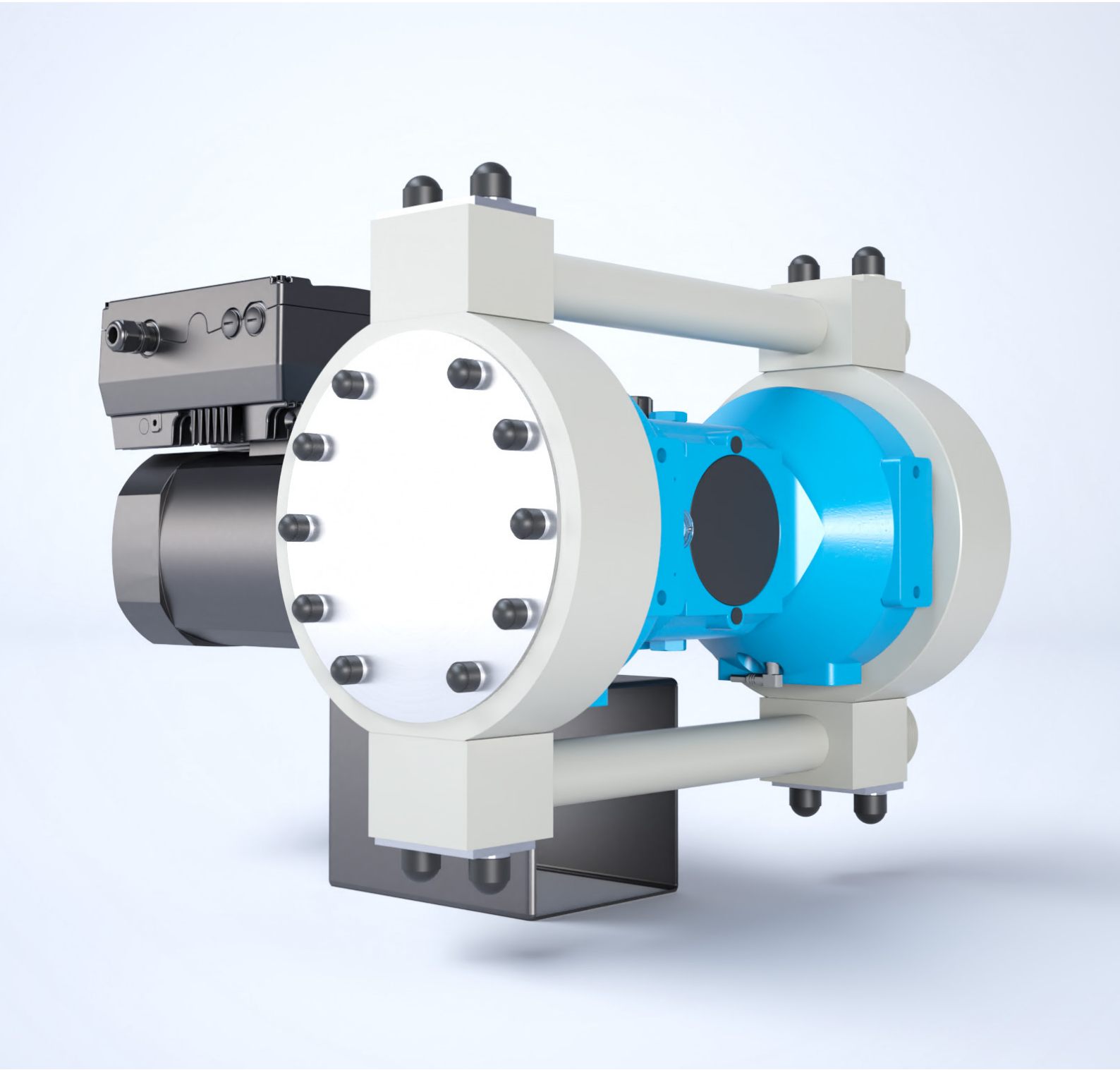
PRODUCT INFORMATION

ZX..411.3
FEEDING PUMP



INSPIRED. SOLUTIONS. FOR CUSTOMERS.

