

Compact cylinder

ACQ Series



Specification

Bore size(mm)	12	16	20	25	32	40	50	63	80	100
Acting type	Double acting									
	Single acting-Push type, Single acting-Pull type									-
Fluid	Air(to be filtered by 40 μ m filter element)									
Operating pressure	Double acting	0.1~1.0MPa(15~145psi)(1.0~10.0bar)								
	Single acting	0.2~1.0MPa(28~145psi)(2.0~10.0bar)								
Proof pressure	1.5MPa(215psi)(15bar)									
Temperature °C	-20~80									
Speed range mm/s	Double acting: 30~500					Single acting: 50~500				
Stroke tolerance	0~100 ^{+1.0} ₀ >100 ^{+1.5} ₀									
Cushion type	Bumper									
Port size ①	M5 × 0.8				1/8"		1/4"		3/8"	

① PT thread, G thread and NPT thread are available. Add) Refer to P457~480 for detail of sensor switch.

Stroke

Bore size (mm)		Standard stroke (mm)										Max. std stroke	Max. stroke							
													Without magnet	With magnet						
12	Double acting	5	10	15	20	25	30	35	40	45	50	50	80	70						
	Single acting	5	10	15	20	-	-	-	-	-	-	20	-	-						
16	Double acting	5	10	15	20	25	30	35	40	45	50	55	60	60	80	70				
	Single acting	5	10	15	20	-	-	-	-	-	-	20	-	-						
20	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	140	130
	Single acting	5	10	15	20	25	30	-	-	-	-	30	-	-	-	-	-	-	-	
25	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	100	100
	Single acting	5	10	15	20	25	30	-	-	-	-	-	-	-	-	-	-	-	-	-
32	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	100	100
	Single acting	5	10	15	20	25	30	-	-	-	-	-	-	-	-	-	-	-	-	-
40	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	100	100
	Single acting	5	10	15	20	25	30	-	-	-	-	-	-	-	-	-	-	-	-	-
50	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	100	100
	Single acting	5	10	15	20	25	30	-	-	-	-	-	-	-	-	-	-	-	-	-
63	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	100	100
	Single acting	5	10	15	20	25	30	-	-	-	-	-	-	-	-	-	-	-	-	-
80	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	-	-
	Single acting	5	10	15	20	25	30	-	-	-	-	-	-	-	-	-	-	-	-	-
100	Double acting	5	10	15	20	25	30	35	40	45	50	60	70	75	80	90	100	100	-	-
	Single acting	5	10	15	20	25	30	-	-	-	-	-	-	-	-	-	-	-	-	-

Note) 1. Please contact the company for other special strokes.

2. The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder. e.g. 23mm stroke cylinder has the same dimensions of 25 std. stroke cylinder.

Ordering code

ACQ	20 × 30	SB	<input type="checkbox"/>	<input type="checkbox"/>
ACQD	20 × 30	SB	<input type="checkbox"/>	<input type="checkbox"/>
ACQJ	20 × 30-30	SB	<input type="checkbox"/>	<input type="checkbox"/>

Model

- ACQ: Compact cylinder(Double acting)
- ASQ: Compact cylinder (Single acting-push)
- ATQ: Compact cylinder (Single acting-pull)
- ACQD: Compact cylinder(Double rod)
- ACQJ: Compact cylinder (Adjustable stroke)

Bore size

Model	Bore size
ACQ	12 16 20 25 32 40 50 63 80 100
ASQ	12 16 20 25 32 40 50 63
ATQ	12 16 20 25 32 40 50 63
ACQD	12 16 20 25 32 40 50 63 80 100
ACQJ	12 16 20 25 32 40 50 63 80 100

Stroke

Refer to stroke table for details

Adjustable stroke

Model	Adjustable stroke
ACQJ	10: 10mm
	20: 20mm
	30: 30mm
	40: 40mm
	50: 50mm
	75: 75mm
100: 100mm	
Others	No this code

Thread type ②

- Blank: PT
- G: G
- T: NPT

Mounting type ①

Model	Mounting type
ACQ	Blank: No accessories
	FA: FA type
	FB: FB type
ASQ	CB: CB type
ATQ	LB: LB type
ACQD	Blank: No accessories
	FA: FA type
	FB: FB type
ACQJ	LB: LB type

Rod type

- Blank: Female thread
- B: Male thread

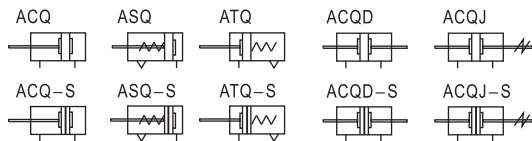
Magnet

- Blank: Without magnet
- S: With magnet

① Please refer to page 279 for accessory parts.

② Standard thread is blank here.

Symbol



Product feature

- JIS standard is implemented.
- C clip is adopted to connect the cylinder body and back cover or front cover, and riveted structure is adopted to connect piston and piston rod to make it compact and reliable.
- The internal diameter of the body is treated with rolling followed by the treatment of hard anodizing, forming an excellent abrasion resistance and durability.
- The seal of piston adopts heterogeneous two-way seal structure. It has compact dimension and the function of grease reservation.
- Compact structure can effectively save installation space.
- There are magnetic switch slots around the cylinder body, which is convenient to install inducting switch.
- Installing accessories with various specifications are optional.



