



- ▲ Motor-driven diaphragm pump with integrated frequency converter
- ▲ High reserves due to a powerful asynchronous motor
- ▲ High flexibility due to variably adjustable suction speeds
- ▲ Almost pulsation-free metering possible
- ▲ Metering capacity setting by varying the pressing speed externally (norm signal 0/4 - 20 mA) and internally (key preselection) in the range 1:100
- ▲ Enable signal input makes safe control handling possible



Version V15



Version V60

The metering pump series ELADOS® EDP L is equipped with a robust three phase alternating current motor, which is controlled via an integrated frequency converter. In combination with a corresponding electronic system, the duration of the suction and metering stroke can be set to different lengths of time. This allows a multitude of applications for this pump concept.

The metering rate can be set in a range of 1:100, thus facilitating a wide range of capabilities with a single pump. Additionally, by choosing an

adequately long metering stroke time, an almost pulsation-free metering can be achieved. Also, by selecting different metering modes, it is possible to adjust the motor speed and suction stroke speed of the pump flexibly to high product viscosities or difficult suction conditions.

Norm signal input and enable signal input (V15) as well as pulse input and batch input (V60) increase the universal applicability of this pump series and turn it into a true all-rounder.



Technical Data

General Data

Max. pump capacity* [l/h] * in metering mode:	
high/low	220
medium	183
low/high	147
Metering back pressure [bar]:	10
Delivering capacity per stroke [cm³]:	30,56
Reproductivity [%]:	<± 3
Max. admissible viscosity [mPas]:	600
Suction height [mWs]**:	2
Number of strokes [1/min] in metering mode:	
high/low	120
medium	100
low/high	80
Recommended minimum diameter D_i [mm]	
suction connection	20
pressure connection	12
Ambient temperature max. [°C]:	40
Weight [kg] (with PP/PVDF pump head):	approx. 25,7
Colour:	blue RAL 5007

*Performance values are determined on the basis of 20° C warm water as metering medium

**Suction height under condition of clean and moistened valves

Electrical Data

Power supply:	115/230 V / 50/60 Hz ± 10 %
Current consumption [A]:	8 (115 V / 50/60 Hz) 4 (230 V / 50/60 Hz)
Motor power [KW]:	0.95
Safety type:	IP 55
Insulation class:	F

With reservations, all data refer to a water temperature of 20° C according to the instructions of the technical manual!

Note: To keep our products up-to-date, we reserve the right for technical changes. Further special versions on request!

