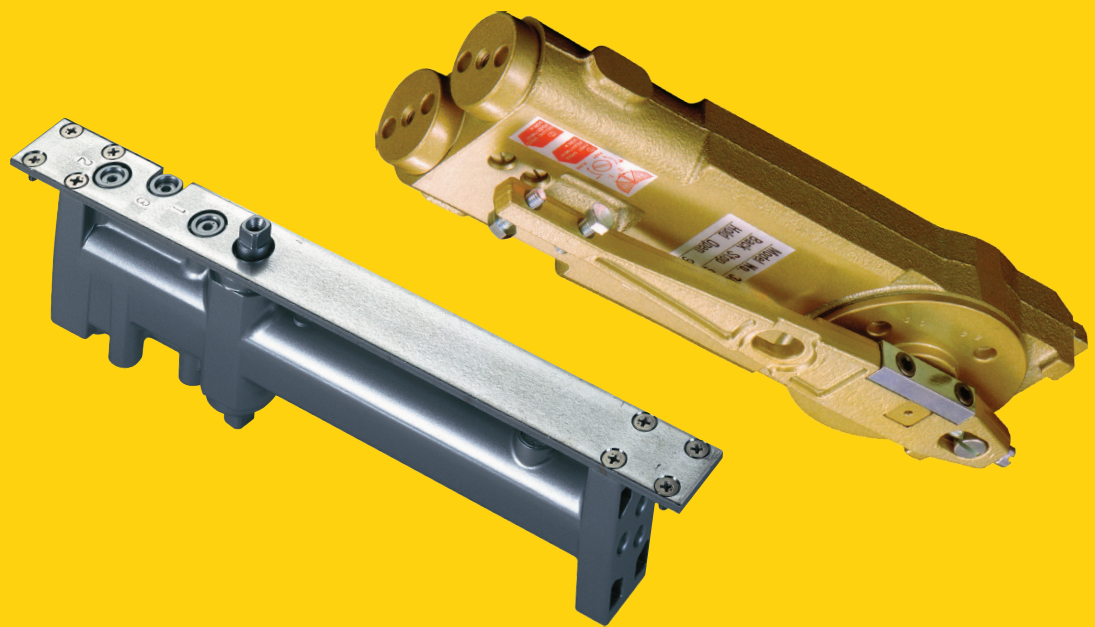


STANLEY®



OVERHEAD CONCEALED DOOR CLOSERS

CO-50 and 30 Series

Overhead Concealed Door Closers

dormakaba 

Trusted experts. Proven reliability. Simply STANLEY.

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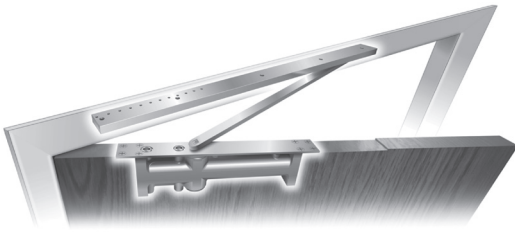
CO-50 General Information

CO-50 Series Single Acting Closers

STANLEY Closers CO-50 Series combines high-quality materials and advanced manufacturing techniques for outstanding quality, performance, and value. Easy field configuration and customization options make CO-50 Series closers a versatile choice for a wide range of applications.

CO-50 Installation Options

The CO-50 Series offers an enhanced menu of installation options to simplify customization and configuration in advance or in the field. Available for either concealed in door or concealed in frame installation, and with hold-open and non-handed options, CO-50 Series closers are easily adaptable to varied applications and door specifications.



