

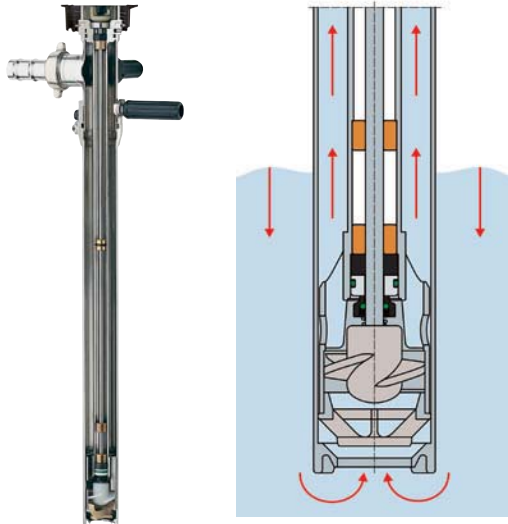
Technical Data Sheet

Drum pumps F/FP 425



More than just pumps

Drum pumps F/FP 425



Advantages/characteristics:

- ▶ For 99.98 % drum emptying
- ▶ With backflow valve
- ▶ Two control levers to easily close the backflow valve
- ▶ With mechanical seal for inner tube seal
- ▶ Optimum residual emptying, with e.g. less than 0.05 l residual quantity in a 200 l drum
- ▶ Reduction of drum cleaning and/or disposal costs
- ▶ No loss of medium when reassembling the pump from one drum to the next
- ▶ Optimum usage of costly fluids
- ▶ Distinct feature: The inner tube is reinforced with a metal core on the PP-version
- ▶ Operation against closed valve (e.g. hand nozzle) is possible (until the indicated max. operating temperature has been reached)



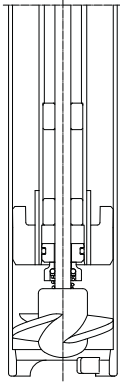
Technical data / type	F 425 PP	FP 425 Ex S	F 425 HC
Seal type		Mechanical seal	
Version	With impeller for max. flow rate, with mixed half axial impeller for max. delivery head (Z-version)		
Pressure-side connection		Thread G 1 1/4 A	
Materials			
Pump	Polypropylene	Stainless steel 316 Ti	Hastelloy C
O-ring ²⁾	FKM	FKM, FFKM	FFKM
Mechanical seal	Oxide ceramics, PTFE/coal, O-ring FKM		Oxide ceramics, PTFE/coal, O-ring FFKM
Shaft	Hastelloy C	Stainless steel	Hastelloy C
Impeller		ETFE	
Dimensions			
Outer tube diameter / Impeller diameter (mm)	50/34	41/34 41/34 Z	40/34
Standard immersion depth	27", 39", 47" (700 mm, 1000 mm, 1200 mm)		47" (1200 mm)
Other immersion depths / special lengths ³⁾	20" - 78" (500 - 2000 mm)		
Operating range			
Container	Drums, IBCs, tanks, canisters, hobbocks, mixing containers etc.		
Media temperature	32 - 122°F (0 - 50°C)	32 - 212°F (0 - 100°C)	32 - 248°F (0 - 120°C)
Media temperature ex-application	-	32 - 104°F (0 - 40°C)	32 - 104°F (0 - 40°C)
Ambient temperature	32 - 104°F (0 - 40°C)	-4 - 104°F (-20 - 40°C)	
Weight Ø 40, ID 1200 mm	-	-	7.7 lbs (3.5 kg)
Weight Ø 41, ID 1000 mm	-	8.4 lbs (3.8 kg)	-
Weight Ø 50, ID 1000 mm	4.4 lbs (2.0 kg)	-	-
Certificates			
Ex-identification	None	II 1/2 G c IIB T4	
Silicone-free version		On request	
Performance data¹⁾			
	Impeller		Half axial impeller (Z-version)
Flow rate max.	31.7 GPM (120 LPM)		22.4 GPM (85 LPM)
Delivery head max.	39 ft (12 m)		85 ft (26 m)
Viscosity max.	1200 cPs		1200 cPs

