

Diaphragm metering pump EcoPro / EcoAdd



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1 Diaphragm metering pump EcoPro / EcoAdd

- ▲ Simple and fast operation thanks to plain text operator guidance and multicolor 3.5" graphic display with touch function
- ▲ Adjustable metering range up to 1:12000
- ▲ Different metering modes adjustable (e.g. for high-viscosity products)
- ▲ USB interface (EcoAdd, transmission of operating data, software updates)
- ▲ Bluetooth interface (EcoAdd, operating data retrievable via smartphone APP)
- ▲ Evaluation and visualization tool for PC/laptop (EcoAdd)
- ▲ Variable arrangement of control unit and mounting console



EcoPro

EcoAdd

The EcoPro/EcoAdd is a metering pump series with step motor technology. This drive technology provides a variety of advantages:

- Precise adjustable metering capacity from 1:100 (for EcoPro) and 1:12000 (for EcoAdd)
- Almost pulsation-free injection
- Adjustment of the suction lift period for viscous products or difficult suction conditions
- Low-noise operation

The modular structure makes a simple modification of EcoPro to the EcoAdd version possible. The

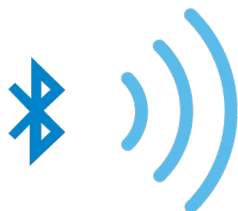
control unit can be turned by 90° with simple methods. This allows the adjustment to local conditions. Also the mounting console is for variable use. This makes it suitable for both installations, on a table or on the wall.

EcoAdd also enables a comfortable data exchange through communication interfaces such as USB or optionally Bluetooth.

The scope of delivery is rounded off by practical accessories, so forming a complete range of equipment for all metering uses.



EcoAdd



EcoAPP



EcoCONNECT

Bluetooth communication by pinboard with smartphone, App and PC software.

Variable structure

Upgrade from EcoPro to EcoAdd



EcoPro

EcoAdd

Control unit can be rotated by 90°:



Standard version:
Operation from the front and
pump head at the side

Option:
Operation from the front and
pump head on the back side

Diaphragm metering pump EcoPro / EcoAdd

Technical data



2 Technical data

Pump type		5	11	30	50	120
EcoPro						
EcoAdd						
Pump capacity range EcoPro	l/h	0.05 - 5	0.11 - 11	0.3 - 30	0.5 - 50	1.2 - 120
Pump capacity range EcoAdd	l/h	0.01 - 5	0.01 - 11	0.01 - 30	0.01 - 50	0.01 - 120
Max. metering back pressure	bar	10	10	3	10	3
Connection thread	Zoll	3/8	3/8	5/8	5/8	1¼
Reproductivity		< ±3 %				
Max. suction height with wet valves	m	2				
Max. metering frequency	1/min	171	190	171	158	171
Max. viscosity (spring-loaded valves)	mPas	1000	1000	500	1000	500
Permissible ambient temperature	°C	2 - 45				
Power supply		100-240 V ±10 % 50/60 Hz				
Safety type		IP 65				
Weight	kg	3.1	3.1	3.8	5.2	5.7
Certificates		CE, UL, CSA				

Materials:

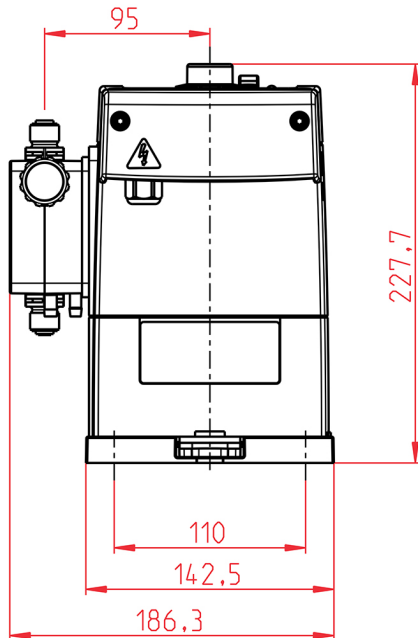
Housing:	PPO (Noryl)
Pump head:	PP or PVDF
Diaphragm:	PTFE – EPDM compound diaphragm
Seals:	FKM or EPDM optional PTFE or FFPM (Kalrez)
Valve balls:	ceramics optional PTFE or stainless steel 1.4401
Valve spring:	Hastelloy C4
Colour:	blue RAL 5007

