

DORMA TENSOR



Double-Acting Hinge for Tempered Glass Doors

DORMA TENSOR

Convenience & Precision

Tempered glass doors are increasingly popular in both commercial and residential markets. Designers often choose to fit them with double-acting hinges.

The **DORMA TENSOR** double-acting hinge is suitable for a wide range of applications, including conversions and renovations. The hinge is installed directly to the wall. These hinges can also be installed directly to a fixed tempered sidelite, the only double-acting hinge on the market to do so.

Please note that DORMA TENSOR is designed for double-acting applications only.

The TENSOR hinge offers an automatic closing function engineered to bring the door safely back to its zero position—a position adjustable within the hinge at any time to ensure that double-panel doors remain precisely aligned. This convenient feature eliminates the need for a concealed floor or overhead closer, which may have been ruled out due to on-site job constraints.

TENSOR's slightly curved outline is derived from the award-winning ARCOS design. An inlay embossed with the DORMA logo provides a mechanical stop, protecting the hinge surface against damage when the door is opened to 90°. The inlay also protects the hinge's technical core—the simple, high-precision zero-position adjustment mechanism. This mechanism ensures the double-acting door closes efficiently and effectively.

At 90°, the TENSOR system holds the door firmly and securely in position. Once pushed in the closing direction, the spring mechanism of the TENSOR fitting takes over, operating from an angle of 80°. The door closes quickly and securely. And while the torque of 8 lb-ft (10 Nm) will keep the door conveniently closed, only 9 lb-ft (12 Nm) is sufficient to open it.

DORMA TENSOR hinges have been successfully tested for 500,000 operating cycles, making TENSOR a perfect addition to the DORMA family of top quality products.

Technical Details

- Hinge with spring-assisted self-closing function
- Suitable for both private residences and public buildings with moderate traffic volume
- Single or pair of doors
- Versions for wall or attachment to sidelite
- Hold-open feature at 90° relative to adjustable zero position
- Fast and easy zero-position adjustment
- Max. torque: 9 lb-ft (12 Nm)
- Max. door weight: 143 lb (65 kg)
- Max. door width: 39-3/8" (1000 mm)
- Max. side panel width: 59" (1500 mm)
- For 3/8" (10 mm) or 1/2" (12 mm) tempered glass
- TUV-tested/third-party verification with respect to quality and the production processes; confirmed completion of 500,000 operating cycles
- Suitable for double-acting applications only.



See back page for Available Finishes.

TOP QUALITY

500,000 Operating Cycles

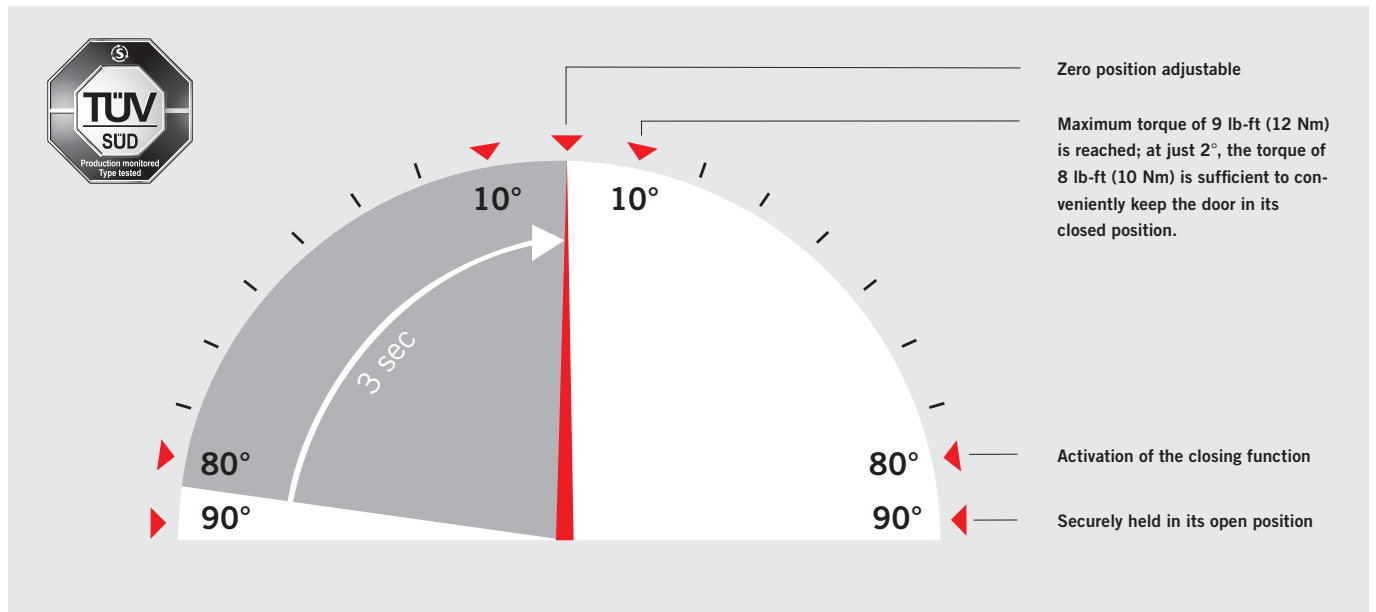
DORMA offers only top quality products and TENSOR double-acting hinges are no exception.

