

## FREE MOUNT CYLINDER: SERIES CU

### SYMBOLS

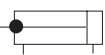
Double acting/Single rod end type



Single acting/Retracted type



Non rotating piston type

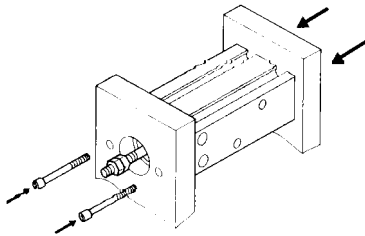


- ✓ Bore sizes  $\varnothing 6, \varnothing 10, \varnothing 16, \varnothing 20, \varnothing 25, \varnothing 32$ mm
- ✓ Double/Single acting (retracted)
- ✓ Non-rotating piston rod type available as standard
- ✓ Precise and direct mounting
- ✓ Magnetic piston standard

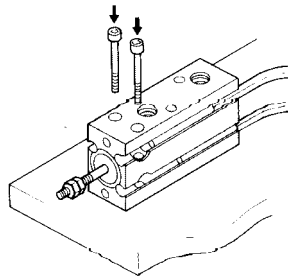


### FLEXIBLE MOUNT/ RECTANGULAR CYLINDER

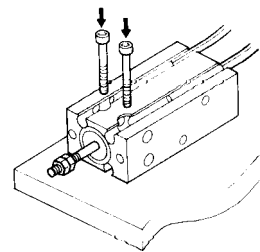
Axis parallel type (Body tapped)



Axis parallel type (Body tapped)



Axis parallel type (Body tapped)



### TECHNICAL SPECIFICATIONS

Fluid	Air
Proof pressure	10.5 Bar
Max. operating pressure	7 Bar
Ambient & fluid temperature	5-60°C
Lubrication	Not required
Cushion	Rubber cushion to both sides
Rod end thread	Male thread
Stroke allowance	+1.0 -0
Mounting	Direct mount

Minimum Operating Pressure (Bar)	Bore Size (mm)					
Type	6	10	16	20	25	32
Double acting (single rod)	0.6	0.6	0.6	0.5	0.5	0.5
Single acting (extended/retracted)	2.0	1.5	1.5	1.3	1.3	1.2

Non - Rotating Piston Rod  
Accuracy/Specification

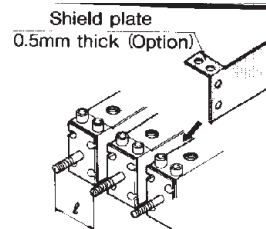
Bore size (mm)	6,10,16	20,25,32
Non-rotating accuracy	$\pm 0.8^\circ$	$\pm 0.5^\circ$

DIMENSIONS  
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How To  
ORDER  
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### SHIELD PLATES

- When using free mount cylinder with auto switches in bore sizes more than  $\varnothing 16$  within the following table of mounting pitch (l), shield plates (options) should be used.
- Option without using shield plate will cause auto switch to function differently.  
(However, there is no need for a shield plate for  $\varnothing 6$  and  $\varnothing 10$ )



Bore size (mm)	Mounting pitch	Shield plate /Parts No.			
		Applicable stroke (mm)			
		5, 10, 15	20, 25, 30	40	50
16	33	CU-S016A	CU-S016B	-	-
20	40	CU-S020A	CU-S020B	CU-S020C	CU-S020D
25	46	CU-S025A	CU-S025B	CU-S025C	CU-S025D
32	56	CU-S032A	CU-S032B	CU-S032C	CU-S032D



