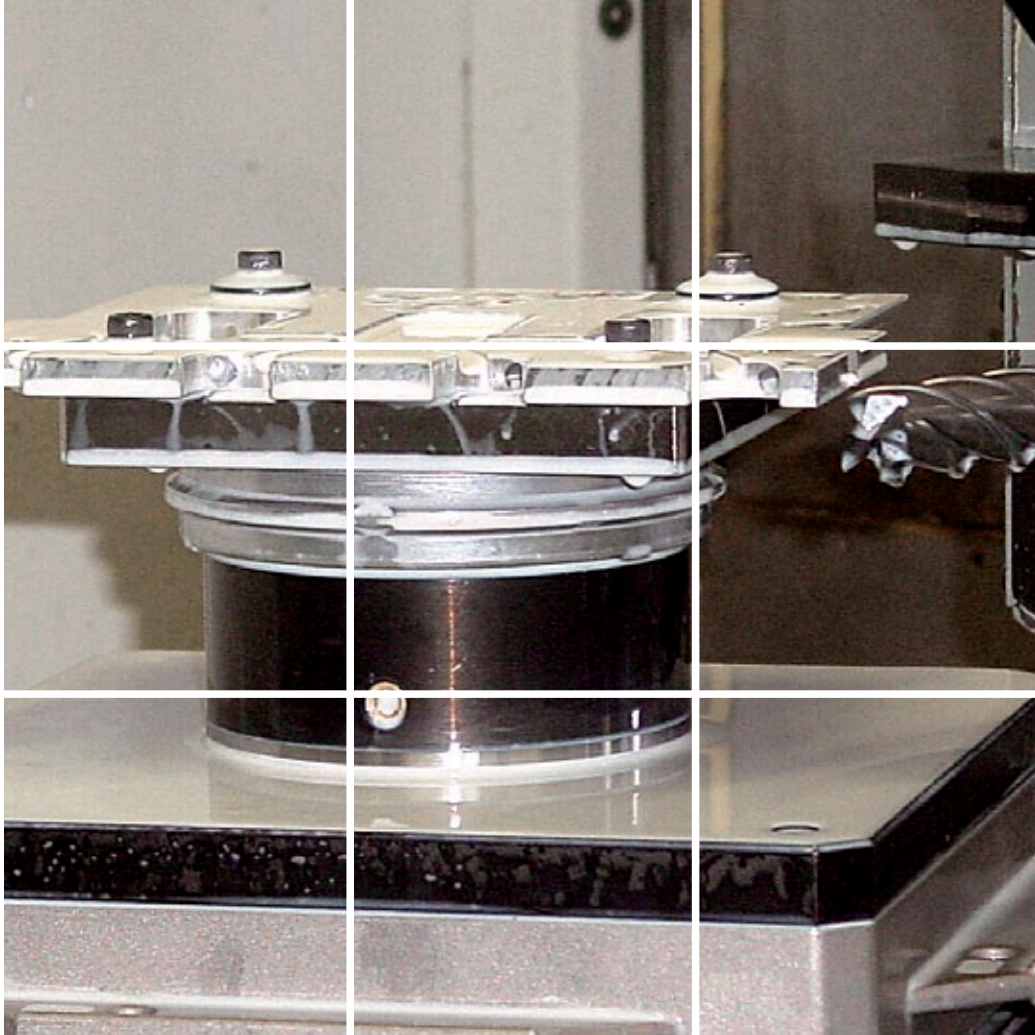


GPS 70, GPS 120, GPS 240

Reference Systems for Precision Production and Die-Sinking EDM

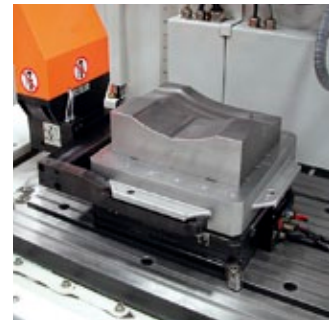


GPS 240 CLAMPING SYSTEM

The machining zero point is defined by the centre of the chuck in the GPS 240 system. The chuck can be mounted on the machine table of any machine tool.

The standardised hole pattern allows clamping from below of workpieces, fixtures and accessories such as vices, three-jaw chucks and magnetic tables. This gives collision-free mounting, even with five-sided machining.

