

Piston diaphragm pumps

Flow capacity 30 l/h ... 850 l/h

Admiss. counterpressure up to 80 bar



R410.2-...KM



R410.2-...KM in survey

- Multi-layer diaphragm technology
- High dosing accuracy
- Safe to run dry
- High quality materials
- Leakage-free
- Low maintenance
- User-friendly
- Integrable into automatic processes
- Manual stroke length adjustment
- Robust metallic stroke mechanism housing

Infobox

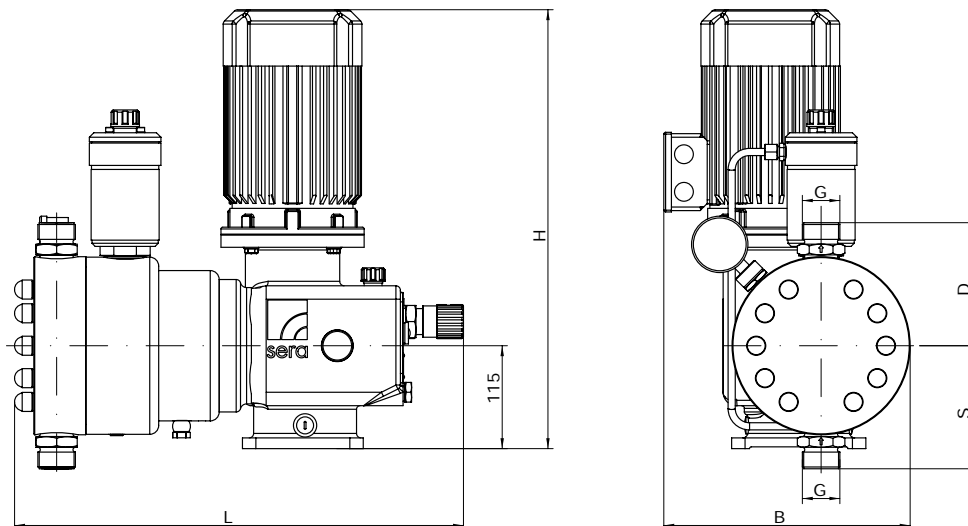
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Technical data

Type	Nominal capacity l/h		Nominal stroke frequency 1/min		Admiss. counter-pressure bar	Admiss. pressure at pump inlet bar	Max. suction height mWS	Inlet/ Outlet nominal width DN	Max. stroke length mm	rated motor power kW
	50 Hz	60 Hz	50 Hz	60 Hz						
R410.2-30KM	0 - 30	0 - 36	76	92	80	-0,3 / 0	3	8	13	0,75
R410.2-38KM	0 - 38	0 - 45	97	116	80	-0,3 / 0	3	8	13	0,75
R410.2-60KM	0 - 60	0 - 72	76	92	70	-0,3 / 0	3	8	13	0,75
R410.2-76KM	0 - 76	0 - 90	97	116	70	-0,3 / 0	3	8	13	1,5
R410.2-120KM	0 - 120	0 - 144	76	92	40	-0,3 / 0	3	15	13	1,5
R410.2-150KM	0 - 150	0 - 180	97	116	40	-0,3 / 0	3	15	13	1,5
R410.2-250KM	0 - 250	0 - 300	76	92	20	-0,3 / 0	3	15	13	1,5
R410.2-310KM	0 - 310	0 - 372	97	116	20	-0,3 / 0	3	15	13	1,5
R410.2-400KM	0 - 400	0 - 480	76	92	14	-0,3 / 0	3	15	13	1,5
R410.2-510KM	0 - 510	–	97	–	14	-0,3 / 0	3	15	13	1,5
R410.2-700KM	0 - 700	–	97	–	11	-0,3 / 0	3	20	13	1,5
R410.2-850KM	0 - 850	0 - 1020	76	92	8	-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)
R410.2-30KM	G 3/4	95	95	495	280	490	35
R410.2-38KM	G 3/4	95	95	495	280	490	35
R410.2-60KM	G 3/4	95	95	495	280	490	35
R410.2-76KM	G 3/4	95	95	495	280	490	35
R410.2-120KM	G 1 1/4	138	138	535	305	530	46
R410.2-150KM	G 1 1/4	138	138	535	305	530	46
R410.2-250KM	G 1 1/4	138	138	535	305	530	46
R410.2-310KM	G 1 1/4	138	138	535	305	530	46
R410.2-400KM	G 1 1/4	138	138	535	305	530	46
R410.2-510KM	G 1 1/4	138	138	535	305	530	46
R410.2-700KM	G 1 1/4	162	162	535	330	530	62
R410.2-850KM	G 1 1/4	162	162	580	330	530	62

