

Controllable multi-layer diaphragm pumps

Flow capacity 70 l/h ... 1200 l/h

Admiss. counterpressure up to 16 bar



C410.2-...ML



C410.2-...ML in survey

- Multi-layer diaphragm technology
- Safe to run dry
- Leakage free
- Low maintenance
- Easy to use
- High dosing accuracy
- Multifunctional
- PROFIBUS DP - interface
- Flexible
- Manual stroke length and stroke frequency adjustment
- Robust metallic housing

Infobox

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Functions and operating modes

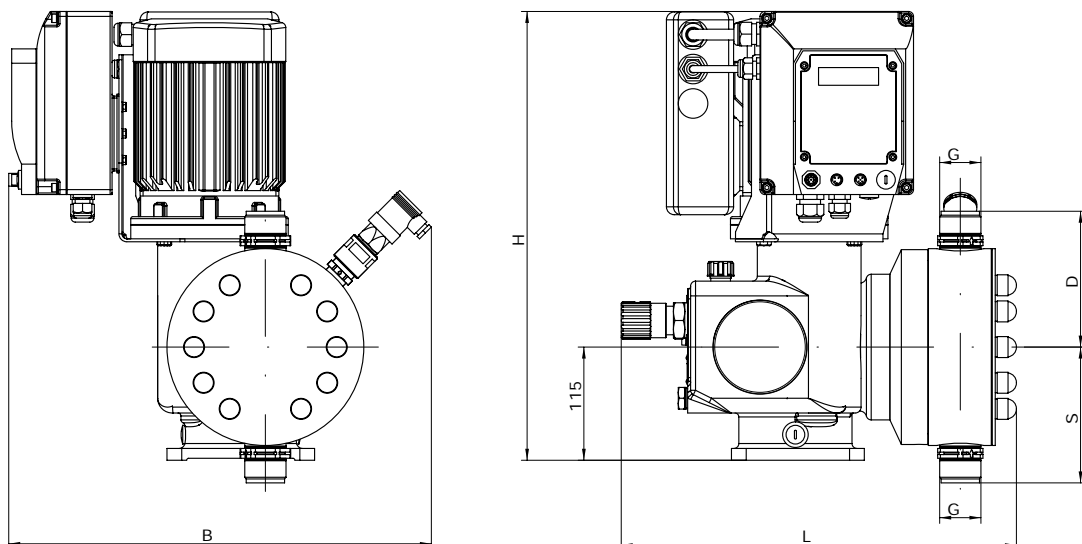
- Manual operation
- Manual stroke frequency adjustment
- PROFIBUS DP-VO slave Interface
- External START/STOP
- Pulse operation / fractinator
- Cycle delay unit
- Analogue operation (0/4-20 mA)*
- Analogue operation standardization
- Charge manual/with timer*
- Speed control / Slow mode
- 3 LED's for status indication
- Multiline illuminated text display
- Menu - driven parameterization
- Flow indication
- Calibration
- 4 - key operation
- 2 digital outputs (PLC)*
- 1 digital input (PLC or contact signal)*
- 2 analogue / digital inputs (optionally reversible)*
- Programmable input- / output functions*
- Connection / evaluation 2-stage level monitoring
- Connection / evaluation diaphragm rupture monitoring
- Connection / evaluation flow monitoring
- Connection / evaluation flow metering
- Voltage 3~ 380-420V+N+PE, 50/60 Hz
- 2m connecting cable with CEE-plug

Technical data

Type	Nominal capacity l/h		Nominal stroke frequency 1/min		Capacity per stroke ml/Stroke	Admiss. counterpressure bar	Admiss. pressure at pump inlet bar	Max. suction height mWC	Inlet/Outlet nominal width DN	Max. stroke length mm	Rated motor power kW
	l/h		1/min								
	50 Hz	60 Hz	50 Hz	60 Hz							
C410.2-70ML	0 - 70	0 - 70	97	97	12	16	-0,3 / 0	3	10	8	0,75
C410.2-135ML	0 - 135	0 - 135	97	97	23	15	-0,3 / 0	3	15	10	0,75
C410.2-500ML	0 - 500	0 - 500	97	97	85	10	-0,3 / 0	3	15	13	0,75
C410.2-1200ML	0 - 1200	0 - 1200	97	97	206	5	-0,3 / 0	3	20	20	1,5

Note: the admissible counterpressure is 10 bar or lower when plastic pump bodies are used.