The economical, pressure-die-cast aluminium pallets are very light, making them especially suitable for manual handling. Naturally the GPS 240 is also suitable for automatic changing. The chuck seal prevents dirt penetrating between the chuck and the pallet. This simplifies maintenance and lengthens the life of the components. A lifting mechanism which operates on locking/opening protects the references when loading heavy workpieces.



Facts

- Repetition accuracy: 0,002 mm
- Indexing accuracy: 0,005 mm
- Indexing: 4 x 90°
- Clamping force: 30.000 N (with force boost 80.000 N)
- Opening pressure: 6 bar

GPS 240 Chucks automatic

- Building-in height: 52 mm
- Required air pressure: 6 bar
- Air-blast cleaning of the references
- Weight: 17 kg

C 219 000

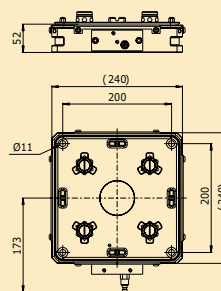
For manual machining operations.

- One air connection
- Clamping force: 30.000 N
- Recommended actuator: C 810 820 or C 810 720

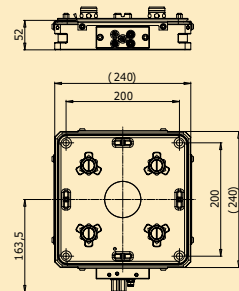
C 219 100

For manual and automatic machining operations.

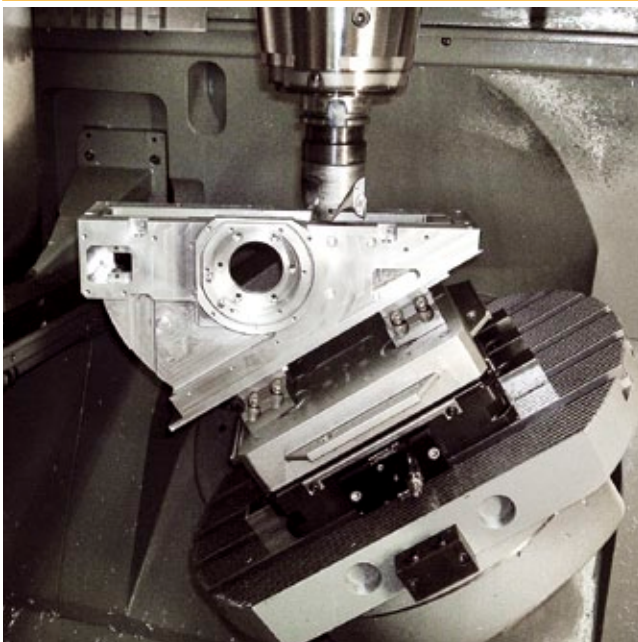
- 4 air connections
- Clamping force: 30.000 N/80.000 N
- Recommended actuator: C 810 830



C 219 000



C 219 100



GPS 240 Chuck automatic with hole Ø100 mm C 219 400

For special applications.

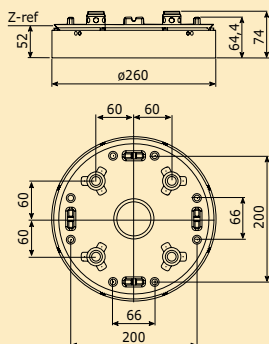
- Building-in height: 58 mm
- Required air pressure: 8 bar
- Air-blast cleaning of the references
- Weight: 17 kg
- Clamping force: 30.000 N
- Recommended actuator: C 810 830



GPS 240 Chuck round with hole Ø54 mm C 217 100

Pneumatic chuck, intended mainly for applications in lathes and milling machines.

- Required air pressure: 6 bar
- Air-blast cleaning of the references
- Clamping force: 30.000 N
- Weight: 16 kg
- Recommended control unit: C 810 820 or C 810 720



GPS 240 Chuck round with hole Ø100 mm C 217 400

For special applications.

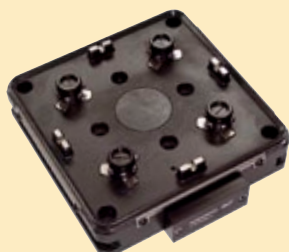
- Building-in height: 58 mm
- Required air pressure: 8 bar
- Air-blast cleaning of the references
- Clamping force: 30.000 N
- Weight: 16 kg
- Recommended control unit: C 810 820 or C 810 720



GPS 240 Pneumatic chuck C 219 200

For manual and automatic machining operations.