Order information

Basic design

R410.2 -30KM up to R410.2-38KM

- Pump body PP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

R410.2-60KM up to R410.2-76KM

- Pump body PP
- Single valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

R410.2-120KM up to R410.2-850KM

- Pump body PP
- Single valves PP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer


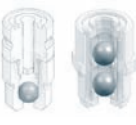
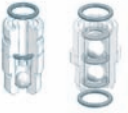
Motor:

- 220-240/380-420 V +/- 5% threephase, 50/60 Hz, IP 55, insul. cl. F

Further options and accessories

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

Type	Basic design	x
R410.2-30KM	16013549	
R410.2-38KM	16013550	
R410.2-60KM	16013551	
R410.2-76KM	16013552	
R410.2-120KM	16013553	
R410.2-150KM	16013554	
R410.2-250KM	16013555	
R410.2-310KM	16013556	
R410.2-400KM	16013557	
R410.2-510KM	16013558	
R410.2-700KM	16013559	
R410.2-850KM	16013589	

Options/Accessories			R410.2-30KM up to R410.2-38KM x	R410.2-60KM up to R410.2-76KM x	R410.2-120KM up to R410.2-510KM x	R410.2-700KM x	R410.2-850KM x
Pump body and valves 	PP	Double valve PP-FRP	●	–	–	–	–
		Single valve PP-FRP	–	●	●	●	●
	PVC-U	Single valve PVC-U	▲	▲	▲	▲	▲
		Double valve PVDF-FRP	▲	▲	–	–	–
	PVDF	Single valve PVDF-FRP	–	▲	▲	▲	▲
		Single valve 1.4571/1.4581	–	–	▲	▲	▲
1.4571	Double valve 1.4571/1.4581	▲	▲	–	–	–	
	Valve balls 	Glass	Single valve	●	●	●	●
Double valve			●	⊙	–	–	–
1.4401		Single valve PVC-U	○	▲	▲	▲	▲
		Single valve	○	▲	▲	▲	▲
PTFE		Double valve	○	○	–	–	–
		Single valve	▲	▲	▲	▲	▲
Double valve	▲	⊙	–	–	–		
	Valve seals 	FPM	Single valve	○	●	●	●
Double valve			●	⊙	–	–	–
EPDM		Single valve	○	○	○	○	○
		Double valve	○	⊙	–	–	–
FEP-covered	Single valve	▲	▲	▲	▲	▲	
	Double valve	▲	○	–	–	–	

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

R410.2-...KM

Order information

Basic design

R410.2-30KM up to R410.2-38KM

- Pump body PP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

R410.2-60KM up to R410.2-76KM

- Pump body PP
- Single valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

R410.2-120KM up to R410.2-850KM

- Pump body PP
- Single valves PP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

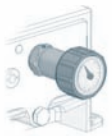
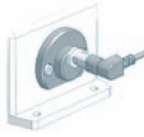

Motor:

- 220-240/380-420 V +/- 5% threephase, 50/60 Hz, IP 55, insul. cl. F

Further options and accessories

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

Type	Basic design	x
R410.2-30KM	16013549	
R410.2-38KM	16013550	
R410.2-60KM	16013551	
R410.2-76KM	16013552	
R410.2-120KM	16013553	
R410.2-150KM	16013554	
R410.2-250KM	16013555	
R410.2-310KM	16013556	
R410.2-400KM	16013557	
R410.2-510KM	16013558	
R410.2-700KM	16013559	
R410.2-850KM	16013589	

Options/Accessories		R410.2-30KM up to R410.2-60KM	R410.2-76KM up to R410.2-510KM	R410.2-700KM	R410.2-850KM
Stroke length adjustment 	with position indicator	▲	▲	▲	▲
	Inductive contact				
Stroke frequency monitoring 	10-60 V DC, three-wire, PNP	▲	▲	▲	▲
	Namur execution, II2G EExia IICT6 acc. to ATEX95	▲	▲	▲	▲
Drive motor 	Special voltage	▲	▲	▲	▲
	Enclosure IP 65	▲	▲	▲	▲
	Protective roof for the fan of the drive	▲	▲	▲	▲
	integrated posistor (3 pcs.) insul. cl. F	▲	▲	▲	▲
	VIK-design	▲	▲	▲	▲
	II2G EExe IIT4 (acc. to ATEX95)	▲	▲	▲	▲
	II2G EExde IICT4 (acc. to ATEX95)	▲	▲	▲	▲
	Single phase AC 230V with capacitor	▲	▲	▲	▲
	Driver for converter operation incl. posistor, 5-50/60Hz	▲	▲	▲	▲
Driver for converter operation II2G EExde IICT4, 5-50/60 Hz gem. ATEX 95, incl. integrated posistor	▲	▲	▲	▲	
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2

