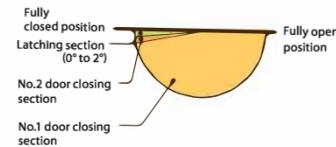


FUNCTION

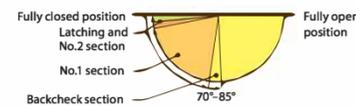
Latching function
(standard)

This function accelerates the door in the final 2° of closing, in order to overcome any resistance such as seals, latch bolts etc. This provides a secure and complete closure of the door.



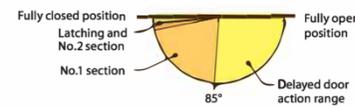
Back-check function
(optional)

This function is built into the door closer body and checks the outward swing of the door. Most suited where the opening door might hit a wall i.e. in a corridor, or where it could injure someone if opened too quickly. It is recommended for use on externally opening doors in windy environments. The backcheck function works between 70° & 85°. The backcheck strength can be adjusted by turning the backcheck valve screw located on the end of the closer body. **IT SHOULD NOT BE REGARDED AS A DOOR STOP!**



Delayed door closing function (optional)

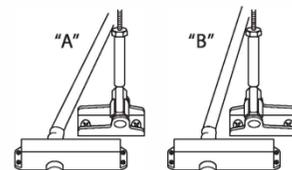
This function reduces the closing speed of the door to allow passers-by sufficient time to pass through the door opening i.e. people in wheelchairs, hospital staff with beds, elderly people etc. The maximum delay of 90 seconds is achieved from the 180° (the fully open angle) thru to 85°. After which the normal closing process takes effect to provide a secure and complete closure of the door. The duration of the delay can be adjusted via the delayed valve screw located next to the spindle.



ADJUSTMENT

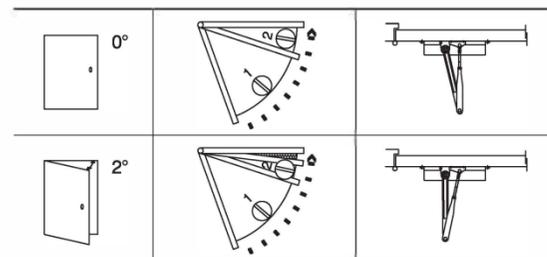
Force adjustment

Installation "A"
Decreases the closing force by about 10% for the first 4° of opening and final 4° of closing.



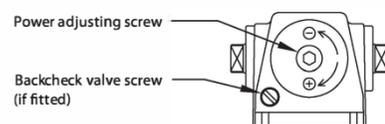
Installation "B"
Increases the closing force by about 10% for the first 4° of opening and final 4° of closing.

Latching angle adjustment



Spring power adjustment

Turn the 'Power Adjusting Screw' the required number of clockwise or anti-clockwise turns according to the door width as indicated in the chart. In adverse weather conditions, increase the number of turns as required.



	Size (EN)	No. of turns	Direction	Max. opening angle
83V	2	6	-	180°
	3	0	*	180°
	4	3	+	180°
85V Fixing Position 1	3	0	*	180°
	4	1	+	180°
85V Fixing Position 2	5	0	*	180°
	6	4	+	130°
87V	6	5	-	130°
	7	0	*	130°

*Pre-set size at factory

NHN FUSIBLE LINK FOR No.80V SERIES

The fusible link is a mechanical device, which can be installed on the standard hold-open arms of the NHN no. 80V series. The door closers fitted with the fusible link can be used on fire doors, which are normally kept open in the hold-open position. In case the fuse element reaches the temperature of 58° C. it will fall apart and the door will be closed by the door closer.

Please ensure yourselves if the use of the fusible link is accepted by the local fire authorities.