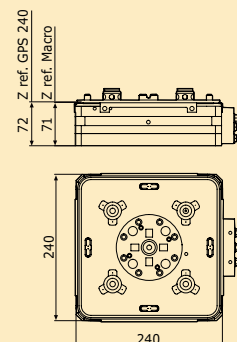
- Air connections positioned centrally on the underside, for applications on a rotating table (- prism / - Z-cleaning / - clamping/releasing / - Turbo/ventilation)
- Clamping force: 30 000 N/80 000 N



GPS 240 Pneumatic chuck with built-in Macro chuck C 219 600

Pneumatic chuck with built-in Macro chuck. Intended mainly for measuring machines.

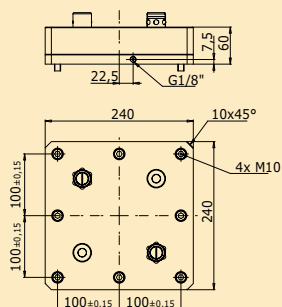
- Required air pressure: 6 bar
- Recommended control unit: C 810 830
- Air-blast cleaning of the references
- Weight: 22 kg



GPS 240 Dummy chuck C 210 060

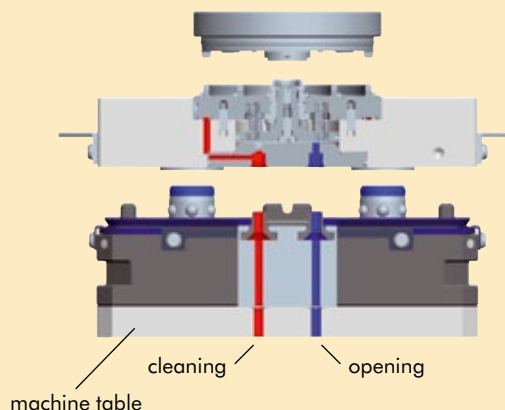
Dummy chuck for clamping a GPS 240 pallet on a tipping station.

- Required air pressure: 6 bar
- Weight: 9.5 kg



GPS 240 Chuck for carriage on request

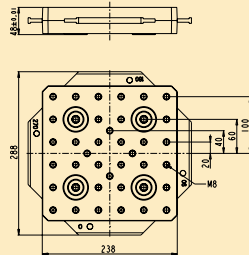
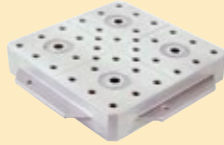
Central feed for both chucks possible. The machine table should have 4 connections, 2x for GPS 240 / 2x for chuck on pallet.



GPS 240 Pallet precision production C 694 400

Milled, coined cast aluminium pallet. Suitable for high-speed milling and demanding milling operations.

- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs



S 500 160

- Set of 4x C 694 400

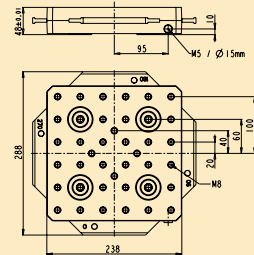
S 500 170

- Set of 10x C 694 400

GPS 240 Pallet precision production prepared for automation C 694 470

Milled, coined cast aluminium pallet with assembled code carrier fixture, without code carrier.

- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs and C 960 740 code carrier fixture (without code carrier)



S 500 161

- Set of 4x C 694 470

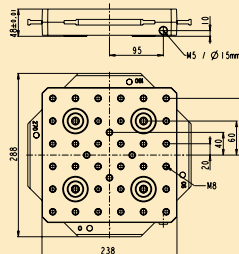
S 500 171

- Set of 10x C 694 470

GPS 240 Pallet precision production ready for use of automation C 694 475

Milled, coined cast aluminium pallet with assembled code carrier.

- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs, C 960 740 code carrier fixture and 3R-863.01 code carrier



S 500 162

- Set of 4x C 694 475

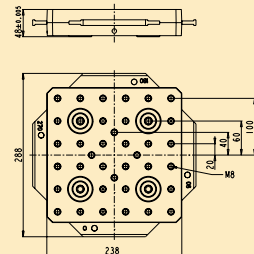
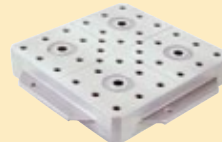
S 500 172

- Set of 10x C 694 475

GPS 240 Pallet adaptation C 694 300

Ground cast aluminium pallet suitable for fixtures and accessories.

