

MacroStd & MacroHP

To compete in the global manufacturing industry, every aspect of efficiency has to be studied. You have to extract the highest possible number of spindle hours from each machine, every day of the week. Here, the importance of a high-class reference system can never be over-estimated. A reference system that reduces set-up times to a few minutes.

Macro is such a reference system. A system that minimises throughput time, and which, thanks to its accuracy, practically eliminates rejects. A system that increases flexibility and profitability. A system that increases competitiveness and ensures the success of its users.

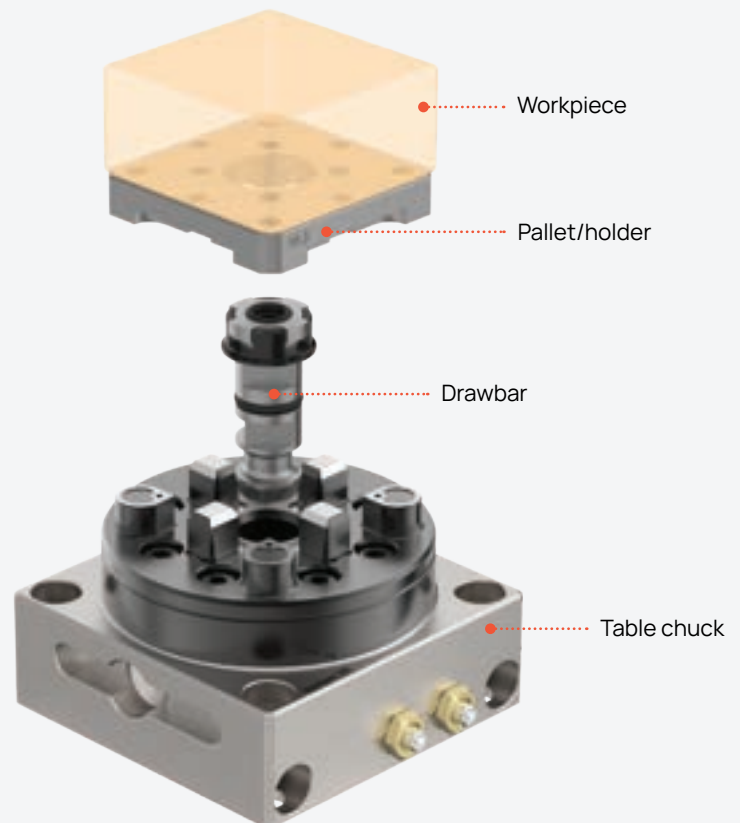
Among users worldwide, the Macro system is a byword for precision. Rightly so, every single Macro product is thoroughly checked before it is dispatched.

But precision can be graded too. Consequently, while maintaining full compatibility, Macro products are “classified” and given names reflecting their accuracy, material and service life (i.e. Standard, High Performance and Nano). Nonetheless, it is worth remembering that the accuracy of any system is determined by the element that has the lowest classification.

- Repetition accuracy:
 - MacroNano within 0.001 mm
 - Macro (Std and HP) within 0.002 mm
- Locking force 6.000 N
- Fixed index positions 4x90°
- Required air pressure, pneumatic chuck 6 bars (± 1)
- Recommended tightening torque, manual chuck 6 Nm
- Recommended max workpiece weight 50 kg.

ADVANTAGES

- Reduces set-up times.
- Ensures precision and quality.
- Has automatic air-blast cleaning of the references in the pneumatic chucks.
- Has higher locking force in the pneumatic chucks – turbo locking.
- Has references of cemented carbide or hardened ground steel.
- Is suitable for automatic changing with System 3R's automation program.
- Air blast cleaning of Z-references.

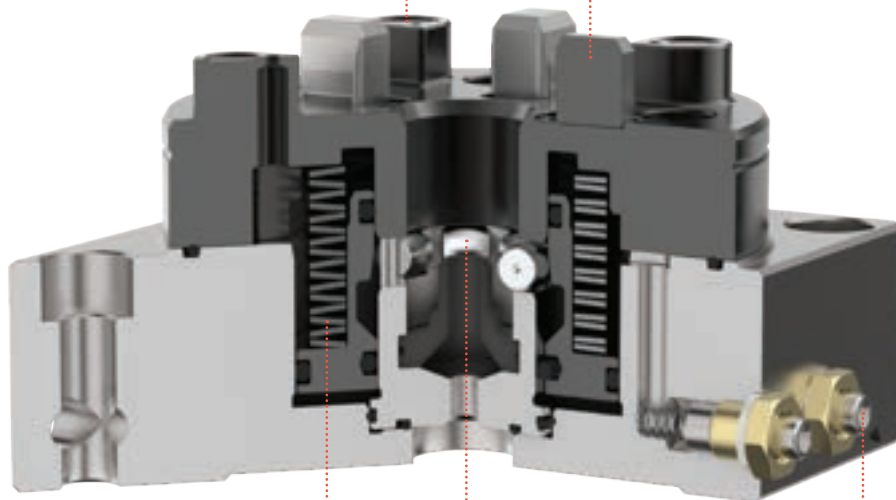


Macro in detail



Z-references are cleaned by air blasted through the chuck's Z-reference nozzles.

X and Y-references.



Spherical rolls.

Spring-loaded when idling; special Turbo function via added air pressure.

Side air inlets are ready for air gun use on delivery.

Macro - Chucks

Lathe chucks	Article number	Drawbar	Feature
Manual Std	3R-600.22	3R-605.2	mounting flange
Manual HP	3R-600.20	3R-605.1 / 3R-605.4	carbide references, 4 Nm
Pneumatic Std	3R-600.1-30	3R-605.1 / 3R-605.4	

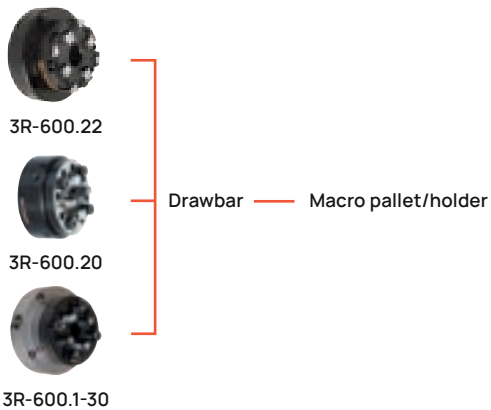
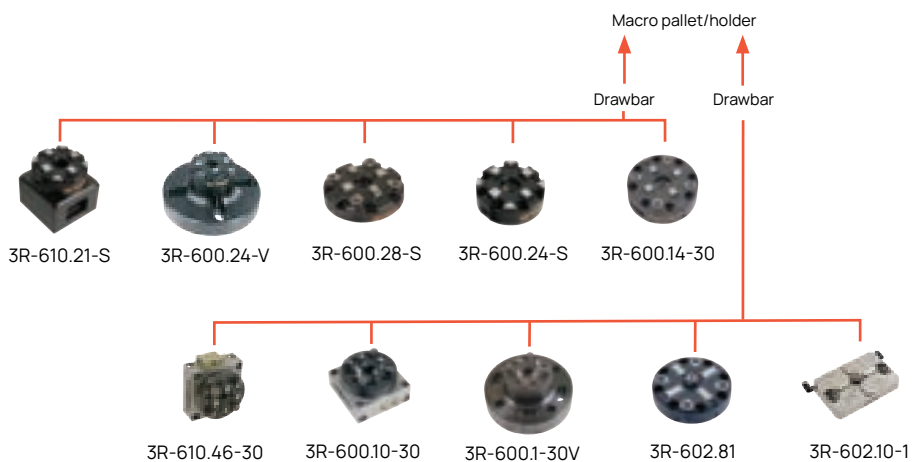