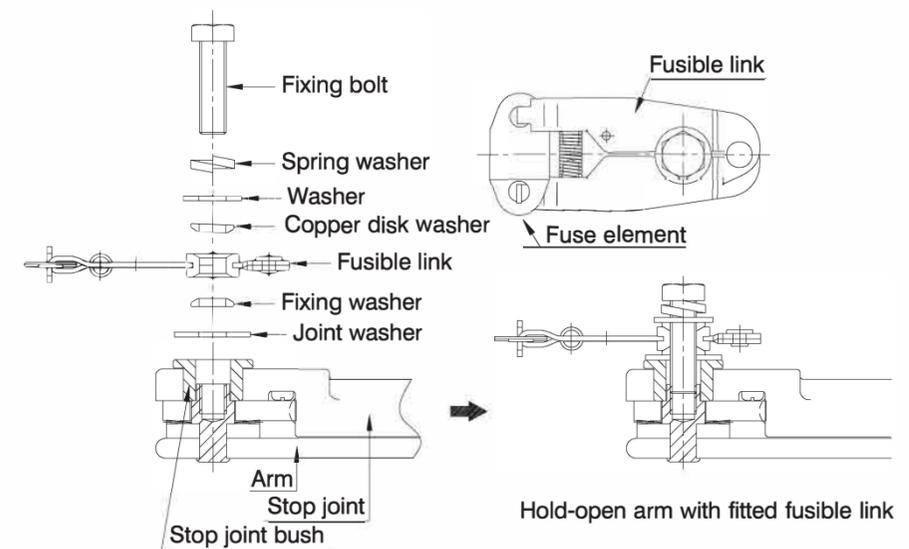
INSTALLATION METHOD.

The fusible link is a mechanical device, which can be installed on the hold-open arms of the NHN door closers.

The fuse element is available in 5 grades, namely (58°, 68°, 74°, 100°, 138° and 176° C) In case the fuse element reaches its maximum temperature, it will melt and fall apart; this will release the door from its hold-open position and the door closer will close the door. Ideally in situations where electricity is not available. Please check always with the local authorities if application of the fusible link is allowed and ask for their written approval.

The installation of the fusible link is easy. The regular bolt of the hold-open arm at the pivot point has to be removed. Fit the fusible link on the pivot point of the hold-open arm with the supplied washers and bolt illustrated. Determine the required hold open position, ensure that the serrations interlock each other and tighten the bolt firmly with a spanner. Do not overtight as it might damage the fusible link.

Remark: The use of fusible link is only possible with the regular hold-open arm applications, NOT in parallel arm applications.



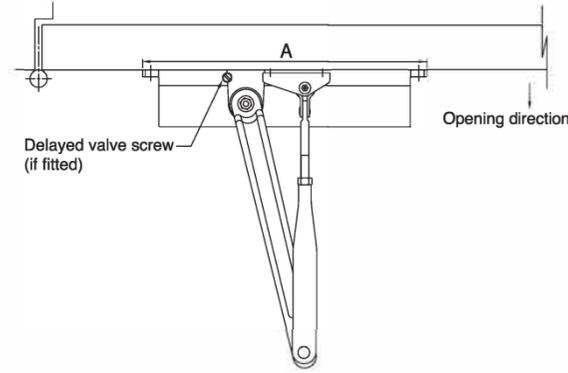
No.	°F	°C
315155	155°	68°
315165	165°	74°
315212	212°	100°
315280	280°	138°
315350	350°	176°

INSTALLATION

Standard installation

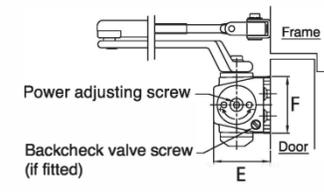
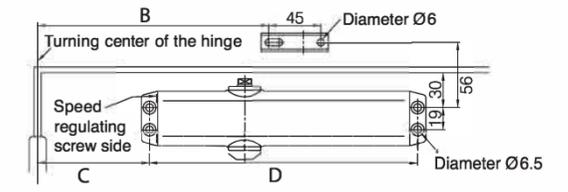
Closer mounted on pull side of the door

This illustration shows right hand configuration (DIN L)



TYPE	A	B	C	D	E	F
83V	246	200	97	232	49	49
85V Fixing Position 1	282	210	55	268	55	52
85V Fixing Position 2			90			
87V	282	210	90	268	55	52

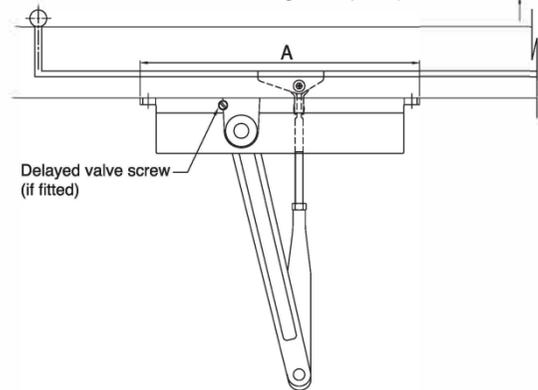
(Unit: mm)