LOW-PULSATION ACTING DIAPHRAGM PUMP FOR HIGH CAPACITY

sera diaphragm pumps are oscillating displacement pumps for dosing liquids. The medium to be pumped is separated from the drive by a diaphragm. This is thus protected from damaging influences of the medium.

They are used everywhere where leak-free and exact dosing is important, such as for aggressive, odorous, abrasive, radioactive, flammable, viscous or toxic media.

Delivery rate adjustment by means of stroke frequency adjustment using external frequency converter and manual stroke length adjustment for optimal adaptation to every requirement.

SAMPLE APPLICATIONS

Fluid media with corrosive, malodorous, abrasive, radioactive, flammable, viscous or toxic properties.

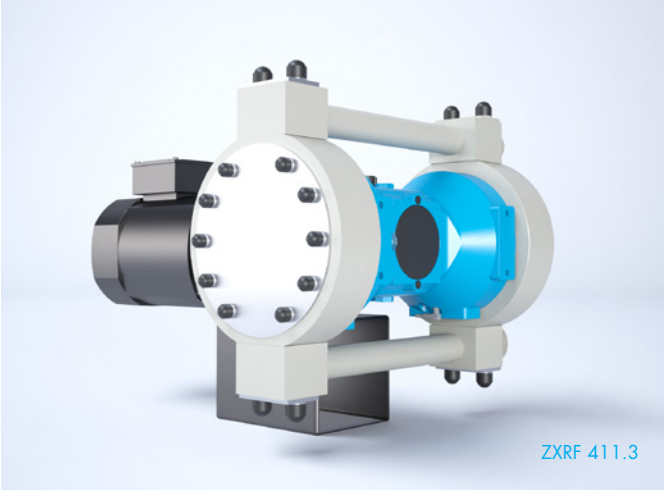
DESIGN

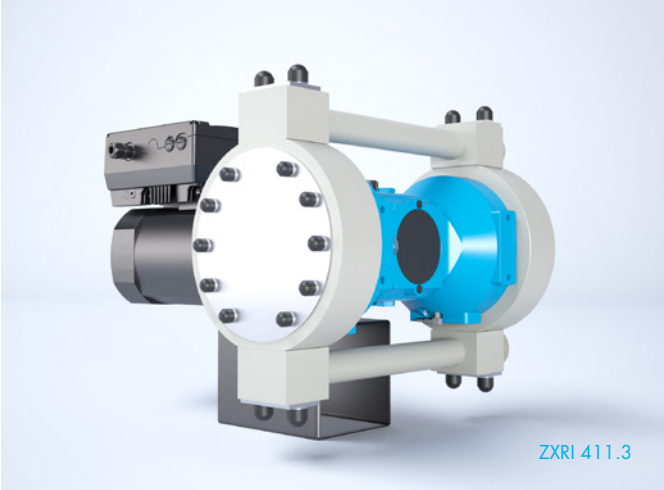
The pump has two pump heads with technical characteristics according to the performance overview. Feeding pumps of the ZXM series operate with a constant stroke frequency, which means that the flow rate is not adjustable.
The ZX series does not have stroke length adjustment like the other motor-driven **sera** diaphragm pumps. However, the ZXRF versions can be controlled via an external frequency converter, allowing the flow rate to then also be adapted to the process conditions. The flow rate of the ZXRI series can be set manually on the integrated frequency converter.

ADVANTAGES AT A GLANCE

- High dosing accuracy
- • Long diaphragm service life*
- • High-grade materials
- • Linear control characteristics (ZRXI models)
- • Low maintenance
- • Low operating costs
- • Leakage-free
- • Can be run dry indefinitely
- • Easy to use
- • Design in accordance with ATEX
- • Large suction heights (up to 8 mWS)

* compared to standard working diaphragms on the market


ZXRF 411.3


ZXRI 411.3

VERSIONS

MATERIALS
The high quality of the materials guarantees reliable continuous operation. The optimum material is available for every requirement.

