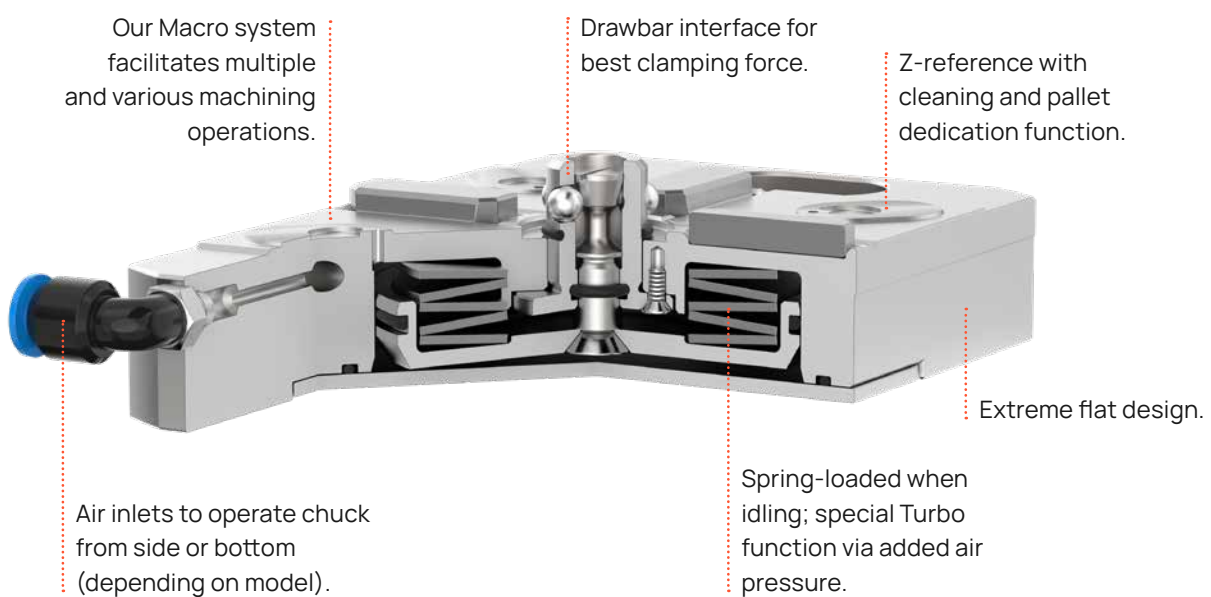


Macro in detail



NOTE: System 3R chucks are also available in the following versions: MacroNano for the highest precision; MacroHT and MacroInconel for extreme high temperatures; and, VDP for superior vibration damping.

Basic equipment – Macro

With a Macro chuck as basic equipment on your machine table, you can interconnect all your machines to create a single system. Move workpieces quickly and precisely from wire EDM machines to grinding machines or die-sinking machines with no need for subsequent re-alignment.

If you choose a pneumatic Macro chuck, you can operate around the clock if you wish.

- Allows fully automated production
- Links all your machines together
- Z-references with automatic air-blast cleaning
- X and Y-references of cemented carbide
- Repetition accuracy:
 - Macro 0.002 mm
 - MacroNano 0.001 mm
- Turbo locking (for enhanced clamping)



NOTE: The pneumatic chucks require an air pressure of 6 ± 1 bar.

Recommendations for loading in Macro chucks

Table chucks with horizontal mounting of the workpiece

Article number	Max. torque	Capacity (X=150mm)
3R-600.24RS	6 Nm	4 kg
3R-600.24-4RS	8 Nm	5 kg
3R-602.10-1	30 Nm	20 kg
3R-602.12-1	45 Nm	30 kg
3R-602.26	30 Nm	20 kg
3R-602.27	30 Nm	20 kg
3R-602.27-1	18 Nm	12 kg
3R-602.81RS	30 Nm	20 kg