Top jamb installation

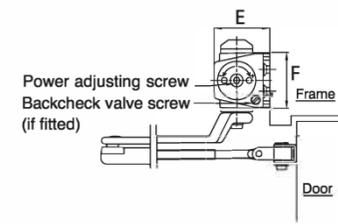
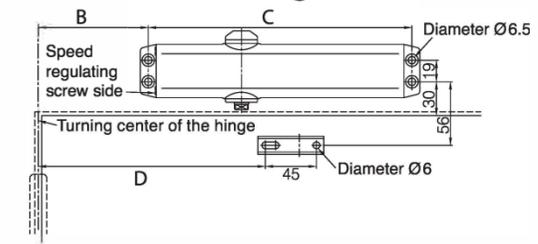
Closer transom mounted on the push side of the door

This illustration shows left hand configuration (DIN R). Opening direction



TYPE	A	B	C	D	E	F
83V	246	97	232	200	49	49
85V Fixing Position 1	282	55	268	210	55	52
85V Fixing Position 2		90				
87V	282	55	268	210	55	52

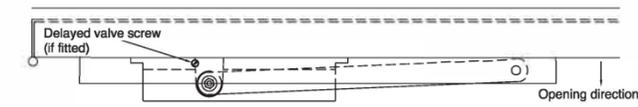
(Unit: mm)



INSTALLATION

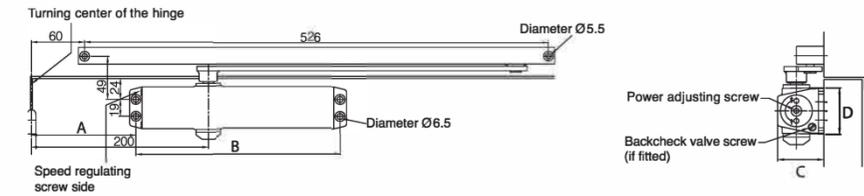
Slide arm installation

This illustration shows right hand configuration (DIN L).

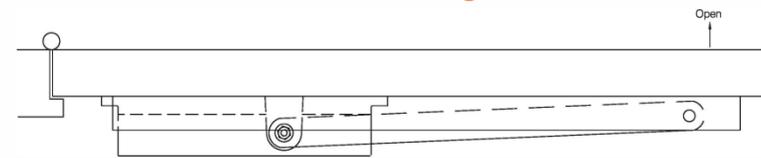


TYPE	A	B	C	D
83V-GL	118	232	49	49
85V-GL/87V-GL	108	268	55	52

(Unit: mm)

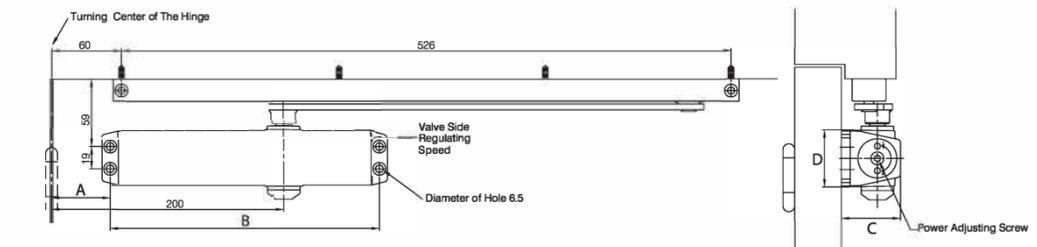


Slide arm installation (Out-swing)

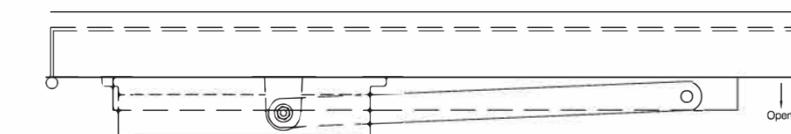


TYPE	A	B	C	D
83V-GL	32	232	49	49
85V-GL/87V-GL	17	268	55	52

(Unit: mm)

