

## ZX411.3 in survey

- Leakage - free
- Safe if run dry
- High quality materials
- Low maintenance
- Low operating costs
- Integrable in automatic processes
- Robust metallic stroke mechanism housing
- User friendly
- Manuell stroke frequency adjustment (only ZXRI-Types)

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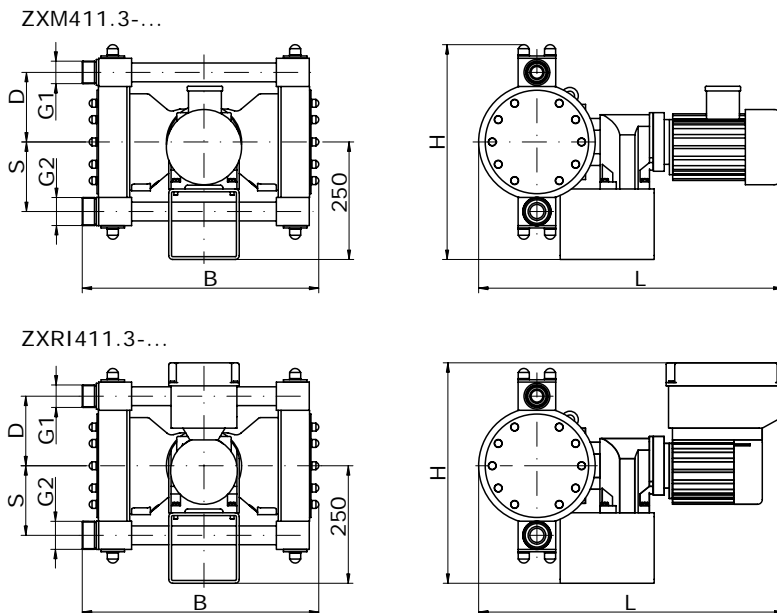
## Technical data

Type	Nominal capacity l/h		Nominal stroke frequency 1/min		Admiss. counter-pressure bar	Admiss. pressure at pump inlet bar	Max. suction height mWC	Inlet nominal width DN	Outlet nominal width DN	Max. stroke length mm	rated motor power kW
	50 Hz	60 Hz	50 Hz	60 Hz							
ZXM411.3-2200e	2.200	2.640	92	110	4	-0,8 / 0	8	32	25	20	0,75
ZXRI411.3-2200e	230 - 2.200	–	84	–	4	-0,8 / 0	8	32	25	20	0,75
ZXM411.3-2600e	2.600	3.120	103	123	4	-0,8 / 0	8	32	25	20	0,75
ZXRI411.3-2600e	230 - 2.600	–	110	110	4	-0,8 / 0	8	32	25	20	0,75
ZXM411.3-3100e	3.100	–	128	–	4	-0,8 / 0	8	32	25	20	0,75
ZXRI411.3-3100e	230 - 3.100	–	123	123	4	-0,8 / 0	8	32	25	20	0,75

e in type designation means: pump with single diaphragm

RI in type designation means: pump with integrated frequency converter

## Dimensional drawing



## Dimensional chart

All indications in mm

Type	G2	G1	S	D	L	B	H	Weight kg
ZXM411.3-2200e	G 2	G 1 1/2	148	148	580	500	450	70
ZXRI411.3-2200e	G 2	G 1 1/2	148	148	650	500	450	80
ZXM411.3-2600e	G 2	G 1 1/2	148	148	580	500	450	70
ZXRI411.3-2600e	G 2	G 1 1/2	148	148	650	500	450	80
ZXM411.3-3100e	G 2	G 1 1/2	148	148	580	500	450	70
ZXRI411.3-3100e	G 2	G 1 1/2	148	148	650	500	450	80

■ Indication of weight for basic design acc. to order information

## Order information

### Basic design

#### ZX...411.3

- Pump body PP
- Single valves PP/PP-FRP
- Valve balls Glass
- Valve seals FPM
- Working diaphragms PTFE-faced

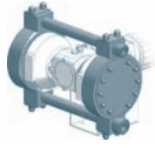



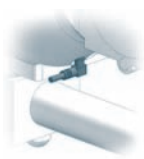
#### Motor:

- 230/400 V threephase, 50/60 Hz, IP 55, insul. cl. F

#### Further options and accessories:

- Connection pieces see chapter 4
- Product documentation see chapter 5

Type	Basic design	x
ZXM411.3-2200e	15002194	
ZXRI411.3-2200e	15002195	
ZXM411.3-2600e	15002196	
ZXRI411.3-2600e	15002197	
ZXM411.3-3100e	15002003	
ZXRI411.3-3100e	15002198	

Options/Accessories			ZXM411.3-2200e ZXM411.3-2600e ZXM411.3-3100e	x	ZXRI411.3-2200e ZXRI411.3-2600e ZXRI411.3-3100e	x
<b>Pump body and valves</b> 	PP	single valve PP/PP-FRP	●		●	
	PVC-U	single valves PVC/PVDF-FRP	○		○	
		single valve PVC-U	▲		▲	
	PVDF	single valve PVDF/PVDF-FRP	▲		▲	
1.4571	single valve 1.4571/1.4581	▲		▲		
<b>Valve balls</b> 	Glass	single valve	●		●	
	1.4401	single valve	▲		▲	
	PTFE	single valve	▲		▲	
<b>Valve sealings</b> 	FPM	single valve	●		●	
	EPDM	single valve	○		○	
	FEP-covered	single valve	▲		▲	
<b>Working diaphragms</b> 	PTFE-faced		●		●	
<b>Diaphragm rupture monitoring</b> 	Diaphragm rupture electrode conductive, mounted to pump					
	MBE-02	for single diaphragm pump	▲		▲	
● = basic design    ▲ = with add. price    ○ = without add. price    ⊗ = on request    -- = not available    Art.-No. = available in basic design/accessories						