Tested by TUV SUD Group — a world-leading international product testing and certification company — TENSOR hinges

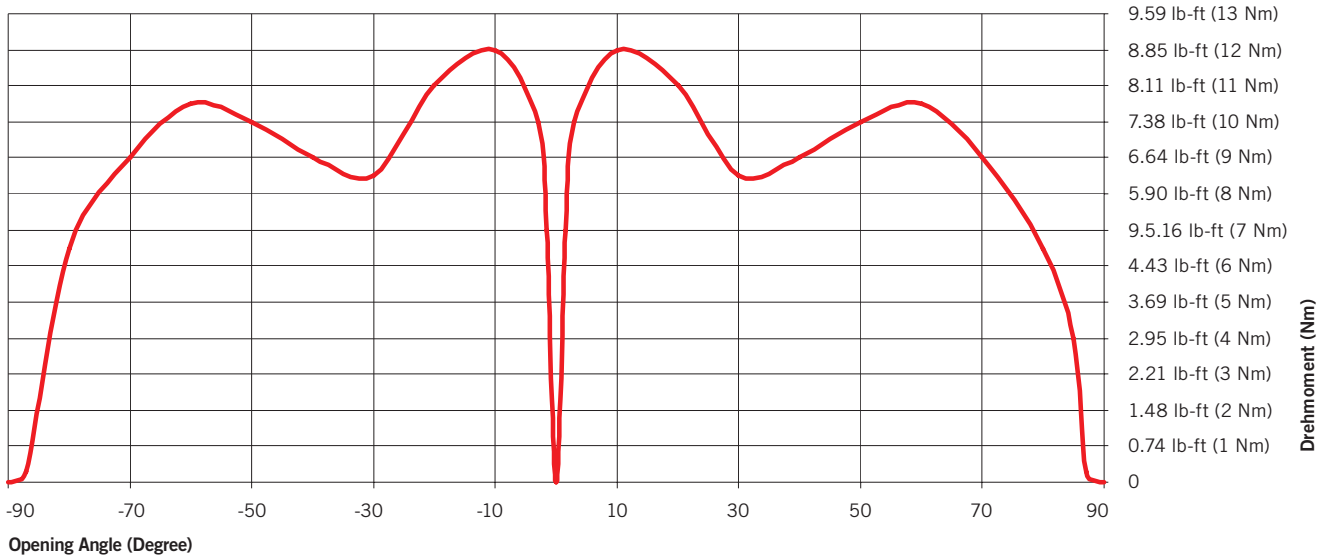
have successfully completed the recommended operating cycle test. This test requires hinges to maintain a 3-second closing speed throughout all 500,000 cycles.

