

- ▲ 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

Type	04800	06700
Pump capacity [l/h] * in metering mode:		
standard (high)	480	670
medium	400	558
low	320	447
Metering back pressure [bar]:	6	4
Delivering capacity per stroke [cm³]:	66,67	93,06
Reproductivity: [%]:		<± 3
Max. admissable viscosity [mPas]:		600
Suction height [mWs]**:		2
Number of strokes in metering mode:		
standard (high)		120
medium		100
low		80
Recommended minimum diameter D_i [mm] :		
suction connection	25	30
pressure connection	20	25
Ambient temperature max. [°C]:		40
Weight [kg] (with PP/PVDF pump head):	approx. 27,7	approx. 29,4
Colour:		blue RAL 5007

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

**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

All values at 50 Hz. 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!

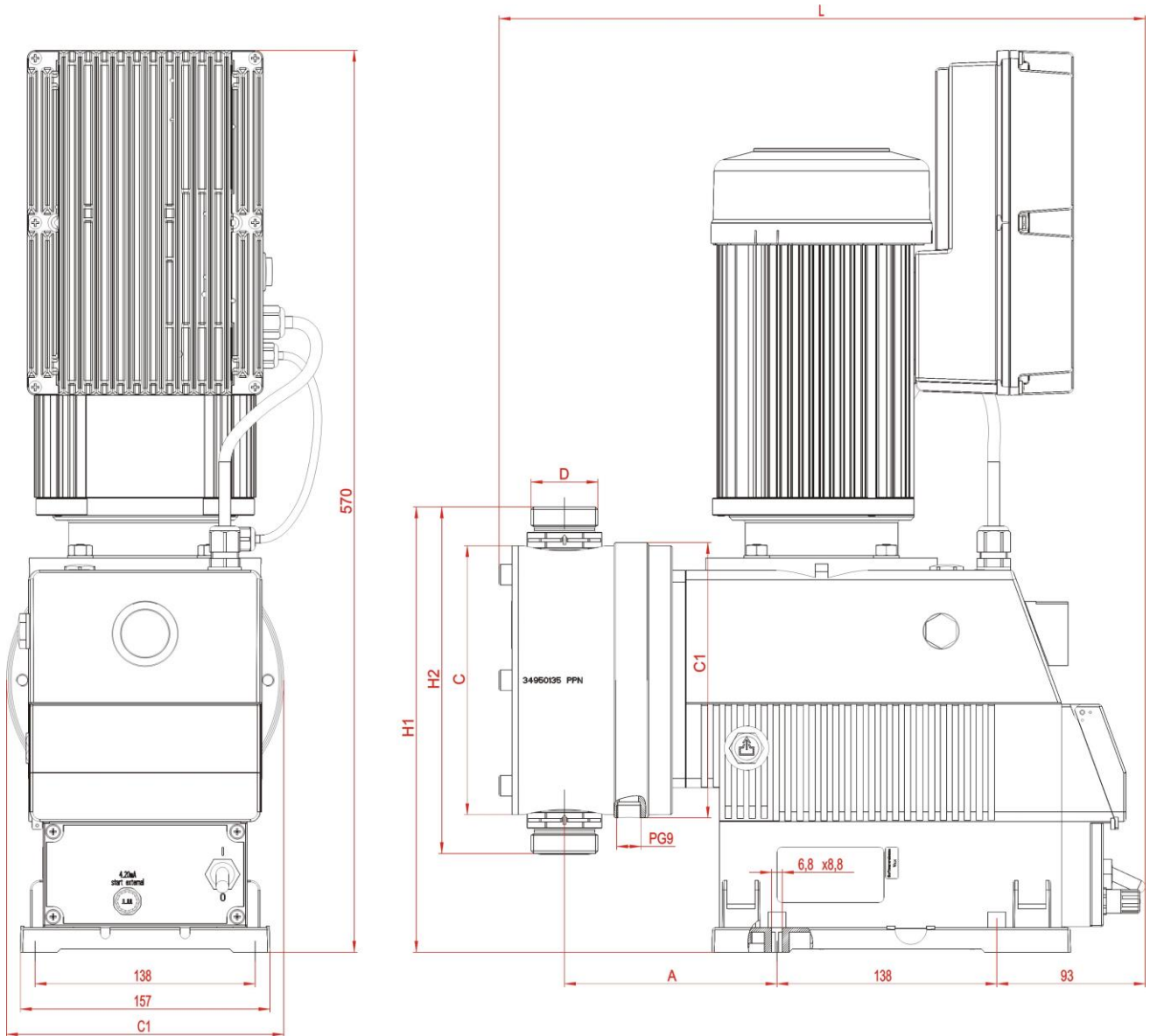


Material

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
04800	142,5	190	194	412	303,5	263	2"
06700	142,5	220	225	412	318,5	293	2"



