

MIXPAC™ F-System

Application System for 2-Component Products

200 ml and 400 ml



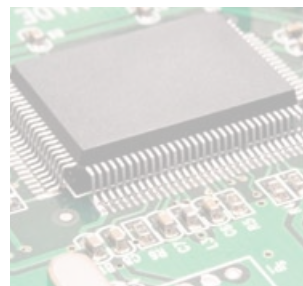
MIXPAC™ F-System: process safety, precision, added value

The Sulzer Mixpac F-System meets the continuously growing industry demand for reliable, safe and easy-to-use application systems for 2-component adhesives and sealants. This system is manufactured from high quality, chemical resistant plastics to meet stringent shelf-life stability and metering requirements for your formulated products. With side-by-side outlets and a coded cap, no longer will the applicator worry about cross-contamination during storage and dispensing. Moreover, the unique design of our system meets the established UN packaging standards to ensure the utmost in transport safety.

By having complementary components, the F-System offers the formulator the unique ability to standardize application systems across a broad range of 2-component adhesives and sealants while ensuring a leak-free connection to the mixer. The F-System components deliver accurate metering, homogenous mixing and fatigue-free dispensing in a user-friendly application system.



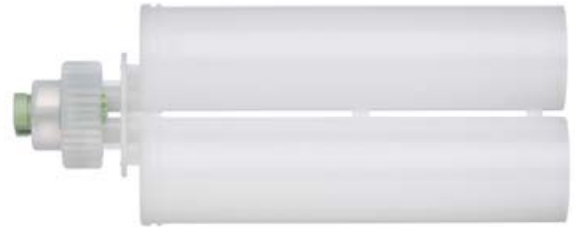
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MIXPAC™ F-System: System components with a modular concept

Primary packaging

- „Side by Side“ cartridges 200 ml and 400 ml (nominal)
- Total separation of components
- Available in different materials
- Standard mixing ratios
- Suitable for front and end filling
- Resealable for multiple use



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Static mixers

- Several geometries available
- Coded interface with separate component connections
- The right mixer for every use and every adhesive
- Very easy to assemble
- Absolutely leak-proof connection



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Dispenser

- Robust, industrial-suited, engineered for fatigue-free operation, can be operated manually or pneumatically, suitable for permitted system pressures
- Can be easily converted for various mixing ratios
- Safe operation



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Type	Cartridge materials	Mixing ratios	Mixing geometries	Dispensers
200	PP, PA6, PBT	1:1, 2:1, 4:1, 10:1	Helix and Quadro	Manual and pneumatic
400	PP, PA6, PBT	1:1, 2:1, 4:1, 10:1	Helix and Quadro	Manual and pneumatic



MIXPAC™ F-System: Cartridges

The „Side-by-Side“ F-System cartridge serves as both the primary package and as a precise metering container for 2-component adhesives and sealants. We offer four standard mixing ratios to accommodate the most commonly formulated products in the industry.



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- **Cartridge materials PP, PA6 and PBT**
 - Excellent chemical stability
 - Excellent shelf-life and storage stability
- **Patented locking system**
(separate component outlets adapted to volume flow)
 - Resealable anytime
 - Prevention of gradual hardening at the outlet
- **Robust design**
 - High pressure resistance
 - High dispensing performance
 - Prevents blow-by
 - Guarantees highly accurate metering
 - Fulfills requirements of UN packaging standards
- **Totally separate components**
 - Increased storage stability
- **Separate outlets**
 - No cross-contamination at outlet
 - High metering precision
 - Absolutely leak-proof connection to mixer
- **Patented interface**
 - Increased process safety
 - Makes use of incompatible mixers difficult
 - Prevents cross-contamination
 - Environmentally friendly due to maximum yield and minimum dead volume

Content	Color Natural	Polypropylene (PP)	Polyamide (PA6)	Polyester (PBT)
200 ml	Natural	1:1, 2:1, 4:1, 10:1	1:1, 2:1, 10:1	4:1, 10:1
400 ml	Natural	1:1, 2:1, 4:1, 10:1	1:1, 2:1, 10:1	4:1, 10:1

Closure

The outlet closure of the MIXPAC™ F-System cartridge consists of a nose plug and bayonet ring. This easy to use stopper and collar ring allow effortless opening and closing without the use of tools or excessive torque. Each time the cartridge outlet is opened and closed, the bayonet ring can be easily tightened to guarantee a leak-free seal.