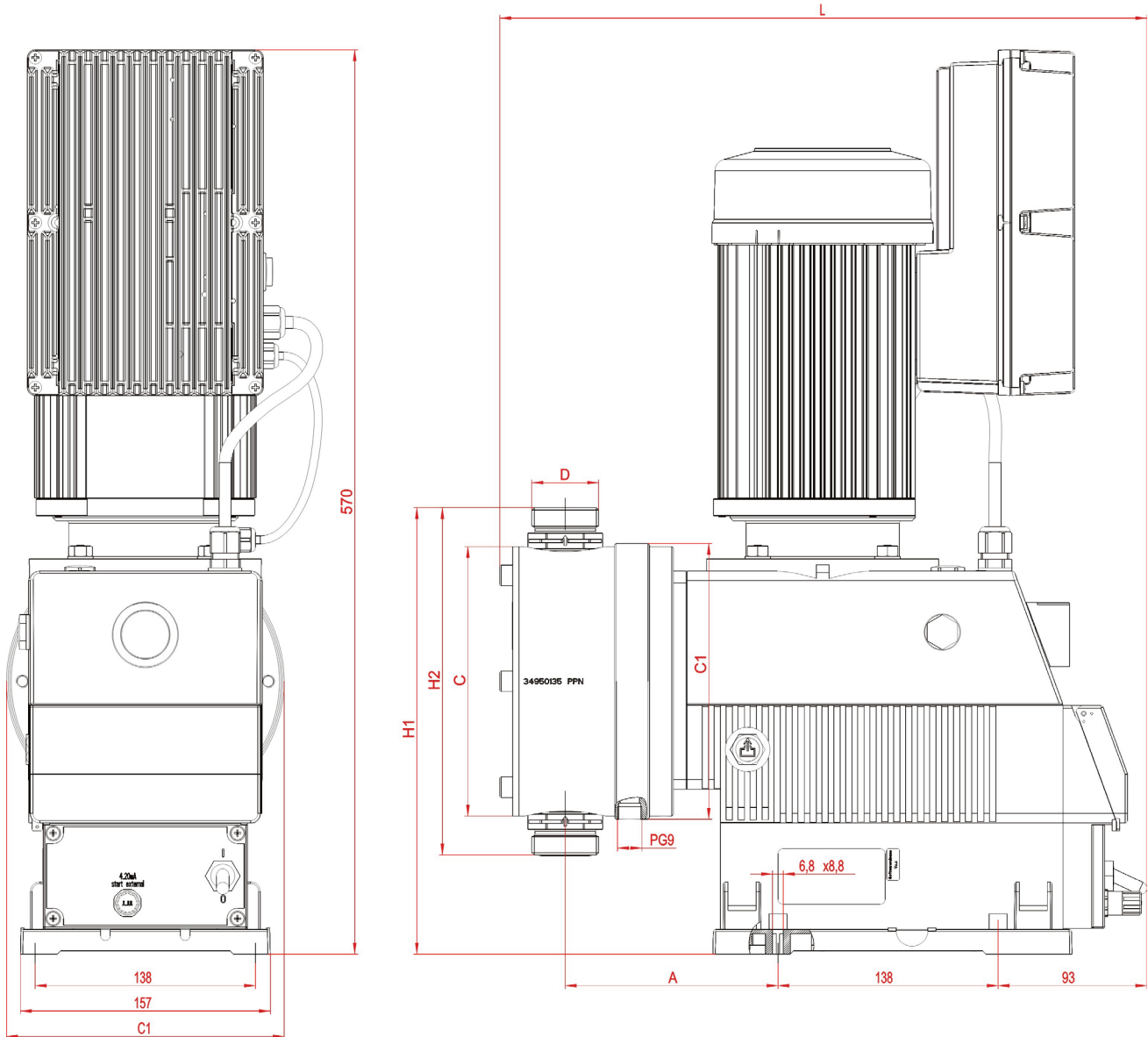


Material

Housing:	thermoplastic polyester
Pump head:	polypropylene (PP) optional: PVDF or stainless steel 1.4571
Diaphragm:	PTFE – EPDM compound diaphragm
Seals:	FPM 602 (Viton B) optional: EPDM or Kalrez
Valve balls:	ceramics optional: PTFE or stainless steel 1.4401

Dimensions

Version **V15 / V60**



Type	Dimensions [mm]						
	A	C	C1	L	H1	H2	D
02200	133,5	170	174	392	280	216	1¼"



Pump code – part 1

1. Electrical version (For detailed information refer to page [7](#))

V 15
V 60

2. Pump capacity

02200 = 220 l/h

3. Pump material

PP = PP (standard)
PV = PVDF
VA = V4A
VC = PVC

4. Metering back pressure (not freely selectable)

10 = 10 bar (for 220 l/h) [8 bar]

5. Sealing material

FP = Viton B (standard)
EP = EPDM
KA = kalrez

6. Valve ball material

KE = ceramics (standard)
VA = V4A
PT = teflon

7. Valve material

PP = PP (standard)
PV = PVDF
VA = V4A
VC = PVC

8. Valve spring

01 = suction valve (SV) and pressure valve (PV) spring-loaded
10 = SV without spring, PV spring-loaded
99 = without spring (standard)

9. Mains supply

99 = without cable

10. Power supply

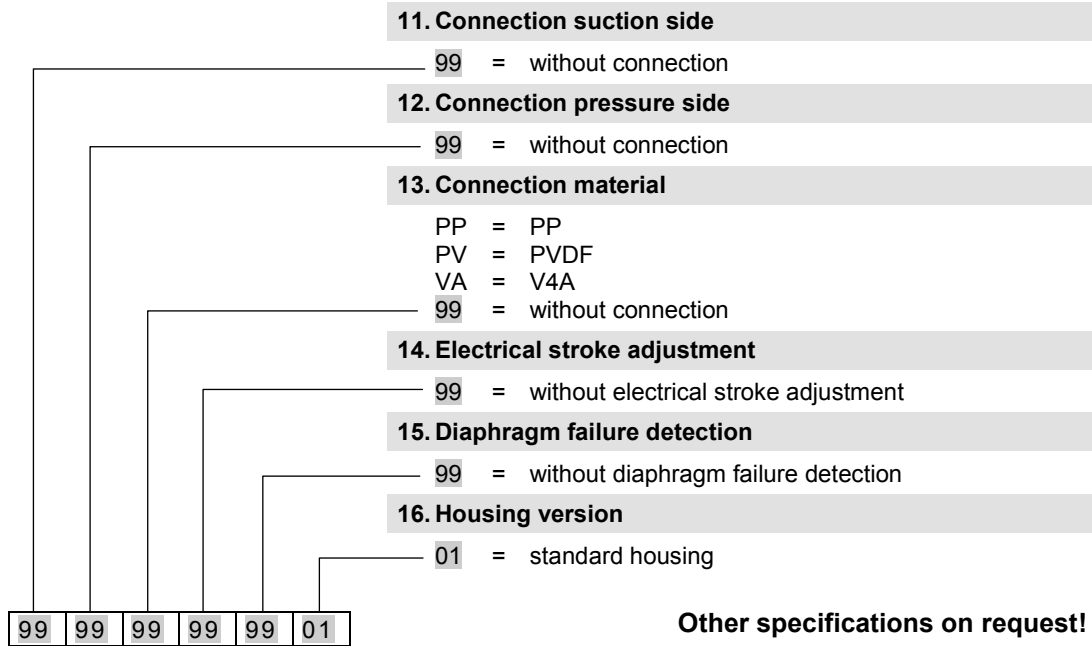
18 = 115/230 V / 50/60 Hz

V60	02200	PP	10	FP	KE	PP	99	99	18
-----	-------	----	----	----	----	----	----	----	----

Other specifications on request!



