

Series ADQCP

Compact Cylinder for Intense-Magnetism Resistant

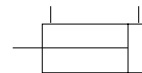
Bore Size (mm) : $\phi 50$, $\phi 63$



- FOR WELDING MACHINE/INTENSE MAGNETIC FIELD
- SAVE SPACING COMPACT DESIGN
- MANUFACTURING CERTIFIED TO ISO 9001/9002 STANDARDS

Symbol

Double Acting /
Single Rod Type



How to Order

ADQCP 50 40 D Y W Z S

1
2
3
4
5
6
7
8

1 Series : Compact Cylinder for Intense-Magnetism Resistant

2 Bore Size (mm)
50 : $\phi 50$
63 : $\phi 63$

3 Standard Stroke (mm)
50 : 25, 30, 35, 40, 45, 50
63 : 25, 30, 35, 40, 45, 50

4 Double Acting : D

5 Rod End Options
Blank : Without attachment
Y : With double knuckle joint pin, flat washer, split pin

6 Reed Auto Switch
Blank : Without auto switch
W6 : 120VAC, OFF lighting
W7 : 24VDC, 120VDC, ON lighting
For Details, Please refer to Page A-203

7 Switch Lead Wire Length
L : 3m
Z : 5m

8 Number of Switches
Blank : 2 pcs.
S : 1 pc.

PART No. of Auto Switch Fittings

Switch	Part No.	
	$\phi 50$	$\phi 63$
W6, W7	BQP1T-050	

Cylinder Specifications

Type	ADQCP
Fluid	Air
Bore Size (mm)	$\phi 50$, $\phi 63$
Max. Operating Pressure	9.9kgf/cm ² {1.0 MPa}
Proof Pressure	15kgf/cm ² {1.5 MPa}
Ambient Fluid Temperature	5~60°c
Thread end Tolerance	KS Grade 2
Stroke Tolerance	+1.0

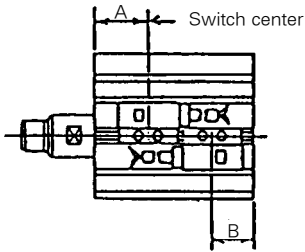
Series ADQCP

Air Cylinder

Minimum stroke for mounting intense-magnetism resistant switch. (mm)

Switch Mounting Position	With 1 Switch	With 2 Switches		
		Same surface	Different Surfaces	Different Surfaces
Cylinder Type Bore				
ADQCP50,63	25	30	25	

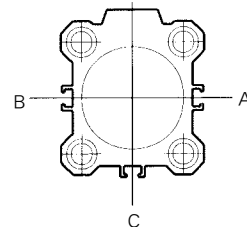
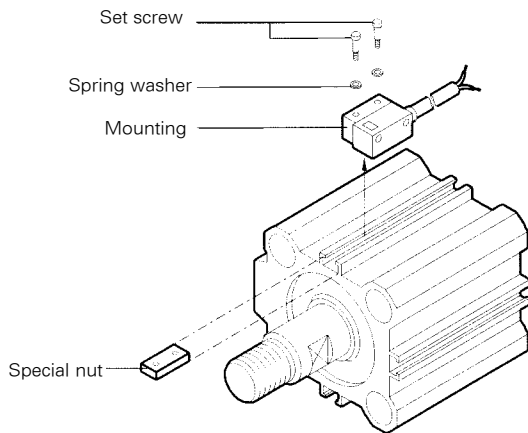
Auto Switch Mounting Position (Stroke End) (mm)



