

Free Mount Cylinder Double Acting, Single Rod Series CU

ø6, ø10, ø16, ø20, ø25, ø32

How to Order

CU 6 - 30 D -

With auto switch **CDU 6 - 30 D - M9BW -**

Built-in magnet

Bore size

6	6 mm
10	10 mm
16	16 mm
20	20 mm
25	25 mm
32	32 mm

Port thread type

Symbol	Type	Bore size
Nil	M5 x 0.8	ø6, ø10, ø16, ø20, ø25
	Rc 1/8	ø32
TN	NPT 1/8	ø32
TF	G 1/8	ø32

Action

D	Double acting
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Standard stroke (mm)

ø6, ø10, ø16	5, 10, 15, 20, 25, 30
ø20, ø25, ø32	5, 10, 15, 20, 25, 30, 40, 50

Auto switch

Nil	Without auto switch
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* Refer to the table below for applicable auto switches.

Number of auto switches

Nil	2 pcs.
S	1 pc.

Made to order
* Refer to page 484 for the Made to Order specifications.

Built-in Magnet Cylinder Model
If a built-in magnet cylinder without an auto switch is required, there is no need to enter the symbol for the auto switch.
(Example): CDU20-25D

Applicable Auto Switches/Refer to pages 1263 to 1371 for further information on auto switches.

Type	Special function	Electrical entry	Indicator light	Wiring (Output)	Load voltage		Auto switch model		Lead wire length (m)				Pre-wired connector	Applicable load	
					DC	AC	Perpendicular	In-line	0.5 (Nil)	1 (M)	3 (L)	5 (Z)		IC circuit	Relay, PLC
Solid state switch	Diagnostic indication (2-color indication)	Grommet	Yes	3-wire (NPN)	24 V	5 V, 12 V	M9NV	M9N	●	●	●	○	○	IC circuit	Relay, PLC
				3-wire (PNP)			M9PV	M9P	●	●	●	○	○		
				2-wire			M9BV	M9B	●	●	●	○	○		
				3-wire (NPN)			M9NVV	M9NV	●	●	●	○	○		
				3-wire (PNP)	24 V	5 V, 12 V	M9PWV	M9PW	●	●	●	○	○	IC circuit	Relay, PLC
				2-wire			M9BWV	M9BW	●	●	●	○	○		
Reed switch		Grommet	Yes	3-wire (NPN equivalent)	—	5 V	—	A96V	A96	●	—	●	—	IC circuit	—
				2-wire	24 V	12 V	100 V	A93V	A93	●	—	●	—	—	Relay, PLC
			No	2-wire			100 V or less	A90V	A90	●	—	●	—	IC circuit	

* Lead wire length symbols: 0.5 m Nil (Example) M9NW
1 m M (Example) M9NWM
3 m L (Example) M9NWL
5 m Z (Example) M9NWZ

* Solid state auto switches marked with "○" are produced upon receipt of order.

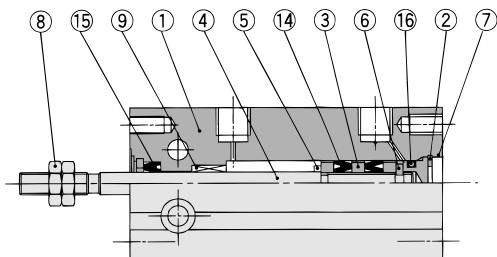
* Since there are applicable auto switches other than the above, refer to page 538 for details.
* For detail about auto switches with pre-wired connector, refer to pages 1328 to 1329.
* Auto switches are shipped together but not assembled.

