

# Series UADQ

## With Auto Switch/Double Acting, Single Acting Type

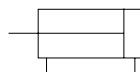
Bore Size mm(inch) :  $\phi 12(1/2\text{Nom.})$ ,  $\phi 16(5/8\text{Nom.})$ ,  $\phi 20(3/4\text{Nom.})$ ,  $\phi 25(1\text{Nom.})$ ,  $\phi 32(1 1/4\text{Nom.})$ ,  
 $\phi 40(1 1/2\text{Nom.})$ ,  $\phi 50(2\text{Nom.})$ ,  $\phi 63(2 1/2\text{Nom.})$ ,  $\phi 80(3 1/4\text{Nom.})$ ,  $\phi 100(4\text{Nom.})$



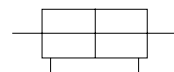
- SPACE SAVING DESIGN
- LIGHT WEIGHT
- 10 BORE SIZES
- AUTO SWITCH CAPABLE
- CYLINDERS FOR SPECIAL APPLICATIONS
- MANUFACTURING CERTIFIED TO ISO 9001&9002 STANDARDS

### Symbol

Double Acting /  
Single Rod Type



Double Acting /  
Double Rod Type



## How to Order

For details, please refer to Page.A-170

### Model/Standard Stroke

Bore Size mm(inch)	Double acting				Single acting		Applicable Auto Switch
	Single Rod Type	Double Rod Type	Non-Rotating Rod Type	Rear Boss Mount Type	Spring Return Type	Spring Extended Type	
	Standard Stroke(mm)				Standard Stroke(mm)		Reed Switch
$\phi 12(1/2\text{Nom.})$	5, 10, 15	-	-	5, 10, 15	-	-	Grommet Type UW4
$\phi 16(5/8\text{Nom.})$	20, 25, 30	-	-	20, 25, 30	-	-	
$\phi 20(3/4\text{Nom.})$	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75	5, 10,	5, 10,	
$\phi 25(1\text{Nom.})$					-	-	
$\phi 32(1 1/4\text{Nom.})$	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150	5, 10,	5, 10,	
$\phi 40(1 1/2\text{Nom.})$							
$\phi 50(2\text{Nom.})$					10,	10,	
$\phi 63(2 1/2\text{Nom.})$	10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150	10, 15, 20, 25, 25, 30, 35, 40, 45, 50, 75, 100	10, 15, 20, 25, 25, 30, 35, 40, 45, 50, 75, 100	10, 15, 20, 25, 25, 30, 35, 40, 45, 50, 75, 100, 125, 150	-	-	
$\phi 80(3 1/4\text{Nom.})$							
$\phi 100(4\text{Nom.})$							

### Intermediate Stroke

A Spacer of 5, 10, 15 and 20mm is used for intermediate stroke between 55 and 100mm stroke(55, 60, 65...).  
 (Example) UAQB50-55D is produced by installing 20mm spacer in UAQB50-75.

## Standard/Specifications

Fluid	Air
Max. Operating Pressure	140 PSI (9.9kgf/cm <sup>2</sup> )
Min. Operating Pressure	7 PSI (0.5kgf/cm <sup>2</sup> ) { $\phi 12$ $\phi 16$ : 1PSI (0.7kgf/cm <sup>2</sup> ) }
Ambient and Fluid Temperature	15~140 ° F (-10~60 °C)
Lubrication	Not Required
Cushion	None
Rod End Thread	Female (Standard Type)
Stroke Tolerance	+1.0 <sub>0</sub> mm (0.039 inch)
Mounting	Through Hole (Standard)
Piston Speed	2~20inch/sec (50~500mm/sec)

## Body Optional

Name	Applicable Type
Cushion	Rubber Cushion
Rod End Male Thread	Option
Boss Mount	Rear Boss Mount Type (Optional)
Non-Rotating Rod Type	Double Acting/Single Rod Type Only

## Non - Rotating Rod Accuracy (Non - Rotating Piston Rod Type)

Bore Size mm(inch)	$\phi 20(3/4\text{Nom.})$	$\phi 32(1\ 1/4\text{Nom.})$	$\phi 40(1\ 1/2\text{Nom.})$	$\phi 50(2\text{Nom.})$	$\phi 63(2\ 1/2\text{Nom.})$
Non-Rotating Rod Accuracy	$\pm 1^\circ$		$\pm 0.8^\circ$		

## Min. Auto Switch Mountable Stroke

No. of Auto Switch	Min. Auto Switch Mountable Stroke(inch)
With 1pc	5mm (0.20)
With 2pcs	10mm (0.39)

## Auto Switch Specification

### Reed Switch Type (Please refer to Page 42)

Auto Switch Model	UW4	
Application	Relay, Sequence Control	
Load Voltage	120VAC, 24VDC	
Range of Load Current	5~40 mA	5~20 mA
Protection Circuit for Contact Braker Point	Non	
Internal Voltage Drop	2.4V or Less	
Indicator Lamp	ON : Red Light Emitting Diode	

- Leak Current - Non
- Response Time - 1.2ms
- Lead Wire - Oil Proof vinyl,  $\phi 3.4$ , 0.2mm<sup>2</sup> 2wire(red, black), 18in ※
- Impact Resistance - 30G
- Insulation Resistance - 50M $\Omega$  or more under the test voltage 500VDC(between case and cable)
- Dielectric Resistance - 1500VAC 1min(between case and cable)
- Ambient Temperature 22~140 °F
- Protection Structure - IEC spec IP67, Water-proof, Oil-proof.

※ If 118in lead wire is required, L is put at the end of model numbers.

(Example) UW4L

ACP

UACP

AX

AS

AM

AL  
ALX

UARD

UAQ

AJ

AG

UAG

ADM

ADR

AMR

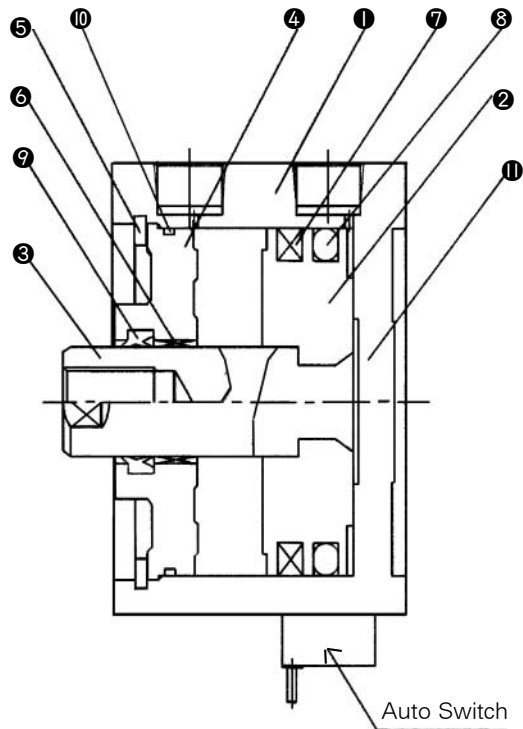
UAMR

AST

W~

# Series UADQ

## Construction/Parts List



### Parts List

No.	Description	Material	Note
①	Cylinder Tube	Aluminum Alloy	-
②	Piston	Aluminum Alloy	Chromate
③	Piston Rod	Stainless Steel	φ 12~ φ 25
		Carbon Steel	φ 32~ φ 100
④	Collar	Aluminum Bearing Alloy	φ 12~ φ 40
		Aluminum Alloy Casting	φ 50~ φ 100
⑤	Retaining Ring	Carbon Steel	Black Zinc Chromate
⑥	Bushing	Lead Bronze Casting	Only Above Bore:50(2Nom.)
⑦	Rubber Magnet	-	-

### Seals List

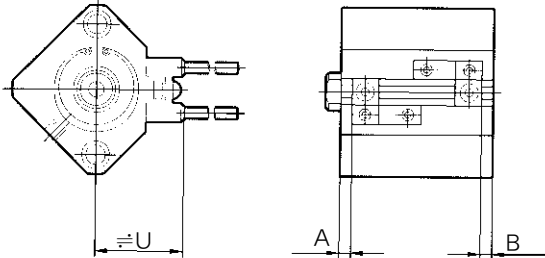
No.	Description	Material	Parts No.									
			12(1/2Nom.)	16(5/8Nom.)	20(3/4Nom.)	25(1Nom.)	32(1 1/4Nom.)	40(1 1/2Nom.)	50(2Nom.)	63(2 1/2Nom.)	80(3 1/4Nom.)	100(4Nom.)
⑧	Piston Packing	NBR	NLP-12	NLP-16A	NLP-20A	NLP-25A	NLP-32A	NLP-40A	NLP-50A	NLP-63A	NLP-80A	NLP-100A
⑨	Rod Packing	NBR	DYR-6K	DYR-8K	DYR-10SK	DYR-12	DYR-16	PDU-16Z	PDU-20Z	PDU-20Z	PDU-25Z	PDU-30Z
⑩	Gasket	NBR	SO-013-6	C14	C18	C22	C29	C36	C46	C60	C75	C95

Auto Switch Mounting Data

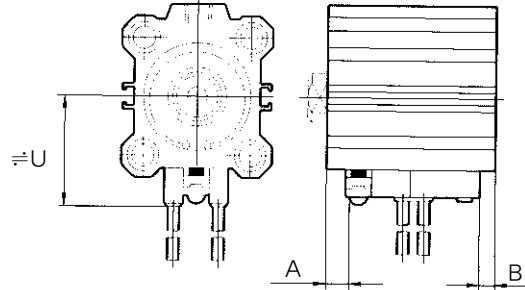
(inch)

UW4

Bore size:  $\phi 12 \sim \phi 25(1/2 \sim 1\text{Nom.})$



Bore Size:  $\phi 32 \sim \phi 100(1 1/4 \sim 4\text{Nom.})$



Auto Switch Mounting Position

Bore size (mm)	A (mm)	B (mm)	U (mm)
$\phi 12(1/2\text{Nom.})$	5	6	19.5
$\phi 16(5/8\text{Nom.})$	8	5.5	22.5
$\phi 20(3/4\text{Nom.})$	8	7	24.5
$\phi 25(1\text{Nom.})$	8	7.5	27.5
$\phi 32(1 1/4\text{Nom.})$	9.5	6.5	31.5
$\phi 40(1 1/2\text{Nom.})$	13.5	9	35
$\phi 50(2\text{Nom.})$	11.5	12	41
$\phi 63(2 1/2\text{Nom.})$	14	15	47.5
$\phi 80(3 1/4\text{Nom.})$	18	18.5	57.5
$\phi 100(4\text{Nom.})$	21.5	24.5	67.5

Weight/Double Acting, Single Rod

(kgf)

Bore Size	Stroke (inch)												Additional Weight for Male Thread
	5 (0.20)	10 (0.39)	15 (0.59)	20 (0.79)	25 (0.98)	30 (1.18)	35 (1.38)	40 (1.57)	45 (1.77)	50 (1.97)	75 (2.95)	100 (3.94)	
$\phi 12(1/2\text{Nom.})$	0.110	0.126	0.141	0.157	0.172	0.187	-	-	-	-	-	-	0.003
$\phi 16(5/8\text{Nom.})$	0.157	0.181	0.207	0.232	0.256	0.280	-	-	-	-	-	-	0.003
$\phi 20(3/4\text{Nom.})$	0.229	0.271	0.315	0.359	0.406	0.450	0.494	0.540	0.584	0.631	-	-	0.005
$\phi 25(1\text{Nom.})$	0.284	0.331	0.395	0.423	0.472	0.518	0.564	0.613	0.657	0.706	-	-	0.011
$\phi 32(1 1/4\text{Nom.})$	0.571	0.598	0.624	0.650	0.701	0.750	0.800	0.851	0.902	0.961	1.22	1.47	0.022
$\phi 40(1 1/2\text{Nom.})$	0.752	0.805	0.858	0.908	0.953	0.997	1.05	1.09	1.14	1.20	1.44	1.68	0.041
$\phi 50(2\text{Nom.})$	-	1.10	1.17	1.25	1.34	1.43	1.50	1.58	1.66	1.78	2.18	2.50	0.08
$\phi 63(2 1/2\text{Nom.})$	-	1.60	1.69	1.78	1.87	1.97	2.06	2.15	2.23	2.38	2.84	3.29	0.09
$\phi 80(3 1/4\text{Nom.})$	-	3.53	3.74	3.95	4.16	4.36	4.57	4.78	4.99	5.28	6.31	7.33	0.17
$\phi 100(4\text{Nom.})$	-	5.55	5.68	5.81	6.05	6.29	6.52	6.75	6.97	7.31	8.45	9.59	0.28

- ACP
- UACP
- AX
- AS
- AM
- AL
- ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~

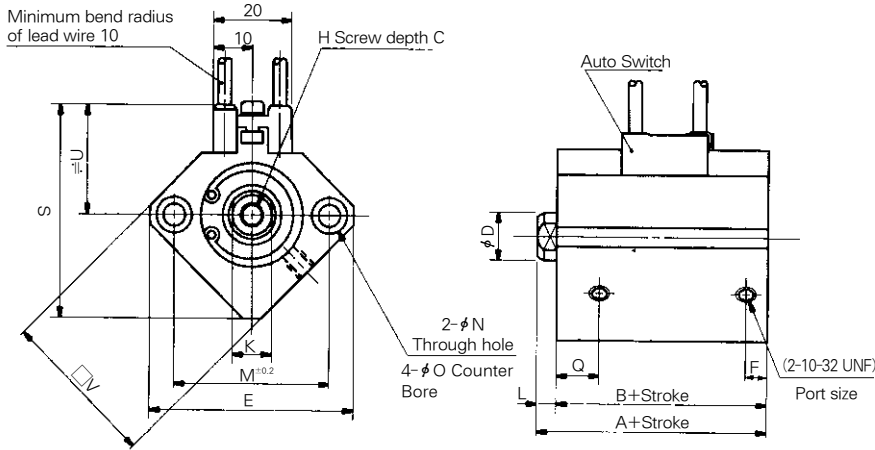
# Series UADQ

## With Auto Switch : Double Acting/Single Rod Type : Dimensions

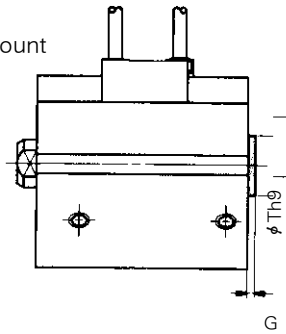
(inch)

Bore Size:  $\phi 12 \sim \phi 25$  (1/2 Nom. ~ 1 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



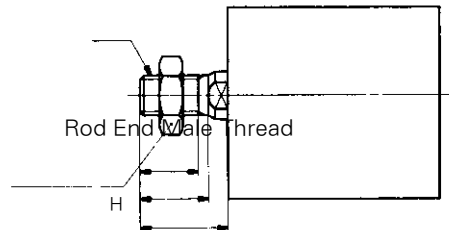
Rear Boss Mount



Rear Boss Mount

Bore size mm(inch)	G	Th9
$\phi 12$ (1/2 Nom.)	1.5	15 <sup>0</sup> <sub>-0.043</sub>
$\phi 16$ (5/8 Nom.)	1.5	20 <sup>0</sup> <sub>-0.052</sub>
$\phi 20$ (3/4 Nom.)	2	13 <sup>0</sup> <sub>-0.043</sub>
$\phi 25$ (1 Nom.)	2	15 <sup>0</sup> <sub>-0.043</sub>

Rod End Male Thread



Rod End nut  
C  
X  
L1

Rod End Male Thread

Bore size mm(inch)	C	X	H	L1
$\phi 12$ (1/2 Nom.)	9	10.5	#8-32UNC	14
$\phi 16$ (5/8 Nom.)	10	12	#8-32UNC	15.5
$\phi 20$ (3/4 Nom.)	12	14	#10-32UNF	18.5
$\phi 25$ (1 Nom.)	15	17.5	1/4-28UNF	22.5

### Standard Type

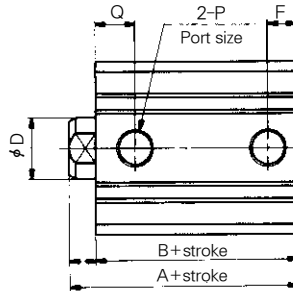
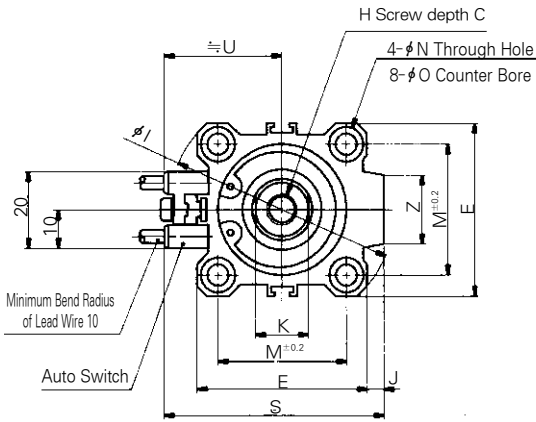
(unit:mm)

Bore size mm(inch)	Stroke range (mm)	A	B	C	D	E	F	H	K	L	M	N	φO	Q	S	U	V
$\phi 12$ (1/2 Nom.)	5~30	31.5	28	6	6	32	6.5	#8-32UNC	5	3.5	22	3.5	6.5 Depth 3.5	11	35.5	19.5	25
$\phi 16$ (5/8 Nom.)	5~30	34	30.5	8	8	38	5.5	#8-32UNC	6	3.5	28	3.5	6.5 Depth 3.5	10	41.5	22.5	29
$\phi 20$ (3/4 Nom.)	5~50 75	36 55.5	31.5 41	7	10	47	5.5	#10-32UNF	8	4.5 14.5	36	6.5	9 Depth 7	10.5	48	24.5	36
$\phi 25$ (1 Nom.)	5~50	37.5	32.5	12	12	52	5.5	1/4-28UNF	10	5	40	5.5	9 Depth 7	11	53.5	27.5	40

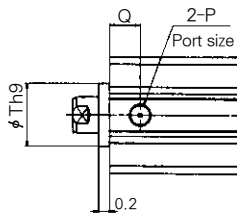
With Auto Switch : Double Acting/Single Rod Type : Dimensions

Bore Size :  $\phi 32 \sim \phi 100$  (1 1/4 Nom. ~ 4 Nom.)

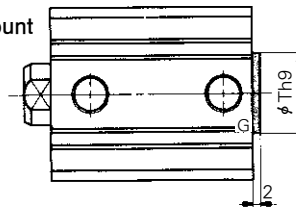
For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



Long Stroke (125st or more) (mm)



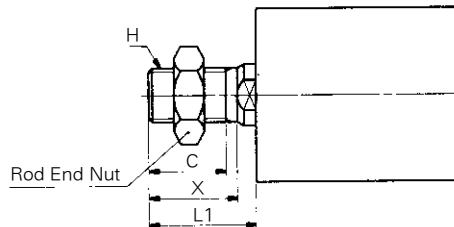
Rear Boss Mount



Rod End Male Thread

Rear Boss Mount (Unit : mm)	
Bore size mm (inch)	Th9
$\phi 32$ (1 1/4 Nom.)	21 $^{0}_{-0.052}$
$\phi 40$ (1 1/2 Nom.)	28 $^{0}_{-0.052}$
$\phi 50$ (2 Nom.)	35 $^{0}_{-0.062}$
$\phi 63$ (2 1/2 Nom.)	35 $^{0}_{-0.062}$
$\phi 80$ (3 1/4 Nom.)	43 $^{0}_{-0.062}$
$\phi 100$ (4 Nom.)	59 $^{0}_{-0.074}$

Bore size (inch)	T
$\phi 32$ (1 1/4 Nom.)	22 $^{0}_{-0.052}$
$\phi 40$ (1 1/2 Nom.)	28 $^{0}_{-0.052}$
$\phi 50$ (2 Nom.) • $\phi 63$ (2 1/2 Nom.)	35 $^{0}_{-0.062}$
$\phi 80$ (3 1/4 Nom.)	43 $^{0}_{-0.062}$
$\phi 100$ (4 Nom.)	59 $^{0}_{-0.074}$



Rod End Nut

Rod End Male Thread (Unit : mm)				
Bore size mm (inch)	C	X	H	L1
$\phi 32$ (1 1/4 Nom.)	20.5	23.5	5/16-24UNF	28.5
$\phi 40$ (1 1/2 Nom.)	20.5	23.5	3/8-24UNF	28.5
$\phi 50$ (2 Nom.)	26	28.5	1/2-20UNF	33.5
$\phi 63$ (2 1/2 Nom.)	26	28.5	1/2-20UNF	33.5
$\phi 80$ (3 1/4 Nom.)	32.5	35.5	5/8-18UNF	43.5
$\phi 100$ (4 Nom.)	32.5	35.5	3/4-16UNF	43.5

Standard (Unit : mm)

Bore size mm (inch)	Stroke range (mm)	A	B	C	D	E	F	H	I	J	K	L	M	N	φO	P	Q	S	U	Z
$\phi 32$ (1 1/4 Nom.)	5~50	40	33	13	16	45	7.5	5/16-24UNF	60	4.5	14	7	34	5.5	9 Depth 7	NPT 1/8"	10.5	58.5	31.5	18
	75, 100	12.5	12.5																	
	125, 150	62.5	45.5																	
$\phi 40$ (1 1/2 Nom.)	5~50	46.5	39.5	13	16	52	8	3/8-24UNF	69	5	14	7	40	5.5	9 Depth 7	NPT 1/8"	11	66	35	18
	75, 100	14	14																	
	125, 150	72	55																	
$\phi 50$ (2 Nom.)	10~50	48.5	40.5	15	20	64	10.5	1/2-20UNF	86	7	17	8	50	6.6	11 Depth 8	NPT 1/4"	10.5	80	41	22
	75, 100	14	18																	
	125, 150	73.5	55.5																	
$\phi 63$ (2 1/2 Nom.)	10~50	54	46	15	20	77	10.5	1/2-20UNF	103	7	17	8	60	9	14 Depth 10.5	NPT 1/4"	15	93	47.5	22
	75, 100	16.5	18																	
	125, 150	75	57																	
$\phi 80$ (3 1/4 Nom.)	10~50	63.5	53.5	21	25	98	12.5	5/8-18UNF	132	6	22	10	77	11	17.5 Depth 13.5	NPT 3/8"	16	112.5	57.5	26
	75, 100	19	20																	
	125, 150	86	66																	
$\phi 100$ (4 Nom.)	10~50	75	63	27	30	117	13	3/4-16UNF	156	6.5	27	12	94	11	17.5 Depth 13.5	NPT 3/8"	23	132.5	67.5	26
	75, 100	23	22																	
	125, 150	97.5	75.5																	

- ACP
- UACP
- AX
- AS
- AM
- AL
- ALX
- UARD
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- AG
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- ADM
- ADR
- AMR
- UAMR
- AST
- W~

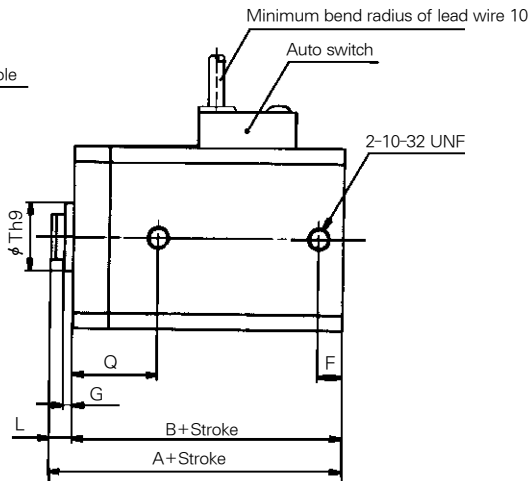
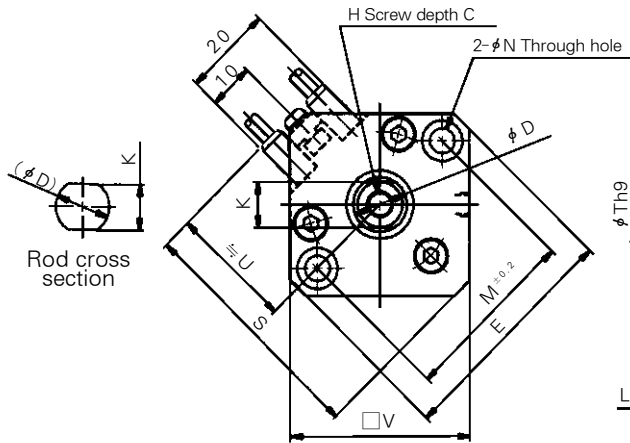
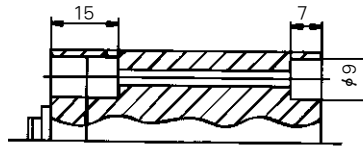
# Series UADQK

## With Auto Switch: Double Acting/Non-Rotating Rod/Single Rod Type: Dimensions

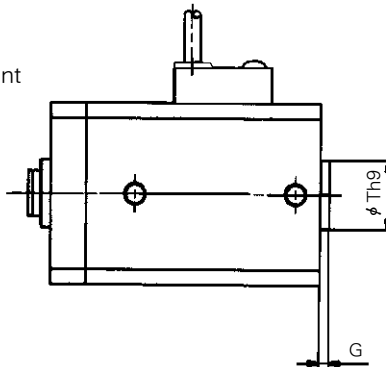
Bore Size :  $\phi 20$ ,  $\phi 25$  (3/4 Nom., 1 Nom.)

For the detail of "A" type (Both End Tapped) Please refer to Page A-205.

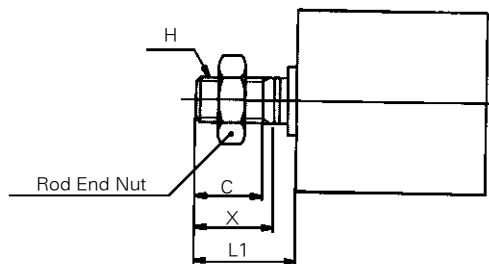
### Through Hole



### Rear Boss Mount



### Rod End Male Thread



### Rod End Male Thread

Bore size mm (inch)	C	H	L1	X
$\phi 20$ (3/4Nom.)	12	#10-32 UNF	18.5	14
$\phi 25$ (1Nom.)	12	3/8-24 UNF	18.5	14

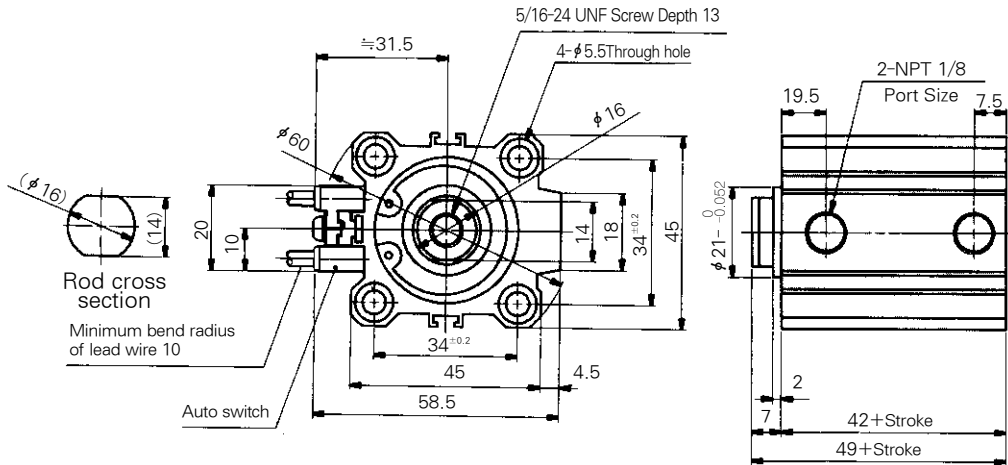
### Standard

Bore size mm (inch)	Stroke range (mm)	A	B	C	D	E	F	G	H	K	L	M	N	Q	S	Thg	U	V
$\phi 20$ (3/4Nom.)	5~50	44	39.5	7	10	47	5.5	2	#10-32 UNF	8	4.5	36	5.5	18.5	48	13 <sup>0</sup> <sub>-0.043</sub>	24.5	36
$\phi 25$ (1Nom.)	5~50	45.5	40.5	12	12	52	5.5	2	1/4-28 UNF	10	5	40	5.5	19	53.5	15 <sup>0</sup> <sub>-0.043</sub>	27.5	40

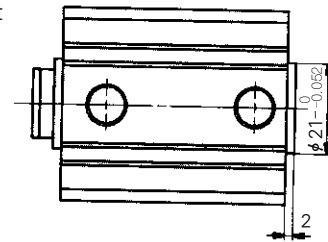
With Auto Switch: Double Acting/Non-Rotating Rod/Single Rod Type: Dimensions

Bore Size :  $\phi 32$  (1 1/4 Nom.)

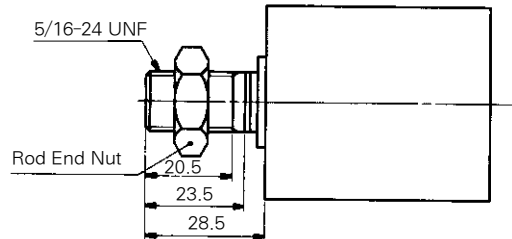
For the detail of "A" type (Both End Tapped) Please refer to Page A-205.



Rear Boss Mount



Rod End Male Thread



ACP

UACP

AX

AS

AM

AL

ALX

UARD

UAQ

AJ

AG

UAG

ADM

ADR

AMR

UAMR

AST

W~

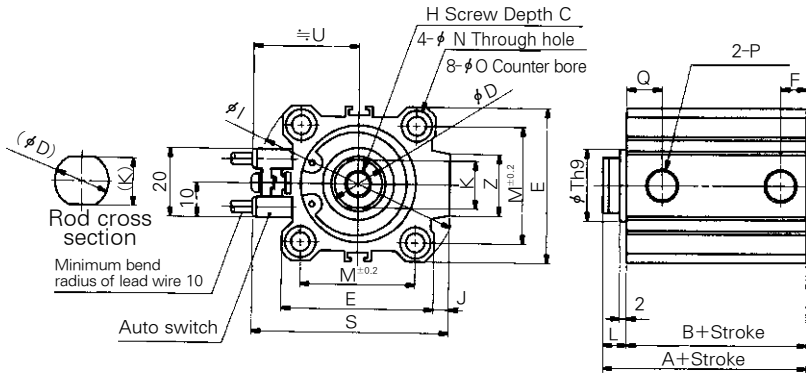


# Series UADQK

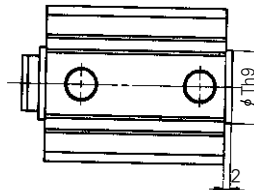
## With Auto Switch: Double Acting/Non-Rotating Rod/Single Rod Type: Dimensions

Bore Size :  $\phi 40 \sim \phi 63$  (1 1/2 Nom. ~ 2 1/2 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



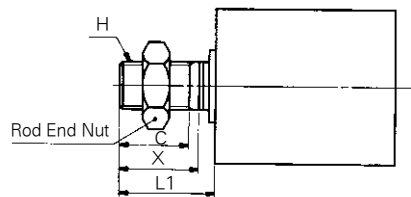
Rear Boss Mount



Rear Boss Mount (mm)

Bore size mm(inch)	Th9
$\phi 40$ (1 1/2 Nom.)	28 $^0_{-0.052}$
$\phi 50$ (2 Nom.)	35 $^0_{-0.062}$
$\phi 63$ (2 1/2 Nom.)	35 $^0_{-0.062}$

Rod End Male Thread



Rod End Male Thread (mm)

Bore size mm(inch)	C	H	L1	X
$\phi 40$ (1 1/2 Nom.)	20.5	3/8-24UNF	28.5	23.5
$\phi 50$ (2 Nom.)	26	1/2-20UNF	33.5	28.5
$\phi 63$ (2 1/2 Nom.)	26	1/2-20UNF	33.5	28.5

### Standard

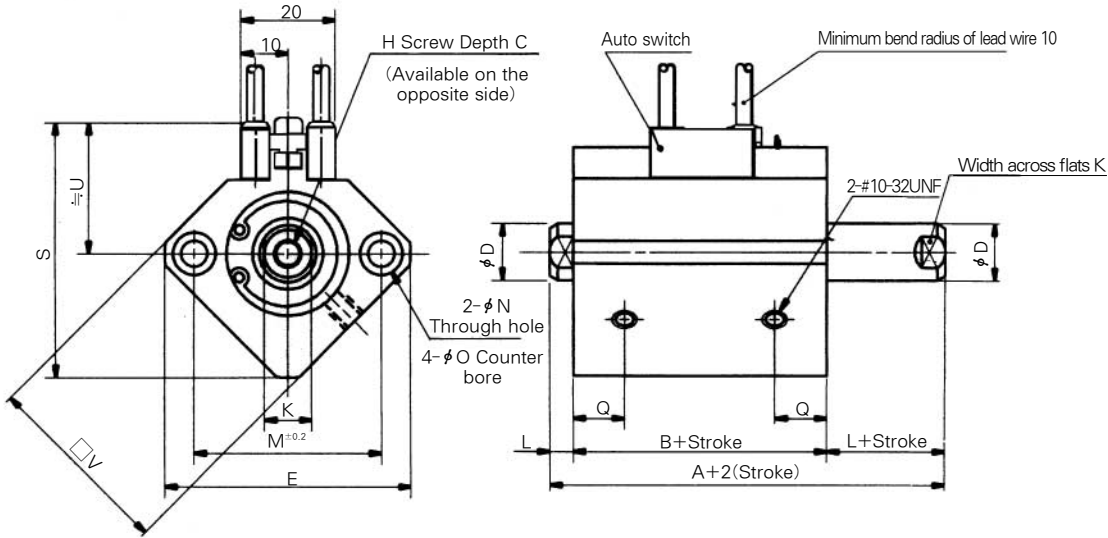
Bore size mm(inch)	Stroke range (mm)	A	B	C	D	E	F	H	I	J	K	L	M	N	$\phi O$	P	Q	S	Thg	U	Z
$\phi 40$ (1 1/2 Nom.)	5~50	46.5	39.5	13	16	52	8	3/8-24UNF	69	5	14	7	40	5.5	9 Depth 7	NPT 1/8"	11	66	28 $^0_{-0.052}$	35	18
	75, 100																				
$\phi 50$ (2 Nom.)	10~50	48.5	40.5	15	20	64	10.5	1/2-20UNF	86	7	18	8	50	6.6	11 Depth 8	NPT 1/4"	10.5	80	35 $^0_{-0.062}$	41	22
	75, 100																				
$\phi 63$ (2 1/2 Nom.)	10~50	54	46	15	20	77	10.5	1/2-20UNF	103	7	18	8	60	9	14 Depth 10.5	NPT 1/4"	15	93	35 $^0_{-0.062}$	47.5	22
	75, 100																				

With Auto Switch: Double Acting/Double Rod Type: Dimensions

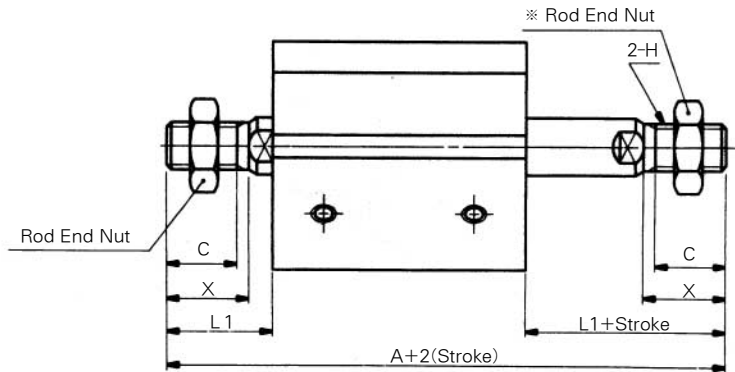
(inch)

Bore Size :  $\phi 20$  (3/4 Nom.),  $\phi 25$  (1 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



Rod End Male Thread



Rod End Male Thread (mm)

Bore size mm (inch)	A	C	H	L1	X
$\phi 20$ (3/4Nom.)	75	12	#10-32UNF	18.5	14
$\phi 25$ (1Nom.)	84	15	1/4-28UNF	22.5	17.5

Standard (Unit : mm)

Bore size mm (inch)	Stroke range (inch)	A	B	C	D	E	H	K	L	M	N	$\phi O$	Q	S	U	V
$\phi 20$ (3/4Nom.)	5~75	47	38	7	10	47	#10-32UNF	8	4.5	36	5.5	9 Depth7	10.5	48	24.5	36
$\phi 25$ (1Nom.)	5~50	49	39	12	12	52	1/4-28UNF	10	5	40	5.5	9 Depth7	11	53.5	27.5	40

- ACP
- UACP
- AX
- AS
- AM
- AL
- ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~

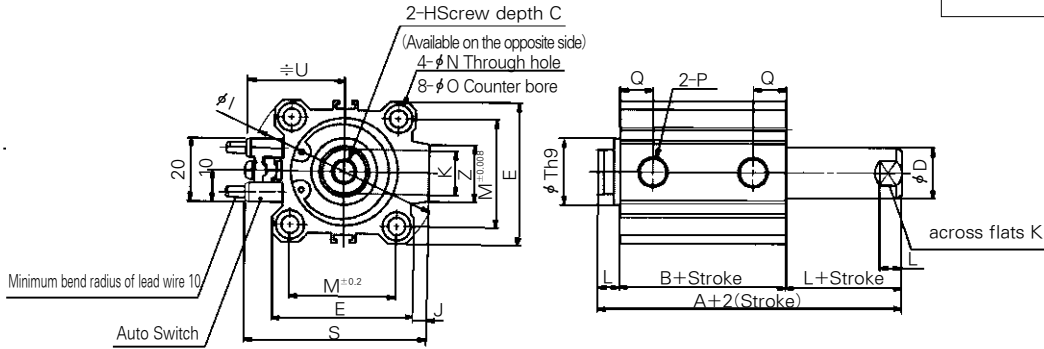
# Series UADQW

## With Auto Switch: Double Acting/Double Rod Type: Dimensions

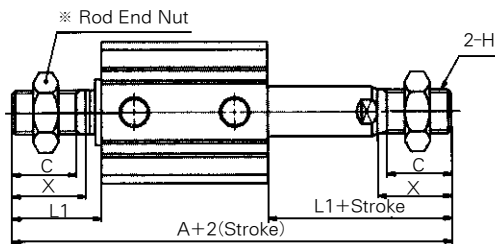
(mm)

Bore Size :  $\phi 32 \sim \phi 100$  (1 1/4 Nom. ~ 4 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



### Rod End Male Thread



### Rod End Male Thread (mm)

Bore size mm(inch)	A	C	H	L1	X
$\phi 32$ (1 1/4 Nom.)	97.5	20.5	5/16-24UNF	28.5	23.5
$\phi 40$ (1 1/2 Nom.)	107	20.5	3/8-24UNF	28.5	23.5
$\phi 50$ (2 Nom.)	117.5	26	1/2-20UNF	33.5	28.5
$\phi 63$ (2 1/2 Nom.)	119	26	1/2-20UNF	33.5	28.5
$\phi 80$ (3 1/4 Nom.)	148	32.5	5/8-18UNF	43.5	35.5
$\phi 100$ (4 Nom.)	157.5	32.5	3/4-16UNF	43.5	35.5

### Standard

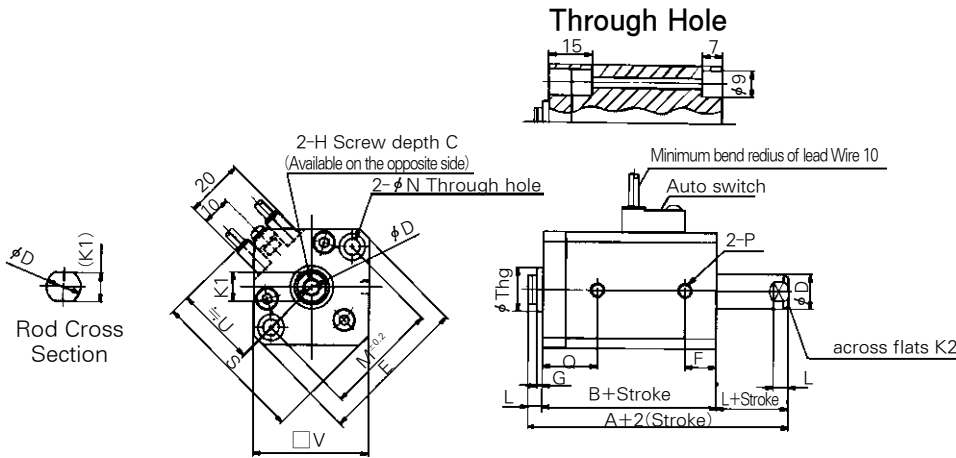
(mm)

Bore size mm(inch)	Stroke range (mm)	A	B	C	D	E	H	I	J	K	L	M	N	$\phi O$	P	Q	S	U	Z
$\phi 32$ (1 1/4 Nom.)	5~30	54.5	40.5	13	16	45	5/16-24UNF	60	4.5	14	7	34	5.5	9 Depth 7	NPT 1/8"	12.5	58.5	31.5	18
$\phi 40$ (1 1/2 Nom.)	10~50	64	50	13	16	52	3/8-24UNF	69	5	14	7	40	5.5	9 Depth 7	NPT 1/8"	14	66	35	18
$\phi 50$ (2 Nom.)	10~50	66.5	50.5	15	20	64	1/2-20UNF	86	7	17	8	50	6.6	11 Depth 8	NPT 1/4"	14	80	41	22
$\phi 63$ (2 1/2 Nom.)	10~50	68	52	15	20	77	1/2-20UNF	103	7	17	8	60	9	14 Depth 10.5	NPT 1/4"	15.5	93	47.5	22
$\phi 80$ (3 1/4 Nom.)	10~50	81	61	21	25	98	5/8-18UNF	132	6	22	10	77	11	17.5 Depth 13.5	NPT 3/8"	18	112.5	57.5	26
$\phi 100$ (4 Nom.)	10~50	94.5	70.5	27	30	117	3/4-16UNF	156	6.5	27	12	94	11	17.5 Depth 13.5	NPT 3/8"	22	132.5	67.5	26

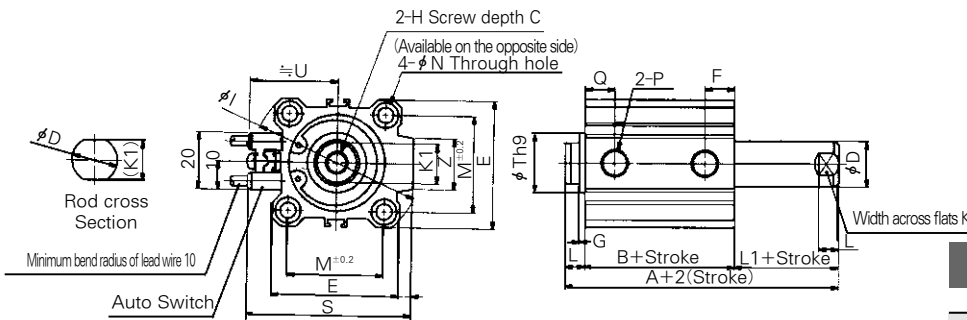
With Auto Switch: Double Acting / Double Rod / Non-rotating Rod / Dimensions

Bore Size :  $\phi 20 \sim \phi 25$  (3/4 Nom. ~ 1Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.



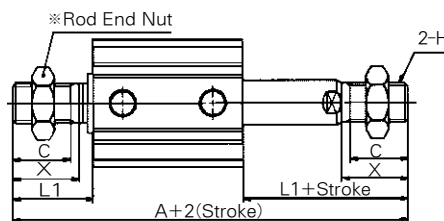
Bore Size:  $\phi 32$  (1.26)



Rod End Male Thread

Rod End Male Thread (mm)

Bore size mm (inch)	A	C	H
$\phi 20$ (3/4Nom.)	83	12	#10-32UNF
$\phi 25$ (1Nom.)	92	15	1/4-28UNF
$\phi 32$ (1 1/4Nom.)	106.5	20.5	5/16-24UNF



Bore size mm (inch)	L1	X
$\phi 20$ (3/4Nom.)	18.5	14
$\phi 25$ (1Nom.)	22.5	17.5
$\phi 32$ (1 1/4Nom.)	28.5	23.5

Standard

(Unit : mm)

Bore size mm (inch)	Stroke range (mm)	A	B	C	D	E	F	G	H	I	J	K1	K2	L	M	N	P	Q	S	Th9	U	V	Z
$\phi 20$ (3/4Nom.)	5~50	55	46	7	10	47	10.5	2	#10-32UNF	-	-	8	8	4.5	36	5.5	10-32UNF	18.5	48	13 <sup>0</sup> <sub>-0.043</sub>	24.5	36	-
$\phi 25$ (1Nom.)	5~50	57	47	12	12	52	11	2	1/4-28UNF	-	-	10	10	5	40	5.5	10-32UNF	19	53.5	15 <sup>0</sup> <sub>-0.043</sub>	27.5	40	-
$\phi 32$ (1 1/4Nom.)	5~75	63.5	49.5	13	16	45	12.5	2	5/16-24UNF	60	4.5	14	14	7	34	5.5	NPT 1/8"	21.5	58.5	21 <sup>0</sup> <sub>-0.052</sub>	31.5	-	18

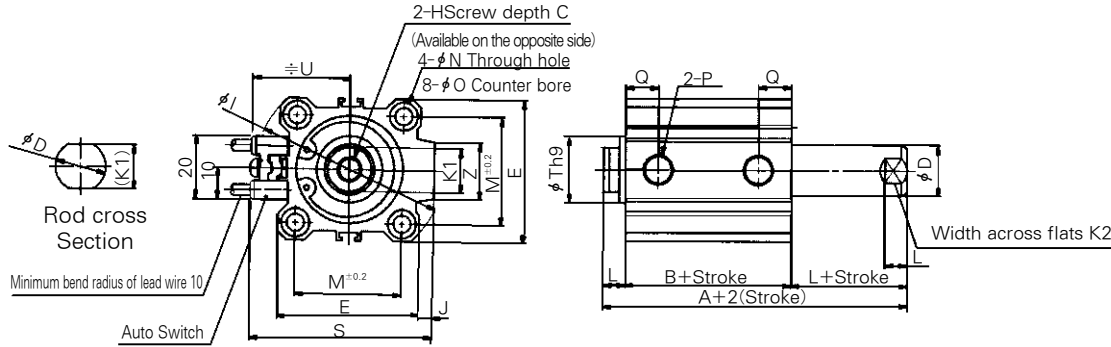
- ACP
- UACP
- AX
- AS
- AM
- AL ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~

# Series UADQKW

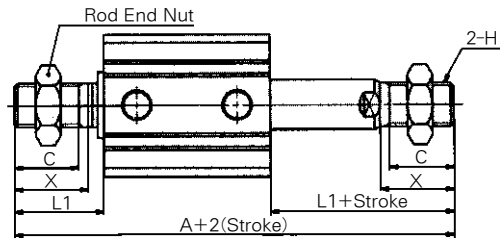
## With Auto Switch: Double Acting / Double Rod / Non-rotating Piston Rod : Dimensions

Bore Size :  $\phi 40 \sim \phi 63$  (1 1/2 Nom. ~ 2 1/2 Nom.)

For the dimension of "A" type (Both Ends Tapped)  
Please refer to Page A-205.



### Rod End Male Thread



### Rod End Male Thread (mm)

Bore size mm (inch)	A	C	H	L1	X
$\phi 40$ (1 1/2 Nom.)	107	20.5	3/8-24UNF	28.5	23.5
$\phi 50$ (2 Nom.)	117.5	26	1/2-20UNF	33.5	28.5
$\phi 63$ (2 1/2 Nom.)	119	26	1/2-20UNF	33.5	28.5

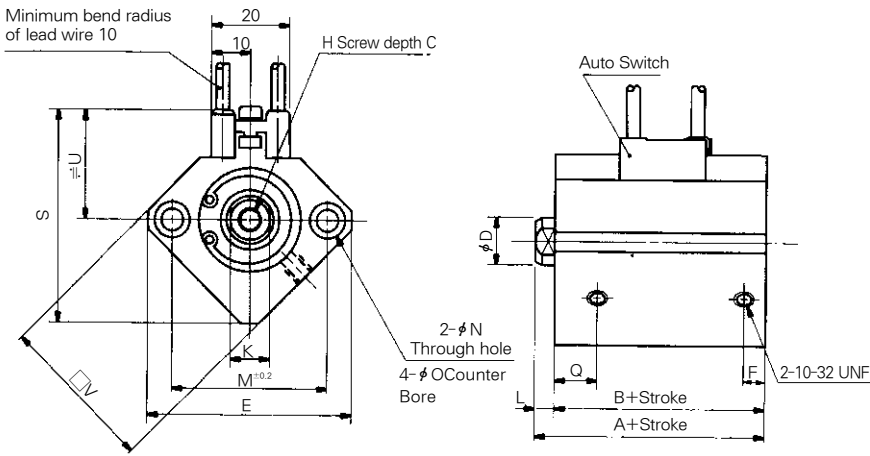
### Standard (mm)

Bore size mm (inch)	Stroke range (mm)	A	B	C	D	E	H	I	J	K1	K2	L	M	N	$\phi O$	P	Q	S	Th9	U	Z
$\phi 40$ (1 1/2 Nom.)	5~75	64	50	13	16	52	3/8-24UNF	69	5	14	14	7	40	5.5	9Depth7	NPT1/8"	14	66	28 <sup>0</sup> <sub>-0.052</sub>	35	18
$\phi 50$ (2 Nom.)	10~75	66.5	50.5	15	20	64	1/2-20UNF	86	7	18	17	8	50	6.5	11Depth8	NPT1/4"	14	80	35 <sup>0</sup> <sub>-0.062</sub>	41	22
$\phi 63$ (2 1/2 Nom.)	10~75	68	52	15	20	77	1/2-20UNF	103	7	18	17	8	60	9	14Depth10.5	NPT1/4"	15.5	93	35 <sup>0</sup> <sub>-0.062</sub>	47.5	22

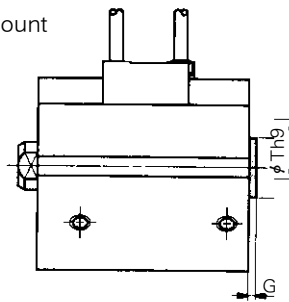
With Auto Switch : Single Acting/Single Rod/Spring Return Type

Bore Size :  $\phi 20$  (3/4" Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.

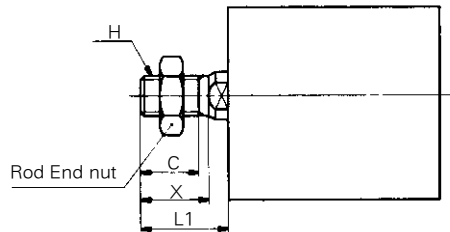


Rear Boss Mount



Rear Boss Mount (mm)		
Bore size mm (inch)	G	Th9
$\phi 20$ (3/4 Nom.)	2	13 <sup>0</sup> <sub>0.043</sub>

Rod End Male Thread



Rod End Male Thread (mm)				
Bore size mm (inch)	C	X	H	L1
$\phi 20$ (3/4 Nom.)	12	14	5/16-18UNC	18.5

Standard

(mm)

Bore size mm (inch)	A		B		C	D	E	F	H	K	L	M	N	$\phi O$	S	U	V
	5st	10st	5st	10st													
$\phi 20$ (3/4 Nom.)	41	46	36.5	41.5	7	10	47	5.5	#10-32UNF	8	4.5	36	5.5	9 Depth 7	48	24.5	36

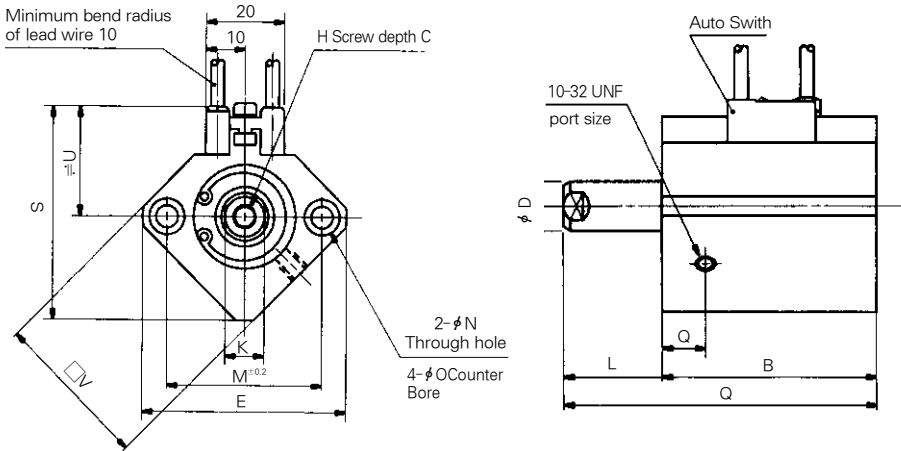
- ACP
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- ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~



With Auto Switch : Single Acting/Single Rod /Spring Extended Type : Dimensions

Bore Size :  $\phi 20$  (3/4 Nom.)

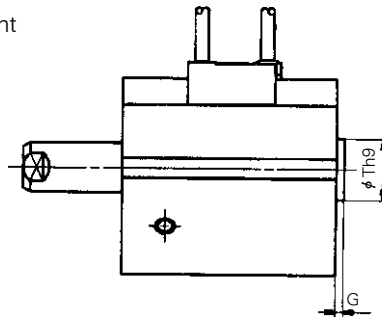
For the dimension of "A" type(Both Ends Tapped) Please refer to Page A-205.



