

CUSTOMISED CYLINDER

Designed for - High Efficiency
- High Performance

MATERIAL GRADE

HARD CHROMIUM PLATED STEEL BARS

EPP®
Global Hydraulic Solutions

Specifications	C45C / JIS S45C
Straightness	Better than 0.5 / 2000 mm
Tolerance	ISO f7
Chromium Thickness	Minimum 25 micron
Surface Hardness	Ra Maximum 0.20 micron , Rt maximum 0.30 micron
Yield Strength	350 N / mm ²
Ultimate Tensile Strength	550 N / /mm ²
Corrosion Resistance	Laboratory tested according to NSS ISO 3768 and ASS ISO 3769. Results evaluated according to ISO 4540. NSSrating : 9

PRECISION HONED TUBES

Specifications	ST 52.3 / SAE 1026 / JIS G 3445 (1974) STKM-13C
Straightness	Commercially straight as per ASTM A - 5
Internal Diameter Tolerance	ISO H9
Tube Condition	Stress relief annealed
Yield Strength	350 N / mm ² / 57KSI
Ultimate Tensile Strength	550 N / mm ² / 74KSI

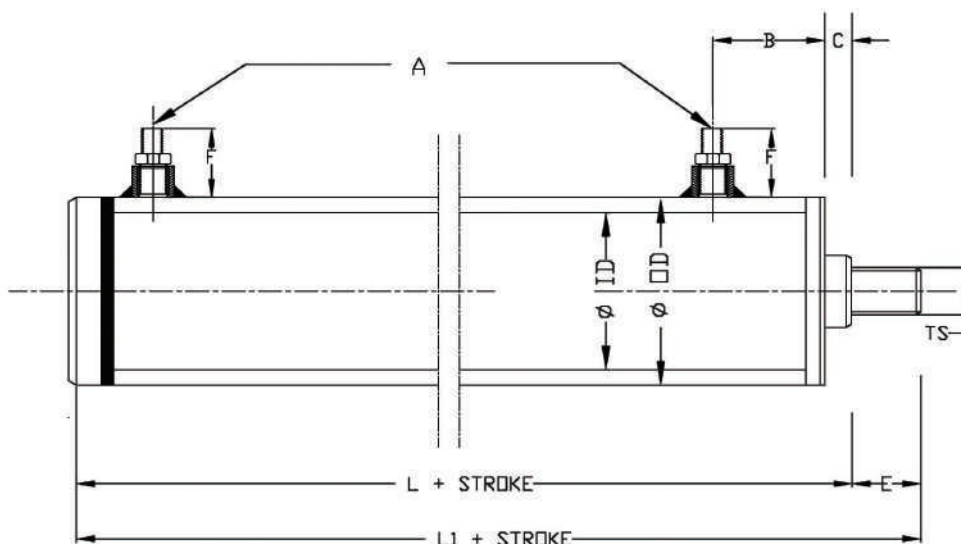
All attachment are mild steel unless otherwise specified
Also available - ST52 clevis on request