TENSOR is the only product of its kind to successfully complete the test, as well as the only double-acting hinge on the market with a glass-to-glass mounting application.

Given these distinctions, the TENSOR double-acting hinge is a perfect addition to the DORMA family of top quality products.



Average Values for a Door with two TENSOR Hinges



SURFACE MOUNTING

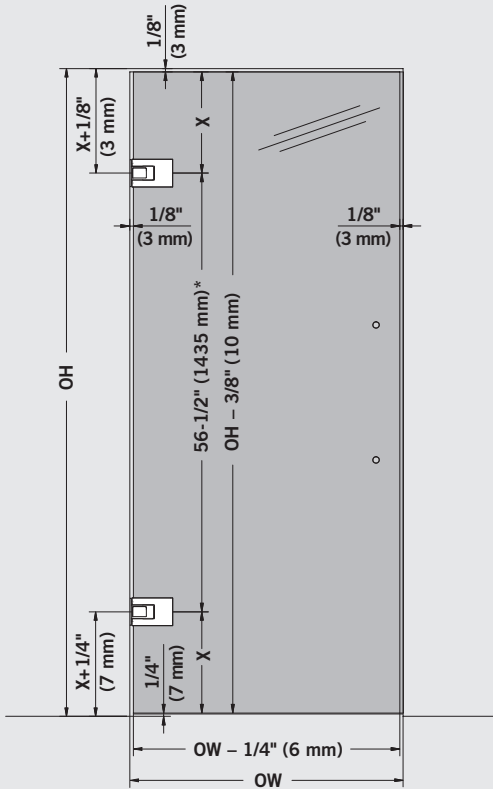
Typical Assemblies

TENSOR double-acting door attached to wall/frame with surface-mounted mounting plate

Single Door

Fastening for 3/8" (10 mm) or 1/2" (12 mm) glass

- Max. door weight
143 lb (65 kg)
- Max. door width
39-3/8" (1000 mm)
- OH = finished opening height
- OW = finished opening width
- Glass height =
OH - 3/8" (10 mm)
- Glass width =
OW - 1/4" (6 mm)

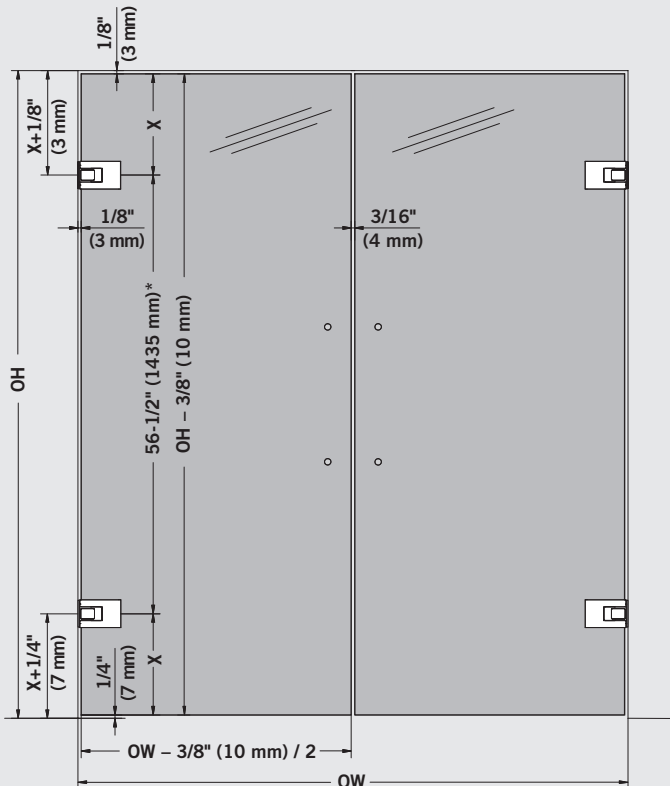


TENSOR double-acting door attached to wall/frame with surface-mounted mounting plate

