ProMinent® Dosing Pump

Vario-D Motor Driven Metering Pump

Capacity range: 17~120 l/h

Backpressure range: 12~3.5 bar

Drive mode: Motor-driven

Control type: manual, external control

The ProMinent® Vario D motor-driven diaphragm dosing pump is a new concept metering pump. This type pump has a good performance and competition thanks to its safety to environment, high dosing accuracy and flexible control modes.

The special design for diaphragm delivery unit makes this type metering pumps particularly suitable for metering viscous media. The combination of the hermetically sealed design and a good anti-corrosion to chemicals allow the pump t o be ideally matched to various metering duties involving virtually all types of chemicals.

Liquid end material:

■ PVT=PVDF/PTFE seal

■ SST=SS/PTFE seal

■ PP1=PP/EPDM seal

■ NP1=NP/FPM seal(Viton®)

■ TT1=PTFE with carbon/PTFE seal

High lights:

■ A choice of 3 liquid end sizes, 5 liquid end materials allow the pump to be ideally matched to the various metering duty.

■ Continuous stroke length adjustment from 30-100%.

■ Motor-driven type is available with a standard version 3-phase motor, a single-phase motor or a 3-phase motor for the use in EXe and EXde areas.

■ Robust design against shock and chemical resistant plastic housing

■ Protection of the pump against overload with integrated relief valve.

■ **Manual control or external control via contact signals or analogue signals.**

General Data:

■ Permissible ambient temperature:	-10 ℃ to +40 ℃
■ Power supply:	220V/400V, 50/60Hz
■ Output:	0.12kW, 0.09kW
■ Type of enclosure:	IP55

TECHNICAL DATA

Pump Type Vario	at 50 Hz Pump Capacity at Max. Back Pressure			Max. Stroke Freq.	at 60 Hz Pump Capacity at Max. Back Pressure		Max. Stroke Freq.	Suction Lift	Perm. Admiss. Pressure Suction Side	Connector Suction/ Discharge Sdie	Shipping Weight
	bar	l/h	ml/ stroke	strokes/ min.	psi	l/h/gph	strokes/ min.	m WG	bar	G - DN	kg
12017	10/12*	16.6	3.6	77	145	20/5.3	92	7	2.8	3/4 - 10	6.6/8.6*
12026	10/12*	26.2	3.6	122	145	31.4/8.3	146	7	2.8	3/4 - 10	6.6/8.6*
12042	10/12*	42	3.6	195	145	50.4/13.3	234	7	2.8	3/4 - 10	6.6/8.6*
10025	10	24.8	5.4	77	145	29.8/7.9	92	4	1.7	3/4 - 10	6.6/8.6*
09039	8.5	39.4	5.4	122	123	47.3/12.5	146	4	1.7	3/4 - 10	6.6/8.6*
07063	6.5	63	5.4	195	94	75.6/20	234	4	1.7	3/4 - 10	6.6/8.6*
06047	5.5	47.4	10.2	77	80	56.9/15	92	3	0.8	1-15	7.5/13.5*
05075	4.5	75	10.2	122	65	90/23.8	146	3	0.8	1-15	7.5/13.5*
04120	3.5(2.3**)	120	10.2	195	50(33**)	144/38	234	3	0.8	1-15	7.5/13.5*

*Data for SST version

The maximum start up pressure when the 1 phase AC motor is switched off at the mains is 20-50% of the nominal maximum operating pressure.

**The value in brackets gives the maximum permissible start up pressure at the use of the "pause" function or for a single stroke via an external controller.