Compact cylinder

ACQ Series

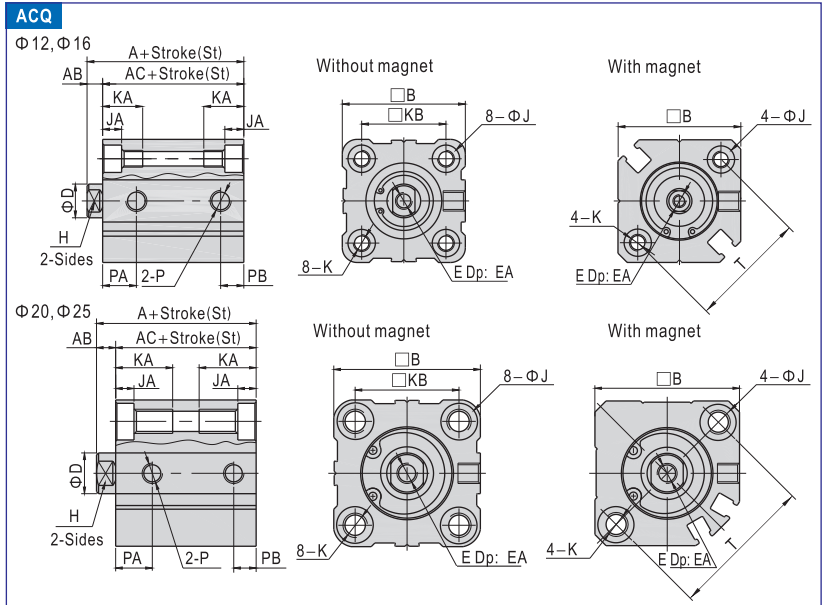
Inner structure and material of major parts

ACQ

ACQS

NO.	Item	Material
1	Back cover	No(Φ 12, 16)\Aluminum alloy(Others)
2	Bumper	TPU(Φ 12~25)\NBR(Others)
3	Piston	Brass(Φ 12, 16)\Aluminum alloy(Others)
4	Wear ring	No(Φ 12~32)\Wear resistant material(Others)
5	Piston seal	NBR
6	Piston rod	Carbon steel with 20 μ m chrome plated
7	Body	Aluminum alloy
8	Bushing	No(Φ 12~32)\Wear resistant material(Others)
9	O-ring	NBR
10	Front cover	Aluminum alloy
11	C clip	Spring steel
12	Front cover packing	NBR
13	Magnet	Φ 12~25 Sintered metal(Neodymium-iron-boron)
		Others Plastic
14	Magnet holder	Brass(Φ 12, 16)\Aluminum alloy(Others)

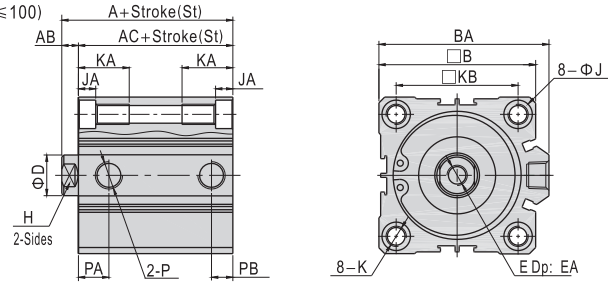
Dimensions



Bore size\Item	A		AC		PA	PB	A	AC	PA	PB	AB		
	Without magnet						With magnet						
	St≤50	St=55	St≥60	St≤50	St=55	St≥60	-	-	-	-			
12	20.5	-	-	17	-	-	7.5	5	31.5	28	9	7	3.5
16	22	22	-	18.5	18.5	-	8	5.5	34	30.5	9.5	5.5	3.5
20	24	-	34	19.5	-	29.5	9	5.5	36	31.5	9.5	5.5	4.5
25	27.5	-	37.5	22.5	-	32.5	11	5.5	37.5	32.5	11	5.5	5

Bore size\Item	B	D	E	EA	H	J	JA	K	KA	KB	P	T
	12	25	6	M3 × 0.5	6	5	6.5	3.5	M4 × 0.7 Thru.hole: Φ 3.4	11	15.5	M5 × 0.8
16	29	8	M4 × 0.7	8	6	6.5	3.5	M4 × 0.7 Thru.hole: Φ 3.4	11	20	M5 × 0.8	28
20	36	10	M5 × 0.8	7	8	9	7	M6 × 1.0 Thru.hole: Φ 5.2	17	25.5	M5 × 0.8	36
25	40	12	M6 × 1.0	12	10	9	7	M6 × 1.0 Thru.hole: Φ 5.2	17	28	M5 × 0.8	40

Φ 32~Φ 100 (Stroke ≤ 100)



Item	A		AC		A	AC	AB	B	BA	D	E	EA		
	Without magnet												With magnet	
	St≤50	St≥60	St≤50	St≥60	-	-							-	-
32	30	40	23	33	40	33	7	45	49.5	16	M8 × 1.25	13		
40	36.5	46.5	29.5	39.5	46.5	39.5	7	53	57	16	M8 × 1.25	13		
50	38.5	48.5	30.5	40.5	48.5	40.5	8	64	71	20	M10 × 1.5	15		
63	44	54	36	46	54	46	8	77	84	20	M10 × 1.5	15		
80	53.5	63.5	43.5	53.5	63.5	53.5	10	98	104	25	M16 × 2.0	20		
100	65	75	53	63	75	63	12	117	123.5	32	M20 × 2.5	26		