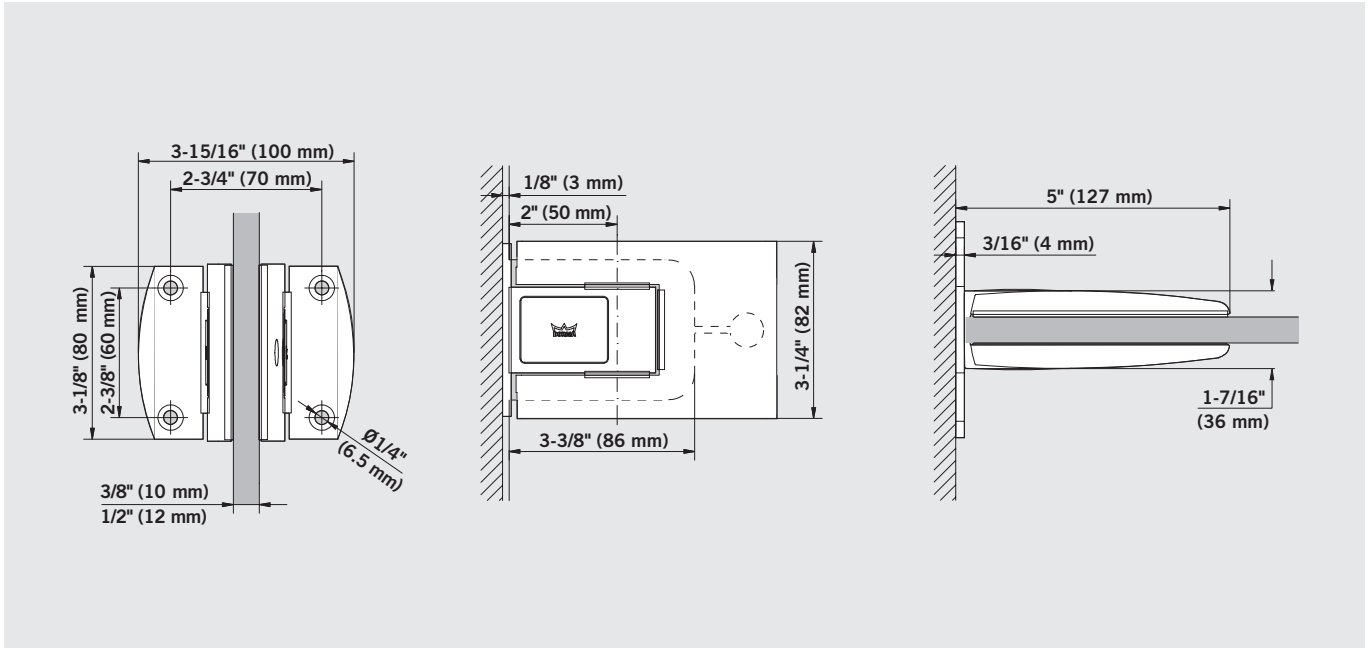
Pair of Doors

Fastening for 3/8" (10 mm) or 1/2" (12 mm) glass

- Max. door weight
143 lb (65 kg)
- Max. door width
39-3/8" (1000 mm)
- OH = finished opening height
- OW = finished opening width
- Glass height =
OH - 3/8" (10 mm)
- Glass width =
OW - 3/8" (10 mm) / 2



