

MULTI-LAYER DIAPHRAGM PUMPS



OVERVIEW

- Multi-layer diaphragm technology
- High dosing accuracy
- Compact design
- Safe to run dry
- Leakage free
- Low-maintenance
- User-friendly
- Motor suitable for operation with frequency converter
- Continuous, manual stroke length adjustment
- Robust, metallic drive housing

TECHNICAL DATA

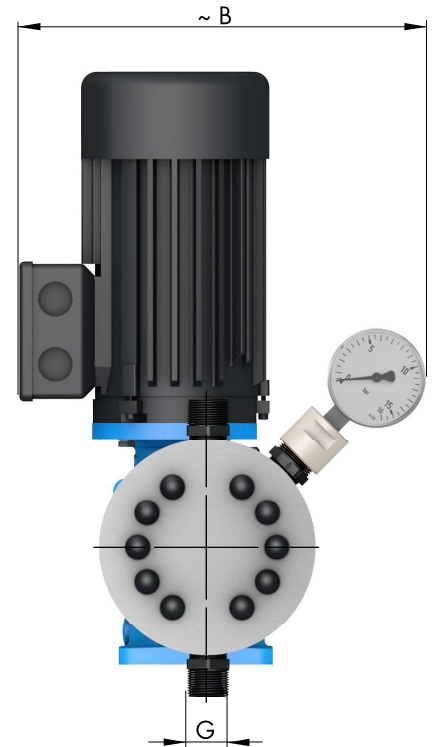
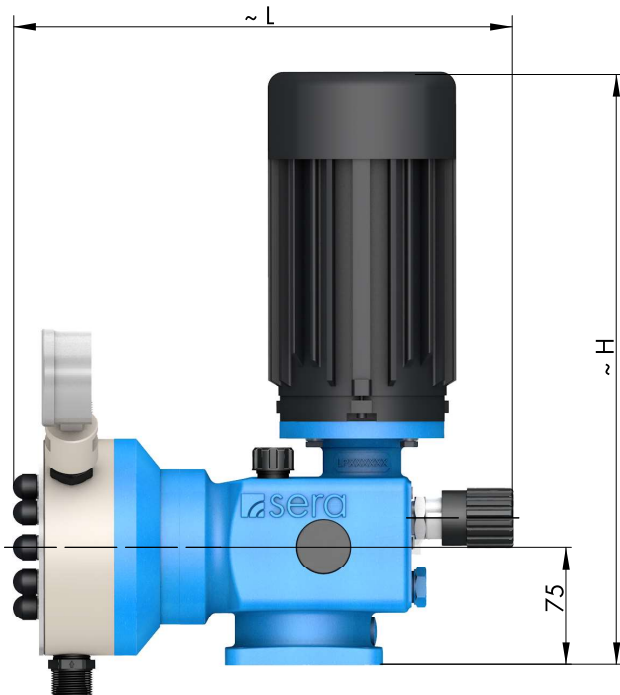
PUMP DATA			RF 409.2-... ML							
			11 ML	17 ML	30 ML	45 ML	72 ML	110 ML	150 ML	220 ML
Permissible pressure p_{2max} at the pump outlet	bar	plastic	10	10	10	10	10	10	4	4
		stainless steel	20	20	16	16	10	10	4	4
Nominal capacity QN at p_{2max}	l/h	50 Hz	0-11	0-17	0-30	0-45	0-72	0-110	0-150	0-220
		60 Hz	0-13	0-20	0-36	0-54	0-86	0-132	0-180	0-264
Quantity per stroke	ml/stroke (100%)		1,8	1,8	5	5	12	12	25	24
Max. suction height	mWC		3	3	3	3	3	3	3	3
Min./max. permissible pressure at the pump inlet	bar	$p_{1min/max}$	-0,3/0	-0,3/0	-0,3/0	-0,3/0	-0,3/0	-0,3/0	-0,3/0	-0,3/0
Recommended nominal diameter of the connecting pipes	mm	DN	10	10	10	10	15	15	15	15
Nominal stroke frequency	1/min	50 Hz	100	150	100	150	100	150	100	150
		60 Hz	120	180	120	180	120	180	120	180
Weight approx.	kg	plastic	14	14	15	15	16	16	18	18
		stainless steel	16	16	17	17	18	18	24	24

ELECTRICAL DATA		RF 409.2-... ML
Power consumption	kW	0,37
Voltage	V	230/400V 50Hz, 460V 60Hz
Frequency	Hz	50/60
Insulation class	ISO	F
Enclosure	IP	55

Flow capacity 11 l/h ... 220 l/h
 Admissible counterpressure up to 20 bar

RF 409.2-...ML

DIMENSIONS



	G		B	L	H		B	L	H
RF 409.2-11 ML, ...-17ML	G 3/4	PVC, PP, PVDF	275	323	380	1.4571	275	310	380
RF 409.2-30 ML, ...-45 ML	G 3/4		279	323	380		279	309	380
RF 409.2-72 ML, ...-110 ML	G 3/4		282	327	380		282	316	380
RF 409.2-150 ML, ...-220 ML	G1 1/4*		296	344	380		296	341	380

