DOMEL

Zelezniki

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

Date: 20.12.2000

Code:	492.3.304	Working order number:	
Voltage / fequency:	110/50 V / Hz	Request number:	
Stator winding:		Number:	
Rotor winding:		Absolute pressure:	kPa
Brushes:		Ambient temperature:	°C
Weight:	2040 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)
40	12,09	1251,52	19220	2,90	51,78	150,14	12,00	11,64	109,72
30	12,09	1248,04	19060	7,15	45,28	323,67	25,93	28,70	95,94
23	11,71	1209,68	19495	12,19	34,34	418,63	34,61	48,94	72,76
21	11,42	1182,64	19841	13,57	30,12	408,58	34,55	54,48	63,82
19	11,07	1147,42	20231	14,68	25,60	375,86	32,76	58,93	54,24
16	10,44	1083,24	20930	16,34	19,11	312,20	28,82	65,60	40,49
13	9,74	1015,36	21775	17,89	13,19	235,92	23,23	71,82	27,95
10	8,93	934,90	22819	19,22	8,11	155,83	16,67	77,16	17,18
6,5	8,14	855,90	23894	20,45	3,57	73,02	8,53	82,10	7,56
0	7,49	792,54	25013	22,52	0,00	0,00	0,00	90,41	0,00

Maximum measured values:

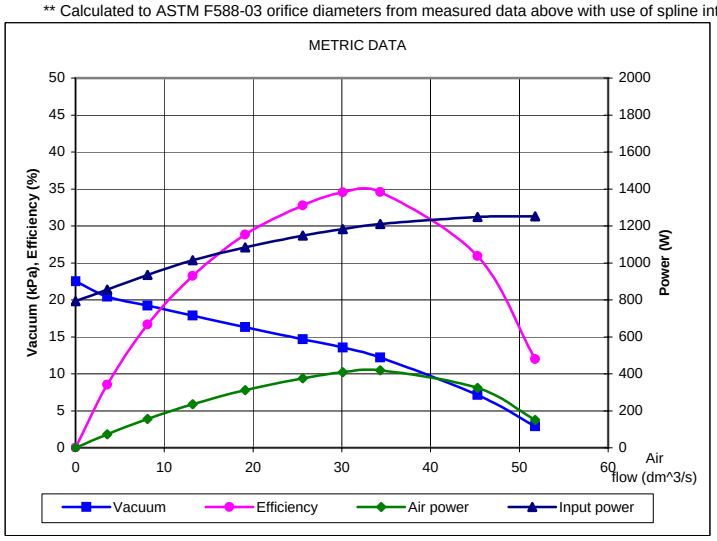
Input power = 1251,52 W, Air power = 418,63 W, Vacuum = 22,52 kPa = 90,41 inH2O, Air Flow = 51,78 L/s = 109,72 CFM, Efficiency = 34,61 %

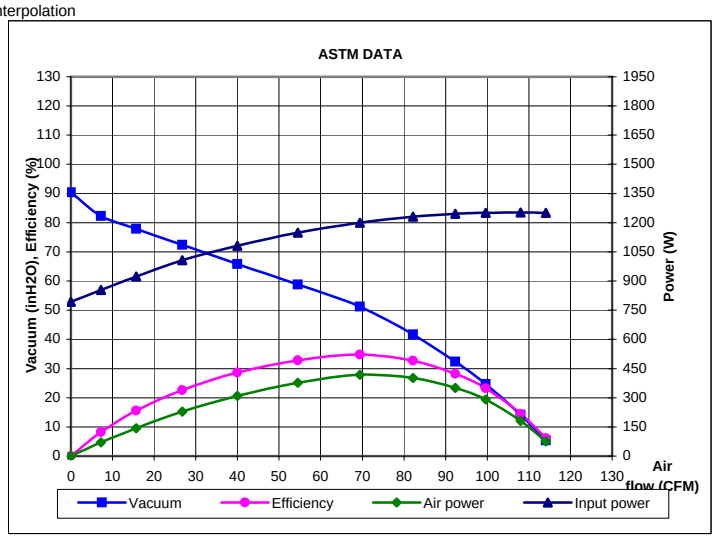
Note for units conversion: 1 inH2O = 0.2490889 kPa, 1 CFM = 0.4719474 l/s, 1 in = 25.4 mm (NIST Special Publication 811,1995)

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								50,80
1,750	12,1	1250	19332	5,4	114,1	75,8	6,1	44,45
1,500	12,1	1252	19169	14,2	108,0	181,6	14,5	38,10
1,250	12,1	1251	19058	24,7	99,6	291,1	23,3	31,75
1,125	12,1	1245	19078	32,4	92,3	350,8	28,2	28,58
1,000	11,9	1231	19226	41,7	82,2	402,0	32,7	25,40
0,875	11,6	1200	19620	51,2	69,4	417,7	34,8	22,23
0,750	11,1	1148	20221	58,8	54,5	376,8	32,8	19,05
0,625	10,4	1081	20962	65,9	39,9	309,2	28,6	15,88
0,500	9,7	1008	21873	72,4	26,8	227,9	22,6	12,70
0,375	8,8	922	22983	77,9	15,7	143,4	15,5	9,53
0,250	8,1	853	23932	82,3	7,3	70,2	8,2	6,35
0,000	7,5	793	25013	90,4	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