Concealed in Door Installation
CO-53 & CO-54 Models



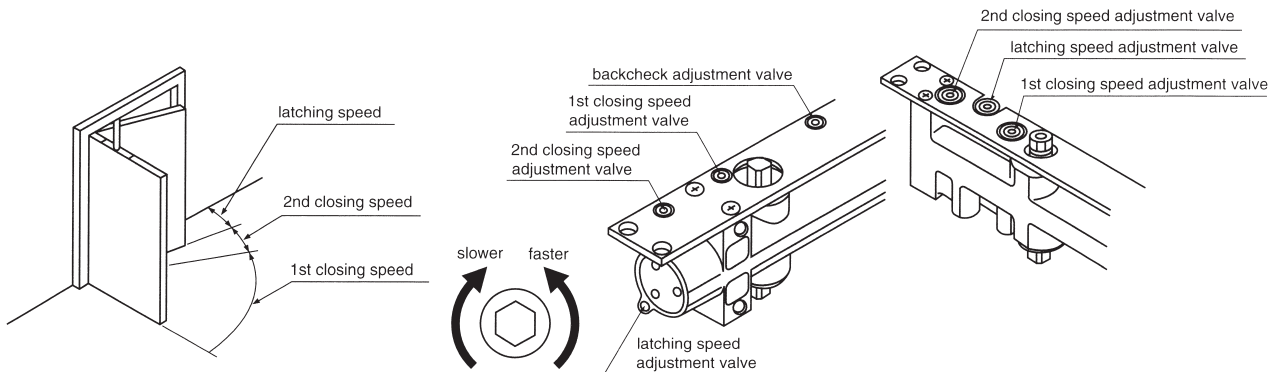
Concealed in Frame Installation
CO-55 & CO-56 Models

CO-50: Exceptional Materials And Performance

Made from R-14 die cast aluminum, the cylinder body of each CO-50 Series closer provides superior durability and performance. The R-14 alloy provides wear characteristics similar to that of cast iron, including enhanced wear resistance from contact with the piston during the opening and closing cycle, but also holds the cylinder body dimensionally stable under extreme internal hydraulic pressures.

CO-50: Full Hydraulic Controls

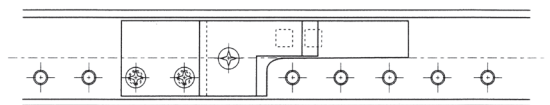
Full hydraulic controls offer complete adjustability. The versatile hydraulic mechanism allows maximum control over door closing speed for both first and second closing (see illustration below), ensuring a smooth and independent operation. The heavy duty CO-55 and CO-56 closers also include latching speed control and a new adjustable hydraulic backcheck function.



CO-50: Mechanical Backcheck Function

All CO-50 Series models* now come with a standard mechanical backcheck function, in which the force and weight of the door are controlled to prevent door damage and injury. Even in extreme environmental conditions or when the door is opened forcefully, the backcheck cushions and absorbs external force to moderate the door's function. Although particularly important in public buildings, hospitals, and schools, mechanical backcheck protects users and property in every application.

*Note: CO-55 and CO-56 closers include a hydraulic backcheck function, making mechanical backcheck functions unnecessary in those models.



CO-50 Series Track Types

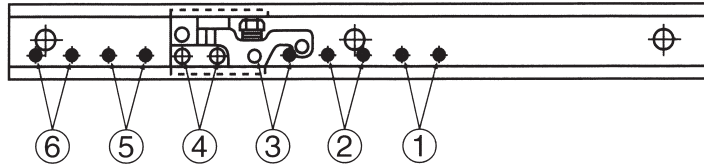
CO-50 Adjustable Door Stop/Hold Open/ Backcheck Angle & Hold Open Force

Adjustment of door stop/hold open/backcheck angle

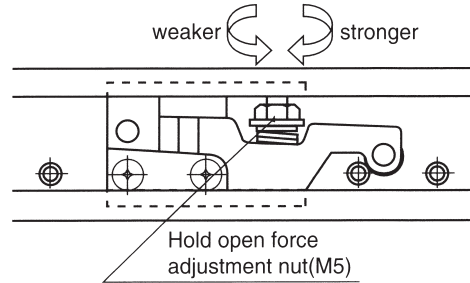
Adjust the door stop, hold open, and backcheck angles by positioning the stopper/stop metal fitting (hold open device), and mechanical backcheck device at 1-6 as shown in the illustration at left.

Adjustment of hold open force

To adjust hold open force, rotate the hold open force adjustment nut.



