

PLUS5

MECHANICAL ZERO POINT SYSTEM

0.1



PLUS 5 - 52

Plus 5 - Mechanical Zero Point system

Page 0.1.4



PLUS 5 - 52/96

Clamping pins

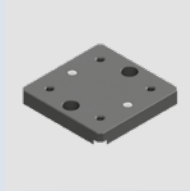
Page 0.1.12



PLUS 5 - 96

Plus 5 - Mechanical Zero Point system

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PLUS 5 - 52/96

Matsuura pallet interface plate

Page 0.1.14



PLUS 5 ALL IN ONE - 52/96

Plus 5 All in One Mechanical Zero Point system

Page 0.1.6



PLUS 5 - 52/96

Plates

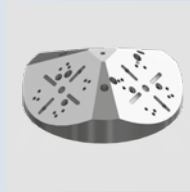
Page 0.1.15



PLUS 5 INDEX - 96

Plus 5 Index- Mechanical Zero Point system

Page 0.1.7



PLUS 5 - 52/96

Alu pyramid

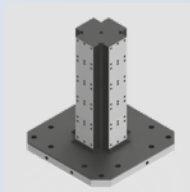
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PLUS 5 - 96

Clamping plate

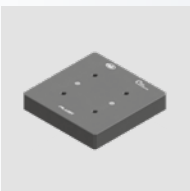
Page 0.1.8



PLUS 5 - 52/96

Tombstone

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PLUS 5 - 52/96

Reduction plates

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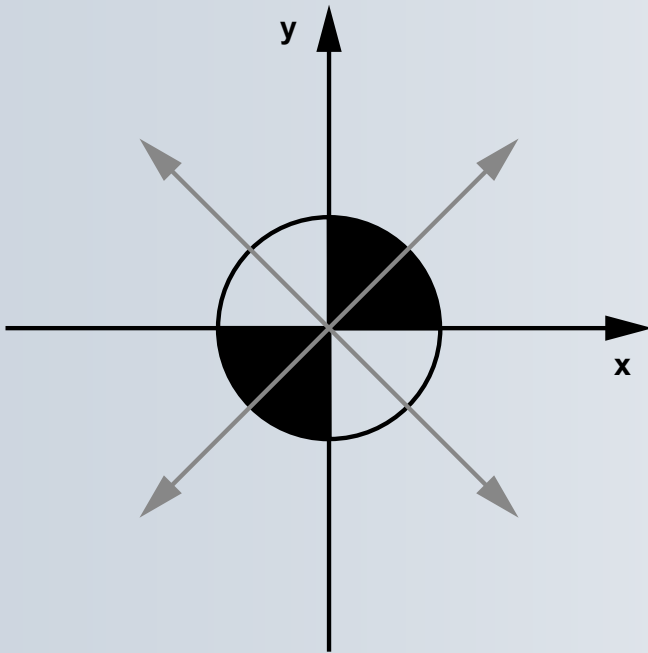
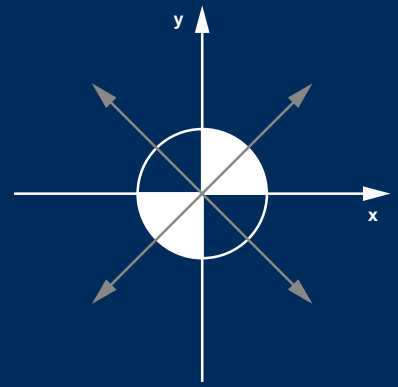
PLUS 5 - 52/96

Accessories

Page 0.1.20

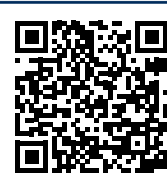
PLUS5

MECHANICAL ZERO POINT SYSTEM

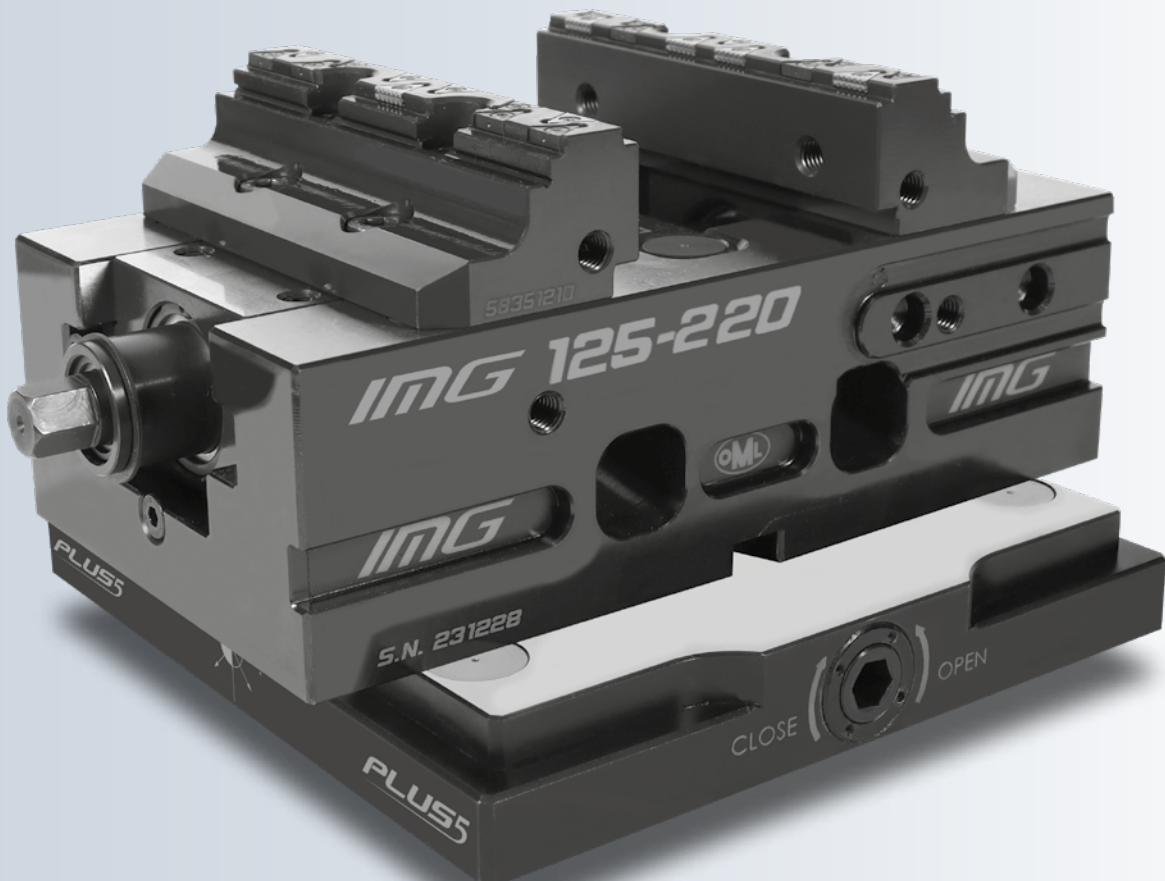


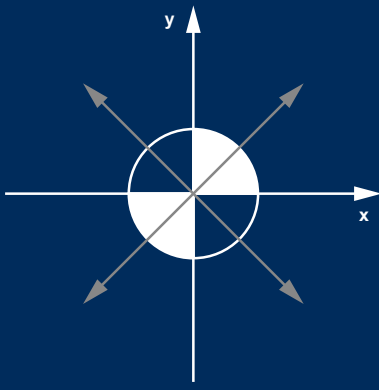
PLUS5

- ▶ The symbol on the side represents the vectorial force transmission system that acts by binding the pins uniformly and in all directions.



Watch the video

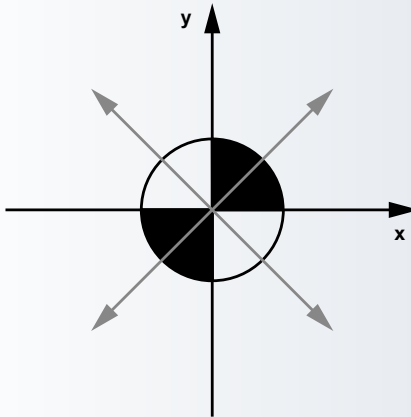




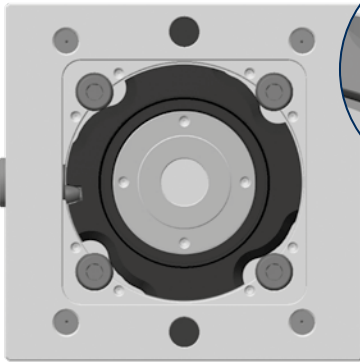
PLUS5

MECHANICAL ZERO POINT SYSTEM

PLUS5 BENEFITS



- ▶ Locking and unlocking system of the pins with a rotation of only 180 degrees
- ▶ Does not require a torque wrench. The limit switch determines locking / unlocking
- ▶ Repeatability < 0.005mm
- ▶ Pull down force 7 kN for Plus 5 52 and 8 kN for Plus 5 96
- ▶ Holding force 40 kN for Plus 5 52 and 80 kN for Plus 5 96

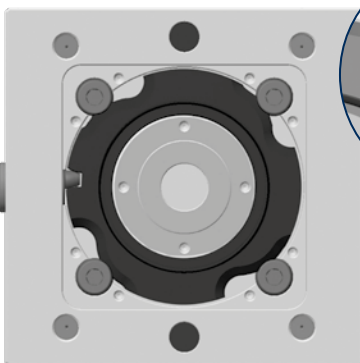


Open

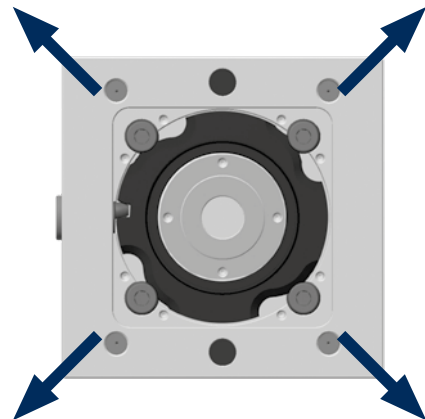
The mechanism designed for locking the pins consists of a cam which is operated by an eccentric pin.

The system guarantees high performance in terms of precision and clamping force.

This is due in particular to the fact that the cam locks the 4 pins outwards at the same time.