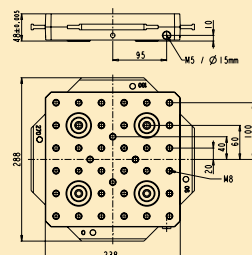
- Construction height: 48.0 ± 0.005 mm
- X/Y-centring with spring-loaded pin
- Flatness: 0.01 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs



GPS 240 Pallet adaptation prepared for automation C 694 370

Ground cast aluminium pallet with assembled code carrier fixture, without code carrier.

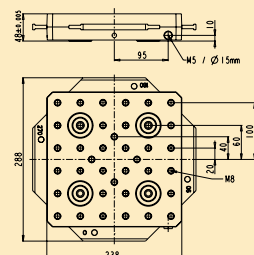
- Construction height: 48.0 ± 0.005 mm
- X/Y-centring with spring-loaded pin
- Flatness: 0.01 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs and C 960 740 code carrier fixture (without code carrier)



GPS 240 Pallet adaptation ready for use of automation C 694 375

Ground cast aluminium pallet with assembled code carrier.

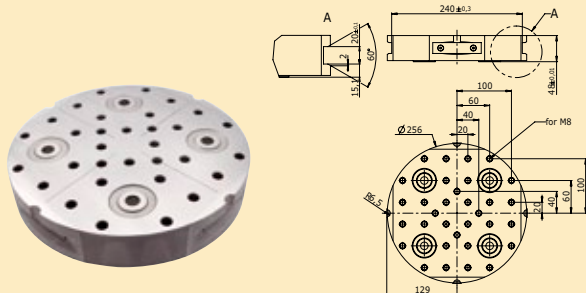
- Construction height: 48.0 ± 0.005 mm
- X/Y-centring with spring-loaded pin
- Flatness: 0.01 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs, C 960 740 code carrier fixture and 3R-863.01 code carrier



GPS 240 Pallet round C 694 450

Milled, coined cast aluminium pallet. Suitable for high-speed milling and demanding turning and milling operations.

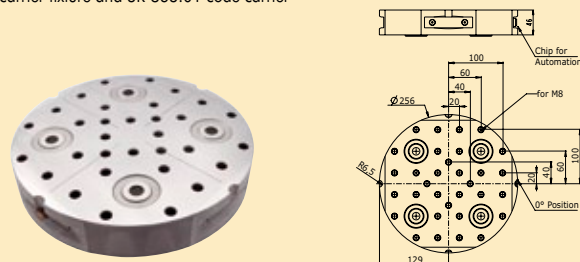
- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs



GPS 240 Pallet round ready for use of automation C 694 465

Milled, coined cast aluminium pallet. Suitable for high-speed milling and demanding turning and milling operations.

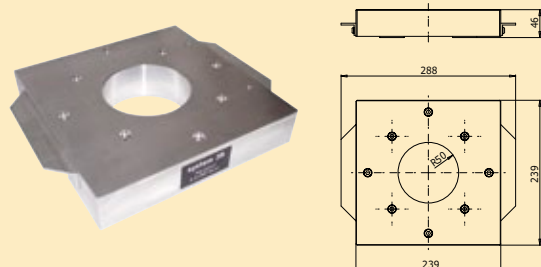
- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 4 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs, C 960 740 code carrier fixture and 3R-863.01 code carrier



GPS 240 Pallet with hole Ø 100 mm C 694 800

Made of aluminium with hole Ø100 mm.

- Construction height: 46 ± 0.005 mm
- X/Y-centring with springy cam, hardened, stainless
- Flatness: 0.01 mm
- Weight: 6 kg



GPS 240 Pallets round

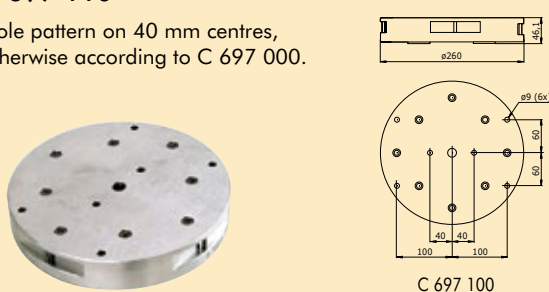
C 697 100

Made of aluminium.

