



More than just pumps



Eccentric worm-drive
pumps

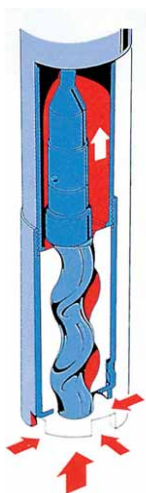
FLUX eccentric worm-drive pumps



In this brochure:

FLUX high viscosity liquid pumps have been tried and tested in numerous industrial sectors around the world. Three pump designs are available in differing models to meet every requirement for transferring thin to high viscosity media.

All models are easy to operate and maintain. Naturally, they all carry the advanced design and safety features that users expect from FLUX. For more than 50 years we have manufactured innovative, high-quality products. Operators readily acknowledge the performance of our powerful and extremely reliable pumps.



Positive displacement pump -eccentric worm type:

- smooth pumping of the liquid with very little turbulences
- easy to clean
- advanced pump design without any inaccessible or hidden voids, ideal for use in the food, cosmetic and pharmaceutical industries
- sanitary version available with 3A-approval
- vertical and horizontal use
- low wear, no valves, vanes etc.
- high output of 10 GPM or 12 GPM

FLUX eccentric worm-drive pumps type F 550 are designed for a wide range of applications. Two versions are available:

The robust **bearing flange version type F 550 S** is suited to continuous operation and is available with a three-phase electric motor, gear motor or compressed-air motor, and are ideal for conveying substances with up to 100,000 cPs viscosity¹.

The lightweight, easy-to-handle version for quick-change applications **type F 550 GS is equipped with a planetary gear**. These models are used with a FLUX commutator or compressed-air motor, and are ideal for conveying substances with up to 50,000 cPs viscosity.

The **F 550 GS6** model is designed for lower capacities, covering the viscosity range up to 80,000 cPs.

Under **type code F 560** both pump designs are available in **sanitary version type F 560 S and F 560 GS**, especially designed for use in the food, cosmetic and pharmaceutical industries. To meet the highest sanitary standards these pump models are also available with **3A-approval**.



For use in hazardous areas Zone 0

for transferring high flammability liquids class IIA or IIB, FLUX high viscosity liquid pumps type F 550 and F 560 are available in versions „XA“ and „XB“, tested and certified according to **ATEX-Directive 2014/34/EU**.



¹ Motor capability can vary depending on flow characteristics of the liquid being pumped.

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Industrial eccentric worm-drive pumps type F 550 S Version with bearing flange

Recommended for transferring

Thin to highly viscous, even pasty, still free flowing substances.

Typical applications

Transferring viscous substances from drums and/or containers.
Feeding filling machines.

Available drive motors

Three-phase electric or compressed-air motors.

Three-phase motors of 0.75 or 1.1 kW, with a speed of 850 rpm. For highly viscous, pasty substances a motor of 1.1 kW is required for viscosities exceeding 50,000 cPs, because of the low velocity of such products². A higher speed may be used if the product is still flowing or if a follower plate would support the continuous flow of the product to the pump inlet – please refer to the VISCOFLUX system information.

For viscosities up to 25,000 cPs, a motor of 0.75 kW will be sufficient.

On compressed-air motors, the speed is controlled by a valve on the motor or in the air supply line.

Scope of supply

A complete eccentric worm-drive pump consists of: drive motor, pump, stator and hose connection.




Technical data - Flow rate estimates based on varying viscosities

| 550S 50/21 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 10 |
| 3,000 | 8 |
| 10,000 | 6 - 7 |
| 20,000 | 4.5 |
| 30,000 | 4 |
| 40,000 | 2.5 - 3.5 |
| 50,000 | 2 - 3 |
| 60,000 | 1.5 - 2 |
| 70,000 | 1.5 - 2 |
| 80-100,000 | 1 - 2 |

| 550S 54/26 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 12 |
| 3,000 | 10 |
| 10,000 | 8 |
| 20,000 | 6 |
| 30,000 | 5.5 |
| 40,000 | 3.5 - 4.5 |
| 50,000 | 3 - 4 |
| 60,000 | 2.5 - 3.5 |
| 70,000 | 2 - 3 |
| 80-100,000 | 1 - 2 |



With higher viscosities delivery rate will be lower, depending on the velocity of the fluid.

Values ± 10% at 930 rpm. Delivery rate depends on the velocity of the fluid.

¹  Ex-proof versions available

² Motor capability can vary depending on flow characteristics of the liquid being pumped.

Eccentric worm-drive pumps with mechanical seal, in bearing flange version, drive motors see page 16

| Type | F 550 S-50/21 | F 550 S-54/26 | F 550 SXA-50/21 | F 550 SXB-50/21 |
|--|--|-----------------------------|---|---|
| Delivery rate max. | 10 GPM (37 LPM) | 12 GPM (45 LPM) | 10 GPM (37 LPM) | |
| Delivery head max. | 116 PSIG (8 bar) | | | |
| Thread on outlet | G 1½A (BSP 1½" male) | | | |
| Seal type | mechanical seal in ceramic oxide, o-rings in FKM | | | |
| Material | bearing flange in aluminium*; outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti | | | |
| Outer-Ø | 50 mm | 54 mm | 50 mm | 50 mm |
| Stator | not included with the pump, separate part number please see list below | | Stator PTFE white, included with the pump | |
| Explosion-proof according to ATEX-Directive 2014/34/EU for use in Zone 0 | not approved for transferring high flammability liquids in Zone 0 | | EC Type Examination Certificate No. PTB 99 ATEX 4050 X (Ex II 1/2 G IIA T4) | EC Type Examination Certificate No. PTB 99 ATEX 4051 X (Ex II 1/2 G IIB T4) |
| Part No./Weight | | |  |  |
| Immersion length 27" (700 mm) | 550 25 507 /10.8 lbs | 550 25 649 /11.9 lbs | 550 23 020 /12.1 lbs | 550 23 400 /12.1 lbs |
| Immersion length 39" (1000 mm) | 550 25 510 /12.3 lbs | 550 25 652 /13.4 lbs | 550 23 021 /13.4 lbs | 550 23 401 /13.4 lbs |
| Immersion length 47" (1200 mm) | 550 25 512 /14.5 lbs | 550 25 654 /14.5 lbs | 550 23 022 /14.5 lbs | 550 23 402 /14.5 lbs |

Other lengths on request.

Also available:

- Version with cardan shaft for higher torque
- Pumps with right/left rotation for emptying the pump or clearing blockages
- Pumps for VISCOFLUX and VISCOFLUX mobile
- Horizontally mounted versions - see page 14

Stators for eccentric worm-drive pumps type F 550 S

| Material | Temperature max. | Recommended for | Part No./Weight outer-Ø 50 mm | Part No./Weight outer-Ø 54 mm |
|---|------------------|---|-------------------------------|-------------------------------|
| NBR white (Nitrile Butadiene Rubber) elastomer | 194°F (90°C) | particularly suitable for oils and greases, also for food products | 550 24 248 /1.1 lbs | 550 25 621 /1.3 lbs |
| NBR black (Nitrile Butadiene Rubber) elastomer | 194°F (90°C) | particularly suitable for oils and greases, not suitable for food products | 550 24 244 /1.1 lbs | 550 25 620 /1.3 lbs |
| FKM (Fluor Rubber) elastomer | 248°F (120°C) | excellent chemical resistance to all different kind of products, not suitable for food products | 550 24 247 /1.1 lbs | 550 25 619 /1.3 lbs |
| PTFE (Ethylene-Tetra-Fluor-Ethylene) solid material | 248°F (120°C) | excellent chemical resistance, particularly suitable for food products, pharmaceuticals and cosmetics | 550 24 256 /1.3 lbs | 550 25 625 /1.5 lbs |

Hose connection in stainless steel, complete with union nut G 1½

| Type F 550 S | Part No./Weight |
|--|----------------------------|
| for flexible hose, inside 1" (DN 25) | 959 04 002 /0.4 lbs |
| for flexible hose, inside 1-1/4" (DN 32) | 959 04 003 /0.6 lbs |
| for flexible hose, inside 1-1/2" (DN 38) | 959 04 004 /0.8 lbs |

Industrial eccentric worm-drive pumps type F 550 GS with planetary gear

Recommended for transferring

Thin to medium viscosity liquids up to a maximum viscosity of 50,000 cPs.

Typical applications

Liquid transfer from barrels and/or containers. The eccentric worm-drive pumps type F 550 GS are particularly lightweight and easy-to-handle, making them extremely versatile pumps. The lightest model has a weight of only 9.5 lbs. The weight of the complete pump depends on the immersion length and motor assembly.

Available drive motors

Commutator motors or compressed air motors.

An infinitely variable speed motor – also available on explosion-proof models – allows the operator to set pump capacity to specific delivery requirements.

Scope of supply

A complete eccentric worm-drive pump consists of: drive motor, pump, stator and hose connection.

The types XA and XB are delivered with stator.



