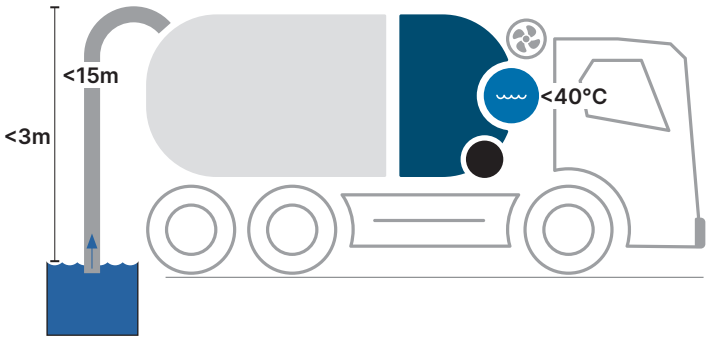
WRP2500

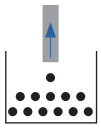
Hose-end performance

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

Operators power experience during air lift of solids

Air flow | m/sec

WRP2500	6" HOSE	5" HOSE	4" HOSE	3" HOSE	2" HOSE
1600 RPM	22 -37%	32 -9%	49 39%	81 131%	120 244%
1500 RPM	22 -37%	30 -15%	46 31%	79 126%	117 235%
1400 RPM	20 -43%	28 -20%	43 23%	73 110%	114 226%
1300 RPM	19 -46%	26 -26%	40 15%	69 96%	110 214%
1200 RPM	17 -52%	24 -32%	37 6%	64 82%	107 205%
1100 RPM	15 -56%	22 -37%	34 -3%	59 68%	102 193%
1000 RPM	14 -60%	20 -43%	31 -11%	53 53%	96 175%
900 RPM	12 -64%	18 -49%	28 -20%	48 38%	91 161%
800 RPM	11 -68%	16 -54%	25 -29%	43 24%	83 136%

WATER FLOW

Tank filling performance fully submerged vacuum lift

m³/h | kW — Performance loss

WRP2500	6" HOSE	5" HOSE	4" HOSE	3" HOSE	2" HOSE
1600 RPM	383 131% 65kW	261 58% 65kW	166 65kW	86 -78% 65kW	53 -86% 65kW
1500 RPM	383 134% 57kW	260 59% 57kW	164 57kW	80 -79% 57kW	50 -87% 57kW
1400 RPM	380 136% 50kW	259 61% 50kW	161 50kW	77 -80% 50kW	50 -87% 50kW
1300 RPM	374 136% 43kW	256 62% 43kW	158 43kW	72 -81% 43kW	47 -87% 43kW
1200 RPM	371 140% 36kW	252 63% 36kW	155 36kW	69 -81% 36kW	47 -87% 36kW
1100 RPM	355 131% 30kW	244 59% 30kW	154 30kW	67 -81% 30kW	47 -87% 30kW
1000 RPM	347 131% 25kW	238 59% 25kW	150 25kW	63 -82% 25kW	43 -88% 25kW
900 RPM	332 128% 21kW	241 65% 21kW	146 21kW	60 -82% 21kW	43 -87% 21kW
800 RPM	312 117% 17kW	227 58% 17kW	144 17kW	56 -82% 17kW	40 -87% 17kW