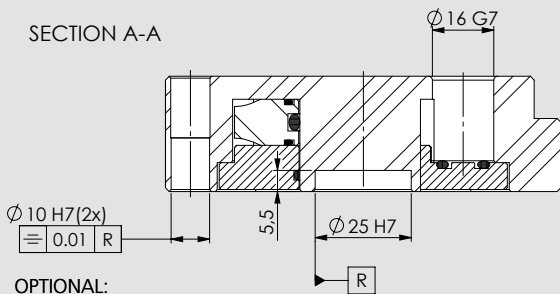
Closed



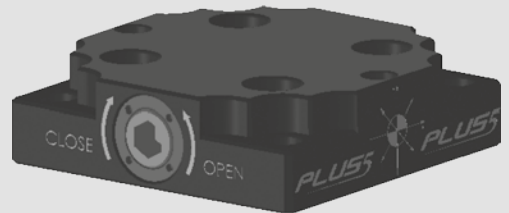
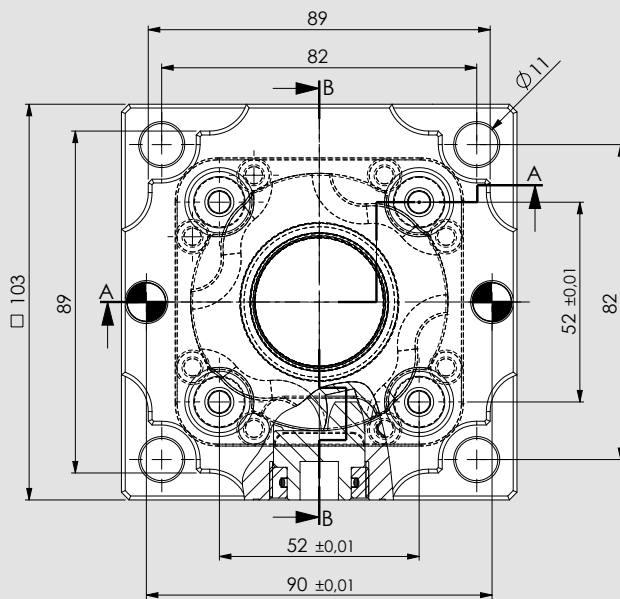
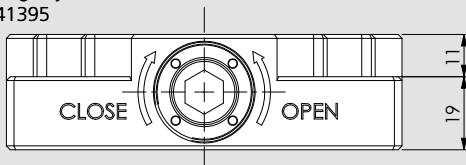
- Complete with wrench 10mm
- Pins not included



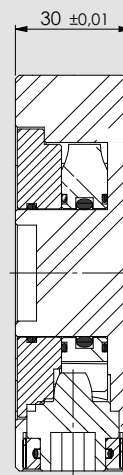
SECTION A-A



OPTIONAL:
Multislot positioning key
58341393 / 58341395



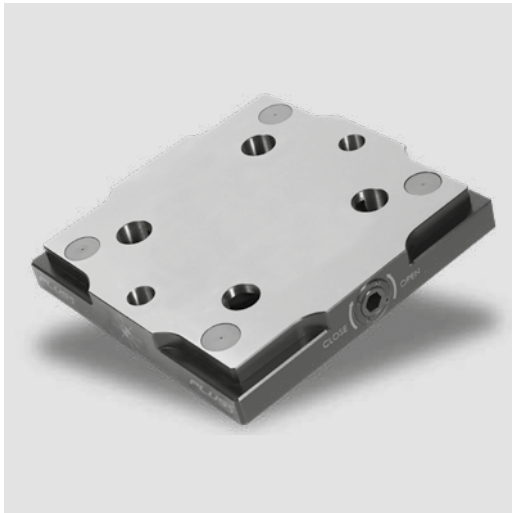
SECTION B-B



Subject to technical changes.

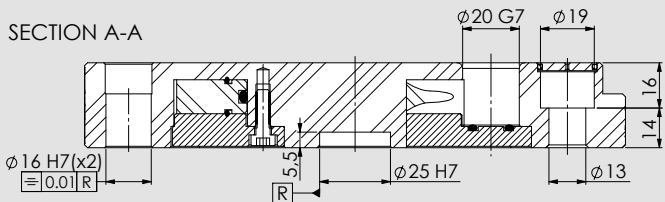
Id. No.
46240101

Weight (Kg)
2

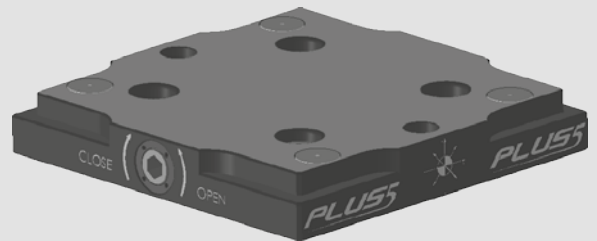
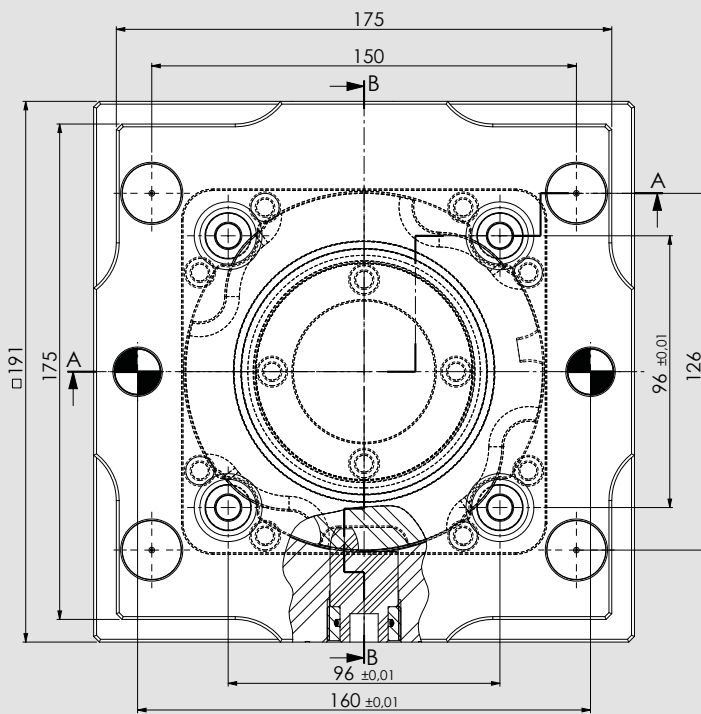
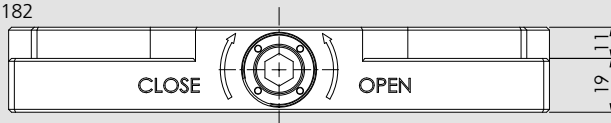


- Complete with wrench 10mm
- Pins not included

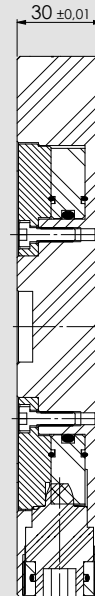
SECTION A-A



OPTIONAL:
Multislot positioning key
71290182



SECTION B-B



Subject to technical changes.

Id. No.
46240102

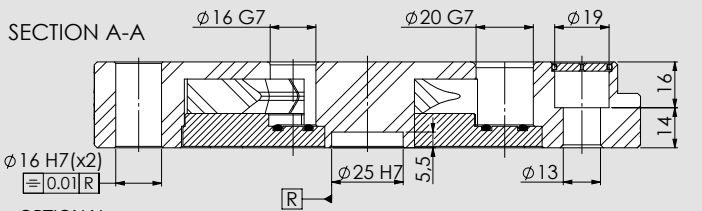
Weight (Kg)
7,5

PLUS 5 All in One 52/96

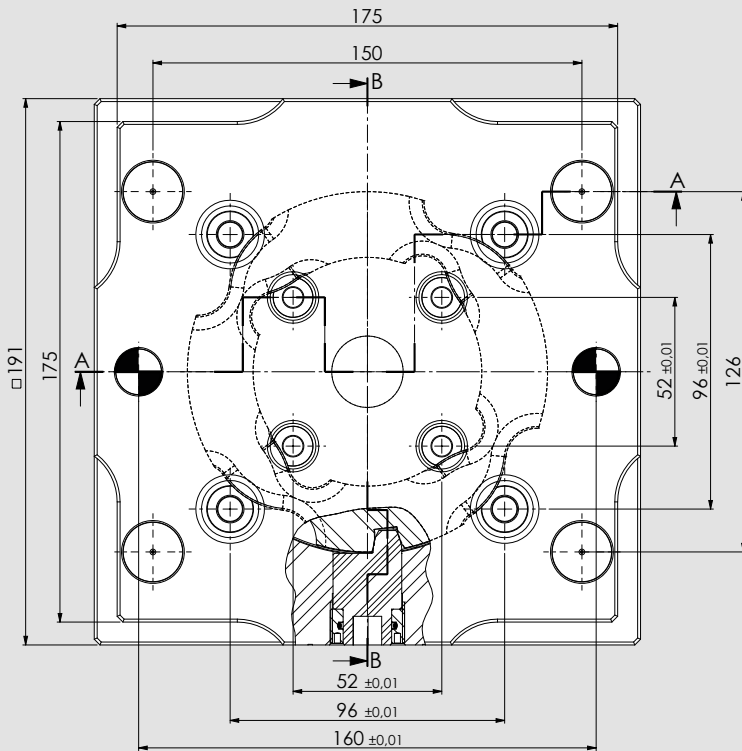
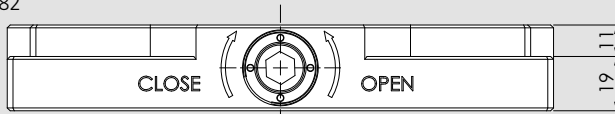
PLUS 5 All in One - Mechanical Zero Point system



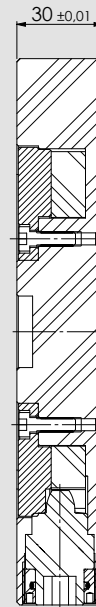
- Complete with:
 - wrench 10mm
 - protection caps (Plus 5 52 / 96)
- Pins not included