Pump code – part 1

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

V 15
V 60

2. Pump capacity

04800 = 480 l/h
06700 = 670 l/h

3. Pump material

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

4. Metering back pressure (not freely selectable)

04 = 4 bar (für 670 l/h) [3.2 bar]
06 = 6 bar (für 480 l/h) [4.8 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

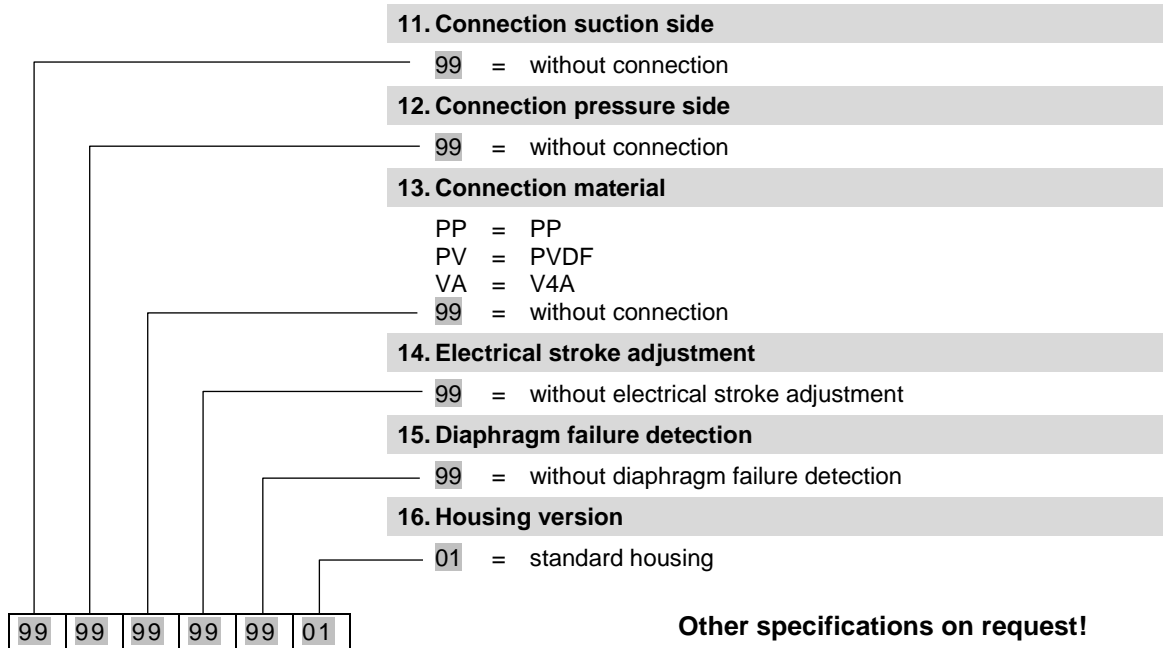
18 = 115/230 V / 50/60 Hz

V60	04800	PP	06	FP	KE	PP	99	99	18
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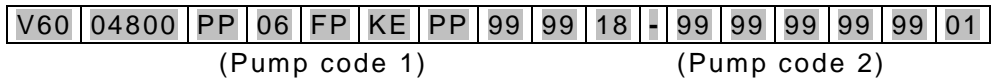
Other specifications on request!



Pump code – part 2



Example of a complete pump code of a standard pump





Electrical versions

- | | |
|-------------|--|
| V 15 | <ul style="list-style-type: none"> ■ 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 | <ul style="list-style-type: none"> ■ 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 fixed metering modes selectable or metering mode
(suction stroke duration and min. metering stroke duration)
freely adjustable |

Ordering data – standard pumps

Article	Pump code / extent of supply	Material - No.
ELADOS® EDP L	V15 04800 PP 06 FP KE PP 99 99 18 - 99 99 99 99 99 01	150315
	V15 06700 PP 04 FP KE PP 99 99 18 - 99 99 99 99 99 01	150415
	Extent of supply: plug for electric supply, operating instructions, without hose connection material, without connector cable	
ELADOS® EDP L	V60 04800 PP 06 FP KE PP 99 99 18 - 99 99 99 99 99 01	150365
	V60 06700 PP 04 FP KE PP 99 99 18 - 99 99 99 99 99 01	150465
	Extent of supply: plug for electric supply, short operating instructions, operating instructions CD, without hose connection material, without connector cable	

For connection material refer to pages [15/16](#)

