

DIAPHRAGM PUMPS



OVERVIEW

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



TECHNICAL DATA

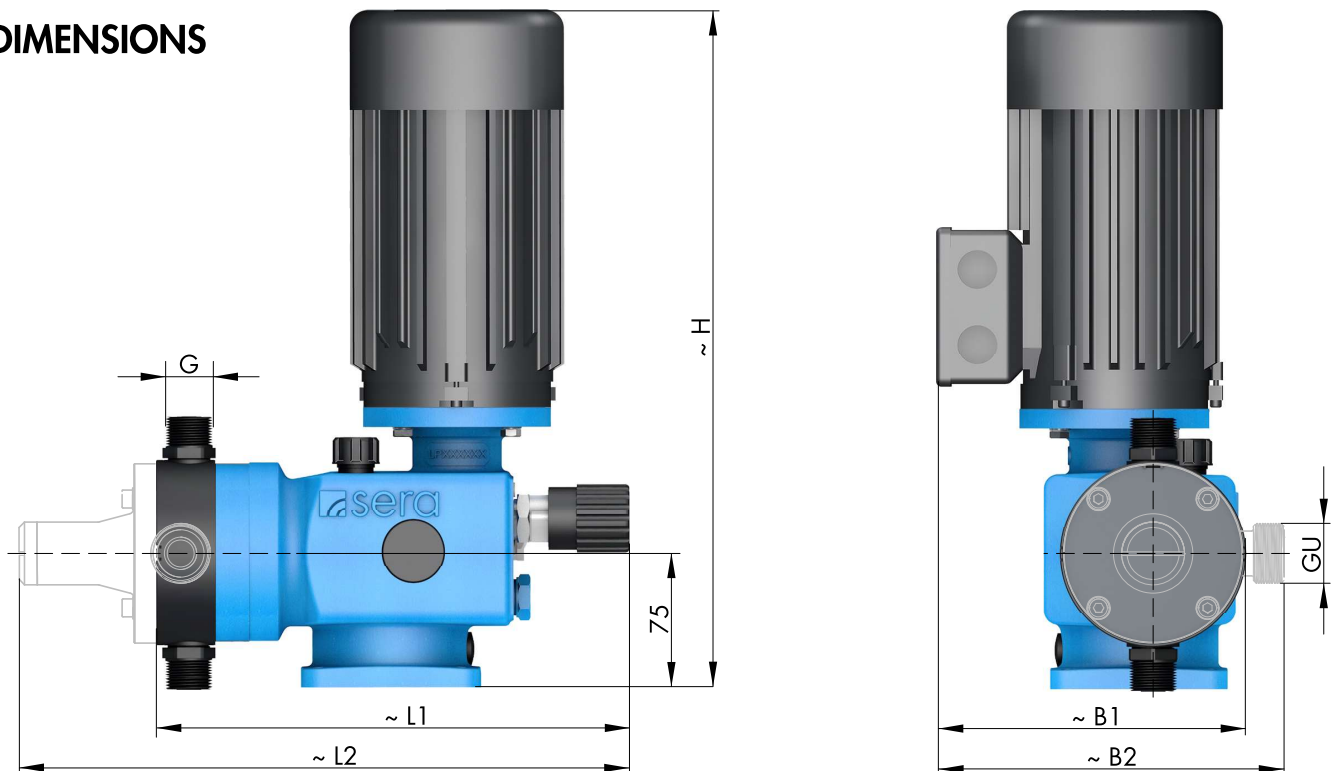
PUMP DATA			RF 409.2-...							
(* 8mWS = performance losses of nominal capacity QN of 20-25%)			50e	75e	90e	115e	140e	180e	250e	350e
Permissible pressure p_{2max} at the pump outlet	bar		10	10	8	4	8	4	3	3
Nominal capacity QN at p_{2max}	l/h	50 Hz	0-50	0-75	0-90	0-115	0-140	0-180	0-250	0-350
		60 Hz	0-60	0-90	0-108	0-138	0-168	0-216	0-300	1
Quantity per stroke	ml/stroke (100%)		8,3	8,3	15,0	19,2	15,6	20,0	41,7	38,9
Max. suction height	mWC		3 (8 *)						3	
Min./max. permissible pressure at the pump inlet	bar	$p_{1min/max}$	-0,3/0 (-0,8/0)						-0,3/0	
Recomm. nominal diameter DN of the connecting pipes	mm		10	15	15	15	15	15	15	15
Nominal stroke frequency	1/min	50 Hz	100	150	100	100	150	150	100	150
		60 Hz	120	180	120	120	180	180	120	–
Weight approx.	kg	plastic	9	9	11	10	11	10	13	13
		stainless steel	10	10	13	13	13	13	21	21