1) Depending on pump version, media and motor 2) Other materials available on request 3) In gradations of 100 mm

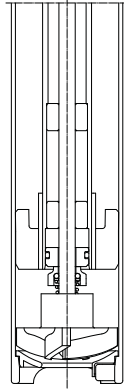
Design, function and dimensions

Drum pumps F/FP 425

Design:

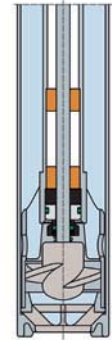
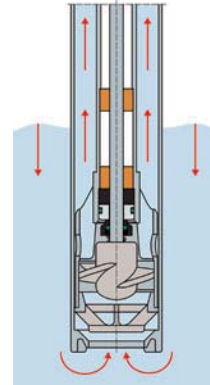


F/FP 425 with mechanical seal and axial impeller



F 425 with mechanical seal and half axial impeller (Z-version)

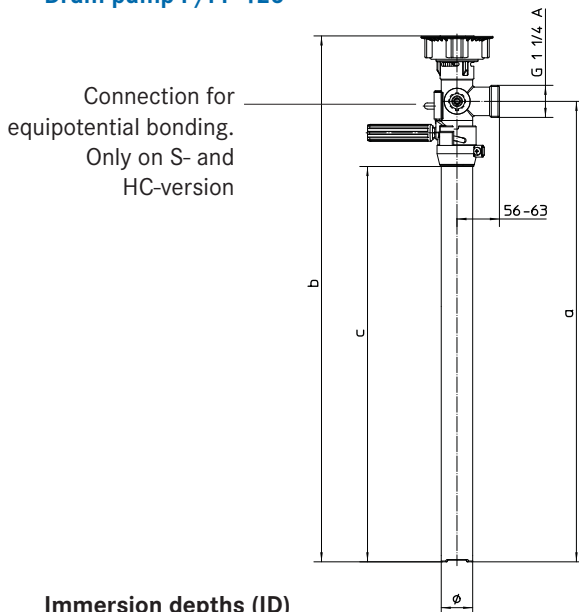
Function:



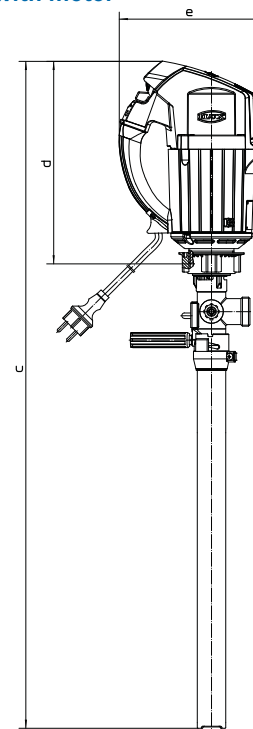
F/FP 425 with open and closed backflow valve

Dimensions:

Drum pump F/FP 425



Drum pump with motor



Immersion depths (ID)

Pump material	Ø (mm)	ID	ID with closed backflow valve			ID with open backflow valve		
			Outer tube/impeller (mm)	a (mm)	b (mm)	c (mm)	a (mm)	b (mm)
PP	50/34	700	816	891	726	824	899	726
		1000	1116	1191	1026	1124	1199	1026
		1200	1316	1391	1226	1324	1399	1226
		Other	ID + 116	ID + 191	ID + 26	ID + 124	ID + 199	ID + 26
S	41/34 41/34 Z	700	805	890	726	812	897	726
		1000	1105	1190	1026	1112	1197	1026
		1200	1305	1390	1226	1312	1397	1226
		Other	ID + 105	ID + 190	ID + 26	ID + 112	ID + 197	ID + 26
HC	40/34	700	815	890	738	822	897	738
		1000	1115	1190	1038	1122	1197	1038
		1200	1315	1390	1238	1322	1397	1238
		Other	ID + 115	ID + 190	ID + 38	ID + 122	ID + 197	ID + 38