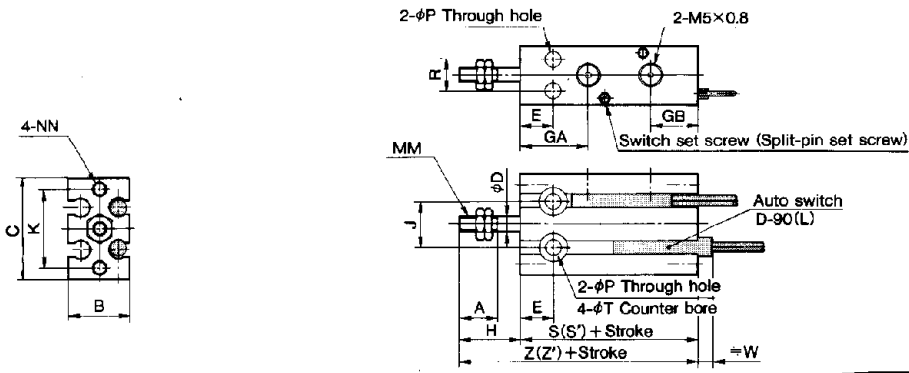
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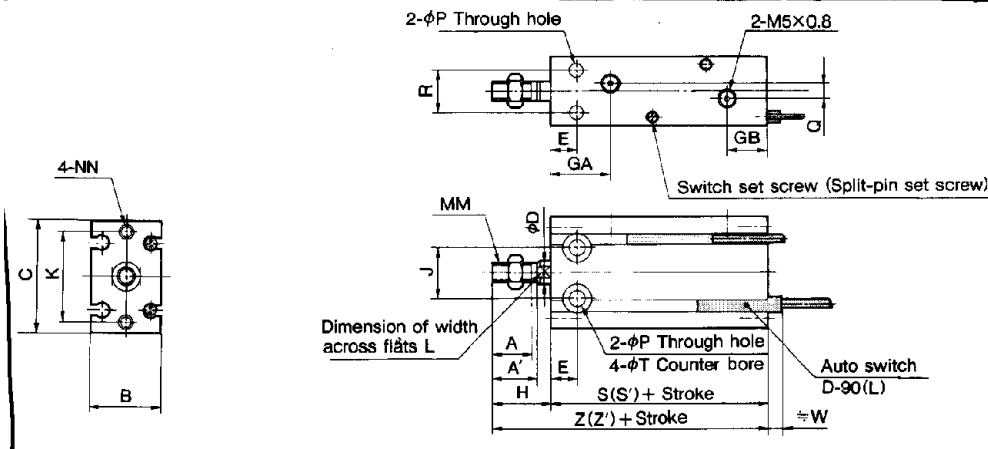
DIMENSIONS