ELECTRICAL DATA		RF409.2-50e ... RF409.2-350e
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 50 l/h ... 350 l/h
Admissible counterpressure up to 10 bar

RF 409.2

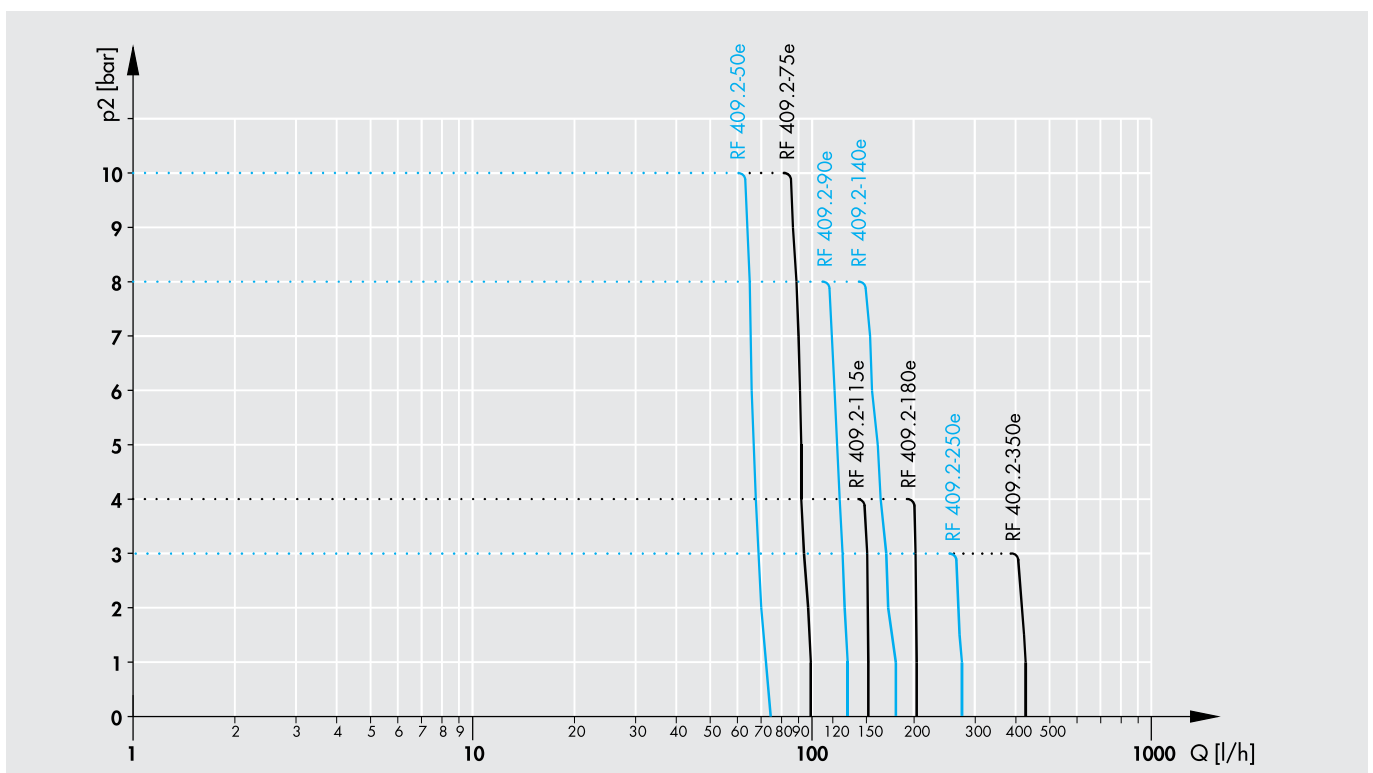
DIMENSIONS



	G	GU		B1	B2	L1	L2	H		B1	B2	L1	L2	H
RF 409.2 -50e, ...-75e	G 3/4	G 3/4	▶	185	185	295	360	370	▶	185	185	295	360	370
RF 409.2 -90e, ... -140e	G 3/4	G1		185	210	300	370	370		185	210	300	370	370
RF 409.2 -115e, ... -180e	G 3/4	G1		185	210	300	370	370		185	210	300	370	370
RF 409.2 -250e, ...-350e	G1 1/4*	G1 1/4*		220	245	355	435	370		220	245	355	435	370