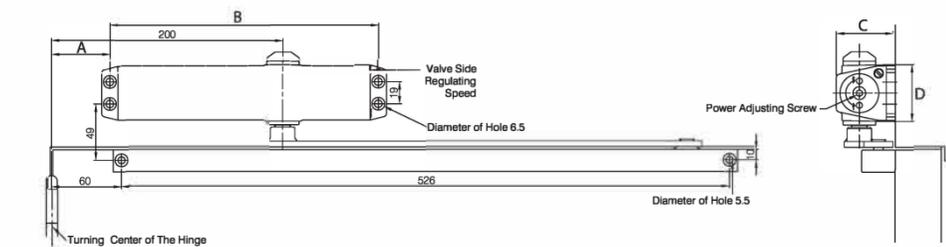


Slide arm installation (Top jamb)



TYPE	A	B	C	D
83V-GL	32	232	49	49
85V-GL/87V-GL	17	268	55	52

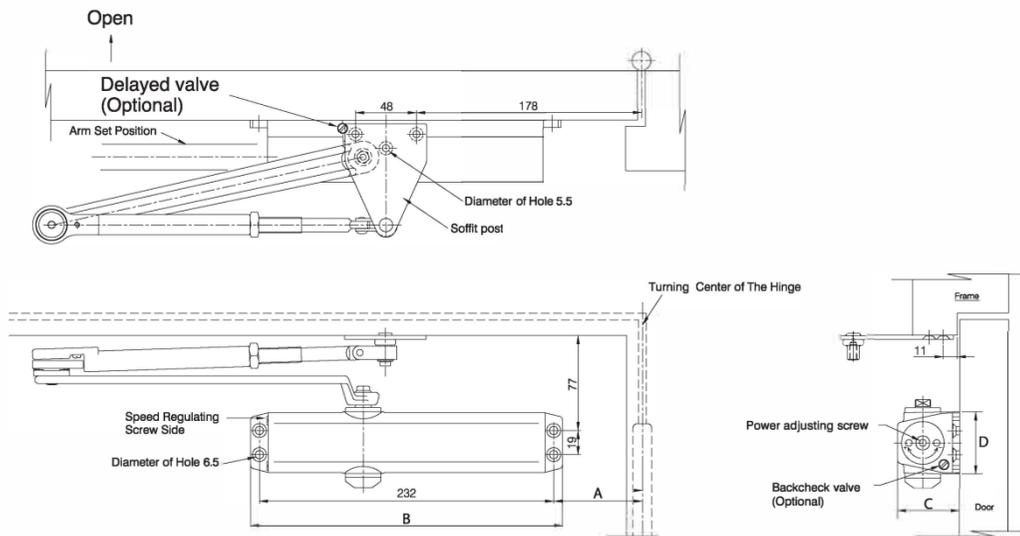
(Unit: mm)



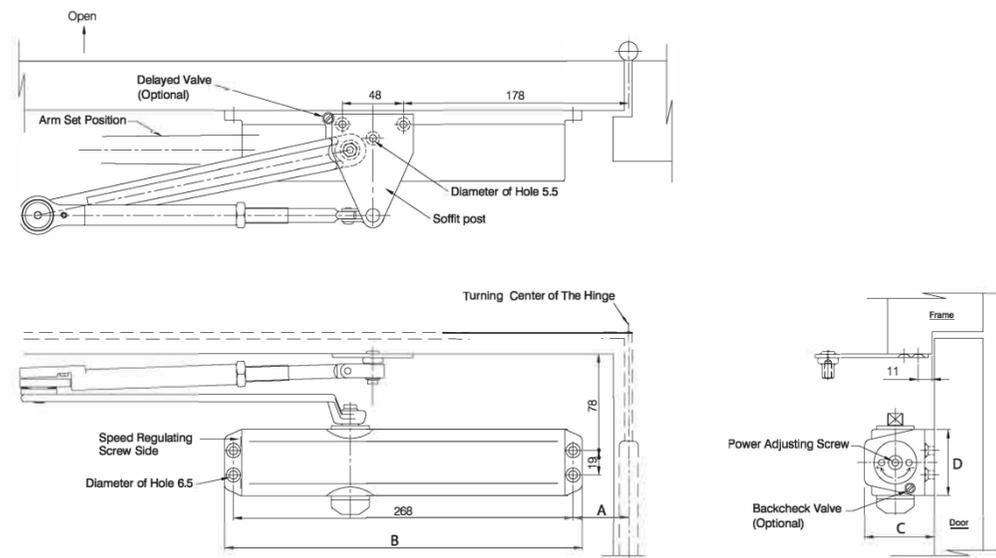
INSTALLATION

Parallel arm installation (with 200-PB bracket)

