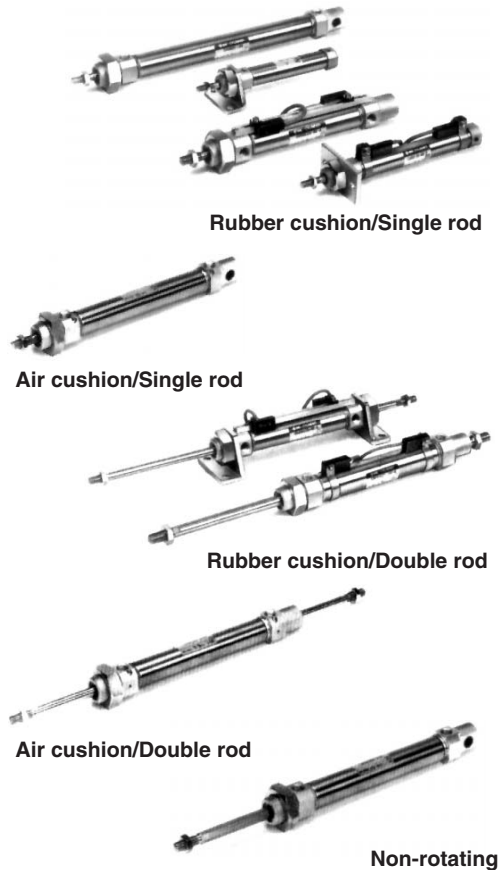


ISO Cylinder: Standard/Non-rotating Type Double Acting, Single/Double Rod **Series C85**



Specifications

Bore size (mm)		8	10	12	16	20	25
Piston rod dia. (mm)		4	4	6	6	8	10
Piston rod thread		M4 x 0.7	M4 x 0.7	M6 x 1	M6 x 1	M8 x 1.25	M10 x 1.25
Port size		M5 x 0.8	M5 x 0.8	M5 x 0.8	M5 x 0.8	G 1/8	G 1/8
Action		Double acting, Single/Double rod					
Fluid		Air					
Proof pressure		1.5 MPa					
Max. operating pressure		1.0 MPa					
Min. operating pressure	Spring return	0.1 MPa	0.08 MPa	0.05 MPa	0.05 MPa		
	Spring extended				0.08 MPa		
Ambient and fluid temperature		−20 to 80°C (Built-in magnet: −10 to 60°C)					
Cushion		Rubber cushion, Air cushion (Except ø8) (Non-rotating: Rubber bumper only)					
Lubrication		Not required. Use turbine oil Class 1 ISO VG32, if lubricated.					
Rod boot	Nylon tarpaulin	—				Max. ambient temperature 60°C	
	Heat resistant tarpaulin	—				Max. ambient temperature 110°C*	
Piston speed		50 to 1500 mm/s					
Allowable kinetic energy	Rubber cushion	0.02 J	0.03 J	0.04 J	0.09 J	0.27J	0.4 J
	Air cushion	—	0.17 J	0.19 J	0.4 J	0.66 J	0.97 J
Non-rotating accuracy		±1° 30'	±1° 30'	± 1°	±1°	±0° 42'	±0° 42'
Stroke tolerance (mm)		0/+1				0/+1.4	

* Maximum ambient temperature of rod boots only.

JIS Symbol

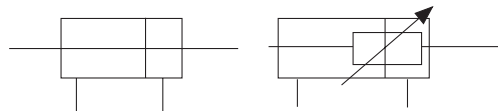
Double acting, Single rod



Rubber cushion

Air cushion

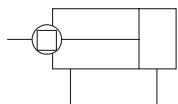
Double acting, Double rod



Rubber cushion

Air cushion

Non-rotating rod: Double acting, Single rod



Weight (Standard, Non-rotating rod)

(g)

Bore size (mm)		8	10	12	16	20	25
Double action	Basic weight	45	49	96	109	183(203)	258(286)
	Add'l weight for each 10 mm of stroke	3	3.2	6.2	7.2	11.8	18.4
Mounting bracket		C85L□A	20	40	95		
		C85L□B	55	105	210		
		C85F□	12	25	90		
		C85T□	20	50	75		
		C85C□	20	40	85		
Accessory	Single knuckle joint	KJID	17	25	45	70	
	Double knuckle joint	GKM□-□	10	20	50	100	
	Floating joint	JA□-□-□	10	20	50	70	