F 550 GS-54/26
with commutator motor F 460 Ex

Technical data - Flow rate estimates based on varying viscosities



| F550 GS 50/21 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 9 |
| 3,000 | 7 |
| 10,000 | 5 |
| 20,000 | 4.5 |
| 30,000 | 4 |
| 40,000 | 2.5 - 3.5 |
| 50,000 | 2 - 3 |

| F550 GS 54/26 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 11 |
| 3,000 | 9 |
| 10,000 | 6.5 |
| 20,000 | 6 |
| 30,000 | 5.5 |
| 40,000 | 3.5 - 4.5 |
| 50,000 | 3 - 4 |

Values ± 10 %. Delivery rate depends on the velocity of the fluid.

¹ Ex-proof versions available

Eccentric worm-drive pumps with mechanical seal in planetary gear version

| Type | F 550 GS-50/21 | F 550 GS-54/26 | F 550 GSXA-50/21 | F 550 GSXB-50/21 |
|--|--|-----------------------------|---|---|
| Delivery rate max. | 10 GPM (37 LPM) | 12 GPM (45 LPM) | 10 GPM (37 LPM) | |
| Delivery head max. | 116 PSIG (8 bar) | | | |
| Thread on outlet | G 1½ A | | | |
| Seal type | mechanical seal in ceramic oxide, o-rings in FKM | | | |
| Material | outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti | | | |
| Outer-Ø | 50 mm | 54 mm | 50 mm | |
| Stator | not included with the pump, separate part number please see list below | | Stator PTFE white, included with the pump | Stator PTFE black, included with the pump |
| Explosion-proof according to ATEX-Directive 2014/34/EU for use in Zone 0 | not approved for transferring highly flammable liquids in Zone 0 | | EC Type Examination Certificate No. PTB 99 ATEX 4050 X (Ex II 1/2 G IIA T4#) | EC Type Examination Certificate No. PTB 99 ATEX 4051 X (Ex II 1/2 G IIB T4) |
| Part No./Weight | | |  |  |
| Immersion length 27" (700 mm) | 550 24 807 /9.5 lbs | 550 25 675 /10.6 lbs | 550 23 030 /10.6 lbs | 550 23 410 /10.6 lbs |
| Immersion length 39" (1000 mm) | 550 24 810 /11.0 lbs | 550 25 676 /12.1 lbs | 550 23 031 /12.1 lbs | 550 23 411 /12.1 lbs |
| Immersion length 47" (1200 mm) | 550 24 812 /12.1 lbs | 550 25 677 /13.2 lbs | 550 23 032 /13.2 lbs | 550 23 412 /13.2 lbs |

Other lengths on request.

Also available:

- Version with cardan shaft for higher torque

Stators for eccentric worm-drive pumps type F 550 GS

| Material | Temperature | Recommended for | Part No./Weight outer-Ø 50 mm | Part No./Weight outer-Ø 54 mm |
|---|---------------|---|-------------------------------|-------------------------------|
| NBR white (Nitrile Butadiene Rubber) elastomer | 194°F (90°C) | particularly suitable for oils and greases, also for food products | 550 24 248 /1.1 lbs | 550 25 621 /1.3 lbs |
| NBR black (Nitrile Butadiene Rubber) elastomer | 194°F (90°C) | particularly suitable for oils and greases, not suitable for food products | 550 24 244 /1.1 lbs | 550 25 620 /1.3 lbs |
| FKM (Fluor Rubber) elastomer | 248°F (120°C) | excellent chemical resistance to all different kind of products, not suitable for food products | 550 24 247 /1.1 lbs | 550 25 619 /1.3 lbs |
| PTFE (Ethylene-Tetra-Fluor-Ethylene) solid material | 248°F (120°C) | excellent chemical resistance, particularly suitable for food products, pharmaceuticals and cosmetics | 550 24 256 /1.3 lbs | 550 25 625 /1.5 lbs |

Hose connection in stainless steel, complete with union nut G 1½

| Type F 550 GS | Part No./Weight |
|--|----------------------------|
| for flexible hose, inside 1" (DN 25) | 959 04 002 /0.4 lbs |
| for flexible hose, inside 1-1/4" (DN 32) | 959 04 003 /0.6 lbs |
| for flexible hose, inside 1-1/2" (DN 38) | 959 04 004 /0.8 lbs |

Sanitary pumps type F 560 S

Version with bearing flange

Recommended for transferring

Thin to highly viscous, even pasty, still free flowing substances to 100,000 cPs

Typical applications

A pump designed to meet the specific requirements of the food, cosmetic and pharmaceutical industries.

The sanitary pump type F 560 S can be stripped down in no time for cleaning and/or sterilization. The stator housing comprises a safety bar to protect containers and to allow transfer operations from plastic inliners.

3A-Certificate for USA

The F 560 S pump is available in versions with 3A-approval: ground and polished, equipped with a closed mechanical seal in stainless steel with sliding faces in silicon carbide (SiC).

FLUX FOOD for EU

The eccentric worm-drive pump F 560 S pump is available in FLUX FOOD version conform to the EU regulations (EG) 1935/2004 and (EU) 10/2011 - recognized by the glass fork symbol.

Available drive motors

Three-phase electric motors⁴ or compressed-air motors

Scope of supply

A complete eccentric worm-drive pump consists of: drive motor, pump, stator and hose connection.





F 560 S3A-50/21
with three-phase motor

Technical data - Flow rate estimates based on varying viscosities

| 560S 50/21 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 10 |
| 3,000 | 8 |
| 10,000 | 6 - 7 |
| 20,000 | 4.5 |
| 30,000 | 4 |
| 40,000 | 2.5 - 3.5 |
| 50,000 | 2 - 3 |
| 60,000 | 1.5 - 2 |
| 70,000 | 1.5 - 2 |
| 80-100,000 | 1 - 2 |

| 560S 54/26 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 12 |
| 3,000 | 10 |
| 10,000 | 8 |
| 20,000 | 6 |
| 30,000 | 5.5 |
| 40,000 | 3.5 - 4.5 |
| 50,000 | 3 - 4 |
| 60,000 | 2.5 - 3.5 |
| 70,000 | 2 - 3 |
| 80-100,000 | 1 - 2 |

¹  3A certificated version available

²  products conform to EG 1935/2004 and EU 10/2011 available

³  Ex-proof versions available

⁴ Motor capability can vary depending on flow characteristics of the liquid being pumped.

Eccentric worm-drive pump with mechanical seal in bearing flange version, drive motors see page 16

| Type | F 560 S1-50/21 | F 560 S2-50/21 | F 560 S1XA-50/21 | F 560 S2XA-50/21 |
|--|--|-----------------------------|---|-----------------------------|
| Delivery rate max. | 10 GPM (37 LPM) | | | |
| Delivery head max. | 116 PSIG (8 bar) | | | |
| Thread on outlet | Rd 58 x 1/6 | G 1½ A | Rd 58 x 1/6 | G 1½ A (BSP 1½" male) |
| Seal type | mechanical seal in SiC, o-rings in FKM (foodgrade) | | | |
| Material | bearing flange, outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti | | | |
| Outer-Ø | 50 mm | | | |
| Stator | not included with the pump, separate part number please see list below | | Stator PTFE white, included with the pump | |
| Explosion-proof according to ATEX-Directive 2014/34/EU for use in Zone 0 | not approved for transferring highly flammable liquids in Zone 0 | | EC Type Examination Certificate No. PTB 99 ATEX 4052 X (Ex II 1/2 IIA T4) | |
| Part No./Weight | | | | |
| Immersion length 27" (700 mm) | 560 24 407 /9.5 lbs | 560 24 507 /9.5 lbs | - | - |
| Immersion length 39" (1000 mm) | 560 24 410 /12.5 lbs | 560 24 510 /12.5 lbs | 560 20 810 /15.6 lbs | 560 20 910 /12.1 lbs |
| Immersion length 47" (1200 mm) | 560 24 412 /13.7 lbs | 560 24 512 /15.4 lbs | 560 20 812 /16.7 lbs | 560 20 912 /13.2 lbs |

| Type | F 560 S1-54/26 | F 560 S2-54/26 |
|--------------------------------|--|-----------------------------|
| Delivery rate max. | 12 GPM (45 LPM) | |
| Delivery head max. | 116 PSIG (8 bar) | |
| Thread on outlet | Rd 58 x 1/6 | G 1½ A |
| Seal type | mechanical seal in SiC, o-rings in FKM (foodgrade) | |
| Material | bearing flange, outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti | |
| Outer-Ø | 54 mm | |
| Stator | not included with the pump, separate part number please see list below | |
| Part No./Weight | | |
| Immersion length 27" (700 mm) | 560 25 507 /9.5 lbs | 560 25 607 /9.5 lbs |
| Immersion length 39" (1000 mm) | 560 25 510 /12.5 lbs | 560 25 610 /12.5 lbs |
| Immersion length 47" (1200 mm) | 560 25 512 /13.7 lbs | 560 25 612 /16.5 lbs |

