PNEUMATIC CYLINDER **AND KITS**

--PART ONE



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Company Profile

Fescolo Pneumatic, established in 2001, is a professional developer and manufacturer of customized cylinders and solenoid valves. We have an excellent R&D technical team, more than 200 sets of equipment, an annual production value of more than 10 million US dollars, and have 100+ employees, including 4 technical engineers and 8 technicians so far.

Our main product range consists of various standard cylinders, non-standard customized cylinders, standard solenoid valves, non-standard customized solenoid valves, 2/2 ways electromagnetic valves, air source treatment units, angle seat valves, air hose and tube fittings. Widely applied in industrial automation, robotic arms, medical treatment, sanitary ware, food machinery, automobile manufacturing and other scientific and technological industries.

If you are looking for non-standard customized cylinders and valves, if you encounter problems in pneumatic system, congratulations, we are just the exact supplier you need. Product customization and ODM are our core competencies. We are in a leading position on projects of customized cylinders and solenoid valves. We can also customize product labels, special inner and outer packaging for you. All our products include a one-year or six-month warranty. Most standard products are available in stock and can be shipped within 3-15 days after you place an order. Fescolo Pneumatic, looks forward to your cooperation sincerely!

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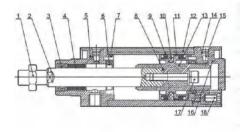
DNC Series ISO6431 Standard



1.Ordering Co	de :							
DNC	-	63	Χ	50	-	25 -	s -	LB
↑		↑		↑		↑	↑	↑
Model		Bore size	Э	Stroke		Adjust stroke	S:with magnet	Fixed type
DNC: Double action	on type					25:25mm	Blank: without	Blank: Basic type
DNCD: Two axis of	double actio	on type				50:50mm	magnet	LB:Foot mounting type
DNCJ: Two axis d	louble actio	n type with st	troke a	adjustable		75:75mm		FA:front flange mounting type
								FB:rear-Flange mounting type
								CA:male sing l e Earring type
								CB:female double earring type
								SDB: Back cover fixed type
2.Characteris	tics:							TC:Trunnion type

- 1) This series of cylinder conforms to: ISO6431 standard
- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) We can offer different kinds of mounting style according to ISO 6431 standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Internal Structure:



NO.	Designation	NO.	Designation
1	Piston Rod Nut	2	Piston Rod
3	Front Cover Seal Ring	4	Bearing
5	Front Cover	6	Buffering O-Ring
7	O-Ring	8	Pistion rod O-Ring
9	Piston O-Ring	10	Magnet(Optional)
11	Wear Ring	12	Barrel
13	Piston	14	Cushion Seal
15	Cushion Needle	16	Back Over
17	Hex Socket Screw	18	Profile Bolt

4. Specification:

4.opcomeane											
Bore (mm)	32	80	100	125							
Action		Double Action									
Applicable medium				Filered Air							
Pressure range				0.1~0.9 MPa							
Proof pressure				1.35 MPa							
Temperature range				-5°C~70 <i>℃</i>							
Speed range				50~800 mm/s							
Cushion style		Adjustable Air Buffer									
Cushion stroke	24 mm 32 mm										
Port size	G1/8 G1/4 G3/8 G1/2										

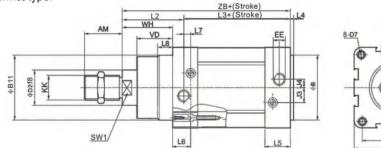
5.Stroke:

Bore	Standard Stroke	Buffer Stroke	Stroke Range
32		20	
40		20	10~2000
50	25 40 50 80	00	
63	100 125 160 200 250 320	22	
80		22	
100 125		32	
		35	

6. Overall and Dimension Sheet:

Bore AM B D2 D5 D7 E EE(G) J3 J4

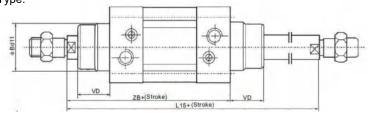
Normal type:





32	22	30	12	32.5	M6	45	1/8	6	5.2	M10×1.25	41.6	62.8	4	26	16	3.3	8	10	6	16	26	120
40	24	35	16	38	M6	54	1/4	8	6	M12×1.25	44	77	4	29.5	16	3.6	10	13	6	20	30	135
50	32	40	20	46.5	M8	64	1/4	10	8.5	M16×1.5	51	78	4	30	17	5.1	10	17	8	27	37	144
63	32	45	20	56.5	M8	75	3/8	12.4	10	M16×1,5	54	87	4	35.5	17	6.6	10	17	8	27	37	157.5
80	40	45	25	72	M10	93	3/8	12.5	8	M20×1.5	62.4	95.2	4	36	17	10.5	10	22	10	34.5	46	173.5
100	40	55	25	89	M10	110	1/2	11.8	10	M20×1.5	69.8	100.4	4	39	17	8	12.5	22	10	38	51	189
125	54	60	32	110	M12	134	1/2	13	8	M27×2	83	124	6	44.7	22	14	10	28	12	46	65	225

Double Axis Type:



Bore	32	40	50	63	80	100
В	30	35	40	45	45	55
L15	46	165	180	195	220	240
VD	16	20	27	27	34.5	38
ZB	120	135	143	158	174	189



DNG Series ISO15552 Standard Cylinder



1.Ordering Code:

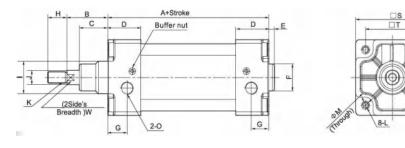
noracing coac.					
DNG -	160 X	100	- 25 -	s -	LB
↑	↑	↑	↑	↑	↑
Model	Bore size	Stroke	Adjust stroke	S:with magnet	Fixed type
DNG: Double action type	;		25:25mm	Blank: without	Blank: Basic type
DNGD: Two axis double	action type		50:50mm	magnet	LB:Foot mounting type
DNGJ: Two axis double	action type with strok	e adjustable	75:75mm		FA:Front flange mounting type
					FB:Rear-Flange mounting type
					CA:Male single Earring type
2.Characteristics:					CB:female double earring type

- 1) This series of cylinder conforms to: ISO15552 standard
- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) We can offer different kinds of mounting style according to ISO15552 standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Specification:

Bore (mm)	160	200	250	320				
Action		Double	Action					
Applicable medium		Filere	ed Air					
Pressure range		0.1~1.	0 MPa					
Proof pressure		1.5	MPa					
Temperature range		-5°C~	-70 <i>℃</i>					
Speed range		50~500) mm/s					
Cushion style		Adjustable	Air Buffer					
Lubrication	Not required (Use Turbine oil SO Vg32 when necessary)							
Port size	Ğ	3/4	G	31				

4. Overall and Dimension Sheet:



	Bore/Symbol	A	В	С	D	E	F	G	Н	1	J	K	L	M	S	T	0
- 7	160	180	80	60	50	6	Φ65	25	72	Ф65	40	M36×2	M16	Ф25ф30	180	140	G3/4°
- 1	200	180	95	70	50	6	Φ75	25	72	Ф75	40	M36×2	M16	Ф25ф30	220	175	G3/4"
	250	200	105	67	52	10	90	31	84	90	50	M42×2	M20	Ф30	270	220	G1"
- 1	320	218	120	82	52	10	110	31	96	110	63	M48×2	M24	Ф34	340	270	G1"

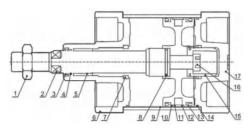
SI Series ISO6431 Standard Cylinder



1.Ordering Cod	de:						
SI	-	50	Χ	50	- 25 -	S	- LB
↑		↑		↑	↑	↑	↑
Model		Bore size		Stroke	Adjust stroke	S:with magne	et Fixed type
SI: Double action ty	уре				25:25mm	without	Blank: Basic type
SID: Two axis doub	ole action	type			50:50mm	magnet	LB:Foot mounting type
SIJ: Two axis doub	le action t	ype with stroke	e adjustab	le	75:75mm		FA:Front flange mounting type
							FB:Rear-Flange mounting type
							CA:Male single Earring type
							CB:Female double earring type
							SDB: Back cover fixed type
2.Characteristi	ics:						TC:Trunnion type

- 1) This series of cylinder conforms to: ISO6431 standard
- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) We can offer different kinds of mounting style according to ISO 6431 standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Internal Structure:



No.:	: Designation	No.	: Designation
1.	Piston rod nut	10.	Piston
2.	Piston rod	11.	Wearing
3.	Front cover seal ring	12.	Magnet (Optional)
4.	O-ring	13.	Piston O-ring
5.	Bearing	14.	Pipe wall O-ring
6.	Front cover	15.	Damping
7.	Buffering O-ring	16.	Hex socket screw
8.	Piston rod O-ring	17.	Back cover
9.	Barrel		

4. Specification:

Bore (mm)	32	40	50	63	80	100	125	160	200					
Action					ouble Actio	n								
Applicable medium					Filered Air									
Pressure range		0.1~0.9 MPa												
Proof pressure		1.35 MPa												
Temperature range		-5°C~70 <i>°c</i>												
Speed range				Ę	50~800 mm/	s								
Cushion style				Adju	ıstable Air B	uffer								
Cushion stroke		24 mm 32 mm												
Port size	G1/8	G1/8 G1/4 G3/8 G1/2 G3/4												

5.Cylinder Theory output:

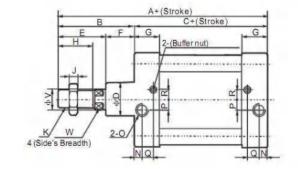
Cylinder	Extern	Deta	on Patterm	Compression				+	Air Pressu	re(kgf/cm	-)		
Diameter	of Piston Rod	Polic	on Pattern	Area(cm²)	1	2	3	4	5	6	7	8	9
20	in.	Double	Press Side	8.04	8.04	16.08	24.12	32.16	40.20	48.24	56.28	64.32	72,36
32	12	Action	Pull Side	6.90	6.90	13.80	20.07	27.60	34.50	41.40	48.30	55.20	62.10
40	40	Double	Press Side	12.56	12.56	25.12	37.68	50.24	62.80	75.36	87.92	100.24	113.04
40	16	Action	Pull Side	10.55	10.55	21.10	31.65	42.20	52.75	63.30	73.85	84.40	94.95
50	20	Double	Press Side	19.63	19.63	39.26	58.89	78.52	98.15	117.78	137.41	157.04	176.67
50	20	Action	Pull Side	16.49	16.49	32.98	49.47	65.96	82.45	98.94	115.43	139.92	148.41
-	20	Double	Press Side	31.17	31.17	62.34	93.51	124.68	155.85	187.02	218.19	249.36	280.53
63	20	Action	Pull Side	28.03	28.03	56.06	84.09	112.12	140,15	168.18	196.21	224.24	252.27
00	05	Double	Press Side	50.26	50.26	100.52	150.78	201.04	251.30	301.56	351.82	402.08	452.34
80	25	Action	Pull Side	45.36	45.36	90.72	136.08	181.44	226.80	272.16	317.52	326.88	408.24
100	OF.	Double	Press Side	78.53	78.53	157.06	235.59	314.12	392.65	471.18	428.82	628.24	706.77
100	25	Action	Pull Side	71.47	71.47	142.94	214.41	285.88	357.35	428.82	500.29	517.76	643.23
105		Double	Press Side	122.72	122.72	245,44	368.16	490.88	613.60	736.32	859.04	981.76	1104.48
125	32	Action	Pull Side	114.68	114.68	229.36	344.04	458.72	573.40	688.08	802.76	917.44	1032.1
100	40	Double	Press Side	201.06	201.06	402.12	603.18	804.24	1005.30	1206.36	1407.42	1608.48	1809.5
160	40	Action	Pull Side	188.49	188.49	376.98	565.47	753.96	942.45	1130.94	1319.43	1507.92	1696.4
200	40	Double	Press Side	314.16	314.16	628.32	942.48	1256.64	1570.80	1884.96	2199.12	2513.28	2827.4
200	40	Action	Pull Side	301.57	301.57	603.14	904.71	1206.28	1507.80	1809.42	2100.99	2412.56	2714.13

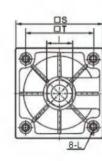
6.Stroke:

ore(mm)	Standard Stroke	Max.Stroke	Permissible Stroke
32	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

7. Overall and Dimension Sheet:

SI series:

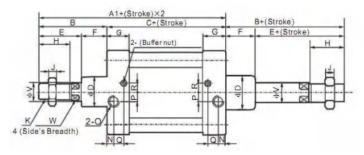


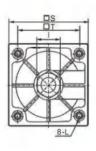


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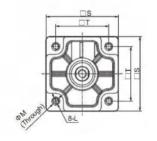
SID series:





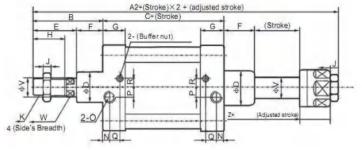
A+ (Stroke) C D (Buffer nut) D K (2Side's Breadth)W G G G G

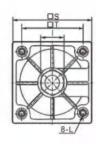
Ф250~Ф320 SI Series:



Bore/Symbol	A	В	C	D	E	F	G	H	1	J	K	L	M	S	T	0
250	200	105	67	52	10	90	31	84	90	50	M42×2	M20	Ф30	270	220	G1
320	218	120	82	52	10	110	31	96	110	63	M48×2	M24	Ф34	340	270	G1

SIJ series:





Bore/Symbol	A	A1	A2	В	C	D	E	F	G	Н	1	J	K	L
32	142	190	187	48	94	30	28	16	27,5	22	17	6	M10×1.25	M6
40	159	213	207	54	105	35	32	18	29	24	19	7	M12×1.25	M6
50	175	244	233	69	105	40	42	25	30	32	24	8	M16×1.5	M8
63	190	259	250	69	120	40	40	24	31.5	32	24	8	M16×1.5	M8
80	214	300	286	86	128	40	53	30	35.5	40	30	10	M20×1.5	M10
100	229	320	308	91	138	45	55	32	36	40	30	10	M20×1.5	M10
125	279	398	372.5	119	160	60	74	45	46	54	41	13.5	M27×2	M12
160	332	484	448	152	180	65	94	58	50	72	55	18	M36×2	M16
200	337	514	472	157	180	75	100	57	50	72	55	18	M36×2	M16