DOUBLE ACTING-SINGLE ROD TYPE Ø6,Ø10



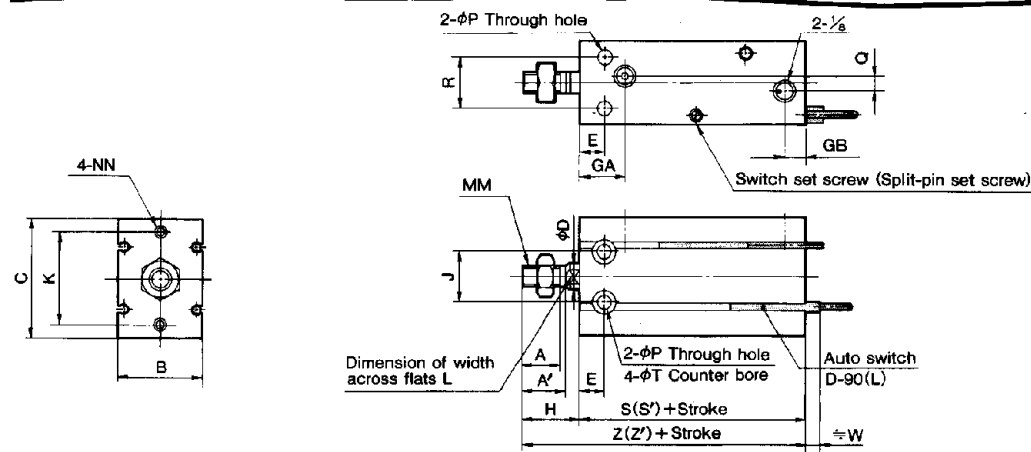
DIMENSIONS

DOUBLE ACTING-SINGLE ROD TYPE Ø16-Ø25



DIMENSIONS

DOUBLE ACTING-SINGLE ROD TYPE Ø32

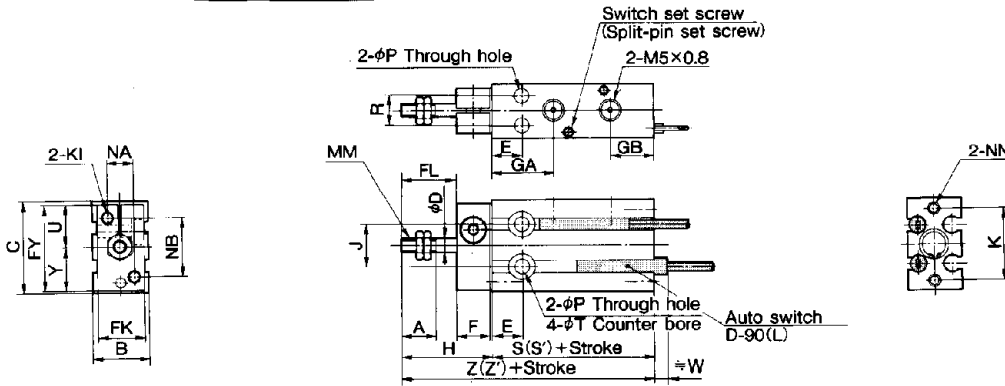


Model	Stroke range (mm)	A	A'	B	C	ØD	E	GA	GB	H	J	K	L	MM	NN	ØP	Q	R	ØT	W	S'	Z'
CDU6	5-30	7	-	13	22	3	7	15	10	13	10	17	-	M3X0.5	M3X0.5Depth5	3.4	-	7	6Depth4.8	2.5	33	46
CDU10	5-30	10	-	15	24	4	7	16.5	10	16	11	18	-	M4X0.7	M3X0.5Depth5	3.4	-	9	6Depth5	1	36	52
CDU16	5-30	11	12.5	20	32	6	7	16.5	11.5	16	14	25	5	M5X0.8	M4X0.7Depth6	4.5	4	12	7.6Depth6.5	0	40	56
CDU20	5-50	12	14	26	40	8	9	19	12.5	19	16	30	6	M6X1.0	M5X0.8Depth8	5.5	8	16	9.5Depth8	1	46	65
CDU25	5-50	15.5	18	32	50	10	10	21.5	13	23	20	38	8	M8X1.25	M5X0.8Depth8	5.5	8	20	9.5Depth9	-1	50	73
CDU32	5-50	19.5	22	40	62	12	11	23	12	27	24	48	10	M10X1.25	M6X1.0Depth9	6.6	12	24	11Depth11.5	-4	52	79

MORE DIMENSIONS  
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### DIMENSIONS