Also available:

- FLUX FOOD pumps conform EG 1935/2004 und EU 10/2011
- Version with cardan shaft for higher torque
- Pumps with right/left rotation for emptying the pump or clearing blockages
- Pumps for VISCOFLUX and VISCOFLUX mobile
- Horizontally mounted versions - see page 14

Eccentric worm-drive pumps type F 560 S3A in 3A version

| Type | F 560 S3A-50/21 | F 560 S3A-54/26 |
|--------------------------------|---|-----------------------------|
| Delivery rate max. | 10 GPM (37 LPM) | 12 GPM (45 LPM) |
| Delivery head max. | 116 PSIG (8 bar) | 116 PSIG (8 bar) |
| Thread on outlet | Clamp 2" | Clamp 2" |
| Seal type | closed mechanical seal in stainless steel, sliding faces in SiC, O-rings in FKM (foodgrade) | |
| Material | bearing flange, outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti, ground and polished | |
| Outer-Ø | 50 mm | 54 mm |
| Stator | stator in PTFE included with the pump | |
| Part No./Weight | | |
| Immersion length 27" (700 mm) | 560 24 007 /12.8 lbs | 560 25 007 /13.9 lbs |
| Immersion length 39" (1000 mm) | 560 24 010 /14.3 lbs | 560 25 010 /15.4 lbs |
| Immersion length 47" (1200 mm) | 560 24 012 /15.4 lbs | 560 25 012 /16.5 lbs |

Stator in PTFE, Stator Housing in Stainless Steel with Safety Bar and inliner

| Type F 560 S1, S2 | Part No./Weight |
|-------------------|----------------------------|
| Outer-Ø 50 mm | 560 21 900 /1.3 lbs |
| Outer-Ø 54 mm | 560 23 900 /1.5 lbs |

Hose connection in stainless steel, complete with union nut or clamp connection

| Part No./Weight | Type F 560 S1 | Type F 560 S2 | Type F 560 S3A |
|--|----------------------------|----------------------------|----------------------------|
| for flexible hose, inside 1" (DN 25) | 959 04 115 /0.4 lbs | 959 04 002 /0.4 lbs | - |
| for flexible hose, inside 1-1/4" (DN 32) | 959 04 134 /0.6 lbs | 959 04 003 /0.6 lbs | 959 04 137 /0.8 lbs |
| for flexible hose, inside 1-1/2" (DN 38) | 959 04 130 /0.8 lbs | 959 04 004 /0.8 lbs | 959 04 109 /0.8 lbs |

Sanitary pumps type F 560 GS with planetary gear

Recommended for transferring

Thin to medium viscosity liquids up to maximum 50,000 cPs.

Typical applications

Very lightweight and easy-to-handle pump for use in the food, cosmetic and pharmaceutical industries. The sanitary pump type F 560 GS can be stripped down in no time for cleaning and/or sterilisation. The stator housing comprises a safety bar to protect containers and to allow transfer out of plastic inliners.

The sanitary pump type F 560 GS is available in special version with 3A-approval: ground, polished, with a closed mechanical seal in stainless steel with sliding faces in silicium carbide (SiC).

Available drive motors

Commutator motors or compressed-air motors.

Infinite speed adjustment – also available on explosion-proof motors – allows the operator to set pump capacity to specific delivery requirements.

Scope of supply

A complete sanitary pump consists of: drive motor, pump, stator and hose connection.

The type XA is delivered with stator.



F 560 GS3A-54/26 with air motor F 416-2 Ex

Technical data - Flow rate estimates based on varying viscosities

| F560 GS 50/21 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 9 |
| 3,000 | 7 |
| 10,000 | 5 |
| 20,000 | 4.5 |
| 30,000 | 4 |
| 40,000 | 2.5 - 3.5 |
| 50,000 | 2 - 3 |

| F560 GS 54/26 | |
|-----------------|-----------|
| VISCOSITY (CPS) | MAX GPM |
| 1,000 | 11 |
| 3,000 | 9 |
| 10,000 | 6.5 |
| 20,000 | 6 |
| 30,000 | 5.5 |
| 40,000 | 3.5 - 4.5 |
| 50,000 | 3 - 4 |

Values ± 10 %. Delivery rate depends on the velocity of the fluid.



¹ 3A certificated version available



² products conform to EG 1935/2004 and EU 10/2011 available



³ Ex-proof versions available

Eccentric worm-drive pumps in planetary gear version with mechanical seal,

| Type | F 560 GS1-50/21 | F 560 GS2-50/21 | F 560 GS1XA-50/21 | F 560 GS2XA-50/21 |
|--|--|-----------------------------|---|-----------------------------|
| Delivery rate max. | 10 GPM (37 LPM) | | | |
| Delivery head max. | 116 PSIG (8 bar) | | | |
| Thread on outlet | Rd 58 x 1/6 | G 1½ A | Rd 58 x 1/6 | G 1½ A (BSP 1½" male) |
| Seal type | mechanical seal in SiC, o-rings in FKM (foodgrade) | | | |
| Material | outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti | | | |
| Outer-Ø | 50 mm | | | |
| Stator | not included with the pump, separate part number please see list below | | Stator PTFE white, included with the pump | |
| Explosion-proof according to ATEX-Directive 2014/34/EU for use in Zone 0 | not approved for transferring highly flammable liquids in Zone 0 | | EC Type Examination Certificate No. PTB 99 ATEX 4052 X (Ex II 1/2 G IIA T4) | |
| Part No./Weight | | | | |
| Immersion length 27" (700 mm) | 560 24 607 /9.5 lbs | 560 24 707 /9.5 lbs | - | - |
| Immersion length 39" (1000 mm) | 560 24 610 /12.5 lbs | 560 24 710 /12.5 lbs | 560 21 010 /13 lbs | 560 21 110 /13 lbs |
| Immersion length 47" (1200 mm) | 560 24 612 /13.6 lbs | 560 24 712 /13.6 lbs | 560 21 012 /13.6 lbs | 560 21 112 /13.6 lbs |

| Type | F 560 GS1-54/26 | F 560 GS2-54/26 |
|--------------------------------|--|-----------------------------|
| Delivery rate max. | 12 GPM (45 LPM) | |
| Delivery head max. | 116 PSIG (8 bar) | |
| Thread on outlet | Rd 58 x 1/6 | G 1½ A (BSP 1½" male) |
| Seal type | mechanical seal in SiC, o-rings in FKM (foodgrade) | |
| Material | outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti | |
| Outer-Ø | 54 mm | |
| Stator | not included with the pump, separate part number please see list below | |
| Part No./Weight | | |
| Immersion length 27" (700 mm) | 560 25 707 /9.5 lbs | 560 25 807 /9.5 lbs |
| Immersion length 39" (1000 mm) | 560 25 710 /12.5 lbs | 560 25 810 /12.5 lbs |
| Immersion length 47" (1200 mm) | 560 25 712 /13.6 lbs | 560 25 812 /13.6 lbs |

Also available:

- FLUX FOOD pumps conform EG 1935/2004 und EU 10/2011
- Version with cardan shaft for higher torque

Eccentric worm-drive pumps type F 560 GS3A in 3A Version, drive motors see page 17

| Type | F 560 GS3A-50/21 | F 560 GS3A-54/26 |
|--------------------------------|---|-----------------------------|
| Delivery rate max. | 10 GPM (37 LPM) | 12 GPM (45 LPM) |
| Delivery head max. | 116 PSIG (8 bar) | 116 PSIG (8 bar) |
| Thread on outlet | Clamp 2" | Clamp 2" |
| Seal type | closed mechanical seal in stainless steel, sliding faces in SiC, o-rings in FKM (foodgrade) | |
| Material | outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti: ground and polished | |
| Outer-Ø | 50 mm | 54 mm |
| Stator | stator in PTFE included with the pump | |
| Part No./Weight | | |
| Immersion length 27" (700 mm) | 560 24 107 /11.9 lbs | 560 25 107 /12.8 lbs |
| Immersion length 39" (1000 mm) | 560 24 110 /12.5 lbs | 560 25 110 /13.6 lbs |
| Immersion length 47" (1200 mm) | 560 24 112 /13.6 lbs | 560 25 112 /14.8 lbs |

Stator in PTFE, stator housing in stainless steel with safety bar and Inliner

| Type F 560 GS1, GS2 | Part No./Weight |
|---------------------|----------------------------|
| Outer-Ø 50 mm | 560 21 900 /1.3 lbs |
| Outer-Ø 54 mm | 560 23 900 /1.5 lbs |

Hose connection in stainless steel, complete with union nut or clamp connection

| Part No./Weight | Type F 560 GS1 | Type F 560 GS2 | Type F 560 GS3A |
|--|----------------------------|----------------------------|----------------------------|
| for flexible hose, inside 1" (DN 25) | 959 04 115 /0.4 lbs | 959 04 002 /0.4 lbs | - |
| for flexible hose, inside 1-1/4" (DN 32) | 959 04 134 /0.6 lbs | 959 04 003 /0.6 lbs | 959 04 137 /0.9 lbs |
| for flexible hose, inside 1-1/2" (DN 38) | 959 04 130 /0.9 lbs | 959 04 004 /0.9 lbs | 959 04 109 /0.9 lbs |

Eccentric worm-drive pumps type F 550 GS6 with planetary gear, ratio 1 : 6.75

Recommended for transferring

Thin to high viscosity substances up to a maximum viscosity of 80,000 cPs.

