



**'NO QUIBBLE'**  
**10 YEARS**  
**GUARANTEE**

## D&E NHN 80VP Series door closer

The D&E NHN80VP series of door closers are a multi-size range of closers. It has successfully been type tested to BS EN 1154 and BS EN 1634-1 and is accredited with CE certification where applicable. All models are supplied complete with a parallel shoe to enable standard arm and parallel arm installations without dropping in performance.

TESTED TO  
EN1154



FIRE TESTED TO  
EN1634-1



|                        |  |        |
|------------------------|--|--------|
| <i>DENHN83VP</i>       | <i>EN 2-4 - Fig 1/6 door closer</i>                              | silver |
| <i>DENHN183VP</i>      | <i>EN 2-4 - Fig 1/6 door closer with H/O</i>                     | silver |
| <i>DENHN83V-GL</i>     | <i>EN 1-3 - slide arm door closer with optional H/O</i>          | silver |
| <i>DENHN83VP-BC</i>    | <i>EN 2-4 - Fig 1/6 door closer with BC</i>                      | silver |
| <i>DENHN183VP-BC</i>   | <i>EN 2-4 - Fig 1/6 door closer with BC &amp; H/O</i>            | silver |
| <i>DENHN83V-BC-GL</i>  | <i>EN 1-3 - slide arm door closer with BC &amp; optional H/O</i> | silver |
| <i>DENHN83VP-DA</i>    | <i>EN 2-4 - Fig 1/6 door closer with DA</i>                      | silver |
| <i>DENHN183VP-DA</i>   | <i>EN 2-4 - Fig 1/6 door closer with DA &amp; H/O</i>            | silver |
| <i>DENHN183V-DA-GL</i> | <i>EN 1-3 - slide arm door closer with DA &amp; optional H/O</i> | silver |

Power adjustment: variable via a 5mm hex key.  
Door weight: 40 - 80 Kgs.  
Door width: 850 - 1100mm.

TESTED TO  
EN1154

FIRE TESTED TO  
EN1634-1



|                        |  |        |
|------------------------|--|--------|
| <i>DENHN85VP</i>       | <i>EN 4-6 - Fig 1/6 door closer</i>                              | silver |
| <i>DENHN185VP</i>      | <i>EN 4-6 - Fig 1/6 door closer with H/O</i>                     | silver |
| <i>DENHN85V-GL</i>     | <i>EN 3-5 - slide arm door closer with optional H/O</i>          | silver |
| <i>DENHN85VP-BC</i>    | <i>EN 4-6 - Fig 1/6 door closer with BC</i>                      | silver |
| <i>DENHN185VP-BC</i>   | <i>EN 4-6 - Fig 1/6 door closer with BC &amp; H/O</i>            | silver |
| <i>DENHN85V-BC-GL</i>  | <i>EN 3-5 - slide arm door closer with BC &amp; optional H/O</i> | silver |
| <i>DENHN85VP-DA</i>    | <i>EN 4-6 - Fig 1/6 door closer with DA</i>                      | silver |
| <i>DENHN185VP-DA</i>   | <i>EN 4-6 - Fig 1/6 door closer with DA &amp; H/O</i>            | silver |
| <i>DENHN185V-DA-GL</i> | <i>EN 3-5 - slide arm door closer with DA &amp; optional H/O</i> | silver |

Power adjustment: variable via a 5mm hex key.  
Door weight: 80 - 120 Kgs.  
Door width: 1100 - 1400mm.

|           |    |  |  |
|-----------|----|--|--|
| CI/SfB    |    |  |  |
| 31        | 49 |  |  |
| June 2012 |    |  |  |

TESTED TO  
EN1154

FIRE TESTED TO  
EN1634-1



|                 |   |        |
|-----------------|---|--------|
| DENHN87VP       | EN 6/7 - Fig 1/6 door closer                          | silver |
| DENHN187VP      | EN 6/7 - Fig 1/6 door closer with H/O                 | silver |
| DENHN87V-GL     | EN 5/6 - slide arm door closer with optional H/O      | silver |
| DENHN87VP-BC    | EN 6/7 - Fig 1/6 door closer with BC                  | silver |
| DENHN187VP-BC   | EN 6/7 - Fig 1/6 door closer with BC & H/O            | silver |
| DENHN87V-BC-GL  | EN 5/6 - slide arm door closer with BC & optional H/O | silver |
| DENHN87VP-DA    | EN 6/7 - Fig 1/6 door closer with DA                  | silver |
| DENHN187VP-DA   | EN 6/7 - Fig 1/6 door closer with DA & H/O            | silver |
| DENHN187V-DA-GL | EN 5/6 - slide arm door closer with DA & optional H/O | silver |

Power adjustment: variable via a 5mm hex key.  
Door weight: 120 - 140 Kgs.  
Door width: 1400 - 1600mm.

Supplied complete with fixing screws for timber and steel doors and full installation instructions.

*Other finishes are available to order but may be subject to quantity  
Covers to suit any of these models page D-1007*

## Functions:

### Latching action:

This is the acceleration of the door in the final 2° of closing. It is designed to overcome any resistance caused by seals, latch bolts etc... This also provides the complete and secure closure of the door.

### Backcheck:

This is the checking of the outward opening door. This function works between 70° & 85°. This function on a closer is designed for use where the opening door might hit a wall for example in a corridor. Other recommended installations are on externally opening doors that may be subject to wind, or where the door might injure someone if it was opened too quickly.

The backcheck strength can be adjusted via the 'backcheck valve screw' located on the end of the closer body.

NOTE: THE BACKCHECK FUNCTION SHOULD NOT BE REGARDED AS A DOOR STOP!

### Delayed Action:

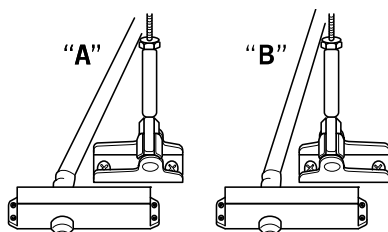
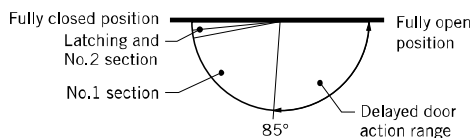
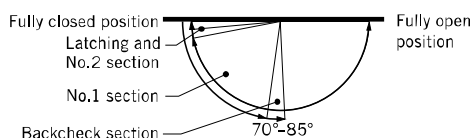
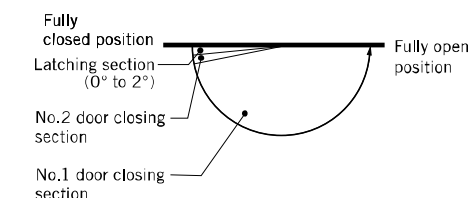
This is the slowing down of the closing speed. This function is designed to allow people sufficient time to pass through the door opening i.e. wheel chair users, the elderly, hospital staff with beds etc... The maximum delay of 90 seconds is achieved between 180° thru to 85°, after which the normal closing process takes effect to provide the complete and secure closing of the door.

The delay can be adjusted via the 'delayed action valve screw' located on the closer body next to the spindle.

### Force adjustment:

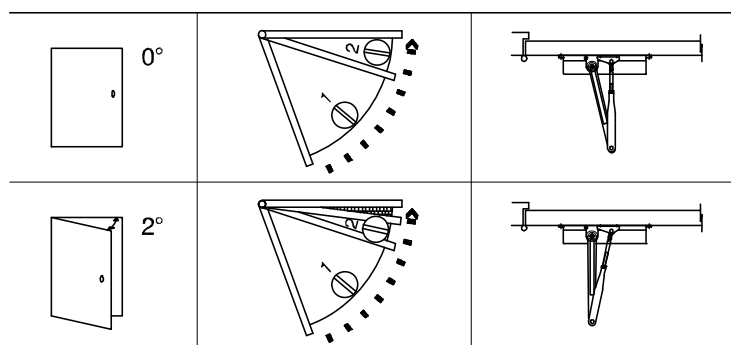
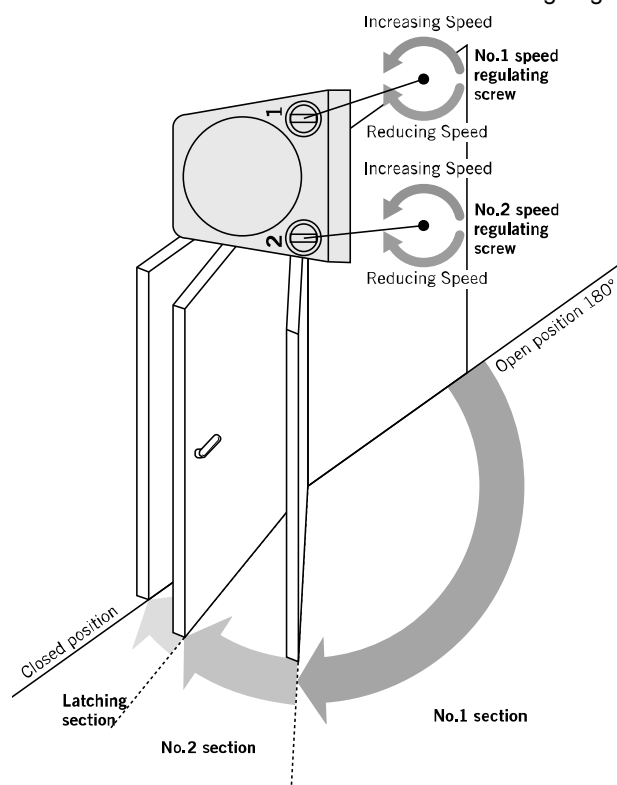
Installation "A" Decreases the closing force by about 10% for the first 4° of opening and the final 4° of closing.

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



## D&E NHN 80VP Series door closer

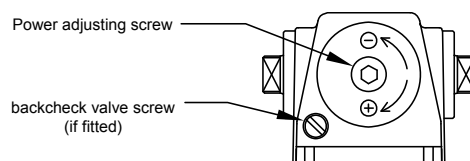
Latching angle adjustment.



## Spring power adjustment:

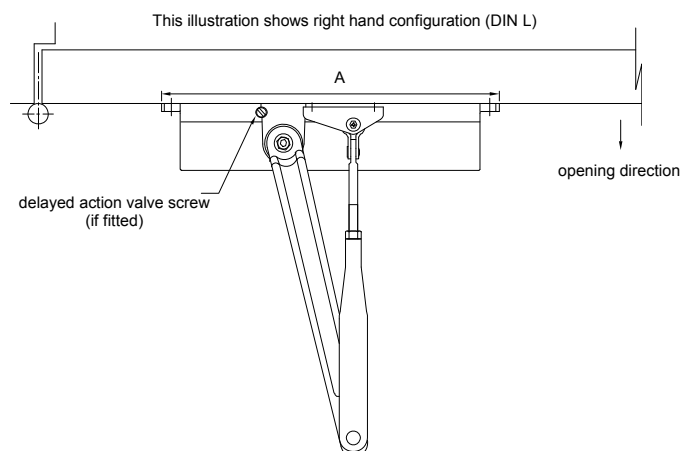
Turn the 'power adjusting screw' the required number of clockwise or anti-clockwise according to the door width as indicated in the chart below.

Installations which are subject to adverse weather conditions, increase the number of turns as required.

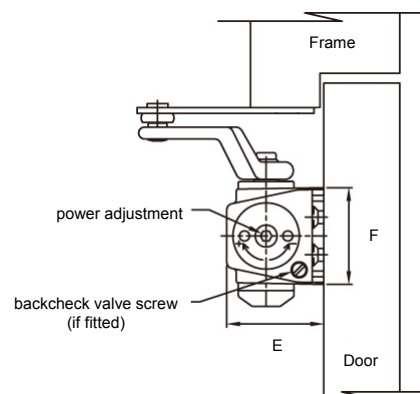
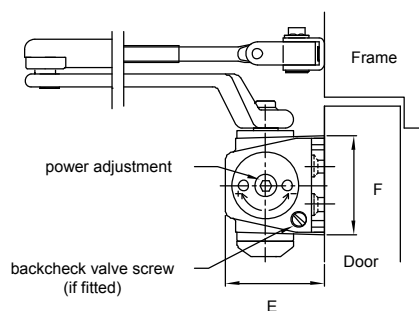
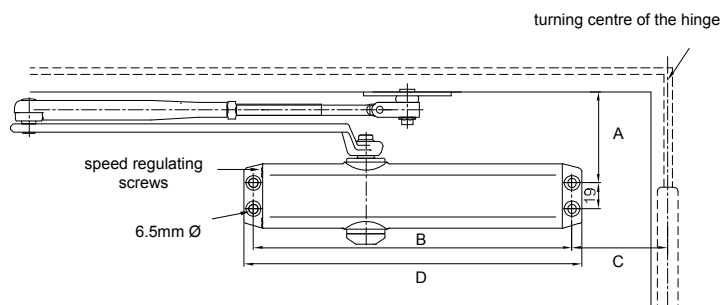
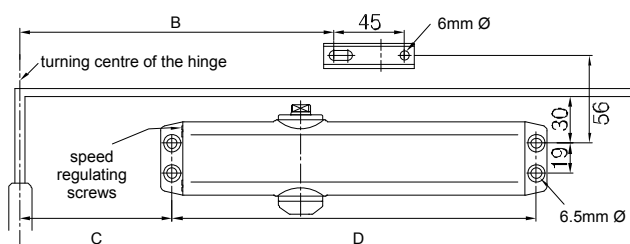
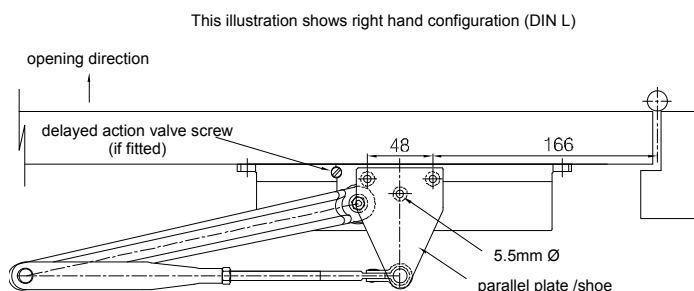


| Model                       | Size (EN) | No. of turns | Direction | Max. opening angle |
|-----------------------------|-----------|--------------|-----------|--------------------|
| NHN83VP                     | 2         | 6            | -         | 180°               |
|                             | 3         | 0            | ⊗         | 180°               |
|                             | 4         | 3            | +         | 180°               |
| NHN85VP (Fixing Position 1) | 3         | 0            | ⊗         | 180°               |
|                             | 4         | 1            | -         | 180°               |
| NHN85VP (Fixing Position 1) | 5         | 0            | ⊗         | 180°               |
|                             | 6         | 4            | +         | 130°               |
| NHN87VP                     | 6         | 5            | -         | 130°               |
|                             | 7         | 0            | ⊗         | 130°               |