Dimensional drawing



Dimensional chart

All indications in mm

Type	G	S	D	L	B	H	Weight (kg)
C410.2-70ML	G 3/4	113	113	408	387	450	40
C410.2-135ML	G 1 1/4	127	127	425	402	450	42
C410.2-500ML	G 1 1/4	138	138	413	409	490	45
C410.2-1200ML	G 1 1/4	162	162	457	425	490	47

- * inapplicable when supplied with PROFIBUS DP - Interface
- Indication of weight for basic design acc. to order information

Order information

Basic design

C410.2-...ML

- Pump body PP
- Single valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Pressure switch IP65
- Control cable (8-pole)


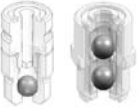


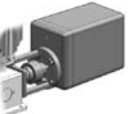
Motor:

- 3~ 380-420V/N/PE, 50/60 Hz, IP 55, ISO F

Further options and accessories:

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

Type	Basic design	x
C410.2-70ML	16013545	
C410.2-135ML	16013546	
C410.2-500ML	16013547	
C410.2-1200ML	16013548	

Options/Accessories			C410.2-70ML	C410.2-135ML	C410.2-500ML	C410.2-1200ML
Pump body and valves 	PP	Single valve PP-FRP	●	●	●	●
	PVC-U	Single valve PVC-U	▲	▲	▲	▲
	PVDF	Single valve PVDF-FRP	▲	▲	▲	▲
	1.4571	Single valve 1.4571/1.4581	–	▲	▲	▲
		Double valve 1.4571/1.4581	▲	–	–	–
	Valve balls 	Glass	Single valve	●	●	●
1.4401			Single valve	–	▲	▲
PTFE		Double valve	▲	–	–	–
		Single valve	–	▲	▲	▲
Double valve		PTFE	▲	–	–	–
		FPM	Single valve	●	●	●
Valve seals 	FPM	Double valve	▲	–	–	–
		EPDM	Single valve	○	○	○
	EPDM	Double valve	▲	–	–	–
		FEP-covered	Single valve	▲	▲	▲
	Double valve	FEP-covered	▲	–	–	–
		Stroke length adjustment 	with position indicator	▲	▲	▲
Stroke length adjustment electrical 	Actuator N C1-BA 230 V, +/- 10%, 50/60 Hz, 128s/10 U, 1,5 Nm, incl. mounting kit for actuator		▲	▲	▲	▲
	Electronic positioning controller PMR3 input signal 0/4-20 mA incl. feedback signal 0/4-20 mA (only in N C1-BA integrated)	▲	▲	▲	▲	

● = Basisausführung – = nicht lieferbar ▲ = mit Aufpreis lieferbar ○ = ohne Aufpreis lieferbar Art.-Nr. = als Basisausführung/ Zubehör lieferbar

C410.2-...ML

Bestellinformationen

Basisausführung

C410.2-...ML

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C410.2-1200ML	16013548	

2

Options/Accessories		C410.2-70ML	x	C410.2-135ML	x	C410.2-500ML	x	C410.2-1200ML	x	
Profibus 	Profibus-interface: Profibus DP-V0 (slave) Bit rate: Automatic 9,6 kbit/s – 12 Mbit/s Connection to dosing pump: M12-cable box, 5-pole, B-coded	▲		▲		▲		▲		
	Profibus Y-distributor M12x1, 5-pole, IP67	90025526		90025526		90025526		90025526		
	Profibus T-distributor M12x1, 5-pole, IP67	90022889		90022889		90022889		90022889		
	Profibus terminating resistor M12x1, 5-pole, IP67	90022890		90022890		90022890		90022890		
Control electronics 	Remote-design, for wall mounting incl. 3m cable and fixing materials	⊙		⊙		⊙		⊙		
Control cable 	M12 cable box 3-pole, 5 meter for level input (Level sensor not included)	90022888		90022888		90022888		90022888		
	M12 cable box 3-pole, ready-made for level input (Level sensor not included)	90022877		90022877		90022877		90022877		
Flow meter* <p>*Note the indications at the data sheet</p>	IP65 incl. cable 0,6m and cable box M12 5-pole (bushing for pump connection) Connection 8014.1: Inlet: G 3/4 (inside), Outlet: G 3/4 (outside) Connection 8015.1 - 8017.1: Inlet: G 1 1/4 (inside), Outlet: G 1 1/4 (outside) Max. operating pressure: 10 bar									
	8014.1	PVC-U/FPM	37602281		-		-		-	
		PVDF/FPM	37602311		-		-		-	
	8015.1	PVC-U/FPM	-		37602320		-		-	
		PVDF/FPM	-		37602332		-		-	
	8016.1	PVC-U/FPM	-		-		37602322		-	
		PVDF/FPM	-		-		37602334		-	
8017.1	PVC-U/FPM	-		-		-		37602323		
	PVDF/FPM	-		-		-		37602335		