Typical applications

Very lightweight and easy-to-handle pump designed for lower capacities. Extremely smooth transfer operations with a speed of 210 or 420 rpm only.

Available drive motors

Single-phase AC motors with capacitor switch or three-phase motors.

Scope of supply

A complete eccentric worm-drive pump consists of: drive motor, pump, stator and hose connection.



F 550 GS6-50/21
with three-phase motor F 403/4


Technical data

| Type | Speed | Curve No. | Performance Chart |
|-----------------|---------------------------------|-----------|-------------------|
| F 550 GS6-50/21 | Motor 1,450 rpm Pump 210 rpm | 1 | |
| | Motor 2,850 rpm Pump 420 rpm | 2 | |
| F 550 GS6-54/26 | Motor 1,450 rpm Pump 210 rpm | 3 | |
| | Motor 2,850 rpm Pump 420 rpm | 4 | |

Values ± 10 %. Delivery rate depends on the velocity of the fluid.

¹ Ex-proof versions available

Eccentric worm-drive pumps with mechanical seal and planetary gear version

| Type | F 550 GS6-50/21 | F 550 GS6-54/26 | F 550 GS6XB-50/21 |
|--------------------------------|---|-----------------------------|--|
| Delivery rate max. | 3.4 GPM (13 LPM) | 5.2 GPM (20 LPM) | 8 GPM (30 LPM) |
| Delivery head max. | 116 PSIG (8 bar) | | |
| Thread on outlet | G 1½ A (BSP 1½" male) NPT Adapters Available | | |
| Seal type | mechanical seal in ceramic oxide, o-rings in FKM | | |
| Material | outer tube, torsion shaft and eccentric worm in stainless steel 316 Ti | | |
| Outer-Ø | 50 mm | 54 mm | 50 mm |
| Stator | not included with the pump, separate part number please see list below | | PTFE black |
| Ex-marking | | | II 1/2 G II B T4  |
| Part No./Weight | | | |
| Immersion length 27" (700 mm) | 550 23 200 /9.4 lbs | 550 23 300 /10.5 lbs | - |
| Immersion length 39" (1000 mm) | 550 23 201 /11.0 lbs | 550 23 301 /12.1 lbs | 550 23 221 /11.5 lbs |
| Immersion length 47" (1200 mm) | 550 23 202 /12.1 lbs | 550 23 302 /13.2 lbs | - |

Also available:

- Version with cardan shaft for higher torque

Stators for eccentric worm-drive pumps type F 550 GS

| Material | Temperature | Recommended for | Part No./Weight outer-Ø 50 mm | Part No./Weight outer-Ø 54 mm |
|---|---------------|---|----------------------------------|----------------------------------|
| NBR white (Nitrile Butadiene Rubber) elastomer | 194°F (90°C) | particularly suitable for oils and greases, also for food products | 550 24 248 /1.1 lbs | 550 25 621 /1.3 lbs |
| NBR black (Nitrile Butadiene Rubber) elastomer | 194°F (90°C) | particularly suitable for oils and greases, not suitable for food products | 550 24 244 /1.1 lbs | 550 25 620 /1.3 lbs |
| FKM (Fluor Rubber) elastomer | 248°F (120°C) | excellent chemical resistance to all different kind of products, not suitable for food products | 550 24 247 /1.1 lbs | 550 25 619 /1.3 lbs |
| PTFE (Ethylene-Tetra-Fluor-Ethylene) solid material | 248°F (120°C) | excellent chemical resistance, particularly suitable for food products, pharmaceuticals and cosmetics | 550 24 256 /1.3 lbs | 550 25 625 /1.5 lbs |

Hose connection in stainless steel complete with union nut G 1½

| Type F 550 GS6 | Part No./Weight |
|--|----------------------------|
| for flexible hose, inside 1" (DN 25) | 959 04 002 /0.4 lbs |
| for flexible hose, inside 1-1/4" (DN 32) | 959 04 003 /0.6 lbs |
| for flexible hose, inside 1-1/2" (DN 38) | 959 04 004 /0.8 lbs |

Drive motors for eccentric worm-drive pumps type F 550 GS6

Single-phase AC motors with capacitor switch, 230 Volt, 50/60 Hz, jet-proof to IP 55, with motor protection switch, 16 ft (5m) cable and plug

| Type | Capacity | Speed | Max. Viscosity | Part No./Weight |
|---------|------------------|-----------|----------------|-----------------------------|
| F 403/2 | 0.6 HP (0.50 kW) | 2,850 rpm | 30,000 cPs | 403 01 015 /17.6 lbs |
| F 403/4 | 0.7 HP (0.55 kW) | 1,450 rpm | 80,000 cPs | 403 01 016 /24.2 lbs |

Three-phase motors 230/400 Volt, 50/60 Hz, jet-proof to IP 55, with motor protection switch, without cable

| Type | Capacity | Speed | Max. Viscosity | Part No./Weight |
|---------|------------------|-----------|----------------|-----------------------------|
| F 403/4 | 0.7 HP (0.55 kW) | 1,450 rpm | 80,000 cPs | 403 01 011 /17.6 lbs |
| F 403/2 | 1 HP (0.75 kW) | 2,850 rpm | 50,000 cPs | 403 01 021 /17.6 lbs |

Three-phase motors 230/400 Volt, 50/60 Hz, explosion-proof to II 2 G EEx e II T3, with cable terminal box, without cable

| Type | Capacity | Speed | Max. Viscosity | Part No./Weight |
|------------|------------------|-----------|----------------|-----------------------------|
| F 403/6 Ex | 0.7 HP (0.55 kW) | 930 rpm | 80,000 cPs | 403 01 018 /10,0 kg |
| F 403/4 Ex | 0.7 HP (0.55 kW) | 1,450 rpm | 80,000 cPs | 403 01 017 /17.6 lbs |
| F 403/2 Ex | 1 HP (0.75 kW) | 2,850 rpm | 50,000 cPs | 403 01 019 /17.6 lbs |

| Accessories | Part No./Weight |
|---|----------------------------|
| Carrying handle, stainless steel for IP 55 motors | 001 10 584 /2.2 lbs |
| Carrying handle, stainless steel for explosion-proof motors | 001 10 587 /2.2 lbs |

Eccentric worm-drive pumps with bearing flange for use in horizontal version

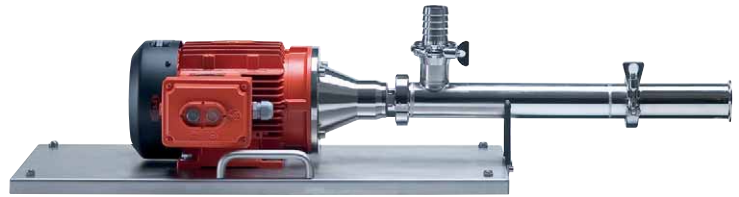
Recommended for transferring

Thin to high viscosity, even pasty, still free flowing substances.

Typical applications

Eccentric worm-drive pumps Type F 550 TR and F 560 TR are designed for horizontal use.

A base plate or a portable cart facilitates the installation with a three-phase electric motor.



F 550 S-54/26 TR with three-phase motor

This pump design is available in different versions:

Type F 550 SF TR with bearing flange in stainless steel and clamp connection between outer tube and stator housing is recommended for use in pharmaceutical and food industries.

Type F 560 S TR with bearing flange in stainless steel and clamp connection between outer tube and stator housing is recommended for use in cosmetics, food and pharmaceutical industries.

The pump can be stripped down in no time for cleaning and/or sterilization.

A special shaft design allows reversible flow operations.

Available drive motors

Three-phase electric motors with bottom flange

Scope of supply

A complete horizontal pump consists of: drive motor, pump and PTFE stator, hose connection on inlet and outlet, base plate or pump trolley.



F 560 S-54/26 TR with three-phase motor

Technical data




| Type | Viscosity (cPs) | Curve No. | Performance Chart |
|------------------|-----------------|-----------|-------------------|
| F 550 S-54/26 TR | 1 | 1 | |
| F 560 S-54/26 TR | 1,000 - 2,000 | 2 | |
| | 20,000 - 25,000 | 3 | |

With higher viscosities delivery rate will be lower, depending on the velocity of the fluid.

Values $\pm 10\%$ at 930 rpm. Delivery rate depends on the velocity of the fluid.