CUJ
CU
CQS
CQ2
RQ
CQM
MU

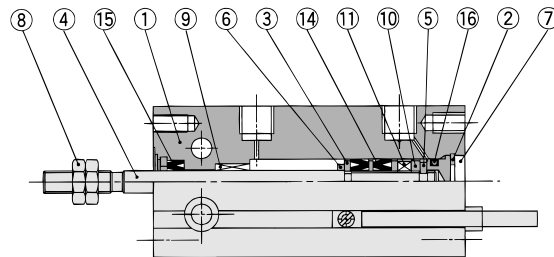
D-□
-X□
Individual
-X□
Technical data

Construction

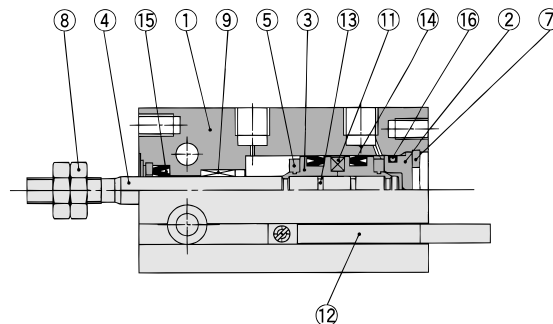
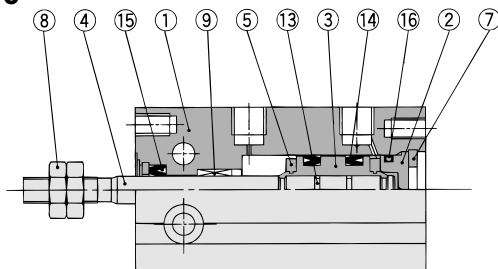
ø6



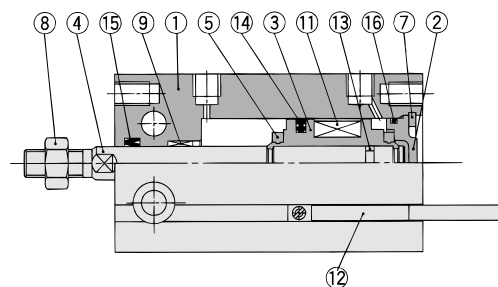
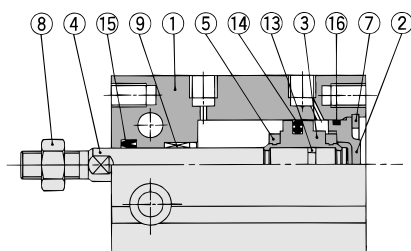
With auto switch



ø10



ø16 to ø32



Component Parts

No.	Description	Material	Note
1	Cylinder tube	Aluminum alloy	Hard anodized
2	Head cover	Brass	ø6 to ø10, Electroless nickel plated
		Aluminum alloy	ø16 to ø32, Chromated
3	Piston	Brass	ø6 to ø10
		Aluminum alloy	ø16 to ø32, Chromated
4	Piston rod	Stainless steel	
5	Bumper A	Urethane	
6	Bumper B	Urethane	
7	Retaining ring	Carbon tool steel	Phosphate coated

Component Parts

No.	Description	Material	Note
8	Rod end nut	Carbon steel	Nickel plated
9	Bushing	Oil-impregnated sintered alloy	
10	Magnet holder	Brass	ø6
11	Magnet	—	
12	Auto switch	—	
13	Piston gasket	NBR	
14*	Piston seal		
15*	Rod seal		
16*	Gasket		

Replacement Parts: Seal Kit

Bore size (mm)	Kit no.	Contents
10	CU10D-PS	Set of nos. above 14, 15, 16
16	CU16D-PS	
20	CU20D-PS	
25	CU25D-PS	
32	CU32D-PS	



* Seal kit includes 14, 15, 16. Order the seal kit, based on each bore size.

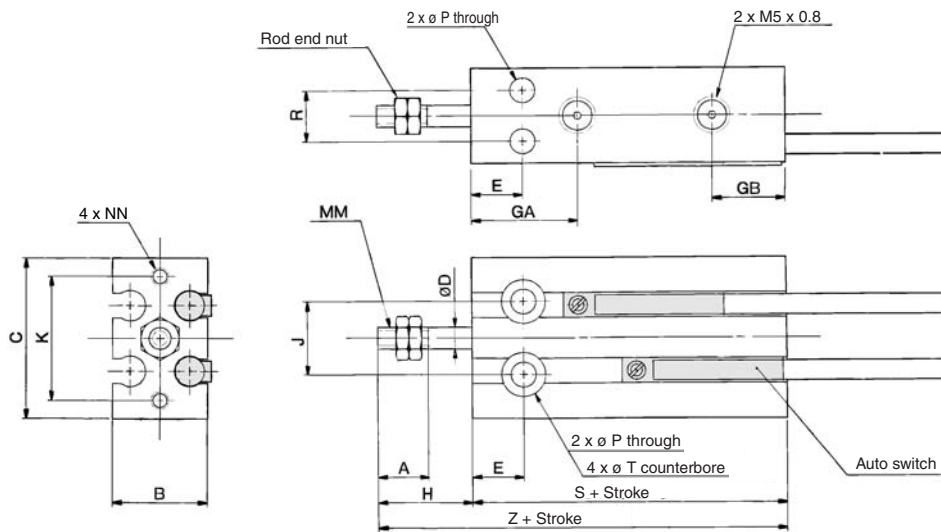
* Seal kit includes a grease pack (10 g).

