

Product Information

Primus 227

Precise, reliable and economical dosing of large flows



Primus 227 offers optimum dosing technology and control safety

Oscillating displacement pump with mechanical diaphragm control

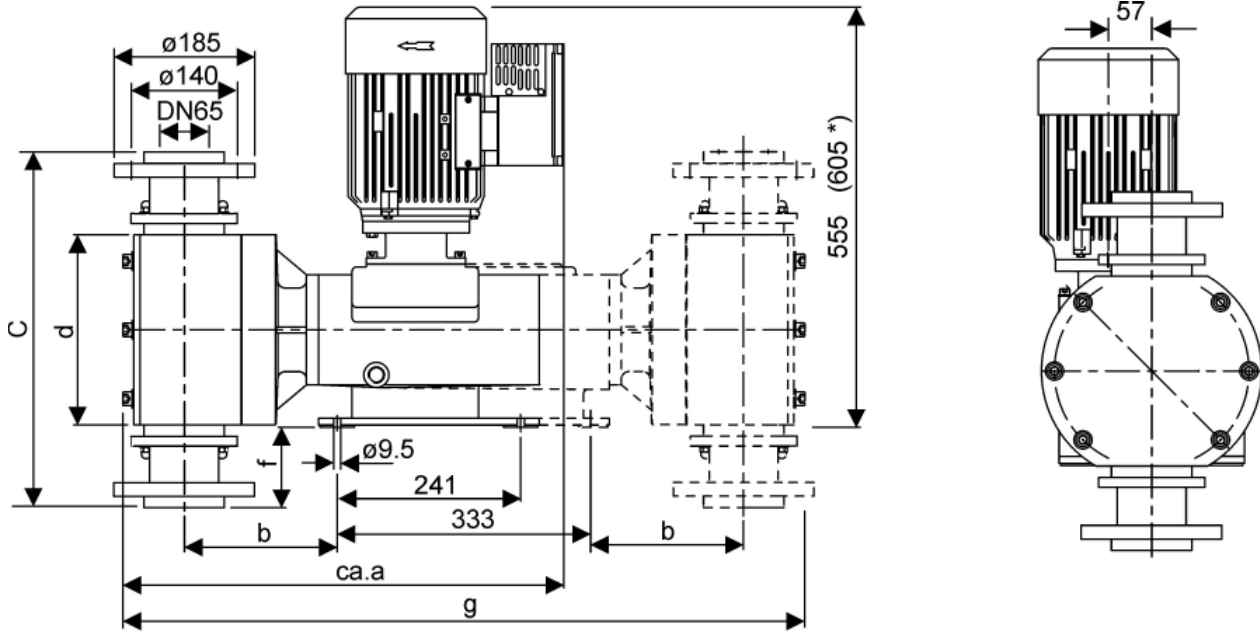
Primus 227 provides flexibility

Optimum capacity graduations from 430 l/h to 2x4000 l/h

Primus 227 is fit even for rough industrial applications

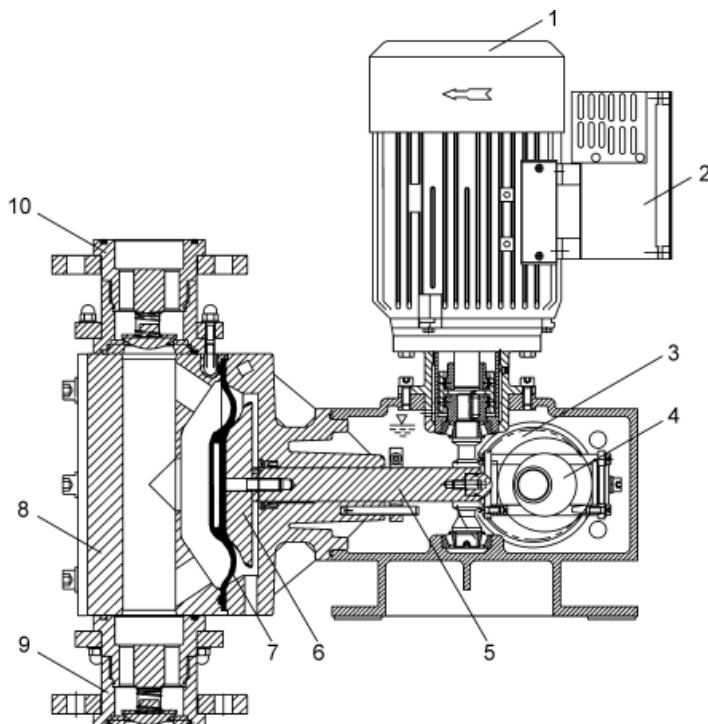
PTFE-coated dosing diaphragms
Dosing heads in suitable material versions

