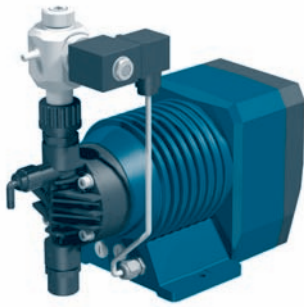


CS204.1



CS 204.1 in survey

- Self-ventilating
- Safe to run dry
- Leakage-free
- Low weight
- Low-maintenance
- User-friendly
- High dosing accuracy
- Multifunctional
- PROFIBUS DP - interface
- Manual stroke length and stroke frequency adjustment
- Robust, corrosion-resistant housing

Infobox

- Order information [Page 2.19](#)
- Options/accessories [Page 2.19](#)
- fittings-allocation [Page 2.22](#)
- connecting pieces [Chapter 4](#)
- resistance chart [Chapter 5](#)
- installation examples [Chapter 5](#)

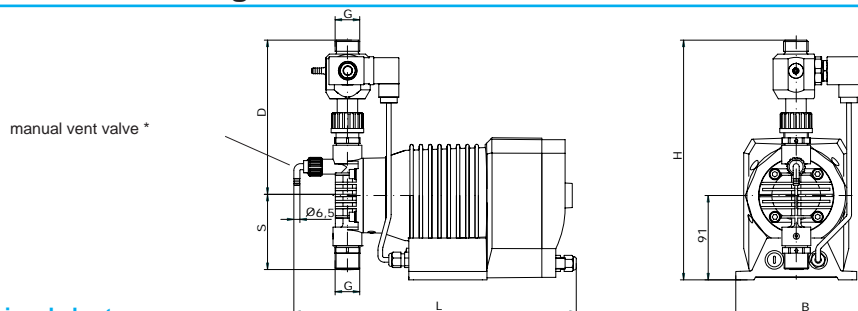
Functions and operating modes

- Manual operation
- Manual stroke frequency adjustment
- PROFIBUS DP-VO Interface
- External START/STOP
- Pulse operation / fractinator
- Cycle delay unit
- Analogue operation (4-20 mA)*
- Analogue operation standardization
- Charge manual/with timer*
- 3 LED's für status indicator
- 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
- Automatic self-ventilating
- Voltage 190 - 240 V, 50/60 Hz
- Voltage 100 - 120 V, 50 Hz
- Voltage 100 - 120 V, 60 Hz
- 2m connecting cable with Euro-plug

Technical data

Typ	Nominal capacity l/h		Nominal stroke frequency 1/min		Capacity per stroke ml/Stroke	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 W
	50 Hz	60 Hz	50 Hz	60 Hz								
CS204.1-0,4e	0 - 0,4	0 - 0,4	150	150	0,04	10	0,1 / 0	1	4	4	1,5	20
CS204.1-1,2e	0 - 1,2	0 - 1,2	150	150	0,13	10	-0,15 / 0	1,5	4	5	1,5	20
CS204.1-2,4e	0 - 2,4	0 - 2,4	150	150	0,22	10	-0,2 / 0	2	4	5	1,5	26
CS204.1-6,0e	0 - 6	0 - 6	150	150	0,66	6	-0,3 / 0	3	4	5	1,5	26
CS204.1-7,0e	0 - 7	0 - 7	150	150	0,78	10	-0,3 / 0	3	4	5	1,5	33
CS204.1-10e	0 - 10	0 - 10	150	150	1,1	6	-0,3 / 0	3	4	5	1,5	33
CS204.1-14e	0 - 14	0 - 14	150	150	1,5	3	-0,3 / 0	3	4	5	1,5	26
CS204.1-25e	0 - 25	0 - 25	150	150	2,7	3	-0,3 / 0	3	5	10	1,5	33
CS204.1-30e	0 - 30	0 - 30	150	150	3,3	2,5	-0,3 / 0	3	5	10	1,5	33
CS204.1-35e	0 - 35	0 - 35	150	150	3,8	1,5	-0,3 / 0	3	5	10	1,5	33

