

Product catalogue 2022



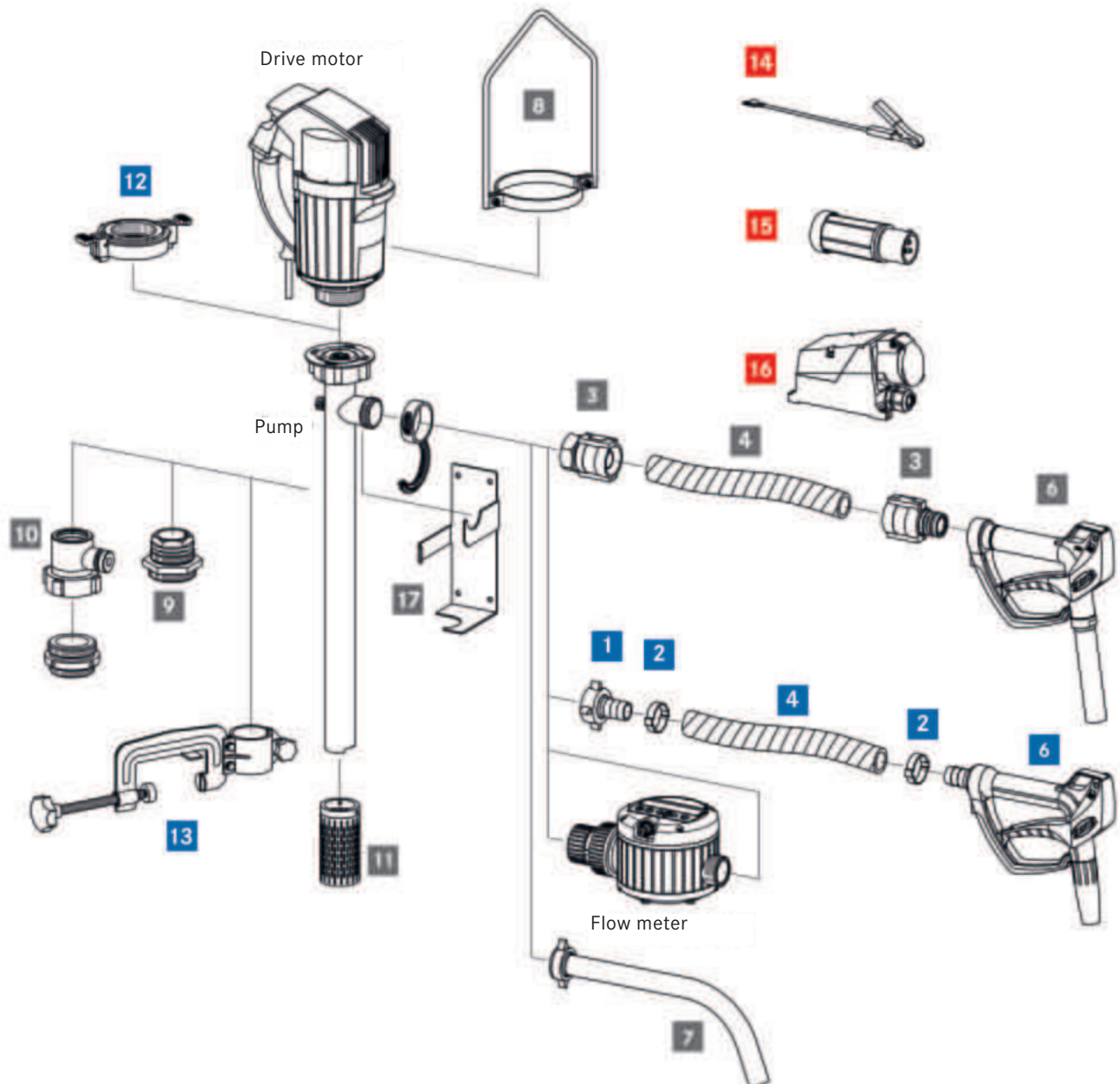
More than just pumps



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



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Pump kits

F 300

F 400

F 500

VISCOFLUX

Flow
meter

Mixer

F 600
F 700





RFM
FDM

Certificates and conformities

Certificates and Conformities

The right solution for every industry

Certified safety for the most widest range of industries and countries: FLUX products have been developed and certified for use around the world; they comply with the highest demands and safety standards. With FLUX you are always on the safe side everywhere.

<p>All FLUX products conform to pertinent fundamental health & safety regulations of the EC Machinery Directive 2006/42/EC and are therefore CE certified. In addition, FLUX products bear the Eurasian EAC mark issued by the customs union of Russia/Belarus/Kazakhstan.</p>	
<p>Dependent on version, FLUX motors are available with VDE GS, UL or also CSA test certification.</p>	
<p>For usage in pharmaceutical, food and cosmetics industries there are the following products available:</p> <ul style="list-style-type: none">• pumps with 3A certification• FLUX FOOD pumps conform to EC 1935/2004, suitable for contact with food• products conform to FDA CFR 21	
<p>For usage in hazardous areas there are FLUX products available with explosion protection, built and certified according to ATEX Directive 2014/34/EU.</p>	

To learn more about our product range contact your local sales partner or go to www.flux-pumps.com



Pump kits

Pump kit "JUNIORFLUX" for low volumes

Pump with fixed motor

drum pump in polypropylene, sealless, with hastelloy C shaft, **commutator motor F 310**, 230 V, 50-60 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.
for canister emptying	700 mm	10-314 43 007
for drum emptying	1.000 mm	10-314 43 010

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

	immersion length	part no.
for drum emptying	1.000 mm	10-314 44 010



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 F 310**, 230 V, 50 Hz, 230 watt (with integral motor), PVC hose DN 19, 2 m with hand nozzle PP AdBlue® * version with small outlet Ø 19 mm

	immersion length	part no.
for drum emptying	1.000 mm	10-314 44 ZV2



Pump kit "COMBIFLUX" for low volumes

with removable battery motor

drum pump in polypropylene, sealless, hastelloy C shaft, brushless DC, **battery motor FBM-B 3100**, includes 18 V Li-Ion battery, charger 220-240 V, 50-60 Hz, with hand nozzle PP

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

	immersion length	part no.
for canister emptying	700 mm	10-314 48 807
for drum emptying	1.000 mm	10-314 48 810

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

	immersion length	part no.
for drum emptying	1.000 mm	10-314 49 910



Pump kit „COMBIFLUX AdBlue®" * for low volumes

with removable battery motor

drum pump COMBIFLUX **FP 314 PP/S-32/25** in polypropylene with stainless steel shaft, sealless, brushless DC **battery motor FBM-B 3100**, includes 18 V Li-Ion battery, charger 220-240 V, 50-60 Hz, PVC hose DN 19, 2 m long with hand nozzle PP AdBlue® * version with small outlet Ø 19 mm

	immersion length	part no.
for drum emptying	1.000 mm	10-314 49 ZV2



* AdBlue® is a registered trademark of: Verband der Automobilindustrie e. V. (VDA)

Pump kits about series F 400

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	10-407 40 010
for IBC emptying	1.200 mm	10-407 40 012

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

	immersion length	part no.
for drum emptying	1.000 mm	10-407 44 010
for IBC emptying	1.200 mm	10-407 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	10-458 60 010
for IBC emptying	1.200 mm	10-458 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	10-407 44 208

Pump kit “AdBlue®” * for IBC emptying

container pump **F 424 PP/S-41/35 Z** 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	10-407 44 112

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

	immersion length	part no.
for IBC emptying	1.200 mm	10-407 41 ZV6

* AdBlue® is a registered trademark of: Verband der Automobilindustrie e. V. (VDA)



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	10-407 10 010
for IBC emptying	1.200 mm	10-407 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	10-457 10 010
for IBC emptying	1.200 mm	10-457 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 Ex h IIB T4...T3 Ga/Gb, 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 db eb IIC T6 or T5 Gb

	immersion length	part no.
for drum emptying	1.000 mm	10-460 24 010
for IBC emptying	1.200 mm	10-460 24 012

- with **commutator motor F 460 Ex EL**, 230 V, 50 Hz, 460 Watt, with no-volt-release, with electronic speed adjustment for use in zone 1, Ex marking II 2 G Ex db eb IIC T6 resp. T5 Gb

	immersion length	part no.
for drum emptying	1.000 mm	10-460 24 110
for IBC emptying	1.200 mm	10-460 24 112



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

	immersion length	part no.
for drum emptying	1.000 mm	10-416 24 010
for IBC emptying	1.200 mm	10-416 24 012



Pump kit “fire brigade”

drum pump **F 430 PP-40/33** in polypropylene with hastelloy C shaft, mechanical seal, seal material FKM

- with **commutator motor F 458**, 24 V DC, 410 watt, PVC hose DN 19, 2 m with hand nozzle PP

	immersion length	part no.
for drum emptying	1.000 mm	10-458 40 610



Pump kit “universal applications”

drum pump **F 430 S-41/38** in stainless steel, for applications in Zone 0, Ex-marking II 1/2 G 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 db eb IIC T6 or T5 Gb

	immersion length	part no.
for drum emptying	1.000 mm	10-460 20 010
for IBC emptying	1.200 mm	10-460 20 012

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

	immersion length	part no.
for drum emptying	1.000 mm	10-416 20 010
for IBC emptying	1.200 mm	10-416 20 012



Pump kit “99,98 % drum emptying”

drum pump **FP 425 Ex S-41/34** for applications in Zone 0, Ex-marking III 1/2 G Ex h IIB T4...T3 Ga/Gb, in stainless steel 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 db eb IIC T6 or T5 Gb

	immersion length	part no.
for drum emptying	1.000 mm	10-460 25 010
for IBC emptying	1.200 mm	10-460 25 012



Pump kit MINIFLUX

drum pump **MINIFLUX S-41/38-136** in stainless steel with stainless steel shaft, mechanical seal FKM, PVC hose DN 19, 2 m long, hand nozzle PP

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

	part no.
for IBC emptying	10-407 29 000



Pump kits

Pump kit for food and pharmaceuticals

FP 427 S-43/38 FOOD drum pump in stainless for contact with food in accordance with (EC) 1935/2004 and FDA CFR 21
Sealless, materials in contact with medium in stainless steel, PTFE, FKM, outer tube diameter 43 mm, 1 1/2" clamp connection

- with **commutator motor F 458**, 230 Volt, 50 Hz, 460 Watt, IP 55 with no-volt release, with special sealing for extreme usage conditions

	immersion length	part no..
for drum emptying	1.000 mm	10-458 27 610
for IBC emptying	1.200 mm	10-458 27 612



Pump kit for food and pharmaceuticals in Ex version

FP 430 Ex FOOD S-41/38 drum pump in stainless for contact with food in accordance with (EC) 1935/2004 and FDA CFR 21
Ex marking II 1/2 G IIB T4, for use in zone 0
With mechanical seal in oxide ceramics, PTFE/carbon, seals in FKM, shaft and rotor in stainless steel 316 Ti, outer diameter 41 mm, 1 1/2" clamp connection

- with **commutator motor F 460 Ex**, 230 Volt, 50 Hz, 460 Watt, Ex marking II 2 G Ex db eb IIC T6 Gb with no-volt release

	immersion length	part no..
for drum emptying	1.000 mm	10-460 20 510
for IBC emptying	1.200 mm	10-460 20 512



Pump kit for food and pharmaceuticals up to 25.000 mPas

F 560 GS3-50/21 FOOD eccentric worm-drive pump in stainless for contact with food in accordance with (EC) 1935/2004 and FDA CFR 21
Version with planetary gearing (reduction of 1 : 15.9) with screw-connected torsion shaft, in stainless steel, with closed mechanical seal, seals in FKM, outer diameter 50 mm, 2" clamp connection, with stator in PTFE and stator housing

- with **commutator motor F 458-1**, 230 Volt, 50 Hz, 700 Watt, IP 55, with no-volt release, connection cable 5 m

	immersion length	part no..
for drum emptying	1.000 mm	10-458 90 000
for IBC emptying	1.200 mm	10-458 90 001



Pump kit for industrial applications up to 30 000 mPas

F 550 GS 50/21 eccentric worm-drive pump
Version with planetary gearing (reduction of 1 : 15.9) with torsion shaft, in stainless steel, with open mechanical seal, seals in FKM, outer diameter 50 mm, G 1 1/2 A connecting thread, with insertion stator in PTFE and stator housing

- with **commutator motor F 457**, 230 Volt, 50 Hz, 800 Watt, with splash water protection IP 24, with no-volt release, 5 m connection cable

	immersion length	part no..
for drum emptying	1.000 mm	10-457 90 000
for IBC emptying	1.200 mm	10-457 90 001



JUNIORFLUX/COMBIFLUX (series 300)

for low volumes



JUNIORFLUX (series 300)

with integral motor

F 300

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

seal in FKM, G1" male discharge connection with **commutator motor F 310**, 230 V, 50 Hz, 230 watt, splash-proof to IP 24. Without hose connections. PP-25 suitable for narrow openings < 32 mm.

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

immersion length	part no.
500 mm	10-310 41 005
700 mm	10-310 41 007
1.000 mm	10-310 41 010

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

immersion length	part no.
500 mm	10-310 42 005
700 mm	10-310 42 007
1.000 mm	10-310 42 010



JUNIORFLUX F 314 sealless, with hastelloy C shaft

G1" male discharge connection with **commutator motor F 310**, 230 V, 50 Hz, 230 watt, splash-proof to IP 24. Without hose connections. PP-25 and PVDF-25 models suitable for narrow openings < 32 mm. Not recommended for small solids, abrasive or crystallising liquids.

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

immersion length	part no.
500 mm	10-314 41 005
700 mm	10-314 41 007
1.000 mm	10-314 41 010

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

immersion length	part no.
500 mm	10-314 42 005
700 mm	10-314 42 007
1.000 mm	10-314 42 010

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

immersion length	part no.
500 mm	10-314 61 005
700 mm	10-314 61 007
1.000 mm	10-314 61 010



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

G 3/4" male discharge connection with **commutator motor F 310**, 230 V, 50 Hz, 230 watt, splash-proof to IP 24, without hose connections. Not recommended for abrasive or crystallising liquids.

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

immersion length	part no.
500 mm	10-314 21 005
700 mm	10-314 21 007
1.000 mm	10-314 21 010



Hose connection see page 14

COMBIFLUX (series 300)

with separate motor



Drum pump FP 314, sealless, combined with commutator motor (FEM 3070) or battery motor (FBM-B 3100). Not recommended for small solids, abrasive or crystallising liquids.

COMBIFLUX FP 314, sealless pump

- **FP 314 PP-25/19** in polypropylene with **hastelloy C shaft**, G 1" male discharge connection. Without hose connections

immersion length	part no.
500 mm	10-314 45 905
700 mm	10-314 45 907
1.000 mm	10-314 45 910

- **FP 314 PP-32/25** in polypropylene with **hastelloy C shaft**, G 1" male discharge connection. Without hose connections

immersion length	part no.
500 mm	10-314 46 905
700 mm	10-314 46 907
1.000 mm	10-314 46 910
1.200 mm	10-314 46 912

- **FP 314 PVDF-25/19** in polyvinylidene fluoride with **hastelloy C shaft**, G 1" male discharge connection. Without hose connections

immersion length	part no.
500 mm	10-314 65 905
700 mm	10-314 65 907
1.000 mm	10-314 65 910

- **FP 314 S-28/25** in stainless steel with **stainless steel shaft**, G ¾" male discharge connection. Without hose connections

immersion length	part no.
500 mm	10-314 26 905
700 mm	10-314 26 907
1,000 mm	10-314 26 910
1.200 mm	10-314 26 912



F 300

Drive motors suitable for COMBIFLUX FP 314

- **commutator motor FEM 3070**, 230 watt, splash-proof to IP 24 with 5 m cable and plug

	part no.
230 V, 50-60 Hz	10-307 01 000
240 V, 50 Hz	10-307 01 001
120 V, 60 Hz	10-307 01 002
110 V, 50-60 Hz	10-307 01 003
100 V, 50-60 Hz	10-307 01 004



- **brushless DC battery motor FBM-B 3100**, with electronic temperature control, splash-proof to IP 44, includes Li-Ion 18 V, 2.5 Ah battery

	part no.
with charger 220-240 V, 50-60 Hz	10-301 01 000
with charger 100-120 V, 50-60 Hz	10-301 01 003
without charger	10-301 01 001



Accessories for battery motor FBM-B 3100

- **battery without charger**, type Li-ion, 18 V, 2,5 Ah

	part no.
B25-3100	10-301 02 002

- **charger without battery**, BCH-3100, 50-60 Hz

	part no.
220-240 V	10-301 02 003
100-120 V	10-301 02 004



Hose connection see page 14

Accessories

JUNIORFLUX/COMBIFLUX (series 300)

F 300

Hose connections consisting of hose connector and union nut for JUNIORFLUX F 310/F 314 and COMBIFLUX FP 314

material	nominal Ø	part no.
PP	DN 13/DN 19	10-959 04 135
PVDF	DN 13	10-959 04 071
PVDF	DN 19	10-959 04 072
S	DN 13	10-959 04 133
S	DN 19	10-959 04 147



PVC hoses

	operating pressure max.	part no.
DN 13 outer Ø 20 mm (with fabric lining)	10 bar	10-001 10 008
DN 19 outer Ø 27 mm (with steel wire-helix)	5 bar	10-001 10 040

Stepless 1-ear hose clips for PVC hoses

	part no.
DN 13	10-959 13 237
DN 19	10-959 13 241



Hand nozzles

material	nominal Ø	outlet-Ø	part no.
PP	DN 13	11 mm	10-001 13 034
PP	DN 19	11 mm	10-001 13 039
PP	DN 19	22 mm	10-001 12 500
PVDF	DN 19	22 mm	10-001 12 501
S	DN 19	28 mm	10-001 12 541
S	G 3/4	28 mm	10-001 12 555



Hose kit for JUNIORFLUX/COMBIFLUX

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

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



Discharge spout for JUNIORFLUX/COMBIFLUX

Material: PP

connection	part no.
union nut G 1	10-959 07 008



Flow meter FMT 120 PP with interlocked wheel impeller in the measuring chamber

in conjunction with our JUNIORFLUX/COMBIFLUX pumps. Construction in PP with fibreglass, not ex-proof, outlet connection G 1" male, O-ring PTFE

inlet connection female	part no.
G 1	10-A05 00 101
G 1 ¼	10-A05 00 102



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

	material	pump-Ø	part no.
canister bunghole 40 - 70 mm	PVC	32 mm	10-001 14 081
canister bunghole 40 - 70 mm	PP/PVC	28 mm	10-001 14 079
canister bunghole 40 - 70 mm	PP/PVC	25 mm	10-001 14 080
canister bunghole 40 - 70 mm	PVDF/PVC	28 mm	10-001 14 082
canister bunghole 40 - 70 mm	PVDF/PVC	25 mm	10-001 14 083



Drum and container pumps

series 400



Drive motors

for drum and container pumps, series 400



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



brushless motor
FBM 4000 Ex

F 400

Type	capacity (watt)	speed control	protection class	cable	plug	with no-volt-release	without no-volt-release
						part no.	part no.

motors with 230 volt, 50 Hz

FEM 4070	500	yes	IP 24	5 m	CEE 7/17	10-407 01 000	10-407 01 001
				5 m	-	10-407 01 004	10-407 01 005

F 457	800	no	IP 24	5 m	CEE 7/17	10-457 01 005	10-457 01 002
				5 m	-	10-457 01 039	10-457 01 038

F 457 EL	800	yes	IP 24	5 m	CEE 7/17	10-457 01 003	10-457 01 041
				5 m	-	10-457 01 040	-

F 458	460	no	IP 55	5 m	CEE 7/7	10-458 00 006	10-458 00 001
				-	-	10-458 00 014	10-458 00 009

F 458 EL	460	yes	IP 55	5 m	CEE 7/7	10-458 00 027	-
				-	-	10-458 00 028	-

F 458-1	700	no	IP 55	5 m	CEE 7/7	10-458 01 004	10-458 01 001
				5 m	-	10-458 01 018	10-458 01 015
				-	-	10-458 01 010	10-458 01 007

F 460 Ex	460	no	IP 55	5 m	CEE 7/7	10-460 00 006	10-460 00 001
				5 m	-	10-460 00 024	10-460 00 021
				-	-	10-460 00 014	10-460 00 009

F 460 Ex EL	460	yes	IP 55	5 m	CEE 7/7	10-460 00 028	-
				5 m	-	10-460 00 035	-
				-	-	10-460 00 029	-

F 460-1 Ex	700	no	IP 55	5 m	CEE 7/7	10-460 01 004	10-460 01 001
				5 m	-	10-460 01 020	10-460 01 017
				-	-	10-460 01 010	10-460 01 007

motors with 230 Volt, 50-60 Hz

FEM 4070	500	yes	IP 24	5 m	CEE 7/17	10-407 01 023	10-407 01 025
F 457	800	no	IP 24	5 m	CEE 7/17	-	10-457 01 037
F 458	460	no	IP 55	5 m	CEE 7/7	-	10-458 00 025
F 458-1	700	no	IP 55	5 m	CEE 7/7	-	10-458 01 020
F 460 Ex	460	no	IP 55	5 m	CEE 7/7	-	10-460 00 026
F 460-1 Ex	700	no	IP 55	5 m	CEE 7/7	-	10-460 01 022
FBM 4000 Ex	600	yes	IP 55	5 m	CEE 7/7	10-400 01 000	-
				5 m	-	10-400 01 001	-
				-	-	10-400 01 002	-

motors with 230-240 Volt, 50-60 Hz for ambient temperature to 60 °C in Ex area

F 460 Ex HT	420-470	no	IP 55	5 m	-	10-460 00 039	10-460 00 038
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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

Type	capacity (watt)	speed control	protection class	cable	plug	with no-volt-release	without no-volt-release
						part no.	part no.

