05



Door Closers & Floor Springs



Surface, concealed and floor-mounted closing devices for every door weight.



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DOOR CLOSERS & FLOOR SPRINGS

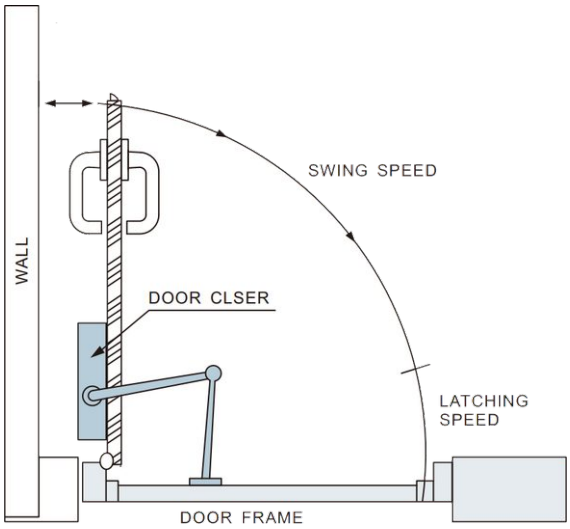
Closer adjustment guide

HOLD-OPEN ARM

Hold open is the ability of the door closer to hold the door in the open position. Most overhead door closers achieve this function via a special type of arm (hold-open arm).

SWING SPEED

Adjustment controls how fast the door closes from fully open to within about fifteen degrees of closed.

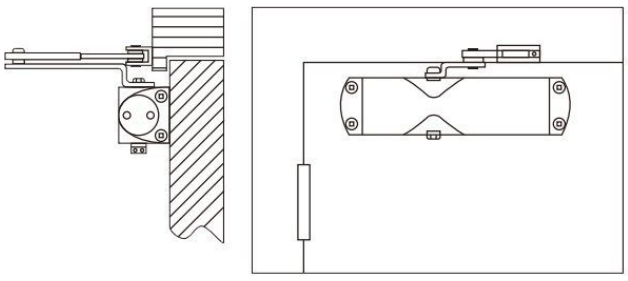


LATCHING SPEED

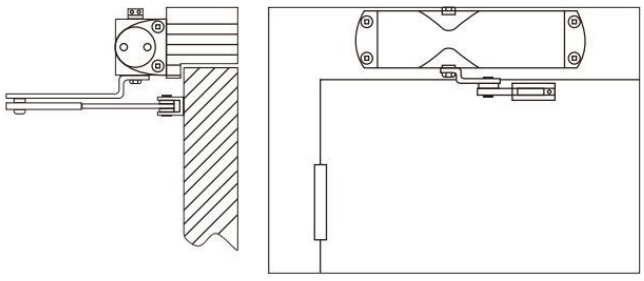
Adjustment controls how fast the door closes for those last few inches.



INSTALLATION



Standard Door Installation



Door Frame Installation

DOOR CLOSERS & FLOOR SPRINGS

Surface Closer

ART. NO. IDC-SC-85HO

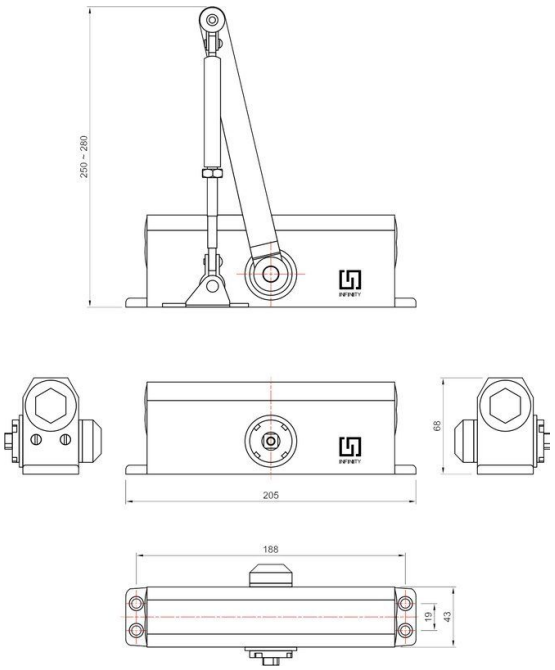


POWER SIZE	EN3
WIDTH OF DOOR	950 mm
WEIGHT OF DOOR	60 kg
MINIMUM DOOR THICKNESS	40 mm
SPEED	Latching & closing speed adjustable
MATERIAL	Aluminium
FINISH	Silver — other finishes available upon request

FEATURES

- High quality imported gaskets to prevent oil leakage
- Strong spring to guarantee powerful closing
- Reliable closing with adjustable latching action
- Complies with BS EN 1154

TECHNICAL DRAWING



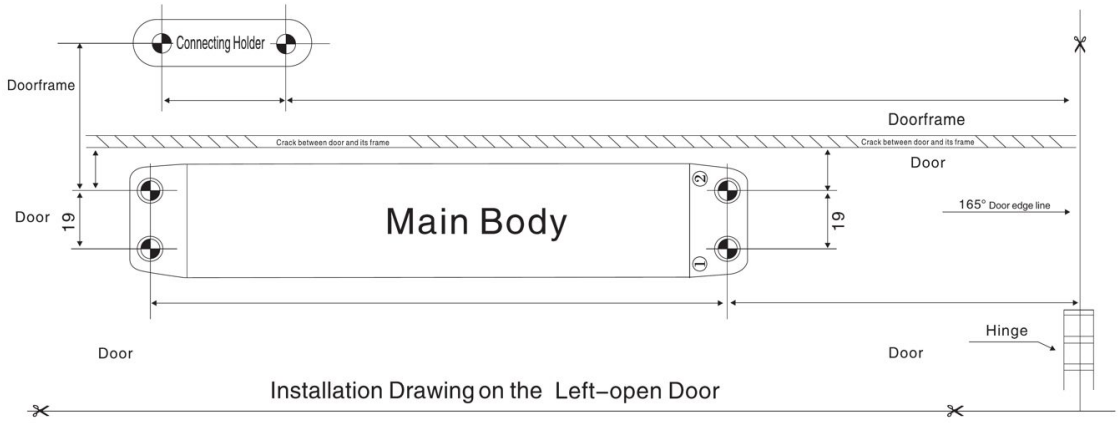
DOOR CLOSERS & FLOOR SPRINGS

Surface Closer – Technical Drawings

ART. NO.

IDC-SC-85HO

INSTALLATION DRAWINGS & SPECIFICATIONS



Installation Drawing on the Left–open Door

Specification and Function

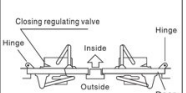
- Applicable Door Width(mm) mm
- Applicable Door Weight(kg) KG
- Adjustable Section of Closing Speed 180° – 20°
- Adjustable Section of Latching Speed 20° – 0°
- The door closer is suitable for installing in various doors, such as, wooden door, metal door, glass door, etc.
- The installation modes of vertical, parallel and slide–rail type all can be chosen at will.
- The door closer can be chosen to stop or unstop ar will.
- Continuous adjustment of closing and latching speed: the fast speed can be adjusted to within 3seconds from 90degree, slowness close can reach to 60seconds or more

Installation Notice of Door Closer with Stop function

1. Not to adjust the gear shaft over 180 degree, otherwise,door closer will be damaged.
2. Ifregulate the gear by swinging arm to 180 degree, the gear will keep stopping. And then the gear should return to original position immediately in order not to damage door closer in the next time.
3. The door closer has the automatically closing function.Better not to pull door by hand.

