

# Price list

valid from 01.01.2015



- ▶ Pump kits
- ▶ Drum pumps
- ▶ Container pumps
- ▶ Eccentric worm-drive pumps
- ▶ Drum emptying systems
- ▶ Flow meters
- ▶ Filling units
- ▶ Centrifugal immersion pumps
- ▶ Air-operated diaphragm pumps
- ▶ Accessories

# Accessories

## of drum and eccentric worm-drive pumps

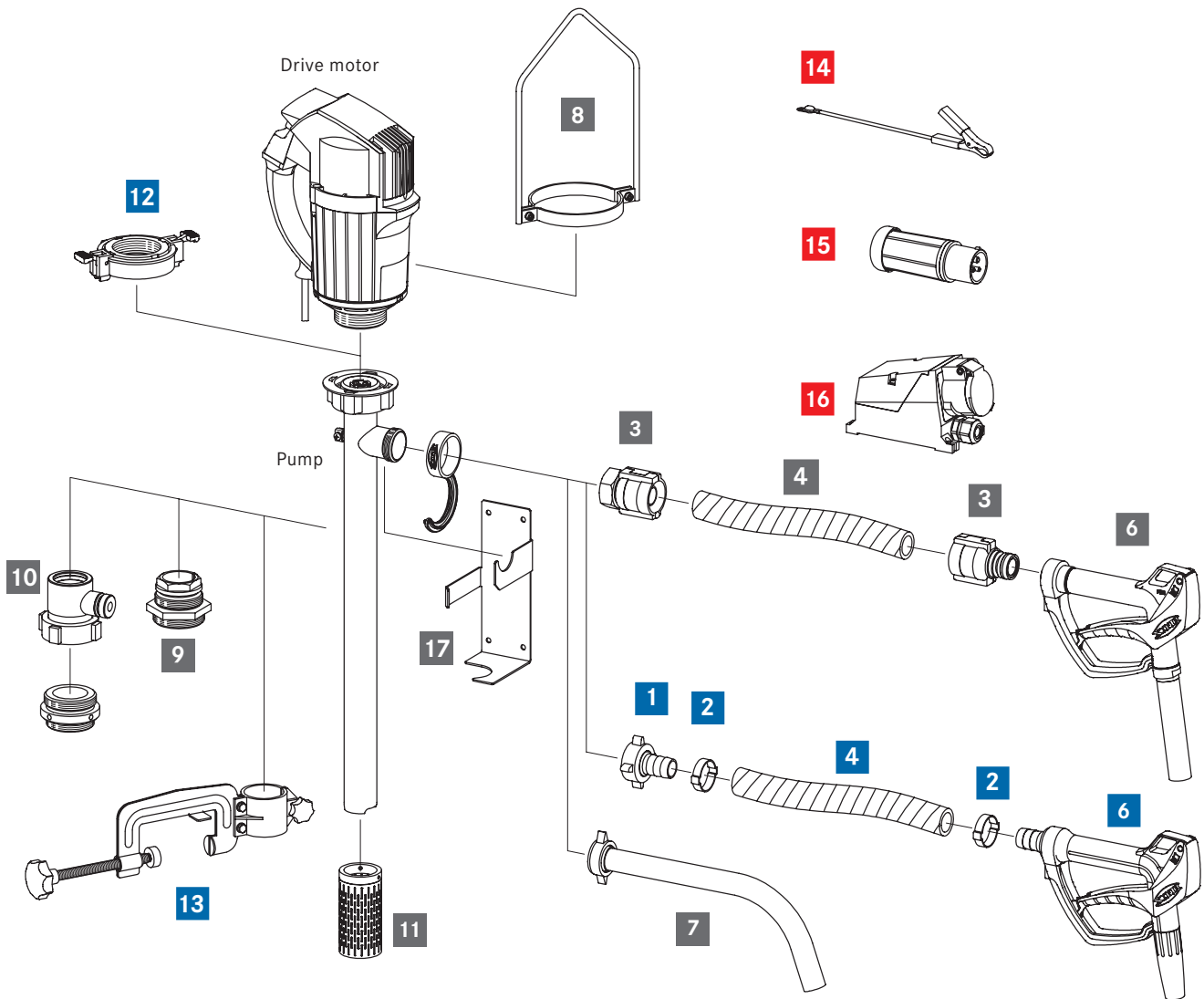
  for use in hazardous areas

  for use in non hazardous areas

  for use in hazardous and non hazardous areas



according to ATEX Directive 94/9 EC  
Products for applications in hazardous  
areas.



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# FLUX Pump Technology

The right solution even for challenging liquids

**Tailor-made products, intelligent solutions, comprehensive service and certified safety are the characteristic features of the versatile FLUX pump technology. With FLUX, you can rely on more than 60 years of competence highly valued all over the world. The high quality of the products and their long life guarantee process and operational reliability and prevent downtime costs.**

The FLUX range of products includes the well-known drum pumps, eccentric worm-drive pumps, centrifugal immersion pumps and air-operated diaphragm pumps, as well as flow meters, mixers and complete system solutions and an extensive range of accessories.

## FBM-B 3100 battery motor

The FBM-B 3100 is the world's first brushless and hence maintenance-free battery motor for pumps. Together with the small seal-less COMBIFLUX FP 314 drum pump, the motor convinces with its high delivery rate which is exceptionally high for this type of pump. Depending on the substance, a delivery rate of 12 l/min to 60 l/min can be achieved. This enables a 200-litre drum to be emptied within just three minutes (at 15,000 rpm). With its powerful exchangeable accumulator, the battery motor provides the highest degree of flexibility – entirely independent from mains supply, for use outdoors or wherever socket outlets and cables are undesirable. The battery motor has won the international awards : iF product design award 2014 and Red Dot Award : Product Design 2014.



FBM-B 3100 battery motor

## The VISCOFLUX family

The VISCOFLUX drum emptying systems work with a combination of an eccentric worm-drive pump and follower plate with process seal. During conveyance, negative pressure builds up below the follower plate which causes it to lower. The flexible process seal adjusts even to beads and tapered constrictions.

The medium is removed gently and continuously. All systems achieve almost complete emptying of the drums to less than 1% residue (less than 2% in drums with liners). High-viscosity, paste-like media and even non-flowable media can be transported with VISCOFLUX and VISCOFLUX mobile. VISCOFLUX lite is ideal for the transfer of highly viscous media which are just capable of flowing. See our VISCOFLUX drum emptying systems on page 57 and the following pages.



VISCOFLUX mobile, VISCOFLUX, VISCOFLUX lite

To learn more about our product range contact your local sales partner or go to [www.flux-pumpen.de](http://www.flux-pumpen.de)



# Pump kits

FLUX pump kits offer a classic combination for every application area. All FLUX drum pumps (pump kits) and drive motors can be easily varied so that the right combination is available whatever the requirement is. FLUX drum pumps, drive motors and accessories can be found on pages 15 – 40. You can use this information to create your own FLUX pumps or ask your FLUX technical adviser to offer the optimal solution.

## Pump kit “JUNIORFLUX” for low volumes

drum pump in polypropylene, sealless, with hastelloy C shaft, **commutator motor FEM 3070**, 230 V, 50 Hz, 230 watt (with integral motor) and hand nozzle PP

- JUNIORFLUX **F 314 PP-25/19** PVC hose DN 13, 1,5 m long

	immersion length	part no.
price per kit	700 mm	314 43 007
price per kit	1.000 mm	314 43 010

- JUNIORFLUX **F 314 PP-32/25** PVC hose DN 19, 1,5 m long

	immersion length	part no.
price per kit	1.000 mm	314 44 010



## Pump kit “acids and alkalis”

drum pump in polypropylene with hastelloy C shaft, **commutator motor FEM 4070**, 230 V, 50 Hz, 500 watt with speed control and no volt release, PVC hose DN 19, 2 m long with hand nozzle in PP and compression gland PP (G 2" male)

- drum pump **F 430 PP-40/33** with mechanical seal, seal material FKM

	immersion length	part no.
for drum emptying	1.000 mm	407 40 010
for IBC emptying	1.200 mm	407 40 012

- drum pump **F 424 PP-41/36** sealless

	immersion length	part no.
for drum emptying	1.000 mm	407 44 010
for IBC emptying	1.200 mm	407 44 012



## Pump kit “concentrated acids”

drum pump **F 430 PVDF-40/33** in polyvinylidene fluoride with hastelloy C shaft, mechanical seal, seal material FKM, **commutator motor F 458**, 230 V, 50 Hz, 460 watt with no volt release, chemical hose DN 19, 2 m long with hand nozzle in PVDF, compression gland PP (G 2" male)

	immersion length	part no.
for drum emptying	1.000 mm	458 60 010
for IBC emptying	1.200 mm	458 60 012



### Pump kit “FES 800” for the transfer of cleaning and disinfecting agents

drum pump **F 424 PP-41/36** in polypropylene with hastelloy C shaft, sealless, with FLUX fume gland (FES), **commutator motor FEM 4070**, 230 V, 50 Hz, 500 watt, with speed control and no volt release, PVC hose DN 19, 2 m long and hand nozzle PP

	immersion length	part no.
for 60 litre containers	800 mm	407 44 208



### Pump kit “JUNIORFLUX AdBlue®” for low volumes

drum pump JUNIORFLUX **F 314 PP/S-32/25** in polypropylene, with stainless steel shaft, sealless, **commutator motor FEM 3070**, 230 V, 50 Hz, 230 watt (with integral motor), PVC hose DN 19, 2 m with hand nozzle PP AdBlue® version with small spout Ø 19 mm

	immersion length	part no.
for drum emptying	1.000 mm	314 44 ZV2



### Pump kit “AdBlue®” for IBC emptying

container pump **F 424 PP/S-41/35Z** in polypropylene with stainless steel shaft, sealless, **commutator motor FEM 4070**, 230 V, 50 Hz, 500 watt, with speed control and no volt release

- with PVC hose DN 19, 3 m long, with hand nozzle in PP and compression gland PP (G 2" male)

	immersion length	part no.
for IBC emptying	1.200 mm	407 44 112



- with special-hose DN 16, 6 m long, with **self-locking hand nozzle** in AL and compression gland PP (G 2" male)

	immersion length	part no.
for IBC emptying	1.200 mm	407 41 ZV6



# Pump kits

## Pump kit “petroleum products”

drum pump **F 430 AL-41/38** in aluminium with stainless steel shaft, mechanical seal, seal material NBR, petroleum hose DN 25, 2 m long, hand nozzle AL and compression gland PP (G 2" male)

- with commutator motor **FEM 4070**, 230 V, 50 Hz, 500 watt with speed control and no volt release

	immersion length	part no.
for drum emptying	1.000 mm	407 10 010
for IBC emptying	1.200 mm	407 10 012

- with commutator motor **F 457**, 230 V, 50 Hz, 800 watt, with no volt release

	immersion length	part no.
for drum emptying	1.000 mm	457 10 010
for IBC emptying	1.200 mm	457 10 012



## Pump kit “highly flammable liquids”

drum pump **FP 424 Ex S-43/38** for applications in Zone 0, Ex-marking II 1/2 G c IIB T4, in stainless steel with stainless steel shaft, sealless, 2 m earth wire, universal hose DN 21, 2 m long, electrically conductive with brass hose fittings and hand nozzle in brass, compression gland PP electrically conductive (G 2" male)

- with commutator motor **F 460 Ex**, 230 V, 50 Hz, 460 watt, with no volt release for applications in Zone 0, Ex-marking II 2 G Ex d e IIC T6 or T5 Gb

	immersion length	part no.
for drum emptying	1.000 mm	460 24 010
for IBC emptying	1.200 mm	460 24 012



- with compressed air motor **F 416 Ex**, 470 watt at 6 bar for applications in Zone 0, Ex-marking II 2 G c IIC T6

	immersion length	part no.
for drum emptying	1.000 mm	416 24 010
for IBC emptying	1.200 mm	416 24 012





### Pump kit “universal applications”

drum pump **FP 430 S-41/38** in stainless steel, for applications in Zone 0, Ex-marking II 1/2 G c IIB T4 with stainless steel shaft, mechanical seal (FKM), 2 m earth wire, universal hose DN 21, 2 m long electrically conductive with stainless steel hose fittings and hand nozzle, compression gland PP electrically conductive (G 2" male)

- with **commutator motor F 460 Ex**, 230 V, 50 Hz, 460 watt with no volt release for applications in Zone 1, Ex-marking II 2 G Ex d e IIC T6 or T5 Gb

	immersion length	part no.
for drum emptying	1.000 mm	460 20 010
for IBC emptying	1.200 mm	460 20 012

- with **compressed air motor F 416 Ex**, 470 watt at 6 bar for applications in Zone 1, Ex-marking II 2 G c IIC T6

	immersion length	part no.
for drum emptying	1.000 mm	416 20 010
for IBC emptying	1.200 mm	416 20 012

### Pump kit “99,98 % drum emptying”

drum pump **FP 425 Ex S-41/34** for applications in Zone 0, Ex-marking II 1/2 G c IIB T4, in stainless steel with stainless steel shaft, mechanical seal (FKM), **commutator motor F 460 Ex** for use in Zone 1, Ex-marking II 2 G Ex d e IIC T6 or T5 Gb, 230 V, 50 Hz, 460 watt with no volt release, 2 m earth wire, universal hose DN 21, 2 m long electrically conductive with stainless steel hose fittings and hand nozzle, compression gland PP electrically conductive (G 2" male)

	immersion length	part no.
for drum emptying	1.000 mm	460 25 010
for IBC emptying	1.200 mm	460 25 012





# JUNIORFLUX/COMBIFLUX

for low volumes



# JUNIORFLUX

with integral motor

## JUNIORFLUX F 310 with mechanical seal, in polypropylene with hastelloy C shaft

seal in FKM, G 1" male discharge connection with **commutator motor FEM 3070**, 230 V, 50 Hz, 230 watt, splash-proof to IP 24. Hose connections DN 13 and DN 19 included with the pump

- **F 310 PP-25/19**

immersion length	part no.
500 mm	310 41 005
700 mm	310 41 007
1.000 mm	310 41 010

- **F 310 PP-32/25**

immersion length	part no.
500 mm	310 42 005
700 mm	310 42 007
1.000 mm	310 42 010



## JUNIORFLUX F 314 sealless, with hastelloy C shaft

G 1" male discharge connection with **commutator motor FEM 3070**, 230 V, 50 Hz, 230 watt, splash-proof to IP 24. Hose connections DN 13 and DN 19 included with the pump

- **F 314 PP-25/19** in polypropylene

immersion length	part no.
500 mm	314 41 005
700 mm	314 41 007
1.000 mm	314 41 010

- **F 314 PP-32/25** in polypropylene

immersion length	part no.
500 mm	314 42 005
700 mm	314 42 007
1.000 mm	314 42 010



- **F 314 PVDF-25/19** in polyvinylidene fluoride

immersion length	part no.
500 mm	314 61 005
700 mm	314 61 007
1.000 mm	314 61 010

## JUNIORFLUX F 314, sealless, in stainless steel, with stainless steel shaft

G 3/4" male discharge connection with **commutator motor FEM 3070**, 230 V, 50 Hz, 230 watt, splash-proof to IP 24. Without hose connections

- **F 314 S-28/25**

immersion length	part no.
500 mm	314 21 005
700 mm	314 21 007
1.000 mm	314 21 010

- **Hose connections** for JUNIORFLUX F 314 S-28/25

	part no.
hose connections stainless steel DN 13	959 04 133
hose connections stainless steel DN 19	959 04 147



# COMBIFLUX

with separate motor



drum pump FP 314, sealless, combined with commutator motor (FEM 3070) or battery motor (FBM-B 3100)

## COMBIFLUX FP 314, sealless pump

- **FP 314 PP-25/19** in polypropylene with **hastelloy C shaft**, G 1" male discharge connection. Hose connections DN 13 and DN 19 included with the pump

immersion length	part no.
500 mm	314 45 905
700 mm	314 45 907
1.000 mm	314 45 910

- **FP 314 PP-32/25** in polypropylene with **hastelloy C shaft**, G 1" male discharge connection. Hose connections DN 13 and DN 19 included with the pump

immersion length	part no.
500 mm	314 46 905
700 mm	314 46 907
1.000 mm	314 46 910

- **FP 314 PVDF-25/19** in polyvinylidene fluoride with **hastelloy C shaft**, G 1" male discharge connection. Hose connections DN 13 and DN 19 included with the pump

immersion length	part no.
500 mm	314 65 905
700 mm	314 65 907
1.000 mm	314 65 910

- **FP 314 S-28/25** in stainless steel with **stainless steel shaft**, G ¾" male discharge connection. Without hose connection (hose connection see page 14)

immersion length	part no.
500 mm	314 26 905
700 mm	314 26 907
1.000 mm	314 26 910



## Drive motors suitable for COMBIFLUX FP 314

- **commutator motor**, 230 V, 50 Hz, 230 watt, splash-proof to IP 24

	part no.
<b>230 V, 50 Hz</b>	307 01 000
<b>240 V, 50 Hz</b>	307 01 001
<b>120 V, 60 Hz</b>	307 01 002
<b>110 V, 50-60 Hz</b>	307 01 003
<b>100 V, 50-60 Hz</b>	307 01 004



- **battery motor FBM-B 3100, with Accu**, nominal tension 18 V, nominal capacity 1.5 Ah, battery type Li-ion, splash-proof IP 44

	part no.
with charger 220-240 V, 50-60 Hz	301 01 000
with charger 100-120 V, 50-60 Hz	301 01 003
without charger	302 01 001



## Accessories for battery motor FBM-B 3100

- **battery without charger**, type Li-ion, 18 V, 1.5 Ah

	part no.
<b>B15-3100</b>	301 02 001



- **charger without battery**, BCH-3100

	part no.
220-240 V, 50-60 Hz	301 02 003
100-120 V, 50-60 Hz	301 02 004



# Accessories

## JUNIORFLUX/COMBIFLUX

### Hose connections consisting of hose connector and union nut for JUNIORFLUX/COMBIFLUX F 314 S and FP 314 S in stainless steel

nominal Ø	part no.
DN 13	959 04 133
DN 19	959 04 147



### Hose connection consisting of hose connector and union nut (for re-order)

	part no.
DN 13 and DN 19 kit for F 310, F 314, FP 314 in PP	959 04 135
DN 13 for F 314, FP 314 in PVDF	959 04 071
DN 19 for F 314, FP 314 in PVDF	959 04 072



### PVC hoses

	operating pressure max	part no.
DN 13 outer Ø 20 mm (with fabric lining)	10 bar	001 10 008
DN 20 outer Ø 27 mm (with steel wire-helix)	5 bar	001 10 040



### Stepless 1-Ear hose clips for PVC hoses

	part no.
DN 13	959 13 237
DN 19	959 13 241



### Hand nozzles

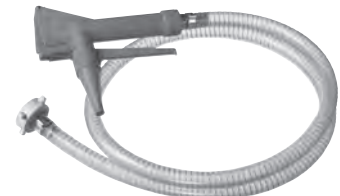
material	nominal Ø	outlet-Ø	part no.
PP	DN 13	11 mm	001 13 034
PP	DN 19	22 mm	001 12 500
PVDF	DN 19	22 mm	001 12 501
S	DN 19	28 mm	001 12 541



### Hose kit

PVC hose DN 13, 1,5 m long with hand nozzle in PP (outlet Ø 11 mm), hose connection and hose clip

connection	part no.
DN 13	001 10 825
DN 19	001 10 846



### Flow meter FMT 50 PP with interlocked wheel impeller in the measuring chamber

in conjunction with our JUNIORFLUX/COMBIFLUX pumps. Construction in PP, not ex-proof, inlet connection G 1" female, outlet connection G 1" male

o-ring	part no.
FKM	A05 00 003



### Drum adaptor PP for safety attachment of the JUNIORFLUX/COMBIFLUX pumps in canisters or plastic drums

	pump-Ø	part no.
canister bunghole 45 mm	25 mm	001 14 069
canister bunghole 45 mm	28 mm	001 14 070
canister bunghole 45 mm	32 mm	001 14 071
bunghole 65 mm	25 mm	001 14 072
bunghole 65 mm	28 mm	001 14 073
bunghole 65 mm	32 mm	001 14 074





# Drive motors

for drum and container pumps



commutator motor  
FEM 4070



commutator motor  
F 457  
F 457 EL



commutator motor  
F 458  
F 458 EL  
F 458-1



commutator motor  
F 460 Ex  
F 460 Ex EL  
F 460-1 Ex



brushless motor  
FBM 4000 Ex

Type	capacity (watt)	frequency (Hz)	speed control	protection class	cable	plug	with novolt release	without novolt release
							part no.	part no.

## 230 volt motors

<b>FEM 4070</b>	500	50	yes	IP 24	5 m	CEE 7/17	407 01 000	407 01 001
		50-60			5 m	-	407 01 004	407 01 005
					5 m	CEE 7/17	407 01 023	407 01 025
<b>F 457</b>	800	50	no	IP 24	5 m	CEE 7/17	457 01 005	457 01 002
		50-60			5 m	-	457 01 039	457 01 038
					5 m	CEE 7/17	-	457 01 037
<b>F 457 EL</b>	800	50	yes	IP 24	5 m	-	457 01 040	-
					5 m	CEE 7/17	457 01 003	457 01 041
<b>F 458</b>	460	50	no	IP 55	5 m	CEE 7/7	458 00 006	458 00 001
					-	458 00 014	458 00 009	
		50-60			5 m	-	458 00 022	458 00 019
					5 m	CEE 7/7	-	458 00 025
<b>F 458 EL</b>	460	50	yes	IP 55	5 m	CEE 7/7	458 00 027	-
					-	458 00 028	-	
<b>F 458-1</b>	700	50	no	IP 55	5 m	CEE 7/7	458 01 004	458 01 001
					-	458 01 010	458 01 007	
		50-60			5 m	-	458 01 018	458 01 015
					5 m	CEE 7/7	-	458 01 020
<b>F 460 Ex</b>	460	50	no	IP 55	5 m	CEE 7/7	460 00 006	460 00 001
					-	460 00 014	460 00 009	
		50-60			5 m	-	460 00 024	460 00 021
					5 m	CEE 7/7	-	460 00 026
<b>F 460 Ex EL</b>	460	50	yes	IP 55	5 m	CEE 7/7	460 00 028	-
					5 m	-	460 00 035	-
					-	460 00 029	-	
<b>F 460-1 Ex</b>	700	50	no	IP 55	5 m	CEE 7/7	460 01 004	460 01 001
					-	460 01 010	460 01 007	
		50-60			5 m	-	460 01 020	460 01 017
					5 m	CEE 7/7	-	460 01 022
<b>FBM 4000 Ex</b>	600	50-60	yes	IP 55	5 m	CEE 7/7	400 01 000	-
					5 m	-	400 01 001	-



Ex-marking: II 2 G Ex d e IIC T6 bzw. T5 Gb





commutator motor  
FEM 4070



commutator motor  
F 457  
F 457 EL



commutator motor  
F 458  
F 458-1



commutator motor  
F 460 Ex  
F 460 Ex-1 EX

Type	capacity (watt)	frequency (Hz)	speed control	protection class	cable	plug	with novolt release	without novolt release
							part no.	part no.

### 240 volt motors

<b>FEM 4070</b>	500	50	yes	IP 24	5 m	CEE 7/17	407 01 008	407 01 009
					5 m	-	407 01 010	407 01 011
<b>F 457</b>	800	50	no	IP 24	5 m	CEE 7/17	457 01 006	457 01 007
					5 m	-	457 01 013	457 01 012
<b>F 457 EL</b>	800	50	yes	IP 24	5 m	CEE 7/17	457 01 008	-
					5 m	-	457 01 016	-
<b>F 458</b>	460	50	no	IP 55	5 m	CEE 7/7	458 00 005	458 00 000
					5 m	-	458 00 021	458 00 018
					-	-	458 00 013	458 00 008
<b>F 458-1</b>	700	50	no	IP 55	5 m	CEE 7/7	458 01 003	458 01 000
					5 m	-	458 01 017	458 01 014
					-	-	458 01 009	458 01 006
<b>F 460 Ex</b>	460	50	no	IP 55	5 m	CEE 7/7	460 00 005	460 00 000
					5 m	-	460 00 023	460 00 020
					-	-	460 00 013	460 00 008
<b>F 460-1 Ex</b>	700	50	no	IP 55	5 m	CEE 7/7	460 01 003	460 01 000
					5 m	-	460 01 019	460 01 016
					-	-	460 01 009	460 01 006

### 120 volt motors

<b>FEM 4070</b>	500	60	yes	COF ENC 2	5 m	NEMA 1-15P	407 01 012	407 01 013
				IP 24	5 m	NEMA 1-15P	407 01 014	407 01 015
<b>F 457</b>	800	60	no	IP 24	5 m	NEMA 1-15P	457 01 004	457 01 000
<b>F 457 EL</b>	800	60	yes	IP 24	5 m	NEMA 1-15P	457 01 001	-
<b>F 458</b>	460	60	no	COF CSA ENC 3 TP	5 m	NEMA 5-15P	-	458 00 026
<b>F 458-1</b>	700	60	no	COF CSA ENC 3 TP	5 m	NEMA 5-15P	-	458 01 021
<b>F 460-1 Ex UL</b>	700	60	no	-	5 m	-	-	460 01 024
<b>F 460 Ex UL</b>	460	60	no	-	5 m	-	-	460 00 031



Ex-marking: II 2 G Ex d e IIC T6 bzw. T5 Gb

# Drive motors

for drum and container pumps



commutator motor  
FEM 4070



commutator motor  
F 457  
F 457 EL



commutator motor  
F 458  
F 458 EL  
F 458-1



commutator motor  
F 460 Ex  
F 460 Ex EL



Ex-marking:  
II 2 G Ex  
d e IIC T6 bzw.  
T5 Gb

Type	capacity (watt)	frequency (Hz)	speed control	protection class	cable	plug	with novolt release	without novolt release
							part no.	part no.