motors with 240 Volt, 50 Hz

FEM 4070	500	yes	IP 24	5 m	CEE 7/17	10-407 01 008	10-407 01 009
				5 m	-	10-407 01 010	10-407 01 011
F 457	800	no	IP 24	5 m	CEE 7/17	10-457 01 006	10-457 01 007
				5 m	-	10-457 01 013	10-457 01 012
F 457 EL	800	yes	IP 24	5 m	CEE 7/17	10-457 01 008	-
				5 m	-	10-457 01 016	-
F 458	460	no	IP 55	5 m	CEE 7/7	10-458 00 005	10-458 00 000
				5 m	-	10-458 00 021	10-458 00 018
				-	-	10-458 00 013	10-458 00 008
F 458-1	700	no	IP 55	5 m	CEE 7/7	10-458 01 003	10-458 01 000
				5 m	-	10-458 01 017	10-458 01 014
				-	-	10-458 01 009	10-458 01 006
F 460 Ex	460	no	IP 55	5 m	CEE 7/7	10-460 00 005	10-460 00 000
				5 m	-	10-460 00 023	10-460 00 020
				-	-	10-460 00 013	10-460 00 008
F 460-1 Ex	700	no	IP 55	5 m	CEE 7/7	10-460 01 003	10-460 01 000
				5 m	-	10-460 01 019	10-460 01 016
				-	-	10-460 01 009	10-460 01 006

motors with 120 Volt, 60 Hz

FEM 4070	500	yes	COF ENC 2	5 m	NEMA 1-15P	10-407 01 012	10-407 01 013
			IP 24	5 m	NEMA 1-15P	10-407 01 014	10-407 01 015
F 457	800	nein	IP 24	5 m	NEMA 1-15P	10-457 01 004	10-457 01 000
F 457 EL	800	yes	IP 24	5 m	NEMA 1-15P	10-457 01 001	-
F 458	460	no	COF CSA ENC 3 TP	5 m	NEMA 5-15P	-	10-458 00 026
F 458-1	700	no	COF CSA ENC 3 TP	5 m	NEMA 5-15P	-	10-458 01 021
F 460-1 Ex UL	460	no	-	5 m	-	-	10-460 01 024
F 460 Ex UL	700	no	-	5 m	-	-	10-460 00 031

motors with 100 Volt, 50-60 Hz

FEM 4070	450	yes	IP 24	5 m	JIS C8303	10-407 01 020	10-407 01 021
F 460 Ex	460	no	IP 55	5 m	-	-	10-460 00 032

motors with 42 Volt, 50 Hz

F 460 Ex	460	no	IP 55	5 m	-	10-460 00 030	-
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Ex-marking: II 2 G Ex db eb IIC T6 bzw. T5 Gb

Drive motors

for drum and container pumps, series 400



commutator motor
FEM 4070



commutator motor
F 457
F 457 EL



commutator motor
F 458
F 458-1



commutator motor
F 460 Ex
F 460-1 Ex



Ex-marking:
II 2 G Ex
db eb IIC T6
resp. T5 Gb

F 400

Type	capacity (watt)	speed control	protection class	cable	plug	with no-volt-release	without no-volt-release
						part no.	part no.

motors with 110 Volt, 50 Hz

FEM 4070	500	yes	IP 24	5 m	CEE 7/17	10-407 01 016	10-407 01 017
				5 m	-	10-407 01 018	10-407 01 019
F 457	800	no	IP 24	5 m	CEE 7/17	10-457 01 009	10-457 01 010
				5 m	-	10-457 01 015	10-457 01 014
F 457 EL	800	yes	IP 24	5 m	CEE 7/17	10-457 01 011	-
				5 m	-	10-457 01 017	-
F 458	460	no	IP 55	5 m	CEE 7/7	10-458 00 007	-
				5 m	-	10-458 00 023	-
				-	-	10-458 00 015	-
F 458-1	700	no	IP 55	5 m	CEE 7/7	10-458 01 005	-
				5 m	-	10-458 01 019	-
				-	-	10-458 01 011	-
F 460 Ex	460	no	IP 55	5 m	CEE 7/7	10-460 00 007	-
				5 m	-	10-460 00 025	-
				-	-	10-460 00 015	-
F 460-1 Ex	700	no	IP 55	5 m	CEE 7/7	10-460 01 005	-
				5 m	-	10-460 01 021	-
				-	-	10-460 01 011	-

motors with 110 Volt, 50-60 Hz

F 458	460	no	IP 55	5 m	CEE 7/7	-	10-458 00 002
				5 m	-	-	10-458 00 020
				-	-	-	10-458 00 010
F 458-1	700	no	IP 55	5 m	CEE 7/7	-	10-458 01 002
				5 m	-	-	10-458 01 016
				-	-	-	10-458 01 008
F 460 Ex	460	no	IP 55	5 m	CEE 7/7	-	10-460 00 002
				5 m	-	-	10-460 00 022
				-	-	-	10-460 00 010
F 460-1 Ex	700	no	IP 55	5 m	CEE 7/7	-	10-460 01 002
				5 m	-	-	10-460 01 018
				-	-	-	10-460 01 008

motors with 24 Volt, DC

F 458	410	no	IP 55	5 m	-	-	10-458 00 003
				-	-	-	10-458 00 011
F 460 Ex	410	no	IP 55	5 m	-	-	10-460 00 003
				-	-	-	10-460 00 011

motors with 12 Volt, DC

F 458	230	no	IP 55	5 m	-	-	10-458 00 004
				-	-	-	10-458 00 012
F 460 Ex	230	no	IP 55	5 m	-	-	10-460 00 004
				-	-	-	10-460 00 012

Accessories for motors

F 457, F 458, F 460 Ex and FBM 4000 Ex



Accessories for motors F 457, F 458, F 460 Ex and FBM 4000 Ex

- **CEE plug**, for applications in Zone 1, 3-poles, 200-250 V

System	part no.
CEAG, Ex-marking: II 2 G Ex db eb IIC/IIB+H2 T6	10-937 01 030
Stahl, Ex-marking II 2 G Ex db eb IIC T6 Gb	10-937 01 018

- **CEE socket**, for applications in Zone 1, 3-poles, 200-250 V

System	part no.
CEAG, Ex-marking: II 2 G Ex eb IIC T6	10-937 50 041
Stahl, Ex-marking II 2 G Ex db eb IIC T6 Gb	10-937 50 022

- **earth wire with crocodile clip**

	cable cross-section	length	clamp	part no.
spiral cable (yellow)	3 mm ²	4 m	stainless steel	10-931 90 023
cable (green/yellow)	4 mm ²	2 m	steel	10-931 90 015

- **carrying handle**, Rilsan-coated

	part no.
F 457	10-001 10 533
F 458, F 458-1	10-001 10 500

- **carrying handle**, cpl. with earth wire

	part no.
F 460 Ex, FBM 4000 Ex	10-001 10 596

- **inertia hoist**, rope length 2 m

	part no.
carrying force 9 – 14 kg	10-001 21 000
carrying force 16 – 21 kg	10-001 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 energy efficiency class IE2	10-414 01 145
0,75 kW energy efficiency class IE3	10-414 01 147
1,1 kW energy efficiency class IE3	10-414 01 149

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

	part no.
0,55 kW energy efficiency class IE2	10-414 01 144
0,75 kW energy efficiency class IE3	10-414 01 146
1,1 kW energy efficiency class IE3	10-414 01 148

Accessories for three-phase gear motors F 414

- **carrying handle**

	part no.
stainless steel	10-001 10 582

- **power supply cable**

	part no.
pre-assembled with sleeve and Cekon plug, 5 m long	10-934 08 020
pre-assembled with sleeve without plug, 5 m long	10-934 08 025
per meter	10-934 08 901
cable assembly to motor, switch or connector	10-Z05 00 MKS

- **cekon plug**

	part no.
5-poles	10-937 01 014
5-poles with commutator	10-937 01 035

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

	part no.
1,30 – 2,00 A	10-936 06 168
1,80 – 3,00 A	10-936 06 169
2,80 – 4,60 A	10-936 06 170



picture similar



picture similar



Image similar



F 400

Drive motors

for drum and container pumps, series 400

Compressed-air motors F 416 Ex for drum and container pumps

470 watt at 6 bar, 14 liter/sec. air consumption, for applications in Zone 1, Ex-marking II 2G Ex h IIC T6 Gb. Require dry, clean, lubricated air.

- **F 416 Ex**

	part no.
with operating valve (adjustable and lockable)	10-416 00 100

- **F 416-1 Ex**

	part no.
no valve, for automatic control	10-416 00 020

- **F 416-2 Ex**

	part no.
with ball valve, to regulate speed	10-416 00 030



Accessories for compressed-air motors F 416 Ex

- **filter-regulator-lubricator unit G 1/4" female connection**

	part no.
for non hazardous areas	10-001 10 100
explosion-proof	10-001 10 113



- **compressed-air hose**

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



- **hose coupling with hose connection in brass**

	part no.
DN 10	10-959 13 066



- **coupling in brass**

	part no.
DN 7,2 - G 1/4" male	10-959 13 210



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

	part no.
DN 10, G 1/4" male	10-959 13 065



- **hose nozzle (brass)**

	part no.
DN 10, G 1/4" male	10-959 05 022



- **plug-in sleeve in brass**

	part no.
DN 10	10-959 13 209



- **1-ear hose clip**

	part no.
Ø 14,8; clamping range 8-18 mm	10-959 13 237



- **earth wire with crocodile clip**

	cable cross-section	length	clamp	part no.
spiral cable (yellow)	3 mm ²	4 m	stainless steel	10-931 90 023
cable (green/yellow)	4 mm ²	2 m	steel	10-931 90 015



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

	part no.
complete with mounting bracket	10-947 15 005



- **exhaust air hose kit for compressed-air motors F 416**
PVC hose DN13, 5 m long

	part no.
connections G 1/2 - G 1/2 A (both male threads) for compressed-air motors F 416 with additional fine filter silencer with oil separator	10-001 10 886



Drum and container pumps, series 400

(drive motors see page 18)



Drum pump FP 424, sealless, not recommended for small solids, abrasive or crystallising liquids. 50 mm diameter options for high flow applications. 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 Ex h IIB T4...T3 Ga/Gb, with zone separation

- **FP 424 Ex S-43/38, FKM seal**, stainless steel shaft
- **FP 424 Ex S-43/38, FEP seal**, stainless steel shaft

immersion length	part no.
700 mm	10-424 22 007
1.000 mm	10-424 22 010
1.200 mm	10-424 22 012

immersion length	part no.
700 mm	10-424 29 307
1.000 mm	10-424 29 310
1.200 mm	10-424 29 312

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

immersion length	part no.
700 mm	10-424 22 107
1.000 mm	10-424 22 110
1.200 mm	10-424 22 112

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

immersion length	part no.
700 mm	10-424 29 407
1.000 mm	10-424 29 410
1.200 mm	10-424 29 412

- **FP 424 Ex S-50/45 Z, FKM seal**, stainless steel shaft **(for increased pumping head)**

immersion length	part no.
700 mm	10-424 22 207
1.000 mm	10-424 22 210
1.200 mm	10-424 22 212

- **FP 424 Ex S-50/45 Z, FEP seal**, stainless steel shaft **(for increased pumping head)**

immersion length	part no.
700 mm	10-424 29 507
1.000 mm	10-424 29 510
1.200 mm	10-424 29 512

in stainless steel (S)

for application in Zone 0, for ambient temperature to +60 °C, Ex-marking II 1/2 G Ex h IIB T4...T3 Ga/Gb, with zone separation

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

immersion length	part no.
1.000 mm	10-424 22 310

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

immersion length	part no.
1.000 mm	10-424 22 410

- **FP 424 Ex (HT) S-50/45 Z FKM seal**, stainless steel shaft **(for increased pumping head)**

immersion length	part no.
1.000 mm	10-424 22 510

in polypropylene (PP)

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

immersion length	part no.
700 mm	10-424 40 007
1.000 mm	10-424 40 010
1.200 mm	10-424 40 012

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

immersion length	part no.
700 mm	10-424 40 707
1.000 mm	10-424 40 710
1.200 mm	10-424 40 712

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

immersion length	part no.
700 mm	10-424 40 107
1.000 mm	10-424 40 110
1.200 mm	10-424 40 112

- **F 424 PP/S-41/35 Z, FKM seal, stainless steel shaft, AdBlue® version***, free from non-ferrous materials

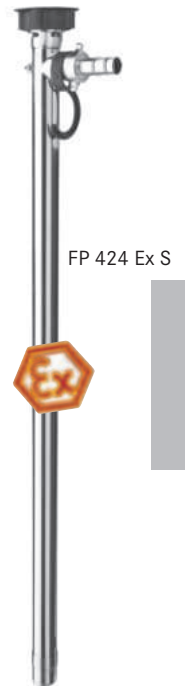
immersion length	part no.
1.000 mm	10-424 40 510
1.200 mm	10-424 40 512

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

immersion length	part no.
700 mm	10-424 40 207
1.000 mm	10-424 40 210
1.200 mm	10-424 40 212

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

immersion length	part no.
700 mm	10-424 40 307
1.000 mm	10-424 40 310
1.200 mm	10-424 40 312



FP 424 Ex S

F 400



F 424 PP

Other seal materials available on request

* AdBlue® is a registered trademark of: Verband der Automobilindustrie e. V. (VDA)

illustration with hose connection (not included)

Drum and container pumps, series 400

(drive motors see page 16)

in polyvinylidene fluoride (PVDF)

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

immersion length	part no.
700 mm	10-424 60 007
1.000 mm	10-424 60 010
1.200 mm	10-424 60 012

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

immersion length	part no.
700 mm	10-424 60 107
1.000 mm	10-424 60 110
1.200 mm	10-424 60 112



F 424 PVDF

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

immersion length	part no.
700 mm	10-424 60 207
1.000 mm	10-424 60 210
1.200 mm	10-424 60 212

Drum pump F 425 for 99,98 % drum emptying

with mechanical seal, G 1¼" male discharge connection, with FLUX-Clip, without hose connection, stainless steel and hastelloy C version: for applications in Zone 0,

Ex-marking stainless steel version: II 1/2 G Ex h IIB T4...T3 Ga/Gb

Ex-marking hastelloy C version: II 1/2 G 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	10-425 22 008
1.000 mm	10-425 22 011
1.200 mm	10-425 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	10-425 29 111
1.200 mm	10-425 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	10-425 22 031
1.200 mm	10-425 22 033

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

immersion length	part no.
1.200 mm	10-425 30 007
1.500 mm	10-425 30 008



FP 425 Ex S

F 425 PP

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

immersion length	part no.
700 mm	10-425 40 048
1.000 mm	10-425 40 051
1.200 mm	10-425 40 053

Drum pump F 426 for mixing and pumping

with mechanical seal, G 1¼" 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	10-426 20 010
1.200 mm	10-426 20 012

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

immersion length	part no.
1.000 mm	10-426 29 010
1.200 mm	10-426 29 012

- **Accessories for F 426 S**

sealing washer for closing the hose connector during mixing

	part no.
sealing washer, S 316 Ti	10-925 69 011
union nut, S	10-907 90 002
flat seal, PE	10-925 64 002



F 426 S

Other seal materials available on request

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

illustration with hose connection (not included)

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

immersion length	part no.
1.000 mm	10-426 40 001
1.200 mm	10-426 40 002

- **Accessories for F 426 PP**
sealing washer for closing the hose connector during mixing

	part no.
sealing washer, PP	10-925 69 000
union nut, PP	10-907 90 024
flat seal, PTFE	10-925 64 003

Other seal materials available on request.

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



F 426 PP

F 400

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	10-427 20 307
1.000 mm	10-427 20 310
1.200 mm	10-427 20 312

	part no.
DN 25	10-959 04 063

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

immersion length	part no.
700 mm	10-427 20 407
1.000 mm	10-427 20 410
1.200 mm	10-427 20 412

	part no.
DN 25	10-959 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	10-427 20 607
1.000 mm	10-427 20 610
1.200 mm	10-427 20 612



Accessories for FOOD version see page 40

in stainless steel, 3A version



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

immersion length	part no.
700 mm	10-427 20 207
1.000 mm	10-427 20 210
1.200 mm	10-427 20 212

	part no.
DN 19	10-959 04 138



FP 427 FOOD

Drive motors see page 16–20, other hose connections see page 27

illustration with hose connection (not included)

Drum and container pumps, series 400

Drum pump F 430

with mechanical seal, G 1¼" male discharge connection, with FLUX-Clip, without hose connection. Suitable for pumping liquids containing small solids or crystallising liquids.

in aluminium, stainless steel shaft and NBR seal

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

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

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

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

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

immersion length	part no.
700 mm	10-430 10 307
1.000 mm	10-430 10 310
1.200 mm	10-430 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	10-430 20 107
1.000 mm	10-430 20 110
1.200 mm	10-430 20 112

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

immersion length	part no.
1.000 mm	10-430 29 110
1.200 mm	10-430 29 112

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

immersion length	part no.
1.000 mm	10-430 28 110
1.200 mm	10-430 28 112

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

immersion length	part no.
700 mm	10-430 20 407
1.000 mm	10-430 20 410
1.200 mm	10-430 20 412

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

immersion length	part no.
1.000 mm	10-430 20 310

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

immersion length	part no.
700 mm	10-430 20 207
1.000 mm	10-430 20 210
1.200 mm	10-430 20 212



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	10-430 20 507
1.000 mm	10-430 20 510
1.200 mm	10-430 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	10-430 30 107
1.000 mm	10-430 30 110
1.200 mm	10-430 30 112



Other seal materials available on request. Additional cost for silicone-free version on request.

Drive motors see page 16–20, hose connections see page 27, mixing tubes see page 39

illustration with hose connection (not included)

Drum pump F 430

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

Suitable for pumping liquids containing small solids or crystallising liquids. 50 mm diameter options for high flow applications.

in polypropylene (PP)

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

immersion length	part no.
700 mm	10-430 40 107
1.000 mm	10-430 40 110
1.200 mm	10-430 40 112

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

immersion length	part no.
700 mm	10-430 40 407
1.000 mm	10-430 40 410
1.200 mm	10-430 40 412

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

immersion length	part no.
700 mm	10-430 40 207
1.000 mm	10-430 40 210
1.200 mm	10-430 40 212

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

immersion length	part no.
1.000 mm	10-430 48 110
1.200 mm	10-430 48 112

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

immersion length	part no.
700 mm	10-430 40 307
1.000 mm	10-430 40 310
1.200 mm	10-430 40 312



F 430 PP

F 400

in polyvinylidene fluoride (PVDF)

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

immersion length	part no.
700 mm	10-430 60 107
1.000 mm	10-430 60 110
1.200 mm	10-430 60 112

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

immersion length	part no.
700 mm	10-430 60 407
1.000 mm	10-430 60 410
1.200 mm	10-430 60 412

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

immersion length	part no.
700 mm	10-430 60 307
1.000 mm	10-430 60 310
1.200 mm	10-430 60 312

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

immersion length	part no.
1.000 mm	10-430 69 110
1.200 mm	10-430 69 112

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

immersion length	part no.
700 mm	10-430 60 207
1.000 mm	10-430 60 210
1.200 mm	10-430 60 212



F 430 PVDF

Other seal material on request

Drive motors see page 16–20, hose connections see page 27, mixing tubes see page 39

illustration with hose connection
(not included)

Drum and container pumps, series 400

Container pump F 430 in polypropylene with hastelloy C shaft

with mechanical seal, seal material FKM, G 1 1/4" male discharge connection, with FLUX-Clip, without hose connection

- F 430 PP-100/50**

immersion length	part no.
1.000 mm	10-430 40 510
1.200 mm	10-430 40 512
1.500 mm	10-430 40 515

- screw top**

to secure the pump in the container in connection with a compression gland or a fume gland (part numbers see page 36)

nominal Ø	part no.
DN 150	10-001 14 063
DN 225	10-001 14 064



F 430 PP-100/50

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 2 G c IIB TX, without hose connection

connection	seal	part no.
inlet: G 2" male parallel outlet: G 1 1/4" male	FKM	10-430 20 002
inlet: clamp 2" outlet: clamp 1 1/2"	FEP/FFKM	10-430 29 012



- F 430 PP-40/33 TR** in polypropylene with hastelloy C shaft

connection	seal	part no.
inlet: G 2" male outlet: G 1 1/4" male	FKM	10-430 40 002

- hose connections** complete for suction side for F 430 TR

	nominal Ø	part no.
in stainless steel, with nickel-plated brass G 2" female union nut	DN 32	10-959 04 059
in polypropylene, with PVC G 2" female union nut	DN 32	10-959 04 010
	DN 38	10-959 04 011



- MINIFLUX IBC pump**, in stainless steel, with stainless steel shaft, Ex-marking: II 2G c IIB TX

connection	seal	part no.
inlet: union nut S 60 x 6, PP	FKM, NBR	10-430 20 003
discharge connection: G 1 1/4" male	FFKM, NBR	10-430 29 003



- Accessories for **MINIFLUX**

	part no.
fixation MINIFLUX, wire cable in stainless steel, length 3 m, hook in brass, nickel-plated	10-001 10 430
union nut Rd 60x6, in stainless steel, connection drum pump/IBC	10-907 90 083
union nut Rd 65x1/6, in stainless steel, connection drum pump/motor	10-907 90 011
O-ring FFKM, FDA	10-925 75 063
connecting piece S to FMC 100 / FMO 104 / FMO 110	10-430 21 043



illustration with hose connection (are not included)

Drive motors see page 16–20, hose connections see page 27

Accessories

for drum and container pumps, series 400



Hose connections

- **stainless steel**, with nickel-plated **brass** G 1 1/4" female union nut

	part no.
DN 19	10-959 04 061
DN 25	10-959 04 041
DN 32	10-959 04 042

- **aluminium**, with nickel-plated **brass** G 1 1/4" female union nut

	part no.
DN 19	10-959 04 050
DN 25	10-959 04 039
DN 32	10-959 04 040



- **stainless steel**, with **stainless steel** G 1 1/4" female union nut

	part no.
DN 19	10-959 04 062
DN 25	10-959 04 063
DN 32	10-959 04 064

- **hastelloy C**, with **stainless steel** G 1 1/4" female union nut

	part no.
DN 25	10-959 04 043



- **polypropylene**, with G 1 1/4" female union nut

	part no.
DN 13	10-959 04 081
DN 19	10-959 04 053
DN 25	10-959 04 052
DN 32	10-959 04 054

- **polyvinylidene fluoride**, with G 1 1/4" female union nut

	part no.
DN 13	10-959 04 082
DN 19	10-959 04 101
DN 25	10-959 04 102
DN 32	10-959 04 103