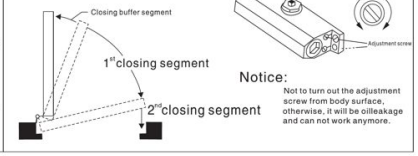
How to decide the opening direction

The door closer is suitable for left–open door and right–open door installation. Please follow the below instruction to decide the open direction before installation.



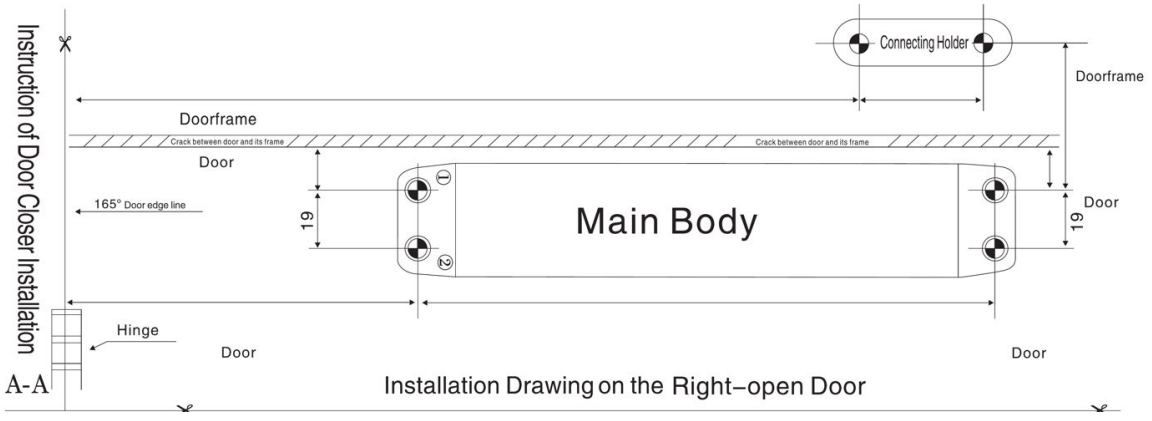
Adjustment of Closing Speed

The 1˚ adjustment screw controls the 1˚ segment closing speed
The 2˚ adjustment screw controls the 2˚ segment closing speed
The adjustment way is clockwise for slow, and counterclockwise for fast.



Notice:

Not to turn out the adjustment screw from body surface, otherwise, it will be oilleakage and can not work anymore.



Installation Drawing on the Right–open Door

DOOR CLOSERS & FLOOR SPRINGS

Surface Closer Installation Steps

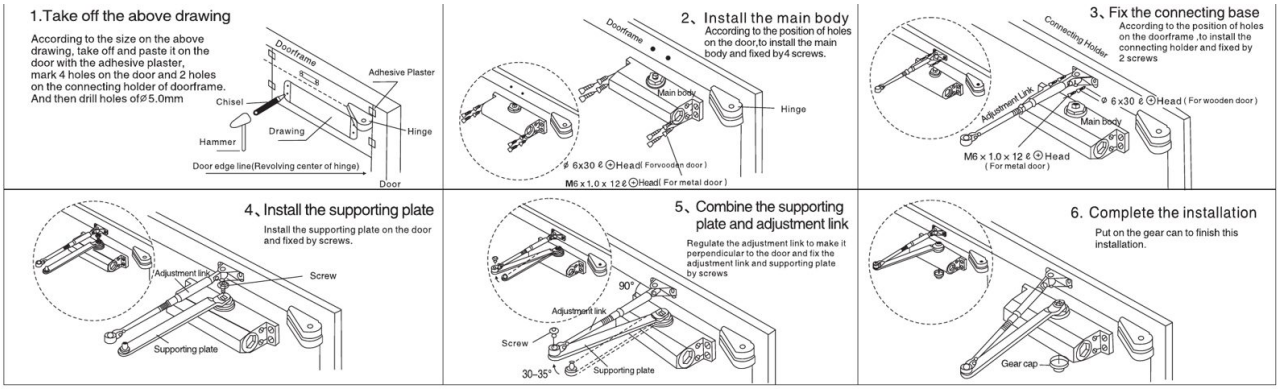
ART. NO.
IDC-SC-85HO

Step-by-step fitting guide for the IDC-SC-85HO surface-mounted overhead closer. The same main body is used for left- or right-opening doors — only the mounting position changes.

KEY INSTALLATION NOTES

- Do not adjust the gear shaft past 180° — this will damage the closer.
- The closer closes automatically once installed; do not force the door shut by hand.
- Closing speed and latching speed are adjusted independently using the two valve screws on the body.
- Suitable for wooden, metal and glass doors; vertical, parallel and slide-rail mounting all apply.

INSTALLATION STEPS



DOOR CLOSERS & FLOOR SPRINGS

Concealed Closer

ART. NO. IDC-CC-65HO

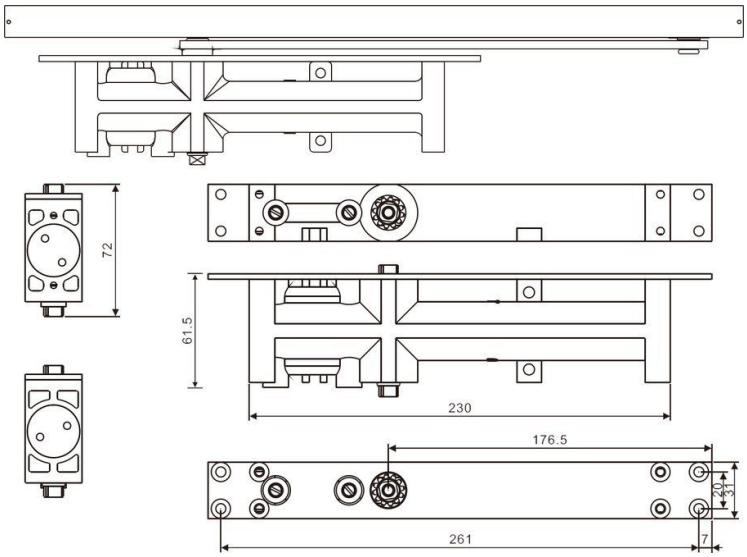


POWER SIZE	EN2-3
WIDTH OF DOOR	950 mm
WEIGHT OF DOOR	65 kg
MINIMUM DOOR THICKNESS	40 mm
SPEED	Latching & closing speed adjustable
MATERIAL	Aluminium
FINISH	Silver — other finishes available upon request

FEATURES

- High quality imported gaskets to prevent oil leakage
- Strong spring to guarantee powerful closing
- Reliable closing with adjustable latching action
- 2 speed controls: closing speed and latching speed

