

# 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.



- 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

CUSTOM.      PACKAGING      INTERNAL

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

BAR      L/H      COLOR

CAPACITY			
PRIUS D 50Hz	PRIUS D AP 50 Hz	PRIUS D 60 Hz	
010060	60 l/h @ 10 bar	010055	55 l/h @ 10 bar
010030	30 l/h @ 10 bar	100004	4 l/h @ 100 bar
010024	24 l/h @ 10 bar	100002	2 l/h @ 100 bar
010012	12 l/h @ 10 bar	1001,5	1,5 l/h @ 100 bar
010016	16 l/h @ 10 bar	050017	17 l/h @ 50 bar
010105	105 l/h @ 10 bar	050009	9 l/h @ 50 bar
010056	56 l/h @ 10 bar	050005	5 l/h @ 50 bar
010042	42 l/h @ 10 bar	05002,5	2,5 l/h @ 50 bar
010021	21 l/h @ 10 bar	030028	28 l/h @ 30 bar
007160	160 l/h @ 7 bar	030015	15 l/h @ 30 bar
007086	86 l/h @ 7 bar	030010	30 l/h @ 10 bar
007064	64 l/h @ 7 bar	030005	5 l/h @ 30 bar
007032	32 l/h @ 7 bar	030076	76 l/h @ 30 bar
005240	240 l/h @ 5 bar	030041	41 l/h @ 30 bar
005128	128 l/h @ 5 bar	030030	30 l/h @ 30 bar
005096	96 l/h @ 5 bar	030015	15 l/h @ 30 bar
005048	48 l/h @ 5 bar	020170	170 l/h @ 20 bar
005350	350 l/h @ 5 bar	020091	91 l/h @ 20 bar
005188	188 l/h @ 5 bar	020068	68 l/h @ 20 bar
005140	140 l/h @ 5 bar	020034	34 l/h @ 20 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	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		
005100	1000 l/h @ 5 bar		
005520	520 l/h @ 5 bar		
005750	750 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		

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
L	0,55Kw	220-240/380-420 - 50 Hz	3-PHASE
3	0,18Kw	220/380 - 60 Hz	3-PHASE
4	0,37Kw	220/380 - 60 Hz	3-PHASE
6	0,37Kw	230 - 50 Hz	1-PHASE
8	0,55Kw	230 - 50 Hz	1-PHASE
7	0,37Kw	110-115 - 60 Hz	1-PHASE

REDUCTION GEAR	(50Hz)	(60Hz)	
1	8:1	175 s/min	-
2	15:1	94 s/min	-
3	10:1	-	175 s/min
4	20:1	70 s/min	87 s/min
5	40:1	35 s/min	44 s/min

O RING	
V	FKM B
D	Dutral

PUMP HEAD MATERIAL	
K	PVDF
S	SS
P	PP
C	PVC

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

PRIUS D AP 60 HZ	
100003	3 l/h @ 100 bar
1001,5	1,5 l/h @ 100 bar
050014	14 l/h @ 50 bar
050007	7 l/h @ 50 bar
0503,5	3,5 l/h @ 50 bar
030026	26 l/h @ 30 bar
030013	13 l/h @ 30 bar
030006	6 l/h @ 30 bar
030072	72 l/h @ 30 bar
030036	36 l/h @ 30 bar
030018	18 l/h @ 30 bar
020138	138 l/h @ 20 bar
020080	80 l/h @ 20 bar
020040	40 l/h @ 20 bar

## 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
- 0,55 kW: 3-phase 0,55kW 230/400V 1400G

#### 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.**



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 50Hz**

PRIUS D 50Hz	Pressure bar	Capacity l/h	stroke length	Stroke/1'	Motor	HOSES CONNECTION			pump head	ACCESSORIES
						PVDF	AISI 316L	PP		
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.)		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.)		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.)		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.)		
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.)		
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.)		
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
005520		520		94	0,37 kW					
005750	5	750	8 mm	175	0,55 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)		
002M00	2	1000	10 mm	175	0,37 kW	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)		
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.)		
005380	5	380		94						
005290		290		70						
005140		140		35						

Motor driven diaphragm metering pump

PRIUS D AP 50Hz							
PRIUS D AP 50Hz	Pressure bar	Capacity l/h	stroke length	Stroke/1'	Motor	HOSES CONNECTION	PUMP HEAD
						AISI 316L	AISI 316L
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
020091		91		94			
020068		68		70			
020034		34		35			

PRIUS D AP 50 Hz								
pump head	stroke length	PRIUS D AP 60Hz	Stroke/1'	Pressure bar	Capacity l/h	Motor	HOSES CONNECTION	PUMP HEAD
							Injection hose / Suction hose	PVDF <sup>1</sup>
NM AP	2 mm	020030	175	20	30	0,37 kW	8x10 PVDF / 8x12 PVC	PVDF <sup>1</sup>
		020016	94		16			
		020012	70		12			
		020006	35		6			

Motor driven diaphragm metering pump

“PRIUS D” SERIES - 60 Hz

Features

- Aluminium enclosure
- Spring return mechanism
- Power supply: 220/380 V, 440-480 V, 110-115 V
- 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

60Hz 3-phase 0,18KW 220/380 V  
 60Hz 3-phase 0,37KW 220/380 V  
 60Hz 3-phase 0,37KW 110-115 V