PUMP BODY AND VALVES
PVC-U, PP, PVDF, 1.4571

VALVE BALLS
PTFE, 1.4401, Hastelloy

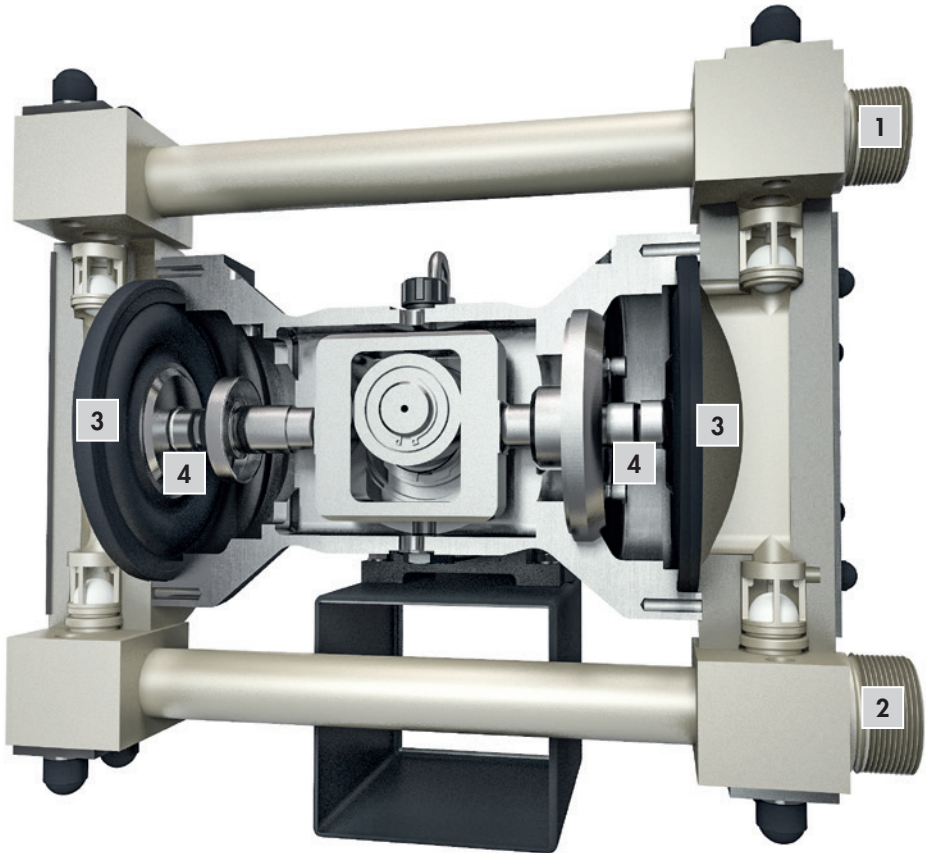
VALVE SEALS
EPDM, FPM, FEP-coated

WORKING DIAPHRAGM
PTFE-laminated

DRIVE
Each drive unit consists of a proven motor model, coupled with a stroke mechanism in a robust housing. **sera** housings cope with even the harshest conditions.
Their material thickness and surface treatment can even withstand chemical attack.

CONTROL
The flow rate of the **sera** diaphragm feeding pumps is either constant (ZXM) or manually adjustable (ZXRI). Automatic flow rate adjustment, depending on analogue input signals, thanks to three-phase motors with frequency converters for stroke frequency adjustment.

ACCESSORIES
We supply all accessories required for optimal installation of dosing pumps, including relief valves, pressure-keeping valves, pulsation dampers, priming aids/siphon vessels, etc.