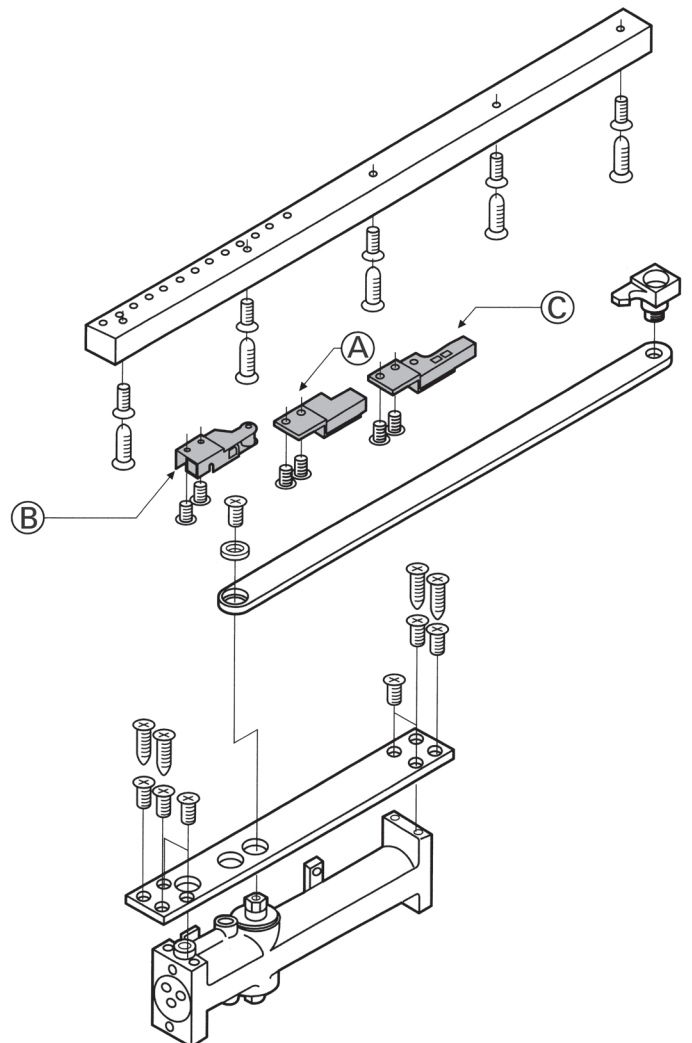
Positioning of stopper/stop metal fitting/backcheck device



Track Accessory Options

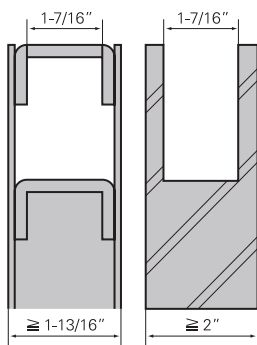
Description		
A	B	C
Stopper (for "without hold open")	Stop Metal Fitting (for "with hold open")	Backcheck Device (for "mechanical backcheck")

- In models CO-53, CO-54, CO-55, and CO-56, stopper A is equipped for "without hold open type."
- In models CO-153, CO-154, CO-155, and CO-156, stop metal fitting B is equipped for "with hold open type."
- In models CO-53BC and CO-54BC, backcheck device C is equipped for "with mechanical backcheck type."

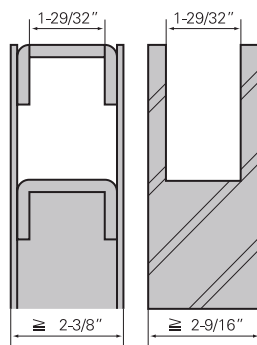


CO-50 Series Model Chart

Model Number			Max interior door width	Max exterior door width	Door Thickness				Body thickness
Without hold open	With hold open	With back check			Steel door		Wooden door		
					Standard installation	Top jamb installation	Standard installation	Top jamb installation	
CO-53	CO-153	CO-53BC	3'2"	2'6"	1-3/4"	1-1/2"	2"	1-11/16"	1-13/32"
CO-54	CO-154	CO-54BC	3'8"	3'0"					
CO-55 R	CO-155 R	—	4'0"	3'6"	2-3/8"	2-3/8"	2-9/16"	2-3/8"	1-7/8"
CO-55 L	CO-155 L	—							
CO-56 R	CO-156 R	—	5'0"	4'0"	2-3/8"	2-3/8"	2-9/16"	2-3/8"	1-7/8"
CO-56 L	CO-156 L	—							