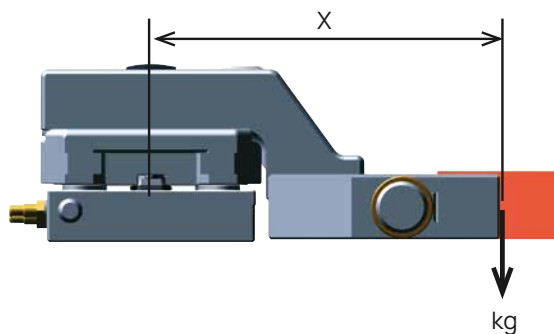
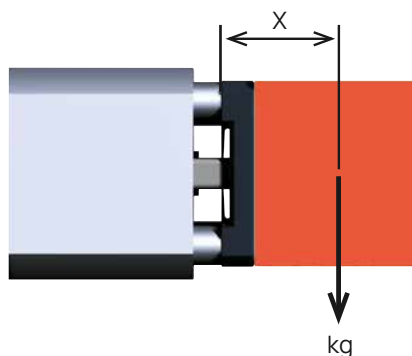


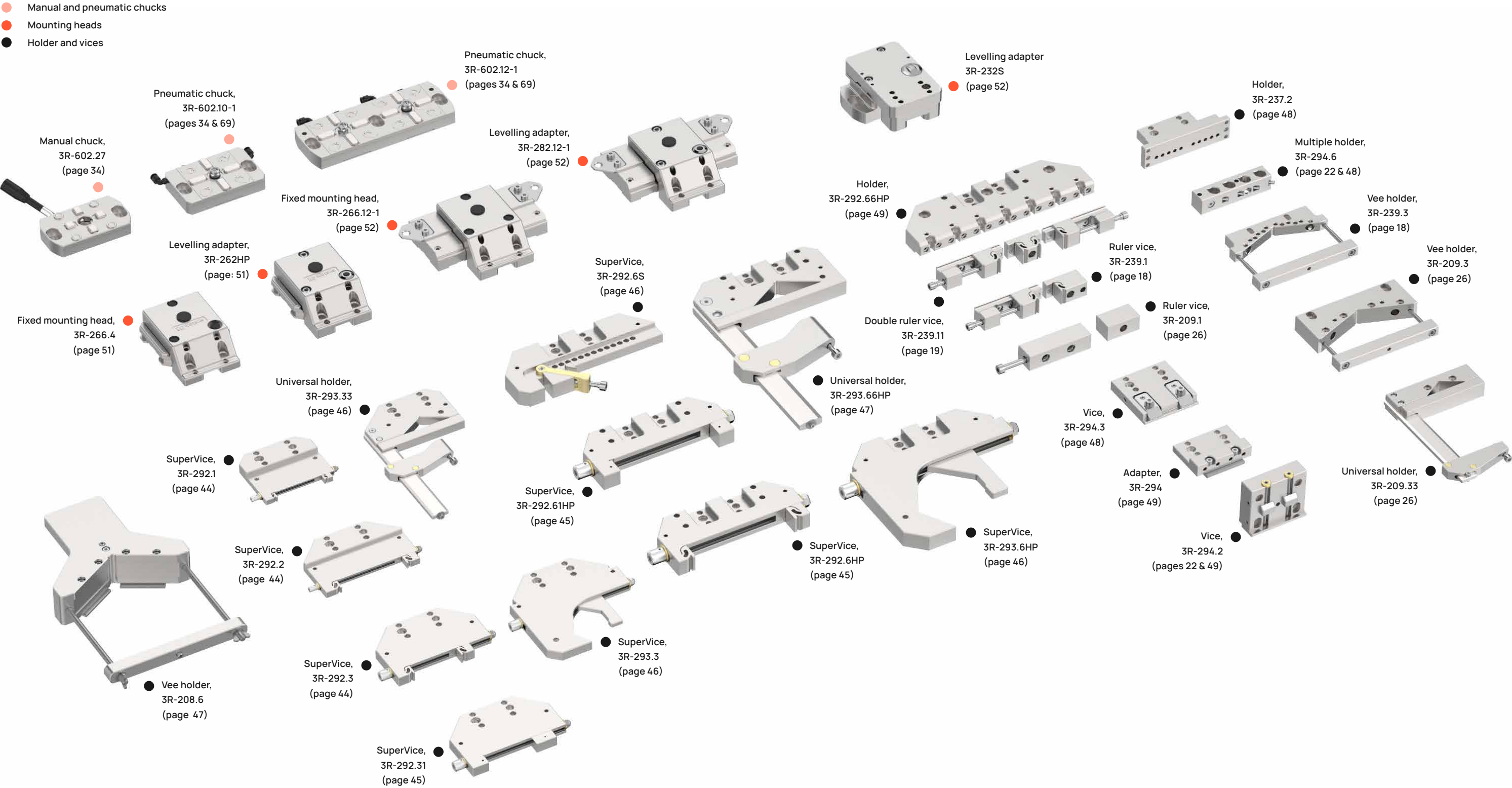
Table chucks with vertical mounting of the workpiece