DOUBLE ACTING-NON-ROTATING PISTON ROD TYPE Ø6,Ø10

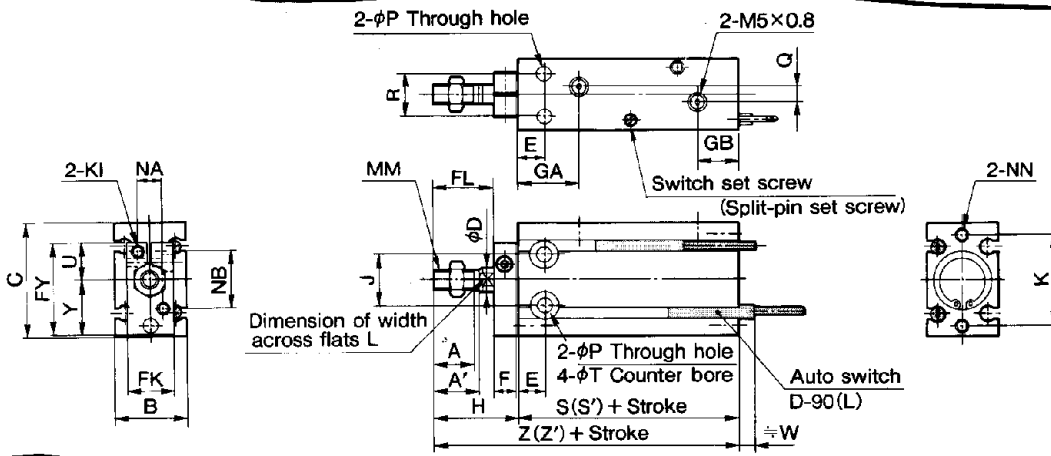


Model	Stroke range (mm)	A	A'
CDUK6	5-30	7	-
CDUK10	5-30	10	-
CDUK16	5-30	11	12.5
CDUK20	5-50	12	14
CDUK25	5-50	15.5	18
CDUK32	5-50	19.5	22

Model	B	C	ØD	E	F	FL	FK
CDUK6	13	22	3	7	8	9	11
CDUK10	15	24	4	7	8	12	12
CDUK16	20	32	6	7	8	17	13
CDUK20	26	40	8	9	8	20	16
CDUK25	32	50	10	10	10	22	20
CDUK32	40	62	12	11	12	29	24

### DIMENSIONS

DOUBLE ACTING-NON-ROTATING PISTON ROD TYPE Ø16~Ø25

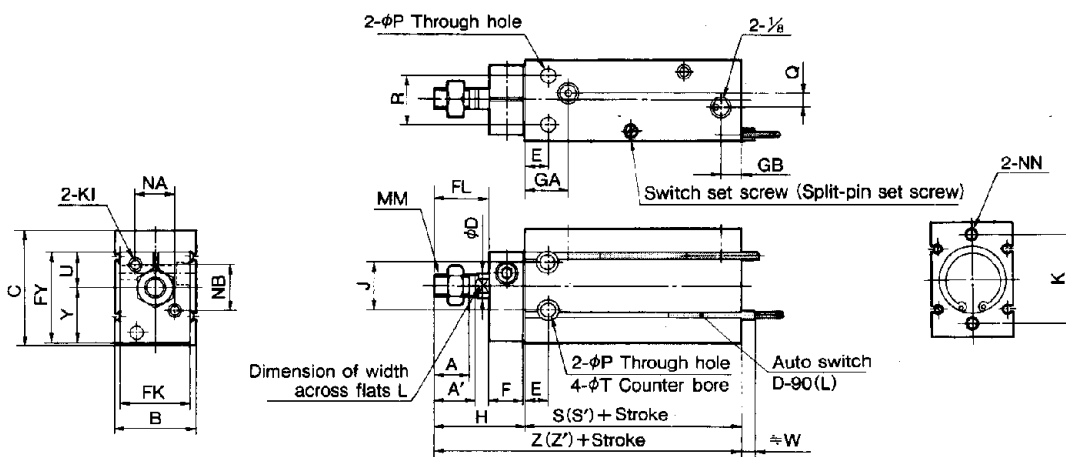


Model	FY	GA	GB	H	J
CDUK6	20.5	15	10	18	10
CDUK10	22	16.5	10	21	11
CDUK16	28	16.5	11.5	26	14
CDUK20	33	19	12.5	29	16
CDUK25	43.5	21.5	13	33	20
CDUK32	51.5	23	12	42	24

Model	K	KI	L	MM	NA	NB
CDUK6	17	M3X0.5	-	M3X0.5	6	14
CDUK10	18	M3X0.5	-	M4X0.7	7	15
CDUK16	25	M4X0.7	5	M5X0.8	6	18
CDUK20	30	M4X0.7	6	M6X1.0	8	20
CDUK25	38	M5X0.8	8	M8X1.25	10	28
CDUK32	48	M5X0.8	10	M10X1.25	12	32

