MODULAR CLAMPING SYSTEMS

APS Automatic Positioning System

www.omlspa.it
Significant reduction of set-up times
Zero Point Clamping System

**APS Zero Point Clamping System Modules**
- Highest precision
- Wear-resistant and rust protected
- Maximum pull-in forces due to turbo function
- Suitable for automation
- Low installation height due to compact design
- Modules fully sealed (proofline)

**APS Clamping Pins**
- Large entry radii on the clamping pins for easy and safe loading
- Wear-resistant

**APS Clamping Unit**
- Fully assembled clamping unit
- Ready to use
- Customer-specific versions available in a short time

**APS Clamping Pallets**
- Fully assembled clamping pallet
- Optional with interface for module height extension
- Customized clamping pallets for any machine / application

**APS Module Height Extensions**
- Ready to use single module units
- Different heights

**APS Combi Units**
- Ready to use combi module units
- Different heights

**APS Spacers**
- Adapt one or more combi unit

**APS Clamping Pins**
- Large entry radii on the clamping pins for easy and safe loading
- Wear-resistant

**APS Accessories**
- Protection covers
- Pins and keys for orientation (single use)
CLAMPING SYSTEM WITH 3 JAWS AT 120°

APS is the only one clamping system ZERO POINT with 3 jaws at 120° and thanks to special treatments antifriction and anticorrosion of the pins and the clamping jaws (already preliminarily treated to 62 HRC), further improves its performance.

MAXIMUM RIGIDITY!
- Monolithic piston with inclined planes
- Jaws with double inclined plane which generates the “PULL DOWN” effect

MAXIMUM ACCURACY!
Maximum accuracy of the tapered coupling between the pin and the module
The Turbo function is always integrated in APS PREMIUM modules. Turbo is the function by means of which the compressed air increases the clamping force applied by the springs until reaching the “PULL DOWN” clamping force of 45 kN.

**UNLOCKING FUNCTION at 6 bar**

**TURBO FUNCTION**

**AUTOMATIC CLEANING FUNCTION (APS PREMIUM)**

Customer Benefits

- Significantly reduced costs due to reduced set-up times
- Modular construction kit system: existing clamping systems can be modified very easy
- Low installation height due to the compact design
- Highest process reliability and repeat accuracy < 0.005 mm
- Wear-resistant and protected against rust (or stainless) due to heat treated elements and an extra hard protective coating
- Maximum pull-in forces until 45 kN (APS 190) thanks to turbo function
- Highest stiffness by means of 3 clamping slides (Premium / Top-Version)
- Fully sealed (proofline)
### Overview

#### APS Versions

<table>
<thead>
<tr>
<th>Type</th>
<th>Clamping slides</th>
<th>Turbo</th>
<th>Pull-in forces with Turbo (without Turbo)</th>
<th>Anti rotating protection (for single use)</th>
<th>Air cleaning</th>
<th>Monitoring via air control</th>
<th>Protective coating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>kN</td>
<td></td>
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<tr>
<td>APS 100-E PREMIUM</td>
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<td>•</td>
<td>15.0 (4)</td>
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<tr>
<td>APS 140-E PREMIUM</td>
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<td>26.0 (7.5)</td>
<td>•</td>
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<td>•</td>
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<tr>
<td>APS 140-E BASIC</td>
<td>-</td>
<td>•</td>
<td>26.0 (7.5)</td>
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<td>APS 140-E BASIC INOX</td>
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<td>26.0 (7.5)</td>
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<tr>
<td>APS 140-I PREMIUM</td>
<td>•</td>
<td>-</td>
<td>26.0 (7.5)</td>
<td>•</td>
<td>-</td>
<td>-</td>
<td>•</td>
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<tr>
<td>APS 190-E PREMIUM</td>
<td>•</td>
<td>-</td>
<td>45.0 (13.5)</td>
<td>•</td>
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</tbody>
</table>

### Machining Process with APS Zero Point Clamping System

- **Turning**
- **Milling**
- **Boring**
- **Measuring**
- **Hardening**
- **Grinding**
- **Eroding**
- **End Control**

- **Automation Product**
- **Cycle time reduced**

**Solution:** APS Zero Point Clamping System in machining process
Clamping Pins

A: Centering Pin

- Type A is used for centering and clamping.

B: Sword Pin

- Type B is used for reference and clamping.

C: Pull-down Pin

- Type C is only used for clamping.

All clamping pins are wear-resistant and protected against rust. Large entry radii of the clamping pins ensure easy and safe loading.

<table>
<thead>
<tr>
<th>Clamping Pins</th>
<th>M6 (15 kN)</th>
<th>M8 (25 kN)</th>
<th>M10 (35 kN)</th>
<th>M12 (50 kN)</th>
<th>M16 (75 kN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding Forces (kN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Holding Forces (kN) with screw DIN EN ISO 4762 - 12.9
Positions of the clamping pins

Positioning of the Sword Pin Type B

The reference slot of the pin type B must be oriented at 90° compared to the axis that links pins A and B (detail D = reference slot for the pin aligned with the reference points into the plate).
**APS 100-E**

**Zero Point Clamping Module**

- **2 Clamping slides**
- **Turbo function**

**Application/customer benefits**
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant and rust protected due to an extra hard protective coating
- Low maintenance
- Low installation height due to the compact design

**Technical features**
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 4 kN)
- Anti rotating protection
- Monitoring via air control
- Air cleaning
- Fully sealed (proofline)

