

## CHARACTERISTICS

- Compact and versatile
- 10 pumping elements
- Flow rate  
Multiline: 0.005 – 0.01 – 0.015 – 0.025 – 0.05 cm<sup>3</sup>/cycle  
Basic: 0,14 – 0,26 cm<sup>3</sup>/cycle
- Maximum operating pressure:  
 Multiline: 200 bar  
 Basic: 280 bar
- Operating temperature:  
 -40 ÷ +60°C
- N° outputs:  
 8 – Multiline  
 2 – Basic
- Reservoir: 1-2 kg
- Lubricant:**  
 Grease NLGI 000 ÷ 2

## APPLICATIONS

- Earth-moving machines
- Machine tools
- Wind energy sector
- Small and medium lubrication systems

## MULTI-OUTLET ELECTRIC GREASE PUMP



“FemtoPUMP” is a compact and versatile multi-outlet electric grease pump, ideal for small to medium sized lubrication systems.

It's made **entirely of plastic**, which makes it cost-competitive.

The application is suitable for both **direct use (Multiline)** and for use with **progressive dividers (Basic)**.

In “**Multiline**” solutions are designed for use with **eight pumping elements** and provides lubrication directly to the end point.

The “**Basic**” systems are designed for use with **two pumping elements** and provides the proper amount of lubricant through the utilization of progressive dividers.

The pump is available in two versions, one utilizing a **stirring paddle (both for 1Kg and for 2Kg)** and the other incorporating a **follower plate (1Kg)**.

- All versions (with follower plate or stirring paddle) include a minimum level sensor.
- The minimum level sensor is placed on the stirring paddle, which also acts as a mechanism that significantly reduces the accumulation of grease on the bottom of the tank.

### BENEFITS:

- It can be configured in a variety of ways for different uses.
- Possibility to adapt the unit according to the application.
- Easy installation due to the small size.

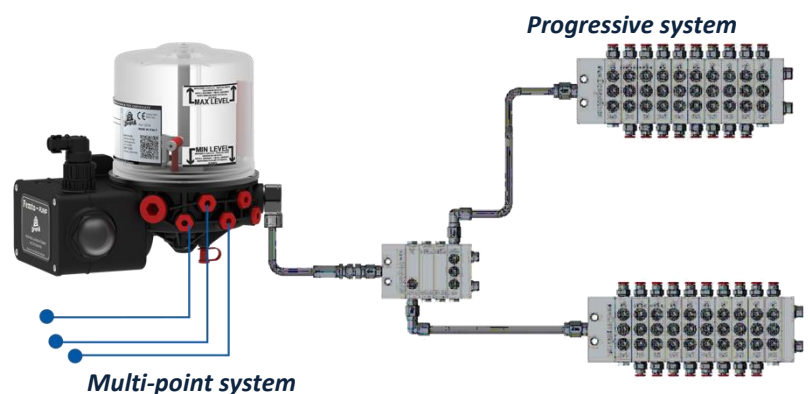
## TECHNICAL CHARACTERISTICS

GENERAL TECHNICAL FEATURES			
Speed	RPM	17±4	
Flow rate:	Multi-line	cm <sup>3</sup> /cycle [in <sup>3</sup> /rev] 0.005 – 0.01 – 0.015 – 0.025 – 0.05 [0.0003 - 0.0006 - 0.0009 - 0.0015 - 0.003]	
	Basic	cm <sup>3</sup> /cycle [0.0085 - 0.016]	
	Basic Reg.	[in <sup>3</sup> /min] 0,14- 0,26 [0.0012 ÷ 0.0085]	
Maximum operating pressure	Multi-line	bar 200 [2900]	
	Basic	[psi] 280 [4061]	
Number of outputs (pumping elements)	Multi-line	No 8	
	Basic	2	
Supply connection (pumping output)	Multi-line	Type G1/8"	
	Basic	G1/4"	
Operating temperature	°C [°F]	-40 ÷ +60 [-40 ÷ +140]	
Reservoir capacity	Follower plate	Medical history	1 [ 0.26]
	Stirring paddle	[gal US]	2 [0.52]
	Stirring paddle		
Lubricant	NLGI	Grease 000 ÷ 2	

