Železniki

VACUUM CLEANER MOTOR PERFORMANCE
CALCULATED FROM METRIC TO IMPERIAL UNITS & ASTM ORIFICE

Date: 3.11.2006

Code:	496.3.447	Working order number:	
Voltage / fequency:	120/60 V / Hz	Request number:	
Stator winding:		Number:	
Rotor winding:		Absolute pressure:	kPa
Brushes:		Ambient temperature:	°C
Weight:	1840 g	Correction factor:	

METRIC UNITS — MEASURED DATA

Orifice mm	Current A	Input Pow. W	Speed /min	Vacuum kPa	Air flow dm3/s	Air Power W	Efficiency %	Vac (inH2O)	Flow (CFM)
50	11,16	1298,64	27864	2,12	69,32	147,24	11,34	8,51	146,88
40	11,02	1282,88	27903	4,22	62,24	262,65	20,47	16,94	131,88
30	10,69	1247,28	28290	8,77	49,90	437,41	35,07	35,21	105,73
23	9,91	1160,36	29216	12,80	35,12	449,48	38,74	51,39	74,42
21	9,53	1118,04	29722	13,98	30,53	426,84	38,18	56,12	64,69
19	9,11	1070,36	30296	15,15	25,97	393,49	36,76	60,82	55,03
16	8,46	997,66	31310	17,08	19,49	332,78	33,36	68,57	41,30
13	7,68	910,34	32746	18,97	13,54	256,70	28,20	76,16	28,69
10	6,85	815,12	34751	19,91	8,23	163,93	20,11	79,93	17,44
6,5	6,13	730,24	35617	20,90	3,61	75,38	10,32	83,91	7,65
0	5,48	655,47	37507	22,24	0,00	0,00	0,00	89,29	0,00

Maximum measured values:

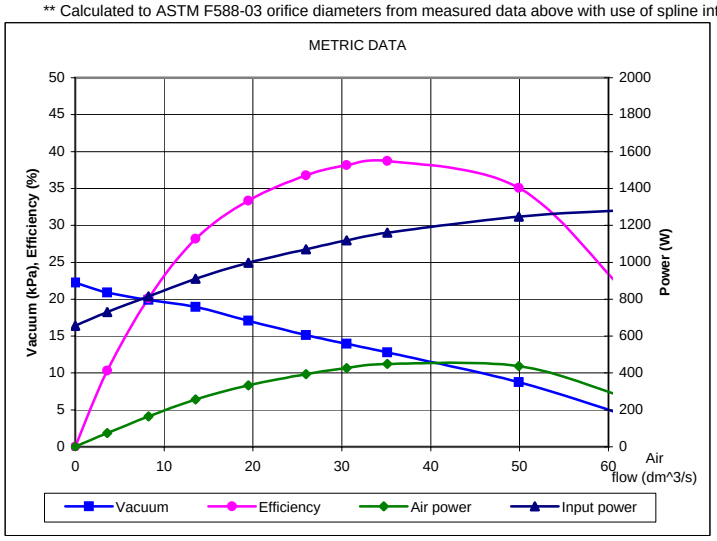
Input power = 1298,64 W, Air power = 449,48 W, Vacuum = 22,24 kPa = 89,29 inH2O, Air Flow * = 69,32 L/s = 146,88 CFM, Efficiency = 38,74 %

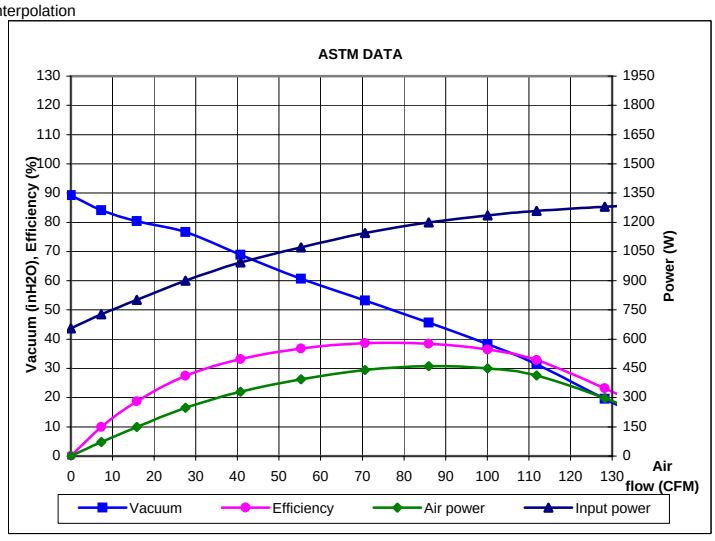
Note for units conversion: 1 inH2O = 0.2490889 kPa, 1 CFM = 0.4719474 l/s, 1 in = 25.4 mm (NIST Special Publication 811,1995)

IMPERIAL UNITS — CALCULATED DATA

Orifice in	Current A	Input Power W	Speed RPM	Vacuum inH2O	Air Flow CFM	Air Power W	Efficiency %	Oriffice mm
2,000	11,4	1300	27865	8,0	148,0	140,1	10,8	50,80
1,750	11,1	1290	27865	12,3	139,1	201,4	15,6	44,45
1,500	11,0	1280	27937	19,6	128,3	296,7	23,2	38,10
1,250	10,8	1258	28177	31,4	111,9	414,0	32,9	31,75
1,125	10,6	1236	28402	38,4	100,1	450,9	36,5	28,58
1,000	10,3	1200	28769	45,7	85,9	460,9	38,4	25,40
0,875	9,8	1145	29400	53,2	70,7	442,1	38,6	22,23
0,750	9,1	1072	30281	60,7	55,3	394,4	36,8	19,05
0,625	8,4	994	31357	68,9	40,7	330,0	33,2	15,88
0,500	7,6	901	32945	76,7	27,5	247,8	27,5	12,70
0,375	6,7	801	34962	80,4	15,9	149,9	18,7	9,53
0,250	6,1	727	35643	84,1	7,3	72,5	10,0	6,35
0,000	5,5	655	37507	89,3	0,0	0,0	0,0	0,00

** Calculated to ASTM F588-03 orifice diameters from measured data above with use of spline interpolation





Measured in accordance with: IEC 60312

Measured by: Ivan Krmelj