

PISTON DIAPHRAGM PUMPS

CONTROLLABLE



OVERVIEW

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

TECHNICAL DATA

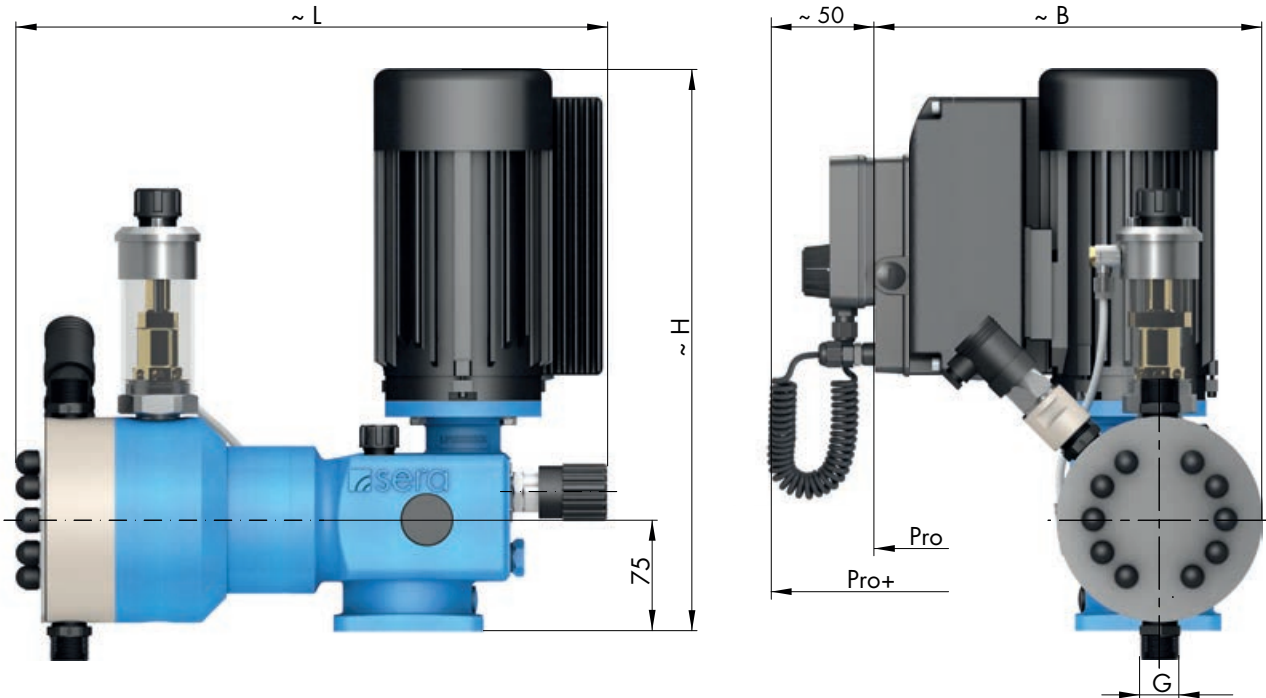
PUMP DATA			C 409.2-... KM Pro/Pro+					
			7,5KM	10KM	18KM	45KM	95KM	190KM
Permissible pressure p_{2max} at the pump outlet	bar	plastic	10	10	10	10	10	8
		stainless st.	80	80	50	25	16	8
Nominal capacity QN at p_{2max}	l/h	50/60 Hz	0-7,5	0-10	0-18	0-45	0-95	0-190
Quantity per stroke	ml/stroke (100%)		1,25	1,1	2,0	5,0	10,6	21,1
Max. suction height	mWC		2	2	2	3	3	3
Min./max. permissible pressure at the pump inlet	bar	$p_{1min/max}$	-0,2/0	-0,2/0	-0,2/0	-0,3/0	-0,3/0	-0,3/0
Recommended nominal diameter DN of the connecting pipes	mm		10	10	10	10	15	15
Nominal stroke frequency	1/min	50/60 Hz	100	150	150	150	150	150
Weight approx.	kg	plastic	17	17	17	20	20	21
		stainless st.	19	19	19	23	23	24

ELECTRICAL DATA		C 409.2-... KM Pro/Pro+	
		230 V, 50/60 Hz	115 V, 50/60 Hz
Power consumption	kW		0,37
Voltage	V	210 - 250	100 - 125
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)		C6A	C10A
Insulation class	ISO		F
Enclosure	IP		55