- Patented coding:
 - Leak-free connection
 - Nose-plug cannot be put on incorrectly
 - No cross-contamination
- Nose-plugs available in polypropylene (PP) and nylon (PA6)

Pistons

We have several different piston designs available to accommodate the formulators' requirements for chemical stability, pressure resistance and mechanical strength. Our double-lip, self-venting pistons ensure outstanding mechanical stability with a leak-proof seal.

- Self-venting pistons
- Double-lip pistons
- Optional O-ring seal for demanding chemistries
- Different materials available



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The F-System cartridges and corresponding components are available in set form. A set is comprised of a cartridge with a preassembled nose-plug and bayonet ring; the pistons are packaged separately in the same box. Depending upon the requirement, the kits can also be assembled with different material combinations.



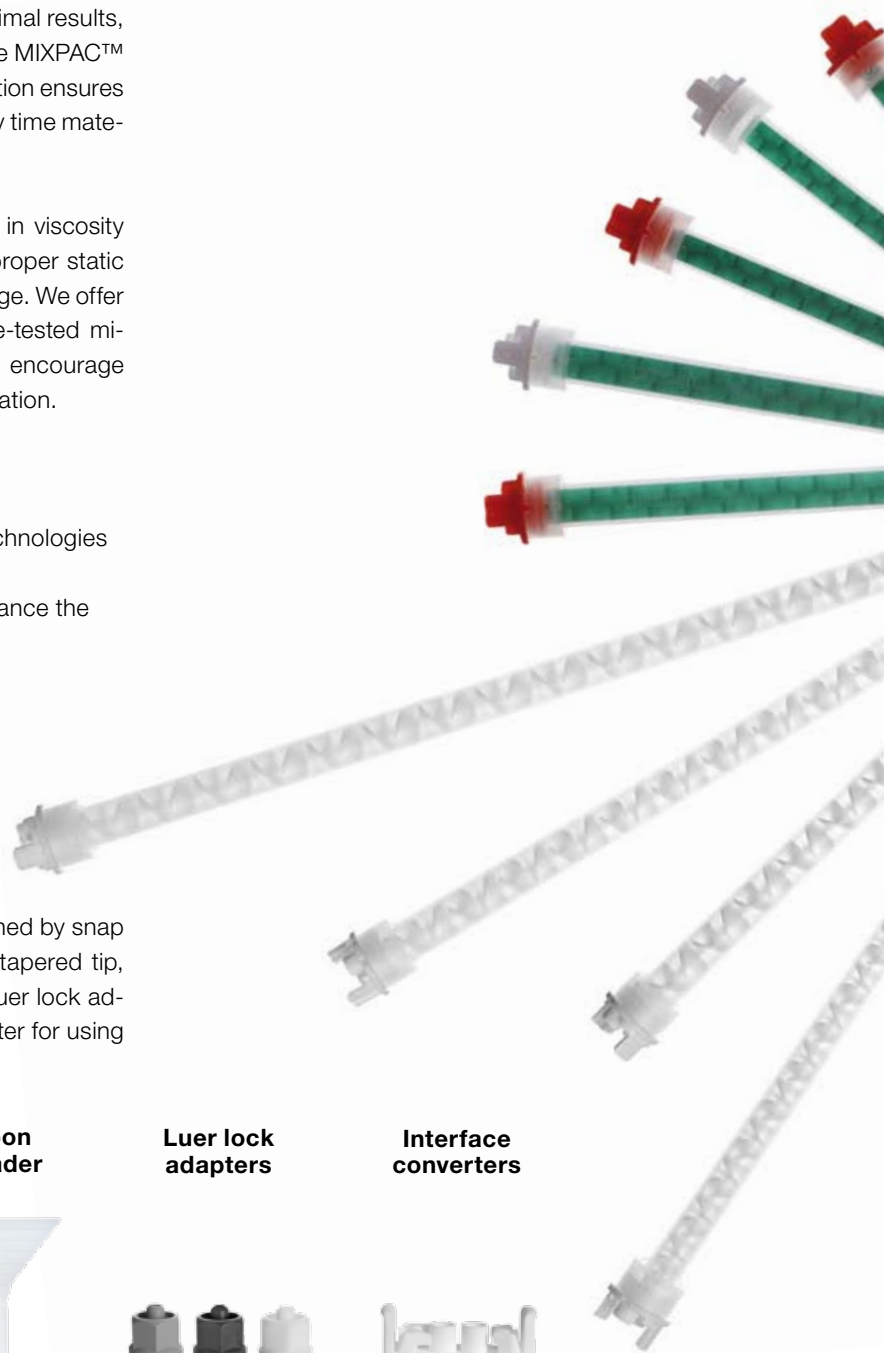
Helix and Quadro™ mixers

For your adhesive or sealant to achieve optimal results, the mixing must be homogenous. Using the MIXPAC™ F-System mixers with an innovative connection ensures that your product is accurately mixed, every time material is dispensed.