Bore/Symbol	N	0	P	Q	R	S	T	V	W	Z
32	13.5	G1/8"	4	7.5	7	47	32.5	12	10	21
40	16	G1/4"	6	8.5	9	53	38	16	13	21
50	15.5	G1/4"	8.5	7.5	7.5	65	46.5	20	17	23
63	16.5	G3/8"	7.5	8.5	9	75	56.5	20	17	23
80	16.5	G3/8"	11	8.5	13.5	95	72	25	22	29
100	18.5	G1/2"	13.5	9.5	14.5	115	89	25	22	29
125	23	G1/2"	14	12	14	140	110	32	27	35
160	25	G3/4"	15	12	20	180	140	40	36	40
200	25	G3/4	15	12	20	220	175	40	36	40



ISO Series ISO6431 Standard Cylinder

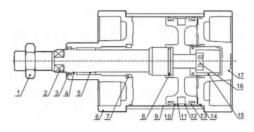


1.Ordering Code:

ISO	- 50	X	50 -	25 -	S	- LB
1	↑		1	↑	↑	↑
Model	Bore size		Stroke	Adjust stroke	S:with magne	t Fixed type
ISO: Double action type	e			25:25mm	Blank: without	Blank: Basic type
ISOD: Two axis double	action type			50:50mm	magnet	LB:Foot mounting type
ISOJ: Two axis double	action type with stroke	adjustab	le	75:75mm		FA:Front flange mounting type
						FB:Rear-Flange mounting type
						CA:Male single Earring type
						CB:Female double earring type
						SDB: Back cover fixed type
2.Characteristics	S :					TC:Trunnion type

- 1) This series of cylinder conforms to: ISO6431 standard
- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) We can offer different kinds of mounting style according to ISO 6431 standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Internal Structure:



No.	: Designation	No.:	Designation
1.	Piston rod nut	10.	Piston
2.	Piston rod	11.	Wearing
3.	Front cover seal ring	12.	Magnet (Optional)
4.	O-ring	13.	Piston O-ring
5.	Bearing	14.	Pipe wall O-ring
6.	Front cover	15.	Damping
7.	Buffering O-ring	16.	Hex socket screw
8.	Piston rod O-ring	17.	Back cover
9.	Barrel		

4. Specification:

4.Specificatio	111.													
Bore (mm)	32	40	50	63	80	100	125	160	200					
Action					Double Actio	n								
Applicable medium					Filered Air									
Pressure range		0.1~0.9 MPa												
Proof pressure		1.35 MPa												
Temperature range		-5°C~70 <i>°C</i>												
Speed range				5	50~800 mm/	s								
Cushion style				Adju	ıstable Air B	uffer								
Cushion stroke		24 mm 32 mm												
Port size	G1/8	G1/8 G1/4 G3/8 G1/2 G3/4												

5.Cylinder Theory output:

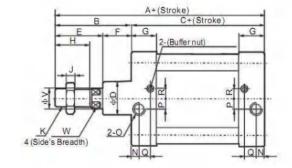
Cylinder	Extern	Deta	on Patterm	Compression				+	Air Pressu	re(kgf/cm	-)		
Diameter	of Piston Rod	Polic	on Pattern	Area(cm²)	1	2	3	4	5	6	7	8	9
20	in.	Double	Press Side	8.04	8.04	16.08	24.12	32.16	40.20	48.24	56.28	64.32	72,36
32	12	Action	Pull Side	6.90	6.90	13.80	20.07	27.60	34.50	41.40	48.30	55.20	62.10
40	40	Double	Press Side	12.56	12.56	25.12	37.68	50.24	62.80	75.36	87.92	100.24	113.04
40	16	Action	Pull Side	10.55	10.55	21.10	31.65	42.20	52.75	63.30	73.85	84.40	94.95
F0	20	Double	Press Side	19.63	19.63	39.26	58.89	78.52	98.15	117.78	137.41	157.04	176.67
50	20	Action	Pull Side	16.49	16.49	32.98	49.47	65.96	82.45	98.94	115.43	139.92	148.41
	20	Double	Press Side	31.17	31.17	62.34	93.51	124.68	155.85	187.02	218.19	249.36	280.53
63	20	Action	Pull Side	28.03	28.03	56.06	84.09	112.12	140,15	168.18	196.21	224.24	252.27
200	05	Double	Press Side	50.26	50.26	100.52	150.78	201.04	251.30	301.56	351.82	402.08	452.34
80	25	Action	Pull Side	45.36	45.36	90.72	136.08	181.44	226.80	272.16	317.52	326.88	408.24
100	25	Double	Press Side	78.53	78.53	157.06	235.59	314.12	392.65	471.18	428.82	628.24	706.77
100	25	Action	Pull Side	71.47	71.47	142.94	214.41	285.88	357.35	428.82	500.29	517.76	643.23
105	20	Double	Press Side	122.72	122.72	245,44	368.16	490.88	613.60	736.32	859.04	981.76	1104.48
125	32	Action	Pull Side	114.68	114.68	229.36	344.04	458.72	573.40	688.08	802.76	917.44	1032.1
100	40	Double	Press Side	201.06	201.06	402.12	603.18	804.24	1005.30	1206.36	1407.42	1608.48	1809.5
160	40	Action	Pull Side	188.49	188.49	376.98	565.47	753.96	942.45	1130.94	1319.43	1507.92	1696.4
200	40	Double	Press Side	314.16	314.16	628.32	942.48	1256.64	1570.80	1884.96	2199.12	2513.28	2827.4
200	40	Action	Pull Side	301.57	301.57	603.14	904.71	1206.28	1507.80	1809.42	2100.99	2412.56	2714.13

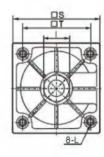
6.Stroke:

ore(mm)	Standard Stroke	Max.Stroke	Permissible Strok
32	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

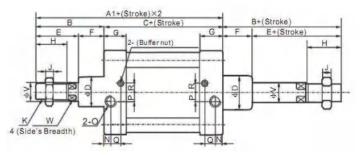
7. Overall and Dimension Sheet:

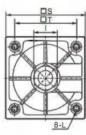
Iso series:





ISOD series:



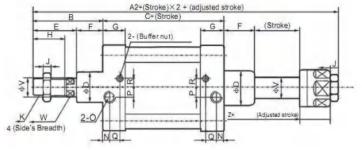


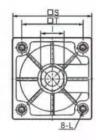
Ф250~Ф320 ISOSeries:

A+ (Stroke) (Buffer nut) G 2-0

Bore/Symbol	A	В	C	D	E	F	G	H	1	J	K	L	M	S	T	0
250	200	105	67	52	10	90	31	84	90	50	M42×2	M20	Ф30	270	220	G1
320	218	120	82	52	10	110	31	96	110	63	M48×2	M24	Ф34	340	270	G1.

ISOJ series:





Bore/Symbol	A	A1	A2	В	C	D	E	F	G	Н	1	J	K	L
32	142	190	187	48	94	30	28	16	27,5	22	17	6	M10×1.25	M6
40	159	213	207	54	105	35	32	18	29	24	19	7	M12×1.25	M6
50	175	244	233	69	105	40	42	25	30	32	24	8	M16×1.5	M8
63	190	259	250	69	120	40	40	24	31.5	32	24	8	M16×1.5	M8
80	214	300	286	86	128	40	53	30	35.5	40	30	10	M20×1.5	M10
100	229	320	308	91	138	45	55	32	36	40	30	10	M20×1.5	M10
125	279	398	372.5	119	160	60	74	45	46	54	41	13.5	M27×2	M12
160	332	484	448	152	180	65	94	58	50	72	55	18	M36×2	M16
200	337	514	472	157	180	75	100	57	50	72	55	18	M36×2	M16

Bore/Symbol	N	0	P	Q	R	S	T	V	W	Z
32	13.5	G1/8"	4	7.5	7	47	32.5	12	10	21
40	16	G1/4"	6	8.5	9	53	38	16	13	21
50	15.5	G1/4"	8.5	7.5	7.5	65	46.5	20	17	23
63	16.5	G3/8"	7.5	8.5	9	75	56.5	20	17	23
80	16.5	G3/8"	11	8.5	13.5	95	72	25	22	29
100	18.5	G1/2"	13.5	9.5	14.5	115	89	25	22	29
125	23	G1/2"	14	12	14	140	110	32	27	35
160	25	G3/4"	15	12	20	180	140	40	36	40
200	25	G3/4	15	12	20	220	175	40	36	40





DSN Series ISO6432 Stainless Steel Mini Cylinder



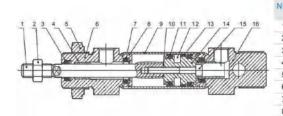
1.Ordering Code:

DSN 20 X LB 25 Model Blank:Fishtail type Bore size Stroke Adjust stroke S:with magnet Fixed type Blank: Basic type DSN: Double action type CM: Rounded type 0~100mm Blank:no magnet LB:Foot mounting type ESN: Single acting spring return U:Horizontal type FA:Front flange mounting type DSND: Two axis double action type DSNJ: Two axis double action type with stroke adjustable SDB: Back cover fixed type U:Back cover fixed type

2.Characteristics:

- 1) This series of stainless steel mini cylinder conforms to: ISO6432 standard
- 3) We can offer different kinds of mounting style according to standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Internal Structure:



10.	Designation	NO.	Designation
1	Piston Rod	9	Barrel
2	Piston Rod Nut	10	Piston rod O-ring
3	Front Cover Seal	11	Piston O-ring
4	Bearing	12	Magnet(Optional)
5	Hexagon Screw	13	Wear Ring
6	Front Cover	14	Piston
7	Cushion Ring	15	Hex Socket Screw
8	O-ring	16	Back Cover

4. Specification:

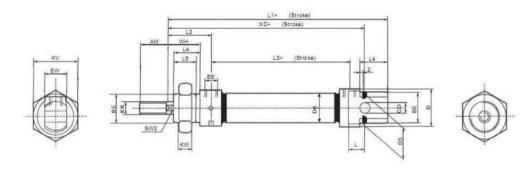
Cylinder diameter(mm)	8	10	12	16	20	25
Working Medium				/Air		
Motion pattern			/Double	Action or sin	gleAction	
Ensured Pressure Resistance			15.3kgf/cn	n²(1.5Mpa)		
Max.pressure			10.2kgf/cn	n²(1.0Mpa)		
Min.pressure		0.5	5kgf/cm²(0.05Mpa) 1kgf/cm ² (0.1l	Mpa)	
Environment and fluid temp	-20~+801	C(Internal Ma	agnetic Install I	by Tach strap:Type N	Max:60°C)
Piston veocity		Ru	bber Bufer(Stand	ard),	Air Buffer(Option)
Buffering			50~75	0mm/s		
Kinetic energy To Lerance(kgf/cm)	0.2	0.3	0.4	0.9	2.7	4
Pipe Size		M5:	×0.8		G1	/8"

5. Stroke:

Bore(mm)	Standard stroke	Max.Stroke(mm)
8	10,25,40,50,80,100,125,160,200	400
10	10,25,40,50,80,100,125,160,200	400
12	10,25,40,50,80,100,125,160,200	400
16	10,25,40,50,80,100,125,160,200	400
20	25,40,50,80,100,125,150,160,175,200,250,300	1000
25	25,40,50,80,100,125,150,160,175,200,250,300	1000

Note:In non-standard stroke options.

6. Overall and Dimension Sheet:



Bore/Symbol	AM	BE	ΦCD	ΦD	Ф D 5	ΦD6	EE	EW	AM	KK	KV	KW	L	Lt	L2	L3	L4	L5	SW2	WH	XC
8	12	M12×1.25	4	15	15	12	M5	8	12	M4	19	7	6	78	22	34	12	10	4	16	64
10	12	M12×1.25	4	15	15	12	M5	8	12	M4	19	7	6	78	22	34	12	10	4	16	64
12	16	M16×1.5	6	20	20	16	M5	12	16	M6	24	6	9	89	28	38	17	15	5	22	75
16	16	M16×1.5	6	20	20	16	M5	12	16	M6	24	6	9	95	28	44	17	15	5	22	82
20	20	M22×1.5	8	27	27	22	G1/8"	16	20	M8	30	8	12	112	32	51.6	20	18	7	24	95
25	22	M22×1.5	8	27	27	22	G1/8"	16	22	M10×1.25	30	8	12	119.5	36	53.1	22	20	8	26	104





ADVU Series ISO6431 Compact Cylinder



1.Ordering Code:

1.Ordering Cot	<i>1</i> 6.							
ADVU	-	50	Χ	80 -	Α	- P	- A	١.
↑		↑		↑	↑	↑	1	
Model		Bore size		Stroke		buffer type	A:with ma	agnet
ADVU: Double acti	on type	16~100mm	1	Normal type: A:	:ma l e th	read	Blank:	:
AEVUZ: Single-driv	ven type		Ф16~2	5:1~200mm BI	lank: fer	nale thread	withou	
AEVUD: Two axis	doub l e ac	tion type	Ф32~6	3:1~300mm			magn	et
			Ф80~10	0:1~400mm				
			S	ingle action:				
			Φ	12:1~10mm				
			Φ	16:1~25mm				

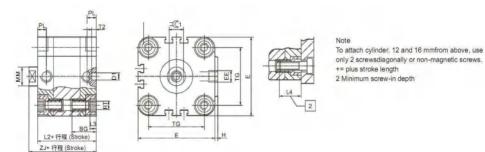
2.Characteristics:

- 1) This series of cylinder conforms to: ISO6431 standard
- 2) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 3) Needn't lubricate on piston rod by oil

3.Specification:

Bore(m	m)	16	20	25	32	40	50	63	80	100
Action					Double	e acting, sing	gle rod/doubl	e rod		
Fluid						Filtered co	mpressed ai	r		
Ensured Pressure R	esistance					1.5MPa				
Operating pressure range	ADVUP-A	0.12~1.0MPa	0.1~1	.0MPa		0.08~1.0MP	а		0.06~1.0MP	а
operating process range	ADVUP-A-S2	0.13~1.0MPa	0.12~1	I.0MPa		0.1~1.0MPa	1		0.8~1.0MPa	
Ambient and fluid t	emperature				-20-	-80 (No free	zing)			
Port size	е		M5				G1/8"			G1/4"
Piston rod thread	Female thread	M4	M5		٨	1 6	N	18	M10	M12
ristori iod tiliedd	Male thread	M8		M10×	1.25		M12>	1.25	M16×1.5	M20×1.5
Cushio	n					Rubbert	umper			