● = basic design

▲ = with add. price

○ = without add .price

⊙ = on request

-- = not available

Art.-No. = available in basic design/accessories

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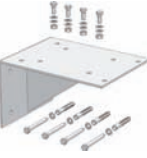
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Options/Accessories		C410.2-70ML x	C410.2-135ML x	C410.2-500ML x	C410.2-1200ML x
Special connection  Special connection (plug) für power supply		⊗	⊗	⊗	⊗
Console  for wall mounting incl. fixing screws	1.4301	90023876	90023876	90023876	90023876
	PP	90023849	90023849	90023849	90023849
● = basic design ▲ = with add. price ○ = without add .price ⊗ = on request – = not available Art.-No. = available in basic design/accessories					

Fittings for suction side of dosing pumps		C410.2-70ML		C410.2-135ML		C410.2-500ML		C410.2-1200ML	
		Typ	S.	Typ	S.	Typ	S.	Typ	S.
Pulsation damper without separating diaphragm	PVC-U / PP	702.1	3.14	702.1	3.14	702.1	3.14	703.1	3.14
	1.4571	⊗		⊗		⊗		⊗	
Suction lance	with level switch 1-stage	SL-02	3.36	–		S-04	3.40	⊗	
		S-03	3.38	–		–		–	
	without level switch	S-01	3.44	S-01	3.44	S-01	3.44	⊗	
Priming aid / Siphon Vessel	PVC-U-transparent	770.2	3.76	770.2	3.76	770.2	3.76	771.2	3.76
Calibration Pot	PVC-U	792.1	3.78	794.1	3.78	795.1	3.78	798.1	3.78
Foot valve	PVC-U	731	3.82	732.2	3.80	732.2	3.80	733.2	3.80
	PP / PVDF	–		732	3.82	732	3.82	733	3.82
	1.4571	731	3.82	732	3.82	732	3.82	733	3.82
	PP-GFK / PVDF-GFK	781.1	3.86	783.1	3.86	783.1	3.86	783.1	3.86
Line strainer	PVC-U / PP / PVDF	752.1	3.88	752.1	3.88	752.1	3.88	753.1	3.88
	1.4408	752	3.90	752	3.90	752	3.90	753	3.90
Float valve	PVC-U	751.1	3.88	–		–		–	
		871	3.92	872	3.92	872	3.92	873	3.92
Fittings for pressure side of dosing pumps		C410.2-70ML		C410.2-135ML		C410.2-500ML		C410.2-1200ML	
		Typ	S.	Typ	S.	Typ	S.	Typ	S.
Diaphragm-type relief valve		620.10	3.4	622.10	3.4	622.10	3.4	623.10	
Diaphragm-type pressure keeping valve		620.D	3.8	622.D	3.8	622.D	3.8	623.D	
Pulsation damper without separating diaphragm	PVC-U / PP	702.1	3.14	702.1	3.14	702.1	3.14	703.1	
	1.4571	⊗		⊗		⊗		⊗	
Diaphragm-pulsation damper with Elastomer-diaphragm	PVC-U / PP / PVDF	722.1	3.22	722.1	3.22	–		–	
	1.4571	722.1	3.26	722.1	3.26	–		–	
Diaphragm-pulsation damper with PTFE/PTFE-faced diaphragm	PVC-U / PP / PVDF	–		–		713.1	3.18	713.1	3.18
	1.4571	810.1-0,32/160	3.28	810.1-0,32/160	3.28	810.1-2,0/100	3.28	810.1-2,0/100	3.28
Check valve	PP-GFK / PVDF-FRP	661.2	3.50	663.2	3.50	663.2	3.50	663.2	3.50
	1.4571	661.2	3.50	662.2	3.50	662.2	3.50	663.2	3.50
	PVC-U	661.2	3.50	–		–		–	
Dosing valve	PP-FRP / PVDF-FRP	691.1	3.54	693.1	3.54	693.1	3.54	693.1	3.54
	1.4571	691.1	3.54	692.1	3.54	692.1	3.54	693.1	3.54
	PVC-U / PP / PVDF	681.1	3.58	682.1	3.58	682.1	3.58	683.1	3.58
	PVC-U	691.1	3.54	–		–		–	
Injection fitting	PVC-U / PP / PVDF	8061.1	3.60	8062.1	3.60	8062.1	3.60	8063.1	3.60

⊗ = on request – = not available

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**.