

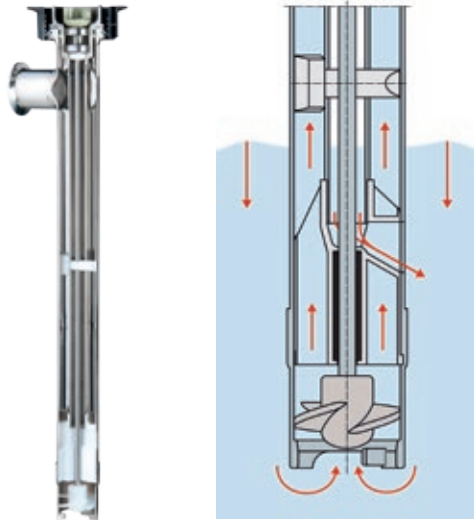
# Technical Data Sheet

Drum pumps F/FP 427



More than just pumps

## Drum pumps F/FP 427



### Advantages/characteristics:

- ▶ Ideal as a hygienic pump
- ▶ Minimised dead spot areas
- ▶ No seal in liquid zone
- ▶ Can be easily dismantled into individual parts for cleaning
- ▶ Can be disassembled virtually without tools
- ▶ Radial shaft seal rings prevent vapours and liquid from penetrating into the coupling area
- ▶ Simultaneous storage of shaft and inner tube with plug-in bearing
- ▶ All parts that come into contact with the medium can be sterilized
- ▶ Also pumps solids-laden fluids, e.g. fruits with pulp, soups with spices



| Technical data/type                                    | F 427 S3  | F 427 S4                       | FP 427 S FOOD | F 427 S 3A     |
|--|---|--------------------------------|---------------|----------------|
| Seal type  | No seal in liquid zone  |                                |               |                |
| Version  | With impeller for max. flow rate                                |                                |               |                |
| Pressure-side connection                               | Thread G 1 1/4 A  | Thread Rd 58 x 1/4             | Clamp 1 1/2"  |                |
| <b>Materials</b>                                       |   |                                |               |                |
| Pump   | Stainless steel 316 Ti  |                                |               |                |
| O-Ring <sup>2)</sup>                                   | FKM   |                                |               |                |
| Shaft  | Stainless steel   |                                |               |                |
| Impeller   | ETFE  | Stainless steel                |               | ETFE           |
| <b>Dimensions</b>                                      |   |                                |               |                |
| Outer tube diameter / Impeller diameter (mm)           | 43/38   |                                |               |                |
| Standard immersion depth                               | 27", 39", 47" (700 mm, 1000 mm, 1200 mm)                        |                                |               |                |
| Other immersion depths / special lengths <sup>3)</sup> | 8" - 78" (200 - 2000 mm)  |                                |               |                |
| <b>Operating range</b>                                 |   |                                |               |                |
| Container  | Drums, IBCs, tanks, canisters, hobbocks, mixing containers etc. |                                |               |                |
| Media temperature                                      | 32 - 212 °F (0 - 100 °C)  |                                |               |                |
| Ambient temperature                                    | -4 - 104 °F (-20 - 40 °C)                                       |                                |               |                |
| Weight Ø 43, ID 1000 mm                                | 6.4 lbs (2.9 kg)  |                                |               |                |
| <b>Certificates</b>                                    |   |                                |               |                |
| Food approvals   | -   | <br>EG 1935/2004<br>FDA CFR 21 |               | <br>3A-version |
| Silicone-free version                                  | -   |                                |               |                |
| <b>Performance data<sup>1)</sup></b>                   |   |                                |               |                |
| Flow rate max.   | <b>Impeller</b><br>63 GPM (240 LPM)                             |                                |               |                |
| Delivery head max.                                     | 42 ft (13 m)  |                                |               |                |
| Viscosity max.   | 1000 cPs  |                                |               |                |