4. Overall and Dimension Sheet:



Bore size(mm)	GB	D1 + H9	E	EE	Н	L2	L3	L4	Φ MM	PL	RT	T2	TG	ZJ	=01
16	18.5	6	29	M5	1	38	3	16	8	8	M4	4	18	42.5	7
20	18.5	6	36	M5	1.5	38	4	18	10	8	M5	4	22	42.5	9
25	18.5	6	40	M5	1.5	39.5	4	18	10	8	M5	4	26	45	9
32	21.5	6	50	G1/8	2	44.5	5	20	12	8	M6	4	32	50.5	10
40	21.5	6	60	G1/8	2.5	45.5	5	20	12	8	M6	4	42	52	10
50	22	6	68	G1/8	3	45.5	6	20	16	8	M8	4	50	53	13
63	24.5	8	87	G1/8	4	50	8	25	16	8	M10	4	62	57.5	13
80	27.5	8	107	G1/8	4	56	8	25	20	8.5	M10	4	82	64	17
100	32.5	8	128	G1/4	5	66.5	8	25	35	10.5	M10	4	103	76.5	22





SDA Series Compact Cylinder



1.Ordering Code:

•							
SDA	-	20	Х	30 -	5	S	- B
↑		1		1	↑	↑	↑
Model		Bore size		Stroke	Adjust stroke	S:with magnet	Cog type
SDA: Double action type	ре	12mm~100r	nm		5: 5mm	Blank:	Blank: Inner thread
SSA: Single action typ	е				15:15mm	without	B:outer thread
STA: Single action dra	wing-in	type			25:25mm	magnet	N: no thread
SDAD: Two axis double	le actio	n type					

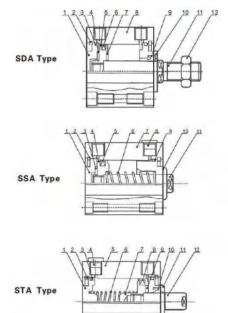
2.Characteristics:

1) This series of cylinder conforms to: Airtac standard

SDAJ: Two axis double action type with stroke adjustable

- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 4) Needn't lubricate on piston rod by oil

3.Internal Structure:



NO.	Designation	NO.	Designation
1	Back cover	2	Type C buckle ring
3	O-ring	4	Anti-crash cushion
5	Piston	6	Piston O-ring
7	Anti-crash cushion	8	Barrel
9	Front cover seal ring	10	Front cover
11	Piston rod	12	Piston Rod Nut
NO.	Designation	NO.	Designation
1	Back cover	2	Type C buckle ring
3	Anti-crash cushion	4	Piston
5	Piston O-ring	6	Compressed spring
7	Barrel	8	Silencer
9	Cover O-ring	10	Front cover
9			

NO.	Designation	NO.	Designation
1	Back cover	2	Type C buckle ring
3	Cover O-ring	4	Silencer
5	Barrel	6	Compressed spring
7	Piston	8	Piston O-ring
9	Anti-crash cushion	10	Frount cover seal ring
11	Front cover	12	Piston rod

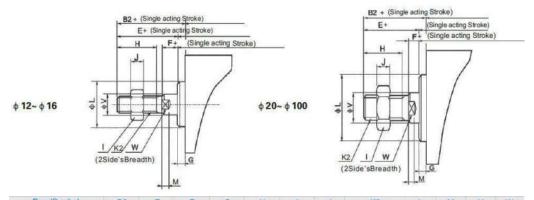
4. Specification:

Bore(mn	n)	12	16	20	25	32	40	50	63	80	100
Making Date						Do	uble Acting				
Motion Patte	ern		Single Action	Extrusion type	Single Action	Drawing-in Typ	е				
Working Media	um						Air				
	Double Action					0.1~0.	9МРа				
Operating Pressure Range	Single Action			0.2~0	.9МРа					-1	
Ensured Pressure Re	esistance					1.35	MРа				
Operating Temperatu	re Range					-5~7	O.C.				
Operating Speed Range	Double Action			30~50	0mm/s			30~35	60mm/s	30~2	60mm/s
Operating Speed Range	Single Action			100~50	00mm/s						
Buffer Type						Fixe	d Type Buff	er			
Port Size			M5	×0.8		G1	/8"	G [*]	1/4"	G	3/8"

5.Stroke:

1	Bore(mm)	12	16	20	25		32	40	50	63	80	100
Double	Not attach magnet	5~60 mm g is grouped a	Every 5mm is one grade	5~85 mm Every 5mm is grouped as one grade	5~90 mm Every 5mm is grouped as one grade	100~110 mmEvery 5 mm is grouped as one grade	5~90 is grou	mm Ever	y 5mm le grade	100~13 is grou	0mm Evi iped as o	very 5mm ne grade
Action	Attach magnet	5~50 mm lis grouped a		5~75mm Every 5mm is grouped as one grade	5~90 mm Every 5mm is grouped as one grade	100mm		mm Ever				very 5mm ne grade
Single	Not attach magnet) mm uped as one grade		5-30 m is grouped	m Every Sm as one gradi	im		÷	
Action	Attach magnet		Every 5mm is grow) mm uped as one grade		5-30 m is grouped	mEvery 5m as one gradi	m			
Max	Stroke	60r	nm	100mm	120	Omm			13	0mm		

6.Outer thread dimension:



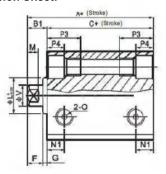
Bore/Symbol	B2	E	F	G	Н	1	J	K2	L	M	V	W
12	17	16	4	1	10	8	4	M5×0.8	10.2	2.8	6	5
16	17.5	16	4	1.5	10	8	4	M5×0.8	11	2.8	6	5
20	20.5	19	4	1.5	13	10	5	M6×1.0	16	2.8	8	6
25	23	21	4	2	15	12	6	M8×1.25	17	2.8	10	8
32	25	22	4	3	15	17	6	M10×1.25	22	2.8	12	10
40	35	32	4	3	25	19	8	M14×1.5	28	2.8	16	14
50	37	33	5	4	25	27	11	M18×1.5	38	2.8	20	17
63	37	33	5	4	25	27	11	M18×1.5	40	2.8	20	17
80	44	39	6	5	30	32	13	M22×1.5	45	4	25	22
100	50	45	7	5	35	36	13	M26×1.5	55	4	32	27

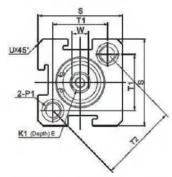


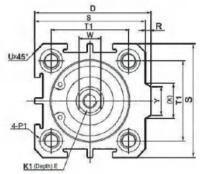
7. Overall and Dimension Sheet:



SDA Type φ20-φ100

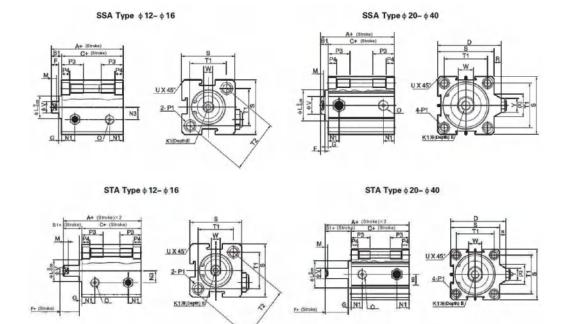






Туре	Sta	ndard	lype	Atta	ich Ma	gnet		1	Е	F	G	K1			814
Bore Size/Symbol	Α	B1	С	Α	B1	С	D	Stroke≤10	Stroke>10	F	G	NI	-	М	N1
12	22	5	17	32	5	27			6	4	1	M3×0.5	10.2	2.8	6.3
16	24	5.5	18.5	34	5.5	28.5	-		6	4	1.5	M3×0.5	11	2.8	7.3
20	25	5.5	19.5	35	5.5	29.5	36		8	4	1.5	M4×0.7	15	2.8	7.5
25	27	6	21	37	6	31	42	1	10	4	2	M5×0.8	17	2.8	8
32	31.5	7	24.5	41.5	7	34.5	50		12	4	3	M6×1	22	2.8	9
40	33	7	28	43	7	36	58.5	1	12	4	3	M8×1.25	28	2.8	10
50	37	9	28	47	9	38	71.5	1	15	5	4	M10×1.5	38	2.8	10.5
63	41	9	32	51	9	42	84.5	1	15	5	4	M10×1.5	40	2.8	11.8
80	52	11	41	62	11	51	104	15	20	6	5	M14×1.5	45	4	14.5
100	63	12	51	73	12	61	124	18	20	7	5	M18×1.5	55	4	20.5

Bore Size/Symbol	N3	0	P1	P3	P4	R	S	TT	T2	U	V	W	X	Y
12	6	M5×0.8	(Double Sides): Φ6.5/ (Thread): M5×0.8/ (Through ports): Φ4.2	12	4.5		25	16.2	23	1.6	6	5	-	
16	6.5	M5×0.8	(Double Sides): 96,5/ (Thread): M5×0.8/ (Through ports): 94,2	12	4.5		29	19.8	28	1.6	6	5		-
20	-	M5×0.8	(Double Sides): Φ6.5/ (Thread):M5×0.8/ (Through ports): Φ4.2	14	4.5	2	34	24		2.1	8	6	11,3	10
25	4	M5×0.8	(Double Sides): Φ 8.2/ (Thread): $M6 \times 1.0$ / (Through ports): Φ 4.6	15	5.5	2	40	28	4	3.1	10	8	12	10
32		G1/8"	(Double Sides): 98,2/ (Thread): M6×1.0/ (Through ports): 94.6	16	5.5	6	44	34		2.15	12	10	18.3	15
40	7	G1/8"	(Double Sides): Φ10/ (Thread):M8×1,25/ (Through ports): Φ6,5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	+	G1/4"	(Double Sides): Ф11/ (Thread):M8 ×1.25/ (Through ports): Ф6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	-	G1/4"	(Double Sides): Ф11/ (Thread): M8×1.25/ (Through ports): Ф6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80		G3/8"	(Double Sides): 414/ (Thread):M12×1.75/ (Through ports): 49.2	25	10.5	10	94	74		3.65	25	22	36	26
100	-	G3/8"	(Double Sides): \$17.5/ (Thread):M14 ×2/ (Through ports): \$411.3	30	13	10	114	90	-	3.65	32	27	35	26

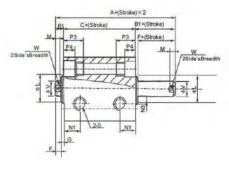


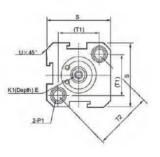
Туре		Sta	ndard	Туре			Atta	ach m	agnet									
	l l	4		(0	1	4	m.	(C	D	E	F	G	K1	L	M	N1
Strbke	≤10	>10	B1	≤10	>10	≤10	>10	B1	≤10	>10								
12	32	42	5	27	37	42	52	5	37	47		6	4	1	M3×0.5	10.2	2.8	6.3
16	34	44	5.5	28.5	38.5	44	54	5.5	38.5	48.5		6	4	1.5	M3×0.5	11	2.8	7.3
20	35	45	5.5	29.5	39,5	45	55	5.5	39.5	49.5	36	8	4	1.5	M4×0.7	16	2.8	7.5
25	37	47	6	34	41	47	57	6	41	51.	42	10	4	2	M5×0.8	17	2.8	8
32	41.5	51.5	7	34.5	44.5	51.5	61.5	7	44.5	54.5	50	12	4	3	M6×1	22	2.8	9
40	43	53	7	36	46	53	63	7	46	56	58.5	12	4	3	M8×1.25	28	2.8	10

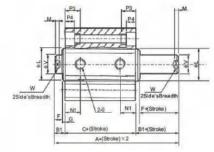
Bore Size/Symbol	N3	0	P1	P3	P4	R	S	T1	T2	U	V	W	X	Y
12	6	M5×0.8	(Double Sides): $\Phi6.5/(Thread):M5 \times 0.8/(Through ports): \Phi4.2$	12	4.5	-	25	16.2	23	1.6	6	5	-	7
16	6.5	M5×0.8	(Double Sides): \$\phi 6.5/(Thread): M5 \times 0.8/(Through ports): \$\phi 4.2\$	12	4.5		29	19.8	28	1.6	6	5		-
20	*	M5×0.8	(Double Sides); Φ 6.5/(Thread); M5 \times 0.8/(Through ports); Φ 4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25		M5×0.8	(Double Sides): \$\Phi 8.2\(\)(Thread): \$\M6 \times 1.0\(\)(Through ports): \$\Phi 4.6\(\)	15	5.5	2	40	28	-	3.1	10	8	12	10
32		G1/8*	(Double Sides): \$\Phi 8.2 (Thread): \$M6 \times 1.0 (Through ports): \$\Phi 4.6\$	16	5.5	6	44	34	-	2.15	12	10	18.3	15
40	-	G1/8"	(Double Sides): 410/(Thread):M8×1.25/(Through ports):46.5	20	7.5	6.5	52	40		2.25	16	14	21.3	16

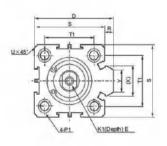
SDAD Type \$\phi 12 \circ \phi 16

SDAD Type \$\phi 20 \sim \phi 100



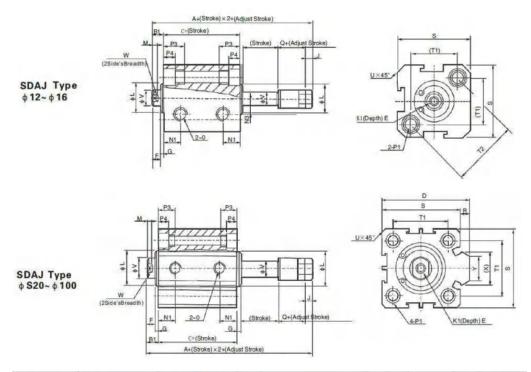






Type	Sta	indard f	ype	Atta	ach Mag	gnet	D		E	F	G	K1		M	N1
Bore Size/Symbol	Α	B1	C	A	B1	С	D	Stroke≤10	Stroke>10	-	G	KI	-	IVI	INT
12	27	5	17	37	5	27	-		6	4	1	M3×0.5	10.2	2.8	6.3
16	29.5	5.5	18.5	39.5	5.5	28.5	2		6	4	1.5	M3×0.5	11	2.8	7.3
20	30.5	5.5	19.5	40.5	5.5	29.5	36	8 (Stroke)	=5 (itis)6.5	4	1.5	M4×0.7	15	2.8	7.5
25	33	6	21	43	6	31	42	10 (Stroke	e)=5(itis)7	4	2	M5×0.8	17	2.8	8
32	38.5	7	24.5	48.5	7	34.5	50	8	12	4	3	M6×1	22	2.8	9
40	40	7	28	50	7	36	58.5	9	12	4	3	M8×1.25	28	2.8	10
50	46	9	28	56	9	38	71.5	11	15	5	4	M10×1.5	38	2.8	10.5
63	50	9	32	60	9	42	84.5	11	15	5	4	M10×1.5	40	2.8	11.8
80	63	11	41	73	11	51	104	14	20	6	5	M14×1.5	45	4	14.5
100	75	12	51	85	12	61	124	18	20	7	5	M18×1.5	55	4	20.5