F 400

Hose couplings and safety binding

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

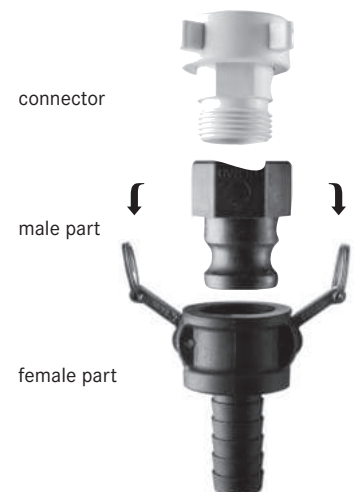
	part no.
connector: G 1" male - G 1 1/4" female	10-959 06 179
male part: G 1" female	10-959 13 213
female part with DN 25 hose connection	10-959 13 220

- **bronze**, with FKM seal

	part no.
connector: G 1" male - G 1 1/4" female	10-959 06 019
male part: G 1" female	10-959 13 211
female part with DN 25 hose connection	10-959 13 219

- **stainless steel**, with FKM seal

	part no.
connector: G 1" male - G 1 1/4" female	10-959 06 144
male part: G 1" female	10-959 13 215
female part with DN 25 hose connection	10-959 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	10-959 13 218
jaws, stainless steel	10-959 13 365
hose connector, S for clamp connection 1 1/2"	10-959 05 174



Accessories

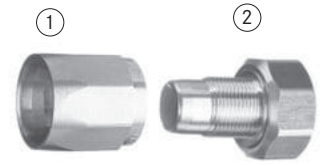
for drum and container pumps, series 400

Swaged hose fittings for the connection of pump and hose – recommended for use with lined hoses

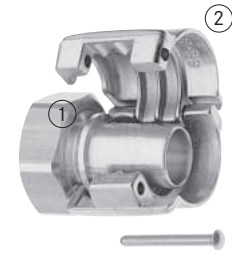
(consisting of hose connection ① and bracket clamp or ferrule type with union nut ②)

- with hose connection brass (for use in hazardous areas)

seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
PUR	-	DN 13 - G ½" female	HE	21 mm	10-959 13 130
PUR	-	DN 19 - G 1" female	HE	27 mm	10-959 13 116
-	-	DN 19 - G 1" male	HE	27 mm	10-959 13 118
PUR	-	DN 19 - G 1¼" female	HE	27 mm	10-959 13 192
PUR	AL nickel-plated	DN 19 - G 1" female	SL	30 - 33 mm	10-959 13 157
PUR	AL nickel-plated	DN 19 - G 1¼" female	SL	30 - 33 mm	10-959 13 180
PUR	AL nickel-plated	DN 21 - G 1¼" female	SL	30 - 33 mm	10-959 13 230
PUR	-	DN 25 - G 1" female	HE	34 mm	10-959 13 097
-	-	DN 25 - G 1" male	HE	34 mm	10-959 13 099
PUR	-	DN 25 - G 1¼" female	HE	34 mm	10-959 13 098
PUR	AL nickel-plated	DN 25 - G 1" female	SF	36 - 38 mm	10-959 13 158
PUR	AL nickel-plated	DN 25 - G 1" male	SF	36 - 38 mm	10-959 13 159
PUR	AL nickel-plated	DN 25 - G 1¼" female	SF	36 - 38 mm	10-959 13 140
-	AL nickel-plated	DN 25 - G 1¼" male	SF	36 - 38 mm	10-959 13 188
PUR	AL nickel-plated	DN 32 - G 1¼" female	SF	43 - 45 mm	10-959 13 014
PUR	AL nickel-plated	DN 32 - G 1½" female	SF	43 - 45 mm	10-959 13 015
PUR	AL nickel-plated	DN 38 - G 1½" female	SF	50 - 52 mm	10-959 13 143
PUR	brass	G 1¼" female - G 1" male	reducer		10-959 06 019
PUR	brass	G 1½" female - G 1¼" male	reducer		10-959 06 002



HE Version
ferrule type with union nut



SF Version
with pinned safety clamps
(Spannfix)

- with hose connection stainless steel (for use in hazardous areas)

seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
PTFE	AL nickel-plated	DN 13 - G ½" female	SL	22 - 24 mm	10-959 13 178
PTFE	AL nickel-plated	DN 19 - G 1" female	SL	30 - 33 mm	10-959 13 160
PTFE	AL nickel-plated	DN 19 - G 1¼" female	SL	30 - 33 mm	10-959 13 181
PTFE	AL nickel-plated	DN 21 - G 1" female	SL	30 - 33 mm	10-959 13 233
PTFE	AL nickel-plated	DN 21 - G 1¼" female	SL	30 - 33 mm	10-959 13 231
PTFE	AL nickel-plated	DN 25 - G 1" female	SF	36 - 38 mm	10-959 13 161
-	AL nickel-plated	DN 25 - G 1" male	SF	36 - 38 mm	10-959 13 162
PTFE	AL nickel-plated	DN 25 - G 1¼" female	SF	36 - 38 mm	10-959 13 144
PTFE	AL nickel-plated	DN 32 - G 1¼" female	SF	43 - 45 mm	10-959 13 145
PTFE	AL nickel-plated	DN 32 - G 1½" female	SF	43 - 45 mm	10-959 13 146
PTFE	AL nickel-plated	DN 38 - G 1½" female	SF	50 - 52 mm	10-959 13 147
PTFE	S	G 1½" female - G 1¼" male	reducer		10-959 06 005



SL Version
with bolted clamps (Spannloc)

- with hose connection polypropylene

seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
PE	S	DN 13 - G 1" female	SL	22 - 24 mm	10-959 13 317
PE	S	DN 13 - G 1¼" female	SL	22 - 24 mm	10-959 13 321
PE	S	DN 19 - G 1" female	SL	30 - 33 mm	10-959 13 319
PE	S	DN 19 - G 1¼" female	SL	30 - 33 mm	10-959 13 323
PE	S	DN 21 - G 1¼" female	SL	30 - 33 mm	10-959 13 325
PE	S	DN 25 - G 1¼" female	SL	36 - 39 mm	10-959 13 327



- with hose connection polyvinylidene fluoride

seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
PTFE	S	DN 13 - G 1" female	SL	22 - 24 mm	10-959 13 318
PTFE	S	DN 19 - G 1" female	SL	30 - 33 mm	10-959 13 320
PTFE	S	DN 19 - G 1¼" female	SL	30 - 33 mm	10-959 13 324
PTFE	S	DN 21 - G 1¼" female	SL	30 - 33 mm	10-959 13 326
PTFE	S	DN 25 - G 1¼" female	SL	36 - 39 mm	10-959 13 328



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

- for hand nozzle **PP/FKM** part No. 10-001 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 25	SF	36 – 38 mm	10-959 13 309
PP	FKM	S	DN 19	SL	30 – 33 mm	10-959 13 330
PP	FKM	S	DN 21	SL	30 – 33 mm	10-959 13 335
PP	FKM	S	DN 25	SF	36 – 38 mm	10-959 13 340

- for hand nozzle **PP/EPDM** part No. 10-001 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 21	SL	30 – 33 mm	10-959 13 305
PP	EPDM	AL nickel-plated	DN 25	SF	36 – 38 mm	10-959 13 310
PP	EPDM	S	DN 19	SL	30 – 33 mm	10-959 13 331
PP	EPDM	S	DN 21	SL	30 – 33 mm	10-959 13 336
PP	FKM	S	DN 25	SF	36 – 39 mm	10-959 13 341

- for hand nozzle **PVDF/FKM** part No. 10-001 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	10-959 13 298
PVDF	FKM	AL nickel-plated	DN 19	SL	30 – 33 mm	10-959 13 301
PVDF	FKM	S	DN 13	SL	22 – 24 mm	10-959 13 329
PVDF	FKM	S	DN 19	SL	30 – 33 mm	10-959 13 332
PVDF	FKM	S	DN 21	SL	30 – 33 mm	10-959 13 337
PVDF	FKM	S	DN 25	SF	36 – 39 mm	10-959 13 342

- for hand nozzle **PVDF/EPDM** part No. 10-001 12 559 with connection Ø 28 mm

hose connection	seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
PVDF	EPDM	S	DN 19	SL	30 – 33 mm	10-959 13 333
PVDF	EPDM	S	DN 25	SF	36 – 39 mm	10-959 13 343

- for hand nozzle **PVDF/FFKM** part No. 10-001 12 560 with connection Ø 28 mm

hose connection	seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
PVDF	FFKM	S	DN 19	SL	30 – 33 mm	10-959 13 334
PVDF	FFKM	S	DN 21	SL	30 – 33 mm	10-959 13 339
PVDF	FFKM	S	DN 25	SF	36 – 39 mm	10-959 13 344



hand nozzle PP
(see page 33)

F 400



hand nozzle PVDF
(see page 33)

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 25	10-959 13 347



Swaged hose fittings for the connection of hose and hand nozzle

- for hand nozzle **MS** part No. 10-001 12 340 with connection Ø 32 mm

hose connector	seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
brass	FEP	–	DN 19	HE	27 mm	10-959 13 134
brass	FEP	AL nickel-plated	DN 19	SL	31 mm	10-959 13 191
brass	FEP	AL nickel-plated	DN 21	SL	31 mm	10-959 13 229
brass	FEP	–	DN 25	HE	34 mm	10-959 13 137
brass	FEP	AL nickel-plated	DN 25	SF	37 mm	10-959 13 152



hand nozzle MS
(see page 34)

HE = version ferrule type with union nut

SF = version with pinned safety clamps (Spannfix)

SL = version with bolted clamps (Spannloc)

Accessories

for drum and container pumps, series 400

Swaged hose fittings for the connection of hose and hand nozzle

- for hand nozzle S part No. 10-001 12 549 with connection Ø 28 mm

hose connector	seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
S	FEP	AL nickel-plated	DN 19	SL	31 mm	10-959 13 258
S	FEP	AL nickel-plated	DN 21	SL	31 mm	10-959 13 259
S	FEP	AL nickel-plated	DN 25	SF	37 mm	10-959 13 260

- for hand nozzle S part No. 10-001 12 550 with connection ø 28 mm and FLUX discharge unit with spring valve FAE-S

Part No. 10-001 12 546 with anti-twist protection

hose connector	seal	bracket clamp	nominal Ø	version	outer Ø hose	part no.
S	FEP	AL nickel-plated	DN 19	SL	31 mm	10-959 13 276
S	FEP	AL nickel-plated	DN 21	SL	31 mm	10-959 13 277
S	FEP	AL nickel-plated	DN 25	SF	37 mm	10-959 13 278



hand nozzle S
(see page 34)

Bonding work

of the chosen hose fittings and hose

bonding work on both sides	part no.
including testing for electrical conductivity	10-000 00 100
without testing for electrical conductivity (with PP/PVDF hose connector)	10-000 00 102

bonding work on one side, without testing for electrical conductivity	part no.
swaged hose fittings with MS/S hose connector	10-000 00 103
swaged hose fittings with PP/PVDF hose connector	10-000 00 104

Hose kits with G 1¼" female drum pump connectors

and connection to **brass hand nozzle** part No. 10-001 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	10-001 10 091
	3 m long	10-001 10 092
DN 25	2 m long	10-001 10 081
	3 m long	10-001 10 082

- universal hose kit

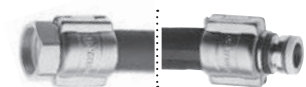
	length	part no.
DN 21	2 m long	10-001 10 839
	3 m long	10-001 10 840

- hose kit for food and chemistry

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



hand nozzle MS
(see page 34)



hose kit

Hose kits with G 1¼" female drum pump connectors

and connection to **stainless steel hand nozzle** part No. 10-001 12 549 with connection Ø 28 mm, electrically conductive with swaged hose fitting in aluminium nickel-plated

- universal hose kit

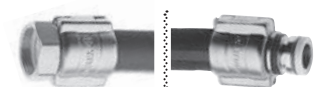
	length	part no.
DN 21	2 m long	10-001 10 870
	3 m long	10-001 10 871

- hose kit for food and chemistry

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



hand nozzle S
(see page 34)



hose kit

Hose lines with hand nozzle with G 1 ¼" female connection to drum pump

- with **hand nozzle PP** (part no. 10-001 12 500 with FKM seal, 10-001 12 506 with EPDM seal), PVC- hose DN 19, 2 m, hose connection PP

seal	part no.
FKM	10-001 10 813
EPDM	10-001 10 847

- with **hand nozzle AL** (part no. 10-001 12 172), petroleum hose DN 25, 2 m, hose connector aluminum, union nut brass

seal	part no.
NBR	10-001 10 815

- with **hand nozzle MS** (part no. 10-001 12 340), universal hose DN 21, 2 m, hose connector brass, bracket clamp AL nickel-plated, electrically conductive integrated

seal	part no.
PTFE	10-001 10 845

- with **handn nozzle PVDF** (part no. 10-001 12 558), hose for food and chemistry DN 19, 2 m, hose connector PVDF, bracket clamp AL nickel-plated

seal	part no.
FKM	10-001 10 814

- with **hand nozzle S** (part no 10-001 12 549), universal hose DN 21, 2 m, hose connector S, bracket clamp AL nickel-plated, electrically conductive integrated

seal	part no.
PTFE/FEP	10-001 10 872



Hose lines with hand nozzle FOOD with 1 ½" Clamp connection

- with **hand nozzle S** (part no. 10-001 12 568), food hose DN 25, 2 m, hose connector S

seal	part no.
FKM	10-001 10 898

- with **hand nozzle S** (part no. 10-001 12 568), hose for food and chemistry DN 19, 2 m, hose connector S, electrically conductive integrated

seal	part no.
FKM	10-001 10 899

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	10-001 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 19 outer Ø 27 mm	5 bar	10-001 10 040
DN 25 outer Ø 33 mm	5 bar	10-001 10 041
DN 32 outer Ø 41 mm	4,5 bar	10-001 10 042
DN 38 outer Ø 47 mm	4 bar	10-001 10 043
DN 50 outer Ø 60 mm	3 bar	10-001 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	10-001 10 076
DN 19 outer Ø 27 mm	10 bar	10-001 10 065
DN 25 outer Ø 34 mm	10 bar	10-001 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	10-001 10 003
DN 38 outer Ø 51 mm	25 bar	10-001 10 004

Accessories

for drum and container pumps, series 400

- **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	10-001 10 022
DN 38 outer Ø 51 mm	16 bar	10-001 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	10-001 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	10-001 10 085
DN 19 outer Ø 31 mm	16 bar	10-001 10 037
DN 25 outer Ø 37 mm	16 bar	10-001 10 030
DN 32 outer Ø 43 mm	16 bar	10-001 10 036
DN 38 outer Ø 51 mm	16 bar	10-001 10 086



- **PTFE hose**, electrically conductive Ω /T-type acc. to EN 12115 suitable for food contact according to Regulation (EC) 1935/2004 and 10/2001 and FDA material inside: PTFE

	operating pressure max.	part no.
DN 19 outer Ø 31 mm	16 bar	10-001 10 892
DN 25 outer Ø 37 mm	16 bar	10-001 10 893



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	10-959 13 237
DN 19	27 mm	10-959 13 241
DN 25	34 mm	10-959 13 243
DN 32	41 mm	10-959 13 248
DN 38	47 mm	10-959 13 251
DN 50	60 mm	10-959 13 255



- for **petroleum hose**

	outer Ø	part no.
DN 13	21 mm	10-959 13 239
DN 19	27 mm	10-959 13 371
DN 25	34 mm	10-959 13 243
DN 32	43 mm	10-959 13 249
DN 38	51 mm	10-959 13 252



- for **special food-grade hose**

	outer Ø	part no.
DN 25	37 mm	10-959 13 246
DN 38	51 mm	10-959 13 254

Forceps to attach the 1-ear hose clip

part no.
10-961 40 811



Non explosion-proof hand nozzles

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

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

nominal Ø	seal	outlet Ø	part no.
DN 13	FKM	6 mm	10-001 13 001
DN 13	FKM	11 mm	10-001 13 034
DN 19	FKM	11 mm	10-001 13 039
DN 19	FKM	20 mm	10-001 13 000
DN 25	FKM	20 mm	10-001 13 035

- **hand nozzle PP** (polypropylene) **with swivel inlet**, outlet Ø 25 mm

nominal Ø	seal	part no.
DN 19	FKM	10-001 12 500
DN 25	FKM	10-001 12 504
DN 19	EPDM	10-001 12 506
DN 25	EPDM	10-001 12 510

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

nominal Ø	seal	part no.
DN 19	FKM	10-001 12 518

- **hand nozzle PVDF** (polyvinylidene fluoride) **with swivel inlet**, outlet Ø 25 mm

nominal Ø	seal	part no.
DN 19	FKM	10-001 12 501
DN 25	FKM	10-001 12 505
DN 19	EPDM	10-001 12 507
DN 25	EPDM	10-001 12 511
DN 19	FFKM	10-001 12 512
DN 25	FFKM	10-001 12 514

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

nominal Ø	seal	part no.
DN 19	NBR	10-001 12 397
DN 25	NBR	10-001 12 172

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

swaged hose fittings see page 29

- **hand nozzle PP** (polypropylene) **with swivel inlet**, outlet Ø 25 mm

nominal Ø	seal	part no.
28 mm	FKM	10-001 12 556
28 mm	EPDM	10-001 12 557

- **hand nozzle PVDF** (polyvinylidene fluoride) **with swivel inlet**, outlet Ø 25 mm

nominal Ø	seal	part no.
28 mm	FKM	10-001 12 558
28 mm	FFKM	10-001 12 560

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

nominal Ø	seal	part no.
G 1" female	NBR	10-001 12 171



F 400

* AdBlue® is a registered trademark of: Verband der Automobilindustrie e. V. (VDA)

Accessories

for drum and container pumps, series 400

Explosion-proof hand nozzles

for applications in Zone 1

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

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

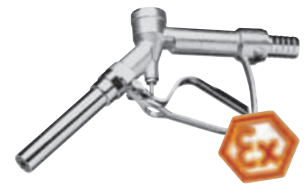
nominal Ø	seal	part no.
DN 19	PTFE/FEP	10-001 12 541
DN 25	PTFE/FEP	10-001 12 542
G ¾" female	PTFE/FEP	10-001 12 555

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

nominal Ø	seal	part no.
G 1" male	EPDM	10-001 12 545

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

nominal Ø	seal	part no.
DN 19	PTFE	10-001 12 396
DN 25	PTFE	10-001 12 337
DN 32	PTFE	10-001 12 338



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

for direct mounting onto FLUX hose kits page 30
or swaged hose fittings page 29-30

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

nominal Ø	seal	part no.
Ø 28	PTFE/FEP	10-001 12 549
G 1" male	PTFE/FEP	10-001 12 543
G 1 ¼" male	PTFE/FEP	10-001 12 544

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

nominal Ø	seal	part no.
Ø 32	PTFE	10-001 12 340
G 1" male	PTFE	10-001 12 389
G 1" female	PTFE	10-001 12 339



Hand nozzles with auto-stop function

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

nominal Ø	version	seal	part no.
G 1" male	with rigid inlet	PTFE	10-001 12 109
G 1" male	with swivel inlet	NBR	10-001 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	10-001 12 097

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

nominal Ø	version	seal	part no.
G 1" male	AdBlue®*	NBR	10-001 12 417

- **suitable for hand nozzle AL** for „AdBlue®“

	part no.
magnetic adapter	10-001 12 453



* AdBlue® is a registered trademark of: Verband der Automobilindustrie e. V. (VDA)

Accessories for hand nozzles

longer outlet tube for mounting on hand nozzle

material	part no.
polypropylene, 220 mm long, Ø 20 mm	10-001 12 228
stainless steel, 220 mm long, Ø 20 mm	10-001 12 285



stop valve in polypropylene for hand nozzles (is inserted in outlet) or for outlet tube PP Ø 20

	seal	spring	part no.
for outlet tube PP Ø 20	FKM	S	10-959 14 019
	FFKM	HC	10-959 14 026
for hand nozzle S with outlet Ø 28 (not permitted for use in hazardous areas)	FKM	S	10-959 14 064
	FFKM	HC	10-959 14 066



F 400

FLUX discharge units with spring valve (FAE) for media up to 300 cP without solids content

wired version with start/stop button, without control cable (page 75), without mounting the control cable

- FLUX discharge units with spring valve **with hose connection**, outlet Ø 32 mm

	material	seal	part no.
FAE PP DN 19	polypropylene	FKM	10-001 12 519
FAE PP DN 25	polypropylene	FKM	10-001 12 523
FAE PVDF DN 19	polyvinylidene fluoride	FKM	10-001 12 520

- FLUX discharge units with spring valve **without hose connection**, connection Ø 28 mm, outlet Ø 32 mm (only in connection with swaged hose fitting, see page 28)

	material	seal	part no.
FAE S	stainless steel	FKM	10-001 12 546
FAE PVDF	polyvinylidene fluoride	FKM	10-001 12 562
FAE S	stainless steel	FFKM	10-001 12 570
FAE PVDF	polyvinylidene fluoride	FFKM	10-001 12 569



FAE S with assembled cable and hose

- accessory for discharge unit**

spiral tape for fixation of the cable on the hose

	part no.
Ø 20 - 100 mm	10-001 10 072

5-core control cable for the connection of the discharge unit with the switching amplifier

	part no.
5 m long	10-934 08 038
10 m long	10-934 08 040
15 m long	10-934 08 041

FLUX flow meters see from page 65

Hoses see page 31

Accessories

for drum and container pumps, series 400

FES fume glands and accessories control emission of dangerous vapours from drums and IBC

Consisting of valve part and threaded ring

(please order both parts for a complete unit)

- valve part PP** (polypropylene), with FKM O-ring, with G 1/4" female connection for hose nozzle

pump Ø	part no.
25 mm	10-001 14 309
32 mm	10-001 14 313
40 mm	10-001 14 181
41 mm	10-001 14 182
50 mm	10-001 14 243



valve part with ball valve

- threaded ring PP** (polypropylene) with FKM flat seal

pump Ø	thread connection	part no.
25/32/40/41 mm	G 2" B male	10-001 14 218
25/32/40/41 mm	CCS 57 x 4 male thread	10-001 14 224
25/32/40/41 mm	CCS 60 x 6 female thread	10-001 14 228
25/32/40/41 mm	CCS 70 x 6 female thread	10-001 14 226
25/32/40/41 mm	CCS 70 x 6 male thread	10-001 14 232
25/32/40/41 mm	BCS 70 x 6 (with O-ring) male thread	10-001 14 236
50 mm	G 2" B male	10-001 14 238
50 mm	CCS 70 x 6 male thread	10-001 14 267
40/41 mm	CCS 64 x 5 male thread	10-001 14 230