* PVC = G1

CHARACTERISTIC CURVES

COMING SOON

MULTI-LAYER DIAPHRAGM PUMPS

BASIC DESIGNS

PP

Pump body **PP**
 Valves **PP-FRP**
 Valve balls **PTFE**
 Multi-layer diaphragm **PTFE**

Type	Valve seals			
	EPDM Article-No.	Price (EUR)	FPM Article-No.	Price (EUR)
RF409.2-11ML	16023828	☉	16023255	☉
RF409.2-17ML	16023625	☉	16023332	☉
RF409.2-30ML	☉	☉		☉
RF409.2-45ML	16023626	☉	16020639	☉
RF409.2-72ML	☉	☉		☉
RF409.2-110ML	16023829	☉	16017559	☉
RF409.2-150ML	☉	☉		☉
RF409.2-220ML	16023085	☉	16015875	☉

PVDF

Pump body **PVDF**
 Valves **PVDF-FRP**
 Valve balls **PTFE**
 Multi-layer diaphragm **PTFE**

Type	Valve seals	
	FEP-covered Article-No.	Price (EUR)
RF409.2-11ML	16023830	☉
RF409.2-17ML	16023831	☉
RF409.2-30ML	☉	☉
RF409.2-45ML	16023401	☉
RF409.2-72ML	16020660	☉
RF409.2-110ML	16023402	☉
RF409.2-150ML	☉	☉
RF409.2-220ML	16023832	☉

PVC-U

Pump body **PVC-U**
 Valves **PVC-U**
 Valve balls **PTFE**
 Multi-layer diaphragm **PTFE**

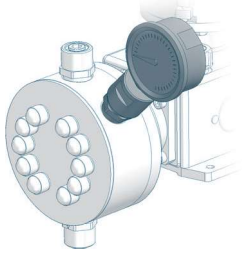
Type	Valve seals			
	EPDM Article-No.	Price (EUR)	FPM Article-No.	Price (EUR)
RF409.2-11ML	16022134	☉	16019499	☉
RF409.2-17ML	16023833	☉	16023837	☉
RF409.2-30ML	16021424	☉	☉	☉
RF409.2-45ML	16023834	☉	16020760	☉
RF409.2-72ML	☉	☉	☉	☉
RF409.2-110ML	16023835	☉	16023838	☉
RF409.2-150ML	☉	☉	16019518	☉
RF409.2-220ML	16023836	☉	16016932	☉

STAINLESS STEEL

Pump body **1.4571**
 Valves **1.4571/1.4581**
 Valve balls **1.4401**
 Multi-layer diaphragm **PTFE**

Type	Valve seals	
	FEP-covered Article-No.	Price (EUR)
RF409.2-11ML	16017227	☉
RF409.2-17ML	16023200	☉
RF409.2-30ML	☉	☉
RF409.2-45ML	16016292	☉
RF409.2-72ML	☉	☉
RF409.2-110ML	16023097	☉
RF409.2-150ML	☉	☉
RF409.2-220ML	16016934	☉

OPTIONS

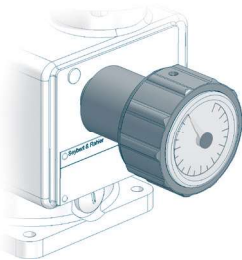


Diaphragm monitoring

Basic version: optical diaphragm rupture indication with manometer Surcharge (EUR)

Pressure switch IP65 ▲

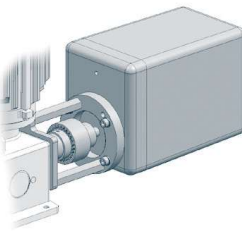
Pressure switch II2G EExde IIC T5 or T6 (acc. to ATEX95) ▲



Stroke length adjustment

Surcharge (EUR)

with position indicator ▲



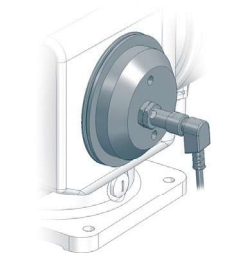
Stroke length adjustment with actuator

(version uL/CSA on request) Surcharge (EUR)

Actuator N C1-BA 230V ±10%, 50/60Hz, 128s/10 U, 1,5Nm
incl. mounting set ▲

Electronic positioning controller ESR-N (only integrated in N C1-BA) Input signal 0/4 - 20mA including
feedback signal 0/4 - 20mA ▲

Actuator D30D-10-Ex II2G EExde IIC T4 acc. to ATEX95 400V, 50Hz, 10 U/min
incl. mounting set and base plate ▲

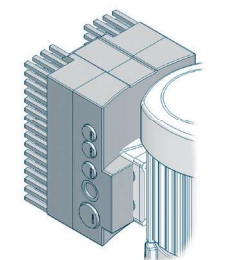


Stroke frequency monitoring

Inductive contact Surcharge (EUR)

