

# DOOR CLOSERS

## 80 Series

Surface Mounting Type



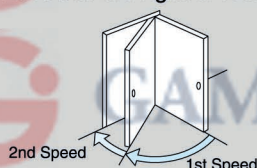
Standard Installation

Right-hand application shown.

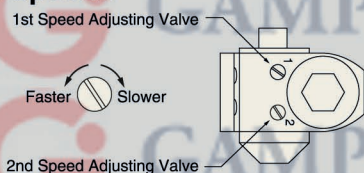
### Door Closing Speed Adjustment

#### Closing Speed Adjusting Valves

Trouble-free adjusting of speeds by simply turning the speed adjusting valves to the right or left.

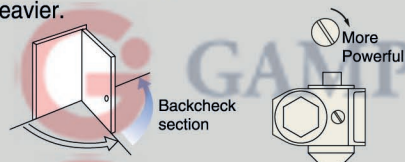


#### Adjustment of 1st and 2nd Speeds



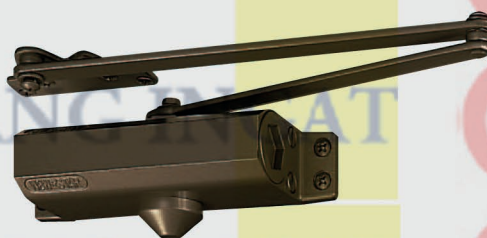
#### Backcheck Function (Optional)

This function uses hydraulic pressure to prevent the door from opening rapidly when a strong wind or external force is imposed in the opening direction of the door. You can open the door slowly in the backcheck section though the opening force is felt a little heavier.



There is the right and left hand for 185,186

### Parallel Installation



### Colors

- Silver (N-01)
- Burnt Umber (N-52)

- A horizontal door closer refined by continued research into a product of the finest quality.
- Different models to fit different door sizes. Each of these models is available for either standard installation or parallel installation. Further, a choice can be made between a closer with or without a hold-open device.
- Simple inversion of the main body (turning upside-down) allows installation on both right and left hand doors.
- An adjustable hold-open range of 70° to 180° is available to parallel installation and that of 70° to 120° is available to standard installation.
- Models 81 and 181 allow a maximum door opening angle of 150°.

Model Number				Applicable Door Dimensions DW×DH mm	Maximum Door Weight kg
Standard Installation		Parallel Installation			
Without Hold-open	With Hold-open	Without Hold-open	With Hold-open		
81	181 <small>The maximum hold-open angle is 120°</small>	P-81	P-181	800×1800	30
82	182 <small>◇</small>	P-82	P-182	900×2100	45
83	183 <small>◇</small>	P-83	P-183	950×2100	65
84	184 <small>◇</small>	P-84	P-184	1050×2400	85
85	* 185 <small>◇</small>	P-85	P-185	1200×2400	120
86	* 186 <small>◇</small>	P-86	P-186	1800×2700	180

(Note) • In the case of standard installation, the maximum hold-open angle is 120°. (180° for parallel installation.)  
 • For installation on fire doors, select a closer with a temperature fuse.  
 • Those models marked with an asterisk (\*) are handed.