ZX...411.3

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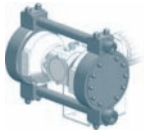



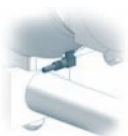

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Options/Accessories			ZXM411.3-2200e ZXM411.3-2600e ZXM411.3-3100e	x	ZXRI411.3-2200e ZXRI411.3-2600e ZXRI411.3-3100e	x	
<b>Pump body and valves</b> 	PP	Single valve PP/PP-FRP	●		●		
	PVC-U	Single valve PVC-U/PVDF-FRP	○		○		
		Single valve PVC-U	▲		▲		
	PVDF	Single valve PVDF/PVDF-FRP	▲		▲		
<b>Valve balls</b> 	1.4571	Single valve 1.4571/1.4581	▲		▲		
	Glass	Single valve	●		●		
		1.4401	Single valve	▲		▲	
		PTFE	Single valve	▲		▲	
<b>Valve seals</b> 	FPM	Single valve	●		●		
	EPDM	Single valve	○		○		
	FEP-covered	Single valve	▲		▲		
<b>Working diaphragm</b> 	PTFE-faced		●		●		
	<b>Diaphragm rupture monitoring</b> 						
<b>Diaphragm rupture monitoring</b> 	Diaphragm rupture electrode conductive, mounted to pump						
	MBE-02	for single diaphragm pump	▲		▲		
		Electrode relay, control cabinet assembly					
	ER-104/C	aux. energy 230 V AC	90022994		90022994		
aux. energy 24 V DC		90022945		90022945			
ER-142	aux. energy 230 V AC II(1)G [EExia] IIC acc. to ATEX 95	90200363		90200363			
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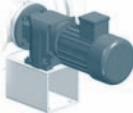

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Options/Accessories		ZXM411.3-2200e ZXM411.3-2600e ZXM411.3-3100e	x	ZXRI411.3-2200e ZXRI411.3-2600e ZXRI411.3-3100e	x
<b>Stroke frequency monitoring</b> 	Inductive contact				
	10-60 V DC, three-wire, PNP	▲		▲	
	Namur execution, II2G EExia IICT6 acc. to ATEX95	▲		▲	
<b>Drive motor</b> 	Special voltage	▲		Ⓞ	
	Enclosure IP 65	▲		Ⓞ	
	Protective roof for the fan of the drive	▲		Ⓞ	
	integrated posistor (3 pcs.) insul. cl. F	▲		●	
	VIK-design	▲		Ⓞ	
	II2G EExe IIT3 (acc. to ATEX95)	▲		–	
	II2G EExe IIT4 (acc. to ATEX95)	Ⓞ		–	
	II2G EExde IICT4 (acc. to ATEX95)	▲		–	
	Single phase AC 230V with capacitor	Ⓞ		–	
Driver for converter operation incl. posistor, 5-100 Hz	▲		●		
Driver for converter operation II2G EExde IICT4, 5-100 Hz gem. ATEX 95, incl. integrated posistor	Ⓞ		–		
<b>Stroke frequency adjustment electrical</b> 	Frequency converter series 8200 Vector input 4-20mA, incl. Keypad (for integration into control cabinet)				
	Single-phase 230 V, 50/60 Hz	1,5 kW	90016865		–
	Three-phase 320-550 V, +/- 0%, 50/60 Hz	1,5 kW	90017528		–
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Fittings for suction side of dosing pumps		ZXM411.3-2200e up to ZXRI411.3-3100e	
		Type	p.
Pulsation damper without separating diaphragm	PVC-U / PP	706.1	3.14
	1.4571	804.1	3.18
Suction aid / Siphon Vessel	transparent PVC-U	772.2	3.76
Calibration Pot	PVC-U	797.1	3.78
Foot valve	PVC-U	735.2	3.80
	PP / PVDF	735	3.82
	1.4571	735	3.82
Line strainer	PVC-U / PP / PVDF	755.1	3.88
	1.4408	755	3.90
Float valve	PVC-U	875	3.92
Fittings for pressure side of dosing pumps		ZXM411.3-2200e up to ZXRI411.3-3100e	
		Type	p.
Diaphragm-type relief valve		624.10	3.4
Diaphragm-type pressure keeping valve		624.D	3.8
Pulsation damper without separating diaphragm	PVC-U / PP	706.1	3.14
	1.4571	804.1	3.18
Diaphragm-pulsation damper with Elastomer-diaphragm	PVC-U / PP / PVDF	713.1	3.20
	1.4571	713.1	3.20

The above allocation considers the fittings which have to be used at least regarding their nominal width in order to ensure the safe and trouble-free operation of the respective pumps when feeding liquids which are similar to water.

Absolutely note the max. admissible operating pressure of the fittings.

The use of fittings of a bigger nominal width is unproblematically possible in most cases.

When choosing the fittings note the installation instructions for dosing pumps or confer with **sera**.