
XCPC

MA6432 Series Stainless Steel Mini Cylinder (ISO 6432)

MA6432 10×50

Ordering Code

MA6432	—	U	20	×	50	—	25	S	—	LB

Type
MA: Double Action Type
MSA: Single-Action Type
MAD: Double-shaft Double Action Type
MAJ: Double-shaft and adjustable stroke type

Back Cover Type
Blank: Fishtail type
CM: Rounded type
U: Horizontal type

Cylinder Bore

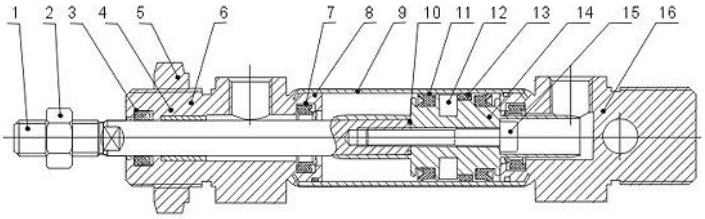
Stroke

Adjustable Stroke Type
0~100mm

Magnet Code
Blank: Without Magn
S: With Magnet

Fixed Type
Blank: Normal type
LB: Front and back fixed type
FA: Front cover swinging type
U: Back cover fixed type

Internal structure



NO	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

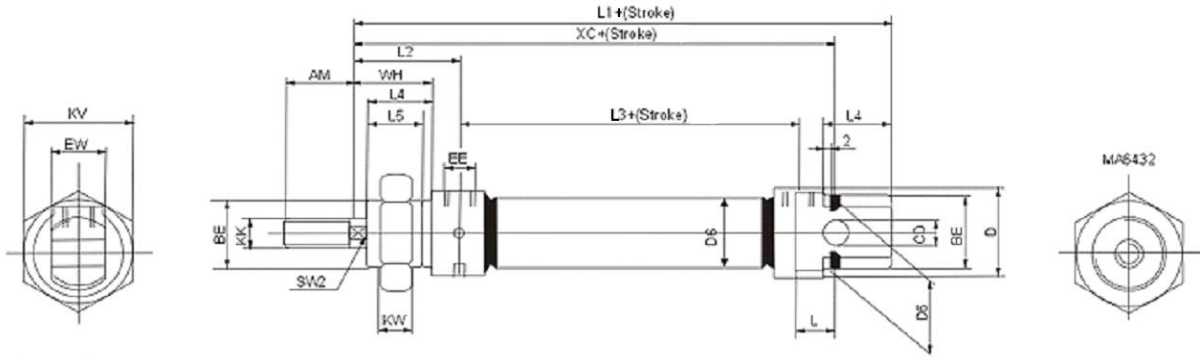
Specification

Cylinder diameter	8	10	12	16	20	25
Fluid	Air					
Motion pattern	Double Action or single Action					
Ensured Pressure Resistance	1.5Mpa (217psi)					
Max.pressure	1.0Mpa (145psi)					
Min.pressure	0.5 ~0.1Mpa (7~14psi)					
Environment and fluid temp	-10~+80℃ (Internal Magnetic Install by Tach strap: Type Max:60℃)					
Piston velocity	Rubber Buffer (Standard), Air Buffer (Option)					
Buffering	50~750mm/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”	

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, 160, 175, 200, 250, 300	1000
25	25, 40, 50, 80, 100, 125, 160, 175, 200, 250, 300	1000

Overall Dimensions



Dimension Sheet

Bore/ Symbol	AM	BE	ϕCD	ϕD	ϕD5	ϕD6	EE	EW	KK	KV	KW	L	L1	L2	L3	L4	L5	SW2	WH	XC
8	12	M12×1.25	4	15	15	12	M5	8	M4	19	6	6	78	22	34	12	10	-	16	64
10	12	M16×1.25	4	15	15	12	M5	8	M4	19	6	6	78	22	34	12	10	-	16	64
12	16	M16×1.5	6	20	20	16	M5	12	M6	24	8	9	89	28	38	17	15	5	22	75
16	16	M16×1.5	6	20	20	16	M5	12	M6	24	8	9	95	28	44	17	15	5	22	82
20	20	M22×1.5	8	27	27	22	G1/8"	16	M8	32	11	12	112	32	51.6	20	18	7	24	95
25	22	M22×1.5	8	27	27	22	G1/8"	16	M10×1.25	32	11	12	119.5	36	53.1	22	20	9	26	104