Dimensional drawing



Dimensional chart

All indications in mm

Type	G	S	D	L	B	H	Weight kg
CS204.1-0,4e	G 3/4	65	153	284	143	244	3,0
CS204.1-1,2e	G 3/4	80	168	305	143	248	3,1
CS204.1-2,4e	G 3/4	80	168	305	143	248	3,4
CS204.1-6,0e	G 3/4	80	168	305	143	248	3,9
CS204.1-7,0e	G 3/4	80	168	305	143	248	4,8
CS204.1-10e	G 3/4	80	168	305	143	248	4,8
CS204.1-14e	G 3/4	80	168	305	143	248	3,8
CS204.1-25e	G 3/4	75	163	265	143	243	5,1
CS204.1-30e	G 3/4	75	163	265	143	243	5,1
CS204.1-35e	G 3/4	75	163	265	143	243	5,1

■ * inapplicable when supplied with PROFIBUS DP-interface

■ ** Manual vent valve only with PP-FRP and PVDF-FRP design at pumps with a nominal capacity from 6 l/h up to 14 l/h

■ Indication of weight acc. to order information

Order information

Basic design

CS204.1-0,4e

- Pump body PP
- Double valves PP
- Valve balls Al₂O₃
- Valve seals FPM
- Working diaphragm PTFE
- Automatic vent valve PP
- Control cable (8-pole)

CS204.1-1,2e up to CS204.1-2,4e

- Pump body PP
- Chamber valves PP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)

CS204.1-1,2e up to CS204.1-14e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)





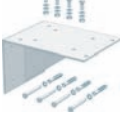
CS204.1-25e up to CS204.1-35e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)

Further options and accessories

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

Type	Basic design	x
CS204.1-0,4e	15003057	
CS204.1-1,2e	16005255	
CS204.1-2,4e	16005256	
CS204.1-6,0e	16005257	
CS204.1-7,0e	16005258	
CS204.1-10e	16005259	
CS204.1-14e	16005260	
CS204.1-25e	16005261	
CS204.1-30e	16005262	
CS204.1-35e	16005263	

Options/Accessories		CS204.1-0,4e x	CS204.1-1,2e CS204.1-2,4e x	CS204.1-6,0e up to CS204.1-14e x	CS204.1-25e up to CS204.1-35e x
Pump body and valve 	PP Chamber valve (double valve)	–	●	–	–
	PP Double valve	●	–	–	–
	PP-FRP Double valve PP-FRP	–	–	●	●
	PVC-U Single valve PVC-U	–	–	–	▲
	PVC-U Chamber valve (double valve)	–	▲	▲	–
	PVC-U Double valve	▲	–	–	–
	PVDF Chamber valve (double valve)	–	▲	–	–
	PVDF Double valve	▲	–	–	–
PVDF-FRP Double valve PVDF-FRP	–	–	▲	⊙	
Valve balls 	Glas Single valve	–	–	–	○
	Glas Double valve	–	●	●	●
	1.4401 Single valve	–	–	–	○
	1.4401 Double valve	–	○	○	○
	PTFE Single valve	–	–	–	▲
	PTFE Double valve	–	▲	▲	▲
Valve seals 	Al ₂ O ₃ Double valve	●	–	–	–
	FPM Single valve	–	–	–	○
	FPM Double valve	●	●	●	●
	EPDM Single valve	–	–	–	○
	EPDM Double valve	○	○	○	○
	FEP-cov. Single valve	–	–	–	▲
FEP-cov. Double valve	▲	▲	▲	▲	
Diaphragm rupture monitoring 	Diaphragm rupture electrode conductive, mounted to pump				
	MBE-02	▲	▲	▲	▲
Console 	1.4301	90023872	90023872	90023872	90023872
	for wall mounting incl. fixing screws	PP	90023844	90023844	90023844

● = basic design ▲ = with add. price ○ = without add .price ⊙ = on request – = not available Art.-No. = available in basic design/accessories

CS204.1

Order information

Basic design

CS204.1-0,4e

- Pump body PP
- Double valves PP
- Valve balls Al₂O₃
- Valve seals FPM
- Working diaphragm PTFE
- Automatic vent valve PP
- Control cable (8-pole)