Type	Bore	φ 50		φ 63	
		A	B	A	B
ADQCP		33.5	22.5	37.5	24

Auto Switch Mounting

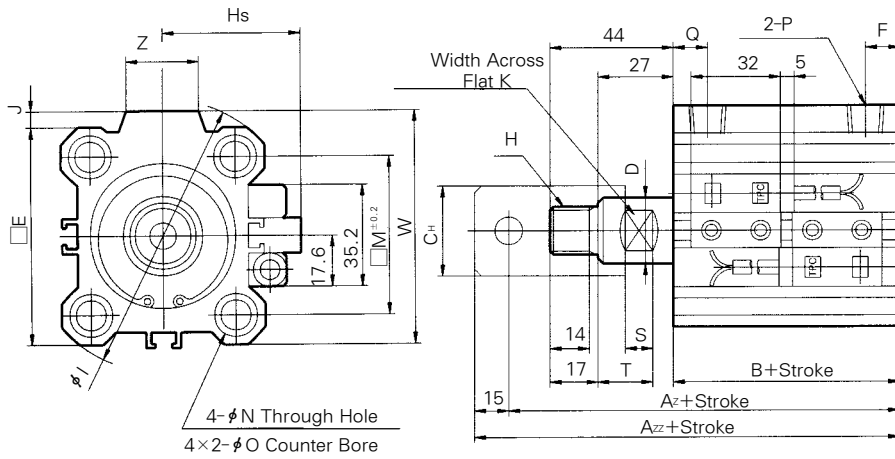
Using the special nut shown below, fix the auto switch in the specified position with two screws. (The proper tightening torque of set screws is 6 kgf · cm.)



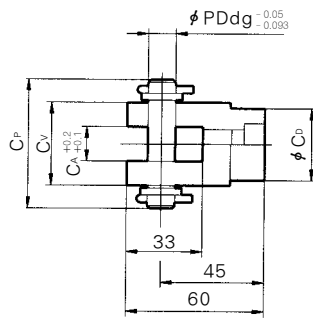
The auto switch can be mounted in three positions-A, B and C-shown above.

Dimensions

φ 50, φ 63



Double Knuckle Joint



(Unit : mm)

Bore size (mm)	A	A _z	A _{zz}	B	φD	E	F	H	φI	J	K	M	φN	φO	P	Q	W	Z	T	S	H _s	C _p	C _v	C _A	PD	C _H	C _D
φ 50	99.5	117.5	132.5	55.5	20	64	10.5	M16×1.5	86	7	17	50	6.6	11Depth 8	NPT1/4	10.5	71	22	20	10	49	55	36	16	12	30	30
φ 63	105	123	138	61	20	77	10.5	M16×1.5	103	7	17	60	9	14Depth 10.5	NPT1/4	15	84	22	20	10	55.5	55	36	16	12	30	30

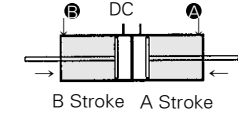
Special Option

Dual Stroke Cylinder/Double Rod Type

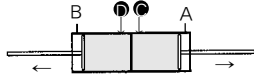
AQB **Bore** - **Stroke A** + **Stroke B** D(C)(M)-XC10

Two cylinders are constructed as one cylinder in a back-to-back configuration allowing the cylinder stroke to be controlled in the three steps.

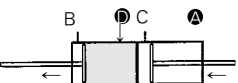
Symbol function



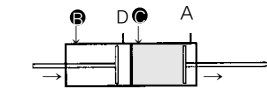
When air pressure is supplied to ports **A** and **B**, both A and B stroke retract.



When air pressure is supplied to ports **B** and **C**, A and B strokes extend.



When air pressure is supplied to ports **A** and **C**, B stroke extends and A retracts strokes.

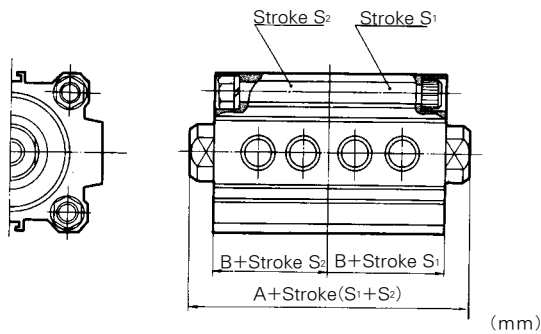


When air pressure is supplied to ports **B** and **C**, A stroke extends and B stroke retracts.

