

### CU Series Free Installation Cylinder



CDU 25 x 30



CDUK 16 x 30

Ordering Code

CU

**Series Code**  
CU:Normal Type  
CDU:Attach  
Magnet Type

□

**Kinds**  
Blank:Normal Type  
K:Non-Rotating  
Piston Rod Type

10

**Cylinder Bore**  
6mm  
10mm  
16mm  
20mm  
25mm  
32mm

30

**Stroke**  
0~50mm

□

**Action**  
D:Double Action  
S:Single Action Spring  
Drawing-in Type  
T:Single Action Spring  
Extrusion Type

Specification

Bore(mm)	6	10	16	20	25	32
Working Medium	Air					
Motion Pattern	Double action/Single Action Extrusion type/Single Action Drawing-in Type					
Ensured Pressure Resistance	1.05Mpa(10.5kgf/cm <sup>2</sup> )					
Max. Working-pressure	0.7Mpa(7.1kgf/cm <sup>2</sup> )					
Min. operating pressure	Single	0.2MPa	0.15MPa		0.13MPa	
	Double	0.12MPa	0.06MPa		0.05MPa	
Ambient and Medium Temperature	Without auto switch:-10~70℃ (No freezing) With auto switch:-10~60℃ (No freezing)					
Lubrication	Non-lube					
Piston speed	50-500 mm/s					
Cushion	Rubber bumper <sup>Note)</sup>					
Rod end thread	Male thread					
Thread tolerance	Class 2					
Cushion	Both ends buffer					
Margin of Stroke Error(mm)	+1.0 0 mm					
Precision of Piston rod with Non-rotating	±0.8°				±0.5°	
Port Size	M5×0.8				G1/8"	

Note) Φ6 single acting with auto switch type: One side rubber bumper.

Standard Stroke

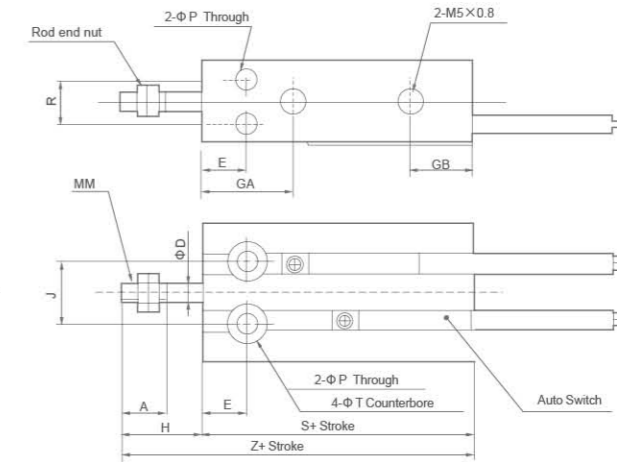
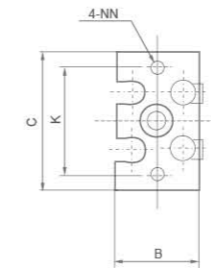
Action Type	Bore size(mm)	Standard stroke(mm)
Double Acting	6,10,16	5,10,15,20,25,30
	20,25,32	5,10,15,20,25,30,40,50
Single Acting	6,10,16,20,25,32	5,10,15

### CU Series Free Installation Cylinder

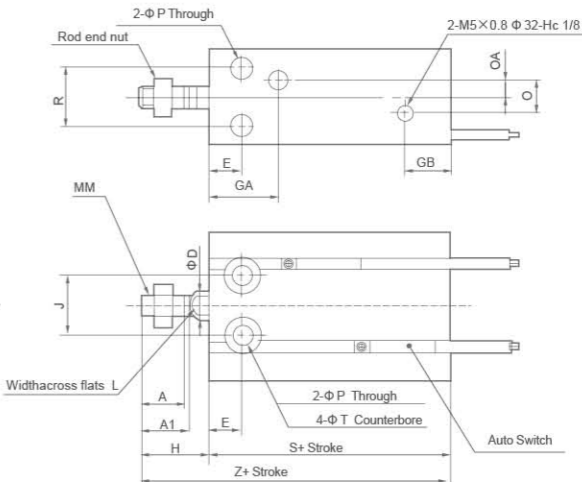
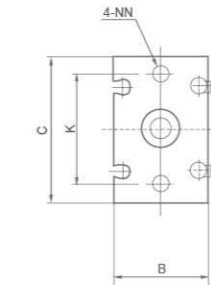
Overall Dimensions