### DIMENSIONS

DOUBLE ACTING-NON-ROTATING PISTON ROD TYPE Ø32



Model	NN	ØP	Q	R
CDUK6	M3X0.5Depth5	3.4	-	7
CDUK10	M3X0.5Depth5	3.4	-	9
CDUK16	M4X0.7Depth6	4.5	4	12
CDUK20	M5X0.8Depth8	5.5	8	16
CDUK25	M5X0.8Depth8	5.5	8	20
CDUK32	M6X1.0Depth9	6.6	12	24

Model	ØT	U	Y
CDUK6	6Depth4.8	10	10.5
CDUK10	6Depth5	10.5	11.5
CDUK16	7.6Depth6.5	12.5	15.5
CDUK20	9.5Depth8	13.5	19.5
CDUK25	9.5Depth9	19	24.5
CDUK32	11Depth11.5	21	30.5

Model	W	S'	Z'
CDUK6	2.5	33	51
CDUK10	1	36	57
CDUK16	0	40	66
CDUK20	1	46	75
CDUK25	-1	50	83
CDUK32	-4	52	94

MORE DIMENSIONS  
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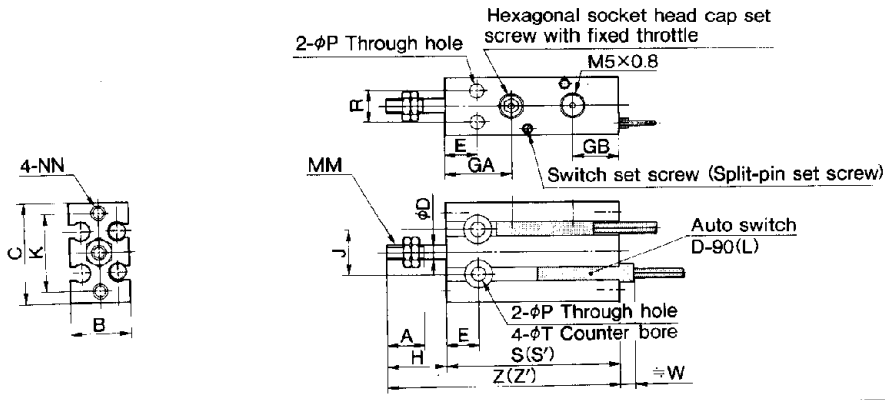
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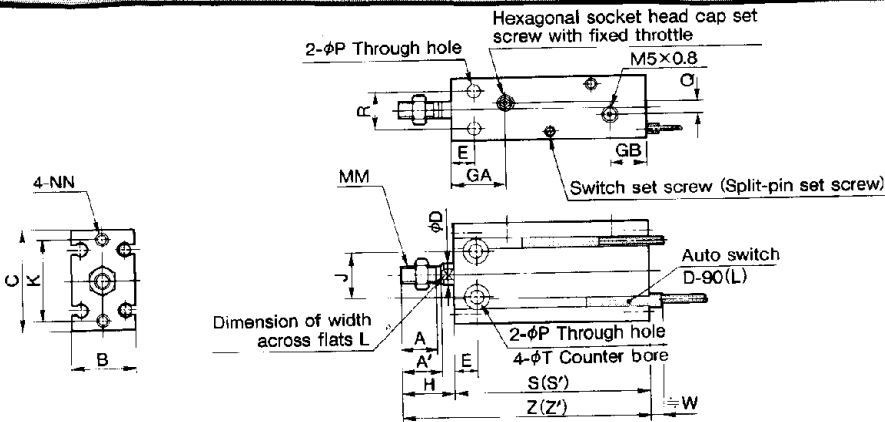
DIMENSIONS

