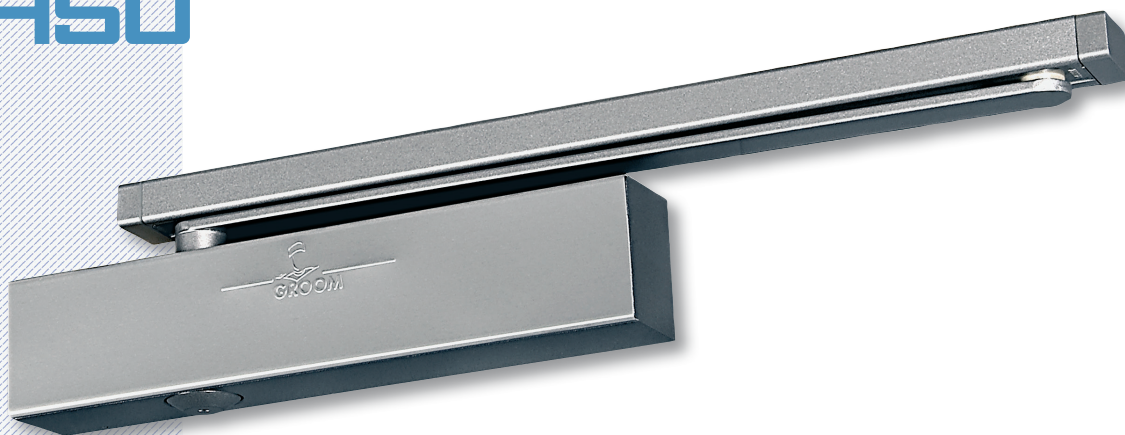


GR450



Perfect solution for healthcare facilities,
thanks to its delayed closing



Disability Compliance
<50N



Firewall Certification
EN 1634 Standard

GROOM PRODUCT ADVANTAGES

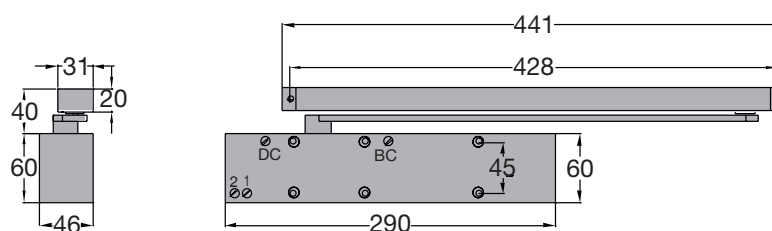
- Adjustable delayed closing by grub screw on front: perfect for healthcare facilities
- High opening flexibility thanks to its asymmetric pinion technology
- Latching and closing speed adjustable by grub screw on front
- Adjustable backcheck by grub screw on front
- Relief valve as a standard
- Opening range up to 180° on hinged side
- Invisible fixings hidden by its clipped cover
- Aesthetic, arm without any visible fixing
- Fitting on any type of support (wood, aluminum, PVC)
- Sustainable and continuous adjustments thanks to its thermostable technology
- Optional multiple fittings

5 YEARS WARRANTY



TECHNICAL CHARACTERISTICS	GR450
Closing force	EN 3
Maximum dimension of the door	< 950 mm
Tested to EN 1154	YES
CE mark for construction products	YES
Disability Compliance < 50 N	YES
Fire door, anti-flame and smoke check doors	YES
Adjustable closing speed by grub screw 180° - 15°	YES
Latching adjustable by grub screw 15° - 0°	YES
Adjustable backcheck by grub screw 65° - 180°	YES
Adjustable delayed closing by grub screw 105° - 70°	YES
Scissor arm	NO
Slide arm	YES
Hold-open arm module (prohibited on fire doors)	OPTION
Cushioned limit stay	OPTION
Standard colors: silver, white, black	YES
RAL colors	OPTION
High Quality finishes	OPTION

> DOOR-CLOSER DESIGN



- 1: adjustable closing speed 180° - 15°
 2: adjustable latching 15° - 0°
 BC: adjustable backcheck 65° - 180°
 DC: adjustable delayed closing 105° - 70°

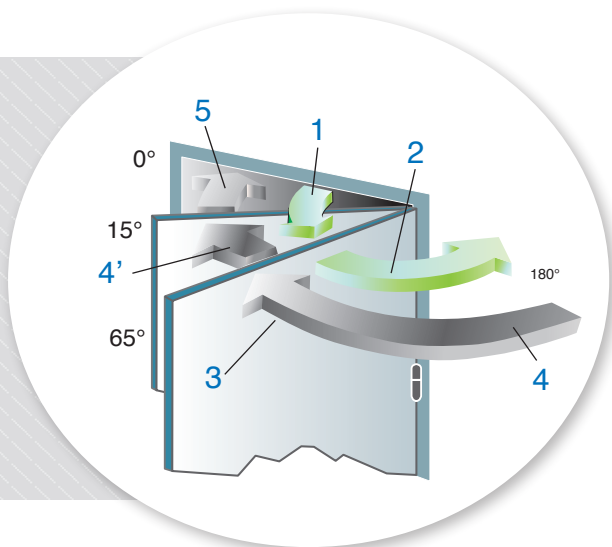


ALL ACCESSORIES ARE AVAILABLE ON PAGES 44/45

GR450 FIXING

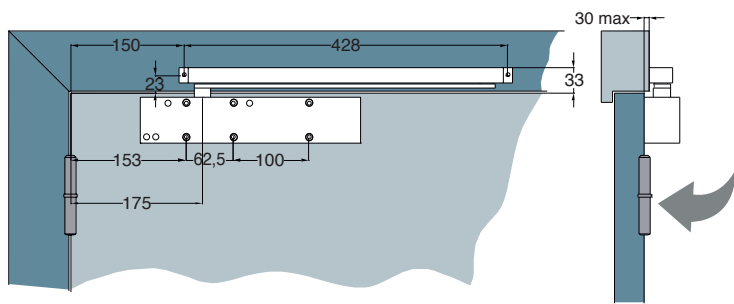
> FUNCTIONS

- Zone 1: Regular opening of the door up to 65°
- Zone 2: Adjustable backcheck 65° - 180°
- Zone 3: Adjustable delayed closing 105° - 70°
- Zone 4 et 4': Adjustable closing speed 180° - 15°
- Zone 5: Adjustable latching 15° - 0°