Calculation: (Example) C85N10-50, C85F10

Basic weight ——— 49 (ø10)g

Additional weight ——— 3.2/10 mm of stroke

Cylinder stroke ——— 50 mm

Mounting bracket ——— 12g

49 + 3.2 x 50/10 = 65g 65 + 12 = 77g

() : In the case of air cushion

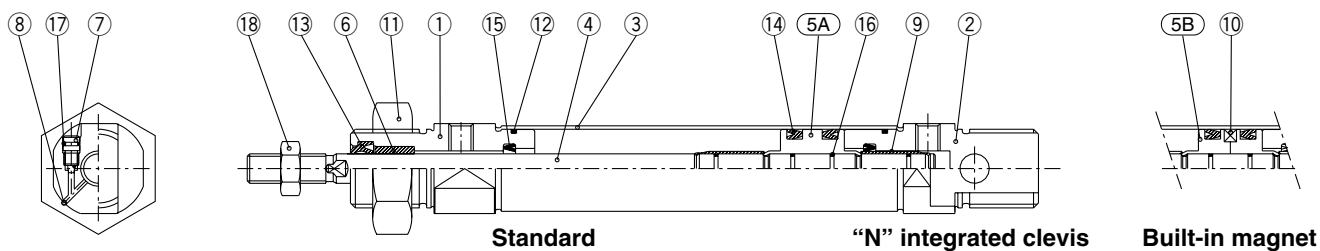
Series C85

Construction

[First angle projection]

Double acting, Single rod

C□85□10 to 16 Air cushion (Disassembly is not possible.)

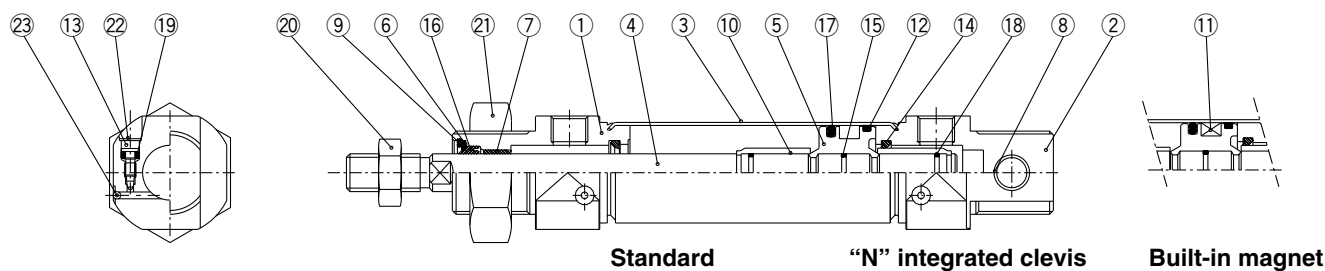


Component Parts

No.	Description	Material	Qty.	Note
①	Rod cover	Aluminum alloy	1	White anodized
②	Head cover N	Aluminum alloy	1	White anodized
③	Cylinder tube	Stainless steel	1	
④	Piston rod	Stainless steel	1	
⑤A	Piston A	Brass	1	
⑤B	Piston B	Brass	2	(Switch type piston)
⑥	Bush	Sintered bronze	1	
⑦	Cushion needle	Stainless steel	2	
⑧	Steel ball	Bearing steel	2	

No.	Description	Material	Qty.	Note
⑨	Cushion ring	Brass	2	
⑩	Magnet	Magnet	1	(Switch type only)
⑪	Mounting nut	Carbon steel	1	Nickel plating
⑫	Tube gasket	NBR	2	
⑬	Rod seal	NBR	1	
⑭	Piston seal	NBR	2	
⑮	Check seal	NBR	2	
⑯	Piston gasket and cushion ring gasket	NBR	3	(4 for switch type)
⑰	Needle seal	NBR	2	
⑱	Rod end nut	Carbon steel	1	Nickel plating

C□85□20/25 Air cushion



Component Parts

No.	Description	Material	Qty.	Note
①	Rod cover	Aluminum alloy	1	White anodized
②	Head cover N	Aluminum alloy	1	White anodized
③	Cylinder tube	Stainless steel	1	
④	Piston rod	Carbon steel	1	Hard chrome plated
⑤	Piston	Aluminum alloy	1	Chromate
⑥	Plain washer	Stainless steel	1	
⑦	Bush	Sintered bronze	1	
⑧	Bush	Sintered bronze	1	
⑨	Retaining ring	Carbon steel	1	Nickel plating
⑩	Cushion ring	Brass	2	
⑪	Magnet	Magnet	1	(Switch type only)
⑫	Wear ring	Resin	1	

No.	Description	Material	Qty.	Note
⑬	Cushion needle	Alloy steel	2	Electroless nickel plating
⑭	Cushion seal	Urethane	2	
⑮	Piston gasket	NBR	1	
⑯	Rod seal	NBR	1	
⑰	Piston seal	NBR	1	
⑱	Cushion ring gasket	NBR	2	
⑲	Cushion needle seal	NBR	2	
⑳	Rod end nut	Carbon steel	1	Nickel plating
㉑	Mounting nut	Carbon steel	1	Nickel plating
㉒	Self locking ring	Stainless steel	2	
㉓	Steel ball	Stainless steel	2	