Article number	Max. torque	Capacity (X=100mm)
3R-600.24RS	8 Nm	6 kg
3R-600.24-4RS	8 Nm	7-8 kg
3R-602.4.1	8 Nm	7-8 kg
3R-602.27-1	8 Nm	7-8 kg
3R-60.360-X	8 Nm	7-8 kg



Overview of the Macro system with horizontal mounting

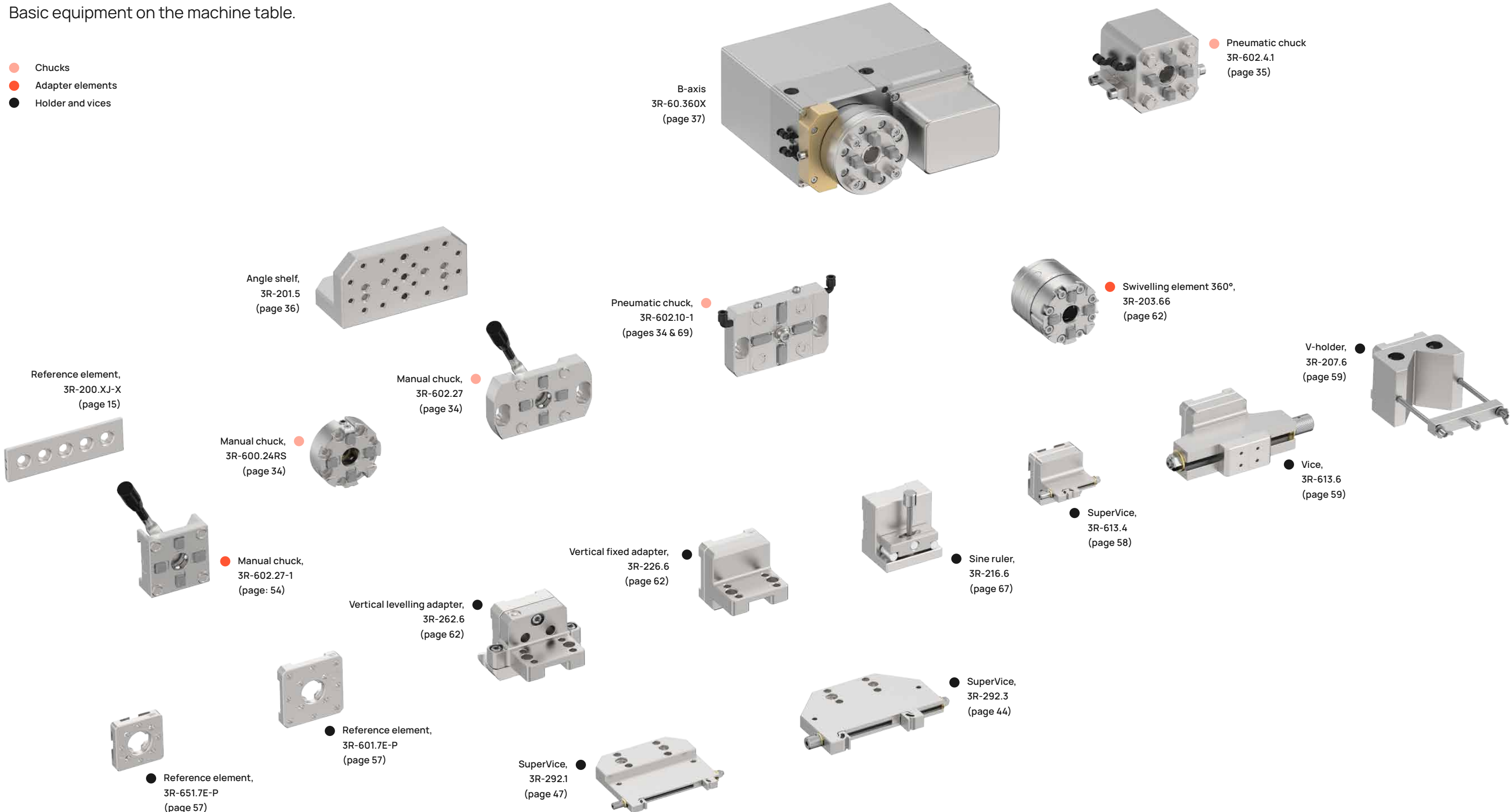
Basic equipment on the machine table.