Table chucks	Article number	Drawbar	Feature
Manual Std	3R-600.21-S	3R-605.2	horizontal and vertical, 6 Nm
Manual VDP	3R-600.24-V	3R-605.2	vibration-damped, 6 Nm, Ø75 mm
Manual Std	3R-600.28-S	3R-605.2	low profile, 6 Nm, Ø100 mm
Manual Std	3R-600.24-S	3R-605.2	6 Nm, Ø75 mm
Pneumatic Std	3R-610.46-30	3R-605.1 / 3R-605.4	horizontal and vertical
Pneumatic Std	3R-600.10-30	3R-605.1 / 3R-605.4	
Pneumatic Std	3R-600.14-30	3R-605.2	low profile
Pneumatic VDP	3R-601-30V	3R-605.1 / 3R-605.4	vibration-damped
Pneumatic Std	3R-602.81	3R-605.10	low profile
Pneumatic HP	3R-602.10-1	3R-605.10	rust resistant

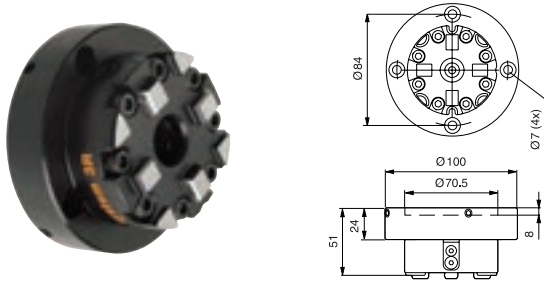


Macro – Chucks

Manual chuck, MacroStd, 3R-600.22

Manual lathe chuck with setting screws for centring.

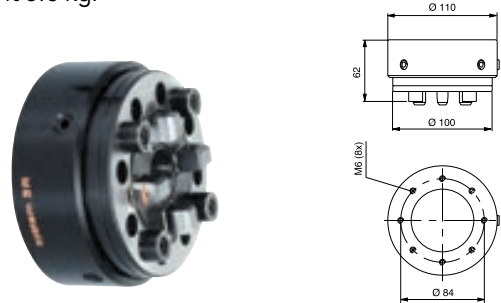
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Weight 2.1 kg.



Manual chuck, MacroHP, 3R-600.20

For mounting on the machine spindle with 3R-A3620 or on a lathe taper with centring ring 3R-612.6.

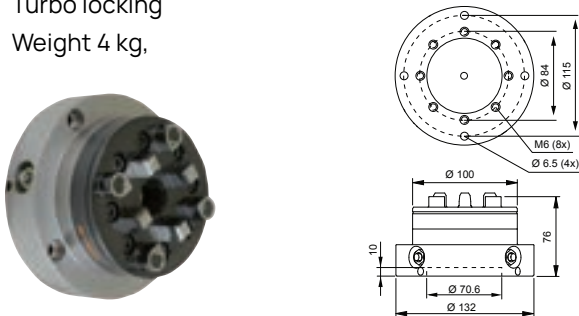
- Required drawbar 3R-605.1 or 3R-605.4
- Carbide XY-references
- Fixed index positions 4x90°
- Tightening torque 4 Nm
- Weight 3.6 kg.



Pneumatic chuck, MacroStd, 3R-600.1-30

Pneumatic chuck for permanent mounting on the machine spindle, onto the machine table or as a lathe chuck.

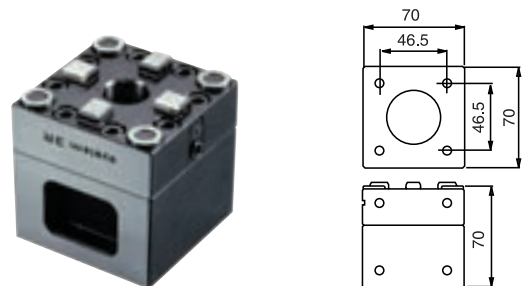
- Required drawbar 3R-605.1 or 3R-605.4
- Fixed index positions 4x90°
- Required air pressure 6 bars (± 1)
- Turbo locking
- Weight 4 kg,



Manual chuck, MacroStd, 3R-610.21

Three ground faces for vertical or horizontal mounting on the machine table.

- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing duct
- Weight 2.2 kg.

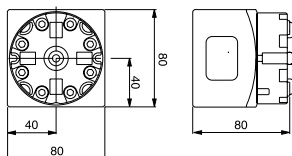


Manual chuck, MacroStd, 3R-610.21-S

Two ground faces for vertical or horizontal mounting on the machine table.

- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing duct
- Weight 3.5 kg.

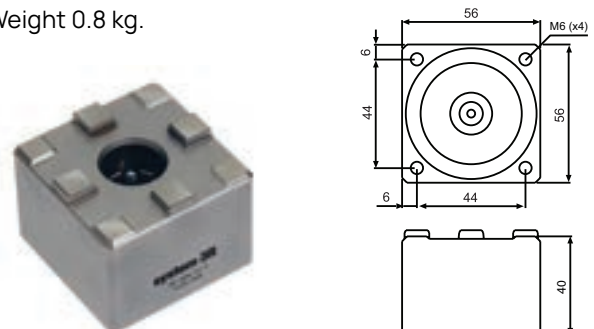
90842, Required drawbar 3R-605.1, otherwise as 3R-610.21-S.



Pneumatic chuck, MacroHP, 3R-600.15-3

Rust resistant pneumatic chuck for permanent mounting on the machine table.

- Drawbar 3R-605.2RS included
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Rust resistant
- Weight 0.8 kg.

