

DIAPHRAGM PUMPS

CONTROLLABLE



OVERVIEW

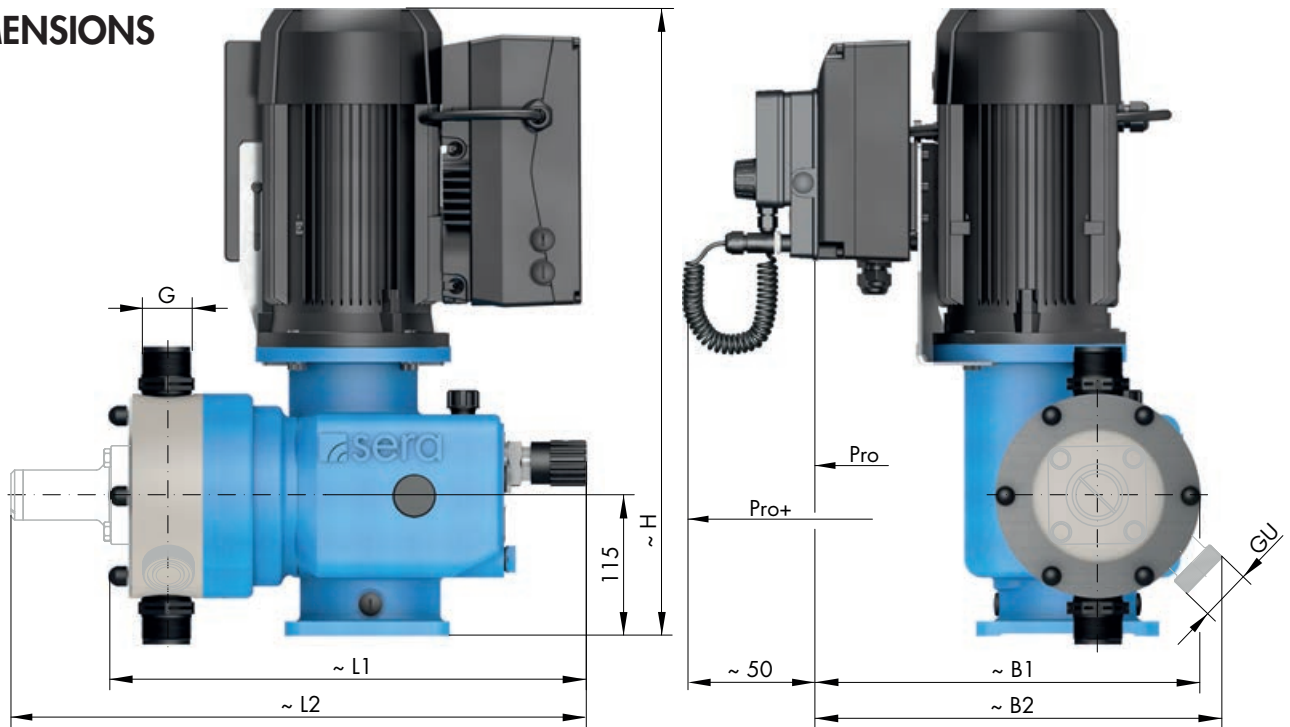
- High dosing accuracy
- Safe to run dry
- Leakage free
- Low-maintenance
- User-friendly
- Flexible, multifunctional
- PROFIBUS DP-Interface
- Digital and analogue control options
- Manual stroke length- and stroke frequency adjustment
- Robust, metallic housing

TECHNICAL DATA

PUMP DATA			C 410.2-... Pro/Pro+			
			280e	570e	900e	1450e
Permissible pressure p_{2max} at the pump outlet	bar		8	6	5	5
Nominal capacity QN at p_{2max}	l/h	50/60 Hz	0-280	0-570	0-900	0-1.450
Quantity per stroke	ml/stroke (100%)		46	98	155	245
Max. suction height	mWC		5	5	3	3
Min./max. permissible pressure at the pump inlet	bar	$p_{1min/max}$	-0,5/0	-0,5/0	-0,3/0	-0,3/0
Recommended nominal diameter DN of the connecting pipes	mm		15	15	20	25
Nominal stroke frequency	l/min	50 Hz	97	97	97	97
Weight approx.	kg	plastic	38	38	49	49
		stainless steel	45	45	64	64

ELECTRICAL DATA			C 410.2-... Pro/Pro+			
			280e	570e	900e	1450e
Power consumption	kW		0,75	0,75	1,1	1,1
Voltage	V		380-420			
Frequency	Hz		50/60			
Inlet voltage, control input	V DC		5...30			
Minimum contact signal time	ms		55			
Analogue input resistance	Ω		39			
Digital output internal/external supply			20V DC, 30mA /... 30V DC, 30mA			
Recommended fuse	(circuit breaker)		C10A			
Insulation class	ISO		F			
Enclosure	IP		55			

