									3/8 BSP	1.00	9.60
201/090		900	1070									3/8 BSP	1.13	10.60
201/100		1000	1170									3/8 BSP	1.25	11.60
201/110		1100	1270									3/8 BSP	1.38	12.60
201/120		1200	1370									3/8 BSP	1.50	13.60
201/130	1300	1470	3/8 BSP	1.63	14.60									
201/140	1400	1570	3/8 BSP	1.76	15.60									
201/150	1500	1670	3/8 BSP	1.88	16.60									
202/010	30	100	300	50	60	25.5	47	20	35	45	43	3/8 BSP	0.19	4.40
202/015		150	350									3/8 BSP	0.29	5.00
202/020		200	400									3/8 BSP	0.39	5.00
202/025		250	450									3/8 BSP	0.49	5.60
202/030		300	500									3/8 BSP	0.59	7.06
202/035		350	550									3/8 BSP	0.68	7.40
202/040		400	600									3/8 BSP	0.79	8.28
202/045		450	650									3/8 BSP	0.88	8.70
202/050		500	700									3/8 BSP	0.98	9.50
202/060		600	800									3/8 BSP	1.18	10.72
202/070		700	900									3/8 BSP	1.37	11.94
202/080		800	1000									3/8 BSP	1.57	12.90
202/090		900	1100									3/8 BSP	1.76	14.10
202/100		1000	1200									3/8 BSP	1.96	15.30
202/110		1100	1300									3/8 BSP	2.16	16.50
202/120	1200	1400	3/8 BSP	2.35	17.70									
202/130	1300	1500	3/8 BSP	2.55	18.90									
202/140	1400	1600	3/8 BSP	2.75	20.10									
202/150	1500	1700	3/8 BSP	2.94	21.30									
203/010	30	100	300	60	70	25.5	46	20	35	45	47	3/8 BSP	0.28	6.10
203/015		150	350									3/8 BSP	0.42	6.50
203/020		200	400									3/8 BSP	0.57	7.08
203/025		250	450									3/8 BSP	0.70	7.65
203/030		300	500									3/8 BSP	0.85	8.46
203/035		350	550									3/8 BSP	0.99	9.30
203/040		400	600									3/8 BSP	1.13	9.84

ORDER CODE	ROD A	Z STROKE	E CLOSED CENTRE	B BORE	C OD	D PIN HOLE	H	T	J	R	S	P	VOL	WEIGHT
203/045		450	650									3/8 BSP	1.27	10.10
203/050		500	700									3/8 BSP	1.41	11.22
203/060		600	800									3/8 BSP	1.70	12.60
203/070		700	900									3/8 BSP	1.98	13.98
203/080		800	1000									3/8 BSP	2.26	14.8
203/085		850	1050									3/8 BSP	2.40	15.4
203/090		900	1100	60	60	60						3/8 BSP	2.54	16.1
203/100		1000	1200									3/8 BSP	2.82	17.3
203/110		1100	1300									3/8 BSP	3.10	18.6
203/120		1200	1400									3/8 BSP	3.38	19.9
203/130		1300	1500									3/8 BSP	3.66	21.2
203/140		1400	1600									3/8 BSP	3.14	22.5
203/150		1500	1700									3/8 BSP	4.22	23.8
204/010		100	310									3/8 BSP	0.38	9.59
204/020		200	410									3/8 BSP	0.77	10.39
204/025		250	460									3/8 BSP	0.96	11.30
204/030		300	510				34				51	3/8 BSP	1.15	12.22
204/035		350	560									3/8 BSP	1.34	13.00
204/040		400	610									3/8 BSP	1.54	14.05
204/050		500	710									3/8 BSP	1.92	15.88
204/055		550	760									3/8 BSP	2.11	16.71
204/060		600	810									3/8 BSP	2.31	17.71
204/070		700	910	70	80							3/8 BSP	2.69	19.54
204/080		800	1010									3/8 BSP	3.00	21.50
204/090	40	900	1110						50	55		3/8 BSP	3.40	22.75
204/100		1000	1210									3/8 BSP	3.85	23.54
204/110		1100	1310									3/8 BSP	4.23	24.54
204/120		1200	1410									3/8 BSP	4.62	25.60