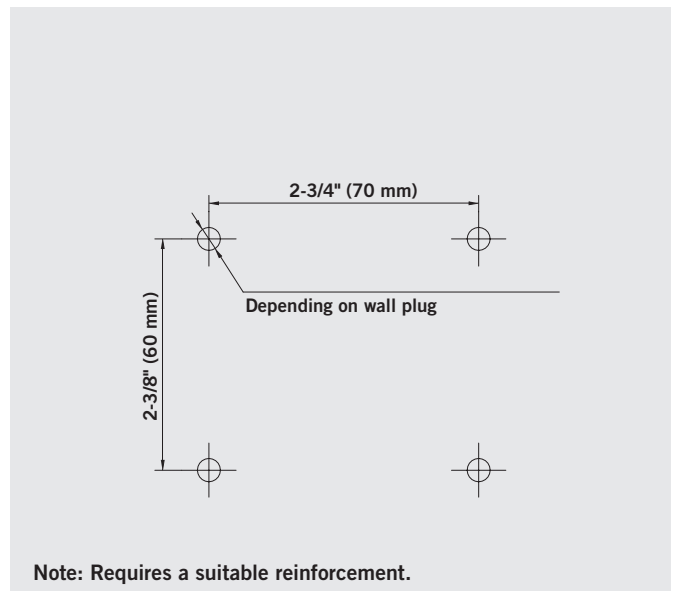
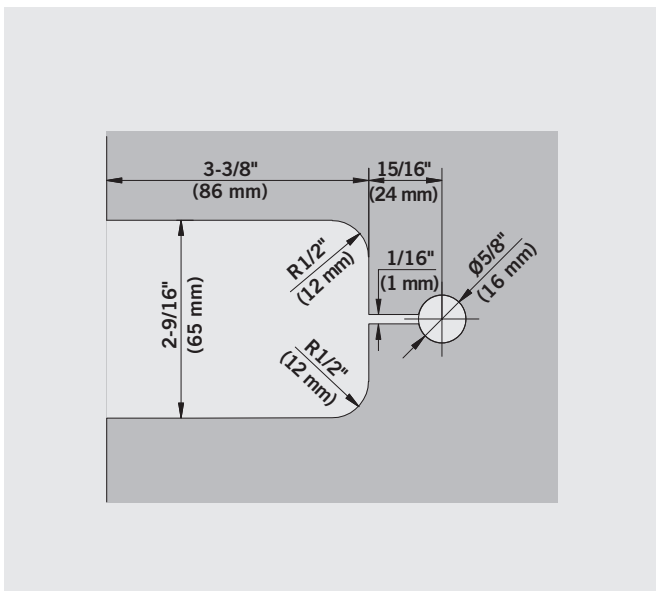
TENSOR Double Acting Hinge



Pair of double-acting hinges including mounting plate, round; for installation onto wall or frame with surface-mounted mounting plate.

For $3/8"$ (10 mm) or $1/2"$ (12 mm) tempered glass
 ■ Art. No. 812.520
 Set of two hinges

Glass Preparation



FIXED TO GLASS SIDE PANEL

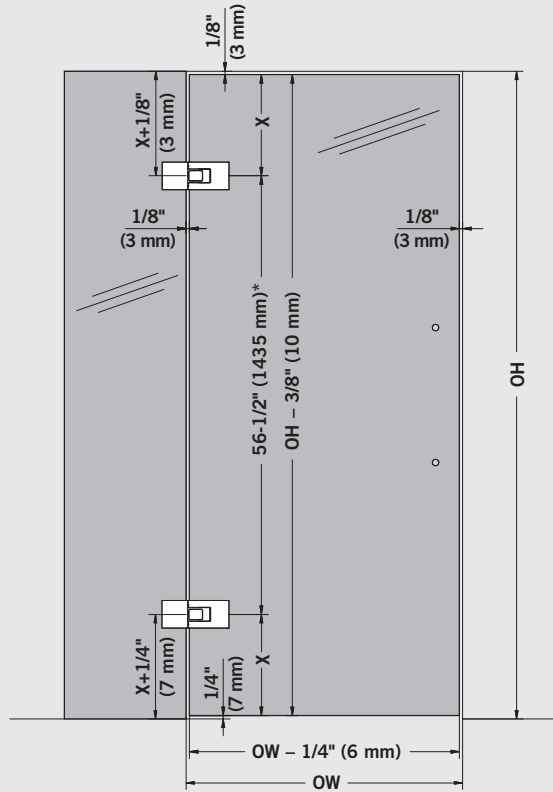
Typical Assemblies

TENSOR double-acting door attached to glass side panel

Single Door

Fastening for 3/8" (10 mm) or 1/2" (12 mm) glass

- Max. door weight
143 lb (65 kg)
- Max. door width
39-3/8" (1000 mm)
- OH = finished opening height
- OW = finished opening width
- Glass height =
OH - 3/8" (10 mm)
- Glass width =
OW - 1/4" (6 mm)