Since every 2-component adhesive varies in viscosity and chemical composition, selecting the proper static mixer is a vital part of the dispensing package. We offer an extensive selection of engineered, time-tested mixers for various F-System cartridges and encourage you to speak with us regarding your application.

- Wide range of static mixers
- Helical and square (Quadro™) mixing technologies
- Optimized interface to maximize and balance the flow rate
- Color codes are for easy identification:
 - Orange interface (4:1 and 10:1)
 - White interface (1:1 and 2:1)
 - Visually prevents use of incorrect mixer

MIXPAC™ Mixer accessories can be attached by snap fit to the end of the mixer tip. We offer a tapered tip, gap filling applicator, ribbon spreader tip, luer lock adapters for needles and an interface converter for using our MIXPAC™ B-System mixers.



Tapered tip



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Gap filling applicator



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Ribbon spreader



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Luer lock adapters

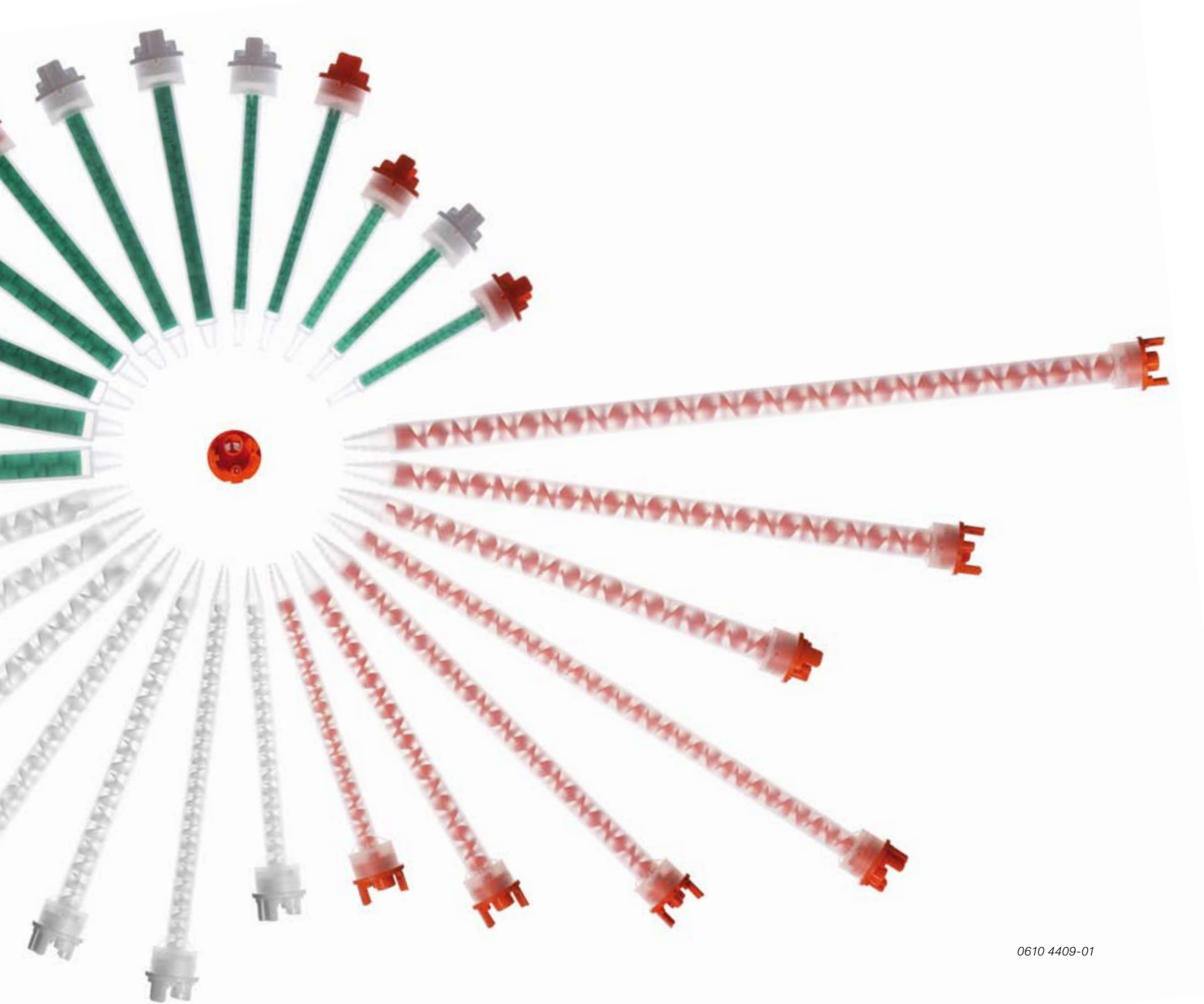


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Interface converters

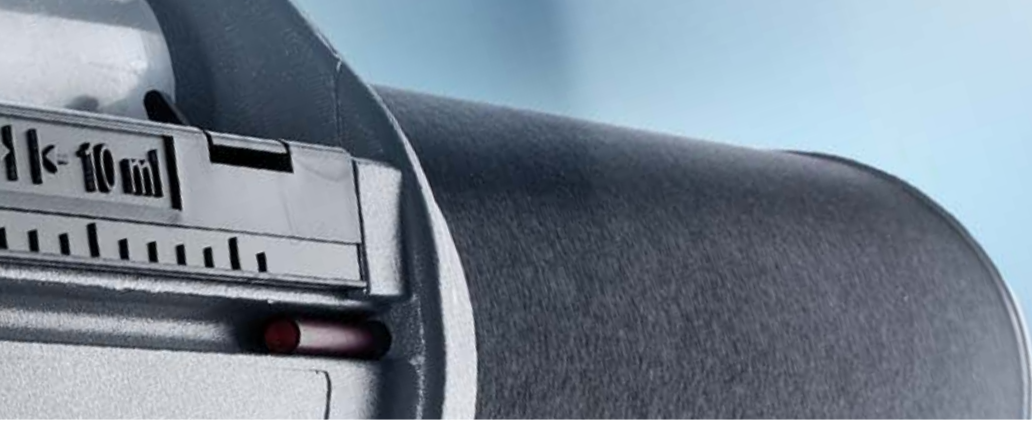


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Type of mixing geometry	Diameter or inner side length in mm	Number of mixer elements	Mixing ratio suitability
Quadro™	3.2, 4.2, 5.3, 5.4, 6.5, 7.5, 8.7, 10.7	16 and 24	1:1 2:1 4:1 10:1
Helix	6.0 8.0 10.0 13.0	18, 24 and 32	1:1 2:1 4:1 10:1



MIXPAC™ F-System: dispensers

Selecting the proper dispenser is critical to the adhesive application process. A 2-component adhesive will only reach its desired performance properties when both the A and B components are precisely metered to the ratio stipulated by the manufacturer. While dispenser selection is often over-looked, its purpose is to be a user-friendly, precision tool for industrial applications.