Double Acting, Single Rod

φ 6~φ 10



φ 16~φ 32



Dimension Sheet

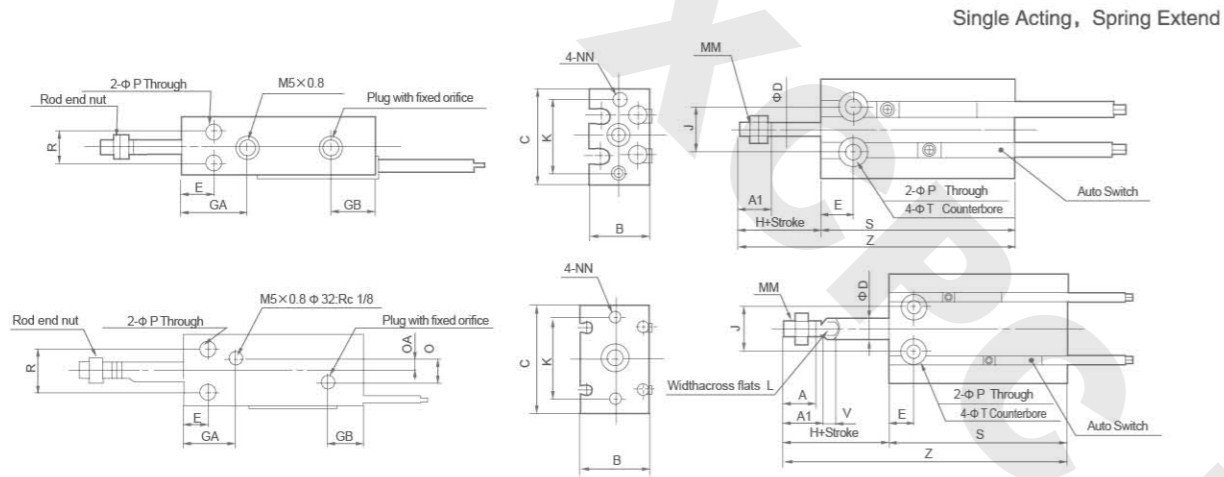
Bore size(mm)	A	A1	B	C	D	E	GA	GB	H	K	J	L	MM
6	7	-	13	22	3	7	15	10	13	17	10	-	M3×0.5
10	10	-	15	24	4	7	16.5	10	16	18	11	-	M4×0.7
16	11	12.5	20	32	6	7	16.5 <sup>Note)</sup>	11.5	16	25	14	5	M5×0.8
20	12	14	26	40	8	9	19	12.5	19	30	16	6	M6×1.0
25	15.5	18	32	50	10	10	21.5	13	23	38	20	8	M8×1.25
32	19.5	22	40	62	12	11	23	12.5	27	48	24	10	M10×1.25

Bore size (mm)	NN	P	Q	QA	R	T	Without Auto Switch		With Auto Switch	
							S	Z	S	Z
6	M3×0.5 depth 5	3.2	-	-	7	6 depth 4.8	33	46	33	46
10	M3×0.5 depth 5	3.2	-	-	9	6 depth 5	36	52	36	52
16	M4×0.7 depth 6	4.5	4	2	12	7.6 depth 6.5	30	46	40	56
20	M5×0.8 depth 8	5.5	9	4.5	16	9.3 depth 8	36	55	46	65
25	M5×0.8 depth 8	5.5	9	4.5	20	9.3 depth 9	40	63	50	73
32	M6×1.0 depth 9	6.6	13.5	4.5	24	11 depth 11.5	42	69	52	79