**Standard equipment**
- Zero Point Clamping Module with mounting screws

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**Type** | **Id. No.** | **Pull-in force with Turbo** | **Holding force M6/M8** | **Unlocking pressure** | **Repeatability** | **Weight**
--- | --- | --- | --- | --- | --- | ---
APS 100-E PREMIUM | 460005 | 15 kN | 15 / 25 kN | 6 bar | < 0.005 mm | 1.9 kg
Zero Point Clamping Module

- 2 Clamping slides
- Turbo function

**Application/customer benefits**
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant and rust protected due to an extra hard protective coating
- Low maintenance
- Low installation height due to the compact design

**Technical features**
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 4 kN)
- Fully sealed (proofline)

**Standard equipment**
Zero Point Clamping Module with mounting screws

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M6/M8</th>
<th>Unlocking pressure</th>
<th>Repeatability</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 100-E BASIC</td>
<td>460007</td>
<td>15.0 kN</td>
<td>15 / 25 kN</td>
<td>6 bar</td>
<td>&lt; 0.005 mm</td>
<td>1.9 kg</td>
</tr>
</tbody>
</table>
**APS 140-E**

**Zero Point Clamping Module**

**Application/customer benefits**
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant and rust protected due to an extra hard protective coating
- Low maintenance
- Low installation height due to the compact design

**Technical features**
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Anti rotating protection
- Monitoring via air control
- Air cleaning
- Fully sealed (proofline)

**Standard equipment**
Zero Point Clamping Module with mounting screws

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M10/M12/M16</th>
<th>Unlocking pressure</th>
<th>Repeatability</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 140-E PREMIUM</td>
<td>460002</td>
<td>26 kN</td>
<td>35/50/75 kN</td>
<td>6 bar</td>
<td>&lt; 0.005 mm</td>
<td>4.5 kg</td>
</tr>
</tbody>
</table>
Zero Point Clamping Module

- 3 Clamping slides
- Turbo function

**Application/customer benefits**
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant and rust protected due to an extra hard protective coating
- Low maintenance
- Low installation height due to the compact design

**Technical features**
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Air cleaning
- Fully sealed (proofline)

**Standard equipment**
Zero Point Clamping Module with mounting screws

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**Type** | **Id. No.** | **Pull-in force with Turbo** | **Holding force M10/M12/M16** | **Unlocking pressure** | **Repeatability** | **Weight**
--- | --- | --- | --- | --- | --- | ---
APS 140-E PREMIUM LIGHT | 460003 | 26 kN | 35/50/75 kN | 6 bar | < 0.005 mm | 4.5 kg
APS 140-E PREMIUM INOX

Zero Point Clamping Module

- 3 Clamping slides
- Turbo function

Application/customer benefits
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant and rust free due to an extra hard protective coating (stainless steel)
- Low maintenance
- Low installation height due to the compact design

Technical features
- 3 Clamping slides
- Repeatability < 0.005 mm
- Stainless steel version
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Anti rotating protection
- Monitoring via air control
- Air cleaning
- Fully sealed (proofline)

Standard equipment
Zero Point Clamping Module with mounting screws

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M10/M12/M16</th>
<th>Unlocking pressure</th>
<th>Repeatability</th>
<th>Weight</th>
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<tbody>
<tr>
<td>APS 140-E PREMIUM INOX</td>
<td>460004</td>
<td>26 kN</td>
<td>35/50/75 kN</td>
<td>6 bar</td>
<td>&lt; 0.005 mm</td>
<td>4.5 kg</td>
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</tbody>
</table>
Zero Point Clamping Integration Module

### Technology that meets demands

- **Application/customer benefits**
  - Reduced set-up times
  - Highest process reliability and repeat accuracy
  - Wear-resistant and rust protected due to an extra hard protective coating
  - Low maintenance
  - Integration module for extra low installation height

- **Technical features**
  - 3 Clamping slides
  - Repeatability < 0.005 mm
  - Protective coating
  - Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
  - Anti rotating protection
  - Monitoring via air control
  - Air cleaning
  - Fully sealed (proofline)

- **Standard equipment**
  - Zero Point Clamping Module with mounting screws

---

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M10/M12/M16</th>
<th>Unlocking pressure</th>
<th>Repeatability</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 140-I PREMIUM</td>
<td>460008</td>
<td>26 kN</td>
<td>35/50/75 kN</td>
<td>6 bar</td>
<td>&lt; 0.005 mm</td>
<td>4.5 kg</td>
</tr>
</tbody>
</table>
### APS 140-E

#### BASIC

#### Zero Point Clamping Module

- 2 Clamping slides
- Turbo function

**Application/customer benefits**
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant an rust protected due to an extra hard protective coating
- Low maintenance
- Low installation height due to the compact design

**Technical features**
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Fully sealed (proofline)

**Standard equipment**
Zero Point Clamping Module with mounting screws

---

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M10/M12/M16</th>
<th>Unlocking pressure</th>
<th>Repeatability</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>APS 140-E BASIC</td>
<td>460001</td>
<td>26 kN</td>
<td>35/50/75 kN</td>
<td>6 bar</td>
<td>&lt; 0.005 mm</td>
<td>4.5 kg</td>
</tr>
</tbody>
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---

[Diagram showing dimensions and features of APS 140-E BASIC zero point clamping module]
**Zero Point Clamping Module**