In external contact mode (control option 1+2), at main frequency 60 Hz the feed rate is the same as at 50 Hz. It is possible to adjust the setting to optimize feed rate at 60 Hz.
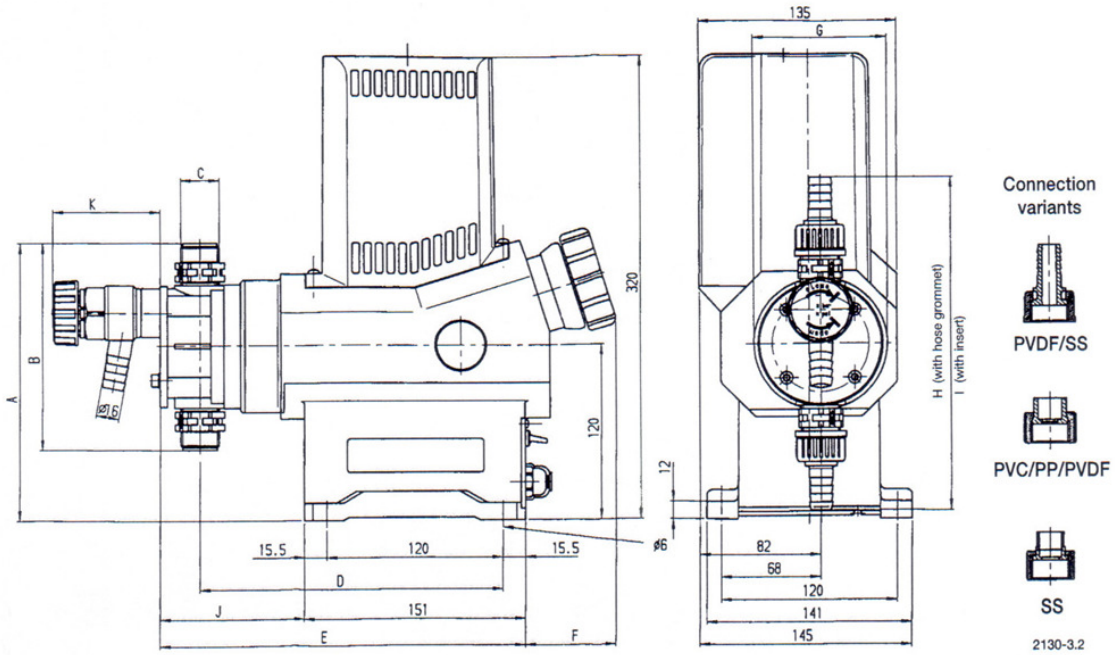
Further details are available on request.

Material in contact with medium

Material	dosing head	suction/pressure connector	seals	balls
PP1	Polypopylene	Polypopylene	EPDM	Ceramic
NP1	Acrylic	PVC	EPDM	Ceramic
PVT	PVDF	PVDF	PTFE	Ceramic
TT1	PTFE with carbon	PTFE with carbon	PTFE	Ceramic
SST	Stainless steel no. 1.4404	Stainless steel no. 1.4404	PTFE	Ceramic

*The liquid end is none metallicmaterial maximum pressures follow with material specify (less than 10 bar)
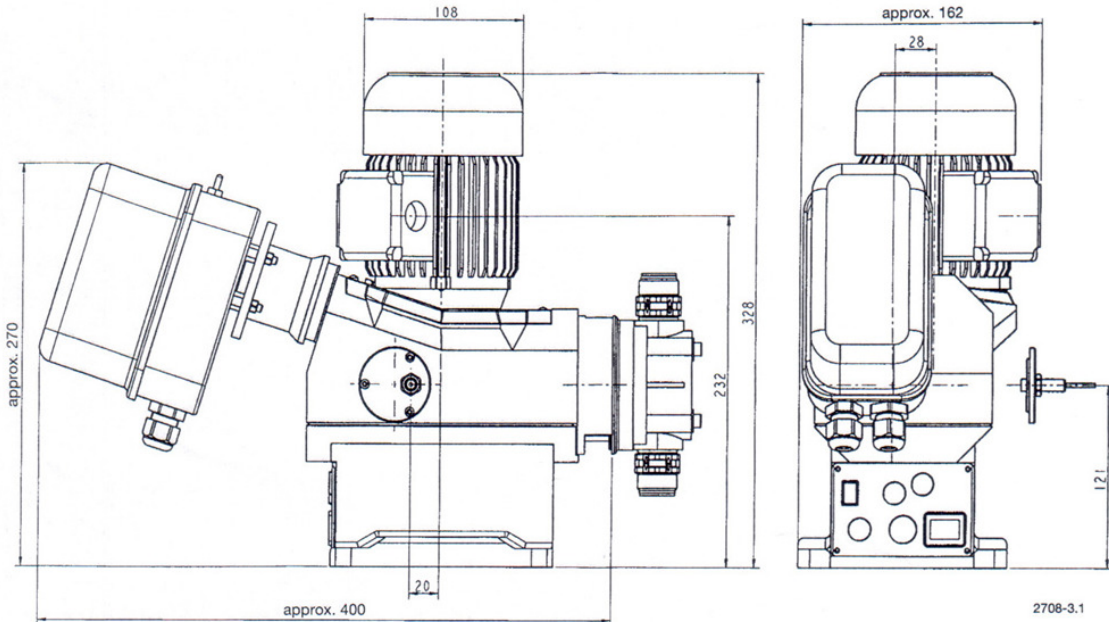
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DIMENSION

