

## Disposable GXP Mixing Elements made of Plastics

### Mixing Elements GXP-9.3-PP (white or orange)

Made of polypropylene

Mechanical strength:  
 Up to a  $\Delta P$  of 80 bar / ME  
 at room temperature



### Mixing Elements GXP-9.3- PA6.6+50%GF (black)

Made of polyamide PA66  
 reinforced with 50% glass  
 fibres

Mechanical strength:  
 Up to a  $\Delta P$  of 250 bar / ME  
 at room temperature

- For difficult to mix and/or disperse viscous liquid systems like 2-K-adhesives, -sealing compounds, -varnishes, silicones, etc.
- Very efficient for cases with large difference in viscosity or extreme flow rate ratios  
 → Short mixer length and with a small volume
- Excellent mixing efficiency per unit length (-> shorter vs. Helix or square Multiflux type mixers)
- Problem solver where other type of mixer reached their limit

The GXP-9.3 mixing element (= ME) is the first one made in series by injection moulding from plastics. It is made of polypropylene PP and in PA66+50%GF (for installation into a tube see reverse side) and has a length and a diameter of 9.3 mm each.



Figure#1: Disposable STAMIXCO Mixer GXP-9.3-PP

The tube and mixing elements of the disposable STAMIXCO mixer shown in Figure#1 is made of resistant PP. The tube length allows to contain up to 20 disposable mixing element GXP-9.3. Different pipe length tubes are under development and should be soon available for use. The mixing elements GXP-9.3-P are made in two colors (white and orange) for easier check of the correct installation in the tube (the bars of the elements have to be offset by 90° to each other). See reverse side.

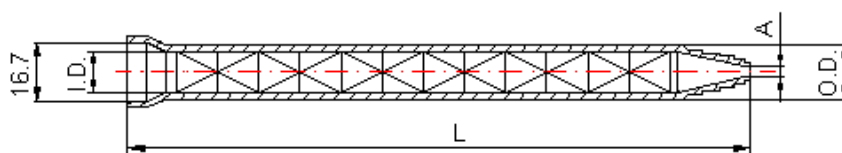


Figure #2:  
 Disposable  
 STAMIXCO Mixer

Type of Mixing Element	D <sub>inside</sub> I.D. mm	No. of GXP - ME n	D <sub>outside</sub> O.D. mm	Length L mm	D <sub>Nozzle</sub> A mm
GXP-PP or GXP-PA66+50%GF	10.0	20	12.7	215	3

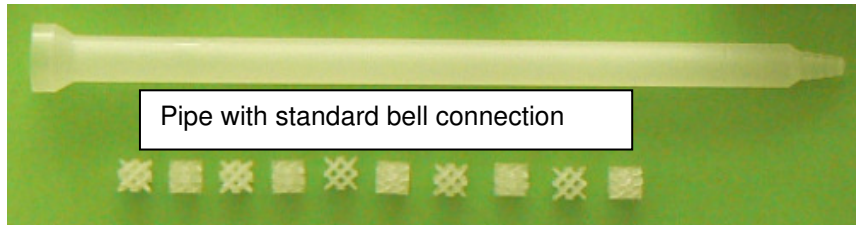
The GXP mixing element are usually applied in form of disposable mixers for mixing 2-K-adhesives, 2-K-sealing compounds and 2-K-varnishes for spraying and casting applications in surface treatment, the civil construction and other industries.

## Installation of GXP Disposable Static Mixing Elements

1 GXP Mixing Element (= ME) DN-9.3








Adjacent mixing elements have to be turned by 90° relative to the other one



Pipe with standard bell connection

$\Delta P$  max. indicated in this sheet are for operating conditions @ room temperature

Pipe made of Polypropylene for 6 ME, $p_{op. max.} = 50 \text{ bar}$	Pipe made of PA6.6 + 50% GF for 6 ME, $p_{op. max.} = 100 \text{ bar}$
	
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">                     ME made of PP,  <math>\Delta P_{max. of ME} = 80 \text{ bar}</math> </div> 	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">                     ME made of PA6.6 + 50% GF,  <math>\Delta P_{max. of ME} = 250 \text{ bar}</math> </div> 
	
<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 0 auto;">                     Combination of the plastic tubes or their connection to other pipes can be made by using e.g. Ermeto/Parker Fluid Connectors 12L series (cutting ring fittings, M 18x1.5mm)                 </div>	