Overview of the Basic equipment – Macro

Basic equipment on the machine table.

- Chucks
- Adapter elements
- Holder and vices

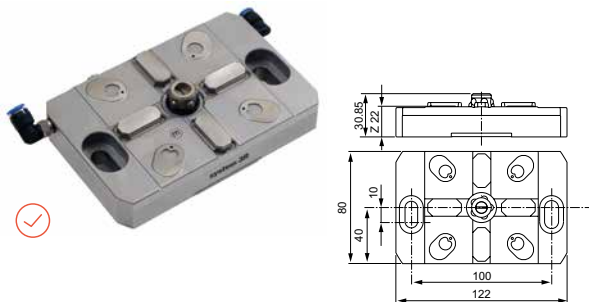


Basic equipment – Macro

Pneumatic chuck, Macro, 3R-602.10-1

Pneumatic chuck for Macro holders.

- Clamping force 6.7 kN
- Fixed index positions 4x90°
- Supplied with drawbar 3R-605.10
- Air-blast cleaning of Z-references
- Protective cover
- Weight 1.4 kg



Protective cover, Macro, 3R-SP37513

Suitable for manual or automatic applications (if gripped on drawbar). Gripper interface is related to choice of drawbar.

- Requires drawbar 3R-605.XX or similar
- Equipped with rubber pads for sealing
- Weight 0.6 kg



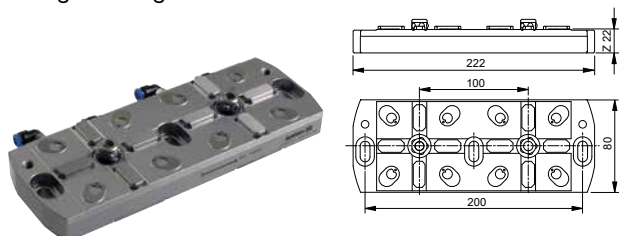
Pneumatic chuck, MacroTwin, 3R-602.12-1

Pneumatic chuck for Macro or MacroTwin. Horizontal mounting on the machine table.

NOTE: With automatic changing via WorkPal, MacroTwin holders only.

Clamping force 2x6.7 kN

- Fixed index positions 4x90°
- Supplied with drawbars 3R-605.10
- Air-blast cleaning of the Z-references
- Protective covers
- Weight 2.4 kg

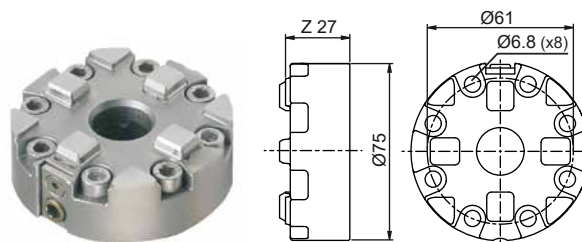


Manual chuck, Macro, 3R-600.24RS

Manual chuck for Macro holder.

