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 Томск (3822)98-41-53
 Тула (4872)74-02-29
 Тюмень (3452)66-21-18
 Ульяновск (8422)24-23-59
 Уфа (347)229-48-12
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We have been your faithful partner since opened our business.

Thousands of SHIBANG hydraulic cylinders and hydraulic systems, which are being used in various related industries and featuring good reliability, stability and durability, are providing the users with professional services and best solutions.

Application



Rotary drilling rig



Excavator



Shield machine



Special vehicle



Port machinery



Marine equipment & offshore engineering



Front carrier



Aerogenerator



Metallurgical machinery



Hydraulic press



Cement equipment



Water conservancy machinery

Product catalog

Series	Equivalent to... series	Specifications	Pressure
SB01 Heavy duty hydraulic cylinder	CD/CG 250 350 CDH1 CDH2	Piston diameter ϕ 40~500mm Travel $\leq 16m$	25~35MPa
SB02 Heavy duty hydraulic cylinder(servo.with sensor)	CD/CG 250 350 CDH1 CDH2	Piston diameter ϕ 40~500mm Travel $\leq 16m$	25~35MPa
SB03 Tie-rod hydraulic cylinder(servo.with sensor)	SB 70 140L1 W 70 140L1	Piston diameter ϕ 32~250mm Travel $\leq 5m$	7,14,21 MPa
SB04 Project hydraulic cylinder(servo.with sensor)	SHSG / HSG	Piston diameter ϕ 25~200mm Travel $\leq 16m$	16~24MPa
SB05 Vehicles hydraulic cylinder(servo.with sensor)	SBDG / DG	Piston diameter ϕ 25~200mm Travel $\leq 16m$	16~24MPa
SB06 Press plunger hydraulic cylinder(servo.with sensor)	SBYZG	Piston diameter ϕ 100~1200mm Travel $\leq 16m$	16~24MPa
SB07 Multi-stage hydraulic cylinder(servo.with sensor)	SBDH	Piston diameter ϕ 50~500mm Travel $\leq 16m$	16~24MPa
SB08 Swivel gear cylinder(servo.with sensor)	SB08	Piston diameter ϕ 40~400mm Swing angle $\leq 360^\circ$	14~16MPa

SB01 (series)

Heavy duty hydraulic cylinder

This series of single-piston double-acting differential cylinders includes 36 kinds of specifications, each of which is specified by a combination of one of 18 bores and one of 2 ratios. Moreover, it is possible to have 384 kinds of specifications, considering the fact that the cylinder head flange, intermediate shaft pin and base mounting (3 factors) can also be those of a double-rod double-acting steady cylinder and in combination with whether there is cushion. Its mounting type and size are in accordance with German steel mills and ISO3320 standards. Especially suitable for adverse environment and where heavy load working status is required, this series is widely used in industrial sectors such as iron and steel, casting, forging and machinery manufacturing etc.

Model designation

Kinds: CD – differential cylinder CG – steady cylinder Pressure: 250 – 25MPa 350 – 35Mpa Mounting type: A – Tail single earring with bush B – Tail single earring with knuckle bearing C – Front flange D – Rear flange E – Intermediate shaft pin F – Base Cylinder head and bottom connecting method: A. Both ends are connected by thread B. Head is connected by thread, and bottom by welding(D$\leq$100) 10 – 10 series, 10–19 series with same size Thread 01 – British 02 – Metric	D/d × S 10 ※ Travel	Remarks Seal T – Slide ring combination seal Structure A – V-ring set Oil medium M – Mineral oil, NBR seals V – Phosphate viton seals Cushionr U –without cushion D–with cushionr Piston rod thread G – for earrings GA, GAK and SA A – for GAS earrings Piston rod material C – 45# steel, plated with hard chrome H – 50# steel, plated with hard chrome L – 1cr1 7Ni2, plated with hard chrome
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SB01 (series)

Heavy duty hydraulic cylinder

Working conditions:

- Working Pressure Mpa: 25、35
- Working temperature °C: -30 ~ +100
- Working medium: Mineral oil, phosphate oil, and water-glycol
- Medium viscosity cst: 2.8-380
- Working speed m/s: 0.5(possible to reach 15 years with special seal)

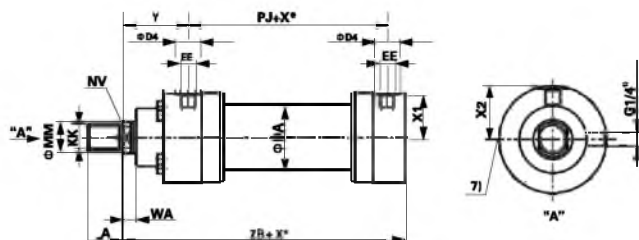
Specifications / technical parameters

Piston	Piston rod	Area ratio	Areas			Force at 250 bar ¹⁾			Flow at 0.1 m/s ²⁾		
			Piston	Rod	Annulus	Push	Regen.	Pull	Out	Regen.	In
AL φ mm	MM φ mm	A ₁ /A ₂	A ₁ cm ²	A ₂ cm ²	A ₃ cm ²	F ₁ kN	F ₂ kN	F ₃ kN	q _{v1} L/min	q _{v2} L/min	q _{v3} L/min
40	22	1.43	12.57	3.80	8.77	31.40	9.50	21.93	7.5	2.3	5.3
	28	1.96		6.16	6.41		15.40	16.03		3.7	3.8
50	28	1.46	19.64	6.16	13.48	49.10	15.40	33.70	11.8	3.7	8.1
	36	2.08		10.18	9.46		25.45	23.65		6.1	5.7
63	36	1.48	31.17	10.18	20.99	77.90	25.45	52.45	18.7	6.1	12.6
	45	2.04		15.90	15.27		39.75	38.15		9.5	9.2
80	45	1.46	50.27	15.90	34.36	125.65	39.75	85.90	30.2	9.5	20.7
	56	1.96		24.63	25.63		61.55	64.10		14.8	15.4
100	56	1.46	78.54	24.63	53.91	196.35	61.55	134.80	47.1	14.8	32.3
	70	1.96		38.48	40.06		96.20	100.15		23.1	24.0
125	70	1.46	122.72	38.48	84.24	306.75	96.20	210.55	73.6	23.1	50.5
	90	2.08		63.62	59.10		159.05	147.70		38.2	35.4
140	90	1.70	153.94	63.62	90.32	384.75	159.05	225.70	92.4	38.2	54.2
	100	2.04		78.54	75.40		196.35	188.40		47.1	45.3
160	100	1.64	201.06	78.54	122.50	502.50	196.35	306.15	120.6	47.1	73.5
	110	1.90		95.03	106.03		237.65	265.08		57.0	63.6
180	110	1.60	254.47	95.03	159.44	636.17	237.65	398.60	152.7	57.0	95.7
	125	1.93		122.72	131.75		306.80	329.37		73.6	79.1
200	125	1.64	314.16	122.72	191.44	785.25	306.80	478.45	188.5	73.6	114.9
	140	1.96		153.94	160.22		384.90	400.55		92.4	96.1
220	140	1.68	380.13	153.94	226.19	950.3	384.8	565.5	228.1	92.4	135.7
	160	2.12		210.06	179.1		502.6	447.7		120.7	107.4
250	160	1.69	490.88	201.06	289.8	1227.2	502.7	724.5	294.5	120.7	173.8
	180	2.08		254.47	236.4		636.2	591.0		152.7	141.8
280	180	1.70	615.75	254.47	361.3	1539.4	636.2	903.2	369.4	152.7	216.7
	200	2.04		314.16	301.6		785.4	753.9		188.5	180.9
320	200	1.64	804.25	314.16	490.1	2010.6	785.4	1225.2	482.5	188.5	294.0
	220	1.90		380.13	424.2		950.3	1060.3		228.1	254.4
360	200	1.45	1017.88	314.16	703.7	2544.7	785.4	1759.3	610.7	188.5	422.2
	220	1.60		380.13	637.7		950.3	1594.4		228.1	382.6
	250	1.93		490.88	527.0		1227.2	1317.5		294.6	316.1
400	220	1.43	1256.64	380.13	876.5	3141.6	950.3	2191.3	754.0	228.1	525.9
	250	1.64		490.88	765.8		1227.2	1914.4		294.6	459.4
	280	1.96		615.75	640.9		1539.4	1602.2		369.5	384.5
450	250	1.45	1590.44	490.88	1099.6	3976.1	1227.2	2748.9	954.2	294.6	659.6
	280	1.63		615.75	974.7		1539.4	2436.7		369.5	584.7
	320	2.02		804.25	786.2		2010.6	1965.5		482.5	471.7
500	280	1.46	1963.5	615.75	1347.7	4908.7	1539.4	3369.4	1178.0	369.5	808.5
	320	1.69		804.25	1159.2		2010.6	2898.1		482.5	695.5
	360	2.08		1017.88	945.6		2544.7	2364.0		610.8	567.2

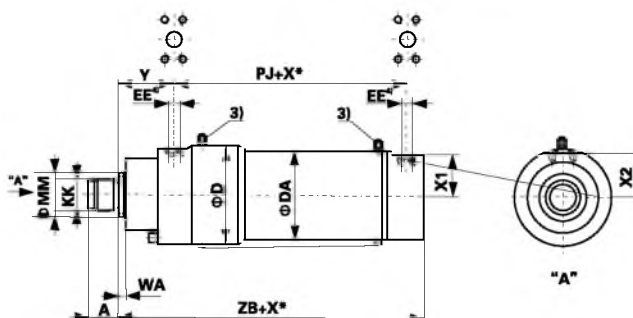
SB01 (series)