CS204.1-1,2e up to CS204.1-2,4e

- Pump body PP
- Chamber valves PP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)

CS204.1-1,2e up to CS204.1-14e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)

CS204.1-25e up to CS204.1-35e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)

Further options and accessories

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

Type	Basic design	x
CS204.1-0,4e	15003057	
CS204.1-1,2e	16005255	
CS204.1-2,4e	16005256	
CS204.1-6,0e	16005257	
CS204.1-7,0e	16005258	
CS204.1-10e	16005259	
CS204.1-14e	16005260	
CS204.1-25e	16005261	
CS204.1-30e	16005262	
CS204.1-35e	16005263	

Options/Accessories

CS204.1-0,4e up to CS204.1-2,4e	x	CS204.1-6,0e up to CS204.1-14e	x	CS204.1-25e up to CS204.1-35e	x
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Flow controller



IP65
incl. cable 0,6m and cable box M12 - 5-pole (bushing for pump connection)
Material valve seals: FPM
Thread connection:
Input: G 3/4 (inlet), output: G 3/4 (outlet)
max. pressure: 10 bar

8191.1	PVC-U/FPM	-	37602227	-	
	PP/FPM	-	37602175	-	
8192.1	PVC-U/FPM	-	-	37602176*	
	PP/FPM	-	-	37602177*	

*Note the indications at the data sheet

Flow meter*



IP65
incl. cable 0,6m and cable box M12 - 5-pole (bushing for pump connection)
Thread connection:
Input: G 3/4 (inlet), output: G 3/4 (outlet)
max. pressure: 8 bar

8010.1	ECTFE/PP/FPM	-	37602337	-	
	ECTFE/PVC-U/FPM	-	37602339	-	
	ECTFE/PVDF/FPM	-	37602341	-	
8011.1	ECTFE/PP/FPM	-	-	37602343	
	ECTFE/PVC-U/FPM	-	-	37602345	
	ECTFE/PVDF/FPM	-	-	37602348	

■ *Note the indications in the data sheet

Sonderanschluss



Sonderanschluss (Stecker)
für Spannungsversorgung

⊙

⊙

⊙

Control cable



M12 cable box 3-pole, 5 meter für level input
(Level sensor not included)

90022888

90022888

90022888

M12 cable box 3-pole, ready-made for level input
(Level sensor not included)

90022877

90022877

90022877

● = basic design

▲ = with add. price

○ = without add .price

⊙ = on request

-- = not available

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

Order information

Basic design

CS204.1-0,4e

- Pump body PP
- Double valves PP
- Valve balls Al₂O₃
- Valve seals FPM
- Working diaphragm PTFE
- Automatic vent valve PP
- Control cable (8-pole)

CS204.1-1,2e up to CS204.1-2,4e

- Pump body PP
- Chamber valves PP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)

CS204.1-1,2e up to CS204.1-14e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)


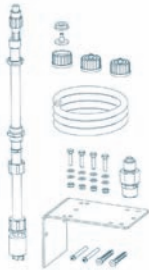
CS204.1-25e up to CS204.1-35e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- Automatic vent valve PP
- Control cable (8-pole)

Further options and accessories

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

Type	Basic design	x
CS204.1-0,4e	15003057	
CS204.1-1,2e	16005255	
CS204.1-2,4e	16005256	
CS204.1-6,0e	16005257	
CS204.1-7,0e	16005258	
CS204.1-10e	16005259	
CS204.1-14e	16005260	
CS204.1-25e	16005261	
CS204.1-30e	16005262	
CS204.1-35e	16005263	