TECHNICAL DRAWING



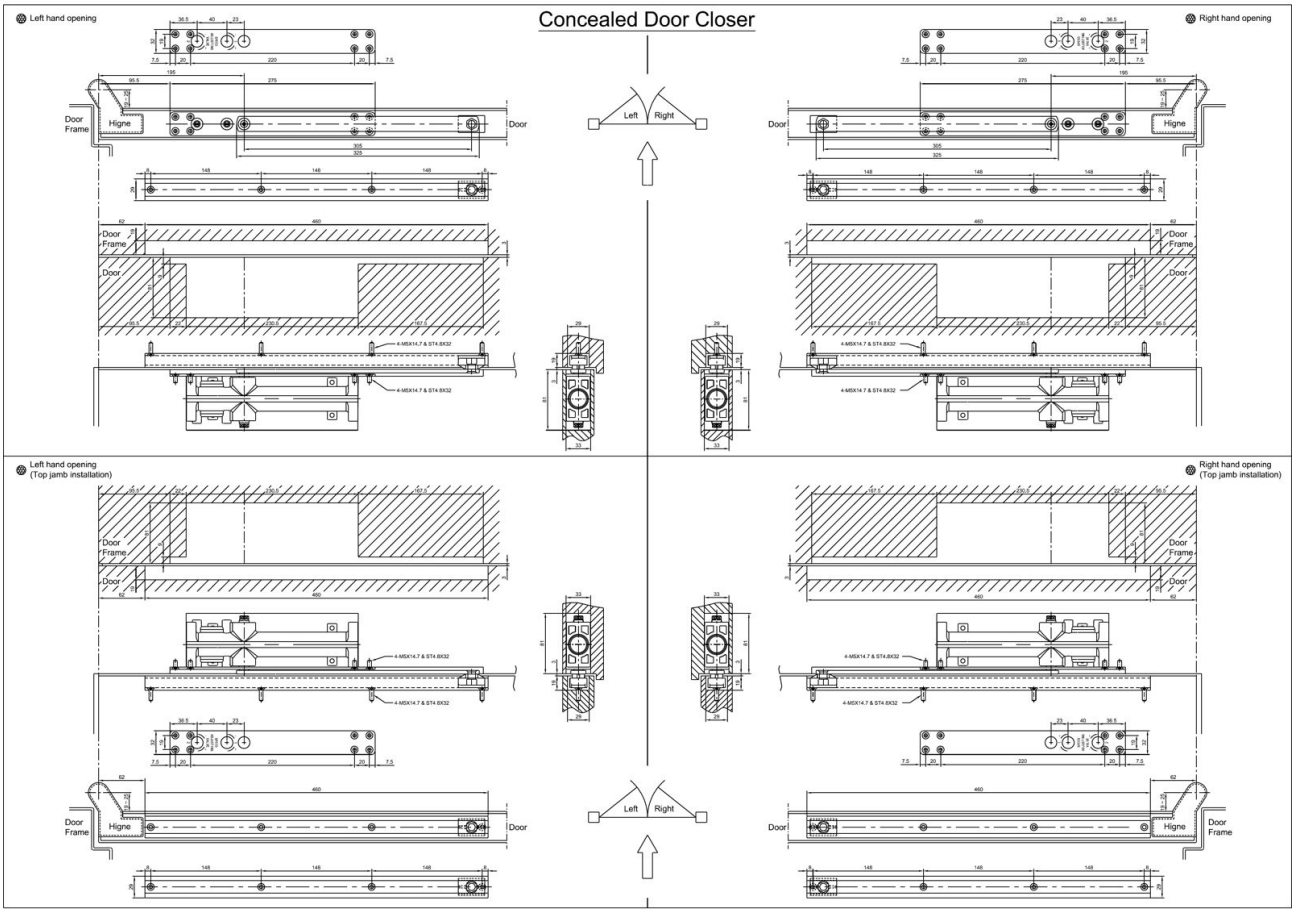
DOOR CLOSERS & FLOOR SPRINGS

Concealed Closer 65 – Technical Drawing

ART. NO.

IDC-CC-65HO

DIMENSIONAL REFERENCE – STANDARD & TOP-JAMB INSTALLATION



DOOR CLOSERS & FLOOR SPRINGS

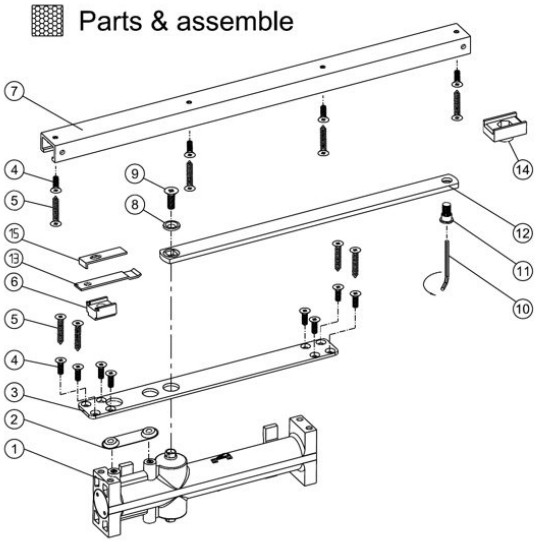
Concealed Closer 65 – Installation

ART. NO.

IDC-CC-65HO

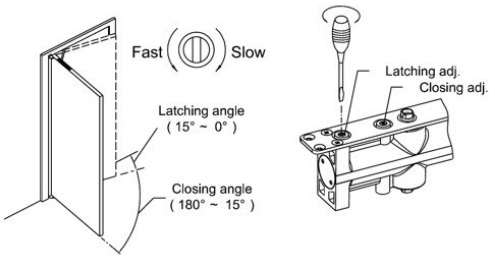
PARTS LIST, INSTALLATION STEPS & ADJUSTMENT

Parts & assemble

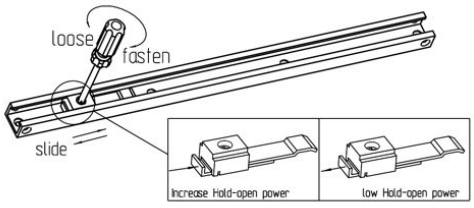


NO.	Parts	QTY	Remark
①	Body	1	
②	Baffle	1	
③	Fixing plate	1	
④	M5X14.7	12	
⑤	ST4.8X32	8	
⑥	Fixing part	1	Optional
⑦	Track	1	
⑧	Washer	1	
⑨	M6X12	1	
⑩	Wrench	1	
⑪	Fixing Screw M8	1	
⑫	Main arm	1	
⑬	Fixing steel plate	1	Optional
⑭	Sliding plastic part	1	
⑮	Adjustment plate	1	Optional