MODEL	PRICE
MA6432 8X50-S	$31.00
MA6432 16X100-S	$35.00
MA6432 25X150-S	$45.00

MAL Series Aluminum alloy Mini Cylinder

MAL 25 × 50

MALJ 25 × 50-25

Ordering Code

MAL — 20 × 50 — 25 S — LB

Type
MAL: Double Action type
MALC: With cushion type
MSA: Single Extrusion Type
MAD: Dual Double Action Type
MACD: Dual Shaft Action Damping Type
MAC: With Cushion Type
MAJ: Double shaft and Adjustable Stroke Type

Cylinder Bore
16mm~40mm

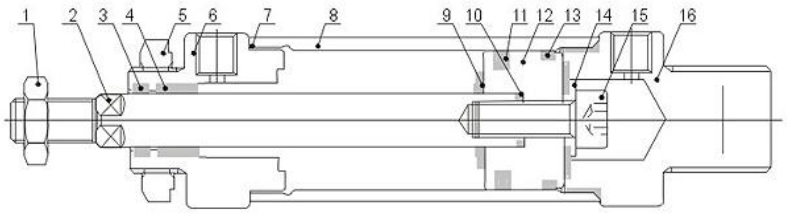
Stroke

Adjustable Stroke Type
0~100mm

Magnet Code
Blank: Without Magnet
S: With Magnet

Fixed Type
Blank: Normal type
LB: Front and back fixed type
FA: Front cover swinging type
U: Back cover fixed type

Internal structure



NO	Designation	NO	Designation
1	Piston Rod Nut	9	Auti-crash cushion
2	Piston Rod	10	Piston Rod O-ring
3	Front Cover Seal Ring	11	Piston O-ring
4	Oiled Bearing	12	Piston
5	Front Cover Nut	13	Wear Ring
6	Front Cover	14	Back cushion
7	Pipe wall O-ring	15	Hex Socket Screw
8	Aluminum tube	16	Back Cover

Specification

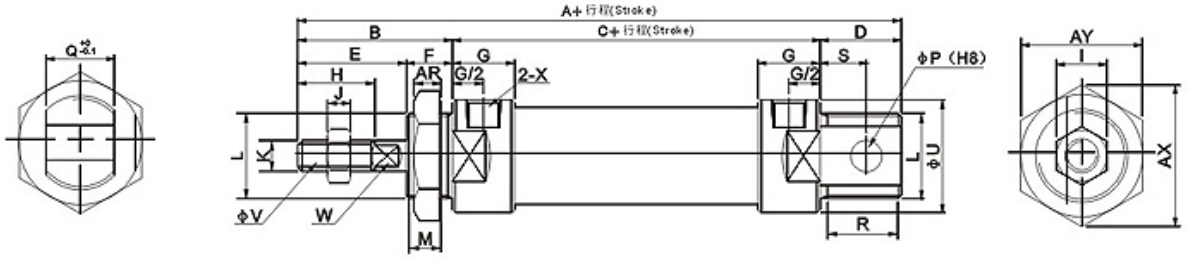
Cylinder diameter		16	20	25	32	40
Motion Pattern		Double Action or Single Action				
Working Medium		Air				
Fised Type		Normal Type LB Type FA Type SDB Type				
Operating Pressure Range		0.1~0.9Mpa (14~130psi)				
Ensured Pressure Resistance		1.35Mpa (195psi)				
Operating Temperature Range		-5~70°C				
Operating Speed Range		30~800mm/s				
Buffer Type	Standard Type	Anti-crash cushion				
	Damping Type	-	Adjustable cushion			
Port Size		M5 × 0.8	G1/8”			G1/4”

Stroke

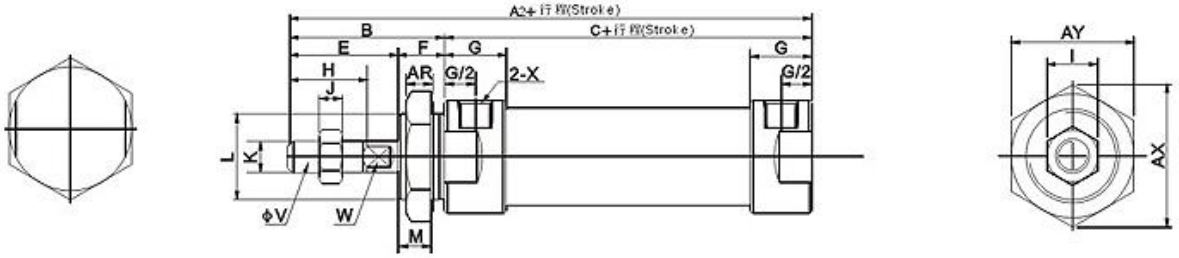
Bore(mm)	Standard stroke	Max. Stroke	Permissible Stroke
16	25, 50, 75, 80, 100, 125, 160, 175, 200	300	500
20	25, 50, 75, 80, 100, 125, 160, 175, 200, 250, 300	500	650
25	25, 50, 75, 80, 100, 125, 160, 175, 200, 250, 300, 350, 400, 450, 500	500	650
32	25, 50, 75, 80, 100, 125, 160, 175, 200, 250, 300,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