CO-53 / 54 / 153 / 154
53BC / 54BC



CO-55 / 56 / 155 / 156

CO-50 Series How To Order

CO-50 Series Concealed Closers		
Concealed In-Door Closers		
Application	CO-50 Series	Weight
Concealed In-Door Size 3	CO-53	5 lbs
Concealed In-Door Size 4	CO-54	5 lbs
Concealed In-Door Size 3 with Hold Open	CO-153	5 lbs
Concealed In-Door Size 4 with Hold Open	CO-154	5 lbs
Overhead Concealed Closers (Handed)		
Application	CO-50 Series	Weight
Overhead Concealed Size 5	CO-55	12 lbs
Overhead Concealed Size 6	CO-56	12 lbs
Overhead Concealed Size 5 with Hold Open	CO-155	12 lbs
Overhead Concealed Size 6 with Hold Open	CO-156	12 lbs

30 Series General Information & How To Order

30 Series: Double Acting Concealed Door Closer

The 30 Series double acting concealed door closers use cast iron construction to ensure the highest performance and durability. Designed and manufactured with the highest quality standards, the 30 Series cast iron housing, high tensile camshaft, and ball bearing bottom pivot allow smoother opening and closing operation.

CO-30 Series Concealed Closers					
Double Acting Overhead Concealed Closers (Side Loading)					
Application		Door Opening		30 Series	Weight
Max Opening	Hold Open	Max Int.	Max Ext.		
105°		3'-0"	2'-6"	30-21S	10 lbs
90°		3'-0"	2'-6"	30-23S	10 lbs
105°	105°	3'-6"	3'-0"	30-30S	10 lbs
90°		3'-6"	3'-0"	30-31S	10 lbs
105°	90°	3'-6"	3'-0"	30-32S	10 lbs
105°				30-34S	10 lbs
105°				30-41S	10 lbs

Spring Tension		Light	Medium	Heavy	
Max. Door Weight		154 lbs	243 lbs	375 lbs	
Max. Door Width	Internal	37.4 in	41.3 in	49.2 in	
	External	29.5 in	35.4 in	41.3 in	
Installation	Hold Open	Max Opening	Model Number		
Side Load	105°	105°	30 - 20S	30 - 30S	30 - 40S
		105°	31 - 21S	30 - 31S	30 - 41S
	90°	90°	30 - 22S	30 - 32S	30 - 42S
		90°	30 - 23S	30 - 33S	30 - 43S
	105°	105°	30 - 24S	30 - 34S	30 - 44S

Each master carton consists of six complete door closers packed in individual carton.
Opening the door wider than its 105° (90°) capacity will seriously damage the closer body.