Designed for permanent mounting.

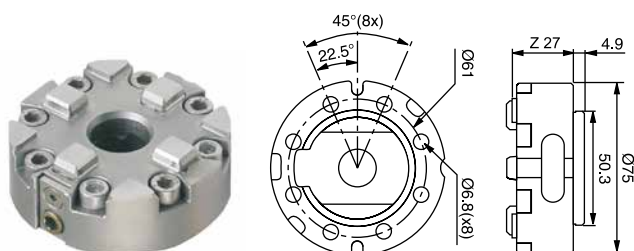
- Clamping force 6 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.2RS
- Tightening torque 6 Nm
- Weight 0.7 kg



Manual chuck, Macro, 3R-600.23RS

Manual chuck with mounting flange for Macro holder. Designed for permanent mounting.

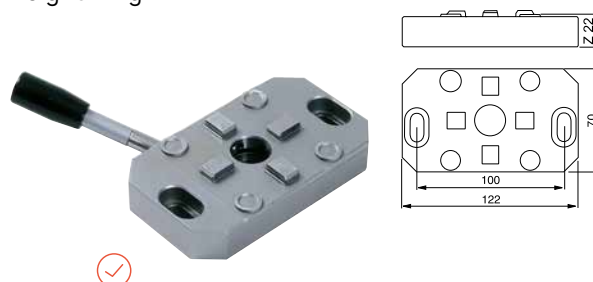
- Clamping force 6 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.2RS
- Tightening torque 6 Nm
- Weight 0.7 kg



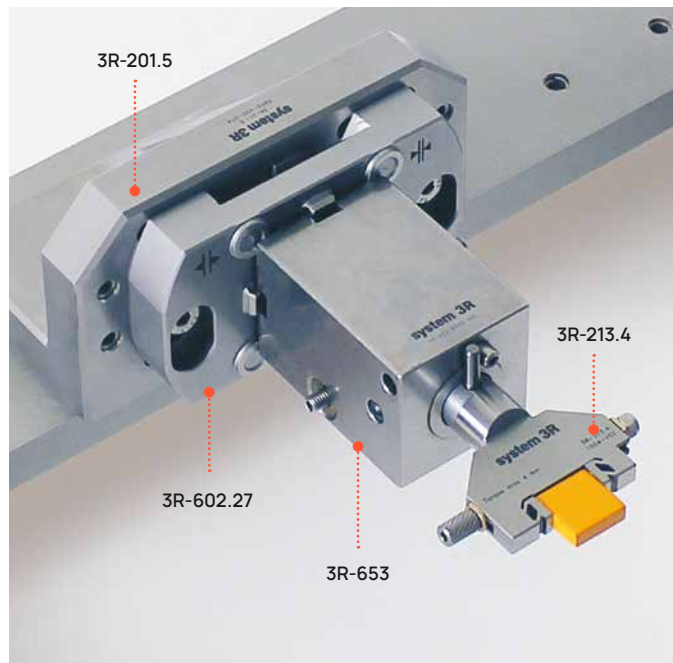
Manual chuck, Macro, 3R-602.27

Manual chuck with lever for Macro holder.

- Clamping force 6 kN
- Fixed index positions 4x90°
- Supplied with drawbar 3R-605.27RS.
- Built-in latch function
- Weight 1.1 kg



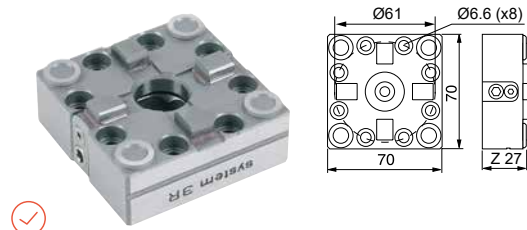
Basic equipment – Macro



Manual chuck, Macro, 3R-600.24-4RS

Manual chuck for Macro holder. Mounts on a suitable fixture.