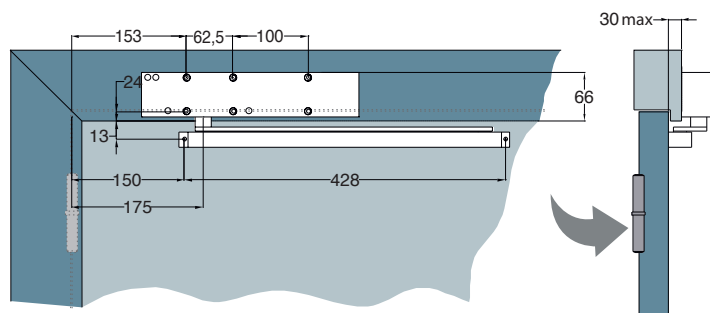


> INSTALLATION

Fitted on pull side body on door

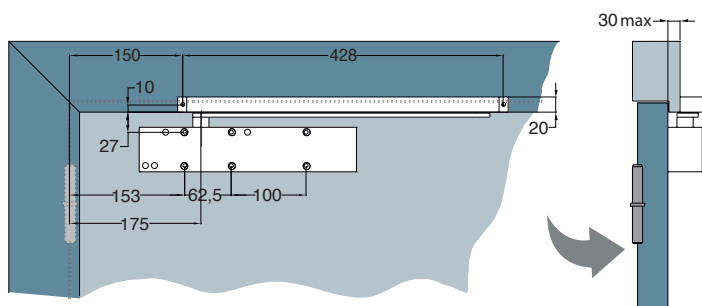


Fitted on push side body on frame

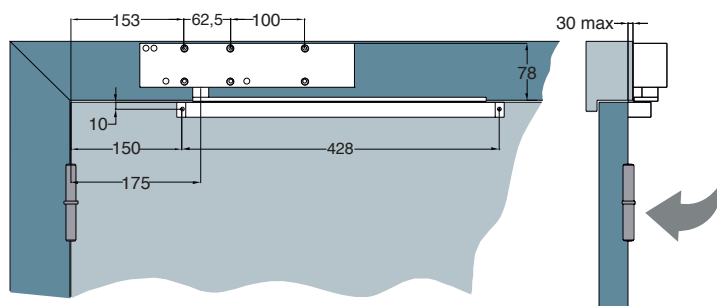


> GR450 REVERSE

Fitted on push side body on door



Fitted on pull side body on frame



> DESCRIPTION

GROOM door closer GR450, with symmetrical rack and pinion technology and slide arm, compliance with EN 1154, CE mark, disability compliance < 50 N.

- Force EN 3 for doors up to 950 mm width and / or 60 kg with an opening angle up to 180°.
- Closing speed and latching adjustments by grub screw on front and hidden under the cover plate.
- Adjustable backcheck by grub screw on front hidden under the cover plate.
- Adjustable delayed closing by grub screw on front hidden under the cover plate.
- Invisible body fixings hidden by its clipped cover.
- Pull or push side installation. Reversible, non-handed.
- Thermostable hydraulic from -20° to +40°, equipped with pressure relief valves.
- Silver, white, black, RAL finishes, high quality finishes.
- Accessories: DIN mounting plate for metal profile mounting, hold-open arm module, cushioned limit stay.

REFERENCES

GR450

COMPLETE DOOR CLOSER

GR45071X	GR450 BC/DC SLIDE ARM
GR45571X	GR450 BC/DC REVERSE SLIDE ARM

BODY ONLY

GR45021X	GR450 BC/DC BODY ONLY
GR45521X	GR450 BC/DC REVERSE BODY ONLY

SLIDE ARM

GR50050X	SLIDE ARM 400/450/500
GR50060X	SLIDE ARM 400/450/500 WITH HOLD-OPEN
GR509400	HOLD-OPEN ARM MODULE ONLY 400/450/500
GR509300	CUSHIONED LIMIT STAY (MECHANICAL) 400/450/500
GR50920X	SUPPORT PLATE FOR SLIDE ARM

ACCESSORIES

GR50900X	GR450 DIN MOUNTING PLATE
GR50980X	GR450 RIGHT MOUNTING PLATE
GR50990X	ANGLED GR450 MOUNTING PLATE

HIGH QUALITY FINISHES

GR450310	GRHF450 BC/DC BODY ONLY BODY STAINLESS STEEL BRUSH
GR450315	GRHF450 BC/DC BODY ONLY CHROME DESIGN
GR450318	GRHF450 BC/DC BODY ONLY BRASS STYLE
GR500530	SLIDE ARM GR450 STAINLESS STEEL BRUSH
GR500540	SLIDE ARM GR450 CHROME DESIGN
GR500520	SLIDE ARM GR450 BRASS STYLE

Code X = Finish Code

0 = RAL 9016 white

1 = silver

5 = RAL 9005 black

8 = other RAL (option)

BC/DC = BackCheck and Delayed Closing