- 2 Clamping slides
- Turbo function

**Application/customer benefits**
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant and rust-free due to an extra hard protective coating (stainless steel)
- Low maintenance
- Low installation height due to the compact design

**Technical features**
- 2 Clamping slides
- Repeatability < 0.005 mm
- Stainless steel version
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Fully sealed (proofline)

**Standard equipment**
Zero Point Clamping Module with mounting screws

---

**Type** | **Id. No.** | **Pull-in force with Turbo** | **Holding force M10/M12/M16** | **Unlocking pressure** | **Repeatability** | **Weight**
--- | --- | --- | --- | --- | --- | ---
APS 140-E BASIC INOX | 460009 | 26 kN | 35/50/75 kN | 6 bar | < 0.005 mm | 4.5 kg
**APS 190-E**

**Zero Point Clamping Module**

- **3 Clamping slides**
- **Turbo function**

**Application/customer benefits**
- Reduced set-up times
- Highest process reliability and repeat accuracy
- Wear-resistant and rust protected due to an extra hard protective coating
- Low maintenance
- Low installation height due to the compact design

**Technical features**
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 13.5 kN)
- Anti rotating protection
- Monitoring via air control
- Air cleaning
- Fully sealed (proofline)

**Standard equipment**
Zero Point Clamping Module with mounting screws

---

### Technical data

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M12/M16</th>
<th>Unlocking pressure</th>
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<th>Weight</th>
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<tr>
<td>APS 190-E PREMIUM</td>
<td>460006</td>
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<td>50/75 kN</td>
<td>6 bar</td>
<td>&lt; 0.005 mm</td>
<td>6.9 kg</td>
</tr>
</tbody>
</table>
APS
Clamping unit fully assembled ready for use

Functional Overview of the APS Clamping Units

1. Pneumatic connections 1/8” (adapter for 1/4” also included in scope of delivery)
2. Turbo function for highest pull-in forces
3. Solid base plate (height 28 mm) for maximum stiffness at a total height of only 60 mm
4. Easy mounting on the machine table due to positioning holes
**APS 100**

<table>
<thead>
<tr>
<th>Application/customer benefits</th>
<th>Technical features</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pre-assembled clamping unit with APS 100 Premium</td>
<td>• 2 Clamping slides</td>
</tr>
<tr>
<td>• Universal applicable</td>
<td>• Repeatability &lt; 0.005 mm</td>
</tr>
<tr>
<td>• Fast and easy set-up</td>
<td>• Protective coating</td>
</tr>
<tr>
<td></td>
<td>• Turbo function for increasing the pull-in forces (pull-in force without Turbo 4 kN)</td>
</tr>
<tr>
<td></td>
<td>• Anti rotating protection</td>
</tr>
<tr>
<td></td>
<td>• Air cleaning</td>
</tr>
</tbody>
</table>

**Standard equipment**

Clamping unit with APS 100 Premium

For clamping pallets please see next catalog pages

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo kN</th>
<th>Holding force M6/M8 kN</th>
<th>Repeatability mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 1 APS 100 Premium</td>
<td>46168280</td>
<td>15</td>
<td>15/25</td>
<td>&lt; 0.005</td>
<td>5.5</td>
</tr>
</tbody>
</table>
Application/customer benefits
- Pre-assembled clamping unit with 2 pieces APS 100 Premium or Basic
- Universal applicable
- Fast and easy set-up

Technical features
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 4 kN)
- Air cleaning (only Premium)
- Anti rotating protection (only Premium)
- Grid dimension 150 mm

Standard equipment
Clamping unit with 2 pieces APS 100 Premium or Basic
For clamping pallets please see next catalog pages

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M6/M8</th>
<th>Repeatability</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 2 APS 100 Premium</td>
<td>46168290</td>
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<td>15/25</td>
<td>&lt; 0.005</td>
<td>10.5</td>
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<tr>
<td>Clamping unit with 2 APS 100 Basic</td>
<td>46168295</td>
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<td>&lt; 0.005</td>
<td>10.5</td>
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</tbody>
</table>
APS 100

Clamping Unit

Application/customer benefits
- Pre-assembled clamping unit with 4 pieces APS 100 Premium or Basic
- Universal applicable
- Fast and easy set-up

Technical features
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 4 kN)
- Air cleaning (only Premium)
- Anti rotating protection (only Premium)
- Grid dimension 150 mm

Standard equipment
Clamping unit with 4 pieces APS 100 Premium or Basic
For clamping pallets please see next catalog pages

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo kN</th>
<th>Holding force M6/M8 kN</th>
<th>Repeatability mm</th>
<th>Weight kg</th>
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</thead>
<tbody>
<tr>
<td>Clamping unit with 4 APS 100 Premium</td>
<td>46168250</td>
<td>15</td>
<td>15/25</td>
<td>&lt; 0.005</td>
<td>20.5</td>
</tr>
<tr>
<td>Clamping unit with 4 APS 100 Basic</td>
<td>46168255</td>
<td>15</td>
<td>15/25</td>
<td>&lt; 0.005</td>
<td>20.5</td>
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</tbody>
</table>
Clamping Unit

**APS 140**

**Application/customer benefits**
- Pre-assembled clamping unit with APS 140 Premium
- Universal applicable
- Fast and easy set-up

**Technical features**
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Anti rotating protection
- Air cleaning

**Standard equipment**
Clamping unit with APS 140 Premium
For clamping pallets please see next catalog pages

---

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo kN</th>
<th>Holding force M10/M12/M16 kN</th>
<th>Repeatability mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 1 APS 140 Premium</td>
<td>46168260</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>11</td>
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</tbody>
</table>
## APS 140