BASIC UNIT

CUSTOMISED CYLINDER

Designed for - High Efficiency
- High Performance

BM
Series



EPP®
Global Hydraulic Solutions

Cylinder Bore Dia.	Capacity (220 bar) KN					OD	A BSPT	B	C	E	F	TS		L	L1	*** X
	Push	Rod		Rod 2								Rod				
		Dia.(1)	Pull	Dia.(2)	Pull							Dia.(1)	Dia.(2)			
40	27	20	20	-	-	50	3/8"	50	20	20	65	M16x1.5	M18x1.5	139	159	300
50	42	25	32	30	27	60	3/8"	57	20	25	65	M18x1.5	M24x2.0	148	173	300
63	67	30	53	35	47	73	3/8"	60	20	30	65	M24x2.0	M24x2.0	159	189	500
80	108	45	74	50	66	95	3/8"	78	20	40	65	M30x2.0	M24x2.0	187	227	800
100	170	50	127	70	86	115	1/2"	91	25	45	65	M36x2.0	M30x2.0	220	265	800
125	265	70	222	80	156	145	1/2"	95	25	60	65	M56x2.0	M45x2.0	236	296	1000
140	332	70	249	90	195	160	1/2"	105	30	70	65	M56x2.0	M64x3.0	262	332	1000
150	381	70	298	80	273	170	1/2"	120	30	80	65	M56x2.0	M64x3.0	297	377	1000
160	434	80	325	90	297	185	1/2"	125	35	80	65	M64x3.0	M72x3.0	305	385	1000
180	549	90	412	100	380	205	1/2"	132	35	90	65	M72x3.0	M80x3.0	330	420	1000
200	678	100	509	125	413	230	1/2"	145	40	110	65	M80x3.0	M110x3.0	355	465	1000
230	897	125	632	150	515	273	1/2"	145	40	130	65	M110x3.0	M120x3.0	355	485	1000
250	1059	125	795	150	678	295	1/2"	171	50	140	65	M110x3.0	M125x3.0	403	543	1200
300	1526	150	1144	180	976	355	3/4"	191	50	150	65	M125x3.0	M140x3.0	438	588	1500
350	2076	180	1527	200	1398	405	3/4"	225	60	160	75	M140x3.0	M150x3.0	1050	1210	1500
400	2712	200	2034	250	1653	457	3/4"	250	70	170	75	M150x3.0	M170x3.0	2480	2650	1500