Diaphragm metering pump EcoPro / EcoAdd

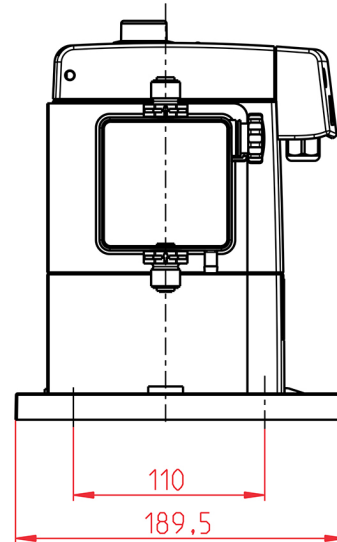
Technical data

Dimensions

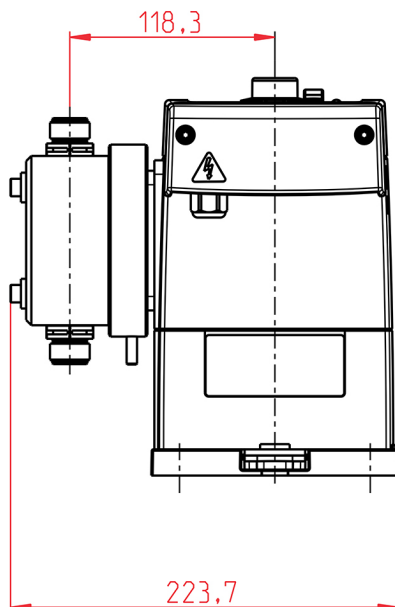
EcoPro 5 / 10 / 30 / 50 l/h:



EcoPro 5/11 l/h



EcoPro side view



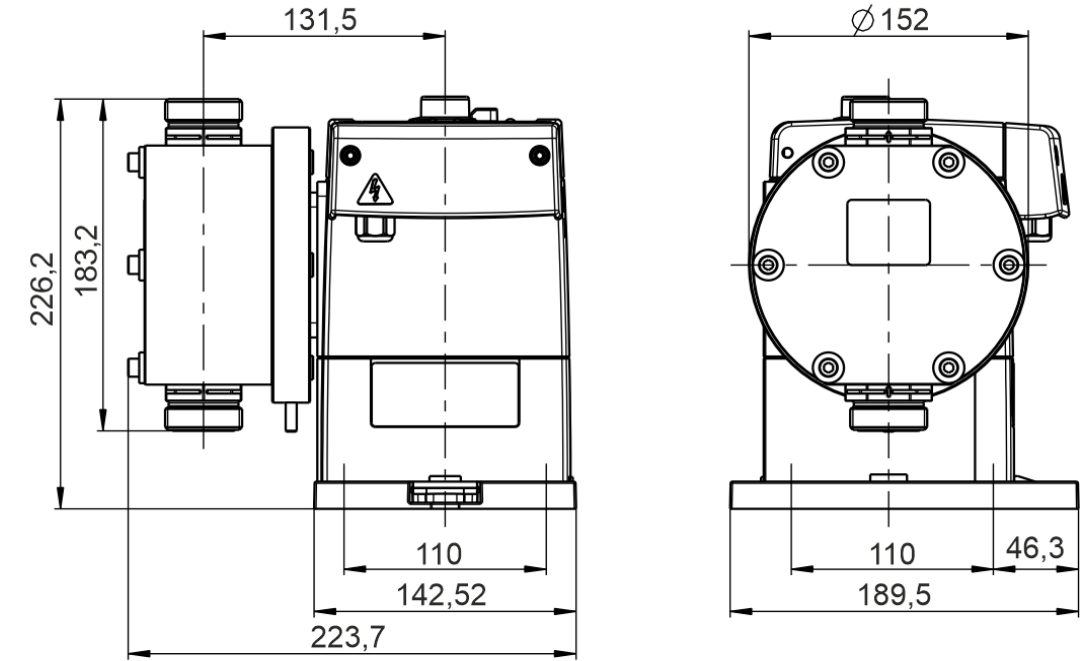
EcoPro 30/50 l/h

Diaphragm metering pump EcoPro / EcoAdd
Technical data

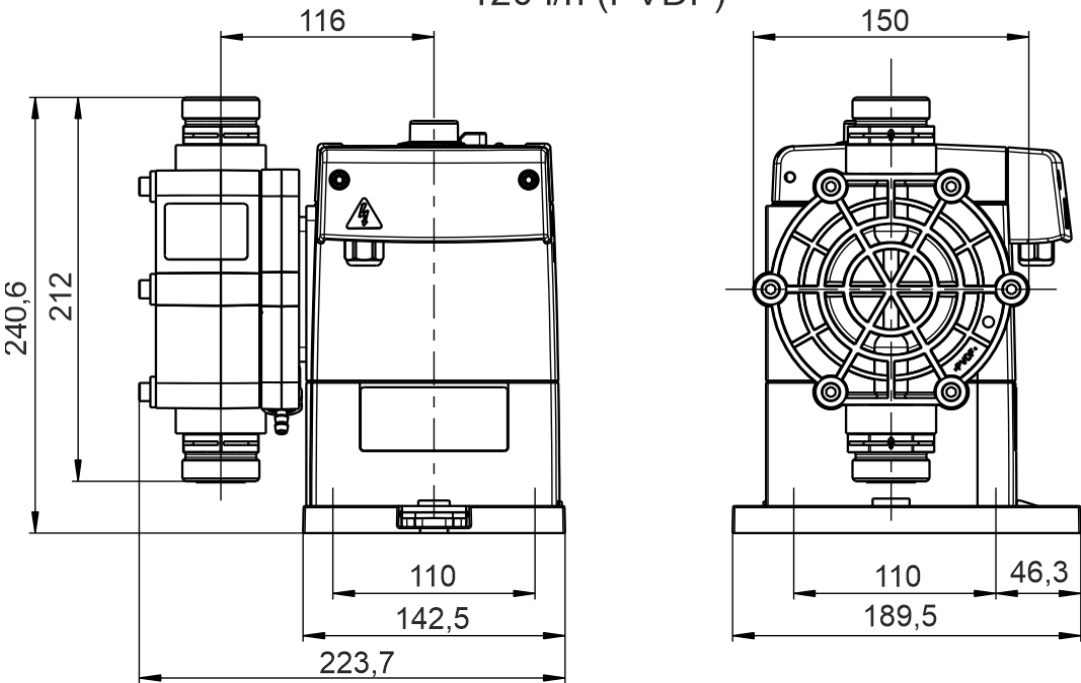


EcoPro 120 l/h:

120 l/h (PP)



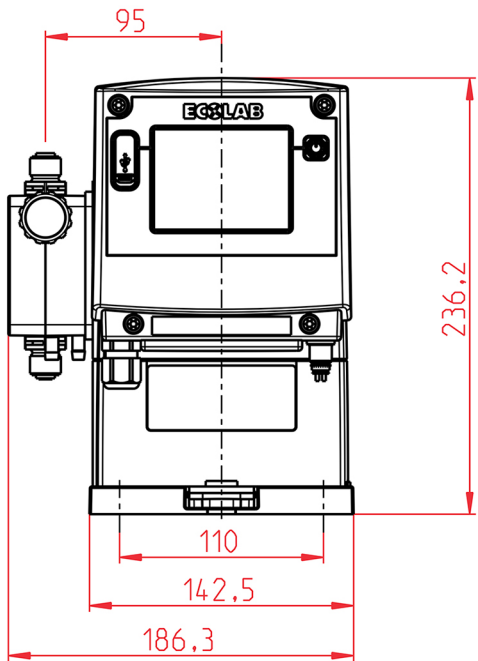
120 l/h (PVDF)