1) Depending on pump version, media and motor

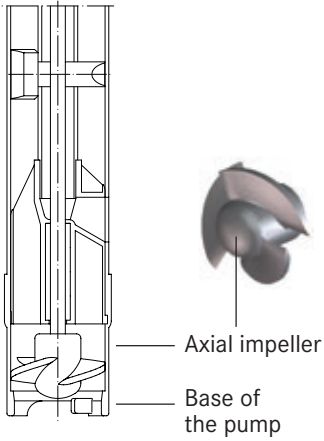
2) Other materials available on request

3) In gradations of 100 mm

# Design, function and dimensions

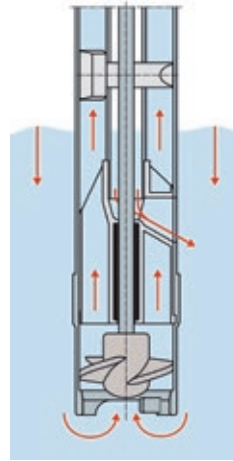
## Drum pumps F/FP 427

### Design:



F/FP 427 with bearing housing and axial impeller

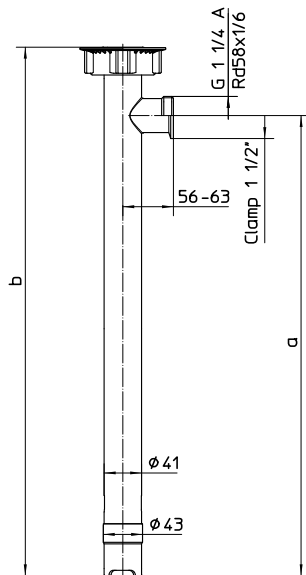
### Function:



F/FP 427 with relief opening for optimum outflow of medium

### Dimensions:

#### Drum pump F/FP 427



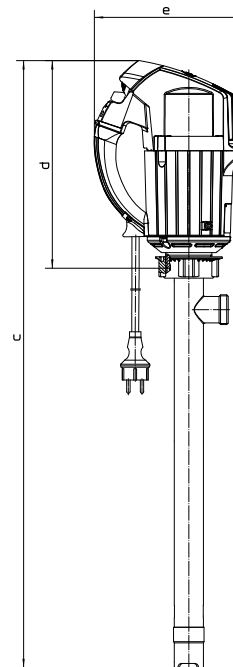
#### Standard immersion depth (ID)

| Ø (mm) | ID (mm) | a (mm) | b (mm) |
|--------|---------|--------|--------|
| 43     | 700     | 715    | 790    |
|        | 1000    | 1015   | 1090   |
|        | 1200    | 1215   | 1290   |

#### Other immersion depths (ID)

a = ID + 15 and b = ID + 90

#### Drum pump with motor



#### F/FP 427 with motor

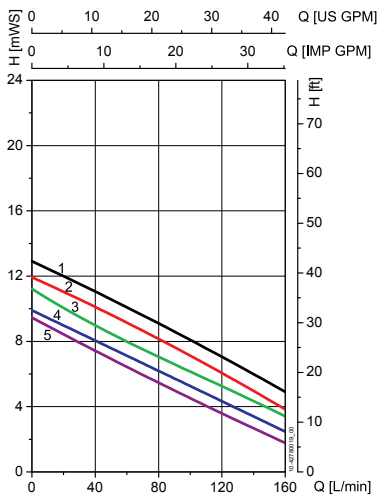
| Motor type        | c (mm)     | d (mm) | e (mm) |
|-------------------|------------|--------|--------|
| FEM 4070          | b + d - 16 | 207    | 186    |
| F 457 (EL)        |            | 225    | 217    |
| F 458 (-1, EL)    |            | 292    | 209    |
| F 460 Ex (-1, EL) |            | 292    | 209    |
| FBM 4000 Ex       |            | 292    | 209    |
| F 416 Ex          |            | 119    | 230    |
| F 416-1 Ex        |            | 101    | 120    |
| F 416-2 Ex        |            | 101    | 120    |

# Performance diagrams<sup>1)</sup> & part numbers

## Drum pumps F/FP 427

The performance diagram applies to the Ø 38 impeller and the indicated motors, for all pipe types respectively.