OPTIONAL:
Multislot positioning key
71290182



SECTION B-B



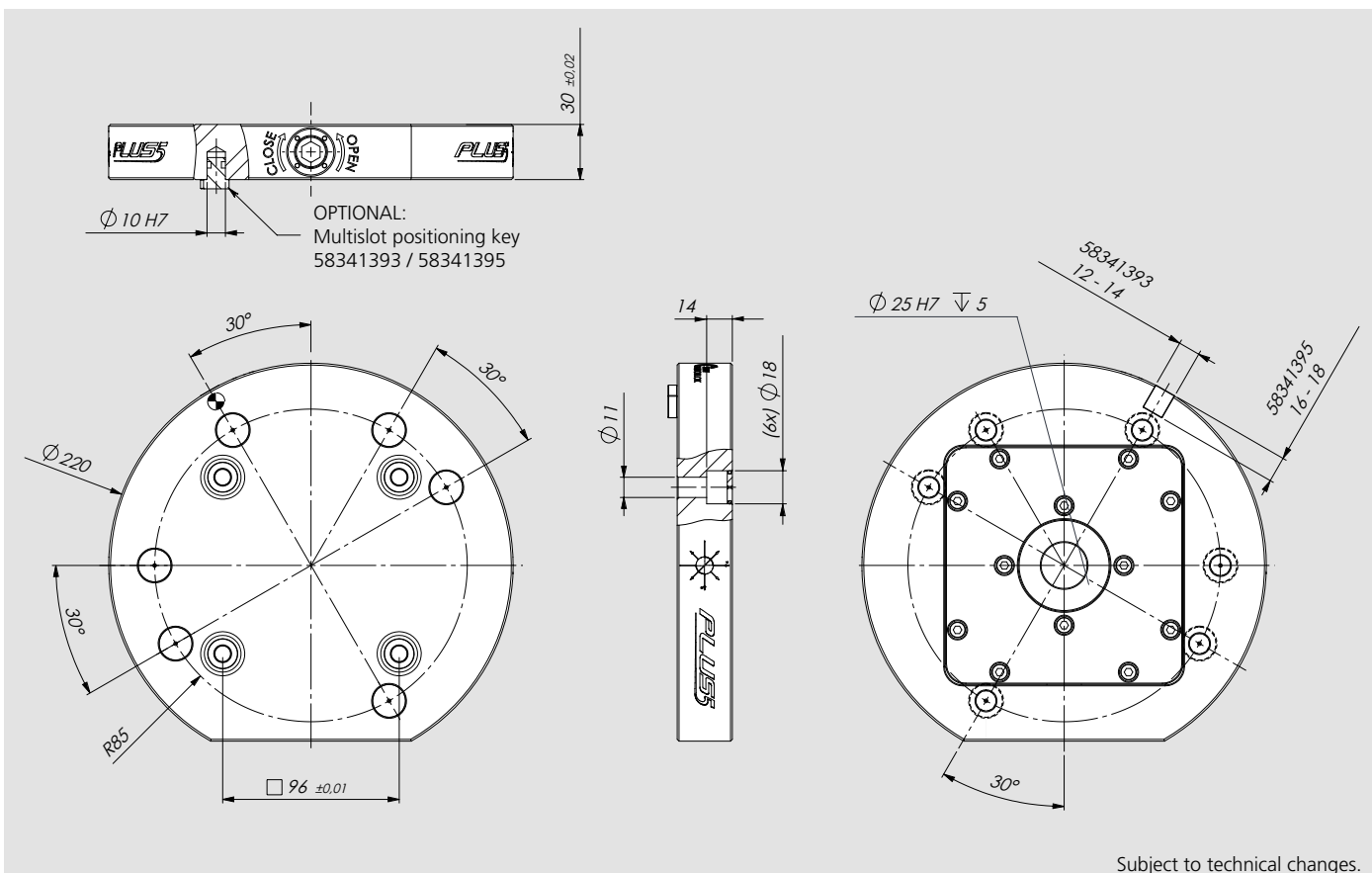
Subject to technical changes.

Id. No.
46240103

Weight (Kg)
7,5

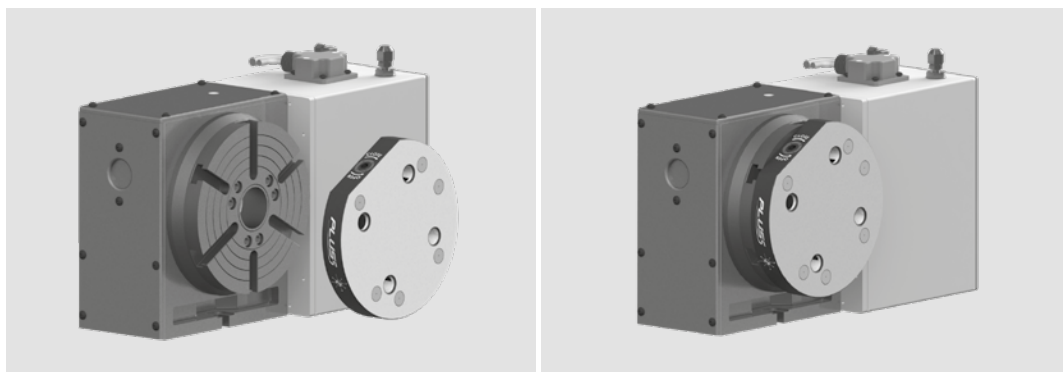


- Complete with wrench 10mm
- Pins not included



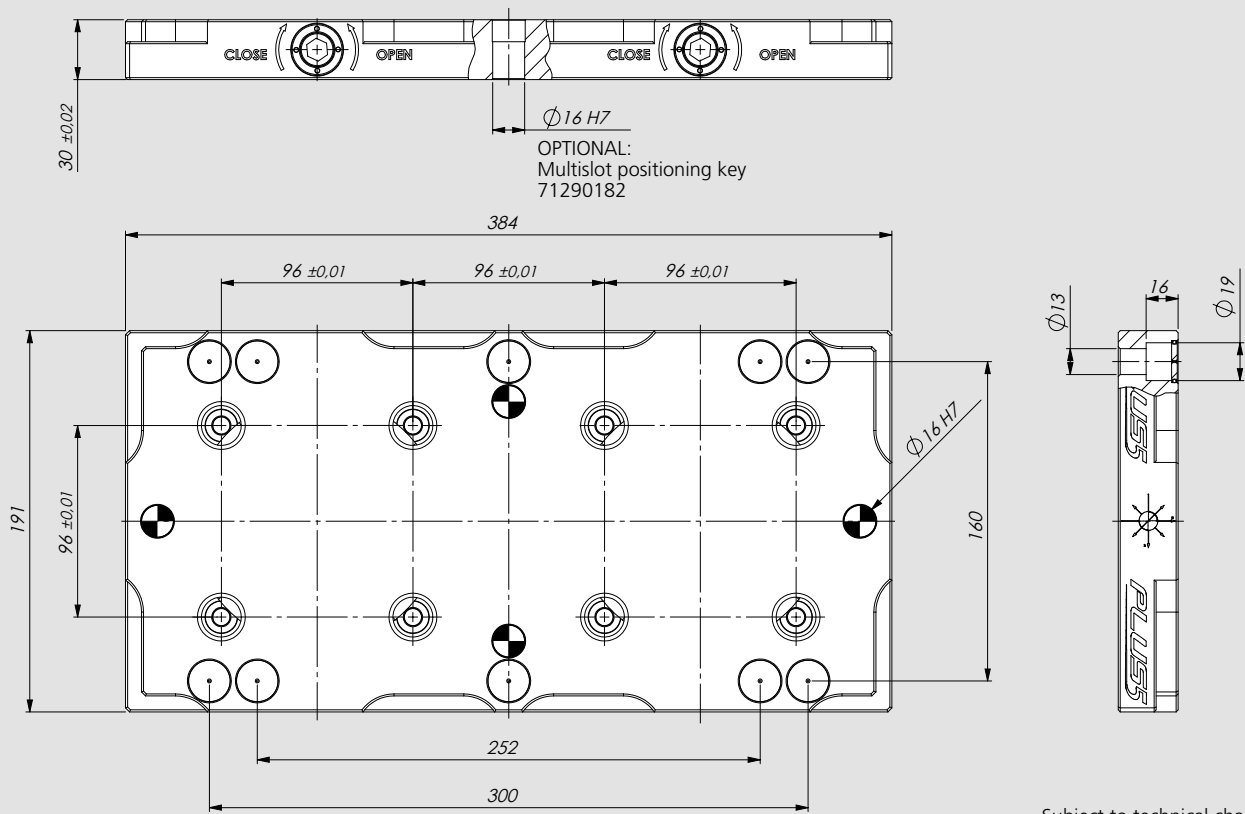
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46240112 | 8 |

Working example





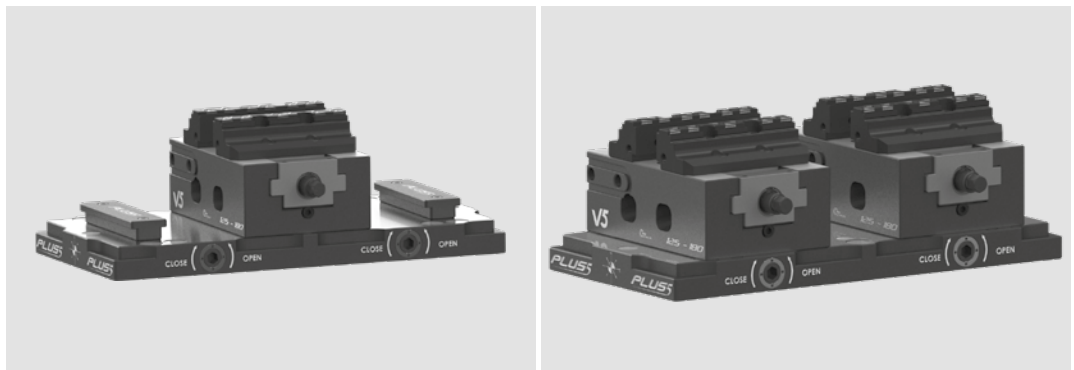
- Complete with:
 - wrench 10mm
 - n. 2 safety plates (Id. No. 46248215)
- Pins not included

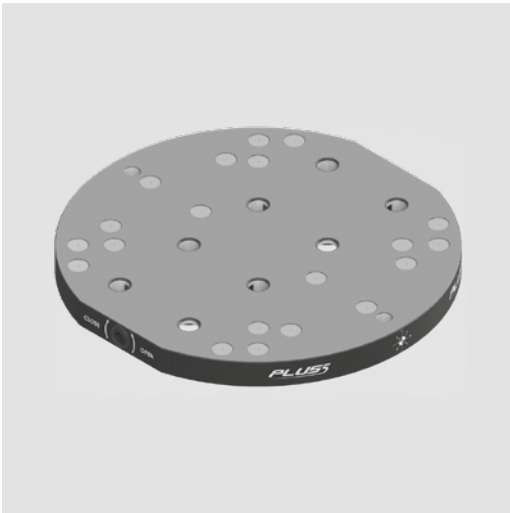


Subject to technical changes.