▼ 83V+200PB



▼ 85V+200PB



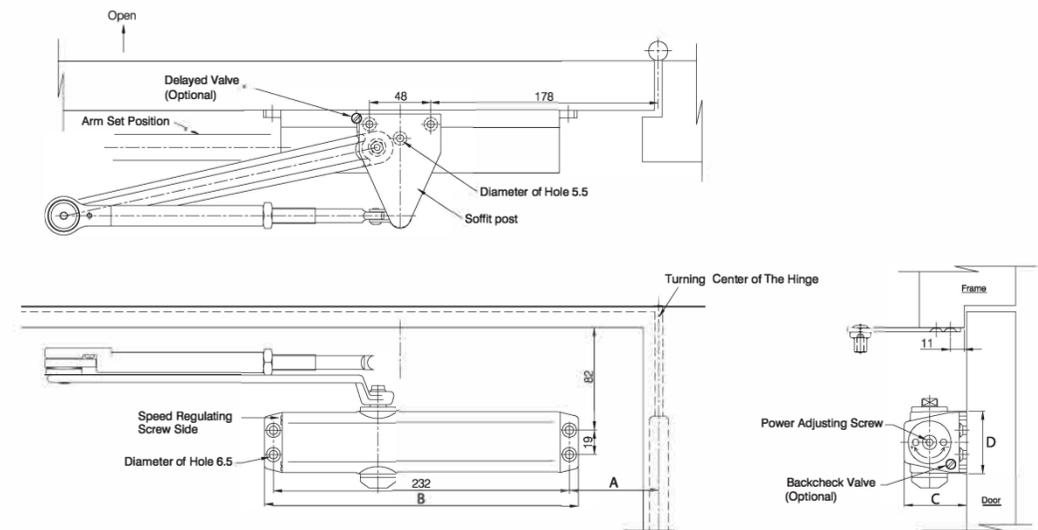
TYPE	A	B	C	D
183V	70	246	49	49
185V	44	282	55	52

(Unit: mm)

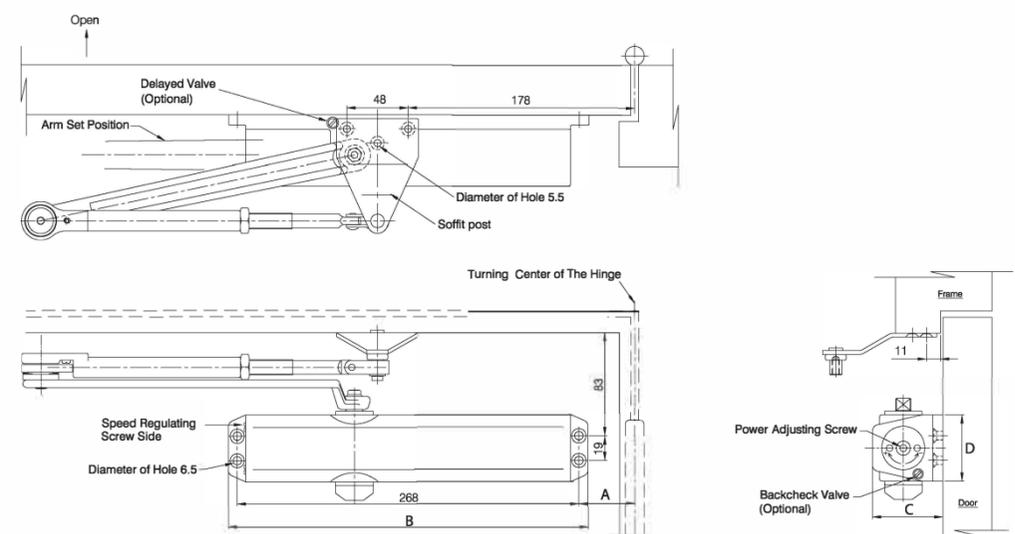
INSTALLATION

Parallel arm installation (with 200-PB1 bracket)

▼ 183V+200PB1



▼ 185V+200PB1



TYPE	A	B	C	D
183V	70	246	49	49
185V	44	282	55	52

(Unit: mm)