F/FP 425 with motor

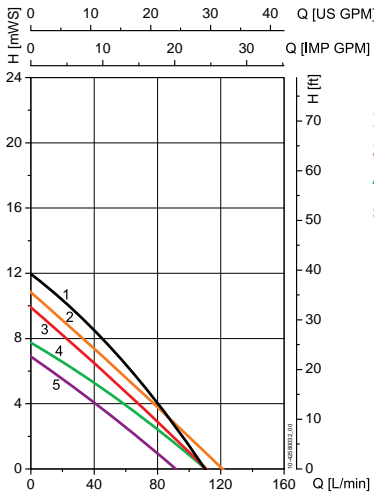
Motor type	c (mm)	d (mm)	e (mm)
FEM 4070	b + d - 16	207	186
F 457 (EL)		225	217
F 458 (-1, EL)		292	209
F 460 Ex (-1, EL)		292	209
FBM 4000 Ex		292	209
F 416 Ex		119	230
F 416-1 Ex		101	120
F 416-2 Ex		101	120

Performance diagrams¹⁾ & part numbers

Drum pumps F/FP 425

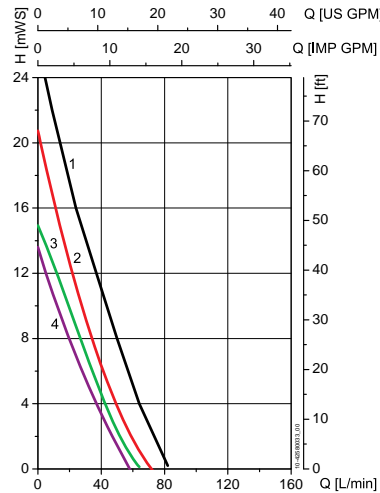
The following performance diagrams apply to the indicated impellers and motors, for all pump materials respectively.

Axial impeller Ø 34



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

Half axial impeller Ø 34 Z



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

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)
F 425 Connection thread G 1 1/4 A	PP	HC	FKM	50	34	425 40 048	425 40 051	425 40 053
	HC	HC	FFKM	40	34	-	-	425 30 007
FP 425 Connection thread G 1 1/4 A	S	S	FKM	41	34	425 22 008	425 22 011	425 22 013
			FFKM			425 29 108	425 29 111	425 29 113
			FKM	34 Z	425 22 028	425 22 031	425 22 033	
			FFKM		-	-	-	

Special lengths								
Type	Material			Diameter (mm)		Part no.		
	Pump	Shaft	O-ring	Ø outer tube	Ø impeller	60" (1500 mm)	78" (2000 mm)	
FP 425 Connection thread G 1 1/4 A	S	S	FKM	41	34	425 22 016	425 22 021	
			FFKM			425 29 116	-	
			FKM	34 Z	425 22 036	425 22 041		
			FFKM		-	-		

Special version (HCL-type for pumping various concentrations of hydrochloric acid)								
Type	Material			Diameter (mm)		Part no.		
	Pump	Shaft in contact with medium	O-ring	Ø outer tube	Ø impeller	27" (700 mm)	39" (1000 mm)	47" (1200 mm)
F 425 HCL mechanical seal with bellows Connection thread G 1 1/4 A	PP	HC	FKM	41	34	425 40 068	425 40 071	425 40 073

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

Hose connections with union nut G 1 1/4						
Connection	Material	Union nut	Size			
			1/2" (DN13)	3/4" (DN19)	1" (DN25)	1-1/4" (DN32)
Polypropylene (PP)	PP	PP	959 04 081	959 04 053	959 04 052	959 04 054
Hastelloy C (HC)	HC	S			959 04 043	959 04 044
Stainless steel (S) 316 Ti	S	Brass nickel-plated		959 04 061	959 04 041	959 04 042
Stainless steel (S) 316 Ti	S	S		959 04 062	959 04 063	959 04 064