*** Stroke exceeded(X)please refer to manufacturer

MODEL CODE: BM - ID / ROD - STROKE

EXAMPLE: ID 100, ROD50, STROKE 500

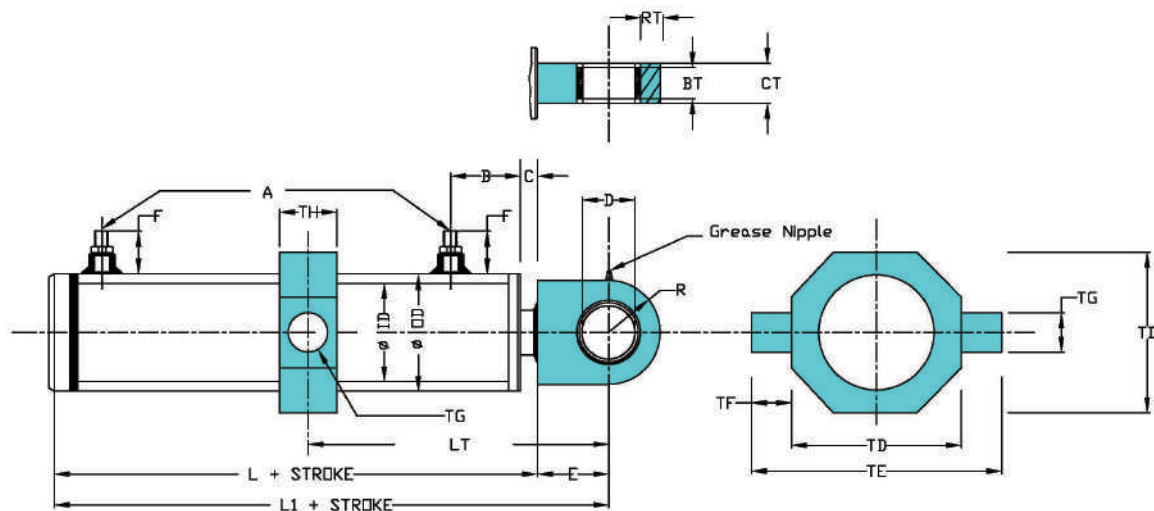
: BM - 100/50-500

CENTER TRUNION & SPHERICAL MOUNTING ON PLUNGER

CUSTOMISED CYLINDER

Designed for - High Efficiency
- High Performance

CTSBC
Series



EPP®
Global Hydraulic Solutions

Cylinder Bore Dia.	Capacity(220bar) KN					OD	A BSPT	B	C	D	F	RT	BT	CT	R	TD	TE	TF	TG	TH	LT Min.	L	L1	*** X
	Push	Rod		Rod 2																				
		Dia.	Pull	Dia.	Pull																			
40	27	20	20	-	-	50	3/8"	50	20	20	65	7.5	16	30	25	65	105	20	20	30	150	139	173	300
50	42	25	32	30	27	60	3/8"	57	20	25	65	9	20	35	30	80	130	25	25	35	160	148	188	300
63	67	30	52	35	47	73	3/8"	60	20	35	65	12.5	25	45	40	95	165	35	35	45	170	159	204	500
80	108	45	74	50	66	95	3/8"	78	20	40	65	14	28	55	45	120	200	40	40	50	210	187	242	800
100	170	50	127	70	86	115	1/2"	91	25	45	65	21.5	32	60	55	150	240	45	45	55	250	220	292	800
125	265	70	222	80	156	145	1/2"	95	25	50	65	32.5	35	80	70	185	285	50	50	60	270	236	318	1000
140	332	70	249	90	195	160	1/2"	105	30	60	65	35	44	85	80	200	310	55	55	65	300	262	357	1000
150	381	70	298	80	273	170	1/2"	120	30	70	65	32.5	49	95	85	240	360	60	60	70	330	297	402	1000
160	434	80	325	90	297	185	1/2"	125	35	80	65	35	55	100	95	260	390	65	65	80	360	305	420	1000
180	549	90	412	100	380	205	1/2"	132	35	80	65	45	55	110	105	260	400	70	70	80	380	330	455	1000
200	678	100	509	125	413	230	1/2"	145	40	90	65	50	60	120	115	280	440	80	80	100	420	355	490	1000
230	897	125	632	150	515	273	1/2"	145	40	100	65	60	70	150	135	390	590	100	100	130	450	355	490	1000
250	1059	125	795	150	678	295	1/2"	171	50	110	65	65	70	150	145	390	590	100	100	130	510	403	558	1200
300	1526	150	1144	180	976	355	3/4"	191	50	120	65	85	85	180	175	450	700	125	125	150	600	438	633	1500
350	2076	180	1527	200	1398	405	3/4"	225	60	150	75	85	100	220	200	500	800	150	150	200	750	1050	1300	1500
400	2712	200	2034	250	1653	470	3/4"	250	70	200	75	100	150	220	250	600	900	200	200	300	950	2480	2800	1500