10 - 60 V DC, three-wire, PNP ▲

NAMUR-design, II2G EExia IIC T6 (acc. to ATEX95) ▲



Stroke frequency adjustment, electrical

Frequency converter (Series INVEOR) mounted on drive motor
Input 4-20 mA Surcharge (EUR)

1-phase
200-230V ±10%, 50/60Hz 0,37 kW ▲

3-phase
400-480V ±10%, 50/60Hz 0,55 kW ▲

Frequency converter accessories	Article-No.	Price (EUR)
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Operating module (incl. control cable)	90039445	▲
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Communication cable for parameterization via PC	90042176	▲
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MULTI-LAYER DIAPHRAGM PUMPS

OPTIONS

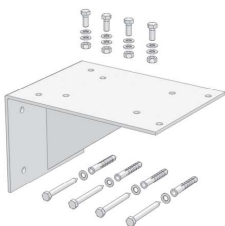


Drive motor

- Please note: If one or several options 'drive motor' are required to fix the add. price of the drive, the calculation will be as follows: 'add. price special drive' plus the single options of the drive.
- Surcharge and availability must be requested from **sera**.

Surcharge special drive		Surcharge (EUR)
(all types)		▲
Special voltage	(all types)	
Enclosure IP65	(all types)	▲
Protection roof	(all types)	▲
VIK design	(all types)	
Electrical acc. to uL/CSA	(all types)	
Single-phase alternating current motor, 230V/50Hz with capacitor		
(all types)		▲
II2G EExe II T4 (acc. to ATEX95)		
(all types)		▲
II2G EExde II C T4 (with PTC resistor, suitable for converter operation, 5-50Hz)		
(all types)		▲

ACCESSORIES



Bracket

for wall mounting (incl. mounting kit)	Article-No.	Price (EUR)
PP	90023848	▲
1.4301	90023875	▲



Connection pieces

Extensive range of connection / transition pieces and dosing hoses

Inserts and pipe sockets with union nuts, flange connections, hose screw connections, hose nozzles as well as dosing hoses and accessories.

to be found in **CHAPTER 4** of this catalog, from **page 442**

FITTINGS FOR THE SUCTION SIDE



Multi-function device

Properties

- Can be used as an priming aid and/or an calibration pot
- Compact design
- Flexible Connection
- Maintenance-free
- incl. glue joint (PVC-U) and welding joint (PP)

Basic version

- Housing: **PVC-U / PVC-transparent**
- Seals: **FPM or EPDM**
- max. operating pressure: **-0,5 ... +2 bar**

Type	DN	Connetion	Volume	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-30ML, ...-45ML, ...-72MB						
MFD 60	8	G $\frac{3}{4}$	0,5 Ltr.	EPDM	37606311	▲
MFD 60	8	G $\frac{3}{4}$	0,5 Ltr.	FPM	37605864	▲
RF409.2-110ML, ...-150ML, ...-220ML						
MFD 570	15	G1	2 Ltr.	EPDM	37606278	▲
MFD 570	15	G1	2 Ltr.	FPM	37605992	▲

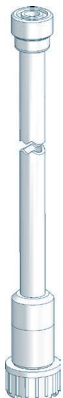
ACCESSORIES



Hand vacuum pump	PVC/FPM	37605682	▲
(incl. 1,5m PVC-Hose d=12/21)			

MULTI-LAYER DIAPHRAGM PUMPS

FITTINGS FOR THE SUCTION SIDE



Suction lance S-01 (without level switch)

Properties

- Compact, robust design
- Maintenance-free
- Easy handling
- High-quality materials
- individual special lengths up to max. 1.500mm possible

Basic version

- Suction lance: **PVC-U**
- Foot valve: **PVC-U**
- Seals: **EPDM** or **FPM**
- Valve ball: **PTFE**
- max. flow rate: **200 l/h**
- Standard length: **650mm, 1.000mm und 1.250mm**

Type	Length	Connection	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-30ML, ...-45ML, ...-72ML, ...-110ML, ...-150ML					
S-01	650 mm	G 3/4	EPDM	37606591	▲
S-01	1.000 mm	G 3/4	EPDM	37606592	▲
S-01	1.250 mm	G 3/4	EPDM	37606593	▲
S-01	max. 1.500 mm	G 3/4	EPDM	37600705	▲
S-01	650 mm	G 3/4	FPM	37606594	▲
S-01	1.000 mm	G 3/4	FPM	37606595	▲
S-01	1.250 mm	G 3/4	FPM	37606596	▲
S-01	max. 1.500 mm	G 3/4	FPM	37600817	▲



Suction lance SL-12.1 (with level switch, 2-stage with plug, 3-pole)

Properties

- Compact design
- Height-adjustable
- 2-stage level monitoring
- Flexible connection
- Easy handling
- High-quality materials
- Maintenance-free
- incl. hose connections 4/6, 6/8, 6/12