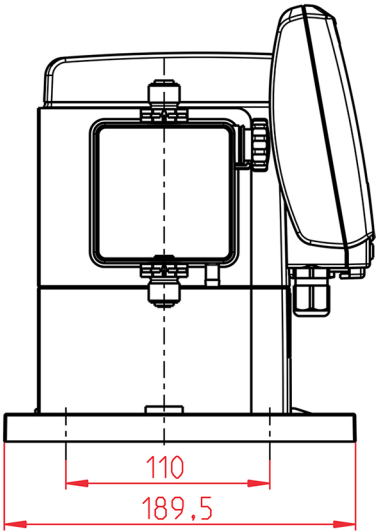
Diaphragm metering pump EcoPro / EcoAdd
Technical data



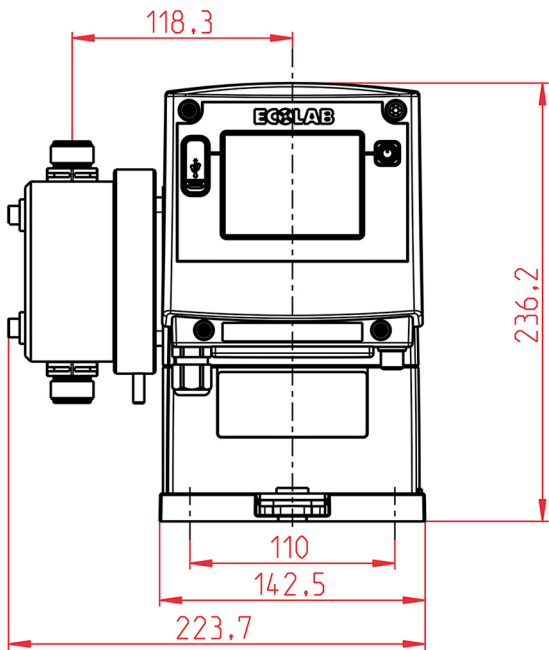
EcoAdd 5 / 10 / 30 / 50 l/h:



EcoAdd 5/11 l/h



EcoAdd side view



EcoAdd 30/50 l/h

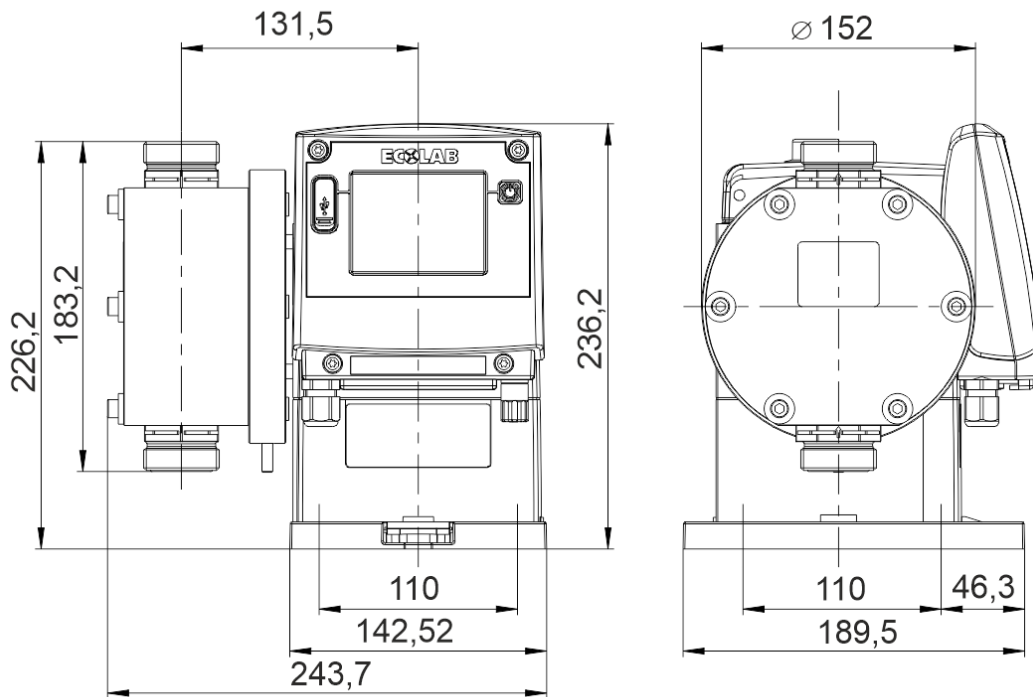
Diaphragm metering pump EcoPro / EcoAdd

Technical data

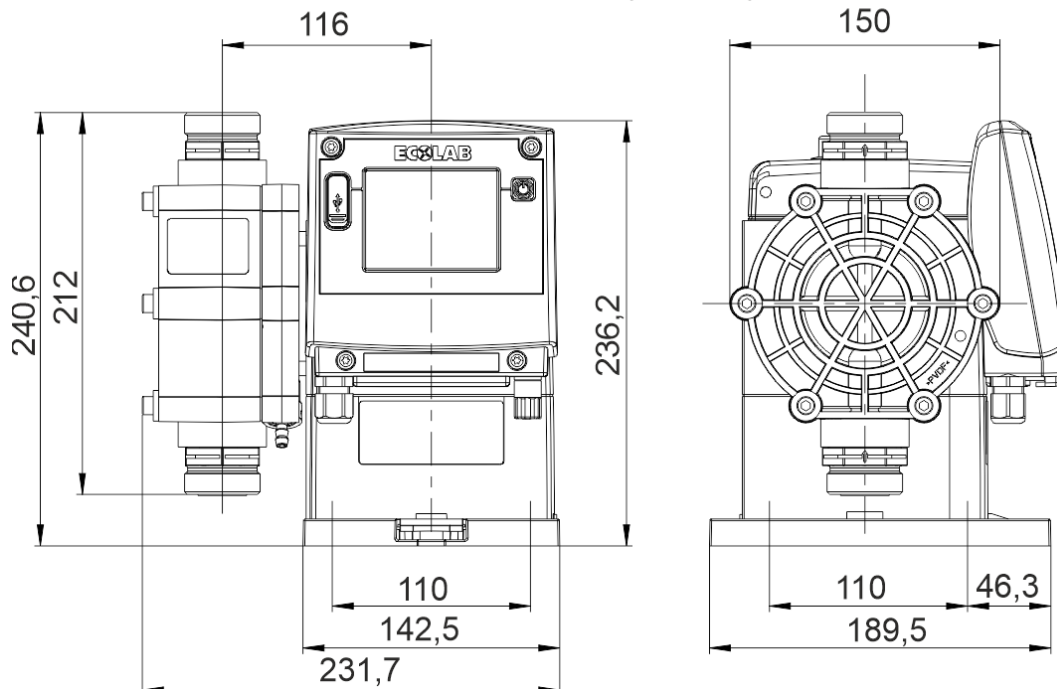


EcoAdd 120 l/h:

120 l/h (PP)



120 l/h (PVDF)



3 Ordering data

Ordering data – standard pumps:

Article	Pump code	Article no.
EcoPro PP/FKM	EcoPro-ES-00510X-PFC-00S-1S-S0	15201000
	EcoPro-ES-01110S-PFC-00S-1S-S0	15202000
	EcoPro-ES-03003S-PFC-00S-1S-S0	15203000
	EcoPro-ES-05010M-PFC-00S-1S-S0	15205000
	EcoPro-ES-12003M-PFC-00S-1S-S0	15206000
PP/EPDM	EcoPro-ES-00510X-PEC-00S-1S-S0	15201100
	EcoPro-ES-01110S-PEC-00S-1S-S0	15202100
	EcoPro-ES-03003S-PEC-00S-1S-S0	15203100
	EcoPro-ES-05010M-PEC-00S-1S-S0	15205100
	EcoPro-ES-12003M-PEC-00S-1S-S0	15206100
PVDF/FKM	EcoPro-ES-00510X-DFC-00S-1S-S0	15201300
	EcoPro-ES-01110S-DFC-00S-1S-S0	15202300
	EcoPro-ES-03003S-DFC-00S-1S-S0	15203300
	EcoPro-ES-05010M-DFC-00S-1S-S0	15205300
	EcoPro-ES-12003M-DFC-00S-1S-S0	15206300
PVDF/EPDM	EcoPro-ES-00510X-DEC-00S-1S-S0	15201400
	EcoPro-ES-01110S-DEC-00S-1S-S0	15202400
	EcoPro-ES-03003S-DEC-00S-1S-S0	15203400
	EcoPro-ES-05010M-DEC-00S-1S-S0	15205400
	EcoPro-ES-12003M-DEC-00S-1S-S0	15206400
EcoAdd PP/FKM	EcoAdd-ES-00510X-PFC-00S-1S-S0	15221000
	EcoAdd-ES-01110S-PFC-00S-1S-S0	15222000
	EcoAdd-ES-03003S-PFC-00S-1S-S0	15223000
	EcoAdd-ES-05010M-PFC-00S-1S-S0	15225000
	EcoAdd-ES-12003M-PFC-00S-1S-S0	15226000
PP/EPDM	EcoAdd-ES-00510X-PEC-00S-1S-S0	15221100
	EcoAdd-ES-01110S-PEC-00S-1S-S0	15222100
	EcoAdd-ES-03003S-PEC-00S-1S-S0	15223100
	EcoAdd-ES-05010M-PEC-00S-1S-S0	15225100
	EcoAdd-ES-12003M-PEC-00S-1S-S0	15226100
PVDF/FKM	EcoAdd-ES-00510X-DFC-00S-1S-S0	15221300
	EcoAdd-ES-01110S-DFC-00S-1S-S0	15222300
	EcoAdd-ES-03003S-DFC-00S-1S-S0	15223300
	EcoAdd-ES-05010M-DFC-00S-1S-S0	15225300
	EcoAdd-ES-12003M-DFC-00S-1S-S0	15226300
PVDF/EPDM	EcoAdd-ES-00510X-DEC-00S-1S-S0	15221400
	EcoAdd-ES-01110S-DEC-00S-1S-S0	15222400
	EcoAdd-ES-03003S-DEC-00S-1S-S0	15223400
	EcoAdd-ES-05010M-DEC-00S-1S-S0	15225400
	EcoAdd-ES-12003M-DEC-00S-1S-S0	15226400

Scope of supply: Diaphragm metering pump (EcoPro/EcoAdd), mounting console,
operating instructions
without hose connection material

Hose connection material, see accessories.

Diaphragm metering pump EcoPro / EcoAdd Ordering data



Ordering data – standard pumps:

Article	Pump code	Article no.
EcoAdd (with Bluetooth module)		
PP/FKM	EcoAdd-EB-00510X-PFC-00S-1S-S0	15221001
	EcoAdd-EB-01110S-PFC-00S-1S-S0	15222001
	EcoAdd-EB-03003S-PFC-00S-1S-S0	15223001
	EcoAdd-EB-05010M-PFC-00S-1S-S0	15225001
	EcoAdd-EB-12003M-PFC-00S-1S-S0	15226001
PP/EPDM	EcoAdd-EB-00510X-PEC-00S-1S-S0	15221101
	EcoAdd-EB-01110S-PEC-00S-1S-S0	15222101
	EcoAdd-EB-03003S-PEC-00S-1S-S0	15223101
	EcoAdd-EB-05010M-PEC-00S-1S-S0	15225101
	EcoAdd-EB-12003M-PEC-00S-1S-S0	15226101
PVDF/FKM	EcoAdd-EB-00510X-DFC-00S-1S-S0	15221301
	EcoAdd-EB-01110S-DFC-00S-1S-S0	15222301
	EcoAdd-EB-03003S-DFC-00S-1S-S0	15223301
	EcoAdd-EB-05010M-DFC-00S-1S-S0	15225301
	EcoAdd-EB-12003M-DFC-00S-1S-S0	15226301
PVDF/EPDM	EcoAdd-EB-00510X-DEC-00S-1S-S0	15221401
	EcoAdd-EB-01110S-DEC-00S-1S-S0	15222401
	EcoAdd-EB-03003S-DEC-00S-1S-S0	15223401
	EcoAdd-EB-05010M-DEC-00S-1S-S0	15225401
	EcoAdd-EB-12003M-DEC-00S-1S-S0	15226401
Scope of supply:	Diaphragm metering pump (EcoPro/EcoAdd), mounting console, operating instructions without hose connection material	

Hose connection material, see accessories.