*** Stroke exceeded(X)please refer to manufacturer

MODEL CODE: CTSBC - ID / ROD - STROKE

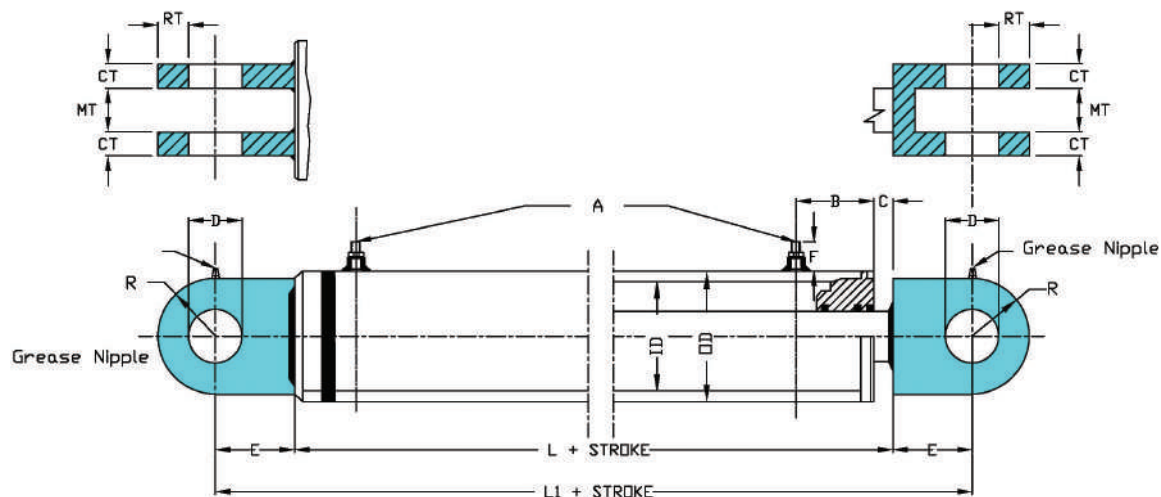
EXAMPLE: ID 100, ROD50, STROKE 500

: CTSBC - 100/50-500

BOTH END FEMALE CLEVIS MOUNTING

CUSTOMISED CYLINDER

Designed for - High Efficiency
- High Performance



EPP®
Global Hydraulic Solutions

Cylinder Bore Dia.	Capacity (220 bar) KN					OD	A BSPT	B	C	D	E	E1	F	RT	MT	CT	R	L	L1	*** X
	Push	Rod		Rod																
		Dia.	Pull	Dia.	Pull															
40	27	20	20	-	-	50	3/8"	50	20	20	34	60	65	15	15	10	25	139	233	300
50	42	25	32	30	27	60	3/8"	57	20	25	40	80	65	17.5	20	10	30	148	268	300
63	67	30	53	35	47	73	3/8"	60	20	35	45	100	65	17.5	30	15	35	159	304	500
80	108	45	74	50	66	95	3/8"	78	20	40	55	110	65	25	35	15	45	187	352	800
100	170	50	127	70	86	115	1/2"	91	25	45	72	140	65	32.5	40	20	55	220	432	800
125	265	70	222	80	156	145	1/2"	95	25	50	82	160	65	45	45	25	70	236	478	1000
140	332	70	249	90	195	160	1/2"	105	30	60	95	180	65	50	55	25	80	262	537	1000
150	381	70	298	80	273	170	1/2"	120	30	70	105	190	65	50	60	30	85	297	592	1000
160	434	80	325	90	297	185	1/2"	125	35	80	115	190	65	55	70	30	95	305	610	1000
180	549	90	412	100	380	205	1/2"	132	35	80	125	230	65	65	70	35	105	330	685	1000
200	678	100	509	125	413	230	1/2"	145	40	90	135	260	65	70	85	40	115	355	750	1000
230	897	125	632	150	515	273	1/2"	145	40	100	135	280	65	85	90	40	135	355	770	1000
250	1059	125	795	150	678	295	1/2"	171	50	110	155	330	65	90	90	45	145	403	888	1200
300	1526	150	1144	180	976	355	3/4"	191	50	120	195	400	65	115	110	60	175	438	1033	1500
350	2076	180	1527	200	1398	405	3/4"	225	60	150	250	450	75	125	130	65	200	1050	1750	1500
400	2712	200	2034	250	1653	457	3/4"	250	70	200	320	510	75	150	150	75	250	2480	3310	1500