Flow capacity 7,5 l/h ... 190 l/h
 Admissible counterpressure up to 80 bar

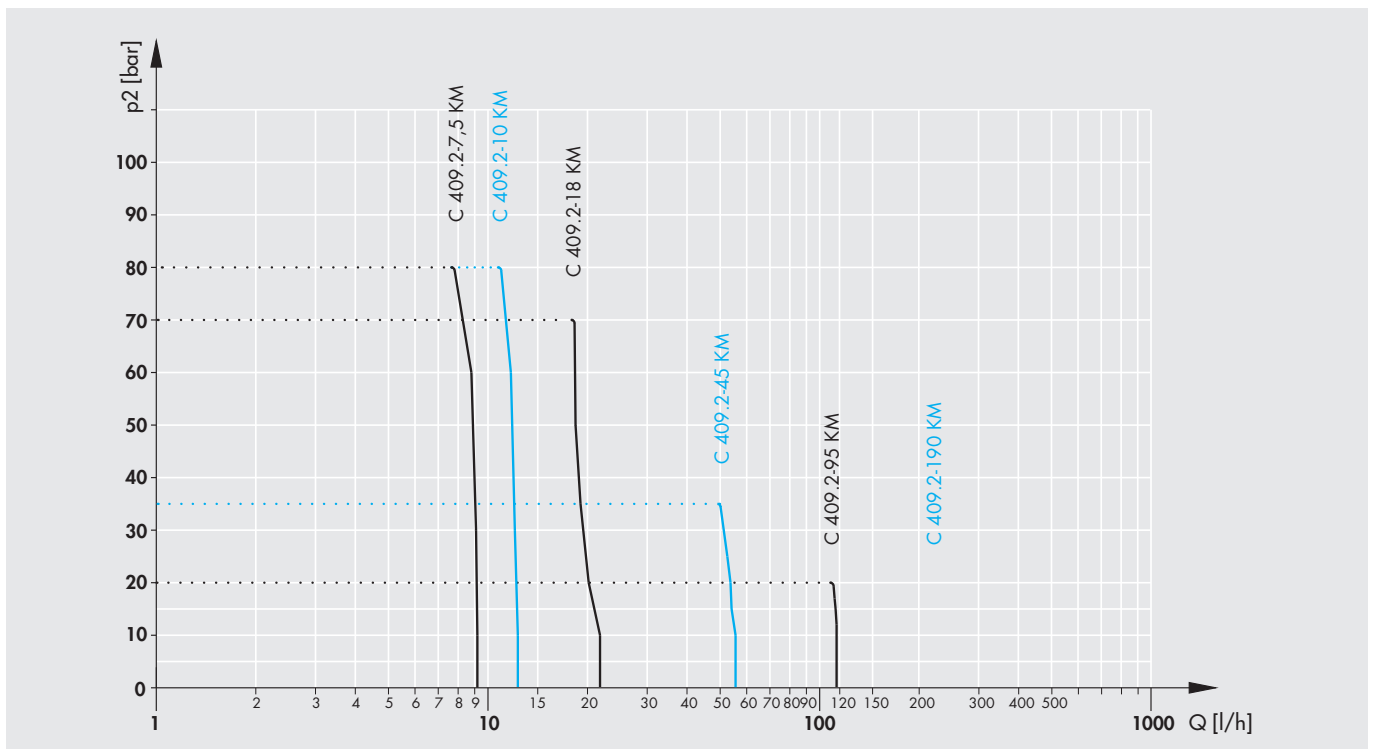
C 409.2 KM

DIMENSIONS



	G		B	L	H		B	L	H
C 409.2-7,5 KM	G ¾	PVC, PP, PVDF	255	350	365	1.4571	255	350	365
C 409.2-10 KM	G ¾		255	350	365		255	350	365
C 409.2-18 KM	G ¾		255	350	365		255	350	365
C 409.2-45 KM	G ¾		270	403	365		270	403	365
C 409.2-95 KM	G ¾		270	403	365		270	403	365
C 409.2-190 KM	G ¾		270	403	365		270	403	365

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

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

Programmable
 input-/output functions
 Diaphragm monitoring
 Connection/evaluation:
 2-stage level monitoring
 Connection/evaluation:
 Flow monitoring
 Connection/evaluation:
 Flow metering
 Voltage 210-250V, 50/60Hz
 3m connection cable with Euro-plug

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)