Order information

Basic design

R410.2 -30KM up to R410.2-38KM

- Pump body PP
- Double valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

R410.2-60KM up to R410.2-76KM

- Pump body PP
- Single valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

R410.2-120KM up to R410.2-850KM

- Pump body PP
- Single valves PP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

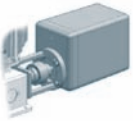
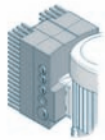

Motor:

- 220-240/380-420 V +/- 5% threephase, 50/60 Hz, IP 55, insul. cl. F

Further options and accessories

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

Type	Basic design	x
R410.2-30KM	16013549	
R410.2-38KM	16013550	
R410.2-60KM	16013551	
R410.2-76KM	16013552	
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R410.2-150KM	16013554	
R410.2-250KM	16013555	
R410.2-310KM	16013556	
R410.2-400KM	16013557	
R410.2-510KM	16013558	
R410.2-700KM	16013559	
R410.2-850KM	16013589	

Options/Accessories		R410.2-30KM up to R410.2-60KM	R410.2-76KM up to R410.2-510KM	R410.2- 700KM	R410.2- 850KM
Stroke length adjustment electrical 	Actuator N1S 230 V, 50/60 Hz, 128s/10 U, 15 Nm Potentiometer 1 kOhm incl. mounting plate for actuator	▲	▲	▲	▲
	Electronic positioning controller PMR3 input signal 0/4-20 mA incl. feedback signal 0/4-20 mA (only in N1S integrated)	▲	▲	▲	▲
	Actuator D30D-10-Ex (II2G EExde IICT4) acc. to ATEX 95, 400 V, 50 Hz, 10 U/min, incl. mounting-kit for actuator and base plate	▲	▲	▲	▲
Stroke frequency adjustment electrical 	Frequency converter series 8200 Motec mounted-on, input 4-20mA				
	Three-phase 0,75 kW 320-550 V, +/- 0%, 50/60 Hz	▲	–	–	–
	1,5 kW	–	▲	▲	▲
	Switch-potentiometer for manuell stroke frequency adjustment and to switch on the pump motor (External control of the frequency conver- ter with mounted switch potentiometer unit is not possible)	▲	▲	▲	▲
Service module hand terminal and keypad incl. 2,5m connection cable	▲	▲	▲	▲	
Stroke frequency adjustment electrical 	Frequency converter series 8200 Vector input 4-20mA, incl. Keypad (for integration into control cabinet)				
	Single-phase 0,75 kW 230 V, 50/60 Hz	90017524	–	–	–
	1,5 kW	–	90016865	90016865	90016865
	Three-phase 0,75 kW 320-550 V, +/- 0%, 50/60 Hz	90017527	–	–	–
1,5 kW	–	90017528	90017528	90017528	

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R410.2-...KM

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R410.2-60KM up to R410.2-76KM

- Pump body PP
- Single valves PP-FRP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

R410.2-120KM up to R410.2-850KM

- Pump body PP
- Single valves PP
- Valve balls Glass
- Valve seals FPM
- Multi-layer diaphragm PTFE
- Optical diaphragm-rupture indication with manometer

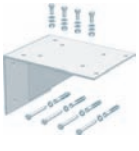
Motor:

- 220-240/380-420 V +/- 5% threephase, 50/60 Hz, IP 55, insul. cl. F

Further options and accessories

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

Type	Basic design	x
R410.2-30KM	16013549	
R410.2-38KM	16013550	
R410.2-60KM	16013551	
R410.2-76KM	16013552	
R410.2-120KM	16013553	
R410.2-150KM	16013554	
R410.2-250KM	16013555	
R410.2-310KM	16013556	
R410.2-400KM	16013557	
R410.2-510KM	16013558	
R410.2-700KM	16013559	
R410.2-850KM	16013589	

Options/Accessories		R410.2-30KM up to R410.2-60KM	x	R410.2-76KM up to R410.2-510KM	x	R410.2- 700KM	x	R410.2- 850KM	x
 <p>Console</p> <p>for wall mounting incl. fixing screws</p>	1.4301	▲		▲		▲		▲	
	PP	▲		▲		▲		▲	