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

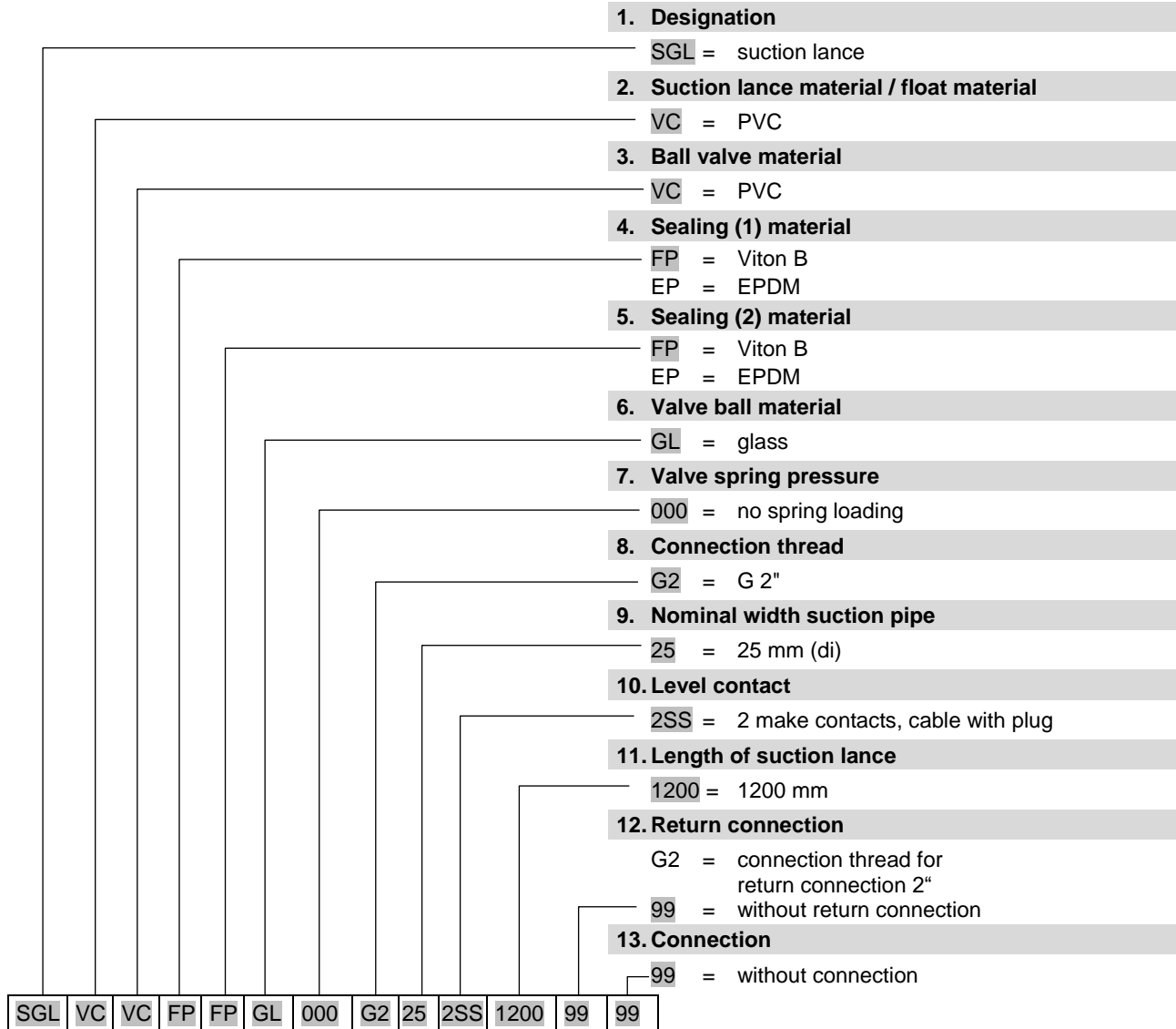
for volumetric measurement of the flow rate

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

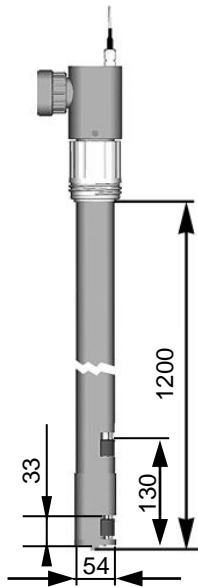


Accessories:

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 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