4 Pump code

Control unit

1. Pump name / electrical version

EcoPro	=	Keys / settings:	on/off, test, viscosity high/low, adjustment range 1:100
		LEDs:	operation, viscosity high/low, alarm
		Inputs:	release
EcoAdd	=	Keys / settings:	on/off, 4 viscosity modes, 5 operating modes adjustment range 1:12000
		Display:	touch display
		Operation mode:	manual, pulse, current, timer, charge
		Inputs:	release, pulse, current, charge, level, flow, diaphragm break
		Outputs:	stroke signal, alarm
		Communication:	USB, CAN Bus
		Option:	Bluetooth extension module

2. Mains supply

E	=	mains cable 2.5 m with EU plug
U	=	mains cable 2.5 m with US plug
N	=	mains cable 2.5 m without plug (end splices)

3. Control unit versions

S	=	standard
B	=	Bluetooth extension (EcoAdd)
T	=	rotated control unit
1	=	Bluetooth extension and rotated control unit (EcoAdd)

EcoPro-ES-00510X-PFC-00S-1S-S0

Pump head

4. Pump capacity (max.) / back pressure / drive

00510X	=	5 l/h / 10 bar / drive size XS
01110S	=	11 l/h / 10 bar / drive size S
03003S	=	30 l/h / 3 bar / drive size S
05010M	=	50 l/h / 10 bar / drive size M
12003M	=	120 l/h / 3 bar / drive size M

5. Material pump head / valves

P	=	PP
D	=	PVDF

6. Sealing material

F	=	FKM
E	=	EPDM
T	=	PTFE-coated
K	=	FFPM (Kalrez)

7. Valve ball material

C	=	ceramics
T	=	PTFE
S	=	stainless steel V4A

8- Valve spring

0	=	without spring (--)
1	=	suction valve (SV): --, pressure valve (PV): 0.1 bar
2	=	SV: --, PV: 0.2 bar (5, 11 l/h)
3	=	SV: --, PV: 0.4 bar (5, 11 l/h)
5	=	SV: 0.1 bar, PV: 0.1 bar

9. Hydraulic connection

0	=	without hose connection
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10. Pump head version

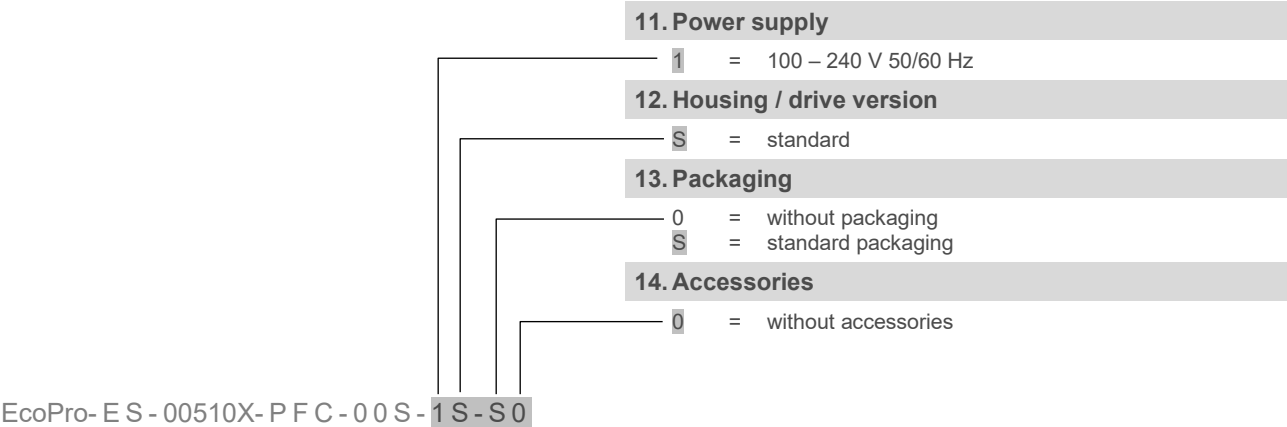
S	=	standard
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EcoPro-ES-00510X-PFC-00S-1S-S0

Diaphragm metering pump EcoPro / EcoAdd
Pump code



Miscellaneous



5 Pump kits

The pump kit is a complete system. The components of this set have been selected to match the respective pump size and to be compatible with the pump head materials. With this operational metering system, the user no longer has to go through the tedious search for suitable individual parts for the metering task.



