491.3.424
Vacuum cleaner motor performance

DOMEL®

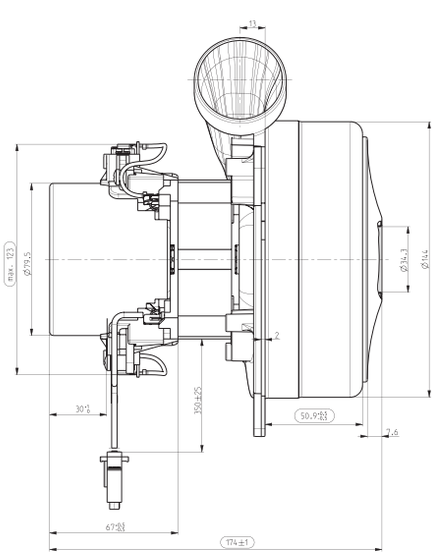
Tangential bypass discharge vacuum cleaner motors 491.3.424 / 850W / 240V / 50Hz are used for wet and dry aspiration. They are suitable for central vacuums. Technical data and dimensions are given in the table. Vacuum motors consist of universal commutator motor and two fan stages. The rotor is supported with two ball bearings enabling vertical or horizontal installation of motor. The motor is designed for insulation class 155 (F) and constructed according to EN 60335-1. The motor has provision for grounding.

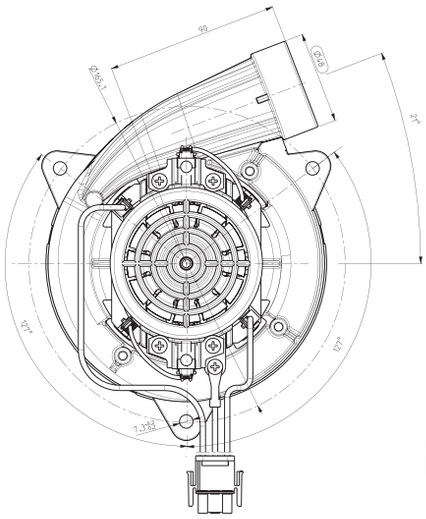
Technical data:

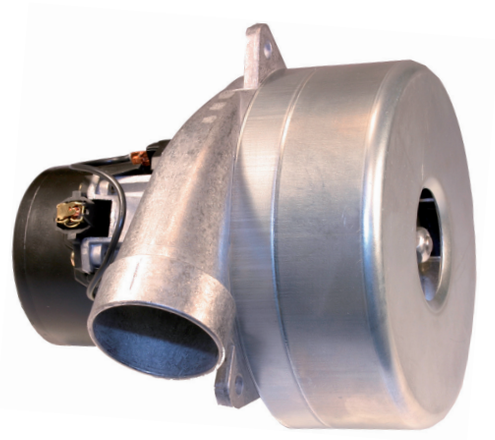
Normal operation:	P_m	>=	850	W
Vacuum:	p_{max}	>=	20,4 81,9	kPa in H_2O
Air Flow at φ50:	$Q_{\varphi 50}$	>=	46 97	dm^3/s CFM
Air Power:	P_{2max}	>=	306	W
Efficiency:	η_{max}	>=	34	%
Mass:	m	=	2,27	kg

Voltage:	240 V
Frequency:	50 Hz
Nominal Power:	850 W

Max. power 900W







Dimensional and performance data are subject to change without notice.

Orifice		Current	Input Power	Speed	Pressure		Air Flow		Air power	Efficiency
mm	in*	A	W	min^{-1}	kPa	in H_2O	dm^3/s	CFM	W	%
50	2	3,93	912	18800	1,0	3,7	48,1	102,2	49	5,4
40	1 1/2	3,92	912	18774	2,3	11,7	45,9	95,1	104	11,4
30	1 1/8	3,96	919	18710	5,7	26,6	40,7	82,3	233	25,3
23	7/8	3,93	912	18760	10,2	43,0	31,6	63,9	322	35,3
19	3/4	3,83	891	19107	12,9	51,5	24,1	51,2	309	34,7
16	5/8	3,66	854	19682	14,9	60,1	18,3	38,3	272	31,9
13	1/2	3,44	805	20567	16,9	68,5	12,9	26,2	217	26,9
10	3/8	3,20	752	21654	18,6	75,6	8,0	15,7	149	19,8
6	1/4	2,94	694	22938	20,0	80,5	3,5	7,3	71	10,2
0	0	2,75	651	24126	21,5	86,2	0,0	0,0	0	0,0

Data above represent the preformance of an average motor sample. Individual data may vary due to normal manufacturing variations.
* Orifice in inch is only approximative.