

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.

PRIUS

- Single or three phase motor power supply
- Spring return mechanism
- Manual degassing valve (PVDF and PP pump heads)
- PTFE membrane valve
- Liquid ends available in different sizes and materials
- Double ball check valve
- Tropicalized three-phase motors



Identification code

Diagram illustrating the identification code structure for the PRIUS D pump, showing the sequence of characters and their corresponding specifications.

Identification Code Structure:

P D 0 0 0 1 0 0 6 0 K V 1 2 0 0 N 0 0 0

Legend:

- CUSTOM.** (Positions 14, 15, 16)
- PACKAGING** (Positions 17, 18, 19)
- INTERNAL** (Positions 20, 21, 22)
- BAR** (Position 10)
- L/H** (Position 11)
- COLOR** (Position 13)
- PUMP HEAD MATERIAL** (Position 12)

	PUMP HEAD MATERIAL
K	PVDF
S	SS
P	PP
- MOTOR** (Position 1)

	MOTOR	POWER SUPPLY	PHASE
1	0,18Kw	220-240/380-420 - 50 Hz	3-PHASE
2	0,37Kw	220-240/380-420 - 50 Hz	3-PHASE
3	0,18Kw	440-480 - 60 Hz	3-PHASE
4	0,37Kw	440-480 - 60 Hz	3-PHASE
6	0,37Kw	220-240 - 50 Hz	1-PHASE
8	0,55Kw	220-240 - 50 Hz	1-PHASE
- REDUCTION GEAR** (Position 14)

	REDUCTION GEAR
1	8:1
2	15:1
3	10:1
4	20:1
5	40:1
- O RING** (Position 15)

	O RING
V	FKM B
D	Dutral

CAPACITY

CAPACITY			
50Hz	HIGH PRESSURE 50Hz	60 Hz	
010060	60 l/h @ 10 bar	010055	55 l/h @ 10 bar
010030	30 l/h @ 10 bar	010027	27 l/h @ 10 bar
010024	24 l/h @ 10 bar	010014	14 l/h @ 7 bar
010012	12 l/h @ 10 bar	010100	100 l/h @ 10 bar
010016	16 l/h @ 10 bar	010050	50 l/h @ 10 bar
010105	105 l/h @ 10 bar	010025	25 l/h @ 10 bar
010056	56 l/h @ 10 bar	007150	150 l/h @ 7 bar
010042	42 l/h @ 10 bar	007075	75 l/h @ 7 bar
010021	21 l/h @ 10 bar	007037	37 l/h @ 7 bar
007160	160 l/h @ 7 bar	005230	230 l/h @ 5 bar
007086	86 l/h @ 7 bar	005115	115 l/h @ 5 bar
007064	64 l/h @ 7 bar	005057	57 l/h @ 5 bar
007032	32 l/h @ 7 bar	005335	335 l/h @ 5 bar
005240	240 l/h @ 5 bar	005165	165 l/h @ 5 bar
005128	128 l/h @ 5 bar	005084	84 l/h @ 5 bar
005096	96 l/h @ 5 bar	005420	420 l/h @ 5 bar
005048	48 l/h @ 5 bar	005210	210 l/h @ 5 bar
005350	350 l/h @ 5 bar	005105	105 l/h @ 5 bar
005188	188 l/h @ 5 bar	005505	505 l/h @ 5 bar
005140	140 l/h @ 5 bar	005250	250 l/h @ 5 bar
005070	212 l/h @ 5 bar	005126	126 l/h @ 5 bar
005440	440 l/h @ 5 bar	003950	950 l/h @ 3 bar
005236	236 l/h @ 5 bar	003713	713 l/h @ 3 bar
005176	176 l/h @ 5 bar		
005088	88 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		
005M00	1000 l/h @ 5 bar		
005750	750 l/h @ 5 bar		
003M00	1000 l/h @ 3 bar		
003750	750 l/h @ 3 bar		

LUBRICANT TYPE

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

Motor driven diaphragm metering pump

"PRIUS D" SERIES - 50 Hz / 3-PHASE MOTOR

Features

- Aluminium enclosure
- Spring return mechanism
- Power supply: 220-240/380-420 V - Δ/Y connection
- 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.

MOTORS

- 0,18 kW: 3-phase 0,18KW 1350G
- 0,37 kW: 3-phase 0,37KW 230/400V 1400G



PVDF PUMP HEAD



SS PUMP HEAD



PP PUMP HEAD

Motor driven diaphragm metering pump

PRIUS D - 50 Hz

Power supply..... 220-240/380-420 V - Δ/Y

PRIUS D 50 Hz / 3-PHASE MOTOR										
PRIUS D	Pressure bar	Capacity l/h	Stroke length	stroke/1'	Motor	HOSE CONNECTION			PUMP HEAD	ACCESSORIES
						PVDF	SS	PP	Model	
010060	10	60	3 mm	175	0,18 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	0,18 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						
005M00	5	1000	10 mm	175	0,55 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005750		750	8 mm	175						
003M00	3	1000	10 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
003750		750	8 mm	175						

ACCESSORIES FOR INSTALLATION

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 accessories: A-B-C.

