Goppion Q-Class
HIGH-PERFORMANCE, HIGHLY CUSTOMIZABLE DISPLAY CASES, WITH MULTIPLE DOOR OPENING SYSTEMS
Q-Class

High-performance, highly customizable display cases providing wide scope for personalization, with multiple door opening systems, concealed hinges and high airtightness

Qv1 type – Rotation on a vertical axis
The doors on these display cases swing open on Goppion's articulated quadrilateral hinges. They can be made with a low or high base and are available with either a glass top or metal light attic (to house the lighting equipment or provide anchoring for interior fittings).

Goppion patented devices that can be fitted

Qv2 type – Tilt-and-slide
These cases have a tilt-and-slide door opening system and are available with a glass top or metal light attic.

Goppion patented devices that can be fitted
Qv4 type – Tilt-and-slide with concealed mechanism
These vertical display cases’ tilt-and-slide opening systems use pantographs and heavy-duty tracks. The cases are available with either a low or high base. Miniaturized tilt-and-slide apparatus is installed in the metal light attic or glass top.

Goppion patented devices that can be fitted

![Diagram of Qv4 type]


Qv5 type – Pull-and-slide with concealed mechanism
These vertical display cases’ pull-and-slide opening systems use pantographs and heavy-duty tracks. The cases are available with either a low or high base and come with either a glass top or metal attic housing the lighting equipment.

Goppion patented devices that can be fitted

![Diagram of Qv5 type]

Museum of Fine Arts, Boston (US).
**Qv7 type – Push-and-slide with concealed mechanism**
These vertical display cases’ push-and-slide opening systems use pantographs and heavy duty tracks. The cases are available with either a low or a high base and have a metal light attic. Qv7 cases require at least two doors in series across the opening face.

Goppion patented devices that can be fitted

1 3 5 6 8 10 16 17 19

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**Qv6 type – Rototranslation with symmetric or asymmetric arms**
These vertical display cases with metal light attic open by rototranslation, in which the door is mechanically repositioned against and parallel to one side of the case. We recommend this solution when there is not enough room in front of the case to swing the door all the way open.

Goppion patented devices that can be fitted

1 3 5 6 8 10 16 17 19

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*Musée du Quai Branly, Silo Est, Paris (FR).*

*The British Museum, Waddesdon Bequest, London (UK).*
Qv1 type

Rotation on a vertical axis
As the door approaches the fully open or fully closed position, the unique action of the quadrilateral hinges translates the coupling face by a few millimeters perpendicular to the mating surface, simultaneously and uniformly compressing or decompressing the gasket around the entire perimeter. This system is recommended when there is sufficient room for the door to swing open completely.

Customization
Mating surfaces with following gaskets:
- half-round in edge-to-face joint
- cast-in-place in edge-to-face joint
- cast-in-place in miter joint
- magnetic in edge-to-face joint, with external door
- magnetic in miter joint

Ceiling:
- glass top
- glass top with metal profile
- center dropped metal light attic
- full metal light attic

Dimensions
L = up to 2,400 (with glass top)
up to 3,000 (with metal light attic)
P = up to 2,400
H = up to 3,000
V = up to 2,900
B = 100 (low baseboard for passive climate control), min. 400 (high baseboard for active climate control)
FB = 70/100/150
FT = 30 (with glass top or center dropped metal light attic), 100 (with incorporated metal light attic)
Qv2 type

Qv2 display cases feature a tilt-and-slide door opening system. The lower portion of the door is pulled out, while the upper part is tilted within guide rails. The door then slides horizontally along tracks and heavy-duty bearings at the bottom, while the top slides along a rail. The door slides in two directions across 50% of its width.