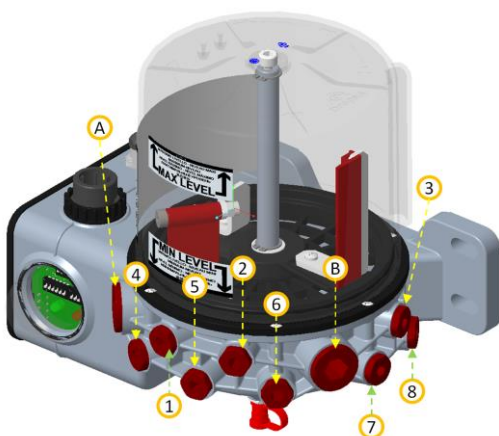
## FEMTO – MULTILINE AND PROGRESSIVE (BASIC)

### BENEFITS OF PROGRESSIVE SYSTEM DROPSA

- Modular progressive system for excellent lubrication
- Ability to expand the system
- High accuracy
- Stainless steel
- Different progressive distributor for all needs
- SMX - nP - nPr+ - SMP (Ref. DropsA documents progressive system SMX C2104PE - nP C2213PE - nPr+ C2220PE - SMP C2071PE)



### PUMPING ELEMENTS POSITION BASIC/MULTILINE



**Note:**  
The control unit can be supplied with or without pumping elements using the codes shown in the ordering information.

### PUMPING ELEMENTS BASIC SYSTEM

#### Positions A/B

Fixed flow rate  
2.8 cm<sup>3</sup>/min  
with By-pass  
0888058



Fixed flow rate  
2.8 cm<sup>3</sup>/min  
0888156



Fixed flow rate  
5.2 cm<sup>3</sup>/min  
0888391



Adjustable flow rate  
0.4 – 2.8cm<sup>3</sup>/min  
0888555



### PUMPING ELEMENTS MULTILINE SYSTEM

#### Position 1-2-3-4-5-6-7-8



1 notch  
0.005cm<sup>3</sup>/cycle  
with By-pass  
0890034



2 notchit  
0.01cm<sup>3</sup>/cycle  
with By-pass  
0890033



3 notches  
0.015cm<sup>3</sup>/cycle  
with By-pass  
0890032



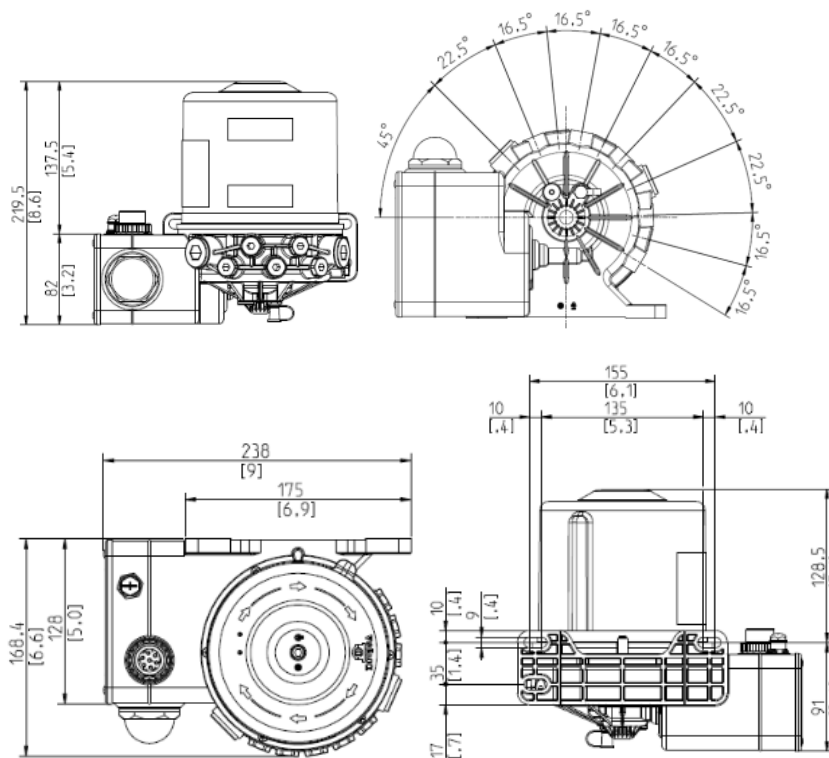
4 notches  
0.025cm<sup>3</sup>/cycle  
with By-pass  
0890031