Bore Size/Symbol	N3	0:	P1	P3	P4	R	S	Ti	T2	U	V	W	X	Y
12	6	M5×0.8	(Double Sides): Φ 6.5/(Thread):M5×0.8/(Through ports): Φ 4.2	12	4.5		25	16.2	23	1.6	6	5	-	-
16	6.5	M5×0.8	(Double Sides): $\Phi6.5/$ (Thread):M5×0.8/ (Through ports):4.2	12	4.5	-	29	19.8	28	1.6	6	5	4	-
20		M5×0.8	(Double Sides): Φ 6.5/(Thread):M5 \times 0.8/(Through ports): Φ 4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25		M5×0.8	(Double Sides): $\Phi 8.2$ (Thread):M6 \times 1.0/ (Through ports): $\Phi 4.6$	15	5.5	2	40	28	-	3.1	10	8	12	10
32	-	G1/8"	(Double Sides): $\Phi 8.2/$ (Thread):M6×1.0/ (Through ports): $\Phi 4.6$	16	5.5	6	44	34	4	2.15	12	10	18.3	1
40		G1/8*	(Double Sides): Φ 10/ (Thread): M8 × 1.25/ (Through ports): Φ 6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	1
50	×	G1/4"	(Double Sides): Φ 11/(Thread): $M8 \times 1.25$ /(Through ports): Φ 6.5	25	8.5	9.5	62	48		4.15	20	17	30	20
63	-	G1/4"	(Double Sides): Φ 11/ (Thread):M8 × 1.25/ (Through ports): Φ 6.5	25	8.5	9.5	75	60	-	3.15	20	17	28.7	20
80		G3/8"	(Double Sides): Φ 14/(Thread):M12×1.75'(Through ports): Φ 9.2	25	10.5	10	94	74	1	3.65	25	22	36	2
100	in.	G3/8"	(Double Sides): Ф17.5/ (Thread):M14×2/ (Through ports): Ф11.3	30	13	10	114	90		3.65	32	27	35	2



Туре	Sta	ndard t	уре	Atta	ach Ma	gnet				-	0	L/A			ALIE
Bore Size/Symbol	A	B1	С	A	B1	С	D	Stroke≤10	Stroke > 10	F	G	K1	L	M	N1
12	22	5	17	32	5	27			6	4	1	M3×0.5	10.2	2.8	6.3
16	24	5.5	18.5	34	5.5	28.5		- 1	5	4	1.5	M3×0.5	11	2,8	7,3
20	25	5.5	19.5	35	5.5	29.5	36	1	В	4	1.5	M4×0.7	15	2.8	7.5
25	27	6	21	37	6	31	42	1	0	4	2	M5×0.8	17	2.8	8
32	31.5	7	24.5	41.5	7	34.5	50	1	2	4	3	M6×1	22	2.8	9
40	33	7	26	43	7	36	58.5	1	2	4	3	M8×1.25	28	2.8	10
50	37	9	28	47	9	38	71.5	1	5	5	4	M10×1.5	38	2.8	10.5
63	41	9	32	51	9	42	84.5	1	5	5	4	M10×1.5	40	2.8	11.8
80	52	11	41	62	11	51	104	15	20	6	5	M14×1.5	45	4	14.5
100	63	12	51	73	12	61	124	18	20	7	5	M18×1.5	55	4	20.5

Bore Size/Symbol	N3	0	P1	P3	P4	R	S	T1	T2	U	٧	W	X	Y
12	6	M5×0.8	(Double Sides): \$\Phi 6.5/(Thread):M5 \times 0.8/(Through ports): \$\Phi 4.2\$	12	4.5		25	16.2	23	1.6	6	5		-
16	6.5	M5×0.8	(Double Sides): \$\phi 6.5/(Thread):M5 \times 0.8/(Through ports):\$\phi 4.2\$	12	4.5		29	19.8	28	1.6	6	5	14.	14
20	-	M5×0.8	(Double Sides): ⊕ 6.5/(Thread):M5×0.8/(Through ports): Ф4.2	14	4.5	2	34	24	-	2.1	8	6	11.3	10
25	4	M5×0.8	(Double Sides): \$\phi 6.5/(Thread):M6 \times 1.0/(Through ports): \$\phi 4.6\$	15	5.5	2	40	28	-	3.1	10	8	12	10
32		G1/8"	(Double Sides): Φ6.5/(Thread):M6 × 1.0/(Through ports): Φ4.6	16	5.5	6	44	34		2.15	12	10	18.3	15
40		G1/8"	(Double Sides): Φ6.5/(Thread):M8×1.25/(Through ports): Φ6.5	20	7.5	6.5	52	40	-	2.25	16	14	21.3	16
50	4	G1/4"	(Double Sides): Φ6.5/(Thread):M8×1.25/(Through ports): Φ6.5	25	8.5	9.5	62	48	-	4.15	20	17	30	20
63	4	G1/4"	(Double Sides): $\Phi6.5$ /(Thread):M8×1.25/(Through ports): $\Phi6.5$	25	8.5	9.5	75	60	4	3.15	20	17	28.7	20
80	-	G3/8"	(Double Sides): Φ 6.5/(Thread): M12×1.75/(Through ports): Φ 9.2	25	10.5	10	94	74		3.65	25	22	36	26
100	+	G3/8"	(Double Sides); Ф6.5/(Thread):M12×1.75/(Through ports):Ф11.3	30	13	10	114	90	-	3.65	32	27	35	26



SC Series Standard Cylinder



2.Characteristics:

3.Internal Structure:

- 1) This series of cylinder conforms to: Airtac standard
- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) We can offer different kinds of mounting style according to standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

1 2 3 4 5 6 7 8	9 10 11 12 13 14
	18 17 15 16

No.	: Designation	No.	: Designation
1.	Piston rod nut	10.	Wear ring
2.	Piston rod	11.	Barrel
3.	Front cover seal ring	12.	buffering o-ring
4.	Bearing	13.	adjustable screw
5.	Front cover	14.	Back cover
6.	Buffering sealing	15.	Hex socket screw
7.	Pipe wall O-ring	16.	Tie rod nut
8.	Piston sealing	17.	Tie rod o-ring
9.	Piston	18.	Piston rod o-ring

CA:Male single Earring type CB:Female double earring type SDB: Back cover fixed type

TC:Trunnion type

4.Specification:

Bore (mm)	32	40	50	63	80	100	125	160	200				
Action		Double Action											
Applicable medium		Filered Air											
Pressure range		0.1~0.9 MPa											
Proof pressure		1.35 MPa											
Temperature range					-5°C~70 <i>℃</i>								
Speed range				;	300~800 mm	/s							
Cushion style				Adj	ustable Air B	uffer							
Cushion stroke		24 mm 32 mm											
Port size	G1/8	G	1/4	G	3/8	G	1/2	G	3/4				

5.Cylinder Theory output:

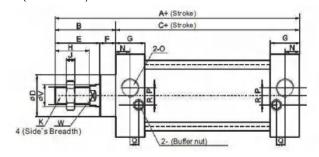
Cylinder	Extern Diameter	Doffer	Dottorm	Compression				Air	Pressure(I	kgf/cm²)			
Diameter	of Piston Rod	Polio	n Patterm	Area(cm²)	1	2	3	4	5	6	7	8	9
20	40	Double	Press Side	8.04	8.04	16.08	24.12	32.16	40.20	48.24	56.28	64.32	72.36
32	12	Action	Pull Side	6.90	6.90	13.80	20,07	27.60	34.50	41.40	48.30	55.20	62.10
40	46	Double	Press Side	12.56	12.56	25.12	37.68	50.24	62.80	75.36	87.92	100.24	113.04
40	16	Action	Pull Side	10.55	10.55	21.10	31.65	42.20	52.75	63.30	73.85	84,40	94.95
50	200	Double	Press Side	19.63	19.63	39.26	58.89	78,52	98.15	117.78	137.41	157.04	176.67
50	20	Action	Pull Side	16.49	16.49	32.98	49.47	65.96	82.45	98.94	115.43	139.92	148.41
63	20	Double Action	Press Side	31.17	31.17	62.34	93.51	124.68	155.85	187.02	218.19	249.36	280.5
03	.20		Pull Side	28.03	28.03	56.06	84.09	112.12	140.15	168.18	196.21	224.24	252.2
80	25	Double	Press Side	50.26	50.26	100.52	150.78	201.04	251.30	301.56	351.82	402.08	452.34
00	.25	Action	Pull Side	45.36	45.36	90.72	136.08	181.44	226.80	272.16	317.52	326.88	408.24
100	25	Double	Press Side	78.53	78.53	157.06	235.59	314.12	392.65	471.18	428.82	628.24	706.77
100	25	Action	Pull Side	71.47	71.47	142.94	214.41	285.88	357.35	428.82	500.29	517.76	643.23
125	20	Double	Press Side	122,72	122.72	245.44	368.16	490.88	613.60	736.32	859.04	981.76	1104.4
125	32	Action	Pull Side	114.68	114.68	229.36	344.04	458.72	573.40	688.08	802.76	917.44	1032.1
160	40	Double	Press Side	201.06	201.06	402.12	603.18	804.24	1005.30	1206.36	1407.42	1608.48	1809.5
100	40	Action	Pull Side	188.49	188.49	376.98	565.47	753.96	942.45	1130.94	1319.43	1507.92	1696.4
200	40	Double	Press Side	314.16	314.16	628.32	942,48	1256.64	1570.80	1884.96	2199.12	2513.28	2827.4
200	40	Action	Pull Side	301.57	301.57	603.14	904.71	1206.28	1507.80	1809.42	2100.99	2412.56	2714.1

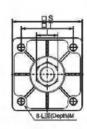
6.Stroke:

Bore(mm)	Standard Stroke	Max,Stroke	Permissible Stroke
32	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

7. Overall and Dimension Sheet:

SC series (Φ32~Φ200):

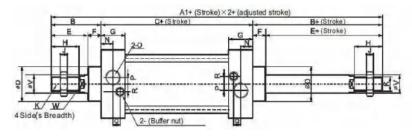


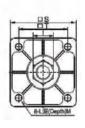


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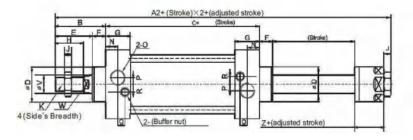


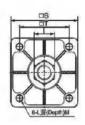
SCD series (Φ32~Φ200):





SCJ series (Φ32~Φ200):

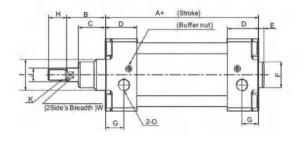


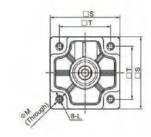


Bore/Symbol	L	M	N	0	P	Q	R	S	Т	V	W	Z
32	M6×1	9.5	13.7	G1/8"	3.5	7.5	7	45	33	12	10	21
40	M6×1	9.5	13.5	G1/4"	6	8.2	9	50	37	16	14	21
50	M6×1	9.5	13.5	G1/4"	8.5	8.2	9	62	47	20	17	23
63	M8×1.25	9.5	13.5	G3/8"	7	8.2	8.5	75	56	20	17	23
80	M10×1.5	11.5	16.5	G3/8"	10	9.5	14	94	70	25	22	29
100	M10×1.5	11.5	16.5	G1/2"	11	9.5	14	112	84	25	22	29
125	M12×1.75	21	16.5	G1/2"	1	1	I	140	110	32	28	33
160	M16×2	25	26	G3/4"	1	1	1	180	140	40	36	38
200	M16×2	25	22.5	G3/4"	1	1	1	220	175	40	36	42

Bore/Symbol	A	A1	A2	В	C	D	E	F	G	H	1	J	K
32	140	187	182	47	93	26	32	15	27.5	22	17	6	M10×1.25
40	142	191	185	49	93	30	34	15	27.5	24	19	7	M12×1.25
50	150	207	196	57	93	36	42	15	27.5	32	24	8	M16×1.5
63	153	210	199	57	96	36	42	15	27.5	32	24	8	M16×1.5
80	182	257	242	75	108	47	54	21	33	40	30	9	M20×1.5
100	188	263	248	75	108	47	54	21	33	40	30	9	M20×1.5
125	239	330	363	104	136	56	71	32	40	54	40	12	M27×2
160	291	412	450	121	166	62	92	60	50	72	50	14	M36×2
200	272	409	451	132	130	75	117	30	41	72	50	16	M36×2

SC Series (Φ250~Φ320):





Bore/Symbol	Α	В	C	D	E	F	G	H	1	J	K	L	M	S	T	0
250	200	105	67	52	10	90	31	84	90	50	M42×2	M20	Ф30	270	220	G1
320	218	120	82	52	10	110	31	96	110	63	M48×2	M24	Ф34	340	270	G1





SU Series Standard Cylinder



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1.Ordering Code: SU

↑	↑	↑	↑	↑	\uparrow
Model	Bore size	Stroke	Adjust stroke	S:with magnet	t Fixed type
SU: Double action type			25:25mm	Blank:	Blank: Basic type
SUD: Two axis double a	action type		50:50mm	without	LB:Foot mounting type
SUJ: Two axis double a	action type with stroke adjustabl	е	75:75mm	magnet	FA:Front flange mounting type

ting type FB:Rear-Flange mounting type CA:Male single Earring type CB:Female double earring type SDB: Back cover fixed type

LB

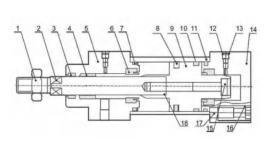
TC:Trunnion type

2.Characteristics:

1) This series of cylinder conforms to: Airtac standard

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- 2) There is an adjustable buffers at the terminals of the cylinder except for mounted cushion.
- 3) We can offer different kinds of mounting style according to standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil



No.:	Designation	No.	: Designation
1.	Piston rod nut	10.	Wear ring
2.	Piston rod	11.	Barrel
3.	Front cover seal ring	12.	buffering o-ring
4.	Bearing	13.	adjustable screw
5.	Front cover	14.	Back cover
6.	Buffering sealing	15.	Hex socket screw
7.	Pipe wall O-ring	16.	Tie rod nut
8.	Piston sealing	17.	Tie rod o-ring
9.	Piston	18.	Piston rod o-ring

4.Specification:

T.Opcomodilo	•••															
Bore (mm)	32	40	50	63	80	100	125	160	200							
Action		Double Action														
Applicable medium		Filered Air														
Pressure range		0.1~0.9 MPa														
Proof pressure		1.35 MPa														
Temperature range					-5°C~70 <i>℃</i>											
Speed range					300~800 mm	/s										
Cushion style				Ad	justable Air B	uffer										
Cushion stroke		24 mm 32 mm														
Port size	G1/8	G	1/4		G3/8	G	1/2	G1/8 G1/4 G3/8 G1/2 G3/4								