Bore size\Item	H	J	JA	K	KA	KB	P	PA		PB			
								Without magnet				With magnet	
								St=5	St>5	St=5	St>5	St=5	St>5
32	14	9	7	M6 × 1.0 Thru.hole: Φ 5.2	17	34	1/8"	7.5	6.5	10.5	7.5		
								10.5	7.5				
40	14	9	7	M6 × 1.0 Thru.hole: Φ 5.2	17	40	1/8"	11	8	11	8		
								9	9				
50	17	11	8	M8 × 1.25 Thru.hole: Φ 6.8	22	50	1/4"	10.5	10.5	10.5	10.5		
								14	9.5				
63	17	14	10.5	M10 × 1.5 Thru.hole: Φ 8.5	28.5	60	1/4"	15	10.5	15	10.5		
								16	14				
80	22	17.5	13.5	M12 × 1.75 Thru.hole: Φ 10.3	35.5	77	3/8"	16	14	16	14		
								20	17.5				
100	27	17.5	13.5	M12 × 1.75 Thru.hole: Φ 10.3	35.5	94	3/8"	20	17.5	20	17.5		
								20	17.5				

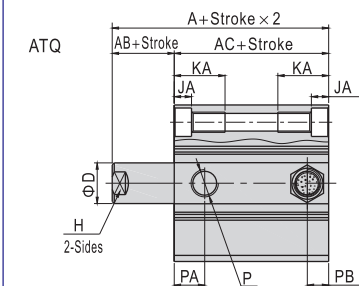
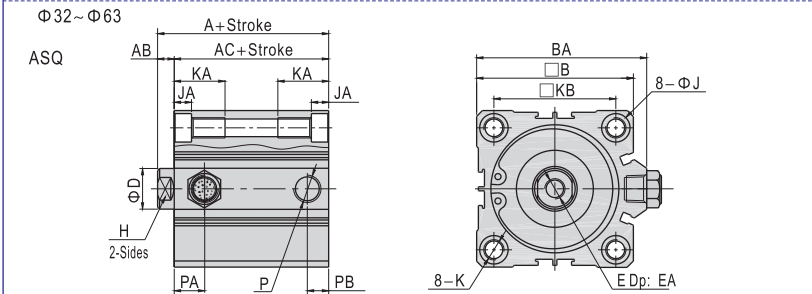
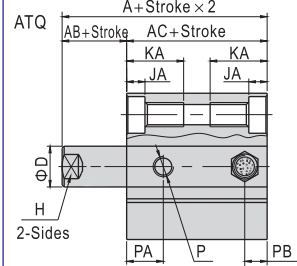
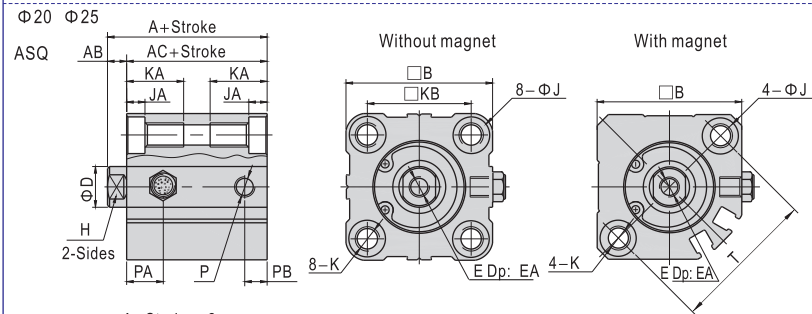
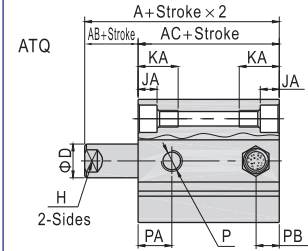
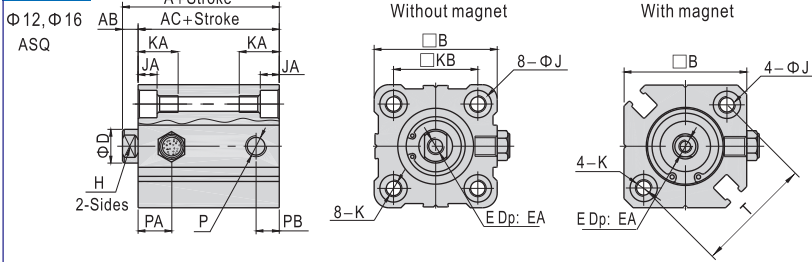


ACQ

Compact cylinder

ACQ Series

ASQ, ATQ



Bore size\Item Stroke	A(Without magnet)			A(With magnet)			AB	B	BA	D
	5/10	15/20	25/30	5/10	15/20	25/30				
12	25.5	30.5	-	36.5	41.5	-	3.5	25	-	6
16	27	32	-	39	44	-	3.5	29	-	8
20	29	34	39	41	46	51	4.5	36	-	10
25	32.5	37.5	42.5	42.5	47.5	52.5	5	40	-	12
32	35	40	45	45	50	55	7	45	49.5	16
40	41.5	46.5	51.5	51.5	56.5	61.5	7	53	57	16
50	48.5	53.5	58.5	58.5	63.5	68.5	8	64	71	20
63	54	59	64	64	69	74	8	77	84	20

