

FLOWFIT® Technical Data

1000 Series Standard Hydraulic Cylinders



CHARACTERISTICS

- Maximum working pressure: 200 bar
- Maximum testing pressure: 300 bar
- Maximum working speed: 0.5 m/s
- Working temperature: -30 °C to +90 °C
- Oil: mineral hydraulic

MATERIALS

- Rod: chrome plated steel F-1140, minimum chrome layer thickness 20 micron, roughness Ra < 0,2, minimum surface hardness 900 HV, corrosion resistance minimum 200 hours in neutral saline fog according to ISO9227 rating 9
- Tube: steel ST-52-3, DIN 2393, inside diameter tolerance ISO H9, roughness Ra <0,8 micron.
- Guide-bushing: steel F-1140 nitrated (nitride hardening)
- Piston: steel F-1140

SEALS

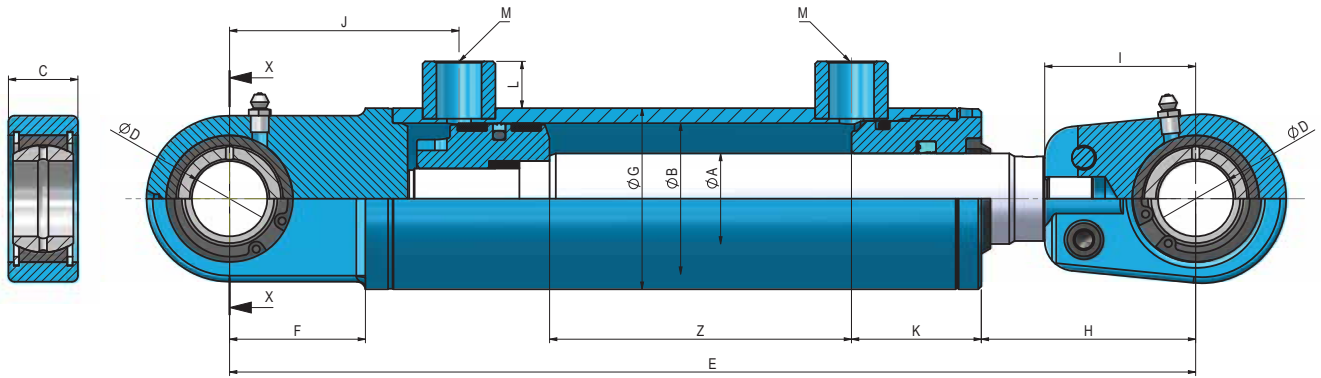
- Guide-bushing:
 - Dynamic: compact polyurethane rod-seal, double lip. NBR metal wiper seal
 - Static: NBR 90 shore o-ring
- Piston:
 - Dynamic: compact double-acting polyurethane seal, plus nitrile o-ring as activator
Special polyacetal guides reinforced with glass fibre.
 - Static: polyamide locking sealing guide