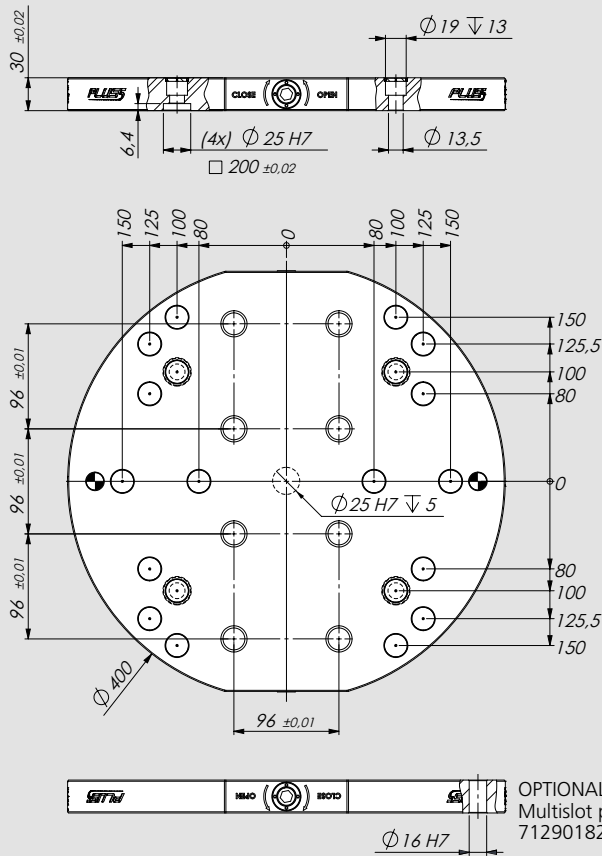
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46248210 | 16 |

Working example



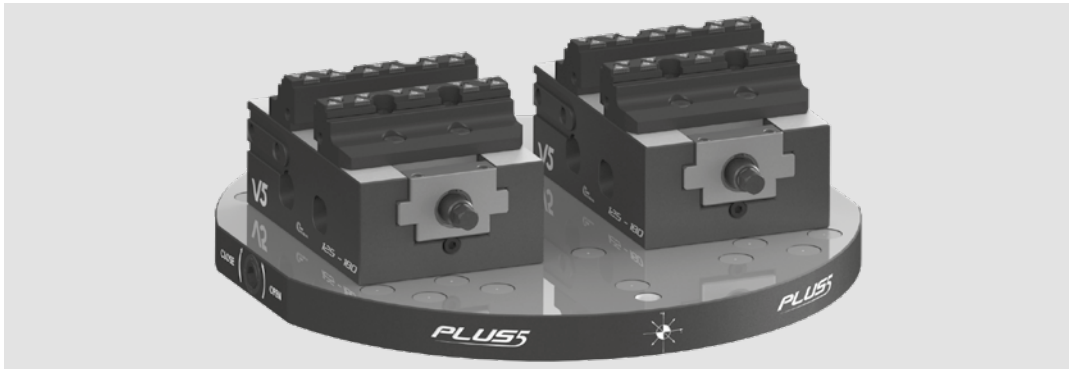


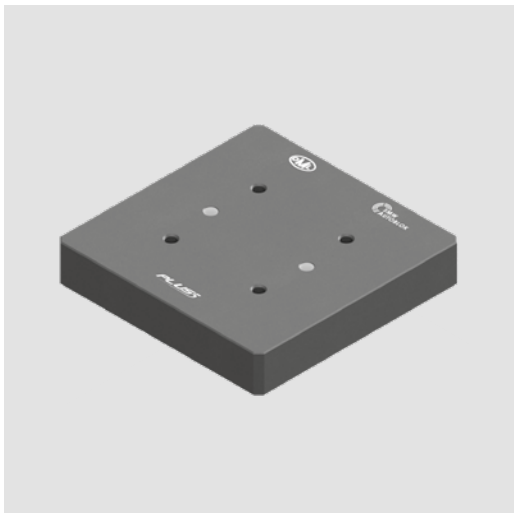
- Complete with:
 - wrench 10mm
 - n. 2 safety plates (Id. No. 46248215)
- Pins not included



| Id. No. | Weight (Kg) |
|----------|-------------|
| 46248220 | 27 |

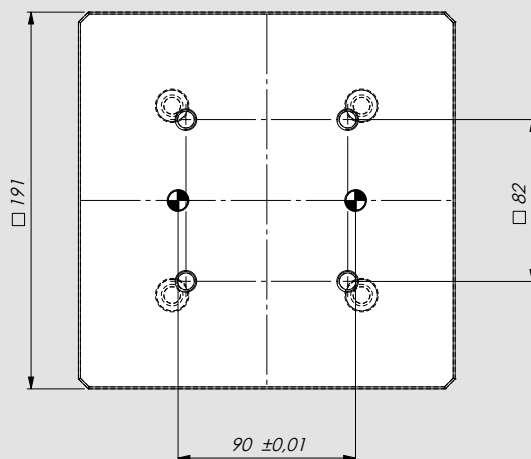
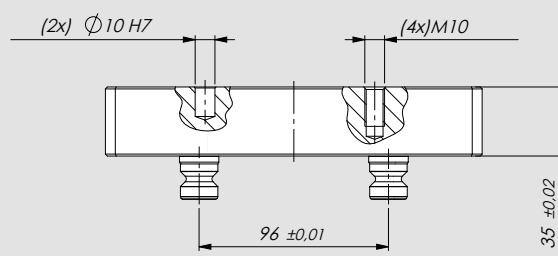
Working example





Complete with

- Fixing screws and dowel pins for Plus 5 52
- Set of 4 Plus 5 96 pins

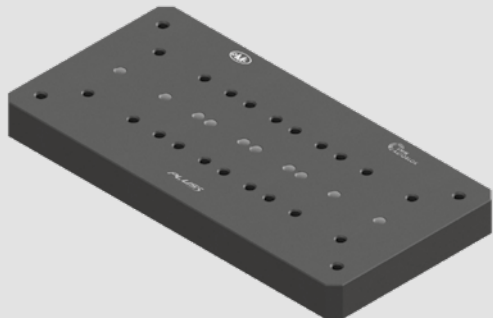


Subject to technical changes.

| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242210 | 10 |

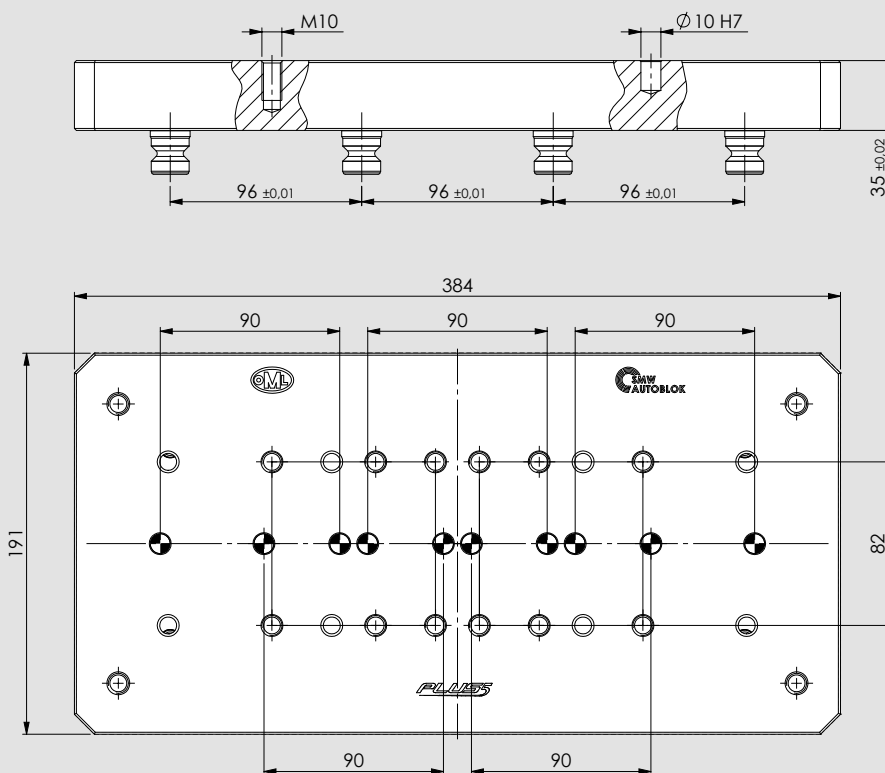
Working example





Complete with

- Fixing screws and dowel pins for Plus 5 52
- n. 2 Set of 4 Plus 5 96 pins



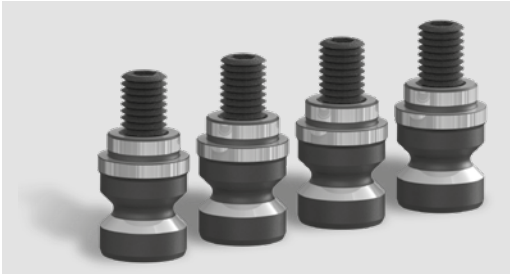
Subject to technical changes.

| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242220 | 21 |

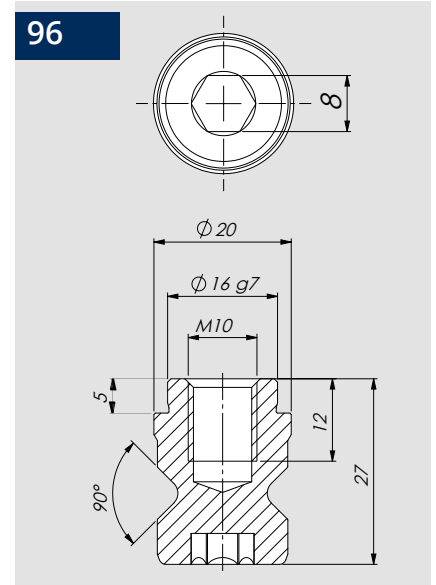
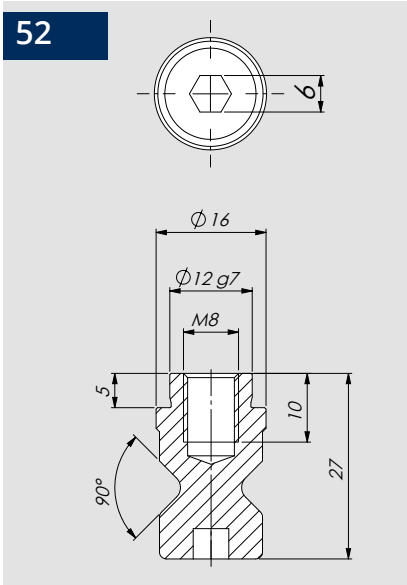
Working example