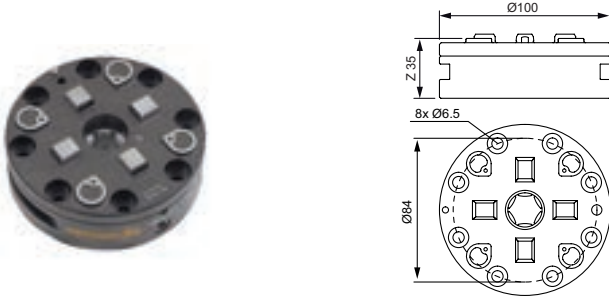


Macro – Chucks

Pneumatic chuck, MacroStd, 3R-600.14-30

Pneumatic low profile chuck for permanent mounting on the machine table.

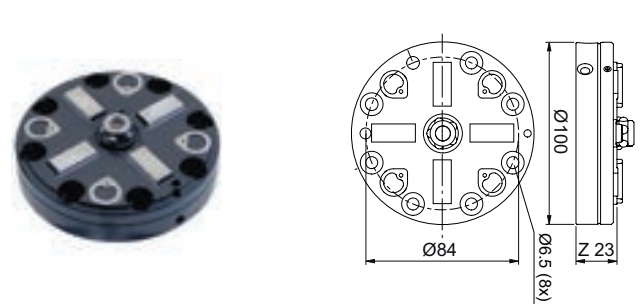
- Required drawbar 3R-605.2
- Locking force 6.500 N
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Weight 2 kg.



Pneumatic chuck, MacroStd, 3R-602.81

Pneumatic low profile chuck for permanent mounting on the machine table.

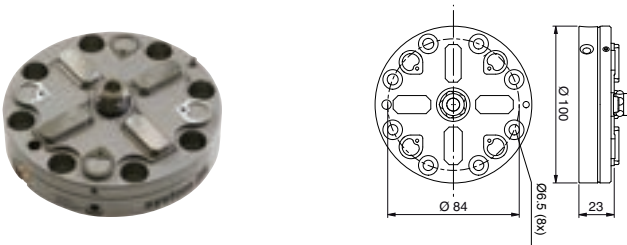
- Required drawbar 3R-605.10
- Locking force 6.700 N
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Weight 1 kg.



Pneumatic chuck, MacroHP, 3R-602.81RS

Rust resistant pneumatic low profile chuck for permanent mounting on the machine table.

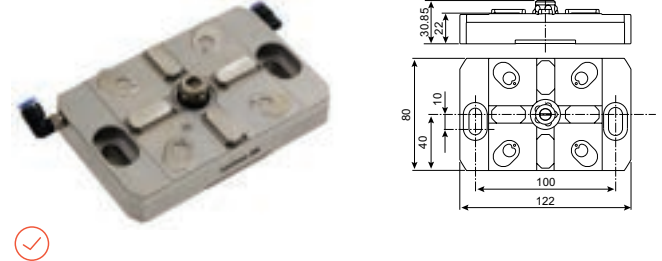
- Required drawbar 3R-605.10
- Locking force 6.700 N
- Fixed index positions 4x90°
- Air-blast cleaning of Z-references
- Rust resistant
- Weight 1 kg.



Pneumatic chuck, MacroHP, 3R-602.10-1

Rust resistant pneumatic low profile chuck for Macro holders. Supplied with drawbar 3R-605.10 and protective cover.

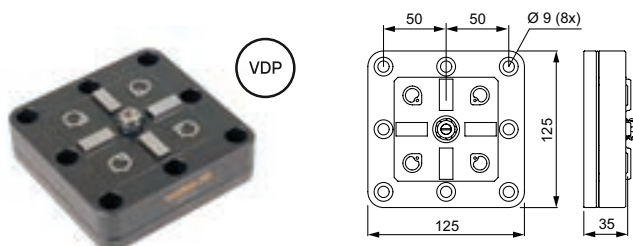
- Fixed index positions 4x90°
- Locking force 6.700 N
- Air-blast cleaning of Z-references
- Rust resistant
- Weight 1.4 kg.



Pneumatic chuck, VDP, 3R-602.10-V

Pneumatic vibration-damped chuck, low-profile version.

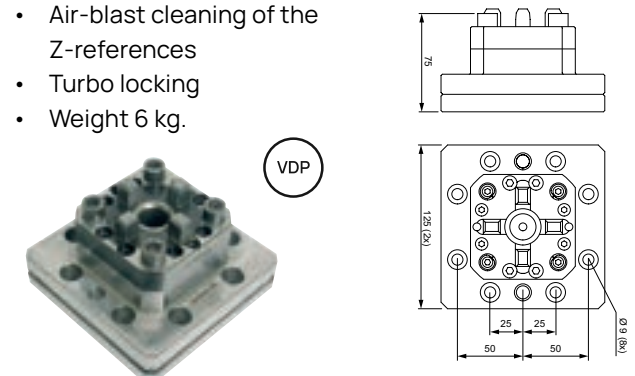
- Required drawbar 3R-605.10
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Turbo locking
- Weight 5 kg.



Pneumatic chuck, VDP, 90716.09

Pneumatic vibration-damped chuck.

- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Carbide XY-references
- Air-blast cleaning of the Z-references
- Turbo locking
- Weight 6 kg.

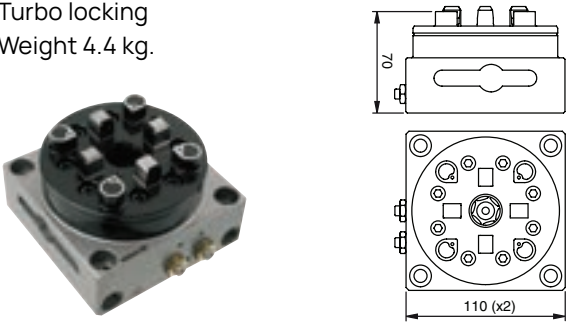


Macro – Chucks

Pneumatic chuck, MacroStd, 3R-600.10-30

Pneumatic table chuck locked/opened with air gun.

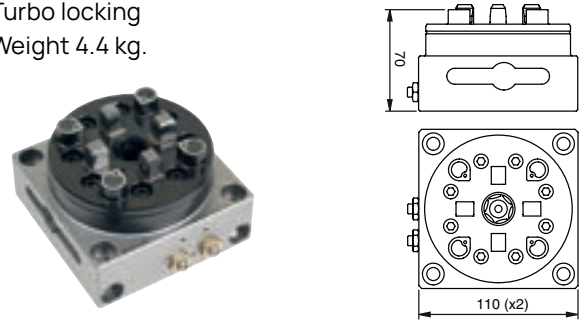
- Required drawbar 3R-605.1 or 3R-605.4
- All references of hardened and ground steel
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Turbo locking
- Weight 4.4 kg.



Pneumatic chuck, MacroHP, 3R-600.10-3

Pneumatic table chuck locked/opened with air gun.