Basic version

- Suction lance: **PVC-U**
- Foot valve: **PVC-U**
- Valve ball: **PTFE**
- Hose (inboard): **PE**
- Level switch: **PP**
2-stage, normally closed (NC)
5m cable (from foot valve) with plug, M12, 3-pole
- max. flow rate: **14 l/h (4/6) ... 35 l/h (6/12)**

Type	Length	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-30ML				
SL-12.1	600 mm	PTFE	37606120	▲
SL-12.1	1.000 mm	PTFE	37606117	▲
SL-12.1	1.200 mm	PTFE	37606118	▲

FITTINGS FOR THE SUCTION SIDE



Suction lance SL-02 (with level switch, 1- or 2-stage with plug, 3-pole)

Properties

- Compact, robust design
- Safe
- Easy handling
- 1-stage level switch
- Flexible connection
- High-quality materials
- Maintenance-free

Basic version

- Suction lance: **PVC-U**
- Foot valve: **PVDF-GFK**
- Valve ball: **PTFE**
- Suction basket: **PP**
- Level switch: **PP**
1- or 2-stage, normally closed (NC)
5m cable (from foot valve) with plug, M12, 3-pole
- max. flow rate: **200 l/h**

Type	Level switch	Length	Connection	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-30ML, ...-45ML, ...-72ML, ...-110ML, ...-150ML						
SL-02	1-stage	630 mm	G 3/4	EPDM	37606372	▲
SL-02	1-stage	1.000 mm	G 3/4	EPDM	37606567	▲
SL-02	1-stage	1.200 mm	G 3/4	EPDM	37606568	▲
SL-02	1-stage	630 mm	G 3/4	FPM	37606566	▲
SL-02	1-stage	1.000 mm	G 3/4	FPM	37606078	▲
SL-02	1-stage	1.200 mm	G 3/4	FPM	37606569	▲
SL-02	2-stage	630 mm	G 3/4	EPDM	37606570	▲
SL-02	2-stage	1.000 mm	G 3/4	EPDM	37606572	▲
SL-02	2-stage	1.200 mm	G 3/4	EPDM	37606573	▲
SL-02	2-stage	630 mm	G 3/4	FPM	37606571	▲
SL-02	2-stage	1.000 mm	G 3/4	FPM	37606577	▲
SL-02	2-stage	1.200 mm	G 3/4	FPM	37606574	▲



ACCESSORIES

Drum connection adapter

Connection	Material	Seal	Article-No.	Price (EUR)
for external thread G=S65x5 DIN2781	PP	EPDM	90011763	▲
	PP	FPM	90011762	▲
for internal thread (set) G=2 fine thread steel drum DIN-ISO 228-1	PP	EPDM	90046044	▲
G=v. Leer/tri-sure BCS 56x4 EN12708	PP	FPM	90046043	▲
for external thread G= DIN51	PP	EPDM	90011767	▲
	PP	FPM	90011766	▲
for wall duct G=2 Wall thickness S=max. 6mm	PP/PVC	EPDM	90011773	▲
	PP/PVC	FPM	90011772	▲
other adapters			Ⓞ	Ⓞ

MULTI-LAYER DIAPHRAGM PUMPS

FITTINGS FOR THE SUCTION SIDE



Suction lance SLP-15x.1 (with level switch, 1- or 2-stage)

Properties

- Compact, robust design
- Easy handling
- 1- or 2-stage level monitoring
- Protective tube
- Maintenance free
- High quality materials
- Protection class IP65

Basic version

- Suction lance: **PVC-U**
- Foot valve: **PVC-U**
- Valve ball: **PTFE**
- Seals: **EPDM** or **FPM**
- Level switch: **PP**
1- or 2-stage, normally closed (NC)
cable gland: **M12x1,5**
- max. flow rate: **700 l/h**

Type	Level switch	Length	Material	Seals	Article-No.	Price (EUR)
RF409.2-220ML						
SLP-151.1	1-stage	750 mm	PVC-U	EPDM	37604108	▲
SLP-151.1	1-stage	750 mm	PVC-U	FPM	37604114	▲
SLP-151.1	1-stage	1.000 mm	PVC-U	EPDM	37604109	▲
SLP-151.1	1-stage	1.000 mm	PVC-U	FPM	37604115	▲
SLP-151.1	1-stage	1.250 mm	PVC-U	EPDM	37604110	▲
SLP-151.1	1-stage	1.250 mm	PVC-U	FPM	37604116	▲
SLP-152.1	2-stage	750 mm	PVC-U	EPDM	37604111	▲
SLP-152.1	2-stage	750 mm	PVC-U	FPM	37604117	▲
SLP-152.1	2-stage	1.000 mm	PVC-U	EPDM	37604112	▲
SLP-152.1	2-stage	1.000 mm	PVC-U	FPM	37604118	▲
SLP-152.1	2-stage	1.250 mm	PVC-U	EPDM	37604113	▲
SLP-152.1	2-stage	1.250 mm	PVC-U	FPM	37604119	▲