Order with the following part number when only the grease pack is needed.

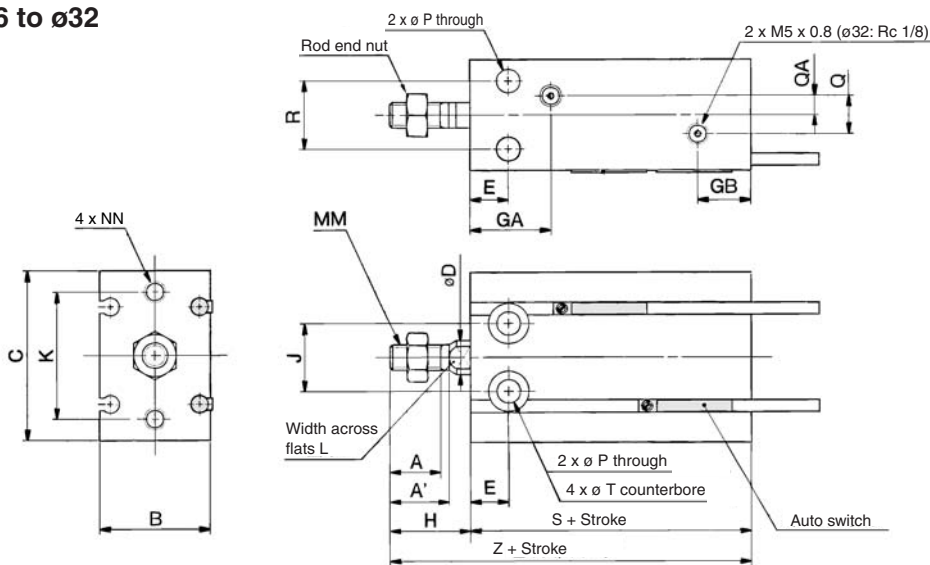
Grease pack part number: GR-S-010 (10 g)

Dimensions: Double Acting, Single Rod

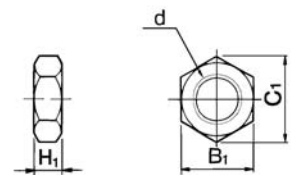
ø6, ø10



ø16 to ø32



Rod End Nut/Accessory



Material: Carbon steel

Part no.	Applicable bore size (mm)	d	H ₁	B ₁	C ₁
NTP-006	6	M3 x 0.5	1.8	5.5	6.4
NTP-010	10	M4 x 0.7	2.4	7	8.1
NTJ-015A	16	M5 x 0.8	4	8	9.2
NT-015A	20	M6 x 1.0	5	10	11.5
NT-02	25	M8 x 1.25	5	13	15.0
NT-03	32	M10 x 1.25	6	17	19.6

Bore size (mm)	A	A'	B	C	D	E	GA	GB	H	J	K	L	MM	NN	P	Q	QA
6	7	—	13	22	3	7	15	10	13	10	17	—	M3 x 0.5	M3 x 0.5 depth 5	3.2	—	—
10	10	—	15	24	4	7	16.5	10	16	11	18	—	M4 x 0.7	M3 x 0.5 depth 5	3.2	—	—
16	11	12.5	20	32	6	7	16.5 ^(Note)	11.5	16	14	25	5	M5 x 0.8	M4 x 0.7 depth 6	4.5	4	2
20	12	14	26	40	8	9	19	12.5	19	16	30	6	M6 x 1.0	M5 x 0.8 depth 8	5.5	9	4.5
25	15.5	18	32	50	10	10	21.5	13	23	20	38	8	M8 x 1.25	M5 x 0.8 depth 8	5.5	9	4.5
32	19.5	22	40	62	12	11	23	12.5	27	24	48	10	M10 x 1.25	M6 x 1.0 depth 9	6.6	13.5	4.5

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

Bore size (mm)	R	T	Without auto switch	With auto switch
6	7	6 depth 4.8	S	Z
10	9	6 depth 5	33	46
16	12	7.6 depth 6.5	36	52
20	16	9.3 depth 8	30	46
25	20	9.3 depth 9	40	56
32	24	11 depth 11.5	36	65
			40	73
			42	79

CUJ

CU

CQS

CQ2

RQ

CQM

MU

D-□

-X□

Individual

-X□

Technical data