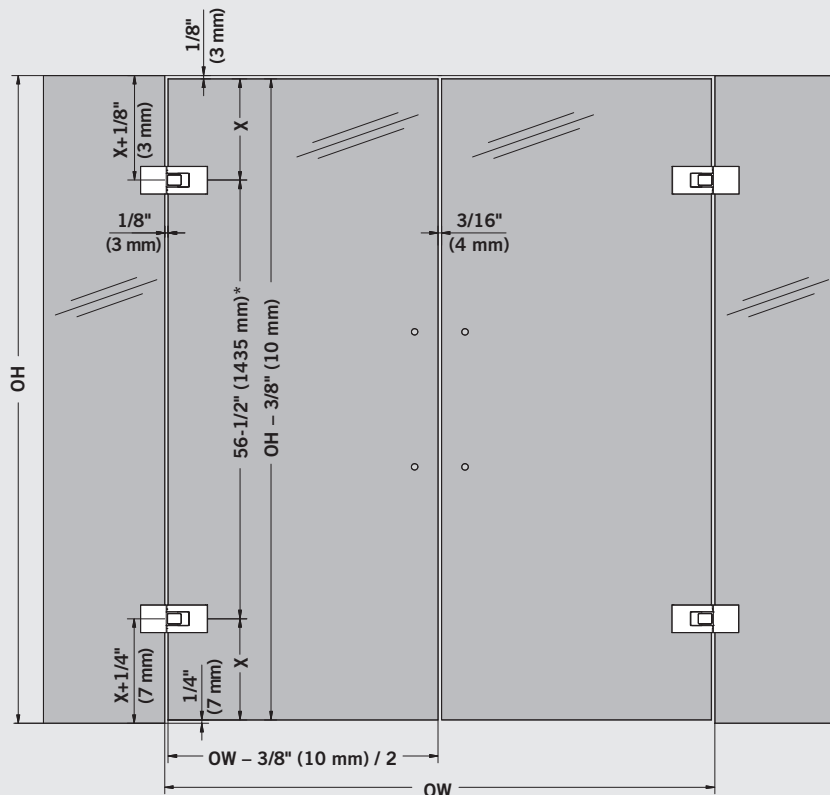


TENSOR double-acting door to glass side panel

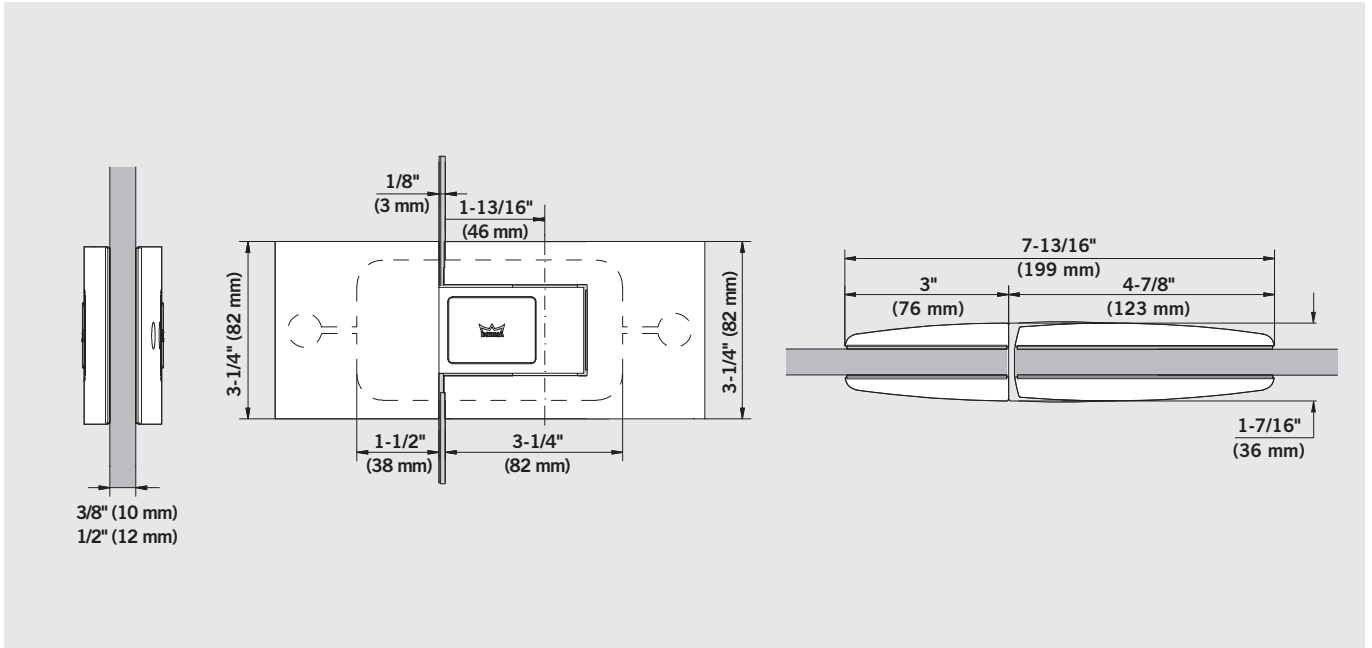
Pair of Doors

Fastening for 3/8" (10 mm) or 1/2" (12 mm) glass

- Max. door weight:
143 lb (65 kg)
- Max. door width:
39-3/8" (1000 mm)
- OH = finished opening height
- OW = finished opening width
- Glass height =
OH - 3/8" (10 mm)
- Glass width =
OW - 3/8" (10 mm) / 2



TENSOR Double Acting Hinge