Bore size\Item Stroke	AC(Without magnet)			AC(With magnet)			E	EA	H
	5/10	15/20	25/30	5/10	15/20	25/30			
12	22	27	-	33	38	-	M3 × 0.5	6	5
16	23.5	28.5	-	35.5	40.5	-	M4 × 0.7	8	6
20	24.5	29.5	34.5	36.5	41.5	46.5	M5 × 0.8	7	8
25	27.5	32.5	37.5	37.5	42.5	47.5	M6 × 1.0	12	10
32	28	33	38	38	43	48	M8 × 1.25	13	14
40	34.5	39.5	44.5	44.5	49.5	54.5	M8 × 1.25	13	14
50	40.5	45.5	50.5	50.5	55.5	60.5	M10 × 1.5	15	17
63	46	51	56	56	61	66	M10 × 1.5	15	17

Bore size\Item	J	JA	K	KA	KB	P
12	6.5	3.5	M4 × 0.7	11	15.5	M5 × 0.8
16	6.5	3.5	M4 × 0.7	11	20	M5 × 0.8
20	9	7	M6 × 1.0	17	25.5	M5 × 0.8
25	9	7	M6 × 1.0	17	28	M5 × 0.8
32	9	7	M6 × 1.0	17	34	1/8"
40	9	7	M6 × 1.0	17	40	1/8"
50	11	8	M8 × 1.25	22	50	1/4"
63	14	10.5	M10 × 1.5	28.5	60	1/4"

Model	Without magnet		With magnet		T
	PA	PB	PA	PB	
12	7.5	5	9	7	22
16	8	5.5	9.5	5.5	28
20	9	5.5	9.5	5.5	36
25	11	5.5	11	5.5	40
32	10.5	7.5	10.5	7.5	-
40	11	8	11	8	-
50	10.5	10.5	10.5	10.5	-
63	15	10.5	15	10.5	-



ACQ

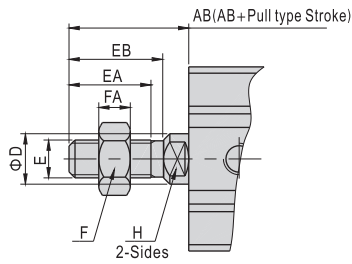


Compact cylinder

ACQ Series

Male thread

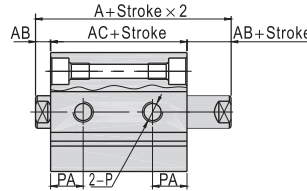
(Bore size: $\Phi 12 \sim \Phi 100$, Stroke ≤ 100)



Bore size/Item	AB	D	E	EA	EB	F	FA	H
12	14	6	M5 × 0.8	9	10.5	8	4	5
16	15.5	8	M6 × 1.0	10	12	10	5	6
20	18.5	10	M8 × 1.25	12	14	12	6	8
25	22.5	12	M10 × 1.25	15	17.5	17	6	10
32	28.5	16	M14 × 1.5	20.5	23.5	19	8	14
40	28.5	16	M14 × 1.5	20.5	23.5	19	8	14
50	33.5	20	M18 × 1.5	26	28.5	27	11	17
63	33.5	20	M18 × 1.5	26	28.5	27	11	17
80	43.5	25	M22 × 1.5	32.5	35.5	32	13	22
100	43.5	32	M26 × 1.5	32.5	35.5	36	13	27