Heavy duty hydraulic cylinder

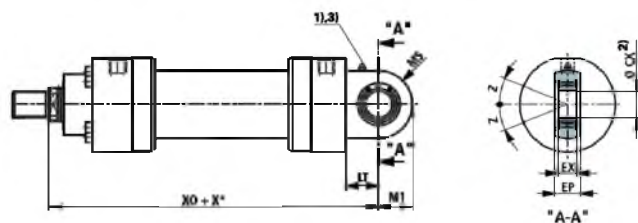
CD250; AL- ϕ 40-320 mm



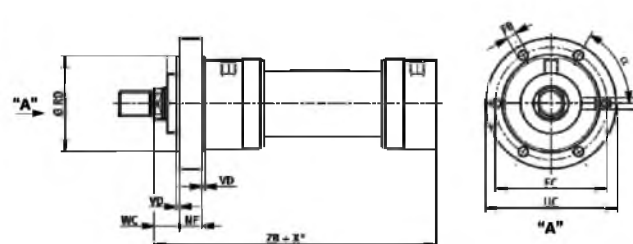
CD250; AL- ϕ 360–500 mm



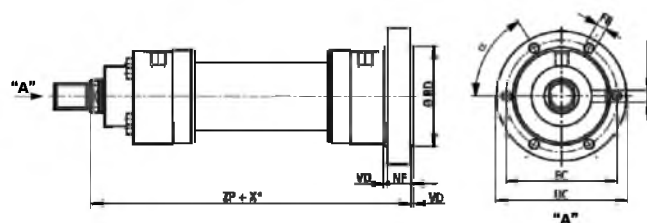
CD250 Mp5; AL- ϕ 40-320 mm



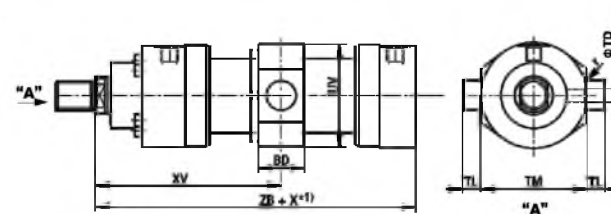
CD250 Mf3; AL- ϕ 40-320 mm



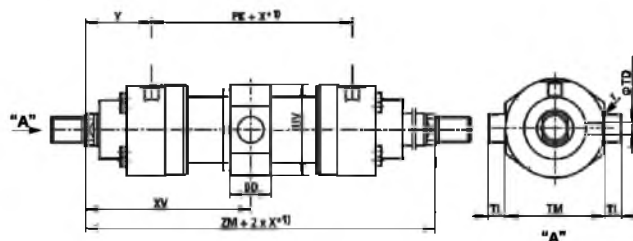
CD250 Mf4; AL- ϕ 40–320 mm



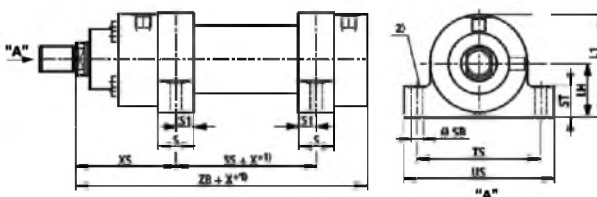
CD250 Mt4; AL- ϕ 40–320 mm



CD250 MT4;AL- ϕ 40-320 mm



CD250 MS2;AL- ϕ 40-320 mm



SB01 (series)

Heavy duty hydraulic cylinder

AL φ	MM φ	KK 5)	A 5)	KK 6)	A 6)	NV	D	DA	D4 2)	EE 4)	EE 4)	PJ	WA	X1	X2	Y	ZB
40	22 28	M16 × 1.5	16	M18 × 2	30	16 22	88	50	34	G 1/2	M22 × 1.5	120	14	41	41	79	226
50	28 36	M22 × 1.5	22	M24 × 2	35	22 30	102	60	34	G1/2	M22 × 1.5	120	18	48.5	48.5	87	233
63	36 45	M28 × 1.5	28	M30 × 2	45	30 36	120	78	42	G3/4	M27 × 2	133	22	56.5	56.5	100	262
80	45 56	M35 × 1.5	35	M39 × 3	55	36 46	140	95	42	G3/4	M27 × 2	146	20	67	67	104	280
100	56 70	M45 × 1.5	45	M50 × 3	75	46 60	170	125	47	G1	M33 × 2	171	30	82	82	124	330
125	70 90	M58 × 1.5	58	M64 × 3	95	60 75	206	150	58	G11/4	M42 × 2	205	32	99	99	135	382
140	90 100	M65 × 1.5	65	M80 × 3	110	75 85	226	170	58	G11/4	M42 × 2	219	35	109.5	109.5	156	420
160	100 110	M80 × 2	80	M90 × 3	120	85 95	265	190	65	G11/2	M48 × 2	240	40	129	129	185	475
180	110 125	M100 × 2	100	M100 × 3	140	95 110	292	210	65	G11/2	M48 × 2	264	40	142.5	142.5	199	515
200	125 140	M110 × 2	110	M110 × 4	150	110 120	310	235	65	G11/2	M48 × 2	278	40	152	152	205	535
220	140 160	M120 × 3	120	M120 × 4	160	120 140	355	273	65	G11/2	M48 × 2	326	40	174	174	242	635
250	160 180	M120 × 3	120	M120 × 4	160	140 160	395	305	65	G11/2	M48 × 2	326	40	194	194	266	659
280	180 200	M130 × 3	130	M150 × 4	190	160 180	425	343	65	G11/2	M48 × 2	375	40	210	210	282	744
320	200 220	—	—	M160 × 4	200	180 200	490	394	65	G11/2	M48 × 2	431	40	242	242	287	815
360	200 220 250	M150 × 3	147	—	—	—	456	419	—	NW51 ⁴⁾		418	40	200	217	280	765
400	220 250 280	M160 × 4	169	—	—	—	520	470	—	NW51 ⁴⁾		418	40	221	251	340	825
450	250 280 320	M180 × 4	186	—	—	—	570	521	—	NW51 ⁴⁾		448	40	256	276	340	855
500	280 320 360	M200 × 4	201	—	—	—	644	610	—	NW51 ⁴⁾		448	40	290	314	345	860

Notes

AL =Piston φ

MM =Piston rod φ

X' =Stroke length

Stroke and overall length tolerances to
ISO 8135

¹⁾ =Bleed point: Viewed to the piston rod ,
this point is always offset by 90°
(clockwise)with reference to the
connection ports

²⁾ = φ D4 max 0.5mm deep

³⁾ =Coupling / bleed point

⁴⁾ =Flange connection see separate table
page 34 and 35

⁵⁾ =Thread version "G"

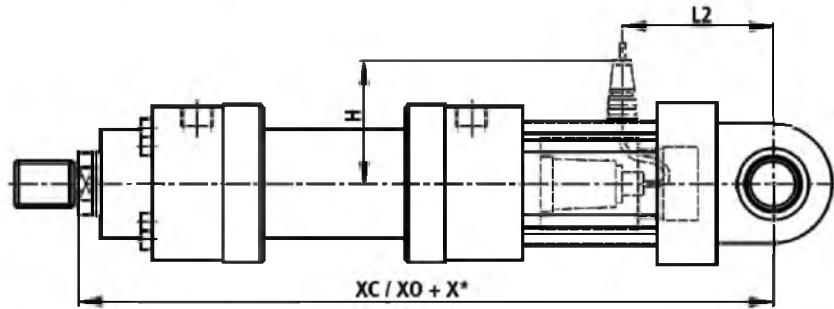
⁶⁾ =Thread version "A"

⁷⁾ =Throttle valve only with end position
cushioning "E" (180° with regard to
bleeding point)

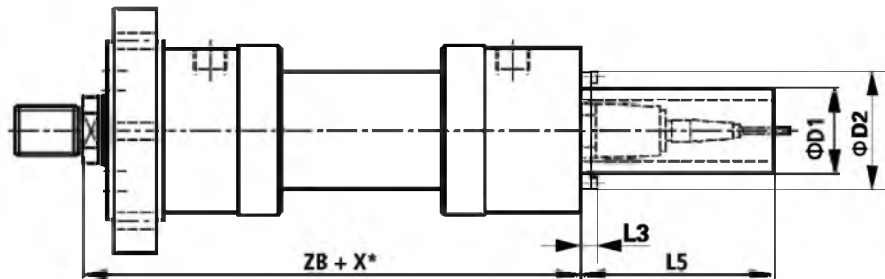
SB02 (series)

Position measuring system

MP3,MP5:AL- ϕ 40-200 mm



MF3:AL- ϕ 40-200 mm



Dimensions (in mm)