### Clamping Unit

#### Application/customer benefits
- Pre-assembled clamping unit with 2 pieces APS 140 Premium Light, Basic or Premium
- Universal applicable
- Fast and easy set-up

#### Technical features
- 3 Clamping slides (Basic: 2 Clamping slides)
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Air cleaning (only Premium Light)
- Grid dimension 200 mm

#### Standard equipment
Clamping unit with 2 pieces APS 140 Premium Light, Basic or Premium
For clamping pallets please see next catalog pages

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### Technical Data

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo kN</th>
<th>Holding force M10/M12/M16 kN</th>
<th>Repeatability mm</th>
<th>Weight kg</th>
</tr>
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<tbody>
<tr>
<td>Clamping unit with 2 APS 140 Premium Light</td>
<td>460020</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
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<tr>
<td>Clamping unit with 2 APS 140 Basic</td>
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<td>35/50/75</td>
<td>&lt; 0.005</td>
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<tr>
<td>Clamping unit with 2 APS 140 Premium</td>
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<td>26</td>
<td>30/50/75</td>
<td>&lt; 0.005</td>
<td>28</td>
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</tbody>
</table>
Clamping Unit

**Application/customer benefits**
- Pre-assembled clamping unit with 4 pieces APS 140 Premium Light or Basic
- Universal applicable
- Fast and easy set-up

**Technical features**
- 3 Clamping slides (Basic: 2 Clamping slides)
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Air cleaning (only Premium Light)
- Grid dimension 200 mm

**Standard equipment**
Clamping unit with 4 pieces APS 140 Premium Light or Basic
For clamping pallets please see next catalog pages

---

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo kN</th>
<th>Holding force M10/M12/M16 kN</th>
<th>Repeatability mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 4 APS 140 Premium Light</td>
<td>460022</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>56</td>
</tr>
<tr>
<td>Clamping unit with 4 APS 140 Basic</td>
<td>460023</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>56</td>
</tr>
</tbody>
</table>
### APS 140

#### Clamping Unit

**Application/customer benefits**
- Pre-assembled clamping unit with 4 pieces APS 140 Premium Light or Basic
- Suitable also for standard machine pallets type JIS 6337-1980
- Universal applicable
- Fast and easy set-up

**Technical features**
- 3 Clamping slides (Basic: 2 Clamping slides)
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Air cleaning (only Premium Light)

**Standard equipment**
Clamping unit with 4 pieces APS 140 Premium Light or Basic
For clamping pallets please see next catalog pages

---

**Type** | **Id. No.** | **B mm** | **E mm** | **F mm** | **G mm** | **Pull-in force with Turbo kN** | **Holding force M10/M12/M16 kN** | **Repeatability mm** | **Weight kg**
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
Clamping unit with 4 APS 140 Premium Light | 46167040 | 400 | 55 | 160 | 250 | 26 | 35/50/75 | < 0.005 | 57
Clamping unit with 4 APS 140 Basic | 46167045 | 400 | 55 | 160 | 250 | 26 | 35/50/75 | < 0.005 | 57
Clamping unit with 4 APS 140 Premium Light | 46167050 | 500 | 75 | 200 | 300 | 26 | 35/50/75 | < 0.005 | 85
Clamping unit with 4 APS 140 Basic | 46167055 | 500 | 75 | 200 | 300 | 26 | 35/50/75 | < 0.005 | 85
Clamping unit with 4 APS 140 Premium Light | 46167060 | 630 | 100 | 250 | 420 | 26 | 35/50/75 | < 0.005 | 130
Clamping unit with 4 APS 140 Basic | 46167065 | 630 | 100 | 250 | 420 | 26 | 35/50/75 | < 0.005 | 130
## Clamping Unit

### APS 140

#### Application/customer benefits
- Pre-assembled clamping unit with 6 pieces APS 140 Premium Light or Basic
- Universal applicable
- Fast and easy set-up

#### Technical features
- 3 Clamping slides (Basic: 2 Clamping slides)
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Air cleaning (only Premium Light)
- Grid dimension 200 mm

#### Standard equipment
Clamping unit with 6 pieces APS 140 Premium Light or Basic
For clamping pallets please see next catalog pages

---

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>D (mm)</th>
<th>Pull-in force with Turbo (kN)</th>
<th>Holding force M10/M12/M16 (kN)</th>
<th>Repeatability (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 6 APS 140 Premium Light</td>
<td>46168110</td>
<td>600</td>
<td>400</td>
<td>200</td>
<td>200</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>83</td>
</tr>
<tr>
<td>Clamping unit with 6 APS 140 Basic</td>
<td>46168115</td>
<td>600</td>
<td>400</td>
<td>200</td>
<td>200</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>84</td>
</tr>
</tbody>
</table>

Special clamping units on request.
### APS 100 Clamping Unit

- **For 5-axis machining center**

### Application/customer benefits
- Pre-assembled clamping unit with 3 pieces APS 100 Premium or Basic
- For 5-axis machining center
- Universal applicable
- Fast and easy set-up

### Technical features
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 4 kN)
- Air cleaning (only Premium)
- Anti rotating protection (only Premium)
- Grid dimension 100 mm

### Standard equipment
Clamping unit with 3 pieces APS 100 Premium or Basic
For clamping pallets please see next catalog pages