## Standard arm installation



## Parallel arm installation

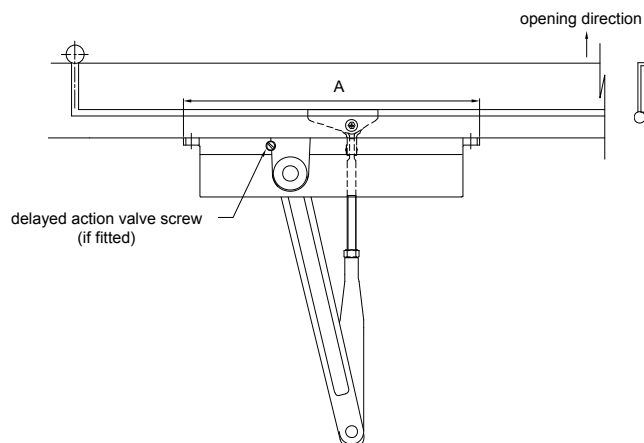


| Model                       | A   | B   | C  | D   | E  | F  |
|-----------------------------|-----|-----|----|-----|----|----|
| NHN83VP                     | 246 | 200 | 97 | 232 | 49 | 49 |
| NHN85VP (Fixing Position 1) | 282 | 210 | 55 | 268 | 55 | 52 |
| NHN85VP (Fixing Position 2) |     |     | 90 |     |    |    |
| NHN87VP                     | 282 | 210 | 90 | 268 | 55 | 52 |

| Model             | A   | B   | C  | D   | E  | F  |
|-------------------|-----|-----|----|-----|----|----|
| NHN83VP           | 246 | 200 | 97 | 232 | 49 | 49 |
| NHN85VP & NHN87VP | 282 | 210 | 90 | 268 | 55 | 52 |

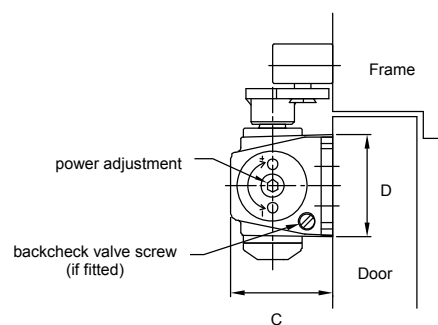
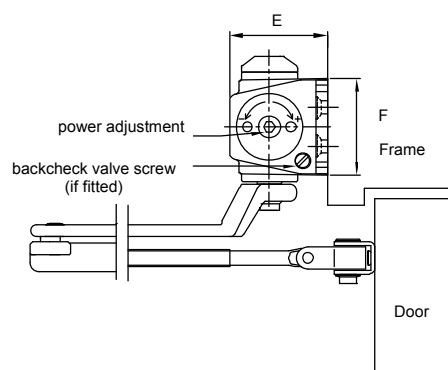
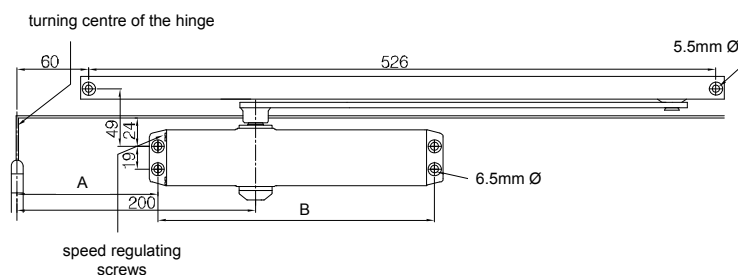
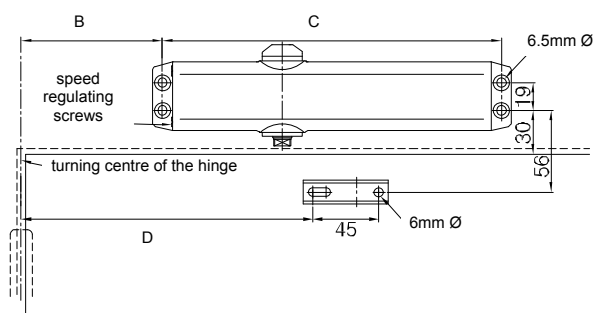
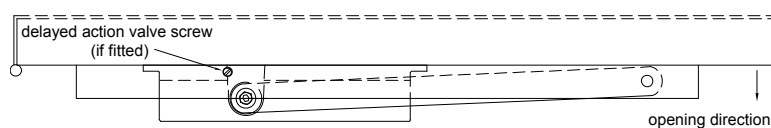
## Top jamb installation

This illustration shows right hand configuration (DIN L)



## Slide arm installation

This illustration shows right hand configuration (DIN L)



| Model                       | A   | B  | C   | D   | E  | F  |
|-----------------------------|-----|----|-----|-----|----|----|
| NHN83VP                     | 246 | 97 | 232 | 200 | 49 | 49 |
| NHN85VP (Fixing Position 1) | 282 | 55 | 268 | 210 | 55 | 52 |
| NHN85VP (Fixing Position 2) |     | 90 |     |     |    |    |
| NHN87VP                     | 282 | 55 | 268 | 210 | 55 | 52 |

| Model                 | A   | B   | C  | D  |
|-----------------------|-----|-----|----|----|
| NHN83V-GL             | 118 | 232 | 49 | 49 |
| NHN85V-GL & NHN87V-GL | 108 | 268 | 55 | 52 |

# D&E NHN 80VP series door closer

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**80VP series drop plate - for use when the fixings for the door closer body falls below the top rail.**

|        |                                      |        |
|--------|--------------------------------------|--------|
| DEXDP1 | drop plate to suit NHN83VP           | silver |
| DEXDP4 | drop plate to suit NHN85VP & NHN87VP | silver |



**80VP series drop plate - for use when the fixings for the door closer body falls below the top rail.**

|           |                                  |        |
|-----------|----------------------------------|--------|
| DEXSB83VP | NHN83VP soffit bracket           | silver |
| DEXSB85VP | NHN85VP & NHN87VP soffit bracket | silver |



**NHN80VP series hold open arm.**

|              |  |        |
|--------------|--|--------|
| DEXHO80VP/SI | standard arm with hold open to suit NHN83VP, NHN85VP & NHN87VP | silver |
|--------------|--|--------|



**80 series slide arm**

|              |  |        |
|--------------|--|--------|
| DEXSA80VP/SI | standard arm with hold open to suit NHN83VP, NHN85VP & NHN87VP | silver |
|--------------|--|--------|



**NHN80VP series soffit plate / parallel arm shoe.**

|             |               |        |
|-------------|---------------|--------|
| DEXB80VP/SI | fig 6 bracket | silver |
| DEXB80VP/WT | fig 6 bracket | white  |



**NHN80VP series L-shape bracket - for use when the fixing position of the soffit plate / parallel arm shoe is not suitable - prime examples of this are PVCu & aluminium frames.**

|               |                                       |        |
|---------------|---------------------------------------|--------|
| DEXLB80VP/SI  | fig 6 / L-shape bracket               | silver |
| DEXLB80VP/WT  | fig 6 / L-shape bracket               | white  |
| DEXLB180VP/SI | fig 6 / L-shape bracket for H/O model | silver |
| DEXLB180VP/WT | fig 6 / L-shape bracket for H/O model | white  |

Sales: 01733 896123



D-1000F

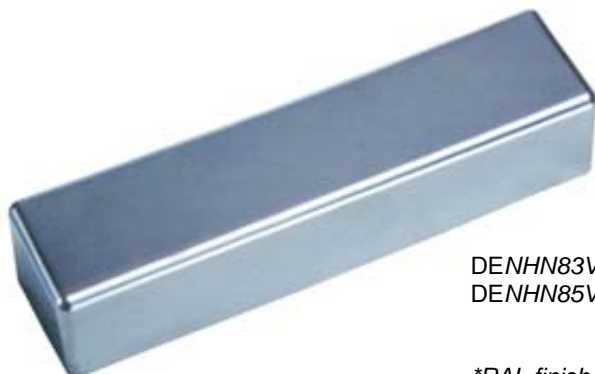
Fax: 01733 894466

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|-----------|----|--|--|
| CI/SfB    |    |  |  |
| 31        | 49 |  |  |
| June 2012 |    |  |  |

## D&E NHN door closer covers

Designed to suit door closer models NHN83VP, NHN85VP & NHN87VP. The clip on facility offers a fast and effective method of fixing.



|                |                   |        |
|----------------|-------------------|--------|
| DENHN83VP/C/SI | door closer cover | silver |
| DENHN85VP/C/SI | door closer cover | silver |

*\*RAL finish is subject to quantity*

**NOTE:** *Standard silver or RAL finish covers are only available square ends - as per image.*



|                   |                   |                      |
|-------------------|-------------------|----------------------|
| DENHN83VP/SRC/SSS | door closer cover | sat. stainless steel |
| DENHN83VP/SRC/PSS | door closer cover | pol. stainless steel |
| DENHN85VP/SRC/SSS | door closer cover | sat. stainless steel |
| DENHN85VP/SRC/PSS | door closer cover | pol. stainless steel |

**NOTE:** *Stainless steel covers are only available as semi-radius ends.*



|           |    |  |  |
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## D&E NHN 400 door closer

The NHN 400 is a 2-5 variable multi-size door closer. It has successfully been type tested to EN1154:1997, EN 1634-1:2000 and is accredited with CE certification\*.

### Silver cover, flat arm & universal bracket

|                |                                   |        |
|----------------|-----------------------------------|--------|
| DENHN400U/SI   | 2-5 universal door closer         | silver |
| DENHN400BCU/SI | 2-5 universal door closer with BC | silver |
| DENHN400HU/SI  | 2-5 universal door closer with DA | silver |

### Silver cover & black flat arm & universal bracket

|                   |                                   |                    |
|-------------------|-----------------------------------|--------------------|
| DENHN400U/SI/BK   | 2-5 universal door closer         | silver / black arm |
| DENHN400BCU/SI/BK | 2-5 universal door closer with BC | silver / black arm |
| DENHN400HU/SI/BK  | 2-5 universal door closer with DA | silver / black arm |

Power adjustment: via a 5mm hex key.

Door weight: 40 - 100 Kgs.

Door width: 850 - 1250mm.

Supplied complete with fixing screws for timber and steel doors and full installation instructions.

*A comprehensive range of accessories is available - please contact the sales team for any special requirements.*



## D&E NHN 400GL slide arm door closer

The NHN 400GL is a 2-5 variable multi-size door closer. It has successfully been type tested to EN1154:1997, EN 1634-1:2000 and is accredited with CE certification\*.

### Silver body & silver arm

|                  |                                   |        |
|------------------|-----------------------------------|--------|
| DENHN400/GL/SI   | 2-5 slide arm door closer         | silver |
| DENHN400BC/GL/SI | 2-5 slide arm door closer with BC | silver |
| DENHN400H/GL/SI  | 2-5 slide arm door closer with DA | silver |

Power adjustment: via a 5mm hex key.

Door weight: 40 - 120 Kgs.

Door width: 850 - 1250mm.

Supplied complete with fixing screws for timber and steel doors and full installation instructions.

*A comprehensive range of accessories is available - please contact the sales team for any special requirements.*

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\* CE certification does not apply to the DA models





## D&E NHN 400 door closer - 'Hi-Finish' Range

The NHN 400 is a 2-5 variable multi-size door closer. It has successfully been type tested to EN1154:1997, EN 1634-1:2000 and is accredited with CE certification\*.

### 'Hi-Finish' cover, flat arm & universal bracket

|              |                           |                      |
|--------------|---------------------------|----------------------|
| DENHN400/PB  | 2-5 universal door closer | pol. brass           |
| DENHN400/PNP | 2-5 universal door closer | pol. nickel plated   |
| DENHN400/SNP | 2-5 universal door closer | sat. nickel plated   |
| DENHN400/PSS | 2-5 universal door closer | pol. stainless steel |
| DENHN400/SSS | 2-5 universal door closer | sat. stainless steel |

|                 |                                   |                      |
|-----------------|-----------------------------------|----------------------|
| DENHN400BCU/PB  | 2-5 universal door closer with BC | pol. brass           |
| DENHN400BCU/PNP | 2-5 universal door closer with BC | pol. nickel plated   |
| DENHN400BCU/SNP | 2-5 universal door closer with BC | sat. nickel plated   |
| DENHN400BCU/PSS | 2-5 universal door closer with BC | pol. stainless steel |
| DENHN400BCU/SSS | 2-5 universal door closer with BC | sat. stainless steel |

|               |                                   |                      |
|---------------|-----------------------------------|----------------------|
| DENHN400H/PB  | 2-5 universal door closer with DA | pol. brass           |
| DENHN400H/PNP | 2-5 universal door closer with DA | pol. nickel plated   |
| DENHN400H/SNP | 2-5 universal door closer with DA | sat. nickel plated   |
| DENHN400H/PSS | 2-5 universal door closer with DA | pol. stainless steel |
| DENHN400H/SSS | 2-5 universal door closer with DA | sat. stainless steel |

### 'Hi-Finish' cover, black arm & universal bracket

|                 |                           |                 |
|-----------------|---------------------------|-----------------|
| DENHN400/PB/BK  | 2-5 universal door closer | PB / black arm  |
| DENHN400/PNP/BK | 2-5 universal door closer | PNP / black arm |
| DENHN400/SNP/BK | 2-5 universal door closer | SNP / black arm |
| DENHN400/PSS/BK | 2-5 universal door closer | PSS / black arm |
| DENHN400/SSS/BK | 2-5 universal door closer | SSS / black arm |

|                    |                                   |                 |
|--------------------|-----------------------------------|-----------------|
| DENHN400BCU/PB/BK  | 2-5 universal door closer with BC | PB / black arm  |
| DENHN400BCU/PNP/BK | 2-5 universal door closer with BC | PNP / black arm |
| DENHN400BCU/SNP/BK | 2-5 universal door closer with BC | SNP / black arm |
| DENHN400BCU/PSS/BK | 2-5 universal door closer with BC | PSS / black arm |
| DENHN400BCU/SSS/BK | 2-5 universal door closer with BC | SSS / black arm |

|                  |                                   |                 |
|------------------|-----------------------------------|-----------------|
| DENHN400H/PB/BK  | 2-5 universal door closer with DA | PB / black arm  |
| DENHN400H/PNP/BK | 2-5 universal door closer with DA | PNP / black arm |
| DENHN400H/SNP/BK | 2-5 universal door closer with DA | SNP / black arm |
| DENHN400H/PSS/BK | 2-5 universal door closer with DA | PSS / black arm |
| DENHN400H/SSS/BK | 2-5 universal door closer with DA | SSS / black arm |

Power adjustment: via a 5mm hex key.