Pump code – part 2



Example of a complete pump code of a standard pump

V60	02200	PP	10	FP	KE	PP	99	99	18	-	99	99	99	99	99	01
(Pump code 1)							(Pump code 2)									



Electrical versions

V 15

- on/off switch
- electronic metering rate setting
- 8 digit display for the adjusted metering rate
- release signal input
- norm signal input 4-20mA
- 3 different metering modes selectable

V 60

- on/off switch
- electronic metering rate setting
- back-lit graphic display
- release signal input
- norm signal input 0/4-20mA
- stroke signal output and alarm signal output
- batch metering
- metering monitoring or metering rate control (in combination with dongle plate and oval gear meter)
- acquisition of operational data and consumption data
- calibration function
- 3 unchangeably stored metering modes selectable or metering mode (suction stroke duration and min. pressure stroke duration) freely adjustable

Ordering data – standard pumps

Article	Pump code / extent of supply	Material - No.
ELADOS® EDP L	V15 02200 PP 08 FP KE PP 99 99 18 - 99 99 99 99 99 01 Extent of supply: plug for electric supply, operating instructions, without hose connection material, without connector cable	150115
ELADOS® EDP L	V60 02200 PP 08 FP KE PP 99 99 18 - 99 99 99 99 99 01 Extent of supply: plug for electric supply, short operating instructions, operating instructions CD, without hose connection material, without connector cable	150165

For connection material refer to page [15](#)

ELADOS® EDP L V60^{PLUS}

with the add-on unit for the capture of operating data (dongle plate) the version V60 turns into version V60PLUS. For installation of the dongle plate the front panel must simply be removed. Then, the dongle plate can be plugged on the allocated terminal.



Article / Designation

Material No.

Dongle Plate

249629

with the following additional functions:

- automatic readjustment of the pump output in combination with an oval gear meter (for operating modes „internal“ and „current“ only)
- automatic calibration function via oval gear meter
- consumption data control by means of oval gear meter



Oval gear meter

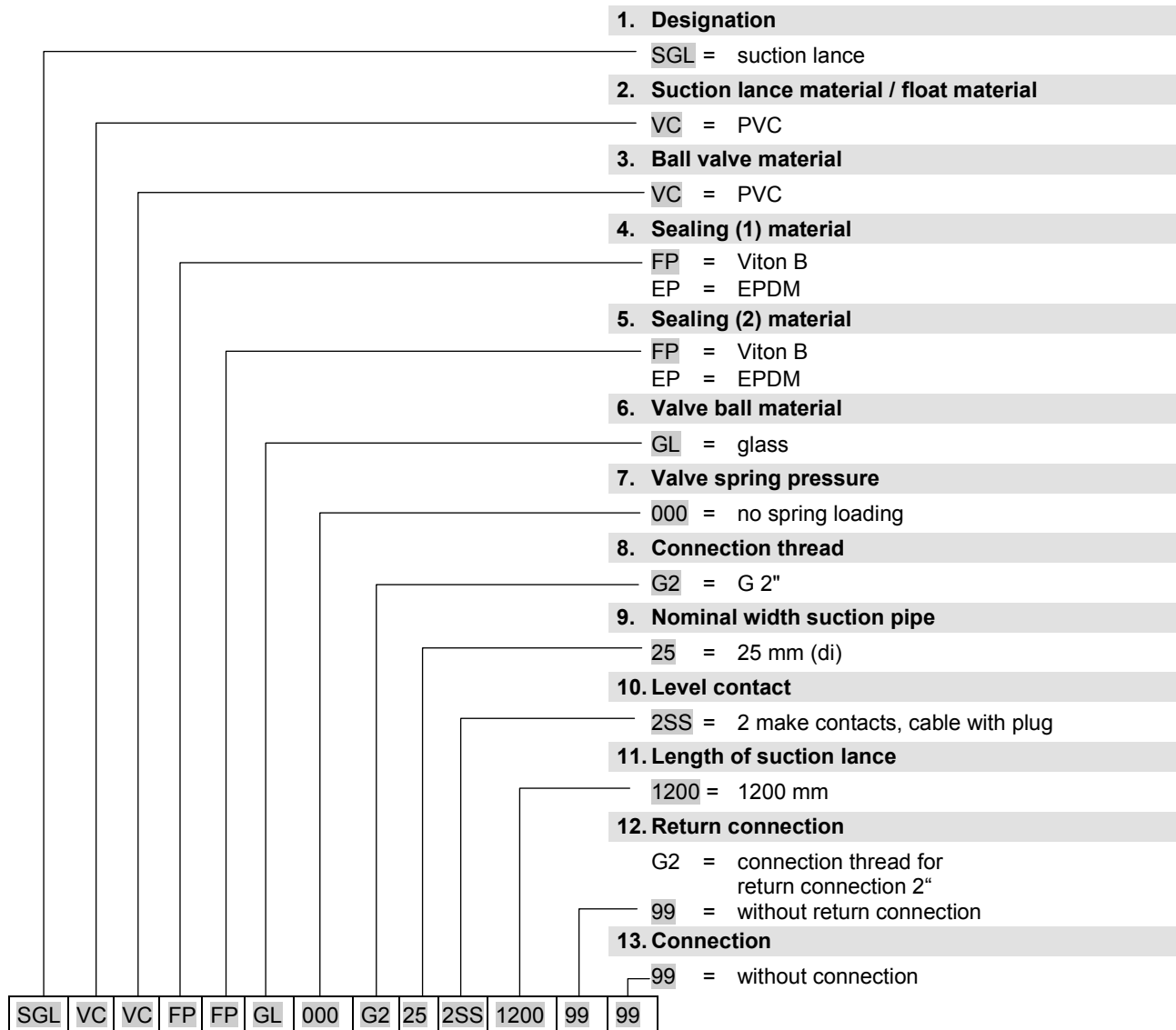
for volumetric measurement of the flow rate

For ordering data refer to paragraph „Measuring and Controlling“ in chapter 6.

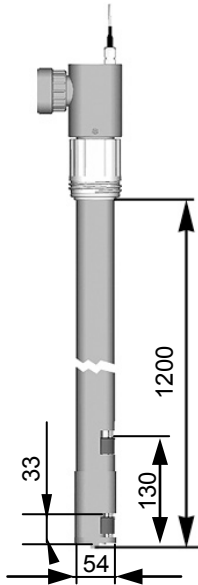


Accessories:

Suction lances



Ordering data



Article / Designation

Material No.