Clamping pins



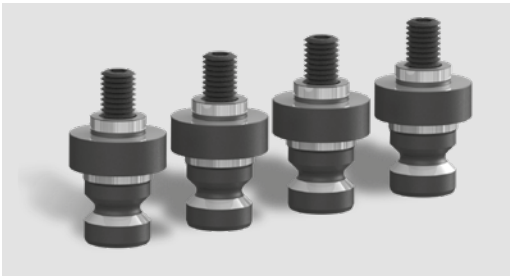
- Complete of grub screw M8 for Plus5 52 and M10 for Plus5 96



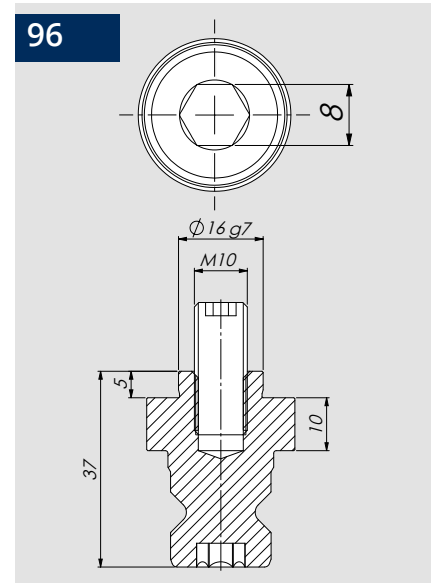
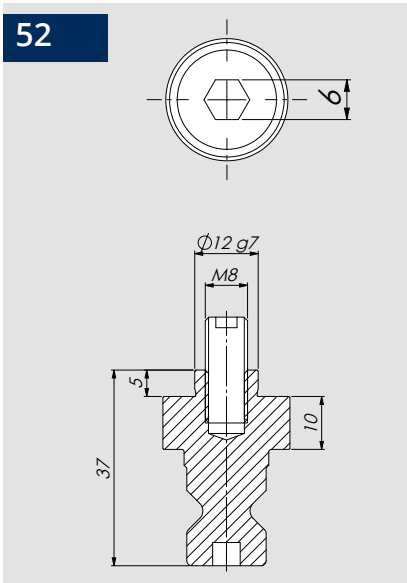
| Description | Id. No. | Weight (Kg) |
|----------------------------|----------|-------------|
| Set of 4 pins for PL5 - 52 | 46240214 | 0,12 |
| Set of 4 pins for PL5 - 96 | 46240224 | 0,20 |
| Pin for PL5 - 52 | 46240210 | 0,03 |
| Pin for PL5 - 96 | 46240220 | 0,05 |

The dimensions of the pin identify compatibility with other pins on the market

Raised clamping pins

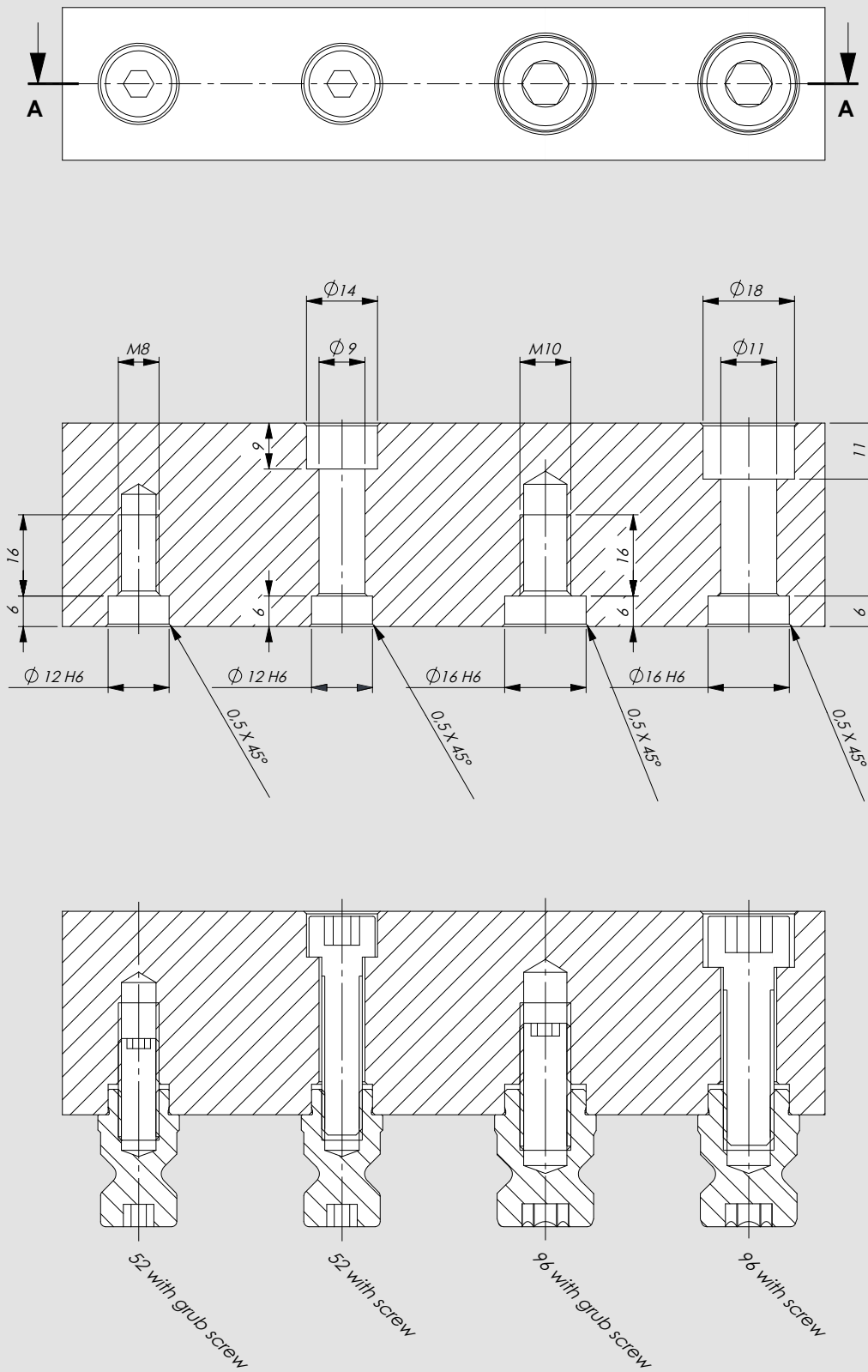


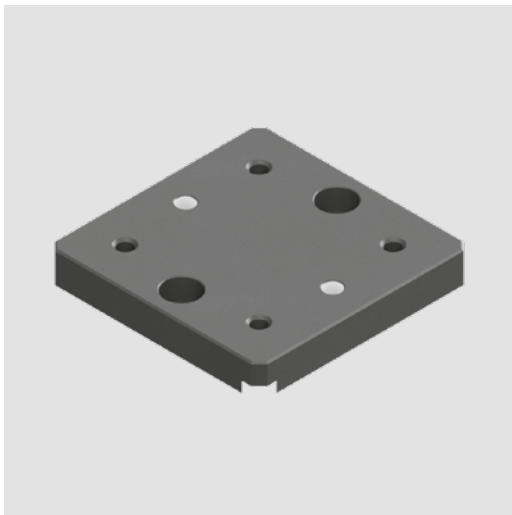
- Complete of grub screw M8 for Plus5 52 and M10 for Plus5 96



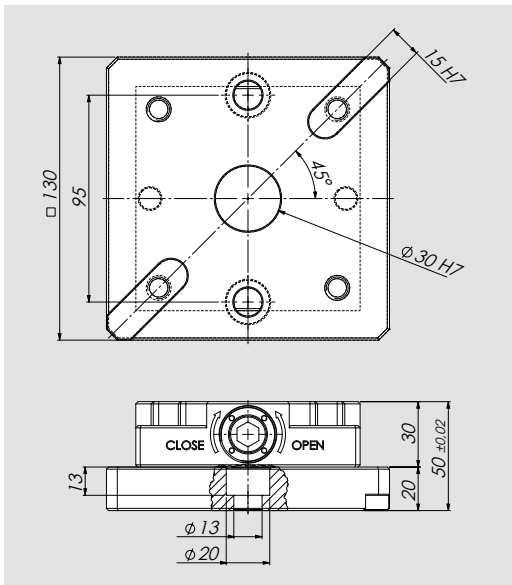
| Description | Id. No. | Weight (Kg) |
|-----------------------------------|----------|-------------|
| Set of 4 raised pins for PL5 - 52 | 46240234 | 0,12 |
| Set of 4 raised pins for PL5 - 96 | 46240244 | 0,20 |
| Raised pin for PL5 - 52 | 46240230 | 0,03 |
| Raised pin for PL5 - 96 | 46240240 | 0,05 |

The dimensions of the pin identify compatibility with other pins on the market





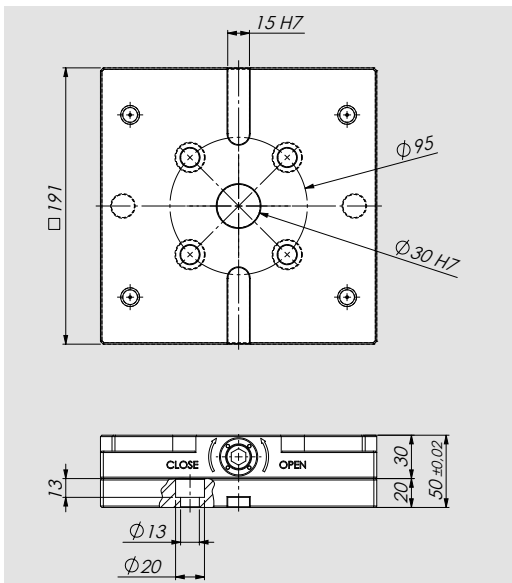
Working example



PLUS 5 - 52 Matsuura pallet interface plate

Complete with screws and dowel pins
Plus 5 not included

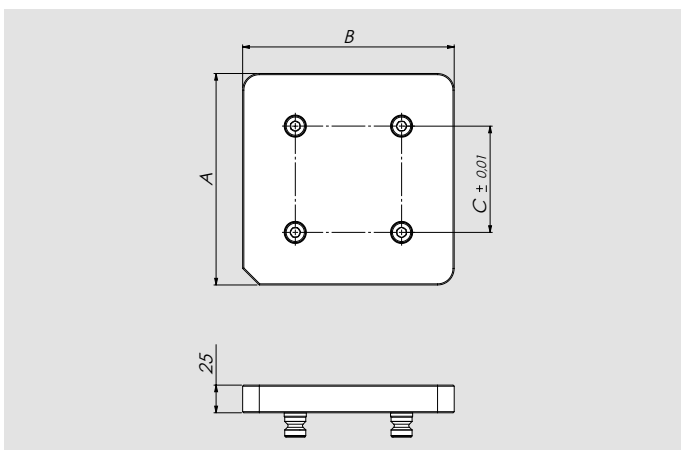
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242110 | 2,5 |