FINISHING

Black prime painting

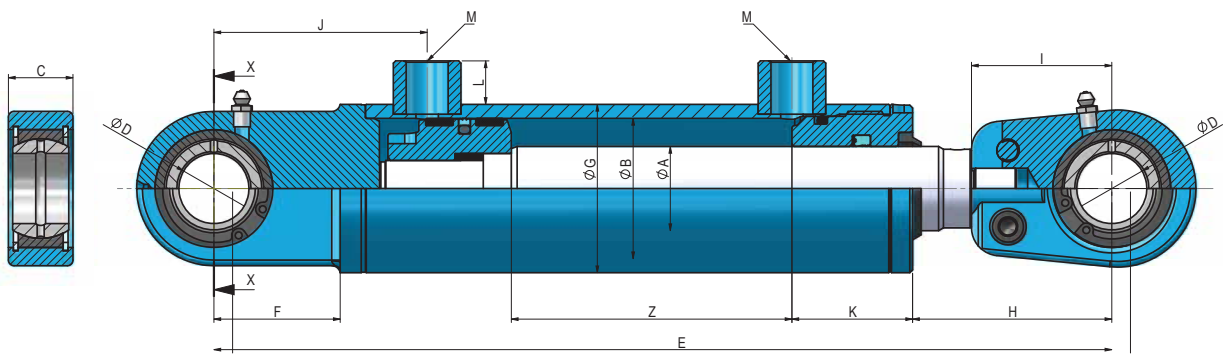
RECOMMENDATIONS

- Protect the cylinder circuit with a relief valve set at 200 bar
- Check the oil cleanness (pollution), and prevent it from having strange objects (place a filter on the cylinder circuit)
- Bleed the circuit by slightly loosening the cylinder fittings before starting-up
- Do not weld on the cylinder tube
- Before welding on the rod or on the bottom, please dismount the cylinder. - In case you need to store the cylinders for a long period of time, please avoid outdoor storage. If not possible, the rod must be completely retracted or it must be greased instead
- For high-pressure cleaning or blasting on the cylinder, the rod and the oil-ports must be suitably protected.
- For double-acting cylinders working as single acting, we recommend to connect the non-used oil-port to tank
- In case you need to dismount the cylinder, please note that the piston is screwed onto the rod end and fixed with industrial glue, so you must use also industrial glue when mounting again



SERIES 1000

REF.	ØA	ØB	STROKE z	E	C	D	F	G	H	I	J	K	L	M BSP	VOL (L)	SEALS JOINTS	WEIGHT (kg)
1000/05	20	32	50	260	19	20	38	40	65	50	63	33	9.5	1/4	0.04	J70N	2.08
1000/10	20	32	100	310	19	20	38	40	65	50	63	33	9.5	1/4	0.08	J70N	2.38
1000/15	20	32	150	360	19	20	38	40	65	50	63	33	9.5	1/4	0.12	J70N	2.68
1000/20	20	32	200	410	19	20	38	40	65	50	63	33	9.5	1/4	0.16	J70N	2.98
1000/30	20	32	300	510	19	20	38	40	65	50	63	33	9.5	1/4	0.24	J70N	3.28
1008/1	20	40	100	305	19	20	38	50	70	50	67	40	15.0	3/8	0.13	J2040N	3.06
1008/150	20	40	150	355	19	20	38	50	70	50	67	40	15.0	3/8	0.19	J2040N	3.46
1008/2	20	40	200	405	19	20	38	50	70	50	67	40	15.0	3/8	0.25	J2040N	3.86
1001/1	25	40	100	305	19	20	38	50	70	50	67	40	15	3/8	0.13	J71N	3.34
1001/2	25	40	200	405	19	20	38	50	70	50	67	40	15	3/8	0.25	J71N	4.28
1001/3	25	40	300	505	19	20	38	50	70	50	67	40	15	3/8	0.38	J71N	5.23
1001/4	25	40	400	605	19	20	38	50	70	50	67	40	15	3/8	0.50	J71N	6.18
1001/5	25	40	500	705	19	20	38	50	70	50	67	40	15	3/8	0.63	J71N	7.13
1009/1	25	50	100	320	23	25	45	60	71	50	76	43	15	3/8	0.20	J2550N	4.36
1009/150	25	50	150	370	23	25	45	60	71	50	76	43	15	3/8	0.29	J2550N	4.89
1009/2	25	50	200	420	23	25	45	60	71	50	76	43	15	3/8	0.39	J2550N	5.42
1009/250	25	50	250	470	23	25	45	60	71	50	76	43	15	3/8	0.49	J2550N	5.95
1002/1	30	50	100	320	23	25	45	60	71	50	76	43	15	3/8	0.20	J72N	4.44
1002/150	30	50	150	370	23	25	45	60	71	50	76	43	15	3/8	0.29	J72N	5.17
1002/2	30	50	200	420	23	25	45	60	71	50	76	43	15	3/8	0.39	J72N	5.62
1002/250	30	50	250	470	23	25	45	60	71	50	76	43	15	3/8	0.49	J72N	6.40
1002/3	30	50	300	520	23	25	45	60	71	50	76	43	15	3/8	0.59	J72N	6.80
1002/350	30	50	350	570	23	25	45	60	71	50	76	43	15	3/8	0.69	J72N	7.63
1002/4	30	50	400	620	23	25	45	60	71	50	76	43	15	3/8	0.79	J72N	7.98
1002/450	30	50	450	670	23	25	45	60	71	50	76	43	15	3/8	0.89	J72N	8.86