* PVC = G1

CHARACTERISTIC CURVES



DIAPHRAGM PUMPS

BASIC DESIGNS

PP-FRP

Pump body **PP-FRP** (** PP)
 Valves **PP-FRP**
 Valve balls **PTFE**
 Diaphragm **PTFE-faced** (* EPDM)



Type	Valve seals			
	EPDM Article-No.	Price (EUR)	FPM Article-No.	Price (EUR)
RF409.2-50e	16007308	☉	16007034	☉
RF409.2-75e	16007307	☉	16014197	☉
RF409.2-90e	16011246	☉	16009081	☉
RF409.2-115e *	16015359	☉	16023330	☉
RF409.2-140e	16010443	☉	16009367	☉
RF409.2-180e *	16019736	☉	16023331	☉
RF409.2-250e **	16008444	☉	16018774	☉
RF409.2-350e **	16020565	☉	16022763	☉

PVDF-FRP

Pump body **PVDF-FRP** (**PVDF)
 Valves **PVDF-FRP**
 Valve balls **PTFE**
 Diaphragm **PTFE-faced** (* EPDM)

Type	Valve seals	
	FEP-covered Article-No.	Price (EUR)
RF409.2-50e	16023822	☉
RF409.2-75e	16013406	☉
RF409.2-90e	16023823	☉
RF409.2-115e *	16023824	☉
RF409.2-140e	16016385	☉
RF409.2-180e *	16023825	☉
RF409.2-250e **	16015244	☉
RF409.2-350e **	16023826	☉

PVC-U

Pump body **PVC-U**
 Valves **PVC-U**
 Valve balls **PTFE**
 Diaphragm **PTFE-faced** (* EPDM)



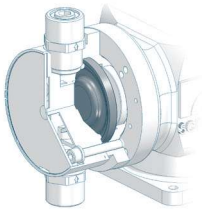
Type	Valve seals			
	EPDM Article-No.	Price (EUR)	FPM Article-No.	Price (EUR)
RF409.2-50e	16010672	☉	16023396	☉
RF409.2-75e	16017474	☉	16006655	☉
RF409.2-90e	16013887	☉	16014980	☉
RF409.2-115e *	16015017	☉	16023429	☉
RF409.2-140e	16014772	☉	16006656	☉
RF409.2-180e *	16014149	☉	16019177	☉
RF409.2-250e	16021233	☉	16006122	☉
RF409.2-350e	16021456	☉	16020207	☉

STAINLESS STEEL

Pump body **1.4571**
 Valves **1.4571**
 Valve balls **1.4401**
 Diaphragm **PTFE-faced** (* EPDM)

Type	Valve seals	
	FEP-covered Article-No.	Price (EUR)
RF409.2-50e	16010202	☉
RF409.2-75e	16012323	☉
RF409.2-90e	16013994	☉
RF409.2-115e *	16023827	☉
RF409.2-140e	16011171	☉
RF409.2-180e *	16006885	☉
RF409.2-250e	16021036	☉
RF409.2-350e	16022917	☉

OPTIONS



Working diaphragm

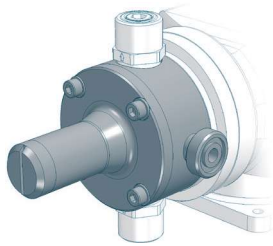
Material	Surcharge (EUR)
FPM	only with ...-115e and ...-180e ▲



Diaphragm monitoring



Diaphragm rupture electrode, conductive, mounted on pump
(Evaluation via electrode relay, ER-104 (see accessories))

MBE-02	incl. connection cable	(length 2m)	Surcharge (EUR)
			▲
	Connection cable for EEXia-circuit	(blue, length 5m)	▲