PLUS 5 - 96 Matsuura pallet interface plate

Complete with screws and dowel pins
Plus 5 not included

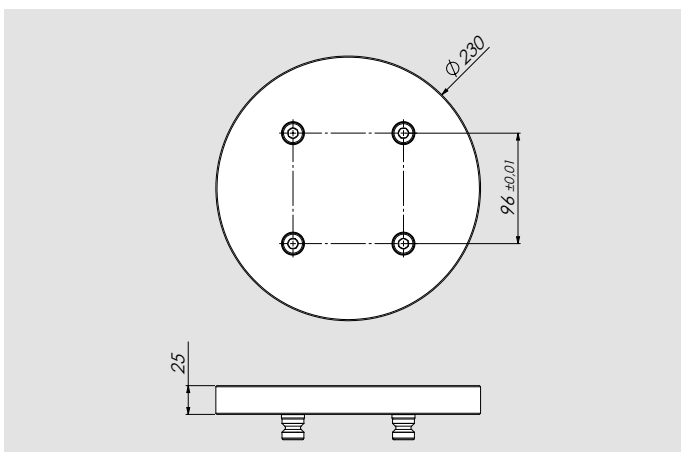
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242120 | 5,5 |



PLUS 5 - 52 / 96
Smooth plate

Complete with set of 4 pins

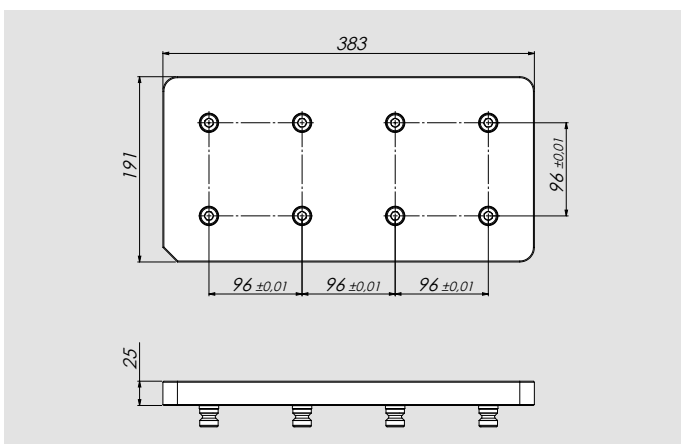
| Id. No. | Type | A | B | C | Weight |
|----------|------|-----|-----|----|--------|
| 46247710 | 52 | 103 | 103 | 52 | 2 Kg |
| 46247720 | 96 | 191 | 191 | 96 | 7 Kg |



PLUS 5 - 96
Smooth round plate

Complete with set of 4 pins

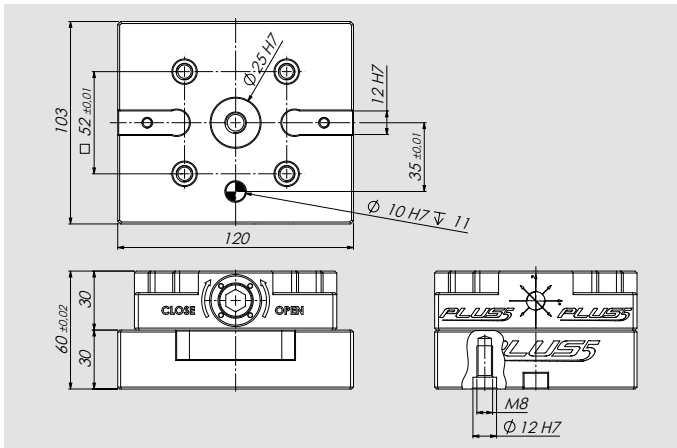
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46247730 | 8 |



PLUS 5 - 96
Double smooth plate

Complete with n. 2 set of 4 pins Plus 5 96

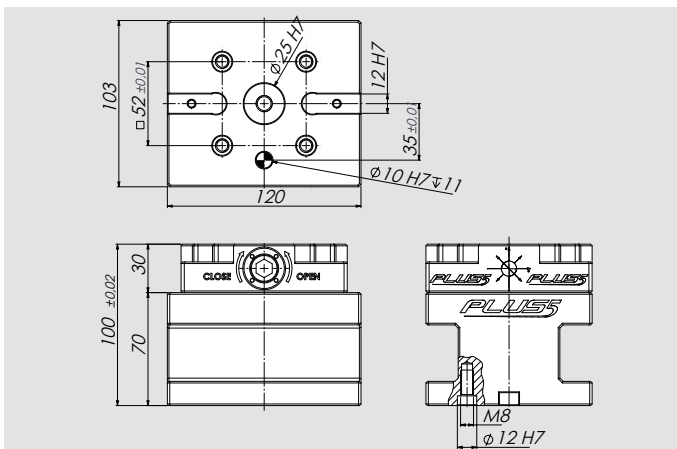
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46247740 | 15 |



RISER PLUS 5 - 52 (H tot = 60)

Complete with screws and dowel pins
Plus 5 not included

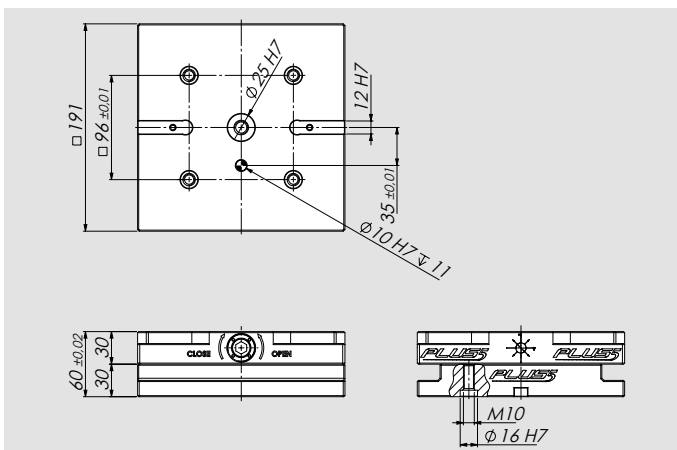
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242018 | 2 |



RISER PLUS 5 - 52 (H tot = 100)

Complete with screws and dowel pins
Plus 5 not included

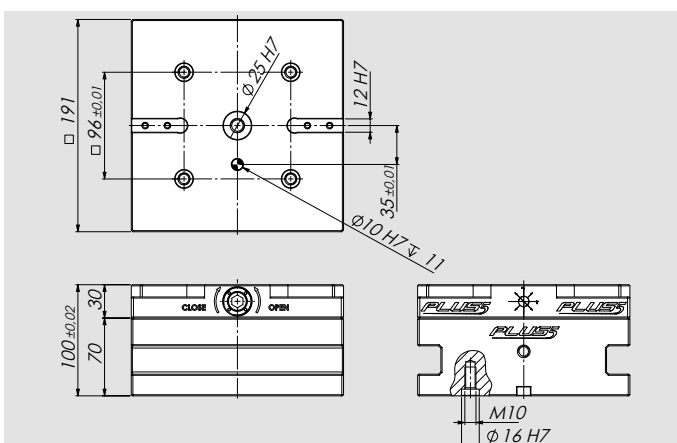
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242019 | 5 |



RISER PLUS 5 - 96 (H tot = 60)

Complete with screws and dowel pins
Plus 5 not included

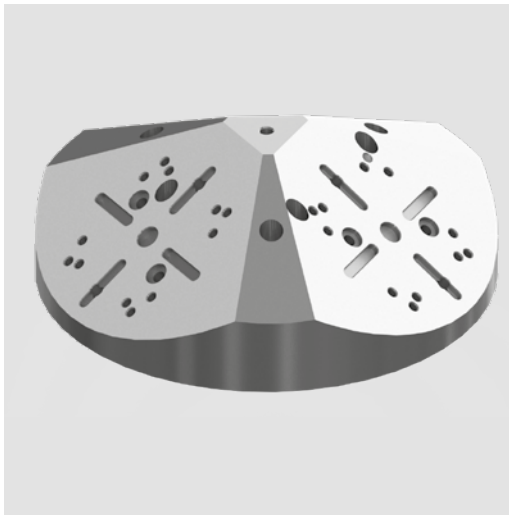
| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242028 | 7 |



RISER PLUS 5 - 96 (H tot = 100)

Complete with screws and dowel pins
Plus 5 not included

| Id. No. | Weight (Kg) |
|----------|-------------|
| 46242029 | 18 |



Applications / Customer Benefits

- Ideal for 5 axis machines
- Compact design
- Possibility to be mounted directly on machine tools with radial slots at 45 / 60 degrees
- Possibility to be mounted directly on single plate or DUO APS (pitch 200/250mm) and Plus 5

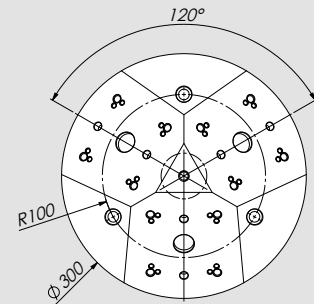
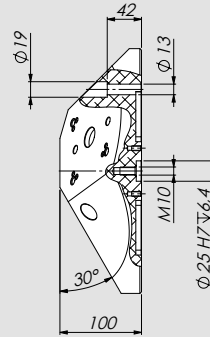
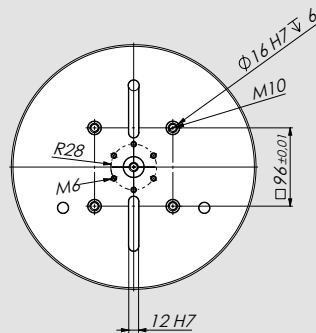
Technical features

- Material: ALU

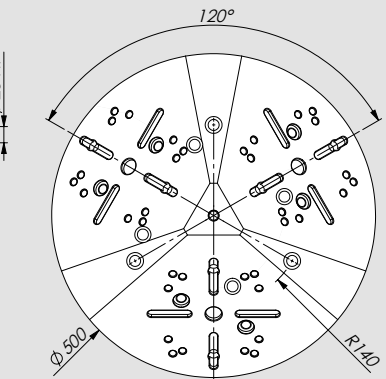
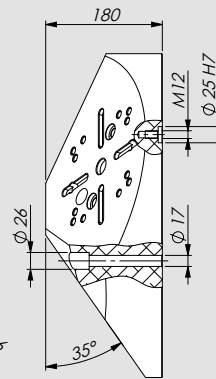
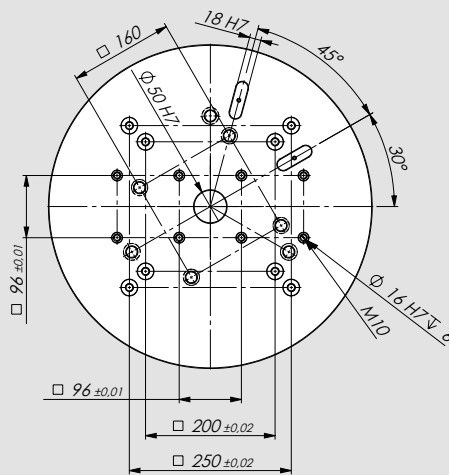
Standard equipment