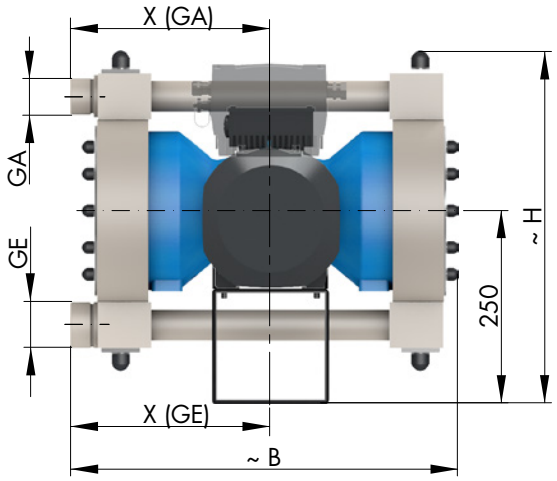
1	Connection on pressure side
2	Suction-side connection
3	Working diaphragm
4	Connection rod

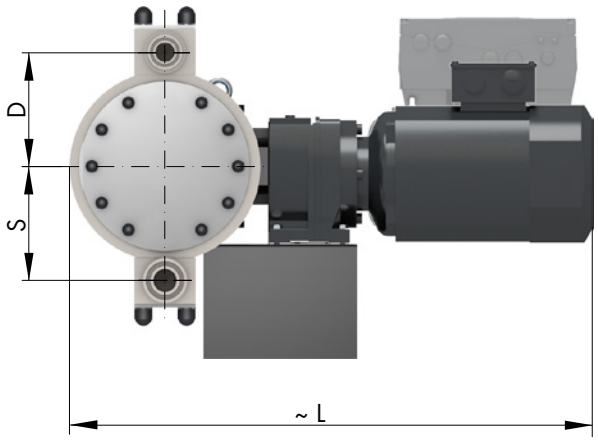
TECHNICAL DATA

PUMP DATA			ZX..411.3-2200e		ZX..411.3-2600e		ZX..411.3-3100e	
			ZXM/RF	ZXRI	ZXM/RF	ZXRI	ZXM/RF	ZXRI
Permissible pressure $p_{2max.}$ at the pump outlet	bar		4					
Nominal capacity QN at $p_{2max.}$	l/h	50 Hz	2.200	230-2.200	2.600	230-2.600	3.100	230-3.100
		60 Hz	2.640	230-2.200	3.120	230-2.600	–	230-3.100
Max. suction height	mWC		8					
Min./max. permissible pressure at the pump inlet	$p_{1min/max}$ bar		-0,8/0					
Recommended nominal diameter DN of the connecting pipes	mm	Inlet	32					
		Outlet	25					
Nominal stroke frequency	1/min	50 Hz	94	94	105	113	131	131
		60 Hz	113	94	126	113	–	131
Weight approx.	kg	plastic	75	75	75	80	80	80
		stainless steel	95	100	100	107	106	109

ELECTRICAL DATA		ZXM 411.3-... e	ZXRF 411.3-... e	ZXRI 411.3-... e
Power consumption	kW	0,75	1,1	0,75
Voltage	V	230/400V 50Hz, 460V 60Hz		
Frequency	Hz	50/60		
Protection category	IP	65	65	54

DIMENSIONS





SUCTION VALVES		ZX..411.3-2200e	ZX..411.3-2600e	ZX..411.3-3100e
DN	Nominal width	32	32	32
GE	PP-FRP/ PVDF-FRP/ PVC-U	G2	G2	G2
GE	1.4571		DN32 PN16 DIN2633	
S	PP-FRP/ PVDF-FRP	148	148	148
S	PVC-U	222	222	222
S	1.4571	281	281	281
PRESSURE VALVES				
DN	Nominal width	25	25	25
GA	PP-FRP/ PVDF-FRP/ PVC-U	G1 1/2	G1 1/2	G1 1/2
GA	1.4571		DN25 PN16 DIN2633	
D	PP-FRP/ PVDF-FRP	148	148	148
D	PVC-U	232	232	232
D	1.4571	221	221	221
MAX. TOTAL HEIGHT				
H	PP-FRP/ PVDF-FRP	460	460	460
H	PVC-U	510	510	510
H	1.4571	530	530	530
MAX. TOTAL WIDTH				
B	PP-FRP/ PVDF-FRP	505	505	505
B	PVC-U	530	530	530
B	1.4571	525	525	525
MAX. TOTAL LENGTH (standard)				
L	PP-FRP/ PVDF-FRP	680	680	680
L	PVC-U	665	665	665
L	1.4571	665	665	665

(Measurements in mm)

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