Suction lances

SGL VC VC FP FP GL 000 G2 25 2SS 1200 99 99	250052
SGL VC VC EP EP GL 000 G2 25 2SS 1200 99 99	250054
SGL VC VC FP FP GL 000 G2 25 2SS 1200 G2 99	250055
SGL VC VC EP EP GL 000 G2 25 2SS 1200 G2 99	250056

Extent of supply: Connecting seal EPDM (black) or Viton (brown), connection cable 5 m, container screw connection S70, **without** hose connection

For connection material refer to chapter EDP L Type 04800 – 06700, pages [15/16](#)



Sealing for suction pipe (spare part)

Viton B	40.64 x 5.33	(for 250052, 250055)	417003359
EPDM	40.6 x 5.3	(for 250054, 250056)	415100413



Suction lance adapter

Screw cap DN 150 for container with bung plug

417401588



Suction and pressure lines

available by the metre
max. operating pressure: 15 bar (at 20° C)

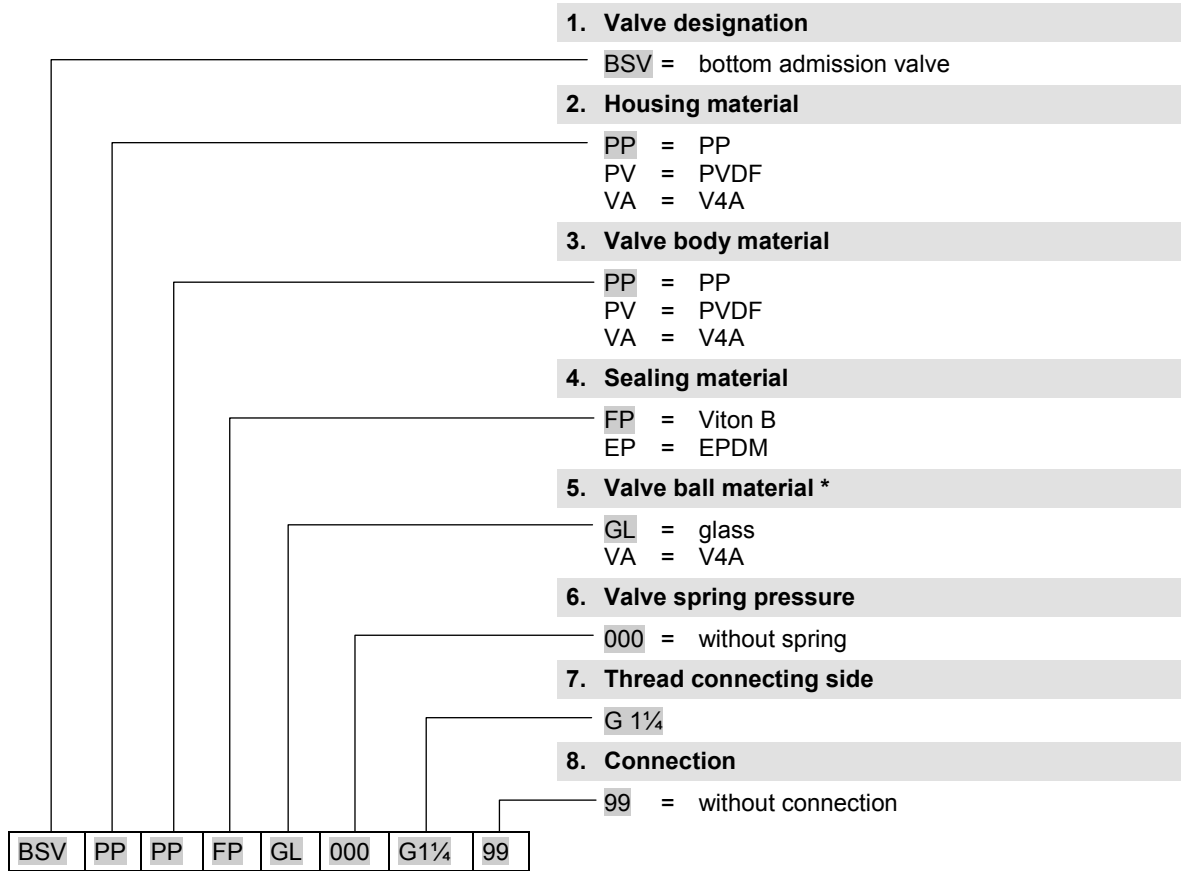
PVC fabric tube, 12/21 mm (int.Ø/ext.Ø)	417400127
PVC fabric tube, 19/27 mm (int.Ø/ext.Ø)	417400131
PVC fabric tube, 25/34 mm (int.Ø/ext.Ø)	417400139

Note:

We explicitly point out that PVC fabric tubes have a limited lifetime if alkaline chemicals will be used. To avoid damage for your staff and your company the tubes have to be exchanged at least every 6 months. In case of non-compliance we exclude all kinds of liability and responsibility.



Bottom admission valve



* Standard valve ball material will soon be changed to ceramics.

Ordering data



Article/Designation

Material-No.

BSV PP PP FP GL 000 G 1¼ – 99	250011
BSV PP PP EP GL 000 G 1¼ – 99	250012
BSV PV PV FP GL 000 G 1¼ – 99	249082
BSV PV PV EP GL 000 G 1¼ – 99	249083
BSV VA VA FP VA 000 G 1¼ – 99	249036
BSV VA VA EP VA 000 G 1¼ – 99	on request

For connection material refer to page [15](#)



Article / Designation

Material No.