- valve part S** (stainless steel), with FEP O-ring with G 3/8" female connection - for use in ATEX areas

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



valve part with 3/8" BSPPF gas compensation connector

- threaded ring S** (stainless steel), with PE flat seal - for use in ATEX areas

pump Ø	nominal Ø	part no.
28/41 mm	G 2" male	10-001 14 325
28/41 mm	S 57 x 4 male thread	10-001 14 329
50 mm	G 2" male	10-001 14 331

- threaded ring MS** (brass), with PE flat seal - for use in ATEX areas

pump Ø	nominal Ø	part no.
41 mm	G 2" male	10-001 14 327



Accessories for additional use of a gas compensation connector

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

part no.
10-959 13 128



- PE corrugated hose** for gas compensation

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

- EPDM compressed air hose** for gas compensation

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



- fume cone** (polypropylene, electrically conductive) for hand nozzle with outlet DN 10

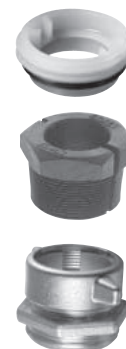
	part no.
for longer outlet tube Ø 20 mm	10-001 14 285
for outlet Ø 24 mm	10-001 14 296



Longer outlet tube see page 35

Compression gland – secure pump into drum or IBC

material	pump Ø	connection	part no.
polyethylene	41 mm	57 x 4 male thread	10-001 14 067
polyethylene	41 mm	70 x 6 male thread	10-001 14 065
polyethylene	50 mm	70 x 6 male thread	10-001 14 066
polypropylene	40/41 mm	R 2 male, electrically conductive	10-001 14 054
polypropylene	50 mm	R 2 male, electrically conductive	10-001 14 062
steel/zinc-plated	40 mm	M 64 x 4 / G 2" male thread	10-001 14 061
steel/zinc-plated	41 mm	M 64 x 4 / G 2" male thread	10-001 14 000
steel/zinc-plated	50 mm	G 2" male thread	10-001 14 003
steel/zinc-plated	50 mm	M 64 x 4 male thread	10-001 14 002



Screw top for IBC – use with G2" male compression gland

connection	part no.
DN 150	10-001 14 063
DN 225	10-001 14 064



Pump inlet suction strainers – for liquids containing solid particles

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



Discharge spout

with union nut G 1¼" female – to suit drum pump outlet

material	nominal Ø	part no.
stainless steel (S)	DN 25	10-959 07 007
polypropylene (PP)	DN 19	10-959 07 009



- **accessory for discharge spout**

double nipple for the connection to the hose line

material	connection	part no.
stainless steel (S)	R 1 ¼ A - R 1 ¼ A	10-001 18 053

Quick action coupling SSK 400

use where quick or frequent disassembly of pump and motor is required

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



Accessories

for drum and container pumps, series 400

Attachment clamps

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

	part no.
for drum and container pumps	10-001 10 426



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

for pump Ø	part no.
40/41 mm	10-001 10 601
50 mm	10-001 10 603



- **container clip**, steel 1.4301, PVC-coated

for pump Ø	part no.
40/41 mm	10-001 15 005
50 mm	10-001 15 006



- **tools**

	part no.
jointed hood-wrench for fume glands , 60-90 mm, for capstan nuts DIN 1816, stud Ø 5mm	10-961 42 500
key for coupling star	10-961 40 889

Mixing tubes

for drum pumps instead of the outer tube for dedicated mixing applications in drums or IBCs

- for F 430 AL-41/38

immersion length	part no.
700 mm	10-430 11 192
1.000 mm	10-430 11 193
1.200 mm	10-430 11 194

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

immersion length	part no.
700 mm	10-430 21 192
1.000 mm	10-430 21 193
1.200 mm	10-430 21 194

- for F 430 PP-40/33

immersion length	part no.
700 mm	10-430 41 192
1.000 mm	10-430 41 193
1.200 mm	10-430 41 194



F 400

Non-return valves

- stainless steel, seal FKM for mounting onto pump discharge

for pumps	part no.
FP 424 - F 430 G 1 ¼ - G 1 ¼ A	10-959 14 024
¾" on both sides	10-959 14 022

- stainless steel, seal PTFE

connection	part no.
G 1 ¼ - G 1 ¼ A	10-959 14 048
G 1 on both sides	10-959 14 047

- polypropylene, FKM seal, for mounting onto pump foot

for pumps	part no.
F 430 PP-40/33	10-959 14 029
F 430 PP-40/33Z	10-959 14 030

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

for pumps	part no.
F 430 PVDF-40/33	10-959 14 038
F 430 PVDF-40/33Z	10-959 14 039



Accessories

for drum and container pumps (series 400) 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 1 1/2"

nominal Ø	seal	part no.
DN 19	FKM	10-959 04 171
DN 19	NBR	10-959 04 172
DN 25	FKM	10-959 04 169
DN 25	NBR	10-959 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 1 1/2", DN 40

nominal Ø	seal	part no.
DN 19	FKM	10-959 13 354
DN 19	NBR	10-959 13 355
DN 25	FKM	10-959 13 356
DN 25	NBR	10-959 13 357



- discharge spout**

material: stainless steel

nominal Ø	seal	part no.
1 1/2" clamp (Ø 28)	FKM	10-959 07 030
1 1/2" clamp (Ø 28)	NBR	10-959 07 033



- outlet tube for hand nozzle S**

stainless steel 316 Ti, connection G 3/4 A, 100 mm long, Ø 10 mm

seal	part no.
PTFE, FDA	10-001 12 658

- flap valve**

material: stainless steel, connection pump clamp 1 1/2", DN 40 (with joint clamp)

seal	part no.
NBR	10-959 19 006
FKM	10-959 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 1 1/2"	PTFE/FKM	10-001 12 568



- cardan clip**

material	connection	part no.
stainless steel	clamp 1 1/2"	10-430 21 019



- seals for swaged hose fittings, Clamp 1 1/2"**

material	part no.
EPDM, FDA/FOOD	10-925 69 017
NBR, FDA/FOOD	10-925 69 015
FKM, FDA/FOOD	10-925 69 014
PTFE, FDA	10-925 69 016

Hoses see page 31

Eccentric worm-drive pumps in stainless steel



Eccentric worm-drive pumps

F 550 – industrial version

G 1 ½" 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	10-550 24 807
1.000 mm	10-550 24 810
1.200 mm	10-550 24 812

- F 550 GS-54/26 TW

immersion length	part no.
700 mm	10-550 25 675
1.000 mm	10-550 25 676
1.200 mm	10-550 25 677

with cardan shaft for higher torque

- F 550 GS-50/21 GW

immersion length	part no.
700 mm	10-550 24 847
1.000 mm	10-550 24 850
1.200 mm	10-550 24 852

- F 550 GS-54/26 GW

immersion length	part no.
700 mm	10-550 25 717
1.000 mm	10-550 25 720
1.200 mm	10-550 25 722



F 550 GS

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

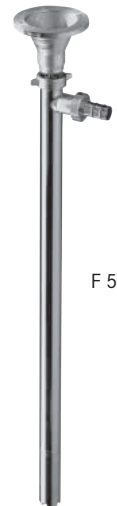
with torsion shaft

- F 550 S-50/21 TW

immersion length	part no.
700 mm	10-550 25 507
1.000 mm	10-550 25 510
1.200 mm	10-550 25 512

- F 550 S-54/26 TW

immersion length	part no.
700 mm	10-550 25 649
1.000 mm	10-550 25 652
1.200 mm	10-550 25 654



F 550 S

with cardan shaft for higher torque

- F 550 S-50/21 GW

immersion length	part no.
700 mm	10-550 24 867
1.000 mm	10-550 24 870
1.200 mm	10-550 24 872

- F 550 S-54/26 GW

immersion length	part no.
700 mm	10-550 25 737
1.000 mm	10-550 25 740
1.200 mm	10-550 25 742

with planetary gear, ratio 1 : 6.75 (GS6)

with torsion shaft

- F 550 GS6-50/21 TW

immersion length	part no.
700 mm	10-550 23 200
1.000 mm	10-550 23 201
1.200 mm	10-550 23 202

- F 550 GS6-54/26 TW

immersion length	part no.
700 mm	10-550 23 300
1.000 mm	10-550 23 301
1.200 mm	10-550 23 302

with cardan shaft for higher torque

- F 550 GS6-50/21 GW

immersion length	part no.
700 mm	10-550 23 203
1.000 mm	10-550 23 204
1.200 mm	10-550 23 205

- F 550 GS6-54/26 GW

immersion length	part no.
700 mm	10-550 23 306
1.000 mm	10-550 23 307
1.200 mm	10-550 23 308



F 550 GS6

Suitable stators see page 43

hose connection see page 49

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
(not included)

suitable stators and stator housings (in stainless steel)

- for pumps with **outer Ø 50 mm**

	part no.
NBR black (complete)	10-550 24 244
NBR white (complete)	10-550 24 248
FKM black (complete)	10-550 24 247
PTFE stator	10-550 24 271
PTFE/carbon stator	10-550 24 273
stator housing for PTFE	10-550 24 241

- for pumps with **outer Ø 54 mm**

	part no.
NBR black (complete)	10-550 25 620
NBR white (complete)	10-550 25 621
FKM black (complete)	10-550 25 619
PTFE stator	10-550 25 626
PTFE/carbon stator	10-550 25 670
stator housing for PTFE	10-550 25 624

Ex-proof 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, with stator and stator housing (without hose connection)

Ex-marking II 1/2 G Ex h IIB T4...T3 Ga/Gb

with planetary gear, ratio 1 : 15.9 (GSX)

- F 550 GSX-50/21, stator PTFE white

immersion length	part no.
1.000 mm	10-550 26 014
1.200 mm	10-550 26 015

- F 550 GSX-50/21, stator PTFE black

immersion length	part no.
1.000 mm	10-550 26 016
1.200 mm	10-550 26 017

- F 550 GSX-54/26, stator PTFE white

immersion length	part no.
1.000 mm	10-550 26 022
1.200 mm	10-550 26 023

- F 550 GSX-54/26, stator PTFE black

immersion length	part no.
1.000 mm	10-550 26 024
1.200 mm	10-550 26 025

with bearing flange, Ø160 mm in aluminium (SX)

- F 550 SX-50/21, stator PTFE white

immersion length	part no.
1.000 mm	10-550 26 010
1.200 mm	10-550 26 011

- F 550 SX-50/21, stator PTFE black

immersion length	part no.
1.000 mm	10-550 26 012
1.200 mm	10-550 26 013

- F 550 SX-54/26, stator PTFE white

immersion length	part no.
1.000 mm	10-550 26 018
1.200 mm	10-550 26 019

- F 550 SX-54/26, stator PTFE black

immersion length	part no.
1.000 mm	10-550 26 020
1.200 mm	10-550 26 021



hose connections see page 49

drive motors for planetary gear versions see page 16-20

drive motors for bearing version see page 51

illustration with hose connection
(not included)

Eccentric worm-drive pumps

F 560 for Pharma, 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, other discharge connections on request)

with torsion shaft

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

immersion length	part no.
700 mm	10-560 24 607
1.000 mm	10-560 24 610
1.200 mm	10-560 24 612

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

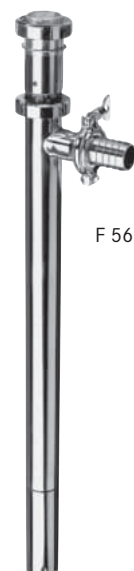
immersion length	part no.
700 mm	10-560 24 707
1.000 mm	10-560 24 710
1.200 mm	10-560 24 712

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

immersion length	part no.
700 mm	10-560 25 707
1.000 mm	10-560 25 710
1.200 mm	10-560 25 712

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

immersion length	part no.
700 mm	10-560 25 807
1.000 mm	10-560 25 810
1.200 mm	10-560 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	10-560 24 627
1.000 mm	10-560 24 630
1.200 mm	10-560 24 632

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

immersion length	part no.
700 mm	10-560 24 727
1.000 mm	10-560 24 730
1.200 mm	10-560 24 732

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

immersion length	part no.
700 mm	10-560 25 727
1.000 mm	10-560 25 730
1.200 mm	10-560 25 732

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

immersion length	part no.
700 mm	10-560 25 827
1.000 mm	10-560 25 830
1.200 mm	10-560 25 832

suitable stators and stator housings (in stainless steel)

- for pumps with outer Ø 50 mm

	part no.
PTFE stator	10-550 24 271
stator housing, e-polished	10-560 28 067

- for pumps with outer Ø 54 mm

	part no.
NBR white stator	10-550 25 545
FKM black stator	10-550 25 546
PTFE stator	10-550 25 626
stator housing, e-polished	10-560 28 069

hose connection see page 49
drive motors for planetary gear version see page 16-20

illustration with hose connection
(not included)

with bearing flange

in polished stainless steel, with closed hygienic mechanical seal, seal material FKM, bearing flange Ø 160 mm in stainless steel (without hose connection, stator and stator housing, other discharge connections on request)

with torsion shaft

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

immersion length	part no.
700 mm	10-560 24 407
1.000 mm	10-560 24 410
1.200 mm	10-560 24 412

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

immersion length	part no.
700 mm	10-560 24 507
1.000 mm	10-560 24 510
1.200 mm	10-560 24 512

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

immersion length	part no.
700 mm	10-560 25 507
1.000 mm	10-560 25 510
1.200 mm	10-560 25 512

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

immersion length	part no.
700 mm	10-560 25 607
1.000 mm	10-560 25 610
1.200 mm	10-560 25 612



F 560 S

F 500

with cardan shaft for higher torque

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

immersion length	part no.
700 mm	10-560 24 427
1.000 mm	10-560 24 430
1.200 mm	10-560 24 432

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

immersion length	part no.
700 mm	10-560 24 527
1.000 mm	10-560 24 530
1.200 mm	10-560 24 532

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

immersion length	part no.
700 mm	10-560 25 527
1.000 mm	10-560 25 530
1.200 mm	10-560 25 532

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

immersion length	part no.
700 mm	10-560 25 627
1.000 mm	10-560 25 630
1.200 mm	10-560 25 632

suitable stators and stator housings (in stainless steel)

- for pumps with **outer Ø 50 mm**

	part no.
PTFE stator	10-550 24 271
stator housing, e-polished	10-560 28 067

- for pumps with **outer Ø 54 mm**

	part no.
NBR white stator	10-550 25 545
FKM black stator	10-550 25 546
PTFE stator	10-550 25 626
stator housing, e-polished	10-560 28 069

hose connection see page 49
drive motors for bearing flange version see page 51

illustration with hose connection
(not included)

Eccentric worm-drive pumps

F 560 suitable for food contact

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	10-560 24 307
1.000 mm	10-560 24 310
1.200 mm	10-560 24 312

- F 560 GS3-54/26 FOOD

immersion length	part no.
700 mm	10-560 25 307
1.000 mm	10-560 25 310
1.200 mm	10-560 25 312



F 560 GS FOOD

with cardan shaft for higher torque

- F 560 GS3-50/21 FOOD

immersion length	part no.
700 mm	10-560 24 327
1.000 mm	10-560 24 330
1.200 mm	10-560 24 332

- F 560 GS3-54/26 FOOD

immersion length	part no.
700 mm	10-560 25 327
1.000 mm	10-560 25 330
1.200 mm	10-560 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	10-560 24 207
1.000 mm	10-560 24 210
1.200 mm	10-560 24 212

- F 560 S3-54/26 FOOD

immersion length	part no.
700 mm	10-560 25 207
1.000 mm	10-560 25 210
1.200 mm	10-560 25 212



F 560 S FOOD

with cardan shaft for higher torque

- F 560 S3-50/21 FOOD

immersion length	part no.
700 mm	10-560 24 227
1.000 mm	10-560 24 230
1.200 mm	10-560 24 232

- F 560 S3-54/26 FOOD

immersion length	part no.
700 mm	10-560 25 227
1.000 mm	10-560 25 230
1.200 mm	10-560 25 232

suitable stators and stator housings in FOOD version

- for pumps with outer Ø 50 mm

	part no.
PTFE stator	10-550 24 271
stator housing, e-polished	10-560 28 280

- for pumps with outer Ø 54 mm

	part no.
PTFE stator	10-550 25 626
NBR white stator	10-550 25 545
stator housing, e-polished	10-560 28 281

accessories for FOOD version see page 50

hose connection see page 49
drive motors for planetary gear version see page 16-20
drive motors for bearing flange version see page 51

illustration with hose connection
(not included)

Eccentric worm-drive pumps

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



Eccentric worm-drive pumps 3A 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 GS 3A-50/21

immersion length	part no.
700 mm	10-560 24 107
1.000 mm	10-560 24 110
1.200 mm	10-560 24 112

- F 560 GS 3A-54/26

immersion length	part no.
700 mm	10-560 25 107
1.000 mm	10-560 25 110
1.200 mm	10-560 25 112



F 560 GS 3A

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

- F 560 S 3A-50/21

immersion length	part no.
700 mm	10-560 24 007
1.000 mm	10-560 24 010
1.200 mm	10-560 24 012

- F 560 S 3A-54/26

immersion length	part no.
700 mm	10-560 25 007
1.000 mm	10-560 25 010
1.200 mm	10-560 25 012



F 560 S 3A

F 500

hose connection see page 49

drive motors for planetary gear version see page 16-20

drive motors for bearing flange version see page 5 1

illustration with hose connection
(not included)

Eccentric worm-drive pumps

F 560 for Pharma, Cosmetic - ex-proof



Ex-proof versions for applications in Zone 0

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

Ex-marking II 1/2 Ex h IIB T4...T3 Ga/Gb

with planetary gear, ratio 1 : 15.9 (GSX)

- F 560 GS1X-50/21

discharge connection Rd 58 x 1/6

immersion length	part no.
1.000 mm	10-560 26 010
1.200 mm	10-560 26 011

- F 560 GS2X-50/21

discharge connection G 1 1/2" male

immersion length	part no.
1.000 mm	10-560 26 012
1.200 mm	10-560 26 013

- F 560 GS1X-54/26

discharge connection Rd 58 x 1/6

immersion length	part no.
1.000 mm	10-560 26 014
1.200 mm	10-560 26 015

- F 560 GS2X-54/26

discharge connection G 1 1/2" male

immersion length	part no.
1.000 mm	10-560 26 016
1.200 mm	10-560 26 017



F 560 GSX

hose connection see page 49

drive motors for planetary gear version see page 16-20

drive motors for bearing flange version see page 51

illustration with hose connection
(not included)

Accessories for eccentric worm-drive pumps

F 550 and F 560



- hose connection stainless steel**

for pump	nominal Ø	part no.
F 550 / F 560	DN 25, G 1 1/2, with union nut	10-959 04 002
	DN 32, G 1 1/2, with union nut	10-959 04 003
	DN 38, G 1 1/2, with union nut	10-959 04 004
F 560	DN 25, Rd 58 x 1/6, with union nut	10-959 04 115
	DN 32, Rd 58 x 1/6, with union nut	10-959 04 134
	DN 38, Rd 58 x 1/6, with union nut	10-959 04 130
	DN 32, clamp 2", with joint-clamp	10-959 04 173
	DN 38, clamp 2", with joint-clamp	10-959 04 175



- bearing flange with impulse sensor**

in stainless steel, with 4 magnets, with 5 m impulse cable, for dosing operation, suitable evaluation unit FLUXTRONIC® see page 63

for pump	connection	part no.
F 550 S, left operation	with union nut at bearing flange	10-550 25 555
F 560 S, left operation		10-560 28 291
F 560 S, left/right operation		10-560 28 319
for pump	connection	part no.
F 560 S, left operation	with clamp at bearing flange	10-560 28 328



- by-pass valve, G 1 1/2" female – G 1 1/2" male thread connection**

	part no.
brass, PTFE seal, with flow-back tube 300 mm long	10-001 18 026
brass, PTFE seal, with hose connection DN 19	10-001 18 028
stainless steel, FKM seal, with hose connection DN 19	10-001 18 029
stainless steel, PTFE seal, with hose connection DN 19	10-001 18 046
brass, PTFE seal, with hose connection DN 25	10-001 18 056
stainless steel, FKM seal, with hose connection DN 25	10-001 18 057
stainless steel, PTFE seal with hose connection DN 25	10-001 18 058



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

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



- container clip, steel 1.4301**

for pump Ø	part no.
50 mm	10-001 15 006



- compression gland (for pump Ø 50 mm)**

	part no.
G 2 A steel, zincd	10-001 14 003
M 64 x 4 steel, zincd	10-001 14 002
G 2 male, electrically conductive, polypropylene	10-001 14 062



- suction strainer S (stainless steel)**

	part no.
for pump Ø 50 mm (short, 62 mm), outer Ø 58	10-001 10 283
for pump Ø 50 mm (long, 108 mm), outer Ø 60	10-001 10 212



- discharge spout, stainless steel 316 Ti**

connection	part no.
G 1 1/2" male	10-959 07 043



hose fittings and hose see from page 28

F 500

Accessories for eccentric worm-drive pumps

F 550 and F 560

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	10-959 04 173
DN 32	NBR	10-959 04 174
DN 38	FKM	10-959 04 175
DN 38	NBR	10-959 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	10-959 13 358
DN 25	NBR	10-959 13 359
DN 32	FKM	10-959 13 360
DN 32	NBR	10-959 13 361
DN 38	FKM	10-959 13 362
DN 38	NBR	10-959 13 363



- **discharge spout** in stainless steel 316 Ti

nominal Ø	part no.
2" clamp connection (Ø42)	10-959 07 036



- **accessories for discharge spout** in stainless steel 316 Ti

	part no.
holder for spout	10-001 22 440
cardan clip for clamp 2" (Ø42)	10-550 24 376
seal for clamp 2", EPDM (with FDA/FOOD approval)	10-925 89 059
seal for clamp 2", FKM (with FDA/FOOD approval)	10-925 89 023