ACCESSORIES

Type	Designation	Article-No.	Price (EUR)
BCS 70x6 Di=50	Container screw connection for internal thread. Ventilation via tolerance of the inner diameter of the adapter or via separate ventilation of the container.	90028923	▲
G2 IBC	For IBC cover with G2 internal thread. Ventilation via adapter. Gas-tight design with „hose set“ possible.	90044282	▲
G2 universal	Bulkhead fitting with flat gasket (made of PVC-U). Ventilation via adapter. Gas-tight design with „hose set“ possible.	90044277	▲
Hose set	G3/4, d12, L=3m for gas tight container screwing for connection to On-site evacuation system	90044369	▲
Quiver	Quiver for storing/holding the suction lance (e.g. when changing containers)	90028919	▲
Control cable	Control cable for level input Cable socket M12x1, 3-pole, 5m length, loosely delivered	90031245	▲



FITTINGS FOR THE SUCTION SIDE



Foot valve (Plastic)

Properties

- Compact design
- Easy installation
- High-quality materials
- Maintenance-free

Basic version

- Ball: **PTFE**
- Sieve: **ETFE**
- Mesh size: **1mm**

Type	DN	Connection	Material	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-30ML, ...-45ML, ...-72ML, ...-110ML, ...-150ML						
781.1	8	G 3/4	PVDF/PVDF-GFK	FEP	30073008	▲
RF409.2-220ML						
783.1	20	G 1 1/4	PP/PP-GFK	EPDM	37600552	▲
783.1	20	G 1 1/4	PP/PP-GFK	FPM	37600553	▲
783.1	20	G 1 1/4	PVDF/PVDF-GFK	FEP	30073018	▲



Foot valve (plastic)

Properties

- Compact design
- Easy installation
- High-quality materials
- Maintenance-free

Basic version

- Ball: **PTFE**
- Sieve: **ETFE**
- Mesh size: **1mm**

Type	DN	Connection	Material	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-30ML, ...-45ML, ...-72ML, ...-110ML, ...-150ML						
731	8	G 3/4	PVC-U	EPDM	37601636	▲
RF409.2-72ML, ...-110ML, ...-150ML, ...-220ML						
⓪			PVC-U		⓪	⓪



Foot valve (Stainless steel)

Properties

- Compact design
- Easy installation
- High-quality materials
- Maintenance-free

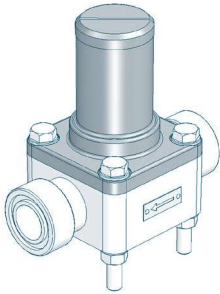
Basic version

- Ball: **1.4401**
- Sieve: **ETFE**
- Mesh size: **1mm**

Type	DN	Connection	Material	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-30ML, ...-45ML						
731	8	G 3/4	1.4571	FEP	37601149	▲
RF409.2-72ML, ...-110ML, ...-150ML, ...-220ML						
732	15	G 1	1.4571	FEP	37603325	▲

MULTI-LAYER DIAPHRAGM PUMPS

FITTINGS FOR THE PRESSURE SIDE



Diaphragm relief valve

for overpressure protection

Properties

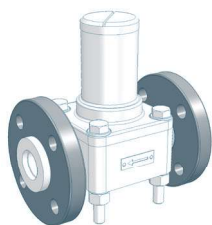
- Compact design
- Easy installation
- Maintenance-free
- High-quality materials

Basic version

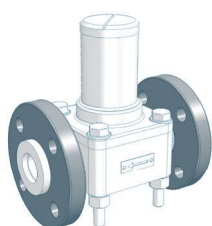
- Valve body: **PVC-U, 1.4581, PP or PVDF**
- Diaphragm: **PTFE-faced**

Type	Nominal size	Connection	Valve body	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML						
620.10	DN8	G 3/4	PVC-U	FPM	37603632	▲
620.10	DN8	G 3/4	PVC-U	EPDM	36200101	▲
620.10	DN8	G 3/4	PP	FPM	37603630	▲
620.10	DN8	G 3/4	PP	EPDM	37603629	▲
620.10	DN8	G 3/4	PVDF	FEP	37601792	▲
620.10	DN8	G 3/4	1.4581	FEP	37600670	▲
RF409.2-72ML, ...-220ML						
622.10	DN15	G 1	PVC-U	FPM	37604006	▲
622.10	DN15	G 1	PVC-U	EPDM	37603635	▲
622.10	DN15	G 1	PP	FPM	Ⓞ	Ⓞ
622.10	DN15	G 1	PP	EPDM	Ⓞ	Ⓞ
622.10	DN15	G 1	PP-GFK	FPM	37603634	▲
622.10	DN15	G 1	PP-GFK	EPDM	37600450	▲
622.10	DN15	G 1	PVDF	FEP	37600717	▲
622.10	DN15	G 1	PVDF-GFK	FEP	37601819	▲
622.10	DN15	G 1	1.4581	FEP	37600695	▲