Specifications

Type	Non-Lub
Bore(mm)	φ 12~φ 100
Action	Double acting
Fluid	Air
Mounting style	Through hole

Dimensions



Bore (mm)	Stroke adjustable range	A		B	
		50 stroke or less	75, 100	50 stroke or less	75, 100
φ 12	5~30	41(63)	-	17(28)	-
φ 16		44(68)	-	18.5(30.5)	-
φ 20	5~50	48(72)	-	19.5(31.5)	-
φ 25		55(75)	-	22.5(32.5)	-
φ 32	5~100	60(80)	80(80)	23(33)	33(33)
φ 40		73(93)	93(93)	29.5(39.5)	39.5(39.5)
φ 50		77(97)	97(97)	30.5(40.5)	40.5(40.5)
φ 63		88(108)	108(108)	36(46)	46(46)
φ 80	10~100	107(127)	127(127)	43.5(53.5)	53.5(53.5)
φ 100		130(150)	150(150)	53(63)	63(63)

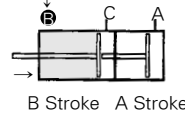
※ () : With auto switch

Dual Stroke Cylinder/Single Rod Type

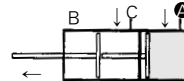
AQB **Bore** - **Stroke A** + **Stroke B-A** D(C)(M)-XC11

Two cylinders are constructed in serial as one cylinder. It is possible control the cylinder stroke in two steps to obtain double the cylinder output force.

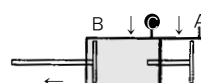
Symbol function



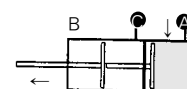
When air pressure is supplied to the **B** port, both A and B stroke retract.



When air pressure is supplied to the **A** port, the rod extends by the A stroke length.



When air pressure is supplied to the **C** port, the rod operates a further length equal, to B+C stroke.

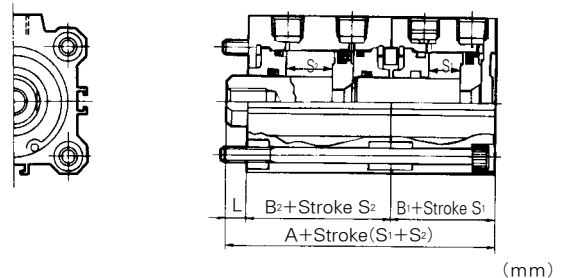


When air pressure is supplied to both ports **A** and **C**, double output force is obtainable in the range of the A stroke length.

Specifications

Type	Non-Lub
Bore(mm)	φ 20~φ 100
Action	Double acting
Fluid	Air
Mounting style	Through hole

Construction · Major Dimensions



Bore (mm)	A	B ₁	B ₂	L
φ 20	50(74)	19.5(31.5)	26(38)	4.5
φ 25	56.5(76.5)	22.5(32.5)	29(39)	5
φ 32	60.5(80.5)	23(33)	30.5(40.5)	7
φ 40	76.5(96.5)	29.5(39.5)	40(50)	7
φ 50	79(99)	30.5(40.5)	40.5(50.5)	8
φ 63	88(106)	36(46)	42(52)	8
φ 80	104.5(124.5)	43.5(53.5)	51(61)	10
φ 100	125.5(145.5)	53(63)	60.5(70.5)	12

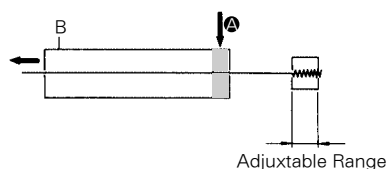
※ () : With auto switch

Adjustable Stroke Cylinder/Extension Adjustable Type

AQB **Bore** — **Stroke** D — XC8

The stroke at extension of the cylinder can be adjusted by the stopper in the head side from full stroke 0~10mm(0.39 inch).

Symbol

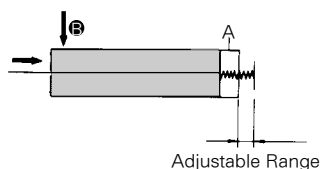


Adjustable Stroke Cylinder/Retraction Adjustable Type

AQ **Mounting** **Bore** — **Stroke** D(M) — XC9

The stroke at retraction of the cylinder can be adjusted from 0~10mm(0.39 inch) by the adjusting bolt.