¹ Ex-proof versions available

Eccentric worm-drive pumps type F 550 and F 560 with bearing flange for use in horizontal version

| Type | F 550 S3-54/26 GW TR | F 560 S2-54/26 TR L/R | F 560 S-54/26 TR L/R  |
|--|--|---|--|
| Direction | one direction | clockwise / anticlockwise | |
| Delivery rate max. | 12 GPM (45 l/min) | | |
| Delivery head max. | 116 PSIG (8 bar) | | |
| Connection Suction side Discharge connection | Clamp 2" Clamp 2" | Clamp 2" G 1 1/2 A | Clamp 2" Clamp 2" |
| Seal type | mechanical seal in ceramic oxide, o-rings in FKM | | |
| Shaft | pinned cardan shaft | | cardan shaft, pinned, easily detachable |
| Material | bearing flange in aluminium; flexible shaft and eccentric worm in stainless steel 316 Ti | bearing flange, shaft and eccentric worm in stainless steel 316 Ti | |
| Outer-Ø | 54 | | |
| Stator | PTFE  | not included in the delivery | |
| Ex-marking | Ex II  2G c IIB TX | - | - |
| Part No. | 550 23 634 | 550 23 664 | 560 23 202 |

| | Part No./Weight |
|---|----------------------------|
| Base plate in stainless steel (316 Ti) | 001 15 033/12.3 lbs |
| Pump trolley in stainless steel (304) | 001 15 038/19.8 lbs |

Hose connection in stainless steel, complete with union nut or clamp connection

| Part No./Weight | Type F 550 S TR Outlet G 1 1/2 A (BSP 1 1/2 male) | Type F 550 S TR Inlet G 2 A (BSP 2" male) | Type F 550 S TR Clamp 2" |
|--|---|---|-----------------------------|
| for flexible hose, inside 1" (DN 25) | 959 04 002/0.4 lbs | - | - |
| for flexible hose, inside 1-1/4" (DN 32) | 959 04 003/0.6 lbs | 959 04 059/0.6 lbs | 959 04 137/0.8 lbs |
| for flexible hose, inside 1-1/2" (DN 38) | 959 04 004/0.8 lbs | 959 04 060/0.8 lbs | 959 04 109/0.8 lbs |

Drive Motors with bottom flange for eccentric worm-drive pumps type F 550 S TR and F 560 S TR

Three-phase motors 230/400 Volt, 50/60 Hz, jet-proof IP 55, with motor protection switch, without cable

| Capacity | Speed | Part No./Weight |
|-----------------|---------|----------------------------|
| 1 HP (0.75 kW) | 700 rpm | 001 02 151/48.5 lbs |
| 1.5 HP (1.1 kW) | 930 rpm | 001 02 159/37.4 lbs |

Drive motors with bottom flange in other capacities on request.
Accessories for drive motors see page 16

Drive motors for eccentric worm-drive pumps

Drive motors for eccentric worm-drive pumps type F 550 and F 560* version with bearing flange



Three-phase motor



Compressed-air motor

Three-phase motors 230/400 Volt, 50/60 Hz, with motor protection switch, without cable

| Capacity | Speed | Enclosure | Part No./Weight |
|------------------|---------|-----------|---------------------|
| 1 HP (0.75 kW) | 930 rpm | IP 55 | 001 01 052/27.5 lbs |
| 1 HP (0.75 kW) | 700 rpm | IP 55 | 001 01 546/48.5 lbs |
| 1.25 HP (1.1 kW) | 930 rpm | IP 55 | 001 01 053/32.5 lbs |
| 1.25 HP (1.1 kW) | 700 rpm | IP 55 | 001 01 547/50.7 lbs |

Three-phase motors 230/400 Volt, 50/60 Hz, with cable terminal box, without cable

| Capacity | Speed | Enclosure | Part No./Weight |
|------------------|---------|-----------|---------------------|
| 1 HP (0.75 kW) | 930 rpm | IP 55 | 001 01 030/27.5 lbs |
| 1 HP (0.75 kW) | 700 rpm | IP 55 | 001 01 506/48.5 lbs |
| 1.25 HP (1.1 kW) | 930 rpm | IP 55 | 001 01 031/32.5 lbs |
| 1.25 HP (1.1 kW) | 700 rpm | IP 55 | 001 01 507/50.7 lbs |

Three-phase motors 230/400 Volt, 50/60 Hz, explosion-proof, with cable terminal box, without cable



| Capacity | Speed | Explosion-proof to | Part No./Weight |
|------------------|---------|--------------------|---------------------|
| 1 HP (0.75 kW) | 930 rpm | II 2 G EEx e II T3 | 001 01 066/33.0 lbs |
| 1.25 HP (1.1 kW) | 930 rpm | II 2 G EEx e II T4 | 001 01 067/39.6 lbs |
| 1.5 HP (0.95 kW) | 700 rpm | II 2 G EEx e II T4 | 001 01 567/48.5 lbs |

*drive motors for sanitary pumps in special white painting on request

| Accessories | Part No./Weight |
|---|--|
| Carrying handle , stainless steel for three-phase motors, not explosion-proof for three-phase motors, explosion-proof | 001 10 571/2.2 lbs 001 10 586/2.6 lbs |
| Power supply cable , 16ft (5m) long with plug 16ft (5m) long without plug yardware | 934 08 020/2.8 lbs 934 08 025/2.8 lbs 934 08 901/0.4 lbs |
| Cekon-plug , 5-pole | 937 01 014/0.2 lbs |
| Motor protection switch, explosion-proof to II 2 G EEx de IIC T6 1 HP (0.75 kW), 700 and 930 rpm, range of setting 1.6 – 2.5 A 1.25 HP and 1.5 HP (0.95 and 1.1 kW), 700 and 930 rpm, range of setting 2.5 – 4.0 A | 936 06 118/5.7 lbs 936 06 119/5.7 lbs |

Compressed-air motors, max. operating pressure 100 PSIG explosion-proof to II 2 G D c T4



| Type | Capacity | Speed at 87 PSIG | Includes: | Part No./Weight |
|------|----------|------------------|---|---------------------|
| G22A | 1.5 HP | 900 rpm | Motor, mounting plate, speed controller, coupling and bolts | FLU 01 002/11.0 lbs |
| G11A | 4 HP | 900 rpm | Motor, mounting plate, speed controller, coupling and bolts | FLU 01 017/15.4 lbs |
| G28A | 5 HP | 900 rpm | Motor, mounting plate, speed controller, coupling and bolts | FLU 01 018/22.0 lbs |

| Accessories | Part No./Weight |
|--|--------------------|
| Carrying handle , stainless steel | 001 10 520/2.2 lbs |
| Filter-regulator-lubricator unit | FLU 00 041/2.2 lbs |
| Compressed-air hose , in PVC, DN 13, yardware | 001 10 008/0.4 lbs |
| Hose coupling , brass, for compressed-air hose DN 13 | 959 13 122/0.2 lbs |
| Nipple , brass, for hose coupling DN 13 – G ½ A (BSP ½" male) | 959 13 121/0.2 lbs |
| Hose nozzle , brass, for compressed-air hose, DN 13 – G ½ A (BSP ½" male) | 959 05 017/0.2 lbs |

Drive motors for eccentric worm-drive pumps type F 550 and F 560 version with planetary gear



FEM 4070



F 457/F 457 EL



F 458/F 458-1



F 460 Ex/F 460-1 Ex

Commutator motors 120V/60 Hz, 230 V/50/60 Hz, 16 ft (5m) cable and plug

| Type | Capacity | Protected to | Part No./Weight version with NVR* | Part No./Weight version without NVR* |
|---------------|----------|------------------------|-----------------------------------|--------------------------------------|
| FEM 4070 | 500 Watt | splash proof IP 24 | 407 01 000/5.7 lbs | 407 01 001/5.7 lbs |
| F 457 | 800 Watt | splash proof IP 24 | 457 01 005/8.8 lbs | 457 01 002/8.8 lbs |
| F 457 EL** | 800 Watt | splash proof IP 24 | 457 01 003/8.8 lbs | 457 01 041/8.8 lbs |
| F 458 | 460 Watt | jet-proof to IP 55 | 458 00 006/11.2 lbs | 458 00 001/11.2 lbs |
| F 458 EL** | 460 Watt | jet-proof to IP 55 | 458 00 027/11.2 lbs | - |
| F 458-1 | 700 Watt | jet-proof to IP 55 | 458 01 004/13.0 lbs | 458 01 001/13.0 lbs |
| F 460 Ex | 460 Watt | II 2 G Ex de IIC T6 Gb | 460 00 006/11.2 lbs | 460 00 001/11.2 lbs |
| F 460 Ex EL** | 460 Watt | II 2 G Ex de IIC T6 Gb | 460 00 028/11.2 lbs | - |
| F 460-1 Ex | 700 Watt | II 2 G Ex de IIC T6 Gb | 460 01 004/13.0 lbs | 460 01 001/13.0 lbs |