OPTIONS

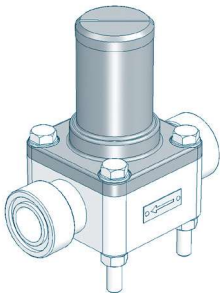


Type	Design	Loose flange	Surcharge [EUR]
620.10	PVC	Loose flange made of PVC-U	Ⓞ
620.10	PP-FRP/PVDF-FRP	Loose flange made of PP with steel inlay	×
620.10	PP	Loose flange made of PP with steel inlay	▲
620.10	PVDF	Loose flange made of PP with steel inlay	▲



Type	Design	Loose flange	Surcharge [EUR]
622.10	PVC	Loose flange made of PVC-U	▲
622.10	PP-FRP/PVDF-FRP	Loose flange made of PP with steel inlay	Ⓞ
622.10	PP	Loose flange made of PP with steel inlay	▲
622.10	PVDF	Loose flange made of PP with steel inlay	▲

FITTINGS FOR THE PRESSURE SIDE



Diaphragm pressure keeping valve

to prevent over-conveyance

Properties

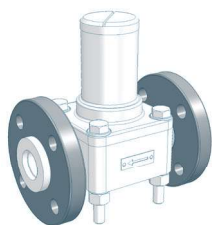
- Compact design
- Easy installation
- Maintenance-free
- High-quality materials

Basic version

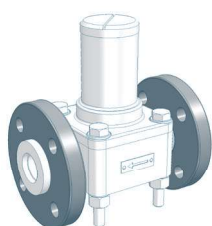
- Valve body: **PVC-U, 1.4581, PP** or **PVDF**
- Diaphragm: **PTFE-faced**

Type	Nominal size	Connection	Valve body	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML						
620.D	DN8	G 3/4	PVC-U	FPM	37600048	▲
620.D	DN8	G 3/4	PVC-U	EPDM	36201101	▲
620.D	DN8	G 3/4	PP	FPM	37600055	▲
620.D	DN8	G 3/4	PP	EPDM	36201105	▲
620.D	DN8	G 3/4	PVDF	FEP	37601827	▲
620.D	DN8	G 3/4	1.4581	FEP	37600525	▲
RF409.2-72ML, ...-220ML						
622.D	DN15	G 1	PVC-U	FPM	37600049	▲
622.D	DN15	G 1	PVC-U	EPDM	36221101	▲
622.D	DN15	G 1	PP	FPM	Ⓞ	Ⓞ
622.D	DN15	G 1	PP	EPDM	Ⓞ	Ⓞ
622.D	DN15	G 1	PP-GFK	FPM	37600056	▲
622.D	DN15	G 1	PP-GFK	EPDM	36221105	▲
622.D	DN15	G 1	PVDF	FEP	37602881	▲
622.D	DN15	G 1	PVDF-GFK	FEP	37601449	▲
622.D	DN15	G 1	1.4581	FEP	37600538	▲

OPTIONS



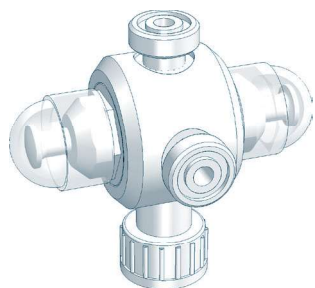
Type	Design	Loose flange	Surcharge [EUR]
620.D	PVC	Loose flange made of PVC-U	Ⓞ
620.D	PP-FRP/PVDF-FRP	Loose flange made of PP with steel inlay	×
620.D	PP	Loose flange made of PP with steel inlay	▲
620.D	PVDF	Loose flange made of PP with steel inlay	▲



Type	Design	Loose flange	Surcharge [EUR]
622.D	PVC	Loose flange made of PVC-U	▲
622.D	PP-FRP/PVDF-FRP	Loose flange made of PP with steel inlay	Ⓞ
622.D	PP	Loose flange made of PP with steel inlay	▲
622.D	PVDF	Loose flange made of PP with steel inlay	▲

MULTI-LAYER DIAPHRAGM PUMPS

FITTINGS FOR THE PRESSURE SIDE



Multi function valve

Properties

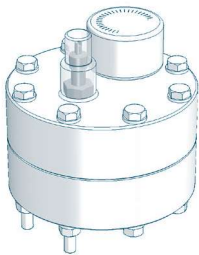
- Maximum operating pressure 10 bar
- Compact design
- Easy installation
- Maintenance-free
- Venting
- Overpressure protection for dosing pumps
- Prevention of over conveyance

Basic version

- Diaphragms: **PTFE-faced**
- Connection: **G^{3/4}**
- **Relief valve side**
Opening pressure: **2 up to 10 bar** (adjustable)
- **Pressure keeping valve side**
Holding pressure: **1,0 - 1,5 bar**

Type	Valve body	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML				
MFV 050	PVC-U	EPDM	37600973	▲
MFV 050	PVC-U	FPM	37600974	▲
MFV 050	PVC-U	FEP	37600975	▲
MFV 050	PP	EPDM	37600982	▲
MFV 050	PP	FPM	37600983	▲
MFV 050	PP	FEP	37600984	▲
RF409.2-72ML, ...-220ML				
Ⓢ			Ⓢ	Ⓢ