## 110 volt motors

FEM 4070	500	50	yes	IP 24	5 m	CEE 7/17	407 01 016	407 01 017
					5 m	-	407 01 018	407 01 019
F 457	800	50	no	IP 24	5 m	CEE 7/17	457 01 009	457 01 010
					5 m	-	457 01 015	457 01 014
F 457 EL	800	50	yes	IP 24	5 m	CEE 7/17	457 01 011	-
					5 m	-	457 01 017	-
F 458	460	50	no	IP 55	5 m	CEE 7/7	458 00 007	-
					5 m	-	458 00 023	-
					-	-	458 00 015	-
		5 m			CEE 7/7	-	458 00 002	
		5 m			-	-	458 00 020	
		-			-	-	458 00 010	
F 458-1	700	50	no	IP 55	5 m	CEE 7/7	458 01 005	-
					5 m	-	458 01 019	-
					-	-	458 01 011	-
		5 m			CEE 7/7	-	458 01 002	
		5 m			-	-	458 01 016	
		-			-	-	458 01 008	
F 460 Ex	460	50	no	IP 55	5 m	CEE 7/7	460 00 007	-
					5 m	-	460 00 025	-
					-	-	460 00 015	-
		5 m			CEE 7/7	-	460 00 022	
		5 m			-	-	460 00 002	
		-			-	-	460 00 010	
F 460-1 Ex	700	50	no	IP 55	5 m	CEE 7/7	460 01 005	-
					5 m	-	460 01 021	-
					-	-	460 01 011	-
		5 m			CEE 7/7	-	460 01 002	
		5 m			-	-	460 01 018	
		-			-	-	460 01 008	

## 100 volt motors

FEM 4070	450	50-60	yes	IP 24	5 m	JIS C8303	407 01 020	407 01 021
F 460 Ex	460	50-60	no	IP 55	5 m	-	-	460 00 032

## 42 volt motors

F 460 Ex	460	50	no	IP 55	5 m	-	460 00 030	-
----------	-----	----	----	-------	-----	---	------------	---

## 24 volt motors

F 458	410	DC	no	IP 55	5 m	-	-	458 00 003
					-	-	-	458 00 011
F 460 Ex	410	DC	no	IP 55	5 m	-	-	460 00 003
					-	-	-	460 00 011

## 12 volt motors

F 458	230	DC	no	IP 55	5 m	-	-	458 00 004
					-	-	-	458 00 012
F 460 Ex	230	DC	no	IP 55	5 m	-	-	460 00 004
					-	-	-	460 00 012

# Drive motors and accessories

for drum and container pumps



## Accessories for commutator and brushless motors F 460 Ex and FBM 4000 Ex

- CEE plug**, for applications in Zone 1, Ex-marking II 2 G EEx de IIC T6,  

3-poles, 220-240 V	part no.
CEAG system	937 01 030
Stahl system	937 01 018
- CEE-socket**, for applications in Zone 1, Ex-marking II 2 G EEx de IIC T6,  

3-poles, 220-240 V	part no.
CEAG system	937 50 041
Stahl system	937 50 022

- earth wire** with crocodile clip

	cable cross-section	length	forceps	part no.
spiral cable (yellow)	3 mm <sup>2</sup>	4 m	stainless steel	931 90 023
cable (green/yellow)	4 mm <sup>2</sup>	2 m	steel	931 90 015

- carrying handle**, Rilsan-coated  

F 457	part no.
	001 10 533
F 458, F 458-1, F 460 Ex, F 460-1 Ex, FBM 4000 Ex	001 10 557

- inertia hoist**, rope length 2 m  

	part no.
carrying force 9 – 14 kg	001 21 000
carrying force 16 – 21 kg	001 21 002

## Three-phase gear motors for drum and container pumps

- F 414**, 230/400 V, 50 Hz, jet-proof to IP 55, **with motor protection switch**  

	part no.
0,55 kW	414 01 112
0,75 kW energy efficiency class 2	414 01 137
1,1 kW energy efficiency class 2	414 01 139

- F 414**, 230/400 V, 50 Hz, jet-proof to IP 55, **with cable terminal box**  

	part no.
0,55 kW	414 01 110
0,75 kW energy efficiency class 2	414 01 136
1,1 kW energy efficiency class 2	414 01 138

## Accessories for three-phase gear motors F 414

- carrying handles**  

stainless steel	part no.
	001 10 582

- power supply cable**  

	part no.
pre-assembled with sleeve and Cekon plug, 5 m long	934 08 020
pre-assembled with sleeve without plug, 5 m long	934 08 025
per meter	934 08 901
cable assembly to motor, switch or connector	000 00 250

- Cekon plug**  

	part no.
5-poles	937 01 014
5-poles with commutator	937 01 035

- motor protection switch**, jet-proof to IP 55, with 2 cable entry ports  

	part no.
0,85 – 1,35 A	936 06 167
1,30 – 2,00 A	936 06 168
1,80 – 3,00 A	936 06 169
2,80 – 4,60 A	936 06 170



# Drive motors

for drum and container pumps

## Compressed air motors for drum and container pumps

470 watt at 6 bar, 14 liter/sec. air consumption,  
for applications in Zone 1, Ex-marking II 2 G c IIC T6

### F 416 Ex

- |  |            |
|--|------------|
| <b>F 416 Ex</b>                                | part no.   |
| with operating valve (adjustable and lockable) | 416 00 100 |
- |                                 |            |
|---------------------------------|------------|
| <b>F 416-1 Ex</b>               | part no.   |
| no valve, for automatic control | 416 00 020 |
- |                                    |            |
|------------------------------------|------------|
| <b>F 416-2 Ex</b>                  | part no.   |
| with ball valve, to regulate speed | 416 00 030 |



### Accessories for compressed air motors F 416 Ex

- |  |            |
|--|------------|
| <b>filter-regulator-lubricator unit</b> G 1/4" female connection | part no.   |
| for non hazardous areas  | 001 10 100 |
| explosion-proof  | 001 10 113 |
- |   |            |
|---|------------|
| <b>compressed air hose</b>                          | part no.   |
| DN 10, electrically conductive, blue, outer-Ø 17 mm | 001 10 098 |
- |  |            |
|--|------------|
| <b>hose coupling with hose connection in brass</b> | part no.   |
| DN 10  | 959 13 066 |
- |                          |            |
|--------------------------|------------|
| <b>coupling in brass</b> | part no.   |
| DN 7,2 - G 1/4" male     | 959 13 210 |
- |   |            |
|---|------------|
| <b>threaded nipple in brass for hose coupling</b> | part no.   |
| DN 10, G 1/4" male                                | 959 13 065 |
- |                            |            |
|----------------------------|------------|
| <b>hose nozzle (brass)</b> | part no.   |
| DN 10, G 1/4" male         | 959 05 022 |
- |                                |            |
|--------------------------------|------------|
| <b>plug-in sleeve in brass</b> | part no.   |
| DN 10                          | 959 13 209 |
- |                                |            |
|--------------------------------|------------|
| <b>1-ear hose clip</b>         | part no.   |
| Ø 14,8; clamping range 8-18 mm | 959 13 237 |



- |                                       |                       |                   |         |                 |            |
|---------------------------------------|-----------------------|-------------------|---------|-----------------|------------|
| <b>earth wire</b> with crocodile clip | cable cross-section   | length            | forceps | part no.        |            |
|                                       | spiral cable (yellow) | 3 mm <sup>2</sup> | 4 m     | stainless steel | 931 90 023 |
|                                       | cable (green/yellow)  | 4 mm <sup>2</sup> | 2 m     | steel           | 931 90 015 |



- |  |            |
|--|------------|
| <b>fine filter sound absorber</b> with oil separator | part no.   |
| with mounting bracket                                | 947 15 005 |



- |  |            |
|--|------------|
| <b>exhaust air hose kit</b> for fine filter sound absorber             | part no.   |
| with oil separator, PVC hose DN 13, connection G 1/2" male 5 m long    | 001 10 886 |
| without oil separator, PVC hose DN 13, connection G 1/2" male 5 m long | 001 10 875 |



# Drum and container pumps

(drive motors see page 16)



## Drum pump F 424, the sealless

sealless, G 1¼" male discharge connection, with FLUX-Clip without hose connection

### in stainless steel (S)

for applications in Zone 0, Ex-marking II 1/2 G c IIB T4

- **FP 424 Ex S-43/38, FKM seal**, stainless steel shaft (with Zone separation)

immersion length	part no.
700 mm	424 22 007
1.000 mm	424 22 010
1.200 mm	424 22 012

- **FP 424 Ex S-43/38, FEP seal**, stainless steel shaft (with Zone separation)

immersion length	part no.
1.000 mm	424 29 310
1.200 mm	424 29 312

- **FP 424 Ex S-43/37Z, FKM seal**, stainless steel shaft **(for increased pumping head)** (with Zone separation)

immersion length	part no.
700 mm	424 22 107
1.000 mm	424 22 110
1.200 mm	424 22 112

- **FP 424 Ex S-50/54Z, FKM seal**, stainless steel shaft **(for increased pumping head)** (with Zone separation)

immersion length	part no.
700 mm	424 20 207
1.000 mm	424 20 210
1.200 mm	424 20 212



FP 424 Ex S

### in polypropylene (PP)

- **F 424 PP-41/36, FKM seal**, hastelloy C shaft

immersion length	part no.
700 mm	424 40 007
1.000 mm	424 40 010
1.200 mm	424 40 012

- **F 424 PP-41/36, FKM seal**, titanium shaft

immersion length	part no.
700 mm	424 40 707
1.000 mm	424 40 710
1.200 mm	424 40 712

- **F 424 PP-41/35Z, FKM seal**, hastelloy C shaft **(for increased pumping head)**

immersion length	part no.
700 mm	424 40 107
1.000 mm	424 40 110
1.200 mm	424 40 112

- **F 424 PP/S-41/35Z, FKM seal**, stainless steel shaft, AdBlue® version

immersion length	part no.
1.200 mm	424 40 512



F 424 PP

- **F 424 PP-50/38, FKM seal**, hastelloy C shaft

immersion length	part no.
700 mm	424 40 207
1.000 mm	424 40 210
1.200 mm	424 40 212

- **F 424 PP-50/43Z, FKM seal**, hastelloy C shaft **(for increased pumping head)**

immersion length	part no.
700 mm	424 40 307
1.000 mm	424 40 310
1.200 mm	424 40 312

### in polyvinylidene fluoride (PVDF)

- **F 424 PVDF-41/36, FKM seal**, hastelloy C shaft

immersion length	part no.
700 mm	424 60 007
1.000 mm	424 60 010
1.200 mm	424 60 012

- **F 424 PVDF-41/35Z, FKM seal**, hastelloy C shaft **(for increased pumping head)**

immersion length	part no.
700 mm	424 60 107
1.000 mm	424 60 110
1.200 mm	424 60 112

- **F 424 PVDF-50/38, FKM seal**, hastelloy C shaft

immersion length	part no.
700 mm	424 60 207
1.000 mm	424 60 210
1.200 mm	424 60 212



F 424 PVDF

Other seal materials available on request

Illustration with hose connection

# Drum and container pumps

(drive motors see page 16)

## Drum pump F 425 for 99,98 % drum emptying

with mechanical seal, G 1/4" male discharge connection, with FLUX-Clip, without hose connection  
stainless steel and hastelloy C version: for applications in Zone 0, Ex-marking II 1/2 G c IIB T4

- **FP 425 Ex S-41/34** in **stainless steel, stainless steel shaft** and **FKM** seal (with Zone separation)

immersion length	part no.
700 mm	425 22 008
1.000 mm	425 22 011
1.200 mm	425 22 013

- **FP 425 Ex S-41/34** in **stainless steel, stainless steel shaft** and **FFKM** seal (with Zone separation)

immersion length	part no.
1.000 mm	425 29 111
1.200 mm	425 29 113

- **FP 425 Ex S-41/34Z** in **stainless steel, stainless steel shaft** and **FKM** seal (**for increased pumping head**) (with Zone separation)

immersion length	part no.
1.000 mm	425 22 031
1.200 mm	425 22 033

- **F 425 HC-40/34** in **hastelloy C, hastelloy C shaft** and **FFKM** seal

immersion length	part no.
1.200 mm	425 30 007

- **F 425 PP-50/34** in **polypropylene, hastelloy C shaft** and **FKM** seal

immersion length	part no.
700 mm	425 40 048
1.000 mm	425 40 051
1.200 mm	425 40 053

Other seal materials available on request

Additional cost for silicone-free version on request (only for stainless steel pumps available)

## Drum pump F 426 for mixing and pumping

with mechanical seal, G 1/4" male discharge connection, with FLUX-Clip, without hose connection  
stainless steel version: for applications in Zone 0, Ex-marking II 1/2 G IIB T4

- **F 426 S-41/38** in **stainless steel, stainless steel shaft** and **FKM** seal

immersion length	part no.
1.000 mm	426 20 010
1.200 mm	426 20 012

- **F 426 S-41/38** in **stainless steel, stainless steel shaft** and **FFKM** seal

immersion length	part no.
1.000 mm	426 29 010
1.200 mm	426 29 012

- **F 426 PP-50/33** in **polypropylene, hastelloy C shaft** and **FKM** seal

immersion length	part no.
1.000 mm	426 40 001
1.200 mm	426 40 002

Other seal materials available on request.

Additional cost for silicone-free version on request (only for stainless steel pumps available).



Drive motors see page 16-20, hose connections see page 28

### Drum pump F 427, can be taken apart completely

sealless, easy to strip for sterile applications, stainless steel shaft, with FLUX-Clip, without hose connection

#### in stainless steel

- **F 427 S3-43/38, G 1 1/4" male** discharge connection
- **Hose connection with G 1 1/4" female** union nut

immersion length	part no.
700 mm	427 20 307
1.000 mm	427 20 310
1.200 mm	427 20 312

	part no.
DN 25	959 04 063

- **F 427 S4-43/38, Rd 58 x 1/6** thread connection

immersion length	part no.
700 mm	427 20 407
1.000 mm	427 20 410
1.200 mm	427 20 412

- **Hose connection with Rd 58 x 1/6** union nut

	part no.
DN 25	959 04 115



F 427

#### in stainless steel, FOOD version

- suitable for food contact according to Regulation (EC) 1935/2004 and FDA CFR 21  
**FP 427 S-43/38 FOOD** in stainless steel, 1 1/2" **clamp** connection (other connections on request)

immersion length	part no.
700 mm	427 20 607
1.000 mm	427 20 610
1.200 mm	427 20 612



Accessories for FOOD version see page 40

#### in stainless steel, 3-A version



- **F 427 S3A-43/38** with 1 1/2" **clamp** connection

immersion length	part no.
700 mm	427 20 207
1.000 mm	427 20 210
1.200 mm	427 20 212

- **Hose connection with clamp** connection 1 1/2"

	part no.
DN 19	959 04 138



FP 427  
FOOD

Other hose connections see page 28

# Drum and container pumps

## Drum pump F 430

with mechanical seal, G 1¼" male discharge connection, with FLUX-Clip, without hose connection

### in aluminium, stainless steel shaft and NBR seal

- **F 430 AL-41/38**

immersion length	part no.
700 mm	430 10 107
1.000 mm	430 10 110
1.200 mm	430 10 112

- **F 430 AL-41/37Z (for increased pumping head)**

immersion length	part no.
700 mm	430 10 407
1.000 mm	430 10 410
1.200 mm	430 10 412

- **F 430 AL-50/38**

immersion length	part no.
700 mm	430 10 307
1.000 mm	430 10 310
1.200 mm	430 10 312



### in stainless steel, stainless steel shaft

for applications in Zone 0, Ex-marking II 1/2 G IIB T4

- **F 430 S-41/38, FKM seal**

immersion length	part no.
700 mm	430 20 107
1.000 mm	430 20 110
1.200 mm	430 20 112

- **F 430 S-41/38, FFKM seal**

immersion length	part no.
1.000 mm	430 29 110
1.200 mm	430 29 112

- **F 430 S-41/38, EPDM seal**

immersion length	part no.
1.000 mm	430 28 210
1.200 mm	430 28 212

- **F 430 S-41/37Z, FKM seal (for increased pumping head)**

immersion length	part no.
700 mm	430 20 407
1.000 mm	430 20 410
1.200 mm	430 20 412



- **F 430 S-50/45Z, FKM seal (for increased pumping head)**

immersion length	part no.
700 mm	430 20 207
1.000 mm	430 20 210
1.200 mm	430 20 212

- additional cost for silicone-free version  
part no. 000 00 300

### in stainless steel FOOD version, stainless steel shaft, FKM seal

for applications in Zone 0, Ex-marking II 1/2 G IIB T4

- suitable for food contact according to Regulation (EC) 1935/2004 and FDA CFR 21  
**FP 430 Ex S-41/38 FOOD** in stainless steel, **clamp connection 1½"** (other connections on request)

immersion length	part no.
700 mm	430 20 507
1.000 mm	430 20 510
1.200 mm	430 20 512



FFKM O-rings on request

Accessories for FOOD version see page 40

### in hastelloy C, hastelloy C shaft and FFKM seal

for applications in Zone 0, Ex-marking II 1/2 G IIB T4

- **F 430 HC-40/38**

immersion length	part no.
700 mm	430 30 107
1.000 mm	430 30 110
1.200 mm	430 30 112



Other seal materials available on request

**Drive motors see page 16–20, hose connections see page 28, mixing tubes see page 39**

Illustration with hose connection



## Drum pump F 430

with mechanical seal, hastelloy C shaft, G 1 1/4" male discharge connection, with FLUX-Clip, without hose connection

### in polypropylene (PP)

- **F 430 PP-40/33, FKM seal**

immersion length	part no.
700 mm	430 40 107
1.000 mm	430 40 110
1.200 mm	430 40 112

- **F 430 PP-40/33Z, FKM seal (for increased pumping head)**

immersion length	part no.
700 mm	430 40 407
1.000 mm	430 40 410
1.200 mm	430 40 412

- **F 430 PP-50/43Z, FKM seal (for increased pumping head)**

immersion length	part no.
700 mm	430 40 207
1.000 mm	430 40 210
1.200 mm	430 40 212

- **F 430 PP-40/33, EPDM seal**

immersion length	part no.
1.000 mm	430 48 110
1.200 mm	430 48 112

- **F 430 PP-50/38, FKM seal**

immersion length	part no.
700 mm	430 40 307
1.000 mm	430 40 310
1.200 mm	430 40 312



F 430 PP

### in polyvinylidene fluoride (PVDF)

- **F 430 PVDF-40/33, FKM seal**

immersion length	part no.
700 mm	430 60 107
1.000 mm	430 60 110
1.200 mm	430 60 112

- **F 430 PVDF-40/33Z, FKM seal (for increased pumping head)**

immersion length	part no.
700 mm	430 60 407
1.000 mm	430 60 410
1.200 mm	430 60 412

- **F 430 PVDF-50/38, FKM seal**

immersion length	part no.
700 mm	430 60 307
1.000 mm	430 60 310
1.200 mm	430 60 312

- **F 430 PVDF-40/33, FFKM seal**

immersion length	part no.
1.000 mm	430 69 110
1.200 mm	430 69 112

- **F 430 PVDF-50/43Z, FKM seal (for increased pumping head)**

immersion length	part no.
700 mm	430 60 207
1.000 mm	430 60 210
1.200 mm	430 60 212



F 430 PVDF

other seal material on request

drive motors see page 16–20, hose connections see page 28, mixing tubes see page 39

# Drum and container pumps

## Container pump F 430 in polypropylene with hastelloy C shaft

with mechanical seal, seal material FKM, G 1¼" male discharge connection, with FLUX-Clip, without hose connection

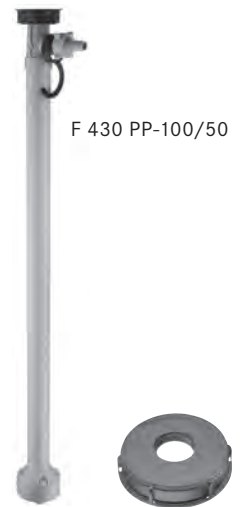
- **F 430 PP-100/50**

immersion length	part no.
1.000 mm	430 40 510
1.200 mm	430 40 512
1.500 mm	430 40 515

- **Screw top**

to secure the pump in the container in connection using compression gland or fume gland (part numbers see page 35)

nominal-Ø	part no.
DN 150	001 14 063
DN 225	001 14 064



## Centrifugal pumps for horizontal and vertical installation (dry installation – outside of drum/container)

**F 430 S-41/38 TR**, stainless steel, with stainless steel shaft, Ex-marking: II 2Gc IIBTX

connection	seal	part no.
inlet: G 2" male outlet: G ¼" male	FKM	430 20 002
inlet: clamp 2" outlet: clamp ½"	FKM	430 29 012
inlet: clamp 1 ½" outlet: clamp 1"	FKM	430 29 022



- **F 430 PP-41/38 TR** in polypropylene with hastelloy C shaft

connection	seal	part no.
inlet: G 2" male outlet: G 1¼" male	FKM	430 40 002

- **Hose connections** complete for suction side and discharge side

	nominal-Ø	part no.
in stainless steel, with nickel -plated brass G 2" female union nut	DN 32	959 04 059
	DN 38	959 04 060
in polypropylene, with G 2" female union nut	DN 32	959 04 010
	DN 38	959 04 011

Drive motors see page 16–20, hose connections see page 28

## Drum pumps in special lengths

G 1¼" male discharge connection, with FLUX-Clip, without hose connection

### Special lengths 500 mm, 1.500 mm, 1.800 mm

	500 mm part no.	1.500 mm part no.	1.800 mm part no.
FP 424 Ex S-43/38	-	424 22 015	-
FP 424 Ex S-43/37Z	-	424 22 115	-
F 424 PP-41/36	-	424 40 015	-
F 424 PP-41/35Z	-	424 40 115	-
F 424 PVDF-41/36	-	424 60 015	-
F 424 PVDF-41/35Z	-	424 60 115	-
FP 425 Ex S-41/34	-	425 22 016	-
F 430 S-41/38	430 20 105	430 20 115	430 20 118
F 430 S-41/37Z	430 20 405	430 20 415	430 20 418
F 430 S-50/45Z	430 20 205	430 20 215	430 20 218
F 430 AL-41/38	430 10 105	430 10 115	430 10 118
F 430 AL-41/37Z	430 10 405	430 10 415	430 10 418
F 430 PP-40/33	430 40 105	430 40 115	430 40 118
F 430 PP-40/33Z	430 40 405	430 40 415	430 40 418
F 430 PP-50/38	430 40 305	430 40 315	430 40 318
F 430 PP-50/43Z	430 40 205	430 40 215	430 40 218
F 430 PVDF-40/33	430 60 105	430 60 115	430 60 118
F 430 PVDF-40/33Z	430 60 405	430 60 415	430 60 418
F 430 PVDF-50/38	430 60 305	430 60 315	430 60 318
F 430 PVDF-50/43Z	430 60 205	430 60 215	430 60 218

### Special lengths 2.000 mm, 2.500 mm, 3.000 mm

	2.000 mm part no.	2.500 mm part no.	3.000 mm part no.
FP 425 Ex S-41/34	425 22 021	-	-
F 430 S-41/38	430 20 120	430 20 125	430 20 130
F 430 S-41/37Z	430 20 420	430 20 425	430 20 430
F 430 S-50/45Z	430 20 220	430 20 225	430 20 230
F 430 AL-41/38	430 10 120	-	-
F 430 AL-41/37Z	430 10 420	-	-
F 430 PP-40/33	430 40 120	-	-
F 430 PP-40/33Z	430 40 420	-	-
F 430 PP-50/38	430 40 320	430 40 325	430 40 330
F 430 PP-50/43Z	430 40 220	430 40 225	430 40 230
F 430 PVDF-40/33	430 60 120	-	-
F 430 PVDF-40/33Z	430 60 420	-	-
F 430 PVDF-50/38	430 60 320	430 60 325	430 60 330
F 430 PVDF-50/43Z	430 60 220	430 60 225	430 60 230

### Other lengths

and packing costs on request

# Accessories

for drum and container pumps

## Hose connections

- **stainless steel**, with nickel-plated **brass** G 1¼" female union nut

	part no.
DN 19	959 04 061
DN 25	959 04 041
DN 32	959 04 042

- **stainless steel**, with **stainless steel** G 1¼" female union nut

	part no.
DN 19	959 04 062
DN 25	959 04 063
DN 32	959 04 064

- **polypropylene**, with G 1¼" female union nut

	part no.
DN 13	959 04 081
DN 19	959 04 053
DN 25	959 04 052
DN 32	959 04 054

- **aluminium**, with nickel-plated **brass** G 1¼" female union nut

	part no.
DN 19	959 04 050
DN 25	959 04 039
DN 32	959 04 040

- **hastelloy C**, with **stainless steel** G 1¼" female union nut

	part no.
DN 25	959 04 043
DN 32	959 04 044

- **polyvinylidene fluoride**, with G 1¼" female union nut

	part no.
DN 13	959 04 082
DN 19	959 04 101
DN 25	959 04 102
DN 32	959 04 103



## Hose couplings

### quick hose couplings

consisting of 3 components: female part (hose side), male part and drum pump connector (please order all components at the same time)

- **polypropylene**, with FKM seal

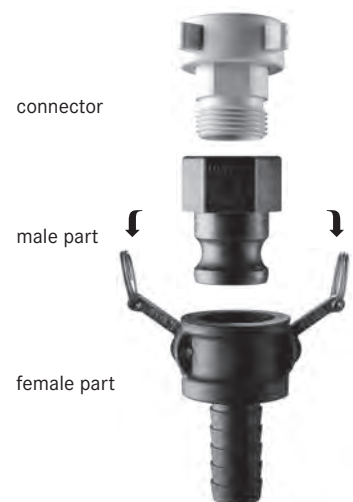
	part no.
connector: G 1" male - G 1¼" female	959 06 179
male part: G 1" female	959 13 213
female part with DN 25 hose connection	959 13 220

- **bronze**, with FKM seal

	part no.
connector: G 1" male - 1¼" female	959 06 019
male part: G 1" female	959 13 211
female part with DN 25 hose connection	959 13 219

- **stainless steel**, with FKM seal

	part no.
connector: G 1" male - G 1¼" female	959 06 144
male part: G 1" female	959 13 215
female part with DN 25 hose connection	959 13 221



### bracket clamp

pressed aluminium jaws for female part of quick hose couplings, for hoses with outer Ø 34 mm

	part no.
jaws, aluminium	959 13 218



## Swaged hose fittings for the connection of pump and hose

consisting of hose connection ① and bracket clamp or ferrule type with union nut ②