SINGLE ACTING RETRACTED TYPE Ø6,Ø10



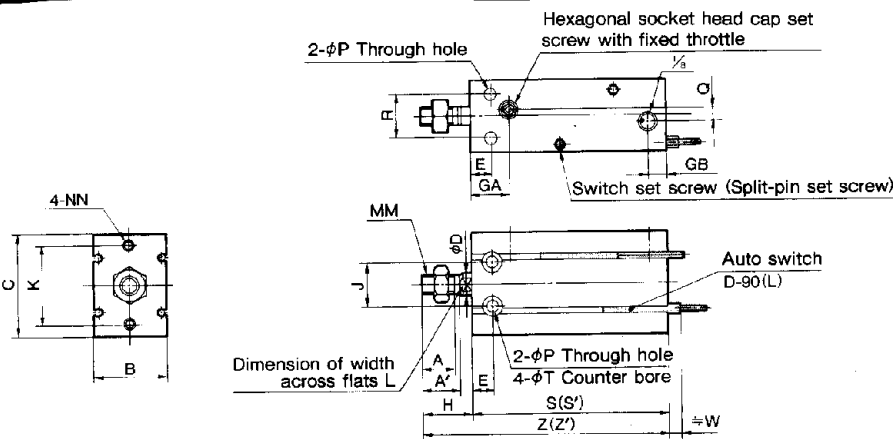
DIMENSIONS

SINGLE ACTING RETRACTED TYPE Ø16~Ø25



DIMENSIONS

SINGLE ACTING RETRACTED TYPE Ø32

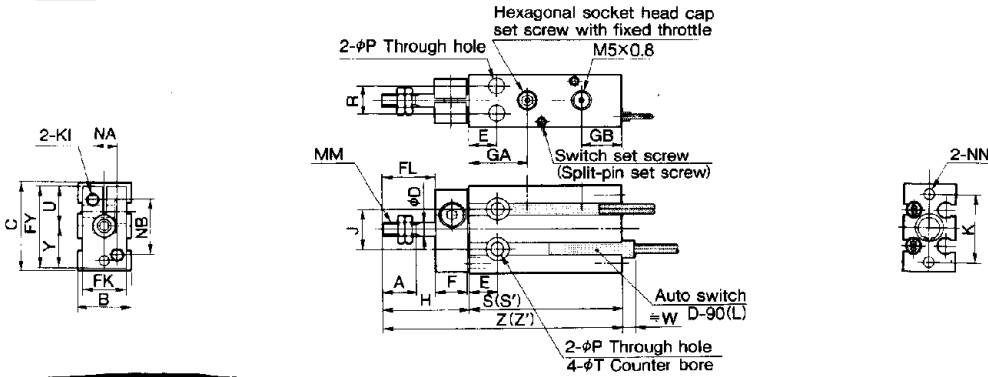


MORE DIMENSIONS  
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Model	Stroke range (mm)	A	A'	B	C	ØD	E	GA	GB	H	J	K	L	MM	NN	ØP	Q	R	ØT	W	S'			Z'		
																					5st	10st	15st	5st	10st	15st
CDU6-•S	5-15	7	-	13	22	3	7	15	10	13	10	17	-	M3X0.5	M3X0.5Depth5	3.4	-	7	6Depth4.8	2.5	38	43	48	51	56	61
CDU10-•S	5-15	10	-	15	24	4	7	16.5	10	16	11	18	-	M4X0.7	M3X0.5Depth5	3.4	-	9	6Depth5	1	41	46	56	57	62	72
CDU16-•S	5-15	11	12.5	20	32	6	7	16.5	11.5	16	14	25	5	M5X0.8	M4X0.7Depth6	4.5	4	12	7.6Depth6.5	0	45	50	60	61	66	76
CDU20-•S	5-15	12	14	26	40	8	9	19	12.5	19	16	30	6	M6X1.0	M5X0.8Depth8	5.5	8	16	9.5Depth8	1	51	56	66	70	75	85
CDU25-•S	5-15	15.5	18	32	50	10	10	21.5	13	23	20	38	8	M8X1.25	M5X0.8Depth8	5.5	8	20	9.5Depth9	-1	55	60	70	78	83	93
CDU32-•S	5-15	19.5	22	40	62	12	11	23	12	27	24	48	10	M10X1.25	M6X1.0Depth9	6.6	12	24	11Depth11.5	-4	57	62	72	84	89	99