Symbol



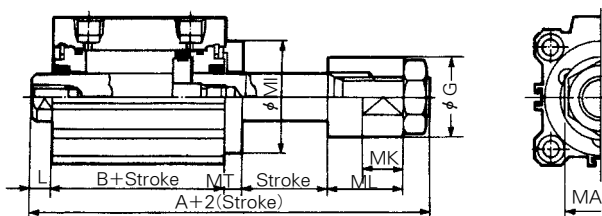
Specifications

Type	Non-Lub
Bore	φ 16~ φ 100
Action	Double Acting
Fluid	Air
Stroke Adjustment System	Adjusting Bolt
Stroke Adjustment Range	10mm(0.39inch)
Mounting Style	Through Hole

Specifications

Type	Non-Lub
Bore size (inch)	φ 20~ φ 100
Action	Double Acting
Fluid	Air
Stroke Adjustment System	Adjusting Bolt
Stroke Adjustment Range	10mm(0.39 inch)
Mounting Style	Through Hole(standard), Both ends Tapped

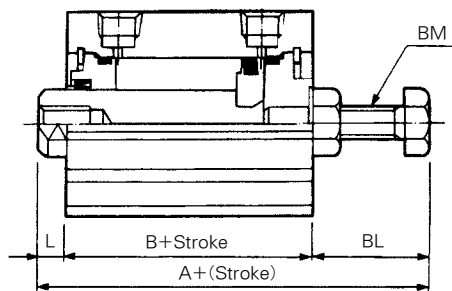
Construction · Major Dimensions



Bore(mm)	(mm)									
	A	B	L	MT	MI	MA	MK	φG	ML	Standard Stroke Range
φ 16	58.5	26	3.5	5	□28	11	7	14	19	30
φ 20	67.5	26	4.5	8	□36	17	10	20	22.5	
φ 25	71	29	5	8	□40	17	10	20	22.5	50
φ 32	78.5	30.5	7	6	φ38	24	14	27	26	
φ 40	88	40	7	6	φ46	24	14	27	26	
φ 50	100.5	40.5	8	8	φ57	30	16	35	30	
φ 63	102	42	8	10	φ68	30	16	35	30	10~50
φ 80	125	51	10	12	φ90	41	20	48	38	
φ 100	138.5	60.5	12	14	φ110	41	20	48	38	

※ Order dimensions are the same as for standard type.

Dimensions



Bore(mm)	(mm)					
	A	B	L	BL	BM	Standard Stroke Range
φ 20	61(73)	26(38)	4.5	30.5	M8×1.25	5~50
φ 25	63.5(73.5)	29(39)	5	29.5	M8×1.25	
φ 32	65.5(75.5)	30.5(40.5)	7	28	M8×1.25	
φ 40	84(94)	40(50)	7	37	M8×1.5	
φ 50	84.5(94.5)	40.5(50.5)	8	36	M8×1.25	10~50
φ 63	88.5(98.5)	42(52)	8	38.5	M8×1.5	
φ 80	109.5(119.5)	51(61)	10	48.5	M8×1.5	
φ 100	125(135)	60.5(70.5)	12	52.5	M8×1.5	

※ Order dimensions are the same as for standard type.
 ※ () : With auto switch

Auto-Switch Type/Grommet Type Series W4

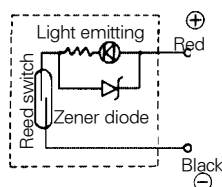


Auto Switch Specifications

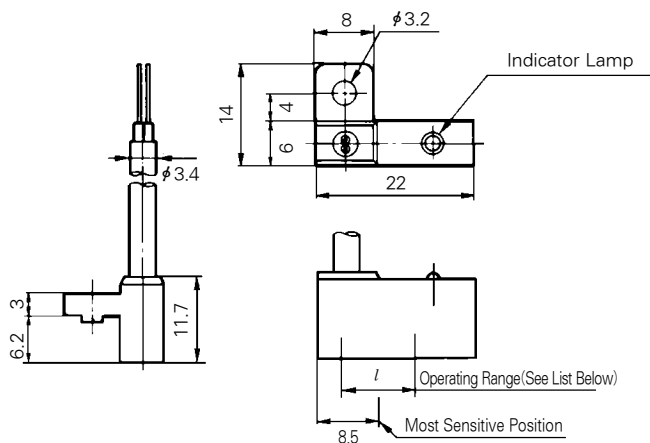
Auto Switch Model	W4	
Application	Relay, Sequence Control	
Voltage	DC24V	AC110V
Range of Load Current	5~40mA	5~20mA
Protection Circuit for Contact Breaker Point	None	
Internal Voltage Drop	2.4V or less	
Indicator Lamp	ON:Red light emitting diode	