### • hose connection brass (also for use in hazardous areas)

seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PUR	AL nickel-plated	DN 13 - G 1/2" female	HE	21 mm	959 13 130
PUR	AL nickel-plated	DN 19 - G 1" female	HE	27 mm	959 13 116
-	AL nickel-plated	DN 19 - G 1" male	HE	27 mm	959 13 118
PUR	AL nickel-plated	DN 19 - G 1 1/4" female	HE	27 mm	959 13 192
PUR	AL nickel-plated	DN 19 - G 1" female	SL	30 - 33 mm	959 13 157
-	AL nickel-plated	DN 19 - G 1" male	SL	30 - 33 mm	959 13 156
PUR	AL nickel-plated	DN 19 - G 1 1/4" female	SL	30 - 33 mm	959 13 180
PUR	AL nickel-plated	DN 21 - G 1 1/4" female	SL	30 - 33 mm	959 13 230
PUR	AL nickel-plated	DN 25 - G 1" female	HE	34 mm	959 13 097
-	AL nickel-plated	DN 25 - G 1" male	HE	34 mm	959 13 099
PUR	AL nickel-plated	DN 25 - G 1 1/4" female	HE	34 mm	959 13 098
PUR	AL nickel-plated	DN 25 - G 1" female	SF	36 - 38 mm	959 13 158
PUR	AL nickel-plated	DN 25 - G 1" male	SF	36 - 38 mm	959 13 159
PUR	AL nickel-plated	DN 25 - G 1 1/4" female	SF	36 - 38 mm	959 13 140
-	AL nickel-plated	DN 25 - G 1 1/4" male	SF	36 - 38 mm	959 13 188
PUR	AL nickel-plated	DN 32 - G 1 1/4" female	SF	43 - 45 mm	959 13 014
PUR	AL nickel-plated	DN 32 - G 1 1/2" female	SF	43 - 45 mm	959 13 015
PUR	AL nickel-plated	DN 38 - G 1 1/2" female	SF	50 - 52 mm	959 13 143
PUR	brass	G 1 1/4" female - G 1" male	reducer		959 06 019
PUR	brass	G 1 1/2" female - G 1 1/4" male	reducer		959 06 002



HE Version  
ferrule type with union nut



SF Version  
with pinned safety clamps  
(Spannfix)

### • hose connection stainless steel (also for use in hazardous areas)

seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PTFE	AL nickel-plated	DN 13 - G 1/2" female	SL	22 - 24 mm	959 13 178
PTFE	AL nickel-plated	DN 19 - G 1" female	SL	30 - 33 mm	959 13 160
PTFE	AL nickel-plated	DN 19 - G 1 1/4" female	SL	30 - 33 mm	959 13 181
PTFE	AL nickel-plated	DN 21 - G 1 1/4" female	SL	30 - 33 mm	959 13 231
PTFE	AL nickel-plated	DN 25 - G 1" female	SF	36 - 38 mm	959 13 161
-	AL nickel-plated	DN 25 - G 1" male	SF	36 - 38 mm	959 13 162
PTFE	AL nickel-plated	DN 25 - G 1 1/4" female	SF	36 - 38 mm	959 13 144
PTFE	AL nickel-plated	DN 32 - G 1 1/4" female	SF	43 - 45 mm	959 13 145
PTFE	AL nickel-plated	DN 32 - G 1 1/2" female	SF	43 - 45 mm	959 13 146
PTFE	AL nickel-plated	DN 38 - G 1 1/2" female	SF	50 - 52 mm	959 13 147
PTFE	S	G 1 1/2" female - G 1 1/4" male	reducer		959 06 005



SL Version  
with bolted clamps (Spannloc)

### • hose connection polypropylene

seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PE	AL nickel-plated	DN 13 - G 1" female	SL	22 - 24 mm	959 13 285
PE	AL nickel-plated	DN 13 - G 1 1/4" female	SL	22 - 24 mm	959 13 289
PE	AL nickel-plated	DN 19 - G 1" female	SL	30 - 33 mm	959 13 287
PE	AL nickel-plated	DN 19 - G 1 1/4" female	SL	30 - 33 mm	959 13 291
PE	AL nickel-plated	DN 21 - G 1 1/4" female	SL	30 - 33 mm	959 13 293
PE	AL nickel-plated	DN 25 - G 1 1/4" female	SF	36 - 38 mm	959 13 295
PE	S	DN 13 - G 1" female	SL	22 - 24 mm	959 13 317
PE	S	DN 13 - G 1 1/4" female	SL	22 - 24 mm	959 13 321
PE	S	DN 19 - G 1" female	SL	30 - 33 mm	959 13 319
PE	S	DN 19 - G 1 1/4" female	SL	30 - 33 mm	959 13 323
PE	S	DN 21 - G 1 1/4" female	SL	30 - 33 mm	959 13 325
PE	S	DN 25 - G 1 1/4" female	SL	36 - 39 mm	959 13 327

### • hose connection polyvinylidene fluoride

seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PTFE	AL nickel-plated	DN 13 - G 1" female	SL	22 - 24 mm	959 13 286
PTFE	AL nickel-plated	DN 13 - G 1 1/4" female	SL	22 - 24 mm	959 13 290
PTFE	AL nickel-plated	DN 19 - G 1" female	SL	30 - 33 mm	959 13 288
PTFE	AL nickel-plated	DN 19 - G 1 1/4" female	SL	30 - 33 mm	959 13 292
PTFE	AL nickel-plated	DN 21 - G 1 1/4" female	SL	30 - 33 mm	959 13 294
PTFE	AL nickel-plated	DN 25 - G 1 1/4" female	SF	36 - 38 mm	959 13 296
PTFE	S	DN 13 - G 1" female	SL	22 - 24 mm	959 13 318
PTFE	S	DN 13 - G 1 1/4" female	SL	22 - 24 mm	959 13 322
PTFE	S	DN 19 - G 1" female	SL	30 - 33 mm	959 13 320
PTFE	S	DN 19 - G 1 1/4" female	SL	30 - 33 mm	959 13 324
PTFE	S	DN 21 - G 1 1/4" female	SL	30 - 33 mm	959 13 326
PTFE	S	DN 25 - G 1 1/4" female	SL	36 - 39 mm	959 13 328

# Accessories

for drum and container pumps

## Swaged hose fittings for the connection of hose and FLUX hand nozzle

- for hand nozzle **PP/FKM** Part No. 001 12 556 with connection Ø 28 mm

hose connection	seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PP	FKM	AL nickel-plated	DN 19	SL	30 - 33 mm	959 13 299
PP	FKM	AL nickel-plated	DN 21	SL	30 - 33 mm	959 13 304
PP	FKM	AL nickel-plated	DN 25	SF	36 - 38 mm	959 13 309
PP	FKM	S	DN 19	SL	30 - 33 mm	959 13 330
PP	FKM	S	DN 21	SL	30 - 33 mm	959 13 335
PP	FKM	S	DN 25	SF	36 - 38 mm	959 13 340

- for hand nozzle **PP/EPDM** Part No. 001 12 557 with connection Ø 28 mm

hose connection	seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PP	EPDM	AL nickel-plated	DN 19	SL	30 - 33 mm	959 13 300
PP	EPDM	AL nickel-plated	DN 21	SL	30 - 33 mm	959 13 305
PP	EPDM	AL nickel-plated	DN 25	SF	36 - 38 mm	959 13 310
PP	EPDM	S	DN 19	SL	30 - 33 mm	959 13 331
PP	EPDM	S	DN 21	SL	30 - 33 mm	959 13 336
PP	FKM	S	DN 25	SF	36 - 39 mm	959 13 341

- for hand nozzle **PVDF/FKM** Part No. 001 12 558 with connection Ø 28 mm

hose connection	seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PVDF	FKM	AL nickel-plated	DN 13	SL	22 - 24 mm	959 13 298
PVDF	FKM	AL nickel-plated	DN 19	SL	30 - 33 mm	959 13 301
PVDF	FKM	AL nickel-plated	DN 21	SL	30 - 33 mm	959 13 306
PVDF	FKM	AL nickel-plated	DN 25	SF	36 - 38 mm	959 13 311
PVDF	FKM	S	DN 13	SL	22 - 24 mm	959 13 329
PVDF	FKM	S	DN 19	SL	30 - 33 mm	959 13 332
PVDF	FKM	S	DN 21	SL	30 - 33 mm	959 13 337
PVDF	FKM	S	DN 25	SF	36 - 39 mm	959 13 342

- for hand nozzle **PVDF/EPDM** Part No. 001 12 559 with connection Ø 28 mm

hose connection	seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PVDF	EPDM	AL nickel-plated	DN 19	SL	30 - 33 mm	959 13 302
PVDF	EPDM	AL nickel-plated	DN 21	SL	30 - 33 mm	959 13 307
PVDF	EPDM	AL nickel-plated	DN 25	SF	36 - 38 mm	959 13 312
PVDF	EPDM	S	DN 19	SL	30 - 33 mm	959 13 333
PVDF	EPDM	S	DN 21	SL	30 - 33 mm	959 13 338
PVDF	EPDM	S	DN 25	SF	36 - 39 mm	959 13 343

- for hand nozzle **PVDF/FFKM** Part No. 001 12 560 with connection Ø 28 mm

hose connection	seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
PVDF	FFKM	AL nickel-plated	DN 19	SL	30 - 33 mm	959 13 303
PVDF	FFKM	AL nickel-plated	DN 21	SL	30 - 33 mm	959 13 308
PVDF	FFKM	AL nickel-plated	DN 25	SF	36 - 38 mm	959 13 313
PVDF	FFKM	S	DN 19	SL	30 - 33 mm	959 13 334
PVDF	FFKM	S	DN 21	SL	30 - 33 mm	959 13 339
PVDF	FFKM	S	DN 25	SF	36 - 39 mm	959 13 344



hand nozzle PP  
(see page 34)



hand nozzle PVDF  
(see page 34)

## Bracket clamp with corrosion protection

in stainless steel ECTFE coated with screws and nuts in HC for hose connection PP or PVDF

version	part no.
DN 13	959 13 345
DN 19	959 13 346
DN 25	959 13 347



HE = version ferrule type with union nut

SF = version with pinned safety clamps (Spannfix)

SL = version with bolted clamps (Spannloc)

## Swaged hose fittings for the connection of hose and hand nozzle

- **for hand nozzle MS** Part No. 001 12 340 with connection Ø 32 mm

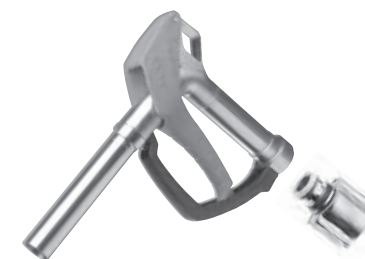
hose connector	seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
brass	PUR	AL nickel-plated	DN 19	HE	27 mm	959 13 134
brass	PUR	AL nickel-plated	DN 19	SL	31 mm	959 13 191
brass	PUR	AL nickel-plated	DN 21	SL	31 mm	959 13 229
brass	PUR	AL nickel-plated	DN 25	HE	34 mm	959 13 137
brass	PUR	AL nickel-plated	DN 25	SF	37 mm	959 13 152

- **for hand nozzle S** Part No. 001 12 549 with connection Ø 28 mm

hose connector	seal	bracket clamp	nominal-Ø	version	outer-Ø hose	part no.
S	PTFE	AL nickel-plated	DN 19	SL	31 mm	959 13 258
S	PTFE	AL nickel-plated	DN 21	SL	31 mm	959 13 259
S	PTFE	AL nickel-plated	DN 25	SF	37 mm	959 13 260



hand nozzle MS  
(see page 35)



hand nozzle S  
(see page 35)

## Bonding work

of the chosen hose fittings and hose

bonding work on both sides	part no.
including testing for electrical conductivity	000 00 100
without testing for electrical conductivity (with PP/PVDF hose connector)	000 00 102

bonding work on one site, without testing for electrical conductivity	part no.
swaged hose fittings with MS/S hose connector	000 00 103
swaged hose fittings with PP/PVDF hose connector	000 00 104

## Hose kits with G 1¼" female drum pump connectors

and connection to **brass hand nozzle** Part No. 001 12 340 with connection Ø 32 mm, electrically conductive with swaged hose fitting in aluminium nickel-plated

- **petroleum hose kit**

	length	part no.
DN 19	2 m long	001 10 091
	3 m long	001 10 092
DN 25	2 m long	001 10 081
	3 m long	001 10 082

- **universal hose kit**

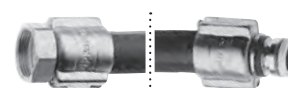
	length	part no.
DN 21	2 m long	001 10 839
	3 m long	001 10 840

- **hose kit for food and chemistry**

	length	part no.
DN 19	2 m long	001 10 089
	3 m long	001 10 090
DN 25	2 m long	001 10 811
	3 m long	001 10 812



hand nozzle MS  
(see page 35)



hose kit

## Hose kits with G 1¼" female drum pump connectors

and connection to **stainless steel hand nozzle** Part No. 001 12 549 with connection Ø 28 mm, electrically conductive with swaged hose fitting in aluminium nickel-plated

- **universal hose kit**

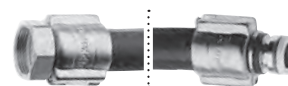
	length	part no.
DN 21	2 m long	001 10 870
	3 m long	001 10 871

- **hose kit for food and chemistry**

	length	part no.
DN 19	2 m long	001 10 873
	3 m long	001 10 874
DN 25	2 m long	001 10 868
	3 m long	001 10 869



hand nozzle S  
(see page 35)



hose kit

# Accessories

## for drum and container pumps

### Hoses without inliner

for use with hose connections or swaged hose fittings

- **PVC hose with fabric lining**  
also suitable for food contact according to Regulation (EC) 1935/2004

	operating pressure max.	part no.
DN 13 outer Ø 20 mm	10 bar	001 10 008



- **PVC hose with steel wire-helix**  
also suitable for food contact according to Regulation (EC) 1935/2004

	operating pressure max.	part no.
DN 20 outer Ø 27 mm	5 bar	001 10 040
DN 25 outer Ø 33 mm	5 bar	001 10 041
DN 32 outer Ø 41 mm	4,5 bar	001 10 042
DN 38 outer Ø 47 mm	4 bar	001 10 043
DN 50 outer Ø 60 mm	3 bar	001 10 044



- **Petroleum hose**  
electrically conductive Ω to EN 12115:2011.  
Material inside: NBR black

	operating pressure max.	part no.
DN 13 outer Ø 21 mm	10 bar	001 10 076
DN 19 outer Ø 27 mm	10 bar	001 10 065
DN 25 outer Ø 34 mm	10 bar	001 10 002



electrically conductive Ω/T to EN 12115:2011.  
Material inside: NBR black

	operating pressure max.	part no.
DN 32 outer Ø 44 mm	25 bar	001 10 003
DN 38 outer Ø 51 mm	25 bar	001 10 004

- **Special food-grade hose**  
suitable for food contact according to Regulation (EC) 1935/2004 and FDA CFR 21.  
Material inside: NBR white

	operating pressure max.	part no.
DN 25 outer Ø 37 mm	16 bar	001 10 022
DN 38 outer Ø 51 mm	16 bar	001 10 023



### Hoses with inliner

for use with swaged hose fittings

- **Universal hose**, electrically conductive Ω to EN 12115:2011.  
Material inside: fluoropolymer THV seamless

	operating pressure max.	part no.
DN 21 outer Ø 31 mm	16 bar	001 10 838



- **Hose for food and chemistry**, electrically conductive Ω/T to EN 12115:2011  
suitable for food contact according to Regulation (EC) 1935/2004 and FDA CFR 21.  
Material inside: ultra-high molecular PE transparent

	operating pressure max.	part no.
DN 13 outer Ø 22 mm	16 bar	001 10 085
DN 19 outer Ø 31 mm	16 bar	001 10 037
DN 25 outer Ø 37 mm	16 bar	001 10 030
DN 32 outer Ø 43 mm	16 bar	001 10 036
DN 38 outer Ø 51 mm	16 bar	001 10 086





### Stepless 1-Ear hose clip

in stainless steel 316 Ti for use with hose connection

- for **PVC hose**

	outer Ø	part no.
DN 13	18 mm	959 13 237
DN 19	27 mm	959 13 241
DN 25	34 mm	959 13 243
DN 32	41 mm	959 13 248
DN 38	47 mm	959 13 251
DN 50	60 mm	959 13 255

- for **petroleum hose**

	outer Ø	part no.
DN 13	21 mm	959 13 239
DN 19	27 mm	959 13 371
DN 25	34 mm	959 13 243
DN 32	43 mm	959 13 249
DN 38	51 mm	959 13 252

- for **special food-grade hose**

	outer Ø	part no.
DN 25	37 mm	959 13 246
DN 38	55 mm	959 13 369

### Forceps to attach the 1-Ear hose clip

part no.
961 40 811



# Accessories

for drum and container pumps

## Non explosion-proof hand nozzles

### Hand nozzles with hose connection for use with hoses without inliner (see page 32)

- **hand nozzle PP** (polypropylene) with small outlet

nominal Ø	seal	outlet Ø	part no.
DN 13	FKM	6 mm	001 13 001
DN 13	FKM	11 mm	001 13 034
DN 19	FKM	11 mm	001 13 039
DN 19	FKM	20 mm	001 13 000
DN 25	FKM	20 mm	001 13 035

- **hand nozzle PP** (polypropylene) with swivel inlet, outlet Ø 22 mm

nominal Ø	seal	part no.
DN 19	FKM	001 12 500
DN 25	FKM	001 12 504
DN 19	EPDM	001 12 506
DN 25	EPDM	001 12 510

- **hand nozzle PP** (polypropylene) **AdBlue®** version with swivel inlet, outlet Ø 19 mm

nominal Ø	seal	part no.
DN 19	FKM	001 12 518

- **hand nozzle PVDF** (polyvinylidene fluoride) **with swivel inlet**, outlet Ø 22 mm

nominal Ø	seal	part no.
DN 19	FKM	001 12 501
DN 25	FKM	001 12 505
DN 19	EPDM	001 12 507
DN 25	EPDM	001 12 511
DN 19	FFKM	001 12 512
DN 25	FFKM	001 12 514

- **hand nozzle AL** (aluminium) **with swivel inlet**, outlet Ø 25 mm

nominal Ø	seal	part no.
DN 19	NBR	001 12 397
DN 25	NBR	001 12 172

### Hand nozzles without hose connection for use with hoses with inliner (see page 32)

swaged hose fittings see page 30

- **hand nozzle PP** (polypropylene) **with swivel inlet**, outlet Ø 22 mm

nominal Ø	seal	part no.
28 mm	FKM	001 12 556
28 mm	EPDM	001 12 557

- **hand nozzle PVDF** (polyvinylidene fluoride) **with swivel inlet**, outlet Ø 22 mm

nominal Ø	seal	part no.
28 mm	FKM	001 12 558
28 mm	EPDM	001 12 559
28 mm	FFKM	001 12 560

- **hand nozzle AL** (aluminium) with swivel inlet, outlet Ø 25 mm

nominal Ø	seal	part no.
G 1" female	NBR	001 12 171



## Explosion-proof hand nozzles

for applications in Zone 1

### Hand nozzles with hose connection for use with hoses without inliner (see page 32)

- **hand nozzle S** (stainless steel), outlet Ø 28 mm

nominal Ø	seal	part no.
DN 19	PTFE/FEP	001 12 541
DN 25	PTFE/FEP	001 12 542

- **hand nozzle MS** (brass nickel-plated), outlet Ø 25 mm

nominal Ø	seal	part no.
DN 19	PTFE	001 12 396
DN 25	PTFE	001 12 337
DN 32	PTFE	001 12 338

### Hand nozzles without hose connection for use with hoses with inliner (see page 31)

for direct mounting onto FLUX hose kits page 31  
or swaged hose fittings page 30-31

- **hand nozzle S** (stainless steel), outlet Ø 28 mm

nominal Ø	seal	part no.
Ø 28	PTFE/FEP	001 12 549
G 1" male	PTFE/FEP	001 12 543
G 1 ¼" male	PTFE/FEP	001 12 544

- **hand nozzle MS** (brass), outlet Ø 25 mm

nominal Ø	seal	part no.
Ø 32	PTFE	001 12 340
G 1" male	PTFE	001 12 389
G 1" female	PTFE	001 12 339

### Self locking hand nozzles

- **hand nozzle AL 20** (aluminium), outlet Ø 24 mm

nominal Ø	version	seal	part no.
G 1" male	with rigid inlet	PTFE	001 12 109
G 1" male	with spout 190 mm long for use with fume cone	PTFE	001 12 335
G 1" male	with swivel inlet	NBR	001 12 347

- **hand nozzle AL 20 R** (aluminium unleaded), outlet Ø 21 mm

nominal Ø	version	seal	part no.
G 1" male	with swivel inlet	NBR	001 12 097

- **hand nozzle AL** (aluminium) for „AdBlue®“, outlet Ø 19 mm

nominal Ø	version	seal	part no.
G 1" male	AdBlue®	NBR	001 12 417

### Accessories for hand nozzles

#### longer outlet tube

for mounting on hand nozzle, 220 mm long, Ø 20 mm

material	part no.
polypropylene	001 12 228
polyvinylidene fluoride	001 12 241
stainless steel	001 12 285



# Accessories

for drum and container pumps

## FES fume glands and accessories

### Consisting of valve part and threaded ring

(please order both parts for a complete unit)

- valve part PP (polypropylene), with FKM O-ring

pumps Ø	part no.
25 mm	001 14 309
32 mm	001 14 313
40 mm	001 14 181
41 mm	001 14 182
50 mm	001 14 243



- threaded ring PP (polypropylene) with FKM flat seal

pumps Ø	thread connection	part no.
25/32/40/41 mm	G 2" B male	001 14 218
25/32/40/41 mm	CCS 57 x 4 male thread	001 14 224
25/32/40/41 mm	CCS 60 x 6 female thread	001 14 228
25/32/40/41 mm	CCS 70 x 6 female thread	001 14 226
25/32/40/41 mm	CCS 70 x 6 male thread	001 14 232
25/32/40/41 mm	BCS 70 x 6 (with O-ring) male thread	001 14 236
50 mm	G 2" B male	001 14 238
50 mm	CCS 70 x 6 male thread	001 14 267
50 mm	CCS 70 x 6 female thread	001 14 269
40/41 mm	CCS 64 x 5 male thread	001 14 230
40/41 mm	CCS 64 x 5 female thread	001 14 271
50 mm	CCS 64 x 5 male thread	001 14 265



- valve part S (stainless steel), with FEP O-ring

pumps Ø	part no.
28 mm (FKM o-ring)	001 14 319
41 mm	001 14 192
41 mm with gas compensation connector DN 10	001 14 194
50 mm	001 14 253
50 mm with gas compensation connector DN 10	001 14 245



valve part with 3/8" BSPPF gas compensation connector

- threaded ring S (stainless steel), with PE flat seal

pumps Ø	nominal Ø	part no.
28/41 mm	G 2" male	001 14 325
28/41 mm	S 57 x 4 male thread	001 14 329
50 mm	G 2" male	001 14 331

- threaded ring MS (brass), with PE flat seal

pumps Ø	nominal Ø	part no.
41 mm	G 2" male	001 14 327
50 mm	G 2" male	001 14 333



### Accessories for additional use of a gas compensation connector

- hose nipple (PP) for valve part PP, DN 10 - G 1/4" male

part no.
959 13 128



- PE-corrugated hose for gas compensation

part no.
DN 10, outer Ø 13 mm
001 10 061

- NBR compressed air hose for gas compensation

part no.
DN 10 electrically conductive, outer Ø 17mm
001 10 098



- fume cone (polypropylene) for hand nozzle with outlet DN 10

part no.
for longer outlet tube Ø 20 mm
001 14 285
for outlet Ø 24 mm
001 14 296



Longer outlet tube see page 35

## Compression gland

material	pumps Ø	connection	part no.
polyethylene	41 mm	57 x 4 male thread	001 14 067
polyethylene	41 mm	70 x 6 male thread	001 14 065
polyethylene	50 mm	70 x 6 male thread	001 14 066
polypropylene	40/41 mm	G 2" male, electrically conductive	001 14 054
polypropylene	50 mm	G 2" male, electrically conductive	001 14 062
steel/zinc-plated	40 mm	M 64 x 4 / G 2" male thread	001 14 061
steel/zinc-plated	41 mm	M 64 x 4 / G 2" male thread	001 14 000
steel/zinc-plated	50 mm	G 2" male thread	001 14 003
steel/zinc-plated	50 mm	M 64 x 4 male thread	001 14 002



## IBC-screw top FLUXCAP

- **FLUXCAP** to protect the medium against ingress of foreign matter. It is closing automatically when pump is pulled out.

pumps Ø		part no.
40 mm	G 2" male	001 14 339



- **Screw top** for IBC suitable for FLUXCAP

connection		part no.
DN 150	G 2" female	001 14 063
DN 225	G 2" female	001 14 064



## Suction strainers

material	pumps Ø	outer Ø	part no.
polypropylene	40/41 mm	53 mm	001 10 200
polypropylene	50 mm	60 mm	001 10 205
polyvinylidene fluoride	40/41 mm	53 mm	001 10 245
polyvinylidene fluoride	50 mm	60 mm	001 10 267
stainless steel	41 mm	53 mm	001 10 209
stainless steel	43 mm (for FP 424 S-43/38 and -43/37 Z)	53 mm	001 10 294
stainless steel	50 mm	59 mm	001 10 212



## Discharge spout

with union nut G 1¼" female

material	nominal Ø	part no.
aluminium (AL)	DN 25	959 07 003
stainless steel (S)	DN 25	959 07 007
polypropylene (PP)	DN 19	959 07 009



## Quick action coupling SSK 400

for the quick assembly of motor and drum pump. In case of frequent disassembly of pump and motor (for hazardous areas only allowed in combination with equipotential bonding on pump and motor)

	part no.
complete	001 10 802
threaded ring (motor)	001 10 800
clamping element (pump)	001 10 804



## Attachment clamps

- **Wall brackets** in stainless steel, with screws for fixing

	part no.
for drum and container pumps	001 10 426



- **Attachment clamp**, material: steel zinc-plated, polypropylene

for pumps Ø	part no.
40/41 mm	001 10 601
50 mm	001 10 603
54 mm	001 10 604



- **Container clip**, aluminium/PVC-coated

for pumps Ø	part no.
40/41 mm	001 15 005
50 mm	001 15 006



- **Mounting flange** with mounting dimensions according to DIN EN 1092-1 outer Ø 165 mm, PCD Ø 125 mm, holes 4 x 18 mm

material	part no.
polypropylene	947 14 021
polyvinylidene fluoride	947 14 034
stainless steel (not allowed with stainless steel pumps which are used in hazardous areas)	947 14 033