Positioning keys and screws for IMG
Pins and screws for Plus 5

IMG 88 - 130
PLUS 5 - 52

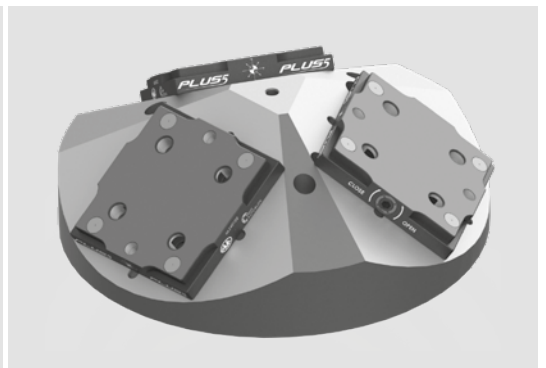
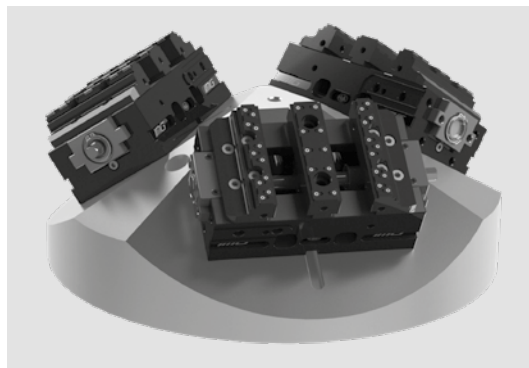


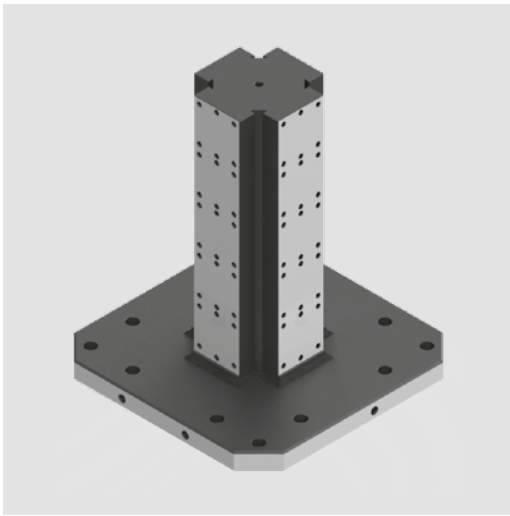
IMG 125 - 180
IMG 125 - 220
PLUS 5 - 96



| Type | Id. No. | Weight |
|--|----------|--------|
| For IMG 88-130 and PLUS 5 - 52 | 58343210 | 12 Kg |
| For IMG 125-180, IMG 125-220 and PLUS 5 - 96 | 58353210 | 55 Kg |

Working example





Applications / Customer Benefits

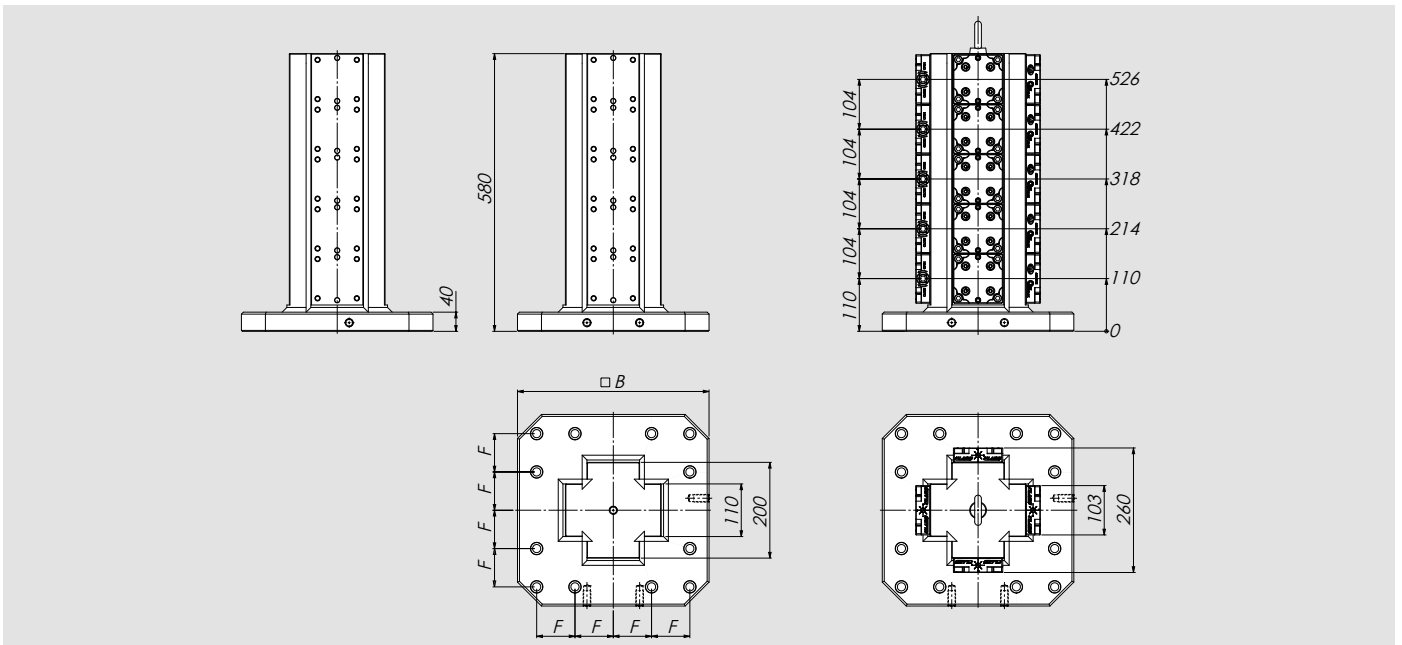
- Ideal for horizontal machines
- Compact design

Technical features

- Material: steel

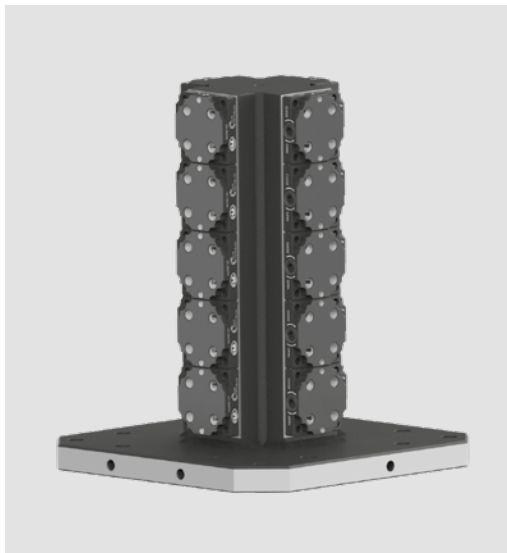
Standard equipment

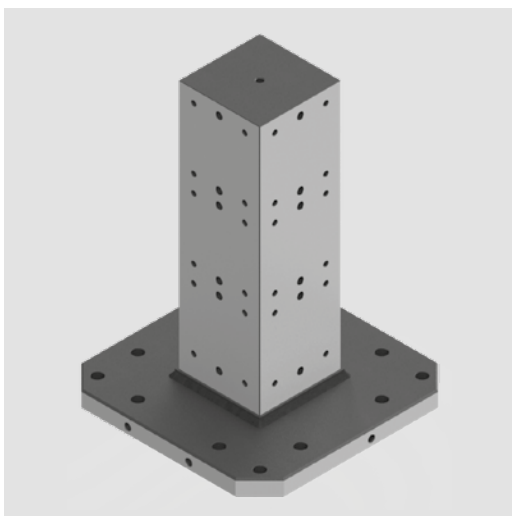
Steel tombstone complete with fixing screws and dowel pins



| Type | Id. No. | B | F | Weight | Weight (only tombstone) |
|----------------------------------|----------|-----|-----|--------|-------------------------|
| Tombstone Plus 5 - 52 - Base 400 | 46247110 | 400 | 80 | 162 Kg | 162 Kg |
| Tombstone Plus 5 - 52 - Base 500 | 46247120 | 500 | 100 | 190 Kg | 190 Kg |

Working example





Applications / Customer Benefits

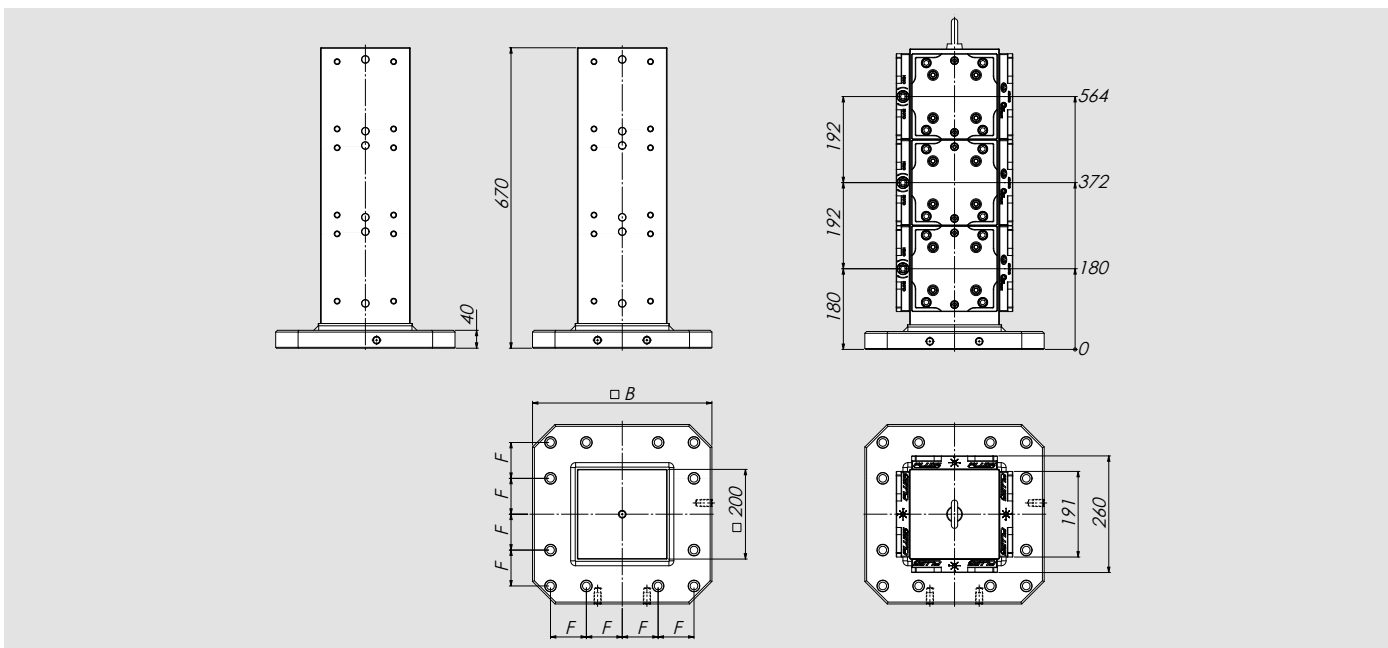
- Ideal for horizontal machines
- Compact design

