

# PRIUS D MF

# Data Sheet

## Multi-Function motor driven diaphragm metering pump

Motor-driven diaphragm dosing pump, mechanical actuated, PRIUS combines efficiency and chemical resistance to a wide capacity range for an extensive number of applications.

- Multifunction motor pump with inverter
- Working mode: Constant, ppm, %, mlq, pause-work, weekly, mA, pulse, Volt and Batch
- Level control
- Alarms
- Stand-by
- Double position of the electronic unit (standard or rotated mounting)
- PTFE diaphragm
- Aluminium enclosure
- Spring return mechanism
- Manual degassing valve (PVDF and PP pump heads)
- Flow regulation
- Liquid ends available in different sizes and materials
- Double ball check valve
- Tropicalized motors
- MODBUS option



STANDARD MOUNTING



ROTATED MOUNTING

## Identification code

**CIRCUIT**

<b>MF</b>	Multifunction 230 VAC
<b>M1</b>	Multifunction 115 VAC
<b>MM</b>	Multifunction+Modbus

**CUSTOM. PACKAGING INTERNAL**

**P D M F 0 1 0 0 6 0 K V 1 2 0 0 N 0 0 0**

**BAR L/H**

**PUMP HEAD MATERIAL**

<b>K</b>	PVDF
<b>S</b>	SS
<b>P</b>	PP
<b>C</b>	PVC

**MOTOR COLOR**

<b>2</b>	0,37Kw
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**REDUCTION GEAR (50Hz)**

<b>1</b>	8:1	175 s/min
<b>2</b>	15:1	94 s/min
<b>4</b>	20:1	70 s/min
<b>5</b>	40:1	35 s/min

**O RING**

<b>V</b>	FKM B
<b>D</b>	Dutral

**CAPACITY**

PRIUS D MF	PRIUS D MF AP
010060	60 l/h @ 10 bar
010030	30 l/h @ 10 bar
010024	24 l/h @ 10 bar
010012	12 l/h @ 10 bar
010016	16 l/h @ 10 bar
010105	105 l/h @ 10 bar
010056	56 l/h @ 10 bar
010042	42 l/h @ 10 bar
010021	21 l/h @ 10 bar
007160	160 l/h @ 7 bar
007086	86 l/h @ 7 bar
007064	64 l/h @ 7 bar
007032	32 l/h @ 7 bar
005240	240 l/h @ 5 bar
005128	128 l/h @ 5 bar
005096	96 l/h @ 5 bar
005048	48 l/h @ 5 bar
005350	350 l/h @ 5 bar
005188	188 l/h @ 5 bar
005140	140 l/h @ 5 bar
005070	212 l/h @ 5 bar
005440	440 l/h @ 5 bar
005236	236 l/h @ 5 bar
005176	176 l/h @ 5 bar
005088	088 l/h @ 5 bar
005530	530 l/h @ 5 bar
005284	284 l/h @ 5 bar
005212	212 l/h @ 5 bar
005106	106 l/h @ 5 bar
002M00	1000 l/h @ 2 bar
004520	520 l/h @ 4 bar
005390	390 l/h @ 5 bar
005180	180 l/h @ 5 bar
003750	750 l/h @ 3 bar
005380	380 l/h @ 5 bar
005290	290 l/h @ 5 bar
005140	140 l/h @ 5 bar

**100004** 4 l/h @ 100 bar  
**100002** 2 l/h @ 100 bar  
**1001,5** 1,5 l/h @ 100 bar  
**050017** 17 l/h @ 50 bar  
**050009** 9 l/h @ 50 bar  
**050005** 5 l/h @ 50 bar  
**05002,5** 2,5 l/h @ 50 bar  
**030028** 28 l/h @ 30 bar  
**030015** 15 l/h @ 30 bar  
**030010** 30 l/h @ 10 bar  
**030005** 5 l/h @ 30 bar  
**030076** 76 l/h @ 30 bar  
**030041** 41 l/h @ 30 bar  
**030030** 30 l/h @ 30 bar  
**030015** 15 l/h @ 30 bar  
**020170** 170 l/h @ 20 bar  
**020091** 91 l/h @ 20 bar  
**020068** 68 l/h @ 20 bar  
**020034** 34 l/h @ 20 bar

**LUBRICANT TYPE**

BRAND	MODEL
MOBIL	MOBILGEAR 632
SHELL	OMALA OIL 320
BP	ENERGOL GR-XP 320
IP	MELLANA OIL 320
ESSO	SPARTAN EP 320
AGIP	BLASIA 320

## Multi-Function motor driven diaphragm metering pump

### “PRIUS D MF” SERIES - SINGLE PHASE SUPPLY

#### Features

- Aluminium enclosure (epoxy coating)
- Spring return mechanism
- Power supply: 230 VAC (+/-10%) - 50/60 Hz - single-phase
- Environment temperature: ..... -10-40°C (14-104°F)
- Chemical temperature with PVDF pump head: ..... -10-65°C (14-149°F)\*
- Chemical temperature with SS pump head: ..... -10-90°C (14-194°F)\*
- Chemical temperature with PP pump head: ..... -10-40°C (14-104°F)
- Installation class ..... II
- Pollution level ..... 2
- Audible noise..... 78 dbA (± 5 dB)
- Protection degree ..... IP 55
- Max suction height ..... 3 m
- Oil capacity..... 0,3 lt (Refer to “Lubricant type” table)

High pressure ranges available (SS pump head).

\* The specified temperature can be exceeded temporarily (max 15') for sterilization or flushing with hot water.