*** Stroke exceeded(X)please refer to manufacturer

MODEL CODE: FC - ID / ROD - STROKE

EXAMPLE: ID 100, ROD50, STROKE 500

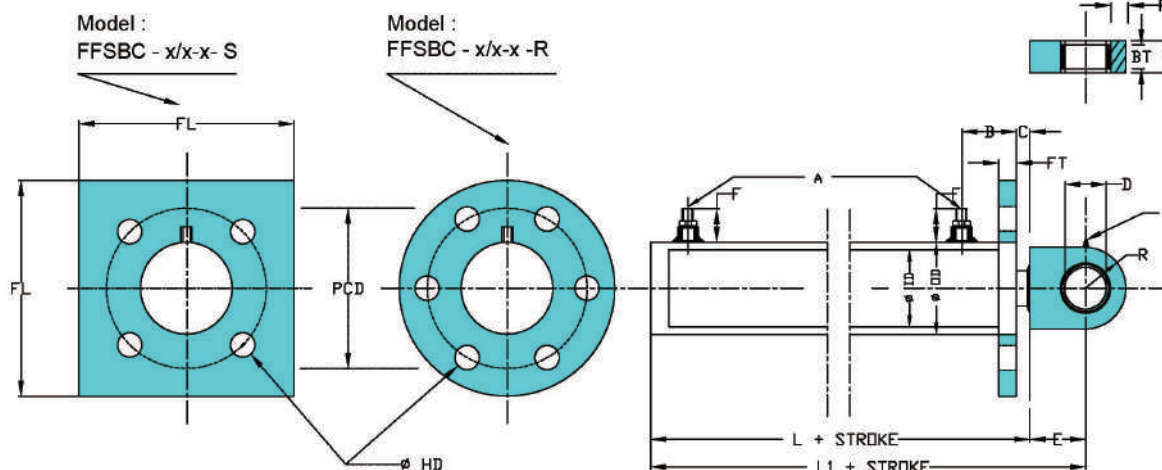
: FC - 100/50-500

FRONT FLANGE & SPHERICAL MOUNTING ON PLUNGER

CUSTOMISED CYLINDER

Designed for - High Efficiency
- High Performance

FFSBC
Series



Cylinder Bore Dia.	Capacity (220 bar) KN					OD	A BSPT	B	C	D	E	F	RT	BT	CT	R	FT	FL	PCD	HD	L	L1	*** X
	Push	Rod		Rod																			
		Dia.	Pull	Dia.	Pull																		
40	27	20	20	-	-	50	3/8"	50	20	20	34	65	7.5	16	30	25	12	120	90	11 (4x)	139	173	300
50	42	25	32	30	27	60	3/8"	57	20	25	40	65	9	20	35	30	18	130	100	13 (4x)	148	188	300
65	67	35	52	-	-	73	3/8"	60	20	35	45	65	12.5	25	45	40	20	145	115	13 (6x)	159	204	500
80	108	45	74	50	66	95	3/8"	78	20	40	55	65	14	28	55	45	25	175	140	18 (6x)	187	242	800
100	170	50	127	70	86	115	1/2"	91	25	45	72	65	21.5	32	60	55	30	200	160	22 (6x)	220	292	800
125	265	70	222	80	156	145	1/2"	95	25	50	82	65	32.5	35	80	70	40	250	210	22 (6x)	236	318	1000
140	332	70	249	90	195	160	1/2"	105	30	60	95	65	35	44	85	80	40	280	220	32 (6x)	262	357	1000
150	381	70	298	80	273	170	1/2"	120	30	70	105	65	32.5	49	95	85	45	330	260	32 (6x)	297	402	1000
160	434	80	325	90	297	185	1/2"	125	35	80	115	65	35	55	100	95	45	340	265	32 (6x)	305	420	1000
180	549	90	412	100	380	205	1/2"	132	35	80	125	65	45	55	110	105	50	360	290	32 (8x)	330	455	1000
200	678	100	509	125	413	230	1/2"	145	40	90	135	65	50	60	120	115	50	400	320	32 (8x)	355	490	1000
230	897	125	632	150	515	273	1/2"	145	40	100	135	65	60	70	150	135	60	500	400	38 (8x)	355	490	1000
250	1059	125	795	150	678	295	1/2"	171	50	110	155	65	65	70	150	145	60	500	400	38 (8x)	403	558	1200
300	1526	150	1144	180	976	355	3/4"	191	50	120	195	65	85	85	180	175	75	550	450	38 (12x)	438	633	1500
350	2076	180	1527	200	1398	405	3/4"	225	60	150	250	75	85	100	220	200	85	650	550	38 (12x)	1050	1300	1500
400	2712	200	2034	250	1653	470	3/4"	250	70	200	320	75	100	150	220	250	100	700	600	38 (12x)	2480	2800	1500

*** Stroke exceeded(X)please refer to manufacturer

MODEL CODE: FFSBC - ID / ROD - STROKE

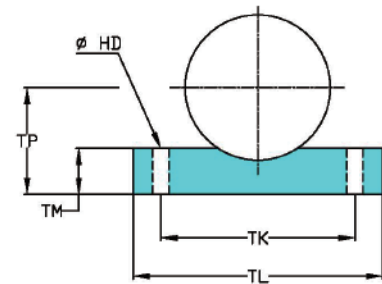
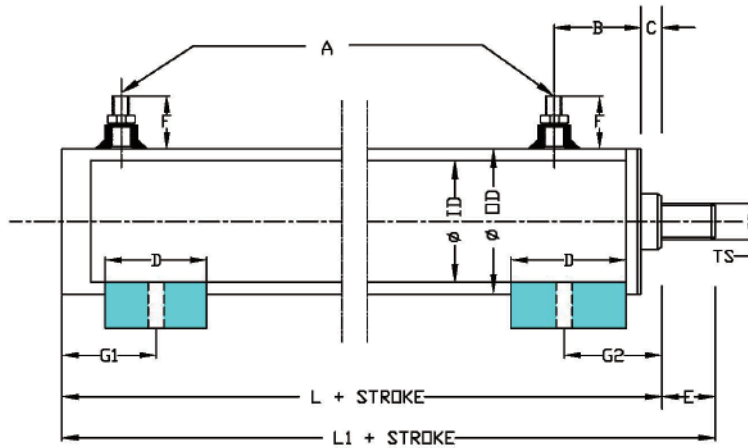
EXAMPLE: ID 100, ROD50, STROKE 500