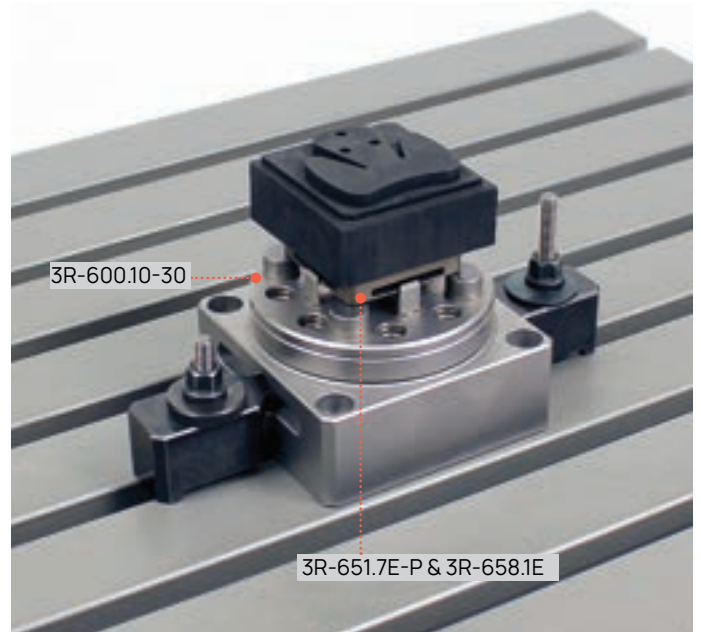
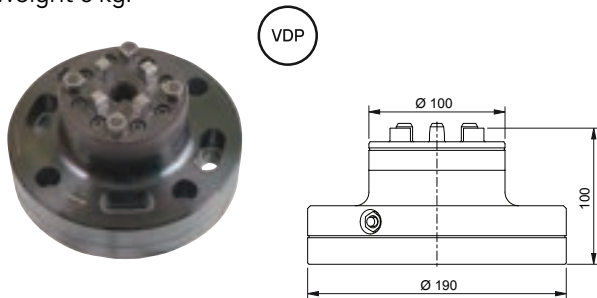
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Carbide XY-References
- Turbo locking
- Weight 4.4 kg.



Pneumatic chuck, VDP, 3R-600.1-30V

Pneumatic vibration-damped table chuck.

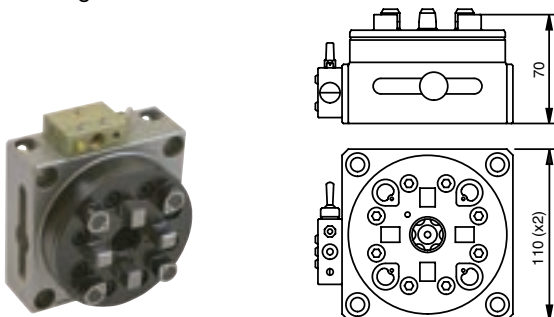
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of the Z-references
- Turbo locking
- Weight 6 kg.



Pneumatic chuck, MacroStd, 3R-610.46-30

Pneumatic chuck for horizontal or vertical use.

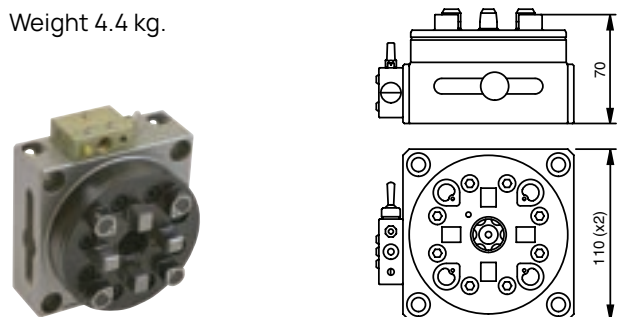
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air unit included
- Weight 4.4 kg.



Pneumatic chuck, MacroHP, 3R-610.46-3

Pneumatic chuck for horizontal or vertical use.

- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air unit included
- Carbide XY-references
- Weight 4.4 kg.

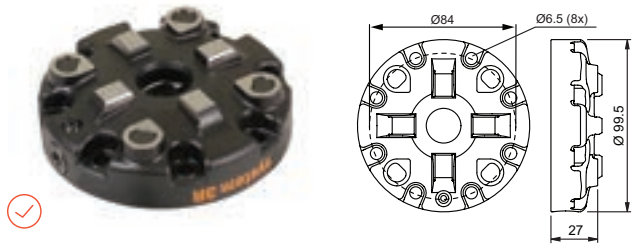


Macro – Chucks

Manual chuck, MacroStd, 3R-600.28-S

Cast chuck low profile with ground back face for mounting on the machine spindle. Also suitable in a fixture on the machine table or with adapterplate 3R-A26488.

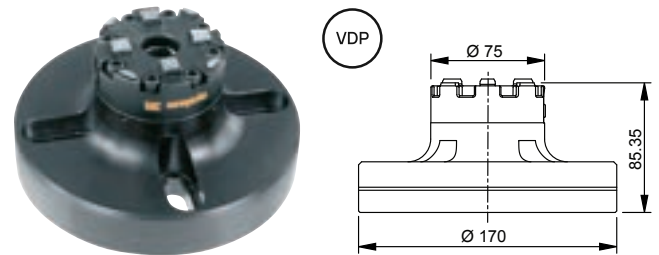
- Tightening torque 6 Nm
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing connection
- Weight 1.1 kg.



Manual chuck, VDP, 3R-600.24-V

Manual vibration-damped table chuck, Ø170 mm.

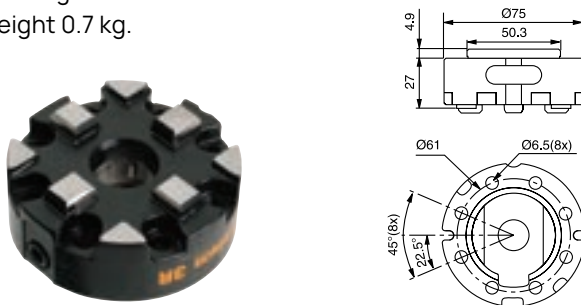
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Building-in height 85 mm.
- Centre spacing 63 to 100 mm
- Weight 6 kg.



Manual chuck, MacroStd, 3R-600.23-S

Cast chuck with mounting flange for mounting on the machine spindle or in a fixture, alternatively 3R-A19724, on the machine table.

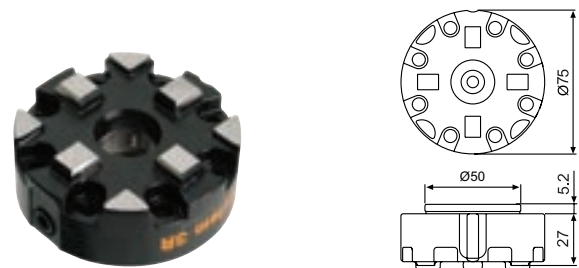
- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing connection
- Weight 0.7 kg.



