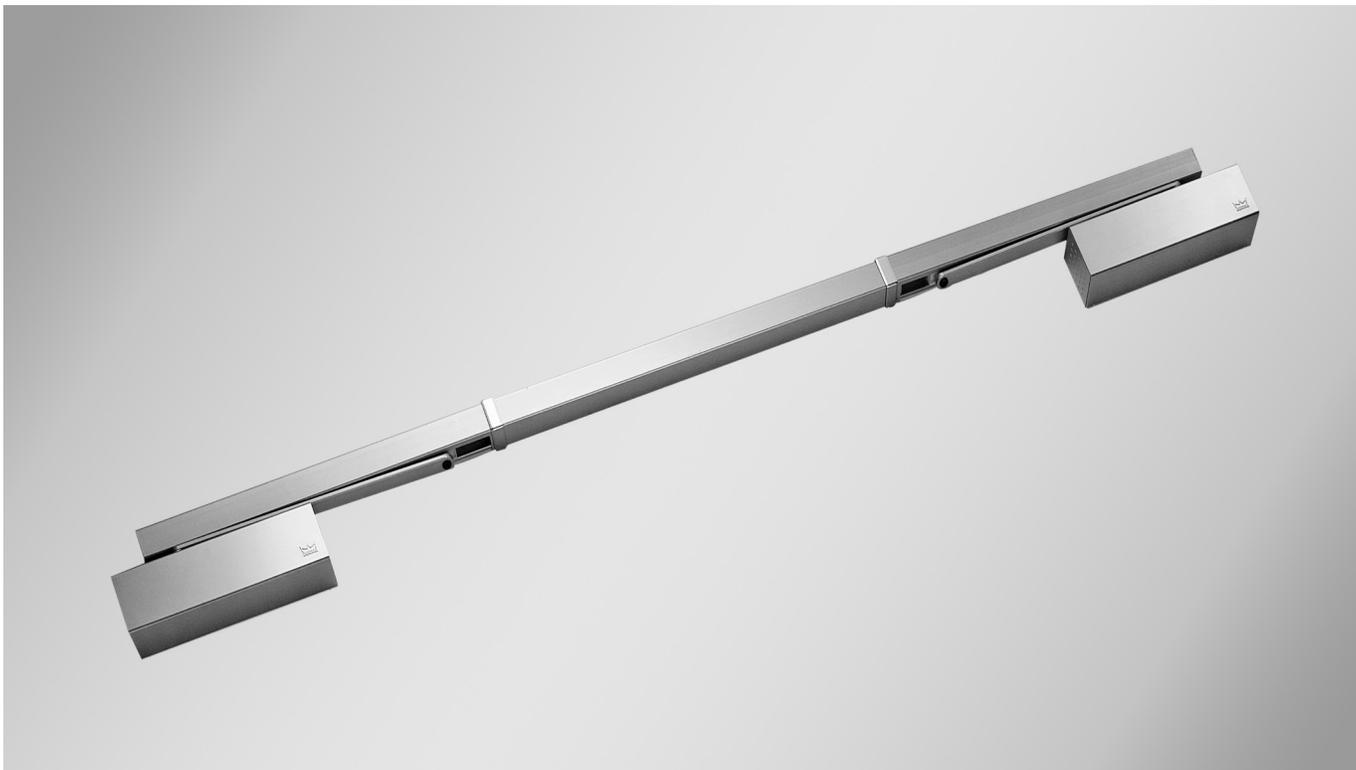




GSR



Surface Applied Door Closer & Coordinator System



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DORMA USA quality and environmental management systems in Reamstown, PA and Steeleville, IL are certified to ISO 9001:2008 and ISO 14001:2004.



**Intertek**



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# THE TS93 GSR SYSTEM IN CONTUR DESIGN

**The TS93 GSR in Contur Design combines exceptionally smooth, efficient door control with proper sequential closing for pairs of doors equipped with astragals or exit devices.**

The GSR Series Coordinator System provides function which ordinarily requires two or more hardware components. Twin TS93 closers feature DORMA's unique cam and roller mechanism which makes door opening both smoother and easier than is possible with traditional rack and pinion closers. A highly efficient GSR coordinator housed in the track unit provides dependable sequential closing of doors. The TS9315 closers comply with barrier-free requirements.