SERIES 1000

REF.	ØA	ØB	STROKE Z	E	C	D	F	G	H	I	J	K	L	M BSP	VOL (L)	SEALS JOINTS	WEIGHT (kg)
1002/5	30	50	500	720	23	25	45	60	71	50	76	43	15	3/8	0.98	J72N	9.16
1002/6	30	50	600	820	23	25	45	60	71	50	76	43	15	3/8	1.18	J72N	10.34
1002/7	30	50	700	920	23	25	45	60	71	50	76	43	15	3/8	1.37	J72N	11.52
1002/800	30	50	800	1020	23	25	45	60	71	50	76	43	15	3/8	1.57	J72N	13.16
1003/1	30	60	100	340	28	30	51	70	83	60	82	45	15	3/8	0.28	J73N	6.15
1003/2	30	60	200	440	28	30	51	70	83	60	82	45	15	3/8	0.57	J73N	7.51
1003/3	30	60	300	540	28	30	51	70	83	60	82	45	15	3/8	0.85	J73N	8.87
1003/4	30	60	400	640	28	30	51	70	83	60	82	45	15	3/8	1.13	J73N	10.23
1003/5	30	60	500	740	28	30	51	70	83	60	82	45	15	3/8	1.41	J73N	11.59
1003/6	30	60	600	840	28	30	51	70	83	60	82	45	15	3/8	1.70	J73N	12.95
1003/7	30	60	700	940	28	30	51	70	83	60	82	45	15	3/8	1.98	J73N	14.31
1004/2	40	70	200	470	30	35	61	80	95	70	94	49	15	3/8	0.77	J74N	11.03
1004/3	40	70	300	570	30	35	61	80	95	70	94	49	15	3/8	1.15	J74N	12.94
1004/4	40	70	400	670	30	35	61	80	95	70	94	49	15	3/8	1.54	J74N	14.85
1004/5	40	70	500	770	30	35	61	80	95	70	94	49	15	3/8	1.92	J74N	16.76
1004/6	40	70	600	870	30	35	61	80	95	70	94	49	15	3/8	2.31	J74N	18.67
1004/7	40	70	700	970	30	35	61	80	95	70	94	49	15	3/8	2.69	J74N	20.58
1004/800	40	70	800	1070	30	35	61	80	95	70	94	49	15	3/8	3.07	J74N	22.33
1005/2	40	80	200	480	30	35	61	90	93	70	94	54	15	3/8	1.01	J75N	12.95
1005/3	40	80	300	580	30	35	61	90	93	70	94	54	15	3/8	1.51	J75N	14.98
1005/4	40	80	400	680	30	35	61	90	93	70	94	54	15	3/8	2.01	J75N	17.01
1005/5	40	80	500	780	30	35	61	90	93	70	94	54	15	3/8	2.51	J75N	19.04
1005/6	40	80	600	880	30	35	61	90	93	70	94	54	15	3/8	3.01	J75N	21.07
1005/7	40	80	700	980	30	35	61	90	93	70	94	54	15	3/8	3.51	J75N	23.10
1006/3	50	100	300	625	35	40	69	115	118	85	104	60	17	1/2	2.36	J76N	26.37
1006/4	50	100	400	725	35	40	69	115	118	85	104	60	17	1/2	3.14	J76N	29.89
1006/5	50	100	500	825	35	40	69	115	118	85	104	60	17	1/2	3.93	J76N	33.41
1006/600	50	100	600	925	35	40	69	115	118	85	104	60	17	1/2	4.71	J76N	36.89
1006/7	50	100	700	1025	35	40	69	115	118	85	104	60	17	1/2	5.50	J76N	40.45
1006/9	50	100	900	1225	35	40	69	115	118	85	104	60	17	1/2	7.07	J76N	47.49
1007/5	70	125	500	920	40	50	88	145	137	105	141	80	20	3/4	6.18	J77	65.70
1007/10	70	125	1000	1420	40	50	88	145	137	105	141	80	20	3/4	12.36	J77	97.45