417401588

Screw cap DN 150 for container with bung plug

Suction and pressure lines

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



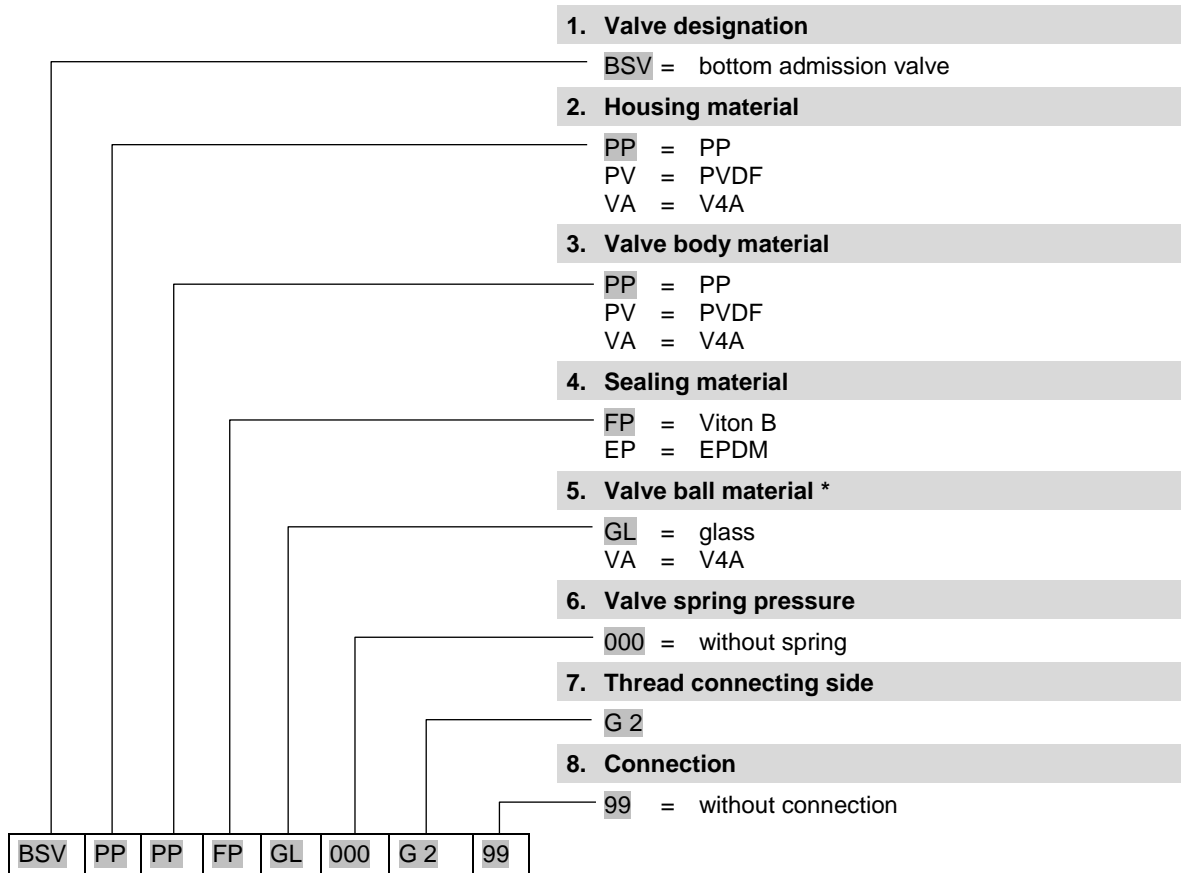
PVC fabric tube, 12/21 mm (int.Ø/ext.Ø)	417400127
PVC fabric tube, 19/27 mm (int.Ø/ext.Ø)	417400131
PVC fabric tube, 25/34 mm (int.Ø/ext.Ø)	417400139

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 2 – 99	250007
BSV PP PP EP GL 000 G 2 – 99	250008
BSV PV PV FP GL 000 G 2 – 99	250009
BSV PV PV EP GL 000 G 2 – 99	250010
BSV VA VA FP VA 000 G 2 – 99	on request
BSV VA VA EP VA 000 G 2 – 99	on request

For connection material refer to pages [15/16](#)



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: 120 cm³/stroke
 Admissible nominal pressure: 10 bar
 Thread connection: G 1 ¼