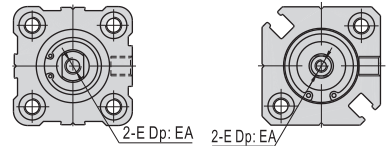
ACQD

$\Phi 12 \Phi 16$

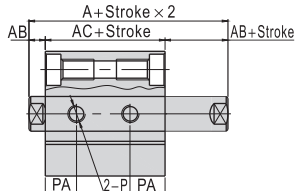


Without magnet

With magnet

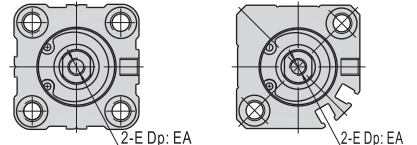


$\Phi 20 \Phi 25$

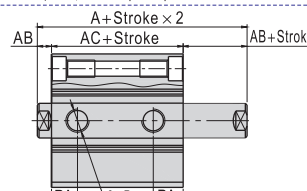


Without magnet

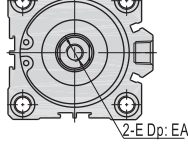
With magnet



$\Phi 32 \sim \Phi 100$

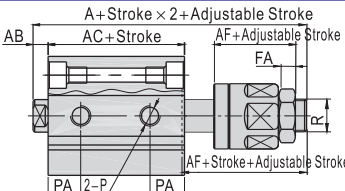


Without magnet



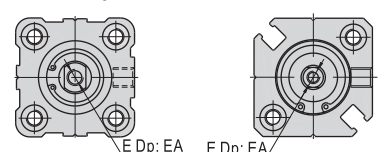
ACQJ

$\Phi 12 \Phi 16$

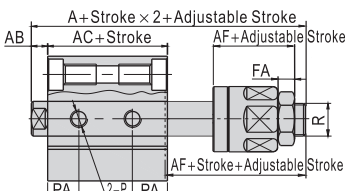


Without magnet

With magnet

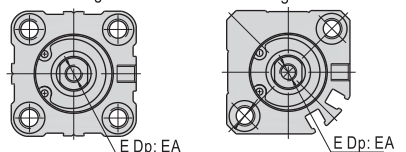


$\Phi 20 \Phi 25$

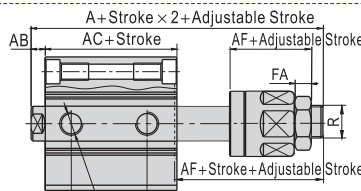


Without magnet

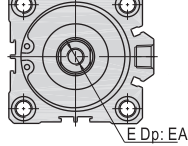
With magnet



$\Phi 32 \sim \Phi 100$



Without magnet



Item	A		A		AB	AC		AC		AF
	Without magnet	With magnet	Without magnet	With magnet		Without magnet	With magnet			
Bore size/Model	ACQD	ACQJ	ACQD	ACQJ	ACQD	ACQJ	ACQD	ACQJ		
12	32.2	45.2	39.4	52.4	3.5	25.2	25.2	32.4	17	
16	33	50	43	60	3.5	26	26	36	21	
20	35	55	47	67	4.5	26	26	38	25	
25	39	60.5	49	70.5	5	29	29	39	27	
32	44.5	64.9	54.5	74.9	7	30.5	30.5	40.5	28	
40	54	74.5	64	84.5	7	40	40	50	28	
50	56.5	77	66.5	87	8	40.5	40.5	50.5	29	
63	58	78.4	68	88.4	8	42	42	52	29	
80	71	95.8	81	105.8	10	51	51	61	35.5	
100	84.5	114.3	94.5	124.3	12	60.5	60.5	70.5	42.5	

Bore size/Item	E	EA	FA	PA	R
12	M3 × 0.5	6	4	9	M5 × 0.8
16	M4 × 0.7	8	5	9.5	M6 × 1.0
20	M5 × 0.8	7	6	9.5	M8 × 1.25
25	M6 × 1.0	9.5(St=5)/12(St>5)	6	11	M10 × 1.25
32	M8 × 1.25	9(St ≤ 10)/13(St > 10)	7	10	M12 × 1.25
40	M8 × 1.25	11(St ≤ 10)/13(St > 10)	7	13	M12 × 1.25
50	M10 × 1.5	12(St ≤ 10)/15(St > 10)	8	13.5	M16 × 1.5
63	M10 × 1.5	12(St ≤ 10)/15(St > 10)	8	14.5(St=5)/16(St > 5)	M16 × 1.5
80	M16 × 2.0	14(St ≤ 15)/20(St > 15)	10	16	M20 × 2.0
100	M20 × 2.5	20(St ≤ 25)/26(St > 25)	13.5	21	M27 × 1.5

Remark) The unmarked dimension is the same as ACQ standard type. Please refer to this page for male thread dimensions.



ACQ



Compact cylinder

ACQ Series(Big bore size)



Specification

Bore size(mm)	125	140	160
Acting type	Double acting		
Fluid	Air(to be filtered by 40 μ m filter element)		
Operating pressure	0.05~1.0MPa(7~145psi)		
Proof pressure	1.5MPa(215psi)		
Temperature °C	-20~80		
Speed range mm/s	30~500		
Stroke tolerance mm	0~100 ^{+1.0} ₀ >100 ^{+1.5} ₀		
Cushion type	Bumper		
Port size ①	3/8"		

① PT thread, G thread and NPT thread are available. Add) Refer to P457~480 for detail of sensor switch.

Stroke

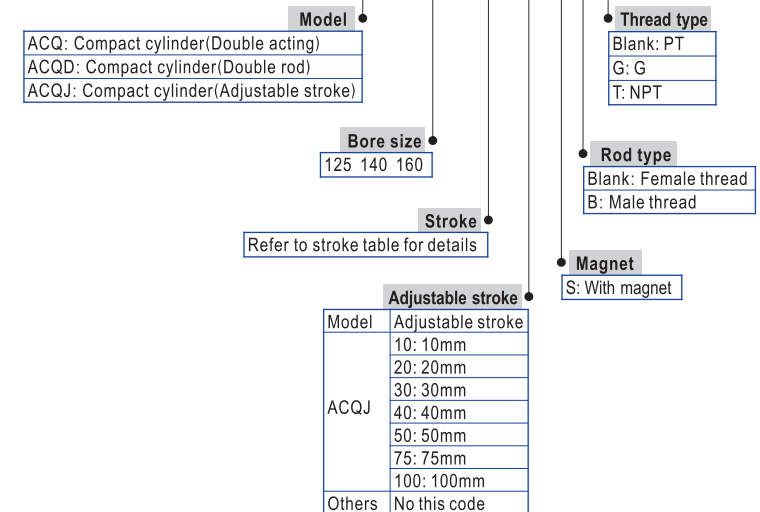
Bore size (mm)	Standard stroke (mm)	Max. std stroke	Max. stroke
125			
140	10 20 30 40 50 75 100 125 150 175 200 250 300	300	300
160			

Note) 1. Please contact the company for other special strokes.

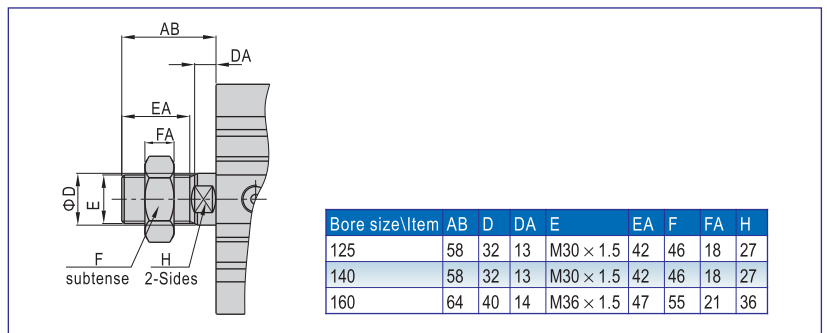
2. The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder. e.g. 23mm stroke cylinder has the same dimensions of 25 std. stroke cylinder.