EMEC

ISO 9001:2008
ISO 14001:2004
OHSAS 18001:2007



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Specifications subject to change without notice.
EN R1-04-16

PRIUS D

Data Sheet

Motor driven diaphragm metering pump

PRIUS D 50 Hz / HIGH PRESSURE							
PRIUS D	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	R3/8"	L1
100002		2		94			
1001,5		1,5		70			
060017	60	17	2 mm	175	0,37 kW	R1/2"	M1
060009		9		94			
060005		5		70			
040028	40	28	2 mm	175	0,37 kW	R1/2"	N
040015		15		94			
040010		10		70			
030076	30	76	4 mm	175	0,37 kW	R3/4"	S
030041		41		94			
030030		30		70			
020146	20	146	6 mm	175	0,37 kW	R3/4"	T
020078		78		94			
020057		57		70			

Motor driven diaphragm metering pump

"PRIUS D" SERIES - 60 Hz / 3-PHASE MOTOR

Features

- Aluminium enclosure
- Spring return mechanism
- Power supply: 440-480 V - Y connection
- 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)

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

MOTORS

- 0,18 kW: 3-phase 0,18KW 1350G
- 0,37 kW: 3-phase 0,37KW 230/400V 1400G



PVDF PUMP HEAD



SS PUMP HEAD



PP PUMP HEAD

Motor driven diaphragm metering pump

PRIUS D - 60 Hz

Power supply..... 440-480 V - Y

PRIUS D 60 Hz / 3-PHASE

PRIUS	Pressure bar	Capacity l/h	stroke length	stroke/1'	Motor	HOSE CONNECTION			PUMP HEAD	ACCESSORIES FOR INSTALLATION
						PVDF	SS	PP	Model	
010055	10	55	3 mm	175	0,18 kW	1/2" 13 mm (i.d.)	R1/2" G1/2"	1/2" 13 mm (i.d.)	NM	A
010027		27		87						
010014		14		44						
010100	10	100	3 mm	175	0,37 kW	3/4" 13 mm (i.d.)	R3/4" G3/4"	3/4" 13 mm (i.d.)	TM	A
010050		50		87						
010025		25		44						
007150	7	150	4 mm	175	0,37 kW	3/4" 13 mm (i.d.)	R3/4" G3/4"	3/4" 13 mm (i.d.)		A
007075		75		87						
007037		37		44						
005230	5	230	6 mm	175	0,37 kW	3/4" 18 mm (i.d.)	R3/4" G3/4"	3/4" 18 mm (i.d.)		B
005115		115		87						
005057		57		44						
005335	5	335	4 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005165		165		87						
005084		84		44						
005420	5	420	5 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)		C
005210		210		87						
005105		105		44						
005505	5	505	6 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)		C
005250		250		87						
005126		126		44						
003950	3	950	10 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
003713		713	8 mm	175						

ACCESSORIES FOR INSTALLATION

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 accessories: A-B-C.

"PRIUS D" SERIES - 50 HZ / SINGLE-PHASE MOTOR

Features

- Aluminium enclosure
- Spring return mechanism
- Power supply: 220-240 V - Δ/Y connection
- 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)

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

MOTORS

- 0,37 kW: MOTOR WITH HIGH STARTING TORQUE 0,37KW 1400G
- 0,55 kW: MOTOR WITH HIGH STARTING TORQUE 0,55KW 1400G B14



PVDF PUMP HEAD



SS PUMP HEAD



PP PUMP HEAD

Motor driven diaphragm metering pump

PRIUS - 50 Hz

Power supply..... 220-240 V

PRIUS D 50 Hz / SINGLE-PHASE MOTOR

PRIUS	Pressure bar	Capacity l/h	Stroke length	stroke/1'	Motor	HOSE CONNECTION			PUMP HEAD	ACCESSORIES FOR INSTALLATION
						PVDF	SS	PP	Model	
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						
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						
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.)		A
007086		86		94						
007064		64		70						
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.)		B
005128		128		94						
005096		96		70						
005350	5	350	4 mm	175	0,55 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005188		188		94						
005140		140		70						
005440	5	440	5 mm	175	0,55 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)		C
005236		236		94						
005176		176		70						
005530	5	530	6 mm	175	0,55 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)		C
005284		284		94						
005212		212		70						