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

seal	part no.
FKM	10-959 19 005
NBR	10-959 19 007



- **inliner protection in stainless steel**

for pump Ø	part no.
50 mm	10-001 10 347
54 mm	10-001 10 350



Drive motors for eccentric worm-drive pumps

F 550 and F 560



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, IE3, with motor protection switch

	part no.
0,75 kW, 1.000 rpm **	10-001 03 443
1,1 kW, 1.000 rpm **	10-001 03 445
0,75 kW, 750 rpm	10-001 01 590
1,1 kW, 750 rpm	10-001 01 591

- **three-phase motor** 230/400 V, 50 Hz, jet-proof to IP 55, IE3, with cable terminal box

	part no.
0,75 kW, 1.000 rpm**	10-001 03 442
1,1 kW, 1.000 rpm**	10-001 03 444
0,75 kW, 750 rpm	10-001 01 588
1,1 kW, 750 rpm	10-001 01 589

- **three-phase motor** 230/400 V, 50 Hz, with cable terminal box
Ex- marking II 2 G Ex e II T3

	part no.
0,75 kW, 1.000 rpm	10-001 01 119
1,0 kW, 1.000 rpm	10-001 01 120
0,95 kW, 750 rpm	10-001 01 592

- **spur wheel back-gear motor** with frequency regulation, 380 - 500 V, 50/60 Hz, jet-proof to IP 54, IE3, without foot flange

	A	part no.
0,055-0,55 kW 47 - 472 min ⁻¹	1,60	10-001 02 178

- **start/stop switch for spur wheel back-gear motor** with frequency regulation and attached set point adjuster

	part no.
switching voltage 24 V DC, IP 66, with 1 m extension cable	10-936 00 040

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

	part no.
FPM 4 Ex, 0,6 kW at 1.000 rpm	10-001 04 000
FPM 6 Ex, 1,2 kW at 1.000 rpm	10-001 04 014
FPM 8 Ex, 2,0 kW at 1.000 rpm	10-001 04 002

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

part no.
10-001 15 037

Special white painting and 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, 3.000 rpm	10-403 01 023
F 403/4, 0,55 kW, 1.500 rpm	10-403 01 024

- **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, 1.500 rpm	10-403 01 025
F 403/2, 0,75 kW, 3.000 rpm	10-403 01 026

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

	part no.
F 403/4 Ex, 0,55 kW, 1.500 rpm	10-403 01 027
F 403/2 Ex, 0,75 kW, 3.000 rpm	10-403 01 029



Image similar



F 500



FPM 4 Ex



Image similar



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	10-001 10 584
for F 403 Ex, explosion-proof	10-001 10 587

for pump flange Ø 160 mm

	part no.
for three-phase motors, not explosion-proof	10-001 10 571
for three-phase motors, explosion-proof	10-001 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	10-001 10 590

- **power supply cable**

	part no.
pre-assembled with sleeve and Cekon plug, 5 m long	10-934 08 020
pre-assembled with sleeve without plug, 5 m long	10-934 08 025
per meter	10-934 08 901
cable assembly to motor, switch or connector	10-Z05 00 MKS

- **cekon-plug**

	part no.
5-poles	10-937 01 014
5-poles with commutator	10-937 01 035

- **CEE round pin plug, for applications in Zone 1**, 5-poles,
380 - 415 V (CEAG), 240 - 415 V (Stahl)

system	part no.
CEAG, Ex-marking II 2 G Ex db eb IIC/IIB+H2 T6	10-937 01 029
Stahl, Ex-marking II 2 G Ex db eb IIC T6 Gb	10-937 01 020

- **CEE socket, for applications in Zone 1**, 5-poles
380 - 415 V (CEAG), 240 - 415 V (Stahl)

system	part no.
CEAG, Ex-marking II 2 G Ex eb IIC T6	10-937 50 040
Stahl, Ex-marking II 2 G Ex db eb IIC T6 Gb	10-937 50 024

- **motor protection switch, for applications in Zone 1**, Ex-marking II 2 G Ex d e IIC T5 Gb,
with 2 cable inlet ports, for mounting on the carrying handle

	part no.
0,75 kW, 700 rpm, 1,6–2,5 A	10-936 06 118
0,75 kW, 930 rpm, 1,6–2,5 A	10-936 06 118
0,95 kW, 700 rpm, 2,5–4,0 A	10-936 06 119
1,1 kW, 930 rpm, 2,5–4,0 A	10-936 06 119

- **earth wire with crocodile clip**

	cable cross-section	length	forceps	part no.
spiral cable (yellow)	3 mm ²	4 m	stainless steel	10-931 90 023
cable (green/yellow)	4 mm ²	2 m	steel	10-931 90 015

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

	part no.
1,30 - 2,00 A	10-936 06 168
1,80 - 3,00 A	10-936 06 169
2,80 - 4.60 A	10-936 06 170
4,20 - 6,70 A	10-936 06 171



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

- **carrying handle**, stainless steel

	part no.
	10-001 10 520



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

	part no.
not explosion-proof	10-001 10 103
explosion-proof	10-001 10 116



- **PVC compressed-air hose**

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



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

	part no.
DN 13	10-959 13 122



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

	part no.
DN 13, G 1/2" male	10-959 13 121



- **hose nozzle (brass)**

	part no.
DN 13, G 1/2" male	10-959 05 017



- **1-ear hose clip**

material	clamping range	part no.
stainless steel	18.8 – 22.0 mm	10-959 13 239



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

	part no.
complete with mounting bracket	10-947 15 005



Eccentric worm-drive pumps for dry installation (TR)

F 550 S 54/26-400 TR

in stainless steel, with bearing flange Ø 160 mm in aluminium, clamp connection between outer tube and stator housing, seal material FKM, with pinned cardan shaft, length 400 mm (without stator, hose connection and console), suction connection clamp 2"

- **only left operation**
open mechanical seal

discharge connection	part no.
S2 (G 1 ½ male)	10-550 23 654
S3 (clamp 2")	10-550 23 664

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

	part no.
NBR white stator	10-550 25 545
FKM black stator	10-550 25 546
PTFE stator	10-550 25 626
stator housing	10-560 28 149

- **explosion-proof version for use in hazardous areas of zone 1**, ex-marking II 1/2 G Ex h IIB T4... T3 Ga/Gb, including PTFE stator and stator housing

discharge connection	part no.
S3 (clamp 2")	10-550 26 004

- **left/right operation**
bellow seal

discharge connection	part no.
S2 (G 1 ½ male)	10-550 23 706
S3 (clamp 2")	10-550 23 700

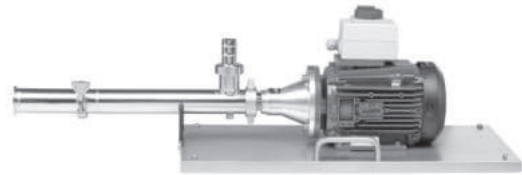


illustration eccentric worm-drive pump with hose connection, stator, stator housing, motor and console
motor image similar



F 560 S-54/26-400 TR

in stainless steel, with bearing flange Ø 160 mm in stainless steel, clamp connection between outer tube and stator housing, closed mechanical seal, seal material FKM, length 400 mm (without stator, hose connection, console), suction connection clamp 2"

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

discharge connection	part no.
S2 (G 1 ½ male)	10-560 25 402
S1 (Rd 58 x 1/6)	10-560 25 401

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

	part no.
NBR white stator	10-550 25 545
FKM black stator	10-550 25 546
PTFE stator	10-550 25 626
PTFE/carbon stator	10-550 25 670
stator housing, e-polished	10-560 28 149

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

discharge connection	part no.
S2 (G 1 ½ male)	10-560 23 202
S1 (Rd 58 x 1/6)	10-560 23 201

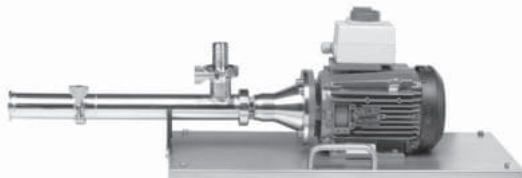


illustration eccentric worm-drive pump with hose connection, stator, stator housing, motor and console
motor image similar



F 560 S3-54/26-400 TR FOOD

in stainless steel, with bearing flange Ø 160 in stainless steel, clamp connection between outer tube and stator housing, with closed mechanical seal, seal material FKM, 2" clamp discharge connection, length 400 mm. Suitable for food contact according to regulation (EC) 1935/2004 and FDA CFR 21 without stator, stator housing and hose connection

- **bearing flange with clamp**

direction of rotation	cardan shaft	part no.
only left rotation	threaded	10-560 25 404
left/right rotation	pinned	10-560 23 203

- **bearing flange with union nut**

direction of rotation	cardan shaft	part no.
only left rotation	threaded	10-560 25 400
left/right rotation	pinned	10-560 23 200

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

	part no.
PTFE FOOD stator	10-550 25 626
NBR FOOD stator	10-550 25 545
stator housing FOOD TR	10-560 28 282

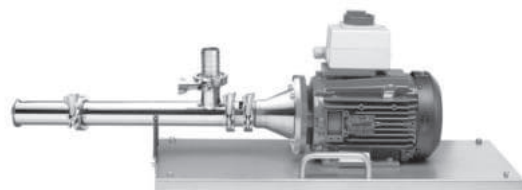


illustration eccentric worm-drive pump with clamp at the bearing flange, with hose connection, stator, stator housing, motor and console
motor image similar

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

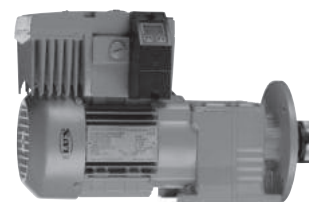
	A	part no.
0,75 kW, 750 rpm	2,70	10-001 02 176
1,1 kW, 1.000 rpm	2,85	10-001 03 448



Image similar

- **spur wheel back-geared motor** with frequency regulation, 380 - 500 V, 50/60 Hz, jet-proof to IP 54

	A	version	part no.
0,55 kW, 47 - 472 rpm	1,6	without foot flange	10-001 02 178
		with foot flange	10-001 02 179



- **start / stop switch for spur wheel back-geared motor** with frequency regulation and attached set point adjuster

	part no.
switching voltage 24 V DC, IP 66, with 1 m extension cable	10-936 00 040

other motors on request

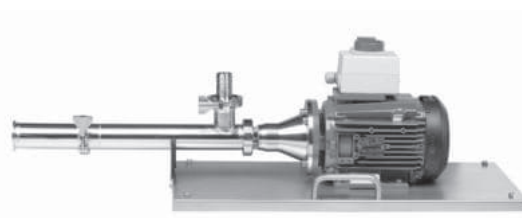
accessories for three-phase motor see page 52

Base plate and pump trolley

	part no.
stainless steel base plate	10-001 15 033
stainless steel pump trolley with electrically conductive rollers	10-001 15 051



pump trolley with pump F 560 TR



console with pump F 560 TR

other TR versions are available on request

hose connection see page 49,
accessories in FOOD version see page 50

Accessories for eccentric worm-drive pumps

F 550 and F 560

Tool for assembly/disassembly of eccentric worm-drive pumps

- **mounting tool for stator housing**

for disassembly and assembly of the stator from the outer tube

for pump	material	part no.
F 550	stainless steel 316 Ti	10-961 40 871
F 560	stainless steel 316 Ti / aluminium	10-961 40 691

- **mounting tool for coupling half**

for disassembly of very tight eccentric worms from the stator

material	part no.
stainless steel 316 Ti / aluminium	10-961 40 872

- **wrench for coupling star**

for pumps F 310 - F 560

material	part no.
steel	10-961 40 155

- **jaws for outer tube and stator**

for mounting the outer tube in the bench vise, material PE

for pump with outer tube	use	jaw-Ø	part no.
Ø 50 mm	disassembly/ assembly stator housing	50 mm	10-961 42 502
	disassembly stator	46 mm	10-961 42 503
Ø 54 mm	disassembly/ assembly stator housing	54 mm	10-961 42 504
	disassembly stator	50 mm	10-961 42 502

- **set of tools for assembly/disassembly of F 550 and F 560**

consisting of mounting tool for stator housing F 550 and F 560, mounting tool for coupling half; jaw Ø 46, Ø 50 and Ø 54

	part no.
set of tools	10-961 40 874

- **tool for eccentric worm-drive pumps in stainless steel**

	part no.
jointed hook wrench, 60-90 mm for groove, with „lug“	10-961 42 505



Drum-emptying systems

VISCOFLUX



VISCOFLUX lite

For transferring high-viscosity media that are just capable of flowing

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

For use with FLUX eccentric worm-drive pumps, 1.000 mm long,
 Ø 54 mm, resp. Ø 50 mm for ex-version

**Designed for 200 litre ISO drums
 with an inside diameter of 571,5 mm**

VISCOFLUX lite

	part no.
pump centring plate (PE) and follower plate (stainless steel 316 Ti, 6 hole pattern)	10-001 22 310
suitable process seals (6 hole pattern)	
	part no.
NBR white	10-925 89 005
NBR black	10-925 89 006
FKM	10-925 89 007



VISCOFLUX

VISCOFLUX lite Ex

Ex-marking: II 1 G IIB TX



	part no.
pump centring plate (PE conductive) and follower plate (stainless steel 316 Ti, 5 hole pattern)	10-001 22 370
suitable process seal (5 hole pattern)	
	part no.
NBR conductive	10-925 89 049
EPDM conductive	10-925 89 050



illustration with pump and motor

suitable pumps see page 42, 43
drive motors see page 16-20 (for pumps with planetary gear)
page 51 (for pumps with bearing flange)

VISCOFLUX mobile S

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 process device is complete in stainless steel and with protection class IP 66.

The drum emptying system is available for the following drums:

- cylindrical with internal diameter 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 for three-phase motors**

version PFC-S (Pharma, Food, Cosmetic)	part no.
with trolley 470 mm for euro pallets	10-001 22 425
with trolley 890 mm for freestanding drums and universal pallets for 4 drums	10-001 22 426

• **process device for compressed-air motors**

version PFC-S (Pharma, Food, Cosmetic)	part no.
with trolley 470 mm for euro pallets	10-001 22 456
with trolley 890 mm for freestanding drums and universal pallets for 4 drums	10-001 22 457

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

	part no.
for drums Ø 560 mm und Ø 571,5 mm	10-001 22 324
for conical drums Ø 550 mm above, Ø 515 mm below	10-001 22 304
for drums with smaller opening at the top Ø 540 mm, below Ø 571 mm	10-001 22 357

• **inliner suction protection - removable**

	part no.
for above listed follower plate (factory assembled)	10-001 22 387

• **process seals**

for drum type	material	regulation	part no.
Ø 560 mm	FKM		10-925 89 030
Ø 560 mm	NBR white	FDA conform	10-925 89 032
Ø 560 mm	NBR white	(EC) No. 1935/2004	10-925 89 035
Ø 571 mm	FKM		10-925 89 031
Ø 571 mm	NBR white	FDA conform	10-925 89 033
Ø 571 mm	NBR white	(EC) No. 1935/2004	10-925 89 036
conical drum	NBR white	FDA conform	10-925 89 060
conical drum	NBR white	(EC) No. 1935/2004	10-925 89 061
with smaller opening	NBR white	FDA conform	10-925 89 039
with smaller opening	NBR white	(EC) No. 1935/2004	10-925 89 040



illustration with pump and motor

[suitable pumps see page 61](#)
[drive motors see page 62](#)
[accessories see page 63](#)

VISCOFLUX

VISCOFLUX mobile S

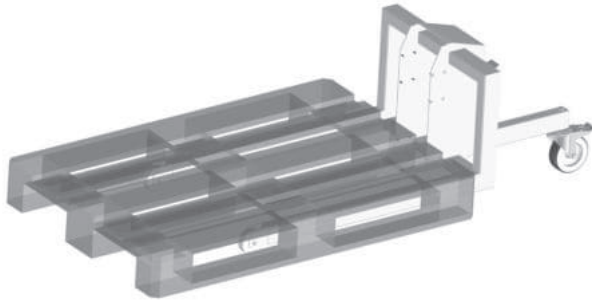
The stand-alone solution for transferring high-viscosity fluids

- optional accessories for VISCOFLUX mobile S**

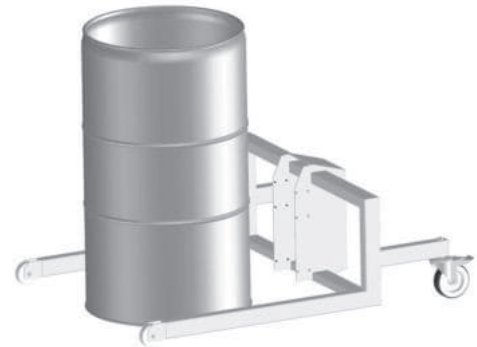
blind cover clamp for follower plate	part no.
Clamp DN 10	10-001 22 355
Clamp 2"	10-001 22 356
trolley (interchangeable)	part no.
470 mm	10-001 22 431
890 mm	10-001 22 432



blind cover



trolley 470 mm for drums on europallets



trolley 890 mm for freestanding drums and for universal pallets for 4 barrels

Control options VISCOFLUX mobile S

- with motor protection switch, protection class IP 65**
with main / emergency stop switch

	adjustment range	part no.
without no-volt protection	1,8 - 3,0 A	10-936 06 196
	2,8 - 4,6 A	10-936 06 197
	4,2 - 6,7 A	10-936 06 204
with no-volt protection	1,8 - 3,0 A	10-936 06 198
	2,8 - 4,6 A	10-936 06 199

- cabinet for three-phase motors with 400 V without speed control**
with motor start/stop button, with end position warning light,
with emergency switch, for pumps with left/right operation

	part no.
	10-936 13 006
with FLUXTRONIC® for batch operation	10-936 13 007

- cabinet for spur-gear motor with frequency converter with 400 V with speed control, with motor start/stop button, with end position warning light,**
with emergency switch, for pumps with left/right operation

	part no.
	10-936 13 008
with FLUXTRONIC® for batch operation	10-936 13 009

- optional accessory for VISCOFLUX mobile S with cabinet**

end position switch with tension spring and fixing support, protection class IP 67

nominal voltage	nominal current	part no.
max. 400 V	max. 4 A	10-001 22 447



end position switch

Eccentric worm-drive pumps

for VISCOFLUX mobile S



Eccentric worm-drive pumps for VISCOFLUX mobile S

in stainless steel, bearing flange Ø 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

bearing flange with clamp

left operation, with open mechanical seal

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

immersion length	part no.
1.000 mm	10-550 23 670
1.200 mm	10-550 23 672

bearing flange with union nut

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

immersion length	part no.
1.000 mm	10-550 23 630
1.200 mm	10-550 23 632

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	10-550 23 730
1.200 mm	10-550 23 732

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

immersion length	part no.
1.000 mm	10-550 23 660
1.200 mm	10-550 23 662

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

immersion length	part no.
1.000 mm	10-550 23 760
1.200 mm	10-550 23 762

illustration eccentric worm-drive pump with bearing flange with clamp, with hose connection, stator and stator housing



VISCOFLUX

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.



bearing flange with clamp

- **left operation**
F 560 S3-54/26 GW TR FOOD
with threaded cardan shaft

immersion length	part no.
1.000 mm	10-560 25 470
1.200 mm	10-560 25 472

bearing flange with union nut

- **left operation**
F 560 S3-54/26 TW TR FOOD
with torsion shaft

immersion length	part no.
1.000 mm	10-560 25 410
1.200 mm	10-560 25 412

- **left/right operation**
F 560 S3-54/26 TW TR L/R FOOD
with pinned torsion shaft

immersion length	part no.
1.000 mm	10-560 23 210
1.200 mm	10-560 23 212

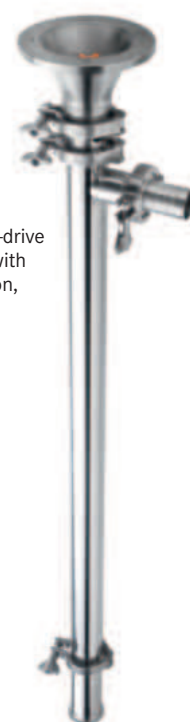
- **left operation**
F 560 S3-54/26 GW TR FOOD
with threaded cardan shaft

immersion length	part no.
1.000 mm	10-560 25 440
1.200 mm	10-560 25 442

- **left/right operation**
F 560 S3-54/26 GW TR L/R FOOD
with pinned cardan shaft

immersion length	part no.
1.000 mm	10-560 23 240
1.200 mm	10-560 23 242

illustration eccentric worm-drive pump with bearing flange with clamp, with hose connection, stator and stator housing



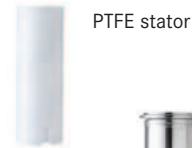
Eccentric worm-drive pumps

for VISCOFLUX mobile S

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

- industrial and hygienic version**

	part no.
FKM stator	10-550 25 546
PTFE stator	10-550 25 626
NBR stator	10-550 25 545
stator housing TR, e-polished	10-560 28 149



PTFE stator

- FOOD version**

	part no.
PTFE FOOD stator	10-550 25 626
NBR FOOD stator	10-550 25 545
stator housing TR, e-polished	10-560 28 282



stator housing, e-polished

Drive motors for VISCOFLUX mobile S

- three-phase motors 230 / 400 V, 50 Hz, jet-proof to IP 55, IE3, with cable terminal box**

kW	rpm	A	part no.
0,75	750	2,70	10-001 01 588
1,1	750	3,45	10-001 01 589
0,75	1.000	1,96	10-001 03 442
1,1	1.000	2,85	10-001 03 444



Image similar

- spur wheel back-geared motor**

400 V, 100 Hz, jet-proof to IP 54, IE3

(The setpoint adjuster for control cabinet mounting is not included)

kW	rpm	A	part no.
0,75	82-817	1,90	10-001 02 180

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

	part no.
FPM 4 Ex, 0,6 kW at 1.000 rpm	10-001 04 000
FPM 6 Ex, 1,2 kW at 1.000 rpm	10-001 04 014
FPM 8 Ex, 2,0 kW at 1.000 rpm	10-001 04 002