Door weight: 40 - 100 Kgs.

Door width: 850 - 1250mm.

Supplied complete with fixing screws for timber and steel doors and full installation

*A comprehensive range of accessories is available - please contact the sales team for any special requirements.*

\* CE certification does not apply to the DA models



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### D&E NHN 400GL slide arm door closer

The NHN 400GL is a 2-5 variable multi-size door closer. It has successfully been type tested to EN1154:1997, EN 1634-1:2000 and is accredited with CE certification\*.

#### 'Hi-Finish' cover & slide arm

|                   |                               |                      |
|-------------------|-------------------------------|----------------------|
| DENHN400PB/GL     | slide arm door closer         | pol. brass           |
| DENHN400PNP/GL    | slide arm door closer         | pol. nickel plated   |
| DENHN400SNP/GL    | slide arm door closer         | sat. nickel plated   |
| DENHN400SSS/GL    | slide arm door closer         | sat. stainless steel |
| DENHN400PSS/GL    | slide arm door closer         | pol. stainless steel |
| DENHN400BC/PB/GL  | slide arm door closer with BC | pol. brass           |
| DENHN400BC/PNP/GL | slide arm door closer with BC | pol. nickel plated   |
| DENHN400BC/SNP/GL | slide arm door closer with BC | sat. nickel plated   |
| DENHN400BC/SSS/GL | slide arm door closer with BC | sat. stainless steel |
| DENHN400BC/PSS/GL | slide arm door closer with BC | pol. stainless steel |
| DENHN400H/PB/GL   | slide arm door closer with DA | pol. brass           |
| DENHN400H/PNP/GL  | slide arm door closer with DA | pol. nickel plated   |
| DENHN400H/SNP/GL  | slide arm door closer with DA | sat. nickel plated   |
| DENHN400H/SSS/GL  | slide arm door closer with DA | sat. stainless steel |
| DENHN400H/PSS/GL  | slide arm door closer with DA | pol. stainless steel |

Power adjustment: via a 5mm hex key.

Door weight: 40 - 100 Kgs.

Door width: 850 - 1250mm.

Supplied complete with fixing screws for timber and steel doors and full installation instructions.

*A comprehensive range of accessories is available -  
please contact the sales team for any special requirements.*



\* CE certification does not apply to the DA models

# D&E classique - T-shape door closer

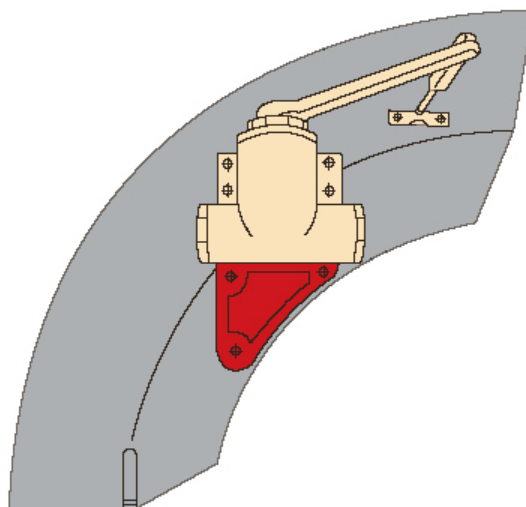
CI/SfB

31

49

September 2007

NO QUOTE  
5 YEARS  
GUARANTEE



## D&E Classique

The D&E **classique** is available fully reversible for left and right hand doors. It is supplied as standard for fig. 1 / standard arm installation but can be supplied with conversion bracket for parallel application where needed. Mounting brackets are available for **arched** or **narrow frame** doorways.

*DEGR03* size 3 - T-shape door closer champagne

Door width: 950mm  
Door weight: 60Kg

*DEGR04* size 4 - T-shape door closer champagne

Door width: 1100mm  
Door weight: 80Kg

*DEGR05* size 5 - T-shape door closer champagne

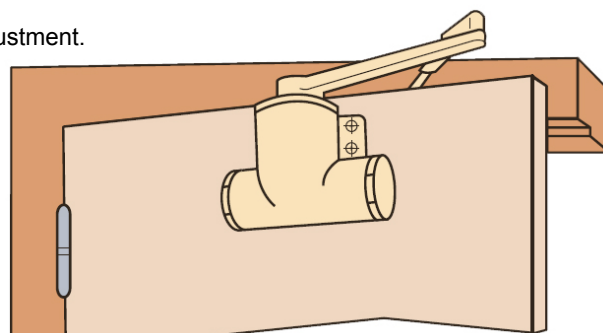
Door width: 1250mm  
Door weight: 100Kg

*DEGR06* size 6 - T-shape door closer champagne

Door width: 1400mm  
Door weight: 120Kg

Integral backcheck as standard

Hydraulic valve speed adjustment.



Sales: 01733 896123



D-1011

Fax: 01733 894466

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# D&E classique - T-shape door closer

|            |    |  |  |
|------------|----|--|--|
| CI/SfB     |    |  |  |
| 31         | 49 |  |  |
| April 2008 |    |  |  |

NO QUOTE  
5 YEARS  
GUARANTEE



## D&E Classique

The D&E **classique** is available fully reversible for left and right hand doors. It is supplied as standard for fig. 1 / standard arm installation but can be supplied with conversion bracket for parallel application where needed. Mounting brackets are available for **arched** or **narrow frame** doorways.

DEGR03/9      size 3 - T-shape door closer      champagne

Door width: 950mm  
Door weight: 60Kg

DEGR04/9      size 4 - T-shape door closer      champagne

Door width: 1100mm  
Door weight: 80Kg

DEGR05/9      size 5 - T-shape door closer      champagne

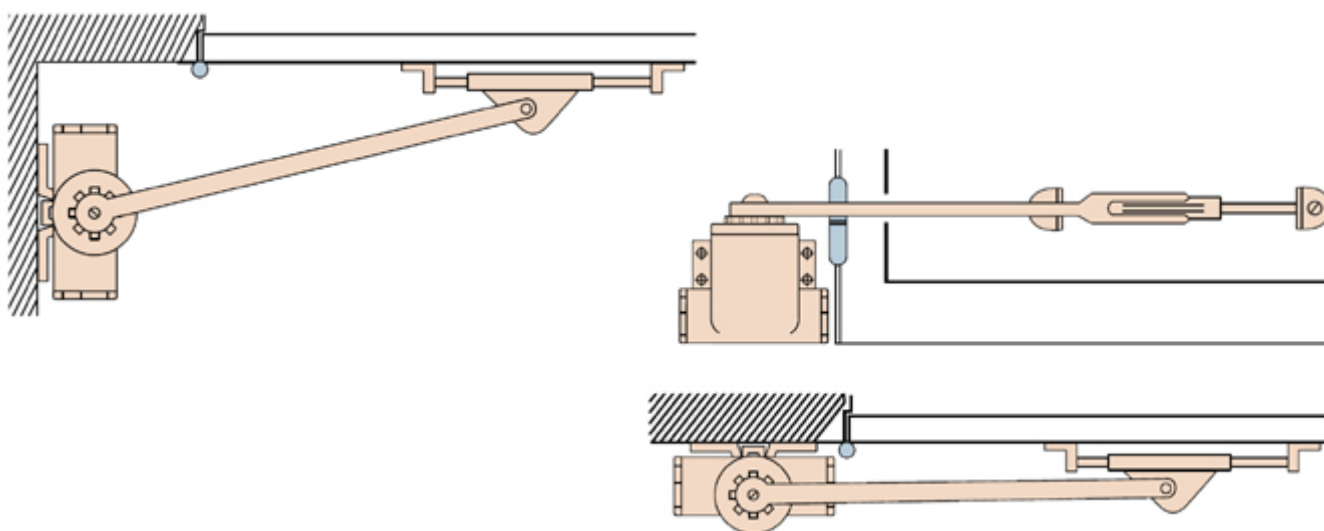
Door width: 1250mm  
Door weight: 100Kg

DEGR06/9      size 6 - T-shape door closer      champagne

Door width: 1400mm  
Door weight: 120Kg

Integral backcheck as standard

Hydraulic valve speed adjustment.



Sales: 01733 896123



D-1011A

Fax: 01733 894466

E&OE

|               |    |  |  |
|---------------|----|--|--|
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| 31            | 49 |  |  |
| December 2013 |    |  |  |



### Accessories:

#### **D&E Classique curved head bracket.**

**The D&E Classique curved head bracket is designed to allow your Classique to be installed on arch top doors.**

|           |                                |           |
|-----------|--------------------------------|-----------|
| DEGR03CHB | curved head bracket for DEGR03 | champagne |
| DEGR04CHB | curved head bracket for DEGR04 | champagne |
| DEGR05CHB | curved head bracket for DEGR05 | champagne |
| DEGR06CHB | curved head bracket for DEGR06 | champagne |

*Most common applications for this product is in Cathedrals, Churches, Monasteries, stately homes, listed buildings, hotels and bars that wish to maintain traditional aesthetics.*

**The Groom Classique is suitable for inward opening doors only**

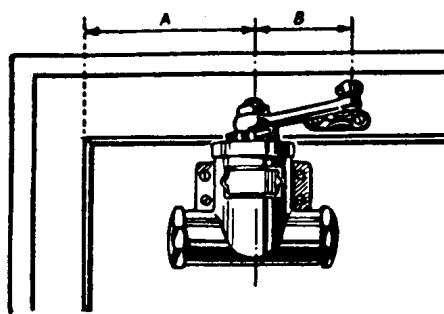


Fig 1. Door Hung  
On Left = RH Closer ( D )

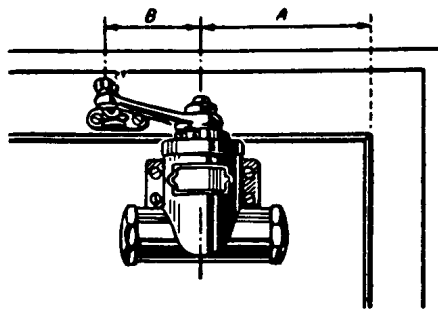


Fig 2. Door Hung  
On Right = LH Closer ( G )

Dimension A, the distance from the centre line of the hinge to the pinion of the closer, varies according to the size of the closer and the required opening angle of the door.

| Door Opening<br>To 90° |        | Door Opening<br>Beyond 90° |        |
|------------------------|--------|----------------------------|--------|
| Size                   | A      | Size                       | A      |
| 3                      | 240 mm | 3                          | 180 mm |
| 4                      | 260 mm | 4                          | 200 mm |
| 5                      | 310 mm | 5                          | 230 mm |
| 6                      | 350 mm | 6                          | 290 mm |

Dimension B, the distance from the pinion of the closer to the centre of the shoe, is ALWAYS 80mm when installed in standard configuration.

**Adjustment**

- 1) Adjust spring power by using the wrench provided to turn the ratchet from the hinge side to the lock side - ( Maximum 8 clicks )
- 2) Adjust the closing power to overcome latching action or air pressure resistance, adjust the threaded of the arm to match Fig 3. Fig 4 will effectively delete any latching action.
- 3) Adjust closing speed via the hydraulic valve located on the right side of the closer body.

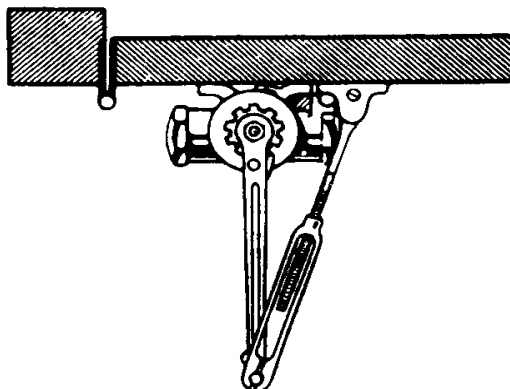


Fig 3.

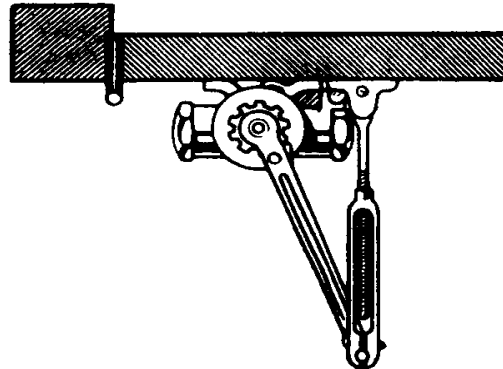


Fig 4.