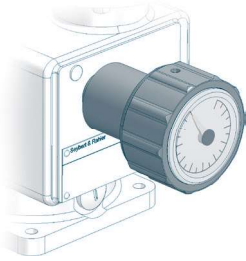
Integrated relief valve

Diaphragm: **PTFE-faced** Connecting seals: **EPDM or FPM** Surcharge (EUR)

PP 	RF 409.2-50e, ...-75e	▲
	RF 409.2-90e, ...-115e, ...-140e, ...-180e	▲
	RF 409.2-250e, ...-350e	▲
PVDF	RF 409.2-50e, ...-75e	⊙
	RF 409.2-90e, ...-115e, ...-140e, ...-180e	⊙
	RF 409.2-250e, ...-350e	⊙
PVC-U 	RF 409.2-50e, ...-75e	▲
	RF 409.2-90e, ...-115e, ...-140e, ...-180e	▲
	RF 409.2-250e, ...-350e	▲
1.4571	RF 409.2-50e, ...-75e	▲
	RF 409.2-90e, ...-115e, ...-140e, ...-180e	▲
	RF 409.2-250e, ...-350e	▲
Connecting seals FEP-covered		
for connection G 3/4	RF 409.2-7,0e, up to and including ...-180e	▲
for connection G1 1/4	RF 409.2-250e, ...-350e	▲

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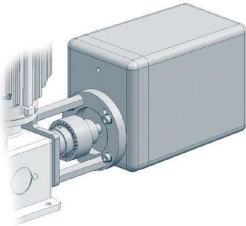
OPTIONS



Stroke length adjustment

Surcharge (EUR)

with position indicator ▲

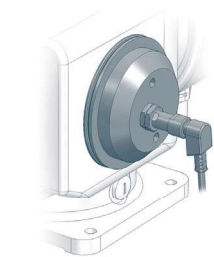


Stroke length adjustment with actuator

(version uL/CSA on request)

Surcharge (EUR)

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

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)
RF 409.2-50e, ...-75e, ...-90e, ...-115e, ..140e ...-180e, ..250e, ..350e		▲
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

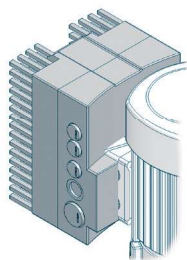
RF 409.2-50e, ...-75e, ...-90e, ...-115e, ..140e ...-180e, ..250e, ..350e	▲
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II 2 G EExe II T4 (acc. to ATEX95)

RF 409.2-50e, ...-75e, ...-90e, ...-115e, ..140e ...-180e, ..250e, ..350e	▲
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II2G EExde II C T4 (suitable for converter operation, 5-50Hz)

RF 409.2-50e, ...-75e, ...-90e, ...-115e, ..140e ...-180e, ..250e, ..350e	▲
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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)
Operating module (incl. control cable)	90039445	▲
Communication cable for parameterization via PC	90042176	▲

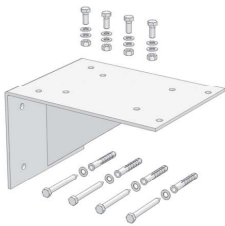
DIAPHRAGM PUMPS

ACCESSORIES



Diaphragm monitoring (evaluation)

Electrode relay for mounting in control cabinet (for evaluating the diaphragm rupture electrode MBE-02 (see options))		Article-No.	Price (EUR)
ER-104	auxiliary power 230 V AC	90022944	▲
ER-104	auxiliary power 24 V DC	90022945	▲
ER-142	auxiliary power 230 V AC II(1)G [Exia] II C	90200363	▲



Bracket

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

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)
RF409.2-50e						
MFD 60	8	G $\frac{3}{4}$	0,5 Ltr.	EPDM	37606311	▲
MFD 60	8	G $\frac{3}{4}$	0,5 Ltr.	FPM	37605864	▲
RF409.2-75e, ...-90e, ...-115e, ...-140e, ...-180e, ...-250e, ...-350e						
MFD 570	15	G1	2 Ltr.	EPDM	37606278	▲
MFD 570	15	G1	2 Ltr.	FPM	37605992	▲

ACCESSORIES

Hand vacuum pump	PVC/FPM (incl. 1,5m PVC-Hose d=12/21)	37605682	▲
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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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e					
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	▲