Ordering code

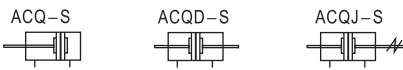
ACQ	125 × 30	S	B	□
ACQD	125 × 30	S	B	□
ACQJ	125 × 30-30	S	B	□



Male thread



Symbol



Product feature

- JIS standard is implemented.
- C clip is adopted to connect the cylinder body and back cover or front cover to make it compact and reliable.
- The internal diameter of the body is treated with rolling followed by the treatment of hard anodizing, forming an excellent abrasion resistance and durability.
- The seal of piston adopts heterogeneous two-way seal structure. It has compact dimension and the function of grease reservation.
- Compact structure can effectively save installation space.
- There are magnetic switch slots around the cylinder body, which is convenient to install inducting switch.

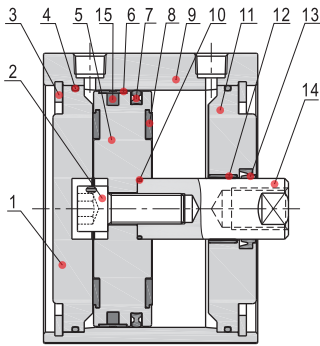
ACQ



Compact cylinder

ACQ Series(Big bore size)

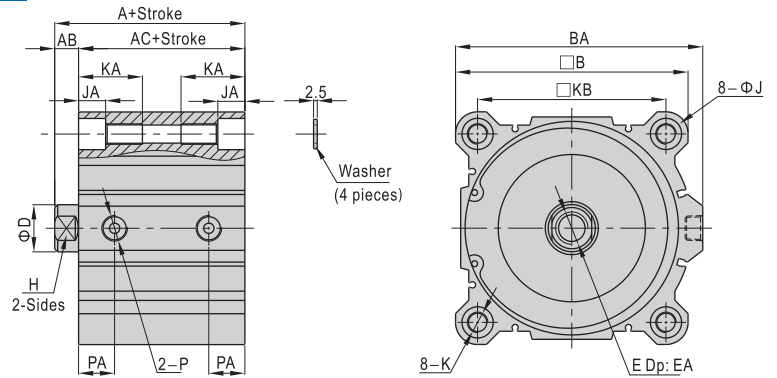
Inner structure and material of major parts



NO.	Item	Material
1	Back cover	Aluminum alloy
2	Screw	Carbon steel
3	C clip	Spring steel
4	O-ring	NBR
5	Piston	Aluminum alloy
6	Wear ring	Wear resistant material
7	Piston seal	NBR
8	Bumper	NBR
9	Body	Aluminum alloy
10	O-ring	NBR
11	Front cover	Aluminum alloy
12	Bushing	Wear resistant material
13	Front cover packing	NBR
14	Piston rod	Carbon steel with 20 μ m chrome plated
15	Magnet	Rubber

Dimensions

ACQ

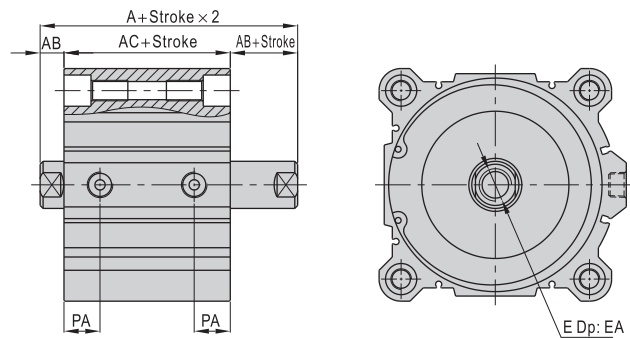


Bore size\Item	A	AB	AC	B	BA	D	E	EA(St≤10)	EA(St>10)	H
125	99	16	83	142	153	32	M22 × 2.5	22.5	30	27
140	99	16	83	158	168	32	M22 × 2.5	22.5	30	27
160	108	17	91	178	188	40	M24 × 3.0	26.5	33	36

Bore size\Item	J	JA	K	KA	KB	P	PA
125	21.5	18.4	M14 × 2.0 Thru.hole: Φ 12.3	43.5	114	3/8"	24.5
140	21.5	18.4	M14 × 2.0 Thru.hole: Φ 12.3	43.5	128	3/8"	24.5
160	24.5	21.2	M16 × 2.0 Thru.hole: Φ 14.3	49	144	3/8"	27.5

Remark) Washer must be used when the cylinder be mounted by through hole.
Please refer to page 272 for male thread dimensions.