FPM 4 Ex

Accessories for TR pumps

for VISCOFLUX mobile S



Hoses

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

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



Swaged hose fittings DN 38

material	nominal Ø	seal	part no.
brass	G 1 ½" female		10-959 13 143
stainless steel	G 1 ½" female		10-959 13 147
stainless steel	Clamp 2"	FKM (FOOD)	10-959 13 362
stainless steel	Clamp 2"	NBR (FOOD)	10-959 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.
with holder	Clamp 2"	10-959 07 046
without holder	Clamp 2"	10-959 07 036



- accessories for discharge spout

	part no.
holder for spout	10-001 22 440
cardan clip for Clamp 2"	10-550 24 376
seal for Clamp 2", EPDM (with FDA/FOOD approval)	10-925 89 059
seal for Clamp 2", FKM (with FDA/FOOD approval)	10-925 89 023



Discharge spout

- in stainless steel 316 Ti, for non-food contact

	nominal Ø	part no.
without holder	G 1 ½" A female	10-959 07 043



Bearing flange with impulse sensor

- in stainless steel, with 4 magnets, with 5 m impulse cable

for pump	nominal Ø	part no.
F 550 S	with union nut at bearing flange	10-550 25 555
F 560 S	with clamp at bearing flange	10-560 28 291
F 560 S with left operation	with clamp at bearing flange	10-560 28 328



suitable digital display FLUXTRONIC®

	part no.
with mounting flange, without cable	10-001 42 113



VISCOFLUX

Flow meter FMC

rotating disc type



Flow meter FMC

nutating disc 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 digital display 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	10-A04 00 005
FMC 100/PP/1/F	FKM	10-A04 00 007
FMC 100/PP/2/F	FEP	10-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	10-A04 00 035
FMC 100/PP/1/F	FKM	10-A04 00 037
FMC 100/PP/2/F	FEP	10-A04 00 039

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

nominal Ø	O-ring	part no.
DN 19	FKM	10-001 12 531
DN 25	FKM	10-001 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	10-A04 00 012
FMC 100/PP/1/A	FKM	10-A04 00 014
FMC 100/PP/2/A	FEP	10-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	10-A04 00 041
FMC 100/PP/1/A	FKM	10-A04 00 043
FMC 100/PP/2/A	FEP	10-A04 00 045

external digital display FLUXTRONIC® see page 68



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	10-A04 00 006
FMC 100/ETFE/1/F	FKM	10-A04 00 008
FMC 100/ETFE/3/F	FFKM	10-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	10-A04 00 036
FMC 100/ETFE/1/F	FKM	10-A04 00 038
FMC 100/ETFE/3/F	FFKM	10-A04 00 079

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

connection	O-ring	part no.
DN 19	FKM	10-001 12 532
DN 25	FKM	10-001 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	10-A04 00 013
FMC 100/ETFE/1/A	FKM	10-A04 00 015
FMC 100/ETFE/3/A	FFKM	10-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	10-A04 00 042
FMC 100/ETFE/1/A	FKM	10-A04 00 044
FMC 100/ETFE/3/A	FFKM	10-A04 00 080

external digital display FLUXTRONIC® see page 68



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	10-A04 00 029
FMC 100/S/1/F	FKM	10-A04 00 031
FMC 100/S/2/F	FEP	10-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	10-A04 00 053
FMC 100/S/1/F	FKM	10-A04 00 055
FMC 100/S/2/F	FEP	10-A04 00 057

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

nominal Ø	O-ring	part no.
Ø 28	PTFE/FEP	10-001 12 550

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

nominal Ø	O-ring	part no.
Ø 32	PTFE	10-001 12 364

- connecting piece in stainless steel

	nominal Ø	part no.
for FLUX drum pumps	G 1¼" female - G 1½" female	10-959 06 059
for FLUX eccentric worm-drive pumps	G 1½" female - G 1½" female	10-959 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	10-A04 00 085
FMC 100/S/1/A	FKM	10-A04 00 086
FMC 100/S/2/A	FEP	10-A04 00 087

- thread connection on both sides G 1½" male

	O-ring	part no.
FMC 100/S/0/A	EPDM	10-A04 00 071
FMC 100/S/1/A	FKM	10-A04 00 072
FMC 100/S/2/A	FEP	10-A04 00 073



Flow meter FMC/FMJ

nutating disc type

- 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	10-A04 00 082
FMC 100/S/1/A	FKM	10-A04 00 083
FMC 100/S/2/A	FEP	10-A04 00 084

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

	O-ring	part no.
FMC 100/S/0/A	EPDM	10-A04 00 023
FMC 100/S/1/A	FKM	10-A04 00 025
FMC 100/S/2/A	FEP	10-A04 00 027

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	10-A04 00 074
FMC 100/S/1/A	FKM	10-A04 00 075
FMC 100/S/2/A	FEP	10-A04 00 076

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

	O-ring	part no.
FMC 100/S/0/A	EPDM	10-A04 00 059
FMC 100/S/1/A	FKM	10-A04 00 061
FMC 100/S/2/A	FEP	10-A04 00 063

external digital display FLUXTRONIC®

	part no.
with mounting flange, without cable	10-001 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	10-A04 25 400
FMC 250/PP/1/A	FKM	10-A04 25 410

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

	O-ring	part no.
FMC 250/PVDF/0/A	EPDM	10-A04 25 600
FMC 250/PVDF/1/A	FKM	10-A04 25 610



FMJ 100, material polypropylene, with digital display FLUXTRONIC®, for flexible use with drum pumps and for manual use (no batch-control possible), 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	10-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

FMO 101 and FMO 102
with impulse output, without digital display FLUXTRONIC®,
in PVDF, thread connection both sides G ¼ female, Reed/Hall Sensor

- for thin-flowing substances up to 1.000 cP

	housing	oval rotors	O-ring	part no.
FMO 101/P/P/0	PVDF	PPS	EPDM	10-AB6 01 400
FMO 101/P/P/1	PVDF	PPS	FKM	10-AB6 01 410
FMO 101/P/P/2	PVDF	PPS	FFKM	10-AB6 01 420
FMO 101/P/S/0	PVDF	S	EPDM	10-AB6 01 100
FMO 101/P/S/1	PVDF	S	FKM	10-AB6 01 110
FMO 101/P/S/2	PVDF	S	FFKM	10-AB6 01 120
FMO 102/P/P/0	PVDF	PPS	EPDM	10-AB6 02 400
FMO 102/P/P/1	PVDF	PPS	FKM	10-AB6 02 410
FMO 102/P/P/2	PVDF	PPS	FFKM	10-AB6 02 420
FMO 102/P/S/0	PVDF	S	EPDM	10-AB6 02 100
FMO 102/P/S/1	PVDF	S	FKM	10-AB6 02 110
FMO 102/P/S/2	PVDF	S	FFKM	10-AB6 02 120



FMO 101 and FMO 102 for applications in Zone 1
Ex-marking II 2G Ex h IIB T4 Gb
with impulse output, without digital display FLUXTRONIC®,
in stainless steel (S), thread connection G ¼, Reed/Hall Sensor

- for thin-flowing substances up to 1.000 cP

	housing	oval rotors	O-ring	part no.
FMO 101/S/S/0	S	S	EPDM	10-AB6 01 300
FMO 101/S/S/1	S	S	FKM	10-AB6 01 310
FMO 101/S/S/2	S	S	FFKM	10-AB6 01 320
FMO 102/S/S/0	S	S	EPDM	10-AB6 02 300
FMO 102/S/S/1	S	S	FKM	10-AB6 02 310
FMO 102/S/S/2	S	S	FFKM	10-AB6 02 320



- digital display FLUXTRONIC® for FMO 101 and FMO 102
Ex-marking Ex II 2G Ex ia IIB T6 Gb

	part no.
with attachment flange and 5 m impulse cable with plug	10-001 42 111



FMO 104 for applications in Zone 1
Ex-marking FMO II 2G Ex h IIB T4 Gb, Ex-marking FLUXTRONIC® II 2G Ex ia IIB T6 Gb, in aluminium
(AL) or stainless steel (S), thread connection both sides G ½ female, Reed/Reed Sensor

for thin-flowing substances up to 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 104/AL/P/0	AL	PPS	EPDM	10-A06 04 100
FMO 104/AL/P/1	AL	PPS	FKM	10-A06 04 110
FMO 104/AL/P/2	AL	PPS	FFKM	10-A06 04 120
FMO 104/S/P/0	S	PPS	EPDM	10-A06 04 200
FMO 104/S/P/1	S	PPS	FKM	10-A06 04 210
FMO 104/S/P/2	S	PPS	FFKM	10-A06 04 220
FMO 104/S/S/0	S	S	EPDM	10-A06 04 300
FMO 104/S/S/1	S	S	FKM	10-A06 04 310
FMO 104/S/S/2	S	S	FFKM	10-A06 04 320

- impulse version, without digital display FLUXTRONIC®

	housing	oval rotors	O-ring	part no.
FMO 104/AL/P/0	AL	PPS	EPDM	10-AB6 04 100
FMO 104/AL/P/1	AL	PPS	FKM	10-AB6 04 110
FMO 104/AL/P/2	AL	PPS	FFKM	10-AB6 04 120
FMO 104/S/P/0	S	PPS	EPDM	10-AB6 04 200
FMO 104/S/P/1	S	PPS	FKM	10-AB6 04 210
FMO 104/S/P/2	S	PPS	FFKM	10-AB6 04 220
FMO 104/S/S/0	S	S	EPDM	10-AB6 04 300
FMO 104/S/S/1	S	S	FKM	10-AB6 04 310
FMO 104/S/S/2	S	S	FFKM	10-AB6 04 320



FMO 104 with FLUXTRONIC®

for high viscosity substances from 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 104/AL/PV/0	AL	PPS	EPDM	10-A06 04 105
FMO 104/AL/PV/1	AL	PPS	FKM	10-A06 04 115
FMO 104/AL/PV/2	AL	PPS	FFKM	10-A06 04 125
FMO 104/S/PV/0	S	PPS	EPDM	10-A06 04 205
FMO 104/S/PV/1	S	PPS	FKM	10-A06 04 215
FMO 104/S/PV/2	S	PPS	FFKM	10-A06 04 225
FMO 104/S/SV/0	S	S	EPDM	10-A06 04 305
FMO 104/S/SV/1	S	S	FKM	10-A06 04 315
FMO 104/S/SV/2	S	S	FFKM	10-A06 04 325

- in impulse version, without digital display FLUXTRONIC®

	housing	oval rotors	O-ring	part no.
FMO 104/AL/PV/0	AL	PPS	EPDM	10-AB6 04 105
FMO 104/AL/PV/1	AL	PPS	FKM	10-AB6 04 115
FMO 104/AL/PV/2	AL	PPS	FFKM	10-AB6 04 125
FMO 104/S/PV/0	S	PPS	EPDM	10-AB6 04 205
FMO 104/S/PV/1	S	PPS	FKM	10-AB6 04 215
FMO 104/S/PV/2	S	PPS	FFKM	10-AB6 04 225
FMO 104/S/SV/0	S	S	EPDM	10-AB6 04 305
FMO 104/S/SV/1	S	S	FKM	10-AB6 04 315
FMO 104/S/SV/2	S	S	FFKM	10-AB6 04 325



FMO 104 in impulse version

- connecting pieces** for FMO 104

FLUX drum pump - FMO 104

for use with	material	connection	part no.
FLUX drum pumps	S	G 1 ½" male – G 1 ¼" female	10-959 06 227
FLUX eccentric worm-drive pumps	S	G 1 ½" male – G 1 ½" female	10-959 06 225

- FMO 104 - hose connection**

for use with	material	connection	part no.
hose connection drum pumps	S	G ½" male – G 1 ¼" male	10-959 06 232
hose connection eccentric worm-drive pumps	S	G ½" male – G 1 ½" male	10-959 06 233

FMO 110

in PVDF, thread connection on both sides G 1" female, Reed/Reed sensor

for thin-flowing substances up to 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 110/P/P/0	PVDF	PPS	EPDM	10-A06 10 400
FMO 110/P/P/1	PVDF	PPS	FKM	10-A06 10 410
FMO 110/P/P/2	PVDF	PPS	FFKM	10-A06 10 420

- impulse version, without digital display FLUXTRONIC®

	housing	oval rotors	O-ring	part no.
FMO 110/P/P/0	PVDF	PPS	EPDM	10-AB6 10 400
FMO 110/P/P/1	PVDF	PPS	FKM	10-AB6 10 410
FMO 110/P/P/2	PVDF	PPS	FFKM	10-AB6 10 420



FMO 110 in impulse version

Flow meter FMO

oval rotor type

FMO 110 for applications in Zone 1

Ex-marking FMO II 2G Ex h IIB T4 Gb, Ex-marking FLUXTRONIC® II 2G Ex ia IIB T6 Gb, in aluminium (AL) or stainless steel (S), thread connection both sides G 1 female, Reed/Reed Sensor

for thin-flowing substances up to 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 110/AL/P/0	AL	PPS	EPDM	10-A06 10 100
FMO 110/AL/P/1	AL	PPS	FKM	10-A06 10 110
FMO 110/AL/P/2	AL	PPS	FFKM	10-A06 10 120
FMO 110/S/P/0	S	PPS	EPDM	10-A06 10 200
FMO 110/S/P/1	S	PPS	FKM	10-A06 10 210
FMO 110/S/P/2	S	PPS	FFKM	10-A06 10 220
FMO 110/S/S/0	S	S	EPDM	10-A06 10 300
FMO 110/S/S/1	S	S	FKM	10-A06 10 310
FMO 110/S/S/2	S	S	FFKM	10-A06 10 320

- impulse version, without digital display FLUXTRONIC®

	housing	oval rotors	O-ring	part no.
FMO 110/AL/P/0	AL	PPS	EPDM	10-AB6 10 100
FMO 110/AL/P/1	AL	PPS	FKM	10-AB6 10 110
FMO 110/AL/P/2	AL	PPS	FFKM	10-AB6 10 120
FMO 110/S/P/0	S	PPS	EPDM	10-AB6 10 200
FMO 110/S/P/1	S	PPS	FKM	10-AB6 10 210
FMO 110/S/P/2	S	PPS	FFKM	10-AB6 10 220
FMO 110/S/S/0	S	S	EPDM	10-AB6 10 300
FMO 110/S/S/1	S	S	FKM	10-AB6 10 310
FMO 110/S/S/2	S	S	FFKM	10-AB6 10 320

for high viscosity substances from 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 110/AL/PV/0	AL	PPS	EPDM	10-A06 10 105
FMO 110/AL/PV/1	AL	PPS	FKM	10-A06 10 115
FMO 110/AL/PV/2	AL	PPS	FFKM	10-A06 10 125
FMO 110/S/PV/0	S	PPS	EPDM	10-A06 10 205
FMO 110/S/PV/1	S	PPS	FKM	10-A06 10 215
FMO 110/S/PV/2	S	PPS	FFKM	10-A06 10 225
FMO 110/S/SV/0	S	S	EPDM	10-A06 10 305
FMO 110/S/SV/1	S	S	FKM	10-A06 10 315
FMO 110/S/SV/2	S	S	FFKM	10-A06 10 325

- pulse version, without digital display FLUXTRONIC®

	housing	oval rotors	O-ring	part no.
FMO 110/AL/PV/0	AL	PPS	EPDM	10-AB6 10 105
FMO 110/AL/PV/1	AL	PPS	FKM	10-AB6 10 115
FMO 110/AL/PV/2	AL	PPS	FFKM	10-AB6 10 125
FMO 110/S/PV/0	S	PPS	EPDM	10-AB6 10 205
FMO 110/S/PV/1	S	PPS	FKM	10-AB6 10 215
FMO 110/S/PV/2	S	PPS	FFKM	10-AB6 10 225
FMO 110/S/SV/0	S	S	EPDM	10-AB6 10 305
FMO 110/S/SV/1	S	S	FKM	10-AB6 10 315
FMO 110/S/SV/2	S	S	FFKM	10-AB6 10 325

- connection pieces for FMO 110

FLUX drum pumps - FMO 110

for use with	material	connection	part no.
drum pumps	PVDF	G 1 A - G 1¼	10-959 06 145
drum pumps	S	G 1 A - G 1¼	10-959 06 144
eccentric worm-drive pumps	S	G 1 A - G 1½	10-959 06 122

- FMO 110 - hose connection

for use with	material	connection	part no.
hose connection drum pump	PVDF	G 1 A - G 1¼ A	10-959 06 236
hose connection eccentric worm-drive pump	S	G 1 A - G 1¼ A	10-959 06 234
hose connection drum pump	S	G 1 A - G 1½ A	10-959 06 235



FMO 110 with FLUXTRONIC®



FMO 110 in impulse version

FMO 110 for applications in Zone 1

Ex-marking FMO II 2G Ex h IIB T4 Gb, Ex-marking FLUXTRONIC® II 2G Ex ia IIB T6 Gb,

with flange connection, Reed/Reed sensor

for thin-flowing substances up to 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

with flange connection PN 16 DN 25 on both sides	housing	oval rotors	O-ring	part no.
FMO 110/S/S/1	S	S	FKM	10-A06 10 111
FMO 110/S/S/2	S	S	FFKM	10-A06 10 121



Image similar

with clamp connection, Reed/Reed sensor

for thin-flowing substances up to 1.000 cP, suitable for food contact according to regulation (EC) 1935/2004 and FDA CFR 21

in stainless steel (S)

- with digital display FLUXTRONIC®, 5-pole socket

clamp 1 1/2" connection on both sides	housing	oval rotors	O-ring	part no.
FMO 110/S/S/0	S	S	EPDM	10-A06 10 302
FMO 110/S/S/1	S	S	FKM	10-A06 10 312

clamp 2" connection on both sides	housing	oval rotors	O-ring	part no.
FMO 110/S/S/0	S	S	EPDM	10-A06 10 303
FMO 110/S/S/1	S	S	FKM	10-A06 10 313



for high viscosity substances from 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

clamp 2" connection on both sides	housing	oval rotors	O-ring	part no.
FMO 110/S/SV/0	S	S	EPDM	10-A06 10 307
FMO 110/S/SV/1	S	S	FKM	10-A06 10 317

accessories for FMO 110 with clamp connection

seal pump/ flow meter	material	part no.
for clamp 1 1/2"	EPDM (with FDA/FOOD approval)	10-925 69 017
for clamp 1 1/2"	FKM (with FDA/FOOD approval)	10-925 69 014
for clamp 2"	EPDM (with FDA/FOOD approval)	10-925 89 059
for clamp 2"	FKM (with FDA/FOOD approval)	10-925 89 023

cardan clip for clamp 2"	material	part no.
for clamp 1 1/2"	stainless steel	10-430 21 019
for clamp 2"	stainless steel	10-550 24 376



Flow meter FMO

oval rotor type

FMO 140

Ex-marking FMO II 2G Ex h IIB T4 Gb, Ex-marking FLUXTRONIC® II 2G Ex ia IIB T6 Gb, in aluminium (AL) or stainless steel (S), nominal pressure PN 16, nominal flange connection DN 40, EN 1092-1, Reed/Reed sensor

for thin-flowing substances up to 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 140/AL/P/0	AL	PPS	EPDM	10-A06 40 101
FMO 140/AL/P/1	AL	PPS	FKM	10-A06 40 111
FMO 140/AL/P/2	AL	PPS	FFKM	10-A06 40 121
FMO 140/S/P/0	S	PPS	EPDM	10-A06 40 201
FMO 140/S/P/1	S	PPS	FKM	10-A06 40 211
FMO 140/S/P/2	S	PPS	FFKM	10-A06 40 221
FMO 140/S/S/0	S	S	EPDM	10-A06 40 301
FMO 140/S/S/1	S	S	FKM	10-A06 40 311
FMO 140/S/S/2	S	S	FFKM	10-A06 40 321

for high viscosity substances from 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 140/AL/PV/0	AL	PPS	EPDM	10-A06 40 106
FMO 140/AL/PV/1	AL	PPS	FKM	10-A06 40 116
FMO 140/AL/PV/2	AL	PPS	FFKM	10-A06 40 126
FMO 140/S/PV/0	S	PPS	EPDM	10-A06 40 206
FMO 140/S/PV/1	S	PPS	FKM	10-A06 40 216
FMO 140/S/PV/2	S	PPS	FFKM	10-A06 40 226
FMO 140/S/SV/0	S	S	EPDM	10-A06 40 306
FMO 140/S/SV/1	S	S	FKM	10-A06 40 316
FMO 140/S/SV/2	S	S	FFKM	10-A06 40 326



FMO 150

Ex-marking FMO II 2G Ex h IIB T4 Gb, Ex-marking FLUXTRONIC® II 2G Ex ia IIB T6 Gb, in aluminium (AL) or stainless steel (S), nominal pressure PN 16, nominal flange connection DN 50, EN 1092-1, Reed/Reed sensor

for thin-flowing substances up to 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 150/AL/P/0	AL	PPS	EPDM	10-A06 50 101
FMO 150/AL/P/1	AL	PPS	FKM	10-A06 50 111
FMO 150/AL/P/2	AL	PPS	FFKM	10-A06 50 121
FMO 150/S/P/0	S	PPS	EPDM	10-A06 50 201
FMO 150/S/P/1	S	PPS	FKM	10-A06 50 211
FMO 150/S/P/2	S	PPS	FFKM	10-A06 50 221
FMO 150/S/S/0	S	S	EPDM	10-A06 50 301
FMO 150/S/S/1	S	S	FKM	10-A06 50 311
FMO 150/S/S/2	S	S	FFKM	10-A06 50 321

for high viscosity substances from 1.000 cP

- with digital display FLUXTRONIC®, 5-pole socket

	housing	oval rotors	O-ring	part no.
FMO 150/AL/PV/0	AL	PPS	EPDM	10-A06 50 106
FMO 150/AL/PV/1	AL	PPS	FKM	10-A06 50 116
FMO 150/AL/PV/2	AL	PPS	FFKM	10-A06 50 126
FMO 150/S/PV/0	S	PPS	EPDM	10-A06 50 206
FMO 150/S/PV/1	S	PPS	FKM	10-A06 50 216
FMO 150/S/PV/2	S	PPS	FFKM	10-A06 50 226
FMO 150/S/SV/0	S	S	EPDM	10-A06 50 306
FMO 150/S/SV/1	S	S	FKM	10-A06 50 316
FMO 150/S/SV/2	S	S	FFKM	10-A06 50 326