Measurements



Pump type	Measurements in mm						
	a	b	c	d	$\varnothing e$	f	g
227-430	567	185	446	228	270	95	880
227-860	567	185	446	228	270	95	880
227-1120	567	185	446	228	270	95	880
227-770	580	201	468	250	290	106	910
227-1520	580	201	468	250	290	106	910
227-2000	580	201	468	250	290	106	910

Functional description



- 1 Motor
- 2 Frequency converter
- 3 Worm wheel
- 4 Eccentric
- 5 Tappet
- 6 Support disk
- 7 Dosing diaphragm
- 8 Dosing head
- 9 Suction valve
- 10 Pressure valve

Pump types

50 Hz		60 Hz		100 Hz ²⁾		V _{stroke} [cm ³]	Head size	p _{max} [bar]	Weight [kg]		Order number	
[l/h] ¹⁾	[n/min]	[l/h] ¹⁾	[n/min]	[l/h] ¹⁾	[n/min]				simplex pump	duplex pump	simplex pump	duplex pump
430	28	516	34	860	56	265	1	5	appr. 50	appr. 90	227-430	227-430/2
770	28	924	34	1540	56	457	2	3	appr. 50	appr. 90	227-770	227-770/2
860	56	1032	67	1720	112	256	1	5	appr. 50	appr. 90	227-860	227-860/2
1120	73	1344	88	2240	146	256	1	5	appr. 50	appr. 90	227-1120	227-1120/2
1520	56	1824	67	3040	112	457	2	3	appr. 50	appr. 90	227-1520	227-1520/2
2000	73	2400	88	4000	146	457	2	3	appr. 50	appr. 90	227-2000	227-2000/2

1) l/h per dosing head, double liter capacity for duplex pumps.

2) operation with frequency converter

Technical data

Accuracy	Dosing flow variation < ± 2%
Suction height	3 m water column
Materials	Enclosure: aluminium, dosing diaphragm: PTFE/NBR, valve seats: PTFE For dosing head and valves please see the table below
Motor	For motor details, please see the table below
Connections	Flange DN 65 with counterflange Flange ANSI 2 1/2"
Option	With diaphragm breakage indication

Motors

Motor	3 AC, 220-240/380-440 V, 50 Hz, 440-480 V, 60 Hz, IP 65/F, PTC resistor
Flameproof motors for simplex and duplex pumps	230/400 V, 50 Hz, IP 65/F, II 2GD EEx de IIC T4 230/400 V, 50 Hz, IP 65/F, II 2GD EEx de IIC T4, PTC resistor
Motor with annexed frequency converter for 100 Hz operation	380-480 V ± 10%, 50/60 Hz, 1.5 kW or 2.2 kW, 3-phase, IP 65/F, without operating elements
Motor kits for simplex pumps Motor kits for duplex pumps	NEMA 145 TC and IEC BG, size 90 B14-C140 NEMA 145 TC and IEC BG, size 100 B14-C160

Options

Accessories	Order number
Operating panel for integrated frequency converter, plain-text display	326-0014
Integrated stroke sensor, pnp stroke sensor	335-033.1

Dosing head and valve versions

Dosing head	Valve body	Materials		
		Valve seat	Gasket	Valve ball
PP	PP	PTFE	Viton	PP
PVC	PVC	PTFE	Viton	PVC
PVC	PVC	PTFE	EPDM	PVC
Stainl. steel	Stainl. steel	PTFE	Viton	Stainl. steel

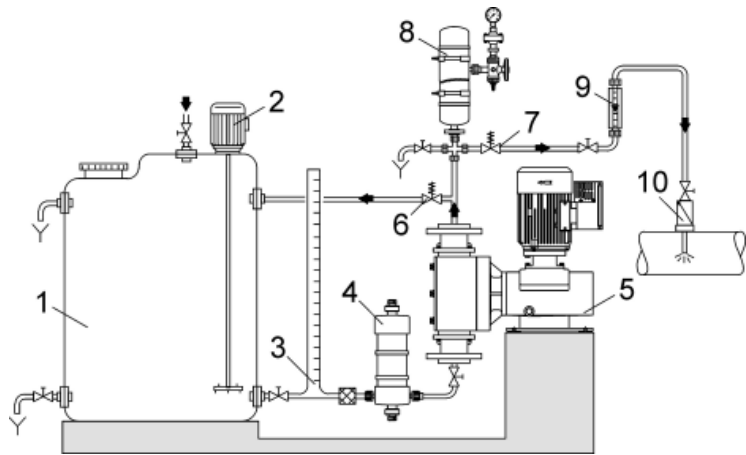
Opto-electronic diaphragm breakage indication