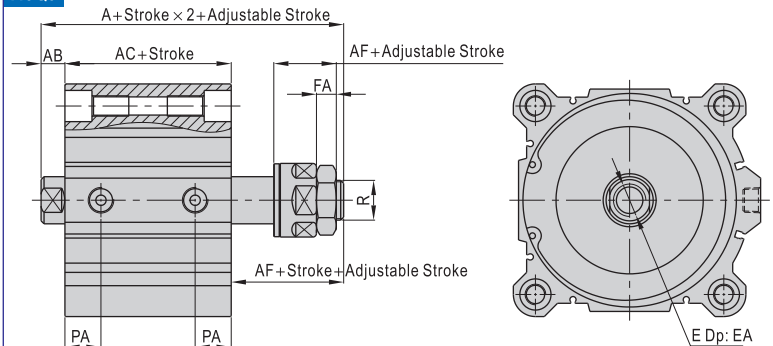
ACQD



Bore size\Item	A	AB	AC	E	EA		PA
					St≤10	St>10	
125	115	16	83	M22 × 2.5	22.5	30	24.5
140	115	16	83	M22 × 2.5	22.5	30	24.5
160	125	17	91	M24 × 3.0	26.5	33	27.5

Remark) The unmarked dimension is the same as ACQ standard type.
Please refer to page 272 for male thread dimensions.

ACQJ



Bore size\Item	A	AB	AC	AF	E	EA		FA	PA	R
						St≤10	St>10			
125	140.8	16	83	42.5	M22 × 2.5	22.5	30	13.5	24.5	M27 × 2.0
140	140.8	16	83	42.5	M22 × 2.5	22.5	30	13.5	24.5	M27 × 2.0
160	175.3	17	91	68	M24 × 3.0	26.5	33	18	27.5	M36 × 2.0

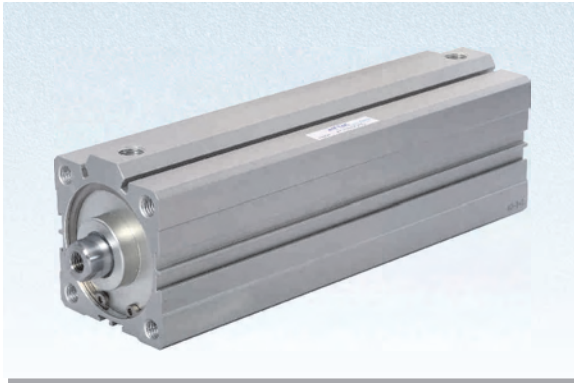
Remark) The unmarked dimension is the same as ACQ standard type.
Please refer to page 272 for male thread dimensions.



ACQ

Compact cylinder

ACQ Series(Longer stroke)



Specification

Bore size(mm)	32	40	50	63	80	100
Acting type	Double acting					
Fluid	Air(to be filtered by 40 μ m filter element)					
Operating pressure	0.1~1.0MPa(15~145psi)					
Proof pressure	1.5MPa(215psi)					
Temperature °C	-20~80					
Speed range mm/s	30~500					
Stroke tolerance mm	+1.5 0					
Cushion type	Bumper					
Port size ①	1/8"		1/4"		3/8"	

① PT thread, G thread and NPT thread are available. Add) Refer to P457~480 for detail of sensor switch.

Stroke

Bore size (mm)	Standard stroke (mm)					Max. std stroke	Max. stroke
32 40 50 63 80 100	125	150	175	200	250	300	350

Note) Within allowable stroke scope, when the stroke is larger than the maximum value, it shall be treated as non-standard one. Please contact the company for other special strokes.

Ordering code

ACQ	50 × 150	S	B	<input type="checkbox"/>	<input type="checkbox"/>
ACQD	50 × 150	S	B	<input type="checkbox"/>	<input type="checkbox"/>
ACQJ	50 × 150-30	S	B	<input type="checkbox"/>	<input type="checkbox"/>

Model

- ACQ: Compact cylinder (Double acting)
- ACQD: Compact cylinder (Double rod)
- ACQJ: Compact cylinder (Adjustable stroke)

Bore size

32 40 50 63 80 100

Stroke

Refer to stroke table for details

Adjustable stroke

Model	Adjustable stroke
ACQJ	10: 10mm
	20: 20mm
	30: 30mm
	40: 40mm
	50: 50mm
	75: 75mm
100: 100mm	
Others	No this code

Thread type

- Blank: PT
- G: G
- T: NPT

Mounting type ①

Model	Mounting type
ACQ	Blank: No accessories
	FA: FA type
	FB: FB type
	CB: CB type
ACQD ACQJ	Blank: No accessories
	FA: FA type
	FB: FB type
	LB: LB type

Rod type

- Blank: Female thread
- B: Male thread

Magnet

- Blank: Without magnet
- S: With magnet

① Please refer to page 279 for accessory parts.

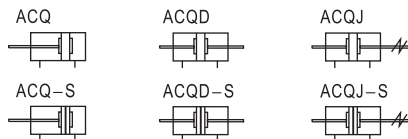
Inner structure and material of major parts

ACQS

ACQ

NO.	Item	Material	NO.	Item	Material
1	Magnet washer	NBR	9	Wear ring	No(Φ 32)\Wear resistant material(Others)
2	Magnet	Plastic	10	Piston seal	NBR
3	Body	Aluminum alloy	11	Magnet holder	Aluminum alloy
4	O-ring	NBR	12	Piston rod	Carbon steel with 20 μ m chrome plated
5	Bumper	NBR	13	Front cover	Aluminum alloy
6	Back cover	Aluminum alloy	14	Bushing	No(Φ 32)\Wear resistant material(Others)
7	Piston	Aluminum alloy	15	Front cover packing	NBR
8	C clip	Spring steel			

Symbol



Product feature

- JIS standard is implemented.
- C clip is adopted to connect the cylinder body and back cover or front cover, and riveted structure is adopted to connect piston and piston rod to make it compact and reliable.
- The internal diameter of the body is treated with rolling followed by the treatment of hard anodizing, forming an excellent abrasion resistance and durability.
- The seal of piston adopts heterogeneous two-way seal structure. It has compact dimension and the function of greasel reservation.
- Compact structure can effectively save installation space.
- There are magnetic switch slots around the cylinder body, which is convenient to install inducting switch.
- Installing accessories with various specifications are optional.