DIAPHRAGM PUMPS

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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e						
SL-02	1-stage	630 mm	G ¾	EPDM	37606372	▲
SL-02	1-stage	1.000 mm	G ¾	EPDM	37606567	▲
SL-02	1-stage	1.200 mm	G ¾	EPDM	37606568	▲
SL-02	1-stage	630 mm	G ¾	FPM	37606566	▲
SL-02	1-stage	1.000 mm	G ¾	FPM	37606078	▲
SL-02	1-stage	1.200 mm	G ¾	FPM	37606569	▲
SL-02	2-stage	630 mm	G ¾	EPDM	37606570	▲
SL-02	2-stage	1.000 mm	G ¾	EPDM	37606572	▲
SL-02	2-stage	1.200 mm	G ¾	EPDM	37606573	▲
SL-02	2-stage	630 mm	G ¾	FPM	37606571	▲
SL-02	2-stage	1.000 mm	G ¾	FPM	37606577	▲
SL-02	2-stage	1.200 mm	G ¾	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	▲
	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			Ⓢ	Ⓢ

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)
RF409.2-250e, ...-350e						
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	▲



DIAPHRAGM PUMPS

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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e						
781.1	8	G 3/4	PVDF/PVDF-GFK	FEP	30073008	▲
RF409.2-250e, ...-350e						
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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e						
731	8	G 3/4	PVC-U	EPDM	37601636	▲



Foot valve (Stainless steel)

Properties

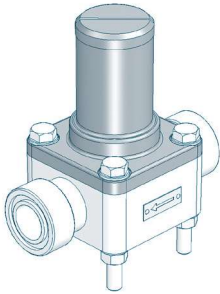
- Compact design
- Easy installation
- High-quality materials
- Maintenance-free

Basic version

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

Type	DN	Connection	Material	Seals	Article-No.	Price (EUR)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e						
731	8	G 3/4	1.4571	FEP	37601149	▲
RF409.2-250e, ...-350e						
732	15	G 1	1.4571	FEP	37603325	▲

FITTINGS FOR THE PRESSURE SIDE



Diaphragm relief valve

for overpressure protection

Properties

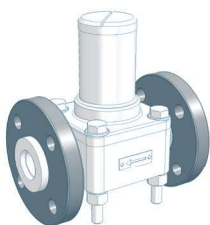
- Compact design
- Easy installation
- Maintenance-free
- High-quality materials

Basic version

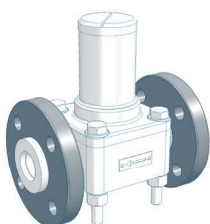
- Valve body: **PVC-U, 1.4581, PP** or **PVDF**
- Diaphragm: **PTFE-faced**

Type	Nominal size	Connection	Valve body	Seals	Article-No.	Price (EUR)
RF409.2-50e						
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	▲
RF409.2-75e, ...-90e, ...-115e, ...-140e, ...-180e, ...-250e, ...-350e						
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



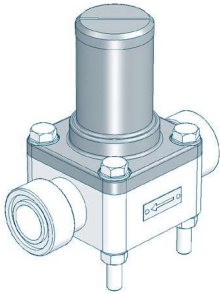
Type	Design	Loose flange	Surcharge [EUR]
620.10	PVC	Loose flange made of PVC-U	Ⓞ
620.10	PP-FRP/PVDF-FRP	Loose flange made of PP with steel inlay	×
620.10	PP	Loose flange made of PP with steel inlay	▲
620.10	PVDF	Loose flange made of PP with steel inlay	▲



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	▲

DIAPHRAGM PUMPS

FITTINGS FOR THE PRESSURE SIDE



Diaphragm pressure keeping valve

to prevent over-conveyance

Properties

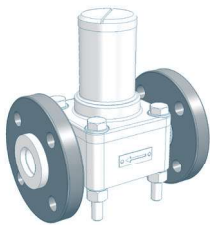
- Compact design
- Easy installation
- Maintenance-free
- High-quality materials

Basic version

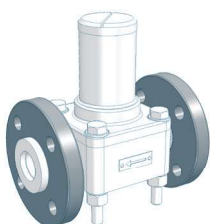
- Valve body: **PVC-U, 1.4581, PP or PVDF**
- Diaphragm: **PTFE-faced**

Type	Nominal size	Connection	Valve body	Seals	Article-No.	Price (EUR)
RF409.2-50e						
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	▲
RF409.2-75e, ...-90e, ...-115e, ...-140e, ...-180e, ...-250e, ...-350e						
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