Overall Dimensions

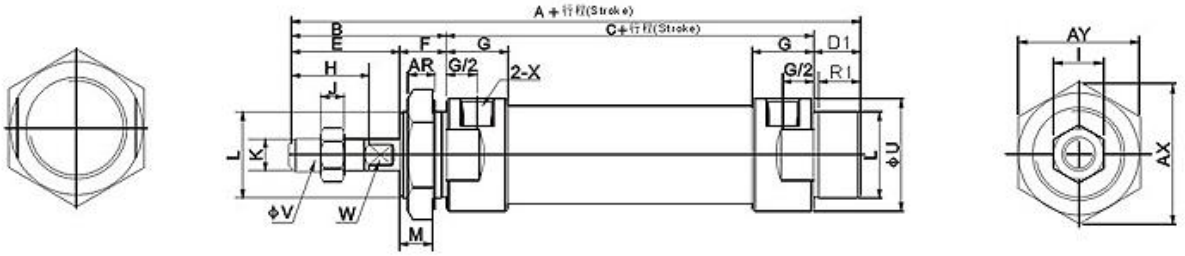
MAL



MAL-CM



MAL-U



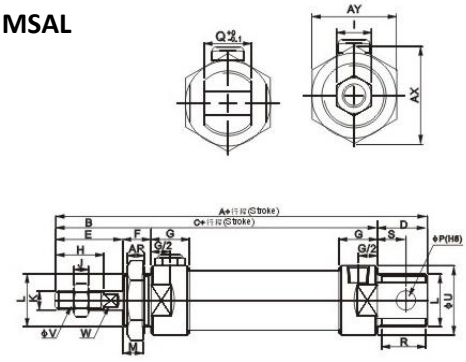
Dimension Sheet

Bore/Symbol	A	A1	A2	B	C	D	D1	E	F	G	H	I	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	16	16	20	12	6	M8×1.25
25	135	128	114	44	70	21	14	30	16	16	22	17	6	M10×1.25
32	141	128	114	44	70	27	14	30	16	16	22	17	6	M10×1.25
40	165	152	138	45	92	27	14	32	22	22	24	17	7	M12×1.25

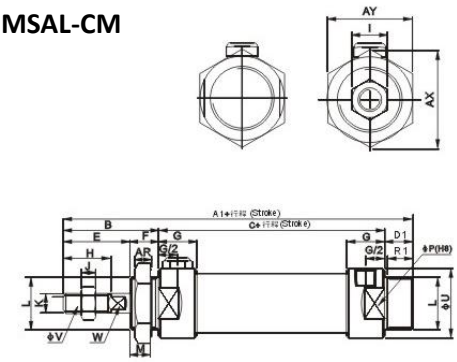
Bore/Symbol	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
16	M16×1.5	14	6	12	14	14	9	21	6	5	M5	6	25	22
20	M22×1.5	10	8	16	19	10	12	29	8	6	G1/8”	7	33	29
25	M22×1.5	1	8	16	19	12	12	34	10	8	G1/8”	7	33	29
32	M24×2.0	12	10	16	25	12	15	39.5	12	10	G1/8”	8	37	32
40	M30×2.0	12	12	20	25	12	15	49.5	16	14	G1/4”	8	37	41