: FFSBC - 100/50-500

FOOT MOUNTING

CUSTOMISED CYLINDER

Designed for - High Efficiency
- High Performance



EPP®
Global Hydraulic Solutions

Cylinder Bore Dia.	Capacity (220 bar) KN					OD	A BSPT	B	C	D	E	F	G1	G2	HD	TK	TL	TM	TP	TS		L	L1	***		
	Push	Rod		Rod 2																Rod				Dia.(1)	Dia.(2)	X
		Dia.(1)	Pull	Dia.(2)	Pull															Dia.(1)	Dia.(2)					
40	27	20	20	-	-	50	3/8"	50	20	40	20	65	44	60	11	80	110	15	35	M16x1.5	M18x1.5	139	159	300		
50	42	25	32	30	27	60	3/8"	57	20	40	25	65	44	69	11	90	120	15	40	M18x1.5	M24x2.0	148	173	300		
63	67	30	53	35	47	73	3/8"	60	20	50	30	65	55	76	13	115	150	18	50	M24x2.0	M24x2.0	159	189	500		
80	108	45	74	50	66	95	3/8"	78	20	50	40	65	57	81	17	140	185	22	60	M30x2.0	M30x2.0	187	227	800		
100	170	50	127	70	86	115	1/2"	91	25	60	45	65	79	98	21	175	230	25	80	M36x2.0	M45x2.0	220	265	800		
125	265	70	222	80	156	145	1/2"	95	25	60	60	65	83	101	25	225	285	25	95	M56x2.0	M64x3.0	236	296	1000		
140	332	70	249	90	195	160	1/2"	105	30	70	70	65	91	110	32	240	310	30	105	M56x2.0	M64x3.0	262	332	1000		
150	381	70	298	80	273	170	1/2"	120	30	80	80	65	93	127	32	275	345	40	115	M56x2.0	M64x3.0	297	377	1000		
160	434	80	325	90	297	185	1/2"	125	35	90	80	65	106	137	32	290	380	40	128	M64x3.0	M72x3.0	305	385	1000		
180	549	90	412	100	380	205	1/2"	132	35	90	90	65	110	143	35	310	390	45	135	M72x3.0	M80x3.0	330	420	1000		
200	678	100	509	125	413	230	1/2"	145	40	90	110	65	112	157	38	340	440	50	160	M80x3.0	M110x3.0	355	465	1000		
230	897	125	632	150	515	273	1/2"	145	40	110	130	65	125	175	45	400	500	70	195	M110x3.0	M120x3.0	355	485	1000		
250	1059	125	795	150	678	295	1/2"	171	50	110	140	65	125	175	45	400	500	70	195	M110x3.0	M125x3.0	403	543	1200		
300	1526	150	1144	180	976	355	3/4"	191	50	130	150	65	155	190	45	470	580	90	250	M125x3.0	M140x3.0	438	588	1500		