## Technical Details

-  TS9315 closers meet barrier-free requirements (adjustable size 1–5).
- TS9356 closers for heavy or wider doors (adjustable size 5–6 +50%).
- Fits openings 59" to 98".
- Minimum door width 15" for pull side, 25" for push side.
- Active door field-selectable.
- Coordinator operates only when inactive door is opened.
- Coordinator fits on 1-1/2" frame face for pull side; requires minimum 1-1/4" wide soffit for push side.
- Optional electrical hold open available for inactive door (EMF 1I), active door (EMF 1A), or both doors (EMF 2).
- Backcheck and delayed action standard.
- Sex nuts supplied standard for 1-3/4" door thickness.
- Coordinator installs on frame; closers install on doors.
- Coordinator and door closers are nonhanded for versatility when selecting the active and inactive door.

- Easy installation.
- Quiet operation.
- Safety override.
- MK-397 optional carry bars available for doors up to 3'-6".
- MK-398 optional carry bars available for doors over 3'-6" (standard with all GSR/PT models).
- Auxiliary stop by others required at field-selected degree of hold open to prevent possible damage to TS93 GSR mechanism or other hardware.

## Certification

The DORMA TS93 GSR/T and TS93 GSR/PT coordinator systems are listed by UL and CUL under their continuing reinspection programs. All GSR products meet the requirements UL 10C for positive pressure. The TS93 door closers are certified to conform to the requirements of ANSI/BHMA A156.4 Grade 1. The TS9315 version door closer meets the requirements of ANSI/BHMA A117.1 and ADA for barrier-free accessibility and are California State Fire Marshall (CSFM) approved.

## Specification

DORMA TS93 GSR Series with two TS93 surface closers and a GSR mechanism. Each closer will consist of a steel cam, roller, and adjustable spring incorporating a track arm assembly. Closers will have two separate temperature-compensating, noncritical adjustment valves to control sweep and latch closing speeds. Adjustable hydraulic backcheck will be effective from approximately 65°. Delayed action range will be effective from approximately 125° to 70°. TS93 closers with field-adjustable spring power sizes 1–5 will meet 5 lb interior barrier-free opening force requirements. Maximum opening range will be approximately 175° on pull side

opening and 120° on push side, conditions permitting. The GSR coordinator mechanism will control sequential closing for pairs of doors. The TS93 GSR is non-handed. Install TS93 closers on the pull side or push side of the door as applicable. Install the GSR coordinator mechanism and slide track assembly on the pull side frame face, or soffit for push side applications.

## Optional Specifications

TS93 GSR shall have optional (EMF 1I) mechanism to provide an electrically held selective single-point hold open function for the inactive door from approximately 80° to 130°. GSR coordinator will hold active door when inactive door is held open. Closing of inactive door will trigger the coordinator and sequentially close the active door (EMF 1I not available with PT unit). TS93 GSR shall have optional (EMF 1A) mechanism to provide an electrically held selective single-point hold open function for the active door from approximately 80° to 130°. The active door will hold open at a preselected point when the inactive door is closed (EMF 1A not available with PT unit). TS93 GSR/T shall have optional (EMF 2) mechanism to provide an electrically held selective single-point hold open function for the active and inactive doors from approximately 80° to 130° for standard pull side GSR/T or 80° to 120° for standard push side GSR/PT. The active door can be held open when the inactive door is closed, or both doors can be held open together.

## Electrical Specifications

### Operating Voltage

- 24 VDC ± 15%

### Power Input

- EMF 1I: 0.067 A (1.4 W)
- EMF 1A: 0.067 A (1.4 W)
- EMF 2: 0.134 A (2.8 W)

**Power Supply Recommendations**  
DORMA PS53 Series. Contact Technical Service for details.

## Warranty

For details, refer to **DORMA Limited Warranty** on our website at [go.dorma.com/terms](http://go.dorma.com/terms).

