

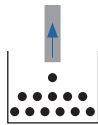
WRP3100

Hose-end performance

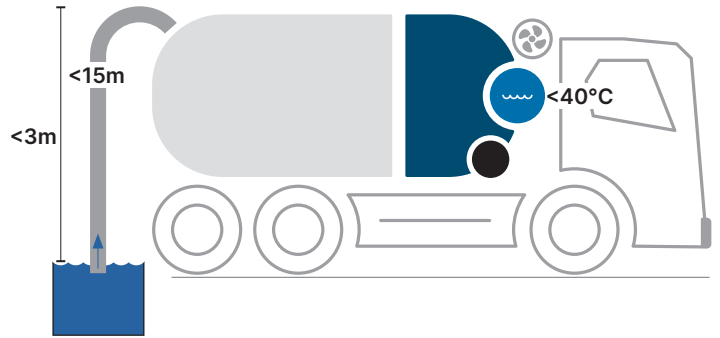
Hose-end flow data is based on the following test parameters:

- Water temperature up to 40°C
- Suction hose length up to 15 m
- Suction depth up to 3 m
- Tolerance ±10%

WATER flow can be used as a test parameter during commissioning and factory acceptance tests.



AIR FLOW



WATER FLOW

		Operators power experience during air lift of solids					Tank filling performance fully submerged vacuum lift					RETURN ON INVESTMENT					
		Air flow m/sec					m³/h kW					Fuel consumption filling 100m³					
		6" HOSE		5" HOSE		4" HOSE	3" HOSE		2" HOSE	Performance loss		6" HOSE		5" HOSE		4" HOSE	3" HOSE
WRP3100	1600 RPM	28 -20%	40 14%	60 73%	97 176%	128 267%	394 43% 83kW	276 83kW	178 -55% 83kW	79 -80% 83kW	26 -93% 83kW	2,11 5,64 KG/CO2	3,00 8,05 KG/CO2	4,66 12,48 KG/CO2	10,48 28,09 KG/CO2	31,80 85,23 KG/CO2	
	1500 RPM	26 -25%	37 7%	57 63%	93 166%	126 259%	392 45% 73kW	270 73kW	173 -56% 73kW	79 -80% 73kW	26 -93% 73kW	1,86 4,99 KG/CO2	2,70 7,25 KG/CO2	4,22 11,32 KG/CO2	9,22 24,70 KG/CO2	27,97 74,96 KG/CO2	
	1400 RPM	25 -30%	35 0%	54 53%	88 152%	123 251%	390 47% 64kW	265 64kW	163 -58% 64kW	79 -80% 64kW	26 -93% 64kW	1,64 4,40 KG/CO2	2,42 6,48 KG/CO2	3,93 10,53 KG/CO2	8,08 21,66 KG/CO2	24,52 65,72 KG/CO2	
	1300 RPM	23 -35%	33 -7%	50 43%	83 137%	118 238%	383 47% 55kW	261 55kW	151 -61% 55kW	79 -79% 55kW	26 -93% 55kW	1,45 3,88 KG/CO2	2,13 5,70 KG/CO2	3,67 9,85 KG/CO2	7,01 18,80 KG/CO2	21,28 57,04 KG/CO2	
	1200 RPM	21 -40%	30 -14%	46 32%	78 122%	116 231%	374 45% 47kW	258 47kW	146 -61% 47kW	79 -79% 47kW	26 -93% 47kW	1,28 3,43 KG/CO2	1,86 4,97 KG/CO2	3,29 8,81 KG/CO2	6,05 16,22 KG/CO2	18,37 49,23 KG/CO2	
	1100 RPM	19 -45%	28 -21%	43 22%	72 105%	112 219%	370 47% 40kW	253 40kW	161 -57% 40kW	79 -79% 40kW	26 -93% 40kW	1,11 2,98 KG/CO2	1,63 4,37 KG/CO2	2,56 6,85 KG/CO2	5,20 13,94 KG/CO2	15,79 42,30 KG/CO2	
	1000 RPM	18 -50%	25 -28%	39 11%	66 89%	106 203%	366 49% 33kW	247 33kW	158 -57% 33kW	71 -81% 33kW	26 -93% 33kW	0,94 2,51 KG/CO2	1,39 3,73 KG/CO2	2,17 5,81 KG/CO2	4,83 12,94 KG/CO2	13,15 35,24 KG/CO2	
	900 RPM	16 -55%	22 -37%	35 0%	60 72%	102 191%	346 43% 27kW	243 27kW	156 -55% 27kW	68 -81% 27kW	26 -92% 27kW	0,78 2,09 KG/CO2	1,11 2,98 KG/CO2	1,73 4,65 KG/CO2	4,00 10,72 KG/CO2	10,34 27,72 KG/CO2	
	800 RPM	14 -60%	20 -43%	31 -11%	54 55%	96 175%	333 42% 21kW	236 21kW	149 -55% 21kW	67 -80% 21kW	26 -92% 21kW	0,63 1,69 KG/CO2	0,89 2,39 KG/CO2	1,41 3,77 KG/CO2	3,15 8,45 KG/CO2	8,05 21,56 KG/CO2	