ACCESSORIES FOR INSTALLATION

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

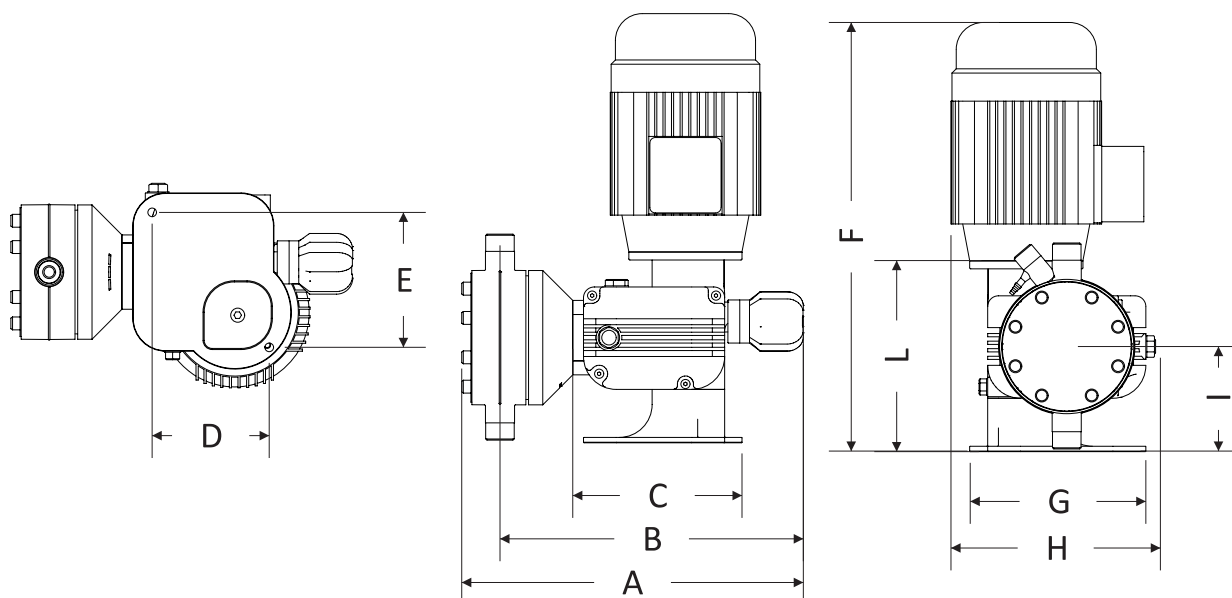
C. INSTALLATION KIT (OPTION)

- 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 accessories: A-B-C.

Motor driven diaphragm metering pump

Dimensions



WEIGHTS AND DIMENSIONS ARE REFERRED TO MOTOR PUMPS WITH PVDF AND PVC PUMP HEAD MODEL.

DIMENSIONS (mm)			
	NM pump head (PVDF)	TM pump head (PVDF)	UM pump head (PP)
A	~ 320	~ 330	~ 350
B	~ 280	~ 315	~ 320
C	157	157	157
L	177	220	300
G	163	163	180
H	~ 190	~ 190	~ 190
I	97,5	110	150
F	~ 400	~ 460	~ 460
E	125,2	125,2	125,2
D	108,6	108,6	108,6
Ø fixing holes	8	8	8

Motor driven diaphragm metering pump

WEIGHTS AND DIMENSIONS ARE REFERRED TO MOTOR PUMPS WITH PVDF AND PP PUMP HEAD MODEL.

PACKAGING			
50 Hz PUMP	60 Hz PUMP	Weight	Dimensions
010060	010055	18 Kg	60x80x50 cm
010105	010100	20 Kg	
007160	007150	20 Kg	
005240	005230	20 Kg	
005350	005335	21 Kg	
005440	005420	21 Kg	
005530	005505	21 Kg	
010030	010027	18 Kg	
010056	010050	20 Kg	
007086	007075	20 Kg	
005128	005115	20 Kg	
005188	005165	21 Kg	
005236	005210	21 Kg	
005284	005250	21 Kg	
010024	/	18 Kg	
010042	/	20 Kg	
007064	/	20 Kg	
005096	/	20 Kg	
005140	/	21 Kg	
005176	/	21 Kg	
005212	/	21 Kg	
010012	/	18 Kg	

WEIGHT			
50 Hz PUMP	60 Hz PUMP	tot.	without motor
010060	010055	12,30 Kg	8,00 Kg
010105	010100	14,30 Kg	8,00 Kg
007160	007150	14,30 Kg	8,00 Kg
005240	005230	14,30 Kg	8,00 Kg
005350	005335	15,60 Kg	9,30 Kg
005440	005420	15,60 Kg	9,30 Kg
005530	005505	15,60 Kg	9,30 Kg
010030	010027	12,30 Kg	8,00 Kg
010056	010050	14,30 Kg	8,00 Kg
007086	007075	14,30 Kg	8,00 Kg
005128	005115	14,30 Kg	8,00 Kg
005188	005165	15,60 Kg	9,30 Kg
005236	005210	15,60 Kg	9,30 Kg
005284	005250	15,60 Kg	9,30 Kg
010024	/	12,30 Kg	8,00 Kg
010042	/	14,30 Kg	8,00 Kg
007064	/	14,30 Kg	8,00 Kg
005096	/	14,30 Kg	8,00 Kg
005140	/	15,60 Kg	9,30 Kg
005176	/	15,60 Kg	9,30 Kg
005212	/	15,60 Kg	9,30 Kg
010012	/	12,30 Kg	8,00 Kg