Fescolo Pneumatic

5.Cylinder Theory output:

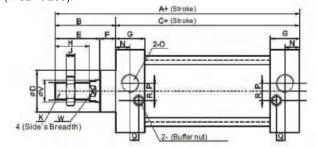
Cylinder inside	Extern Diameter	District	Detterm	Compression				Air	Pressure(kgf/cm²)			
Diameter	of Piston Rod	Polio	n Patterm	Area(cm²)	1	2	3	4	5	6	7	8	9
32	12	Double	Press Side	8.04	8.04	16.08	24.12	32.16	40.20	48.24	56.28	64.32	72.36
-32	12;	Action	Pull Side	6.90	6.90	13.80	20,07	27.60	34.50	41.40	48.30	55.20	62.10
40	46	Double	Press Side	12.56	12.56	25.12	37.68	50.24	62.80	75.36	87.92	100.24	113.04
40	16	Action	Pull Side	10.55	10.55	21.10	31.65	42.20	52.75	63.30	73.85	84,40	94.95
50	20	Double	Press Side	19.63	19.63	39.26	58.89	78,52	98.15	117.78	137.41	157.04	176.67
50	20	Action	Pull Side	16.49	16.49	32.98	49.47	65.96	82.45	98.94	115.43	139.92	148.4
63	20	Double Action	Press Side	31.17	31.17	62.34	93.51	124.68	155.85	187.02	218.19	249.36	280.5
03	20		Pull Side	28.03	28.03	56.06	84.09	112.12	140.15	168.18	196.21	224.24	252.2
80	25	Double	Press Side	50.26	50.26	100.52	150.78	201.04	251.30	301.56	351.82	402.08	452.3
00	25	Action	Pull Side	45.36	45.36	90.72	136.08	181,44	226.80	272.16	317.52	326.88	408.2
100	25	Double	Press Side	78.53	78.53	157.06	235.59	314.12	392.65	471.18	428.82	628.24	706.7
100	25	Action	Pull Side	71.47	71.47	142.94	214.41	285.88	357.35	428.82	500.29	517.76	643.23
125	20	Double	Press Side	122,72	122.72	245.44	368.16	490.88	613.60	736.32	859.04	981.76	1104.4
125	32	Action	Pull Side	114.68	114.68	229.36	344.04	458.72	573.40	688.08	802.76	917.44	1032.1
160	40	Double	Press Side	201.06	201.06	402.12	603.18	804.24	1005.30	1206.36	1407.42	1608.48	1809.5
100	40	Action	Pull Side	188.49	188.49	376.98	565.47	753.96	942.45	1130.94	1319.43	1507.92	1696.4
200	40	Double	Press Side	314.16	314.16	628.32	942,48	1256.64	1570.80	1884.96	2199.12	2513.28	2827.4
200	40	Action	Pull Side	301.57	301.57	603.14	904.71	1206.28	1507,80	1809.42	2100.99	2412.56	2714.1

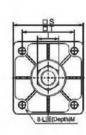
6.Stroke:

Bore(mm)	Standard Stroke	Max.Stroke	Permissible Strok
32	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

7. Overall and Dimension Sheet:

SU series (Φ32~Φ200):

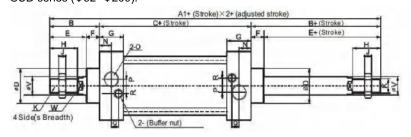




31

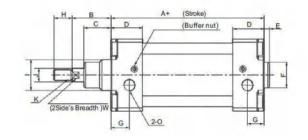
30

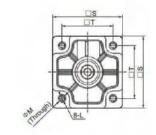
SUD series (Φ32~Φ200):



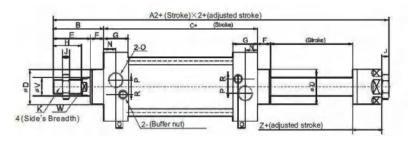


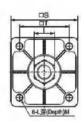
SU Series (Φ250~Φ320):





SUJ series (Φ32~Φ200):





Bore/Symbol	Α	В	C	D	E	F	G	H	-	1	K	L	M	S	T	0
250	200	105	67	52	10	90	31	84	90	50	M42×2	M20	Ф30	270	220	G1
320	218	120	82	52	10	110	31	96	110	63	M48×2	M24	Ф34	340	270	G1

Bore/Symbol	Α	A1	A2	В	С	D	E	F	G	Н	-1	J	K
32	140	187	182	47	93	26	32	15	27.5	22	17	6	M10×1.25
40	142	191	185	49	93	30	34	15	27.5	24	19	7	M12×1.25
50	150	207	196	57	93	36	42	15	27.5	32	24	8	M16×1.5
63	153	210	199	57	96	36	42	15	27.5	32	24	8	M16×1.5
80	182	257	242	75	108	47	54	21	33	40	30	9	M20×1.5
100	188	263	248	75	108	47	54	21	33	40	30	9	M20×1.5
125	239	330	363	104	136	56	71	32	40	54	40	12	M27×2
160	291	412	450	121	166	62	92	60	50	72	50	14	M36×2
200	272	409	451	132	130	75	117	30	41	72	50	16	M36×2

Bore/Symbol	L	M	N	0	P	Q	R	S	T	V	W	Z
32	M6×1	9.5	13.7	G1/8"	3.5	7.5	7	45	33	12	10	21
40	M6×1	9.5	13.5	G1/4"	6	8.2	9	50	37	16	14	21
50	M6×1	9.5	13.5	G1/4"	8.5	8.2	9	62	47	20	17	23
63	M8×1.25	9.5	13.5	G3/8"	7	8.2	8.5	75	56	20	17	23
80	M10×1.5	11.5	16.5	G3/8"	10	9.5	14	94	70	25	22	29
100	M10×1.5	11.5	16.5	G1/2"	11	9.5	14	112	84	25	22	29
125	M12×1.75	21	16.5	G1/2"	1	1	1	140	110	32	28	33
160	M16×2	25	26	G3/4"	1	1	J	180	140	40	36	38
200	M16×2	25	22.5	G3/4"	1	1	T	220	175	40	36	42



MA Series Stainless Steel Mini Cylinder



1.Ordering Code:

MA 20 X S LB 25 Model Blank:Fishtail type Bore size Stroke Adjust stroke S:with magnet Fixed type Blank: Basic type MA: Double action type CM: Rounded type 0~100mm Blank:no magnet LB:Foot mounting type MSA: Single spring return type U:Horizontal type FA:Front flange mounting type MAD: Two axis double action type MACD: Two axis double action type with stroke adjustable SDB: Back cover fixed type U:Back cover fixed type

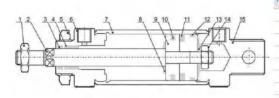
MAC: Two axis double action type

MAJ: Two axis double action type with stroke adjustable

2.Characteristics:

- 1) This series of stainless steel mini cylinder conforms to: Airtac standard
- 3) We can offer different kinds of mounting style according to standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Internal Structure:



VO.	Designation	NO.	Designation
1	Piston Rod Nut	2	Piston Rod
3	Front Cover Seal Ring	4	Oiled Bearing
5	Front Cover Nut	6	Front Cover
7	Stainless steel tube	8	Anti-crash cushion
9	Piston	10	Piston O-Ring
11	Magnet(Optional)	12	Wear Ring
13	Seal cushion	14	Hex socket screw
15	Back Cover		

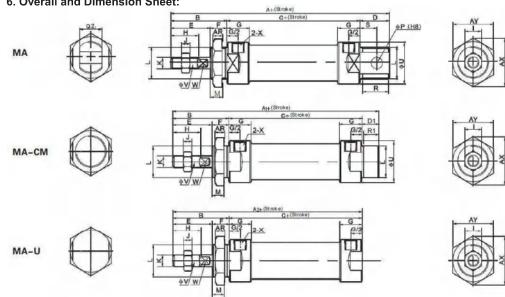
4. Specification:

	Bore(mm)	16	20	25	32		40
Motion pat	tern		Double A	Action or Sing	le Action		
Working M	ledium			Air			
Fixed Type			Normal Type LB Type	FAType	SDB Type	U Type	
Operating \	/oltage Range		0	.1~0.9MPa			
Ensured Pr	essure Resistance			1.35MPa			
Operating T	emperature Range			-5~70℃			
Operating S	Speed Range		50	0~800mm/s			
Buffer Type	Standard Type			Anti-crash cu	shion		
Buller Type	Damping Type	*		Adjustable	cushion		
Pipe Siz	re .	M5×0.8		G	1/8"		

5. Stroke:

Bore(mm)								St	anda	rd Str	oke					Max.Stroke	Permissible Stroke
16	25	50	75	80	100	125	160	175	5 20	00						300	500
20	25	50	75	80	100	125	160	175	200	250	300					500	650
25	25	50	75	80	100	125	160	175	200	250	300	350	400	450	500	500	650
32	25	50	75	80	100	125	160	175	200	250	300	350	400	450	500	500	650
40	25	50	75	80	100	125	160	175	200	250	300	350	400	450	500	500	650

6. Overall and Dimension Sheet:

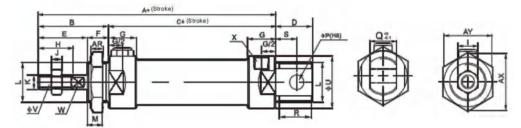


Bore/Symbol	A	A1	A2	В	C	D	D1	E	F	G	Н	1	j	K
16	114	114	98	38	60	16	16	22	16	10	16	10	5	M6×1
20	137	128	116	40	76	21	12	28	12	16	20	12	6	M8×1.25
25	141	134	120	44	76	21	14	30	14	16	22	17	6	M10×1.25
32	147	134	120	44	76	27	14	30	14	16	22	17	6	M10×1.25
40	149	136	122	46	76	27	14	32	14	16.7	24	17	7	M12×1.25

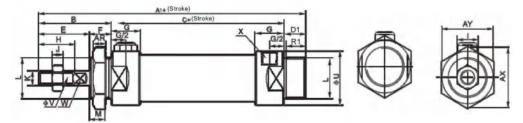
Bore/Symbol	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
16	M16×1.5	14	6	12	14	14	9	21	6	5	M5	6	24	27.5
20	M22×1.5	10	8	16	19	10	12	27	8	6	G1/8*	7	33	29
25	M22×1.5	12	8	16	19	12	12	30	10	8	G1/8"	7	33	29
32	M24×2.0	12	10	16	25	12	15	35	12	10	G1/8"	8	37	32
40	M30×2.0	12	12	20	25	12	15	41.6	16	14	G1/8"	9	47	41

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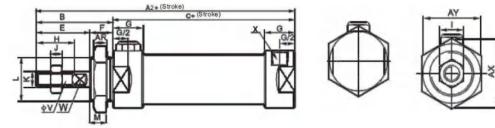
MSA:



MSA-CM:



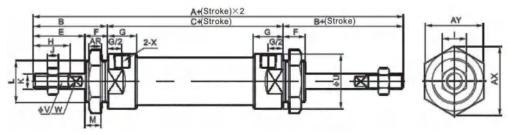
MSA-U:



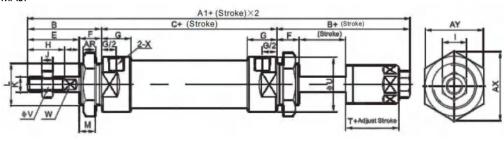
Symbol		A	1	A1	1	42	В		0	-	D.	-	F	-	14		
Bore/Stroke	0-50	51-100	0-50	51-100	0-50	51-100	В	0-50	51-100	D	D1	E	r	G	п	1	J
16	114	139	128	153	98	123	38	60	85	16	16	22	16	10	16	10	5
20	137	162	134	159	116	141	40	76	101	21	12	28	12	16	20	12	6
25	141	166	134	159	120	145	44	76	101	21	14	30	14	16	22	17	6
32	147	172	136	161	120	145	44	76	101	27	14	30	14	16	22	17	6
40	149	174	122	144	122	147	46	76	101	27	14	32	14	22	24	17	7

Inside Diameter/Symbol	K	L	M	P	Q	R	R1	s	Ü	٧	W	X	AR	AX	AY
16	M6×1	M16×1.5	14	6	12	14	14	9	21	6	5	M5	6	25	22
20	M8×1.25	M22×1,5	10	8	16	19	10	12	27	8	6	G1/8"	7	33	29
25	M10×1.25	M22×1.5	12	8	16	19	12	12	30	10	8	G1/8"	7	33	29
32	M10×1.25	M24×2.0	12	10	16	25	12	15	35	12	10	G1/8"	8	37	32
40	M12×1.25	M30×2.0	12	12	20	25	12	15	41.6	16	14	G1/8"	9	47	41

MAD:



MAJ:



Inside Diameter/Symbol	A	A1	В	C	E	F	G	Н	1	J	K
16	136	135	38	60	22	16	10	16	10	5	M6×1
20	156	153	40	70	28	12	16	20	12	6	M8×1.25
25	164	161	44	70	30	14	16	22	17	6	M10×1.25
32	164	161	44	70	30	14	16	22	17	6	M10×1.25
40	168	164	46	92	32	14	22	14	17	7	M12×1.25

nside Diameter/Symbol	L	M	U	V	W	X	AR	AX	AY	T
16	M16×1.5	14	21	6	5	M5	6	25	22	16
20	M22×1.5	10	29	9	6	G1/8*	7	33	29	19
25	M22×1.5	12	34	10	8	G1/8*	7	33	29	21
32	M24×2.0	12	39.5	12	10	G1/8*	8	37	32	21
40	M30×2.0	12	49.5	16	12	G1/8*	9	47	41	21

MAL Series Aluminum Alloy Mini Cylinder



1.Ordering Code:

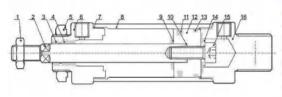
MAL LB 20 X Model Blank:Fishtail type Bore size Stroke Adjust stroke S:with magnet Fixed type Blank: Basic type MAL: Double action type CM: Rounded type 0~100mm Blank:no magnet LB:Foot mounting type MSAL: Single spring return type U:Horizontal type FA:Front flange mounting type MALC: With cushion type MALD: Two axis double action type SDB: Back cover fixed type

MALCD: Two axis double action with damping type
MALJ: Two axis double action type with stroke adjustable

2.Characteristics:

- 1) This series of stainless steel mini cylinder conforms to: Airtac standard
- 3) We can offer different kinds of mounting style according to standard, like Foot mounting, Front flange mounting, Rear-flange mounting, and so on.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3.Internal Structure:



NO.	Designation	NO.	Designation
1	Piston Rod Nut	2	/Piston Rod
3	Front Cover Seal Ring	4	/Oiled Bearing
5	Front Cover Nut	6	/Front Cover
7	Pipe wall O-ring	8	/Aliminum tube
9	Auti-crash cushion	10	/Piston rod O-Ring
11	Piston O-Ring	12	/Piston
13	Wear Ring	14	/Seal cushion
15	Hex socket screw	16	/Back Over

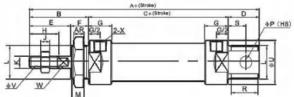
Bore	e(mm)	16	20	25	32	40
Motion	pattern			Double Action or Sing	gle Action	
Working	Medium			Air		
Fixed	d Type		Normal Type	LB Type FAType	SDB Type	
Operating V	oltage Range			0.1~0.9MPa		
Ensured Press	sure Resistance			1.35MPa		
Operating Tem	perature Range			-5~70℃		
Operating 8	Speed Range			30~800mm/s		
Buffer Type	Standard Type			Anti-crash cushion	1	
buller Type	Damping Type	*		Adjustable cushion		
Po	rt Size	M5×0.8		G1/8"		G1/4*

5. Stroke:

Bore(mm)	Standard Stroke	Max.Stroke	Permissible Stroke
16	25,50,75, 80,100 ,125,160,175,200	300	500
20	25,50,75,80,100,125,160,175,200, 250,300	500	650
25	25,50,75,80,100,125,160,175,200,250,300,350,400,450,500	500	650
32	25,50,75,80,100,125,160,175,200,250,300,350,400,450,500	500	650
40	25,50,75,80,100,125,160,175,200,250,300,350,400,450,500	500	650

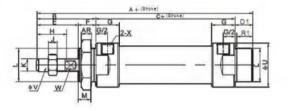
6. Overall and Dimension Sheet:



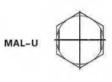


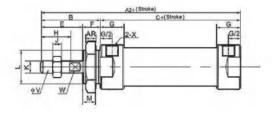












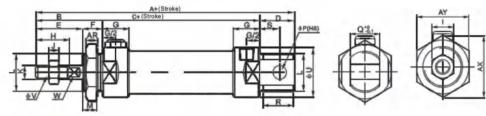


Bore/Symbol	А	A1	A2	В	C	D	D1	E	F	G	H	1	J	K
16	114	114	98	38	60	16	16	22	16	10	16	10	5	M6×1
20	131	122	110	40	70	21	12	28	12	16	20	12	6	M8×1.25
25	135	128	114	44	70	21	14	30	14	16	22	17	6	M10×1.25
32	141	128	114	44	70	27	14	30	14	16	22	17	6	M10×1.25
40	165	152	138	45	92	27	14	32	14	22	24	17	7	M12×1.25

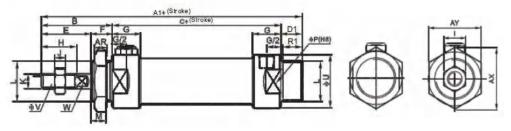
Bore/Symbol	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
16	M16×1.5	14	6	12	14	14	9	21	6	5	M5	6	25	22
20	M22×1.5	10	8	16	19	10	12	29	8	6	G1/8"	7	33	29
25	M22×1.5	12	8	16	19	12	12	34	10	8	G1/8"	7	33	29
32	M24×2.0	12	10	16	25	12	15	39.5	12	10	G1/8"	8	37	32
40	M30×2.0	12	12	20	25	12	15	49.5	16	14	G1/4"	9	37	41

FESCOLO

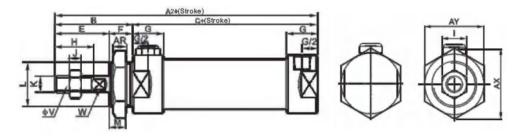
MSAL:



MSAL-CM:



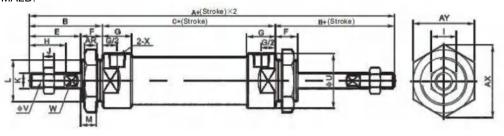
MSAL-U:



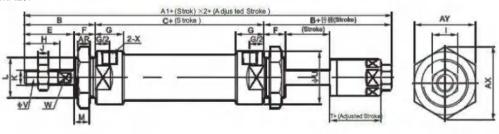
Symbol		A	1	A1	1	42	В		C		DA	-	-		н		
Bore/Stroke	0-50	51-100	0-50	51-100	0-50	51-100	В	0-50	51-100	D	D1	E	-	G	п	1.	-
20	131	156	122	147	110	135	40	70	95	21	12	28	12	16	20	12	6
25	135	160	160	153	114	139	44	70	95	21	14	30	14	16	22	17	6
32	141	166	166	153	114	139	44	70	95	27	14	30	14	16	22	17	6
40	165	190	190	177	138	163	46	92	117	27	14	32	14	22	24	17	7

Inside Diameter/Symbol	К	L	M	P	Q	R	R1	s	U	٧	W	x	AR	AX	AY
20	M8×1.25	M22×1.5	10	8	16	19	10	12	29	8	6	G1/8*	7	33	29
25	M10×1.25	M22×1.5	12	8	16	19	12	12	34	10	8	G1/8*	7	33	29
32	M10×1.25	M24×2.0	12	10	16	25	12	15	39.5	12	10	G1/8*	8	37	32
40	M12×1.25	M30×2.0	12	12	20	25	12	15	49.5	16	14	G1/4"	9	47	41

MALD:



MALJ:



Inside Diameter/Symbol	A	A1	В	C	E	F	G	Н	1	J	K
20	150	147	40	70	28	12	16	20	12	6	M8×1.25
25	158	155	44	70	30	14	16	22	17	6	M10×1.25
32	158	155	44	70	30	14	16	22	17	6	M10×1.25
40	184	180	46	92	32	14	22	24	17	7	M12×1.25

Inside Diameter/Symbol	L	M	U	V	W	X	AR	AX	AY	T
20	M22×1.5	10	29	8	6	G1/8"	7	33	29	19
25	M22×1.5	12	34	10	8	G1/8*	7	33	29	21
32	M24×1.5	12	39.5	12	10	G1/8*	8	37	32	21
40	M30×2.0	12	49.5	16	14	G1/4*	9	47	41	21

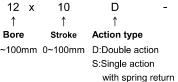


CQ2 Series Compact Cylinder



1.Ordering Code:

CQ2	В -	12
↑	↑	↑
Model	Mounting style	Bore
CQ2: Normal type	A: Female thread	12~100m
CDQ2: With magnet inside	on both ends	
	B: With through hole	



T:Single action

with spring extent

Rod thread type
Blank: Female thread
M: Male thread

C: With cushion

2. Characteristics:

- 1) This series of cylinder conforms to: SMC standard
- 2) Improved water and magnetic resistance performance
- 3) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 4) Needn't lubricate on piston rod by oil

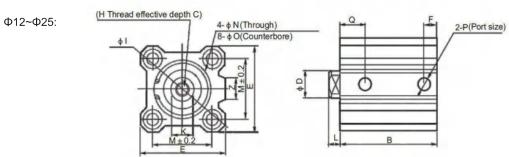
3. Specification:

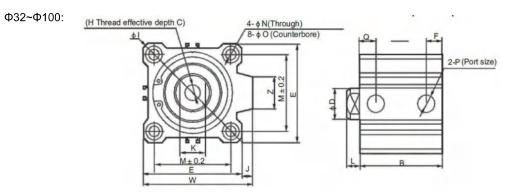
Bore(mm)	12	16	20	25	32	40	50	63	80	100
Working Medium					,	Air				
Motion Pattern		I	Double action	n/Single Ad	tion Extrus	ion type/S	ingle Action	Drawing-in	n Type	
Ensured Pressure Resistance					15.3kgf/cr	n²(1.5Mpa)				
Max.pressure					10.2kgf/cr	n²(1.0Mpa)				
Environment and fluid temp					5~+	60°C				
Thread Type			1	nner Threa	d(Standard)/Outer Th	read(Option	ial)		
Buffering						10				
Margin of Stroke Error(mm)					+1	0.0				
Installation			Through	Hole (Stan	dard), Inn	er size on	the two side	s(Optional	1)	
Port size		M5	×0.8		G	/8*	G1	/4"	G	3/8"

Note:Pls Confirm Single Type Can't With Cushion.

4. Overall and Dimension Sheet:

1) Through hole type CQ2 series:





Dimension for double action type:

Model	Stroke range (mm)	В	ФД	E	F	Н	C	ФІ	J	K	L	M	ФΝ	ФО	P	Q	W	Z
CQ2B12-□D	5~30	17+st	6	25	5	M3×0.5	6	32	-	5	3.5	15.5	3.5	6.5 depth 3.5	M5×0.8	7.5	-	
CQ2B16-□D	5~30	18.5+st	8	29	5.5	M4×0.7	8	38	-	6	3.5	20	3.5	6.5 depth 3.5	M5×0.8	8		10
CQ2B20-□D	5~50	19.5+st	10	36	5.5	M5×0.8	7	47	-	8	4.5	25.5	5.5	9 depth 7	M5×0.8	9	+1	10
CQ2B25-□D	5~50	22.5+st	12	40	5.5	M6×1.0	12	52	+	10	5	28	5.5	9 depth 7	M5×0.8	111	4	10
CQ2B32-□D	5	221-4	16	45	5.5	M8×1.25	13	00	4.5	.,	7	34		9 depth 7	M5×0.8	11.5		40
CQ2B32-LD	10~50	23+st	10	45	7.5	MIO A 1.23	13	60	4.5	14	1	34	5.5	9 depui /	1/8	10.5	49.5	18
CQ2B40-□D	5~50	29.5+st	16	52	8	M8×125	13	69	5	14	7	40	5.5	9 depth 7	1/8	11	57	18
CQ2B50-□D	10~50	30.5+st	20	64	10.5	M10×15	15	86	7	17	8	50	6.6	11 depth 8	1/4	10.5	71	22
CQ2B63-□D	10~50	36+st	20	77	10.5	M10×1.5	15	103	7	17	8	60	9	14 depth 10.5	1/4	15	84	22
CQ2B80-□D	10~50	43.5+st	25	98	12.5	M16×2.0	21	132	6	22	10	77	11	17.5 depth 13.5	3/8	16	104	26
CQ2B100-□D	10~50	53+st	30	117	13	M20×25	27	156	6.5	27	12	94	11	17.5 depth 13.5	3/8	23	123.5	26

Note 1)The standard stroke is at a distance of each 5 mm.

 $Note \ 2) The \ stroke \ between \ 55 mm - 100 mm (55, 60, 65, 70, 80, 85, 90, 95,) need \ to \ be \ added \ thickness \ of \ 5, 10, 15 \ or \ 20 mm \ pad.$

Note 3)External dimensions with rumper are same as standard type as shown above.

Long Stroke:

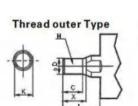
Model	(mm)	В	F	P	Q
32	75,100	33	7.5	1/8	10.5
40	75,100	39.5	8	1/8	11
50	75,100	40.5	10.5	1/4	10.5
63	75,100	46	10.5	1/4	15
80	75,100	53.5	12.5	3/8	16
100	75,100	63	13	3/8	23

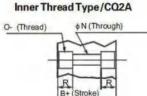
St=(Stroke)



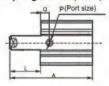
Dimension for single action type:

******		В			_		F					J.						P		C	2		-
Model	5st	10st	20st	ΦД	E	5st	10st	Н	C	Ф	J	K	+	M	ФИ	ФО	5st	10st 20	st 5	st	10st		Z
CQ2B12-US	22	27	-	6	25	5	5	M3×0.5	6	32	-	5	3.5	15.5	3.5	6.5 /depth 3,5	M5>	8.0	- 7	.5	7.5		
CQ2B16-□S	23.5	28.5		8	29	5.5	5.5	M4×0.7	8	38	7	6	3.5	20	3.5	6.5 /depth 3.5	M5>	8.0	-	8	8		10
CQ2B20-□S	24.5	29.5	з.	10	36	5.5	5.5	M5×0.8	7	47		8	4.5	25.5	5.5	9 /depth 7	M52	0.8	- 3	9	9	-	10
CQ2B25-□S	27.5	32.5	-	12	40	5.5	5.5	M6×1.0	12	52	~	10	5	28	5.5	9 /depth 7	M5>	0.8	- 1	11	11		10
CQ2B32-□S	28	33		16	45	5.5	7.5	M8×1.25	13	60	4.5	14	7	34	5.5	9 /depth 7	M5×0.8	1/8	- 1	1.5	11.5	49.5	18
CQ2B40-□S	34.5	39.5		16	52	8	8	M8×1.25	13	69	5	14	7	40	5.5	9 /depth 7	1/	8	- 1	11	11	57	18
CQ2B50- S	-	40.5	50.5	20	64	10.5	10.5	M10×1.5	15	86	7	17	8	50	6.6	11 /depth 8		1/4	1	0.5	10.5	71	22





Single Action (with Spring extent) \$\phi\$ 12~\$\phi\$50



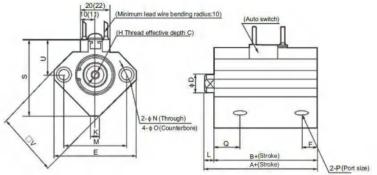
Thread	outer	Type
		. 1 10 -

Note3)Inner Thread Type Single Action (with Spring extent)

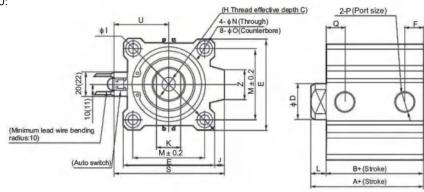
Bore	C	v	AD	100		K	Bore			Bore		Α			L	
(mm)	C	X	ΦD	Н	-	r.	(mm)	0	R	(mm)	5st	10st	20st	5st	10st	20s
12	9	10.5	6	M5×0.8	14	5	12	M4×0.7	7	12	30.5	40.5	+	8.5	13.5	-
16	10	12	8	M6×1.0	15.5	6	16	M4×0.7	7	16	32	42	н	8.5	13.5	-
20	12	14	10	M8×1.25	18.5	8	20	M6×1.0	10	20	34	44	4	9.5	14.5	
25	15	17.5	12	M10×1.25	22.5	10	25	M6×1.0	10	25	37.5	47.5	-	10	15	
32	20.5	23.5	16	M14×1.5	28.5	14	32	M6×1.0	10	32	40	50	-	12	17	
40	20.5	23.5	16	M14×1.5	28.5	14	40	M6×1.0	10	40	46.5	56.5	-	12	17	
50	26	28.5	20	M18×1.5	33.5	17	50	M8×1.25	14	50	-	58.5	78.5	,	18	28
63	26	28.5	20	M18×1.5	33.5	17	63	M10×1.5	18	*Extern	al dime	ensions	with n	umpe	r are sa	ame a
80	32.5	35.5	25	M22×1.5	43.5	22	80	M12×1.75	22	stsnda	ard type	as sh	own at	oove.		
100	32.5	35.5	30	M26×1.5	43.5	27	100	M12×1.75	22							