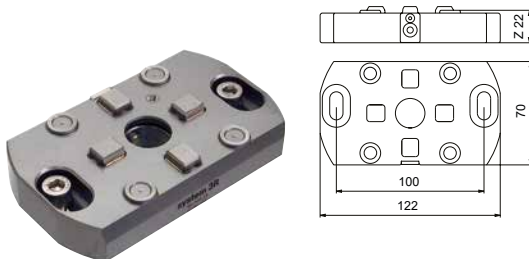
- Clamping force 6 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.2RS
- Tightening torque 6 Nm
- Ground front edge
- Weight 1 kg



Manual chuck, Macro, 3R-602.26

Manual chuck for Macro holder.

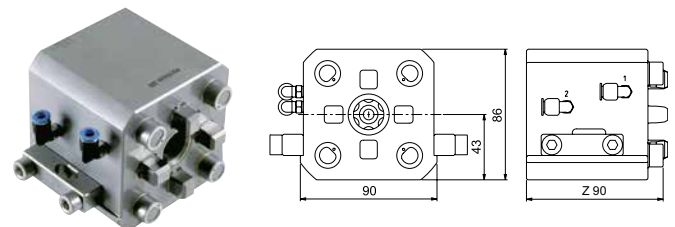
- Clamping force 6 kN
- Fixed index positions 4x90°
- Supplied with drawbar 3R-605.26
- Tightening torque 6 Nm
- Weight 1.1 kg



Pneumatic chuck, Macro, 3R-602.4.1

Pneumatic chuck for Macro holder.

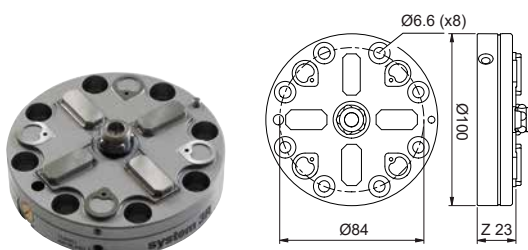
- Clamping force 6 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.1RS
- Air-blast cleaning of Z-references
- Weight 4.1 kg



Pneumatic chuck, Macro, 3R-602.81RS

Pneumatic chuck, low-profile, for Macro holder.

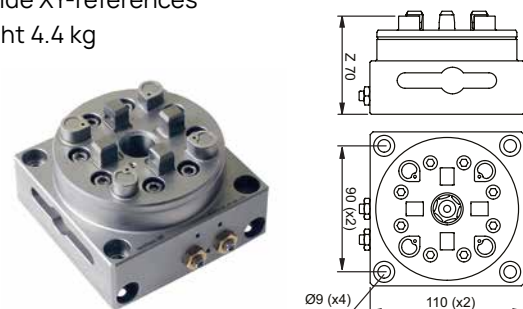
- Clamping force 6 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.10
- Air-blast cleaning of Z-references
- Weight 4.1 kg



Pneumatic chuck, MacroHP, 3R-600.10-3RS

Pneumatic chuck locked/opened with air gun.

- Clamping force 6 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.1RS
- Air-blast cleaning of the Z-references
- Carbide XY-references
- Weight 4.4 kg

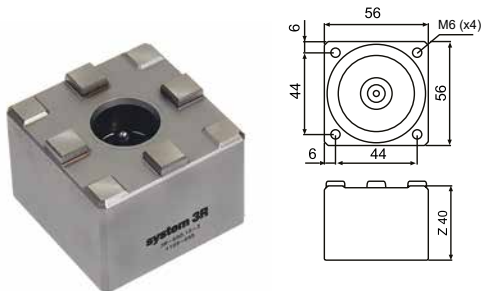


Basic equipment – Macro

Pneumatic chuck, Macro, 3R-600.15-3

Pneumatic chuck for permanent mounting on the machine table.