Technical features

- Material: steel

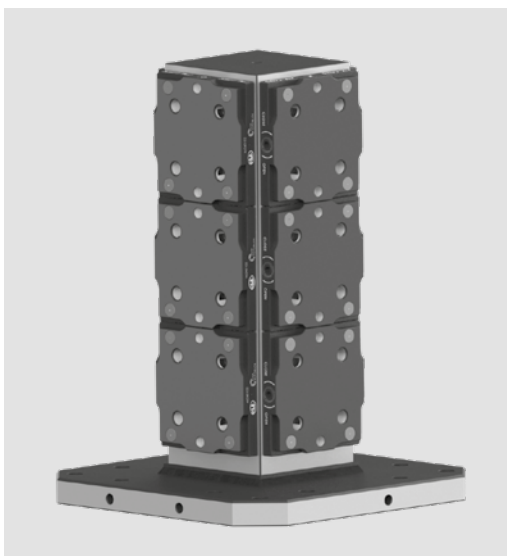
Standard equipment

Steel tombstone complete with fixing screws and dowel pins



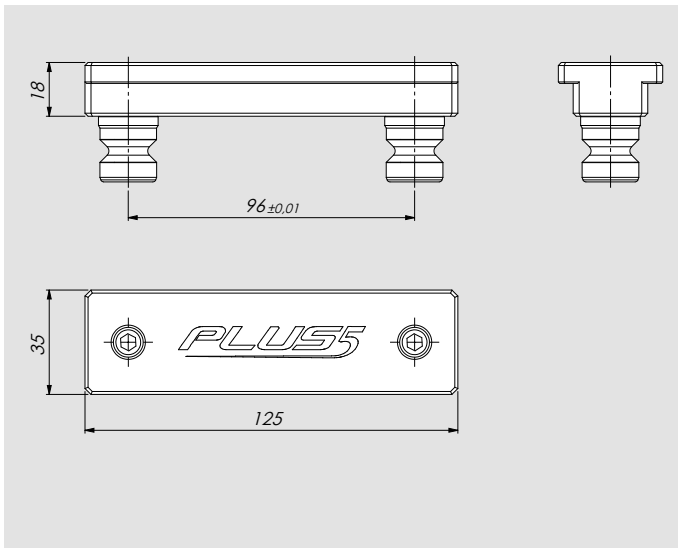
| Type | Id. No. | B | F | Weight | Weight (only tombstone) |
|-----------------------------|----------|-----|-----|--------|-------------------------|
| Cubo Plus 5 - 96 - Base 400 | 46247210 | 400 | 80 | 253 Kg | 253 Kg |
| Cubo Plus 5 - 96 - Base 500 | 46247220 | 500 | 100 | 280 Kg | 280 Kg |

Working example



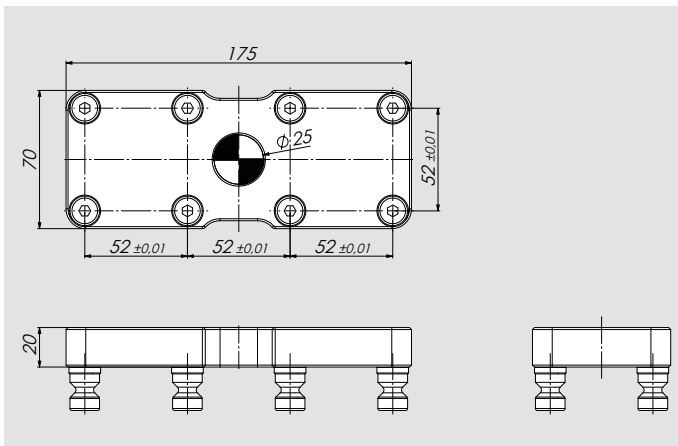
PLUS 5 - 96

Safety plate for locking on two different modules. Complete with pins 96



PLUS 5 - 52

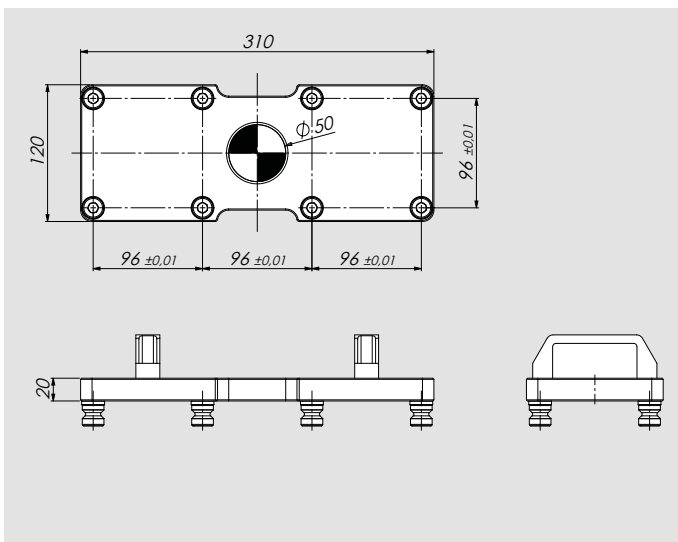
Alignment plate complete with pins 52



| Id. No. | Weight (Kg) |
|----------|-------------|
| 46240410 | 2 |

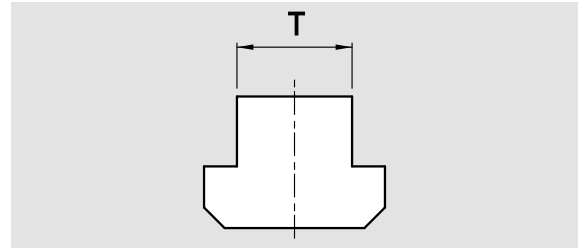
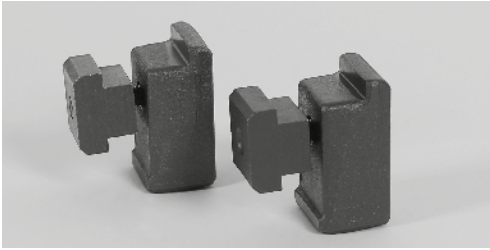
PLUS 5 - 96

Alignment plate complete with pins 96

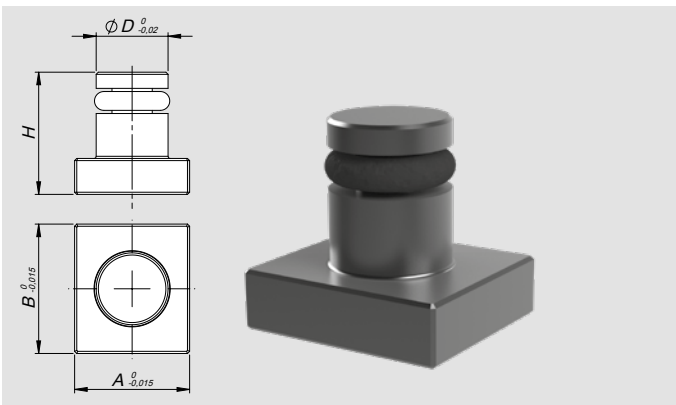


PLUS 5 - 52/96

Pair of Clamps



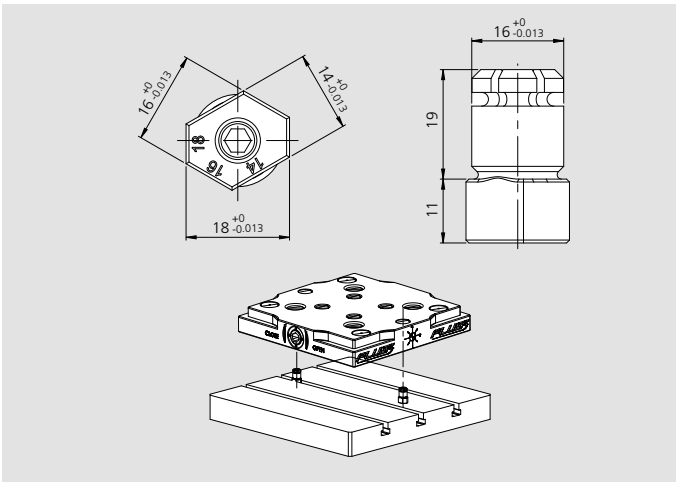
| Type | mm 12 | mm 14 | mm 16 | mm 18 | mm 20 | mm 22 |
|--------------|----------|----------|----------|----------|----------|----------|
| PLUS 5 52/96 | 58022792 | 58022793 | 58022794 | 58022795 | 58022796 | 58022797 |



Key only for:

- Plus 5 52
- Plus 5 Index 96

| Id. No. | A | B | H | D |
|----------|----|----|----|----|
| 58341393 | 12 | 14 | 17 | 10 |
| 58341395 | 16 | 18 | 17 | 10 |



Multi-Slot screw for Plus 5 96

| Type | Id. No. |
|-------------------------|----------|
| Multi-Slot 14 / 16 / 18 | 71290182 |



PLUS 5 - 52/96
Steel protection cap

| Type | Id. No. | Weight (Kg) |
|--------------------------|----------|-------------|
| Set 4 caps Plus 5 52 | 46240314 | 0,08 |
| Set 4 caps Plus 5 96 | 46240324 | 0,16 |
| Protection cap Plus 5 52 | 46240310 | 0,02 |
| Protection cap Plus 5 96 | 46240320 | 0,04 |

