

Plunger Metering Pump Orlita® PS

Orlita® PS - simple, robust and reliable.



Capacity range of single head pump: 0 – 37,000 l/h; 400 – 4 bar

ORLITA® PS plunger metering pumps (PS 18 to PS 1400) with a stroke length of 15 to 60 mm provide a capacity ranging from 0 to 37,000 l/h at 400 – 4 bar. A wide range of drive versions is available, including some for use in Exe and Exde areas with ATEX certification. The Orlita® PS product range

is designed to comply with API 675. Its modular construction permits the free combination of drives, power ends and dosing heads, producing a pump for a range of different feed rates and media operating at different working pressures.

Your benefits

Flexible adaptation to the process:

- Precise capacity even at maximum pressure
- Metering reproducibility is better than $\pm 0.5\%$ within the 10-100% stroke length range under defined conditions and with correct installation.
- Cone valves for use as suction and/or discharge valves with minimal wear, good self-cleaning and low pressure loss (NPSHR)

- Excellent hydraulic efficiency

Excellent flexibility:

- The modular construction ensures a wide range of uses
- It is possible to combine up to 6 metering units, even with different pump capacities, in multiple pump systems

Field of application

- Oil/ gas production (onshore/offshore)
- Refineries
- Chemical/Petrochemical industry
- Pharmaceuticals & cosmetics
- Packaging industry (bottling pumps)
- Maximum temperature applications of up to +400 °C

Plunger Metering Pump Orlita® PS

Orlita® PS - simple, robust and reliable.

Technical Data

Pump type	Plunger Ø	Theor. stroke volume	Max. capacity (theo.) in l/h at strokes/min (50 Hz)						Max. pressure
			58	73	91	112	145	207	
	mm	ml/stroke	l/h	l/h	l/h	l/h	l/h	l/h	bar
PS 18/	5	0.29	1.0	1.2	1.6	1.9	2.5	3.6	250
PS 18/	6	0.42	1.4	1.8	2.3	2.8	3.6	5.2	250
PS 18/	7	0.58	2.0	2.5	3.1	3.8	5.0	7.1	250
PS 18/	8	0.75	2.6	3.2	4.1	5.0	6.5	9.3	250
PS 18/	10	1.18	4.1	5.1	6.4	7.8	10.2	14.6	200
PS 18/	12	1.70	5.9	7.3	9.2	11.3	14.7	21.0	139
PS 18/	16	3.02	10.5	13.1	16.4	20.1	26.2	37.4	78
PS 18/	20	4.71	16.4	20.5	25.6	31.5	41.0	58.5	50
PS 18/	25	7.36	25.6	32.0	40.0	49.2	64.0	91.5	32
PS 18/	30	10.60	36.9	46.1	57.6	70.9	92.2	131.7	16
PS 18/	36	15.27	53.1	66.4	83.0	102.1	132.8	189.7	15
PS 18/	40	18.85	65.6	82.0	102.4	126.1	163.9	234.2	10
PS 18/	50	29.45	102.4	128.1	160.1	197.1	256.2	366.0	8

Pump type	Plunger Ø	Theor. stroke volume	Max. capacity (theo.) in l/h at strokes/min (50 Hz)						Max. pressure
			58	73	91	112	145	207	
	mm	ml/stroke	l/h	l/h	l/h	l/h	l/h	l/h	bar
PS 35/	7	0.77	2.6	3.3	4.1	5.1	6.7	9.5	630
PS 35/	8	1.01	3.5	4.3	5.4	6.7	8.7	12.4	400
PS 35/	10	1.57	5.4	6.8	8.5	10.5	13.6	19.5	400
PS 35/	12	2.26	7.8	9.8	12.3	15.1	19.6	28.1	250
PS 35/	16	4.02	13.9	17.4	21.8	26.9	34.9	49.9	156
PS 35/	20	6.28	21.8	27.3	34.1	42.0	54.6	78.0	100
PS 35/	25	9.82	34.1	42.7	53.3	65.7	85.4	122.0	64
PS 35/	30	14.14	49.2	61.5	76.8	94.6	122.9	175.7	44
PS 35/	36	20.36	70.8	88.5	110.6	136.2	177.1	253.0	30
PS 35/	40	25.13	87.4	109.3	136.6	168.2	218.6	312.3	25
PS 35/	50	39.27	136.6	170.8	213.5	262.8	341.6	488.0	16
PS 35/	65	66.37	230.9	288.6	360.8	444.1	577.3	824.8	9
PS 35/	80	100.53	349.8	437.3	546.6	672.7	874.6	1,249.4	6
PS 35/	100	157.08	546.6	683.3	854.1	1,051.2	1,366.5	1,952.2	4

Plunger Metering Pump Orlita® PS

Orlita® PS - simple, robust and reliable.