RETURN ON INVESTMENT

Fuel consumption filling 100m³

Diesel oil consumption liter — KG/CO2 emissions

WRP2500	6" HOSE	5" HOSE	4" HOSE	3" HOSE	2" HOSE
1600 RPM	1,72 4,61 KG/CO2	2,52 6,76 KG/CO2	3,98 10,66 KG/CO2	7,70 20,64 KG/CO2	12,40 33,23 KG/CO2
1500 RPM	1,50 4,03 KG/CO2	2,21 5,93 KG/CO2	3,51 9,41 KG/CO2	7,18 19,25 KG/CO2	11,42 30,60 KG/CO2
1400 RPM	1,31 3,51 KG/CO2	1,92 5,15 KG/CO2	3,09 8,28 KG/CO2	6,43 17,24 KG/CO2	9,88 26,48 KG/CO2
1300 RPM	1,14 3,06 KG/CO2	1,66 4,45 KG/CO2	2,69 7,21 KG/CO2	5,92 15,86 KG/CO2	9,11 24,40 KG/CO2
1200 RPM	1,00 2,68 KG/CO2	1,48 3,96 KG/CO2	2,40 6,44 KG/CO2	5,37 14,38 KG/CO2	7,95 21,30 KG/CO2
1100 RPM	0,88 2,36 KG/CO2	1,28 3,43 KG/CO2	2,03 5,45 KG/CO2	4,70 12,60 KG/CO2	6,69 17,93 KG/CO2
1000 RPM	0,77 2,05 KG/CO2	1,11 2,99 KG/CO2	1,77 4,74 KG/CO2	4,22 11,31 KG/CO2	6,15 16,49 KG/CO2
900 RPM	0,67 1,79 KG/CO2	0,92 2,47 KG/CO2	1,52 4,08 KG/CO2	3,68 9,87 KG/CO2	5,14 13,77 KG/CO2
800 RPM	0,58 1,56 KG/CO2	0,80 2,15 KG/CO2	1,26 3,38 KG/CO2	3,26 8,72 KG/CO2	4,59 12,29 KG/CO2

DOC1140

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

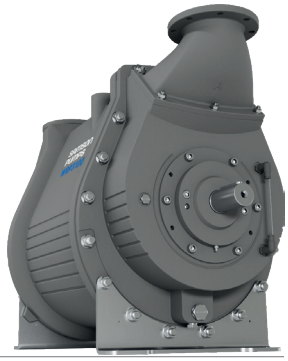
Customized calculations
Our team of vacuum specialists, with extensive experience, is available for customized calculations based on specific investments.
Reach out for a consultation and achieve goals with precision and expertise.

WRP2500

Pump-end performance

Features:

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



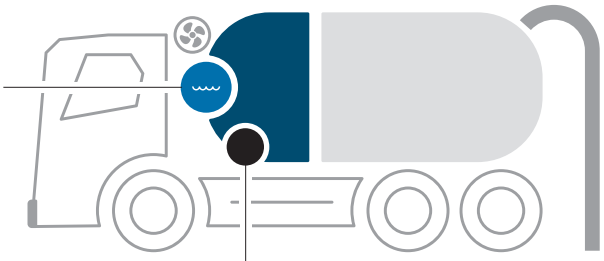
Water evaporation from saturation inside the pump

Metric	50% vacuum	70% vacuum	80% vacuum
20°C	6	4	2
30°C	18	11	5
40°C	37	22	11
50°C	68	41	20
55°C	89	53	27

L/h

US	50% vacuum	70% vacuum	80% vacuum
68°F	1,6	1,1	0,5
86°F	4,8	2,9	1,3
104°F	9,8	5,8	2,9
122°F	18,0	10,8	5,3
131°F	23,5	14	7,1

Gal/h



Vacuum

Metric	m3/h	kW	Nm
1600 RPM	2020	66	394
1500 RPM	1894	58	369
1400 RPM	1776	50	341
1300 RPM	1665	43	316
1200 RPM	1562	37	294
1100 RPM	1464	31	269
1000 RPM	1373	26	248
900 RPM	1287	21	223
800 RPM	1207	17	203

US	CFM	HP	Lbs *ft
1600 RPM	1190	90	291
1500 RPM	1116	79	272
1400 RPM	1046	68	252
1300 RPM	981	58	233
1200 RPM	920	50	217
1100 RPM	862	42	199
1000 RPM	809	35	183
900 RPM	758	29	164
800 RPM	711	23	150

Pressure

Metric	m3/h	kW	Nm
1600 RPM	1879	94	561
1500 RPM	1776	83	528
1400 RPM	1658	73	498
1300 RPM	1546	63	463
1200 RPM	1442	53	422
1100 RPM	1342	45	391
1000 RPM	1248	37	353
900 RPM	1159	30	318
800 RPM	1073	24	287

US	CFM	HP	Lbs *ft
1600 RPM	1107	128	414
1500 RPM	1046	113	390
1400 RPM	977	99	367
1300 RPM	910	86	341
1200 RPM	849	72	311
1100 RPM	791	61	288
1000 RPM	735	50	261
900 RPM	682	41	235
800 RPM	632	33	211