

# Series AJ

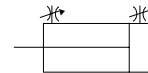
## Clamp Cylinder/Double Acting

Bore size :  $\phi 32$ ,  $\phi 50$ ,  $\phi 63$

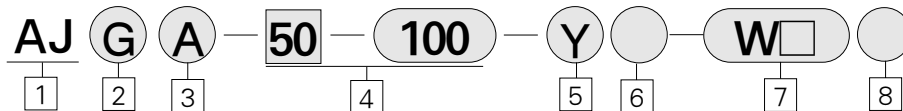


- TWO TYPES OF CLEVIS WIDTH ARE AVAILABLE(16.5mm, 19.5mm)
- THE PIPING ENTRY ORIENTATION CAN BE SELECTED
- EVEN MORE COMPACT AND LIGHT WEIGHT
- NON LUBE TYPE
- POSSIBLE TO DISASSEMBLE
- BUILT - IN SPEED CONTROLLER

Symbol



### How to Order



#### 1 Clamp Cylinder

#### 2 Magnet

Blank : Without Magnet  
G : Built-in Magnet

#### 3 Clevis Width

A : 16.5mm( $\phi 50$ ,  $\phi 63$ )  
16<sup>+0.4</sup><sub>-0.2</sub>mm( $\phi 32$ )  
B : 19.5mm( $\phi 50$ ,  $\phi 63$ )

#### 4 Bore Size(mm)-Stroke(mm)

32 :  $\phi 32$  : 50, 75, 100, 125, 150,  
200, 250, 300  
50 :  $\phi 50$  : 50, 75, 100, 125, 150  
63 :  $\phi 63$  : 50, 75, 100, 125, 150

#### 5 Accessories

Blank : None  
I : Single knuckle joint  
Y : Double knuckle joint

#### 6 Mount

B : Limit switch mount  
D : Cam mount  
19 : Foot mount

#### 7 Applicable Auto Switch

**Solid State Switch**  
W2 : 24VDC, For welding machine, intense magnetic field

#### Reed Switch

W3 : 24VDC, 100 · 200VAC  
W6 : AC100V, OFF Lighting  
W7 : DC24V, AC100V, ON Lighting

#### 8 Number of Switch

Blank : 2 pcs.  
S : 1 pc.  
Y : n pcs.

ACP

UACP

AX

AS

AM

AL  
ALX

UARD

UAQ

AJ

AG

UAG

ADM

ADR

AMR

UAMR

AST

W~

## Specifications

Clevis width	16.5mm	Series AJA
	19.5mm	Series AJB
Fluid	Air	
Proof pressure	15 kgf/cm <sup>2</sup> (1.5MPa)	
Max. operating pressure	9.9 kgf/cm <sup>2</sup> (0.99Mpa)	
Min. operating pressure	0.5 kgf/cm <sup>2</sup> (0.05Mpa)	
Ambient and fluid temperature	5~60℃	
Piston velocity	50~500 mm/sec	
Cushion	Air-cushion	
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
Single knuckle joint	TCKA40-17-101A	TCKB40-17-102A
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		$\phi$ 32	$\phi$ 50	$\phi$ 63
Cylinder	Basic weight	0.42	0.96	1.23
	Additional weight per 50 stroke	0.06	0.11	0.13
Single knuckle joint		0.2		
Double knuckle joint (With pin)		0.28		
Limit switch mount		0.22		
Cam		0.12		
Special bracket		2.2		

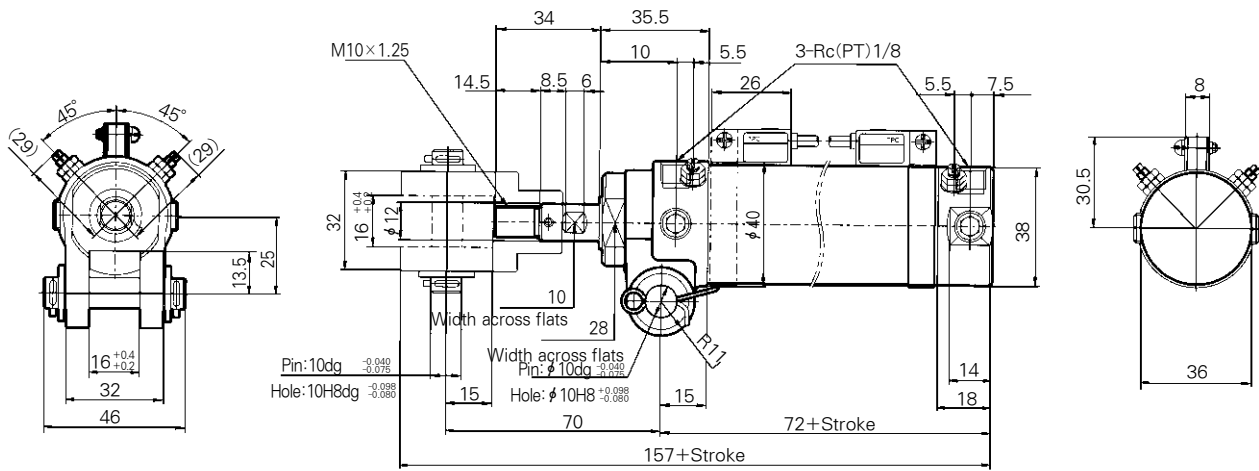
## Calculation Method

Example : AJ $\bigcirc$ 50-04Y • Basic weight ... 0.96( $\phi$  50)  
 • Additional weight ... 0.01/25g stroke  
 • Cylinder stroke ... 100mm stroke  
 • Double knuckle joint ... 0.28(r)  
 $0.96 + 0.10 \times 100 / 250.28 = 1.64\text{kgf}$

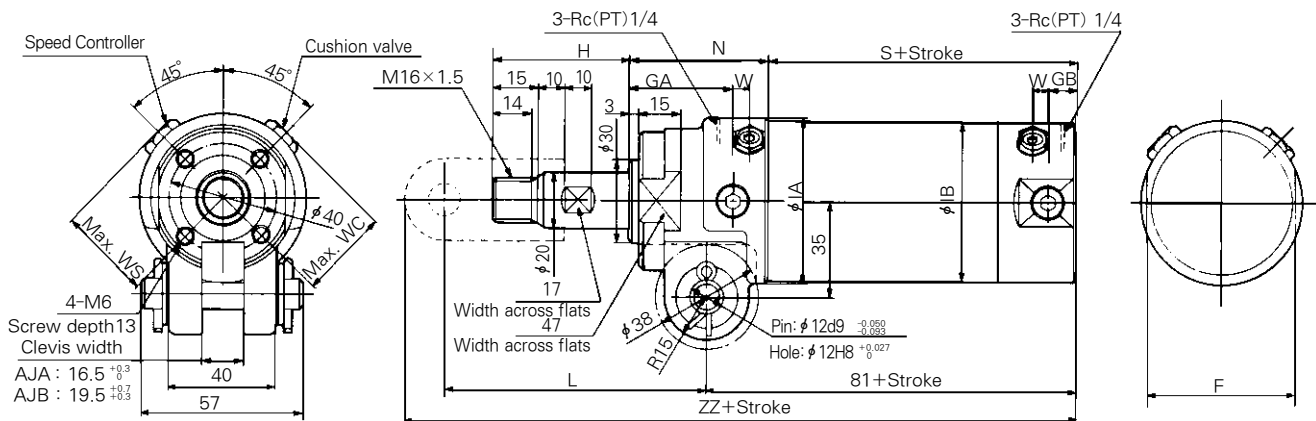
## Dimensions/Series AJ

(Unit:mm)

### AJ○32



### AJ○50, AJ○63



(Unit:mm)

Bore Size(mm)	F	GA	GB	H	φA	φB	L	N	S	W	WC	WS	ZZ
φ 50	55	32	10	50	60	58	97	47	58	7	38	39	194
φ 63	69	34	12	50	74	72	97	47	58	5.5	44	45	194

### N

(Unit:mm)

Sign	H					L					ZZ					
	Stroke	50	75	100	125	150	50	75	100	125	150	50	75	100	125	150
Bore Size(mm)	φ 50	52	62	70	83	83	98	107	115	128	128	194	204	212	225	225
	φ 63	52	62	70	83	83	98	107	115	128	128	194	204	212	225	225

ACP

UACP

AX

AS

AM

AL

ALX

UARD

UAQ

AJ

AG

UAG

ADM

ADR

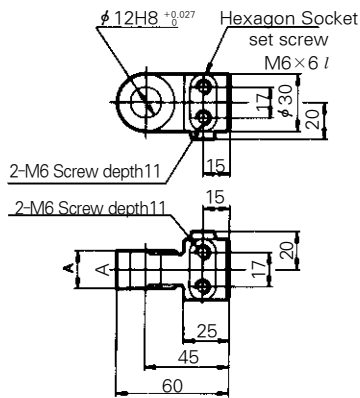
AMR

UAMR

AST

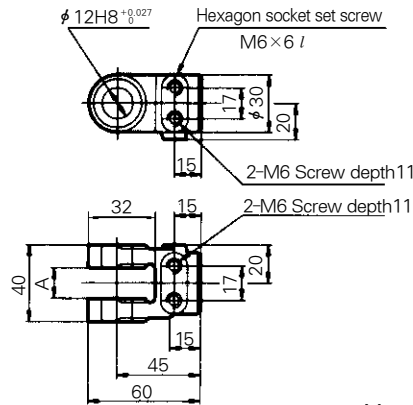
W~

### Single knuckle joint



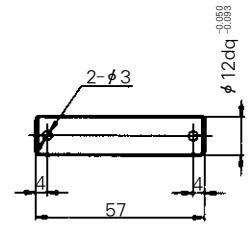
Material:Cast iron

### Double knuckle joint



Material:Cast iron

### Pin : TC1K040-23-54806

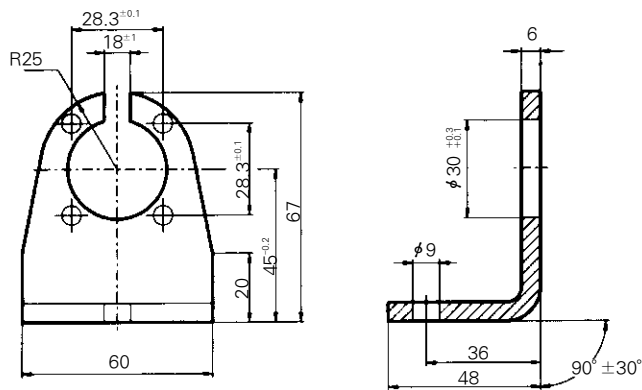


Material:Carbon steel

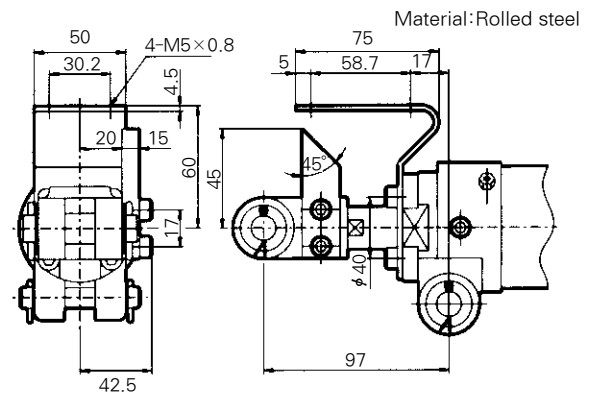
Part No.	A	Applicable clamp cylinder
TCKA40-17-101A	20 <sup>0</sup> <sub>-0.1</sub>	AJA
TCKB40-17-102A	19.5 <sup>0</sup> <sub>-0.5</sub>	AJB

Part No.	A	Applicable clamp cylinder
TCKA40-18-206A	16.5 <sup>+0.2</sup> <sub>0</sub>	Series AJA
TCKB40-18-207A	19.5 <sup>+0.7</sup> <sub>+0.2</sub>	Series AJB

### Foot Dimensions



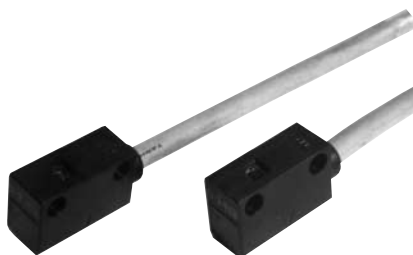
### Limit Switch Mount : Cam Mount



**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.

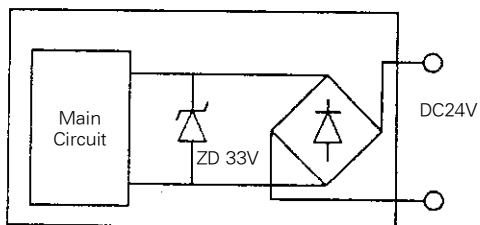
# Automatic Reed Switch/Intense-Magnetism-Resistant Type Series W2



## Auto Switch Specifications

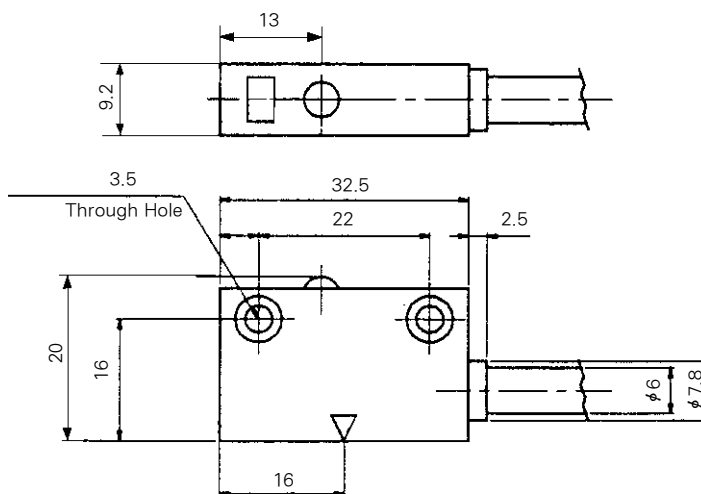
Wiring Method	2 Wire
Applications	24V DC Relay, Sequence controller
Load Voltage	24V DC
Load Current	6~40mA
Internal Voltage Drop	7 V or Less
Leakage Current	1.6mA at 24V DC
Indicator Lamp	Appropriate operating range-Green Light emitting diode
Acting Time	40ms or Less
Lead Wire	Oil proof vinyl cap type cord $\phi 6$ , 0.5mm <sup>2</sup> , 2cores(white, black)
Impact Resistance	1,000G
Insulation Resistance	50M $\Omega$ or more at 500DC
Ambient Temperature	-10 $^{\circ}$ C~60 $^{\circ}$ C
Protection Structure	EC Standard IP67(Watertight)

## Auto Switch Internal Circuit



## Auto Switch Dimensions

(Unit:mm)



ACP

UACP

AX

AS

AM

AL  
ALX

UARD

UAQ

AJ

AG

UAG

ADM

ADR

AMR

UAMR

AST

W~