

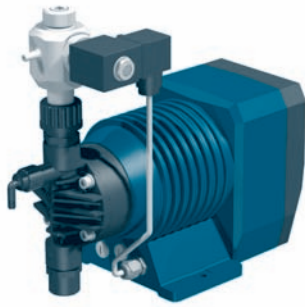
# Self-ventilating solenoid diaphragm pumps

Flow capacity 0,4 l/h ... 35 l/h

Admiss. counterpressure up to 10 bar



RS204.1



## RS204.1 in survey

- Self-ventilating
- Compact design
- Low weight
- Safe to run dry
- Leakage-free
- Low-maintenance
- User-friendly
- High dosing accuracy
- Integrable into automatic processes
- Manual stroke length and stroke frequency adjustment
- Robust, corrosion-resistant housing

## Infobox

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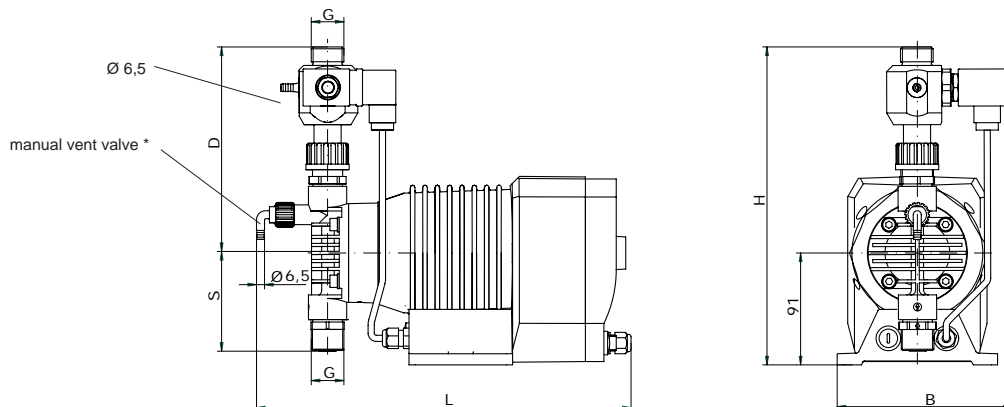
## Functions and operating modes

- Manual operation
- Manual stroke frequency adjustment (10%, 25%, 50%, 100%)
- External STOP
- Pulse operation (1:1)
- Analogue operation (4-20 mA)
- 3 LEDs for status indication
- 2-key operation
- 2 digital inputs (PLC or contact signal)
- 1 analogue input (4-20 mA)
- 2-stage level monitoring
- 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

Type	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								
RS204.1-0,4e	0 - 0,4	0 - 0,4	150	150	0,04	10	-0,1 / 0	1	4	4	1,5	20
RS204.1-1,2e	0 - 1,2	0 - 1,2	150	150	0,13	10	-0,15 / 0	1,5	4	5	1,5	20
RS204.1-2,4e	0 - 2,4	0 - 2,4	150	150	0,27	10	-0,2 / 0	2	4	5	1,5	26
RS204.1-6,0e	0 - 6	0 - 6	150	150	0,67	6	-0,3 / 0	3	4	5	1,5	26
RS204.1-7,0e	0 - 7	0 - 7	150	150	0,78	10	-0,3 / 0	3	4	5	1,5	33
RS204.1-10e	0 - 10	0 - 10	150	150	1,11	6	-0,3 / 0	3	4	5	1,5	33
RS204.1-14e	0 - 14	0 - 14	150	150	1,56	3	-0,3 / 0	3	4	5	1,5	26
RS204.1-25e	0 - 25	0 - 25	150	150	2,78	3	-0,3 / 0	3	5	10	1,5	33
RS204.1-30e	0 - 30	0 - 30	150	150	3,33	2,5	-0,3 / 0	3	5	10	1,5	33
RS204.1-35e	0 - 35	0 - 35	150	150	3,89	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)
RS204.1-0,4e	G 3/4	65	153	284	143	244	3,0
RS204.1-1,2e	G 3/4	80	168	305	143	248	3,1
RS204.1-2,4e	G 3/4	80	168	305	143	248	3,8
RS204.1-6,0e	G 3/4	80	168	305	143	248	3,9
RS204.1-7,0e	G 3/4	80	168	305	143	248	4,8
RS204.1-10e	G 3/4	80	168	305	143	248	4,8
RS204.1-14e	G 3/4	80	168	305	143	248	3,8
RS204.1-25e	G 3/4	75	163	265	143	243	5,1
RS204.1-30e	G 3/4	75	163	265	143	243	5,1
RS204.1-35e	G 3/4	75	163	265	143	243	5,1

- 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 for basic design acc. to order information