Overall Dimensions

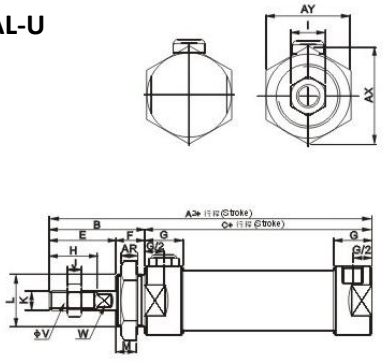
MSAL



MSAL-CM



MSAL-U

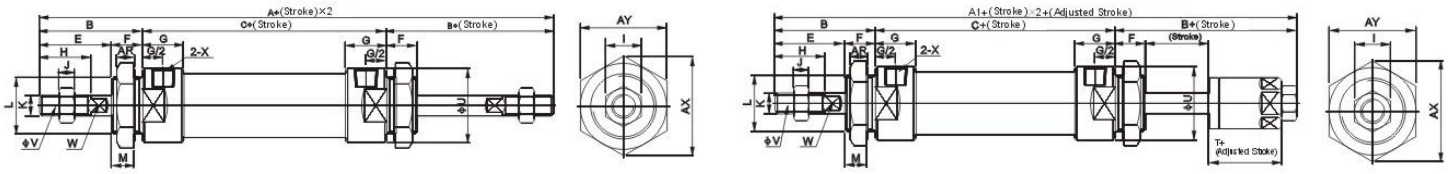


Dimension Sheet

Symbol	A		A1		A2		B	C		D	D1	E	F	G	H	I	J
Bore/Stroke	0-50	51-100	0-50	51-100	0-50	51-100		0-50	51-100								
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	K	L	M	P	Q	R	R1	S	U	V	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	G1/8”	9	47	41

Overall Dimension



Dimension Sheet

Inside Diameter/Symbol	A	A1	B	C	E	F	G	H	I	I	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	38.5	12	10	G1/8”	8	37	32	21
40	M30×2.0	12	49.5	16	14	G1/4”	9	47	41	21

Pricing

MODEL	PRICE
MAL 16X70-LB	$22.00
MAL 20X25-LB	$23.00
MAL 32X100-S	$60.00
MAL 32X125-S-LB	$68.00
MALC 32X100-S-CM	$96.80
MALJ 32X125-25-S-LB	$120.00

CJPB Series Needle Cylinder

Ordering Code

CJP	—	10	—	5	—	B
Model		**Cylinder Bore**		**Stroke**		**Thread Type**
CJPB: Panel Mount Type		6-ϕ6mm 10-ϕ 10mm		0~30mm		Blank: With Thread

Specification

Bore(mm)	6	10	15
Working Medium	Air		
Motion Pattern	Double action/ Single Action Drawing-in Type		
Ensured Pressure Resistance	1.05Mpa (152psi)		
Max. Pressure	0.7Mpa (102psi)		
Min. Pressure	0.2Mpa (29psi)	0.15Mpa (22psi)	
Operating Temperature Range	5~+60℃		
Buffering	NO		
Margin of Stroke Error (mm)	$^{+1.0}_{0}$		
Port Size	M5×0.8 (Panel mount Type)		

Pricing

MODEL	PRICE
MAL 16X70-LB	$28.44

SDA Series Thin Type (Compact) Cylinder

Ordering Code

SDA	—	20	—	30	—	5	—	S	—	B

Type
SDA: Double Action Type
SSA: Single Action Extrusion Type
STA: Single Action Drawing –in Type
SDAD: Double-shaft Double Action Type
SDAJ: Double-shaft and Adjustable Stroke Type

Cylinder Bore
12mm~100mm

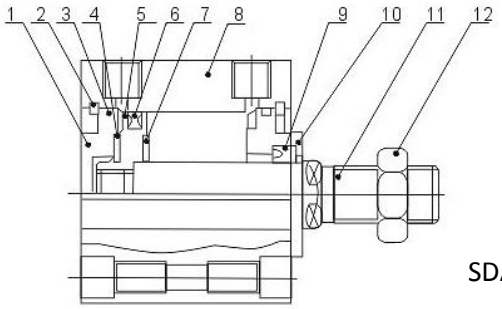
Stroke

Adjust Stroke
5mm
15mm
25mm

Magnet Code
Blank: Without Magnet
S: Attach Magnet

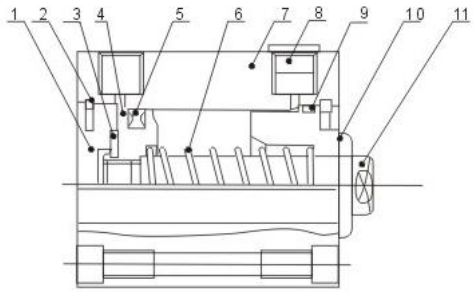
Cog Type
Blank: Inner Thread
B: Outer Thread
N: no Thread

Internal structure



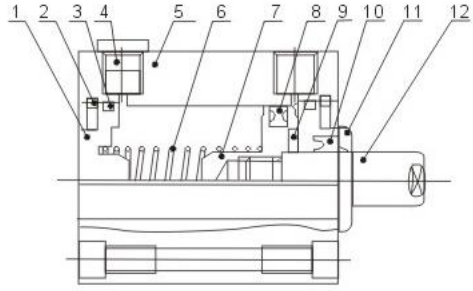
SDA Type

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 seal ring	8	Barrel
9	Front cover seal ring	10	Front cover
11	Piston rod	12	Piston Rod Nut