Pulsation attenuator

For reducing pressure peaks and pulsations on the pressure side of oscillating displacement pumps and for preventing cavitation on the suction side.

Stroke volume: 40 cm³/stroke
 Admissible nominal pressure: 10 bar
 Thread connection: G 1 ¼

PDS 250 D25 PP/Hypalon

415503005

Housing material: PP
 Sealing/diaphragm: Hypalon

PDS 250 D25 PP/Viton

415503006

Housing material: PP
 Sealing/diaphragm: Viton



Manometer

415502560

0-10 bar, connection G ¼

Note:

When setting the charging pressure, the pulsation attenuator must be discharged on the metering medium side.



Reducer G ½ a – G ¼ a

415202771



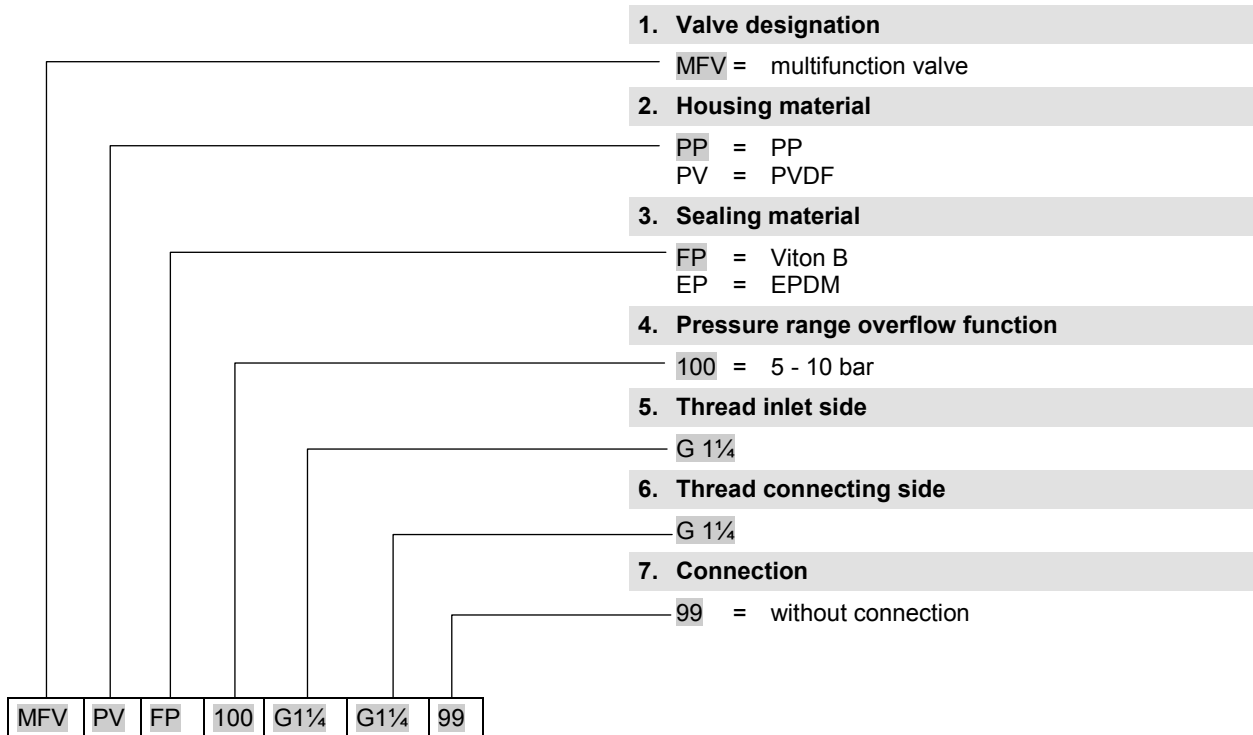
Pump bracket

250047

- VA , including mounting accessories
- bracket with holder out of square end hollow profile
- with separate movable fixing plate



Multifunction valve



This safety-relevant component serves the purpose of protecting the piping system and the metering pump and permits a safe and reliable commissioning and maintenance of the system.

The multiple function valve covers the following functions: **overflowing, retaining pressure, venting and draining.**

Dimensions (L * D * H): 341 x 160 x 200 mm

Ordering data



Article / Designation

Material No.

MFV PP FP 100 G 1¼ – G 1¼ – 99	250060
MFV PP EP 100 G 1¼ – G 1¼ – 99	250061
MFV PV FP 100 G 1¼ – G 1¼ – 99	250064
MFV PV EP 100 G 1¼ – G 1¼ – 99	250065