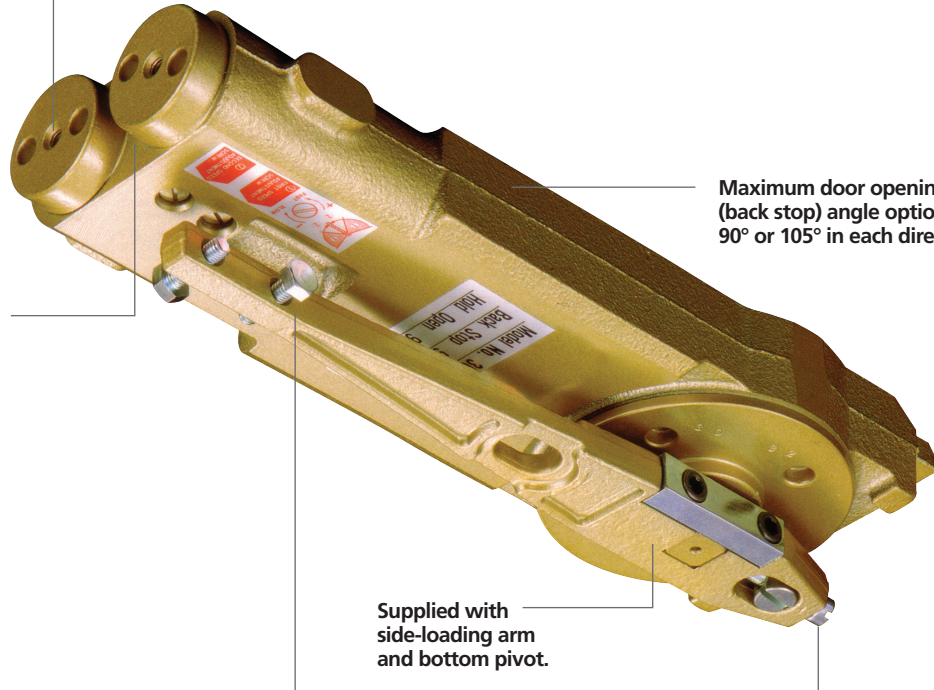
30 Series Adjustments

Compact body size fits in 4" x 1 3/4" openings.

Three varying spring tensions—light, medium, or heavy duty—allow use with different door sizes and weights.

In-door alignment, vertical positioning, heel-to-frame positioning via arm, arm channel, and bottom pivot are fully adjustable.

In-door alignment, vertical positioning, heel-to-frame positioning via arm, arm channel, and bottom pivot are fully adjustable.

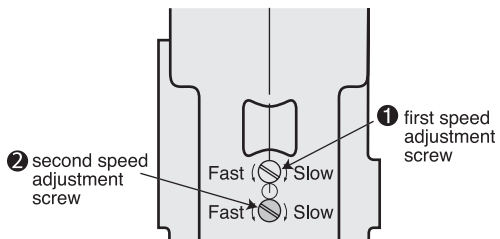
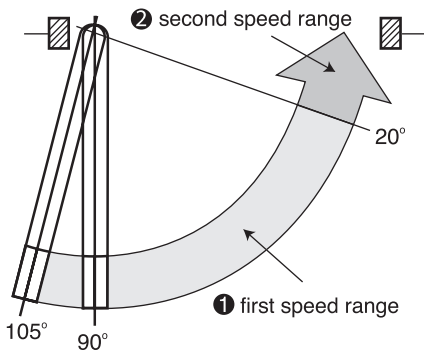


Maximum door opening (back stop) angle options are 90° or 105° in each direction.

Supplied with side-loading arm and bottom pivot.

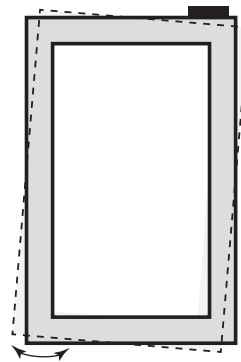
30 SERIES SPEED ADJUSTMENT

Turn adjustment screw 1 for desired first speed then turn adjustment screw 2 to produce a suitable second speed.