5.2 Dimensions sheet

Connection variants:
PVDF/SS
PVC/PP/PVDF
SS

2130-3.2

Delivery unit	Connection	A	B	C	D	E	F	G	H	I	J	K
042 PVT	DN 10	191	142	G3/4A	208	246 (251*)	65	85	228	180	95 (100*)	74*
042 SST	DN 10	190	140	G3/4A	208	241	65	85	226	180	90	–
063 PVT	DN 10	191	142	G3/4A	208	246 (251*)	65	85	228	180	95 (100*)	74*
063 SST	DN 10	190	140	G3/4A	208	241	65	85	226	180	90	–
120 PVT	DN 15	218	195	G1A	210	256 (263*)	65	135	328	235	105 (112*)	69*
120 SST	DN 15	218	195	G1A	210	249	65	135	328	241	98	–

* PVT with relief valve

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VARIO d® Series Identcode Ordering System

VAMd	Type	Capacity									
		bar	l/h		bar	l/h		bar	l/h		
	12017	12	16.6	10025	10	24.8	06047	6	47.4		
	12026	12	26.2	09039	9	39.4	05075	5	75		
	12042	12	42	07063	7	63	04120	4	120		

Material Liquid end

PP1	Polypopylene (PP)
NP1	Acrlic (PVC)
PVT	PVDF
TT1	PTFE with Carbon
SST	Stainless steel no. 1.4404

Liquid end version

0......	no spring
1......	with 2 vavle springs, Hastelly C4, 0.1bar
4......	with pressure relief valve,without valve spring,PVT only
5......	with pressure relief valve,with valve spring,PVT only

Hydraulic Connection

. 0.....	standard according to techical data
. 1.....	union nut and PVC insert-soft
. 2.....	union nut and PP insert
. 3.....	union nut and PVDF insert
. 4.....	union nut and stainless steel insert
. 7......	union nut and PVDF hose nozzle
. 8.....	union nut and stainless steel hose nozzle

Version

..0....	with ProMinent® logo(standard)

Electrical power supply

...S...	3 Ph., 220V/380V,50 Hz/60Hz (**Basic type only**)
...A...	1 Ph., 230V50 Hz Euro plug

Control Type

....0	basic type only
....1	mains switch, fuse, two-stage level input, external contact with pause function as NC, metering monitoring input and dual colour function display
....3	mains switch, fuse, two-stage level input, analog with pause function as, NC metering monitoring input and dual colour function display

Control version

.....0	for control types 0 (basic type)

Only for control types 1:

.....1	6000 pulses / h
.....2	2000 pulses / h
.....3	4000 pulses / h
.....4	8000 pulses / h
.....5	10000 pulses / h
.....6	12000 pulses / h

Only for control type 3:

.....B	4...20 mA

Switch mode relay:

......0	without relay (basic type)
......1	with fault indicating relay (NC)
......3	with fault indicating relay (NO)

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