### Axial impeller Ø 38



- 1) F 416 Ex, F 416-1 Ex, F 416-2 Ex (6 bar)
- 2) F 457, F 457 EL, F 458-1, F 460-1 Ex
- 3) FBM 4000 Ex
- 4) FEM 4070
- 5) F 458, F 458 EL, F 460 Ex, F 460 Ex EL

### Part numbers:

| Standard immersion depths                   |          |       |        |               |            |              |               |               |               |  |
|---|----------|-------|--------|---------------|------------|--------------|---------------|---------------|---------------|--|
| Type  | Material |       |        | Diameter (mm) |            | Part no.     |               |               |               |  |
|   | Pump     | Shaft | O-Ring | Ø outer tube  | Ø impeller | 27" (700 mm) | 39" (1000 mm) | 47" (1200 mm) | 60" (1500 mm) |  |
| F 427 S3,<br>Connection thread<br>G 1 ¼ A   | Standard | S     | FKM    | 43            | 38         | 427 20 307   | 427 20 310    | 427 20 312    | 427 20 315    |  |
| F 427 S4,<br>Connection thread<br>Rd 58 x ½ |          |       |        |               |            | 427 20 407   | 427 20 410    | 427 20 412    |               |  |
| F 427 S5,<br>Connection Clamp 1 ½"          |          |       |        |               |            | 427 20 507   | 427 20 510    | 427 20 512    |               |  |
| FP 427 S,<br>Connection Clamp 1 ½"          |          |       |        |               |            | FOOD         | 427 20 607    | 427 20 610    | 427 20 612    |  |
| F 427 S 3A,<br>Connection Clamp 1 ½"        |          |       |        |               |            | 3A           | 427 20 207    | 427 20 210    | 427 20 212    |  |

Other immersion depths/other O-rings/other connections on request

| Hose connections  |                               |                 |      |             |            |               |  |
|---|-------------------------------|-----------------|------|-------------|------------|---------------|--|
| with union nut G 1 ¼ and Rd 58 x ½ for standard versions and clamp 1 ½ for FOOD- and 3A-version |                               |                 |      |             |            |               |  |
| Connection and/or connection thread   | Material                      |                 |      | Size        |            |               |  |
|   | Connection                    | Union nut       | Seal | 3/4" (DN19) | 1" (DN25)  | 1-1/4" (DN32) |  |
| Standard G 1 ¼  | Stainless steel (S)<br>316 Ti | Stainless steel | -    | 959 04 062  | 959 04 063 | 959 04 064    |  |
| Milk tube screw fitting 58 x ½  |                               |                 | -    |             | 959 04 115 |               |  |
| Clamp 1 ½, FOOD-version   |                               |                 | -    | FKM         | 959 04 171 | 959 04 169    |  |
| Clamp 1 ½, 3A-version   |                               |                 | -    | NBR         | 960 04 172 | 960 04 170    |  |
|   |                               |                 | -    | -           | 959 04 138 |               |  |

1) Determined with water at 68°F (20°C), measured values ± 10 % maximum flow rate with open discharge outlet