NVR* = no-volt release

EL** = version with infinitely variable speed variator

Accessories

Carrying handle, steel painted in black for drive motor Type F 457 for drive motors Type F 458 and F 460 Ex

Part No./Weight

001 10 533/.6 lbs
001 10 557/.6 lbs



F 416 Ex



F 416-1 Ex



F 416-2 Ex

Compressed air motors, max. operating pressure 6 bar, thread for compressed air hose G ¼ (BSP ¼" female)

| Type | Capacity | Explosion-proof to | Version | Part No./Weight |
|------------|----------|--------------------|--------------------|--------------------|
| F 416 Ex | 470 Watt | II 2 G cp IIC T6 | with trigger valve | 416 00 122/3.1 lbs |
| F 416-1 Ex | 470 Watt | II 2 G cp IIC T6 | without valve | 416 00 125/1.9 lbs |
| F 416-2 Ex | 470 Watt | II 2 G cp IIC T6 | with ball valve | 416 00 030/2.2 lbs |

Accessories

Filter-regulator-lubricator unit

Part No./Weight

FLU 00 041/2. lbs

Compressed-air hose, electrically conductive, DN 10, yardware

001 10 098/.4 lbs

Hose coupling, brass, for compressed-air hose DN 10

959 13 066/.2 lbs

Nipple brass, for hose coupling DN 10 - G ¼ A (BSP ¼" male)

959 13 065/.2 lbs

Hose nozzle, brass, for compressed-air hose, DN 10 - G ¼ A (BSP ¼" male)

959 05 022/.2 lbs

Further accessories for drive motors please see special brochure FLUX ACCESSORIES.

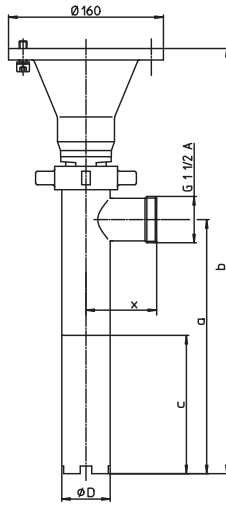
Viscosity Chart

| Media | Viscosity | Temperature |
|----------------------------|-----------------|-------------------|
| Alkyd resins | 500–3,000 cPs | 68°F (20°C) |
| Apple-purée | 1,500 cPs | 68°F (20°C) |
| Baby food | 1,400 cPs | 68°F (20°C) |
| Brewers's yeast | 370 cPs | 68°F (20°C) |
| Butter | 30,000 cPs | 104°F (40°C) |
| Butter cream, sour | 550 cPs | 68°F (20°C) |
| Butter fat | 45 cPs | 104°F (40°C) |
| Castor oil | 2,420 cPs | 50°F (10°C) |
| Castor oil | 1,000–1,500 cPs | 68°F (20°C) |
| Caustic soda 50 % | 45 cPs | 68°F (20°C) |
| Chocolate confectionery | 2,600 cPs | 104°F (40°C) |
| Chocolate sauce | 280 cPs | 50°F (10°C) |
| Cleaning emulsions | 1,500 cPs | 158°F (70°C) |
| Cocoa butter | 50 cPs | 140°F (60°C) |
| Cocoa paste | 4,000 cPs | 68°F (20°C) |
| Coconut oil | 80 cPs | 68°F (20°C) |
| Cod-liver oil | 35 cPs | 104°F (40°C) |
| Corn oil | 30 cPs | 140°F (60°C) |
| Cotton seed oil | 60 cPs | 68°F (20°C) |
| Cream, 30–50 % fat | 11–115 cPs | 68°F (20°C) |
| Dental adhesive | 30,000 cPs | 68°F (20°C) |
| Dipropylene glycol | 107 cPs | 68°F (20°C) |
| Evaporated milk | 80 cPs | 104°F (40°C) |
| Evaporated milk, sweetened | 6,100 cPs | 68°F (20°C) |
| Fruit juice | 50 cPs | 68°F (20°C) |
| Fruit juice concentrate | 1,500 cPs | 68°F (20°C) |
| Fruit mash | 600 cPs | 68°F (20°C) |
| Gelatine | 1,200 cPs | 113°F (45°C) |
| Glucose | 4,300–6,800 cPs | 77–86°F (25–30°C) |
| Glycerine 100 % | 4,500 cPs | 50°F (10°C) |
| Glycerine 100 % | 1,490 cPs | 68°F (20°C) |
| Glycol | 20 cPs | 68°F (20°C) |
| Gravy | 110 cPs | 176°F (80°C) |
| Hand creme | 8,000 cPs | 68°F (20°C) |
| Honey | 2,000 cPs | 104°F (40°C) |
| Jam | 8,500 cPs | 68°F (20°C) |
| Lacquers (25 % pigments) | 3,000 cPs | 68°F (20°C) |
| Lard | 65 cPs | 104°F (40°C) |
| Latex emulsions | 200 cPs | 68°F (20°C) |
| Linseed oil | 55 cPs | 68°F (20°C) |
| Liqueurs | 10–100 cPs | 68°F (20°C) |
| Liquid egg | 150 cPs | 113°F (45°C) |
| Liquid soap | 85 cPs | 140°F (60°C) |
| Liquid wax | 500 cPs | 194°F (90°C) |
| Lubricating oil | 60–200 cPs | 68°F (20°C) |
| Machine oil, heavy | 600 cPs | 68°F (20°C) |
| Machine oil, light | 150 cPs | 68°F (20°C) |
| Malt extract | 9,500 cPs | 68°F (20°C) |
| Mayonnaise | 2,000 cPs | 68°F (20°C) |

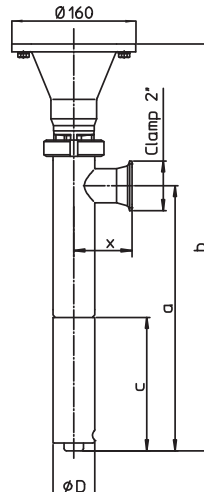
| Media | Viscosity | Temperature |
|----------------------------|-----------------|--------------|
| Molasses 80° Bx | 10,000 cPs | 68°F (20°C) |
| Molasses 83° Bx | 50,000 cPs | 68°F (20°C) |
| Molasses 85° Bx | 100,000 cPs | 68°F (20°C) |
| Motor oil SAE 10W | 160 cPs | 68°F (20°C) |
| Motor oil SAE 140 | 2,300 cPs | 68°F (20°C) |
| Motor oil SAE 20W | 160 cPs | 68°F (20°C) |
| Motor oil SAE 30 | 380 cPs | 68°F (20°C) |
| Motor oil SAE 40 | 600 cPs | 68°F (20°C) |
| Motor oil SAE 50 | 900 cPs | 68°F (20°C) |
| Motor oil SAE 5W | 50 cPs | 68°F (20°C) |
| Motor oil SAE 90 | 700 cPs | 68°F (20°C) |
| Oleic acid | 40 cPs | 68°F (20°C) |
| Olive oil | 85 cPs | 68°F (20°C) |
| Palm oil | 130 cPs | 68°F (20°C) |
| Paraffin emulsion | 3,000 cPs | 68°F (20°C) |
| Peanut oil | 40 cPs | 104°F (40°C) |
| Polyester resin | 3,000 cPs | 86°F (30°C) |
| Polyglycerine caprylate | 6,000–7,000 cPs | 59°F (15°C) |
| Polymer solution | 20,000 cPs | 68°F (20°C) |
| Polyol (A-Component) | 85,000 cPs | 50°F (10°C) |
| Polyol, non-pigmented | 500–5,000 cPs | 68°F (20°C) |
| Potassium hydroxide | 67 cPs | 68°F (20°C) |
| Printing ink (and colours) | 550–2,200 cPs | 104°F (40°C) |
| Pudding | 1,000 cPs | 104°F (40°C) |
| Rapeseed oil | 160 cPs | 68°F (20°C) |
| Resin solution | 7,100 cPs | 68°F (20°C) |
| Salad dressing | 1,300–2,600 cPs | 68°F (20°C) |
| Salad oil | 65 cPs | 68°F (20°C) |
| Shampoo | 3,000 cPs | 68°F (20°C) |
| Soft cheese | 30,000 cPs | 140°F (60°C) |
| Soybean oil | 80 cPs | 68°F (20°C) |
| Soybean oil, treated | 600–800 cPs | 68°F (20°C) |
| Starch solution 25° Baumé | 300 cPs | 68°F (20°C) |
| Steam turbine oil | 300–1,100 cPs | 68°F (20°C) |
| Sugar solution 65° Bx | 120 cPs | 68°F (20°C) |
| Sugar solution 70° Bx | 400 cPs | 68°F (20°C) |
| Tomato ketchup | 1,000 cPs | 86°F (30°C) |
| Tomato paste | 195 cPs | 68°F (20°C) |
| Tooth paste | 70,000 cPs | 104°F (40°C) |
| Train oil | 100 cPs | 68°F (20°C) |
| Transformer oil | 30 cPs | 86°F (30°C) |
| Transformer oil | 75 cPs | 50°F (10°C) |
| Vegetable soup | 430 cPs | 68°F (20°C) |
| Vitamin oil | 4,500 cPs | 50°F (10°C) |
| Water-based lacquer | 900 cPs | 68°F (20°C) |
| Whey | 800–1,500 cPs | 104°F (40°C) |
| Whipped foods | 1,500 cPs | 104°F (40°C) |
| White oil | 300 cPs | 68°F (20°C) |
| Yogurt | 150 cPs | 104°F (40°C) |

The media listed above have to be considered as examples only, as their viscosity may change substantially due to different composition and/or other temperatures. An in-service test will provide the utmost certainty in selecting the most suitable pump type. This applies especially to "Non-Newtonian liquids", the exact viscosity of which is difficult to define and may change during pumping operation (intrinsic viscosity). FLUX sales representatives will be at your disposal for an individual demonstration.