204/130		1300	1510									3/8 BSP	5.00	27.54
204/140		1400	1610									3/8 BSP	5.39	29.54
204/150		1500	1710					26				3/8 BSP	5.77	32.50
204/180		1800	2010									3/8 BSP	6.93	34.60
205/010		100	310									3/8 BSP	0.53	10.00
205/020		200	410									3/8 BSP	1.01	12.10
205/025		250	460									3/8 BSP	1.25	13.00
205/030		300	510									3/8 BSP	1.51	14.10
205/035		350	560									3/8 BSP	1.76	15.00
205/040		400	610			30.5						3/8 BSP	2.01	16.10
205/050		500	710									3/8 BSP	2.51	18.10
205/060		600	810									3/8 BSP	3.02	20.10
205/070		700	910	80	90		21				56	3/8 BSP	3.52	22.10
205/080		800	1010									3/8 BSP	4.02	24.10
205/090		900	1110									3/8 BSP	4.52	26.10
205/100		1000	1210									3/8 BSP	5.03	28.10
205/110		1100	1310									3/8 BSP	5.53	30.10
205/120		1200	1410									3/8 BSP	6.03	32.10
205/130		1300	1510									3/8 BSP	6.53	34.10
205/140		1400	1610									3/8 BSP	7.04	36.10
205/150		1500	1710									3/8 BSP	7.54	38.10
206/005		50	275									3/8 BSP	0.31	10.70
206/010		100	325									3/8 BSP	0.63	12.20
206/020		200	425									3/8 BSP	1.27	15.15
206/030		300	525									3/8 BSP	1.91	18.15
206/040		400	625									3/8 BSP	2.54	21.15
206/050		500	725									3/8 BSP	3.17	24.15
206/060	50	600	825	90	100		28		60	70	60	3/8 BSP	3.80	27.15
206/070		700	925									3/8 BSP	4.43	30.15
206/080		800	1025									3/8 BSP	5.09	33.2
206/090		900	1125									3/8 BSP	5.72	36.2
206/100		1000	1225									3/8 BSP	6.36	39.20
206/110		1100	1325									3/8 BSP	7.03	42.20
206/120		1200	1425									3/8 BSP	7.63	45.20

ORDER CODE	ROD A	Z STROKE	E CLOSED CENTRE	B BORE	C OD	D PIN HOLE	H	T	J	R	S	P	VOL	WEIGHT		
206/130	50	1300	1525	90	100	30.5	28	26	60	70	60	3/8 BSP	8.27	48.20		
206/140		1400	1625									3/8 BSP	8.91	51.20		
206/150		1500	1725									3/8 BSP	9.54	54.20		
207/010		100	325	100	115		25				60	70	60	1/2 BSP	0.78	19.50
207/020		200	425											1/2 BSP	1.57	22.70
207/030		300	525											1/2 BSP	2.36	27.60
207/040		400	625										67	1/2 BSP	3.14	30.80
207/050		500	725											1/2 BSP	3.94	34.00
207/060		600	825											1/2 BSP	4.74	37.20
207/070		700	925											1/2 BSP	5.54	40.40
207/080		800	1025											1/2 BSP	6.28	41.30
207/090		900	1125											1/2 BSP	7.07	43.00
207/100		1000	1225											1/2 BSP	7.86	45.90
207/110		1100	1325											1/2 BSP	8.64	48.80
207/120		1200	1425											1/2 BSP	9.43	51.70
207/130	1300	1525	1/2 BSP			10.21		54.60								
207/140	1400	1625	1/2 BSP			11.00		57.50								
207/150	1500	1725	1/2 BSP			11.79		60.40								
208/020	70	200	510	120	140	40.5	39	30	80	80	1/2 BSP	2.26	45.00			
208/040		400	710								1/2 BSP	4.23	55.00			
208/050		500	810								1/2 BSP	5.65	62.50			
208/060		600	910								1/2 BSP	7.07	70.00			
208/070		700	1010								1/2 BSP	8.49	77.50			
208/100		1000	1310								1/2 BSP	11.31	100.00			
208/130		1300	1610								1/2 BSP	14.71	138.00			