Pump type	Plunger Ø	Theor. stroke volume	Max. capacity (theo.) in l/h at strokes/min (50 Hz)							Max. pressure
			78	98	122	134	155	182	193	
	mm	ml/stroke	l/h	l/h	l/h	l/h	l/h	l/h	l/h	bar
PS 80/	20	6.28	29	37	46	50	58	68	72	400
PS 80/	25	9.82	45	57	71	79	91	107	113	250
PS 80/	30	14.14	66	83	103	113	131	154	163	178
PS 80/	36	20.36	95	119	149	164	189	222	235	123
PS 80/	40	25.13	117	148	184	202	233	274	290	100
PS 80/	50	39.27	183	231	287	316	365	428	453	64
PS 80/	60	56.55	264	333	414	455	526	617	653	44
PS 80/	65	66.37	310	390	486	535	617	724	766	37
PS 80/	80	100.53	470	592	736	810	935	1,097	1,161	25
PS 80/	100	157.08	734	925	1,150	1,266	1,461	1,714	1,814	16
PS 80/	125	245.44	1,148	1,445	1,797	1,978	2,283	2,679	2,835	10
PS 80/	140	307.88	1,440	1,813	2,254	2,482	2,864	3,360	3,557	8
PS 80/	160	402.12	1,880	2,368	2,944	3,242	3,741	4,389	4,646	6

Important note:

All performance data is stated at 50 Hz motor frequency

Abridged presentation of our complete product range. Other types on request

Pump type	Plunger Ø	Theor. stroke volume	Max. capacity (theo.) in l/h at strokes/min (50 Hz)						Max. pressure
			107	117	134	152	171	200	
	mm	ml/stroke	l/h	l/h	l/h	l/h	l/h	l/h	bar
PS 180/	30	28.27	181	199	226	257	290	339	229
PS 180/	36	40.72	262	286	326	370	417	489	159
PS 180/	40	50.27	323	353	403	457	515	604	125
PS 180/	50	78.54	505	552	630	714	805	943	80
PS 180/	54	91.61	589	644	735	833	939	1,100	70
PS 180/	65	132.73	854	934	1,065	1,207	1,361	1,594	48
PS 180/	70	153.94	990	1,083	1,235	1,400	1,579	1,849	40
PS 180/	80	201.06	1,293	1,415	1,613	1,829	2,062	2,416	32
PS 180/	94	277.59	1,786	1,953	2,227	2,526	2,847	3,335	23
PS 180/	125	490.87	3,158	3,455	3,939	4,467	5,036	5,898	13
PS 180/	140	615.75	3,962	4,334	4,941	5,603	6,317	7,399	10
PS 180/	160	804.25	5,175	5,660	6,454	7,318	8,251	9,664	8
PS 180/	200	1,256.64	8,086	8,845	10,085	11,435	12,892	15,100	5

Plunger Metering Pump Orlita® PS

Orlita® PS - simple, robust and reliable.

Pump type	Plunger Ø	Theor. stroke volume	Max. capacity (theo.) in l/h at strokes/min (50 Hz)						Max. pressure
			99	117	134	156	173	204	
	mm	ml/stroke	l/h	l/h	l/h	l/h	l/h	l/h	bar
PS 600/	30	28.27	168	198	227	264	293	345	400
PS 600/	36	40.27	242	285	327	381	422	497	353
PS 600/	40	50.27	299	352	403	470	521	614	286
PS 600/	50	78.54	467	551	630	735	814	959	183
PS 600/	54	91.61	545	643	735	857	949	1,119	157
PS 600/	65	132.73	789	932	1,067	1,243	1,376	1,621	100
PS 600/	70	153.94	916	1,080	1,236	1,441	1,596	1,880	93
PS 600/	80	201.06	1,196	1,411	1,616	1,882	2,084	2,456	71
PS 600/	94	277.59	1,651	1,949	2,229	2,599	2,878	3,391	51
PS 600/	125	490.87	2,921	3,446	3,946	4,596	5,090	5,998	29
PS 600/	140	615.75	3,664	4,323	4,951	5,766	6,385	7,523	23
PS 600/	160	804.25	4,785	5,647	6,466	7,531	8,339	9,827	16
PS 600/	200	1,256.64	7,477	8,823	10,104	11,768	13,030	15,354	11

Pump type	Plunger Ø	Theor. stroke volume	Max. capacity (theo.) in l/h at strokes/min (50 Hz)						Max. pressure
			93	106	125	143	169	191	
	mm	ml/stroke	l/h	l/h	l/h	l/h	l/h	l/h	bar
PS 1400/	40	75.40	419	480	565	647	766	864	400
PS 1400/	50	117.81	654	750	884	1,011	1,197	1,350	275
PS 1400/	60	169.65	943	1,080	1,273	1,456	1,724	1,944	190
PS 1400/	70	230.91	1,283	1,470	1,733	1,983	2,346	2,646	140
PS 1400/	80	301.59	1,676	1,920	2,263	2,590	3,065	3,456	107
PS 1400/	94	416.39	2,314	2,651	3,125	3,576	4,231	4,772	77
PS 1400/	125	736.31	4,093	4,689	5,527	6,323	7,483	8,439	44
PS 1400/	140	923.63	5,134	5,882	6,933	7,932	9,387	10,587	35
PS 1400/	160	1,206.37	6,706	7,683	9,055	10,360	12,261	13,827	25
PS 1400/	200	1,884.96	10,478	12,005	14,149	16,188	19,157	21,606	17
PS 1400/	280	3,694.51	20,538	23,530	27,732	31,729	37,549	42,348	8

Important note:

All performance data is stated at 50 Hz motor frequency

Abridged presentation of our complete product range. Other types on request