# Accessories

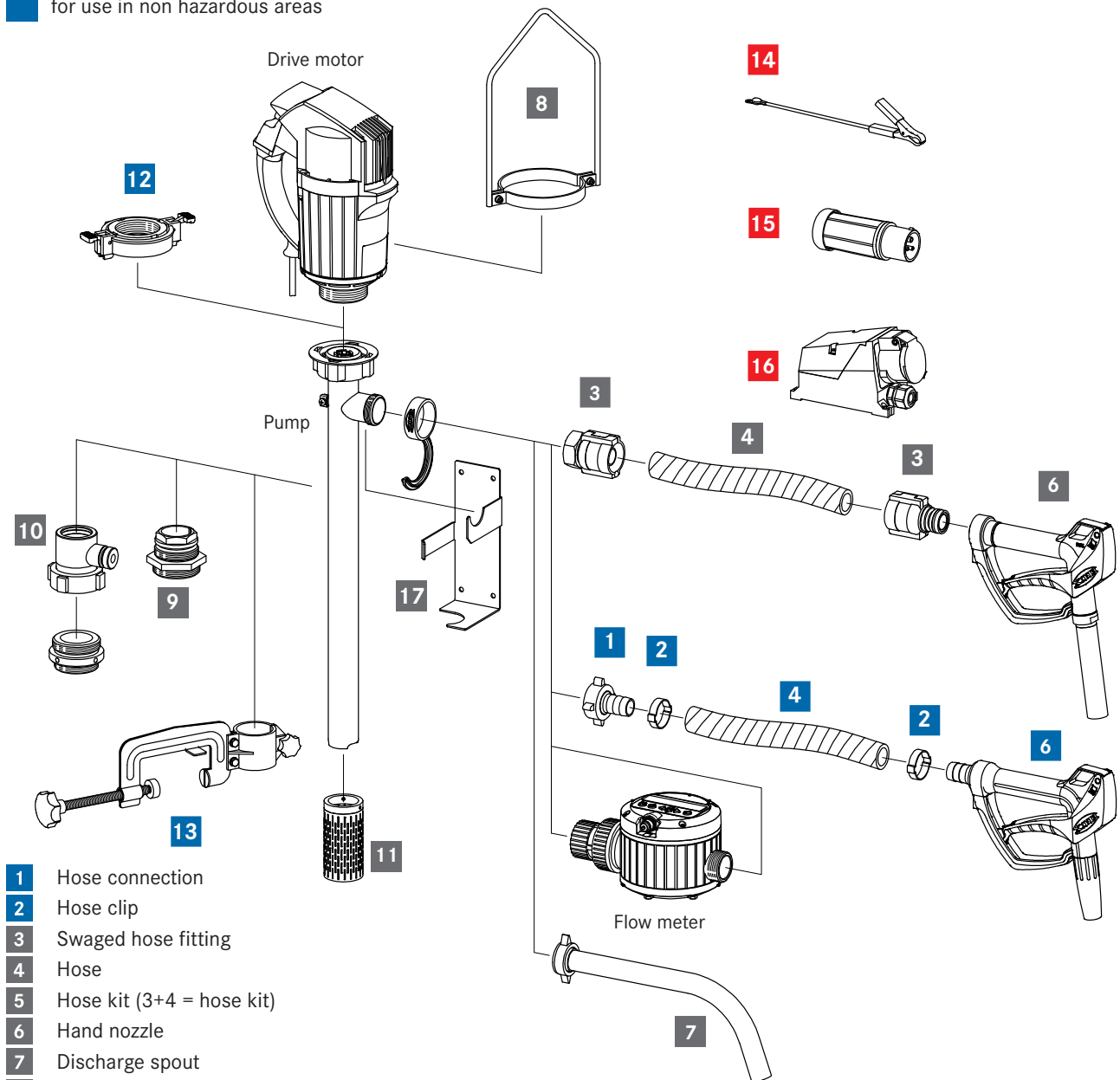
## Drum pumps F/FP 427

### Accessories for drum pump F/FP 427

Compatible with drum pumps from the F/FP 427 series, we offer a wide selection of accessories, for example, compression glands, hoses, hand nozzles. More information can be found in the FLUX accessory brochure, in the price list or on our homepage: [www.flux-pumps.com](http://www.flux-pumps.com).

- for use in hazardous areas
- for use in non hazardous areas

- for use in hazardous and non hazardous areas



- 1 Hose connection
- 2 Hose clip
- 3 Swaged hose fitting
- 4 Hose
- 5 Hose kit (3+4 = hose kit)
- 6 Hand nozzle
- 7 Discharge spout
- 8 Carrying handle
- 9 Compression gland
- 10 Fume gland
- 11 Suction strainer
- 12 Quick action coupling
- 13 Attachment clamp
- 14 Earth (ground) wire
- 15 Explosion-proof plug
- 16 Explosion-proof socket
- 17 Wall bracket

### FLUX PUMPS CORPORATION

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