## Finish

### Standard Sprayed Finishes

- Aluminum: 689
- Bronze: 691 (Dull), 690 (Statuary), or 695 (Dark Duranodic)
- Gold: 696 (Satin)
- Black: 693

### Optional DORMA Custom Color or Designer Color Finishes

Contact Customer Service.

### Optional Plated/

### Architectural Finishes

- Brass: 605 (Bright)
- Stainless Steel: 630 (Satin)

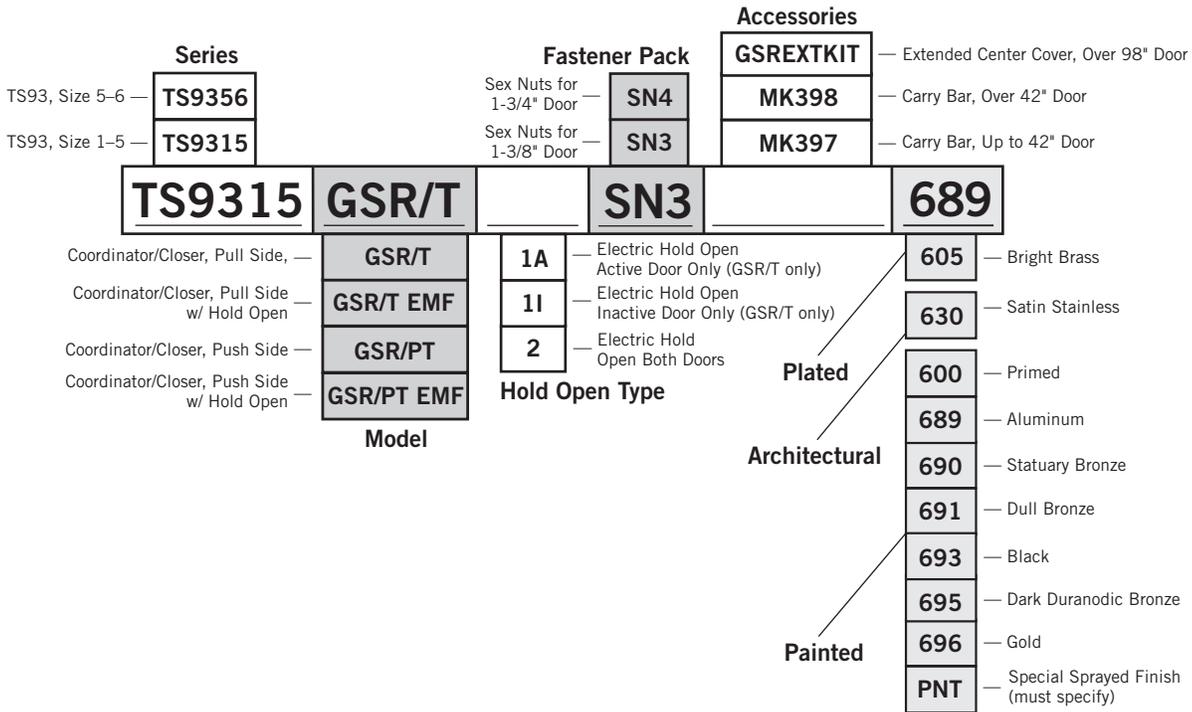
Closer cover, arm, and track channel are plated. Cover end caps and track end caps are painted complementary or contrasting color.

## REDUCED OPENING FORCE INSTALLATIONS CAUTION

Manual door closers, including closers certified to meet ANSI/BHMA A156.4, when installed and adjusted to conform to ADA or other reduced opening force requirements, may not provide sufficient power to reliably close and latch a door.

Refer to the catalog for information on Low Energy Operators to meet reduced opening force requirements without affecting closing power.