PVDF PUMP HEAD



SS PUMP HEAD



PP PUMP HEAD

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## Multi-Function motor driven diaphragm metering pump

PRIUS D MF

PRIUS D MF										
PRIUS D MF	Pressure bar	Capacity l/h	Stroke length	stroke/1'	Motor	HOSE CONNECTION			PUMP HEAD Model	ACCESSORIES
						PVDF	SS	PP		
010060	10	60	3 mm	175	0,37 kW	1/2" 13 mm (i.d.)	R1/2" G1/2"	1/2" 13 mm (i.d.)	NM	A
010030		30		94						
010024		24		70						
010012		12		35						
010016	10	16	4 mm	35	0,37 kW	1/2" 13 mm (i.d.)	R1/2" G1/2"	1/2" 13 mm (i.d.)	NM	A
010105	10	105	3 mm	175	0,37 kW	3/4" 13 mm (i.d.)	R3/4" G3/4"	3/4" 13 mm (i.d.)	TM	A
010056		56		94						
010042		42		70						
010021		21		35						
007160	7	160	4 mm	175	0,37 kW	3/4" 13 mm (i.d.)	R3/4" G3/4"	3/4" 13 mm (i.d.)	TM	A
007086		86		94						
007064		64		70						
007032		32		35						
005240	5	240	6 mm	175	0,37 kW	3/4" 18 mm (i.d.)	R3/4" G3/4"	3/4" 18 mm (i.d.)	TM	B
005128		128		94						
005096		96		70						
005048		48		35						
005350	5	350	4 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005188		188		94						
005140		140		70						
005070		70		35						
005440	5	440	5 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005236		236		94						
005176		176		70						
005088		88		35						
005530	5	530	6 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005284		284		94						
005212		212		70						
005106		106		35						
002M00	2	1000	10 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
004520	4	520		94						
005390	5	390		70						
005180	180	35								
003750	3	750	8 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005380	5	380		94						
005290	290	70								
005140	140	35								

### ACCESSORIES

#### A. INSTALLATION KIT INCLUDED

- 1/2" foot filter with 13 mm (int. diam.) hose fitting
- 3/4" injection valve
- 13 x16 PVDF or 12 X 18 PVC delivery hose
- 13 x16 PVDF or 12 X 18 PVC suction hose

#### B. INSTALLATION KIT (OPTION)

- 1 1/2" foot filter with 18 mm (int. diam.) hose fitting (G1 1/2" - 18 mm)
- 1 1/2" injection valve

#### C. INSTALLATION KIT (OPTION)

- 1 1/2" foot filter with 30 mm (int. diam.) hose fitting (G1 1/2" - 30 mm)
- 1 1/2" injection valve

**Stainless Steel pump does not fit installation kit.**

Packaging of all models always includes:

- LEVEL PROBE
- INPUT / STANDBY CABLE
- ALARM CABLE

**EMEC**

ISO 9001:2015  
ISO 14001:2004  
OHSAS 18001:2007



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Specifications subject to change without notice.  
EN R1-11-17

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## Multi-Function motor driven diaphragm metering pump

PRIUS D MF - HIGH PRESSURE

PRIUS D MF AP / HIGH PRESSURE							
PRIUS D MF AP	Pressure bar	Capacity l/h	Stroke length	stroke/1'	Motor	HOSE CONNECTION	PUMP HEAD
						SS	Model
100004	100	4	1.5 mm	175	0,37 kW	3/8"	L1
100002		2		94			
1001,5		1,5		70			
050017	50	17	2 mm	175	0,37 kW	1/2"	M1
050009		9		94			
050005		5		70			
05002,5		2,5		35			
030028	30	28	2 mm	175	0,37 kW	1/2"	N
030015		15		94			
030010		10		70			
030005		5		35			
030076	30	76	4 mm	175	0,37 kW	1/2"	S
030041		41		94			
030030		30		70			
030015		15		35			
020170	20	170	6 mm	175	0,37 kW	3/4"	T
020078		78		94			
020057		57		70			
020028		28		35			

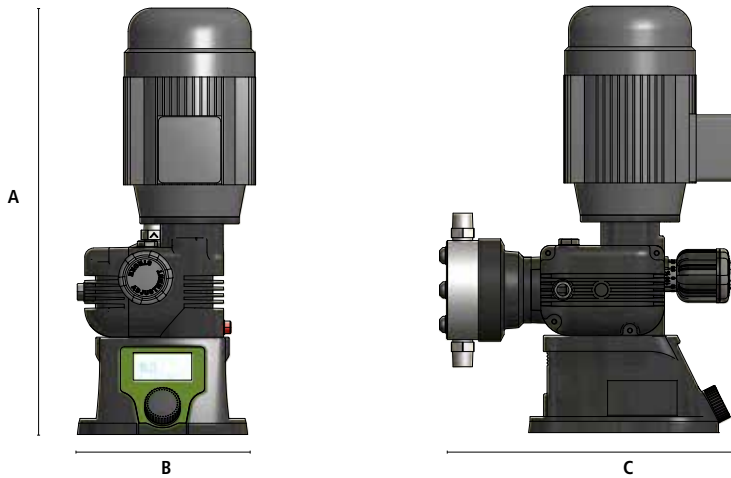
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## Multi-Function motor driven diaphragm metering pump

### Dimensions

WEIGHTS AND DIMENSIONS ARE REFERRED TO MOTOR PUMPS WITH UM PUMP HEAD MOD.



DIMENSIONS (mm)	
	UM pump (PP)
<b>A</b>	450
<b>B</b>	200
<b>C</b>	340
<b>D</b>	340
<b>E</b>	200
<b>F</b>	140
<b>G</b>	160
∅ fixing holes	8

WEIGHT (kg)	
with PP pump head	16
with SS pump head	25