Sulzer Mixpac F-System dispensers are available in both manual and pneumatic versions and may easily be converted to accommodate different product ratios.



Features

- Consistent and precise metering
 - Torsion resistant design to maintain equal dispensing of both components
 - Robust, integral plunger
 - Integrated pressure release to eliminate drooling
- Industrial application
 - Aluminum alloy housing
 - Wear-resistant mechanisms
- User-friendly
 - Highly ergonomic design
 - Balanced and light-weight
 - Good visibility during application due to position of cartridge
 - Visible dispense indicator
- User safety
 - Integrated pressure-relief valve in the handle
 - Safety switch (no thrust when cartridge is not loaded)





MIXPAC™ F-System

	Product advantages	Benefits for the user
 	Advanced Technology Platform	<ul style="list-style-type: none"> A complete solution from a single source A system for every 2-component chemistry and application Controlled, reproducible dispensing Increased process safety and control Available in wide range of materials for excellent chemical and shelf-life stability Innovative Interface to Eliminate Cross-Contamination Damage-proof primary packaging Precise volume dispensing Ensures a highly reliable, repeatable process Increased process safety
	Value-Added Robust Industrial Design	<ul style="list-style-type: none"> Meets UN packaging standards to ensure the utmost in transport safety High pressure resistance for high viscosity materials Increased dispensing precision Excellent user protection Separate component chambers prevent premature chemical reaction and ensure proper, on-ratio metering and dispensing
	Extensive Static Mixer Technology	<ul style="list-style-type: none"> Square and helical mixing geometries Wide range of mixers available Minimum pressure loss when dispensing
	Dispensers	<ul style="list-style-type: none"> Industrial design for safe operation and wear-resistance Drip-free, precise metering for efficient dispensing Ergonomic design for fatigue-free work Universal system compatibility

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