SPEED Adjustment



Hold-Open: Angle and power size adjustment

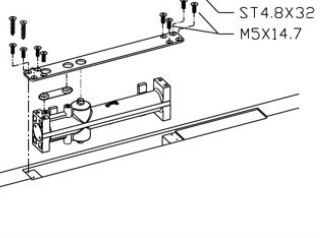


Suitable for R/L use

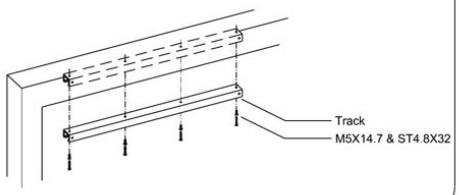
INSTALLATION

EN	DOOR WIDTH (mm)	DOOR WEIGHT (kg)	DOOR THICKNESS (mm)
2	≤850	≤40	wooden door ≥40
3	≤950	≤60	metal door ≥35

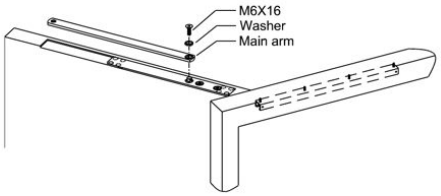
① Fixing and installation of the body



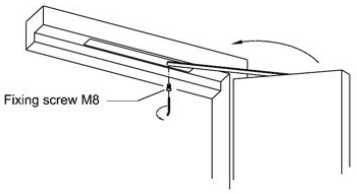
② Fixing and installation of the track arm.



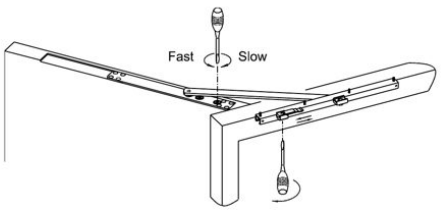
③ Combining the main arm and body.



③ Combining the main arm and sliding plastic part in the track.



③ Opening angle and closing speed adjustment.



DOOR CLOSERS & FLOOR SPRINGS

Concealed Closer

ART. NO. IDC-CC-100HO

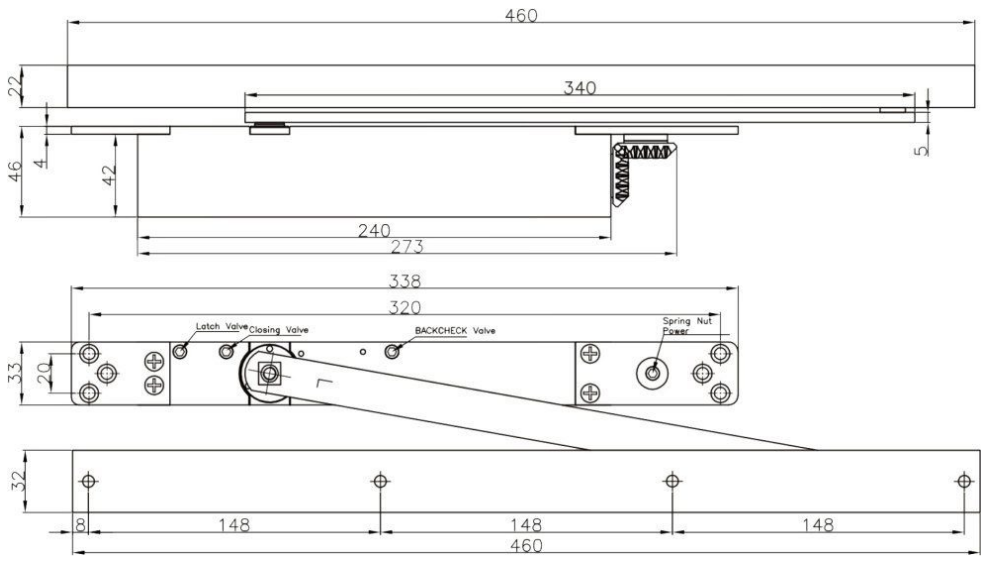


POWER SIZE	EN2-4
WIDTH OF DOOR	1100 mm
WEIGHT OF DOOR	100 kg
MINIMUM DOOR THICKNESS	44 mm
SPEED	Latching & closing speed adjustable
MATERIAL	Aluminium
FINISH	Silver — other finishes available upon request

FEATURES

- Global popular style: cam action mechanical concealed door closer
- Suitable for all kinds of doors
- Aluminium extrusion body, imported O-seal ring, full needle bearing, anti-freeze and rated hydraulic oil
- 2 speed controls: closing speed and latching speed

TECHNICAL DRAWING



DOOR CLOSERS & FLOOR SPRINGS

Concealed Closer 100 Installation Steps

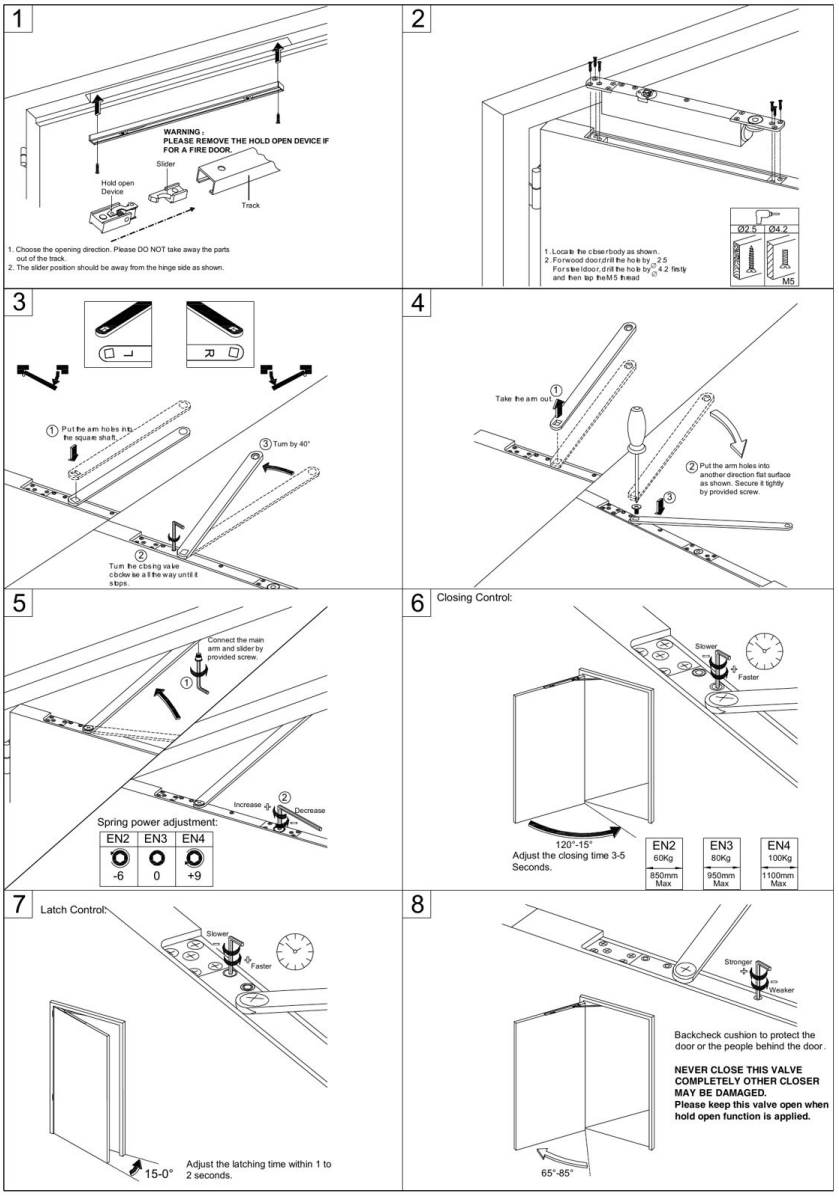
ART. NO.
IDC-CC-100HO

Step-by-step fitting guide for the IDC-CC-100HO concealed track closer, with adjustable spring power EN2–EN4, backcheck and cam action.