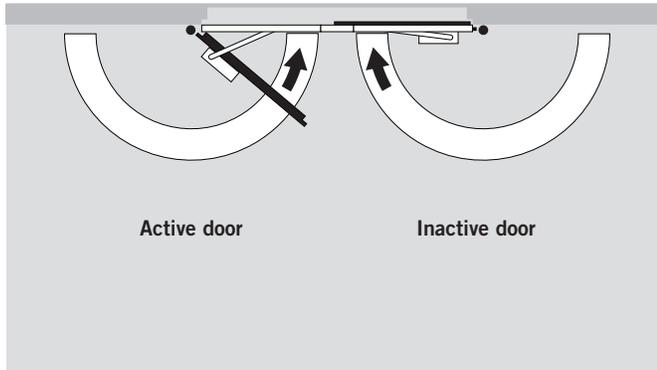
# HOW TO ORDER GSR SERIES



**MK397 Carry Bar**—Recommended for use with the GSR/T for doors up to 3'6" to ensure that the active door is opened far enough for the inactive door to close. See Carry Bar Instructions for installation.

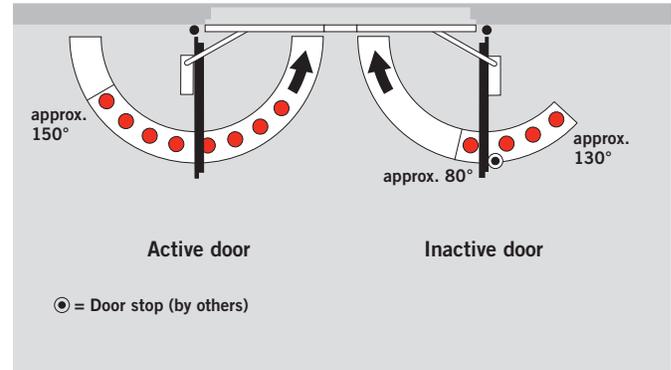
**MK398 Carry Bar**—Required and standard with the GSR/PT and GSR/PT EMF/w units. Recommended for use with GSR/T for doors 3'6" and wider to ensure that the active door is opened far enough for the active door to close. See Carry Bar Instructions for installation.

## GSR/T



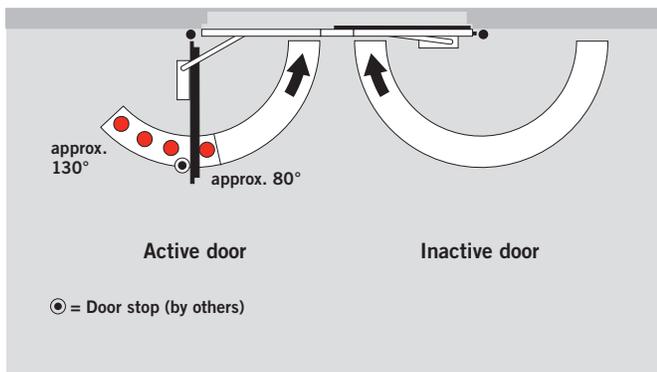
- For use on pairs of labeled doors with astragals, exit devices, or other hardware requiring sequential closing.
  - Twin closers assure self-closing of doors.
  - GSR mechanism coordinates sequential closing of doors.
  - GSR holds active door open until inactive door triggers release.
  - GSR operates only when inactive door is opened.
- NOTE:** Maximum opening angles both doors 175°.

## GSR/T EMF 11



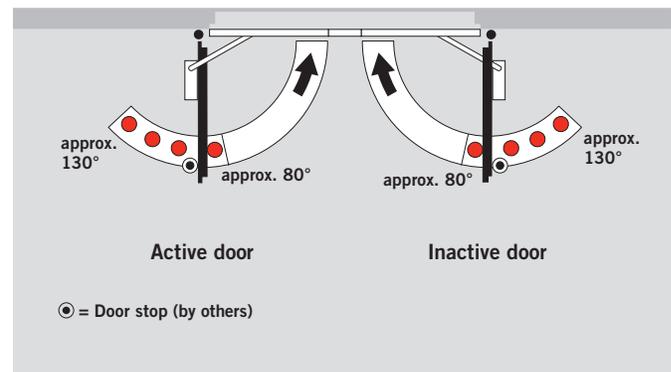
- Same as GSR/T with added hold open feature.
  - Selective electrical single-point holder-release mechanism at inactive door.
  - Integrates with new or existing detectors or fire/smoke control systems.
  - GSR coordinator holds active door open when inactive door is electrically held open.
  - Actuation of fire system, remote detector, or loss of power initiates release and sequential closing.
  - Single-point hold-open position adjustable between approx. 80° and 130°.
- NOTE:** Active door can be opened up to maximum selected hold-open point (door stop positioned accordingly). Active door can be held open by door coordinator up to max. 150°.