FITTINGS FOR THE PRESSURE SIDE



Diaphragm pulsation damper (Plastic, PTFE-diaphragm, max. 10 bar)

Properties

- Any mounting position
- Easy installation
- Long service life
- Easy handling
- High-quality materials
- Low maintenance

Type	Connection	max. Pressure	Material	Diaphragm	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML						
720.1	G ½	10 bar	PVC-U	PTFE	37601848	▲
720.1	G ½	10 bar	PP	PTFE	37601856	▲
720.1	G ½	10 bar	PVDF	PTFE	37601857	▲

ACCESSORIES



Connection adapter

Thread connection	G3/4 male	PVC-U	EPDM	90021733	▲
Connction to pulsation damper	G1/2 male	PVC-U	FPM	90025079	▲
		PP	EPDM	90038083	▲
		PP	FPM	90038082	▲
		PVDF	FEP	Ⓢ	Ⓢ



Retaining clamp

(2 Piece each pulsation damper)	PP	d 16	90010649	▲
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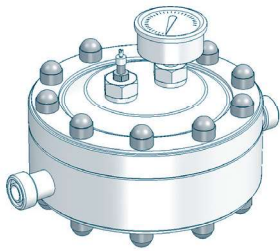


Filling pump FLP 2 for filling device

with manometer, max. 7 bar incl. 2m hose and coupling for air valve	90009396	▲
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MULTI-LAYER DIAPHRAGM PUMPS

FITTINGS FOR THE PRESSURE SIDE



Diaphragm pulsation damper (Plastic, PTFE(-faced) diaphragm, max. 10 bar)

Properties

- Any mounting position
- Easy installation
- Long service life
- Easy handling
- High-quality materials
- Low maintenance
- Diaphragm: PTFE-faced

Type	Connection	max. Pressure	Material	Seals	Article-No.	Price (EUR)
RF409.2-45ML						
721.2	G 3/4	10 bar	PVC-U	EPDM	37602014	▲
721.2	G 3/4	10 bar	PVC-U	FPM	37602013	▲
721.2	G 3/4	10 bar	PP	EPDM	37603419	▲
721.2	G 3/4	10 bar	PP	FPM	37602017	▲
721.2	G 3/4	10 bar	PVDF	FEP	37604046	▲
RF409.2-72ML, ...-220ML						
722.1	G 1	10 bar	PVC-U	EPDM	37600647	▲
722.1	G 1	10 bar	PVC-U	FPM	30100008	▲
722.1	G 1	10 bar	PP	EPDM	37600676	▲
722.1	G 1	10 bar	PP	FPM	30100009	▲
722.1	G 1	10 bar	PVDF	FEP	37601852	▲

ACCESSORIES



Filling pump FLP 2 for filling device

with manometer, max. 7 bar incl. 2m hose and coupling for air valve 90009396 ▲



Retaining clamp

(2 Piece each pulsation damper) PP d 25 90010651 ▲

FITTINGS FOR THE PRESSURE SIDE



Diaphragm pulsation damper (Stainless steel, max. 10 bar)

Properties

- Any mounting position
- Easy installation
- Long service life
- Easy handling
- High-quality materials
- Low maintenance

Type	Connection	max.Pressure	Material	Diaphragm	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML						
810.1-0,16/10	G ½	10 bar	1.4571	Butyl	37603720	▲
810.1-0,16/10	G ½	10 bar	1.4571	FPM	37603724	▲
810.1-0,16/10	G ½	10 bar	1.4571	PTFE	×	×
RF409.2-72ML, ...-110ML						
810.1-0,32/10	G ½	10 bar	1.4571	Butyl	37603721	▲
810.1-0,32/10	G ½	10 bar	1.4571	FPM	37603725	▲
810.1-0,32/10	G ½	10 bar	1.4571	PTFE	×	×
RF409.2-220ML						
810.1-0,75/10	G ½	10 bar	1.4571	Butyl	37603722	▲
810.1-0,75/10	G ½	10 bar	1.4571	FPM	37603726	▲
810.1-0,75/10	G ½	10 bar	1.4571	PTFE	37606307	▲

ACCESSORIES



Filling- and pressure measuring device

(mounted on pulsation damper)

Design: Plastic	Manometer: 0-16 bar Measuring system: copper alloyed	●
Design: Stainless steel	Manometer: 0-16 bar, glycerine-damped Measuring system: copper alloyed Housing: 1.4301	▲



Filling pump FLP 2 for filling device

with manometer, max. 7 bar incl. 2m hose and coupling for air valve	90009396	▲
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MULTI-LAYER DIAPHRAGM PUMPS

FITTINGS FOR THE PRESSURE SIDE



Diaphragm pulsation damper (Stainless steel, max. 100-180 bar)

Properties

- Any mounting position
- Easy installation
- Long service life
- Easy handling
- High-quality materials
- Low maintenance

