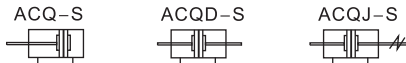


Compact cylinder

ACQ Series——Big bore size



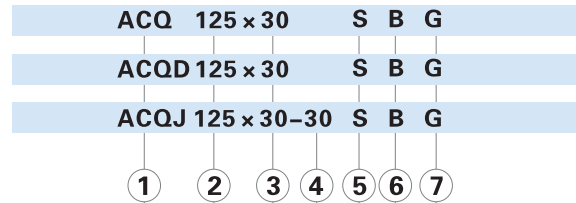
Symbol



Product feature

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

Ordering code



① Model	② Bore size	③ Stroke	④ Adjustable Stroke	⑤ Magnet	⑥ Rod type	⑦ Thread type
ACQ: Compact cylinder (Double acting)	125 140 160	Refer to stroke table for details	No this code 10 20 30 40 50 75 100	S: With magnet	Blank: Female thread B: Male thread	G: G
ACQD: Compact cylinder (Double rod)						
ACQJ: Compact cylinder (Adjustable stroke)						

Specification

Bore size(mm)	125	140	160
Acting type	Double acting		
Fluid	Air(to be filtered by 40 μ m filter element)		
Operating pressure	0.15~1.0MPa(22~145psi)		
Proof pressure	1.5MPa(215psi)		
Temperature °C	-20~70		
Speed range mm/s	30~500		
Stroke tolerance	Stroke ≤ 100 $+1.0_0$ Stroke > 100 $+1.5_0$		
Cushion type	Bumper		
Port size [Note1]	3/8"		

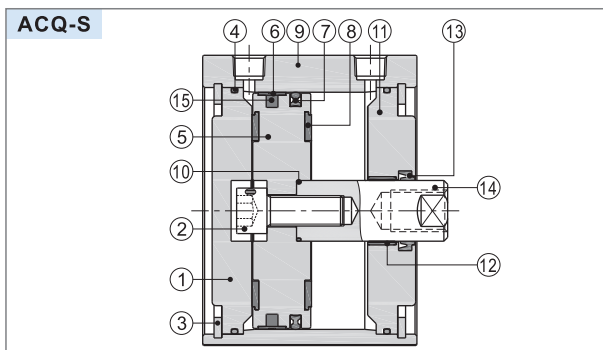
[Note1] G thread is available.
Add) Refer to P427 for detail of sensor switch.

Stroke

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

Note) The dimensions of non-std stroke cylinder has the same dimensions as the next longer stroke std. stroke cylinder. e.g. 35mm stroke cylinder(bore size160) has the same dimensions of 40 std. stroke cylinder, so the value of "CA" is 131mm.

Inner structure and material of major parts



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

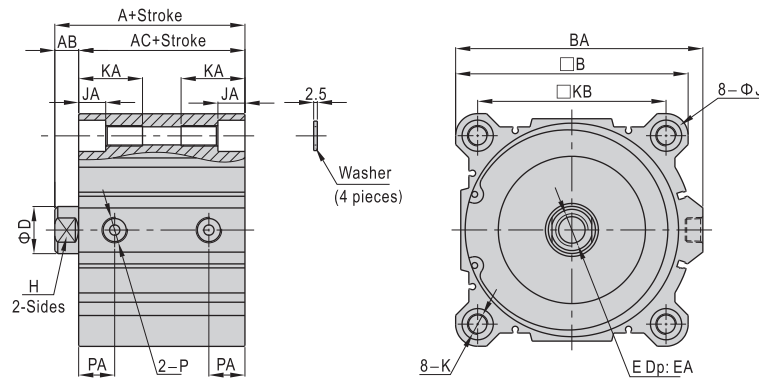


Compact cylinder

ACQ Series—Big bore size

Dimensions

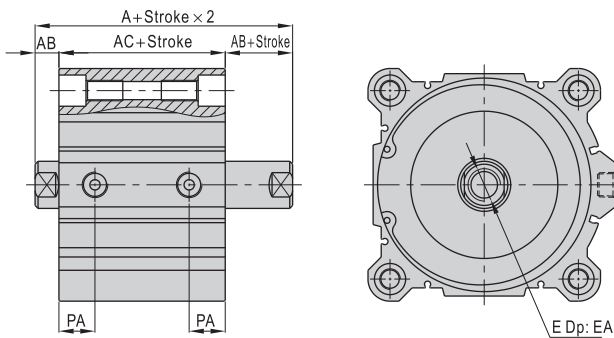
ACQ



Bore size\Item	A	AB	AC	B	BA	D	E	EA(St≤10)	EA(St>10)	H	J	JA	K	KA	KB	P	PA
125	99	16	83	142	153	32	M22 × 2.5	22.5	30	27	21.5	18.4	M14 × 2.0 Thru.hole: Φ 12.3	43.5	114	3/8"	24.5
140	99	16	83	158	168	32	M22 × 2.5	22.5	30	27	21.5	18.4	M14 × 2.0 Thru.hole: Φ 12.3	43.5	128	3/8"	24.5
160	108	17	91	178	188	40	M24 × 3.0	26.5	33	36	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 this page for male thread dimensions.

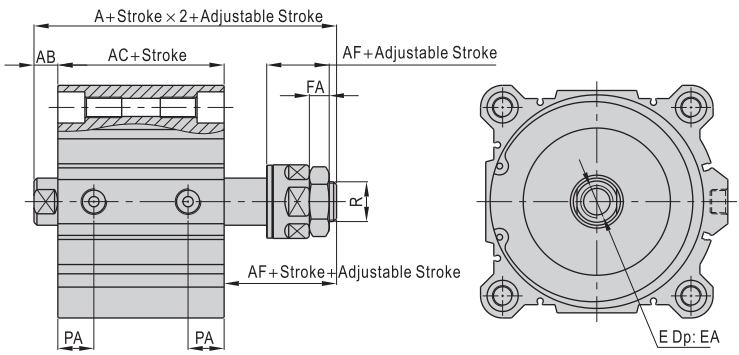
ACQD



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 this page for male thread dimensions.

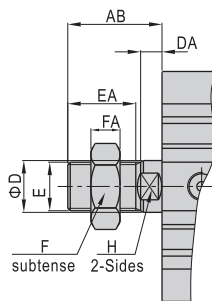
ACQJ



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 this page for male thread dimensions.

Male thread



Bore size\Item	AB	D	E	EA	EB	F	FA	H
125	58	32	M30 × 1.5	42	45	46	18	27
140	58	32	M30 × 1.5	42	45	46	18	27
160	64	40	M36 × 1.5	47	50	55	21	36