Rear Boss Mount

Bore size mm(inch)	G	Th9
$\phi 20(3/4\text{Nom.})$	2	13 $_{-0.043}^0$

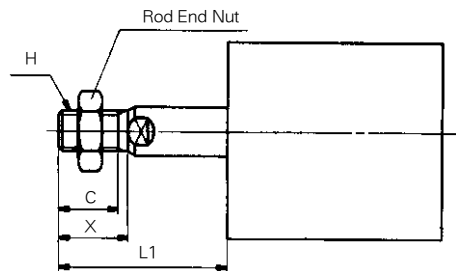
Rear Boss Mount



Rod End Male Thread

Bore size mm(inch)	C	X	H	L1	
				5st	10st
$\phi 20(3/4\text{Nom.})$	12	14	#10-32UNF	23.5	28.5

Rod End Male Thread



Standard

(mm)

Bore size mm(inch)	A		B		C	D	E	H	K	L		M	N	$\phi O$	Q	S	U	V
	5st	10st	5st	10st						5st	10st							
$\phi 20(3/4\text{Nom.})$	46	56	36.5	41.5	7	10	47	#10-32UNF	8	9.5	14.5	36	5.5	9 Depth 7	10.5	48	24.5	36

- ACP
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- ALX
- UARD
- UAQ
- AJ
- AG
- UAG
- ADM
- ADR
- AMR
- UAMR
- AST
- W~

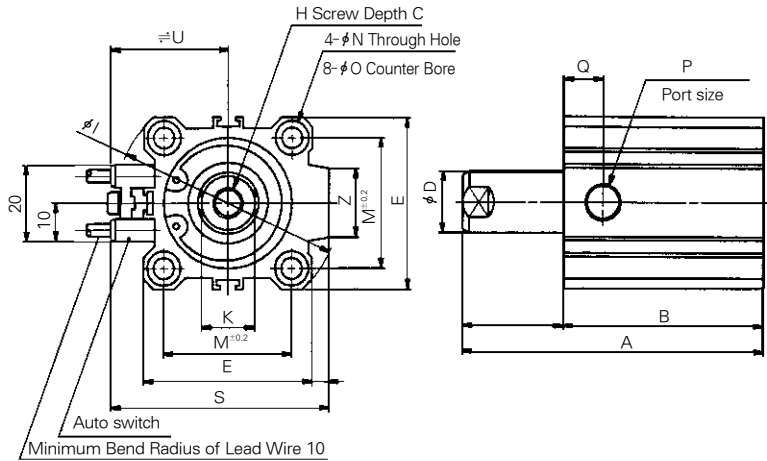


# Series UADQ

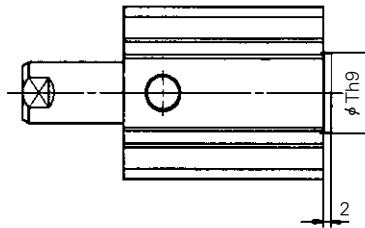
## With Auto Switch : Single Acting/Single Rod/Spring Extend Type : Dimensions

Bore Size :  $\phi 32 \sim \phi 50$  ( $1\frac{1}{4}$  Nom.  $\sim$  2 Nom.)

For the dimension of "A" type (Both Ends Tapped) Please refer to Page A-205.

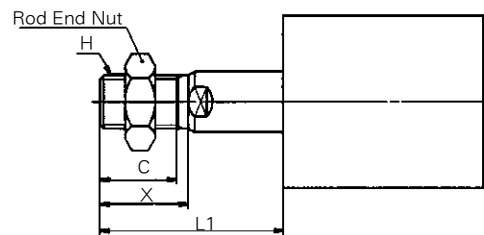


Rear Boss Mount



Rear Boss Mount (mm)	
Bore size mm (inch)	Th9
$\phi 32$ ( $1\frac{1}{4}$ Nom.)	21 <sup>0</sup> <sub>-0.052</sub>
$\phi 40$ ( $1\frac{1}{2}$ Nom.)	28 <sup>0</sup> <sub>-0.052</sub>
$\phi 50$ (2 Nom)	35 <sup>0</sup> <sub>-0.052</sub>

Rod End Male Thread



Rod End Male Thread (mm)						
Bore size mm (inch)	C	X	H	L1		
				5st	10st	20st
$\phi 32$ ( $1\frac{1}{4}$ Nom.)	20.5	23.5	$\frac{5}{16}$ -24UNF	33.5	38.5	-
$\phi 40$ ( $1\frac{1}{2}$ Nom.)	20.5	23.5	$\frac{3}{8}$ -24UNF	33.5	38.5	-
$\phi 50$ (2 Nom)	26	28.5	$\frac{1}{2}$ -20UNF	-	43.5	53.5

### Standard Type

(mm)

Bore size mm (inch)	A		B		C	D	E	H	I	J	K	L		M	N	O	P	Q	S	U	V
	5st	10st	5st	10st								5st	10st								
$\phi 32$ ( $1\frac{1}{4}$ Nom.)	50	60	38	43	13	16	45	$\frac{5}{16}$ -24UNF	60	4.5	14	12	17	34	5.5	9 Depth 7	NPT $\frac{1}{8}$ "	10.5	58.5	31.5	18
$\phi 40$ ( $1\frac{1}{2}$ Nom.)	56.5	66.5	44.5	49.5	13	16	52	$\frac{3}{8}$ -24UNF	69	5	14	12	17	40	5.5	9 Depth 7	NPT $\frac{1}{8}$ "	11	66	35	18
$\phi 50$ (2 Nom)	-	68.5	-	50.5	15	20	64	$\frac{1}{2}$ -20UNF	86	7	17	-	18	50	6.6	11 Depth 8	NPT $\frac{1}{4}$ "	10.5	80	41	22

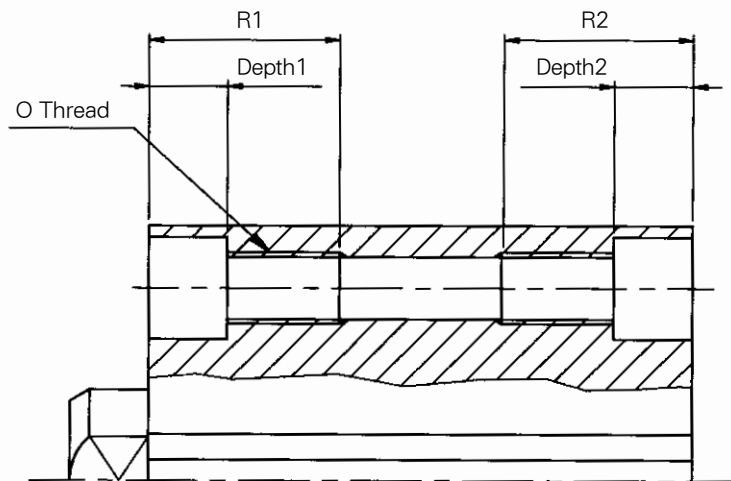
Both Ends Tapped

⟨“A” Type⟩

(mm)

Bore Size mm(inch)	O	Depth1	Depth2	R1	R2
φ 12(1/2Nom.)	8-32 UNC	3.5(-)	3.5	10.5(-)	10.5
φ 16(5/8Nom.)	8-32 UNC	3.5(-)	3.5	10.5(-)	10.5
φ 20(3/4Nom.)	1/4-20 UNC	7(15)	7	17(25)	17
φ 25(1Nom.)	1/4-20 UNC	7(15)	7	17(25)	17
φ 32(1 1/4Nom.)	1/4-20 UNC	7(7)	7	17(17)	17
φ 40(1 1/2Nom.)	1/4-20 UNC	7(7)	7	17(17)	17
φ 50(2Nom.)	5/16-18 UNC	8(8)	8	22(22)	22
φ 63(2 1/2Nom.)	7/16-14 UNC	10.5(10.5)	10.5	28.5(28.5)	28.5
φ 80(3 1/4Nom.)	1/2-13 UNC	10.5(10.5)	10.5	35.5(35.5)	35.5
φ 100(4Nom.)	1/2-13 UNC	13.5(13.5)	13.5	35.5(35.5)	35.5

※ ( ) Non-Rotating Type



ACP

UACP

AX

AS

AM

AL  
ALX

UARD

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AJ

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