Manual chuck, MacroStd, 3R-SP15055

Cast chuck with ground flange for installation in fixture/plate.

- Required drawbar 3R-605.2
- Tightening torque 6 Nm
- Fixed index positions 4x90°
- Flushing connection
- Weight 0.7 kg.



Manual chuck, MacroStd, 3R-600.24-S

Cast chuck with ground back face for mounting on the machine spindle with 3R-A11489 or in a fixture on the machine table.

- Tightening torque 6 Nm.
- Required drawbar 3R-605.2
- Fixed index positions 4x90°
- Flushing connection
- Weight 0.7 kg.

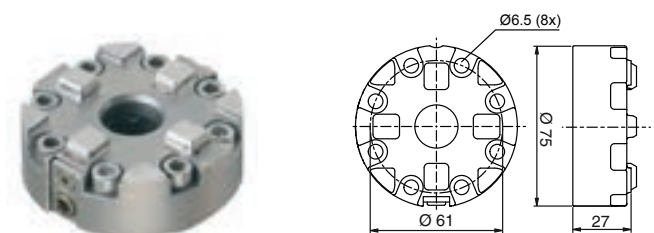


Manual chuck, MacroHP, 3R-600.24RS

Rust resistant manual chuck for Macro holder.

Designed for permanent mounting.

- Tightening torque 6 Nm
- Required drawbar 3R-605.2RS
- Rust-resistant
- Fixed index positions 4x90°
- Weight 0.7 kg.



Macro – Chucks

Pneumatic chuck, MacroStd, 90412.1X

Pneumatic chuck with built-on surface-mounted swivel. Intended for B-axes and similar. Air connection from the side. For further information contact System 3R.

- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Turbo locking.



Pneumatic chuck, MacroHP, 90412.2X

Pneumatic chuck with integral swivel at the rear. Intended for B-axes and similar. Air connection from the rear. For further information contact System 3R.

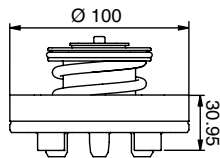
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Turbo locking.



Pneumatic chuck, MacroStd, 3R-SP24460

Pneumatic chuck for building-in, for example in a fixture, dividing head or B-axis.

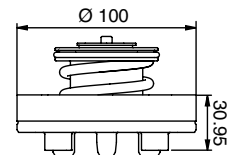
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Air-blast cleaning of Z-references
- Turbo locking
- Weight 1.8 kg.



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

Rust resistant chuck for Macro holder. For permanent mounting on the machine spindle or fixture.

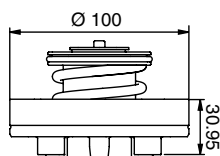
- Required drawbar 3R-605.1RS
- Clamping force 6.000 N
- Required air pressure 6 bars (± 1)
- Carbide XY-References
- Rust resistant
- Fixed index positions 4x90°
- Weight 1.8 kg.



Pneumatic chuck, MacroHP, 3R-SP26771

Pneumatic chuck for building-in, for example in a fixture, dividing head or B-axis.

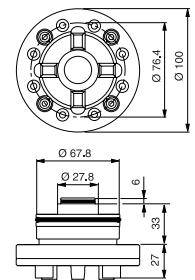
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Carbide XY-References
- Fixed index positions 4x90°
- Air-blast cleaning of Z-references
- Turbo locking
- Weight 1.8 kg.



Pneumatic chuck, MacroHP, 3R-SP7359

Pneumatic chuck for building-in, for example in a fixture, dividing head or B-axis.

- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Carbide XY-References
- Fixed index positions 4x90°
- Air-blast cleaning of Z-references
- Turbo locking
- Weight 1.8 kg.



3R-SP7359-RS

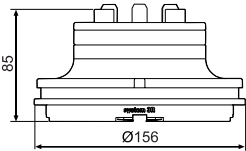
- Rust resistant version, otherwise as 3R-SP7359.
- Required drawbar 3R-605.1RS.

Macro – Chuck adaptes & adapters

Pneumatic chuck adapter, MacroMagnum-Macro, 3R-682.600-A

MacroMagnum chuck adapter with built-in pneumatic Macro chuck for mounting in 3R-686.10-2A.

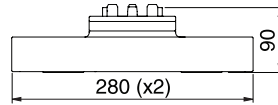
- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Fixed index positions 4x90°
- Turbo locking
- Weight 4.5 kg.



Pneumatic chuck adapter, Dynafix-Macro, 3R-772-600A

Dynafix chuck adapter with built-in pneumatic Macro chuck for mounting in 3R-770-1A or 3R-770-5A.

- Required drawbar 3R-605.1 or 3R-605.4
- Required air pressure 6 bars (± 1)
- Carbide XY-References
- Turbo locking
- Weight 11 kg.

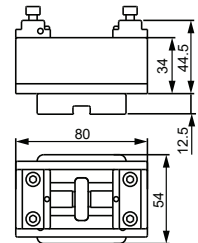


Centering vice, Macro, 3R-658-CV

Centering vice on Macro reference element.

Choose between different jaws (not included).

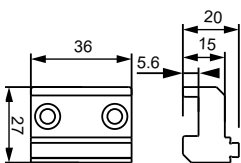
- Vice length 80 mm
- Jaws width 36 mm
- Clamping length 30/78 mm
- Clamping force 16.000 N
- Weight 0.9 kg.



Pair of clamping jaws, Macro, 3R-658-J2

Clamping jaws 36 mm. Fits on Centering vice, Macro, 3R-658-CV.

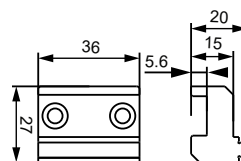
- Weight 0.2 kg.



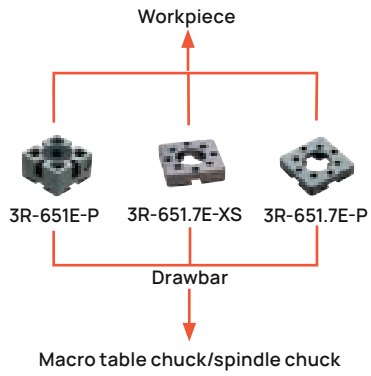
Pair of grip jaws, Macro, 3R-658-J1

Grip jaws 36 mm. Fits on Centering vice, Macro, 3R-658-CV.