### Type Id. No. Pull-in force with Turbo Holding force M10/M12/M16 Repeatability Weight
<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M10/M12/M16</th>
<th>Repeatability</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 3 APS 100 Premium</td>
<td>46168010</td>
<td>15</td>
<td>15/25</td>
<td>&lt; 0.005</td>
<td>37</td>
</tr>
<tr>
<td>Clamping unit with 3 APS 100 Basic</td>
<td>46168015</td>
<td>15</td>
<td>15/25</td>
<td>&lt; 0.005</td>
<td>36</td>
</tr>
</tbody>
</table>
Clamping Unit

For 5-axis machining center

**APS 140**

**Application/customer benefits**
- Pre-assembled clamping unit with 4 pieces APS 140 Premium Light or Basic
- For 5-axis machining center
- Universal applicable
- Fast and easy set-up

**Technical features**
- 3 Clamping slides (Basic: 2 Clamping slides)
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Air cleaning (only Premium Light)
- Grid dimension 150 mm

**Standard equipment**
Clamping unit with 4 pieces APS 140 Premium Light or Basic
For clamping pallets please see next catalog pages

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo kN</th>
<th>Holding force M10/M12/M16 kN</th>
<th>Repeatability mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 4 APS 140 Premium Light</td>
<td>46168020</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>45</td>
</tr>
<tr>
<td>Clamping unit with 4 APS 140 Basic</td>
<td>46168025</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>45</td>
</tr>
</tbody>
</table>

Special clamping units on request.
**APS 140**

**Clamping Unit**

- **For 5-axis machining center**

**Application/customer benefits**
- Pre-assembled clamping unit with 5 pieces APS 140 Premium Light or Basic
- For 5-axis machining center
- Universal applicable
- Fast and easy set-up

**Technical features**
- 3 Clamping slides (Basic: 2 Clamping slides)
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Air cleaning (only Premium Light)
- Grid dimension 250 mm

**Standard equipment**
Clamping unit with 5 pieces APS 140 Premium Light or Basic
For clamping pallets please see next catalog pages

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Pull-in force with Turbo</th>
<th>Holding force M10/M12/M16</th>
<th>Repeatability</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping unit with 5 APS 140 Premium Light</td>
<td>46168030</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>68</td>
</tr>
<tr>
<td>Clamping unit with 5 APS 140 Basic</td>
<td>46168035</td>
<td>26</td>
<td>35/50/75</td>
<td>&lt; 0.005</td>
<td>67</td>
</tr>
</tbody>
</table>

Special clamping units on request.
Flange for Indexing Tables

**APS 140**

**Application/customer benefits**
- Flange for indexing tables and CNC indexing tables with T-slots flange
- Including 1 APS 140 Premium Module

**Technical features**
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Anti rotating protection
- Monitoring via air control
- Air cleaning
- Fully sealed (proofline)

**Standard equipment**
Flange with 1 APS 140 modul for indexing tables and for orientation on indexing tables with T-slots

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flange</td>
<td>46167620</td>
<td>17</td>
</tr>
</tbody>
</table>
Applicaton/customer benefits
- Pre-assembled clamping pallet for APS 100/140
- Universal applicable
- Ready to use

Technical features
- Fully assembled
- Rust protected
- High quality steel (1.1730)

Standard equipment
1 Clamping pallet: fully assembled with 1 clamping pin (Type A), anti rotation key and hand grips
2 Clamping pallet: fully assembled with 1 clamping pin (Type A) and 1 clamping pin (Type B)
4 Clamping pallet: fully assembled with 1 clamping pin (Type A), 1 clamping pin (Type B), 2 clamping pin (Type C)

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>A mm</th>
<th>B mm</th>
<th>C mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping pallet APS 100</td>
<td>46167721</td>
<td>149</td>
<td>149</td>
<td>231</td>
</tr>
<tr>
<td>Clamping pallet APS 140</td>
<td>46167722</td>
<td>199</td>
<td>149</td>
<td>281</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>A mm</th>
<th>B mm</th>
<th>C mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping pallet APS 100</td>
<td>46167723</td>
<td>299</td>
<td>149</td>
<td>150</td>
</tr>
<tr>
<td>Clamping pallet APS 140</td>
<td>46167724</td>
<td>399</td>
<td>199</td>
<td>200</td>
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</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>A mm</th>
<th>B mm</th>
<th>C mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping pallet APS 100</td>
<td>46167725</td>
<td>299</td>
<td>299</td>
<td>150</td>
</tr>
<tr>
<td>Clamping pallet APS 140</td>
<td>46167726</td>
<td>399</td>
<td>399</td>
<td>200</td>
</tr>
</tbody>
</table>
Customized Clamping Pallets

**Application/customer benefits**
- Customized clamping pallets
- Short delivery times
- Usable for any machine or application
- Rust protected by means of burnishing

**Technical features**
- High quality steel (1.1730)

**Standard equipment**
Customized clamping pallet
Fully assembled with APS clamping pins on request

---

**Customized clamping pallets**

**Dimensions**

<table>
<thead>
<tr>
<th>Dimension</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

---

**Request form**
Simply fill in and send to: omlspa@omlspa.it

---

**M12**  
**M16**  
**M10**  
**M12**
### APS 140

#### Clamping Pallet

**Basic**

**Premium**

### Application/customer benefits
- Pre-assembled clamping pallet for APS 140
- Universal applicable
- 2 Versions: Premium and Basic