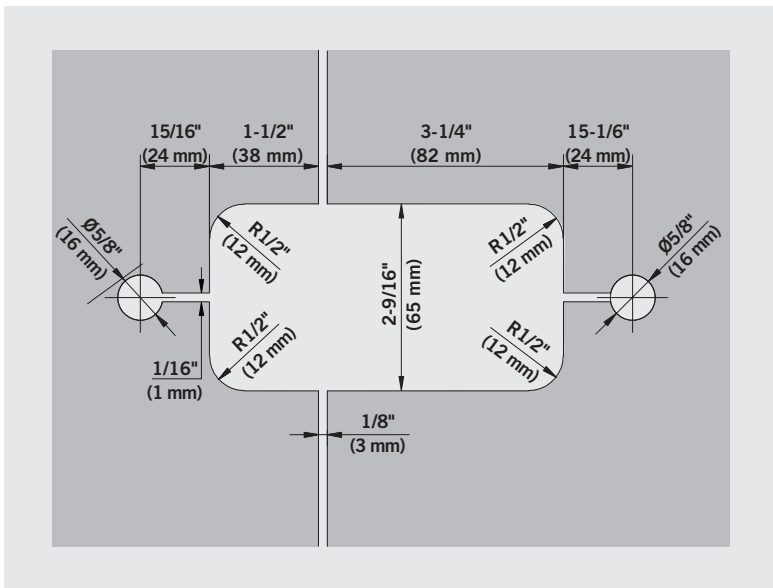
Pair of double-acting hinges
for installation glass to glass.

See Back page for Available
Finishes.

For 3/8" (10 mm) or 1/2"
(12 mm) tempered glass

- Art. No. 812.523
- Set of two hinges

Glass Preparation





AVAILABLE FINISHES



Aluminum EV1 Deco, Bright Clear Anodized (114)



Polished Chrome (122)



Aluminum, similar to Satin Stainless Steel (113)

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