### Mixing tubes

for drum pumps instead of the outer tube

- for F 430 AL-41/38

immersion length	part no.
1.000 mm	430 11 193

- for F 430 S-41/38 (not allowed in hazardous areas)

immersion length	part no.
1.000 mm	430 21 193

- for F 430 PP-40/33

immersion length	part no.
1.000 mm	430 41 193



### Non-return valves

- stainless steel, nominal  $\varnothing$  G 1 1/4" female – G 1 1/4" male, for mounting onto pump discharge

seal	part no.
FKM	959 14 024
FFKM	959 14 048

- polypropylene, FKM seal, for mounting onto pump foot

for pumps	part no.
F 430 PP-40/33	959 14 029
F 430 PP-40/33Z	959 14 030

- polyvinylidene fluoride, FKM seal, for mounting onto pump foot

for pumps	part no.
F 430 PVDF-40/33	959 14 038
F 430 PVDF-40/33Z	959 14 039



### Float switches

- polypropylene**

immersion length	part no.
700 mm	001 16 021
1.000 mm	001 16 022
1.200 mm	001 16 023
1.500 mm	001 16 024

- stainless steel**

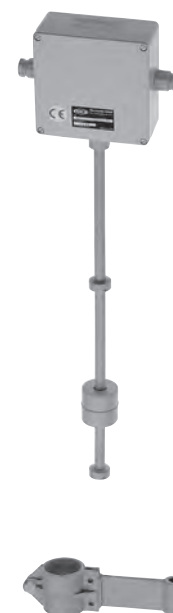
immersion length	part no.
700 mm	001 16 011
1.000 mm	001 16 012
1.200 mm	001 16 013
1.500 mm	001 16 014

- fixing element\* for float switch polypropylene**

for pumps $\varnothing$	part no.
40/41 mm	001 16 101
50 mm	001 16 103

- fixing element\* for float switch stainless steel**

for pumps $\varnothing$	part no.
41 mm	001 16 016
50 mm	001 16 017



\* two fixing elements required for lengths from 1.000 mm

# Accessories

for drum and container pumps in FOOD version

## Accessories for drum and container pumps in FOOD version

suitable for food contact according to Regulation (EC) 1935/2004 and FDA CFR 21

- Hose connections**

material: stainless steel 316 Ti, pump connection clamp 1½"

nominal Ø	seal	part no.
DN 19	FKM	959 04 171
DN 19	NBR	959 04 172
DN 25	FKM	959 04 169
DN 25	NBR	959 04 170



- Swaged hose fittings for the connection of pump and hose**

for use with hose or special hose for food and chemistry, screwed version, stainless steel 316 Ti, connection pump clamp 1½"

nominal Ø	seal	part no.
DN 19	FKM	959 13 354
DN 19	NBR	959 13 355
DN 25	FKM	959 13 356
DN 25	NBR	959 13 357



- Discharge spout**

material: stainless steel

nominal Ø	part no.
1 ½" clamp (Ø 28)	959 07 031



- Flap valve**

material: stainless steel, connection pump clamp 1½", DN 40 (with joint clamp)

seal	part no.
NBR	959 19 006
FKM	959 19 004



- Hand nozzle**

for use with FLUX drum pump FP 430 S FOOD (for alcohols) outlet Ø 28 mm

material	nominal Ø	seal	part no.
stainless steel	clamp 1½"	PTFE/FKM	001 12 568



Hoses see page 32



# Eccentric worm-drive pumps in stainless steel



# Eccentric worm-drive pumps

## F 550 – industrial version

G 1 1/2" male connection, in stainless steel, with open mechanical seal, seal material FKM\* (without hose connection, stator and stator housing)

### with planetary gear, ratio 1 : 15.9 (GS)

#### with torsion shaft

- F 550 GS-50/21 TW

immersion length	part no.
700 mm	550 24 807
1.000 mm	550 24 810
1.200 mm	550 24 812

- F 550 GS-54/26 TW

immersion length	part no.
700 mm	550 25 675
1.000 mm	550 25 676
1.200 mm	550 25 677

#### with cardan shaft for higher torque

- F 550 GS-50/21 GW

immersion length	part no.
700 mm	550 24 847
1.000 mm	550 24 850
1.200 mm	550 24 852

- F 550 GS-54/26 GW

immersion length	part no.
700 mm	550 25 717
1.000 mm	550 25 720
1.200 mm	550 25 722



F 550 GS

### with bearing flange (S) bearing flange Ø 160 mm in aluminium

#### with torsion shaft

- F 550 S-50/21 TW

immersion length	part no.
700 mm	550 25 507
1.000 mm	550 25 510
1.200 mm	550 25 512

- F 550 S-54/26 TW

immersion length	part no.
700 mm	550 25 649
1.000 mm	550 25 652
1.200 mm	550 25 654

#### with cardan shaft for higher torque

- F 550 S-50/21 GW

immersion length	part no.
700 mm	550 24 867
1.000 mm	550 24 870
1.200 mm	550 24 872

- F 550 S-54/26 GW

immersion length	part no.
700 mm	550 25 737
1.000 mm	550 25 740
1.200 mm	550 25 742



F 550 S

### with planetary gear, ratio 1 : 6.75 (GS6)

#### with torsion shaft

- F 550 GS6-50/21 TW

immersion length	part no.
700 mm	550 23 200
1.000 mm	550 23 201
1.200 mm	550 23 202

- F 550 GS6-54/26 TW

immersion length	part no.
700 mm	550 23 300
1.000 mm	550 23 301
1.200 mm	550 23 302

#### with cardan shaft for higher torque

- F 550 GS6-50/21 GW

immersion length	part no.
700 mm	550 23 203
1.000 mm	550 23 204
1.200 mm	550 23 205

- F 550 GS6-54/26 GW

immersion length	part no.
700 mm	550 23 306
1.000 mm	550 23 307
1.200 mm	550 23 308



F 550 GS6

suitable stators see page 43

\*Additional cost for FFKM o-rings

hose connection see page 44

drive motors for planetary gear versions see page 16-20

drive motors for bearing flange version and planetary gear version with ratio 1 : 6.75 see page 51

Illustration with hose connection

# Eccentric worm-drive pumps



F 550 industrial version – ex-proofed



## suitable stators and stator housings (in stainless steel)

- for pumps with **outer-Ø 50 mm**

	part no.
NBR black (complete)	550 24 244
NBR white (complete)	550 24 248
FKM black (complete)	550 24 247
PTFE stator	550 24 271
stator housing for PTFE	550 24 241

- for pumps with **outer-Ø 54 mm**

	part no.
NBR black (complete)	550 25 620
NBR white (complete)	550 25 621
FKM black (complete)	550 25 619
PTFE stator	550 25 626
stator housing for PTFE	550 25 624

## Ex-proofed version for applications in Zone 0

in stainless steel, with open mechanical seal, seal material FKM, with torsion shaft, G 1 1/2" male discharge connection (without hose connection)

### with planetary gear, ratio 1 : 15.9 (GSX)

- F 550 GSXA-50/21, stator PTFE white**  
Ex-marking II 1/2 G IIA T4

immersion length	part no.
700 mm	550 23 030
1.000 mm	550 23 031
1.200 mm	550 23 032

- F 550 GSXB-50/21, stator PTFE black**  
Ex-marking II 1/2 G IIB T4

immersion length	part no.
700 mm	550 23 410
1.000 mm	550 23 411
1.200 mm	550 23 412

### with bearing flange bearing flange Ø 160 mm in aluminium (SX)

- F 550 SXA-50/21, stator PTFE white**  
Ex-marking II 1/2 G IIA T4

immersion length	part no.
700 mm	550 23 020
1.000 mm	550 23 021
1.200 mm	550 23 022

- F 550 SXB-50/21, stator PTFE black**  
Ex-marking II 1/2 G IIB T4

immersion length	part no.
700 mm	550 23 400
1.000 mm	550 23 401
1.200 mm	550 23 402



hose connections see page 44

drive motors for planetary gear versions see page 16-20

drive motors for bearing flange version see page 5 1

Illustration with hose connection

# Accessories for eccentric worm-drive pumps

## F 550 industrial version

- **Hose connections with G 1½" female union nut (stainless steel)**

nominal Ø	part no.
DN 25	959 04 002
DN 32	959 04 003
DN 38	959 04 004



- **compression gland (for pumps ø 50 mm)**

	part no.
G 2" male, steel, zinc-plated	001 14 003
M 64 x 4, steel, zinc-plated	001 14 002
G 2" male, polypropylene, electrically conductive	001 14 062



- **suction strainer S (stainless steel), outer Ø 59 mm**

	part no.
for pumps Ø 50 mm (short, 62 mm)	001 10 283
for pumps Ø 50 mm (long, 108 mm)	001 10 212



- **inliner suction protection**

for pumps with Ø	part no.
50 mm	001 10 347
54 mm	001 10 350



- **by-pass valve, G 1½" female – G 1½" male thread connection**

	part no.
brass, PTFE seal, with flow-back tube 300 mm long	001 18 026
brass, PTFE seal, with hose connection DN 19	001 18 028
stainless steel, FKM seal, with flow-back tube 300 mm long	001 18 027
stainless steel, FKM seal, with hose connection DN 19	001 18 029
stainless steel, PTFE seal, with hose connection DN 19	001 18 046
brass, PTFE seal, with hose connection DN 25	001 18 056
stainless steel, FKM seal, with hose connection DN 25	001 18 057
stainless steel, PTFE seal with hose connection DN 25	001 18 058



- **attachment clamp, material: steel zinc-plated, polypropylene**

for pumps Ø	part no.
50 mm	001 10 603
54 mm	001 10 604



- **container clip, aluminium/PVC-coated**

for pumps Ø	part no.
50 mm	001 15 006



- **bearing flange with impuls sensor**  
in stainless steel, with 5 m impulse cable

for pumps	part no.
F 550 (S) with mechanical seal	550 25 555



### suitable digital unit

	part no.
FLUXTRONIC®	001 42 113



professional dismantling tool on request

Swaged hose fittings and hose kits see page 29

# Eccentric worm-drive pumps

F 560 for Pharma, Food, Cosmetic



## with planetary gear, ratio 1 : 15.9 (GS)

in stainless steel, with closed mechanical seal, seal material FKM\*  
(without hose connection, stator and stator housing)

### with torsion shaft

- F 560 GS1-50/21,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 24 607
1.000 mm	560 24 610
1.200 mm	560 24 612

- F 560 GS2-50/21,  
G 1½" male discharge connection

immersion length	part no.
700 mm	560 24 707
1.000 mm	560 24 710
1.200 mm	560 24 712

- F 560 GS1-54/26,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 25 707
1.000 mm	560 25 710
1.200 mm	560 25 712

- F 560 GS2-54/26,  
G 1½" male discharge connection

immersion length	part no.
700 mm	560 25 807
1.000 mm	560 25 810
1.200 mm	560 25 812



F 560 GS

### with cardan shaft for higher torque

- F 560 GS1-50/21,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 24 627
1.000 mm	560 24 630
1.200 mm	560 24 632

- F 560 GS2-50/21,  
G 1½" male discharge connection

immersion length	part no.
700 mm	560 24 727
1.000 mm	560 24 730
1.200 mm	560 24 732

- F 560 GS1-54/26,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 25 727
1.000 mm	560 25 730
1.200 mm	560 25 732

- F 560 GS2-54/26,  
G 1½" male discharge connection

immersion length	part no.
700 mm	560 25 827
1.000 mm	560 25 830
1.200 mm	560 25 832

## suitable stators and stator housings (in stainless steel)

- for pumps with outer-Ø 50 mm

	part no.
PTFE stator	550 24 271
stator housing, e-polished	560 28 067

- for pumps with outer-Ø 54 mm

	part no.
NBR white stator	550 25 545
FKM black stator	550 25 546
PTFE stator	550 25 626
stator housing, e-polished	560 28 069

\*Additional cost for FFKM o-rings

hose connection see page 50  
drive motors for planetary gear version see page 16-20

Illustration with hose connection

# Eccentric worm-drive pumps

## F 560 for Pharma, Food, Cosmetic

### with bearing flange

in stainless steel, with closed mechanical seal, seal material FKM\* bearing flange Ø 160 mm in stainless steel (without hose connection, stator and stator housing)

### with torsion shaft

- F 560 S1-50/21,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 24 407
1.000 mm	560 24 410
1.200 mm	560 24 412

- F 560 S2-50/21,  
G 1½" male discharge connection

immersion length	part no.
700 mm	560 24 507
1.000 mm	560 24 510
1.200 mm	560 24 512

- F 560 S1-54/26,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 25 507
1.000 mm	560 25 510
1.200 mm	560 25 512

- F 560 S2-54/26,  
G 1½" male discharge connection

immersion length	part no.
700 mm	560 25 607
1.000 mm	560 25 610
1.200 mm	560 25 612



F 560 S

### with cardan shaft for higher torque

- F 560 S1-50/21,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 24 427
1.000 mm	560 24 430
1.200 mm	560 24 432

- F 560 S2-50/21,  
G 1½ male discharge connection

immersion length	part no.
700 mm	560 24 527
1.000 mm	560 24 530
1.200 mm	560 24 535

- F 560 S1-54/26,  
Rd 58 x 1/6 discharge connection

immersion length	part no.
700 mm	560 25 527
1.000 mm	560 25 530
1.200 mm	560 25 532

- F 560 S2-54/26,  
G 1½ male discharge connection

immersion length	part no.
700 mm	560 25 627
1.000 mm	560 25 630
1.200 mm	560 25 632

### suitable stators and stator housings (in stainless steel)

- for pumps with **outer-Ø 50 mm**

	part no.
PTFE stator	550 24 271
stator housing, e-polished	560 28 067

- for pumps with **outer-Ø 54 mm**

	part no.
NBR white stator	550 25 545
FKM black stator	550 25 546
PTFE stator	550 25 626
stator housing, e-polished	560 28 069

\*Additional cost for FFKM o-rings

**hose connection see page 50**  
**drive motors for bearing flange version see page 51**

Illustration with hose connection

# Eccentric worm-drive pumps

F 560 for Pharma, Food, Cosmetic



## Eccentric worm-drive pumps in FOOD version



in stainless steel, with closed mechanical seal, seal material FKM, suitable for food contact according to regulation (EC) 1935/2004 and FDA CFR 21. 2" clamp discharge connection (other connections on request) (without hose connection, stator and stator housing)

### with planetary gear, ratio 1 : 15.9 (GS FOOD) with torsion shaft

- F 560 GS3-50/21 FOOD

immersion length	part no.
700 mm	560 24 307
1.000 mm	560 24 310
1.200 mm	560 24 312

- F 560 GS3-54/26 FOOD

immersion length	part no.
700 mm	560 25 307
1.000 mm	560 25 310
1.200 mm	560 25 312



F 560 GS FOOD

### with cardan shaft for higher torque

- F 560 GS3-50/21 FOOD

immersion length	part no.
700 mm	560 24 327
1.000 mm	560 24 330
1.200 mm	560 24 332

- F 560 GS3-54/26 FOOD

immersion length	part no.
700 mm	560 25 327
1.000 mm	560 25 330
1.200 mm	560 25 332

### with bearing flange (S FOOD) bearing flange Ø 160 mm in stainless steel with torsion shaft

- F 560 S3-50/21 FOOD

immersion length	part no.
700 mm	560 24 207
1.000 mm	560 24 210
1.200 mm	560 24 212

- F 560 S3-54/26 FOOD

immersion length	part no.
700 mm	560 25 207
1.000 mm	560 25 210
1.200 mm	560 25 212



F 560 S FOOD

### with cardan shaft for higher torque

- F 560 GS3-50/21 FOOD

immersion length	part no.
700 mm	560 24 227
1.000 mm	560 24 230
1.200 mm	560 24 232

- F 560 GS3-54/26 FOOD

immersion length	part no.
700 mm	560 25 227
1.000 mm	560 25 230
1.200 mm	560 25 232

### suitable stators and stator housings in FOOD version

- for pumps with **outer-Ø 50 mm**

	part no.
PTFE stator	560 28 260
stator housing, e-polished	560 28 280

- for pumps with **outer-Ø 54 mm**

	part no.
PTFE stator	560 28 259
NBR white stator	560 28 258
stator housing, e-polished	560 28 281

accessories for FOOD Version see page 50

**hose connection see page 50**

**drive motors for planetary gear version see page 16-20**

**drive motors for bearing flange version see page 5 1**

Illustration with hose connection

# Eccentric worm-drive pumps

F 560 for Pharma, Food, Cosmetic – 3A-certified

## Eccentric worm-drive pumps 3-A version



in stainless steel, with closed mechanical seal, seal material FKM, with torsion shaft, 2" clamp discharge connection, with stator PTFE, without hose connection

### with planetary gear, ratio 1 : 15.9 (GS 3A)

- F 560 GS3A-50/21

immersion length	part no.
700 mm	560 24 107
1.000 mm	560 24 110
1.200 mm	560 24 112

- F 560 GS3A-54/26

immersion length	part no.
700 mm	560 25 107
1.000 mm	560 25 110
1.200 mm	560 25 112

### with bearing flange (S 3A) bearing flange Ø 160 mm in stainless steel

- F 560 S3A-50/21

immersion length	part no.
700 mm	560 24 007
1.000 mm	560 24 010
1.200 mm	560 24 012

- F 560 S3A-54/26

immersion length	part no.
700 mm	560 25 007
1.000 mm	560 25 010
1.200 mm	560 25 012



hose connection see page 50

drive motors for planetary gear version see page 16-20

drive motors for bearing flange version see page 5 1

Illustration with hose connection



# Eccentric worm-drive pumps

F 560 for Pharma, Food, Cosmetic



## Ex-proofed versions for applications in Zone 0

in stainless steel, with open mechanical seal, seal material FKM, with torsion shaft, without hose connection

### with planetary gear, ratio 1 : 15.9 (GSX)

- **F 560 GS1XA-50/21, Rd 58 x 1/6** discharge connection, **stator PTFE white** explosion-proof to II 1/2 G IIA T4

immersion length	part no.
1.000 mm	560 21 010
1.200 mm	560 21 012

- **F 560 GS1XB-50/21, Rd 58 x 1/6** discharge connection, **stator PTFE black** explosion-proof to II 1/2 G IIB T4

immersion length	part no.
1.000 mm	560 21 410
1.200 mm	560 21 412

- **F 560 GS2XA-50/21, G 1½" male** discharge connection, **stator PTFE white** explosion-proof to II 1/2 G IIA T4

immersion length	part no.
1.000 mm	560 21 110
1.200 mm	560 21 112

- **F 560 GS2XB-50/21, G 1½" male** discharge connection, **stator PTFE black** explosion-proof to II 1/2 G IIB T4

immersion length	part no.
1.000 mm	560 21 510
1.200 mm	560 21 512



F 560 GSX

### with bearing flange (SX) bearing flange Ø 160 in stainless steel

- **F 560 S1XA-50/21, Rd 58 x 1/6** discharge connection, **stator PTFE white** explosion-proof to II 1/2 G IIA T4

immersion length	part no.
1.000 mm	560 20 810
1.200 mm	560 20 812

- **F 560 S1XB-50/21, Rd 58 x 1/6** discharge connection, **stator PTFE black** explosion-proof to II 1/2 G IIB T4

immersion length	part no.
1.000 mm	560 21 210
1.200 mm	560 21 212

- **F 560 S2XA-50/21, G 1½" male** discharge connection, **stator PTFE white** explosion-proof to II 1/2 G IIA T4

immersion length	part no.
1.000 mm	560 20 910
1.200 mm	560 20 912

- **F 560 S2XB-50/21, G 1½" male** discharge connection, **stator PTFE black** explosion-proof to II 1/2 G IIB T4

immersion length	part no.
1.000 mm	560 21 310
1.200 mm	560 21 312



F 560 SX

hose connection see page 50

drive motors for planetary gear version see page 16-20

drive motors for bearing flange version see page 51

Illustration with hose connection

# Accessories

for eccentric worm-drive pumps

- **hose connection stainless steel, with union nut**

	part no.
DN 25 Rd 58 x 1/6	959 04 115
DN 32 Rd 58 x 1/6	959 04 134
DN 38 Rd 58 x 1/6	959 04 130
DN 25 G 1½" female	959 04 002
DN 32 G 1½" female	959 04 003
DN 38 G 1½" female	959 04 004



- **hose connection in stainless steel with 2" clamp connection**

	part no.
DN 25	959 04 136
DN 32	959 04 137
DN 38	959 04 109



- **Inliner suction protection**

for pumps with Ø	part no.
50 mm	001 10 347
54 mm	001 10 350



- **bearing flange with impuls sensor**  
in stainless steel, with 5 m impulse cable

for pump	part no.
F 560 (S) with mechanical seal	560 28 291



**suitable digital unit**

	part no.
FLUXTRONIC®	001 42 113



## Accessories for eccentric worm-drive pumps in FOOD version

suitable for food contact according to Regulation (EC) 1935/2004 and FDA CFR 21

- **Hose connections** material: stainless steel 316 Ti, 2" clamp connection

nominal Ø	seal	part no.
DN 32	FKM	959 04 173
DN 32	NBR	959 04 174
DN 38	FKM	959 04 175
DN 38	NBR	959 04 176



- **Swaged hose fittings** for use with hose or special hose for food and chemistry, screwed version, stainless steel 316 Ti, connection pump clamp 2"

nominal Ø	seal	part no.
DN 25	FKM	959 13 358
DN 25	NBR	959 13 359
DN 32	FKM	959 13 360
DN 32	NBR	959 13 361
DN 38	FKM	959 13 362
DN 38	NBR	959 13 363



- **Discharge spout** material: stainless steel 316 Ti

nominal Ø	part no.
2" clamp connection (Ø42)	959 07 036



- **Flap valve** material: stainless steel, 2" clamp connection, DN 50 (with joint clamp)

seal	part no.
FKM	959 19 005
HNBR	959 19 007



### Drive motors for F 550 and F 560 eccentric worm-drive pumps with bearing flange

- **three-phase motor\*** 230/400 V, 50 Hz, jet-proof to IP 55, **with motor protection switch**

	part no.
0,75 kW, 930 rpm **	001 01 052
1,1 kW, 930 rpm **	001 01 053
0,75 kW, 700 rpm	001 01 546
1,1 kW, 700 rpm	001 01 547

- **three-phase motor\*** 230/400 V, 50 Hz, jet-proof to IP 55, **with cable terminal box**

	part no.
0,75 kW, 930 rpm**	001 01 030
1,1 kW, 930 rpm**	001 01 031
0,75 kW, 700 rpm	001 01 506
1,1 kW, 700 rpm	001 01 507

- **three-phase motor\*** 230/400 V, 50 Hz, **with cable terminal box**

	part no.
0,8 kW, 930 rpm (II 2 G Ex e II T4)	001 01 066
1,1 kW, 930 rpm (II 2 G Ex e II T3)	001 01 067
0,95 kW, 700 rpm (II 2 G Ex e II T3)	001 01 567

- **spur wheel back-geared motor** with frequency regulation, 400 V, 100 Hz, jet-proof to IP 54

	part no.
0,055-0,55 kW 47 - 472 min <sup>-1</sup>	001 02 152

- **compressed air motor\***, explosion-proof, with exhaust silencer

	part no.
FPM 4 Ex, 0,6 kW at 1.000 rpm	001 04 000
FPM 6 Ex, 1,2 kW at 1.000 rpm	001 04 014
FPM 8 Ex, 2,0 kW at 1.000 rpm	001 04 002

- **fixing support** for motor mounted on pump trolley or base plate

	part no.
	001 15 037

\* special white painting on request.