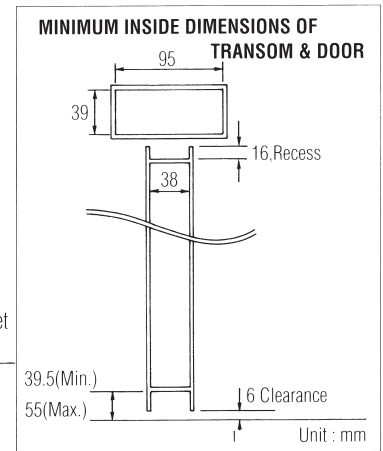
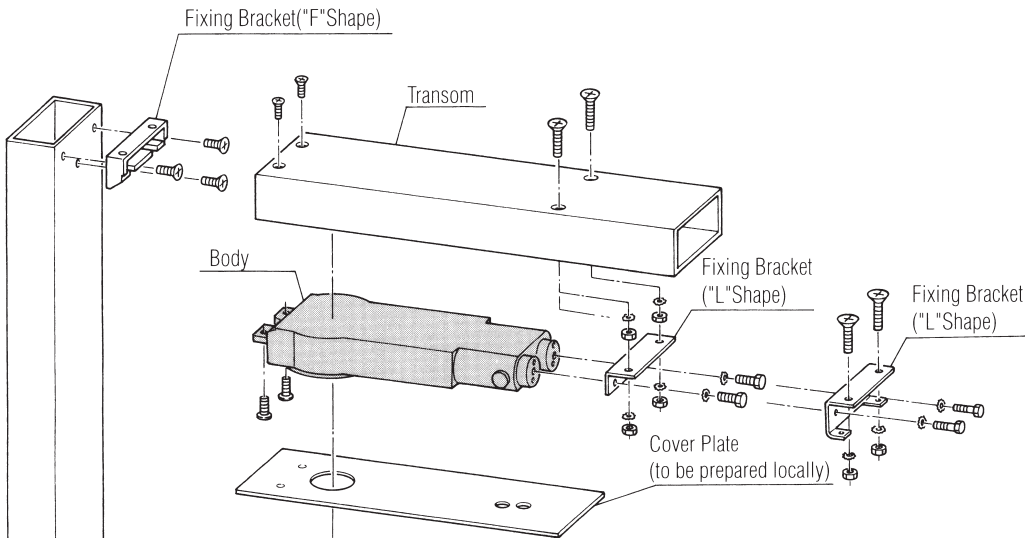
30 SERIES PARALLEL POSITION ADJUSTING DOOR

Clearance adjustable by screw B after loosening screw C.

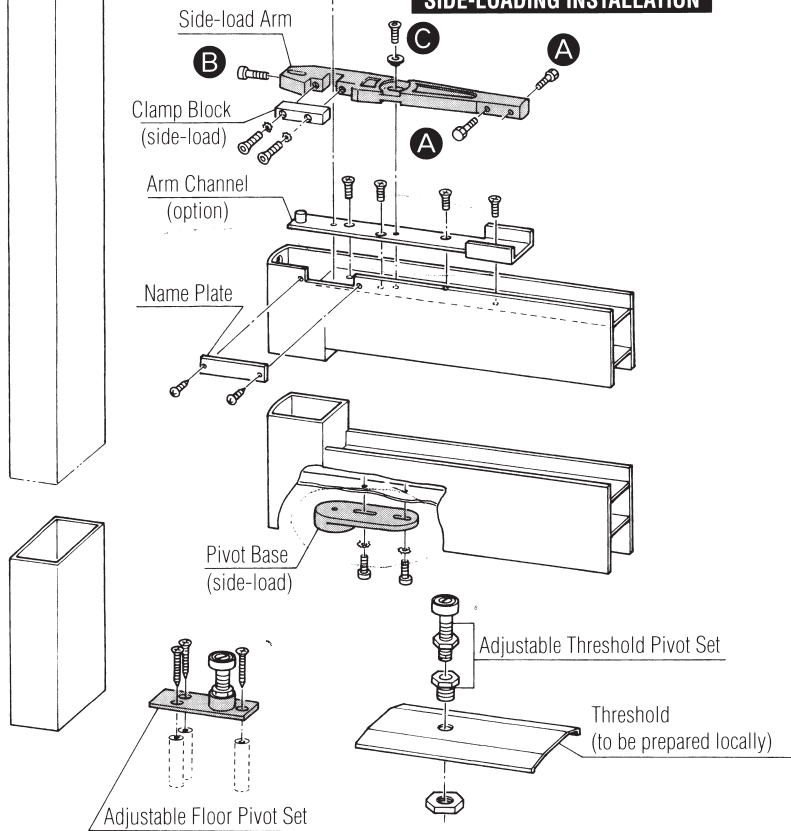


30 Series Adjustments

30 Series Parts And Accessories



SIDE-LOADING INSTALLATION



FLOOR MOUNTING

THRESHOLD MOUNTING

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