- Construction height: 46.1 ± 0.01 mm
- X/Y-centring with springy cam, hardened, stainless
- Flatness: 0.01 mm
- Weight: 6 kg

C 697 110

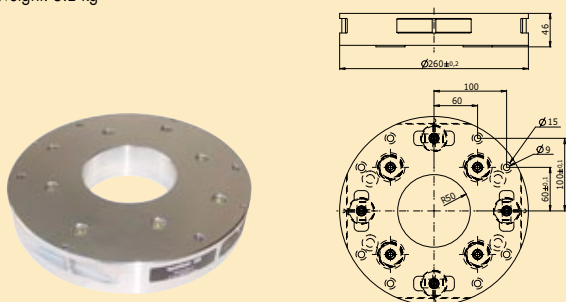
Hole pattern on 40 mm centres, otherwise according to C 697 000.



GPS 240 Pallet round with hole Ø 100 mm C 697 800

Made of aluminium with hole Ø100 mm.

- Construction height: 46 ± 0.01 mm
- X/Y-centring with springy cam, hardened, stainless
- Flatness: 0.01 mm
- Weight: 5.2 kg



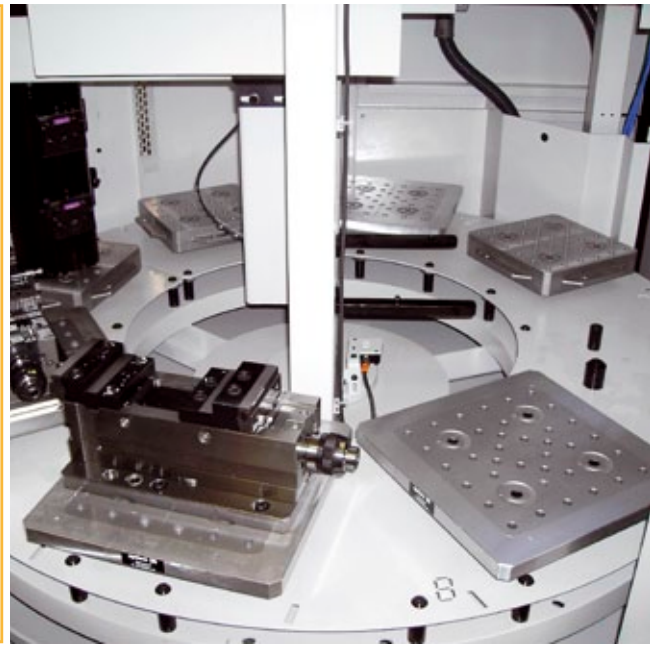
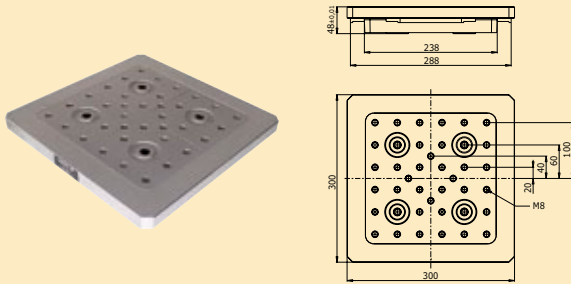
coined pallet (for high machining forces)

pallet with spring-loaded pin

GPS 240 Pallet 300x300 mm C 694 600

Milled, coined cast aluminium pallet. Suitable for high-speed milling and demanding milling operations.

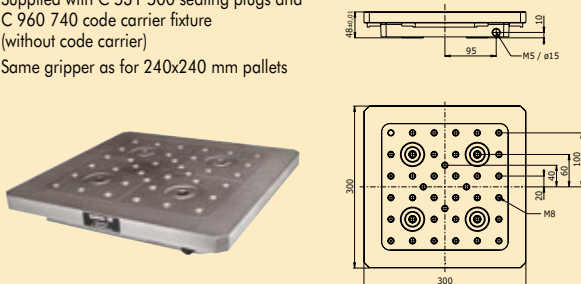
- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 6 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs



GPS 240 Pallet 300x300 mm prepared for automation C 694 670

Milled, coined cast aluminium pallet with assembled code carrier fixture, without code carrier.