\*\* energy efficiency class 2

stainless steel version on request



### Drive motors for eccentric worm-drive pumps with planetary gear, ratio 1 : 6.75 (F 550 GS 6)

- **single phase AC motor** with capacitor switch, 230 V, 50 Hz, jet-proof to IP 55, with motor protection switch, 5 m cable and plug

	part no.
F 403/2, 0,55 kW, 2850 rpm	403 01 015
F 403/4, 0,55 kW, 1450 rpm	403 01 016

- **three-phase motor**, 230/400 V, 50 Hz, jet-proof to IP 55, with motor protection switch, without cable

	part no.
F 403/4, 0,55 kW, 1450 rpm	403 01 011
F 403/2, 0,55 kW, 2850 rpm energy efficiency class 2	403 01 021

- **three-phase motor**, 230/400 V, 50 Hz, explosion-proof, Ex-marking II 2 G EEx e II T3, with cable terminal box, without cable

	part no.
F 403/6 Ex, 0,55 kW, 930 rpm	403 01 018
F 403/4 Ex, 0,55 kW, 1450 rpm	403 01 017
F 403/2 Ex, 0,75 kW, 2850 rpm	403 01 019



# Accessories for drive motors

F 550 and F 560

## Accessories for three-phase motors

- **carrying handle**, stainless steel (pump unit is screwed to the carrying handle)  
**for pump flange Ø 120 mm**

	part no.
for F 403	001 10 584
for F 403 Ex, explosion-proof	001 10 587

### for pump flange Ø 160 mm

	part no.
for three-phase motors, not explosion-proof	001 10 571
for three-phase motors, explosion-proof	001 10 586

- **carrying handle for motor flange Ø 160 mm**

	part no.
separate fixation of pump and motor - single disconnection of pump and motor is possible, motor stays at the carrying handle	001 10 590

- **Power supply cable**

	part no.
pre-assembled with sleeve and Cekon plug, 5 m long	934 08 020
pre-assembled with sleeve without plug, 5 m long	934 08 025
per meter	934 08 901
cable assembly to motor, switch or connector	000 00 250

- **Cekon-plug**

	part no.
5-poles	937 01 014
5-poles with commutator	937 01 035

- **CEE round pin plug, for applications in Zone 1, Ex-marking, II 2 G EEx de IIC T6, 5-poles, 380-415 V**

	part no.
CEAG system	937 01 029
Stahl system	937 01 020

- **CEE socket, for applications in Zone 1, Ex-marking, II 2 G EEx de IIC T6, 5-poles, 380-415 V**

	part no.
CEAG system	937 50 040
Stahl system	937 50 024

- **motor protection switch, for applications in Zone 1, Ex-marking II 2 G EEx de IIC T6 with 2 cable inlet ports, for mounting on the carrying handle**

	part no.
0,75 kW, 700 rpm, 1,6-2,5 A	936 06 118
0,75 kW, 930 rpm, 1,6-2,5 A	936 06 118
0,95 kW, 700 rpm, 2,5-4,0 A	936 06 119
1,1 kW, 930 rpm, 2,5-4,0 A	936 06 119

- **earth wire with crocodile clip**

	cable cross-section	length	forceps	part no.
spiral cable (yellow)	3 mm <sup>2</sup>	4 m	stainless steel	931 90 023
cable (green/yellow)	4 mm <sup>2</sup>	2 m	steel	931 90 015

- **motor protection switch, jet-proof acc. to IP 65 with 2 cable inlet ports**

	part no.
0,85 - 1,35 A	936 06 167
1,30 - 2,00 A	936 06 168
1,80 - 3,00 A	936 06 169
2,80 - 4,60 A	936 06 170
4,20 - 6,70 A	936 06 171
6,50 - 10,00 A	936 06 172
10,00 - 16,00 A	936 06 173



## Accessories for compressed air motors FPM 4 Ex – FPM 8 Ex

- **carrying handle**, stainless steel

	part no.
	001 10 520



- **filter, regulator and lubricator unit** consisting of water separator, (oil mist blower), manometer; connection G 1/2" female

	part no.
non explosion-proof	001 10 103
explosion-proof	001 10 116



- **PVC compressed air hose**

	part no.
DN 13, outer Ø 20 mm	001 10 008



- **hose coupling** with hose connector in brass

	part no.
DN 13	959 13 122



- **threaded nipple in brass** for hose coupling

	part no.
DN 13, G 1/2" male	959 13 121



- **hose nozzle (brass)**

	part no.
DN 13, G 1/2" male	959 05 017



- **1-Ear hose clip**

material	clamping range	part no.
stainless steel	18,8 - 22,0 mm	959 13 239



- **fine filter sound absorber** with oil separator

	part no.
complete with mounting bracket	947 15 005



# Eccentric worm-drive pumps for dry installation (TR)

## F 550 S 54/26-400 TR

in stainless steel, with bearing flange  $\varnothing$  160 mm in aluminium, clamp connection between outer tube and stator housing, seal material FKM, with pinned cardan shaft (without stator, hose connection and consol)

- **only left operation**  
open mechanical seal

discharge connection	part no.
S2 (G 1 1/2 male)	550 23 654
S3 (clamp 2")	550 23 634

- **left/right operation**  
bellow seal

discharge connection	part no.
S2 (G 1 1/2 male)	550 23 706
S3 (clamp 2")	550 23 700



- **stators and stator housing for F 550 TR**

	part no.
NBR white stator	550 25 545
FKM black stator	550 25 546
PTFE stator	550 25 626
stator housing	560 28 149



Illustration with hose connection, stator, stator housing, motor and consol

## F 560 S-54/26-400 TR

in stainless steel, with bearing flange  $\varnothing$  160 mm in stainless steel, clamp connection between outer tube and stator housing, closed mechanical seal, seal material FKM (without stator, hose connection, consol)

- **only left operation**  
(threaded cardan shaft)

discharge connection	part no.
S2 (G 1 1/2 male)	560 25 402
S1 (Rd 58 x 1/6)	560 25 401

- **left/right operation**  
(pinned cardan shaft)

discharge connection	part no.
S2 (G 1 1/2 male)	560 23 202
S1 (Rd 58 x 1/6)	560 23 201

- **stators and stator housing for F 560 TR**

	part no.
NBR white stator	550 25 545
FKM black stator	550 25 546
PTFE stator	550 25 626
stator housing, e-polished	560 28 149

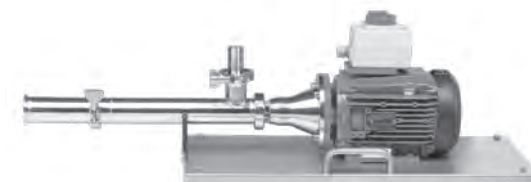


Illustration with hose connection, stator, stator housing, motor and consol



## F 560 S3-54/26 TR FOOD

in stainless steel, with bearing flange  $\varnothing$  160 in stainless steel, clamp connection between outer pipe and stator housing, with closed mechanical seal, seal material FKM, 2" clamp discharge connection. Suitable for food contact according to regulation (EC) 1935/2004 and FDA CFR 21 without stator, stator housing and hose connection

direction of rotation	cardan shaft	part no.
only left operation	threaded	560 25 400
left/right operation	pinned	560 23 200

- **stators and stator housing for F 560 TR FOOD**

	part no.
PTFE FOOD stator	560 28 259
NBR FOOD stator	560 28 258
stator housing FOOD TR	560 28 282

**FOOD accessories see page 50**

other TR version are available on request

**hose connection see page 50, drive motors see page 55**

# Accessoires eccentric worm-drive pumps for dry installation (TR)



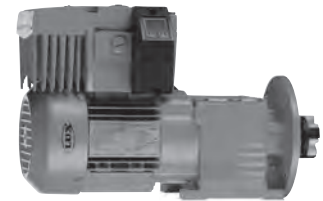
## Drive motors with foot flange

- **Three-phase motor\*** 230/400 V, 50 Hz, protection class IP 55, with motor protection switch, without cable

	part no.
0,75 kW, 700 rpm	001 02 151
1,1 kW, 930 rpm	001 02 159

- **spur wheel back-geared motor** with frequency regulation, 400 V, 100 Hz, jet-proof to IP 54

	part no.
0,55 kW, 47 - 472 rpm	001 02 156



other motors on request

accessories for drive three-phase motor see page 52

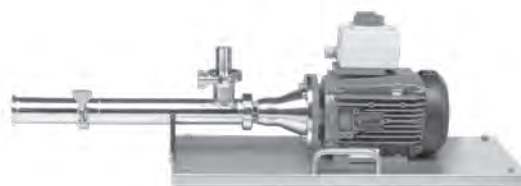
\* additional cost white paint finish 65,00 €

## Base plate and pump trolley

	part no.
stainless steel base plate	001 15 033
stainless steel pump trolley with electrically conductive rollers	001 15 038



pump trolley with pump F 560 TR



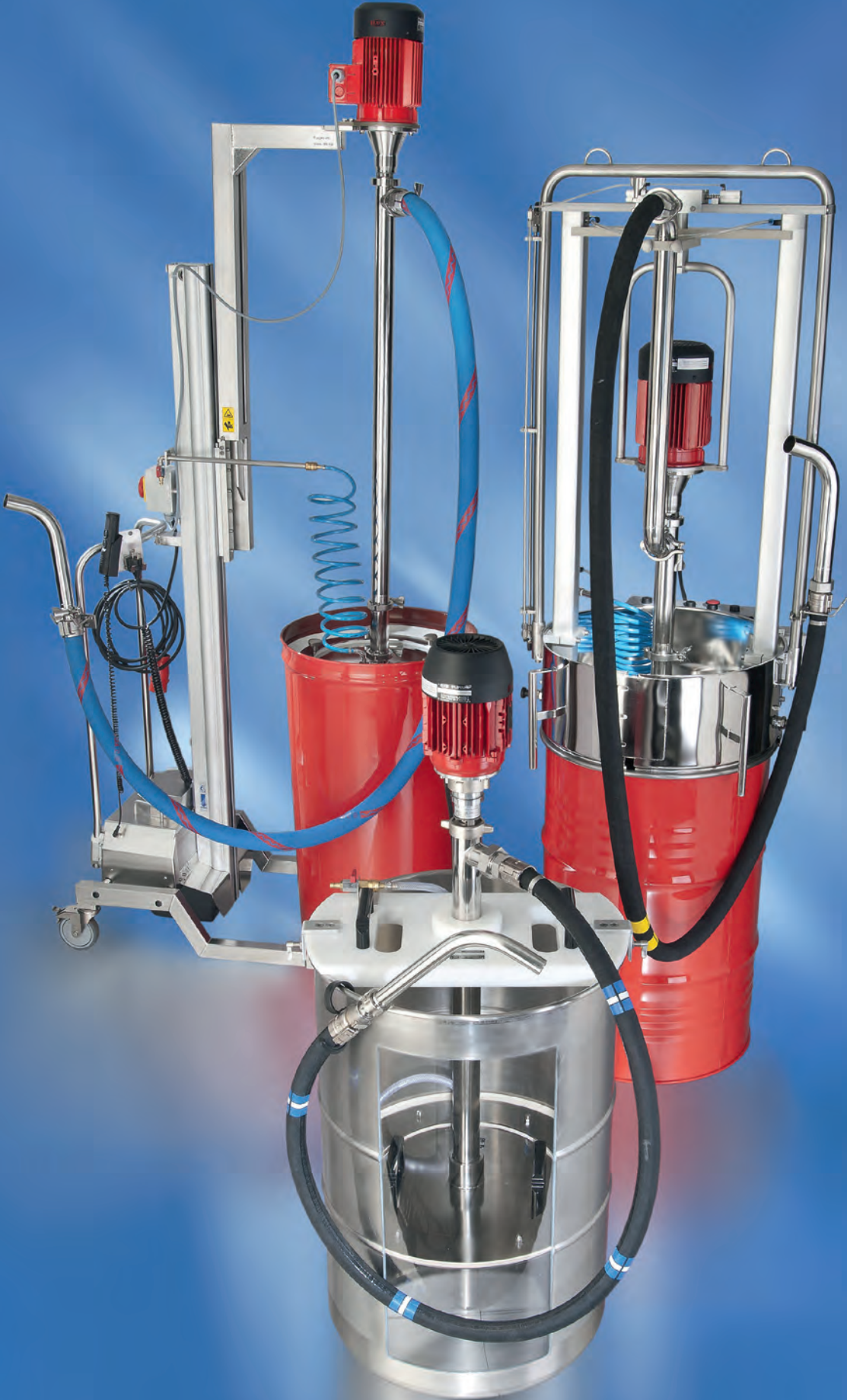
console with pump F 560 TR





# Drum-emptying systems

VISCOFLUX



# VISCOFLUX lite

The FLUX specialist for transferring high-viscosity media that are just capable of flowing

Designed for 200 litre ISO drums  
with an inside diameter of 571.5 mm

consisting of: pump centring plate and follower plate  
with flexible process seal

for use with FLUX eccentric worm-drive pumps Ø 54 mm

- **VISCOFLUX lite**

	part no.
without process seal	001 22 310

- **suitable process seals**

	part no.
NBR white	925 89 005
NBR black	925 89 006
FKM	925 89 007



illustration with pump and motor

**suitable pumps see page 42, 45, 46**

**drive motors see page 16-20 (for pumps with planetary gear)**

**page 51 (for pumps with bearing flange)**

Drum emptying system for cylindrical ISO drums with lid and an internal diameter of 560 mm and 571.5 mm.

Consisting of the guide cylinder with control unit, compressed air cylinder, a medium riser in 1.4571 stainless steel, DN 50, 710 mm long, with 2" clamp connection on both sides and a follower plate with process seal.

The VISCOFLUX is mounted on the drum with a clamping ring.



illustration with pump and motor

#### for drums with an internal diameter 560 mm

with process seal	part no.
NBR (FDA conform)	001 22 230
FKM	001 22 240

#### for drums with an internal diameter 571.5 mm

with process seal	part no.
NBR (FDA conform)	001 22 200
FKM	001 22 250

#### Accessories for VISCOFLUX motor

motor protection switch with plate in aluminium	part no.
1,8 - 3,0 A	936 06 155
2,8 - 4,6 A	936 06 156

[suitable pumps see page 62](#)

[drive motors see page 63](#)

[accessories see page 64](#)

# VISCOFLUX mobile

The stand-alone solution for transferring high-viscosity fluids

The portable drum emptying system for ISO drums with lid. Consisting of a process device with integrated moving sledge and lifting sledge as well as a driving unit.

The barrel emptying system is available in two versions:

- **industrial version** (driving unit with blue cover in plastic)
- **Pharma, Food, Cosmetic** (driving unit with cover in stainless steel)



available for the following drums

- cylindrical with internal diameter of 571.5 mm
- cylindrical with internal diameter 560 mm
- conical with internal diameter top 550 mm, bottom 515 mm
- with a smaller opening at the top 540 mm, bottom 571.5 mm (sea containers drums)

- **process device**

	part no.
industrial version	001 22 305
Pharma, Food, Cosmetic version	001 22 325

- **follower plate** in stainless steel (without process seal)

	part no.
for drums with $\varnothing$ 560 mm or 571,5 mm	001 22 324
for conical drums with $\varnothing$ 550 mm above, $\varnothing$ 515 mm below	001 22 304
for conical drums $\varnothing$ 550 mm above, $\varnothing$ 515 mm below with inliner suction protection	001 22 385
for drums with smaller opening at the top 540 mm below 571.5 mm	001 22 357

- **process seals**

for drum type	material	regulation	part no.
$\varnothing$ 560 mm	FKM		925 89 030
$\varnothing$ 560 mm	NBR white	FDA conform	925 89 032
$\varnothing$ 560 mm	NBR white	(EC) No. 1935/2004	925 89 035
$\varnothing$ 571 mm	FKM		925 89 031
$\varnothing$ 571 mm	NBR white	FDA conform	925 89 033
$\varnothing$ 571 mm	NBR white	(EC) No. 1935/2004	925 89 036
conical drum	NBR white	FDA conform	925 89 034
conical drum	NBR white	(EC) No. 1935/2004	925 89 037
with smaller opening	NBR white	FDA conform	925 89 039
with smaller opening	NBR white	(EC) No. 1935/2004	925 89 040

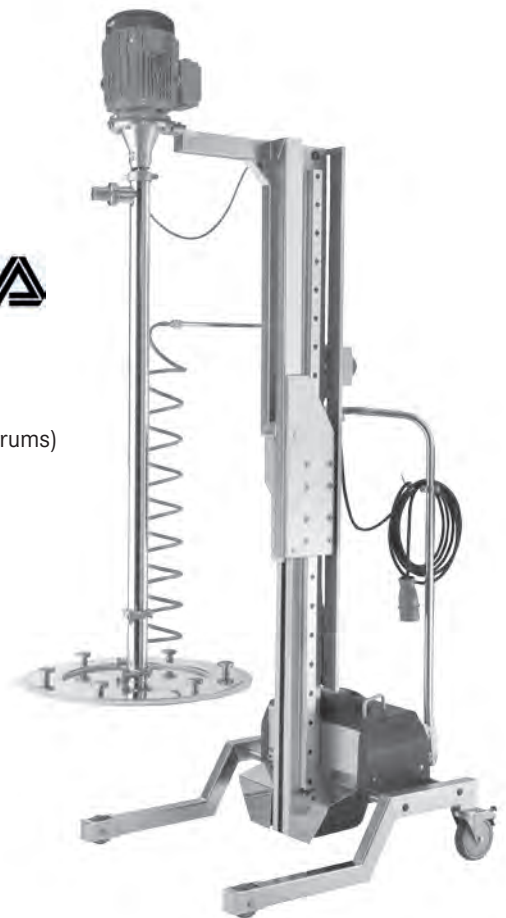


illustration with pump and motor

[suitable pumps see page 62](#)

[drive motors see page 63](#)

[accessories see page 64](#)

[control options see page 61](#)

## Control options VISCOFLUX mobile

	Variant 0		Variant 1	Variant 2	Variant 3	Variant 4
<b>Version</b>	With motor protection switch		Cabinet without speed control (motor/pump)		Cabinet with speed control (motor/pump)	
<b>Motor</b>	Three-phase current		Three-phase current		Gear with frequency converter	
	0,75 kW	1,1 kW				
<b>Voltage</b>			400 V		400 V	
<b>Functions</b>	Main / Emergency switch				Speed control	
					Motor Start/Stop	
					Batch-Pumps	
					Left/right operation	
					End position with warning light	
					Emergency switch	
				with FLUXTRONIC®		with FLUXTRONIC®
<b>Part no.</b>	936 06 151	936 06 152	936 13 006	936 13 007	936 13 008	936 13 009



example VISCOFLUX mobile Pharma, Food, Cosmetic version with motor protection switch (control version 0)



example VISCOFLUX mobile industrial version with cabinet (control version 4)

- optional accessories for VISCOFLUX mobile**

	part no.
PVC apron (not in combination with full covering)	001 22 345
limit switch (only in combination with control unit)	001 22 346
Bracket for medium hose, stainless steel (304)	001 22 336
blind cover clamp DN 10, for follower plate	001 22 355
blind cover clamp 2", for follower plate	001 22 356
electrically conductive rollers in front, thermoplastic rubber	001 22 347
full covering, stainless steel (304)	001 22 344



blind cover



PVC apron



limit switch



bracket for medium hose



full covering

# Eccentric worm-drive pumps

for VISCOFLUX/VISCOFLUX mobile

## Eccentric worm-drive pumps for VISCOFLUX

in stainless steel, with bearing flange  $\varnothing$  160 mm, seal material FKM, 2" clamp connection on both sides, (without hose connection, stator and stator housing)

### industrial version (F 550 S TR)

bearing flange in aluminium, with pinned cardan shaft

#### • only left operation

##### F 550 S3-54/26-400 GW TR

seal	part no.
open mechanical seal	550 23 634

#### • left/right operation

##### F 550 S3-54/26-400 GW L/R TR

seal	part no.
bellow seal	550 23 700

### Pharma, Food, Cosmetic version (F 560 S TR)

bearing flange in stainless steel, with closed mechanical seal, with cardan shaft



#### • only left operation

##### F 560 S3-54/26-400 TR FOOD

shaft	part no.
threaded	560 25 400

#### • left/right operation

##### F 560 S3-54/26-400 TR L/R FOOD

shaft	part no.
pinned	560 23 200

## Eccentric worm-drive pumps for VISCOFLUX mobile

in stainless steel, bearing flange  $\varnothing$  160 mm, seal material FKM, 2" clamp connection on suction side, (without hose connection, stator and stator housing)

### industrial versions (F 550 S TR)

bearing flange in aluminium, G 1 1/2" male connection

only left operation, with open mechanical seal

#### • F 550 S2-54/26 TW TR with torsion shaft

immersion length	part no.
1.000 mm	550 23 630
1.200 mm	550 23 632

#### • F 550 S2-54/26 GW TR with cardan shaft

immersion length	part no.
1.000 mm	550 23 660
1.200 mm	550 23 662

with left/right operation with bellow seal

#### • F 550 S2-54/26 TW L/R TR with torsion shaft

immersion length	part no.
1.000 mm	550 23 730
1.200 mm	550 23 732

#### • F 550 S2-54/26 GW L/R TR with cardan shaft

immersion length	part no.
1.000 mm	550 23 760
1.200 mm	550 23 762

### Pharma, Food, Cosmetic version (F 560 S TR)

bearing flange in stainless steel, with closed mechanical seal, 2" clamp connection, Suitable for food contact according to regulation (EC) 1935/2004 and FDA CFR 21.



only left operation

#### • F 560 S3-54/26 TW TR FOOD with torsion shaft

immersion length	part no.
1.000 mm	560 25 410
1.200 mm	560 25 412

#### • F 560 S3-54/26 GW TR FOOD with threaded cardan shaft

immersion length	part no.
1.000 mm	560 25 440
1.200 mm	560 25 442

with left/right operation

#### • F 560 S3-54/26 TW TR L/R FOOD with torsion shaft

immersion length	part no.
1.000 mm	560 23 210
1.200 mm	560 23 212

#### • F 560 S3-54/26 GW TR L/R FOOD with pinned cardan shaft

immersion length	part no.
1.000 mm	560 23 240
1.200 mm	560 23 242

## Stators and stator housings for eccentric worm-drive pumps F 550 TR and F 560 TR

- Industrial version**

	part no.
FKM stator	550 25 546
PTFE stator	550 25 626
NBR stator	550 25 545
stator housing, e-polished	560 28 149

- FOOD version (FOOD)**

	part no.
PTFE FOOD stator	560 28 259
NBR FOOD stator	560 28 258
stator housing, e-polished	560 28 282

## Drive motors for VISCOFLUX/VISCOFLUX mobile eccentric worm-drive pumps

- Three-phase motors 400 V, 50 Hz, jet-proof to IP 55, with cable terminal box**

kW	rpm	A	part no.
0,75	700	2,4	001 01 506
1,1	700	3,5	001 01 507
0,75	930	2,1	001 01 030
1,1	930	2,9	001 01 031

- spur wheel back-geared motor** with frequency regulation, 400 V, 100 Hz, jet-proof to IP 54

kW	rpm	part no.
0,75	82-872	001 02 165



# Accessories for TR pumps

for VISCOFLUX/VISCOFLUX mobile

## Hoses

DN 38, outer Ø 51 mm, (product sold by meter – we recommend 3 m)

	operating pressure max.	part no.
petroleum hose	25 bar	001 10 004
special foodgrade hose	16 bar	001 10 023
hose for food and chemistry	16 bar	001 10 086



## Swaged hose fittings DN 38

material	nominal Ø	seal	part no.
brass	G 1 1/2" female		959 13 143
stainless steel	G 1 1/2" female		959 13 147
stainless steel	Clamp 2"	FKM (FOOD)	959 13 362
stainless steel	Clamp 2"	NBR (FOOD)	959 13 363



## Discharge spout

in stainless steel 316 Ti, suitable for food contact according to regulation (EC) 1935/2004 and FDA CFR 21

nominal Ø	part no.
2" clamp connection (Ø 42)	959 07 036



## Bearing flange with impuls sensor

in stainless steel, with 5 m impulse cable

for pump	part no.
F 550 S	550 25 555
F 560 S	560 28 291



## suitable digital unit

	part no.
FLUXTRONIC®	001 42 113







A series of horizontal dotted lines spanning the width of the page, intended for taking notes.



# Flow meter FMC

nutating disk type



# Flow meter FMC

## nutating disk type

flow meter for applications in Zone 1, Ex-marking II 2 G Ex ia IIB T6 Gb



FLUX flow meters in impulse version without display electronics FLUXTRONIC® do not need an Ex certification, because this is a component that has no own potential source of ignition.

### FMC 100, material: polypropylene (PP)

#### for portable use with drum pumps

- with digital display FLUXTRONIC®, thread connection: inlet G 1¼" female, outlet G 1¼" male

	o-ring	part no.
FMC 100/PP/0/F	EPDM	A04 00 005
FMC 100/PP/1/F	FKM	A04 00 007
FMC 100/PP/2/F	FEP	A04 00 009

- impulse version without digital display, for use with hand nozzle, with impulse cable, 5 m long, thread connection inlet G 1¼" female, outlet G 1¼" male

	o-ring	part no.
FMC 100/PP/0/F	EPDM	A04 00 035
FMC 100/PP/1/F	FKM	A04 00 037
FMC 100/PP/2/F	FEP	A04 00 039

- hand nozzle polypropylene (PP) with digital display FLUXTRONIC®

nominal Ø	o-ring	part no.
DN 19	FKM	001 12 531
DN 21	FKM	001 12 565
DN 25	FKM	001 12 535

#### for stationary use - fixed installation into pipeline

- with digital display FLUXTRONIC®, thread connection on both sides G 1½" male

	o-ring	part no.
FMC 100/PP/0/A	EPDM	A04 00 012
FMC 100/PP/1/A	FKM	A04 00 014
FMC 100/PP/2/A	FEP	A04 00 016

- impulse version without digital display, for use with external digital display FLUXTRONIC®, with impulse cable, 5 m long, thread connection on both sides G 1½" male

	o-ring	part no.
FMC 100/PP/0/A	EPDM	A04 00 041
FMC 100/PP/1/A	FKM	A04 00 043
FMC 100/PP/2/A	FEP	A04 00 045

External digital display FLUXTRONIC® see page 70

### FMC 100, material: ethylene-tetrafluorethylene (ETFE)

#### for portable use with drum pumps

- with digital display FLUXTRONIC®, thread connection: inlet G 1¼" female, outlet G 1¼" male

	o-ring	part no.
FMC 100/ETFE/0/F	EPDM	A04 00 006
FMC 100/ETFE/1/F	FKM	A04 00 008
FMC 100/ETFE/3/F	FFKM	A04 00 077

- impulse version without digital display, for use with hand nozzle, with impulse cable, 5 m long, thread connection inlet G 1¼" female, outlet G 1¼" male

	o-ring	part no.
FMC 100/ETFE/0/F	EPDM	A04 00 036
FMC 100/ETFE/1/F	FKM	A04 00 038
FMC 100/ETFE/3/F	FFKM	A04 00 079

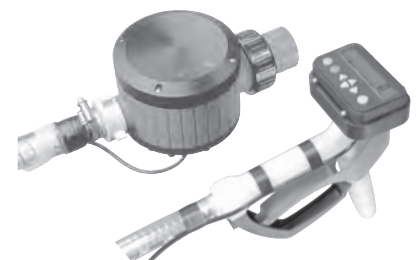
- hand nozzle polyvinylidene fluoride (PVDF) with digital display FLUXTRONIC®

nominal Ø	o-ring	part no.
DN 19	FKM	001 12 532
DN 21	FKM	001 12 566
DN 25	FKM	001 12 536

#### for stationary use - fixed installation into pipeline

- with digital display FLUXTRONIC®, thread connection on both sides G 1½" male

	o-ring	part no.
FMC 100/ETFE/0/A	EPDM	A04 00 013
FMC 100/ETFE/1/A	FKM	A04 00 015
FMC 100/ETFE/3/A	FFKM	A04 00 078



- impulse version without digital display, for use with external digital display FLUXTRONIC®, with impulse cable, 5 m long, thread connection on both sides G 1½" male

	o-ring	part no.
FMC 100/ETFE/0/A	EPDM	A04 00 042
FMC 100/ETFE/1/A	FKM	A04 00 044
FMC 100/ETFE/3/A	FFKM	A04 00 080

External digital display FLUXTRONIC® see page 70



## FMC 100, material: stainless steel (S)

### for portable use with drum pumps

- with digital display FLUXTRONIC®, thread connection: inlet G 1½" male, outlet G 1¼" male

	o-ring	part no.
FMC 100/S/0/F	EPDM	A04 00 029
FMC 100/S/1/F	FKM	A04 00 031
FMC 100/S/2/F	FEP	A04 00 033



- impulse version without digital display, for use with hand nozzle, with impulse cable, 5 m long, thread connection inlet G 1¼" male, outlet G 1¼" male

	o-ring	part no.
FMC 100/S/0/F	EPDM	A04 00 053
FMC 100/S/1/F	FKM	A04 00 055
FMC 100/S/2/F	FEP	A04 00 057



- hand nozzle stainless steel (S) with digital display FLUXTRONIC®

nominal Ø	o-ring	part no.
Ø 28	PTFE/FEP	001 12 550

- hand nozzle nickel-plated brass (MS) with digital display FLUXTRONIC®

nominal Ø	o-ring	part no.
Ø 32	PTFE	001 12 364

- connecting piece in stainless steel

	nominal-Ø	part no.
for FLUX drum pumps	G 1¼" female - G 1½" female	959 06 059
for FLUX eccentric worm-drive pumps	G 1½" female - G 1½" female	959 06 061

### for stationary use - fixed installation into pipeline, with digital display FLUXTRONIC®

- G 1" female thread connection on both sides

	o-ring	part no.
FMC 100/S/0/A	EPDM	A04 00 085
FMC 100/S/1/A	FKM	A04 00 086
FMC 100/S/2/A	FEP	A04 00 087



- flange connector on both sides outer Ø 115 mm, PC Ø 85 mm, 4 bores Ø 14 mm

	o-ring	part no.
FMC 100/S/0/A	EPDM	A04 00 082
FMC 100/S/1/A	FKM	A04 00 083
FMC 100/S/2/A	FEP	A04 00 084

- thread connection on both sides Rd 65 x 1/6

	o-ring	part no.
FMC 100/S/0/A	EPDM	A04 00 023
FMC 100/S/1/A	FKM	A04 00 025
FMC 100/S/2/A	FEP	A04 00 027

- thread connection on both sides G 1½" male

	o-ring	part no.
FMC 100/S/0/A	EPDM	A04 00 071
FMC 100/S/1/A	FKM	A04 00 072
FMC 100/S/2/A	FEP	A04 00 073

# Flow meter FMC/FMJ

nutating disk type

## FMC 100, material: stainless steel (S)

- impulse version without digital display for use with external digital display FLUXTRONIC®, with impulse cable, 5 m long, thread connection on both sides G 1¼" male

	o-ring	part no.
FMC 100/S/0/A	EPDM	A04 00 074
FMC 100/S/1/A	FKM	A04 00 075
FMC 100/S/2/A	FEP	A04 00 076

- impulse version without digital display for use with external digital display FLUXTRONIC®, with impulse cable, 5 m long, thread connection on both sides Rd 65 x 1/6

	o-ring	part no.
FMC 100/S/0/A	EPDM	A04 00 059
FMC 100/S/1/A	FKM	A04 00 061
FMC 100/S/2/A	FEP	A04 00 063



## External digital display FLUXTRONIC®

	part no.
with wall mounting flange	001 42 113

## FMC 250, for stationary use – fixed installation into pipeline, with digital display FLUXTRONIC®

- polypropylene, thread connection on both sides, G 2¼" male

	o-ring	part no.
FMC 250/PP/0/A	EPDM	A04 25 400
FMC 250/PP/1/A	FKM	A04 25 410

- polyvinylidene fluoride, thread connection on both sides G 2¼" male

	o-ring	part no.
FMC 250/PVDF/0/A	EPDM	A04 25 600
FMC 250/PVDF/1/A	FKM	A04 25 610



## FMJ 100, for manual use (no batch-control possible), with digital display FLUXTRONIC®

- polypropylene, for flexible use with drum pumps, not explosion-proof, thread connection inlet G 2" male, outlet G 1¼" male (with connecting piece)

	o-ring	part no.
FMJ 100/PP/1/F	FKM	A04 00 088



Accessories for FMC see page 75-76

Connectors (according to standards) for pipeline construction on request

# Flow meter FMO

oval rotor type



# Flow meter FMO

## oval rotor type

flow meter for applications in Zone 1, Ex-marking II 2 G Ex ia IIB T6 Gb



FLUX flow meters in impulse version without display electronics FLUXTRONIC® do not need an Ex certification, because this is a component that has no own potential source of ignition.