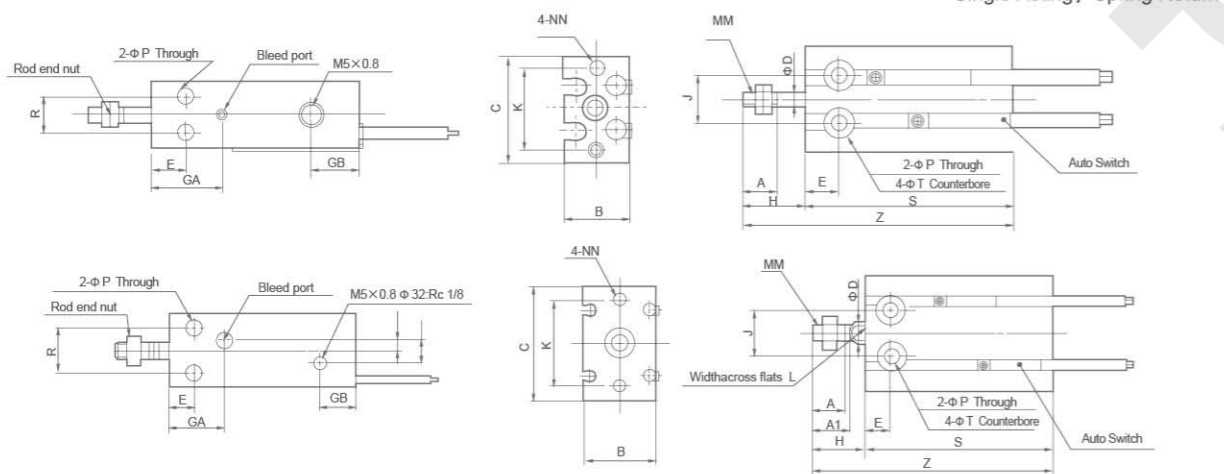
Note)5 Stroke(CU16-5D):14.5mm

### CU Series Free Installation Cylinder

Overall Dimensions



Overall Dimensions



Dimension Sheet

Bore size(mm)	A	A1	B	C	D	E	GA	GB	H	K	J	L	MM	NN	P
6	7	-	13	22	3	7	15	10	13	17	10	-	M3×0.5	M3×0.5 (depth) 5	3.2
10	10	-	15	24	4	7	16.5	10	16	18	11	-	M4×0.7	M3×0.5 (depth) 5	3.2
16	11	12.5	20	32	6	7	16.5	11.5	16	25	14	5	M5×0.8	M4×0.7 (depth) 6	4.5
20	12	14	26	40	8	9	19	12.5	19	30	16	6	M6×1.0	M5×0.8 (depth) 8	5.5
25	15.5	18	32	50	10	10	21.5	13	23	38	20	8	M8×1.25	M5×0.8 (depth) 8	5.5
32	19.5	22	40	62	12	11	23	12.5	27	48	24	10	M10×1.25	M6×1.0 (depth) 9	6.6

Bore size (mm)	Q	QA	R	T	V (Note)	Without Auto Switch						With Auto Switch					
						S			Z			S			Z		
						5st	10st	15st	5st	10st	15st	5st	10st	15st	5st	10st	15st
6	-	-	7	6 (depth) 4.8	-	38	43	48	56	66	76	38	43	48	56	66	76
10	-	-	9	6 (depth) 5	-	41	46	56	62	72	87	41	46	56	62	72	87
16	4	2	12	7.6 (depth) 6.5	3.5	45	50	60	66	76	91	45	50	60	66	76	91
20	9	4.5	16	9.3 (depth) 8	5	41	46	56	65	75	90	51	56	66	75	85	100
25	9	4.5	20	9.3 (depth) 9	5	45	50	60	73	83	98	55	60	70	83	93	108
32	13.5	4.5	24	11 (depth) 11.5	5	47	52	62	79	89	104	57	62	72	89	99	114

Note) "V" Only for Single Acting, Spring Extend

### STM Series Slide Bearing Cylinder



STMB 16 x 50

STMS 16 x 125

Ordering Code

**STM** Series Code Sliding Type  
**B** Mounting type B: Body fixed Type S: Sliding Block Fixed Type  
**16** × **50** Cylinder Bore Stroke  
 10mm 16mm 20mm 25mm  
 0~250mm

Specification

	10	16	20	25
Bore(mm)	10	16	20	25
Motion Pattern	Double action			
Working Medium	Air			
Operating Temperature Range	-5~+70 C			
Operating Pressure Range	1.0~9.0kgf/cm <sup>2</sup>			
Ensured Pressure Resistance	13.5kgf/cm <sup>2</sup>			
Operating Speed Range	50~200mm/s			
Buffer Type	Shock Absorter			
Lubrication	NO			
Non-rotating Precision	±0.1°		±0.05°	
Port size	M5×0.8			G1/8"

Standard Stroke

Bore size(mm)	Standard stroke(mm)										
10	25	50	75	100							
16	25	50	75	100	125	150	175	200			
20	25	50	75	100	125	150	175	200	250		
25	25	50	75	100	125	150	175	200	250		

Thoretical thrust

Bore size(mm)	Rod size (mm)	Pressure area (cm <sup>2</sup> )	Operating pressure(Kgf/cm <sup>2</sup> )								
			1	2	3	4	5	6	7	8	9
10	6	0.50	0.48	0.95	1.43	1.9	2.38	2.85	3.43	3.8	4.28
16	8	1.51	1.43	2.87	4.30	5.74	7.17	8.61	10.04	11.48	12.91
20	10	2.36	2.24	4.48	6.73	8.97	11.21	13.45	15.69	17.94	20.18
25	12	3.78	3.51	7.18	10.77	14.36	17.96	21.55	25.14	28.73	32.32