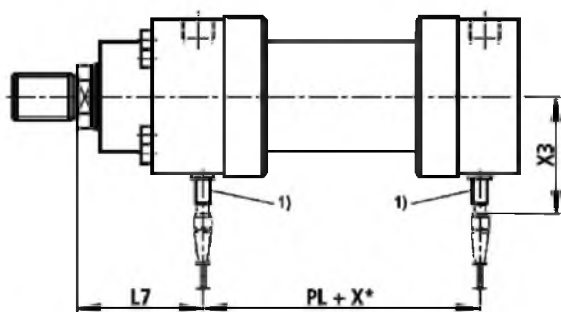
AL ϕ	MM ϕ	X* max.最大	XC	XO	H	ZB	ZP	VD	L2	L3	L4	L5	L6	D1 ϕ	D2 ϕ	D3 ϕ
40	28	700	417	417	115	235	265	5	98	12	0	160	160	60	88	0
50	28 36	800	430	430	120	243	274	5	103	12	0	160	160	60	88	0
63	36 45	1100	480	480	130	287	310	5	116	12	0	160	160	60	88	0
80	45 56	1400	515	515	125	312	330	5	132	12	0	160	137	60	88	0
100	56 70	1700	560	560	135	352	390	5	145	12	0	160	117	60	88	0
125	70 90	2000	620	620	145	392	432	5	172	12	21.5	160	115	60	88	33
140	90 100	2300	665	665	155	430	475	10	182	12	21.5	160	105	60	88	33
160	100 110	2600	720	720	165	475	535	10	200	12	28.5	160	90	60	88	43
180	110 125	3000	775	775	175	515	585	10	222	12	28.5	160	80	60	88	43
200	125 140	3000	815	815	190	535	615	10	237	12	32	160	70	60	88	48
220	140 160	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)
250	160 180	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)
280	180 200	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)
320	200 220	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)	1)

Notes for main dimensions, see pages 10 and
 AL =Piston ϕ
 MM =Piston rod ϕ
 X* =Stroke length
 1) =Dimensions on request

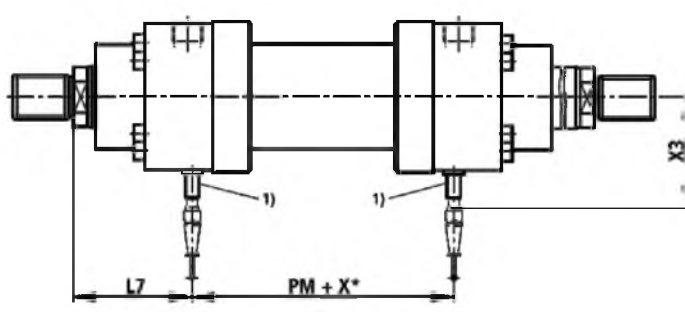
SB02 (series)

Proximity switch

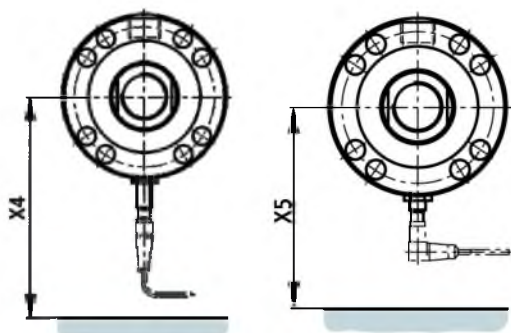
CDH1:AL- ϕ 40-320 mm



CGH1:AL- ϕ 40-320 mm



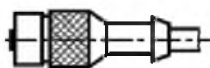
Mounting types



Plug-in connector with 5m cable

Material no.00026512

(Plug-in connector is not included within the scope of supply, has to be ordered separately)

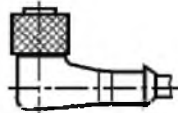


Plug-in connector , angled with 5m cable

(The orientation of the cable exit is not definable)

Material no . 00021404

(Plug-in connector is not included within the scope of supply, has to be ordered separately)



Dimensions (in mm)

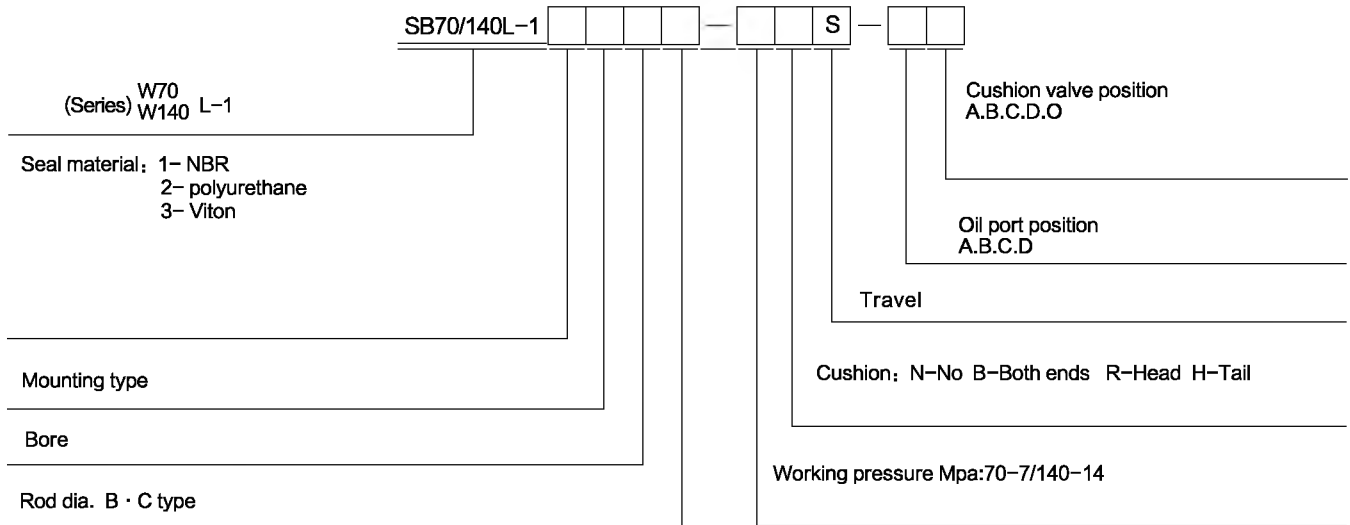
AL ϕ	MM ϕ	PL	PM	L7	X3	X4	X5
40	22 28	112	112	83	94	170	125
50	28 36	110	110	92	98	175	130
63	36 45	125	125	104	103	180	135
80	45 56	138	138	108	108	185	140
100	56 70	161	161	129	116	195	150
125	70 90	193	193	141	126	205	160
140	90 100	209	209	161	146	225	180
160	100 110	228	228	191	151	230	185
180	110 125	254	254	204	159	235	190
200	125 140	264	264	212	166	245	200
220	140 160	2)	2)	2)	2)	2)	2)
250	160 180	2)	2)	2)	2)	2)	2)
280	180 200	2)	2)	2)	2)	2)	2)
320	200 220	2)	2)	2)	2)	2)	2)

SB03 (series)

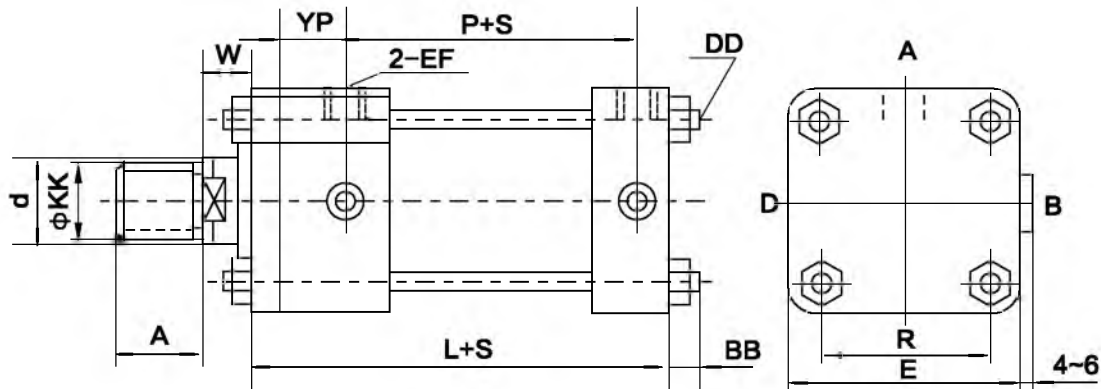
Tie-rod hydraulic cylinder

This series of hydraulic cylinders is of simple and compact structure, and is smaller than the cylinders with same pressure rating. Working pressure 7MPa, 14MPa; bore 40–250mm; ambient $-10^{\circ}\text{C}\sim+80^{\circ}\text{C}$

Model designation



Basic types



Specifications / technical parameters

Bore D	Minimum starting pressure	Max. allowed speed	Max. travel mm	Piston area cm			Ratio		Bore 缸径 D	Minimum starting pressure	Max. allowed speed	Max. travel mm	Piston area cm ²			Ratio	
				Rodless chamber	Rod chamber		Series B型	Series C型					Rodless chamber	Rod chamber 有杆腔		Series B	Series C
					Series	Series								Series B	Series C		
40	≤0.3 MPa	300 mm/s	1200	12.5	8.1	10	1.45	1.25	150	≤0.3 MPa	300 mm/s	2000	176.7	119.9	141.4	1.47	
50				19.6	13.4	15.6	1.46		160				201.0	137.4	161.4	1.46	
63			1600	31.1	21.2	25	1.47		180				254.4	175.9	204.2	1.45	
80				50.2	34.3	40.3	1.46		200				314.1	215.6	250.5	1.46	
100				78.5	53.9	62.6	1.46		220				394.0	271.3	315.5	1.45	
125			2000	122.7	83.1	98	1.47		250				490.8	336.9	392.3	1.46	
140				153.0	103.6	122.7	1.48										

SB03 (series)