KEY INSTALLATION NOTES

- Remove the hold-open device before fitting to a fire door.
- Maximum opening angle: 120° (non hold-open) / 105° (hold-open).
- Spring power, closing speed and latching speed are all field-adjustable — see steps 5–8.
- Backcheck valve: never close fully, or the closer may be damaged.

INSTALLATION STEPS



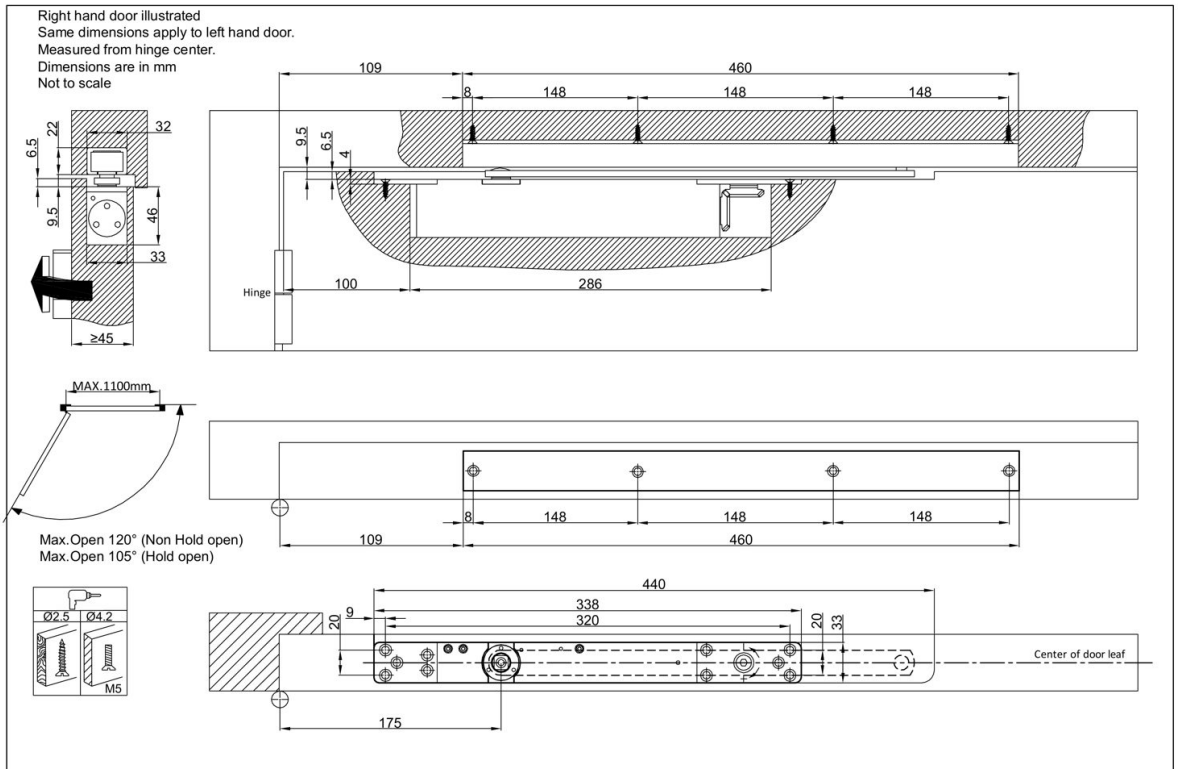
DOOR CLOSERS & FLOOR SPRINGS

Concealed Closer 100 – Technical Drawing (1 of 2)

ART. NO.

IDC-CC-100HO

DIMENSIONAL REFERENCE 1/2



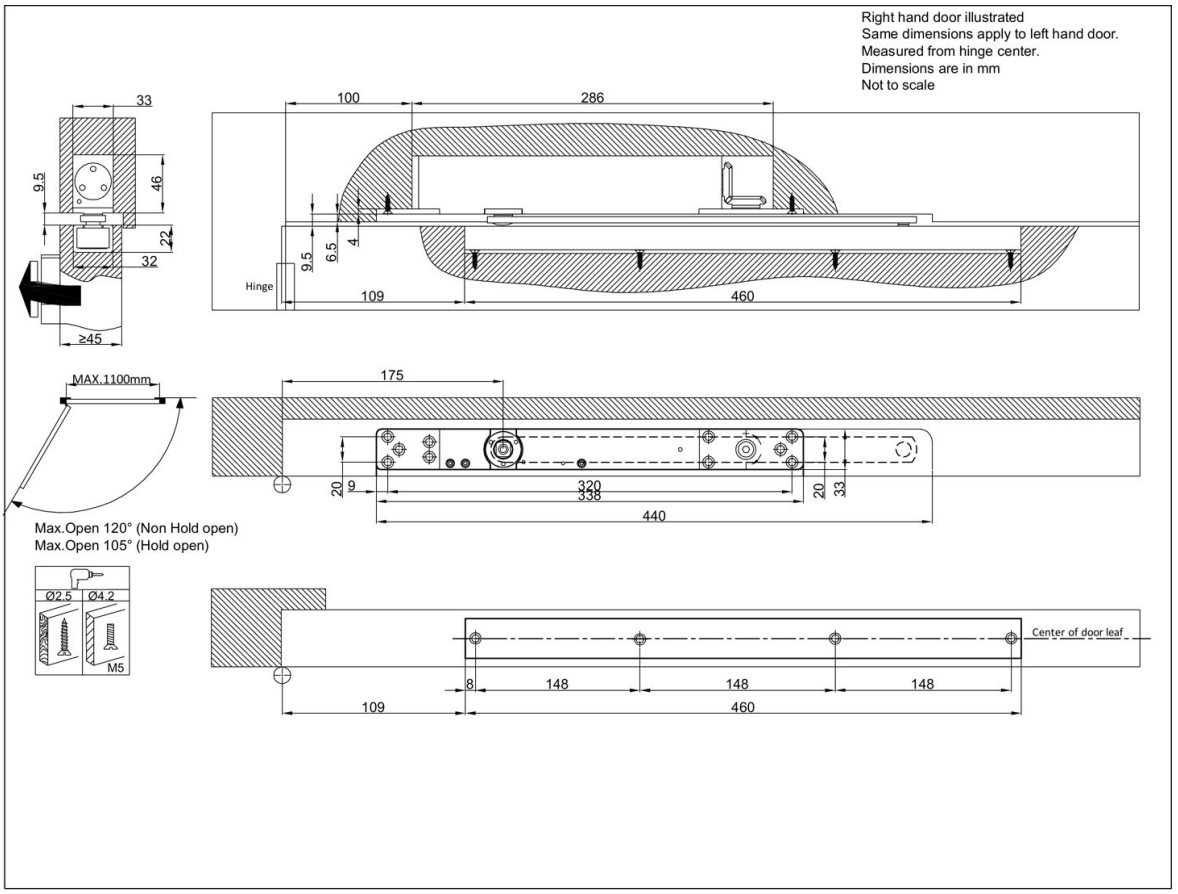
DOOR CLOSERS & FLOOR SPRINGS

Concealed Closer 100 – Technical Drawing (2 of 2)

ART. NO.