### Technical features
- Grid dimension 200 mm
- Fully assembled including clamping pins
- Premium Version with additional adaption for module units
- Rust protected

### Standard equipment
Clamping pallet fully assembled with 1 centering pin (Type A) and 1 sword pin (Type B)

---

**Type**
- Clamping pallet APS 140 Premium
- Clamping pallet APS 140 Basic

**Id. No.**
- 46186435
- 46186430
Application/customer benefits
- Pre-assembled clamping pallet for APS 140
- Universal applicable
- 2 Versions: Premium and Basic

Technical features
- Grid dimension 200 mm
- Fully assembled including clamping pins
- Premium Version with additional adaption for module units
- Rust protected

Standard equipment
Clamping pallet fully assembled with 1 centering pin (Type A), 1 sword pin (Type B) and 2 clamping pins (Type C)

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping pallet APS 140 Premium</td>
<td>46186415</td>
</tr>
<tr>
<td>Clamping pallet APS 140 Basic</td>
<td>46186410</td>
</tr>
</tbody>
</table>
Module Height Extension

Application/customer benefits
- Pre-assembled module extension unit with 1 piece APS 100 Premium
- Universal applicable
- Fast and easy set-up

Technical features
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 4 kN)
- Anti rotating protection
- Air cleaning

Standard equipment
Module height extension with 1 piece APS 100 Premium

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Height mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module extension APS 100 Premium</td>
<td>460110</td>
<td>65</td>
<td>6</td>
</tr>
</tbody>
</table>
Module Height Extension

Application/customer benefits
- Pre-assembled module extension unit with 1 piece APS 140 Premium
- Universal applicable
- Fast and easy set-up

Technical features
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 7.5 kN)
- Anti rotating protection
- Air cleaning

Standard equipment
Module height extension with 1 piece APS 140 Premium

---

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Height mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module extension APS 140 Premium</td>
<td>460112</td>
<td>60</td>
<td>8</td>
</tr>
<tr>
<td>Module extension APS 140 Premium</td>
<td>460113</td>
<td>80</td>
<td>11.5</td>
</tr>
<tr>
<td>Module extension APS 140 Premium</td>
<td>460114</td>
<td>120</td>
<td>14.5</td>
</tr>
<tr>
<td>Module extension APS 140 Premium</td>
<td>460115</td>
<td>180</td>
<td>18.5</td>
</tr>
</tbody>
</table>
APS 190

Module Height Extension

**Application/customer benefits**
- Pre-assembled module extension unit with 1 piece APS 190 Premium
- Universal applicable
- Fast and easy set-up

**Technical features**
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces (pull-in force without Turbo 13.5 kN)
- Anti rotating protection
- Air cleaning

**Standard equipment**
Module height extension with 1 piece APS 190 Premium

---

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Height (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module extension APS 190 Premium</td>
<td>460111</td>
<td>100</td>
<td>21</td>
</tr>
</tbody>
</table>
Application Examples

Clamping pallets with module height extensions

460112 (APS 140 H60)
460113 (APS 140 H80)
460114 (APS 140 H120)
460115 (APS 140 H180)

460111 (APS 190 H100)

46186435

46186415
Application Examples

Module height extensions and clamping devices

460110 Module unit H65 APS 100 Premium

HG-N 160 Manual chuck (Example)
Ø 160 max. (on request)
Ø 125 Standard 46168376

460112 Module unit H60-180 APS 140 Premium

HG-N 160 Manual chuck (Example)
Ø 200 max. (on request)
Ø 160 Standard 46168377

460111 Module unit H100 APS 190 Premium

HG-N 210 Manual chuck (Example)
Ø 250 max. (on request)
Ø 200 Standard 46168379
Application/customer benefits
- Pre-assembled clamping unit with 2 pieces APS 100 Premium
- Universal applicable
- Fast and easy set-up

Technical features
- 2 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces up to 15 kN (pull-in force without Turbo 4 kN)
- Anti rotating protection
- Air cleaning

Standard equipment
Combi unit with 2 pieces APS 100 Premium

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Height mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combi unit with 2 pieces APS 100 Premium</td>
<td>460117</td>
<td>125</td>
<td>7</td>
</tr>
<tr>
<td>Combi unit with 2 pieces APS 100 Premium</td>
<td>460118</td>
<td>160</td>
<td>9</td>
</tr>
</tbody>
</table>
**APS 140**

---

### Zero Point Clamping System

- **Combi unit**

### Application/customer benefits
- Pre-assembled clamping unit with 2 pieces APS 140 Premium
- Universal applicable
- Fast and easy set-up

### Technical features
- 3 Clamping slides
- Repeatability < 0.005 mm
- Protective coating
- Turbo function for increasing the pull-in forces up to 26 kN (pull-in force without Turbo 7.5 kN)
- Anti rotating protection
- Air cleaning

### Standard equipment
Clamping unit with 2 pieces APS 140 Premium

---

### Type and Specifications

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Height mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combi unit with 2 pieces APS 140 Premium</td>
<td>460119</td>
<td>160</td>
<td>17</td>
</tr>
<tr>
<td>Combi unit with 2 pieces APS 140 Premium</td>
<td>460120</td>
<td>200</td>
<td>21</td>
</tr>
</tbody>
</table>
Zero Point Clamping System