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

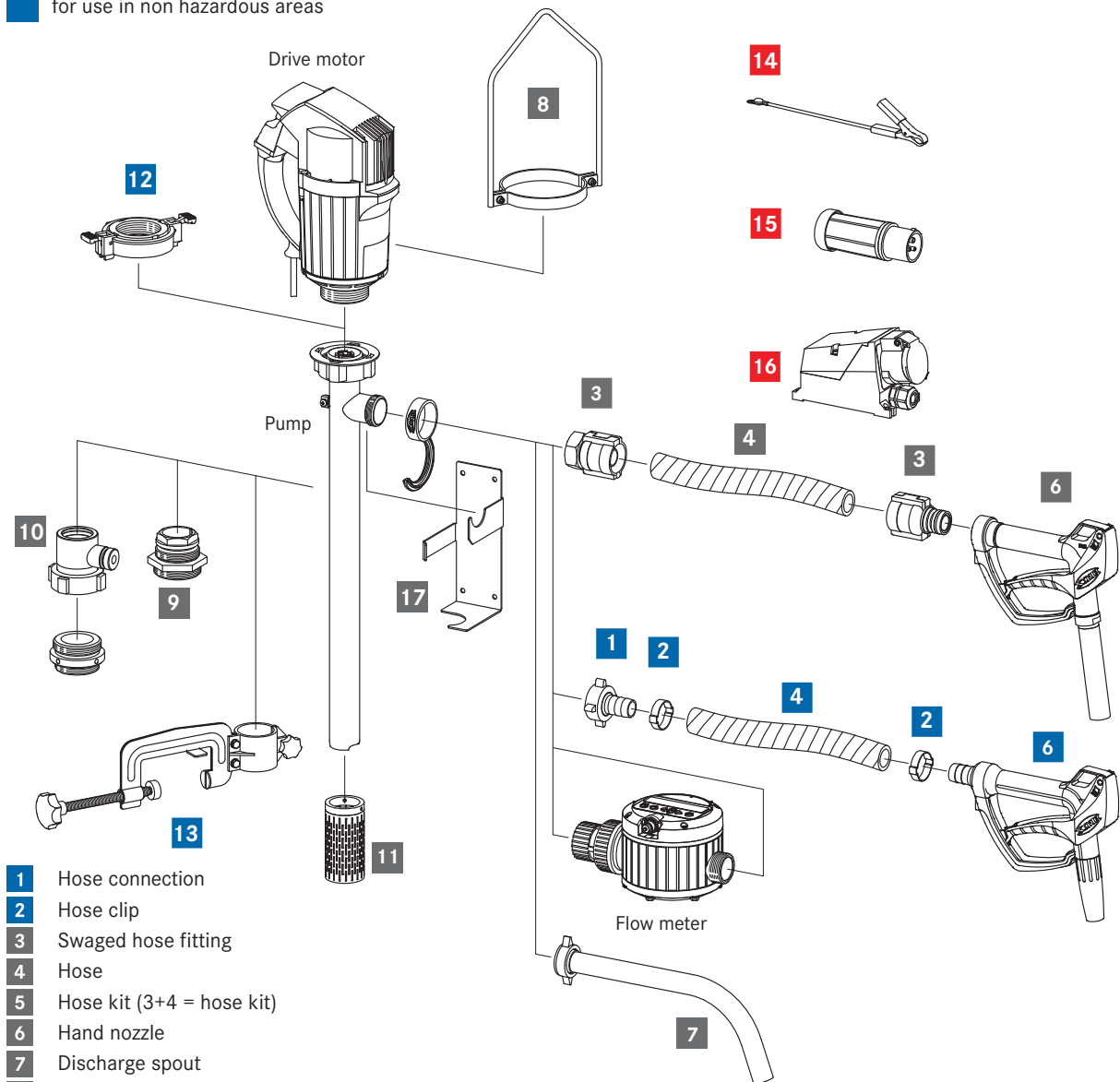
Accessories

Drum pumps F/FP 425

Accessories for drum pump F/FP 425

Compatible with drum pumps from the F/FP 425 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.fluxcrg.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