PDS 750 D32 PP/Hypalon

415503007

Housing material: PP
 Sealing/Diaphragm Hypalon

PDS 750 D32 PP/Viton

415503008

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 i

415202771

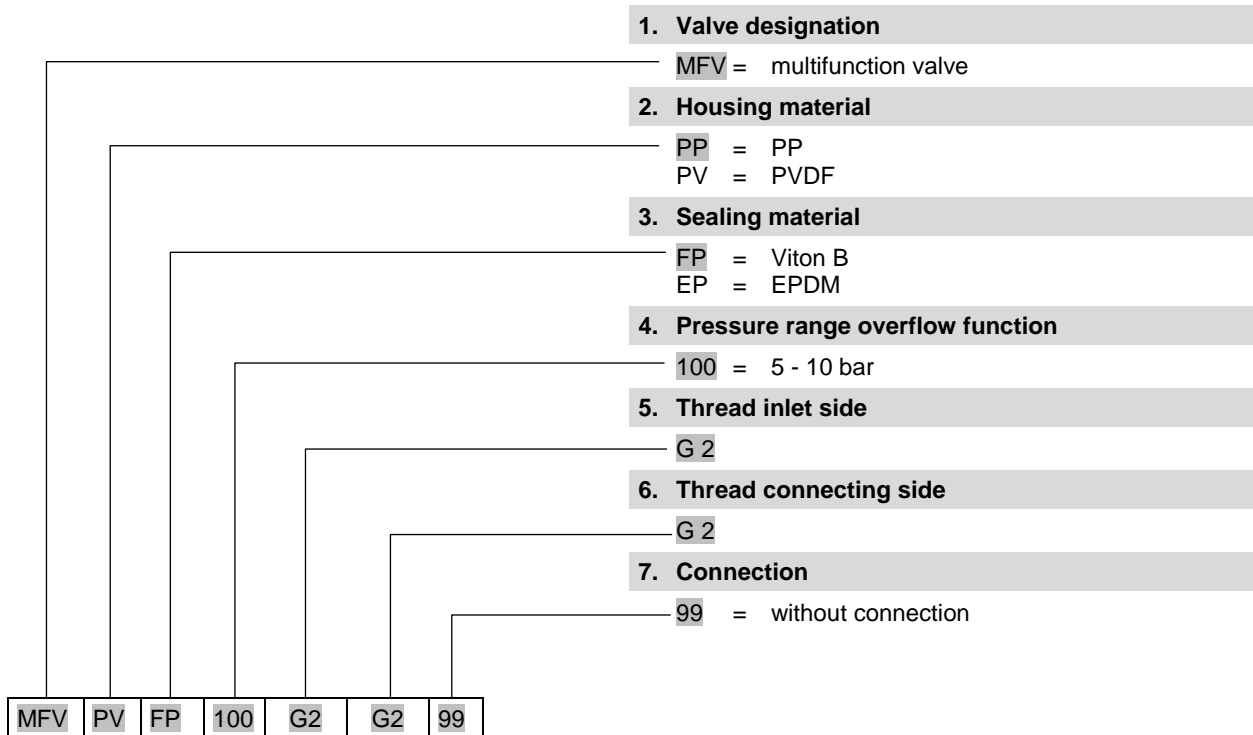


Pump bracket

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.

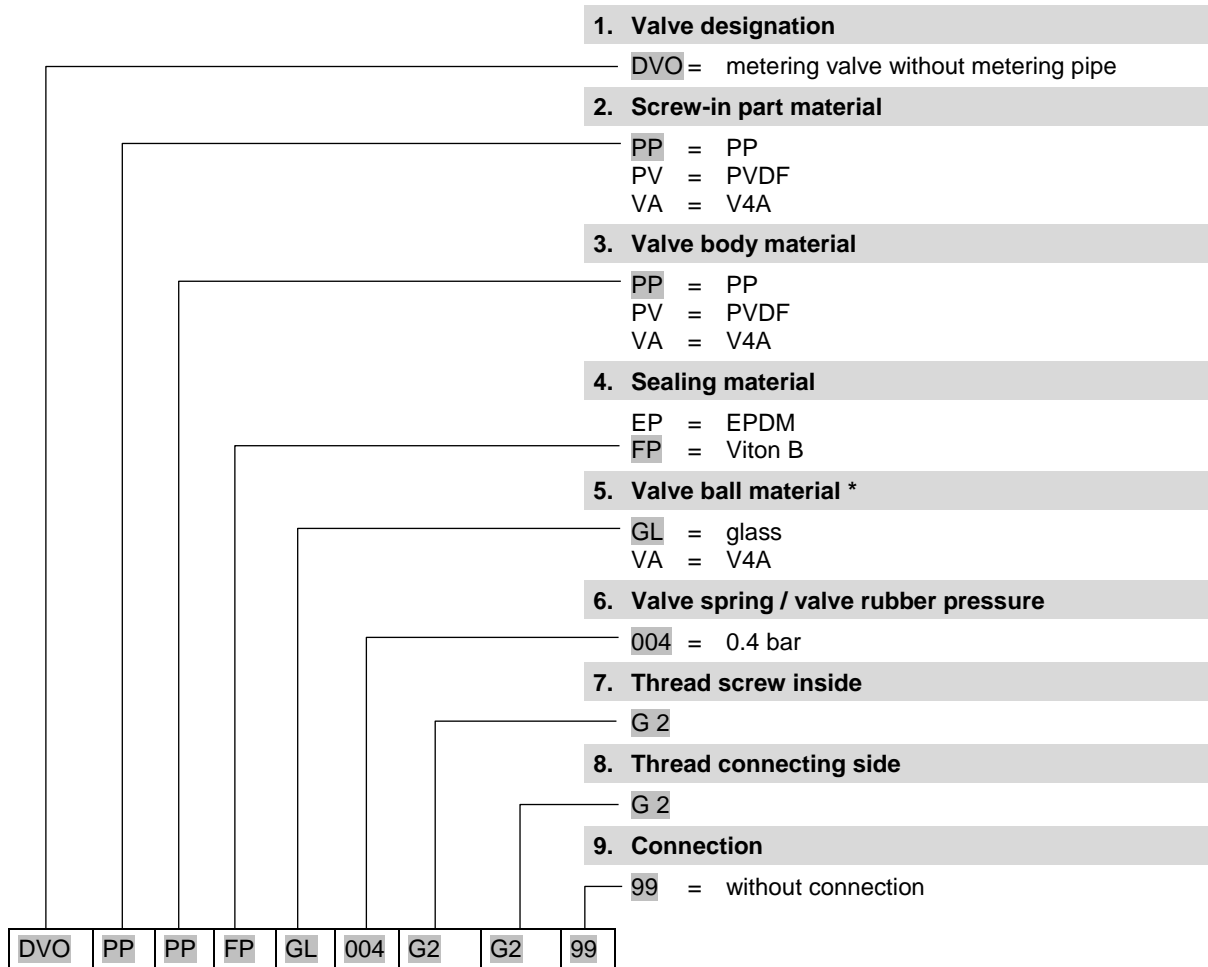
MFV PP FP 100 G 2 – G 2 – 99	250062
MFV PP EP 100 G 2 – G 2 – 99	250063
MFV PV FP 100 G 2 – G 2 – 99	250066
MFV PV EP 100 G 2 – G 2 – 99	250067