Type	Connection	max.Pressure	Material	Diaphragm	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML						
810.1-0,16/180	G ½	180 bar	1.4571	Butyl	90008811	▲
810.1-0,16/180	G ½	180 bar	1.4571	FPM	90009498	▲
810.1-0,16/180	G ½	180 bar	1.4571	PTFE	×	×
RF409.2-72ML, ...-110ML						
810.1-0,32/160	G ½	160 bar	1.4571	Butyl	90010409	▲
810.1-0,32/160	G ½	160 bar	1.4571	FPM	90010983	▲
810.1-0,32/160	G ½	160 bar	1.4571	PTFE	×	×
RF409.2-220ML						
810.1-0,75/140	G ½	140 bar	1.4571	Butyl	37600313	▲
810.1-0,75/140	G ½	140 bar	1.4571	FPM	37600148	▲
810.1-0,75/140	G ½	140 bar	1.4571	PTFE	37606302	▲

ACCESSORIES



Filling- and pressure measuring device

Design: removeable
 Manometer d63, plastic housing, measuring system: copper alloyed
 incl. 2,5m filling hose, connection M14x1,5

0 - 25 bar	37601674	▲
0 - 100 bar	37601673	▲
0 - 250 bar	30066005	▲

FITTINGS FOR THE PRESSURE SIDE



Dosing valve (Plastic)

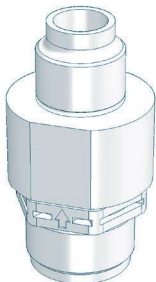
Properties

- Compact design
- Any mounting position
- Maintenance-free
- High-quality materials

Basic version

- integrated injection lance
- Valve ball: **PTFE**
- Seals: **EPDM** or **FPM**
- Spring: **Hastelloy C4**

Type	DN	Inlet	Outlet	Material	Seal	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML, ...-72ML, ...-110ML							
691.2	8	G 3/4	R 1/2	PVC-U	EPDM	37606318	▲
691.2	8	G 3/4	R 1/2	PVC-U	FPM	37605769	▲
691.2	8	G 3/4	R 1/2	PP-GFK	EPDM	37605768	▲
691.2	8	G 3/4	R 1/2	PP-GFK	FPM	37606317	▲
RF409.2-220ML							
×						×	×



Dosing valve (Plastic)

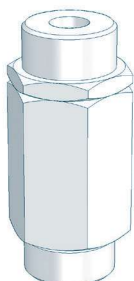
Properties

- Compact design
- Any mounting position
- Maintenance-free
- High-quality materials

Basic version

- Valve ball: **PTFE**
- Spring: **Hastelloy C4**

Type	DN	Inlet	Outlet	Material	Seal	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML, ...-72ML, ...-110ML							
691.1	8	G 3/4	R 1/2	PVDF-GFK	FEP	30072015	▲
RF409.2-220ML							
693.1	20	G 1 1/4	R 1 1/4	PP-GFK	EPDM	37604661	▲
693.1	20	G 1 1/4	R 1 1/4	PP-GFK	FPM	37603317	▲
693.1	20	G 1 1/4	R 1 1/4	PVDF-GFK	FEP	30072027	▲



Dosing valve (Stainless steel)

Properties

- Compact design
- Any mounting position
- Maintenance-free
- High-quality materials

Basic version

- Valve ball: **1.4401**
- Seals: **FEP-covered**
- Spring: **Hastelloy C4**

Type	DN	Inlet	Outlet	Material	Seal	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML, ...-72ML, ...-110ML							
691.1	8	G 3/4	R 1/2	1.4571	FEP	37600493	▲
RF409.2-220ML							
692.1	15	G 1	R 1	1.4571	FEP	37600669	52▲00

MULTI-LAYER DIAPHRAGM PUMPS

FITTINGS FOR THE PRESSURE SIDE



Injection fitting

Properties

- incl. injection lance for better mixing
- Easy installation
- Any mounting position
- Maintenance-free
- High-quality materials

Basic version

- Cone-type check valve (spring loaded)
- Shut-off ball valve
- Injection lance (L=150mm)
- max. operating pressure: 10 bar

Type	DN	Inlet	Outlet	Material	Seals	Article-No.	Price (EUR)
RF409.2-11ML, ...-17ML, ...-45ML, ...-72ML, ...-110ML							
8061.1	10	G ¾	R ½	PVC-U	EPDM	37602105	▲
8061.1	10	G ¾	R ½	PVC-U	FPM	37602106	▲
8061.1	10	G ¾	R ½	PP	EPDM	37602107	▲
8061.1	10	G ¾	R ½	PP	FPM	37602108	▲
8061.1	10	G ¾	R ½	PVDF	FPM	37602109	▲
RF409.2-220ML							
8062.1	15	G 1	R ¾	PVC-U	EPDM	37602110	▲
8062.1	15	G 1	R ¾	PVC-U	FPM	37602111	▲
8062.1	15	G 1	R ¾	PP	EPDM	37602112	▲
8062.1	15	G 1	R ¾	PP	FPM	37602113	▲
8062.1	15	G 1	R ¾	PVDF	FPM	37602114	▲