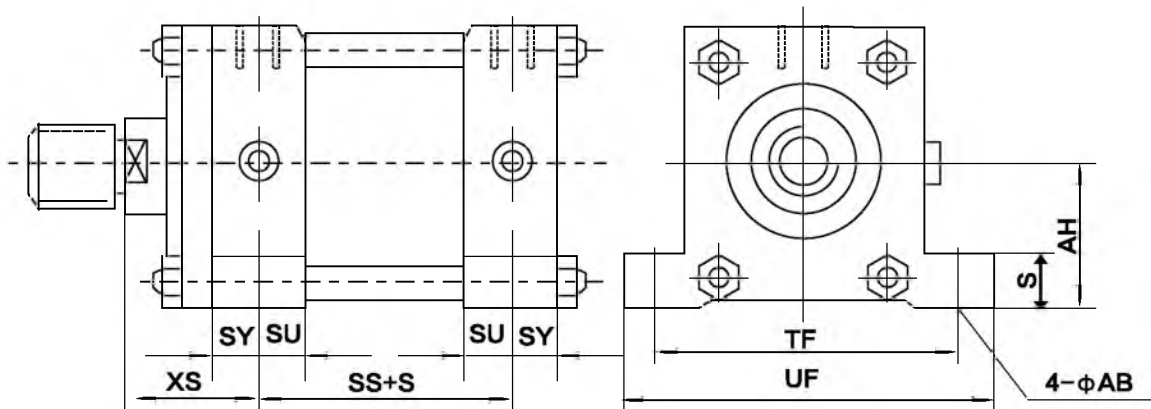
Tie-rod hydraulic cylinder

Basic types and dimensions

Bore	D	40	50	63	80	100	125	140	150	160	180	200	220	250
B型	ΦKK	M22×1.5	M24×1.5	M30×1.5	M39×1.5	M48×1.5	M64×2	M72×2	M76×2	M80×2	M95×2	M100×2	M120×2	M130×2
	A	30	35	45	60	75	95	110	115	120	140	150	180	195
	d	22	28	35	45	55	70	80	85	90	110	110	125	140
C型	ΦKK	M16×1.5	M20×1.5	M24×1.5	M30×1.5	M39×1.5	M48×1.5	M56×2	M60×2	M64×2	M72×2	M80×2	M95×2	M100×2
	A	25	30	35	45	60	75	80	85	95	110	120	140	150
	d	18	22	28	35	45	55	63	65	70	80	90	100	110
BB		11	11	13	16	18	21	22	25	25	27	29	34	37
DD		M10×1.25	M10×1.25	M12×1.5	M16×1.5	M18×1.5	M22×1.5	M24×1.5	M27×1.5	M27×1.5	M30×1.5	M33×1.5	M39×1.5	M42×1.5
E		65	75	90	110	135	165	185	196	210	235	262	292	325
EE		ZG 3/8	ZG 1/2	ZG 3/4	ZG 3/4	ZG 1	ZG 1	ZG 1	ZG 1	ZG 1 1/4	ZG 1 1/4	ZG 1 1/4	ZG 1 1/4	ZG 2
L		141	155	163	184	192	220	230	240	253	275	301	305	346
P		90	98	102	110	116	130	138	146	156	172	184	184	200
		45	52	63	80	102	122	138	148	160	182	200	225	250
W		30	30	35	35	40	45	50	50	55	55	55	60	65
YP		38	42	46	56	58	67	69	71	74	75	85	89	106

LA Installation dimensions

LA Tangential stand



Installation & outline dimensions

Bore/	D	40	50	63	80	100	125	140	150	160	180	200	220	250
ΦAB		11	14	18	18	22	26	26	30	33	33	36	42	45
LA	AH	37.5±0.15	45±0.15	50±0.15	60±0.25	71±0.25	85±0.25	95±0.25	105±0.25	112±0.25	125±0.25	140±0.25	150±0.25	170±0.25
	SS	98	108	106	124	122	136	144	146	150	172	186	186	206
	ST	14	17	19	25	27	32	35	37	42	47	52	52	57
	SU	31	34	32	42	38	41	41	38	40	—	—	—	—
	SY	13	14	18	18	22	25	25	28	31	35	39	39	47
	TF	95	115	132	155	190	224	250	270	285	315	355	395	425
	UF	118	145	165	190	230	272	300	320	345	375	425	475	515
	XS	57	60	71	74	85	99	106	111	122	123	131	140	158

SB03 (series)

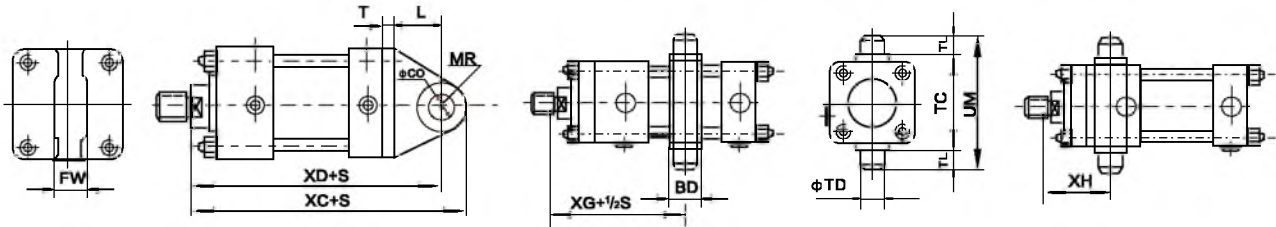
Tie-rod hydraulic cylinder

CA T^A_C F^A_B F^C_D Installation dimensions

CA Tail single earring seat

TC Intermediate shaft pin

TA Head shaft pin

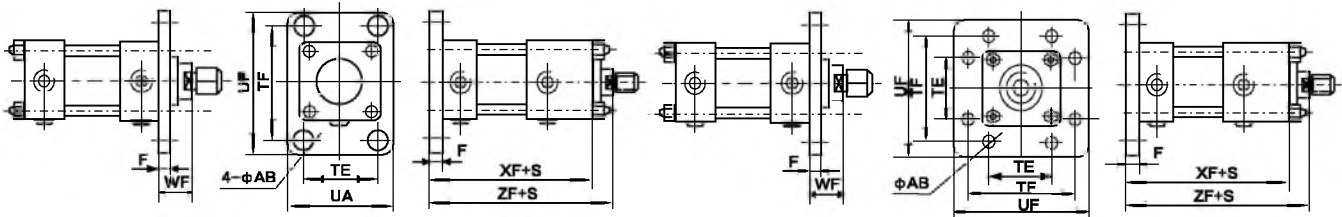


FA Rectangular front flange

FB Rectangular rear flange

FC Square front flange

FD Square rear flange



Installation & outline dimensions

Bore	D	40	50	63	80	100	125	140	150	160	180	200	220	250
CA	φCD	16	20	32	32	40	50	63	63	70	80	90	100	100
	FW ^{-0.1/-0.4}	25	32	40	40	50	63	80	80	80	110	125	125	125
	L	28	33	48	55	65	77	95	95	107	118	134	145	140
	MR	16	20	32	32	40	50	63	63	70	80	90	100	100
	T	10	12	14	17	19	23	25	27	30	32	36	40	45
	XD	209	230	261	291	316	365	400	412	445	480	526	550	596
T ^A _C	XC	225	250	292.5	322.5	356	415	463	475	516	560	616	650	696
	BD	28	33	43	43	53	58	78	78	88	98	108	117	117
	TC	69	85	98	118	145	175	195	206	218	243	272	300	335
	φTD	20	25	32	32	40	50	63	63	70	80	90	100	100
	TL	20	25	32	31.5	40	50	63	63	70	80	90	100	100
	UM	109	135	162	182	225	275	321	332	360	403	452	500	535
F ^A _B	XG	113	121	132	146	156	177	188	194	207	216	232	241	271
	XH	62	66	74	82	89	103	112	112	126	-	-	-	-
	φAB	11	14	18	18	22	26	26	30	33	33	36	42	45
	F	11	13	15	18	20	24	26	28	31	33	37	41	46
	TE	46	58	65	87	109	130	145	155	170	185	206	230	250
	TF	95	115	132	155	190	224	250	270	285	315	355	395	425
F ^C _D	UA	69	85	98	118	150	175	195	210	225	243	272	310	335
	UF	118	145	165	190	230	272	300	320	345	375	425	475	515
	WF	41	43	50	53	60	69	76	78	86	88	92	101	111
	XF	152	168	178	202	212	244	256	268	284	308	388	346	392
	ZF	182	198	213	237	252	289	306	318	339	365	393	406	457

SB04 (series)