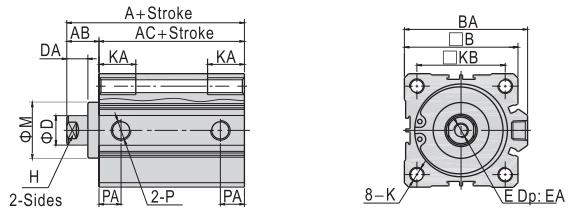
Compact cylinder

ACQ Series(Longer stroke)

■ Dimensions

ACQ

Φ 32~ Φ 100(Stroke > 100)

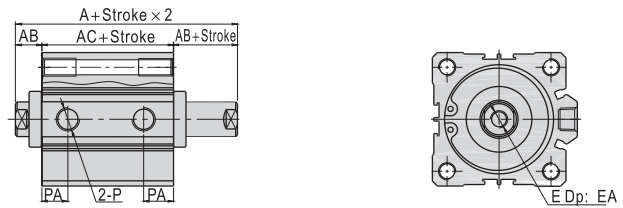


Bore size/Item	A	AB	AC	B	BA	D	DA	E	EA
32	62.5	17	45.5	45	49.5	16	12	M8 × 1.25	13
40	72	17	55	53	57	16	12	M8 × 1.25	13
50	73.5	18	55.5	64	71	20	13	M10 × 1.5	15
63	75	18	57	77	84	20	13	M10 × 1.5	15
80	86	20	66	98	104	25	15	M16 × 2.0	21
100	97.5	22	75.5	117	123.5	32	17	M20 × 2.5	27

Bore size/Item	H	K	KA	KB	M	P	PA
32	14	M6 × 1.0 Thru.hole: Φ 5.2	17	34	22	1/8"	12.5
40	14	M6 × 1.0 Thru.hole: Φ 5.2	17	40	28	1/8"	14
50	17	M8 × 1.25 Thru.hole: Φ 6.8	22	50	35	1/4"	14
63	17	M10 × 1.5 Thru.hole: Φ 8.5	27	60	35	1/4"	16.5
80	22	M12 × 1.75 Thru.hole: Φ 10.3	32	77	43	3/8"	19
100	27	M12 × 1.75 Thru.hole: Φ 10.3	33	94	59	3/8"	23

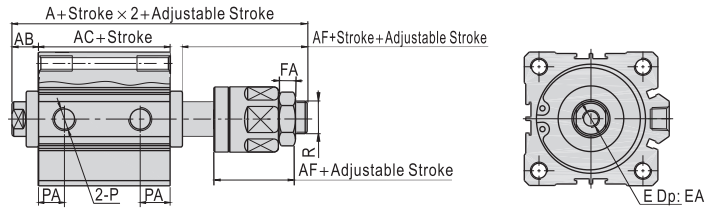
ACQD

Φ 32~ Φ 100(Stroke > 100)



ACQJ

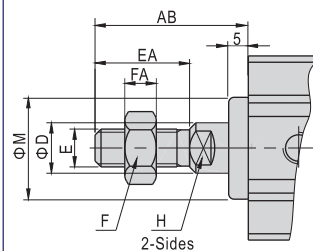
Φ 32~ Φ 100(Stroke > 100)



Bore size/Item	A		AC		A		AC		AB	AF	EA	FA	PA	R
	Without magnet	With magnet	Without magnet	With magnet	Without magnet	With magnet								
Model	ACQD	ACQJ	ACQD	ACQJ	ACQD	ACQJ	ACQD	ACQJ						
32	79.5	95.5	45.5	55.5	89.5	105.5	55.5	65.5	17	28	13	7	12.5	M12 × 1.25
40	89	105	55	65	99	115	65	75	17	28	13	7	14	M12 × 1.25
50	91.5	107.5	55.5	65.5	101.5	117.5	65.5	75.5	18	29	15	8	14	M16 × 1.5
63	93	109	57	67	103	119	67	77	18	29	15	8	16.5	M16 × 1.5
80	106	126.5	66	76	116	136.5	76	86	20	35.5	21	10	19	M20 × 1.5
100	119.5	145	75.5	85.5	129.5	155	85.5	95.5	22	42.5	27	13.5	23	M27 × 2.0

Remark) The unmarked dimension is the same as ACQ standard type.

Male thread (Bore size: Φ 32~ Φ 100 Stroke > 100 Longer type)



Bore size/Item	AB	D	E	EA	FA	F	H	M
32	38.5	16	M14 × 1.5	23.5	8	19	14	22
40	38.5	16	M14 × 1.5	23.5	8	19	14	28
50	43.5	20	M18 × 1.5	28.5	11	27	17	35
63	43.5	20	M18 × 1.5	28.5	11	27	17	35
80	53.5	25	M22 × 1.5	35.5	13	32	22	43
100	53.5	32	M26 × 1.5	35.5	13	36	27	59