IDC-CC-100HO

DIMENSIONAL REFERENCE 2/2



DOOR CLOSERS & FLOOR SPRINGS

Floor Spring

ART. NO. IDC-FS-200HO

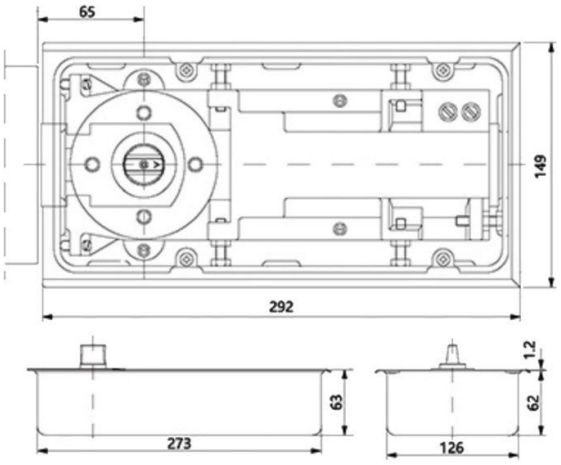


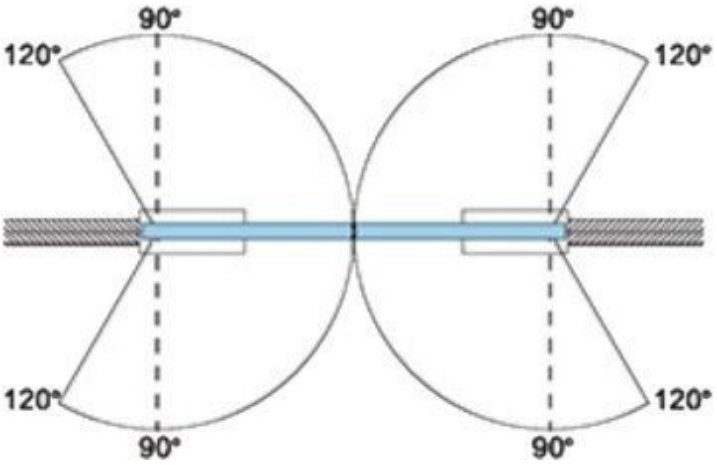
POWER SIZE	EN2-4
WIDTH OF DOOR	1300 mm
WEIGHT OF DOOR	200 kg
MINIMUM DOOR THICKNESS	44 mm
SPEED	Latching & closing speed adjustable
MATERIAL	Cast iron
FINISH	Stainless steel cover — other finishes available upon request

FEATURES

- Global popular style floor closer
- Suitable for all kinds of doors
- Cast iron body
- 2 speed controls: closing speed and latching speed

TECHNICAL DRAWING

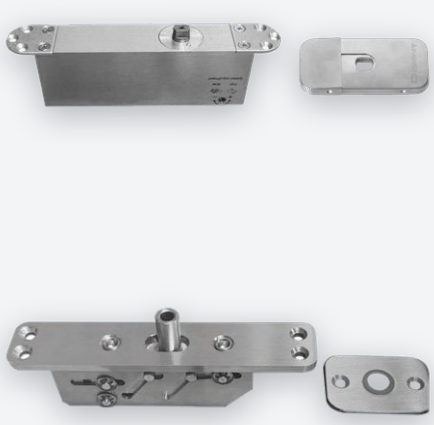




DOOR CLOSERS & FLOOR SPRINGS

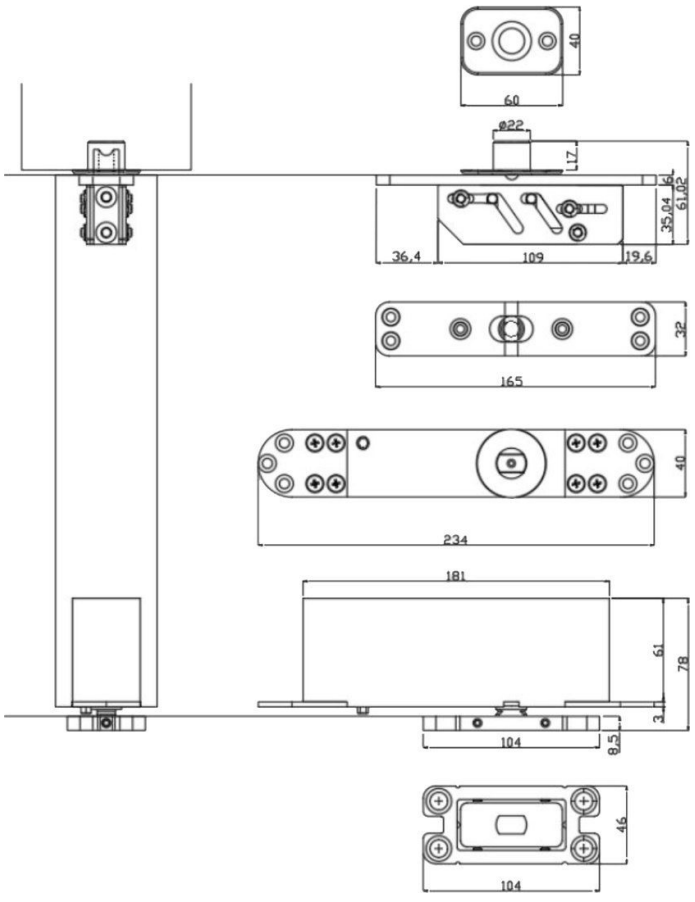
Hydraulic Floor Pivot

ART. NO. IDC-HP290



WIDTH OF DOOR	2000 mm
WEIGHT OF DOOR	290 kg
AUTOMATIC CLOSING	± 180°, ± 90°
SPEED	Bidirectional adjustable speed
MATERIAL	Stainless steel
FINISH	Stainless steel

TECHNICAL DRAWING



DOOR CLOSERS & FLOOR SPRINGS

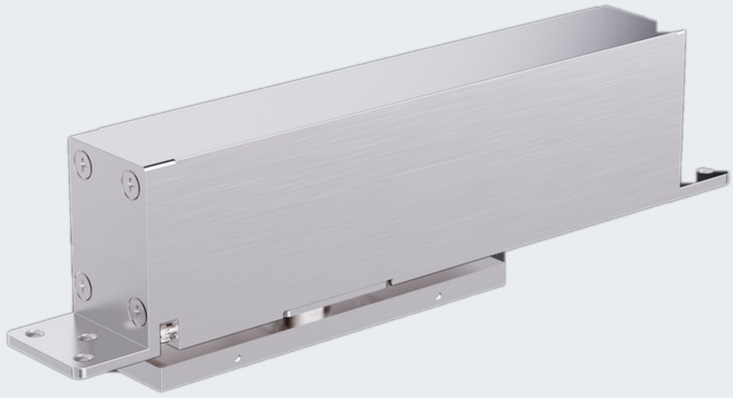
Heavy-Duty Pivot Door Hinge

Off-axis hydraulic floor pivot for heavy wooden and metal doors, with soft-closing damping and an adjustable top shaft for precise alignment.