### FMO 1 and FMO 2 with impulse output, without digital display FLUXTRONIC®, in PPS (P) or stainless steel (S), thread connection on both sides G 1/4" female

	housing	oval rotors	o-ring	part no.
FMO 1/P/P/0	PPS	PPS	EPDM	A08 01 400
FMO 1/P/P/1	PPS	PPS	FKM	A08 01 410
FMO 1/P/P/3	PPS	PPS	FFKM	A08 01 430
FMO 1/P/S/0	PPS	S	EPDM	A08 01 100
FMO 1/P/S/1	PPS	S	FKM	A08 01 110
FMO 1/P/S/3	PPS	S	FFKM	A08 01 130
FMO 1/S/S/0	S	S	EPDM	A08 01 200
FMO 1/S/S/1	S	S	FKM	A08 01 210
FMO 1/S/S/3	S	S	FFKM	A08 01 230
FMO 2/P/P/0	PPS	PPS	EPDM	A08 02 400
FMO 2/P/P/1	PPS	PPS	FKM	A08 02 410
FMO 2/P/P/3	PPS	PPS	FFKM	A08 02 430
FMO 2/P/S/0	PPS	S	EPDM	A08 02 100
FMO 2/P/S/1	PPS	S	FKM	A08 02 110
FMO 2/P/S/3	PPS	S	FFKM	A08 02 130
FMO 2/S/S/0	S	S	EPDM	A08 02 300
FMO 2/S/S/1	S	S	FKM	A08 02 310
FMO 2/S/S/3	S	S	FFKM	A08 02 330

- digital display FLUXTRONIC® for FMO 1 and FMO 2

	part no.
with attachment flange and 5 m impulse cable with plug	001 42 111



FLUXTRONIC® with FMO 1

### FMO 4 with digital display FLUXTRONIC®, in aluminium (AL) or stainless steel (S), thread connection on both sides G 1/2" female

- for thin-flowing substances up to 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 4/AL/P/0	AL	PPS	EPDM	A08 04 100
FMO 4/AL/P/1	AL	PPS	FKM	A08 04 110
FMO 4/AL/P/2	AL	PPS	FEP	A08 04 120
FMO 4/S/P/0	S	PPS	EPDM	A08 04 200
FMO 4/S/P/1	S	PPS	FKM	A08 04 210
FMO 4/S/P/2	S	PPS	FEP	A08 04 220
FMO 4/S/S/0	S	S	EPDM	A08 04 300
FMO 4/S/S/1	S	S	FKM	A08 04 310
FMO 4/S/S/2	S	S	FEP	A08 04 320

- for high viscosity substances from 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 4/AL/PV/0	AL	PPS	EPDM	A08 04 105
FMO 4/AL/PV/1	AL	PPS	FKM	A08 04 115
FMO 4/AL/PV/2	AL	PPS	FEP	A08 04 125
FMO 4/S/PV/0	S	PPS	EPDM	A08 04 205
FMO 4/S/PV/1	S	PPS	FKM	A08 04 215
FMO 4/S/PV/2	S	PPS	FEP	A08 04 225
FMO 4/S/SV/0	S	S	EPDM	A08 04 305
FMO 4/S/SV/1	S	S	FKM	A08 04 315
FMO 4/S/SV/2	S	S	FEP	A08 04 325

- connecting piece for FMO 4

for use with	nominal Ø	part no.
FLUX drum pumps	G 1/2" male - G 1 1/4" female	959 06 143
FLUX eccentric worm-drive pumps	G 1/2" male - G 1 1/2" female	959 06 134





**FMO 7 with digital display FLUXTRONIC, in PPS (P), thread connection on both sides G 1" female**

- for thin-flowing substances up to 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 7/P/P/0	PPS	PPS	EPDM	A08 07 100
FMO 7/P/P/1	PPS	PPS	FKM	A08 07 110

- connection piece polyvinylidene fluoride (PVDF) for FMO 7

for use with	nominal-Ø	part no.
FLUX drum pumps	G 1" male - G 1¼" female	959 06 145



**FMO 10 with digital display FLUXTRONIC®, in aluminium (AL) or stainless steel (S), thread connection on both sides G 1" female**

- for thin-flowing substances up to 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 10/AL/P/0	AL	PPS	EPDM	A08 10 100
FMO 10/AL/P/1	AL	PPS	FKM	A08 10 110
FMO 10/AL/P/2	AL	PPS	FEP	A08 10 120
FMO 10/S/P/0	S	PPS	EPDM	A08 10 200
FMO 10/S/P/1	S	PPS	FKM	A08 10 210
FMO 10/S/P/2	S	PPS	FEP	A08 10 220
FMO 10/S/S/0	S	S	EPDM	A08 10 300
FMO 10/S/S/1	S	S	FKM	A08 10 310
FMO 10/S/S/2	S	S	FEP	A08 10 320

- for high-viscosity substances from 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 10/AL/PV/0	AL	PPS	EPDM	A08 10 105
FMO 10/AL/PV/1	AL	PPS	FKM	A08 10 115
FMO 10/AL/PV/2	AL	PPS	FEP	A08 10 125
FMO 10/S/PV/0	S	PPS	EPDM	A08 10 205
FMO 10/S/PV/1	S	PPS	FKM	A08 10 215
FMO 10/S/PV/2	S	PPS	FEP	A08 10 225
FMO 10/S/SV/0	S	S	EPDM	A08 10 305
FMO 10/S/SV/1	S	S	FKM	A08 10 315
FMO 10/S/SV/2	S	S	FEP	A08 10 325

- connection piece stainless steel (S) for FMO 10

for use with	nominal Ø	part no.
FLUX- drum pumps	G ½" male - G 1¼" female	959 06 144
FLUX- eccentric worm-drive pumps	G ½" male - G 1½" female	959 06 122



**FMO 40 with digital display FLUXTRONIC®, in aluminium (AL) or stainless steel (S), thread connection on both sides G 1½" female**

- for thin-flowing substances up to 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 40/AL/P/0	AL	PPS	EPDM	A08 40 100
FMO 40/AL/P/1	AL	PPS	FKM	A08 40 110
FMO 40/AL/P/2	AL	PPS	FEP	A08 40 120
FMO 40/S/P/0	S	PPS	EPDM	A08 40 200
FMO 40/S/P/1	S	PPS	FKM	A08 40 210
FMO 40/S/P/2	S	PPS	FEP	A08 40 220
FMO 40/S/S/0	S	S	EPDM	A08 40 300
FMO 40/S/S/1	S	S	FKM	A08 40 310
FMO 40/S/S/2	S	S	FEP	A08 40 320



# Flow meter FMO

oval rotor type

**FMO 40 with digital display FLUXTRONIC®,  
in aluminium (AL) or stainless steel (S), thread connection on both sides G 1½" female**

- for high-viscosity substances from 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 40/AL/PV/0	AL	PPS	EPDM	A08 40 105
FMO 40/AL/PV/1	AL	PPS	FKM	A08 40 115
FMO 40/AL/PV/2	AL	PPS	FEP	A08 40 125
FMO 40/S/PV/0	S	PPS	EPDM	A08 40 205
FMO 40/S/PV/1	S	PPS	FKM	A08 40 215
FMO 40/S/PV/2	S	PPS	FEP	A08 40 225
FMO 40/S/SV/0	S	S	EPDM	A08 40 305
FMO 40/S/SV/1	S	S	FKM	A08 40 315
FMO 40/S/SV/2	S	S	FEP	A08 40 325



**FMO 40 and FMO 50 with digital display FLUXTRONIC®,  
in aluminium (AL) or stainless steel (S), nominal pressure PN 16,  
nominal flange connection DN 40 (FMO 40) or DN 50 (FMO 50)**

- for thin-flowing substances up to 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 40/AL/P/0	AL	PPS	EPDM	A08 40 101
FMO 40/AL/P/1	AL	PPS	FKM	A08 40 111
FMO 40/AL/P/2	AL	PPS	FEP	A08 40 121
FMO 40/S/P/0	S	PPS	EPDM	A08 40 201
FMO 40/S/P/1	S	PPS	FKM	A08 40 211
FMO 40/S/P/2	S	PPS	FEP	A08 40 221
FMO 40/S/S/0	S	S	EPDM	A08 40 301
FMO 40/S/S/1	S	S	FKM	A08 40 311
FMO 40/S/S/2	S	S	FEP	A08 40 321

FMO 50/AL/P/0	AL	PPS	EPDM	A08 50 101
FMO 50/AL/P/1	AL	PPS	FKM	A08 50 111
FMO 50/AL/P/2	AL	PPS	FEP	A08 50 121
FMO 50/S/P/0	S	PPS	EPDM	A08 50 201
FMO 50/S/P/1	S	PPS	FKM	A08 50 211
FMO 50/S/P/2	S	PPS	FEP	A08 50 221



- for high-viscosity substances from 1.000 cP

	housing	oval rotors	o-ring	part no.
FMO 40/AL/PV/0	AL	PPS	EPDM	A08 40 106
FMO 40/AL/PV/1	AL	PPS	FKM	A08 40 116
FMO 40/AL/PV/2	AL	PPS	FEP	A08 40 126
FMO 40/S/PV/0	S	PPS	EPDM	A08 40 206
FMO 40/S/PV/1	S	PPS	FKM	A08 40 216
FMO 40/S/PV/2	S	PPS	FEP	A08 40 226
FMO 40/S/SV/0	S	PPS	EPDM	A08 40 306
FMO 40/S/SV/1	S	PPS	FKM	A08 40 316
FMO 40/S/SV/2	S	PPS	FEP	A08 40 326

FMO 50/AL/PV/0	AL	PPS	EPDM	A08 50 106
FMO 50/AL/PV/1	AL	PPS	FKM	A08 50 116
FMO 50/AL/PV/2	AL	PPS	FEP	A08 50 126
FMO 50/S/PV/0	S	PPS	EPDM	A08 50 206
FMO 50/S/PV/1	S	PPS	FKM	A08 50 216
FMO 50/S/PV/2	S	PPS	FEP	A08 50 226
FMO 50		S		

## FMO 4 to FMO 50 with impulser cap (without digital display)

compared to the corresponding version with digital display FLUXTRONIC® the price is reduced.

The part numbers changes from A08 to AB8.



- **impulse cable for version without digital display**  
insulated to transmit control signal from  
FMO Reed-Relais to the external digital display FLUXTRONIC®

	part no.
5 m long	934 08 032
10 m long	934 08 033
15 m long	934 08 034



## External digital display FLUXTRONIC®

	part no.
with wall mounting flange	001 42 113

## Accessories for flow meters

- **switching amplifier FSV 100** (2 signals)  
can be integrated into flow meter, with power supply cable, 5 m long

	part no.
230 V, 50 - 60 Hz, IP 54, 4 A	001 49 040
100 - 120 V, 50 - 60 Hz, IP 54, 8 A	001 49 046



- **switching amplifier FSV 300** (2 signals)  
can be integrated into flow meter,  
with power supply cable 3 m long and 5-poles socket

	part no.
400 V, 50 Hz, IP 54, max. 3,15 A	001 49 055



- **switching amplifier FSV 112** (2 signals)  
in casing for mounting on wall, without cable

	part no.
230 V, 50 - 60 Hz, IP 54, 6 A	001 49 041



- **control cable** for the connection of flow meter and switching amplifier **FSV 112**,  
plug on both ends

	part no.
5 m long	934 08 039



- **power supply cable** for switching amplifier **FSV 112**

	part no.
5 m long	934 08 037



- **connecting cable** from **FSV 100** and **FSV 112** to magnetic valve

	part no.
5 m long	934 08 036



- **connecting cable** from **FSV 100** and **FSV 112** to motor

	part no.
0,5 m long	934 08 035



- **switching amplifier FSV 132** (2 signals)  
without casing, for installation in switch box

	part no.
230 V, 50 - 60 Hz, IP 20, AC - 4A, DC - 2 A	940 04 020



# Accessories for flow meter

- **control cable** for the connection of flow meter or filling unit and switching amplifier **FSV 132**

	part no.
5 m long	934 08 038
10 m long	934 08 040
15 m long	934 08 041

- **switching amplifier FSV 133 (1 signal)**

Ex i entry acc. to EN 60947-5-6, electronic exit 35 V DC/50 mA

	part no.
DC 24 V, 50 mA	940 04 041



## Accessories for flow meter in hazardous areas Zone 1

- **switching amplifier FSV 121 Ex (1 signal)**

explosion-proof II 2 G Ex ed (ia) IIC T6 in casing for mounting on wall, with plug connections for network connection cable and connecting cable, with control cable, 5 m long, 230 V, 50 Hz, IP 54

	part no.
	001 49 051



- **power supply cable** for switching amplifier **FSV 121 Ex**

	length	part no.
with plug connection	5 m	934 08 048



- **connection cable**

	length	part no.
from motor to FSV 121 Ex	5 m	934 08 049



- **switching amplifier FSV 121-1/2 Ex, 230 V, 50 Hz, 4A, IP 66,**  
Ex-marking II 2 G EEx de (ia) IIC T6, without plug-ins and cable, with housing for wall mounting

	part no.
121-1, 1 signal (to control one pump or valve)	001 49 039
121-2, 2 signals (to control two pumps or valves)	001 49 063



- **control cable** for the connection of flow meter and switching amplifier **FSV 121-1 Ex**

	part no.
5 m long	934 08 038
10 m long	934 08 040
15 m long	934 08 041



- **earth wire** for FMC PP and FMC ETFE to produce a conductive connection of hose connection and motor

	part no.
1 m long	931 90 009



## Further accessories for FMJ / FMC / FMO

- **clear protection cover for FLUXTRONIC® display:**

	part no.
FMJ	001 42 101
FMC/FMO	001 42 121





# Filling units

## FLUX filling units (FAE) for media up to 300 cP without solids content

wired version with start-stop-button, without control cable (page 68), without mounting the control cable

- filling units **with hose connection**

	material	seal	part no.
FAE-PP DN 19	polypropylene	FKM	001 12 519
FAE-PP DN 25	polypropylene	FKM	001 12 523
FAE-PVDF DN 19	polyvinylidene fluoride	FKM	001 12 520
FAE-PVDF DN 25	polyvinylidene fluoride	FKM	001 12 524

- filling units **without hose connection, Ø 28 mm** (only in connection with swaged hose fitting, see page 29)

	material	seal	part no.
FAE-S Ø 28 mm	stainless steel	FKM	001 12 546
FAE-PP Ø 28 mm	polypropylene	FKM	001 12 561
FAE-PVDF Ø 28 mm	polyvinylidene fluoride	FKM	001 12 562



FAE-S with assembled cable and hose

## Wireless version – without transmitter (FRC) see below

- filling units **with hose connection**

	material	seal	part no.
FAE-PP DN 19	polypropylene	FKM	001 12 525
FAE-PP DN 25	polypropylene	FKM	001 12 529
FAE-PVDF DN 19	polyvinylidene fluoride	FKM	001 12 526
FAE-PVDF DN 25	polyvinylidene fluoride	FKM	001 12 530



FAE-PVDF with FLUX remote control (FRC) and hose

- filling units **without hose connection, Ø 28 mm** (only for the connection with swaged hose fittings, see page 29)

	material	seal	part no.
FAE-S Ø 28	stainless steel	FKM	001 12 547
FAE-PP Ø 28	polypropylene	FKM	001 12 563
FAE-PVDF Ø 28	polyvinylidene fluoride	FKM	001 12 564

## FLUX Remote Control (FRC) for the use with the above mentioned wireless FLUX filling units

Consisting of transmitter in PP housing with seal kit, key button with cover in silicone incl. mounting material to fit on a hand nozzle or filling unit with a range of up to 10 m.

- wireless receiver FRC 100**

integrated in amplifier FSV 100 with power supply cable, 5 m long, 230 V, 50-60 Hz, IP 54. In order to guarantee the operating safety transmitter and receiver are addressed on each other.

part no. \_\_\_\_\_  
001 49 058



- wireless receiver FRC 001**

with cap rail clip for assembly in switch box. In order to guarantee the operating safety transmitter and receiver are addressed on each other.

part no. \_\_\_\_\_  
001 49 061



- wireless repeater**

to increase the range from 10 m to 20 m in damp housing, with power supply cable, 3 m long, with 2-pin plug, 230 V, 50 Hz.

part no. \_\_\_\_\_  
936 06 143



FLUX flow meters see from page 67

Hoses see page 32



# Centrifugal immersion pumps

with mechanical seal

## Centrifugal immersion pumps F 620 in stainless steel, with mechanical seal, seal material FKM, with open conical rotor in polypropylene, discharge connection G 1½" male

- F 620 S-15**

nominal length	conical rotor Ø	part no.
700 mm	15 mm	620 23 001
1.000 mm	15 mm	620 23 002
1.500 mm	15 mm	620 23 003
additional cost for stainless steel conical rotor		620 24 030

- F 620 S-30**

nominal length	conical rotor Ø	part no.
700 mm	30 mm	621 23 001
1.000 mm	30 mm	621 23 002
1.500 mm	30 mm	621 23 003
additional cost for stainless steel conical rotor		621 24 005

Other lengths up to 3.000 mm available on request

- mounting flange** in stainless steel

mounting dimensions (bottom mounting flange to bottom pump) is reduced at least by 100 mm compared to the specified nominal

	part no.
outer Ø 265 mm, PCD Ø 225 mm, 8 holes Ø 18 mm	947 14 005

- suction strainer**, in stainless steel for:

	part no.
F 620 S-15, F 620 S-30	001 10 232



F 620 S-30  
with suction strainer

## Centrifugal immersion pumps F 620 in stainless steel with mechanical seal, seal material FKM, closed impeller Ø 157 mm in stainless steel, discharge connection G 1½" male

- F 620 S-157/3**

nominal length	impeller height	part no.
1.200 mm	3 mm	620 20 012

- F 620 S-157/5**

nominal length	impeller height	part no.
1.200 mm	5 mm	620 20 112

Other lengths up to 3.000 mm available on request

- suction strainer**, in stainless steel for:

	part no.
F 620 S-157/3	001 10 345
F 620 S-157/5	001 10 346



## Centrifugal immersion pump F 640 in polypropylene, with mechanical seal, seal material FKM, with open conical rotor or closed impeller in polypropylene, discharge connection G 2¼" male

- F 640 PP-15 (with conical rotor)**

nominal length	part no.
700 mm	640 41 407
1.000 mm	640 41 410
1.500 mm	640 41 415

- F 640 PP-30 (with conical rotor)**

nominal length	part no.
700 mm	640 41 607
1.000 mm	640 41 610
1.500 mm	640 41 615

- F 640 PP-15Z (with impeller for increased pumping head)**

nominal length	part no.
700 mm	640 41 507
1.000 mm	640 41 510
1.500 mm	640 41 515

- F 640 PP-30Z (with impeller for increased pumping head)**

nominal length	part no.
700 mm	640 41 707
1.000 mm	640 41 710
1.500 mm	640 41 715



F 640 PP-30  
with suction strainer

Other lengths up to 4.000 mm available on request



- **mounting flange** in polypropylene  
mounting dimensions (bottom mounting flange to bottom pump) is reduced at least by 100 mm compared to the specified nominal

	part no.
outer Ø 265 mm, LK Ø 225 mm, 8 holes Ø 18 mm	947 14 001

- **suction strainer** in polypropylene for:

	part no.
F 640 PP-15, F 640 PP-30, F 640 PP-15Z, F 640 PP-30Z A	001 10 235

Drive motors see page 80

### Centrifugal immersion pump F 640 with mechanical seal, seal material FKM, discharge connection G 2 1/4" male, without mounting flange

- **F 640 PP-185** in polypropylene, with closed polypropylene impeller\*

nominal length	housing Ø	part no.
700 mm	185 mm	640 41 207
1.000 mm	185 mm	640 41 210
1.500 mm	185 mm	640 41 215

- **F 640 PVDF-185** in polyvinylidene fluoride, with closed polyvinylidene fluoride impeller\*

nominal length	housing Ø	part no.
700 mm	185 mm	640 61 207
1.000 mm	185 mm	640 61 210
1.500 mm	185 mm	640 61 215

- **F 640 PP-230** in polypropylene with closed polypropylene impeller\*

nominal length	housing Ø	part no.
700 mm	230 mm	640 41 307
1.000 mm	230 mm	640 41 310
1.500 mm	230 mm	640 41 315

- **F 640 PVDF-230** in polyvinylidene fluoride with closed polyvinylidene fluoride impeller\*

nominal length	housing Ø	part no.
700 mm	230 mm	640 61 307
1.000 mm	230 mm	640 61 310
1.500 mm	230 mm	640 61 315

\* in order to achieve the desired output, centrifugal impellers in diameters of 100 to 140 mm (for housing Ø 185) and 130 to 160 mm (for housing Ø 230) are available

other lengths up to 4.100 mm available on request

### Accessories for centrifugal immersion pumps F 640

- **mounting flange polypropylene**

mounting dimensions (bottom mounting flange to bottom pump) is reduced at least by 100 mm compared to the specified nominal

	part no.
outer Ø 340 mm, PCD Ø 295 mm, 4 holes Ø 22 mm	947 14 049
outer Ø 445 mm, PCD Ø 400 mm, 6 holes Ø 22 mm	947 14 084

- **mounting flange polyvinylidene fluoride**

mounting dimensions (bottom mounting flange to bottom pump) is reduced at least by 100 mm compared to the specified nominal

	part no.
outer Ø 340 mm, PCD Ø 295 mm, 4 holes Ø 22 mm	947 14 070
outer Ø 445 mm, PCD Ø 400 mm, 6 holes Ø 22 mm	947 14 085

- **suction strainer** welded to the lid of the pump housing:

pump	material	part no.
F 640 PP-185	polypropylene	001 10 311
F 640 PVDF-185	polyvinylidene fluoride	001 10 312
F 640 PP-230	polypropylene	001 10 301
F 640 PVDF-230	polyvinylidene fluoride	001 10 302



F 640 PP-185  
with mounting flange

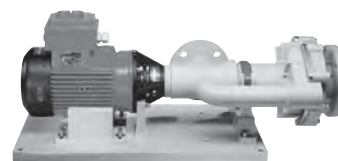
# Centrifugal immersion pumps

and drive motors

## Centrifugal immersion pumps for dry installation, for horizontal or vertical use

with mechanical seal, with open conical rotor or closed centrifugal impeller, without base plate, inlet with thread connection or DN 65 flange, nominal pressure PN 10, outlet with thread connection or DN 50 flange, nominal pressure PN 10

	inlet	outlet	part no.	
F 640 PP-30 TR	G 2" male	G 2¼ male	640 41 601	
F 640 PP-30 TR	flange	flange	640 41 600	
F 620 S-30 TR	G 2" male	G 1½ male	620 25 502	
	housing Ø	inlet	outlet	part no.
F 640 PP-230 TR	230 mm*	flange	flange	640 41 300



F 640 PP-230 TR  
with base plate

\*in order to achieve the desired output, centrifugal impellers in diameters of 100 to 160 mm are available

	part no.
base plate (polypropylene)	001 15 023

Drive motors see below

## Hose connections for centrifugal immersion pumps F 620 and F 640

- **stainless steel**, with union nut G 1½" female

	part no.
DN 25	959 04 002
DN 32	959 04 003
DN 38	959 04 004



- **polypropylene**, with union nut G 2¼" female

	part no.
DN 32	959 04 098
DN 38	959 04 099
DN 50	959 04 100



- **polyvinylidene fluoride**, with union nut G 2¼" female

	part no.
DN 32	959 04 104
DN 38	959 04 105
DN 50	959 04 096



Hoses see drum pump accessories on page 31

## Drive motors for centrifugal immersion pumps F 620 and F 640, three-phase motor 230/400 V, 50 Hz

- jet-proof to IP 55, **with motor protection switch**, energy efficiency class 2, 2.850 rpm

	part no.
0,75 kW	001 00 056
1,1 kW	001 00 057
1,5 kW	001 00 058
2,2 kW	001 00 059
3,0 kW	001 00 060
4,0 kW	001 00 061



- jet-proof to IP 55, **with cable terminal box**, energy efficiency class 2, 2.850 rpm

	part no.
0,75 kW	001 00 035
1,1 kW	001 00 036
1,5 kW	001 00 037
2,2 kW	001 00 038
3,0 kW	001 00 039
4,0 kW	001 00 040
5,5 kW	001 00 041



- **explosion-proof, Ex-marking II 2 G EEx e II T3**, **with cable terminal box**, 2.850 rpm

	part no.
0,75 kW	001 00 066
1,1 kW	001 00 067
1,5 kW	001 00 068
2,0 kW	001 00 069
2,5 kW	001 00 070
3,3 kW	001 00 071



## Accessories for three-phase motors

- **carrying handle**, in stainless steel

	part no.
up to 3,0 kW, not explosion-proof	001 10 571
up to 4,0 kW, not explosion-proof	001 10 531
up to 3,3 kW, explosion-proof	001 10 586



- **power supply cable**

	part no.
pre-assembled with sleeve and Cekon plug, 5 m long	934 08 020
pre-assembled with sleeve without plug, 5 m long	934 08 025
per meter	934 08 901
cable assembly to motor, switch or connector	000 00 250



- **Cekon- plug**

	part no.
5-poles	937 01 014



- **motor protection switch**, protection category IP 65, with 2 cable inlet ports, for mounting onto the motor

adjustment range	part no.
0,85 - 1,35 A	936 06 167
1,30 - 2,00 A	936 06 168
1,80 - 3,00 A	936 06 169
2,80 - 4,60 A	936 06 170
4,20 - 6,70 A	936 06 171
6,50 - 10,00 A	936 06 172
10,00 - 16,00 A	936 06 173



- **motor protection switch, explosion-proof** for applications in Zone 1, Ex-marking II 2 G EEx de IIC T6, with 2 cable inlet ports, for mounting onto the carrying handle

	part no.
0,75 kW and 1,1 kW, 1,6-2,5 A	936 06 118
1,5 kW and 2,0 kW, 2,5-4,0 A	936 06 119
2,5 kW and 3,3 kW, 4,0-6,5 A	936 06 120



- **CEE round pin plug** for applications in Zone 1  
Ex-marking II 2 G EEx de IIC T6, 5-pin, 380-415 V

	part no.
CEAG system	937 01 029
Steel system	937 01 020



- **CEE socket** for applications in Zone 1  
Ex-marking II 2 G EEx de IIC T6, 5-pin, 380-415 V

	part no.
CEAG system	937 50 040
Steel system	937 50 024



# Centrifugal immersion pumps

## Sample configuration

### FLUX pump systems for mobile tanks and buried tanks

We recommend to store AdBlue® in tanks at a yearly demand of more than 5.000 liters. These pumps in polypropylene are used in filling stations where two to six fuel dispensers are to be supplied with AdBlue®.

