CO-50 -HO 8-HO 2<sub>Speed</sub>











500,000 cycles

**COU-50** 













500,000 cycles



# RYOBI CONCEALED DC CO-50 and COU-50

### **HIDDEN POWER**

When the aesthetic appearance of the door is compromised by the need for a door closer, then the obvious choice is a concealed unit. Ryobi recognize that, due to the different sizes and weights of doors, the requirement is for a series of concealed closers designed to perform efficiently in each application. The solution is the CO-50 and COU-50 series: a complete range of concealed closers, covering size 2-6 doors, designed to be compact, durable and reliable, whatever the door specification.



To meet the necessity for a concealed closer to be ultra slim and yet withstand the high pressures generated in such a compact housing, the CO-50 and COU-50 series uses Ryobi's advanced R14 Aluminium Alloy Die-castings throughout the range. This high silicon alloy, developed by Ryobi for its automotive cylinder blocks, is unique in its exceptional strength and low friction properties.

Full hydraulic controls, the precision of a rack and pinion mechanism, together with the availability of speed controls and backcheck functions, the CO-50 and COU-50 series, provides the highest level of features built into a quality product, that will deliver a life long performance.

# DOOR CLOSERS

### **WORLD CLASS TECHNOLOGY**

Ryobi are the world's largest manufacturer of Aluminum die-castings and world leaders in door closer design. The CO-50 and COU-50 range of concealed door closers have been developed by utilizing the advanced design technology and highest standards of quality that only Ryobi can demonstrate. Combining the advanced R14 alloy and state of the art production methods, the CO-50 and COU-50 series is guaranteed to provide an unrivaled quality and a lifetime of trouble free service.



## CONCEALED BYOBI CO-50 (DOOR CLOSERS RYOBI CO-50 (

#### ■CO-50/COU-50 INSTALLATION OPTIONS

In order to ensure total adaptability to the widest range of applications, the concealed series is available with a choice of either standard or top jamb installations. To further enhance the ranges flexibility, options such as hold open and nonhanding for the CO-50 are also available.



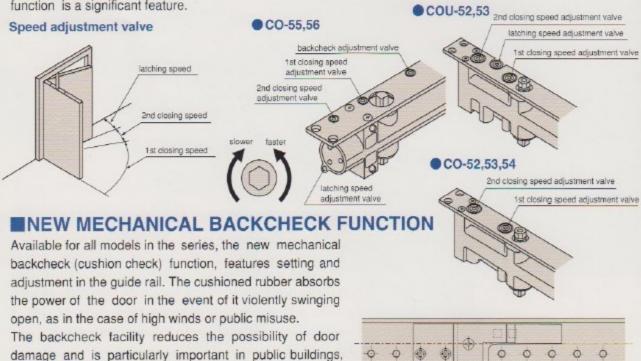


#### **■**EXCEPTIONAL PERFORMANCE-EXCEPTIONAL VALUE

Ryobi's technology in high quality die-casting and advanced production methods have been combined to produce a highly competitive range of performance closers. In-house tested to 500,000 cycles and incorporating precision rack and pinion mechanisms, the concealed closer range offers outstanding quality and performance at a very realistic price.

#### **FULLY HYDRAULIC CONTROLS**

Maximum control over the doors closing speed is provided by the easy to operate hydraulic adjustment, whilst the versatile hydraulic mechanism also allows for 1st and 2nd closing (as illustrated), ensuring a smooth and independent control over the doors movement. The added benefit of a latching speed control is available with the COU-50 series and CO-55,56, whilst for the heavy duty CO-55 and 56 a new, adjustable, hydraulic backcheck function is a significant feature.



Note: CO-55,56 have hydraulic backcheck function.

Mechanical backcheck function is not necessary for CO-55,56.

schools and hospitals where the protection of people and

property is paramount.

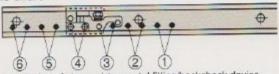
# **COU-50**

### ■ADJUSTABLE DOOR STOP/HOLD OPEN/BACKCHECK ANGLE & HOLD OPEN FORCE

By the positioning of stopper, stop metal fitting (hold open device), and mechanical backcheck device, the door stop angle, hold open angle and backcheck angle are adjustable as required. Hold open force is also adjustable by the hold open force adjustment nut as shown in the chart.

#### Adjustment of door stop/hold open/ backcheck angle

Door stop/Hold open/backcheck angle are adjustable by the posistioning of stopper/stopmetal fitting (hold open device), and mechanical backcheck device at ①~⑥ as shown in illustration.

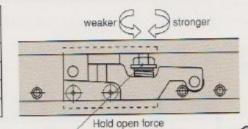


Positioning of stopper/stop metal fitting/backcheck device \*This illustration shows the positioning of stop metal fitting (hold open device) at ④. Please see each drawings for the details.