## GSR/T EMF 1A



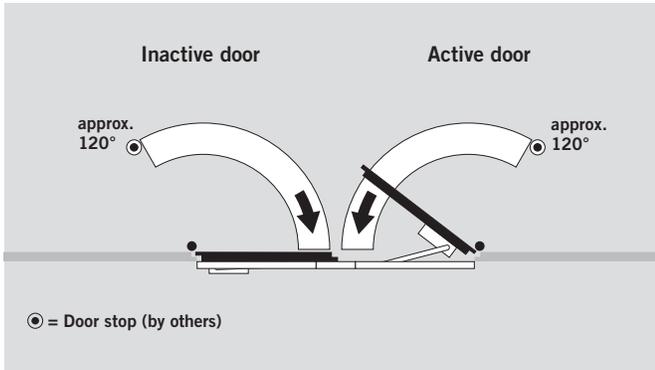
- Same as GSR/T EMF 11 above, but holder-release device located at active door only.
  - Permits electric hold open of active door when inactive door is closed.
  - Hold-open position between approx. 80° and 130°.
- NOTE:** Active door can be opened up to maximum selected hold-open point (door stop positioned accordingly). Maximum opening angle inactive door 175°.

## GSR/T EMF 2



- Combines function of GSR/T EMF 11 and EMF 1A.
  - Electromagnetic hold open solenoids at both doors.
  - GSR coordinator holds active door open when inactive door is held open.
  - Active door can be electrically held open when inactive door is closed.
  - Hold-open points for each door between approx. 80° and 130°.
- NOTE:** Active door can be opened up to maximum selected hold-open point (door stop positioned accordingly).

## GSR/PT

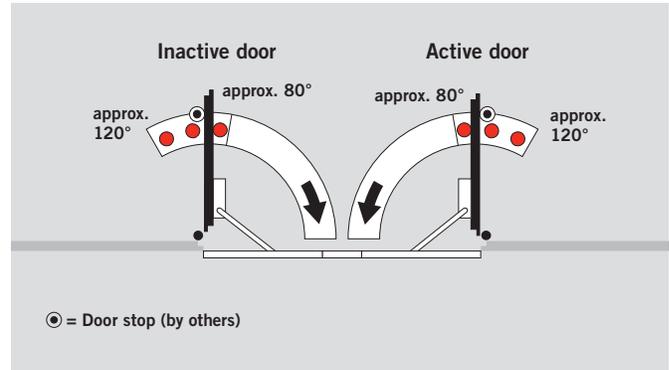


- For use on push side installations on pairs of labeled doors with astragals, exit devices, or other hardware requiring sequential closing.
- Twin closers assure self-closing of doors.
- GSR mechanism coordinates sequential closing of doors.

- GSR holds active door open until inactive door triggers release.
- GSR operates only when inactive door is opened.