ART. NO. IC-HDP500

Heavy-Duty Hydraulic Floor Pivot

Set includes matching adjustable top shaft — Mod. IC-AS16



Hydraulic Floor Pivot — Mod. IC-HP500

ADJUSTABLE TOP SHAFT — MOD. IC-AS16



500 kg
Max. door weight

≤ 1800 mm
Max. door width

125°
Max. opening angle

EN 4
Closing torque

- Bidirectional opening & closing
- Two-stage hydraulic speed control
- Forged bearing steel cam shaft
- Pre-embedded-free adjustable base
- 304 stainless steel top shaft, Ø16mm
- Sealed, waterproof & corrosion-resistant

HEAVY-DUTY PIVOT DOOR HINGE

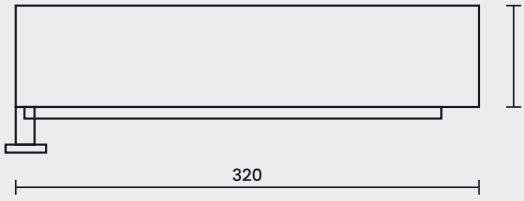
ART. NO.	IC-HDP500
COMPONENTS	Hydraulic floor pivot (Mod. IC-HP500) + adjustable top shaft (Mod. IC-AS16)
MATERIAL	45# carbon steel body · 304 stainless steel top shaft & cam
CAPACITY	500kg max. door weight · ≤1800mm width · ≥60mm door thickness
OPERATION	Bidirectional · soft-closing · 90° auxiliary positioning · 125° max. opening
STANDARD	EN 4 closing torque · 500,000-cycle fatigue tested

DOOR CLOSERS & FLOOR SPRINGS

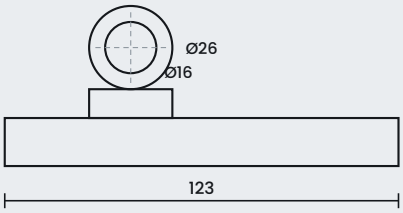
Dimensions & Installation Reference

Overall dimensions for the hydraulic floor pivot and adjustable top shaft, with the door-gap reference table for correct on-site fitting.

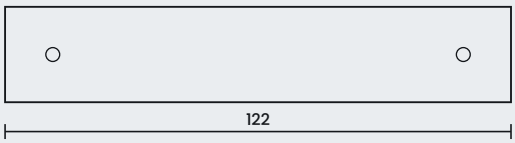
45 × 70 × 320mm overall



32 × 50 × 138mm overall



Base drilling — 4×Ø10



TOP SHAFT MOUNTING

- Mounting plate: 123 × 85mm, 4 fixing holes
- Telescopic shaft insertion depth ≥ 15mm
- Adjustable for left/right door-gap alignment
- 304 stainless steel, brushed finish

DOOR GAP REFERENCE

Thickness	X min / Y	Thickness	X min / Y
60mm	8mm / 3mm	85mm	13mm / 3mm
65mm	9mm / 3mm	90mm	14mm / 3mm
70mm	10mm / 3mm	100mm	14mm / 4mm
75mm	11mm / 3mm	110mm	15mm / 5mm
80mm	12mm / 3mm	120mm	15mm / 5mm

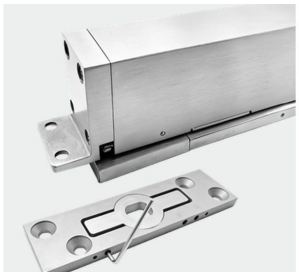
CLOSING RANGE & POSITIONING

Valve 1 (adjustable)	75° – 20°
Valve 2 (adjustable)	75° – 0°
Fixed range	85° – 75°
Auxiliary positioning	90°
Maximum opening	125°

DOOR CLOSERS & FLOOR SPRINGS

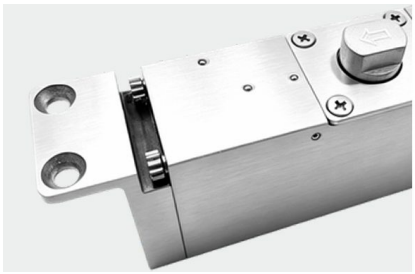
Construction & Engineering

Forged bearing-steel components and a two-stage regulating valve give this pivot its load capacity, sealing and precise closing control.



Forged Bearing Steel Cam Shaft

- High-strength steel · super strong load-bearing
- Pre-embedded-free adjustable base



Two-Stage Regulating Valve Control

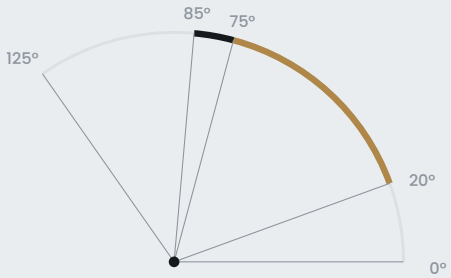
- Solid cam shaft · sealed, waterproof design
- 90° positioning with latching force at small angles

EXPLODED VIEW — COMPONENTS

1	Hydraulic main body	× 1
2	Long decorative cover	× 1
3	Short decorative cover	× 1
4	Load-bearing base	× 1
5	Fixing screw	× 4

Body: 45# carbon steel, precision-machined and surface-treated for corrosion resistance.

CLOSING RANGE DIAGRAM



Valve 1 (adjustable)	75° – 20°
Valve 2 (adjustable)	75° – 0°
Fixed range	85° – 75°
Max. opening	125°

DOOR CLOSERS & FLOOR SPRINGS

Installation Guide

Step-by-step fitting instructions for the hydraulic floor pivot and its matching top shaft, plus the floor mortise reference for recessing.

1 **Mark & Drill**

Use an infrared level to mark the position and drill per the dimension drawing, checking frame-to-leaf gaps.

2 **Mount Body & Top Pivot**

Fix the main body and upper seat to the door leaf, then fix the top pivot to the frame and rotate the shaft 90°.

3 **Engage the Shaft**

Tilt the leaf, align the shaft with the base and snap into place — engage ≥15mm of pivot core, then lock.

4 **Set Closing Speed**

Locate regulating valves 1 & 2. Default closing speed is 6–10 seconds; adjust to suit the application.