### Reversing The Handing

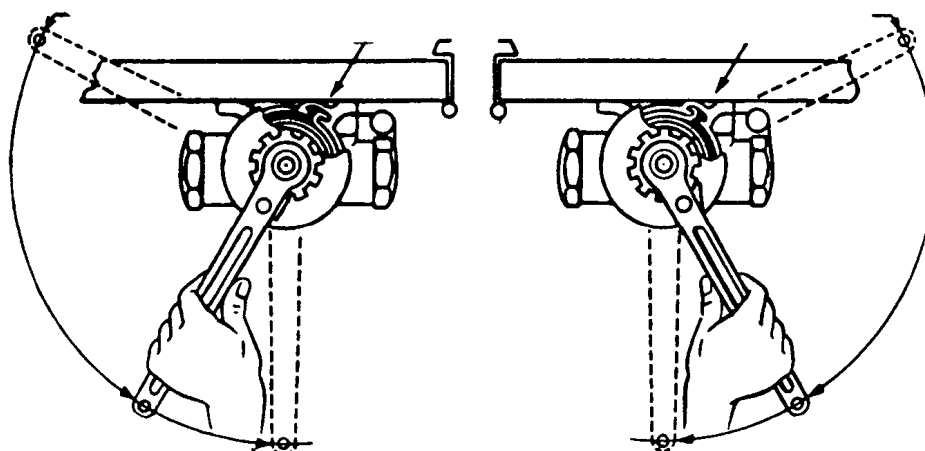


Fig 5a. Left Hand

Fig 5b. Right Hand

Fit the arm to obtain check action at the position shown behind the door .

Closers are normally supplied in right hand configuration. To change to left hand, remove the arm, ratchet and cover; withdraw the spring from the housing, reverse it and replace, ensuring that the tail of the spring is correctly located in the groove of the housing, i.e. RH closer - ( the tail points to the left - see Fig 5b ).

Replace the cover and the ratchet, ensuring that the slot of the ratchet housing is aligned with the inner tail of the spring.

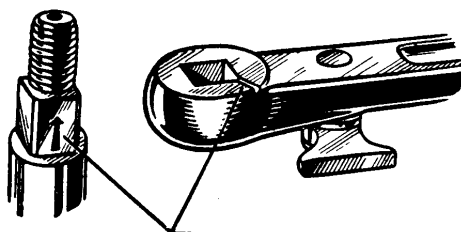
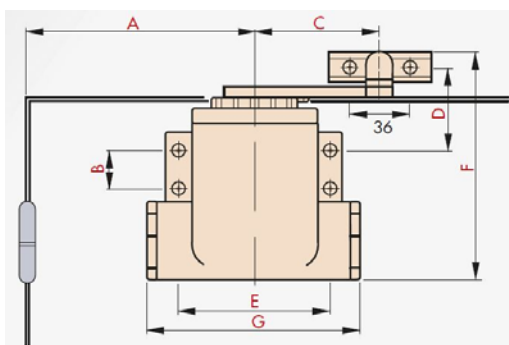


Fig 6.

When fitting the arm, ensure that the mark on the arm lines up with the arrow on the pinion, irrespective of the handing of the closer ( Fig 6 ). The exception to this is when the Conversion Bracket is to be installed, when the mark on the arm goes on the opposite side to the arrow on the pinion.



| Code                        | Size 3 | Size 4 | Size 5 | Size 6 |
|-----------------------------|--------|--------|--------|--------|
| A - Door Opening to 90°     | 240    | 260    | 310    | 350    |
| A - Door Opening Beyond 90° | 180    | 200    | 230    | 290    |
| B                           | 29     | 33     | 35     | 40     |
| C                           | 80     | 80     | 80     | 80     |
| D                           | 48     | 48     | 60     | 72     |
| E                           | 85     | 96     | 107    | 120    |
| F                           | 145    | 160    | 185    | 215    |
| G                           | 135    | 145    | 170    | 194    |



### D&E Auto-hinge 1000 series.

The 1000 series is a door closer built into a pair of hinges. Comprising of 1 spring hinge and 1 damper hinge and offers a fully adjustable, controlled closing action.

#### Suitable for use on internal doors up to 35Kg.

|             |                 |     |
|-------------|-----------------|-----|
| DE1111/35/L | auto-hinge - LH | SAA |
| DE1111/35/R | auto-hinge - RH | SAA |

|              |                          |     |
|--------------|--------------------------|-----|
| DE1111/35/SL | auto-hinge with H/O - LH | SAA |
| DE1111/35/SR | auto-hinge with H/O - RH | SAA |

|          |                                     |     |
|----------|-------------------------------------|-----|
| DE1110/L | blank hinge - non load bearing - LH | SAA |
| DE1110/R | blank hinge - non load bearing - RH | SAA |

Hold open angle: 85° (hold open model only)

Opening angle: 180°

Door weight: 1 pr 35Kg

Packaging: 1 / 10 prs

Supplied handed (see page D-1023)

Supplied complete with fixing screws

See page D-1022 & D-1023 for all technical information including model specification for timber / metal doors in timber / metal frames etc...

### D&E Auto-hinge 100 series.

The 100 series is a door closer built into a pair of hinges. Comprising of 1 spring hinge and 1 damper hinge and offers a fully adjustable, controlled closing action.

#### Suitable for use on internal doors up to 40Kg.

|            |                 |        |
|------------|-----------------|--------|
| DE112/40/L | auto-hinge - LH | silver |
| DE112/40/R | auto-hinge - RH | silver |

|             |                          |        |
|-------------|--------------------------|--------|
| DE112/40/SL | auto-hinge with H/O - LH | silver |
| DE112/40/SR | auto-hinge with H/O - RH | silver |

|         |                                     |        |
|---------|-------------------------------------|--------|
| DE110/L | blank hinge - non load bearing - LH | silver |
| DE110/R | blank hinge - non load bearing - RH | silver |

Opening angle: 180°

Hold open angle: 85° & 150° (hold open model only)

Door weight: 1 pr 40Kg

Packaging: 1 / 10 prs

Supplied handed (see page D-1023)

Supplied complete with fixing screws

See page D-1022 & D-1023 for all technical information including model specification for timber / metal doors in timber / metal frames etc...

### D&E Auto-hinge 100 series.

The 100 series is a door closer built into a pair of hinges. Comprising of 1 spring hinge and 1 damper hinge and offers a fully adjustable, controlled closing action.

#### Suitable for use on internal doors up to 60Kg.

|            |                 |        |
|------------|-----------------|--------|
| DE113/60/L | auto-hinge - LH | silver |
| DE113/60/R | auto-hinge - RH | silver |

|             |                          |        |
|-------------|--------------------------|--------|
| DE113/60/SL | auto-hinge with H/O - LH | silver |
| DE113/60/SR | auto-hinge with H/O - RH | silver |

|         |                                     |        |
|---------|-------------------------------------|--------|
| DE110/L | blank hinge - non load bearing - LH | silver |
| DE110/R | blank hinge - non load bearing - RH | silver |

Opening angle: 180°

Hold open angle: 85° & 150° (*hold open model only*)

Door weight: 1 pr 60Kg

Packaging: 1 / 10 prs

Supplied handed (see page D-1023)

Supplied complete with fixing screws

See page D-1022 & D-1023 for all technical information including model specification for timber / metal doors in timber / metal frames etc...

### D&E Auto-hinge 100 tri-set series.

The 113 series tri-set is a door closer built into a set of hinges. The tri-set comprises of 2 spring hinges and 1 damper hinge and offers a fully adjustable, controlled closing action.

#### Suitable for use on internal doors up to 80Kg.

|            |                         |        |
|------------|-------------------------|--------|
| DE113/80/L | tri-set auto-hinge - LH | silver |
| DE113/80/R | tri-set auto-hinge - RH | silver |

|             |                                  |        |
|-------------|----------------------------------|--------|
| DE113/80/SL | tri-set auto-hinge with H/O - LH | silver |
| DE113/80/SR | tri-set auto-hinge with H/O - RH | silver |

|         |                                     |        |
|---------|-------------------------------------|--------|
| DE110/L | blank hinge - non load bearing - LH | silver |
| DE110/R | blank hinge - non load bearing - RH | silver |

Opening angle: 180°

Hold open angle: 85° & 150° (*hold open model only*)

Door weight: 1 set 80Kg

Packaging: 1 / 10 sets

Supplied handed (see page D-1023)

Supplied complete with fixing screws

See page D-1022 & D-1023 for all technical information including model specification for timber / metal doors in timber / metal frames etc...



### ***D&E Auto-hinge 100 PC series - weather resistant.***

The D&E 113PC series is a door closer built into a pair of hinges. Comprising of 1 spring hinge and 1 damper hinge and offers a fully adjustable, controlled closing action which is enhanced by a thermal compensator.

#### ***Suitable for use on external doors up to 60Kg.***

|                     |                    |        |
|---------------------|--------------------|--------|
| <i>DE113PC/60/L</i> | PC auto-hinge - LH | silver |
| <i>DE113PC/60/R</i> | PC auto-hinge - RH | silver |

|                      |                             |        |
|----------------------|-----------------------------|--------|
| <i>DE113PC/60/SL</i> | PC auto-hinge with H/O - LH | silver |
| <i>DE113PC/60/SR</i> | PC auto-hinge with H/O - RH | silver |

|                  |  |        |
|------------------|--|--------|
| <i>DE110PC/L</i> | PC blank hinge - non load bearing - LH | silver |
| <i>DE110PC/R</i> | PC blank hinge - non load bearing - RH | silver |

Opening angle: 180°

Hold open angle: 85° & 150°

Door weight: 1 pr 60Kg

Packaging: 1 / 10 prs

Supplied handed (see page D-1023)

Supplied complete with fixing screws

See page D-1022 & D-1023 for all technical information including model specification for timber / metal doors in timber / metal frames etc...

**D&E Auto-hinge NK153 series.**

The D&E NK153 series is a door closer built into either a pair or set of hinges. There are two door weight configurations. The 60Kg models comprise of 1 spring hinge and 1 damper hinge. The 80Kg models comprise of 2 spring hinges and 1 damper hinge. Both offer a fully adjustable, controlled closing action.

**Suitable for use on frameless glass doors up to 60Kg.**

|              |                       |        |
|--------------|-----------------------|--------|
| DENK153/60/L | NK153 auto-hinge - LH | silver |
| DENK153/60/R | NK153 auto-hinge - RH | silver |

|               |                               |        |
|---------------|-------------------------------|--------|
| DENK153/60/SL | NK153 auto-hinge with HO - LH | silver |
| DENK153/60/SR | NK153 auto-hinge with HO - RH | silver |

|           |                                     |        |
|-----------|-------------------------------------|--------|
| DENK150/L | blank hinge - non load bearing - LH | silver |
| DENK150/R | blank hinge - non load bearing - RH | silver |

Opening angle: 180°

Hold open angle: 85° & 150°

Door weight: 1 pair 60Kg

Glass thickness: 8 to 12mm

Door dimensions: 2100 x 900mm

Packaging: 1 / 10 prs

Supplied handed (see page D-1023)

Supplied complete with fixing screws.

**Suitable for use on frameless glass doors up to 80Kg.**

|              |                               |        |
|--------------|-------------------------------|--------|
| DENK153/80/L | NK153 tri-set auto-hinge - LH | silver |
| DENK153/80/R | NK153 tri-set auto-hinge - RH | silver |

|               |                                       |        |
|---------------|---------------------------------------|--------|
| DENK153/80/SL | NK153 tri-set auto-hinge with HO - LH | silver |
| DENK153/80/SR | NK153 tri-set auto-hinge with HO - RH | silver |

|           |                                     |        |
|-----------|-------------------------------------|--------|
| DENK150/L | blank hinge - non load bearing - LH | silver |
| DENK150/R | blank hinge - non load bearing - RH | silver |

Opening angle: 180°

Hold open angle: 85° & 150°

Door weight: 1 set 80Kg

Glass thickness: 8 to 12mm

Door dimensions: 2200 x 1000mm

Packaging: 1 / 10 prs

Supplied handed (see page D-1023)

Supplied complete with fixing screws

| Part No.          |                | Hand | Max Door Weight | Hold Open Position | Max Opening Angle | Max Door Dimensions |
|-------------------|----------------|------|-----------------|--------------------|-------------------|---------------------|
| Without hold open | With hold open |      |                 |                    |                   |                     |

## 1000 series

### **To suit a Timber door in a Timber frame**

|       |        |       |      |     |      |                                      |
|-------|--------|-------|------|-----|------|--------------------------------------|
| 1111R | 1111SR | Right | 35Kg | 85° | 180° | W: 850mm<br>H: 2000mm<br>T: min 30mm |
| 1111L | 1111SL | Left  |      |     |      |                                      |
| 1110R | —      | Right | —    | —   |      |                                      |
| 1110L | —      | Left  | —    | —   |      |                                      |

## 100 series

### **To suit a Timber door in a Timber frame**

|                 |                  |       |      |                  |      |                                       |
|-----------------|------------------|-------|------|------------------|------|---------------------------------------|
| 112R            | 112SR            | Right | 40Kg | 85°<br>&<br>150° | 180° | W: 900mm<br>H: 2100mm<br>T: min 30mm  |
| 112L            | 112SL            | Left  |      |                  |      |                                       |
| 113R            | 113SR            | Right | 60Kg |                  |      | W: 1000mm<br>H: 2200mm<br>T: min 30mm |
| 113L            | 113SL            | Left  |      |                  |      |                                       |
| 113R<br>Tri-Set | 113SR<br>Tri-Set | Right | 80Kg |                  |      |                                       |
| 113L<br>Tri-Set | 113SL<br>Tri-Set | Left  |      |                  |      |                                       |
| 110R            | —                | Right | —    | —                |      |                                       |
| 110L            | —                | Left  |      |                  |      |                                       |

### **To suit a Timber door in a Steel frame**

|        |          |       |      |            |      |                                      |
|--------|----------|-------|------|------------|------|--------------------------------------|
| 122R-T | 122SR -T | Right | 40Kg | 85° & 150° | 180° | W: 900mm<br>H: 2100mm<br>T: min 30mm |
| 122L-T | 122SL-T  | Left  |      |            |      |                                      |
| 120R-T | —        | Right | —    | —          |      |                                      |
| 120L-T | —        | Left  |      |            |      |                                      |

