



# FGF - FGFAP SERIES



## MOTOR DRIVEN HYBRID PLUNGER PUMPS

# FGF SERIES - MOTOR DRIVEN HYBRID PLUNGER PUMP

The FG PUMPS FGF series are hybrid plunger dosing pumps. Easy to use with minimum maintenance, FGF series are built following high quality standard.

The medium to be pumped is separated from the drive by a special seal. This is thus protected from damaging influences of the medium.

Safe and leak free operations, FGF pumps have a special concept of "plunger pump":

- no more seal wear, like other standard plunger pumps;
- no more leakage after seal wear;
- an intelligent concept of seal, that work with the plunger and no more around the plunger.

Accuracy +/- 2% from 10% to 100% of nominal flow.

Standard micrometric manual adjustment, 1 mm per turn. 0-100% of adjustment while running or steady.



## FGF SERIES APPLICATIONS

### PVC PUMP HEAD

ideal for:

- Sulfuric acid, PAC, sodium hydroxide
- Aluminum chloride, detergents, hydrogen peroxide
- Acid and neutral chemical products

### PVDF PUMP HEAD

ideal for:

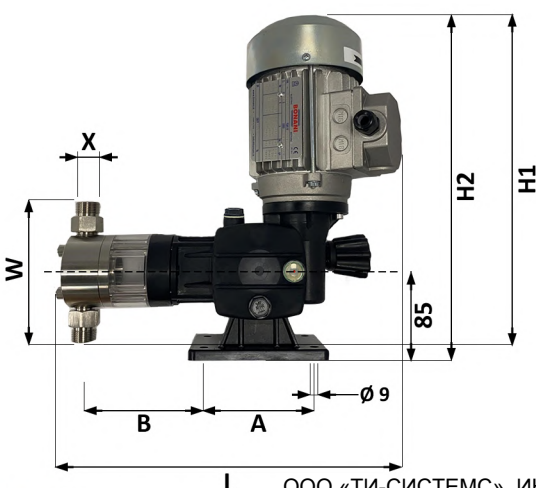
- Fluorides, chrome, sodium hypochlorite
- Neutral chemical products
- Acid and strong acid chemical products

### S.S.316L PUMP HEAD

ideal for:

- Beverage and Food industry
- Peracetic acid, polyelectrolyte, nitric acid
- Alkali and neutral chemical products

## FGF DIMENSIONS



	T	H1	H2	A	B	L	W
PVC	80	348	340	110	130	375	188
PVDF	80	329	340	110	130	375	153
S.S. 316L	80	328	340	110	130	375	149
X - Connections	Gas	Npt					
PVC pump-head	3/8" F	3/8" F					
Pvdf pump-head	3/4" M	3/8" F					
S.s. 316L pump-head	3/8" F	3/8" F					

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# TECHNICAL DATA

## TECHNOPOLYMER PUMP BODY

TYPE	FLOWRATE (l/h) AT		STROKE LENGTH mm	STROKES / min		MAX PRESSURE bar (psi)	STANDARD MOTOR kw	Ø VALVES
	50 hz	60 hz		50 Hz	60 Hz			
FGF2	2	2,4	2	34	41	8 (116)	0.18	5*
FGF4	4	4,8	2	71	85	8 (116)	0.18	5*
FGF6	6	7,2	2	106	127	8 (116)	0.18	5*
FGF7	7	8,4	2	126	152	8 (116)	0.18	5*
FGF8	8	--	2	150	--	8 (116)	0.18	5*
FGF5	5	6	4	34	41	8 (116)	0.18	5*
FGF11	11	13,2	4	71	85	8 (116)	0.18	5*
FGF17	17	20,4	4	106	127	8 (116)	0.18	8,5
FGF20	20	25,2	4	126	152	8 (116)	0.18	8,5
FGF24	24	--	4	150	--	8 (116)	0.18	8,5
FGF10	10	12	6	34	41	8 (116)	0.18	8,5
FGF21	21	25	6	71	85	8 (116)	0.18	8,5
FGF30	30	36	6	106	127	8 (116)	0.18	8,5
FGF38	38	45,6	6	126	152	8 (116)	0.18	8,5
FGF42	42	--	6	150	--	8 (116)	0.18	8,5