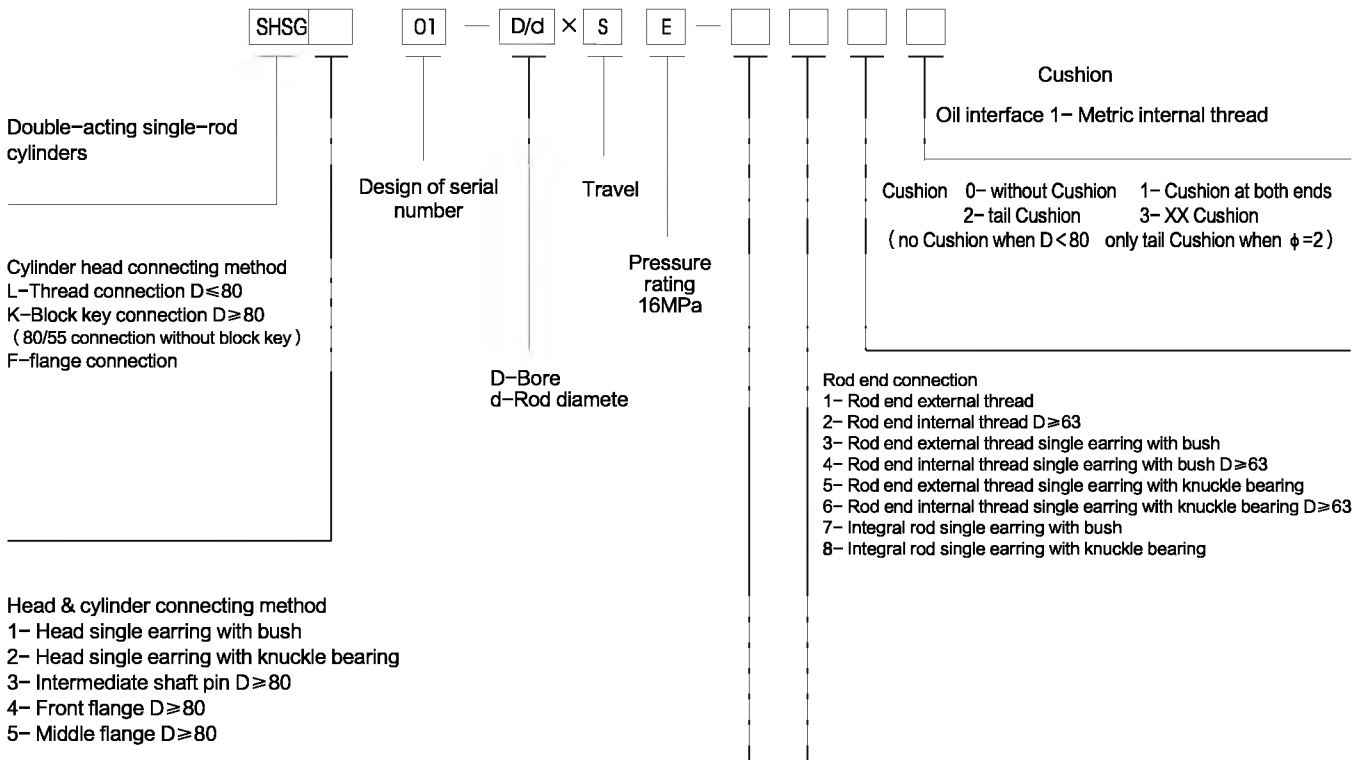
Project hydraulic cylinder

This series of hydraulic cylinders, featuring simple structure, reliable working, easy assembly/disassembly, easy maintenance, optional cushions and various mounting modes etc, is applicable for hydraulic driving for engineering machinery, lifting & transport machinery and mining machinery. Working pressure 16MPa, bore 40 ~ 250mm.

Specifications / technical parameters

Bore D/mm	Rod diameter d mm		Ratio ϕ	16MPa				Maximum travel mm
				Thrust KN	Pull KN			
	1.33	1.16	2		1.33	1.46	2	
40	20	22	25	20.11	15.08	14.02	12.25	6000
50	25	28	32	31.42	23.56	21.56	18.55	8000
63	32	35	45	49.88	37.01	34.48	24.43	8000
80	40	45	55	80.42	60.32	54.98	42.41	10000
(90)	45	50	63	101.79	76.32	70.37	51.91	10000
100	50	55	70	125.66	94.25	87.95	64.08	16000
(110)	55	63	80	152.06	114.04	102.18	71.63	16000
125	63	70	90	196.35	146.47	134.77	94.56	16000
(140)	70	80	100	246.30	184.73	165.88	120.54	16000
150	75	85	105	282.74	212.06	191.95	144.20	16000
160	80	90	110	321.70	241.27	219.91	169.65	16000
(180)	90	100	125	407.15	305.36	281.49	210.80	16000
200	100	110	140	502.64	376.99	350.60	256.35	16000
(220)	110	125	160	608.21	456.16	411.86	286.51	16000
250	125	140	180	785.40	589.05	539.10	378.25	16000

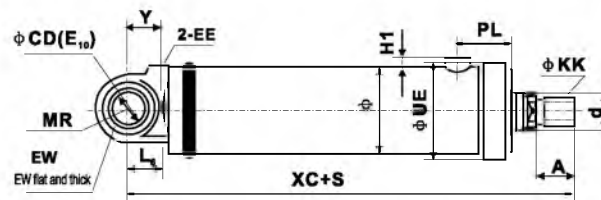
Model designation



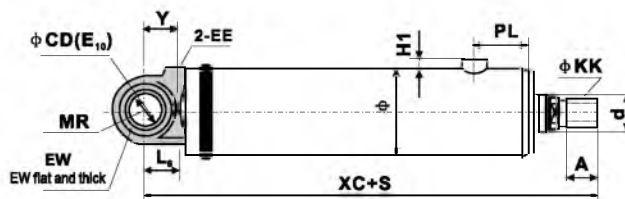
SB04 (series)

Project hydraulic cylinder

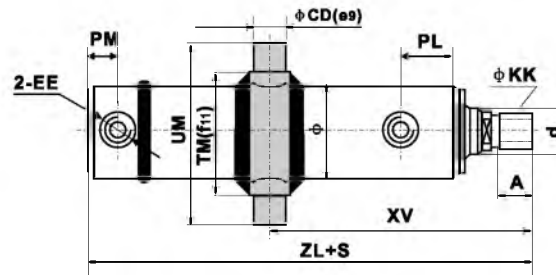
1. Rod end is external thread connection



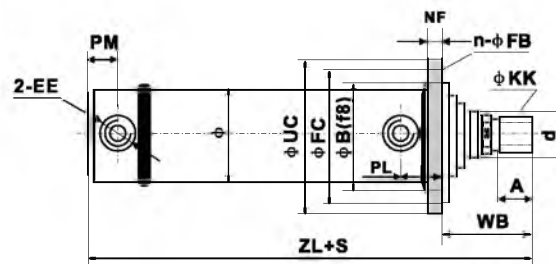
1.) Tail single earring connection



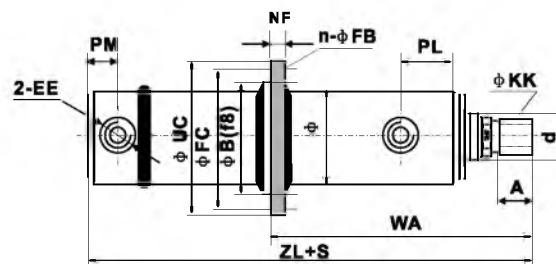
3.) Intermediate shaft pin connection



4.) Front flange connection



5.) Middle flange connection



SB04 (series)

Project hydraulic cylinder

Rod end is external thread connection dimensions

mm

D	φ	d			φ CD(E10)	EW	MR	L ₆	φ KK	A	Y	PL	XC	EE	H ₁	φ UE
		1.33	1.46	2												
40	57	20	22	*25	20或GE20ES	25	25	30	M16×1.5	30	30	65	225+S	M14×1.5	15	65
50	68	25	28	*32	30或GE30ES	35	35	40	M22×1.5	35	40	65	243+S	M18×1.5	15	75
63	83	32	35	45	30或GE30ES	35	35	40	M27×1.5	40	40	65	258+S	M18×1.5	15	90
80	102	40	45	55	40或GE40ES	45	45	50	M33×1.5	45	50	⁷⁵ △ 65	300+S	M22×1.5	18	110
90	114	45	50	63	40或GE40ES	45	45	50	M36×2	45	50	⁶⁶ ▲ 76	305+S ▲ 325+S	M22×1.5	18	
100	127	50	55	70	50或GE50ES	60	60	65	M42×2	50	60	⁷² ▲ 82	340+S ▲ 360+S	M27×2	20	
110	140	55	63	80	50或GE50ES	60	60	65	M48×2	55	60	⁷⁷ ▲ 87	360+S ▲ 380+S	M27×2	20	
125	152	63	70	90	50或GE50ES	60	60	65	M52×2	60	60	78	370+S	M27×2	20	
140	168	70	80	100	60或GE60ES	70	70	75	M60×2	65	70	⁸⁵ ▲ 95	405+S ▲ 425+S	M27×2	20	
150	180	75	85	105	60或GE60ES	70	70	75	M64×2	70	75	⁹² ▲ 102	420+S ▲ 440+S	M33×2	22	
160	194	80	90	110	60或GE60ES	70	70	75	M68×2	75	70	100	435+S	M33×2	22	
180	219	90	100	125	70或GE70ES	80	80	85	M76×3	85	89	107	480+S	M42×2	24	
200	245	100	110	140	80或GE80ES	90	95	95	M85×3	95	100	110	510+S	M42×2	24	
220	273	110	125	160	90或GE90ES	100	105	105	M95×3	105	110	120	560+S	M42×2	25	
250	299	125	140	180	100或GE100ES	110	120	120	M105×3	115	122	135	641+S	M42×2	25	