**APS 100/140**

- **Spacers for Combi Units**

**Application/customer benefits**
- Spacers to adapt more different module units
- Universal use

**Technical features**
- Height 20 mm

**Standard equipment**
Spacer without clamping pin

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Height mm</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spacer H20 APS 140-100</td>
<td>46168371</td>
<td>20</td>
<td>2.2</td>
</tr>
<tr>
<td>Spacer H20 APS 140-140</td>
<td>46168366</td>
<td>20</td>
<td>2.3</td>
</tr>
<tr>
<td>Spacer H20 APS 100-100</td>
<td>46168370</td>
<td>20</td>
<td>1.1</td>
</tr>
</tbody>
</table>
Combi Units and Spacers

Application Examples
**Zero Point Clamping System**

**Clamping pins**

**Application/customer benefits**
- Fixation and positioning on the clamping systems APS 100
- Wear-resistant due to an extra hard protective coating
- Large entry radii of the clamping pins for easy and safe loading

**Technical features**
- Centering pin Type A (Standard)
- Sword pin Type B (Positioning pin)
- Clamping pin Type C (with centering play 0.1 mm)

**Standard equipment**
Clamping pin with mounting screw M6x35

### Accessories

<table>
<thead>
<tr>
<th>Type</th>
<th>Thread</th>
<th>Type A Id. No.</th>
<th>Type B Id. No.</th>
<th>Type C Id. No.</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping pin APS 100</td>
<td>M8</td>
<td>46162155</td>
<td>46162156</td>
<td>46162157</td>
<td>0.3</td>
</tr>
</tbody>
</table>

ISO 10642 M6x35

[M8 ø12.5]  [M8 ø23.7]  [M8 ø15h6]  [M8 ø12.5]
**APS 140**

**Zero Point Clamping System**

### Accessories

- **Type A**
- **Type B**
- **Type C**

### Application/customer benefits
- Fixation and positioning on the clamping systems APS 140
- Wear-resistant due to an extra hard protective coating
- Large entry radii of the clamping pins for easy and safe loading

### Technical features
- Centering pin Type A (Standard)
- Sword pin Type B (Positioning pin)
- Clamping pin Type C (with centering play 0.1 mm)

### Standard equipment
- Clamping pin with mounting screw M10x45

---

### Table: Clamping Pins

<table>
<thead>
<tr>
<th>Type</th>
<th>Thread</th>
<th>Type A Id. No.</th>
<th>Type B Id. No.</th>
<th>Type C Id. No.</th>
<th>Weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clamping pin APS 140</td>
<td>M12</td>
<td>46162355</td>
<td>46162356</td>
<td>46162357</td>
<td>0.3</td>
</tr>
<tr>
<td>Clamping pin APS 140</td>
<td>M16</td>
<td>46162455</td>
<td>46162456</td>
<td>46162457</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Zero Point Clamping System

■ Clamping pins

Application/customer benefits
- Fixation and positioning on the clamping systems APS 190
- Large entry radii of the clamping pins for easy and safe loading

Technical features
- Centering pin Type A (Standard)

Standard equipment
Clamping pin with mounting screw M8x40 (6 pieces)

<table>
<thead>
<tr>
<th>Id. No.</th>
<th>Type</th>
<th>Weight</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 16 26 08</td>
<td>A</td>
<td>0,85 Kg</td>
<td>Pin with central hole Ø 30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Id. No.</th>
<th>Type</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 16 26 15</td>
<td>A</td>
<td>M16 1 Kg</td>
</tr>
<tr>
<td>46 16 26 16</td>
<td>B</td>
<td>M16 1 Kg</td>
</tr>
<tr>
<td>46 16 26 17</td>
<td>C</td>
<td>M16 1 Kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Id. No.</th>
<th>Type</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 16 26 35</td>
<td>A</td>
<td>Ø 25 = pin APS-140 M12 0,85 Kg</td>
</tr>
</tbody>
</table>
Accessories for APS 100 and APS 140

Protection cover

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 100</td>
<td>460030</td>
</tr>
<tr>
<td>APS 140</td>
<td>460031</td>
</tr>
<tr>
<td>APS 190</td>
<td>46162625</td>
</tr>
</tbody>
</table>

Anti rotation kit for APS Premium

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 100</td>
<td>46162133</td>
</tr>
<tr>
<td>APS 140/190</td>
<td>46162333</td>
</tr>
</tbody>
</table>

Key for orientation (single use)

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 140 (f7) for clamping plate</td>
<td>46162328</td>
</tr>
<tr>
<td>APS 140 (h7) for module</td>
<td>46162329</td>
</tr>
</tbody>
</table>

Multi-Slot screw for the positioning of clamping units

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Slot 14/16/18</td>
<td>71290182</td>
</tr>
</tbody>
</table>
## Accessories for APS 100 and APS 140

### Protection cover for screws for APS modules

![Protection cover for screws](image)

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 100</td>
<td>46162129</td>
</tr>
<tr>
<td>APS 140</td>
<td>46162309</td>
</tr>
<tr>
<td>APS 190</td>
<td>46162609</td>
</tr>
</tbody>
</table>

### Protection cover quick connection 1/8”

![Protection cover quick connection](image)

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 100/140</td>
<td>46167019</td>
</tr>
</tbody>
</table>

### Quick fitting female 1/8”

![Quick fitting female](image)

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Ø E</th>
<th>F</th>
<th>L</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 100/140</td>
<td>71612801</td>
<td>18.8</td>
<td>G1/8</td>
<td>42</td>
<td>7</td>
</tr>
</tbody>
</table>