ALL FGF MODELS HAVE A Ø 32 mm PLUNGER

\* For "V" execution code, CERAMIC valve material is standard for 5 Ø valves

# STANDARD PUMP-HEAD MATERIALS

EXECUTION CODE	HEAD MATERIAL	VALVE MATERIAL	CAGE MATERIAL	SEAT VALVE MATERIAL	HOUSING MATERIAL	SEAL / PLUNGER* MATERIAL	GVA/GVM** O-RINGS MATERIAL
V	PVC	CERAMIC / PYREX	PP	PVC	PP ***	PTFE / PVDF	FPM
VA	PVC	CERAMIC / PYREX	PP	PVC	PP ***	PTFE / S.S.316L	FPM
VA33	PVC	S.S.316L	PP	S.S.316L	PP ***	PTFE / S.S.316L	FPM
F	PVDF	PTFE	PVDF	PVDF	PVDF	PTFE / PVDF	PTFE
A	S.S.316L	S.S.316L	PP	S.S.316L	S.S.316L	PTFE / S.S.316L	FPM

STANDARD

\*\* GVA= Suction Valve Group  
GVM= Discharge Valve



GVA GVM

\*\*\* Reinforced polypropylene

V1	PVC	CERAMIC	PP	PVC	PP ***	PTFE / PVDF	FPM
V33	PVC	S.S.316L	PP	S.S.316L	PP ***	PTFE / PVDF	FPM
V2	PVC	PTFE	PP	PVC	PP ***	PTFE / PVDF	FPM
F5	PVDF	HASTELLOY C-276	PVDF	PVDF	PVDF	PTFE / PVDF	PTFE
F1	PVDF	CERAMIC	PVDF	PVDF	PVDF	PTFE / PVDF	PTFE
A331	S.S.316L	S.S.316L	PP	S.S.316L	S.S.316L	PTFE / S.S.316L	PTFE
A3323	S.S.316L	S.S.316L	S.S.316L	S.S.316L	S.S.316L	PTFE / S.S.316L	FPM

EXECUTIONS AVAILABLE

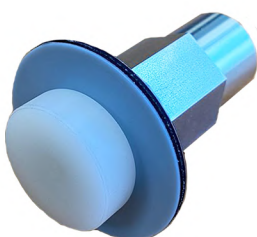
PVC, PVDF and S.S.316L are the standard wet parts materials:

Green color follows PVC  
Pink color follows PVDF  
Blue color follows S.S.316L

GVA/GVM EPDM o-rings available on request

Other special executions available on request

Other pump-head materials available on request (PTFE, Titanium as example)



\*Plunger kit with PTFE seal and PVDF piston



\*Plunger kit with PTFE seal and S.S.316L piston

# FGFAP SERIES - HIGH PRESSURE MOTOR DRIVEN HYBRID PLUNGER PUMP

The FG PUMPS FGFAP series are hybrid plunger dosing pumps for high pressure. Easy to use with minimum maintenance, FGFAP series are built following high quality standard.

The medium to be pumped is separated from the drive by a special seal. This is thus protected from damaging influences of the medium.

Safe and leak free operations, FGFAP pumps have a special concept of "plunger pump":

- no more seal wear, like other standard plunger pumps;
- no more leakage after seal wear;
- an intelligent concept of seal, that work with the plunger and no more around the plunger.

Accuracy +/- 2% from 10% to 100% of nominal flow.  
Standard micrometric manual adjustment, 1 mm per turn. 0-100% of adjustment while running or steady.