These pumps are especially made up to the customers' requirements.

Depending on the installation by the builder of the filling station the pumps are equipped with a thread on outlet 2" male or a bearing flange. Mounting flanges in different sizes guarantee safe installation in the manhole pit.

In order to obtain the requested delivery rate centrifugal impellers of either stainless steel or PP in different sizes are available. Three-phase motors with a power of 1,5 – 5,5 kW are used.

### Centrifugal immersion pump to deliver AdBlue® out of a tank

#### sample configuration:

1. pump F 640 AB-157/230-1900  
immersion length = 1.650 mm, mounting flange:  $\varnothing = 340$  mm, PCD  $\varnothing = 295$  mm,  
bore = 8 X  $\varnothing 22$  mm  
flange on outlet:  $\varnothing = 165$  mm, PCD  $\varnothing = 125$  mm,  
bore = 4 X  $\varnothing 18$  mm
2. three-phase drive motor 2,2 kW with a shelter and acid protection finishing

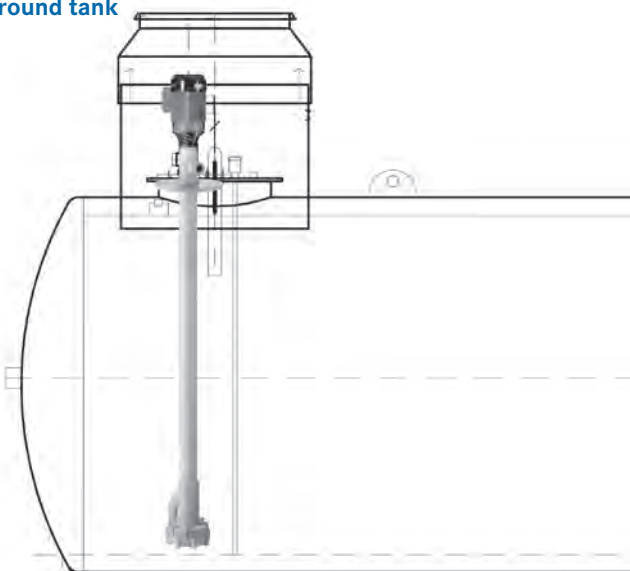


### Centrifugal immersion pump to deliver AdBlue® from a 8.000 liter underground tank

one fuel dispenser and two hand nozzles

#### Sample configuration:

1. pump F 640 AB-157/230-1900  
immersion length = 1.650 mm, mounting flange:  $\varnothing = 340$  mm,  
PCD  $\varnothing = 295$  mm,  
bore = 8 X  $\varnothing 22$  mm  
flange on outlet:  $\varnothing = 165$  mm, PCD  $\varnothing = 125$  mm,  
bore = 4 X  $\varnothing 18$  mm
2. three-phase drive motor 2,2 kW with a shelter and acid protection finishing
3. control box, non-return valve, manuel diaphragm valve,  
pressure relief valve, liquid level control for tank and manhole pit,  
seal kit, self-locking screws

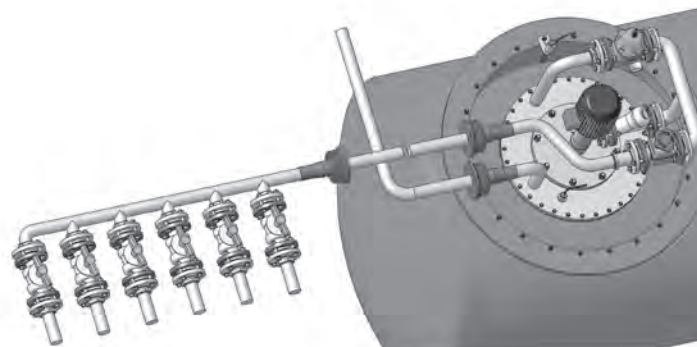


### Centrifugal immersion pump to deliver AdBlue® from a 15.000 liter buried tank

12 m length of pipeline to fuel dispensers, Ø DN 63, 3 fuel dispensers with 6 hand nozzles, pump controlled by frequency converter

#### Sample configuration:

1. pump F 640 AB-157/230-2300  
immersion length = 2.050 mm, mounting flange: Ø = 340 mm,  
PCD Ø = 295 mm,  
bore = 8 X Ø 22 mm,  
flange on outlet: Ø = 165 mm, PCD Ø = 125 mm,  
bore = 4 X Ø 18 mm
2. three-phase drive motor 3,0 kW with a shelter and acid protection finishing
3. control box, with frequency converter, non-return valve, manual diaphragm valve,  
pressure relief valve, liquid level control for tank and manhole pit, seal kit, self-locking screws



Optional available:

- especially constructed terminal box with frequency converter for control of the pump(s)
- different connection pieces like ball valves, liquid level control...

### Sealless centrifugal immersion pumps F 706 / F 716 / F 726 for continuous use

available in following materials:

polypropylene (PP): F 706 / F 716 / F 726

polyvinylidene fluoride (PVDF): F 716 / F 726

#### Special features and benefits type 716 and F 726:

- each pump is determined to the required duty point
- for continuous use
- immersion lengths up to 1.000 mm. The immersion length of the pump can be extended up to 1.500 mm maximum by the suction tube option.
- F 716 / F 726 safe to run dry. With free-flying shaft for very low wear. There is no need for an additional bearing carrier.

#### Drive motors:

As drive motors three-phase motors are available from 0.37 to 5.5 kW, jet-proof to IP 55, for individual models explosion-proof motors II 2 G EEx e II T3 are also available



Further information on request





# Air-operated diaphragm pumps

RFM in solid construction

## RFM 10 in polypropylene (PP) or polytetrafluoroethylene (PTFE), connection pump G 3/8" female

	diaphragm/seal	part no.
RFM 10 PP/NN	NBR	D10 40 010
RFM 10 PP/TK	PTFE/FFKM	D10 40 120
RFM 10 PP/TE	PTFE/EPDM	D10 40 130
RFM 10 PP/TV	PTFE/FKM	D10 40 140
RFM 10 PP/EE	EPDM	D10 40 210
RFM 10 PP/VV	FKM	D10 40 310
RFM 10 PTFE/TK	PTFE/FFKM	D10 00 120
RFM 10 PTFE/TE	PTFE/EPDM	D10 00 130
RFM 10 PTFE/TV	PTFE/FKM	D10 00 140
RFM 10 PTFE/EE	EPDM	D10 00 210
RFM 10 PTFE/VV	FKM	D10 00 310



## RFM 10 in polytetrafluoroethylene (PTFE), FDA CFR 21 conform, connection pump G 3/8" female

	diaphragm/seal	part no.
RFM 10 PTFE/TK (FDA)	PTFE/FFKM	D10 00 121
RFM 10 PTFE/TE (FDA)	PTFE/EPDM	D10 00 131



## RFML 10 electrically conductive PP or PTFE, for applications in Zone 1, Ex-marking II 2 G c IIB TX connection pump G 3/8" female

	diaphragm/seal	part no.
RFML 10 PP/NN	NBR	D10 41 010
RFML 10 PP/TK	PTFE/FFKM	D10 41 120
RFML 10 PP/TE	PTFE/EPDM	D10 41 130
RFML 10 PP/TV	PTFE/FKM	D10 41 140
RFML 10 PP/EE	EPDM	D10 41 210
RFML 10 PP/VV	FKM	D10 41 310
RFML 10 PTFE/TK	PTFE/FFKM	D10 01 120
RFML 10 PTFE/TE	PTFE/EPDM	D10 01 130
RFML 10 PTFE/TV	PTFE/FKM	D10 01 140
RFML 10 PTFE/EE	EPDM	D10 01 210
RFML 10 PTFE/VV	FKM	D10 01 310



## RFM 15 in polypropylene (PP) or polytetrafluoroethylene (PTFE), connection pump G 1/2" female

	diaphragm/seal	part no.
RFM 15 PP/NN	NBR	D15 40 010
RFM 15 PP/TK	PTFE/FFKM	D15 40 120
RFM 15 PP/TE	PTFE/EPDM	D15 40 130
RFM 15 PP/TV	PTFE/FKM	D15 40 140
RFM 15 PP/EE	EPDM	D15 40 210
RFM 15 PP/VV	FKM	D15 40 310
RFM 15 PTFE/TK	PTFE/FFKM	D15 00 120
RFM 15 PTFE/TE	PTFE/EPDM	D15 00 130
RFM 15 PTFE/TV	PTFE/FKM	D15 00 140
RFM 15 PTFE/EE	EPDM	D15 00 210
RFM 15 PTFE/VV	FKM	D15 00 310



## RFM 15 in polytetrafluoroethylene (PTFE), FDA CFR 21 conform, connection pump G 1/2" female

	diaphragm/seal	part no.
RFM 15 PTFE/TK (FDA)	PTFE/FFKM	D15 00 121
RFM 15 PTFE/TE (FDA)	PTFE/EPDM	D15 00 131





**RFML 15 electrically conductive PP or PTFE, for applications in Zone 1,  
Ex-marking II 2 G c IIB TX connection pump G 1/2" female**

	diaphragm/seal	part no.
RFML 15 PP/NN	NBR	D15 41 010
RFML 15 PP/TK	PTFE/FFKM	D15 41 120
RFML 15 PP/TE	PTFE/EPDM	D15 41 130
RFML 15 PP/TV	PTFE/FKM	D15 41 140
RFML 15 PP/EE	EPDM	D15 41 210
RFML 15 PP/VV	FKM	D15 41 310
RFML 15 PTFE/TK	PTFE/FFKM	D15 01 120
RFML 15 PTFE/TE	PTFE/EPDM	D15 01 130
RFML 15 PTFE/TV	PTFE/FKM	D15 01 140
RFML 15 PTFE/EE	EPDM	D15 01 210
RFML 15 PTFE/VV	FKM	D15 01 310



**RFM 25 in polypropylene (PP) or polytetrafluoroethylene (PTFE), connection pump G 1" female**

	diaphragm/seal	part no.
RFM 25 PP/NN	NBR	D25 40 010
RFM 25 PP/TK	PTFE/FFKM	D25 40 120
RFM 25 PP/TE	PTFE/EPDM	D25 40 130
RFM 25 PP/TV	PTFE/FKM	D25 40 140
RFM 25 PP/EE	EPDM	D25 40 210
RFM 25 PP/VV	FKM	D25 40 310
RFM 25 PTFE/TK	PTFE/FFKM	D25 00 120
RFM 25 PTFE/TE	PTFE/EPDM	D25 00 130
RFM 25 PTFE/TV	PTFE/FKM	D25 00 140
RFM 25 PTFE/EE	EPDM	D25 00 210
RFM 25 PTFE/VV	FKM	D25 00 310



**RFM 25 in polypropylene (PP) for abrasive fluids, connection pump G 1" female, flap valve PUR**

	diaphragm/seal	part no.
RFM 25 PP/N/PUR	NBR/PUR	D25 40 510

**RFM 25 in polytetrafluoroethylene (PTFE) FDA CFR 21 conform, connection pump G 1" female**

	diaphragm/seal	part no.
RFM 25 PTFE/TK (FDA)	PTFE/FFKM	D25 00 121
RFM 25 PTFE/TE (FDA)	PTFE/EPDM	D25 00 131



**RFML 25 electrically conductive PP or PTFE, for applications in Zone 1,  
Ex-marking II 2 G c IIB TX, connection pump G 1" female**

	diaphragm/seal	part no.
RFML 25 PP/NN	NBR	D25 41 010
RFML 25 PP/TK	PTFE/FFKM	D25 41 120
RFML 25 PP/TE	PTFE/EPDM	D25 41 130
RFML 25 PP/TV	PTFE/FKM	D25 41 140
RFML 25 PP/EE	EPDM	D25 41 210
RFML 25 PP/VV	FKM	D25 41 310
RFML 25 PTFE/TK	PTFE/FFKM	D25 01 120
RFML 25 PTFE/TE	PTFE/EPDM	D25 01 130
RFML 25 PTFE/TV	PTFE/FKM	D25 01 140
RFML 25 PTFE/EE	EPDM	D25 01 210
RFML 25 PTFE/VV	FKM	D25 01 310



# Air-operated diaphragm pumps

RFM in solid construction

## RFM 40 in polypropylene (PP) connection pump G 1/2" female

	diaphragm/seal	part no.
RFM 40 PP/NN	NBR	D40 40 015
RFM 40 PP/TE	PTFE/EPDM	D40 40 135
RFM 40 PP/TV	PTFE/FKM	D40 40 145
RFM 40 PP/EE	EPDM	D40 40 215
RFM 40 PP/VV	FKM	D40 40 315

## RFM 40 in polypropylene (PP) for abrasive fluids, connection pump G 1 1/2" female, flap valve PUR

	diaphragm/seal	part no.
RFM 40 PP/N/PUR	NBR/PUR	D40 40 510

## RFM 40 in polytetrafluoroethylene (PTFE), FDA CFR 21 conform, connection pump G 1 1/2" female

	diaphragm/seal	part no.
RFM 40 PTFE/TK (FDA)	PTFE/FFKM	D40 00 121
RFM 40 PTFE/TE (FDA)	PTFE/EPDM	D40 00 131

## RFML 40, in polytetrafluoroethylene (PTFE) for applications in Zone 1, Ex-marking II 2 G c IIBTX, connection pump G 1 1/2" female

	diaphragm/seal	part no.
RFML 40 PTFE/TK	PTFE/FFKM	D40 01 125
RFML 40 PTFE/TE	PTFE/EPDM	D40 01 135
RFML 40 PTFE/TV	PTFE/FKM	D40 01 145
RFML 40 PTFE/EE	EPDM/EPDM	D40 01 215
RFML 40 PTFE/VV	FKM/FKM	D40 01 315

## RFML 40, in polytetrafluoroethylene (PTFE) for applications in Zone 1, Ex-marking II 2 G c IIBTX, FDA CFR 21 conform, connection pump G 1 1/2" female

	diaphragm/seal	part no.
RFML 40 PTFE/TK (FDA)	PTFE/FFKM	D40 01 121
RFML 40 PTFE/TE (FDA)	PTFE/EPDM	D40 01 131



# Accessories for air-operated diaphragm pumps RFM



## Reduction nipple to connect the hose connections to the pump for:

### • RFM 10

material	connection	part no.
PP	G 1" male - G 3/8" male	959 06 159
PVDF	G 1" male - G 3/8" male	959 06 169

### • RFM 15

material	connection	part no.
PP	G 1" male - G 1/2" male	959 06 160
PVDF	G 1" male - G 1/2" male	959 06 170

### • RFM 25

material	connection	part no.
PP	G 1 1/4" male - G 1" male	959 06 161
PVDF	G 1 1/4" male - G 1" male	959 06 171

### • RFM 40

material	connection	part no.
PP	G 2" male - G 1 1/2" male	959 06 162
PVDF	G 2" male - G 1 1/2" male	959 06 172



## Hose connections for connection to the pump (reduction nipple is necessary):

### • RFM 10/15

material	connection	part no.
PP	DN 13 - G 1" female	959 04 073
PVDF	DN 13 - G 1" female	959 04 071
PP	DN 19 - G 1" female	959 04 074
PVDF	DN 19 - G 1" female	959 04 072

### • RFM 25

material	connection	part no.
PP	DN 25 - G 1 1/4" female	959 04 052
PVDF	DN 25 - G 1 1/4" female	959 04 102
PP	DN 32 - G 1 1/4" female	959 04 054
PVDF	DN 32 - G 1 1/4" female	959 04 103

### • RFM 40

material	connection	part no.
PP	DN 32 - G 2" female	959 04 010
PVDF	DN 32 - G 2" female	959 04 084
PP	DN 38 - G 2" female	959 04 011
PVDF	DN 38 - G 2" female	959 04 085
PP	DN 50 - G 2" female	959 04 012
PVDF	DN 50 - G 2" female	959 04 086



## Suction tube for RFM 10, RFM 15 and RFM 25, polypropylene, with thread connector at the bottom G 3/4" male

	length	outer Ø	part no.
with hose nozzle DN 13	700 mm	20 mm	959 18 020
	1.000 mm	20 mm	959 18 021
with hose nozzle DN 25	700 mm	25 mm	959 18 008
	1.000 mm	25 mm	959 18 009
with thread connector G 1" male	700 mm	25 mm	959 18 010
	1.000 mm	25 mm	959 18 011
with thread connector G 1 1/4" male	700 mm	25 mm	959 18 012
	1.000 mm	25 mm	959 18 013

## Suction strainer

### • for suction tube

material	connection	outer Ø	part no.
PP	G 1/2" female	20 mm	001 10 335
PP	G 1/2" female	25 mm	001 10 324

### • for suction hose

material	with hose connector	part no.
PP	DN 19	001 10 330
PP	DN 25	001 10 331



# Accessories for air-operated diaphragm pumps

## RFM/RFML

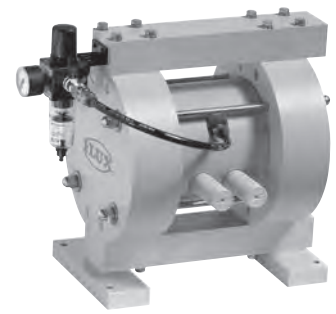
### Pressure regulator with filter unit and speed control valve, complete (pre-mounted) for:

- **RFM** (for use in non hazardous areas)

	part no.
RFM 10 (1/4")	D01 00 410
RFM 15/25 (1/4")	D01 00 412
RFM 40 (1/2")	D01 00 403
Filter cartridge (1/4") for re-order	001 10 115

- **RFML** (for use in hazardous areas)

	part no.
RFML 10	D01 00 320
RFML 15/25	D01 00 322



RFM 15 with pressure regulator

### Stroke counter complete with 5/2-way control valve for RFM

	part no.
RFM 10/15	D01 00 101
RFM 25	D01 00 102
RFM 40	D01 00 103

- **impulse cable**

	part no.
for use with digital display, 5 m long	934 08 038

- **external digital display FLUXTRONIC®**

	part no.
with mounting flange	001 42 113



RFM 15 with stroke counter, impulse cable and external digital display FLUXTRONIC®

### Pulsation dampers, passive, max. operating pressure 8 bar:

for RFM 10 and RFM 15	material	part no.
PDP 15 PP/N	NBR	D01 15 400
PDP 15 PP/E	EPDM	D01 15 420
PDP 15 PP/V connector female thread 3/4" female	FKM	D01 15 430

for RFM 25	material	part no.
PDP 25 PP/N	NBR	D01 25 400
PDP 25 PP/E	EPDM	D01 25 420
PDP 25 PP/V connector female thread 1" female	FKM	D01 25 430

for RFM 40	material	part no.
PDP 40 PP/N	NBR	D01 40 400
PDP 40 PP/E	MEPDM	D01 40 420
PDP 40 PP/V connector female thread 1" female	FKM	D01 40 430

- **filling connection** for filling pulsation damper

material	connection	part no.
brass	G 1/4" female - filling connection	D01 00 000



Further accessories see page 95

# Air-operated diaphragm pumps

FDM/FDMH moulded pump design



## FDM 07, pump connection 3/4" NPTF male, G 1/4" female 1/4" NPTF female

		housing	diaphragm	part no.
FDM 07 PP/AA		PP	sanitroprene	M07 40 010
FDM 07 PP/TT		PP	PTFE	M07 40 100
FDM 07 AC/TT	Ex*	AC	PTFE	M07 50 000
				part no.
adapter plate for replacement FDM 06 by FDM 07				M07 70 100



## FDM 10, pump connection G 3/8" female

		housing	diaphragm	part no.
FDM 10 PP/AA		PP	sanitroprene	M10 40 010
FDM 10 PP/TT		PP	PTFE	M10 40 110
FDM 10 AC/TT	Ex*	AC	PTFE	M10 50 110
FDM 10 PVDF/TT		PVDF	PTFE	M10 60 110



## FDM 12, pump connection 1/2" NPT

		housing	diaphragm	part no.
FDM 12 PP/AA		PP	sanitroprene	M12 40 210
FDM 12 PP/TT		PP	PTFE	M12 40 110
FDM 12 AC/TS	Ex*	AC	PTFE	M12 50 010
FDM 12 PVDF/TT		PVDF	PTFE	M12 60 010
FDM 12 AL/TT	Ex*	AL	PTFE	M12 10 100
FDM 12 AL/NN	Ex*	AL	NBR	M12 10 200
FDM 12 S/TT	Ex*	S	PTFE	M12 20 000



## FDM 25, pump connection flange 1" (hose connection see page 96)

		housing	diaphragm	part no.
FDM 25 PP/AA		PP	sanitroprene	M25 40 010
FDM 25 PP/TT		PP	PTFE	M25 40 100
FDM 25 PVDF/TT		PVDF	PTFE	M25 60 000

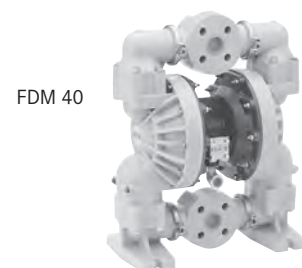


## FDM 25, pump connection G 1" female

		housing	diaphragm	part no.
FDM 25 AL/NN	Ex*	AL	NBR	M25 10 000
FDM 25 AL/TT	Ex*	AL	PTFE	M25 10 100
FDM 25 S/TT	Ex*	S	PTFE	M25 20 100

## FDM 40, pump connection flange 1 1/2" (hose connection see page 96)

		housing	diaphragm	part no.
FDM 40 PP/AA		PP	sanitroprene	M40 40 010
FDM 40 PP/TT		PP	PTFE	M40 40 100
FDM 40 PVDF/TT		PVDF	PTFE	M40 60 000



## FDM 40, pump connection G 1 1/2" female

		housing	diaphragm	part no.
FDM 40 AL/NN	Ex*	AL	NBR	M40 10 000
FDM 40 AL/TT	Ex*	AL	PTFE	M40 10 100
FDM 40 S/TT	Ex*	S	PTFE	M40 20 100
FDM 40 GG/NN	Ex*	GG	NBR	M40 30 000

\* for use in Zone 1, explosion-proof II 2 G D X



# Air-operated diaphragm pumps

FDM/FDMH moulded pump design

## FDM 50, pump connection flange 2" (hose connection see page 96)

		housing	diaphragm	part no.
FDM 50 PP/AA		PP	santoprene	M50 40 010
FDM 50 PP/TT		PP	PTFE	M50 40 100
FDM 50 PVDF/TT		PVDF	PTFE	M50 60 000

## FDM 50, pump connection G 2" female

		housing	diaphragm	part no.
FDM 50 AL/NN	Ex*	AL	NBR	M50 10 200
FDM 50 AL/TT	Ex*	AL	PTFE	M50 10 300
FDM 50 S/TT	Ex*	S	PTFE	M50 20 300
FDM 50 GG/NN	Ex*	GG	NBR	M50 30 200
FDM 50 GG/TT	Ex*	GG	PTFE	M50 30 300

## FDM 80, pump connection G 3" female

		housing	diaphragm	part no.
FDM 80 AL/NN	Ex*	AL	NBR	M80 10 000
FDM 80 AL/TT	Ex*	AL	PTFE	M80 10 100
FDM 80 S/TT	Ex*	S	PTFE	M80 20 100
FDM 80 GG/TT	Ex*	GG	PTFE	M80 30 100