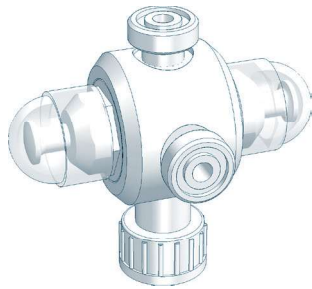


Type	Design	Loose flange	Surcharge [EUR]
620.D	PVC	Loose flange made of PVC-U	Ⓞ
620.D	PP-FRP/PVDF-FRP	Loose flange made of PP with steel inlay	×
620.D	PP	Loose flange made of PP with steel inlay	▲
620.D	PVDF	Loose flange made of PP with steel inlay	▲



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	▲

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

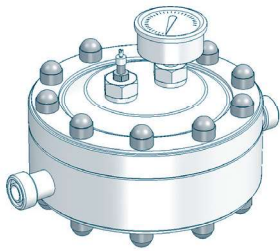
Basic version

- 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)
RF409.2-50e				
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	▲
RF409.2-75e, ...-90e, ...-115e, -140e, ...-180e, ...-250e, ...-350e				
Ⓢ			Ⓢ	Ⓢ

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)
RF409.2-50e						
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	▲
RF409.2-75e, ...-90e, ...-115e, ...-140e, ...-180e						
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	▲
RF409.2-250e, ...-350e						
723.1	G 1 1/4	10 bar	PVC-U	EPDM	37601002	▲
723.1	G 1 1/4	10 bar	PVC-U	FPM	30100011	▲
723.1	G 1 1/4	10 bar	PP	EPDM	37603271	▲
723.1	G 1 1/4	10 bar	PP	FPM	30100012	▲
723.1	G 1 1/4	10 bar	PVDF	FEP	37600918	▲

ACCESSORIES



Filling pump FLP 2 for filling device

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

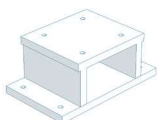
MPD 721.2, MPD 722.1



Retaining clamp

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

MPD 723.1



Bracket

for wall mounting PP 90011722 ▲

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)
RF409.2-50e						
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	×	×
RF409.2-75e, ...-90e, ...-115e, ...-140e, ...-180e						
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	×	×
RF409.2-250e, ...-350e						
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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DIAPHRAGM PUMPS

FITTINGS FOR THE PRESSURE SIDE



Dosing valve (Plastic)

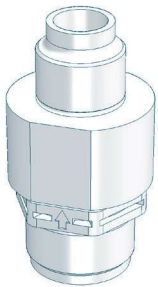
Properties

- 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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e							
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	▲



Dosing valve (Plastic)

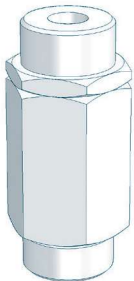
Properties

- 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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e							
691.1	8	G 3/4	R 1/2	PVDF/-GFK	FEP	30072015	▲
RF409.2-250e, ...-350e							
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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e							
691.1	8	G 3/4	R 1/2	1.4571	FEP	37600493	▲
RF409.2-250e, ...-350e							
692.1	15	G 1	R 1	1.4571	FEP	37600669	▲
693.1	20	G 1 1/4	R 1 1/4	1.4571	FEP	37600789	▲

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)
RF409.2-50e, ...-75e, ...-90e, ...-115e, ...-140e, ...-180e							
8061.1	10	G 3/4	R 1/2	PVC-U	EPDM	37602105	▲
8061.1	10	G 3/4	R 1/2	PVC-U	FPM	37602106	▲
8061.1	10	G 3/4	R 1/2	PP	EPDM	37602107	▲
8061.1	10	G 3/4	R 1/2	PP	FPM	37602108	▲
8061.1	10	G 3/4	R 1/2	PVDF	FPM	37602109	▲
RF409.2-250e, ...-350e							
8062.1	15	G 1	R 3/4	PVC-U	EPDM	37602110	▲
8062.1	15	G 1	R 3/4	PVC-U	FPM	37602111	▲
8062.1	15	G 1	R 3/4	PP	EPDM	37602112	▲
8062.1	15	G 1	R 3/4	PP	FPM	37602113	▲
8062.1	15	G 1	R 3/4	PVDF	FPM	37602114	▲