- **impulse cable** for FMO 104 / FMO 110 version without digital display
2-core, both sides with wire sleeves, insulated to transmit control signal from FMO reed-relais to the external digital display FLUXTRONIC®

	part no.
5 m long	10-934 08 032
10 m long	10-934 08 033
15 m long	10-934 08 034

- **connecting cable, shielded** for FMC / FMO to extend the impulse cable

	part no.
5 m long with plug and coupling	10-934 08 039

- **external digital display FLUXTRONIC®**

	part no.
with wall mounting flange, without cable	10-001 42 113

- **clear protection cover for FLUXTRONIC® display**

for	part no.
FMJ	10-001 42 101
FMC/FMO	10-001 42 121

- **earth wire** for FMC PP and FMC ETFE to produce a conductive connection of hose connection and motor

	part no.
1 m long	10-931 90 009

- **switching amplifier FSV 100**

		part no.
can be integrated into flow meter, 2 signals, with power supply cable, 5 m long	230 V, 50 – 60 Hz, IP 54, 4A	10-001 49 040
connecting cable for magnetic valve	5 m long	10-934 08 036
connecting cable for motor	0,5 m long	10-934 08 035

- **power supply cable** for FSV 100

	part no.
5 m long, without plug	10-934 08 047

- **connecting cable** to motor for FSV 100

	part no.
0,5 m long, without coupling	10-934 08 057

- **connecting cable** to FLUXTRONIC® FSV 100

	part no.
5 m long, 5 core, sleeve for strands on both ends	10-934 08 030
10 m long, 5 core, sleeve for strands on both ends	10-934 08 031

- **assembly output assignment FMC/FMO**

	part no.
	10-000 00 25 1

- **platine with Hall-sensor for wear-free measurement, for FMO 104 - 150,**
not suitable for use in hazardous areas

	part no.
	10-A06 04 919



Flow meter

Accessories for flow meter

Switching amplifier with Ex input for use out of the hazardous areas

- switching amplifier FSV 132

		part no.
for installation in switch box	2 signals, 230 V, 50 – 60 Hz, IP 20, AC - 4A, DC - 2A Ex-marking: II (1) G [Ex ia Ga] IIC	10-940 04 020
5-core control cable for the connection of flow meter or FAE	5 m long	10-934 08 038
	10 m long	10-934 08 040
	15 m long	10-934 08 041



- switching amplifier FSV 133 Ex (only for transferring impulse)

		part no.
for installation in switch box	1 signal, Ex i entry acc. to EN 60947-5-6, electronic exit 30 V DC/50 mA Ex-marking: II 3 (1) G Ex nAc nCc [ia] IIC T4	10-940 04 043
5-core control cable for the connection of flow meter or FAE	5 m long	10-934 08 038
	10 m long	10-934 08 040
	15 m long	10-934 08 041



Switching amplifier in Ex-version, Zone 1

- switching amplifier FSV 121 Ex

		part no.
for wall mounting with miniCLIX plug connections for network connection cable, with control cable 5 m long	1 signal, 230 V, 50 Hz, 4 A, IP 66 Ex-marking: II 2 G db eb [ia Ga] IIC T6 Gb	10-001 49 051
power supply cable	5 m long, with plug-in	10-934 08 048
connection cable to motor	5 m long	10-934 08 049



- switching amplifier FSV 121-1/2 Ex

		part no.
for wall mounting, without plug-ins and control cable	121-1: 1 signal 230 V, 50 Hz, 4A, IP 66, Ex-marking: II 2(1) G Ex db eb [ia Ga] IIC T6 Gb	10-001 49 039
	121-2, 2 signals 230 V, 50 Hz, 4A, IP 66, Ex-marking: II 2(1) G Ex db eb [ia Ga] IIC T6 Gb	10-001 49 063
control cable for the connection of flow meter or FAE	5 m long	10-934 08 038
	10 m long	10-934 08 040
	15 m long	10-934 08 041



Mixers

for assembly on IBC



Mixer sets

for assembly on IBC

for viscosity up to 1.500 cP

circulation capacity approx. 2,6 m³/min. related to water

- **IBC mixer set EHM 0.55/6-Mo**
three-phase motor BG 80 0,55 kW, protection class IP 55
with 3 x 400 V, 50 Hz, motor protection switch and 5 m cable with plug
mixer shaft EHM BG80 PE in steel/PE coating
mixing blade DRK 175 in PP-GFVI, diameter 175 mm / 3 blades
IBC cover with flange DN 150, rotary shaft seal PTFE

immersion length	part no.
800 mm	10-P00 00 001

for viscosity up to 2.000 cP

circulation capacity approx. 2,6 m³/min. related to water

- **IBC mixer set EHM 0.75/6-Rt**
three-phase motor BG90 0,75 kW, efficiency class 3, protection class IP 55
with 3 x 400 V, 50 Hz, motor protection switch and 5 m cable with plug
mixer shaft EHM BG 80 PE in steel/PE coating
mixing blade DRK 175 in PP-GFVI, diameter 175 mm / 3 blades
IBC cover DN 150 with protection tube, rotary shaft seal BG90 in PTFE
IBC traverse RT 1000

immersion length	part no.
850 mm	10-P00 00 003

for viscosity up to 2.500 cP

circulation capacity approx. 3,8 m³/min. related to water

- **IBC mixer set EHM 1,1/6-Rt**
three-phase motor BG 90 1,1 kW, efficiency class 3, protection class IP 55
with 3 x 400 V, 50 Hz, motor protection switch and 5 m cable with plug
mixer shaft EHM BG80 PE in steel/PE coating
mixing blade DRK 175 in PP-GFVI, diameter 200 mm / 3 blades
IBC cover DN 50 with protection tube, rotary shaft seal BG90 in PTFE
IBC traverse RT 1000

immersion length	part no.
850 mm	10-P00 00 004

for viscosity up to 6.000 cP

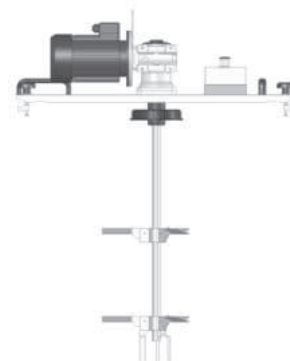
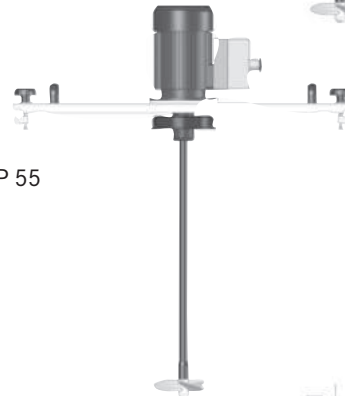
- **IBC mixer set ESM 0.75/133-RT**
three-phase motor BG90 0,75 kW, efficiency class 3, protection class IP 55
with 3 x 400 V, 50 Hz, motor protection switch and 5 m cable with plug
mixer shaft ESG63 in stainless steel
folding mixing blade KLR3 in stainless steel, diameter 400 mm / 3 blades
IBC cover with flange DN 150, rotary shaft seal ESG63 in PTFE
IBC traverse RT 1000

immersion length	part no.
900 mm	10-P00 00 005

for viscosity up to 12.000 cP

- **IBC mixer set ESM 1,5/70-RT**
three-phase motor BG90 1,5 kW, efficiency class 3, protection class IP 55
with 230 V / 380 - 400 V / 460 - 480 V, 50/60 Hz, motor protection switch
and 5 m cable with plug
mixer shaft ESG63 in stainless steel
2 folding mixing blades KLR3 in stainless steel, diameter 400 mm / 3 blades
IBC cover with flange DN 150, rotary shaft seal ESG63 in PTFE
IBC traverse RT 1000

immersion length	part no.
850 mm	10-P00 00 002



Centrifugal immersion pumps (600 and 700 series)



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	10-620 23 001
1.000 mm	15 mm	10-620 23 002
1.500 mm	15 mm	10-620 23 003
additional cost for stainless steel conical rotor		10-620 24 030

- **F 620 S-30**

nominal length	conical rotor Ø	part no.
700 mm	30 mm	10-621 23 001
1.000 mm	30 mm	10-621 23 002
1.500 mm	30 mm	10-621 23 003
additional cost for stainless steel conical rotor		10-621 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	10-947 14 005

- **suction strainer**, in stainless steel for:

	part no.
F 620 S-15, F 620 S-30	10-001 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	10-620 20 012

- **F 620 S-157/5**

nominal length	impeller height	part no.
1.200 mm	5 mm	10-620 20 112

Other lengths up to 3.000 mm and versions for AdBlue® * available on request



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	10-640 41 407
1.000 mm	10-640 41 410
1.500 mm	10-640 41 415

- **F 640 PP-30 (with conical rotor)**

nominal length	part no.
700 mm	10-640 41 607
1.000 mm	10-640 41 610
1.500 mm	10-640 41 615

- **F 640 PP-15 Z (with impeller for increased pumping head)**

nominal length	part no.
700 mm	10-640 41 507
1.000 mm	10-640 41 510
1.500 mm	10-640 41 515

- **F 640 PP-30 Z (with impeller for increased pumping head)**

nominal length	part no.
700 mm	10-640 41 707
1.000 mm	10-640 41 710
1.500 mm	10-640 41 715



F 640 PP-30
with suction strainer

Other lengths up to 4.000 mm available on request

* AdBlue® is a registered trademark of: Verband der Automobilindustrie e. V. (VDA)

- **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	10-947 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	10-001 10 235

Drive motors see page 82

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	10-640 41 207
1.000 mm	185 mm	10-640 41 210
1.500 mm	185 mm	10-640 41 215

- **F 640 PVDF-185** in polyvinylidene fluoride, with closed polyvinylidene fluoride impeller*

nominal length	housing Ø	part no.
700 mm	185 mm	10-640 61 207
1.000 mm	185 mm	10-640 61 210
1.500 mm	185 mm	10-640 61 215

- **F 640 PP-230** in polypropylene with closed polypropylene impeller*

nominal length	housing Ø	part no.
700 mm	230 mm	10-640 41 307
1.000 mm	230 mm	10-640 41 310
1.500 mm	230 mm	10-640 41 315

- **F 640 PVDF-230** in polyvinylidene fluoride with closed polyvinylidene fluoride impeller*

nominal length	housing Ø	part no.
700 mm	230 mm	10-640 61 307
1.000 mm	230 mm	10-640 61 310
1.500 mm	230 mm	10-640 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 and versions for AdBlue® ** 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	10-947 14 049
outer Ø 445 mm, PCD Ø 400 mm, 6 holes Ø 22 mm	10-947 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	10-947 14 070
outer Ø 445 mm, PCD Ø 400 mm, 6 holes Ø 22 mm	10-947 14 085

- **suction strainer** welded to the lid of the pump housing:

pump	material	part no.
F 640 PP-185	polypropylene	10-001 10 311
F 640 PVDF-185	polyvinylidene fluoride	10-001 10 312
F 640 PP-230	polypropylene	10-001 10 301



F 640 PP-185
with mounting flange

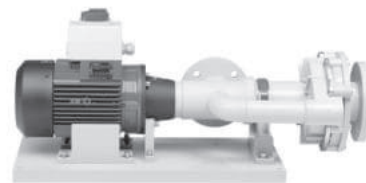
Centrifugal immersion pumps

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	10-640 41 601	
F 640 PP-30 TR	flange	flange	10-640 41 600	
F 620 S-30 TR	G 2" male	G 1½ male	10-620 25 502	
	housing Ø	inlet	outlet	part no.
F 640 PP-230 TR	230 mm*	flange	flange	10-640 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)	10-001 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	10-959 04 002
DN 32	10-959 04 003
DN 38	10-959 04 004



- **polypropylene**, with union nut G 2¼" female

	part no.
DN 32	10-959 04 098
DN 38	10-959 04 099
DN 50	10-959 04 100



- **polyvinylidene fluoride**, with union nut G 2¼" female

	part no.
DN 38	10-959 04 105
DN 50	10-959 04 096



Hoses see drum pump accessories on page 31

Drive motors for centrifugal immersion pumps F 620 and F 640

- **Three-phase motor**, 50 Hz, jet-proof to IP 55, with motor protection switch, IE3, 3.000 rpm

	part no.
0,75 kW, 230 / 400 V	10-001 03 429
1,5 kW, 230 / 400 V	10-001 03 433
2,2 kW, 230 / 400 V	10-001 03 435
3,0 kW, 400 V	10-001 03 437
4,0 kW, 400 V	10-001 03 439



- **Three-phase motor**, 50 Hz, jet-proof to IP 55, with cable terminal box, IE3, 3.000 rpm

	part no.
0,75 kW, 230 / 400 V	10-001 03 422
1,5 kW, 230 / 400 V	10-001 03 432
2,2 kW, 230 / 400 V	10-001 03 434
3,0 kW, 400 / 690 V	10-001 03 436
4,0 kW, 400 / 690 V	10-001 03 438
5,5 kW, 400 / 690 V (for 700 series only)	10-001 03 440



F 600
F 700

Accessories for three-phase motors

- **carrying handle**, in stainless steel

	part no.
up to 3,0 kW, not explosion-proof	10-001 10 571
up to 4,0 kW, not explosion-proof	10-001 10 531
up to 3,3 kW, explosion-proof	10-001 10 586

- **power supply cable**

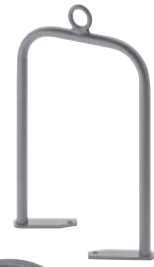
	part no.
pre-assembled with sleeve and Cekon plug, 5 m long	10-934 08 020
pre-assembled with sleeve without plug, 5 m long	10-934 08 025
per meter	10-934 08 901
cable assembly to motor, switch or connector	10-Z05 00 MKS

- **cekon-plug**

	part no.
5-poles	10-937 01 014

- **motor protection switch**, protection category IP 65, with 2 cable inlet ports, for mounting onto the motor

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



Centrifugal immersion pumps

sealless

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 F 716 and F 726:

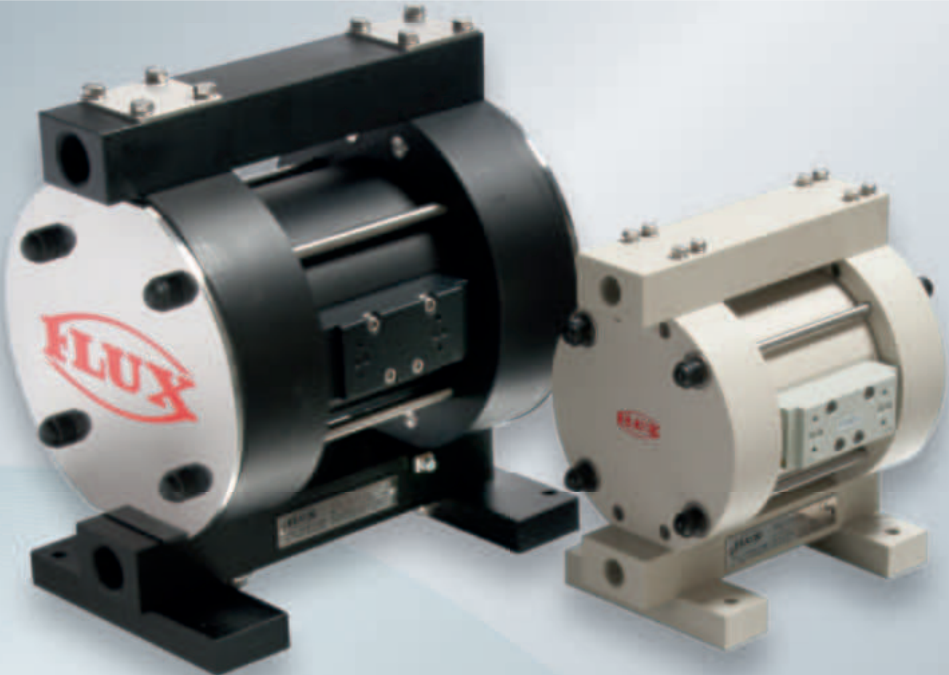
- each pump is determined to the required duty point
- for continuous use
- immersion lengths up to 1.000 mm. The immersion length of the pump can be extended up to 1.500 mm maximum by the suction tube option.
- F 716 / F 726 safe to run dry. With free-flying shaft for very low wear. There is no need 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



Air-operated diaphragm pumps (RFM and FDM series)



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	10-D10 40 010
RFM 10 PP/TK	PTFE/FFKM	10-D10 40 120
RFM 10 PP/TE	PTFE/EPDM	10-D10 40 130
RFM 10 PP/TV	PTFE/FKM	10-D10 40 140
RFM 10 PP/EE	EPDM	10-D10 40 210
RFM 10 PP/VV	FKM	10-D10 40 310
RFM 10 PTFE/TK	PTFE/FFKM	10-D10 00 120
RFM 10 PTFE/TE	PTFE/EPDM	10-D10 00 130
RFM 10 PTFE/TV	PTFE/FKM	10-D10 00 140
RFM 10 PTFE/EE	EPDM	10-D10 00 210
RFM 10 PTFE/VV	FKM	10-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	10-D10 00 121
RFM 10 PTFE/TE (FDA)	PTFE/EPDM	10-D10 00 131



RFML 10 electrically conductive PP or PTFE, for applications in Zone 1, Ex-marking II 1/2 G Ex h IIB T6.. T4 Ga/Gb, connection pump G 3/8" female

	diaphragm/seal	part no.
RFML 10 PP/NN	NBR	10-D10 41 010
RFML 10 PP/TK	PTFE/FFKM	10-D10 41 120
RFML 10 PP/TE	PTFE/EPDM	10-D10 41 130
RFML 10 PP/TV	PTFE/FKM	10-D10 41 140
RFML 10 PP/EE	EPDM	10-D10 41 210
RFML 10 PP/VV	FKM	10-D10 41 310
RFML 10 PTFE/TK	PTFE/FFKM	10-D10 01 120
RFML 10 PTFE/TE	PTFE/EPDM	10-D10 01 130
RFML 10 PTFE/TV	PTFE/FKM	10-D10 01 140
RFML 10 PTFE/EE	EPDM	10-D10 01 210
RFML 10 PTFE/VV	FKM	10-D10 01 310



RFML 10 electrically conductive PTFE, FDA CFR 21 conform

	diaphragm/seal	part no.
RFML 10 PTFE/TK-FDA	PTFE/FFKM	10-D10 01 121
RFML 10 PTFE/TE-FDA	PTFE/EPDM	10-D10 01 131



RFM 15 in polypropylene (PP) or polytetrafluoroethylene (PTFE), connection pump G 1/2" female

	diaphragm/seal	part no.
RFM 15 PP/NN	NBR	10-D15 40 010
RFM 15 PP/TK	PTFE/FFKM	10-D15 40 120
RFM 15 PP/TE	PTFE/EPDM	10-D15 40 130
RFM 15 PP/TV	PTFE/FKM	10-D15 40 140
RFM 15 PP/EE	EPDM	10-D15 40 210
RFM 15 PP/VV	FKM	10-D15 40 310
RFM 15 PTFE/TK	PTFE/FFKM	10-D15 00 120
RFM 15 PTFE/TE	PTFE/EPDM	10-D15 00 130
RFM 15 PTFE/TV	PTFE/FKM	10-D15 00 140
RFM 15 PTFE/EE	EPDM	10-D15 00 210
RFM 15 PTFE/VV	FKM	10-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	10-D15 00 121
RFM 15 PTFE/TE (FDA)	PTFE/EPDM	10-D15 00 131



RFML 15 electrically conductive PP or PTFE, for applications in Zone 1, Ex-marking II ½ G Ex h IIB T6..T4 Ga/Gb, connection pump G ½" female

	diaphragm/seal	part no.
RFML 15 PP/NN	NBR	10-D15 41 010
RFML 15 PP/TK	PTFE/FFKM	10-D15 41 120
RFML 15 PP/TE	PTFE/EPDM	10-D15 41 130
RFML 15 PP/TV	PTFE/FKM	10-D15 41 140
RFML 15 PP/EE	EPDM	10-D15 41 210
RFML 15 PP/VV	FKM	10-D15 41 310
RFML 15 PTFE/TK	PTFE/FFKM	10-D15 01 120
RFML 15 PTFE/TE	PTFE/EPDM	10-D15 01 130
RFML 15 PTFE/TV	PTFE/FKM	10-D15 01 140
RFML 15 PTFE/EE	EPDM	10-D15 01 210
RFML 15 PTFE/VV	FKM	10-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	10-D25 40 010
RFM 25 PP/TK	PTFE/FFKM	10-D25 40 120
RFM 25 PP/TE	PTFE/EPDM	10-D25 40 130
RFM 25 PP/TV	PTFE/FKM	10-D25 40 140
RFM 25 PP/EE	EPDM	10-D25 40 210
RFM 25 PP/VV	FKM	10-D25 40 310
RFM 25 PTFE/TK	PTFE/FFKM	10-D25 00 120
RFM 25 PTFE/TE	PTFE/EPDM	10-D25 00 130
RFM 25 PTFE/TV	PTFE/FKM	10-D25 00 140
RFM 25 PTFE/EE	EPDM	10-D25 00 210
RFM 25 PTFE/VV	FKM	10-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	10-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	10-D25 00 121
RFM 25 PTFE/TE (FDA)	PTFE/EPDM	10-D25 00 131



RFML 25 electrically conductive PP or PTFE, for applications in Zone 1, Ex-marking II ½ G Ex h IIB T6..T4 Ga/Gb, connection pump G 1" female

	diaphragm/seal	part no.
RFML 25 PP/NN	NBR	10-D25 41 010
RFML 25 PP/TK	PTFE/FFKM	10-D25 41 120
RFML 25 PP/TE	PTFE/EPDM	10-D25 41 130
RFML 25 PP/TV	PTFE/FKM	10-D25 41 140
RFML 25 PP/EE	EPDM	10-D25 41 210
RFML 25 PP/VV	FKM	10-D25 41 310
RFML 25 PTFE/TK	PTFE/FFKM	10-D25 01 120
RFML 25 PTFE/TE	PTFE/EPDM	10-D25 01 130
RFML 25 PTFE/TV	PTFE/FKM	10-D25 01 140
RFML 25 PTFE/EE	EPDM	10-D25 01 210
RFML 25 PTFE/VV	FKM	10-D25 01 310