SSA Type

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
11	Piston rod		



STA Type

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	Front cover sealing
11	Front cover	12	Piston Rod

Specification

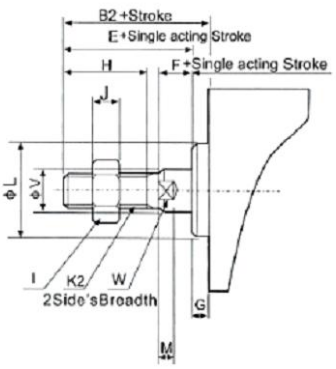
Bore(mm)		12	16	20	25	32	40	50	63	80	100
Motion Pattern		Double Acting									
		Single Acting Extrusion type Single Acting Drawing-in Type						-			
Working Medium		Basic type FA type FB type CA type CB type LB type TC type TC-M type									
Operating Pressure Range	Double Action	0.1~0.9MPa (14~130psi)									
	Single Action	0.2~0.9MPa (29~130psi)						-			
Ensured Pressure Resistance		1.35MPa (195psi)									
Operating Temperature Range		-5~70°C									
Operating Speed Range	Double Action	30~500mm/s						30~350mm/s		30~250mm/s	
	Single Action	100~500mm/s						-			
Buffer Type		PT1/8"	Fixed Type Buffer								
Port Size		M5×0.8				G1/8"		G1/4"		G3/8"	

Stroke

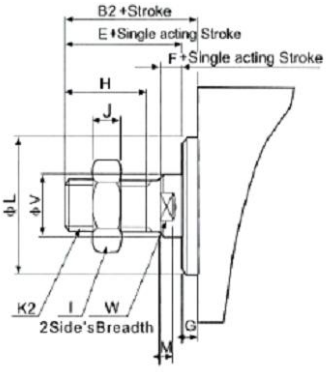
Bore(mm)		12	16	20	25		32	40	50	63	80	100
Double Action	Not attach magnet	5~60 mm Every 5mm is grouped as one grade		5~85 mm Every 5mm is grouped as one grade	5~90 mm Every 5mm is grouped as one grade	100~110 mm Every 5mm is grouped as one grade	5~90 mm Every 5mm is grouped as one grade			100~130 mm Every 5mm is grouped as one grade		
	Attach magnet	5~50 mm Every 5mm is grouped as one grade		5~75 mm Every 5mm is grouped as one grade	5~90 mm Every 5mm is grouped as one grade	100 mm	5~90 mm Every 5mm is grouped as one grade			100~120 mm Every 5mm is grouped as one grade		
Single Action	Not attach magnet	5~30 mm Every 5mm is grouped as one grade					5~30 mm Every 5mm is grouped as one grade			-		
	Attach magnet	5~30 mm Every 5mm is grouped as one grade					5~30 mm Every 5mm is grouped as one grade			-		
Max. Stroke		60mm		100mm	120mm		130mm					

Outer Thread Dimension

ϕ12~ϕ16



ϕ20~ϕ100



Bore/Symbol	B2	E	F	G	H	I	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	M10×1.5	17	2.8	10	8
32	25	22	4	3	15	17	6	M14×1.5	22	2.8	12	10
40	35	32	4	3	25	19	8	M18×1.5	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	M22×1.5	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

Pricing

MODEL	PRICE
SDA 16X20-B	$18.00
SDA 20X20-B	$20.00
SDA 63X40-B	$48.00
SDA 63X60	$56.56
SDA 63X60-B	$56.56

CQ2 Series Thin Type (Compact) Cylinder

Ordering Code

CQ2	–	□	12	–	10	D	□
Model		Basic model	Cylinder Bore		Stroke	Action	Cylinder body (optional)
CQ2: Normal Type CDQ2: Attach		B: with through bore A: with female	Single action: ϕ12-ϕ50mm			D: double action (with spring return)	Blank: Inner Thread Type M: Thread outer

Specification

Bore(mm)	12	16	20	25	32	40	50	63	80	100
Working Medium	Air									
Motion Pattern	Double action/Single Action Extrusion type/Single Action Drawing-in Type									
Ensured Pressure Resistance	1.5Mpa (217psi)									
Max.pressure	1.0Mpa (145psi)									
Environment and fluid temp	5~+60℃									
Thread Type	Inner Thread(Standard)/Outer Thread(Optional)									
Buffering	无/NO									
Margin of Stroke Error(mm)	+1.0									
Installation	Through Hole (Standard), Inner size on the two sides(Optional)									
Port size	M5×0.8				G1/8"		G1/4"		G3/8"	

MODEL	PRICE
CQ2A 63X60	$114.44