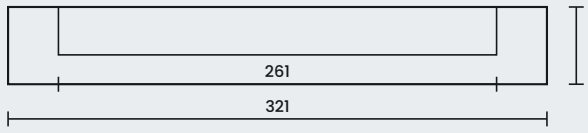
5 **Align the Door Leaf**

Loosen the base screws to even the left/right gap, then adjust diagonal screws for leaf angle and retighten.

6 **Final Check**

Cycle the door to confirm smooth, quiet operation, check all screws are tight, then fit the decorative covers.

FLOOR MORTISE REFERENCE



Overall length × recess depth, mm

Recess the floor to the dimensions shown, keeping the inner channel clear for the base plate and fixing screws. Confirm the recess depth against the actual base before milling — figures are nominal and may vary by batch.

DOOR CLOSERS & FLOOR SPRINGS

Top Shaft — Fitting & Adjustment

304 stainless-steel construction with fine on-site adjustment for a precise, flush door gap on both sides of the leaf.



304 Stainless Steel Construction

- Stainless steel brushing process
- Resistant to corrosion, not prone to rusting



Fine Left / Right Adjustment

- Telescopic Ø16mm shaft, ≥15mm insertion depth
- Fine-tunes door gaps for a precise, flush fit

ON-SITE ADJUSTMENT

1. **Up / Down**
   Install the top pivot set on the frame, fix the upper bracket to the leaf, then adjust the telescopic shaft via side hole 1 with a long spanner.

2. **Left / Right**
   Support and level the leaf, loosen the two No. 3 hex screws, then adjust the door gap through side hole 2 using a long hex key.

3. **Retighten**
   Once the left/right gap is set, retighten the No. 3 hex screws uniformly to complete the adjustment.

INSTALLED EXAMPLE



Fitted to a heavy wood-and-metal pivot door

DOOR CLOSERS & FLOOR SPRINGS

Heavy Weight Floor Spring

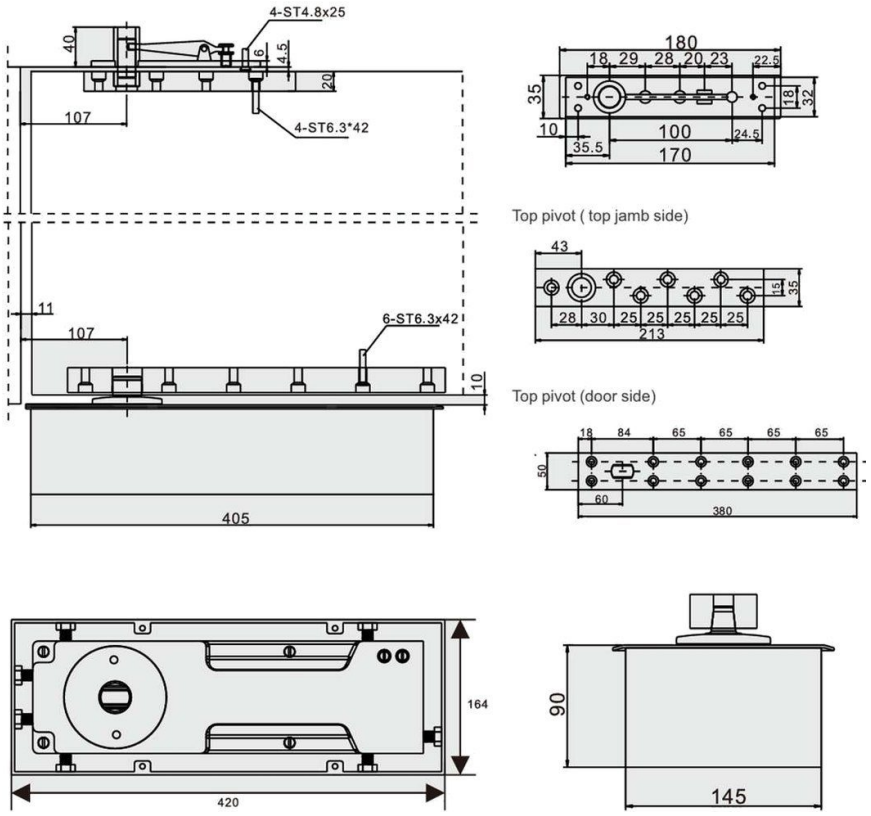
ART. NO. IFS-1000



Infinity floor spring for extra heavy-duty framed and large doors. Size EN7 for doors up to 1000 kg. Spring tension is adjustable to regulate closing speed.

FORCE	EN7 force efficient closing door opening force
HOLD OPEN	Hold open function
MAX. DOOR WEIGHT	1000 kg
MAX. DOOR WIDTH	1800 mm
SIZE	405 × 145 × 88 mm
POSITIONING	90° / 130° positioning, rotatable 360°
SPEED CONTROL	Two section speed control
LATCHING SPEED	Adjustment 0–20°
CLOSING SPEED	Adjustment 20°–90°
MATERIAL	Stainless steel + cast iron

DIMENSIONAL DRAWING



DOOR CLOSERS & FLOOR SPRINGS

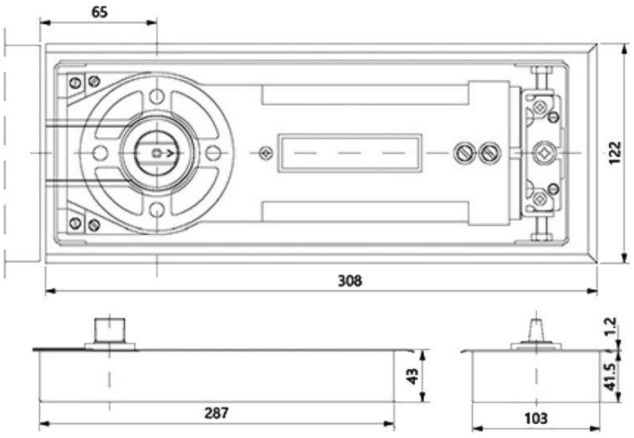
Floor Spring

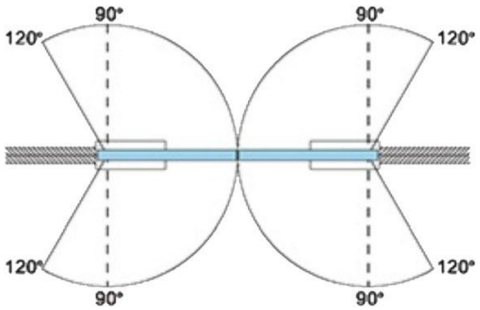
ART. NO. IFS-90



MAX. DOOR LEAF WIDTH	< 900 mm
HOLD OPEN	Hold open function
MAX. DOOR WEIGHT	90 kg
SPEED GOVERNING CONTROL	Two stage adjustable speed
DIMENSION (L × W × H)	287 × 103 × 42 mm
SPEED CONTROL	Two section speed control
MATERIAL	Stainless steel + cast iron

TECHNICAL DRAWING & OPENING ANGLE





Central axis,90° two-way open type, the maximum dynamic positioning the opening Angle of 120°