Optical sensor	Order number
Evaluation electronics 230 V, 50/60 Hz	334-23
Evaluation electronics 115 V, 50/60 Hz	334-22

Fittings and accessories

Flow scheme of a complete dosing system

- 1 Dosing tank 502
- 2 Electric agitator 509
- 3 Extraction device 521
- 4 Suction pulsation damper 516
- 5 Dosing pump Primus 227
- 6 Pressure relief valve 525
- 7 Pressure loading valve 525
- 8 Pulsation damper 517
- 9 Measuring tube
- 10 Injection unit 522

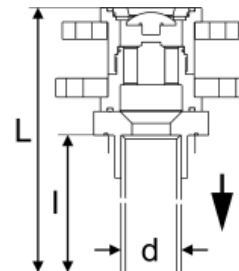


Injection units 522

- Disc check valve with a PTFE-coated spring
- Injection tube

Material	Connections	l [mm]	L [mm]	d*) [mm]	T _{max} [°C]	PN [bar]	Order number
PVC/Viton/PVC	Flange DN 65	220	377	63	20°	6	522-217
PP/Viton/PP	Flange DN 65	220	377	63	40°	6	522-218

*) prepared for flange DN 80

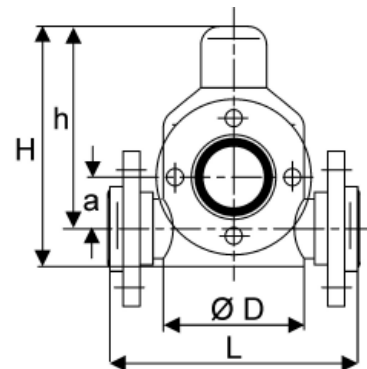


Pressure relief valve 525

protect the discharge pipework against too high pressures.

- Overflow function by a diaphragm-spring system
- Bypass valves with a connected T-piece
- Opening pressure 10 bars

Material	Connections	L [mm]	H [mm]	h [mm]	ø D [mm]	a [mm]	Order number
PP/Viton	Flange DN 65	326	230	195	130	46	525-0616
PVC/Viton	Flange DN 65	266	230	195	130	46	525-0614
PVC/EPDM	Flange DN 65	266	230	195	130	46	525-0615
St. steel/Viton	Flange DN 65	394	243	203	198	-	525-0617

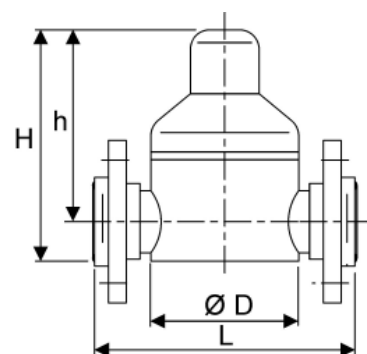


Pressure loading valves 525

are essential, if the dosing system has no backpressure, if the backpressure varies or if the injection point is at a lower level than the pump.

- Pressure adjustable by a spring-loaded screw, factory pre-adjustment approx. 3 bars
- banking-up pressure principle

Materials	Connections	L [mm]	H [mm]	h [mm]	ø D [mm]	Order number
PP/Viton	Flange DN 65	326	230	195	130	525-0568
PVC/Viton	Flange DN 65	266	230	195	130	525-0568.1
PVC/EPDM	Flange DN 65	266	230	195	130	525-0569.1
St. steel/Viton	Flange DN 65	280	243	203	198	525-0571



Spare parts sets

- Gaskets for dosing heads
- Inner valve parts
- 1 dosing diaphragm

Head size	PVC/Viton	PVC/EPDM	PP/Viton	St. steel/Viton
1	553-1329	553-1329.1	553-1330	553-1331
2	553-1332	553-1332.1	553-1333	553-1334

© 2005 by ALLDOS Eichler GmbH

Presented by: