

Series AJ

Clamp Cylinder/Double Acting

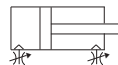
Bore Size(mm) : Ø50, Ø63



PAT

- TWO TYPES OF CLEVIS WIDTH ARE AVAILABLE(16.5mm, 19.5mm)
- THE PIPING ENTRY ORIENTATION CAN BE SELECTED
- EVEN MORE COMPACT AND LIGHT WEIGHT
- NON LUBE TYPE
- POSSIBLE TO DISASSEMBLE
- BUILT-IN SPEED CONTROLLER

Symbol



How to Order



1 Clamp Cylinder

2 Magnet

Blank : None
G : Built-in Magnet

3 Clevis Width

A : 16.5 ± 0.3 mm
B : 19.5mm

4 Bore Size(mm)-Stroke(mm)

50 : Ø 50 : 50, 75, 100, 125, 150
63 : Ø 63 : 50, 75, 100, 125, 150

5 Accessories

Blank : None
Y : Double knuckle joint

6 Mount

B : Limit switch mount
N : Length of Rod end is different
D : Cam mount
19 : Foot mount

7 Auto Switch

Blank : None
Solid State Switch
W2 : 24VDC, For welding machine, intense magnetic field(except Ø 80)
Reed Switch
W3 : 24VDC, 100 · 200VAC
W2PZ : 5m Magnetic auto switch (DC24V Only)
*Refer to auto switch specification

8 Number of Auto Switches

Blank : 2 pcs
S : 1 pc
N : N pcs

ACP

APM

AS

AX

AM2

AM

AL
ALX

AQ
ADQ

AQ2
ADQ2

AJ
AJM

ABK

ACK1

NSK

AG

NGQ

AGX
GX

NP

ADR

AMR

NDM

ARD

NST

AST

ASTH

NLCD

NLCS

Series AJ

Specifications

Clevis width	16.5mm	Series AJA
	19.5mm	Series AJB
Fluid		Air
Proof pressure		1.5MPa(213psi)
Max. operating pressure		1.0Mpa(140psi)
Min. operating pressure		0.05Mpa(7psi)
Ambient and fluid temperature. °C(°F)		5~60°C (41°F~140°F)
Piston velocity		50~500 mm/sec
Cushion		Air-cushion (Both side)
Lubrication		Non-lube
Screw tolerance		KS 2 class
Stroke length tolerance		$^{+0.1}_0$
Speed controller		Built in (Standard)
Mounting style		Double clevis (Basic type only)

Accessories (Option)

Description	Series AJA	Series AJB
Double knuckle joint (With pin and split pin)	TCKA40-18-206A	TCKB40-18-207A
Limit switch mount	TCKAM040-48-16070A	
Cam	TCKAM040-42-16070	

※ $\phi 32$: Double Knuckle Joint - AC1K032-18-1887
Clevis Pin - AC1K032-23-1887

Weight table(The basic weight is for 0 stroke.)

(kgf)

Bore Size		$\phi 50$	$\phi 63$
Cylinder	Basic weight	0.96	1.23
	Additional weight per 50 stroke	0.11	0.13
Double knuckle joint (With pin)		0.28	
Limit switch mount		0.22	
Cam		0.12	
Special bracket		2.2	

Calculation Method

Example : AJ ϕ 50-04Y

- Basic weight ... 0.96($\phi 50$)
- Additional weight ... 0.01/25g stroke
- Cylinder stroke ... 100mm stroke
- Double knuckle joint ... 0.28(r)

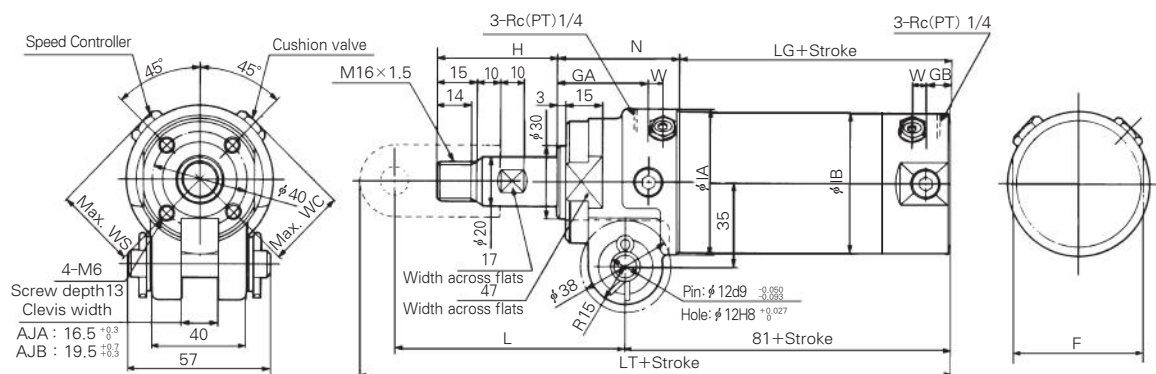
$$0.96 + 0.10 \times 100 / 250.28 = 1.64 \text{ kgf}$$

Series AJ

Dimensions/Series AJ

(Unit:mm)

AJ○50, AJ○63



(Unit:mm)

Bore Size(mm)	F	GA	GB	H	φIA	φIB	L	N	LG	W	WC	WS	LT
φ 50	55	32	10	50	60	58	97	47	58	7	38	39	193
φ 63	69	34	12	50	74	72	97	47	58	5.5	44	45	193

N

(Unit:mm)

Sign	H					L					LT				
Stroke	50	75	100	125	150	50	75	100	125	150	50	75	100	125	150
Bore Size(mm)	50	62	70	83	83	97	107	115	128	128	194	204	212	225	225
φ 50	52	62	70	83	83	97	107	115	128	128	194	204	212	225	225
φ 63	52	62	70	83	83	97	107	115	128	128	194	204	212	225	225

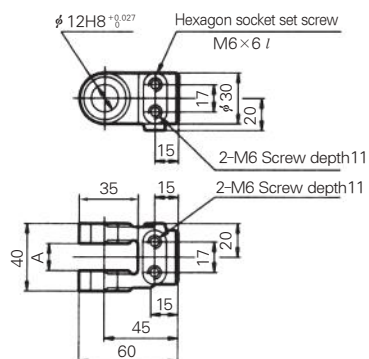
Series AJ

Accessories

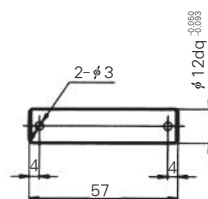
(Unit:mm)

Double knuckle joint

Pin : TC1K040-23-54806



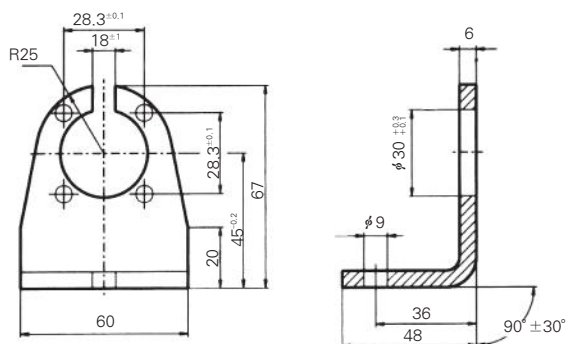
Material: Cast iron



Material: Carbon steel

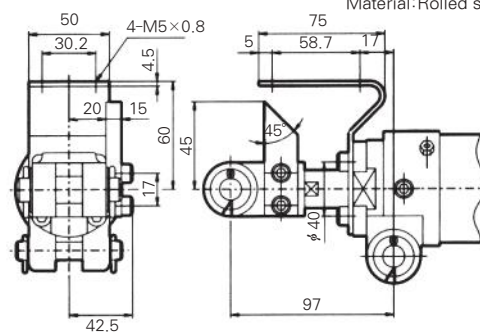
Part No.	A	Applicable clamp cylinder
TCKA40-18-206A	$16.5^{+0.2}_0$	Series AJA
TCKB40-18-207A	$19.5^{+0.2}_0$	Series AJB

Foot Dimensions



Limit Switch Mount : Cam Mount

Material: Rolled steel



Note 1) The limit switch mount and the cam fitting are possible to change to optional positions by removing the hexagon socket head cap bolts.

Note 2) The cam fitting can be used when the mounting hole dimension is 97mm.

Series **AJM**

Clamp Cylinder / With intense-magnetism resistant auto switch

Bore Size(mm) : Ø50, Ø63



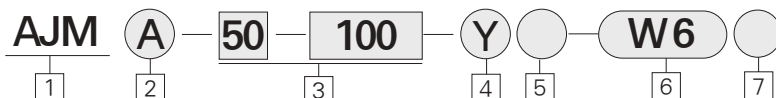
PAT

- TWO TYPES OF CLEVIS WIDTH ARE AVAILABLE(16.5mm, 19.5mm EXCEPT $\phi 32$)
- GAITER IS UNNECESSARY
BECAUSE A HEAVY DUTY COIL SCRAPER IS PROVIDED AS A COUNTER MEASURE AGAINST SPATTER, ROD BOOT IS UNNECESSARY
- BUILT-IN MAGNET

Symbol



How to Order



1 Clamp Cylinder
With intense - magnetism
resistant auto switch

2 Clevis Width
A : 16.5mm($\phi 50$, $\phi 63$)
B : 19.5mm($\phi 50$, $\phi 63$)

3 Bore Size / Stroke(mm)
50 : $\phi 50 - 50, 75, 100, 125, 150$
63 : $\phi 63 - 50, 75, 100, 125, 150$

4 Accessories
Blank : None
Y : Double knuckle joint

5 Mount
B : Limit switch mount
D : Cam mount

N : Rod end is different in
length
19 : Foot mount

6 Auto Switch
W6 : 24VDC, OFF lighting
W7 : 24VDC, 100VAC,
ON lighting
※ Refer to auto switch specification

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

ACP

APM

AS

AX

AM2

AM

AL
ALXAQ
ADQAQ2
ADQ2**AJ**
AJM

ABK

ACK1

NSK

AG

NGQ

AGX
GX

NP

ADR

AMR

NDM

ARD

NST

AST

ASTH

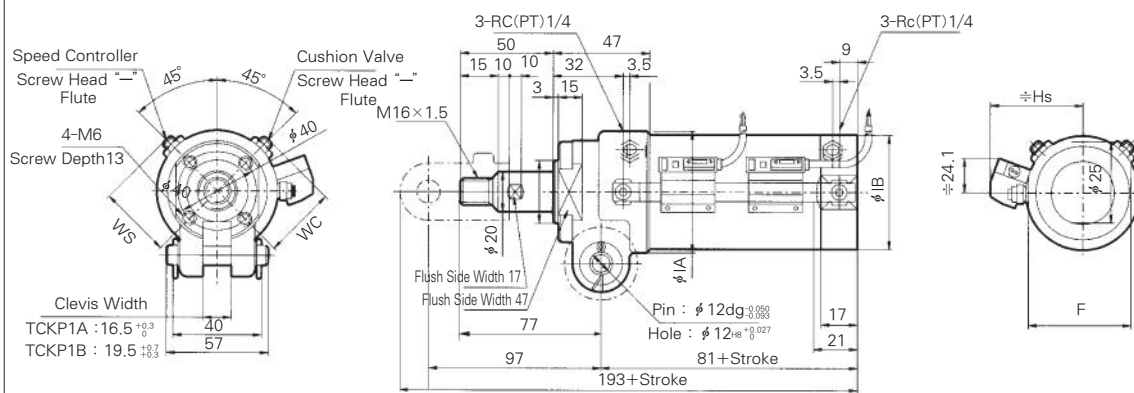
NLCD

NLCS

Series AJM

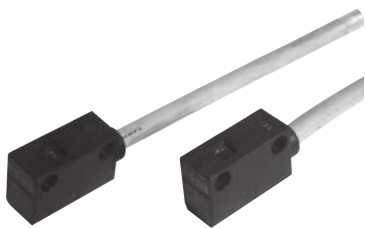
Dimensions/Series AJM

(Unit:mm)

AJM ϕ 50, AJM ϕ 63

Bore	F	ϕ IA	ϕ IB	WC	WS	Hs
ϕ 50	55	60	58	38	39	49
ϕ 63	69	74	72	44	45	54.5

Series AJM



Auto Switch Specifications

Switch model NO.	W6(L), (Z)	W7(L), (Z)	
Switch type	Reed switch		
Operating voltage	AC100V	DC24V	AC100V
Operating Current circuit	20mA	5~40mA	5~20mA
Operating time	1.2mS		
Internal drop voltage	Nil	2.4V	
Leakge current Polarity	Max. 1.8mA	0	
Impact resistance	Operating	Present	
Pilot lamp	30G		
Type of lead wire	Oilproof, fire-resistant vinyl captype cord : 0.75mm ² × 2		
Lead wire length	0.5m, (3m), (5m)		
Ambient and fluid temperature	40° F~140° F		
Insulation resistance	50MΩ max. at DC 500V		
Protective construction	IEC : IP67 JIS CO920(Watertight)		
Application	Sequence controller relay		

ACP

APM

AS

AX

AM2

AM

AL
ALXAQ
ADQAQ2
ADQ2AJ
AJM

ABK

ACK1

NSK

AG

NGQ

AGX
GX

NP

ADR

AMR

NDM

ARD

NST

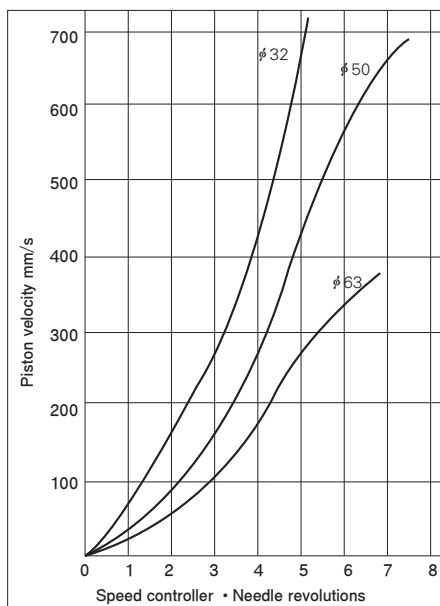
AST

ASTH

NLCD

NLCS

Speed Controller Needle Revolutions And Corresponding Cylinder Speed



Conditions : OUT side supply pressure 5kgf/cm²,
No-load