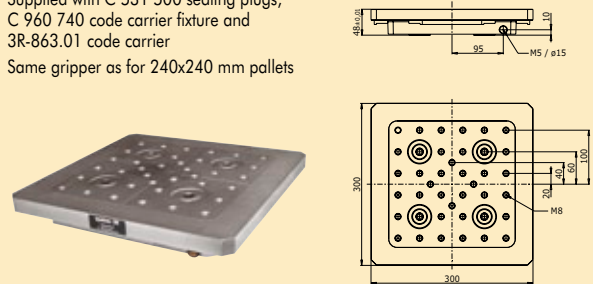
- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 6 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs and C 960 740 code carrier fixture (without code carrier)
- Same gripper as for 240x240 mm pallets



GPS 240 Pallet 300x300 mm ready for use of automation C 694 675

Milled, coined cast aluminium pallet with assembled code carrier.

- Construction height: 48.0 ± 0.01 mm
- X/Y-centring with coined cam
- Flatness: 0.02 mm
- Weight: 6 kg
- Recommended workpiece weight: 100 kg
- Supplied with C 531 500 sealing plugs, C 960 740 code carrier fixture and 3R-863.01 code carrier
- Same gripper as for 240x240 mm pallets



GPS 240 Pallets with vice for grinding and EDM

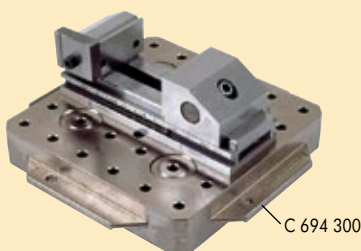
- X/Y-centring with spring-loaded pin

C 585 400

Vice for workpieces < 80 mm.

C 585 600

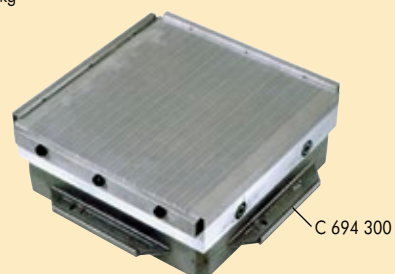
Vice for workpieces < 120 mm.



GPS 240 Magnetic tables C 694 270

Adapted for milling. Two independent magnetic fields can be set individually.

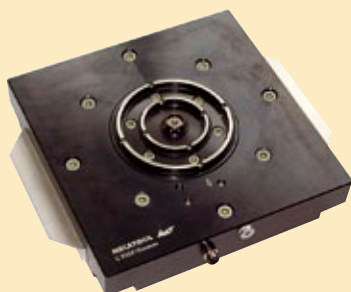
- Magnetic field height: 6 mm
- Magnetic holding force: 120 N/cm²
- Pole: 4 mm
- Pole distance: 11 mm
- Dimensions: 240 x 240 x 94 mm
- Weight: 21.5 kg



GPS 240 Pallet with integrated GPS 120/70 chuck C 522 560

Adapter pallet which can accommodate the smaller GPS 120/70 pallets with Ø 120/70 mm.

- Material: aluminium / steel
- Height Z-Z: 54 mm
- References stainless steel, hardened
- Weight: 8,1 kg



Master pallet C 846 600

The pallet has a ground reference ruler and a ground indication hole for alignment of the references.

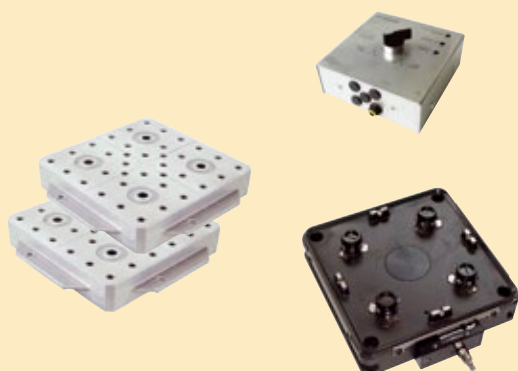


C 694 300

GPS 240 Starter kit S 500 310

Contents:

- C 219 000 pneumatic chuck
- C 810 820 actuator
- C 694 400 coined pallet (2x)



Lifting grip C 810 960

Lifting gear for handling GPS 240 pallets 240x240 mm.

- Weight: 2.9 kg



Presetting station C 810 650

For alignment of workpieces on GPS 240 pallets.

- Parallelism: 0.005 mm
- Required air pressure: 6 ± 1 bar
- Supplied with dial indicator, dial indicator holder and actuator



Controllers

C 810 820

Unit for controlling pneumatic chucks C 217 100 and C 219 000.

- 1 connection (clamping/releasing)

C 810 830

Unit for controlling pneumatic chucks C 219 100 and C 219 600.