## Order information

### Basic design

#### RS204.1-0,4e

- Pump body PP
- Double valves PP
- Valve balls Al<sub>2</sub>O<sub>3</sub>
- Valve seals FPM
- working diaphragm PTFE
- automatic vent valve PP

#### RS204.1-1,2e up to RS204.1-2,4e

- Pump body PP
- Chamber valves PP
- Valve balls glass
- Valve seals FPM
- working diaphragm PTFE-faced
- automatic vent valve PP

#### RS204.1-6,0e up to RS204.1-14e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls glass
- Valve seals FPM
- working diaphragm PTFE-faced
- automatic vent valve PP





#### RS204.1-25e up to RS204.1-35e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- automatic vent valve PP

#### Further options and accessories

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

Type	Basic design	x
RS204.1-0,4e	15002790	
RS204.1-1,2e	16005246	
RS204.1-2,4e	16005247	
RS204.1-6,0e	16005248	
RS204.1-7,0e	16005249	
RS204.1-10e	16005250	
RS204.1-14e	16005251	
RS204.1-25e	16005252	
RS204.1-30e	16005253	
RS204.1-35e	16005254	

Options/Accessories			RS204.1-0,4e	RS204.1-1,2e RS204.1-2,4e	RS204.1-6,0e up to RS204.1-14e	RS204.1-25e up to RS204.1-35e
<b>Pump body and valves</b> 	PP	Chamber valve (double valve)	–	●	–	–
		Double valve	●	–	–	–
	PP-FRP	Double valve	–	–	●	●
		Single valve	–	–	–	▲
	PVC-U	Chamber valve (double valve)	–	▲	▲	–
		Double valve	▲	–	–	–
	PVDF	Chamber valve (double valve)	–	▲	–	–
Double valve		▲	–	–	–	
PVDF-FRP	Double valve	–	–	▲	⊗	
<b>Valve balls</b> 	Glass	Single valve	–	–	–	○
		Double valve	–	●	●	●
	1.4401	Single valve	–	–	–	○
		Double valve	–	○	○	○
	PTFE	Single valve	–	–	–	▲
		Double valve	–	▲	▲	▲
Al <sub>2</sub> O <sub>3</sub>	Double valve	●	–	–	–	
<b>Valve sealings</b> 	FPM	Single valve	–	–	–	○
		Double valve	●	●	●	●
	EPDM	Single valve	–	–	–	○
		Double valve	○	○	○	○
	FEP-covered	Single valve	–	–	–	▲
		Double valve	▲	▲	▲	▲
<b>Control cable</b> 	M12 cable box 3-pole, 5 meter für 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
	M12 cable box 5-pole, 5 meter for impulse and analogue signal		90022887	90022887	90022887	90022887

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

RS204.1

## Order information

### Basic design

#### RS204.1-0,4e

- Pump body PP
- Double valves PP
- Valve balls Al<sub>2</sub>O<sub>3</sub>
- Valve seals FPM
- working diaphragm PTFE
- automatic vent valve PP

#### RS204.1-1,2e up to RS204.1-2,4e

- Pump body PP
- Chamber valves PP
- Valve balls glass
- Valve seals FPM
- working diaphragm PTFE-faced
- automatic vent valve PP

#### RS204.1-6,0e up to RS204.1-14e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls glass
- Valve seals FPM
- working diaphragm PTFE-faced
- automatic vent valve PP

#### RS204.1-25e up to RS204.1-35e

- Pump body PP-FRP
- Double valves PP-FRP
- Valve balls glass
- Valve seals FPM
- Working diaphragm PTFE-faced
- automatic vent valve PP

#### Further options and accessories

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

Type	Basic design	x
RS204.1-0,4e	15002790	
RS204.1-1,2e	16005246	
RS204.1-2,4e	16005247	
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RS204.1-7,0e	16005249	
RS204.1-10e	16005250	
RS204.1-14e	16005251	
RS204.1-25e	16005252	
RS204.1-30e	16005253	
RS204.1-35e	16005254	

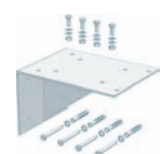
## Options/Accessories

### Special connection



Special connection (plug) für power supply

### Console

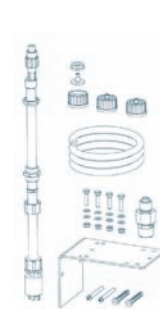


for wall mounting incl. fixing screws

1.4301

PP

### 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

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

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

Fittings for suction side of dosing pumps		RS204.1-0,4e up to RS204.1-2,4e		RS204.1-6,0e up to RS204.1-35e	
		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	PVC-U-transparent	769.1	3.74	769.1	3.74
Suction aid / Siphon Vessel	PVC-U-transparent	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	3.84	751.1	3.84
	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		RS204.1-0,4e up to RS204.1-2,4e		RS204.1-6,0e up to RS204.1-35e	
		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**.