### Adjustment of hold open force

Hold open force is adjustable by the hold open force adjustment nut.

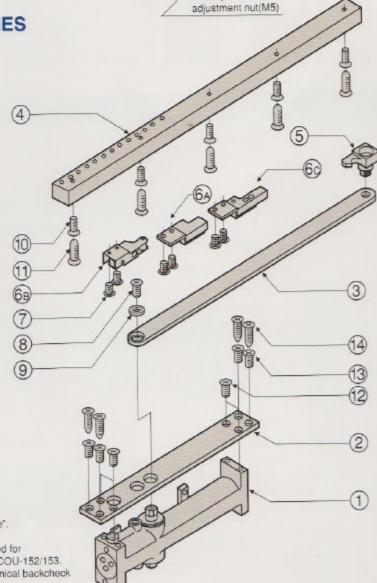
Model	Adjustable range(kg-m)				
CO/COU-152	0~3.6				
CO/COU-153	0~3.1				
CO-154	0~2.7				
CO-155	0~3.7				
CO-156	0~1.5				



### PARTS AND ACCESSORIES

No.	Name of	Parts a	nd A	Accessories				
1	Body							
2	Mounting plate							
3	Arm							
4	Guide rail							
5	Slider							
6	6-A	6-B		6-C				
	Stopper (for "Without hold open")	Stop met fitting (for hold oper	"With	Backcheck device (for "Mechanical backcheck")				
7	⊕Flat head machine screw (With M4 head)(M5 L=12-2pcs)							
	CO52~54,C	OU52,53	CO55,56					
8	Flat head r screw(With (M5. L=12)	M4 head)	Flat head machine screw (#10-24UNC L=3/8")					
9	Washer							
10	⊕Flat hea (With M			ew =12 - 5pcs)				
11	⊕ Flat head tapping screw (φ4. L=25 - 5pcs)							
	CO52~54,C	OU52,53	CO55,56					
12	(A) Flat head machine		⊕ Flat head machine screw (M6, L=12-4pcs)					
13	Flat head screw (M5, L=12		sc	at head machine rew 16, L=16-4pcs)				
14	Flat head screw (\$5, L=30		-					

- Stopper 6-A is equipped for "without hold open type".
  CO-52/53/54/55/56 & COU-52/53/52H/53H.
- Stop metal fitting 6-B (hold open device) is equipped for "with hold open type". CO-152/153/154/155/156 & COU-152/153.
- Backcheck device 6-C is equipped for "with mechanical backcheck type". CO-52BC/53BC/54BC & COU-52BC/53BC.