- 4 connections (- prism / - Z-cleaning / - clamping/releasing / - Turbo/ventilation)

C 810 850

Unit to control two pneumatic chucks.

- 5 connections (- prism / - Z-cleaning / - clamping/releasing / - Turbo/ventilation / - ventilation tube)



Sealing C 219 007

The chuck seal is a wear part which should be replaced every three to six months.

- Material: Viton
- Supplied singly



coined pallet (for high machining forces)

pallet with spring-loaded pin

Clamp kit C 810 870

Contents:

E 030 220 clamp (x4)
E 010 144 washer M10 (x4)
E 010 143 washer M8 (x4)
E 000 428 Allen screw M10x45 (x4)
E 000 354 Allen screw M8x45 (x4)
E 040 030* T-slot nut M10x12 (x4)
E 040 031* T-slot nut M10x14 (x4)
E 040 032* T-slot nut M10x16 (x4)
E 040 033* T-slot nut M10x18 (x4)
E 040 020* T-slot nut M8x12 (x4)
E 040 021* T-slot nut M8x14 (x4)
E 040 022* T-slot nut M8x16 (x4)
E 040 023* T-slot nut M8x18 (x4)



* When ordering, state the required dimension of the T-slot nut.

Clamp strip kit C 810 880

Contents:

C 810 881 undrilled clamp strip (x2)
E 010 144 washer M10 (x4)
E 010 143 washer M8 (x4)
E 000 428 Allen screw M10x45 (x4)
E 000 354 Allen screw M8x45 (x4)
E 040 030* T-slot nut M10x12 (x4)
E 040 031* T-slot nut M10x14 (x4)
E 040 032* T-slot nut M10x16 (x4)
E 040 033* T-slot nut M10x18 (x4)
E 040 020* T-slot nut M8x12 (x4)
E 040 021* T-slot nut M8x14 (x4)
E 040 022* T-slot nut M8x16 (x4)
E 040 023* T-slot nut M8x18 (x4)



* When ordering, state the required dimension of the T-slot nut.

Clamp strip kit for double mounting C 810 920

For mounting two chucks on 300 mm centres.

Contents:

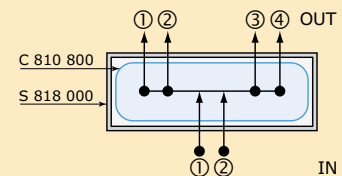
C 810 921 undrilled spacer (x1)
C 810 881 undrilled clamp strip (x2)
E 010 144 washer M10 (x6)
E 010 143 washer M8 (x6)
E 000 428 Allen screw M10x45 (x6)
E 000 354 Allen screw M8x45 (x6)
E 040 030* T-slot nut M10x12 (x6)
E 040 031* T-slot nut M10x14 (x6)
E 040 032* T-slot nut M10x16 (x6)
E 040 033* T-slot nut M10x18 (x6)
E 040 020* T-slot nut M8x12 (x6)
E 040 021* T-slot nut M8x14 (x6)
E 040 022* T-slot nut M8x16 (x6)
E 040 023* T-slot nut M8x18 (x6)



* When ordering, state the required dimension of the T-slot nut.

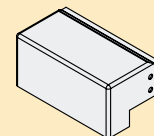
Pneumatic control "2/4" C 810 800

To control two systems on the machine table with only two hoses (IN).
2x2 functions – opening/cleaning and presence monitoring.



S 818 000

With protective cover which is adapted to suit the machine.



Hand gate valve C 810 720

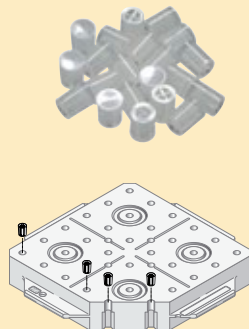
For controlling pneumatic chucks C 217 100 and C 219 000.



Sealing plugs C 531 500

Plugs for sealing GPS 240 pallets.

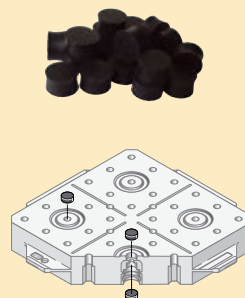
- Supplied in sets of 40



Seals C 531 250

To seal the holes in the four clamping elements of the pallet.

- Material: elastomer
- Supplied in sets of 20



Reference protectors C 531 210

To protect the Z-reference of the pallet.

- Supplied in sets of 20