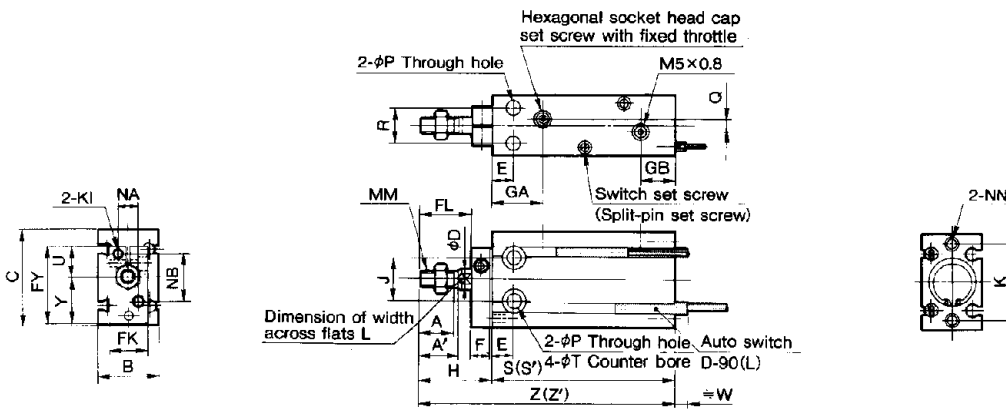
### DIMENSIONS

SINGLE ACTING RETRACTED - NON ROTATING PISTON ROD TYPE  $\phi 6, \phi 10$



### DIMENSIONS

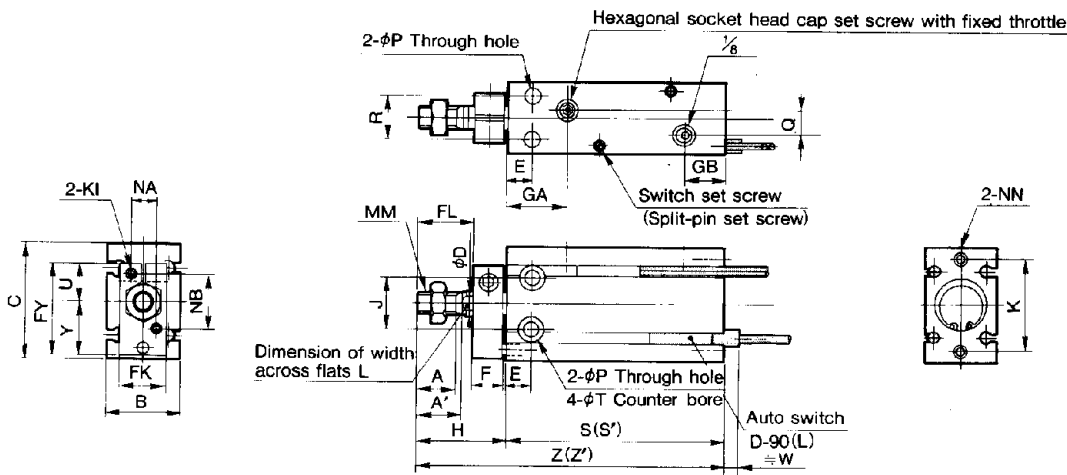
SINGLE ACTING RETRACTED - NON ROTATING PISTON ROD TYPE  $\phi 16 - \phi 25$



Model	Stroke range (mm)	A	A'	B	C
CDUK6-•S	5-15	7	-	13	22
CDUK10-•S	5-15	10	-	15	24
CDUK16-•S	5-15	11	12.5	20	32
CDUK20-•S	5-15	12	14	26	40
CDUK25-•S	5-15	15.5	18	32	50
CDUK32-•S	5-15	19.5	22	40	62

### DIMENSIONS

SINGLE ACTING RETRACTED - NON ROTATING PISTON ROD TYPE  $\phi 32$



Model	$\phi D$	E	F	FL	FX	FY	GA
CDUK6-•S	3	7	8	9	11	20.5	15
CDUK10-•S	4	7	8	12	12	22	16.5
CDUK16-•S	6	7	8	17	13	28	16.5
CDUK20-•S	8	9	8	20	16	33	19
CDUK25-•S	10	10	10	22	20	43.5	21.5
CDUK32-•S	12	11	12	29	24	51.5	23