### **To suit a Steel door in a Steel frame**

|        |         |       |      |            |      |                                      |
|--------|---------|-------|------|------------|------|--------------------------------------|
| 143R-T | 143SR-T | Right | 60Kg | 85° & 150° | 180° | W: 900mm<br>H: 2100mm<br>T: min 30mm |
| 143L-T | 143SL-T | Left  |      |            |      |                                      |
| 140R-T | —       | Right | —    | —          |      |                                      |
| 140L-T | —       | Left  |      |            |      |                                      |

### **To suit a Steel door in a Steel frame**

|        |         |       |       |            |      |                                       |
|--------|---------|-------|-------|------------|------|---------------------------------------|
| 244R-T | 244SR-T | Right | 120Kg | 85° & 150° | 180° | W: 1200mm<br>H: 2100mm<br>T: min 40mm |
| 244L-T | 244SL-T | Left  |       |            |      |                                       |
| 240R-T | —       | Right | —     | —          |      |                                       |
| 120L-T | —       | Left  |       |            |      |                                       |

| Part No.          |                | Hand | Max Door Weight | Hold Open Position | Max Opening Angle | Max Door Dimensions |
|-------------------|----------------|------|-----------------|--------------------|-------------------|---------------------|
| Without hold open | With hold open |      |                 |                    |                   |                     |

## **100 PC series**

### ***To suit timber, aluminium & lightweight steel doors***

|         |          |       |      |                  |      |                                      |
|---------|----------|-------|------|------------------|------|--------------------------------------|
| 113R-PC | 113SR-PC | Right | 60Kg | 85°<br>&<br>150° | 180° | W: 900mm<br>H: 2100mm<br>T: min 30mm |
| 113L-PC | 113SL-PC | Left  |      |                  |      |                                      |
| 110R-PC | —        | Right | —    | —                |      |                                      |
| 110L-PC | —        | Left  |      |                  |      |                                      |

### ***To suit aluminium, lightweight steel & partition doors***

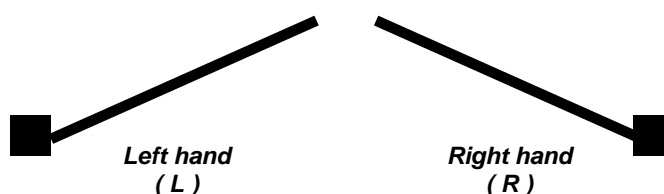
|         |          |       |      |            |      |                                      |
|---------|----------|-------|------|------------|------|--------------------------------------|
| 133R-PC | 133SR-PC | Right | 60Kg | 85° & 180° | 180° | W: 900mm<br>H: 2100mm<br>T: min 30mm |
| 133L-PC | 133SL-PC | Left  |      |            |      |                                      |
| 130R-PC | —        | Right | —    | —          |      |                                      |
| 130L-PC | —        | Left  |      |            |      |                                      |

### ***To suit a Steel door in a Steel frame***

|           |            |       |      |            |      |                                      |
|-----------|------------|-------|------|------------|------|--------------------------------------|
| 143R-T-PC | 143SR-T-PC | Right | 60Kg | 85° & 150° | 180° | W: 900mm<br>H: 2100mm<br>T: min 30mm |
| 143L-T-PC | 143SL-T-PC | Left  |      |            |      |                                      |
| 140R-T-PC | —          | Right | —    | —          |      |                                      |
| 140L-T-PC | —          | Left  |      |            |      |                                      |

### ***To suit a Steel door in a Steel frame***

|           |             |       |       |            |      |                                       |
|-----------|-------------|-------|-------|------------|------|---------------------------------------|
| 244R-T-PC | 244SR -T-PC | Right | 120Kg | 85° & 150° | 180° | W: 1200mm<br>H: 2100mm<br>T: min 40mm |
| 244L-T-PC | 244SL-T-PC  | Left  |       |            |      |                                       |
| 240R-T-PC | —           | Right | —     | —          |      |                                       |
| 240L-T-PC | —           | Left  |       |            |      |                                       |





## D&E Auto-hinge - Centre Hang type

The D&E Auto-Hinge centre hang type is a concealed single action pivot door closer. Suitable for use on doors ranging from 40Kg up to 510Kg, it offers a controlled closing action.

DEA8K/L                      centre hang auto-hinge - LH - 40Kg  
DEA8K/R                      centre hang auto-hinge - RH - 40Kg

DEA8/L                        centre hang auto-hinge - LH - 50Kg  
DEA8/R                        centre hang auto-hinge - RH - 50Kg

DEA10/L                      centre hang auto-hinge - LH - 85Kg  
DEA10/R                      centre hang auto-hinge - RH - 85Kg

DEA12/L                      centre hang auto-hinge - LH - 100Kg  
DEA12/R                      centre hang auto-hinge - RH - 100Kg

DEA14/L                      centre hang auto-hinge - LH - 130Kg  
DEA14/R                      centre hang auto-hinge - RH - 130Kg

DEA16/L                      centre hang auto-hinge - LH - 160Kg  
DEA16/R                      centre hang auto-hinge - RH - 160Kg

DEA18/L                      centre hang auto-hinge - LH - 200Kg  
DEA18/R                      centre hang auto-hinge - RH - 200Kg

DEA22/L                      centre hang auto-hinge - LH - 240Kg  
DEA22/R                      centre hang auto-hinge - RH - 240Kg

DEA26/L                      centre hang auto-hinge - LH - 310Kg  
DEA26/R                      centre hang auto-hinge - RH - 310Kg

DEA30/L                      centre hang auto-hinge - LH - 410Kg  
DEA30/R                      centre hang auto-hinge - RH - 410Kg

DEA30H/L                    centre hang auto-hinge - LH - 510Kg  
DEA30H/R                    centre hang auto-hinge - RH - 510Kg

Opening angle:            180°

Door weight:              all door weights shown above are subject to certain criteria - see pages D-1025 & D-1026 for further information.

Finish:                      stove enamelled

Packaging:                each

Supplied handed (see page D-1025)

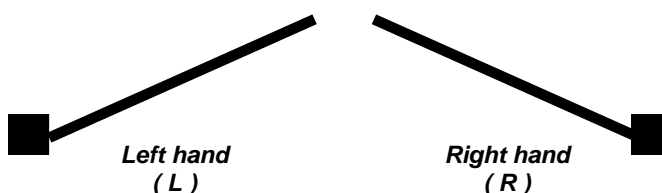
Supplied complete with fixing screws

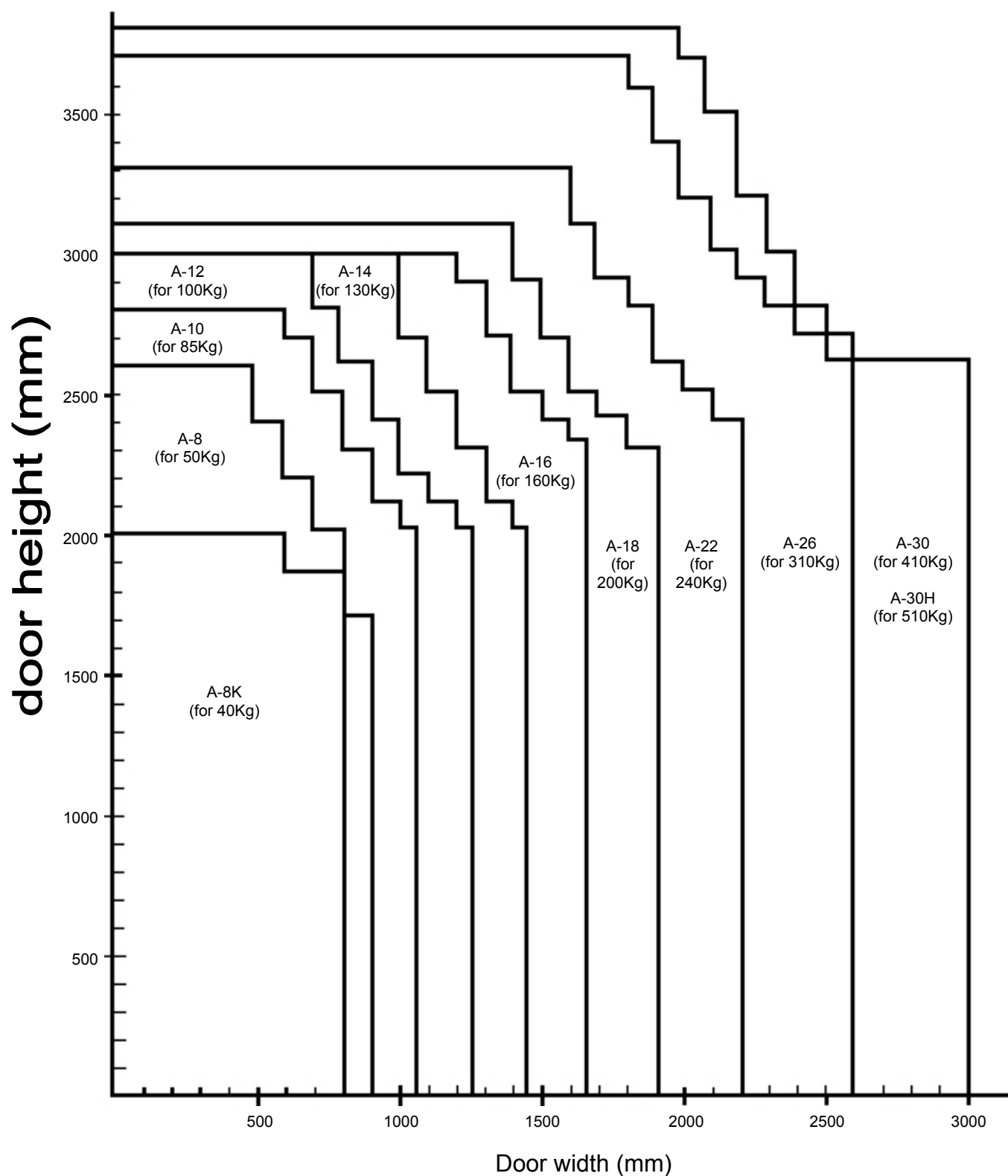


| model no. | door dimensions (mm) |            |           | max door weight | standard closing force | max opening angle |
|-----------|----------------------|------------|-----------|-----------------|------------------------|-------------------|
|           | width                | height     | thickness |                 |                        |                   |
| A-8K      | 800 (max)            | 1850 (max) | 36 (min)  | 40              | 6.9 N-m                | 180°              |
| A-8       |                      | 2000       |           | 50              | 8.9 N-m                |                   |
| A-10      | 1000                 | 2100       | 40        | 85              | 10.8 N-m               |                   |
| A-12      | 1200                 |            |           | 100             | 15.7 N-m               |                   |
| A-14      | 1400                 |            |           | 130             | 19.7 N-m               |                   |
| A-16      | 1600                 | 2400       | 45        | 160             | 24.6 N-m               |                   |
| A-18      | 1800                 |            | 50        | 200             | 41.2 N-m               |                   |
| A-22      | 2200                 |            |           | 240             | 49.1 N-m               |                   |
| A-26      | 2600                 | 2600       | 55        | 310             | 60.9 N-m               |                   |
| A-30      | 3000                 |            |           | 410             | 68.7 N-m               |                   |
| A-30H     |                      |            |           | 510             |                        |                   |

1. Select an appropriate model according to the dimensions (height x width) of the door.  
(See chart on page D-1026)
  2. Ensure that the door weight is within the guidelines set out in the table below.
- N.B. The chart on page D-1026 is based on a wind velocity of 3m/sec. If being used in conjunction with a smoke ventilation system or should the wind conditions be any greater then please contact the sales office.

| <i>model</i>     | <i>weight / 1m<sup>2</sup></i> | <i>type of door</i>                  |
|------------------|--------------------------------|--------------------------------------|
| A-8K             | 27Kg/m <sup>2</sup> max        | steel door<br>(only for wicket door) |
| A-8              | 31Kg/m <sup>2</sup> max        | steel door                           |
| A-10, A-12       | 39Kg/m <sup>2</sup> max        |                                      |
| A-14, A-16       | 41Kg/m <sup>2</sup> max        |                                      |
| A-18, A-22, A-26 | 45Kg/m <sup>2</sup> max        |                                      |
| A-30             | 52Kg/m <sup>2</sup> max        |                                      |
| A-30H            | 65Kg/m <sup>2</sup> max        |                                      |





|                |    |  |  |
|----------------|----|--|--|
| CI/SfB         |    |  |  |
| 31             | 49 |  |  |
| September 2007 |    |  |  |



## D&E Soss invisible door closer hinge

The D&E Soss invisible door closer hinge is a completely concealed door closer. It is ideally suited to environments where an overhead closer can not be installed.

For use with the Soss DE218 hinges only.