2) CDQ2 series:





Ф32~Ф100:



Dimension for double action type:

Model	Stroke range (mm)	Α	В	ΦD	E	F	Н	C	Φ)	J	K	L	М	ФΝ	ФО	P	Q	S	U	V	Z
CDQ2B12	5~30	31.5	28	6	32	6.5	M3×0.5	6	+	-	5	3.5	22	3.5	6.5 depth 3.5	M5×0.8	11	35.5	19.5	25	
CDQ2B16	5~30	34	30.5	8	38	5.5	M4×0.7	8	-		6	3.5	28	3.5	6.5 depth 3.5	M5×0.8	10	41.5	22.5	29	-
CDQ2B20	5~50	36	31.5	10	46.8	5.5	M5×0.8	7	-	10	8	4.5	36	5.5	9 depth 7	M5×0.8	10.5	48	24.5	36	-
CDQ2B25	5~50	37.5	32.5	12	52	5.5	M6×1.0	12		à.	10	5	40	5.5	9 depth 7	8.0×2M	11	53.5	27.5	40	-
CDQ2B32	5~50	40	33	16	45	7.5	M8×1.25	13	60	4.5	14	7	34	5.5	9 depth 7	1/8	10.5	58.5	31.5	+	18
CDQ2B40	5~50	46.5	39.5	16	52	8	M8×1.25	13	69	5	14	7	40	5.5	9 depth 7	1/8	11	66	35	-	18
CDQ2B50	10~50	48.5	40.5	20	64	10.5	M10×1.5	15	86	7	17	8	50	6.6	11 depth 8	1/4	10.5	80	41	10.	22
CDQ2B63	10~50	54	46	20	77	10.5	M10×1.5	15	103	7	17	8	60	9	14 depth 10.5	1/4	15	93	47.5	1	22
CDQ2B80	10~50	63.5	53.5	25	98	12.5	M16×2,0	21	132	6	22	10	77	11	17.5 depth 13.5	3/8	16	112.5	57.5	-	26
CDQ2B100	10~50	75	63	30	117	13	M20×2.5	27	156	6.5	27	12	94	11	17.5 depth 13.5	3/8	23	132.5	67.5		26

Long Stroke:

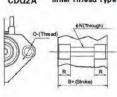
Model	Stroke	A	В	F	P	Q
32	75,100	40	33	7.5	1/8	10.5
40	75,100	46.5	39.5	8	1/8	11
50	75,100	48.5	40.5	10.5	1/4	10.5
63	75,100	54	46	10.5	1/4	15
80	75,100	63.5	53.5	12.5	3/8	16
100	75,100	75	63	13	3/8	23

Note 1)The standard stroke is at a distance of each 5 mm.

Note 2)The stroke between 55mm-100mm(55,60,65,70,80,85,90,95,)need to be added thickness of 5,10,15 or 20mm pad. Note 3)External dimensions with rumper are same as standard type as shown above.

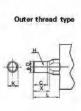
Note 4)The stroke of cylinder in 5 mm can be fixed only one magnetism swith





Bore (mm)	0	R
12	M4×0.7	7
16	M4×0.7	7
20	M6×1.0	10
25	M6×1.0	10
32	M6×1.0	10
40	M6×1.0	10
50	M8×1.25	14
63	M10×1.5	18
80	M12×1.75	22
100	M12×1.75	22

Inner Thread Type



Bore (mm)	C	X	ΦD	н	L	K
12	9	10.5	6	M5×0.8	14	5
16	10	12	8	M6×1.0	15.5	6
20	12	14	10	M8×1.25	18.5	8
25	15	17.5	12	M10×1.25	22.5	10
32	20.5	23.5	16	M14×1.5	28.5	14
40	20.5	23.5	16	M14×1.5	28.5	14
50	26	28.5	20	M18×1.5	33.5	17
63	26	28.5	20	M18×1.5	33.5	17
80	325	35.5	25	M22×1.5	43.5	22
100	325	35.5	30	M26×1.5	43.5	27





CU, CDU Series Free Mounting Cylinder



1.Ordering Code:

CU		10 -	30	D -	A93
↑	↑	1	↑	↑	↑
Model	Rod Type	Bore	Stroke	Action type	Magnet switch type
CU: Normal type	Black: Basic type	6mm	0~50mm	D:Double action	Blank: No switch
CDU: With magnet inside	K: Non-rotating piston	10mm		S:Single action	
	rod type	16mm		with spring return	
		20mm		T:Single action	
		25mm		with spring extent	
		32mm			

2.Characteristics:

- 1) This series free installation cylinders can be mounted freely and easily.
- 2) Small size and light weight.
- 3) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 4) Needn't lubricate on piston rod by oil

3.Specification:

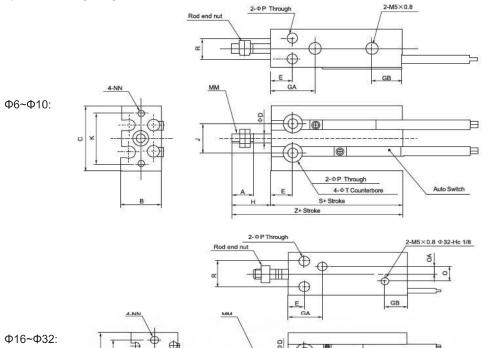
Bore(mm)		6mm	10mm	16mm	20mm	25mm	32mm			
Working Medium				A	ir					
Motion Pattern		Dou	able action/Single	e Action Extrusio	n type/Single Ac	tion Drawing-in T	/ре			
Ensured Pressure Resist	ance			1.05Mpa(10.5kgf/cm ²)					
Max. Working-pressur	е			0.7Mpa(7	.1kgf/cm²)					
Min. operating pressure	Single	0.2MPa	0.15	MPa		0.13MPa				
Min. operating pressure	Double	0.12MPa	0.06	MPa		0.05MPa				
Ambient and Medium Temp	erature	Without auto switch:-10-70 ℃(No freezing) With auto swith:-10-60 ℃(No freezing)								
Lubrication		Non-lube								
Piston speed				50-50) mm/s					
Cushion				Rubber b	umper Note)					
Rod end thread				Male	thread					
Thread tolerance				Cla	ss 2					
Cushion				Both en	ds buffer					
Margin of Stroke Error(r	nm)			+	0.0 mm					
Precision of Piston rod with No	n-rotating		±0.8°			±0.5°				
Port Size				M5×0.8			G1/8"			

4. Stroke:

	Bore size (mm)	Standard stroke(mm)
Double Acting	6,10,16	5,10,15,20,25,30
Double Acting	20,25,32	5,10,15,20,25,30,40,50
Single Acting	6,10,16,20,25,32	5,10,15

5. Overall and Dimension Sheet:

1) Double Acting, Single Rod:



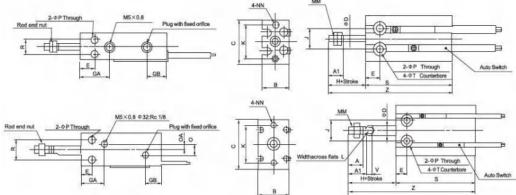
				70			- 0 -	Z+ Strok	e				
Bore size(mm)	A	A1	В	С	D	E	GA	GB	н	K	J	L	MM
6	7		13	22	3	7	15	10	13	17	10		M3×0.5
10	10	- 2	15	24	4	7	16.5	10	16	18	11		M4×0.7
16	11	12.5	20	32	6	7	16.5 ^{Note)}	11.5	16	25	14	5	M5×0.8
20	12	14	26	40	8	9	19	12.5	19	30	16	6	M6×1.0
25	15.5	18	32	50	10	10	21.5	13	23	38	20	8	M8×1.25
00	40.5	22	40	00	40	44	00	40.5	07	40	24	40	MANYAR

2-ΦP Through

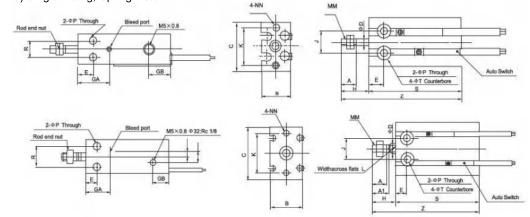
Bore size	NN	ь	0	QA	R		Without A	uto Switch	With Aut	o Switch
(mm)	NN		u	UA.	K		S	Z	S	Z
6	M3×0.5 depth 5	3.2			7	6 depth 4.8	33	46	33	46
10	M3×0.5 depth 5	3.2	*	-	9	6 depth 5	36	52	36	52
16	M4×0.7 depth 6	4.5	4	2	12	7.6 depth 6.5	30	46	40	56
20	M5×0.8 depth 8	5.5	9	4.5	16	9.3 depth 8	36	55	46	65
25	M5×0.8 depth 8	5.5	9	4.5	20	9.3 depth 9	40	63	50	73
32	M6×1.0 depth 9	6.6	13.5	4.5	24	11 depth 11.5	42	69	52	79

FESCOLC

2) Single Acting, Spring Extend:



3) Single Acting, Spring Return:



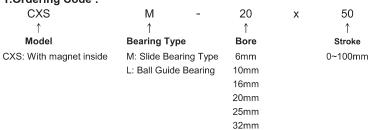
Bore size(mm)	A	A1	В	C	D	E	GA	GB	Н	ŀ	()	J	3.1	MM		N	N	P
6	7		13	22	3	7	15	10	13	1	7 1	0 .		M3×0.5	M:	3×0.5	(depth) 5	3.2
10	10	-	15	24	4	7	16.5	10	16	1	8 1	1 .		M4×0.7	M:	3×0.5	(depth) 5	3.2
16	11	12.5	20	32	6	7	16.5	11.5	16	2	5 1	4	5	M5×0.8	M-	1×0.7	(depth) 6	4.5
20	12	14	26	40	8	9	19	12.5	19	3	0 1	6	ŝ	M6×1.0) M	8.0×6	(depth) 8	5.5
25	15.5	18	32	50	10	10	21.5	13	23	3	8 2	20 8	3	M8×1.2	5 M	8.0×6	(depth) 8	5.5
32	19.5	22	40	62	12	11	23	12.5	27	4	8 2	4 1	0 1	M10×1.2	25 M	5×1.0	(depth) 9	6.6
Bore size		225				V			/ithout A	uto Swi				- 1	With Au	to Swite		
(mm)	Q	QA	R	Ţ		(Note)		S			Z			S			Z	
						(14010)	5st	10st	15st	5st	10st	15st	5st	10st	15st	5st	10st	15st
6		-	7	6 (dept	th) 4.8		38	43	48	56	66	76	38	43	48	56	66	76
10	+		9	6 (dep	oth) 5		41	46	56	62	72	87	41	46	56	62	72	87
16	4	2	12	7.6 (dep	oth) 6.5	3.5	45	50	60	66	76	91	45	50	60	66	76	91
20	9	4.5	16	9.3 (de	epth) 8	5	41	46	56	65	75	90	51	56	66	75	85	100
25	9	4.5	20	9.3 (de	pth) 9	5	45	50	60	73	83	98	55	60	70	83	93	108
32	13.5	4.5	24	11 (dept	th) 11.5	5	47	52	62	79	89	104	57	62	72	89	99	114

Note) "V" Only for Single Acting, Spring Extend

CXS Series Dual Rod Cylinder



1.Ordering Code:



2.Characteristics:

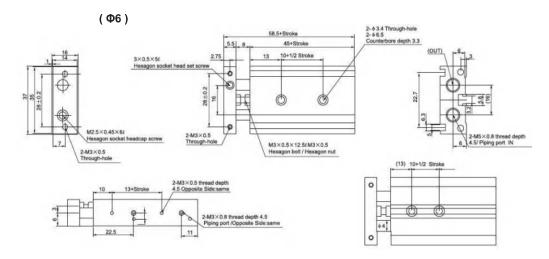
- 1) Double cylinder structure with high precision and dual output force.
- 2) No rotation.
- 3) Better performance against side loads.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

3. Specification:

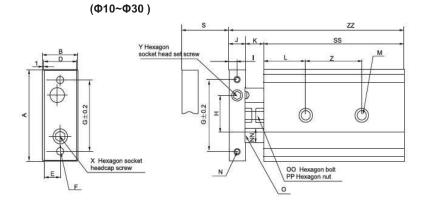
Bor	e(mm)	6	10		20	25	32
Working	g Medium			A	ir		
Motion	n Pattern			Double	action		
Ensured Pres	sure Resistance			1.05Mpa(1	0.7kgf/cm²)		
Max.p	pressure			0.7Mpa(7	.1kgf/cm²)		
Min.p	ressure	0.15Mpa(1.5kgf/cm²)	0.1Mpa(1	.0kgf/cm²)	0.	05Mpa(0.51kgf/cn	n²)
Operating Ten	nperature Range			5~+	60°C		
But	ffering			Both en	ds buffer		
Str	uctare			Double	Power		
Stroke Adju	stable Range			Return Stro	oke: 0~5mm		
Be	aring			Slide Bearing/Ba	all Guide Bearing		
Precision of	Slide Bearing	±0.1	±0.15	±0.13	±0.11	±0.1	±0.08
Piston rod Non-rotating	Ball Guide Bearing	±0.1	±0.1	±0.07	±0.06	±0.05	±0.04
Por	rt size			M5×0.8			G1/8"

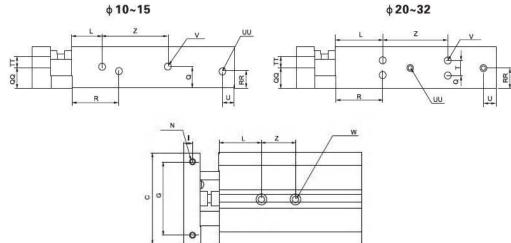


4. Overall and Dimension Sheet:



Model	Stroke	10+1/2 Stroke	13+Stroke	45+Stroke	58.5+Stroke
CXS□6-10	10	15	23	55	68.5
CXS□6-20	20	20	33	65	78.5
CXS□6-30	30	25	43	75	88.5
CXS□6-40	40	30	53	85	95.5
CXS□6-50	50	35	63	95	108.5