F 550 S

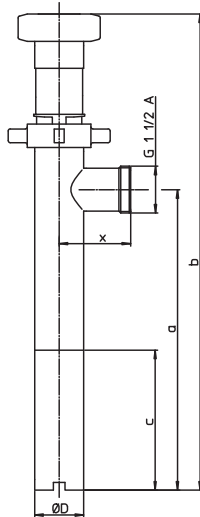


F 560 S

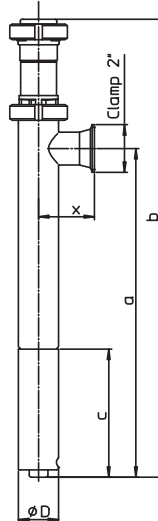


| Type | F 550 S-50/21 | | | | | F 560 S-50/21 | |
|--------------------------------|---------------|----|------|------|-----|---------------|-----|
| Dimensions in mm | ØD | x | a | b | c | b | c |
| Immersion length 27" (700 mm) | 50 | 73 | 714 | 897 | 143 | 897 | 145 |
| Immersion length 39" (1000 mm) | 50 | 73 | 1014 | 1197 | 143 | 1197 | 145 |
| Immersion length 47" (1200 mm) | 50 | 73 | 1214 | 1397 | 143 | 1397 | 145 |
| Type | F 550 S-54/26 | | | | | F 560 S-54/26 | |
| Dimensions in mm | ØD | x | a | b | c | b | c |
| Immersion length 27" (700 mm) | 54 | 75 | 740 | 923 | 170 | 924 | 172 |
| Immersion length 39" (1000 mm) | 54 | 75 | 1040 | 1223 | 170 | 1224 | 172 |
| Immersion length 47" (1200 mm) | 54 | 75 | 1240 | 1423 | 170 | 1424 | 172 |

F 550 GS



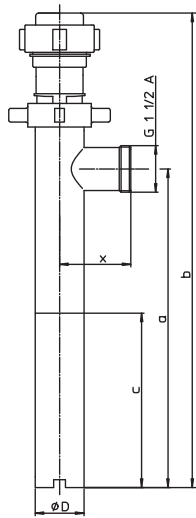
F 560 GS



| Type | F 550 GS-50/21 | | | | | F 560 GS-50/21 | |
|--------------------------------|----------------|----|------|------|-----|----------------|-----|
| Dimensions in mm | ØD | x | a | b | c | b | c |
| Immersion length 27" (700 mm) | 50 | 73 | 714 | 887 | 143 | 887 | 145 |
| Immersion length 39" (1000 mm) | 50 | 73 | 1014 | 1187 | 143 | 1187 | 145 |
| Immersion length 47" (1200 mm) | 50 | 73 | 1214 | 1387 | 143 | 1387 | 145 |
| Type | F 560 GS-54/26 | | | | | | |
| Dimensions in mm | ØD | x | a | b | c | | |
| Immersion length 27" (700 mm) | 54 | 75 | 740 | 914 | 172 | | |
| Immersion length 39" (1000 mm) | 54 | 75 | 1040 | 1214 | 172 | | |
| Immersion length 47" (1200 mm) | 54 | 75 | 1240 | 1414 | 172 | | |

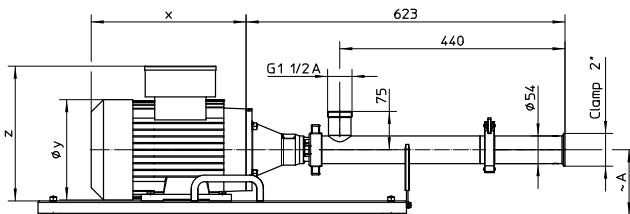
Dimensions

F 550 GS6



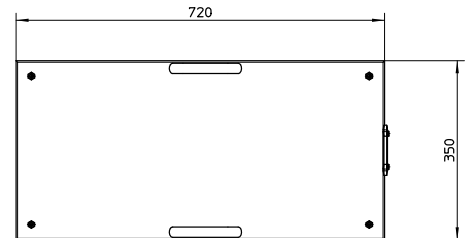
| Type | F 550 GS6-50/21 | | | | | F 550 GS6-54/26 | | | | |
|--------------------------------|-----------------|----|------|------|-----|-----------------|----|------|------|-----|
| Dimensions in mm | ϕD | x | a | b | c | ϕD | x | a | b | c |
| Immersion length 27" (700 mm) | 50 | 73 | 713 | 867 | 143 | 54 | 75 | 740 | 894 | 170 |
| Immersion length 39" (1000 mm) | 50 | 73 | 1013 | 1167 | 143 | 54 | 75 | 1040 | 1194 | 170 |
| Immersion length 47" (1200 mm) | 50 | 73 | 1213 | 1367 | 143 | 54 | 75 | 1240 | 1394 | 170 |

F 550 S-54/26 TR

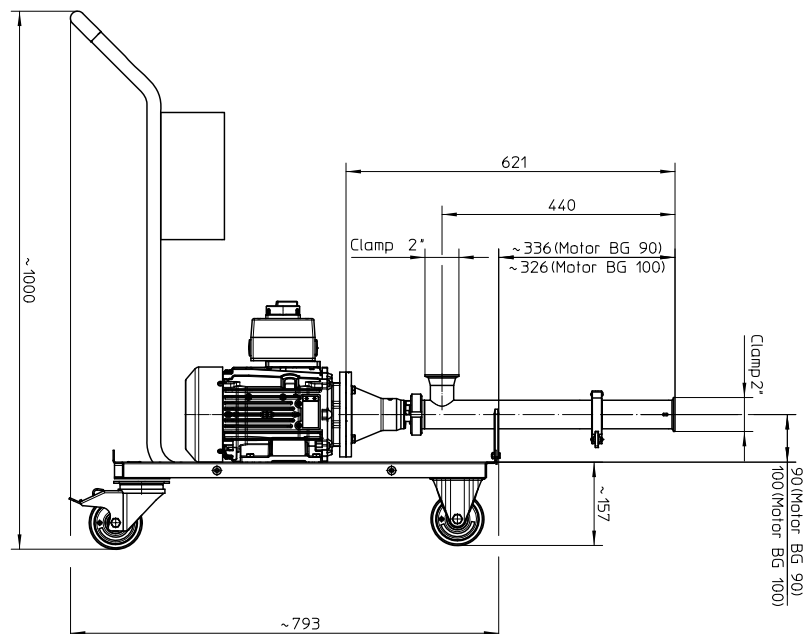


Console

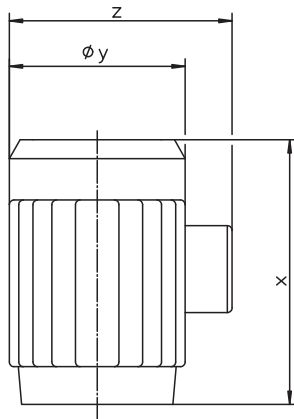
Length: 720 mm
Width: 350 mm



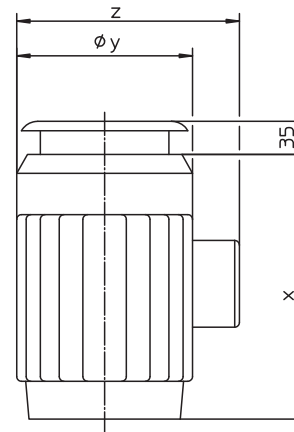
Pump trolley with pump F 560 S-54/26 TR



Three-phase motor for pumps with flange TPM IP 55



TPM Ex



Three-phase motors (TPM), jet-proof to IP 55, for use with F 550 S and F 560 S

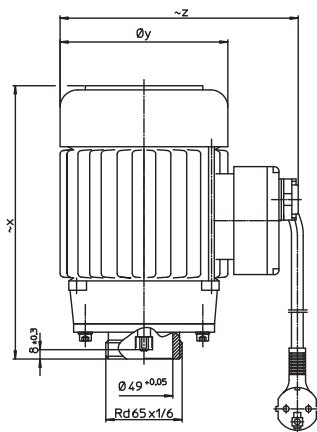
| Capacity | Speed | X | ØY | Z | |
|----------|---------|-----|-----|-----|-----|
| | | | | KK | MSS |
| 0.75 kW | 930 rpm | 286 | 182 | 244 | 305 |
| 0.75 kW | 700 rpm | 303 | 196 | 254 | 314 |
| 1.1 kW | 930 rpm | 303 | 182 | 244 | 305 |
| 1.1 kW | 700 rpm | 303 | 196 | 254 | 314 |