Fire pack available for use on 30 minute fire doors - *contact the office for details.*

|             |                         |                    |
|-------------|-------------------------|--------------------|
| DE218DC/B   | sooss door closer hinge | brass plated       |
| DE218DC/SNP | sooss door closer hinge | sat. nickel plated |
| DE218F/B    | sooss fire rated hinge  | brass plated       |
| DE218F/SNP  | sooss fire rated hinge  | sat. nickel plated |

Door weight: 25Kg

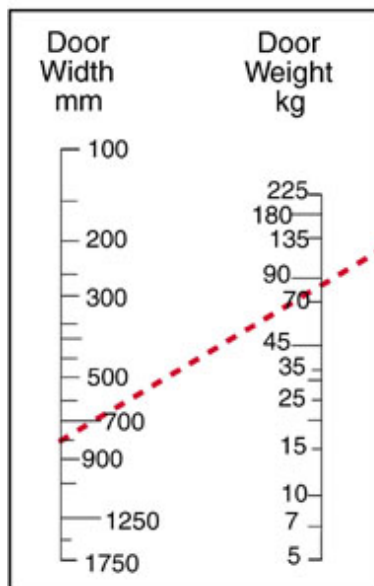
*Illustration shows 2 x standard DE218F Soss hinges & 1 x DE218DC Soss door closer hinge. Additional hinges, of either model, may be required. See below how to identify what your requirements are or please fax or email the office with the full details of your door, including the ironmongery.*

## Identifying the correct hinge

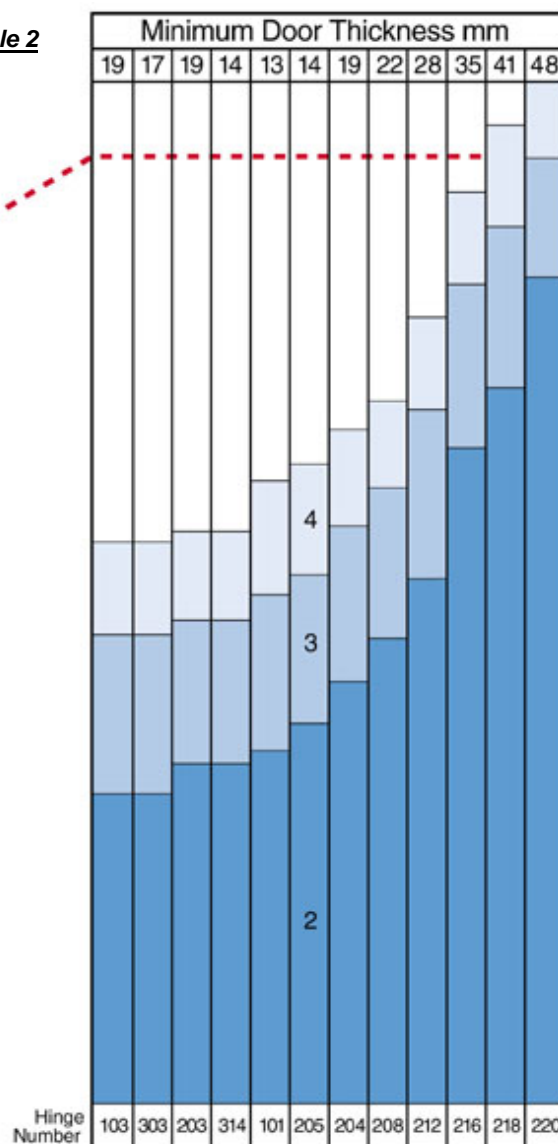
The stringent method of identifying the correct hinge for the task in hand is to follow these four easy steps.

1. Determine the width, thickness and height of the door.
2. Once the above is achieved go to table 1 *overleaf*. Locate the width and the weight of your door and draw a straight line through those two points, continuing the line on to the left hand edge of table 2. An example of this has been illustrated by a dotted line for a door 800mm wide and 85Kg in weight.
3. Where the line meets the left hand edge of table 2, draw a horizontal line the full width of the table. This determines your recommended hinge.
4. If you look at the dotted line this meets a light blue box, this indicates that if your door has a minimum thickness of 41mm then you can use 4 hinges type DE218, or, if you follow the line through to the next column because your door has a minimum thickness of 48mm then you must use 3 hinges of type DE220.

**Table 1**



**Table 2**





### D&E transom closer

The *DEGRL100* transom closer is a double action door closer that is installed in the transom of the door. Fully adjustable closing and latching action. Successfully type tested to EN1154 and has achieved the CE mark.

*DEGRL100450* double action transom door closer EN 1-4 complete with top arm and floor pivot silver

*DEGRL100455* body only - incl. cover plate silver

*DEGRL100820* bottom pivot with arm for side assembly

*DEGRL100830* top pivot with arm for side assembly

EN classification:

|   |   |     |   |   |   |
|---|---|-----|---|---|---|
| 3 | 8 | 1-4 | 1 | 1 | 4 |
|---|---|-----|---|---|---|

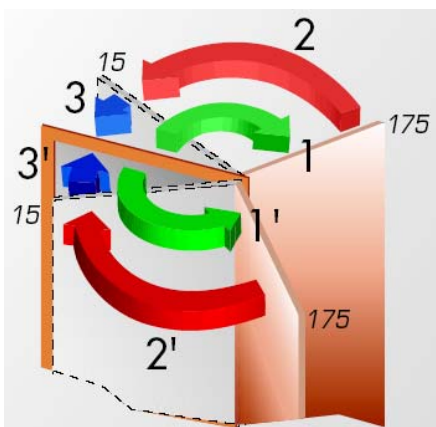
Size: 1-4 adjustable by allen key

Max door width: 1100mm

Max door weight: 120Kg

Max opening angle: 170 degrees

Dimensional data: see page D-1030 & D-1031

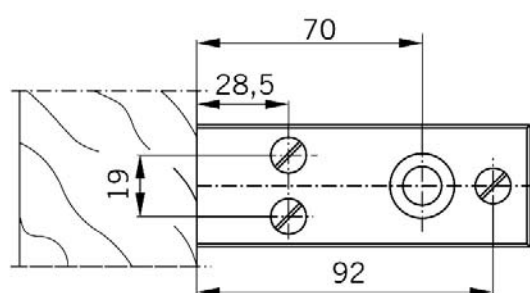
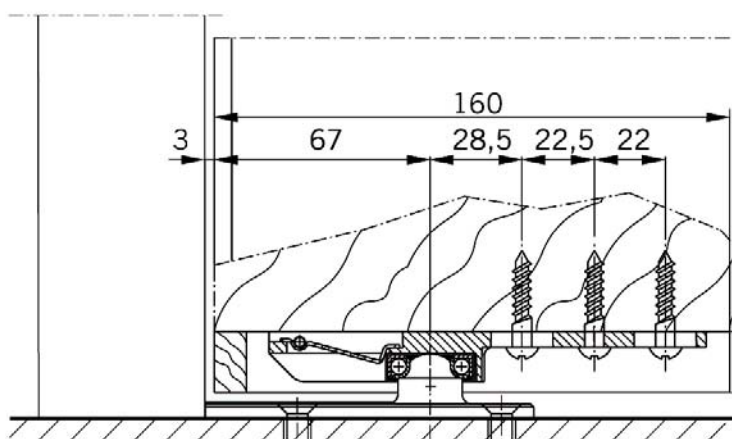
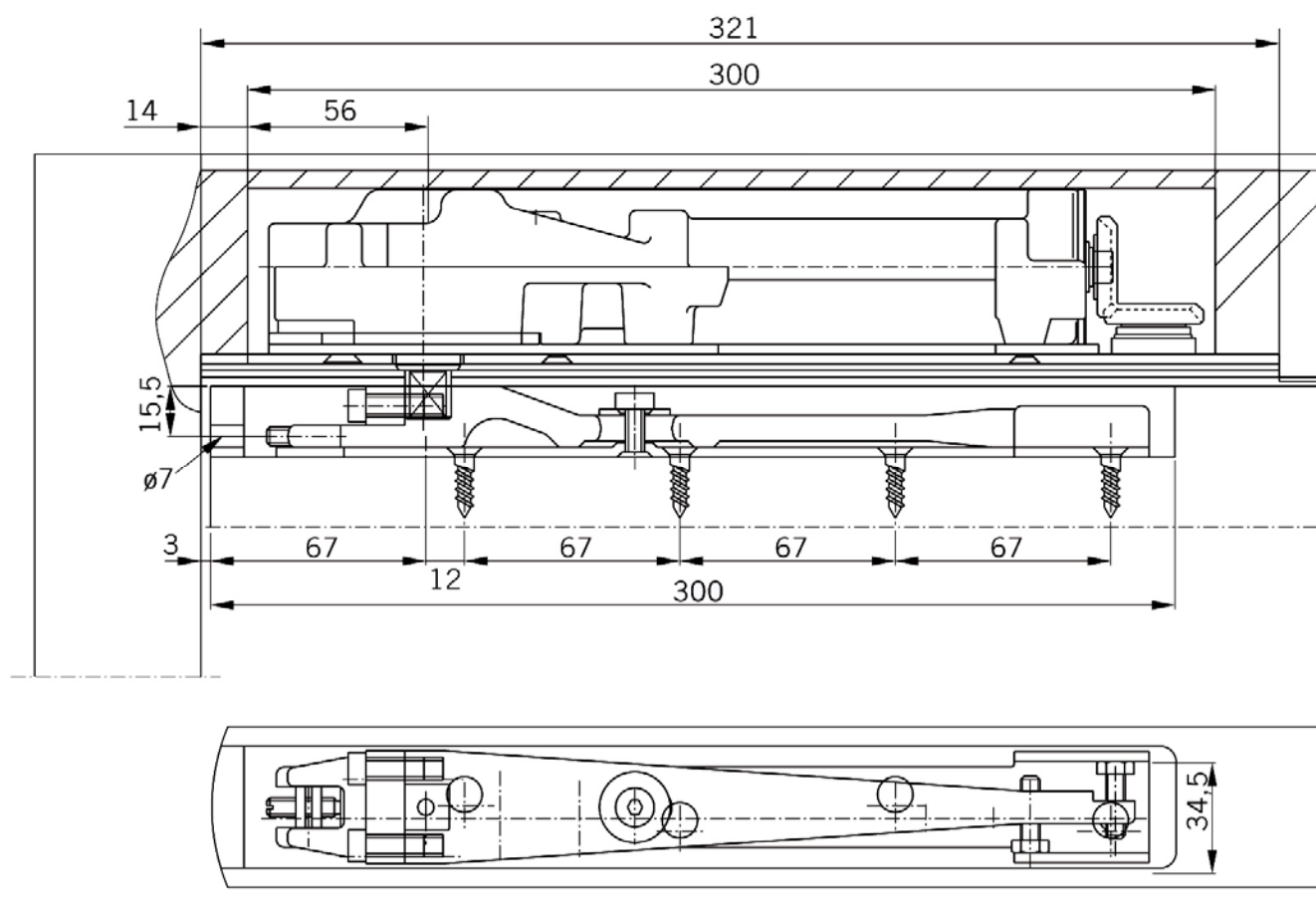


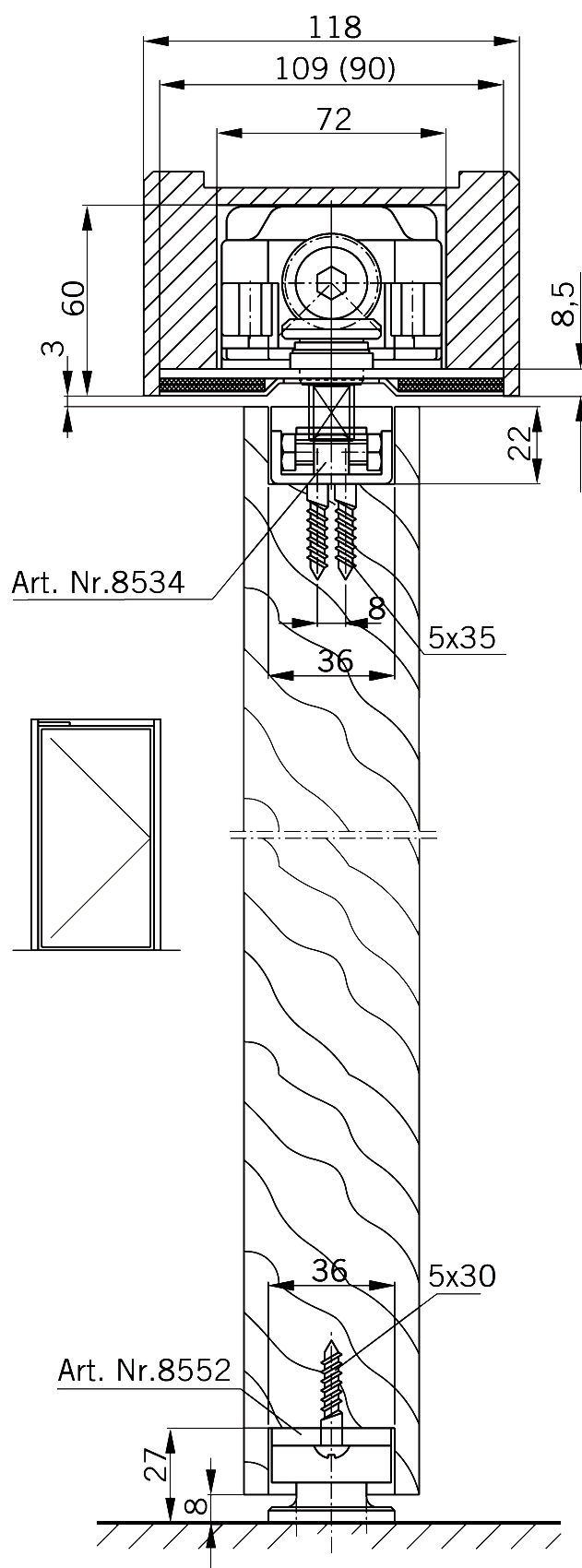
### Operation

Zone 1 & 1' door opening through a range of 175° in either direction.

Zone 2 & 2' 175° & 15° controlled close - adjustable by needle valve

Zone 3 & 3' 15° - 0° controlled latching angle - adjustable by needle valve









NO QUIBBLE  
5 YEARS  
GUARANTEE

### D&E transom door closer

The Groom GRL050 series transom door closer has been developed mainly for use with aluminium or steel door frames. The closer body is installed in the transom by setting the closer body in such a manner that the revolving shaft faces downwards and is connected with the driving arm for the opening and closing of the door. All mechanical functions have been installed in the upper side as to avoid cutting away the floor as required in the case of a floor spring. Successfully type tested to EN1154.