## FDMH 25, pump connection G 1" female

		housing	diaphragm	part no.
FDMH 25 S/TS	Ex*	S	PTFE	M25 20 200



FDM 50



FDM 80



FDMH 25

## Hose nipples for:

- FDM 07**

material	connection	part no.
S (1.4408)	DN 8 - G 1/4 male	959 05 357
MS	DN 10 - G 1/4 male	959 05 022
PP	DN 10 - G 1/4 male	959 13 128
PVC	DN 12 - G 1/4 male	959 05 181
- FDM 10**

material	connection	part no.
PVC	DN 15 - G 3/8" male	959 05 232
MS	DN 13 - G 3/8" male	959 05 231
- FDM 12**

material	connection	part no.
PP	DN 13 - G 1/2" male	959 05 183
MS	DN 13 - G 1/2" male	959 05 017
MS	DN 19 - 1/2" NPT	959 05 247
stainless steel 316 Ti	DN 13 - 1/2" NPT	959 05 249
MS	DN 13 - 1/2" NPT	959 05 258
- FDM 25**

material	connection	part no.
PP	DN 25 - G 1" male	959 05 192
MS	DN 19 - G 1" male	959 05 161
MS	DN 25 - G 1" male	959 05 052
stainless steel 316 Ti	DN 25 - G 1" male	959 05 190
- FDM 40**

material	connection	part no.
PVC	DN 50 - G 1 1/2" male	959 05 184
MS	DN 38 - G 1 1/2" male	959 05 185
MS	DN 32 - G 1 1/2" male	959 05 186
MS	DN 25 - G 1 1/2" male	959 05 187
stainless steel 316 Ti	DN 38 - G 1 1/2" male	959 05 188
- FDM 50**

material	connection	part no.
PVC	DN 63 - G 2" male	959 05 193
MS	DN 38 - G 2" male	959 05 194
MS	DN 50 - G 2" male	959 05 195



\* for use in Zone 1, explosion-proof II 2 G D X



### Reduction nipples to connect the hose connections to the pump:

• <b>FDM 07</b>	material	connection	part no.
	MS	G ¼ male - G ½ male	959 06 091
• <b>FDM 10</b>	material	connection	part no.
	PP	G 1" male - G ¾" male	959 06 159
	PVDF	G 1" male - G ¾" male	959 06 169
• <b>FDM 12</b>	material	connection	part no.
	PP	½ NPT - G 1¼" male	959 06 078
	PVDF	½ NPT - G 1¼" male	959 06 077
	stainless steel 316 Ti	½ NPT - G 1¼" male	959 06 079
• <b>FDM 25</b>	material	connection	part no.
	reduction nipple	MS	G 1" male - G 1¼" male
short	stainless steel 316 Ti	G 1" male - G 1¼" male	959 06 081
reduction nipple	MS	G 1" male - G 1¼" male	959 06 082
	long	stainless steel 316 Ti	G 1" male - G 1¼" male



### Hose connections for connection to the pump (reduction nipple is necessary):

• <b>FDM 07</b>	material	connection	part no.
	stainless steel 1.4571	DN 13 - G ¾ female	959 04 133
	stainless steel 1.4571	DN 19 - G ¾ female	959 04 147
• <b>FDM 10</b>	material	connection	part no.
	PP	DN 13 - G 1" female	959 04 073
	PP	DN 19 - G 1" female	959 04 074
	PVDF	DN 13 - G 1" female	959 04 071
	PVDF	DN 19 - G 1" female	959 04 072



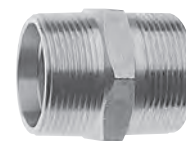
### Connection pieces for connection to the pump FDM 12 (with NPT thread)

material	connection	part no.
MS	G ½" female - ½" NPT male	959 06 112
S	G ½" male - ½" NPT male	959 06 119



### Double nipples for:

• <b>FDM 40</b>	material	connection	part no.
	MS	G ½" male - G 1½" male	001 18 051
	stainless steel 1.4436	G ½" male - G 1½" male	001 18 047
• <b>FDM 50</b>	material	connection	part no.
	MS	G 2" male - G 2" male	959 06 098
	stainless steel 1.4436	G 2" male - G 2" male	959 06 099



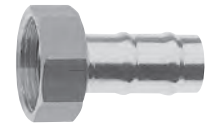
# Accessories for air-operated diaphragm pumps

## FDM

### Hose connections for:

- FDM 12 and FDM 25**

material	connection	part no.
PP	DN 13 - G 1/4" female	959 04 081
PP	DN 19 - G 1/4" female	959 04 053
PP	DN 25 - G 1/4" female	959 04 052
PP	DN 32 - G 1/4" female	959 04 054
PVDF	DN 13 - G 1/4" female	959 04 082
PVDF	DN 19 - G 1/4" female	959 04 101
PVDF	DN 25 - G 1/4" female	959 04 102
PVDF	DN 32 - G 1/4" female	959 04 103
AL	DN 25 - G 1/4" female	959 04 119
AL	DN 32 - G 1/4" female	959 04 120
stainless steel 316 Ti	DN 19 - G 1/4" female	959 04 116
stainless steel 316 Ti	DN 25 - G 1/4" female	959 04 117
stainless steel 316 Ti	DN 32 - G 1/4" female	959 04 118



- FDM 40**

material	connection	part no.
AL	DN 25 - G 1/2" female	959 04 005
AL	DN 32 - G 1/2" female	959 04 006
AL	DN 38 - G 1/2" female	959 04 001
stainless steel 316 Ti	DN 25 - G 1/2" female	959 04 002
stainless steel 316 Ti	DN 32 - G 1/2" female	959 04 003
stainless steel 316 Ti	DN 38 - G 1/2" female	959 04 004



- FDM 50**

material	connection	part no.
PP	DN 32 - G 2" female	959 04 010
PP	DN 38 - G 2" female	959 04 011
PP	DN 50 - G 2" female	959 04 012
PVDF	DN 32 - G 2" female	959 04 084
PVDF	DN 38 - G 2" female	959 04 085
PVDF	DN 50 - G 2" female	959 04 086
stainless steel 316 Ti	DN 32 - G 2" female	959 04 059
stainless steel 316 Ti	DN 38 - G 2" female	959 04 060
stainless steel 316 Ti	DN 50 - G 2" female	959 04 009



### Pulsation dampers for FDM 12, active

	housing	diaphragm	part no.
PD 12 AL/NBR	AL	NBR	M00 11 200
PD 12 PP/PTFE	PP	PTFE	M00 41 200
PD 12 PTFE/PTFE	PTFE	PTFE	M00 61 200



### Pulsation dampers for FDM 25, active

	housing	diaphragm	part no.
PD 25 S/PTFE	S	PTFE	M00 22 500
PD 25 PP/PTFE	PP	PTFE	M00 42 500
PD 25 PTFE/PTFE	PTFE	PTFE	M00 62 500

### Flanges complete with flat seal FKM and stainless steel screws (per pump two pieces are needed) for:

- FDM 25**

material	connection	part no.
PP	G 1/4" male	947 14 059
PVDF	G 1/4" male	947 14 060

- FDM 40**

material	connection	part no.
PP	G 2" male	947 14 061
PVDF	G 2" male	947 14 062

- FDM 50**

material	connection	part no.
PP	G 2" male	947 14 063
PVDF	G 2" male	947 14 064





### Hose connections for:

- FDM 07**

material	connection	outer Ø	part no.
MS	DN 13 - G ½" female	21 mm	959 13 179

- FDM 12**

material	connection	outer Ø	part no.
MS	DN 13 - G ½" female	21 mm	959 13 179
MS	DN 13 - ½" male NPT	21 mm	959 13 186
MS	DN 13 - G ½" female	22 mm	959 13 177
S	DN 13 - ½" male NPT	22 mm	959 13 187



Brass and stainless steel hose connectors for hoses with DN 19, DN 25 and DN 32 see accessories for drum pumps on page 28

### Suction tubes FDM 10, FDM 12 and FDM 25

- stainless steel 316 Ti**, thread connector below G ⅜" female at Ø 18 mm, G ¾" female at Ø 28 mm

version	length	outer Ø	part no.
with thread connection G ½" male	700 mm	18 mm	959 18 016
	1.000 mm	18 mm	959 18 017
with hose nozzle DN 25	700 mm	28 mm	959 18 000
	1.000 mm	28 mm	959 18 001
with thread connection G 1" male	700 mm	28 mm	959 18 002
	1.000 mm	28 mm	959 18 003
with thread connection G ¾" male	700 mm	28 mm	959 18 004
	1.000 mm	28 mm	959 18 005

- polypropylene**, thread connector below G ½" male at Ø 20 mm, G ¾" male at Ø 25 mm

version	length	outer Ø	part no.
with hose nozzle DN 13	700 mm	20 mm	959 18 020
	1.000 mm	20 mm	959 18 021
with hose nozzle DN 25	700 mm	25 mm	959 18 008
	1.000 mm	25 mm	959 18 009
with thread connection G 1" male	700 mm	25 mm	959 18 010
	1.000 mm	25 mm	959 18 011
with thread connection G 1¼" male	700 mm	25 mm	959 18 012
	1.000 mm	25 mm	959 18 013



### Suction strainer

- suction strainer** for suction tube

material	connection	part no.
stainless steel 316 Ti	28 mm, G ¾" male	001 10 325
stainless steel 316 Ti	18 mm, G ⅜" male	001 10 334
PP with flowback stop valve	20 mm, G ½" female	001 10 335
PP with flowback stop valve	25 mm, G ¾" female	001 10 324

- for suction hose**

material	with hose connector	part no.
PP	DN 19	001 10 330
PP	DN 25	001 10 331

- earth wire** with crocodile clip

	cable cross-section	length	forceps	part no.
spiral cable (yellow)	3 mm <sup>2</sup>	4 m	stainless steel	931 90 023
cable (green/yellow)	4 mm <sup>2</sup>	2 m	steel zinc-plated	931 90 015



Hoses and hose clips see accessories for drum pumps on page 32-33

# Accessories for air-operated diaphragm pumps

## Further accessories for FDM

- **pressure regulator** for:

	connection	part no.
FDM 10 / 12 / 25	G 1/4" female	001 10 101
FDM 25 / 40 / 50 / 80	G 1/2" female	001 10 102

- **filter-regulator-lubricator unit** for:

	connection	part no.
FDM 07 - FDM 25	G 1/4" female	001 10 111
FDM 07 - FDM 25, explosion-proof	G 1/4" female	001 10 114
FDM 40 / 50 / 80	G 1/2" female	001 10 110

- **double nipple** for the connection between filter-regulator and speed regulating valve for:

	connection	part no.
FDM 07 - FDM 25	G 1/4 A - G 1/4 male	959 06 166
FDM 40 - FDM 80	G 1/2 A - G 1/2 male	959 06 167

- **speed regulation valve** for:

	connection	part no.
FDM 07 - FDM 25	G 1/4" female	D01 00 230
FDM 40 - FDM 80	G 1/2" female	D01 00 231

- **air connection** in brass (double nipple fixing) for:

	version	connection	part no.
FDM 10 / 12 / 25	straight	1/4" NPT - G 1/4" male	959 06 088
FDM 40, FDM 50 PP/PVDF	straight	1/2" NPT - G 1/2" male	959 06 086
FDM 50 AL/S/GG, FDM 80 AL/S/GG	with 90° bend	3/4" NPT - G 1/2" male	959 06 138



## Further accessories for FDM and RFM

- **compressed air hose**

nominal Ø, material	outer Ø	part no.
DN 10, electrically conductive	17 mm	001 10 098
DN 10, PVC	17 mm	001 10 071
DN 13, PVC	20 mm	001 10 008

- **coupling** in brass

nominal Ø	part no.
DN 7,2 - G 1/4" male	959 13 210

- **hose couplings** with hose connector in brass

nominal Ø	part no.
DN 10	959 13 066
DN 13	959 13 122

- **threaded nipple** in brass

nominal Ø	part no.
DN 10 - G 1/4" male	959 13 065
DN 13 - G 1/2" male	959 13 121

- **plug-in sleeve** in brass for hose coupling

nominal Ø	part no.
DN 13	959 13 257
DN 10	959 13 209

- **hose nozzle** (brass)

nominal Ø	part no.
DN 10 - G 1/4" male	959 05 022
DN 13 - G 1/2" male	959 05 017

- **1-Ear hose clip**

clamping range	part no.
8 - 18,0 mm	959 13 237
18,8 - 22,0 mm	959 13 239



## GENERAL TERMS AND CONDITIONS OF SALE of FLUX-GERÄTE GMBH

### § 1 General, scope

(1) All supplies and services FLUX-GERÄTE GMBH are made exclusively at the following delivery and payment conditions (hereinafter also referred to as "terms of sale"). Terms and conditions of the customer that contradict or diverge from our terms of sale are herewith expressly excluded. FLUX-GERÄTE GMBH is only bound by such terms and conditions if FLUX-GERÄTE GMBH has acknowledged them in writing. Our terms of sale still apply even if we carry out the delivery to the customer without any reservation in the knowledge that the terms and conditions of the customer contradict or diverge from our terms of sale.

(2) In placing the order and accepting the goods delivered by us, the customer confirms its agreement with our terms and conditions. The storage and processing of the data of our customers is computerized to the extent that this is necessary for the due processing of the business relationship.

(3) All arrangements made between the customer and ourselves for the purpose of executing an agreement are set forth in said agreement.

(4) Our terms of sale only apply to companies as defined by Article 310 (1) BGB [Bürgerliches Gesetzbuch: German Civil Code].

### § 2 Offers and deliveries

(1) Our offers are generally valid for a limited period of time. If the order of the customer qualifies as an offer in accordance with Article 145 BGB, we can accept it within two weeks. The order is accepted by the order confirmation of FLUX-GERÄTE GMBH which forms the basis of the contractual agreement and determines the scope of the delivery.

(2) In the case of offers which are limited in time and which allow a certain period of time for acceptance, the offer is decisive if no order confirmation is issued within the period allowed. Side agreements and amendments must be confirmed by us in writing.

(3) We reserve the right to make design changes and other changes to technical data and specifications to the extent that these represent technical improvements and are deemed to be reasonably acceptable for the customer.

(4) Documents such as drawings, samples and the like provided to FLUX-GERÄTE GMBH as attachments to the request for an offer or the order remain the property of the customer. They form the binding basis for the preparation and elaboration of the offer by FLUX-GERÄTE GMBH. When placing orders, the customer must make written reference to any subsequent changes compared to the initial request for an offer and the offer by FLUX-GERÄTE GMBH. If FLUX-GERÄTE GMBH attaches similar documents to its offers in the way described above, these are and remain the property of FLUX-GERÄTE GMBH. The customer agrees not to use these documents for purposes not governed by the agreement, to duplicate them or to otherwise make them accessible to third parties. Obvious errors, printing, arithmetical, typing and calculation errors are not binding for FLUX-GERÄTE GMBH and do not entitle the customer to claim damages or compensation.

### § 3 Prices and payment

(1) Unless otherwise agreed in the order confirmation, the prices are ex works "Maulbronn", excluding costs of shipping and packaging; these will be invoiced separately.

(2) The delivery is made at the price stated in the offer of FLUX-GERÄTE GMBH or in the order confirmation in accordance with § 2 above.

(3) The invoice amount is due within 14 days of the invoice date with 2% discount, or net within 30 days. Invoices for repairs are due immediately for payment, without deductions. The 2% discount is not granted if other receivables are overdue. If payment periods are exceeded, we reserve the right to claim damages for delayed payment of 8% above the base interest rate. For orders for goods with a net value of less than EUR 25, we charge a minimum quantity surcharge up to this net value.

(4) Payments can only be withheld or offset against any counterclaims if the counterclaims of the customer are undisputed, acknowledged and legally enforceable.

### § 4 Delivery period, delivery not possible, delays

(1) The delivery period begins as of the date of the order confirmation. However, this only applies if all the technical details have been clarified at this point in time.

(2) Compliance with our delivery obligation also presupposes that the customer satisfies its obligations punctually and properly. We reserve the right to make a plea of non-performance.

The delivery period is as agreed between the contractual parties. For FLUX-GERÄTE GMBH to keep the delivery date, all commercial and technical questions must have been clarified between the contractual parties and the customer must have fulfilled all its responsibilities, e.g. such as providing the necessary official certifications or permits or payment of a down-payment. If this is not the case, the delivery period is prolonged accordingly. This does not apply if FLUX-GERÄTE GMBH is responsible for the delay.

(3) Keeping the delivery period is also subject to the condition that FLUX-GERÄTE GMBH receives its own deliveries on time. FLUX-GERÄTE GMBH will immediately announce any indication of possible delays.

(4) The delivery period is deemed to have been kept if the item being delivered has left the plant of FLUX-GERÄTE GMBH in Maulbronn before the end of the delivery period or the customer has been notified that the item is ready for shipment. If the products have to be inspected and accepted, the inspection date is decisive, unless there are reasonable grounds to reject acceptance; alternatively, notification that the products are ready for inspection is deemed to be decisive.

(5) If the shipment or inspection of the products being delivered is delayed for reasons caused by the customer, the costs caused by the delay will be charged to the customer starting one month after notification that the products are ready for shipment or inspection.

(6) If the failure to keep the delivery period is due to force majeure, labor disputes or other events which are beyond the control of FLUX-GERÄTE GMBH, the delivery period is extended accordingly. FLUX-GERÄTE GMBH will inform the customer about the beginning and end of such events as soon as reasonably possible.

(7) The customer can withdraw from the contract without notice if circumstances render performance impossible for FLUX-GERÄTE GMBH before the transfer of risk. The customer can also withdraw from the contract if execution of part of a delivery is impossible and the customer has a legitimate interest in rejecting partial delivery. If this is not the case, the customer must pay that part of the contractually agreed price that relates to the partial delivery. The same applies if FLUX-GERÄTE GMBH is unable to execute the contract. §§ 7-9 apply by analogy.

(8) If the customer is in default of acceptance or if it violates any other duty to cooperate, we are entitled to claim compensation for any loss that we have sustained as a result, including any additional expenses that have been incurred. Further claims and rights are reserved.

(9) Provided the prerequisites of (4) are in place, the risk of accidental loss or the accidental deterioration of the purchased goods is transferred to the customer at the point in time when the customer is in default of acceptance or payment.

(10) We are liable in accordance with the legal provisions to the extent that the underlying purchase agreement contains a fixed date of delivery in accordance with Article 286 (2) No. 4 BGB or Section 376 HGB [Handelsgesetzbuch: German Commercial Code]. We are also liable in accordance with the legal provisions if the customer is entitled on account of a delay in delivery for which we are responsible to claim that its interest in executing the contract has lapsed.

(11) We are also liable in accordance with the legal provisions if the delay in delivery is due to the willful or gross negligent breach of contract by us; if our representatives or agents are responsible, the liability lies with us. If the delay in delivery is due to a gross negligent breach of contract by us, our liability for damages is limited to foreseeable losses that typically occur in such cases.

(12) We are also liable in accordance with the legal provisions if the delay in delivery for which we are responsible is due to the culpable infringement of a significant contractual duty, in this case, our liability for damages is limited to foreseeable losses that typically occur.

(13) In the case of a delay in delivery, we are liable for every full week of delay in the form of a lump-sum compensation for delay equivalent to 0.5% of the value of the goods being delivered per week, but not more than 10% of the total value of the goods being delivered. If FLUX-GERÄTE GMBH is in default with the delivery, the customer is entitled to grant FLUX-GERÄTE GMBH by written declaration an additional period for delivery of at least another four weeks, beginning from the receipt of the written declaration. If this additional term expires without success, the customer is entitled to withdraw from the contract.

(14) This does not affect other legal claims and rights of the customer.

### § 5 Transfer of risk

(1) The risk is transferred to the customer when the goods being delivered leave the plant, even if part deliveries have been made or FLUX-GERÄTE GMBH has agreed to provide other services, e.g. shipping costs or delivery and installation. Where an inspection is necessary, this is decisive for the transfer of risk. It must be carried out immediately as of the inspection date, alternatively after FLUX-GERÄTE GMBH notifies the customer that the goods are ready for inspection. The customer may only refuse to accept the goods after inspection if there is a significant defect.

(2) If shipment or inspection is delayed or does not take place due to circumstances that are beyond the control of FLUX-GERÄTE GMBH, the risk is transferred to the customer from the day on which the customer is notified that the goods are ready for shipping or inspection. FLUX-GERÄTE GMBH agrees at the expense of the customer to take out any insurance the customer may demand.

(3) Partial deliveries are permissible to the extent that the deliveries can be split and partial deliveries are deemed to be reasonably acceptable for the customer.

(4) At the customer's request, we will take out transport insurance to cover the delivery, any costs incurred for this are borne by the customer.

### § 6 Retention of title

(1) The delivered goods remain our property until all current and future receivables from the business relationship with the customer have been paid, regardless of the legal grounds.

If the customer contravenes the contractual arrangements, including but not limited to default of payment, we are entitled to take back the goods that have been delivered. An application for the opening of insolvency protection proceedings entitles FLUX-GERÄTE GMBH to withdraw from the contract and to demand that the delivered goods be returned immediately. The repossession of the purchased goods by FLUX-GERÄTE GMBH constitutes a withdrawal from the contract. After repossession of the purchased goods, FLUX-GERÄTE GMBH is authorized to sell the goods, the proceeds of which are to be offset against the liabilities of customer, less reasonable selling costs.

(2) In the event of attachments or other interventions of third parties, the customer must inform us immediately in writing so that we can institute proceedings in accordance with Section 771 ZPO [Zivilprozessordnung: German Code of Civil Procedure]. If the third party is not able to reimburse the costs of litigation incurred in and out of court, the customer is liable for any losses we may incur.

(3) The customer is authorized to resell the delivered goods in the course of ordinary business, but on a revocable basis. The customer assigns to us all receivables up to the final invoice amount (including value added tax) of our receivable which are due to the customer from the resale from its customers or third parties, regardless of whether the purchased item is resold without or after processing. The assigned receivables act as security for all claims in accordance with paragraph 1 above. At our request, the customer is obliged to inform us of the

assignment to third parties for the purpose of payment to us and to provide us with the necessary information and documents that we need to enforce our rights.

(4) The customer may neither sell the delivered goods, pledge them or offer them as collateral. In the event of attachments or confiscation or other orders by third parties, the customer must inform FLUX-GERÄTE GMBH immediately.

### § 7 Warranty claims

(1) The warranty claims of the customer require that its statutory obligations in accordance with Section 377 HGB to examine the goods and to give notice of defects have been duly fulfilled.

(2) If the purchased item exhibits a defect, the customer is entitled to supplementary performance and can choose between remedying the defect or the supply of a new, defect-free item. In the event of a remedy of the defect or a new delivery, we are obliged to bear all expenses involved in the supplementary performance, including but not limited to transport and travel expenses, labor and material costs, provided these are not increased by the circumstance that the purchased item has been relocated to a place other than the place of performance.

(3) If the supplementary performance fails, the customer can demand either withdrawal from the contract or a price reduction.

### § 8 Liability

(1) We are liable in accordance with the legal provisions if the customer claims damages due to the willful or gross negligent breach of contract by us or our representatives or agents. Unless we are accused of a willful breach of contract, our liability for damages is limited to foreseeable losses that typically occur in such cases.

(2) We are also liable in accordance with the legal provisions if we culpably infringe a cardinal obligation; in this case, our liability for damages is, however, again limited to foreseeable losses that typically occur. A contractual duty is deemed to be a cardinal obligation if the breach of duty relates to a duty which the customer relied on to be performed and was justified in relying thereon.

(3) To the extent that the customer is entitled to damages instead of the performance, our liability - also in the context of § 7 (3) - is limited to foreseeable losses that typically occur.

(4) If the delivered goods cannot be used in accordance with the contract through the fault of FLUX-GERÄTE GMBH as a result of suggestions and advice given before or after the contract was concluded not being implemented or being wrongly implemented or through the infringement of other contractually agreed secondary obligations - including but not limited to instructions for the operation and maintenance of the delivered goods - the rulings of §§ 8 et seq. apply by analogy, excluding further claims of the customer.

(5) We assume no liability for damage caused for the following reasons: unsuitable or incorrect use or storage, incorrect assembly/installation by the customer or third party, unauthorized repair attempts and modifications, natural wear and tear, faulty or careless handling, etc. on which we have no influence, as well as in the case of improper usage and non-compliance with our instructions for use.

(6) In the absence of any provisions to the contrary above, liability shall be excluded.

(7) Warranty claims become statute barred after 12 months, beginning upon transfer of risk.

(8) In the event of a delivery recourse in accordance with Articles 478, 479 BGB, the statute of limitations remains unaffected; it is five years from the delivery of the deficient goods.

### § 9 Joint liability

(1) Liability for compensation for damages which goes beyond that envisaged under § 8 is excluded, regardless of the nature of the claim being asserted. This applies in particular to claims for damages arising from faults upon conclusion of contract, on account of other breaches of duty or on account of tort claims to compensation for property damages according to Article 823 BGB.

(2) The limitation as described under paragraph (1) above also applies if the customer demands reimbursement of needless expense instead of making a claim for compensation.

(3) If liability for compensation for damages against us is excluded or limited, this shall also apply with respect to the personal liability for damages of our employees, workers, co-workers, representatives, and agents.

### § 10 Secrecy

The customer is required to treat all information, know-how and other business secrets obtained in connection with the execution of each contract with strict confidentiality and is not permitted without the express approval of FLUX-GERÄTE GMBH to pass on any information, documents, documentation, drawings, sketches or other materials to third parties or otherwise to make such materials accessible. FLUX-GERÄTE GMBH also treats the documents of customers confidentially.

### § 11 Court of competent jurisdiction - place of performance

(1) For commercial customers, our registered office is the court of competent jurisdiction; we are, however, also entitled to sue the customer at the court competent for its place of domicile.

(2) The law of the Federal Republic of Germany applies; application of the United Nations Convention on Contracts for the International Sale of Goods (UN Purchasing Convention) is excluded.

(3) Unless otherwise stipulated in the order confirmation, our registered office is the place of performance.



FLUX is a world renowned brand for the highest standards in pump technology. It all began in 1950 with the invention of the electric barrel pump. Today, FLUX offers a wide range of products which can be configured individually. For example, FLUX pumps are used in the chemical and pharmaceutical industries, in machine and plant construction, as well as in electroplating, sewage treatment plants, and the food industry.

Whether as a stand-alone or a system solution, FLUX quality means long useful life, excellent economic efficiency and a maximum of safety.

Apart from the outstanding FLUX product quality and reliability, our clients appreciate the expertise and dedication of our employees to customer service.

Today, FLUX-GERÄTE GMBH supplies pumps to almost one hundred countries world wide.