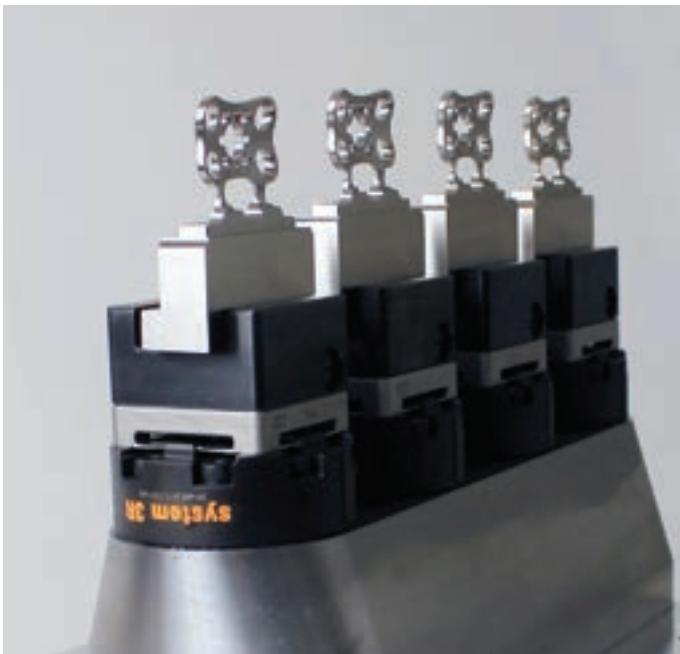
- Weight 0.2 kg.



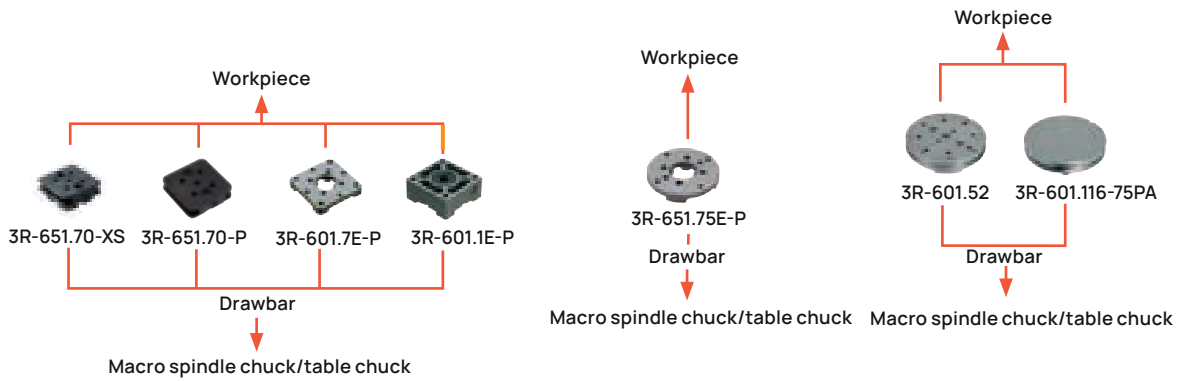
Macro – Pallets & reference elements



Pallets and ref. elements, 54x54 mm	Article number	Feature
Hardened reference element 12.5 mm, HP	3R-651.7E-P	rust resistant
Hardened reference element 12.5 mm, Std	3R-651.7E-XS	
Hardened pallet 30 mm, HP	3R-651E-P	rust resistant



Macro – Pallets & reference elements



Pallets and ref. elements, 70x70 mm

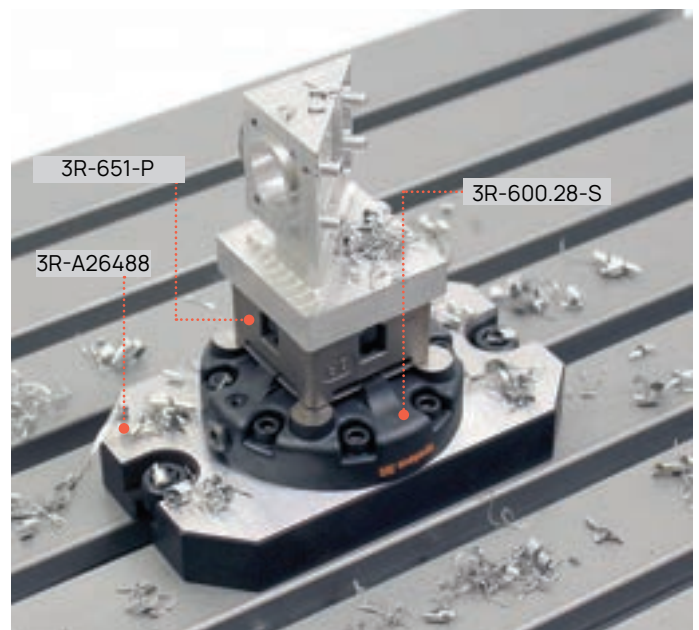
	Article number	Feature
Hardened reference element 12.5 mm, HP	3R-601.7E-P	rust resistant
Hardened pallet 30 mm, HP	3R-601.1E-P	rust resistant
Unhardened pallet, HP	3R-651.70-P	reference element 54x54 mm
Unhardened pallet, Std	3R-651.70-XS	reference element 54x54 mm

Ref. element, Ø75 mm

Hardened reference element 12.5 mm standard and HP	3R-651.75E-P	rust resistant
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Pallets, Ø116 mm

Hardened pallet, HP	3R-601.52	3Refix Ø10 mm, rust resistant
Unhardened pallet, HP	3R-601.116-75PA	With reference element Ø75 mm



Macro – Pallets & reference elements

Pallet Ø116 mm, 3R-601.116-75PA

Unhardened pallet with reference element 3R-651.75-P.

- X, Y & Z-references hardened
- Ready for code carrier
- Ready for automation.



Accessories:

Sealing ring, High, 3R-612.116-A

Suitable for some Macro chucks with drawbar 3R-605.1*.

NOTE: Only suitable for Ø116 mm pallets.

Sealing ring, Low, 3R-612.116-S

Suitable for some Macro chucks with drawbar 3R-605.2*.

NOTE: Only suitable for Ø116 mm pallets.



*For more info please ask System 3R.

PT Pallet 70x70 mm, 3R-651.70-P

Unhardened pallet with reference element 3R-651.7-P.

- Ready for code carrier
- Ready for automation
- Gripp outside the pallet
- Sealing ring between pallet and chuck
- Weight 1 kg.



PT Pallet 70x70 mm, 3R-651.70-XS

Unhardened pallet with reference element 3R-651.7-XS

- X, Y & Z-references hardened
- Ready for code carrier
- Ready for automation
- Gripp outside the pallet
- Sealing ring between pallet and chuck
- Weight 1 kg.



PT = Process Tooling Application example.

Accessories:

PT Sealing ring, High, 3R-612.54-A

Suitable for some Macro chucks with drawbar 3R-605.1*.