*** Stroke exceeded(X)please refer to manufacturer

MODEL CODE: FM - ID / ROD - STROKE

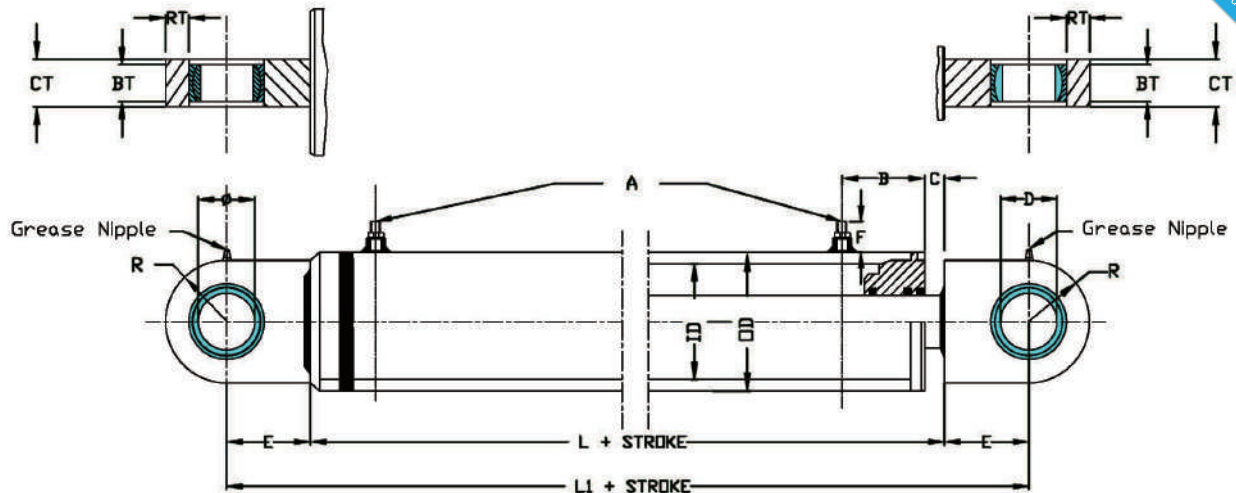
EXAMPLE: ID 100, ROD50, STROKE 500

: FM - 100/50-500

BOTH END SPHERICAL BEARING MOUNTING

CUSTOMISED CYLINDER

Designed for - High Efficiency
- High Performance



Cylinder Bore Dia.	Capacity (220 bar) KN					OD	A BSPT	B	C	D	E	F	RT	BT	CT	R	L	L1	*** X
	Push	Rod		Rod															
		Dia.	Pull	Dia.	Pull														
40	27	20	20	-	-	50	3/8"	50	20	20	34	65	7.5	16	30	25	139	207	300
50	42	20	32	30	27	60	3/8"	57	20	25	40	65	9	20	35	30	148	228	300
63	67	35	52	35	47	73	3/8"	60	20	35	45	65	12.5	25	45	40	159	249	500
80	108	30	74	50	66	95	3/8"	78	20	40	55	65	14	28	55	45	187	297	800
100	170	50	127	70	86	115	1/2"	91	25	45	72	65	21.5	32	60	55	220	364	800
125	265	70	222	80	156	145	1/2"	95	25	50	82	65	32.5	35	80	70	236	400	1000
140	332	70	249	90	195	160	1/2"	105	30	60	95	65	35	44	85	80	262	452	1000
150	381	70	298	80	273	170	1/2"	120	30	70	105	65	32.5	49	95	85	297	507	1000
160	434	80	325	90	297	185	1/2"	125	35	80	115	65	35	55	100	95	305	535	1000
180	549	90	412	100	380	205	1/2"	132	35	80	125	65	45	55	110	105	330	580	1000
200	678	100	509	125	413	230	1/2"	145	40	90	135	65	50	60	120	115	355	625	1000
230	897	125	632	150	515	273	1/2"	145	40	100	135	65	60	70	150	135	355	625	1000
250	1059	125	795	150	678	295	1/2"	171	50	110	155	65	65	70	150	145	403	713	1200
300	1526	150	1144	180	976	355	3/4"	191	50	120	195	65	85	85	180	175	438	828	1500
350	2076	180	1527	200	1398	405	3/4"	225	60	150	250	75	85	100	220	200	1050	1650	1500
400	2712	200	2034	250	1653	457	3/4"	250	70	200	320	75	100	150	220	250	2480	3100	1500

*** Stroke exceeded(X)please refer to manufacturer

MODEL CODE: SBC - ID / ROD - STROKE

EXAMPLE: ID 100, ROD50, STROKE 500

: SBC - 100/50-500