#### Side Load

|             |  |
|-------------|--|
| DEGRL053051 | transom door closer - EN1154 size 3 - complete         |
| DEGRL053041 | transom door closer with H/O- EN1154 size 3 - complete |
| DEGRL054051 | transom door closer - EN1154 size 4 - complete         |
| DEGRL054041 | transom door closer with H/O- EN1154 size 4 - complete |

#### End Load

|             |  |
|-------------|--|
| DEGRL053052 | transom door closer - EN1154 size 3 - complete         |
| DEGRL053042 | transom door closer with H/O- EN1154 size 3 - complete |
| DEGRL054052 | transom door closer - EN1154 size 4 - complete         |
| DEGRL054042 | transom door closer with H/O- EN1154 size 4 - complete |

#### Accessories

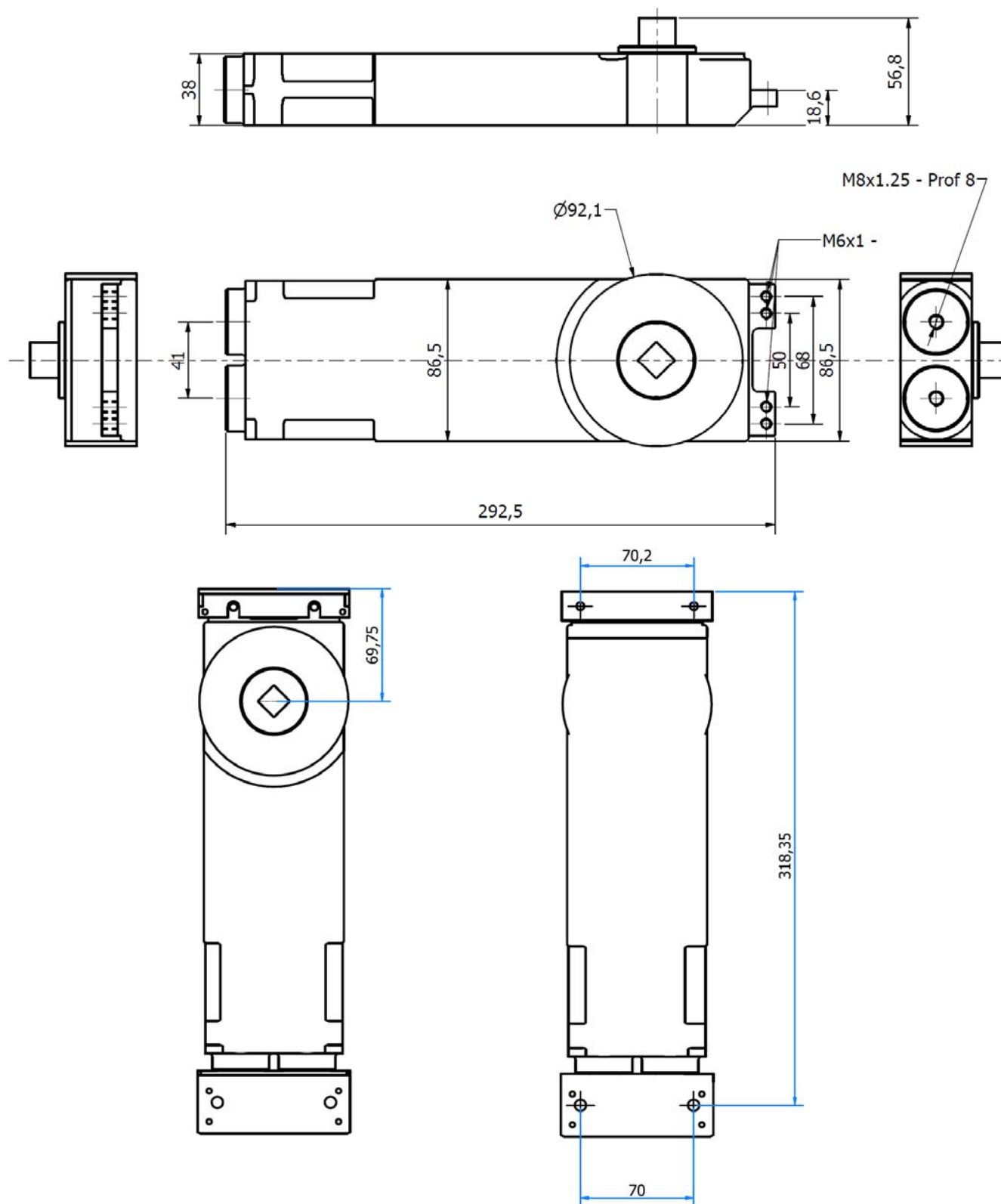
|             |                                      |
|-------------|--------------------------------------|
| DEGRL000831 | RA-853A-40 side load arm             |
| DEGRL000832 | RA-513A-77 end load arm              |
| DEGRL000833 | RA-R513A-73 pinch free side load arm |
| DEGRL000821 | SCR-Q101 heavy duty bottom pivot     |

|                    |        |   |   |   |   |   |   |
|--------------------|--------|---|---|---|---|---|---|
| EN classification: | Size 3 | 3 | 8 | 3 | 0 | 1 | 4 |
|                    | Size 4 | 3 | 8 | 4 | 0 | 1 | 4 |

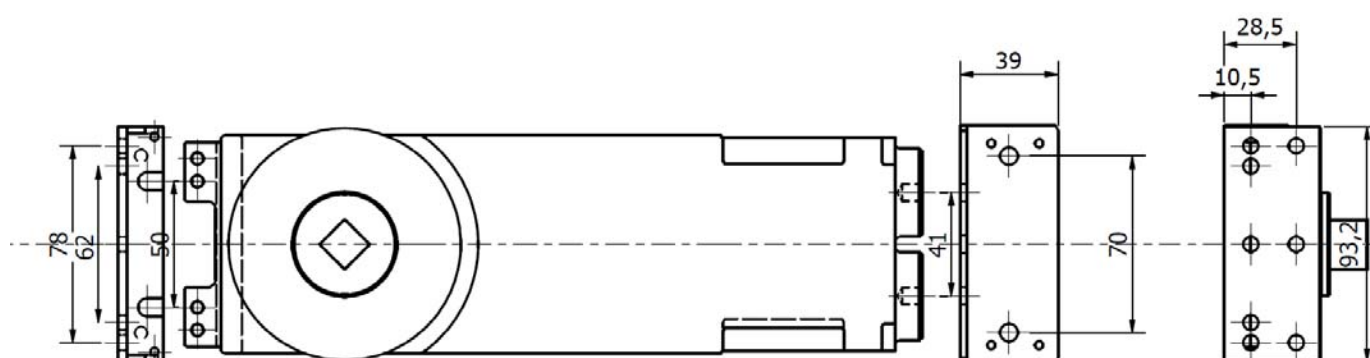
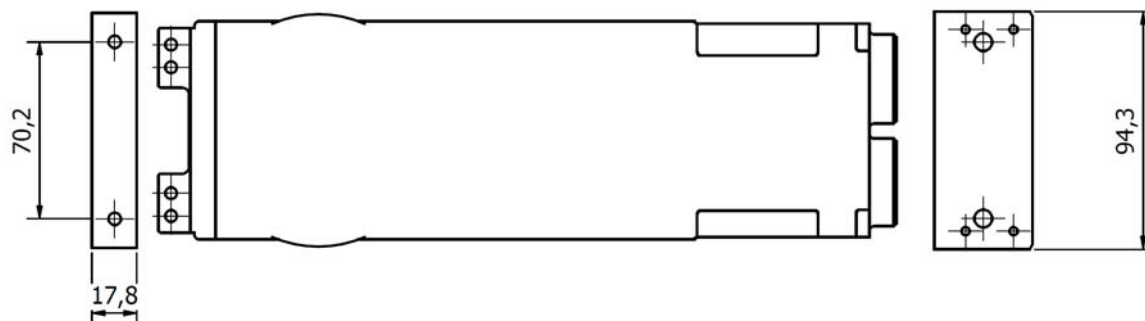
Std spindle height: 12mm  
17mm & 20mm are available to special order - see Groom brochure pages 28 & 29)

Hold open angle: 90°

|            |    |  |  |
|------------|----|--|--|
| CI/SfB     |    |  |  |
| 31         | 49 |  |  |
| March 2011 |    |  |  |



|            |    |  |  |
|------------|----|--|--|
| CI/SfB     |    |  |  |
| 31         | 49 |  |  |
| March 2011 |    |  |  |





## D&E floor spring

The *DEGRP100* floor spring is a double action door closer that is installed in the floor. Fully adjustable closing and latching action. Successfully type tested to EN1154 and has achieved the CE mark.

### Body only

*DEGRP100350* floor spring body without H/O - EN 3

*DEGRP100340* floor spring body with H/O - EN 3

EN classification:

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 3 | 8 | 3 | 1 | 1 | 4 |
|---|---|---|---|---|---|

Max door width: 950mm

Size: EN 3

Max door weight: 80Kg

*DEGRP100450* floor spring body without H/O - EN 4

*DEGRP100440* floor spring body with H/O - EN 4

EN classification:

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 3 | 8 | 4 | 1 | 1 | 4 |
|---|---|---|---|---|---|

Max door width: 1100mm

Size: EN 4

Max door weight: 100Kg

*DEGRP100820* cover plate sat. stainless steel

*DEGRP100810* square pivot for *DEGRP100*

*DEGRP100811* rectangular pivot for *DEGRP100*

*DEGRP100820* aluminium top centre for *DEGRP100*

*DEGRP100821* steel top centre for *DEGRP100*

*DEGRP100822* hinge bearing

*DEGRP100810* bottom strap for rectangular pivot

*DEGRP100810* bottom strap for rectangular pivot for use on aluminium doors

Size: 1-4 adjustable by allen key

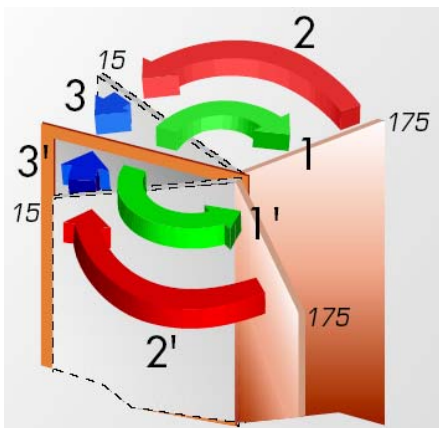
Max door width: 1100mm

Max door weight: 120Kg

Max opening angle: 170 degrees

Dimensional data: see page D-1034

|                |    |  |  |
|----------------|----|--|--|
| CI/SfB         |    |  |  |
| 31             | 49 |  |  |
| September 2007 |    |  |  |



## Operation

Zone 1 & 1'

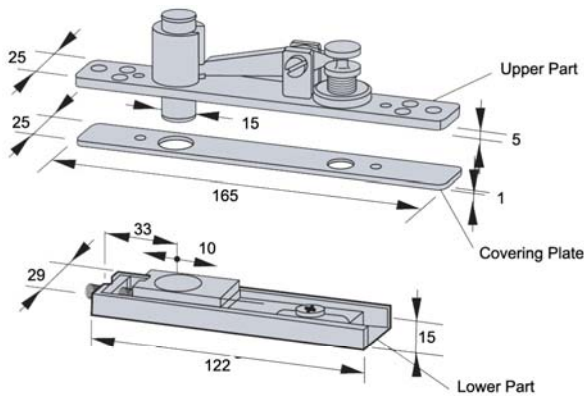
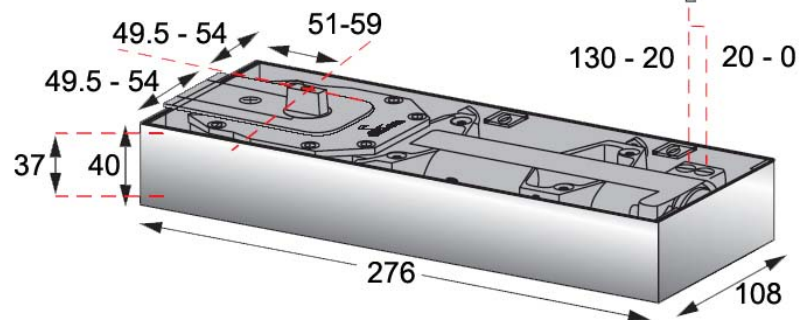
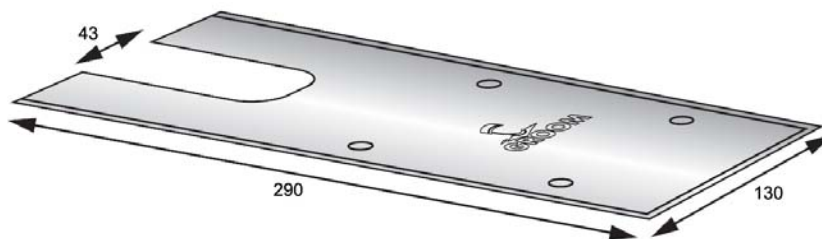
door opening through a range of 175° in either direction.

Zone 2 & 2'

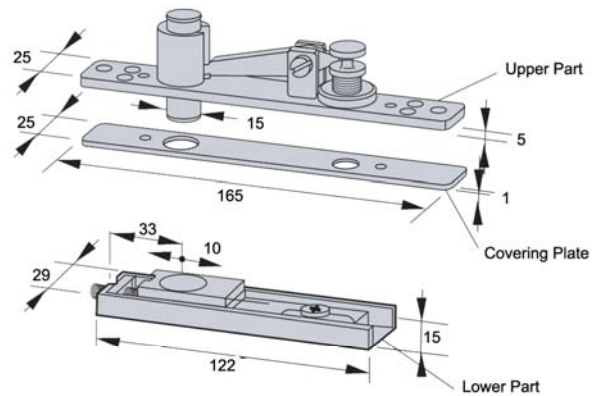
175° & 15° controlled close - adjustable by needle valve

Zone 3 & 3'

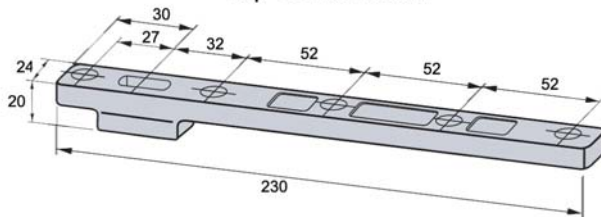
15° - 0° controlled latching angle



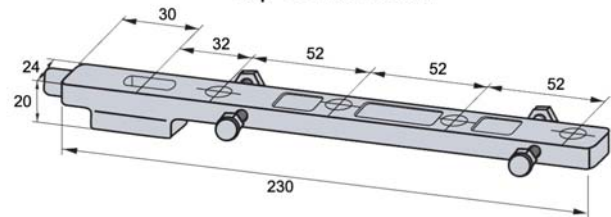
Top Centre Steel



Top Centre Steel



Bottom strap



Bottom strap - to suit aluminium door

|               |    |  |  |
|---------------|----|--|--|
| CI/SfB        |    |  |  |
| 31            | 49 |  |  |
| December 2013 |    |  |  |



### D&E hydraulic gate closer

The 'adeco' DEDC2600 gate closer is a single action closer with controlled closing action. The separate adjustment for both the closing & latching speeds allow for a personalised closing motion. The DEDC2600 is also supplied as standard with an optional hold open facility.