PT Sealing ring, Low, 3R-612.54-S

Suitable for some Macro chucks with drawbar 3R-605.2*.

*For more info please ask System 3R.

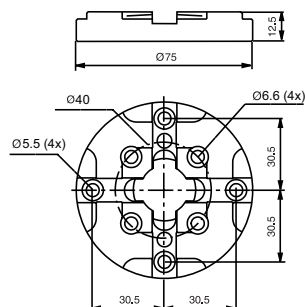


Reference element Ø75 mm, 3R-651.75E-P

Hardened and milled with clearance holes for eight fixing screws.

NOTE: Must be mounted on the workpiece/fixture before it is locked in a chuck.

- Fixed index positions 4x90°
- Parallel-ground top and bottom faces
- Rust resistant
- Supplied in sets of 10.
- Weight per set 2.7 kg.

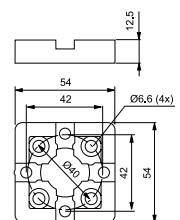


Reference element 54x54 mm, MacroHP, 3R-651.7E-P

Hardened and precision-cast, with clearance holes for four fixing screws.

NOTE: Must be mounted on the workpiece/fixture before it is locked in a chuck.

- Parallel-ground top and bottom faces
- Fixed index positions 4x90°
- Rust resistant
- Supplied in sets of 8
- Weight per set 1.3 kg.



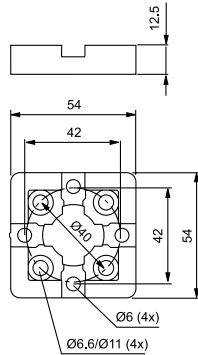
Macro – Pallets & reference elements

Reference element 54x54 mm, MacroStd, 3R-651.7E-XS

Hardened pallet for copper electrodes and workpieces.

NOTE: Must be mounted on the workpiece before it is locked in a chuck. For graphite electrodes spacer plate 3R-658.1E is required.

- Untreated side faces
- Supplied in sets of 8
- Weight per set 1.3 kg.

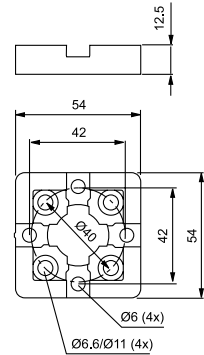
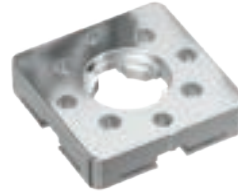


Reference element 54x54 mm, MacroStd, 3R-651.7E-S

Pallet for copper electrodes and workpieces.

NOTE: Must be mounted on the workpiece before it is locked in a chuck. For graphite electrodes spacer plate 3R-658.1E is required.

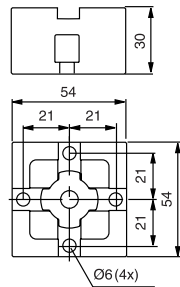
- Nickel plated coating
- Untreated side faces
- Supplied in sets of 8
- Weight per set 1.3 kg.



Pallet 54x54 mm, MacroHP, 3R-651E-P

Hardened, with clearance holes for four fixing screws.

- Ready for code carrier
- Fixed index positions 4x90°
- Rust resistant
- Flushing duct
- Supplied in sets of 8
- Weight per set 3.4 kg.

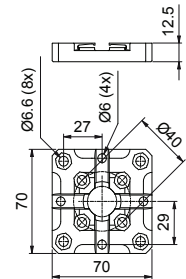
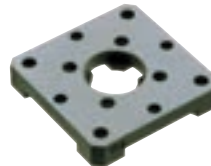


Reference element 70x70 mm, MacroHP, 3R-601.7E-P

Hardened and precision-cast, with clearance holes for four fixing screws.

NOTE: Must be mounted on the workpiece/fixture before it is locked in a chuck.

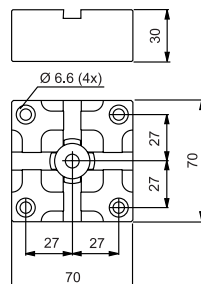
- Parallel-ground top and bottom faces
- Fixed index positions 4x90°
- Rust resistant
- Supplied in sets of 5
- Weight per set 3 kg.



Pallet 70x70 mm, MacroHP, 3R-601.1E-P

Hardened, with clearance holes for four fixing screws.

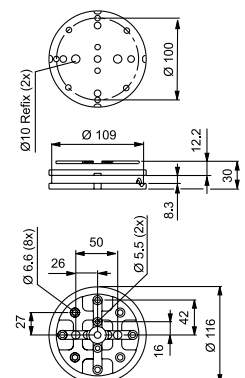
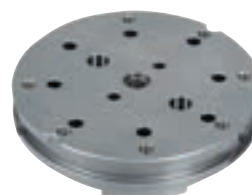
- Ready for code carrier
- Fixed index positions 4x90°
- Rust resistant
- Flushing duct
- Supplied in sets of 5
- Weight per set 3.2 kg.



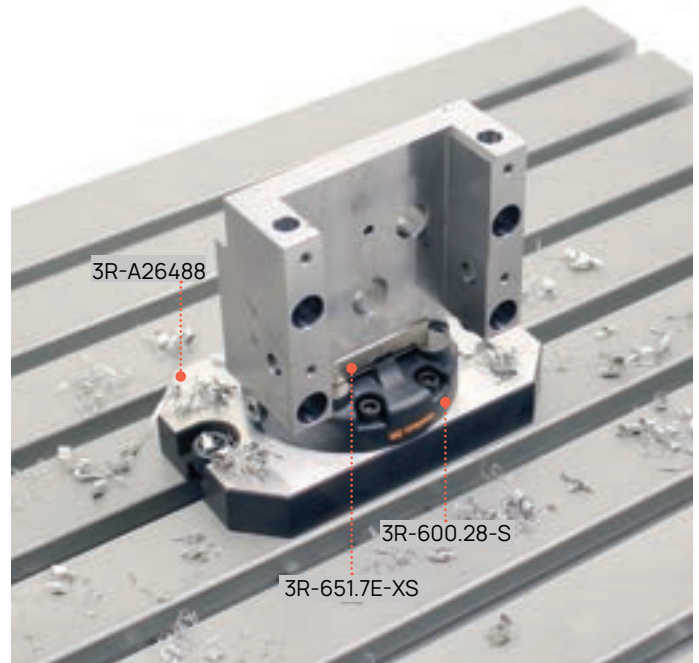
Pallet Ø116 mm, MacroHP, 3R-601.52

Hardened, with 3Refix holes and clearance holes for ten fixing screws.

- 3Refix Ø10 mm
- Ready for code carrier
- Parallel-ground top and bottom faces
- Fixed index positions 4x90°
- Rust resistant
- Weight 1.9 kg.