Options/Accessories		CS204.1-0,4e up to CS204.1-2,4e	CS204.1-6,0e up to CS204.1-14e	CS204.1-25e up to CS204.1-35e
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
	Profibus T-distributor M12x1, 5-pole, IP67	90022889	90022889	90022889
	Profibus terminating resistor M12x1, 5-pole, IP67	90022890	90022890	90022890
Dosing kit 	Dosing kit - Level switch 1-stage cons. of: 1 Pc. SL-11.1, PVC-U, glass-balls, 600 mm, plug M12 3 Pc. Hose screwings for PVC-U-hose 10 m. PVC-U-hose 6/12 1 Pc. Dosing valve 691.1, PP/PP-FRP, EPDM, PTFE, 1 bar 1 Pc. Console 1.4301 incl. fixing screws	37602656	37602656	37602656
	Option: SL-11.1 - 1000 mm	▲	▲	▲
	Option: Dosing valve 691.1, PVC-U, EPDM, PTFE, 1 bar	▲	▲	▲
	Dosing kit - Level switch 2-stage cons. of: 1 Pc. SL-12.1, PVC-U, glass-balls, 600 mm, plug M12 3 Pc. Hose screwings for PVC-U-hose 10 m. PVC-U-hose 6/12 1 Pc. Dosing valve 691.1, PP/PP-FRP, EPDM, PTFE, 1 bar 1 Pc. Console 1.4301 incl. fixing screws	37602658	37602658	37602658
	Option: SL-12.1 - 1000 mm	▲	▲	▲
Option: Dosing valve 691.1, PVC-U, EPDM, PTFE, 1 bar	▲	▲	▲	
● = basic design ▲ = with add. price ○ = without add. price ⊕ = on request – = not available Art.-No. = available in basic design/accessories				

2

Fittings for suction side of dosing pumps		CS204.1-0,4e up to CS204.1-2,4e		CS204.1-6,0e up to CS204.1-35e	
		Type	P.	Type	P.
Suction lance	with level switch 1-stage	SL-11.1	3.34	SL-11.1	3.34
	with level switch 2-stage	SL-12.1	3.34	SL-12.1	3.34
	without level switch	S-01	3.46	S-01	3.46
Priming aid	transparent PVC-U	769.1	3.74	769.1	3.74
Suction aid / Siphon Vessel	transparent PVC-U	770.2	3.76	770.2	3.76
Calibration Pot	PVC-U	791.1	3.78	792.1	3.78
Foot valve	PVC-U	731	3.82	731	3.82
	PP-FRP / PVDF-FRP	781.1	3.86	781.1	3.86
	1.4571	731	3.82	731	3.82
Line strainer	PVC-U	751.1	3.88	751.1	3.88
	PVC-U / PP / PVDF	752.1	3.88	752.1	3.88
	1.4408	752	3.90	752	3.90
Float valve	PVC-U	871	3.92	871	3.92
Pulsation damper without separating diaphragm	PVC-U / PP	702.1	3.14	702.1	3.14
	1.4571	⊖		⊖	
Fittings for pressure side of dosing pumps		CS204.1-0,4e up to CS204.1-2,4e		CS204.1-6,0e up to CS204.1-35e	
		Type	P.	Type	P.
Diaphragm-type relief valve		620.10	3.4	620.10	3.4
Diaphragm-type pressure keeping valve		620.D	3.8	620.D	3.8
Multi-function valve	4 bar opening pressure	MFV 05004	3.10	MFV 05004	3.10
	6 bar opening pressure	MFV 05006	3.10	MFV 05006	3.10
	10 bar opening pressure	MFV 05010	3.10	MFV 05010	3.10
Pulsation damper without separating diaphragm	PVC-U / PP	702.1	3.14	702.1	3.14
	1.4571	⊖		⊖	
Diaphragm-pulsation damper with PTFE/PTFE-faced diaphragm	PVC-U / PP / PVDF	720.1	3.22	720.1	3.22
	1.4571	721.1	3.26	721.1	3.26
Diaphragm-pulsation damper with Elastomer-diaphragm	1.4571	810.1-0,16/180	3.28	810.1-0,16/180	3.28
Check valve	PVC-U	661.2	3.50	661.2	3.50
	PP-FRP / PVDF-FRP	661.2	3.50	661.2	3.50
	1.4571	661.2	3.50	661.2	3.50
Dosing valve	PVC-U	691.1	3.54	691.1	3.54
	PVC-U / PP / PVDF	681.1	3.58	681.1	3.58
	PP-FRP / PVDF-FRP	691.1	3.54	691.1	3.54
	1.4571	691.1	3.54	691.1	3.54
Injection fitting	PVC-U / PP / PVDF	8061.1	3.60	8061.1	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**.