Air flow m/sec

100+	Overcapacity extreme
45-99%	Overcapacity high
15-44%	Overcapacity
0-14%	Perfect 35 - 40 m/sec
0--29%	Water is flying
-30--	Insufficient speed

Performance +/- %

90+ %
60-90%
40-60%
20-40%
10-20%
Full capacity

Diesel oil consumption per 100m³

5L +	Highly Inefficient
4-5L	Inefficient
3-4L	Less Efficient
2-3L	Moderately Efficient
1-2L	Efficient
0-1L	Highly Efficient

Customized calculations

Our team of vacuum specialists, with extensive experience, is available for customized calculations based on specific investments. Reach out for a consultation and achieve goals with precision and expertise.

WRP3100

Pump-end performance

Features:

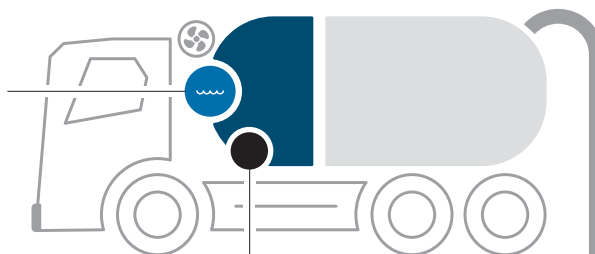
- Hard anodized aluminum
- Dry run resistant mechanical shaft seals
- Life-time lubricated bearings
- Available in ATEX Zone 1
- Low noise



Water evaporation from saturation inside the pump

Metric	50% vacuum	70% vacuum	80% vacuum	US	50% vacuum	70% vacuum	80% vacuum
20°C	7	4	2	68°F	1,8	1,1	0,5
30°C	21	12	6	86°F	5,5	3,2	1,6
40°C	45	26	13	104°F	11,9	6,9	3,4
50°C	82	48	24	122°F	21,7	12,7	6,3
55°C	107	62	31	131°F	28,3	16,4	8,2

L/h Gal/h



Vacuum

Metric	m3/h	kW	Nm	US	CFM	HP	Lbs *ft
1600 RPM	2558	83	495	1600 RPM	1507	113	365
1500 RPM	2398	73	465	1500 RPM	1412	99	343
1400 RPM	2238	64	437	1400 RPM	1318	87	322
1300 RPM	2078	55	404	1300 RPM	1224	75	298
1200 RPM	1918	47	374	1200 RPM	1130	64	276
1100 RPM	1759	40	347	1100 RPM	1036	54	256
1000 RPM	1598	33	315	1000 RPM	941	45	232
900 RPM	1439	27	287	900 RPM	848	37	211
800 RPM	1279	21	251	800 RPM	753	29	185

Pressure

Metric	m3/h	kW	Nm	US	CFM	HP	Lbs *ft
1600 RPM	2379	112	669	1600 RPM	1401	152	493
1500 RPM	2248	98	624	1500 RPM	1324	133	460
1400 RPM	2089	86	587	1400 RPM	1231	117	433
1300 RPM	1929	74	544	1300 RPM	1136	101	401
1200 RPM	1771	63	501	1200 RPM	1043	86	370
1100 RPM	1613	53	460	1100 RPM	950	72	339
1000 RPM	1452	44	420	1000 RPM	855	60	310
900 RPM	1295	36	382	900 RPM	763	49	282
800 RPM	1137	28	334	800 RPM	670	38	247