Macro – Accessories



Drawbars

3R-605.1E

- Ø20x57.1 mm with flushing holes Ø7 mm
- Supplied in sets of 10.



3R-605.1EE

- Supplied in sets of 40.



3R-605.2

- Ø20x36.9 mm with Ø7 mm flushing hole.



3R-605.2E

- Supplied in sets of 5.



3R-605.2EE

- Supplied in sets of 20.

3R-605.4E

For round pallets adapted for automatic changing.

- Ø20x57.1 without flushing hole
- Supplied in sets of 10.

3R-605.4EE

- Supplied in sets of 40.

3R-605.10

- Ø20x13 mm
- Rust resistant.



3R-605.10E

- Supplied in sets of 10.



3R-605.10EE

- Supplied in sets of 20.



Clamping force meter kit, 3R-SSP115-BASE

For both pneumatic and manual chucks. This stand alone unit in combination with individual drawbars or drawbar kits, able to cover MacroJunior, Macro, MacroMagnum and Dynafix.

NOTE: Require drawbars with bayonet interface similar to 3R-605.1.

- Add-on kit for use in Macro/MacroMagnum, 3R-SSP115-MACRO
- Operating temp. +10 to +40° C
- Gauge size Ø90x47 mm
- Working range 1-22 kN
- Deviation ± 0.1 kN.
- Weight:
Display 0.34 kg.
Gauge 1.3 kg.



Add-on kit, 3R-SSP115-Macro

Add-on kit for 3R-SSP115-BASE.

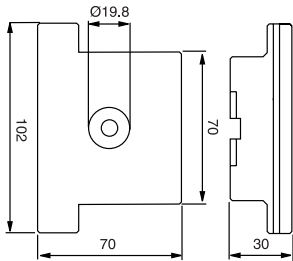


Macro – Accessories

Control ruler, 3R-606.1

For setting angular positions and for centring Macro chucks.

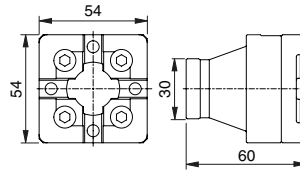
- Ground hole for centring.
- Measuring length 100 mm
- Weight 1.4 kg.



Control ruler, 3R-656.1

For setting angular positions. Ground outside diameter for centring.

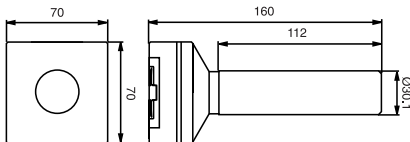
- Measuring length 50 mm
- Weight 0.8 kg.



Control rod, 3R-606

Control rod with ground C-reference for setting Macro chucks.

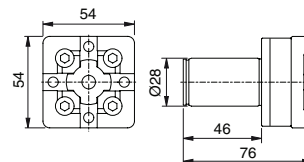
- Measuring length 110 mm
- Weight 2.3 kg.



Control rod, 3R-656

Check mandrel with ground C-reference for setting Macro chucks.

- Measuring length 38 mm
- Weight 1 kg.



Converter kit, 90842.01

To convert 3R-600.24-S to enable long drawbar 3R-605.1.



Converter kit, 3R-A27634

To convert 3R-600.28-S to enable long drawbar 3R-605.1.

- Extra height 18.5 mm.



Macro – Accessories

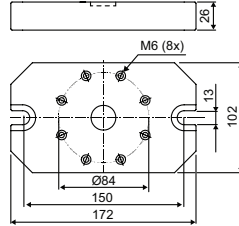
Centring ring, 3R-612.6

For centring 3R-600.20.



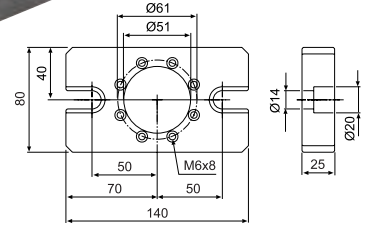
Adapter plate, 3R-A26488

For mounting 3R-600.28-S.



Adapter plate, 3R-A19724

For mounting of 3R-400.34, 3R-460.34 and 3R-600.24-S on machine table. Supplied with fixing screws for chuck and table.



Splash guard, 90027

Splash guard for Macro chucks with long drawbar. Can also be used as a cover for unused chucks.

NOTE: Does not work with sealing ring 3R-612.116.



Torque wrenches, 3R-614-04

Mainly for MacroCombi and Ø10 3Rrefix mandrels.

- 4 Nm.

3R-614-06

For Macro chucks.

- 6 Nm.

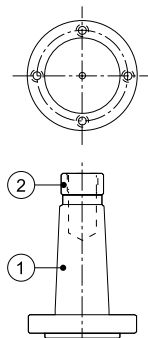


Lathe taper, 3R-TXXXX

Taper attachment for mounting chucks in taper spindles.

Note: Manufactured on request. State machine type, taper (1), drawbar thread (2) and which 3R chuck is to be mounted.

Use the order form at the end of the catalogue.



Allen key, 3R-333-03

- 3 mm
- Supplied in 10.



Allen key, 3R-333-05

- 5 mm
- Supplied in 10.



Macro – Accessories

Connection for air gun, 90815

For manual operation of pneumatic chucks with air gun.

- Supplied in sets of 2.



Locking ring key, 3R-605-GE

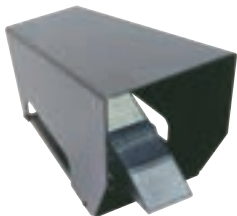
To lift the locking ring of the drawbars.

- Supplied in sets of 2.



Control unit, 3R-611.2

Foot operation of pneumatic chucks.



Control unit, 3R-611.4

Unit for operation of pneumatic chucks. Two functions, opened/ closed.



Control unit, 3R-611.46

Unit for hand operation of pneumatic chucks. Three functions – open/neutral/ closed.



Code carriers, 3R-863.01-10

With pre-programmed unique identity, designed for pallet use.

- Supplied in sets of 10.



3Refix mandrel

When positioning with 3Refix mandrels –always tighten the expanding mandrel in the R0 hole first.

3R-901-10E-TX

- 3Refix Ø10 mm
- Recommended tightening torque 4 Nm
- Supplied in sets of 10
- Weight per set 0.2 kg.

3R-901-20E

- 3Refix Ø20 mm
- Recommended tightening torque 10 Nm
- Supplied in sets of 10
- Weight per set 1 kg.

3R-901-10RS

- 3Refix Ø10 mm
- Rust-resistant
- Recommended tightening torque 4 Nm
- Weight per set 0.5 kg.

3R-901-20RS

- 3Refix Ø20 mm
- Rust-resistant
- Recommended tightening torque 10 Nm
- Weight per set 0.1 kg.