### Quick fitting male 1/8”

![Quick fitting male](image)

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>F</th>
<th>L</th>
<th>Ø M</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS 100/140</td>
<td>71612802</td>
<td>G1/8</td>
<td>29.3</td>
<td>15</td>
<td>6</td>
</tr>
</tbody>
</table>
Pair of clamps

Consisting of:
Pair of clamps incl. T-nut and screw

<table>
<thead>
<tr>
<th>Type</th>
<th>12 mm</th>
<th>14 mm</th>
<th>16 mm</th>
<th>18 mm</th>
<th>20 mm</th>
<th>22 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>APS</td>
<td>58042792</td>
<td>58042793</td>
<td>58042794</td>
<td>58042795</td>
<td>58042796</td>
<td>58042797</td>
</tr>
</tbody>
</table>

Pre-centering

Interface plate for TCi/MCi 150 on APS 140

<table>
<thead>
<tr>
<th>Type</th>
<th>Id. No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interface plate for TCi/MCi 150 on APS 140</td>
<td>46167710</td>
<td>14</td>
</tr>
</tbody>
</table>

Note: 2 pieces (1 Type A, 1 Type B) clamping pins included
Multi Plate System

Connection system for multiple large plates

Application/customer benefits
- Smart, easy and accurate solution for large plates
- Any dimension of plates for machine tool tables possible
- Safe and reliable connection between the plates
- Maintenance free
- Large entry radii of the clamping pins for easy and safe loading

Technical features
- Sealed connecting elements
- Media feed through the connecting elements

Connecting element for media transfer

Media transfer
- Sealing
- Air feed
- Plate 1
- Plate 2

Mechanical connection
- Fixing from above
- Connecting Bolt
- Plate 1
- Plate 2

Accessories
Functional Overview of the APS Clamping Units

1. Pre-centering
2. APS Zero point clamping module
3. Distribution plate for media feed (pneumatic / hydraulic) 6 channel
Zero Point Clamping System

Media feed through the pallet

Application examples

Pneumatic/ Hydraulic Power Vice

Hydraulic Power Chuck

Distribution fittings

Distribution plate
Dimensions of standard adaption for machine tools pallet

Manufacturing tolerances

<table>
<thead>
<tr>
<th>B</th>
<th>E</th>
<th>F</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>mm</td>
</tr>
<tr>
<td>400</td>
<td>55</td>
<td>80</td>
<td>250</td>
</tr>
<tr>
<td>500</td>
<td>75</td>
<td>100</td>
<td>300</td>
</tr>
<tr>
<td>630</td>
<td>100</td>
<td>125</td>
<td>420</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>⊥</th>
<th>//</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02/0.035</td>
<td>0.03/0.05</td>
<td>± 0.01/± 0.02</td>
</tr>
<tr>
<td>500/1000</td>
<td>500/1000</td>
<td>200/300</td>
</tr>
</tbody>
</table>
Zero Point Clamping System

Application examples (Tombstone dimensions, type and number of modules are made according to customer specifications)

- Tombstones, Crankwebs, Plates

- **Tombstone with 8 APS modules**

- **Tombstone with 12 APS modules**

- **Tombstone with 24 APS modules**

- **Crankweb with 18 APS modules**

- **Tombstone with 6 APS modules**

- **Plates**
Tombstones and Crankwebs on customer request

- Request form
- Simply fill in and send to: omlspa@omlspa.it

### Tombstones

![Tombstone Diagram]

**Technical data**

<table>
<thead>
<tr>
<th>B (mm)</th>
<th>C (mm)</th>
<th>H (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Numbers of modules**

<table>
<thead>
<tr>
<th>Modules type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium E open turbo</td>
</tr>
<tr>
<td>Premium I open turbo</td>
</tr>
<tr>
<td>Premium Light open turbo</td>
</tr>
<tr>
<td>Basic open</td>
</tr>
</tbody>
</table>

### Cross Tombstones

![Cross Tombstone Diagram]

**Technical data**

<table>
<thead>
<tr>
<th>B (mm)</th>
<th>C (mm)</th>
<th>S (mm)</th>
<th>H (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<tbody>
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<td>Premium I open turbo</td>
</tr>
<tr>
<td>Premium Light open turbo</td>
</tr>
<tr>
<td>Basic open</td>
</tr>
</tbody>
</table>

### Triangular Tombstones

![Triangular Tombstone Diagram]

**Technical data**

<table>
<thead>
<tr>
<th>B (mm)</th>
<th>C1 (mm)</th>
<th>S (mm)</th>
<th>H (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Numbers of modules**

<table>
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<tr>
<th>Modules type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium E open turbo</td>
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<tr>
<td>Premium I open turbo</td>
</tr>
<tr>
<td>Premium Light open turbo</td>
</tr>
<tr>
<td>Basic open</td>
</tr>
</tbody>
</table>

### Crankwebs

![Crankweb Diagram]

**Technical data**

<table>
<thead>
<tr>
<th>B (mm)</th>
<th>S (mm)</th>
<th>H (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Numbers of modules**

<table>
<thead>
<tr>
<th>Modules type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium E open turbo</td>
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<tr>
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</tr>
<tr>
<td>Premium Light open turbo</td>
</tr>
<tr>
<td>Basic open</td>
</tr>
</tbody>
</table>
Application Examples
Technical characteristics and dimensions are not obliged. OML S.r.l. may give in every time some modifications.