EcoAdd pump kit

5.1 Pump kits EcoPro

Pump kit EcoPro 5 l/h DFC with bottom admission valve

Consisting of:

	Article	Article no.
	Diaphragm metering pump EcoPro EcoPro-ES-00510X-DFC-00S-1S-S0	15201300
	Bottom admission valve BSV VC PV FP KE 000 G 3/8 - 22	243129
	Hose PE 4/6 mm Length: 5 m	417400301
	Metering valve DVP DDFC-H03-G1/2-G3/8-045-S00	252157
	Connection sets (3 pcs.) Connection set Di4/Da6-G3/8-PVDF-NA	252101

Diaphragm metering pump EcoPro / EcoAdd Pump kits



Pump kit EcoPro 11 l/h DFC with bottom admission valve

Consisting of:

	Article	Article no.
	Diaphragm metering pump EcoPro EcoPro-ES-01110X-DFC-00S-1S-S0	15202300
	Bottom admission valve BSV VC PV FP KE 000 G 3/8 - 23	243130
	Hose PE 6/8 mm Length: 5 m	417400310
	Metering valve DVP DDFC-H03-G1/2-G3/8-045-S00	252157
	Connection sets (3 pcs.) Connection set Di6/Da8-G3/8-PVDF-NA	252105

Diaphragm metering pump EcoPro / EcoAdd Pump kits



Pump kit EcoPro 50 l/h PFC with bottom admission valve

Consisting of:

Article

Article no.



Diaphragm metering pump EcoPro

EcoPro-ES-05010M-PFC-00S-1S-S0

15202500



Bottom admission valve

BSV PV PV FP GL 000 G 5/8 – 06

249018



PVC-fabric PE 6/12 mm

Length: 5 m

417400123



Metering valve

DVP PPFC-H07-G1/2-G5/8-045-S00

252177



Connection sets (3 pcs.)

Connection set Di6/Da12-G5/8-PP-GY

252118

5.2 Pump kits EcoAdd

Pump kit EcoAdd 5 l/h DFC with suction lance 540 mm

Consisting of:

	Article	Article no.
	Diaphragm metering pump EcoAdd EcoAdd-ES-00510X-DFC-00S-1S-S0	15221300
	Suction lance, 540 mm A-SGL-VVF0C-G3/8-06-2SS-0540-99-99-p	10240524
	Hose PE 4/6 mm Length: 5 m	417400301
	Metering valve DVP DDFC-H03-G1/2-G3/8-045-S00	252157
	Connection sets (4 pcs.) Connection set Di/Da 4/6-6/8-6/12-G3/8-PV-NA	252138

Diaphragm metering pump EcoPro / EcoAdd Pump kits



Pump kit EcoAdd 11 l/h DFC with suction lance 540 mm

Consisting of:



Article

Article no.

Diaphragm metering pump EcoAdd

EcoAdd-ES-01110S-DFC-00S-1S-S0

15222300



Suction lance, 540 mm

A-SGL-VVF0C-G3/8-06-2SS-0540-99-99-p

10240524



Hose PE 5/8 mm

Length: 5 m

417400300



Metering valve

DVP DDFC-H03-G1/2-G3/8-045-S00

252157



Connection sets (4 pcs.)

Connection set Di5/Da8-G3/8-PVDF-NA

252103

Diaphragm metering pump EcoPro / EcoAdd Pump kits



Pump kit EcoAdd 50 l/h DFC with suction lance 475 mm

Consisting of:



Article

Article no.

Diaphragm metering pump EcoAdd

EcoAdd-ES-05010M-PFC-00S-1S-S0

15225000



Suction lance, 475 mm

A-SGL-VVF0C-G3/8-06-2SS-0540-99-99-p

10240410



PVC-fabric PE 10/16 mm

Length: 5 m

417400126



Metering valve

DVP PPFC-H07-G1/2-G5/8-045-S00

252177



Connection sets (4 pcs.)

Connection set Di/Da 6/12-10/16-G5/8-PP-GY

249237