- Leakage current - None
 - Response time - 1.2 ms
 - Lead Wire - Oil proof vinyl. $\phi 3.4$, 0.2mm², 2 wire(red, black), 0.5 m
 - Impact Resistance - 30G
 - Insulation Resistance - 50M Ω or more under the test voltage 500VDC (Between case and cable)
 - Withstand Voltage - 1500VAC 1min.(between case and cable)
 - Ambient Temperature - 5~60° F(5~60° C)
 - Protection Structure - IEC spec IP67, Water-proof(JISCO920), oil-proof.
- ※ If 3m lead wire is required, L is put at end of model numbers.
(Example) W4L

Auto Switch/Internal Circuit



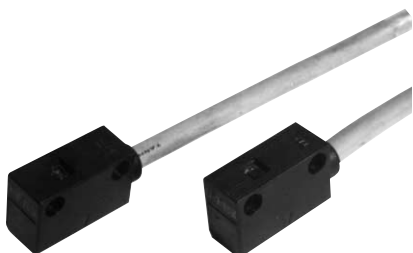
Auto Switch Dimensions



Operating Range (l Dimensions)

Series	Bore Size (mm)									
	$\phi 12$	$\phi 16$	$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 100$
ADQ	10	8	9	9	11	11	10	12	12	13

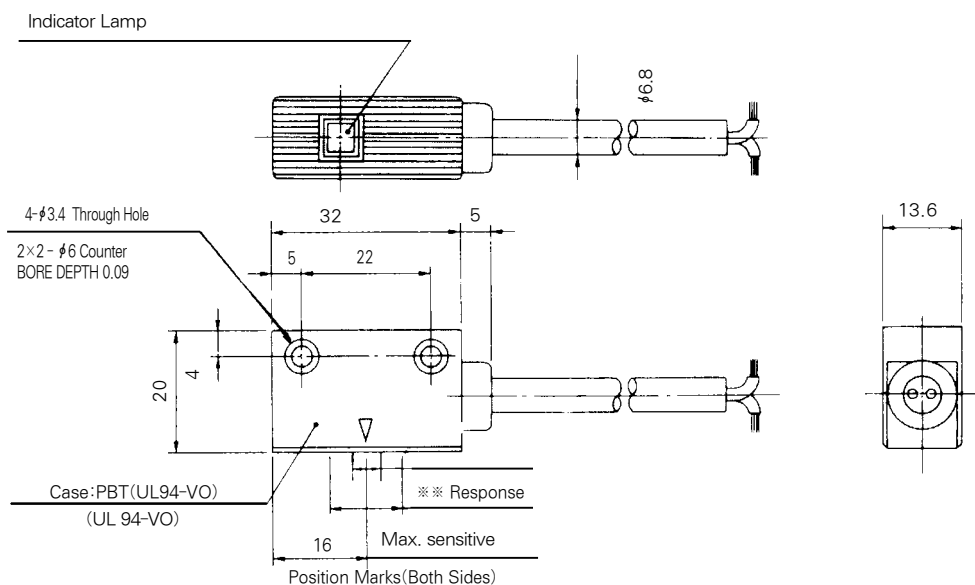
Automatic Reed Switch / Intense-Magnetism-Resistant Type Series W6/W7



Auto Switch Specifications

Auto Switch model	W6(L)(Z)	W7(L)(Z)	
Operating Voltage	AC120V	DC24V	AC100V
Operating Current Range	20mA	5~40mA	5~20mA
Internal Voltage Drop	0V	Max 2.4V	
Operating Time	1.2m/sec		
Impact Resistance	30G		
Protection Structure	IEC STandard IP67		
Pilot Lamp	OFF Lighting(Red LED)	ON Lighting(red LED)	
Leakage Current	MAX. 1.8mA	0	
Ambient Temperature Range	-10~60℃		
Insulation Resistance	50M Ω /500V DC		
Application	Relay, Sequence Controller		

Auto Switch Dimensions



Operation Range(/ Dimension)

Series	Bore Size (mm)	
	ϕ 50	ϕ 63
ADQCP	8	8
AMD□P	9	9
AJCP	8	8