

# PRIMEROY® K dosing pump

Hydraulically actuated diaphragm liquid end • Flow rate up to 2497 l/h • Pressure up to 37 bar



## Main mechanical characteristics

- Reciprocating dosing pump with variable stroke length
- Stroke micrometric adjustment while running or stopped
- Multiplexing capability up to 2x6 heads
- Maximum stroke length: 40 mm
- Stroke speeds at 50 Hz - 1000 rpm: 39 and 120 spm  
Stroke speeds at 50 Hz - 1500 rpm: 59, 100, 144 and 180 spm
- Design end load: 475 daN

## Main liquid end configurations

- Diaphragm liquid end ("H") or ("P"):
  - Liquid end body: 316L stainless steel ("H") or plastic ("P")
  - Diaphragm: PTFE
  - Hydraulically actuated diaphragm
  - "GSD" design (patent pending), life currently exceeding 20,000 hours
  - Compact footprint for high flow rates



PRIMEROY® K dosing pump

## Main electrical characteristics

- Motor power supply: 400 V - 50 Hz - 3 phase as standard.  
Other voltages/frequencies on request
- Electric equipment for non hazardous or hazardous area, large variety of protections and insulations
- Conforming to the European standards, Nema motors available

## Performance

- Conformity to API 675
- In accordance with ATEX CE EX II 2 G/D c T3 or T4 on request

## Options

- Double or triple diaphragm
- Diaphragm failure detection
- Cooling/heating jacket
- Special materials
- Food grade design
- Slurry configuration
- Special valves
- Remote valves
- Automatic flow rate adjustment: electronic servomotor (waterproof or explosion-proof)
- Rev counter
- Sand-proof
- Special designs available

## GSD diaphragm and metallic liquid end ("H")

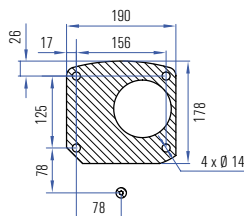
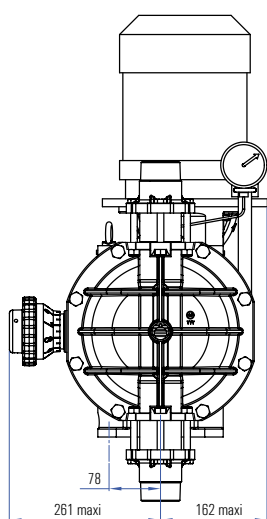
Ø Plunger (mm)	Swept volume (cm <sup>3</sup> )	Ø Diaphragm (mm)	Stroke speed max. (spm) Motor speed 1500 rpm	Flow rate max. (l/h)		Pressure max. (bar)	Connections
				10 bar	P. max.		
40	50.27	145	180	488	448	37	1" - VV1 m
50	78.54	145	180	780	747	24	1" - VV1 m
63	124.69	145	180	1238	1219	15	1" - VV1 m
70	153.94	225	144	1197	1189	12	2" - VV1 m
80	201.06	225	144	-	1598	9	2" - VV1 m
90	254.47	225	144	-	2022	7	2" - VV1 m
100	314.16	225	144	-	2497	5	2" - VV1 m

**GSD diaphragm and plastic liquid end ("P")**

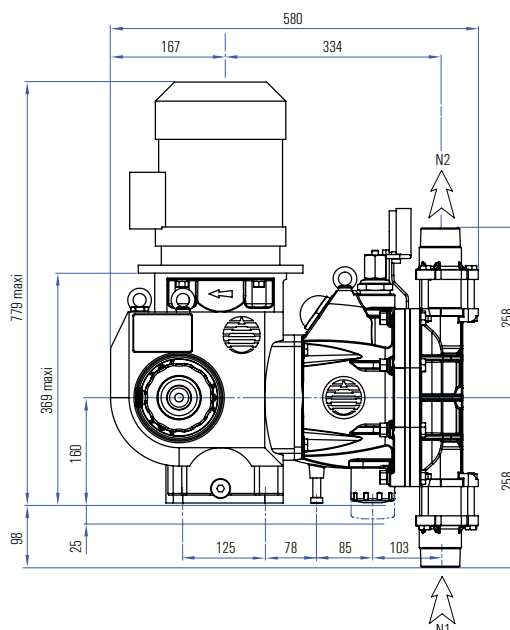
Ø Plunger (mm)	Swept volume (cm <sup>3</sup> )	Ø Membrane (mm)	Stroke speed max. (spm) Motor speed 1500 rpm	Flow rate max. (l/h)	Pressure max. (bar)	Connections
40	50.27	145	180	488	10	1" - WV1 f
50	78.54	145	180	780	10	1" - WV1 f
63	124.69	145	180	1238	10	1" - WV1 f
70	153.94	225	144	1197	10	1" 1/2 - WV1 f
80	201.06	225	144	1598	9	1" 1/2 - WV1 f
90	254.47	225	144	2022	7	1" 1/2 - WV1 f
100	314.16	225	144	2497	5	1" 1/2 - WV1 f

**General dimensions (in mm)**

**GSD diaphragm liquid end simplex configuration**



N1: Suction  
 N2: Discharge



The general dimensions are given as an indication only.  
 The dimensions given correspond to the maximum dimensions (largest liquid end, most powerful motor).

**Weight and packing**

Version	Net weight (*) kg	Gross weight (*) kg	Packing (mm) (L x W x H)
PRIMERROY® K simplex	120	170	700 x 650 x 1000

(\*) Approximately

Distributed by:



• Meurs Process B.V. • Phone +31(0)481 365530  
 Manege 11 Fax +31(0)481 365539  
 6662 WC Elst info@meursprocess.nl  
 The Netherlands www.meursprocess.nl