Extent of supply: 2 fixing clips with securing bracket (415018707)
3 o-ring seals (417003412) Viton B,
operating manual

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

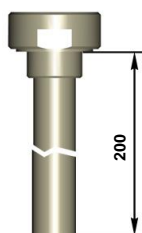
For connection material refer to pages [15/16](#)

Metering valves



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

Ordering data





Article / Designation	Material No.
DVO PP PP FP GL 004 G 2 – G 2 – 99	250013
DVO PP PP EP GL 004 G 2 – G 2 – 99	250014
DVO PV PV FP GL 004 G 2 – G 2 – 99	250015
DVO PV PV EP GL 004 G 2 – G 2 – 99	250016
DVO VA VA FP VA 004 G 2 – G 2 – 99	auf Anfrage
DVO VA VA EP VA 004 G 2 – G 2 – 99	auf Anfrage

For connection material refer to pages [15/16](#)

Metering pipe PP G 1¼ für DVO G 2	250094
Metering pipe PV G 1¼ für DVO G 2	250095

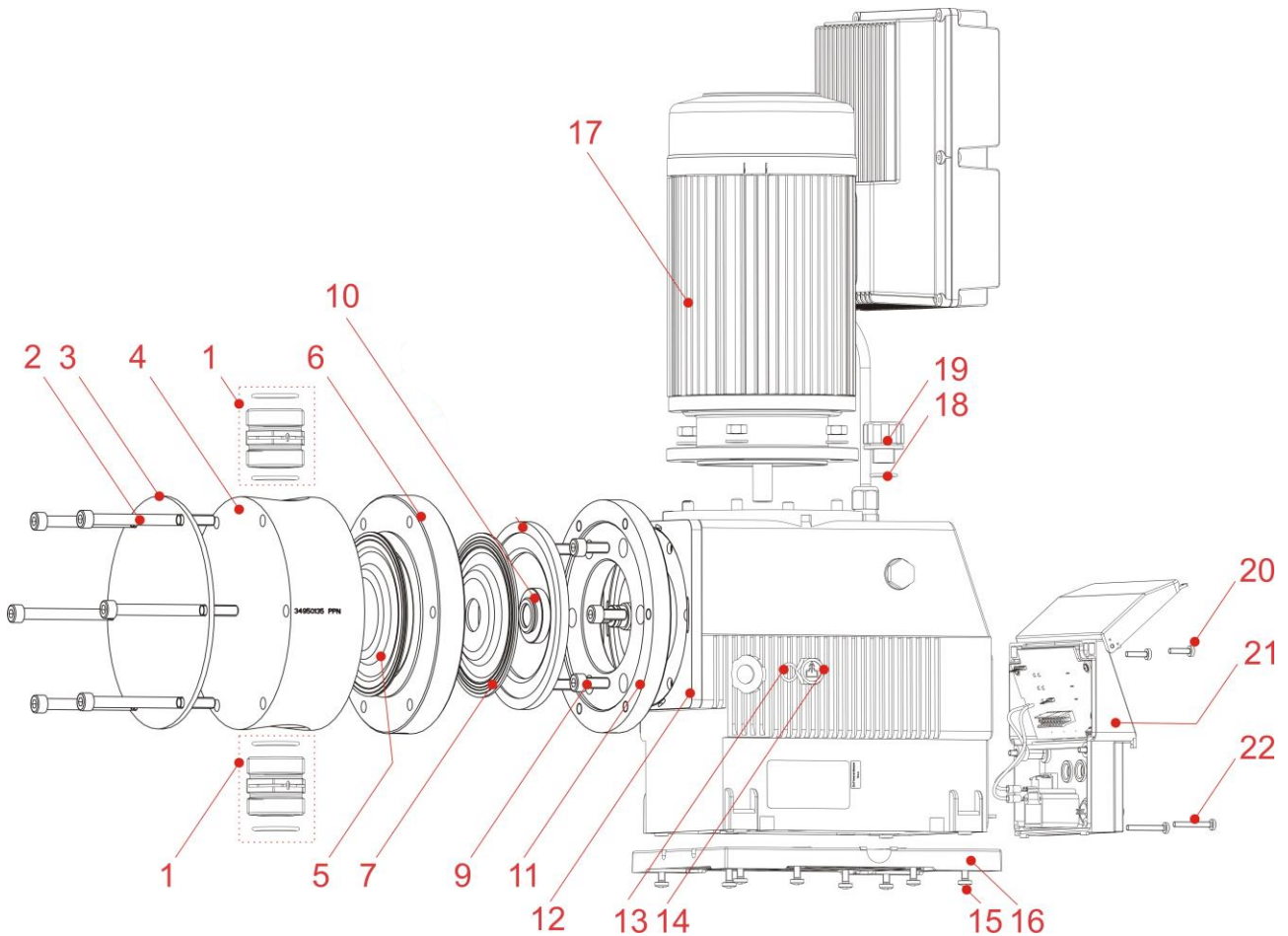
Connection material for suction and pressure valves, bottom admission valves and metering valves
(to be ordered separately)