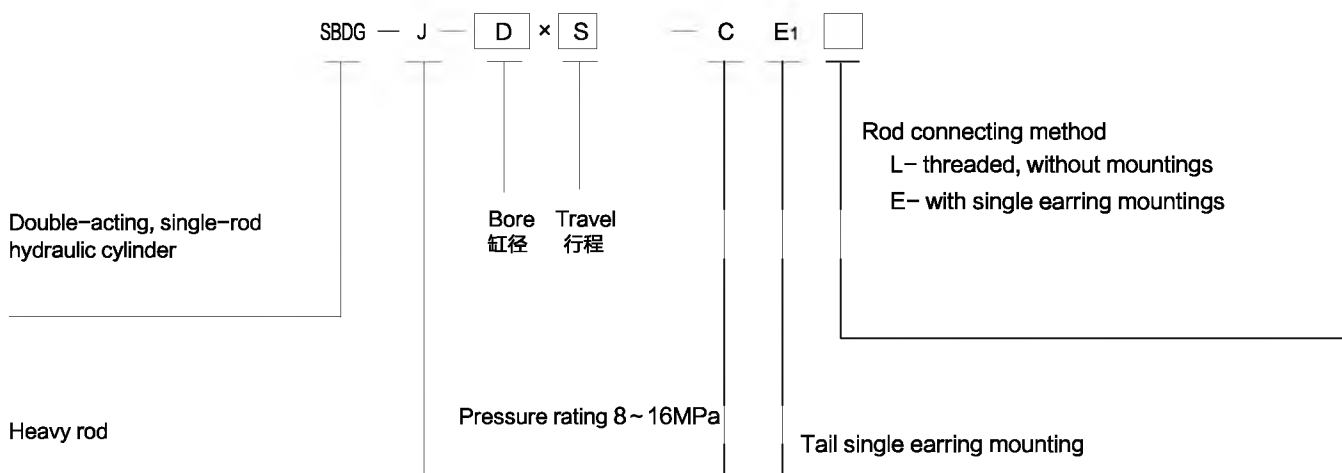
D	φ TM	UM	ZL	PM	φ B	φ FC	φ UC	NF	WB	n- φ FB	XV	WA	S
80	125	185	275+S	25	115	145	175	20	81	8- φ 13.5	>215<160+S	>200<190+S	55
90	140	200	280+S ▲ 300+S	25	130	160	190	20	⁸² ▲ 92	8- φ 15.5	>225<165+S	>210<195+S	60
100	155	230	310+S ▲ 330+S	30	145	180	210	20	⁸⁸ ▲ 98	8- φ 18	>250<170+S	>230<210+S	80
110	170	245	330+S ▲ 350+S	30	160	195	225	22	⁹⁵ ▲ 105	8- φ 18	>260<190+S	>240<225+S	70
125	185	260	340+S	30	175	210	240	22	98	10- φ 18	>225<200+S	>235<240+S	55
140	200	290	370+S ▲ 390+S	35	190	225	260	24	¹⁰⁸ ▲ 118	10- φ 20	>290<210+S	>265<250+S	80
150	215	305	385+S ▲ 405+S	35	205	245	285	26	¹¹⁴ ▲ 124	10- φ 22	>305<225+S	>285<265+S	80
160	230	320	400+S	35	220	260	300	28	119	10- φ 22	>310<240+S	>290<280+S	70
180	255	360	440+S	42	245	285	325	30	130	10- φ 24	>345<255+S	>320<300+S	90
200	285	405	460+S	40	275	320	365	32	143	10- φ 26	>365<265+S	>340<315+S	100
220	320	455	503+S	53	305	355	405	34	156	10- φ 29	>395<285+S	>365<340+S	100
250	350	500	547+S	55	330	390	450	36	171	12- φ 32	>430<315+S	>395<375+S	105

SB05 (series)

Vehicles hydraulic cylinder

This series are double-acting, single-rod, tail-single-earring installed hydraulic cylinders, and are widely applicable for hydraulic driving for engineering machinery, transport machinery, mining machinery and other vehicles etc. Working pressure 8~16MPa, bore 40~320mm.

Model designation



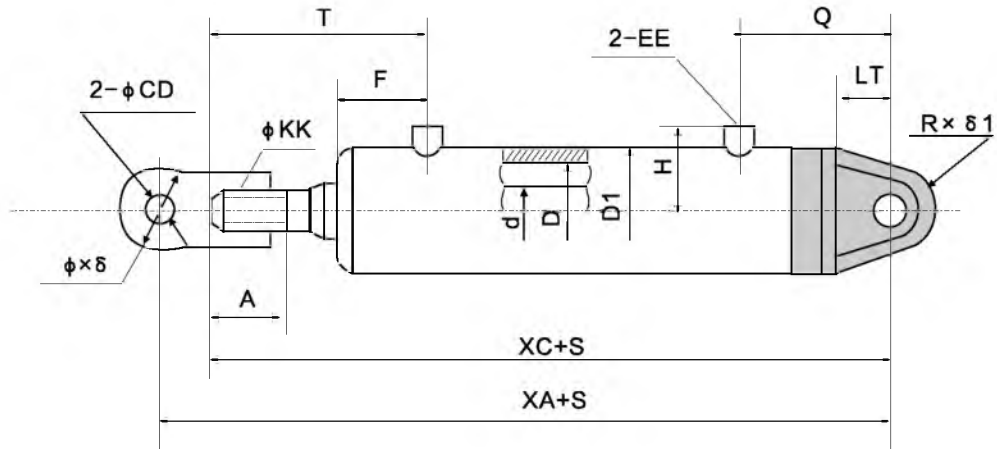
Specifications / technical parameters

Model	Bore D / mm	Rod diameter d / mm	Piston area cm ²		Thrust 推力 KN		Pull KN		Maximum travel mm
			Without rod end 无杆端	With rod end 有杆端	14MPa	16MPa	14MPa	16MPa	
SBDG-J 40 × SCE1 ^L _E	40	22	12.57	8.77	17.60	20.11	12.28	14.03	1500
SBDG-J 50 × SCE1 ^L _E	50	28	19.63	13.48	27.48	31.41	18.87	21.57	1500
SBDG-J 63 × SCE1 ^L _E	63	35	31.17	21.55	43.64	49.87	30.17	34.48	2500
SBDG-J 80 × SCE1 ^L _E	80	45	50.27	34.36	70.38	80.43	48.10	54.98	2500
SBDG-J 100 × SCE1 ^L _E	100	55	78.54	54.78	109.96	125.66	76.69	87.65	6000
SBDG-J 110 × SCE1 ^L _E	110	63	95.03	63.86	133.04	152.05	89.40	102.18	6000
SBDG-J 125 × SCE1 ^L _E	125	70	122.72	84.23	171.82	196.35	117.92	134.77	8000
SBDG-J 140 × SCE1 ^L _E	140	80	153.94	103.67	215.52	246.30	145.14	165.87	8000
SBDG-J 150 × SCE1 ^L _E	150	85	176.71	119.97	247.39	282.74	167.96	191.95	8000
SBDG-J 160 × SCE1 ^L _E	160	90	201.06	137.44	281.48	321.70	192.42	219.90	8000
SBDG-J 180 × SCE1 ^L _E	180	100	254.47	175.93	356.26	407.15	246.30	281.49	8000
SBDG-J 200 × SCE1 ^L _E	200	110	314.16	219.13	439.82	502.66	306.78	350.61	8000
SBDG-J 220 × SCE1 ^L _E	220	125	380.13	257.41	532.18	608.21	360.37	411.86	8000
SBDG-J 250 × SCE1 ^L _E	250	140	490.87	336.94	687.22	785.39	471.72	539.10	8000
SBDG-J 320 × SCE1 ^L _E	320	180	804.25	549.78	1125.95	1286.80	769.69	879.65	8000

SB05 (series)

Vehicles hydraulic cylinder

Outline and installation dimensions



Specifications / technical parameters

mm

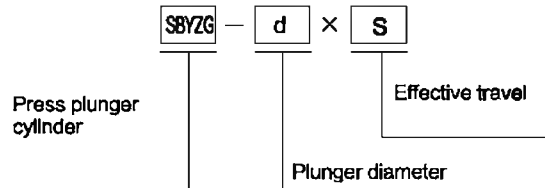
Model	Bore D	Rod diameter d	D ₁	EE	φ KK	A	φ CD (H ₁₀)	φ × δ deep	R × δ deep	XC	XA	F	H	Q	LT	T	
SBDG-J 40 × SCE ₁	LE LE	40	22	60	Z3/8 " M18 × 1.5	M20 × 1.5	29	16	46 × 37.5	20 × 22	200	226	43	45	59	27	88
SBDG-J 50 × SCE ₁	LE LE	50	28	70	Z3/8 " M18 × 1.5	M24 × 1.5	34	20	56 × 45	25 × 28	243	276	52	50	66	32	104
SBDG-J 63 × SCE ₁	LE LE	63	35	83	Z1/2 " M22 × 1.5	M30 × 1.5	36	32	71 × 60	35 × 40	274	317	67	58	79	40	114
SBDG-J 80 × SCE ₁	LE LE	80	45	102	Z1/2 " M27 × 2	M39 × 1.5	42	40	90 × 75	43 × 50	306	359	70	71	94	50	121
SBDG-J 100 × SCE ₁	LE LE	100	55	127	Z3/4 " M33 × 2	M48 × 1.5	62	50	112 × 95	53 × 63	369	427	81	84.5	111	60	154
SBDG-J 110 × SCE ₁	LE LE	110	63	140	Z3/4 " M33 × 2	M56 × 2	70	55	116 × 105	55 × 75	404	472	85	90	118	65	185
SBDG-J 125 × SCE ₁	LE LE	125	70	152	Z3/4 " M27 × 2	M64 × 2	70	63	134 × 118	62 × 80	421	496	90	100	136	75	166
SBDG-J 140 × SCE ₁	LE LE	140	80	168	Z1 " M33 × 2	M72 × 3	75	65	134 × 125	65 × 80	460	540	95	104	144	80	195
SBDG-J 150 × SCE ₁	LE LE	150	85	180	Z1 " M33 × 2	M80 × 3	80	70	170 × 135	75 × 80	481	566	101	115	169	81	185
SBDG-J 160 × SCE ₁	LE LE	160	90	194	Z1 " M33 × 2	M80 × 3	85	80	160 × 145	80 × 85	528	613	115	117	168	90	200
SBDG-J 180 × SCE ₁	LE LE	180	100	219	M42 × 2	M90 × 3	95	90	176 × 160	90 × 95	606	716	126	130	185	105	253
SBDG-J 200 × SCE ₁	LE LE	200	110	245	M42 × 2	M100 × 3	105	100	184 × 170	100 × 105	680	800	157	143	200	110	302
SBDG-J 220 × SCE ₁	LE LE	220	125	273	M42 × 2	M110 × 3	112	100	200 × 170	100 × 120	693	811	157	157	200	120	314
SBDG-J 250 × SCE ₁	LE LE	250	140	299	M42 × 2	M125 × 4	125	110	200 × 170	110 × 136	716	831	157	170	210	130	322
SBDG-J 320 × SCE ₁	LE LE	320	180	402	M48 × 2	M160 × 4	166	140	280 × 170	140 × 176	847	1017	200	225	264	160	406