Model	GB	H	J	K	KI	L
CDUK6-•S	10	18	10	17	M3X0.5	-
CDUK10-•S	10	21	11	18	M3X0.5	-
CDUK16-•S	11.5	26	14	25	M4X0.7	5
CDUK20-•S	12.5	29	16	30	M4X0.7	6
CDUK25-•S	13	33	20	38	M5X0.8	8
CDUK32-•S	12	42	24	48	M5X0.8	10

Model	MM	NA	NB	NN	$\phi P$	Q	R	$\phi T$	U	Y	W	S'			Z'		
												5st	10st	15st	5st	10st	15st
CDUK6-•S	M3X0.5	6	14	M3X0.5Depth5	3.4	-	7	6Depth4.8	10	10.5	2.5	38	43	48	56	61	66
CDUK10-•S	M4X0.7	7	15	M3X0.5Depth5	3.4	-	9	6Depth5	10.5	11.5	1	41	46	56	62	67	77
CDUK16-•S	M5X0.8	6	18	M4X0.7Depth6	4.5	4	12	7.6Depth6.5	12.5	15.5	0	45	50	60	71	76	86
CDUK20-•S	M6X1.0	8	20	M5X0.8Depth8	5.5	8	16	9.5Depth8	13.5	19.5	1	51	56	66	80	85	95
CDUK25-•S	M8X1.25	10	28	M5X0.8Depth8	5.5	8	20	9.5Depth9	19	24.5	-1	55	60	70	88	93	103
CDUK32-•S	M10X1.25	12	32	M6X1.0Depth9	6.6	12	24	11Depth11.5	21	30.5	-4	57	62	72	99	104	114

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**ACCESSORIES**  
**AUTO SWITCH SPECIFICATION**

MODEL		TYPE	LOAD VOLTAGE	LOAD CURRENT	POWER SOURCE	INTERNAL VOLTAGE DROP	INDICATOR LAMP
Part No. Grommet Type	Part No. Connector Type						
D-90L	-	REED	24VDC LESS	MAX 50mA		0	NONE
D-A93L		REED FLUSH MOUNT	24VDC 100VAC	5-40mA 5-20mA		MAX 2.6V	ON:RED L.E.D
D-F9NL	-	3 WIRE SOLID STATE NPN	28VDC OR LESS	MAX 50mA	5-28VDC	1.5V MAX	ON:RED L.E.D
D-F9PL	-	3 WIRE SOLID STATE PNP	28VDC OR LESS	MAX 50mA	5-28VDC	0.8V MAX	ON:RED L.E.D
D-F9BL	-	2 WIRE SOLID STATE	10-28VDC	5- 30mA	-	4V MAX	ON:RED L.E.D

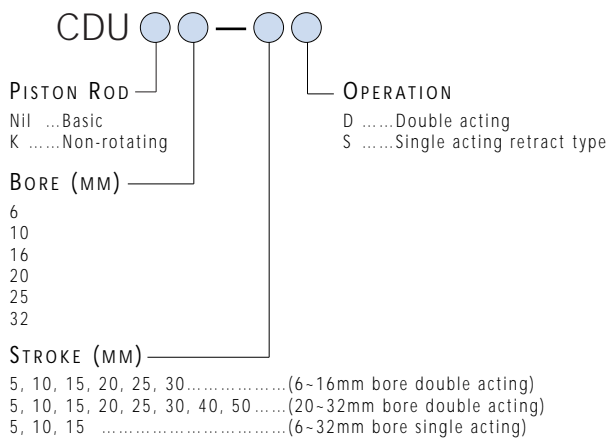
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- Seal Kits  
 CU6-PS .....06  
 CU10-PS .....010  
 CU16-PS .....016  
 CU20-PS .....020  
 CU25-PS .....025  
 CU32-PS .....032

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