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Fittings for suction side of dosing pumps		R410.2-30KM up to R410.2-60KM		R410.2-76KM up to R410.2-150KM		R410.2-250KM up to R410.2-510KM		R410.2-700KM		R410.2-850KM	
		Type	P.	Type	P.	Type	P.	Type	P.	Type	P.
Suction lance	with level switch	SL-02	3.36	∅		S-04	3.40	∅		∅	
	1-stage	S-03	3.38	∅		∅		SLP-151.1		∅	
	without level switch	S-01	3.46	S-01	3.46	S-01	3.46	S-01	3.46	S-01	3.46
Suction aid / Siphon Vessel	PVC-U-transparent	770.2	3.76	770.2	3.76	770.2	3.76	771.2	3.76	771.2	3.76
Calibration Pot	PVC-U	792.1	3.78	794.1	3.78	795.1	3.78	795.1	3.78	796.1	3.78
Foot valve	PVC-U	731	3.82	732.2	3.82	732.2	3.82	733.2	3.82	734.2	3.82
	PP / PVDF	∅		732	3.82	732	3.82	733	3.82	733	3.82
	PP-FRP / PVDF-FRP	781.1	3.86	783.1	3.86	783.1	3.86	783.1	3.86	∅	
	1.4571	731	3.82	732	3.82	732	3.82	733	3.82	733	3.82
Line strainer	PVC-U	751.1	3.88	∅		∅		∅		∅	
	PVC-U / PP / PVDF	752.1	3.88	752.1	3.88	752.1	3.88	753.1	3.88	753.1	3.88
	1.4408	752	3.90	752	3.90	752	3.90	753	3.90	753	3.90
Float valve	PVC-U	871	3.92	872	3.92	872	3.92	872	3.92	873	3.92
Pulsation damper without separating diaphragm	PVC-U / PP	702.1	3.14	702.1	3.14	702.1	3.14	702.1	3.14	703.1	3.14
	1.4571	∅		∅		∅		∅		∅	
Fittings for pressure side of dosing pumps		R410.2-30KM up to R410.2-60KM		R410.2-76KM up to R410.2-150KM		R410.2-250KM up to R410.2-510KM		R410.2-700KM		R410.2-850KM	
		Type	P.	Type	P.	Type	P.	Type	P.	Type	P.
Diaphragm-type relief valve		620.10	3.4	622.10	3.4	622.10	3.4	623.10	3.4	623.10	3.4
	for suspension	∅		622.S	3.6	622.S	3.6	623.S	3.6	623.S	3.6
Diaphragm-type pressure keeping valve		620.D	3.8	622.D	3.8	622.D	3.8	623.D	3.8	623.D	3.8
Pulsation damper without separating diaphragm	PVC-U / PP	702.1	3.14	702.1	3.14	702.1	3.14	702.1	3.14	703.1	3.14
	1.4571	∅		∅		∅		∅		∅	
Diaphragm-pulsation damper with Elastomer-diaphragm	PVC-U / PP / PVDF	713.1	3.18	713.1	3.18	713.1	3.18	713.1	3.18	713.1	3.18
	1.4571	713.1	3.20	713.1	3.20	713.1	3.20	713.1	3.20	713.1	3.20
		810.1-0,32/160	3.28	810.1-0,75/140	3.28	810.1-0,75/140	3.28	810.1-0,75/140	3.28	810.1-2,0/100	3.28
Diaphragm-pulsation damper with PTFE/PTFE-faced diaphragm	PVC-U / PP / PVDF	721.2	3.22	723.1	3.22	723.1	3.22	723.1	3.22	∅	
	1.4571	721.1	3.26	723.1	3.26	723.1	3.26	723.1	3.26	724.1	3.26
Check valve	PVC-U	661.2	3.50	∅		∅		∅		∅	
	PP-FRP / PVDF-FRP	661.2	3.50	∅		∅		∅		∅	
	1.4571	661.2	3.50	662.2	3.50	662.2	3.50	663.2	3.50	663.2	3.50
Dosing valve	PP-FRP / PVDF-FRP	691.1	3.54	693.1	3.54	693.1	3.54	693.1	3.54	693.1	3.54
	1.4571	691.1	3.54	692.1	3.54	692.1	3.54	693.1	3.54	693.1	3.54
Injection fitting	PVC-U / PP / PVDF	8061.1	3.60	8062.1	3.60	8062.1	3.60	8063.1	3.60	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**.