	Article / Designation	Material No.
	Connection parts hose connection	
	Connection set PP, G 2 - NW 25/27	250096
	consisting of:	
	<ul style="list-style-type: none"> ■ 1 union nut PP G 2 (415099837) ■ 1 pressure hose nozzle PP NW 25/27 (34950254) ■ 2 stainless steel hose clips for hose AD 25-40 (415013306) 	
	Connection set PP, G 2 - NW 30/32	250097
	consisting of:	
	<ul style="list-style-type: none"> ■ 1 union nut PP G 2 (415099837) ■ 1 pressure hose nozzle PP NW 25/27 (34950255) ■ 2 stainless steel hose clips for hose AD 25-40 (415013306) 	
	Union nut G 2	
	PP	415099837
	PVDF	415099074
	VA (1.4571)	415205316
		
	Pressure hose nozzle	
	PP NW 20/22	34950253
	PP NW 25/27 (illustration)	34950254
	PP NW 30/32	34950255
	PVDF NW 20/22	34950197
	PVDF NW 25/27 (illustration)	34950198
	PVDF NW 30/32	34950202
	VA (1.4571)	on request
		
	Hose clips (stainless steel)	
	for hose AD 20-32	415013305
	for hose AD 25-40	415013306
		

	Article / Designation	Material No.
	Connection parts for tube connection	
	Union nut G2	
	PP	415099837
	PVDF	415099074
	VA (1.4571)	415205316
	Insertion part (welded bush) for G2	
	Tube connection DN 25 (d32)	
	PP for hose DN 25	34950191
	PVDF	34950192
	Insertion part 2 (welded bush) for G2	
	Tube connection DN 32 (d40)	
	PP	415099711
	PVDF	415099035
	Insertion part for G2 with screw-in thread	34950237
	VA, with screw-in thread G 1¼ i	

Further connection parts on request!

Spare Parts:

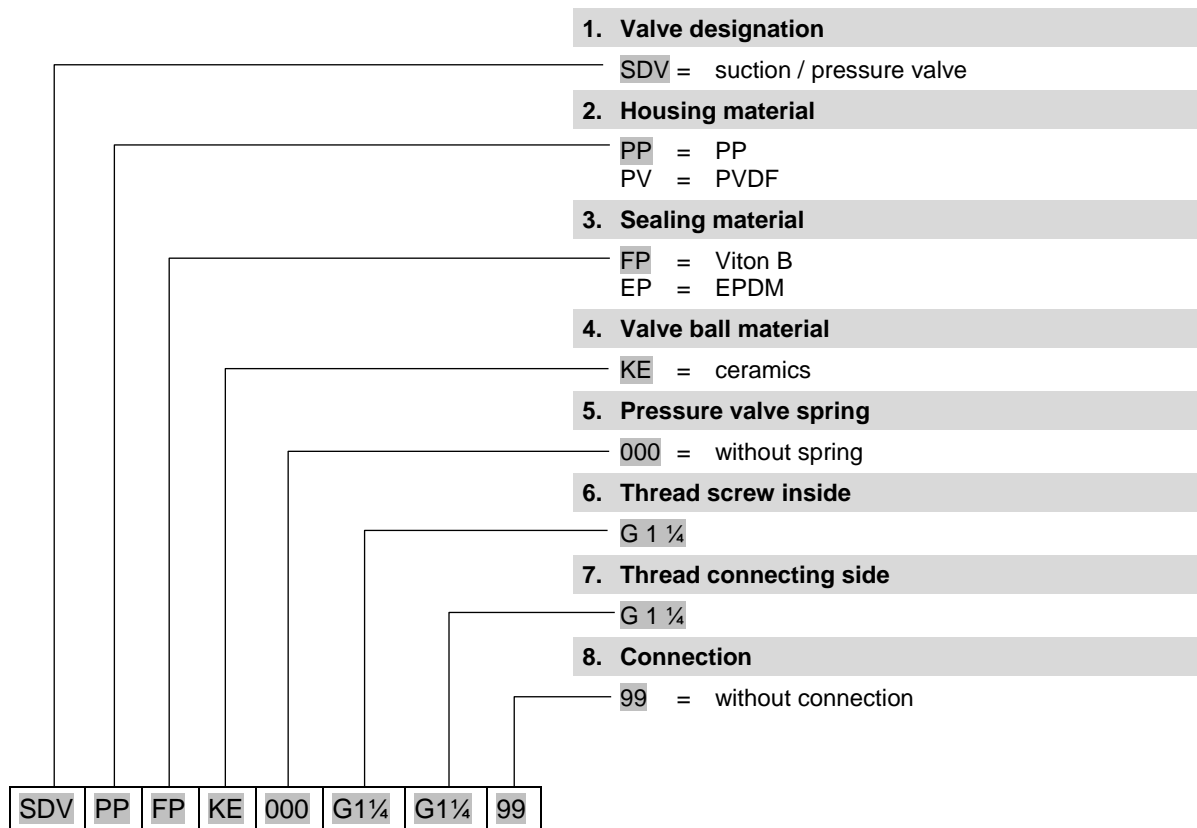


Pos	Beschreibung	Typ 04800	Typ 06700
1	SDV PFPKE000 G2 – G2 -99 Suction/pressure valve PP/FPM (Viton B) G2"		249503
	SDV PP EP KE 000 G2 – G2 -99 Suction/pressure valve PP/EPDM G2"		249504
	SDV PV FP KE 000 G2 – G2 -99 Suction/pressure valve PVDF/FPM (Viton B) G2"		249505
	SDV PV EP KE 000 G2 – G2 -99 Suction/pressure valve PVDF/EPDM G2"		249506
2	Hexagon socket screw, M8 x 120 VA		413031067
3	Pressing plate	34950160	34950145
4	Metering head PP	34950134	34950136
	Metering head PVDF	34950138	34950139
5	Delivery diaphragm	34950153	34950105
6	Intermediate ring PP	34950149	34950151
	Intermediate ring PVDF	34950195	34950196
7	Supporting disc	34950164	34950165
9	Hexagon socket screw M8 x 20 VA (6 x)		413031055
10	Receiver disc for protective diaphragm		34950152
11	Intermediate plate	34950146	34950148
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 pages [15/16](#)

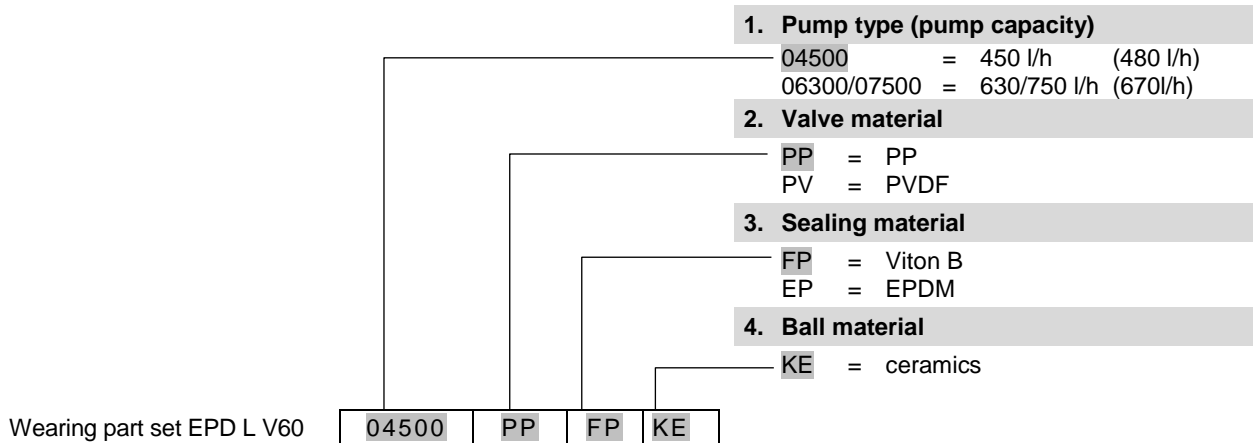


Wearing part set

Consisting of 1 piece each:

- Suction valve
- Pressure valve
- Diaphragm
- Protection diaphragm

Description	Material-No.
for type 04800	
Wearing part set EMP VI 04500 PFPKE	250164
Wearing part set EMP VI 04500 PPEPKE	250166
Wearing part set EMP VI 04500 PVFPKE	250168
Wearing part set EMP VI 04500 PVEPKE	250170
for type 06700	
Wearing part set EMP VI 06300/07500 PFPKE	250165
Wearing part set EMP VI 06300/07500 PPEPKE	250167
Wearing part set EMP VI 06300/07500 PVFPKE	250169
Wearing part set EMP VI 06300/07500 PVEPKE	250171



For connection material refer to pages [15/16](#)