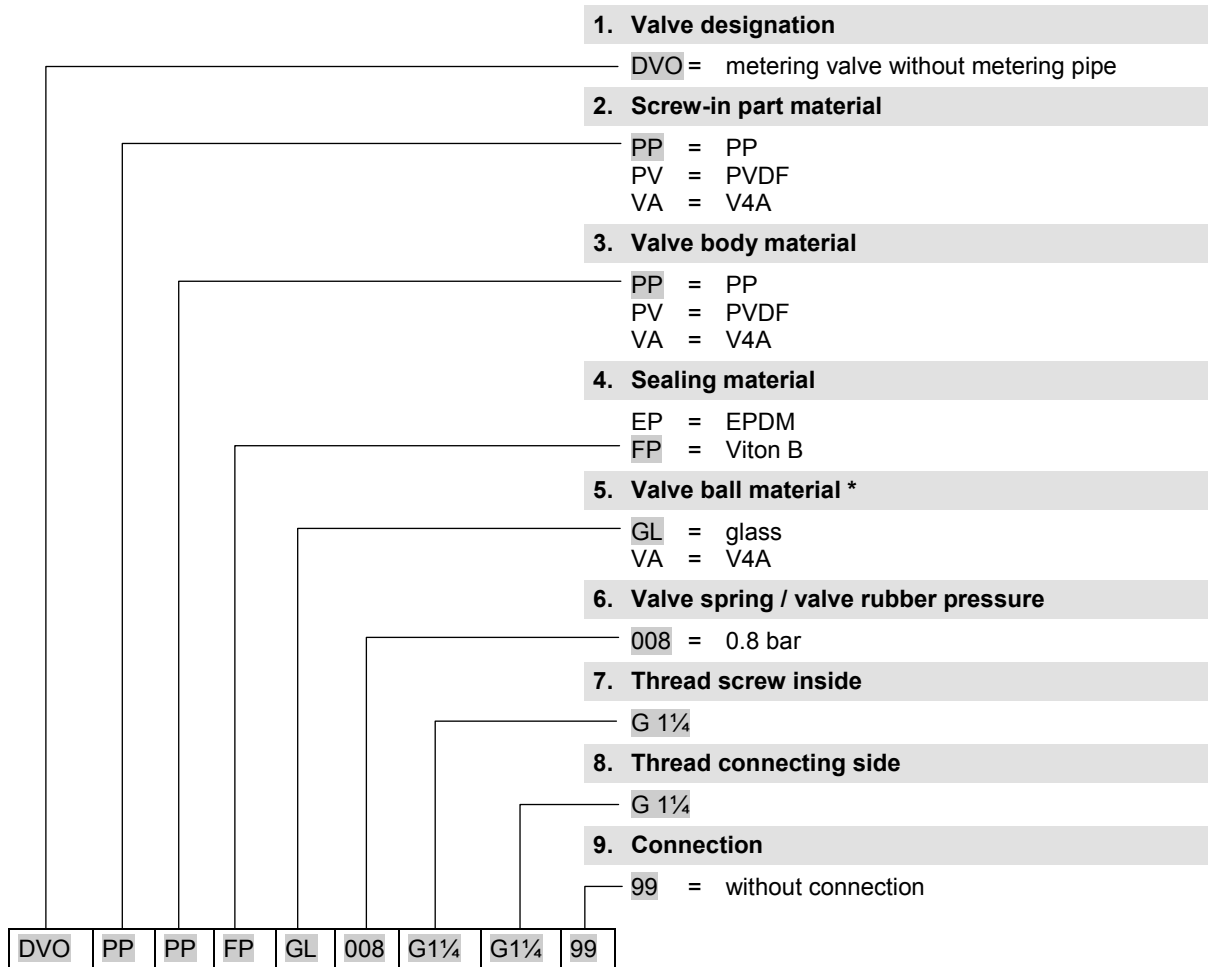
Extent of supply: 2 fixing clips with securing bracket (415018707)
3 o-ring seals (417003593) Viton B, operating manual

The multiple function valve is to be installed close to the pump onto a suitable wall.

For connection material see page 15

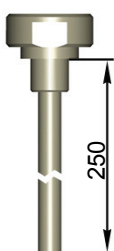


Metering valves



* The standard valve ball material will soon be changed to ceramics.

Ordering data



Article / Designation

Material No.

DVO PP PP FP GL 008 G 1¼ – G 1¼ – 99	250017
DVO PP PP EP GL 008 G 1¼ – G 1¼ – 99	250018
DVO PV PV FP GL 008 G 1¼ – G 1¼ – 99	249086
DVO PV PV EP GL 008 G 1¼ – G 1¼ – 99	on request
DVO VA VA FP VA 008 G 1¼ – G 1¼ – 99	249468
DVO VA VA EP VA 008 G 1¼ – G 1¼ – 99	249059