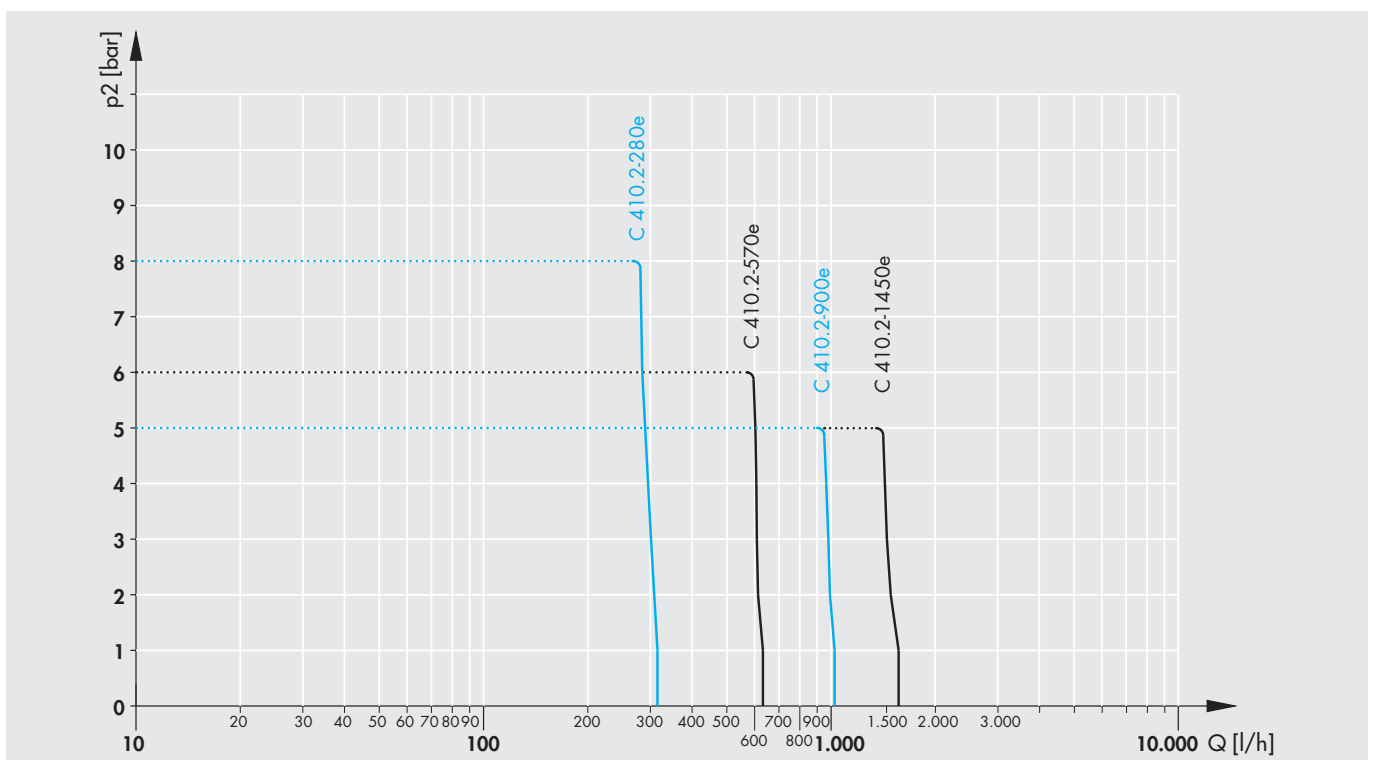
DIMENSIONS



	G	GU		B1	B2	L1	L2	H		B1	B2	L1	L2	H
C 410.2-280e	G1¼*	G1¼*	▶ PVC, PP, PVDF	355	365	403	484	~530	▶ 1.4571	355	365	400	484	~530
C 410.2-570e	G1¼*	G1¼*		355	365	403	484	~530		355	365	400	484	~530
C 410.2-900e	G1¼	5		380	5	428	5	~540		380	5	425	5	~540
C 410.2-1450e	G1¼	5		380	5	428	5	~540		380	5	425	5	~540

* PVC = G1

CHARACTERISTIC CURVES



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FUNCTIONS AND OPERATING MODES

Manual operation
 Manual stroke frequency adjustment
 PROFIBUS DP-VO Slave interface (option)
 External START/STOP
 Pulse operation / fractinator
 Pulse memory
 Analogue operation (0/4 ... 20 mA)*
 Analogue operation standardization
 Batch dosing (manual / with timer)*
 3 LEDs for status indication

Speed control/Slow Mode
 Multiline, illuminated display
 Menu-driven parameterization
 Flow indication
 Calibration function
 4-key operation
 2 digital outputs (PLC)*
 1 digital output
 (PLC or contact signal)*
 2 analogue/digital inputs
 (reversible)*

Programmable
 input-/output functions*
 Diaphragm monitoring
 Connection/evaluation:
 2-stage level monitoring
 Connection/evaluation:
 Flow monitoring
 Connection/evaluation:
 Flow metering
 Voltage 3~380 -420V/N/PE, 50/60Hz
 2m connection cable with CEE-plug, 5-pole

* inapplicable when supplied with PROFIBUS DP - interface (Option)

Operating Modes & Messaging	Pro	Pro+
Manual	✓	✓
Pulse	✓	✓
Analogue	✓	✓
Batch	✗	✓
Timer	✗	✓
Interface	✗	✓
Calibration	✓	✓
Slowmode	✓	✓
Suction mode	✓	✓
Diaphragm monitoring	✓	✓
Data logging (SD-Card)	✗	✓
Error messaging	Error Code + display color change	Plain text + display color change
Clock for data & time	✗	✓

Connection & Control	Pro	Pro+
Control elements & Display	4-button control Multilingual display 4-color status indicator	Removeable handheld with two buttons and clickwheel Display with 8 languages (de, en, es, fr, nl, cs, fi, tr) 4-color status indicator
Control cable	optional	5m control cable (8-pole)
In-/Output connection	✓	✓
Level connection	✓	✓
Flow monitor & measurement connection	✗	✓
Profibus / Profinet	✗	optional
Inputs	Digital pulse (NO/NC) Digital extern stop (NO/NC) Analogue 4-20mA	Digital/analogue, free parametrised Digital/analogue, free parametrised Digital, free parametrised
Outputs	24V Ready to run (NO/NC) Stroke signal (NO/NC)	24V Digital, free parametrised Digital, free parametrised Analogue, free parametrised
Updateable	USB (Stick)	USB (to host)