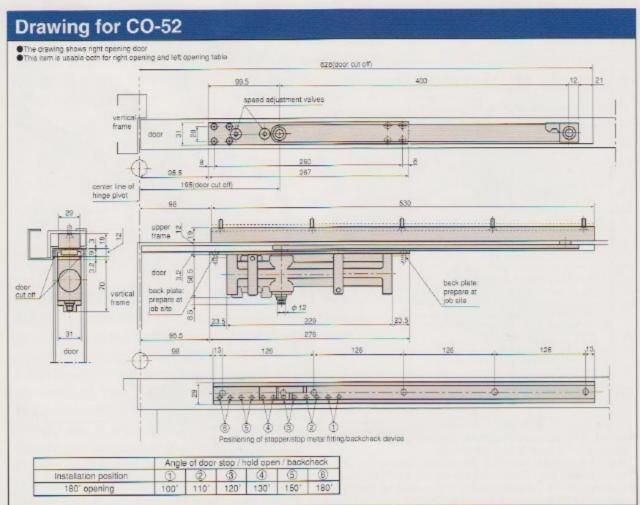
# CONCEALED BYOBI CO-50

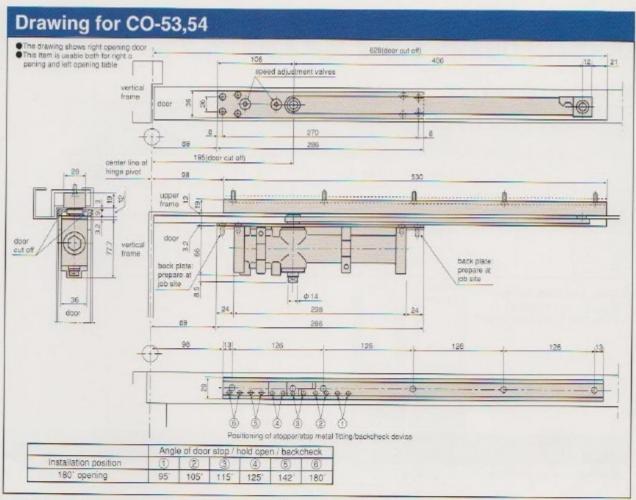
#### MODEL CHART

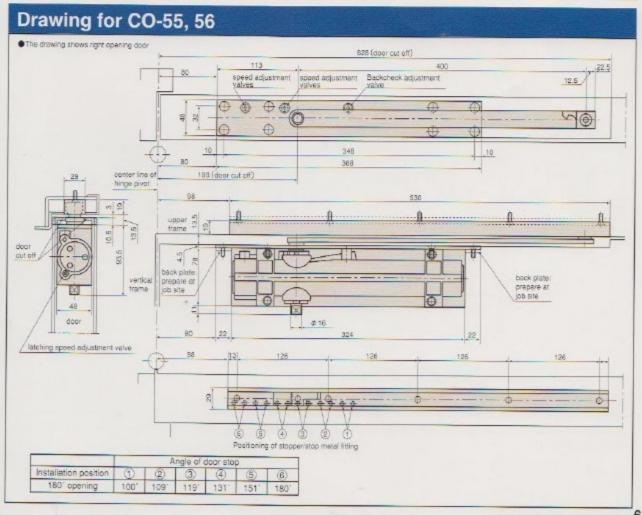
					Door thickness									
Model Number		Max door	Max	Steel door		Wooden door		Body						
Without hold open	With hold open	With Backcheck	dimensions	dimensions	sions door weight	Standard installation	Top jamb installation	Standard installation	Top jamb installation	thickness				
CO-52	CO-152	CO-52BC	900×2100	45kg	≥40mm	≥38mm	≥45mm	≥43mm	31mm					
CO-53	CO-153	CO-53BC	950×2100	65kg	≥45mm	>45mm > 20mm	≥38mm	≥38mm ≥50mm	≥43mm	36mm				
CO-54	CO-154	CO-54BC	1050×2400	85kg		= 30IIIII	in John M	£4311111	36mm					
CO-55 R	CO-155 R	-	1200×2400	10000	1001-				48mm					
CO-55 L	CO-155 L			1200×2400 120	120kg	≥60mm	≥60mm	≥65mm	≥60mm	48mm				
CO-56 R	CO-156 R		4000 V 0700	VOTAS ADDIO		≥ 00mm	=00(1)(1)	E00011111	48mm					
CO-56 L	CO-156 L	-	1800×2700	1800 X 2700	1800 X 2700	1600 \ 2700	1600 X 2700	- 1800×2700	180kg					48mm

Note: Hydlaulic backcheck function is standard function for CO-55 & 56.

#### Door cut dimension





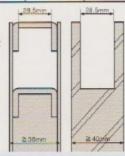


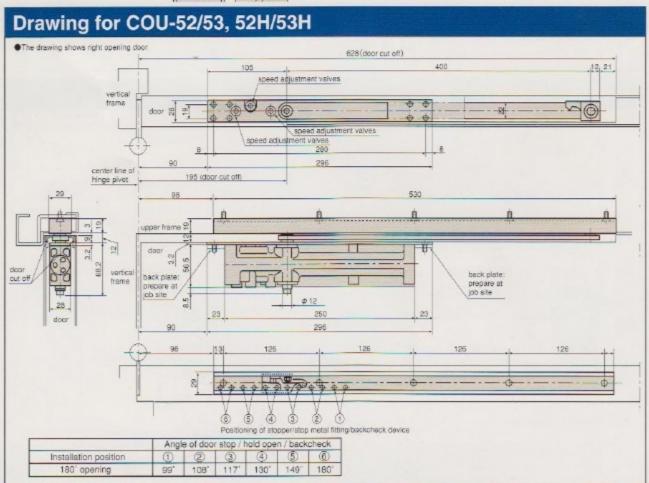
# CONCEALED RYOBI COU-50

#### ■ MODEL CHART

Model Number		Max door	Max						
				Steel door		Wooden door		Body	
Without hold open	With hold open	With Backcheck	dimensions	weight	Standard installation	Top jamb installation	Standard installation	Top jamb installation	thickness
COU-52 R	COU-152 R	COU-52BC R	900×2100	0×2100 45kg	- ≥36mm	≥36mm	≥40mm	≧40mm	28mm
COU-52 L	COU-152 L	COU-52BC L							28mm
COU-53 R	COU-153 R	COU-53BC R	950×2100	65kg					28mm
COU-53 L	COU-153 L	COU-53BC L							28mm
COU-52 HR			900×2100 950×2100	2100 45kg	45kg ≥36mm	≥36mm	≥40mm	≥35mm	28mm
COU-52 HL									28mm
COU-53 HR				OFFICE OFFICE					28mm
COU-53 HL				00 65Kg					28mm

Door cut dimension
 COU-52,53 / 152,153
 COU-52H,53H / 52BC,53BC





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### RYOBI LIMITED

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