## 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.
- 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.

#### Specification

Bore size(mm)	125	140	160								
Acting type		Double acting									
Fluid	Air(to	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	+1.4										
Cushion type	Bumper										
Port size ①		3/8"									

① PT thread, NPT thread and G thread are available. Add) Refer to P397~420 for detail of sensor switch.

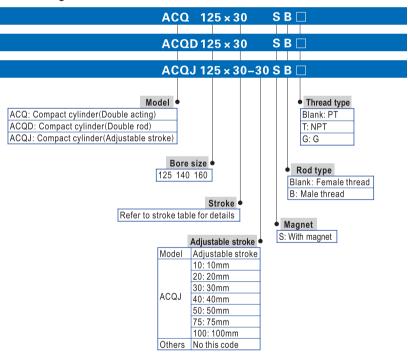
#### Stroke

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			

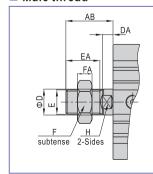
Note) 1. Please contact the company for other special strokes.

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



#### Male thread

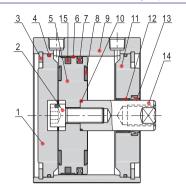


Bore size\Item	AB	D	DA	Е	EA	F	FA	Н
125	58	32	13	$M30 \times 1.5$	42	46	18	27
140	58	32	13	$M30 \times 1.5$	42	46	18	27
160	64	40	14	M36 × 1.5	47	55	21	36

# ACQ

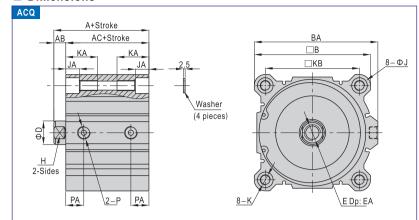
# ACQ Series(Big bore size)

#### 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 $\mu$ m chrome plated
15	Magnet	Rubber

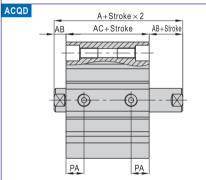
#### Dimensions

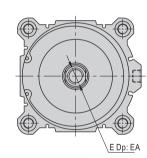


Bore size\Item	Α	AB	AC	В	BA	D	E	EA(St≤	≨10)	EA(St>	10)	Н
125	99	16	83	142	153	32	$M22 \times 2.5$	22.5		30		27
140	99	16	83	158	168	32	$M22 \times 2.5$	22.5		30		27
160	108	17	91	178	188	40	$M24 \times 3.0$	26.5		33		36
Bore size\Item	J	J/	1	K				KA	KB	Р	P/	\
125	21.5	10	2 /	M14 ·	~ 2 N	Thru	holo: Ф 12-3	12.5	11/	2/0"	2/	1.5

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
	24.5	21.2	M16 × 2.0 Thru.hole: Φ14.3	49	144	3/8"	27.5

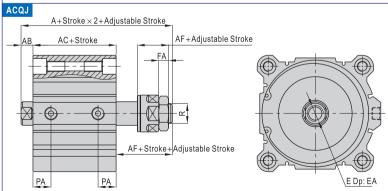
Remark) Washer must be used when the cylinder be mounted by through hole.
Please refer to page 254 for male thread dimensions.





Bore size\Item	٨	AB	AC	Е	E	PA	
Dore Size\item	A	AD	AC	E	St≤10	St>10	ГА
125	115	16	83	$M22 \times 2.5$	22.5	30	24.5
140	115	16	83	M22 × 2.5	22.5	30	24.5
160	125	17	91	$M24 \times 3.0$	26.5	33	27.5

Remark) The unmarked dimension is the same as ACQ standard type. Please refer to page 254 for male thread dimensions.



Bore size\Item	٨	۸D	AC	۸⊏	Е	EA St≤10 St>10		ΕΛ	PA	R
Dore Size/item	A	AD	AC	АГ	-	St≤10	St>10	гА	FA	IX.
125	140.8	16	83	42.5	$M22 \times 2.5$	22.5	30	13.5	24.5	$M27 \times 2.0$
140	140.8	16	83	42.5	$M22 \times 2.5$	22.5	30	13.5	24.5	$M27 \times 2.0$
160	175.3	17	91	68	$M24 \times 3.0$	26.5	33	18	27.5	$M36 \times 2.0$

Remark) The unmarked dimension is the same as ACQ standard type. Please refer to page 254 for male thread dimensions.