Three-phase motors (TPM), explosion-proof, for use with F 550 S and F 560 S

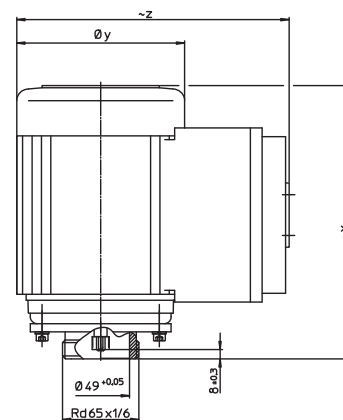
| Capacity | Speed | X | ØY | Z (KK) |
|----------|---------|-----|-----|--------|
| 0.75 kW | 930 rpm | 244 | 176 | 237 |
| 1.1 kW | 930 rpm | 269 | 176 | 237 |
| 0.95 kW | 700 rpm | 303 | 196 | 256 |
| 1.1 kW | 700 rpm | 303 | 196 | 252 |

Motors for pumps with planetary gear GS6

SPM



TPM



Single-phase motor (SPM) with capacitor switch, for use with F 550 GS6

| Type | Capacity | Speed | X | ØY | Z (KK) |
|---------|----------|----------|-----|-----|--------|
| F 403/2 | 0.5 kW | 2850 rpm | 233 | 143 | 203 |
| F 403/4 | 0.55 kW | 1450 rpm | 259 | 160 | 208 |

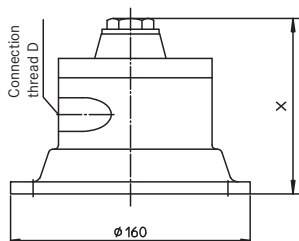
Three-phase motor (TPM), jet-proof to IP 55, for use with F 550 GS6

| Type | Capacity | Speed | X | ØY | Z (MSS) |
|---------|----------|----------|-----|-----|---------|
| F 403/4 | 0.55 kW | 1450 rpm | 233 | 143 | 257 |
| F 403/2 | 0.75 kW | 2850 rpm | 259 | 160 | 277 |

KK = cable terminal box MSS =
Motor protection switch

Dimensions

Compressed-air motors

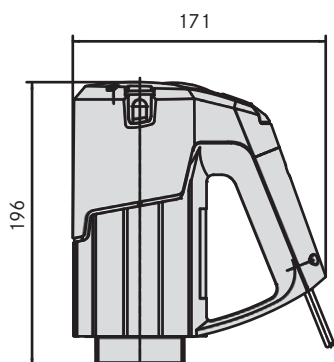


for use with F 550 S and F 560 S version with bearing flange

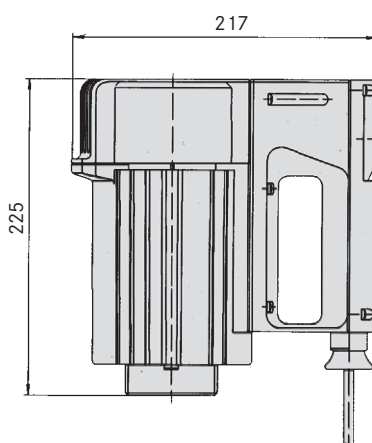
| Type | Capacity | Speed | X | Connection thread D |
|----------|----------|----------|-----|--|
| FPM 4 Ex | 0.5 kW | 1000 rpm | 117 | G $\frac{3}{8}$ " (BSP $\frac{3}{8}$ " female) |
| FPM 6 Ex | 1.1 kW | 1000 rpm | 155 | G $\frac{1}{2}$ " (BSP $\frac{1}{2}$ " female) |
| FPM 8 Ex | 1.8 kW | 1000 rpm | 177 | G $\frac{1}{2}$ " (BSP $\frac{1}{2}$ " female) |

Drive motors for F 550 and F 560 version with planetary gear GS

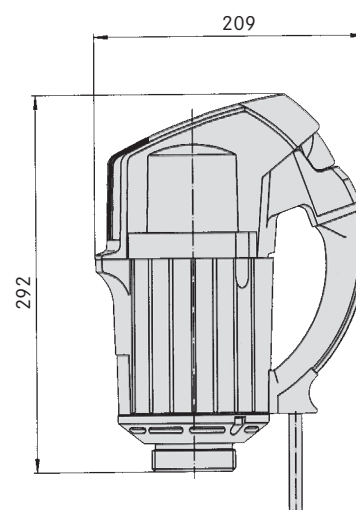
FEM 4070



F 457/F 457 EL

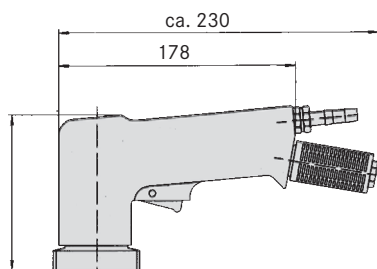


F 458/F 458 EL/ 458-1/F 460 Ex/F 460 Ex EL/F 460-1 Ex

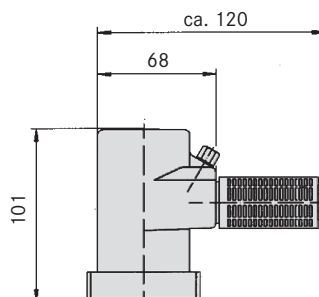


Compressed-air motor for F 550 and F 560 with planetary gear GS

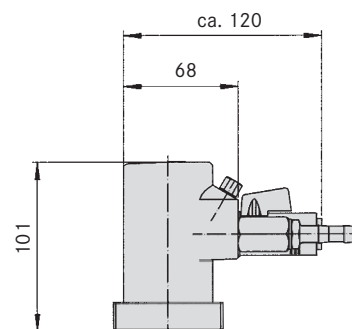
F 416 Ex



F 416-1 Ex



F 416-2 Ex



With motor and pump assembled, the total length reduces by 16 mm



VISCOFLUX lite / VISCOFLUX lite E

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

The drum emptying system VISCOFLUX lite is used to transfer higher-viscosity media which are just capable of flowing, out of ISO drums with lid. In the Ex version it is suitable for the use in hazardous areas of zone 1 and for transferring a wide variety of flammable media (zone 0/1). The system transports the media gently and continuously. Like the VISCOFLUX and the VISCOFLUX mobile, the VISCOFLUX lite leaves just less than 1 % of the media in the drum.

Advantages

- **Resource-saving – up to less than 1 % residue**
Efficient use of the medium and low expenditure for disposal
- **Ex-Version available** For applications in zone 0/1
- **Continuous and gentle transport** No structural change of the medium
- **Customised solution** Due to individual selection of drive motor in combination with matching eccentric worm-drive pump
- **Quick to install** With few components
- **For ISO drums** Ø 571 mm
- **For sea container drums** Ø 540 mm at the top, Ø 571 mm at the bottom
- Ask about custom capability for container sizes not listed



VISCOFLUX mobile S

The stand-alone solution for transferring high-viscosity fluids

VISCOFLUX mobile is a portable and thus very flexible variant of the tried and tested VISCOFLUX drum emptying system. VISCOFLUX mobile is ideal for the gentle conveyance of high-viscosity, paste-like and non-free flowing materials to 500,000+ cPs, even from conical drums with aseptic bags. Industrial and Pharma Food Cosmetic versions are available - each for various drum diameters.

Advantages

- **Mobile use** Can be moved to the drum without a crane or fork-lift truck
- **Low space requirement** Can be transported even in lifts
- **One transfer system for different drum types** Also suitable for conical drums and for drums which have suffered the usual transportation dents
- **Energy savings** Usually no heating of the medium necessary
- **No structural change to the medium** Due to gentle, continuous transport
- **Completely made of stainless steel**, protection class IP 66
- Ask about custom capability for container sizes not listed

(For further information please reference the brochures for the products above)



More than just pumps



Today the FLUX name is recognised around the globe as the trademark for top standards in pump technology. Everything started with the invention of the electric drum pump in 1950. Nowadays FLUX has an extensive range of products each of which can be customized. FLUX pumps are used for example in the chemical and pharmaceutical industries; in machinery and plant engineering as well as companies in electroplating, effluent treatment and the foodstuffs sector.

Whether single-product or system solution – FLUX quality is synonymous with a long service life, excellent economy and maximum safety.

In addition to the excellent product quality FLUX customers appreciate the superb level of expertise our staff has to offer as well as their genuine customer focus.

These days FLUX-GERÄTE GMBH supplies pumps to almost 100 countries around the globe.

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