Model	A	В	C	D	E		F		G	H		J	K	L			М			- 3	N		NN	0		00)	P
CXS 10-10 /20/30/40/50	46	17	44	15	7.5	2-M	4×	0.7	35	20	4	8	9	20		2-0	through 6.5 ore de	igh pth3.3	t	2-M: hread	3×0.5 dept		Φ6	5	M4×	0.7	×14.5	L 33.
CXS[15-10 /20/30/40/50	58	20	56	18	9	2-M	5×	0.8	45	25	5	10	9	30		2-	3/throu	igh pth4.4	t	2-M	4×0.7		Ф8	6	M4×	0.7	×14.5	L 48
CXS 20-10/20/ 30/40/50/75/100	64	25	62	23	11.5	2-M	5×	0.8	50	28	6	12	12	30		2-0	5/throu Ф9,5 ore de	igh pth5.3	t	2-Me hread	4×0.		Ф10	8	м6×	1.0>	×18.5	L 53
CXSI 25-10/20/ 30/40/50/75/100	80	30	78	28	14	2-M	6×	1.0	60	35	6	12	12	30		2-	0/throu 0 11 ore de	gh pth6.3	th	2-Mi read	5×0.6 depth		Ф12	10	M6×	1.00	×18.5	L 64
CXS 32-10/20/ 30/40/50/75/100	98	38	96	36	18	2-M	6×	1.0	75	44	8	16	14	30		2-	9/throu Φ11 ore de	igh pth6.3	t	2-M: hread	5×0.6 dept		Ф16	13	M8×	12.	5×23	76
Model	F	P	C	Q	d F	R R	₹⋾	d li	ull.	9		U	Ú				٧				W				Х			4
CXS 10-10 /20/30/40/50	M4	×0.	7 8.	5 7	3	0 7				8		-M5		4.5	th		M3×0).5 th 4.5			M4× ad de	0.7 epth 7	, N	13×0	0.5×1	OL I	мз×с	.5×51
CXS□15-10 /20/30/40/50	M4	×0.	7 1	0 1	0 38	.5 10				8		-M5: ad de			th		44×0				M5× ad de	0.8 opth 8	B N	15×0	0.8×1	OL I	M4×0	.7×41
CXS 20-10/20/ 30/40/50/75/100	М6	×1.	0 7.7	512	5 4	5 7.7	5 9.	5 6.	5	8		-M5 ad de			tř		44×0 d dep				M6× d de	1.0 pth 1	o N	16×	1.0×1	2L 1	M5×0	.8×51
CXS[25-10/20/ 30/40/50/75/100	M6	×1.	0 8.	5 1	5 4	6 15	5 1	3 9		9	thre	4-1 ad de		6.5	th		45×0	1.8 th 7.5	,		18× d de	1.25 pth 1	2 N	16×	1.0×1	4L I	M6×1	.0×5L
CXS 32-10/20/ 30/40/50/75/100	M82	<1.2	5 9	1	9 5	6 19	9 2	0 11	.5 1	0	thre	4-1 ad de		6.5	th		45×0),8 th 7.5			18×	1.25 pth 1	2 N	18×1	.25×1	6L M	M8×1	.25×8I
Model S	SS	Z	22		Мо	del		s s	SS	Z	ZZ	M	odel	8	SS	Z	ZZ	Mo	odel	S	SS	Z	ZZ	Мо	del	S	SS	Z Z
CXSL 10-10 10	65	30	82	C	(S_)	15-10)	10	70	25	89	CXS	20-1	10 1	08 0	30	104	CXS	25-10	10	82	30	106 (CXS	32-10	10	92	40 12
CXS[10-20 20	75	-	92	(C)	KS_	15-20	2 :	20 1	30	-	99	CXS	20-2	20 2	90		114	CXS	25-20		100	1	116 (CXS	32-20	20	102	13
CXS□10-30 30	85		102	- 211		15-30			90		109	CXS	1400		100		124		125-30		102		-		132-30	-	112	14:
CXS 10-40 40	95	40	112	-	-	15-40	500	-	00	35	110.0	CXS	-	1000	110		1000	-	25-40	-	-	40	100	-	32-40		122	
CXS 10-50 50	105		122	C	(S	15-50) :	50 1	10		129	CXS			120		169		25-50	-	122				32-50	-	132	16:
												CXS	120-7	(2)	5 145	60	103	LIXS	125-75	75	147	60	171 (455	132-75	13	157	70 18

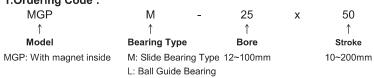




MGP Series Three Rod Cylinder



1.Ordering Code:



2.Characteristics:

- 1) Double cylinder structure with high precision and dual output force.
- 2) Three shaft can bear higher side loads and no rotation.
- 3) Better performance against side loads.
- 4) Different thread type can be offered according to customers' requirements, e.g.:BSP, NPT etc.
- 5) Needn't lubricate on piston rod by oil

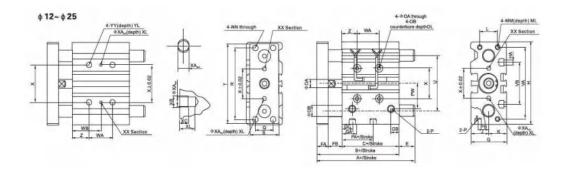
3.Specification:

Bore(i	mm)	12	16	20	25	32	40	50	63	80	100
Workin	g Medium					A	dr				
Motion	Pattern					Double	-action				
Ensured Pres	sure Resistance					1.5Mpa(15	5.3kgf/cm²)				
Max.Opera	iting pressure					1.0Mpa(10	0.2kgf/cm²)				
Min. Opera	iting pressure					0.12Mpa(1.2kgf/cm²)				
Ambient and Me	edium Temperature					-10~	+60°C				
Pisto	n Speed				50~50	0mm/s				50~40	00mm/s
В	uffer					Rubber	Cushion				
Tolerand	e of Stroke					+1.5	mm				
Be	aring				Slide	bearing/b	all guide be	aring			
Precision of	Slide Bearing	±0.	08"	±0	.07"	±0	.06°	± 0	.05°	±0	0.04"
Piston rod Non-rotating	Ball Guide Bearing	±0.	10"	±0	.09"	± 0	.08°	± 0	.06°	±0	0.05°
Por	rt size	M5>	0.8		G1	/8"		G	1/4"	G	3/8"

4. Stroke:

Bore size (mm)	Standard stroke (mm)
12,16	10,20,30,40,50,75,100,125,150,175,200,250
20,25	20,30,40,50,75,100,125,150,175,200,250,300,350,400
32 to 100	25,50,75,100,125,150,175,200,250,300,350,400

5. Overall and Dimension Sheet:



Bore size	Standard stroke (mm)		С	DA.	FA	FB	G	GA	GB		НА	J	К	L	MM	ML	NN	OA
12	10,20,30,40,	42	29	6	8	5	26	11	7.5	58	M4	13	13	18	M4×0.7	10	M4×0.7	4.3
16	50,75,100	46	33	8	8	5	30	11	8	64	M4	15	15	22	M5×0.8	12	M5×0.8	4.3
20	20,30,40,50, 75,	53	37	10	10	6	36	10.5	8.5	83	M5	18	18	24	M5×0.8	13	M5×0.8	5.6
25	100,125,150,175,200	53.5	37.5	12	10	6	42	11.5	9	93	M5	21	21	30	M6×1.0	15	M6×1.0	5.6

Bore size	Standard stroke (mm)	ОВ	OL			PB	PW		R	S	Т	U	VA	VB	Х	XA	ХВ	XC	YL	
12	10,20,30,40,	8	4.5	M5×0.8	13	8	18	14	48	22	56	41	50	37	23	3	3.5	3	10	5
16	50,75,100	8	4.5	M5×0.8	15	10	19	16	54	25	62	46	56	38	24	3	3.5	3	10	5
20	20,30,40,50, 75,	9.5	5.5	RC1/8	12.5	10.5	25	18	70	30	81	54	72	44	28	3	3.5	3	12	17
25	100,125,150,175,200	9.5	5.5	RC1/8	12.5	13.5	28.5	26	78	38	91	64	82	50	34	4	4.5	3	12	17

	Standard stroke		WA			WB			YY
Bore size	(mm)	30 st or less	Over 40 st to 100 st	125 st or less	30 st or less	Over 40 st to 100 st	125 st or less	XL	
12	10,20,30,40,	20	40		15	25		6	M5×0.8
16	50,75,100	24	44		17	27		6	M5×0.8
20	20,30,40,50, 75,	24	44	120	29	39	77	6	M6×1.0
25	100,125,150,175,200	24	44	120	29	39	77	6	M6×1.0

MGPM Slide bearing

Bore size		A					
Bore size	50st≥	50st< 100st≥	100st<	DB	50st≥	50st< 100st≥	100st<
12	42	60.5	85	8	0	18.5	43
16	46	64.5	95	10	0	18.5	49

MGPL Ball bushing bearing

			200			
30st≽	30st< 100st≥	100st<	DB	30st≽	30st< 100st≥	100st<
43	55	85	6	1	13	43
49	65	95	8	3	19	49
	30st≥ 43 49	30st≥ 30st< 100st≥ 43 55 49 65	43 55 85	43 55 85 6	43 55 85 6 1	

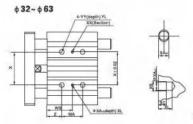
MGPM Slide bearing

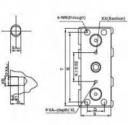
		A				E	
Bore size	50st≥	50st< 200st≥	200st<	DB	50st≥	50st< 200st≽	200st<
20	53	84.5	122	16	0	31.5	69
25	53.5	85	122	20	0	31.5	68.5

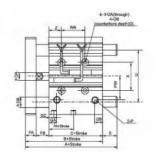
MGPL Ball bushing bearing

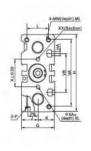
		A					E	
30st≥	30st< 100st≥	100st< 200st≥	200st<	DB	30st≽	30st< 100st≥	100st< 200st≥	200st<
63	80	104	122	10	10	27	51	69
69.5	80.5	104.5	122	13	16	32	51	68.5











Bore size	Standard stroke(mm)	В		DA	FA	FB	G	GA	GB	GC		HA	J	K			MM	ML		IN	OA
32		59.5	37.5	16	12	10	48	12.5	9	12.5	112	M6	24	24	34	M8	×1.25	20	M8>	×1.25	6.6
40	25,50,70,100,	66	44	16	12	10	54	14	10	14	120	M6	27	27	40	M8	×1.25	20	M8>	×1.25	6.6
50	125,150,175,200	72	44	20	16	12	64	14	11	12	148	M8	32	32	46	M1	0×1.5	22	M10	×1.5	8.6
63		77	49	20	16	12	78	16.5	13.5	16.5	162	M10	39	39	58	M1	0×1.5	22	M10	×1.5	8.6
Bore size	Standard stroke(mm)	OB	OL		P	PA	PE	PV	/ Q	R	S	Т	U	VA	VB	х	XA	XB	XC	XL	Z
32		11	7.5	F	RC1/8	7	15	34	30	96	44	110	78	98	63	42	4	4.5	3	6	21
40	25,50,70,100,	11	7.5	F	RC1/8	13	18	38	30	104	44	118	86	106	72	50	4	4.5	3	6	22
50	125,150,175,200	14	9	F	RC1/4	9	21.	5 47	40	130	60	146	110	130	92	66	5	6	4	8	24
63		14.	9	F	RC1/4	14	28	55	50	130	70	158	124	142	110	80	5	6	4	8	24

Paris and	Standard stroke(mm)		WA			WB		YY	
Bore size	Standard Stoke(IIIII)	25 st	50,75,100 st	100 st or above	25 st	50,75,100 st	100 st or above	¥ ¥.	
32		24	48	124	33	45	83	M8×1.25	16
40	25,50,70, 100,125,	24	48	124	34	46	84	M8×1.25	16
50	150,175,200	24	48	124	36	48	86	M10×1.5	20
63		28	52	128	38	50	88	M10×1.5	20

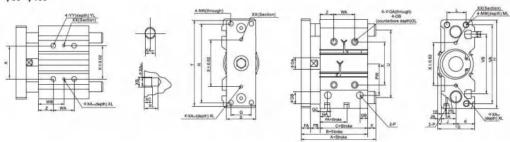
MGPM Slide bearing

				~			
Bore size	50st≥	50st<200st≥	200st<	DB -	50st≽	50st<200st≥	200st<
32	97	102	140	20	37.5	42.5	80.5
40	97	102	140	20	31	36	74
50	106.5	118	161	25	34.5	46	89
63	106.5	118	161	25	29.5	41	84

MGPL Ball bushing bearing

Describes			A					E	
Bore size	50st≥	50st<100st≥	100st<200st≥	200st<	DB	50st≥	50st<100st≥	100st<200st≥	200st<
32	81	98	118	140	16	21.5	38.5	58.5	80
40	81	98	118	140	16	15	32	52	74
50	93	114	134	161	20	21	42	62	89
63	93	114	134	161	20	16	37	57	84

φ80~φ100



80 20,50, 75, 95.5 56.5 25		7.1															
100,125,	22	18	91.5	19	15.5	14.5	202	M12	45.5	38	7.5	46	54	M12×1.75	30	M12×1.75	10.6
100 150,175,200 116 66 30	25	25	111.5	23	19	18	240	M14	55.5	45	10.5	56	62	M14×2.0	32	M14×2.0	12.5

Bore size	Standard stroke (mm)	OB	OL		PA	PB	PW		R				VA	VB	×	XA	XB	XC		
80	20,50, 75, 100,125.	17.5	8	RC3/8	14.5	25.5	74	52	174	75	198	156	180	140	100	6	7	5	10	28
100	150,175,200	20	8	RC3/8	17.5	32.5	89	64	210	90	236	188	210	166	124	6	7	5	10	11

	Standard stroke		WA			WB		1000	100
Bore size	(mm)	25 st	50,75,100 st	100 st or above	25 st	50,75,100 ≰	100 st or above	YY	
80	20,50, 75, 100,125.	28	52	128	42	54	92	M12×1.75	24
100	150,175,200	48	72	148	35	47	85	M14×2.0	28

MGPM Slide bearing

Domeiro		A				E	
Bore size	50st≽	50st<200st≥	200st<	DB	50st≽	50st<200st≽	200st<
80	115	142	193	30	18.5	45.5	96.5
100	137	162	203	36	21	46	87

MGPL Ball bushing bearing

			A					E	
Bore size	50st≽	25st<50st≥	50st<200st≥	200st<	DB	50st≥	25st<50st≥	50st<200st≥	200st<
80	109.5	130	160	193	25	13	33.5	63.5	96.5
100	121	147	180	203	30	5	31	64	87