DEDC2600 gate closer black

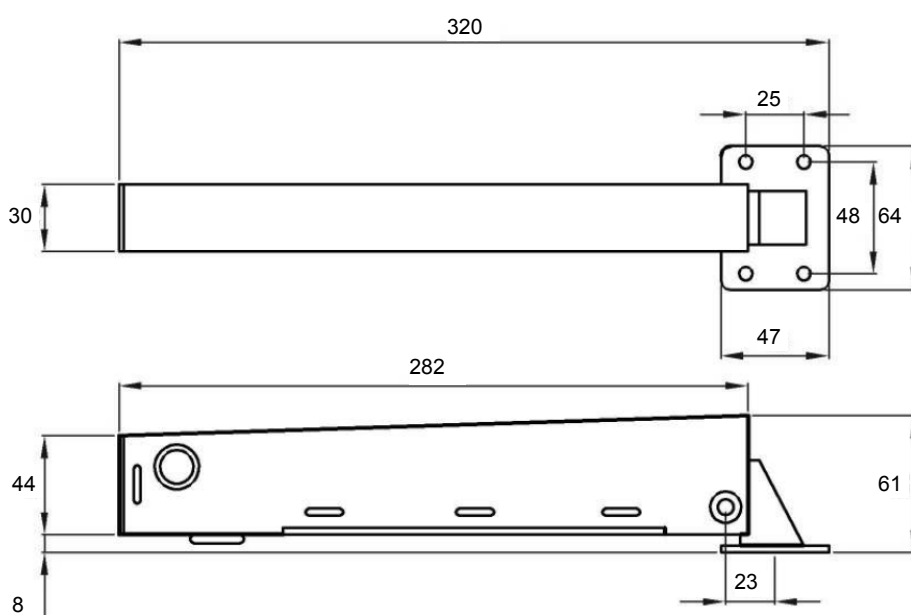
Max gate width: 1000mm

Gate weight: 50Kg

Hold open angle: 90°

Max opening angle: 90°

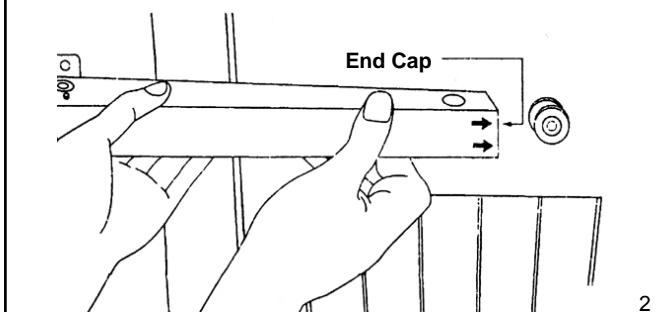
Suitable for use with conventional butt hinges only.



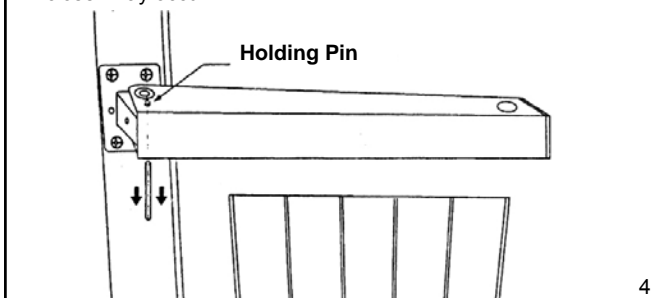
- The DC2600 can be installed at the top, middle or bottom of the gate on the 'PULL' side only.
- The face of the gate must be flush with the face of the gatepost.
- The gate should be hinged as close to the gate post as possible.
- The pivot point of the closer must be inline with the centre pivot line of the hinges. It may be necessary to fabricate a bracket or spacer to allow the closer to be installed correctly.
- The gate must swing freely on its hinges prior to installing the closer and the hinges must be greased regularly.
- The guide roller must be fitted. It may be necessary to fabricate a bracket / spacer to mount receive the guide roller.
- The gate must not be allowed to be opened more than 90°. If this is a possibility then a floor mounted door / gate stop should be installed.
- The holding pin (see fig. 4) must not be removed until the closer is fitted.

Maximum Gate Weight: 50Kgs / Maximum Gate Width: 1000mm

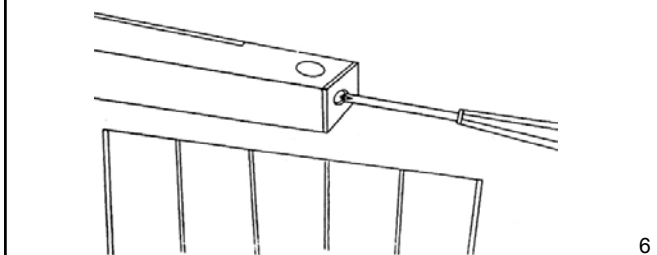
- 2:** Remove the end cap and slide the closer on to the guide roller. Replace the end cap.



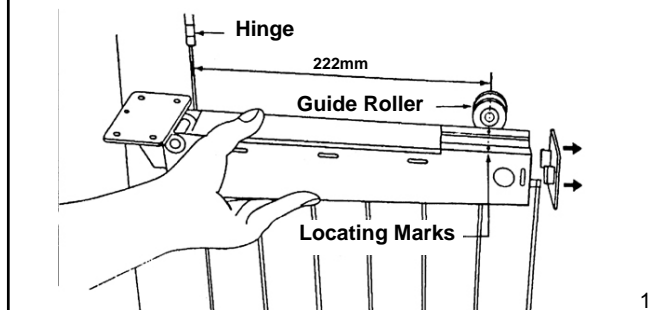
- 4:** Open the gate slowly until the holding pin either drops out or can be removed easily. If the holding pin is not removed prior to operating the gate, then the gate will not open and damage the closer may occur.



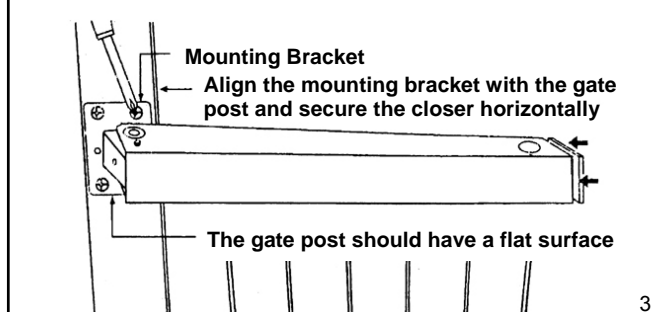
- 6:** With the gate in the closed position, the final latching speed can be adjusted in the same manner as part 5 of these instructions.



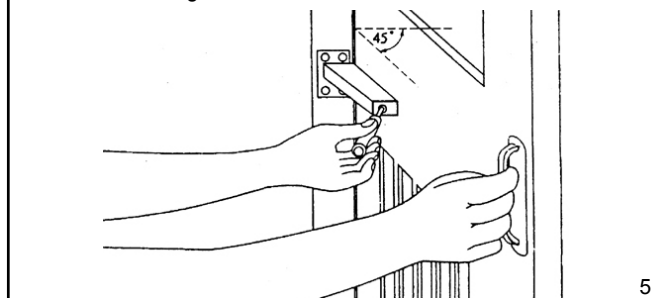
- 1:** From the centre pivot line of the hinges, measure 222mm and secure the guide roller to the gate. This will line up with the locating marks which are on the body of the closer.



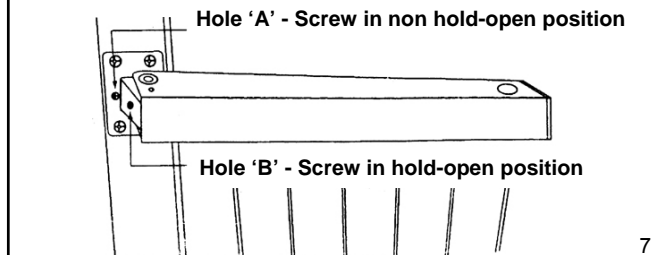
- 3:** Secure the mounting bracket to the gate post with the four (4) screws supplied.



- 5:** Holding the door open at about 45°, you can adjust the closing speed as required. Adjustment is via a screwdriver and should be in ¼ turn increments clockwise or anti-clockwise for a slower or faster closing action.



- 7:** To engage the hold-open function, simply remove the screw from hole 'A' and screw it into hole 'B' for safe keeping. To remove the hold open function simply reverse this procedure. Do not force the closer beyond the screw as doing so will damage the closer.





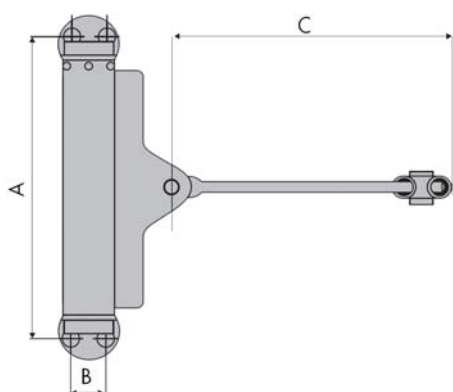


## D&E 'tirex' gate closer

The D&E *tirex* gate closer is a helical door spring with a pivoted arm.

The arm locates between two (2) rollers which are mounted on the door to eliminate any wear on the door.

The closing speed is adjusted by inserting the tension bar into a hole in the capstan and increasing / decreasing the tension as required. The desired tension is then held in place by a pin that is inserted into an adjacent hole.



DEGR152201 gate closer - 40Kg silver

Dim A: 115mm  
Dim B: 21mm  
Dim C: 240mm

DEGR154201 heavy duty gate closer - 80Kg silver

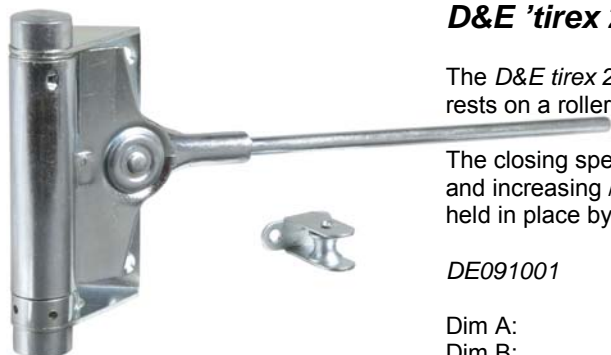
Dim A: 169mm  
Dim B: 21mm  
Dim C: 342mm

Max opening angle: 180°

## D&E 'tirex 2' gate closer

The D&E *tirex 2* gate closer is a helical door spring with a pivoted arm. The arm rests on a roller which is mounted on the door to eliminate any wear on the door.

The closing speed is adjusted by inserting the tension bar into a hole in the capstan and increasing / decreasing the tension as required. The desired tension is then held in place by a pin that is inserted into an adjacent hole.



DE091001 gate closer - 25Kg zinc plated

Dim A: 75mm  
Dim B: 235mm

DE091002 gate closer - 40Kg zinc plated

Dim A: 100mm  
Dim B: 235mm

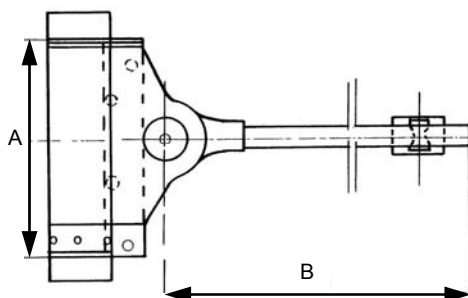
DE091003 gate closer - 60Kg zinc plated

Dim A: 125mm  
Dim B: 235mm

DE091004 heavy duty gate closer - 80Kg zinc plated

Dim A: 150mm  
Dim B: 300mm

Max opening angle: 180°





## D&E 'spiral' gate closer

The D&E spiral gate closer is a helical spring.

The closing speed is adjusted by the inserting the tension bar into a hole in the capstan and increasing / decreasing the tension as required. The desired tension is then held in place by a pin that is inserted into an adjacent hole.

DEGR172001 gate closer - 40Kg silver

Dim A: 222mm

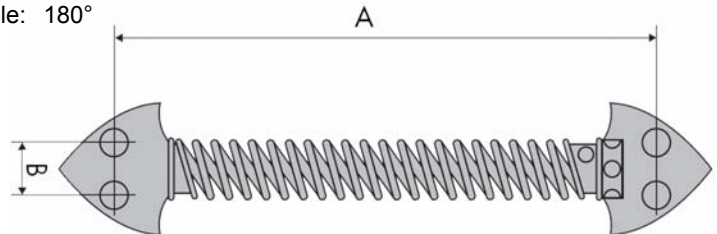
Dim B: 16mm

DEGR174001 gate closer - 60Kg silver

Dim A: 283mm

Dim B: 17mm

Max opening angle: 180°



## D&E 'spiral 2' stainless steel gate closer

The D&E 'spiral 2' gate closer is a helical spring.

The closing speed is adjusted by the inserting the tension bar into a hole in the capstan and increasing / decreasing the tension as required. The desired tension is then held in place by a pin that is inserted into an adjacent hole.

DE089280i gate closer - 60Kg stainless steel

Dim A: 270mm

Dim B: 18mm

Stainless steel grade: SUS 304