## FGFAP SERIES APPLICATIONS

### PVDF PUMP HEAD

ideal for:

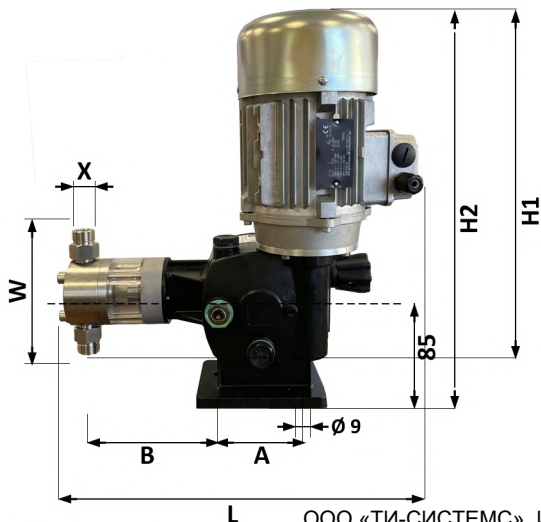
- Fluorides, chrome, sodium hypochlorite
- Neutral chemical products
- Acid and strong acid chemical products

### S.S.316L PUMP HEAD

ideal for:

- Beverage and Food industry
- Peracetic acid, polyelectrolyte, nitric acid
- Alkali and neutral chemical products

## FGFAP DIMENSIONS



	T	H1	H2	A	B	L	W
PVDF	80	360	390	95	150	375	153
S.S. 316L	80	360	390	95	150	375	149

X - Connections	Gas	Npt	
Pvdf pump-head	3/4"М	3/8"Ф	
S.s. 316L pump-head	3/8"Ф	3/8"Ф	

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# TECHNICAL DATA

## ALUMINIUM PUMP BODY

TYPE	FLOWRATE (l/h) AT		STROKE LENGTH mm	STROKES / min		MAX PRESSURE bar (psi)		STANDARD MOTOR kw	Ø VALVES
	50 hz	60 hz		50 Hz	60 Hz	PVDF	S.S.316L		
FGFAP6	6	7	4.5	34	41	16 (230)	26 (375)	0.37	5
FGFAP12	12	14	4.5	71	85	16 (230)	26 (375)	0.37	5
FGFAP20	20	24	4.5	106	127	16 (230)	26 (375)	0.37	5
FGFAP26	26	31	4.5	126	152	16 (230)	26 (375)	0.37	5
FGFAP30	30	--	4.5	150	--	16 (230)	26 (375)	0.37	5

ALL FGF MODELS HAVE A Ø 32 mm PLUNGER

# STANDARD PUMP-HEAD MATERIALS

EXECUTION CODE	HEAD MATERIAL	VALVE MATERIAL	CAGE MATERIAL	SEAT VALVE MATERIAL	HOUSING MATERIAL	SEAL / PLUNGER* MATERIAL	GVA/GVM** O-RINGS MATERIAL
F	PVDF	PTFE	PVDF	PVDF	PVDF	PTFE / PVDF	PTFE
A	S.S.316L	S.S.316L	PP	S.S.316L	S.S.316L	PTFE / S.S.316L	FPM
F5	PVDF	HASTELLOY C-276	PVDF	PVDF	PVDF	PTFE / PVDF	PTFE
F1	PVDF	CERAMIC	PVDF	PVDF	PVDF	PTFE / PVDF	PTFE
A331	S.S.316L	S.S.316L	PP	S.S.316L	S.S.316L	PTFE / S.S.316L	PTFE
A3323	S.S.316L	S.S.316L	S.S.316L	S.S.316L	S.S.316L	PTFE / S.S.316L	FPM

STANDARD  
EXECUTIONS  
AVAILABLE

\*\* GVA= Suction Valve Group  
GVM= Discharge Valve



PVDF Material



S.S.316L Material

PVDF and S.S.316L are the standard wet parts materials:

Pink color follows PVDF  
Blue color follows S.S.316L

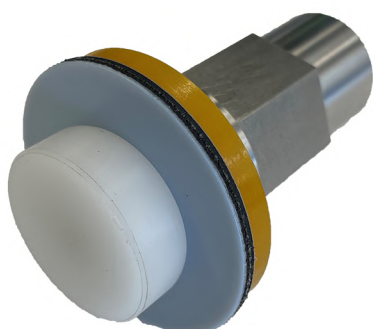
GVA/GVM EPDM o-rings available on request

Other special executions available on request

Other pump-head materials available on request (Titanium as esample)

\*Plunger kit with PTFE seal and PVDF piston

\*Plunger kit with PTFE seal and S.S.316L piston





# FG PUMPS

METERING PUMPS FOR  
CHEMICALS



**MADE IN ITALY**