RFML 25 electrically conductive PTFE, FDA CFR 21 conform

	diaphragm/seal	part no.
RFML 25 PTFE/TK-FDA	PTFE/FFKM	10-D25 01 121
RFML 25 PTFE/TE-FDA	PTFE/EPDM	10-D25 01 131



Air-operated diaphragm pumps

RFM in solid construction

RFM 40 in polypropylene (PP) or polytetrafluoroethylene (PTFE) connection pump G 1/2" female

	diaphragm/seal	part no.
RFM 40 PP/NN	NBR	10-D40 40 015
RFM 40 PP/TE	PTFE/EPDM	10-D40 40 135
RFM 40 PP/TV	PTFE/FKM	10-D40 40 145
RFM 40 PP/EE	EPDM	10-D40 40 215
RFM 40 PP/VV	FKM	10-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	10-D40 40 510

RFM 40, in polytetrafluoroethylene (PTFE), connection pump G 1 1/2" female

	diaphragm/seal	part no.
RFM 40 PTFE/TK	PTFE/FFKM	10-D40 00 125
RFM 40 PTFE/TE	PTFE/EPDM	10-D40 00 135
RFM 40 PTFE/TV	PTFE/FKM	10-D40 00 145
RFM 40 PTFE/EE	EPDM/EPDM	10-D40 00 215
RFM 40 PTFE/VV	FKM/FKM	10-D40 00 315

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	10-D40 00 121
RFM 40 PTFE/TE (FDA)	PTFE/EPDM	10-D40 00 131



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	10-959 06 159
PVDF	G 1" male - G 3/8" male	10-959 06 169

- RFM 15**

material	connection	part no.
PP	G 1" male - G 1/2" male	10-959 06 160
PVDF	G 1" male - G 1/2" male	10-959 06 170

- RFM 25**

material	connection	part no.
PP	G 1 1/4" male - G 1" male	10-959 06 161
PVDF	G 1 1/4" male - G 1" male	10-959 06 171

- RFM 40**

material	connection	part no.
PP	G 2" male - G 1 1/2" male	10-959 06 162



Hose connections for connection to the pump (reduction nipple is necessary):

- RFM 10/15**

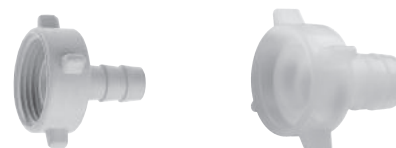
material	connection	part no.
PP	DN 13 - G 1" female	10-959 04 073
PVDF	DN 13 - G 1" female	10-959 04 177
PP	DN 19 - G 1" female	10-959 04 074
PVDF	DN 19 - G 1" female	10-959 04 178

- RFM 25**

material	connection	part no.
PP	DN 25 - G 1 1/4" female	10-959 04 052
PVDF	DN 25 - G 1 1/4" female	10-959 04 102
PP	DN 32 - G 1 1/4" female	10-959 04 054
PVDF	DN 32 - G 1 1/4" female	10-959 04 103

- RFM 40**

material	connection	part no.
PP	DN 32 - G 2" female	10-959 04 010
PVDF	DN 32 - G 2" female	10-959 04 084
PP	DN 38 - G 2" female	10-959 04 011
PVDF	DN 38 - G 2" female	10-959 04 085
PP	DN 50 - G 2" female	10-959 04 012



Suction tube for RFM 10, RFM 15 and RFM 25, polypropylene, with thread connector at the bottom G 1/2" male when outer-Ø 20 mm, G 3/4" male when outer-Ø 25 mm

	length	outer Ø	part no.
with hose nozzle DN 13	1.000 mm	20 mm	10-959 18 021
	700 mm	25 mm	10-959 18 008
with hose nozzle DN 25	1.000 mm	25 mm	10-959 18 009
	700 mm	25 mm	10-959 18 010
with thread connector G 1" male	1.000 mm	25 mm	10-959 18 011
	1.000 mm	25 mm	10-959 18 013

Suction strainer

- for suction tube**

material	connection	outer Ø	part no.
PP	G 1/2" female	20 mm	10-001 10 335
PP	G 1/2" female	25 mm	10-001 10 324

- for suction hose**

material	with hose connector	part no.
PP	DN 19	10-001 10 330



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")	10-D01 00 410
RFM 15/25 (1/4")	10-D01 00 412
RFM 40 (1/2")	10-D01 00 405
filter cartridge (1/4") for re-order	10-001 10 115

- **RFML** (for use in hazardous areas)

	part no.
RFML 10	10-D01 00 320
RFML 15/25	10-D01 00 322



RFM 15 with pressure regulator

Stroke counter complete with 5/2-way control valve for RFM

	part no.
RFM 10/15	10-D01 00 101
RFM 25	10-D01 00 102
RFM 40	10-D01 00 103

- **impulse cable**

	part no.
for use with digital display, 5 m long	10-934 08 038

- **external digital display FLUXTRONIC®**

	part no.
with mounting flange	10-001 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	10-D01 15 400
PDP 15 PP/E	EPDM	10-D01 15 420
PDP 15 PP/V connector female thread 3/4" female	FKM	10-D01 15 430

for RFM 25	material	part no.
PDP 25 PP/N	NBR	10-D01 25 400
PDP 25 PP/E	EPDM	10-D01 25 420
PDP 25 PP/V connector female thread 1" female	FKM	10-D01 25 430

for RFM 40	material	part no.
PDP 40 PP/N	NBR	10-D01 40 400
PDP 40 PP/E	EPDM	10-D01 40 420
PDP 40 PP/V connector female thread 1" female	FKM	10-D01 40 430

- **filling connection** for filling pulsation damper

material	connection	part no.
brass	G 1/4" female - filling connection	10-D01 00 000



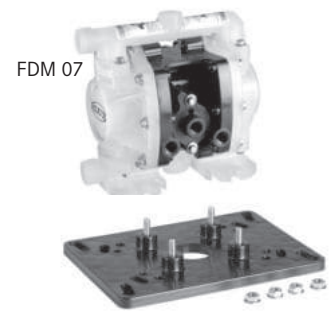
Air-operated diaphragm pumps

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	santoprene	10-M07 40 010
FDM 07 PP/TT		PP	PTFE	10-M07 40 100
FDM 07 AC/TT	Ex*	AC	PTFE	10-M07 50 000
				part no.
adapter plate for replacement FDM 06 by FDM 07				10-M07 70 100



FDM 10, pump connection G 3/8" female

		housing	diaphragm	part no.
FDM 10 PP/AA		PP	santoprene	10-M10 40 010
FDM 10 PP/TT		PP	PTFE	10-M10 40 110
FDM 10 AC/TT	Ex*	AC	PTFE	10-M10 50 110
FDM 10 PVDF/TT		PVDF	PTFE	10-M10 60 110



FDM 12, pump connection 1/2" NPT

		housing	diaphragm	part no.
FDM 12 PP/AA		PP	santoprene	10-M12 40 210
FDM 12 PP/TT		PP	PTFE	10-M12 40 110
FDM 12 AC/TS	Ex*	AC	PTFE	10-M12 50 010
FDM 12 PVDF/TT		PVDF	PTFE	10-M12 60 010
FDM 12 AL/TT	Ex*	AL	PTFE	10-M12 10 100
FDM 12 AL/NN	Ex*	AL	NBR	10-M12 10 200
FDM 12 S/TT	Ex*	S	PTFE	10-M12 20 000



FDM 25, pump connection flange 1" (hose connection see page 92)

		housing	diaphragm	part no.
FDM 25 PP/AA		PP	santoprene	10-M25 40 010
FDM 25 PP/TT		PP	PTFE	10-M25 40 100
FDM 25 PVDF/TT		PVDF	PTFE	10-M25 60 000



FDM 25, pump connection G 1" female

		housing	diaphragm	part no.
FDM 25 AL/NN	Ex*	AL	NBR	10-M25 10 000
FDM 25 AL/TT	Ex*	AL	PTFE	10-M25 10 100
FDM 25 S/TT	Ex*	S	PTFE	10-M25 20 100

FDM 40, pump connection flange 1 1/2" (hose connection see page 92)

		housing	diaphragm	part no.
FDM 40 PP/AA		PP	santoprene	10-M40 40 010
FDM 40 PP/TT		PP	PTFE	10-M40 40 100
FDM 40 PVDF/TT		PVDF	PTFE	10-M40 60 000



FDM 40, pump connection G 1 1/2" female

		housing	diaphragm	part no.
FDM 40 AL/NN	Ex*	AL	NBR	10-M40 10 000
FDM 40 AL/TT	Ex*	AL	PTFE	10-M40 10 100
FDM 40 S/TT	Ex*	S	PTFE	10-M40 20 100
FDM 40 GG/NN	Ex*	GG	NBR	10-M40 30 000

* for use in Zone 1, explosion-proof II 2 G D X



RFM
FDM

Air-operated diaphragm pumps

FDM/FDMH moulded pump design

FDM 50, pump connection flange 2" (hose connection see page 97)

		housing	diaphragm	part no.
FDM 50 PP/AA		PP	santoprene	10-M50 40 010
FDM 50 PP/TT		PP	PTFE	10-M50 40 100
FDM 50 PVDF/TT		PVDF	PTFE	10-M50 60 000

FDM 50, pump connection G 2" female

		housing	diaphragm	part no.
FDM 50 AL/NN	Ex*	AL	NBR	10-M50 10 200
FDM 50 AL/TT	Ex*	AL	PTFE	10-M50 10 300
FDM 50 S/TT	Ex*	S	PTFE	10-M50 20 300
FDM 50 GG/NN	Ex*	GG	NBR	10-M50 30 200
FDM 50 GG/TT	Ex*	GG	PTFE	10-M50 30 300

FDM 80, pump connection G 3" female

		housing	diaphragm	part no.
FDM 80 AL/NN	Ex*	AL	NBR	10-M80 10 000
FDM 80 AL/TT	Ex*	AL	PTFE	10-M80 10 100
FDM 80 S/TT	Ex*	S	PTFE	10-M80 20 100
FDM 80 GG/TT	Ex*	GG	PTFE	10-M80 30 100

FDMH 25, pump connection G 1" female

		housing	diaphragm	part no.
FDMH 25 S/TS	Ex*	S	PTFE	10-M25 20 200

* for use in Zone 1, explosion-proof II 2 G D X



Hose nipples for:

• FDM 07

material	connection	part no.
MS	DN 10 - G ¼ male	10-959 05 022
PP	DN 10 - G ¼ male	10-959 13 128
PVC	DN 12 - G ¼ male	10-959 05 181

• FDM 10

material	connection	part no.
PVC	DN 15 - G ⅜ male	10-959 05 232
MS	DN 13 - G ⅜ male	10-959 05 231

• FDM 12

material	connection	part no.
PP	DN 13 - G ½ male	10-959 05 183
MS	DN 13 - G ½ male	10-959 05 017
MS	DN 19 - ½" NPT	10-959 05 247
S 316 Ti	DN 13 - ½" NPT	10-959 05 249
MS	DN 13 - ½" NPT	10-959 05 258

• FDM 25

material	connection	part no.
PP	DN 25 - G 1" male	10-959 05 192
MS	DN 19 - G 1" male	10-959 05 161
MS	DN 25 - G 1" male	10-959 05 052
S 316 Ti	DN 25 - G 1" male	10-959 05 190

• FDM 40

material	connection	part no.
MS	DN 38 - G 1½" male	10-959 05 185
MS	DN 32 - G 1½" male	10-959 05 186
S 316 Ti	DN 38 - G 1½" male	10-959 05 188

• FDM 50

material	connection	part no.
MS	DN 38 - G 2" male	10-959 05 194



FDM 50



FDM 80



FDMH 25



Reduction nipples to connect the hose connections to the pump:

• FDM 07

material	connection	part no.
MS	G ¼ male - G ½ male	10-959 06 091
MS	internal thread ¾ - 14 NPTi internal thread ½ - 14 NPTi	10-959 06 229

• FDM 10

material	connection	part no.
PP	G 1" male - G ¾" male	10-959 06 159
PVDF	G 1" male - G ¾" male	10-959 06 169

• FDM 12

material	connection	part no.
PP	½ NPT - G 1¼" male	10-959 06 078
PVDF	½ NPT - G 1¼" male	10-959 06 077
stainless steel 316 Ti	½ NPT - G 1¼" male	10-959 06 079

• FDM 25

	material	connection	part no.
reduction nipple short	MS	G 1" male - G 1¼" male	10-959 06 080
	S 316 Ti	G 1" male - G 1¼" male	10-959 06 081
reduction nipple long	MS	G 1" male - G 1¼" male	10-959 06 082
	S 316 Ti	G 1" male - G 1¼" male	10-959 06 083



Hose connections for connection to the pump:

• FDM 07

material	connection	part no.
S 316 Ti*	DN 13 - G ¾ female	10-959 04 133
S 316 Ti*	DN 19 - G ¾ female	10-959 04 147
PP	¾ - 14 A NPT	10-959 13 381

• FDM 10

material	connection	part no.
PP	DN 13 - G 1" female	10-959 04 073
PP	DN 19 - G 1" female	10-959 04 074
PVDF	DN 13 - G 1" female	10-959 04 177
PVDF	DN 19 - G 1" female	10-959 04 178

* reduction nipple is necessary



Connection pieces for connection to the pump:

• FDM 12

material	connection	part no.
MS	G ½" female - ½" NPT A male	10-959 06 112
S	G ½" A male - ½" NPT A male	10-959 06 119



Double nipples for:

• FDM 40

material	connection	part no.
MS	G ½" male - G 1½" male	10-001 18 051
S 1.4436	G ½" male - G 1½" male	10-001 18 047



• FDM 50

material	connection	part no.
MS	G 2" male - G 2" male	10-959 06 098
S 1.4436	G 2" male - G 2" male	10-959 06 099



Hoses for:

DN 9, outer Ø 12 mm

• FDM 07

material	pressure	part no.
PE	max. 9 bar at 23°C	10-001 10 889

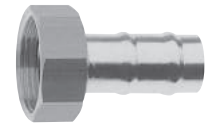
Accessories for air-operated diaphragm pumps

FDM

Hose connections for:

- FDM 12 and FDM 25**

material	connection	part no.
PP	DN 13 - G 1/4" female	10-959 04 081
PP	DN 19 - G 1/4" female	10-959 04 053
PP	DN 25 - G 1/4" female	10-959 04 052
PP	DN 32 - G 1/4" female	10-959 04 054
PVDF	DN 13 - G 1/4" female	10-959 04 082
PVDF	DN 19 - G 1/4" female	10-959 04 101
PVDF	DN 25 - G 1/4" female	10-959 04 102
PVDF	DN 32 - G 1/4" female	10-959 04 103
AL	DN 25 - G 1/4" female	10-959 04 119
AL	DN 32 - G 1/4" female	10-959 04 120
stainless steel 316 Ti	DN 19 - G 1/4" female	10-959 04 116
stainless steel 316 Ti	DN 32 - G 1/4" female	10-959 04 118



- FDM 40**

material	connection	part no.
stainless steel 316 Ti	DN 25 - G 1/2" female	10-959 04 002
stainless steel 316 Ti	DN 32 - G 1/2" female	10-959 04 003
stainless steel 316 Ti	DN 38 - G 1/2" female	10-959 04 004



- FDM 50**

material	connection	part no.
PP	DN 32 - G 2" female	10-959 04 010
PP	DN 38 - G 2" female	10-959 04 011
PP	DN 50 - G 2" female	10-959 04 012
PVDF	DN 32 - G 2" female	10-959 04 084
PVDF	DN 38 - G 2" female	10-959 04 085
stainless steel 316 Ti	DN 32 - G 2" female	10-959 04 059
stainless steel 316 Ti	DN 50 - G 2" female	10-959 04 009



Pulsation dampers for FDM 25, active

	housing	diaphragm	part no.
PD 25 S/PTFE	S	PTFE	10-M00 22 500



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	10-947 14 059
PVDF	G 1/4" male	10-947 14 060

- FDM 40**

material	connection	part no.
PP	G 2" male	10-947 14 061
PVDF	G 2" male	10-947 14 062

- FDM 50**

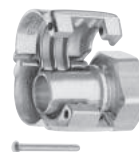
material	connection	part no.
PP	G 2" male	10-947 14 063



Hose connections for:

- FDM 12**

material	connection	outer Ø	part no.
MS	DN 13 – G ½" female	21 mm	10-959 13 179
MS	DN 13 – G ½" female	22 mm	10-959 13 177
S	DN 13 – ½" male NPT	22 mm	10-959 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 27

Suction tubes with 90° bend

- stainless steel 316 Ti**, with thread connector below G ¾" female

version	length	outer Ø	part no.
with thread connection G 1 male	1.000 mm	28 mm	10-959 18 026
	1.200 mm	28 mm	10-959 18 027
with thread connection G 1¼ male	1.000 mm	28 mm	10-959 18 032
	1.200 mm	28 mm	10-959 18 033

- stainless steel 316 Ti**, without thread connector on below

version	length	outer Ø	part no.
with thread connection G 1½ male	1.000 mm	41 mm	10-959 18 034
	1.200 mm	41 mm	10-959 18 035



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	1.000 mm	18 mm	10-959 18 017
with hose nozzle DN 25	1.000 mm	28 mm	10-959 18 001
	1.000 mm	28 mm	10-959 18 003
with thread connection G 1" male	1.200 mm	28 mm	10-959 18 030
	700 mm	28 mm	10-959 18 004
with thread connection G ¼" male	1.000 mm	28 mm	10-959 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	1.000 mm	20 mm	10-959 18 021
with hose nozzle DN 25	700 mm	25 mm	10-959 18 008
	1.000 mm	25 mm	10-959 18 009
with thread connection G 1" male	700 mm	25 mm	10-959 18 010
	1.000 mm	25 mm	10-959 18 011
with thread connection G 1¼" male	1.000 mm	25 mm	10-959 18 013



Suction strainer

- suction strainer** for suction tube

material	connection	part no.
stainless steel AISI 304	28 mm, G ¾" male	10-001 10 325
stainless steel AISI 304	18 mm, G ⅜" male	10-001 10 334
PP with flowback stop valve	20 mm, G ½" female	10-001 10 335
PP with flowback stop valve	25 mm, G ¾" female	10-001 10 324

- for suction hose**

material	with hose connector	part no.
PP	DN 19	10-001 10 330

- earth wire** with crocodile clip

	cable cross-section	length	forceps	part no.
spiral cable (yellow)	3 mm²	4 m	stainless steel	10-931 90 023
cable (green/yellow)	4 mm²	2 m	steel zinc-plated	10-931 90 015



Hoses and hose clips see accessories for drum pumps on page 31-32

RFM
FDM

Accessories for air-operated diaphragm pumps

Further accessories for FDM

- **pressure regulator** for:

	connection	part no.
FDM 10 / 12 / 15 / 25	G ¼" female	10-001 10 101
FDM 40 / 50 / 80	G ½" female	10-001 10 102

- **filter-regulator-lubricator unit** for:

	connection	part no.
FDM 07 - FDM 25	G ¼" female	10-001 10 111
FDM 07 - FDM 25, explosion-proof	G ¼" female	10-001 10 114
FDM 40 / 50 / 80	G ½" female	10-001 10 110
FDM 40 - FDM 80, explosion-proof	G ½" female	10-001 10 117

- **double nipple** for the connection between filter-regulator and speed regulating valve for:

	connection	part no.
FDM 07 - FDM 25	G ¼ A - G ¼ male	10-959 06 166
FDM 40 - FDM 80	G ½ A - G ½ male	10-959 06 167

- **speed regulation valve** for:

	connection	part no.
FDM 07 - FDM 25	G ¼" female	10-D01 00 230
FDM 40 - FDM 80	G ½" female	10-D01 00 231

- **air connection** in brass (double nipple fixing) for:

	version	connection	part no.
FDM 10 / 12 / 25	straight	¼" NPT - G ¼" male	10-959 06 088
FDM 40, FDM 50 PP/PVDF	straight	½" NPT - G ½" male	10-959 06 086
FDM 50 AL/S/GG, FDM 80 AL/S/GG	with 90° bend	¾" NPT - G ½" male	10-959 06 138



Further accessories for FDM and RFM

- **compressed-air hose**

nominal Ø, material	outer Ø	part no.
DN 10, EPDM, electrically conductive	17 mm	10-001 10 098
DN 10, PVC	17 mm	10-001 10 071
DN 13, PVC	20 mm	10-001 10 008



- **coupling** in brass

nominal Ø	part no.
DN 7,2 - G ¼" male	10-959 13 210



- **hose couplings** complete

consisting of threaded nipple and hose coupling

nominal Ø, material	part no.
DN 10 - G ¼" male, brass	10-959 13 108
DN 13 - G ½" male, steel nickel-plated	10-959 13 109



- **plug-in sleeve** in brass for hose coupling

nominal Ø	part no.
DN 10	10-959 13 209



- **hose nozzle** (brass)

nominal Ø	part no.
DN 10 - G ¼" male	10-959 05 022
DN 13 - G ½" male	10-959 05 017



- **1-ear hose clip**

clamping range	part no.
8 - 18,0 mm	10-959 13 237
18,8 - 22,0 mm	10-959 13 239



	part no.
individual certificate FOOD	10-Z01 00 400
individual certificate FDA	10-Z01 00 401
test certificate acc. to DIN EN 10204-2.2	10-954 60 577
inspection certificate for drum pump with commutator motor	10-954 60 526
inspection certificate for commutator motor	10-954 60 582
acceptance test certificate for eccentric worm-drive pump with commutator motor	10-954 60 529
acceptance test certificate for eccentric worm-drive pump with three-phase motor	10-954 60 528
acceptance test certificate for centrifugal immersion pump with three-phase motor	10-954 60 527
calibration report FMC	10-954 60 768
calibration report FMO	10-954 60 750
certificate of origin	10-Z01 00 0K3

General terms and conditions

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 nor 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. For safety reasons, products intended to be used in hazardous areas may only be opened and repaired by FLUX-GERÄTE GMBH or by a service partner authorized by FLUX-GERÄTE GMBH.

(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.



More than just pumps

FLUX is a world renowned brand for the highest standards in pump technology. It all began in 1950 with the invention of the electric drum 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.

FLUX-GERÄTE GMBH

Talweg 12 · D-75433 Maulbronn

Tel +49 7043 101-0 · Fax +49 7043 101-444

info@flux-pumpen.de · www.flux-pumps.com