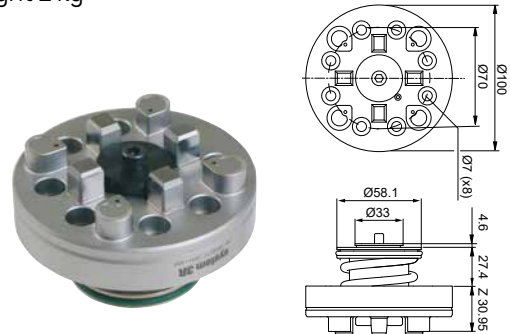
- Clamping force 4.5 kN
- Fixed index positions 4x90°
- Supplied with drawbar 3R-605.2RS
- Weight 0.8 kg



Pneumatic in-built chuck, Macro, 3R-SP26771-RS

Chuck for Macro holder. For permanent mounting on the machine spindle or fixture.

- Clamping force 6 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.1RS
- Weight 2 kg

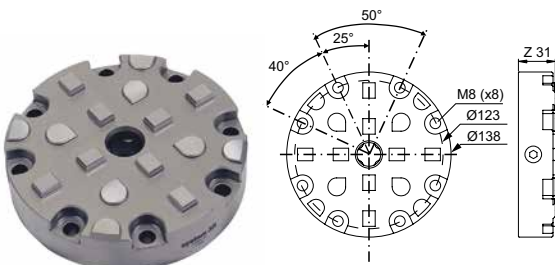


Manual chuck (low profile), MacroMagnum, 3R-680.24RS

Chuck for MacroMagnum holder. For permanent mounting on the machine spindle or table.

NOTE: Master 3R-606.1 or 3R-686.1-HD required at installation.

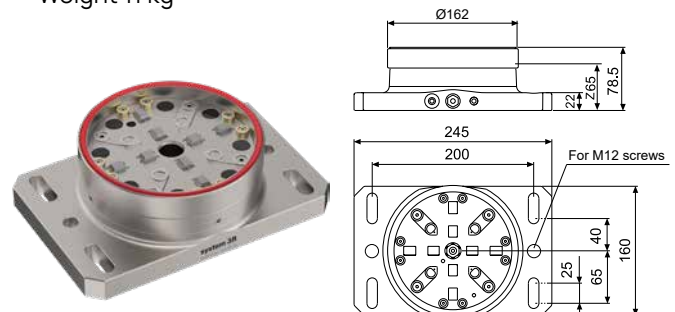
- Clamping force – Macro at 4 kN: 6 kN, MacroMagnum at 10 kN: 16 kN
- Fixed index positions 4x90°
- Required drawbar 3R-605.2RS
- Tightening torque Macro 4 Nm, MacroMagnum 10 Nm
- Weight 5 kg



Pneumatic chuck MacroMagnum, 3R-680.10-2RS

Pneumatic table chuck for MacroMagnum holder.

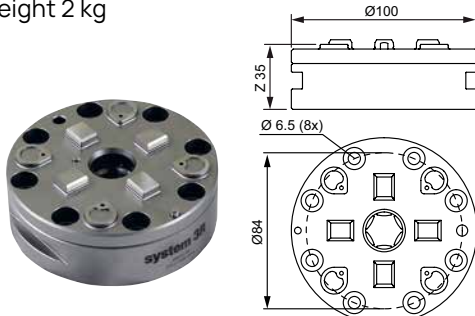
- Carbide XY-references
- Rust resistant
- Fixed index positions 4x90°
- Required drawbar 3R-605.1RS
- Clamping force – Macro at 5 kN with Turbo MacroMagnum at 15.5 kN
- Weight 11 kg



Pneumatic chuck (low profile), Macro, 90945.01

Pneumatic chuck for permanent mounting on the machine table.

- Clamping force 6.2 kN
- Required drawbar 3R-605.2RS
- Fixed index positions 4x90°
- Weight 2 kg



Angle shelf, 3R-201.5

Mounts directly on the machine table. For vertical mounting of a Macro chuck or short reference element in the machine.

EXAMPLES OF SUITABLE CHUCKS: 3R-600.24RS, 3R-602.10-1, 3R-602.26, 3R-602.27 and Reference element 3R-200.1J-U.

- Weight 4.2 kg