For connection material see page 15

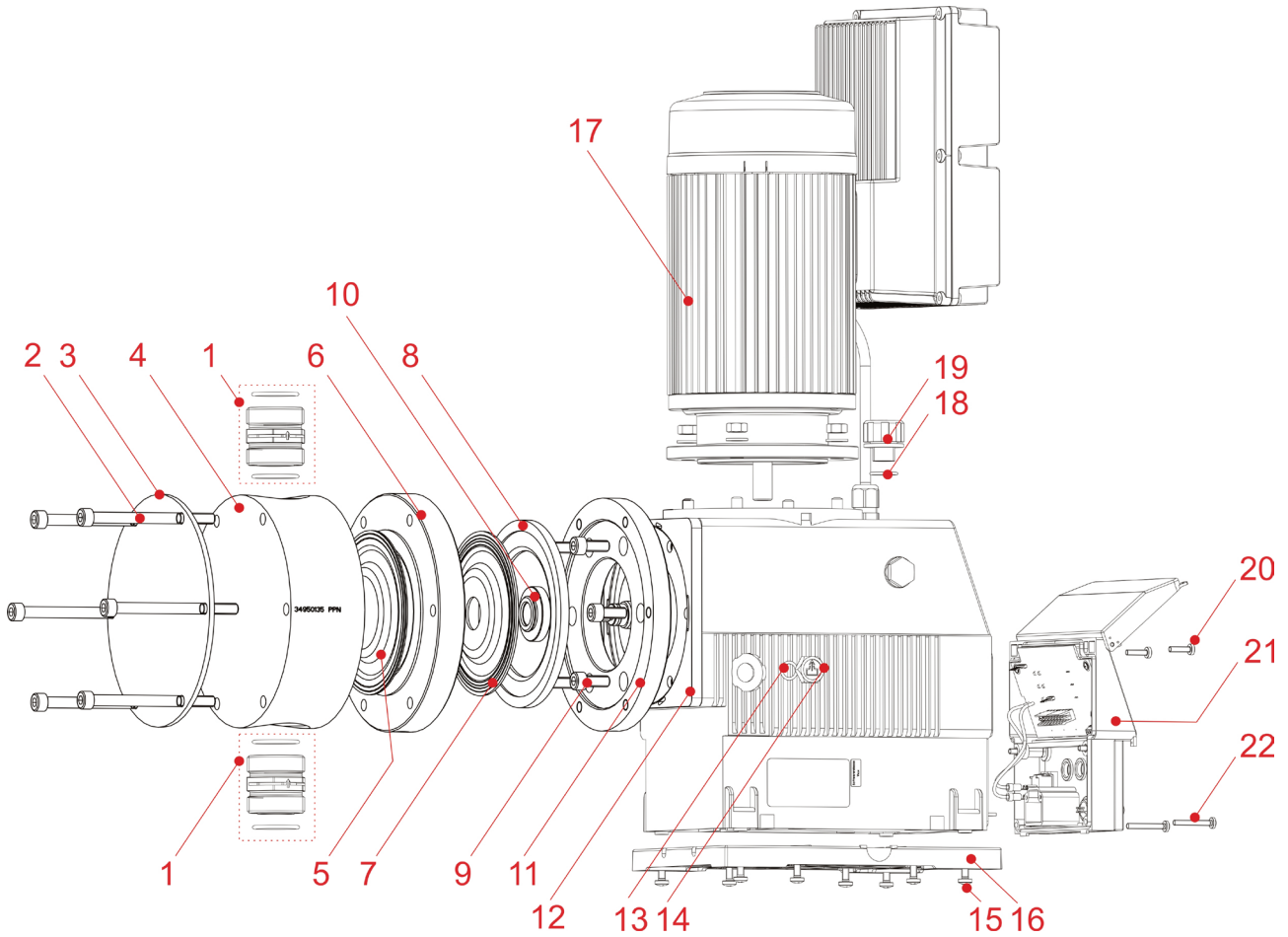
Metering pipe PP G ¾ für DVO G 1¼	249235
Metering pipe PV G ¾ für DVO G 1¼	249236



Connection material for suction and pressure valves, bottom admission valves and metering valves
(to be ordered separately)

	Article / Designation	Material No.	
	Connection parts hose connection Connection set PP, G 1¼ - NW 20/22	249239	
	consisting of: <ul style="list-style-type: none"> ■ 1 union nut PP G 2 (415099835) ■ 1 pressure hose nozzle PP NW 20/22 (34950256) ■ 2 stainless steel hose clips for hose AD 25-40 (415013306) 		
	Union nut G 1¼ PP PVDF VA (1.4571)	415099835 415099072 38610405	
		Pressure hose nozzle PP for hose NW 20/22 (illustration) PP for hose NW 25/27 PVDF for hose NW 20/22 (illustration) PVDF for hose NW 25/27 VA	34950256 34950257 34950199 34950201 on request
			Hose clips (stainless steel) for hose AD 20-32 for hose AD 25-40
Connection parts for tube connection Union nut G 1¼ PP PVDF VA (1.4571)			415099835 415099072 38610405
		Insertion part (welded bush) for G 1¼ tube connection DN 20 (d25) PP PVDF	415099709 415099033
	Insertion part for G 1¼ with internal thread VA, screw-in thread G ¾	38610407	

Spare Parts:

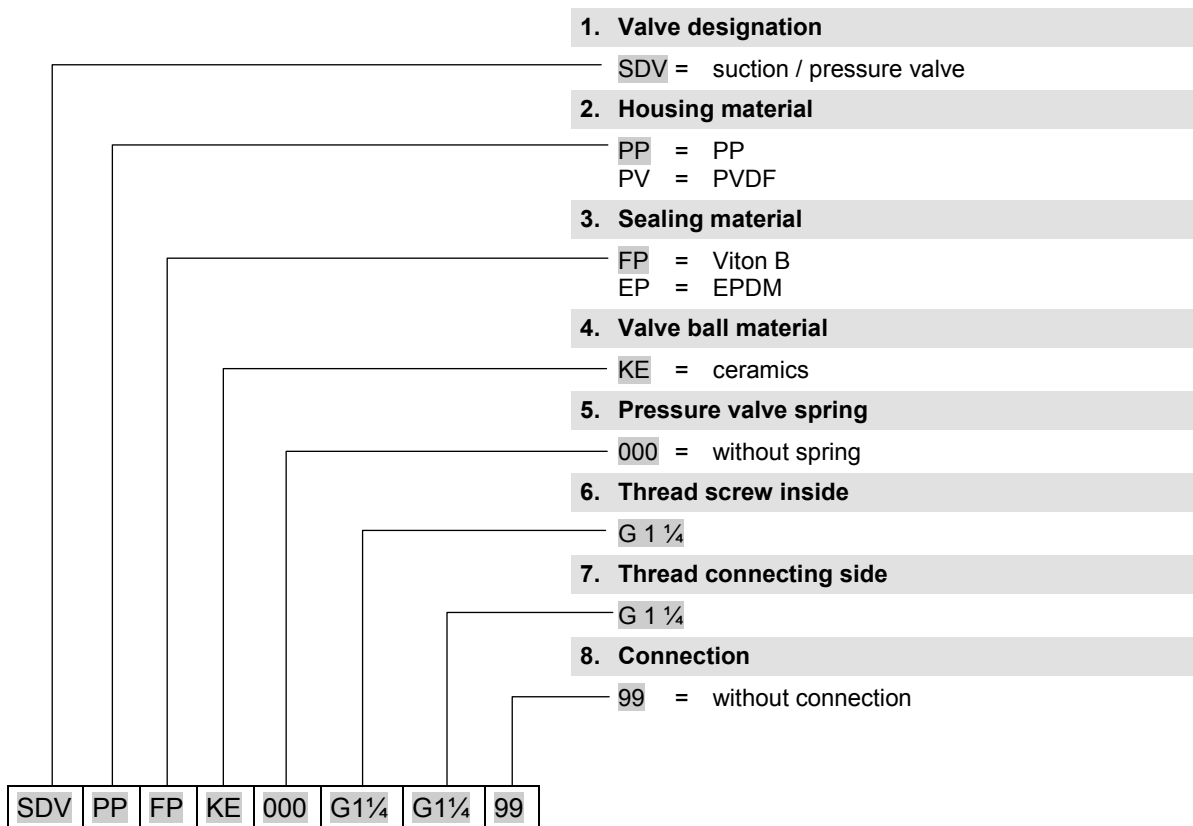


Pos	Designation	Type 02200
1	SDV PFPKE000 G1¼ - G1¼ -99 Suction/pressure valve PP/FPM (Viton B) G1¼"	249075
	SDV PP EP KE 000 G1¼ - G1¼ - 99 Suction/pressure valve PP/EPDM G1¼"	249055
	SDV PV FP KE 000 G1¼ - G1¼ - 99 Suction/pressure valve PVDF/FPM (Viton B) G1¼"	249074
	SDV PV EP KE 000 G1¼ - G1¼ - 99 Suction/pressure valve PVDF/EPDM G1¼"	249041
2	Hexagon socket screw M8 x 100 VA	413031066
3	Pressing plate	34950144
4	Metering head PP	34950135
	Metering head PVDF	34950137
5	Delivery diaphragm	34950101
6	Intermediate ring PP	34950150
	Intermediate ring PVDF	34950194
7	Protective diaphragm	34950163
8	Supporting disc	34950177
9	Hexagon socket screw M8 x 20 VA (6 x)	413031055
10	Receiver disc for protective diaphragm	34950152
11	Intermediate plate	34950147
12	Flange plate	34950124



13	O-ring 9 x 2 NBR	417002063
14	Locking nut	415204603
15	Oval head bolt M5 x 16 VA	413119274
16	Mounting plate	34950123
17	Motor with frequency converter 115/230V50/60Hz 0.95kW	250201
18	O-ring 15 x 2,5 NBR	417002137
19	Gear bleeder screw	415204601
20	Oval head bolt M4x16 V2A	413119230
21	Front panel EDP L V15 including indicator board	on request
22	Oval head bolt M4x30 V2A	413119236

Valve key for suction valves / pressure valves



For connection material refer to page [15](#)

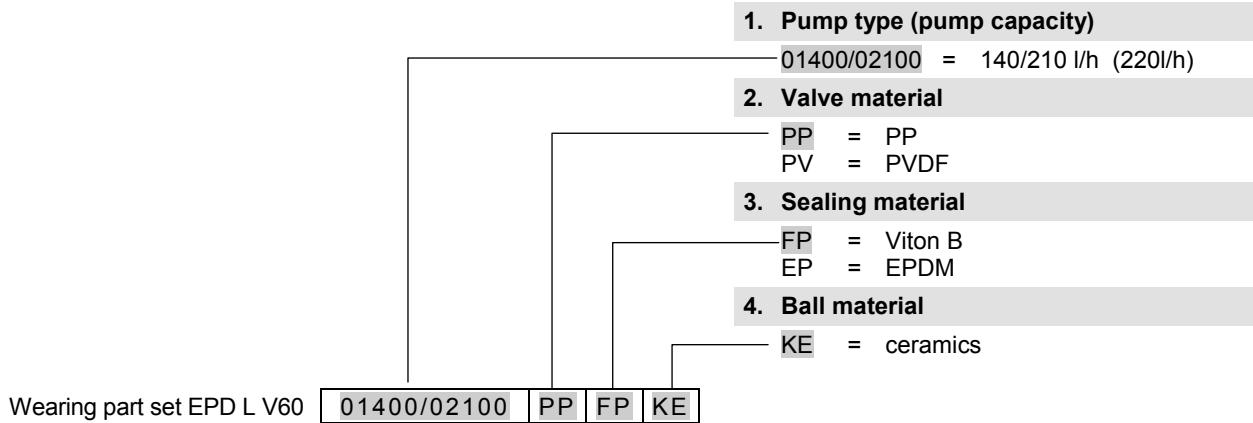


Wearing part set

Consisting of one piece each:

- Suction valve
- Pressure valve
- Diaphragm
- Protection diaphragm

Description <i>for type 02200</i>	Material-No.
Wearing part set EMP VI 01400/02100 PFPKE	250160
Wearing part set EMP VI 01400/02100 PPEPKE	250161
Wearing part set EMP VI 01400/02100 PVFPKE	250162
Wearing part set EMP VI 01400/02100 PVEPKE	250163



For connection material refer to page [15](#)