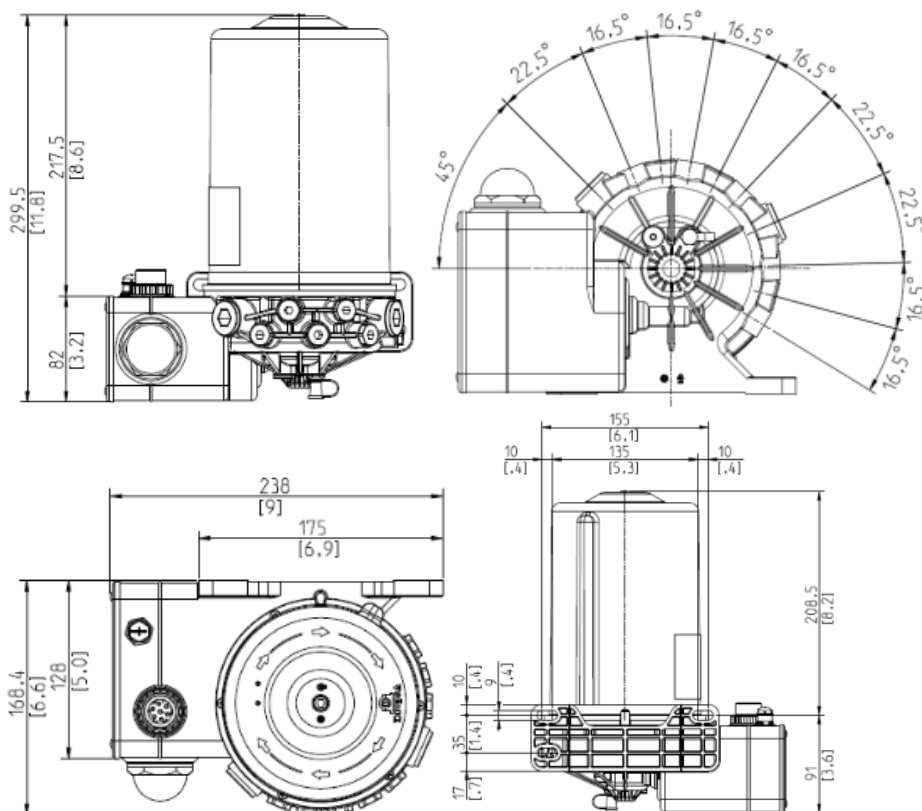
5 notches  
0.05cm<sup>3</sup>/cycle  
with By-pass  
0890030

## DIMENSIONS

### Femto pump 1 Kg all versions



### Femto pump 2 Kg all versions



## ORDERING INFORMATION

### STANDARD PUMP (WITHOUT PUMPING ELEMENTS)

TYPE	VOLTAGE	RESERVOIR	MANUAL VERSION (Without Controller)	AUTOMATIC VERSION (With built in Controller)
<i>BASIC Can fit up to 2 main pump elements</i>	12 VDC	1KG	0891111	0891131
		2KG	0891112	0891132
		1KG <i>Follower Plate version</i>	0891113	0891133
	24 VDC	1KG	0891121	0891141
		2KG	0891122	0891142
		1KG <i>Follower Plate version</i>	0891123	0891143
<i>MULTILINE 2 Basic Elements + 8 Multi line</i>	12 VDC	1KG	0891211	0891231
		2KG	0891212	0891232
		1KG <i>Follower Plate version</i>	0891213	0891233
	24 VDC	1KG	0891221	0891241
		2KG	0891222	0891242
		1KG <i>Follower Plate version</i>	0891223	0891243

### PUMPING CODES

PUMPS				
CODE	TYPE	FLOW RATE	NOTES	ID
0888058C	BASIC	2.8cm <sup>3</sup> /min	Internal By-Pass	<b>1</b>
0888156		2.8cm <sup>3</sup> /min	No By-pass	<b>2</b>
0888391		5.2cm <sup>3</sup> /min		<b>3</b>
0888555		0.4 ÷ 2.8cm <sup>3</sup> /min	Adjustable	<b>4</b>
0890034	MULTI-LINE	0.005cm <sup>3</sup> /cycle	1 notch	<b>1</b>
0890033		0.010cm <sup>3</sup> /cycle	2 notches	<b>2</b>
0890032		0.015cm <sup>3</sup> /cycle	3 notches	<b>3</b>
0890031		0.025cm <sup>3</sup> /cycle	4 notches	<b>4</b>
0890030		0.050cm <sup>3</sup> /cycle	5 notches	<b>5</b>



## PRE-CONFIGURATED PUMP