60Hz 3-phase 0,21KW 440/480 V  
 60Hz 3-phase 0,43KW 440/480 V



PVDF PUMP HEAD



SS PUMP HEAD



PP PUMP HEAD

PRIUS D AP 60Hz							
PRIUS D AP 60Hz	Pressure bar	Capacity l/h	stroke length	Stroke/1'	Motor	HOSES CONNECTION	PUMP HEAD
						AISI 316L	AISI 316L
100003	100	3	1.5 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	3/8"	L1
1001,5		1,5		70			
050014	50	14	2 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	1/2"	M1
050007		7		70			
0503,5		3,5		35			
030026	30	26	2 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	1/2"	N
030013		13		70			
030006		6		35			
030072	30	72	4 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	1/2"	S
030036		36		70			
030018		18		35			
020138	20	138	6 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	3/4"	T
020080		80		81			
020040		40		41			

# Motor driven diaphragm metering pump

PRIUS D - 60 Hz

Power supply..... 220/380 V - Δ/Y - three-phase  
 Power supply..... 440/480 V - Y - three-phase  
 Power supply..... 110-115 V - single-phase

PRIUS D 60 Hz										
PRIUS D 60 Hz	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 (220/380 V) or 0,21 kW (440/480 V)	1/2" 13 mm (i.d.)	R1/2" G1/2"	1/2" 13 mm (i.d.)	NM	A
010027		27		87						
010014		14		44						
010043		43		175						
005075		75		175						
010100	10	100	3 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	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 (220/380 V) or 0,43 kW (440/480 V)	3/4" 13 mm (i.d.)	R3/4" G3/4"	3/4" 13 mm (i.d.)	TM	A
007075		75		87						
007037		37		44						
005230	5	230	6 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	3/4" 18 mm (i.d.)	R3/4" G3/4"	3/4" 18 mm (i.d.)	TM	B
005115		115		87						
005057		57		44						
005335	5	335	4 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	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 (220/380 V) or 0,43 kW (440/480 V)	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005210		210		87						
005105		105		44						
005505	5	505	6 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	G1-1/2" 30 mm (i.d.)	R1"	G1-1/2" 30 mm (i.d.)	UM	C
005250		250		87						
005126		126		44						
003950	3	950	10 mm	175	0,37 kW (220/380 V) or 0,43 kW (440/480 V)	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.**

Motor driven diaphragm metering pump

“PRIUS D” SERIES - 50 HZ / SINGLE-PHASE MOTOR

Features

- Aluminium enclosure
- Spring return mechanism
- Power supply: 230 V
- 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..... 230 V

### PRIUS D 50 Hz / SINGLE-PHASE MOTOR

PRIUS D 50 MON	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						
010012		12		35						
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.)	UM	B
005128		128		94						
005096		96		70						
005048		48		35						
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						
005070		70		35						
005440	5	440	5 mm	175	0,55 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	0,55 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						

#### 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)

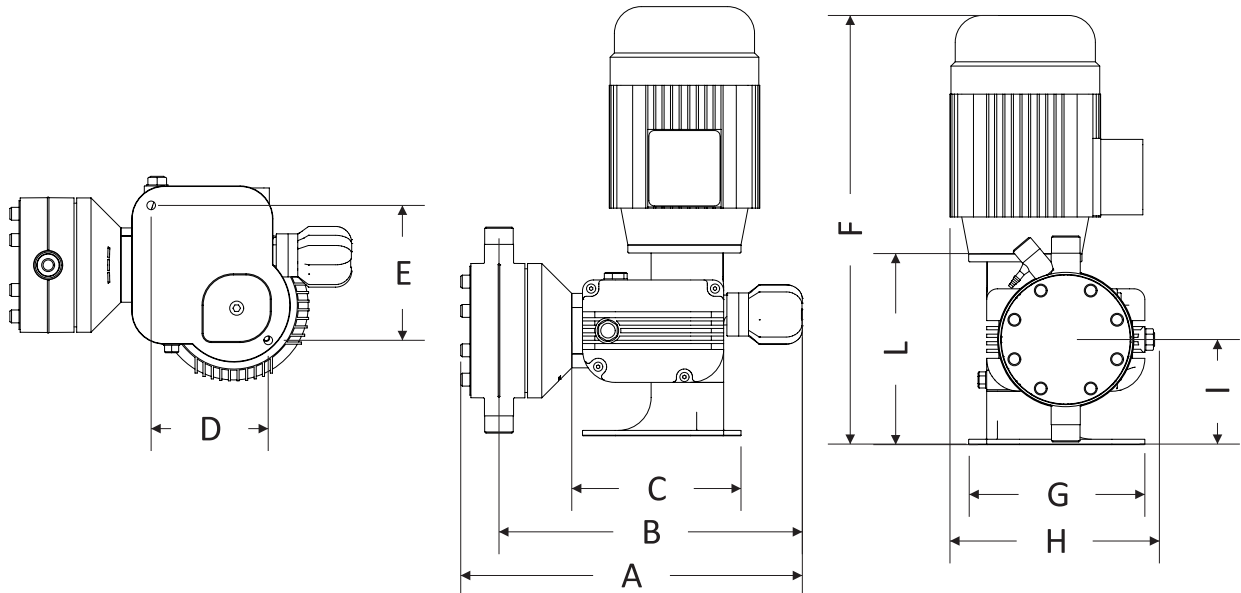
- 1 1/2" foot filter with 30 mm (int. diam.) hose fitting (G1 1/2" - 30 mm)
- 1 1/2" injection valve

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)
<b>A</b>	~ 320	~ 320	~ 340
<b>B</b>	~ 280	~ 315	~ 320
<b>C</b>	157	157	157
<b>L</b>	177	220	300
<b>G</b>	163	163	180
<b>H</b>	~ 190	~ 190	~ 190
<b>I</b>	97,5	110	150
<b>F</b>	~ 390	~ 390	~ 390
<b>E</b>	125,2	125,2	125,2
<b>D</b>	108,6	108,6	108,6
∅ 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