



Marking heads for marking unit 315

Technical data sheet

Operating mode

Scribe marking means a diamond or solid carbide tip is pressed into the workpiece surface and simultaneously drawn through the material - similar to a scribe.

Dot matrix/ DataMatrix marking and Vibropeening mean a solid carbide tip is pressed into the surface. Each dot positioning is activated separately. Particular mention must be made of the great tolerance equalisation in the workpiece distance and the capability of deep marking.

Stylus marking means a solid carbide tip is pressed into the surface. The dot positioning happens in frequencies. Thus, very close, individual dots are created.

Application area

- **Scribe marking**

Very well applicable on almost any 3-dimensional deformable material. Very low noise marking process with highly attractive print image. Well suited for slightly curved surfaces. Minimal force onto workpiece.



- **Dot matrix marking**

Very well applicable on almost any 3-dimensional deformable material. Individually visible dots, often in connection with DataMatrix coding. Eminently suited for deep stamping. Minimal force onto workpiece.



- **DataMatrix**

Camera legible 2D-code (ECC 200) - marked with the same tool as the dot matrix marking. Process capable code, readable even after hardening, blasting or thin coating of the material. Very well applicable on almost any 3-dimensional deformable material.



- **Vibropeening**

The result of this marking process is similar to stylus marking. It is either created with dot matrix or DataMatrix marking heads. The marking speed is a bit slower than the stylus marking. But the tolerance equalisation distance to the workpiece is reasonably bigger.



- **Stylus marking**






Very well applicable on almost any 3-dimensional deformable material. Minimal force onto workpiece. Even applicable for slightly curved surfaces. Eminently suited for type plates with foil cover or for filigree markings.



Options

Scribe marking heads

- Different diamond and solid carbide tips are available
- Scribe marking heads for almost any material, e.g. (stainless) steel, aluminium cast – crude or machined grey cast iron (excluding scribe marking head R16 K)
- Slightly uneven surfaces can be marked with consistent depth.
- Standard distance of marking stylus to workpiece surface 1 mm
- Max. distance up to 4 mm possible, if workpiece is made out of aluminium or plastic

	<ul style="list-style-type: none"> • R16 K • Short, slim marking head for "softer" material, e.g. aluminium, plastic • Marking depths from about 0.01 to 0.05 mm*
	<ul style="list-style-type: none"> • R20 K • Short, slim standard marking head • Marking depths from 0.01 to 0.1 mm*
	<ul style="list-style-type: none"> • R20 M • Medium length, slim marking head • Marking depths from about 0.01 to 0.1 mm*
	<ul style="list-style-type: none"> • R20 L • Long, slim marking head • Marking depths from about 0.01 to 0.1 mm*
	<ul style="list-style-type: none"> • R32 K • Short, strong marking head • Marking depths > 0.1 mm possible*

- R32 M



- Medium length, slim and strong marking head
- Marking depths > 0.1 mm (depending on material)*

Stylus marking heads

- Distance of marking stylus to workpiece surface 2.5 mm ± 0.5 mm

- NGS 10



- Short, slim stylus marking head for any machined materials
- Marking depths from 0.05 to 0.1 mm*
- Suitable for even workpieces like e.g. type plates




- NGS 20




- Short stylus marking head for any machined materials
- Marking depths from 0.05 to 0.15 mm*
- Suitable for even workpieces that need deeper stamping depths

Dot matrix/ DataMatrix marking heads

- Different marking tips are available
- Bigger differences in distance result in different dot sizes and marking depths.
- For almost any materials, e.g. (stainless) steel, aluminium cast, grey cast iron crude or machined
- Suitable even for curved surfaces

	<ul style="list-style-type: none"> • PD16LS • Long, slim marking head • Standard distance from marking stylus to workpiece surface 2.5 mm • Max. marking stroke of 12 mm possible
	<ul style="list-style-type: none"> • PD20K • Short, slim marking head • Standard distance from marking stylus to workpiece surface 2.5 mm • Max. marking stroke of 7 mm possible
	<ul style="list-style-type: none"> • PD20L • Long, strong marking head • Suitable for marking depths > 0.2 mm* • Standard distance from marking stylus to workpiece surface 5 mm • Max. marking stroke of 16 mm possible

Double marking head

	<ul style="list-style-type: none"> • R20 K + PD20K • Combination of the short and slim marking heads R20 K and PD20K • Marking depths from about 0.01 to 0.1 mm* • Max. distance up to 4 mm possible, if workpiece is made out of aluminium or plastic • Connect the advantages of the scribe marking with very low noise and highly attractive print image with the DataMatrix marking • Application of the best suited marking tool for each marking process • Depending on the application the marking area changed
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Technical details are subject to change.

*) Details on marking depths are only guideline values. Exact information on marking depths can only be made after a sample marking with an original workpiece.