**Customization**
Mating surfaces with following gaskets:
- half-round in edge-to-face joint

Ceilings:
- glass top with metal profile
- inset metal attic

**Dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>up to 1,600</td>
</tr>
<tr>
<td>P</td>
<td>up to 1,400</td>
</tr>
<tr>
<td>H</td>
<td>up to 2,400</td>
</tr>
<tr>
<td>V</td>
<td>up to 2,300</td>
</tr>
<tr>
<td>HB</td>
<td>100 (low baseboard for passive climate control), min. 400 (high baseboard for active climate control)</td>
</tr>
<tr>
<td>FB</td>
<td>100</td>
</tr>
<tr>
<td>FT</td>
<td>30</td>
</tr>
</tbody>
</table>

Up to 50% L self-supporting
Qv4 type

Tilt-and-slide with concealed mechanism
The door is tilted by pulling the lower edge out further than the upper, with the aid of pantographs, which powerfully compress gasket when the door closes; the door then slides horizontally along tracks with an extremely low friction coefficient. This system is recommended when a hinged door would not have sufficient clearance and when the length and shallowness of the case would make it impossible to include mechanisms to support the weight of the open door.

Customization
Mating surfaces with following gaskets:
• cast-in-place in miter joint
• magnetic in edge-to-face joint, with external door
• magnetic in miter joint

Ceilings:
• glass top
• glass top with metal profile
• inset metal attic
• integrated metal attic

Dimensions
L = up to 3,000
P = up to 2,400
H = up to 3,000
V = up to 2,900
B = 100 (low baseboard for passive climate control),
min. 400 (high baseboard for active climate control)
FB = 70/100/150
FT = 30

Two-directional opening 60%
In glass-topped display cases the pull-and-slide opening system with concealed opening mechanism is set into the thickness of the glass top (Goppion Proprietary), while it is concealed in the base by a backpainted strip. This system provides over 60% two-directional opening when self-supported and up to 80% with the use of the supporting device, or up to 80% one-directional self-supported opening.
Qv5 type

Pull-and-slide with concealed mechanism
These vertical display cases’ pull-and-slide opening systems use pantographs and heavy-duty tracks. The cases can be made with either a low or a high base and come with a glass top or metal attic housing the lighting equipment. On closing, the pantographs powerfully compress the sealing gaskets. On opening, the pantographs pull the door out then allow the door to be slid horizontally along tracks with an extremely low coefficient of friction. We recommend this system when a hinged door would not have sufficient clearance and when the length and shallowness of the case would make it impossible to install a mechanism to support the weight of the open door.

Customization
Mating surfaces with following gaskets:
- half-round in edge-to-face joint
- cast-in-place in edge-to-face joint
- cast-in-place in miter joint
- magnetic in edge-to-face joint, with external door
- magnetic in miter joint

Ceilings:
- incorporated metal attic

Dimensions
L = up to 6,000
P = up to 2,400
H = up to 3,000
V = up to 2,900
B = 100 (low baseboard for passive climate control), min. 400 (high baseboard for active climate control)
FB = 70/100/150
FT = 70/100/150
Qv6 type

Rototranslation with symmetric or asymmetric arms
Qv6 cases offer complete opening of glass front. In the model with symmetric arms, the door is supported by four arms of equal length, two below and two above, which shift the pane sideways, parallel to the front of the case, as they rotate. With asymmetric arms, the door is supported by four arms that provide a rototranslatory action as they rotate, bringing the door parallel to the side of the case, thus opening the front completely. We recommend this option when the size of the room does not enable the door to be swung perpendicular to the front of the case. Symmetric-armed cases are equipped with a metal attic, while asymmetric-armed cases have a glass top and metal perimeter profile.

Customization
Mating surfaces with following gaskets:
• half-round in edge-to-face joint
• cast-in-place in edge-to-face joint
• cast-in-place in miter joint
• magnetic in edge-to-face joint, with external door
• magnetic in miter joint

Ceilings:
• incorporated metal attic

Dimensions
L = up to 4,000
P = up to 2,000
H = up to 3,000
V = up to 2,900
B = 100 (low baseboard for passive climate control), min. 400 (high baseboard for active climate control)
FB = 100/150
FT = 100/150
Display Cases Classes & Types

Museo dell'Opera del Duomo, Florence (IT).