

S-Type Mixers

Technical Information

In Stock

Ready to Dispatch

Mixing science with solutions



Mixing Technology with Proven Benefits

Statiflo is a world leader in motionless mixing technology. We are constantly expanding the limits of motionless mixing technology to create innovative products including the most efficient static mixers currently available.

Statiflo S-Type Motionless Mixers

offer many key benefits for combining miscible and immiscible liquids. They are efficient and economical, delivering precise, predetermined results.

- Statiflo Motionless Mixers are maintenance free devices. Installation and operating costs are minimised. As well as direct operating savings, Statiflo Motionless Mixers deliver a high level of mixing efficiency, therefore the consumption of dosed chemicals and formation of by-products can be dramatically reduced. No straight pipe lengths upstream or downstream of the mixer are required. This means inline sampling can be performed immediately after the mixer allowing any necessary adjustments to be made as quickly as possible minimising potential product waste.
- Statiflo Motionless Mixers are installed in thousands of process plants worldwide, providing the highest standards of mixing efficiency, reliability and economy.
- The below image shows some examples of where Statiflo Motionless Mixers can be used in municipal water treatment processes.



S-Type Mixers

Statiflo S-Type Motionless Mixers offer many key benefits for combining miscible and/or immiscible liquids. They are efficient and economical, delivering precise, predetermined results.

Statiflo S-Type Motionless Mixers

are a range of high quality, standard static mixers which are prefabricated and kept in stock ready for a quick dispatch.

- The S Type mixers are available in either all-stainless steel construction, complete with schedule 10s housing and RFSO flanges, or in a uPVC variant with a Pressure Class E housing complete with with stub end flanges and galvanised carbon steel backing rings.
- To complete the offer, each S Type mixer is supplied with a 1" BSP injection boss for chemical dosing.
- This range of mixers is perfect for water treatment, or other simple mixing applications.

Key benefits include:

- Highly efficient mixing
- No moving parts for maintenance-free operation
- Energy saving, as no direct power is required
- No need for tanks
- Ease of installation
- Minimal space requirement
- Simple to operate with no special training required
- Available worldwide through our Statiflo
 offices and representative network



Typical images of the Statiflo S-Type Mixer range



Pressure drop information



- 1) Mixers are designed for liquid/liquid miscible applications only.
- 2) Both sidestream and mainstream viscosities to be between 1 and 10 cP.
- 3) Maximum sidestream to mainstream volume ratio of 1:1000.
- 4) Mixer designed to achieve CoV < 0.05 within one pipe diameter of mixer discharge, subject to fully turbulent flow.
- 5) Minimum and maximum recommended flowrates are included on the graph above.
- 6) For alternative designs/applications please contact Statiflo directly.
- 7) Statiflo cannot accept responsibility for the selection of the materials of construction.
- 8) PED/UKCA: The Statiflo S-Type mixers are designed in accordance with Sound Engineering Practice (SEP) Category for non-hazardous liquid/liquid mixing applications. For any other application please contact Statiflo directly for review or quotation.



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Notes

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Pressure drop (bar)

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uPVC S-Type Mixers: Technical Information

Mixer Diameter	DN25	DN40	DN50
Number of Elements	4	4	4
Overall Length L (mm)	260	365	450
Injection Dimension A (mm)	75	100	115
Weight (kg)	1	3	4
Packing Dimensions (cm)	35 x 25 x 20	43 x 31 x 25	63 x 33 x 26

Mixer Diameter	DN80	DN100
Number of Elements	4	4
Overall Length L (mm)	595	730
Injection Dimension A (mm)	120	120
Weight (kg)	5	8
Packing Dimensions (cm)	63 x 33 x 26	78 x 38 x 30

Design Conditions for all items: 10 barg at 20°C

Housing and End Connections for all items:

- Housing: Pressure Class E uPVC

- End Connections: Stub end flanges and EN1092-1 PN10 galvanised carbon steel backing rings.

Technical Documentation:

- GA Drawing
- Certificate of Conformity
- Installation, Operation & Maintenance Manual





Stainless Steel S-Type Mixers: Technical Information

Mixer Diameter	DN25	DN40	DN50
Number of Elements	4	4	4
Overall Length L (mm)	270	400	460
Injection Dimension A (mm)	65	90	90
Weight (kg)	3	6	8
Packing Dimensions (cm)	35 x 25 x 20	43 x 31 x 25	63 x 33 x 26

Mixer Diameter	DN80	DN100
Number of Elements	4	4
Overall Length L (mm)	610	770
Injection Dimension A (mm)	90	95
Weight (kg)	12	17
Packing Dimensions (cm)	63 x 33 x 26	100 x 25 x 35

Design Conditions for all items: 10 barg at 50°C

Housing and End Connections for all items:

- Housing: Schedule 10s 316L stainless steel
- End Connections: EN1092-1 PN10 RFSO Flanges

Technical Documentation:

- GA Drawing
- Certificate of Conformity
- Installation, Operation & Maintenance Manual



Static Mixer Sizing Questionnaire

Reference Date

			Item	
			Quantity	
Process Data			Initials	
COMPONENT	MAIN FLOW	ADDITIVE 1	ADDITIVE 2	MIXTURE
Fluid Name				
Physical State				
Flowrate				
Viscosity, cP				
Density, kg/m³				
Pressure, barg				
Temperature, °C				
Miscible System				
Interfacial Tension, dynes/cm - immiscible systems only				
ls the maxium Coefficient of Variation (CoV) of 0.05 required at the mixer discharge or 3-5 diameters downstream?		tream?		er Discharge Diameters Downstream
Alternative CoV required (Please	Specify)			

Mechanical Data				
Pipe Diameter, mm				
Alternative Pipe Diameter, mm (if any)				
Maximum Pressure drop, bar				
Removable Elements?		Yes/No		
Injection Point(s)*		Yes/No*		
Sample Point(s)*		Yes/No*		
Sanitary Finish (Food/Pharmaceutical Applications)		Yes/No		
End Connections/Specification				
Housing Schedule				
Materials of Construction	 ☐ 316L Stainless Steel ☐ 304 Stainless Steel 	□ Carbon Steel □ PTFE Lined Pipe	 Polyethylene Polypropylene 	GRP uPVC
	Other (Please Specify)			
Design Code				
Operating/Design Temperature, °C				
Operating/Design Pressure, barg				
Heating/Cooling Jacket		Yes/No		
Special Painting				
Tests/NDE				
Other Data				

Brief Process Description with Flowsheet (if applicable)

*If injection and/or sample point(s) are required please sketch number, size and location.

Please return completed questionnaire to your local representative or Statiflo office



Statiflo is the only international mixer specialist able to offer true global expertise. We have over 2,000 customers in more than 70 countries, in all process industries – endorsing our primary position in this field.

STATIFIC Dynamic Leaders in Static Mixing

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Statiflo has representatives throughout the world, to find one in your area, visit **www.statiflo.com**