SB06 (series)

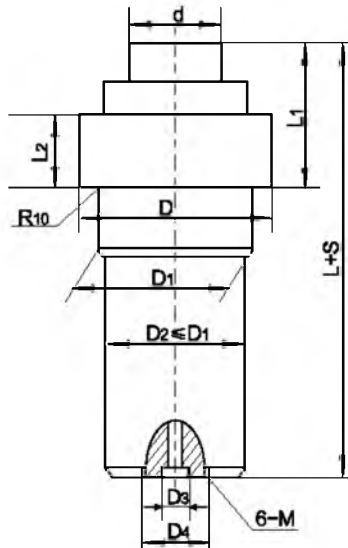
Press plunger hydraulic cylinder

SBYZG is plunger cylinder dedicated for press of hydraulic machinery, and is suitable for various types of oil cylinder machine; its working pressure generally is 26MPa, plunger diameter 63–520mm, and effective travel 0–5000mm.

Model designation



Outline and installation dimensions



Specifications / technical parameters

Model	Plunger diameter d (mm)	Effective area (cm ²)	Thrust
			26MPa
SBYZG-100 × S	100	78.54	20420.35
SBYZG-125 × S	125	122.75	31906.80
SBYZG-140 × S	140	153.94	40023.89
SBYZG-160 × S	160	201.06	52276.10
SBYZG-180 × S	180	254.47	66151.94
SBYZG-200 × S	200	314.16	81681.41
SBYZG-220 × S	220	380.13	98834.50
SBYZG-230 × S	230	415.48	108023.66
SBYZG-240 × S	240	452.39	117621.23
SBYZG-250 × S	250	490.87	127627.20
SBYZG-250 × S	250	530.93	138041.58
SBYZG-260 × S	260	615.75	160095.56
SBYZG-280 × S	280	706.86	183783.17
SBYZG-320 × S	320	804.25	209104.40
SBYZG-340 × S	340	907.92	236059.27
SBYZG-360 × S	360	1017.88	264647.77
SBYZG-400 × S	400	1256.64	326725.84
SBYZG-420 × S	420	1385.44	360215.01
SBYZG-460 × S	460	1661.90	432094.65
SBYZG-520 × S	520	21223.72	552166.32

Notes:

1. Upper oil inlet fixing bolt hole and plunger end face are connected, and to be separately agreed when ordering.
2. Oil inlet position of small plunger cylinder can be determined by user himself.
3. D1 is installation positioning size for plunger cylinder; cylinder outside diameter $D2 \leq D1$

Installation & outline dimensions

d	D	D1	D2	D3 × 深 Deep	D4	L	L1	L2	6-M
100			φ 140	—	M27 × 2				—
125			φ 180	—	M27 × 2				—
140	φ 310	φ 210	φ 194	—	M27 × 2	300	140	70	—
160	φ 360	φ 230	φ 230	—	M33 × 2	320	140	70	—
180	φ 360	φ 260	φ 260	—	M33 × 2	350	165	80	—
200	φ 380	φ 280	φ 280	—	M42 × 2	375	165	80	—
220	φ 400	φ 310	φ 310	—	M42 × 2	400	185	100	—
230	φ 410	φ 310	φ 310	—	M42 × 2	410	185	100	—
240	φ 420	φ 340	φ 340	φ 54 × 5	φ 120	430	185	100	M16
250	φ 460	φ 350	φ 350	φ 54 × 5	φ 120	430	220	110	M16
260	φ 505	φ 360	φ 360	φ 54 × 5	φ 120	440	260	135	M16
280	φ 520	φ 395	φ 395	φ 54 × 5	φ 120	460	280	135	M16
300	φ 540	φ 410	φ 410	φ 54 × 5	φ 120	460	280	160	M16
320	φ 570	φ 440	φ 440	φ 54 × 5	φ 120	475	285	200	M16
340	φ 590	φ 465	φ 465	φ 66.5 × 5	φ 136	520	300	200	M24
360	φ 610	φ 500	φ 500	φ 66.5 × 5	φ 136	630	330	200	M24
400	φ 680	φ 570	φ 570	φ 66.5 × 5	φ 136	690	330	200	M24
420	φ 735	φ 612	φ 612	φ 70 × 5	φ 140	700	380	250	M24
460	φ 790	φ 660	φ 660	φ 70 × 5	φ 140	710	380	270	M24
520	φ 900	φ 730	φ 730	φ 80 × 5	φ 160	800	495	270	M24
600	φ 1020	φ 800	φ 800	φ 80 × 5	φ 160	860	520	300	M24
700	φ 1120	φ 860	φ 860	φ 100 × 5	φ 200	960	550	300	M27
800	φ 1250	φ 980	φ 980	φ 100 × 5	φ 250	1020	580	340	M27
1000	φ 1480	φ 1200	φ 1200	φ 150 × 5	φ 280	1100	620	400	M33
1200	φ 1800	φ 1460	φ 1460	φ 150 × 5	φ 350	1250	730	500	M36

SB07 (series)

Multi-stage Hydraulic Cylinders

SBDH Series Multi-stage Hydraulic Cylinders, including single and double acting types, are applicable where large travel and short mounting distance or total length (travel may be larger than mounting distance or total length) are required. SBDH Series hydraulic cylinders produced by us, featuring compact arrangement, reasonable structure, reliable operation, easy assembly/disassembly and easy maintenance, are widely used for various kinds of working machinery, mining machinery, handling machinery, environmental protection machinery, transportation machinery (wrecker) etc. For this series of hydraulic cylinders, it is possible to design by customization such parameters as working pressure, working travel, mounting distance, number of stages, travel of each stage and rod diameter etc, upon user's demand.



Type Selection (single acting)

SBDH001 - 100 III

SBDH001 - 100 Number of special cylinder determined by the Company

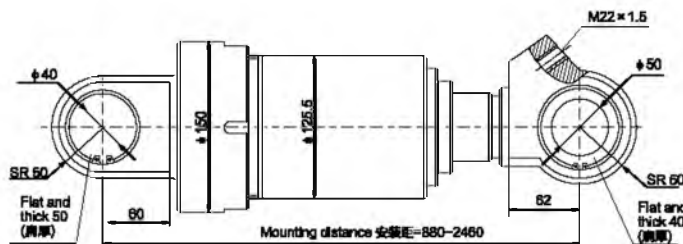
100 - First stage bore

III Third stage bore

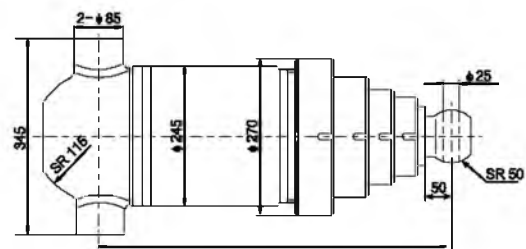
Technical parameters

Model	Working pressure 工作压力(Mpa)	Total travel (mm)	Mounting distance (mm)	Cushion position
SBDH001-100III	16	1580(Three stage 三级)	880	-
SBDH002-200III	20	3250(Four stage 四级)	1270	-

SBDH001-100 III Outline connecting size



SBDH002-200IV Outline connecting size



Type Selection(double acting)

SBDH100 - 250/220.160/150.100/90

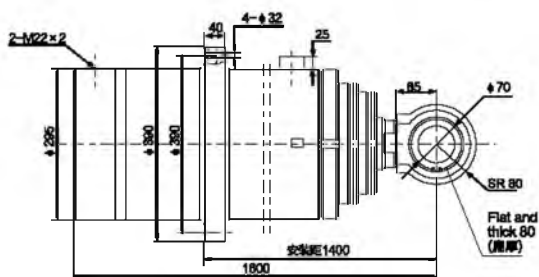
SBDH100 - Number of special cylinder determined by the Company

250/220.160/150.100/90 - Bore is respectively 250/160/100 Rod diameter is respectively 220/150/90

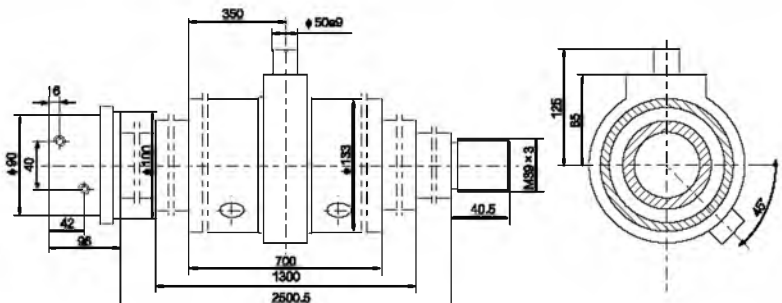
Technical parameters

Model 型号	Working pressure 工作压力(Mpa)	Total travel 总行程(mm)	Mounting distance 安装距(mm)	Cushion position 缓冲部位
SBDH100 - 250/220.160/150.100/90	16	2700	1400	Rod chamber
SBDH111-110/90.75/40	16	±848	2500.5	-