**NOTE:** Maximum opening angle 120° (door stop positioned accordingly).

## GSR/PT EMF 2



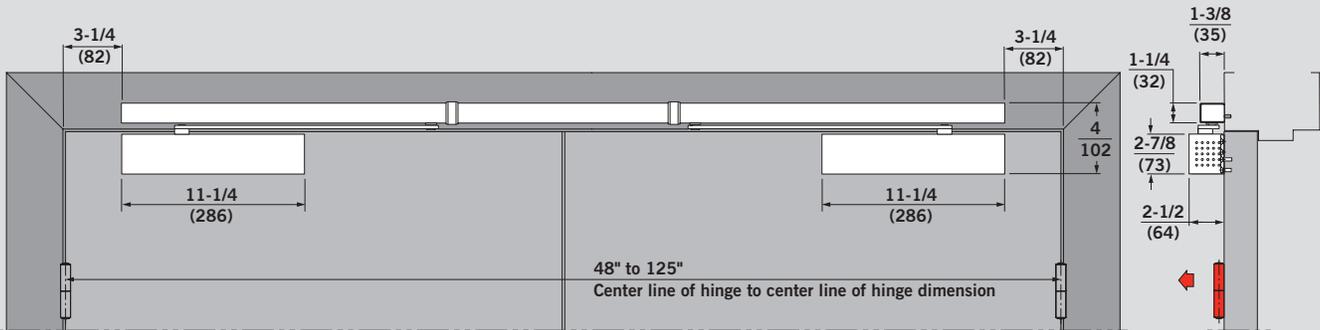
- Combines function of GSR/T EMF 1I and EMF 1A, for push side installations.
- Electromagnetic hold open solenoids at both doors.
- GSR coordinator holds active door open when inactive door is held open.
- Active door can be electrically held open when inactive door is closed.

- Hold-open points for each door between approx. 80° and 120°.

**NOTE:** Active door can be opened up to maximum selected hold-open point (door stop positioned accordingly).

# TS93 GSR/T

GSR/T  
 GSR/T EMF 1  
 GSR/T EMF 1A  
 GSR/T EMF 2



Size Selection Chart

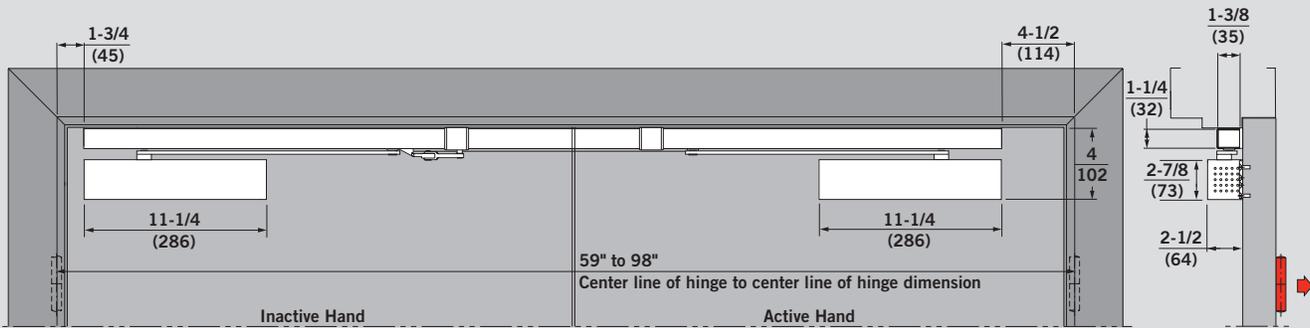
Closer	Interior/ Exterior	Door Width						
		1'-3" min.	2'-6" max.	3'-0" max.	3'-6" max.	4'-0" max.	4'-6" max.	5'-0" max.
TS9315	Interior	•	•	♿	♿	♿	N/A	N/A
TS9356	Interior	N/A	N/A	N/A	N/A	•	•	•

Minimum door rail for closer 3"  
 Minimum frame face for coordinator 1-1/2"  
 Minimum ceiling clearance for coordinator 1-5/8"

- Recommended application.
- ♿ Opening force 5 lb or less on interior doors; 8.5 lb or less on exterior doors where door without closer attached requires 1 lb opening force or less.
- N/A Not applicable/application not recommended

# TS93 GSR/PT

GSR/PT  
 GSR/PT EMF 2



Size Selection Chart

Closer	Interior/ Exterior	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
		max.	max.	max.	max.	max.	max.
TS9315	Interior	•	♿	♿	♿	N/A	N/A
TS9356	Interior	N/A	N/A	N/A	•	•	•

Minimum door rail for closer 4"  
 Minimum soffit for coordinator 1-1/4"

- Recommended application.
- ♿ Opening force 5 lb or less on interior doors; 8.5 lb or less on exterior doors where door without closer attached requires 1 lb opening force or less.
- N/A Not applicable/application not recommended



[www.dorma.com](http://www.dorma.com)



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