SBDH110-250/220.160/150.100/90 Outline connecting size



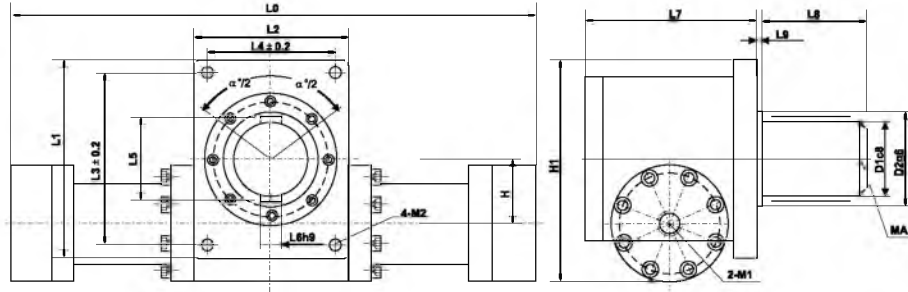
SBDH111-110/90.75/40 Outline connecting size



Swivel Gear Cylinders

Mounting D MF S

SB08 ST M D MF S



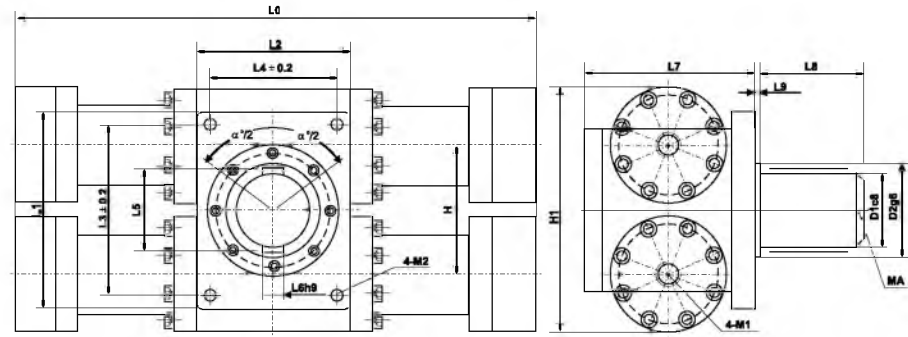
Specifications / technical parameters

Size D MF S (in mm) 尺寸 D MF S (mm)

DA	MA max	D1	D2	H	H1	L0	L1	L2	L3	L4	L5	L6	L7	L8	L9	M1		M2
																01	02	
40	730	70	95	55	197	275+1.54 α 1)	184	164	160	140	79	20	174	105	6	G1/2	M22 × 1.5	M12 × 20
50	1297	80	105	66	231	288+1.75 α 1)	210	170	185	146	90	22	183	125	6	G1/2	M22 × 1.5	M12 × 20
63	2266	90	115	72	253	310+1.92 α 1)	232	194	200	164	100	25	210	140	6	G3/4	M27 × 2	M16 × 25
80	3987	95	125	86	292	370+2.09 α 1)	257	205	225	175	105	25	232	150	8	G3/4	M27 × 2	M16 × 25
100	7476	115	145	100	343	400+2.51 α 1)	306	234	265	194	129	32	264	165	8	G1	M33 × 2	M20 × 30
125	13141	125	155	116	390	464+2.83 α 1)	334	274	285	230	139	32	304	170	8	G1 1/4	M42 × 2	M24 × 35
140	18317	145	180	125	418	484+3.14 α 1)	354	286	305	240	161	36	310	200	10	G1 1/4	M42 × 2	M24 × 35
160	26583	165	200	140	464	511+3.49 α 1)	390	315	330	255	183	40	334	220	10	G1 1/2	M48 × 2	M30 × 45
180	36334	175	220	152	518	584+3.77 α 1)	440	390	380	330	195	45	400	240	12	G1 1/2	M48 × 2	M30 × 45
200	52335	195	240	170	578	611+4.40 α 1)	500	425	440	365	215	45	458	260	12	G1 1/2	M48 × 2	M30 × 45
2203)	92372	200	245	200	660	1338+5.62 α 1)	600	550	520	470	2)	45	560	340	12	G1 1/2	M48 × 2	M36 × 55
2503)	152416	220	275	255	775	1540+7.34 α 1)	700	590	620	510	2)	45	600	380	12	G1 1/2	M48 × 2	M36 × 55
2803)	182900	250	315	300	900	1700+8.34 α 1)	800	690	720	610	2)	50	700	420	12	G1 1/2	M48 × 2	M36 × 55
3203)	325720	320	395	320	980	1920+9.12 α 1)	900	790	820	710	2)	56	750	480	12	G1 1/2	M48 × 2	M36 × 55

Mounting G MF S

SB08 ST M G MF S

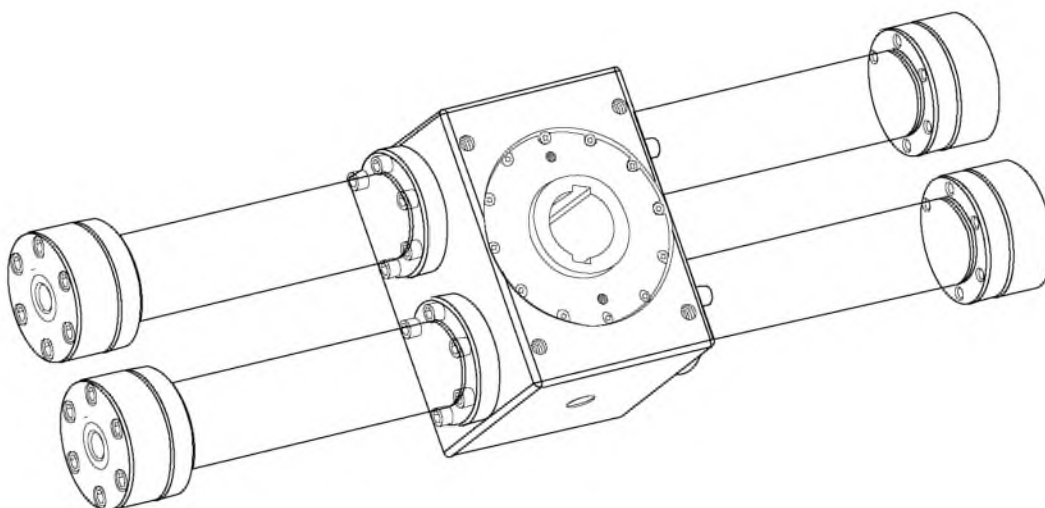


Specifications / technical parameters

Size G MF S (in mm) 尺寸 G MF S (mm)

DA	MA max	D1	D2	H	H1	L0	L1	L2	L3	L4	L5	L6	L7	L8	L9	M1		M2
																01	02	
40	1460	70	95	110	210	275+1.54 α 1)	184	164	160	140	79	20	174	105	6	G1/2	M22 × 1.5	M12 × 20
50	2594	80	105	132	252	288+1.75 α 1)	210	170	185	146	90	22	183	125	6	G1/2	M22 × 1.5	M12 × 20
63	4532	90	115	144	274	310+1.92 α 1)	232	194	200	164	100	25	210	140	6	G3/4	M27 × 2	M16 × 25
80	7974	95	125	172	327	370+2.09 α 1)	257	205	225	175	105	25	232	150	8	G3/4	M27 × 2	M16 × 25
100	14952	115	145	200	380	400+2.51 α 1)	306	234	265	194	129	32	264	165	8	G1	M33 × 2	M20 × 30
125	26282	125	155	232	446	464+2.83 α 1)	334	274	285	230	139	32	304	170	8	G1 1/4	M42 × 2	M24 × 35
140	36634	145	180	250	482	484+3.14 α 1)	354	286	305	240	161	36	310	200	10	G1 1/4	M42 × 2	M24 × 35
160	53166	165	200	280	538	511+3.49 α 1)	390	315	330	255	183	40	334	220	10	G1 1/2	M48 × 2	M30 × 45
180	72668	175	220	304	596	584+3.77 α 1)	440	390	380	330	195	45	400	240	12	G1 1/2	M48 × 2	M30 × 45
200	104670	195	240	340	656	611+4.40 α 1)	500	425	440	365	215	45	458	260	12	G1 1/2	M48 × 2	M30 × 45
2203)	184744	200	245	400	720	1338+5.62 α 1)	600	550	520	470	2)	45	560	340	12	G1 1/2	M48 × 2	M36 × 55
2503)	304832	220	275	510	850	1540+7.34 α 1)	700	590	620	510	2)	45	600	380	12	G1 1/2	M48 × 2	M36 × 55
2803)	365800	250	315	600	1000	1700+8.34 α 1)	800	690	720	610	2)	50	700	420	12	G1 1/2	M48 × 2	M36 × 55
3203)	651440	320	395	640	1060	1920+9.12 α 1)	900	790	820	710	2)	56	750	480	12	G1 1/2	M48 × 2	M36 × 55

Swivel Gear Cylinders



ORDERING DETAILS SB08/订货说明 SB08

ORDERING EXAMPLES: SB08 ST M G MS S / 100~90° M U 02 M W

[illegible]

NOTES:

DA=Piston ϕ

MA=Maximum output torque (NM)

 α =Swiveling angle($0^{\circ} \sim 360^{\circ}$)

¹⁾ =The customer according to n

selection

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
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Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
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Иваново (4932)77-34-06

Ижевск (3412)26-03-58
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Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
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Красноярск (391)204-63-61
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Набережные Челны (8552)20-53-41
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Орел (4862)44-53-42
Оренбург (3532)37-68-04
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Казань (772)734-952-31

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Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
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Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93