# 491.3.714-4

## Vacuum cleaner motor performance

DOMEL®

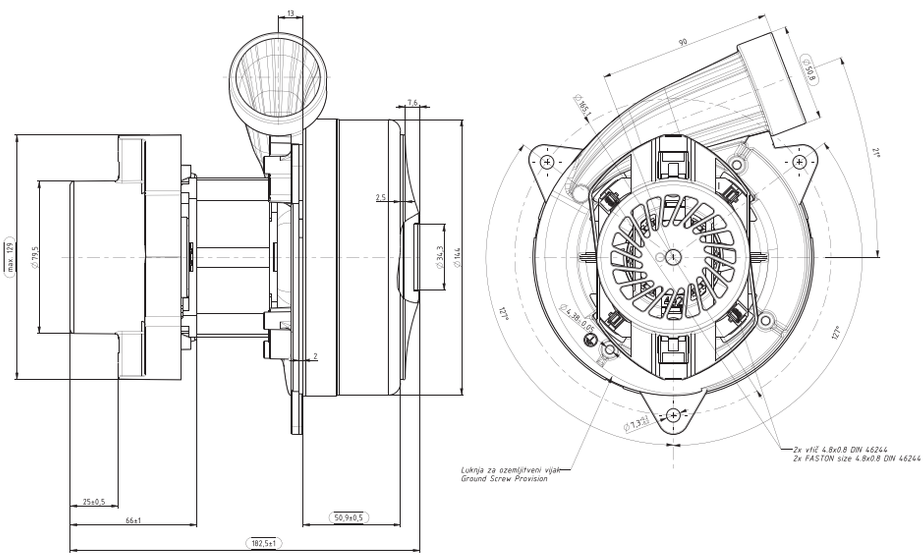
Tangential bypass discharge vacuum cleaner motors 491.3.714-4/ 1600W / 230V / 50Hz are used for wet and dry aspiration. They are suitable for central vacuums. Technical data and dimensions are given in the table. Vacuum motors consist of universal commutator motor and two fan stages. The rotor is supported 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.

## Max. power 1700W

## Technical data:

| | | | | |
|---|---|---|---|---|
| Normal operation: | $P_m$ | >= | 1610 | W |
| Vacuum: | $P_{max}$ | >= | 27,3<br>109,6 | kPa<br>in $H_2O$ |
| Air Flow at φ50: | $Q_{\varphi 50}$ | >= | 61<br>129 | $dm^3/s$<br>CFM |
| Air Power: | $P_{2max}$ | >= | 540 | W |
| Efficiency: | $\eta_{max}$ | >= | 36 | % |
| Mass: | m | = | 2,59 | kg |

| | |
|---|---|
| Voltage: | 230 V |
| Frequency: | 50 Hz |
| Nominal Power: | 1600 W |



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 | 7,67 | 1706 | 22817 | 1,8 | 6,7 | 64,6 | 137,4 | 119 | 7,0 |
| 40 | 1 1/2 | 7,65 | 1704 | 22821 | 4,1 | 20,5 | 61,0 | 125,6 | 247 | 14,5 |
| 30 | 1 1/8 | 7,67 | 1706 | 22784 | 9,6 | 43,9 | 52,0 | 104,7 | 498 | 29,2 |
| 23 | 7/8 | 7,52 | 1674 | 23040 | 16,2 | 67,7 | 39,1 | 78,8 | 635 | 37,9 |
| 19 | 3/4 | 7,17 | 1599 | 23746 | 19,6 | 78,6 | 29,2 | 62,1 | 572 | 35,8 |
| 16 | 5/8 | 6,77 | 1515 | 24594 | 22,1 | 89,2 | 21,9 | 45,7 | 483 | 31,9 |
| 13 | 1/2 | 6,32 | 1420 | 25639 | 24,4 | 98,7 | 15,1 | 30,8 | 368 | 25,9 |
| 10 | 3/8 | 5,83 | 1316 | 26947 | 26,4 | 106,5 | 9,3 | 18,2 | 245 | 18,6 |
| 6 | 1/4 | 5,29 | 1199 | 28652 | 27,6 | 111,0 | 4,1 | 8,4 | 112 | 9,4 |
| 0 | 0 | 4,89 | 1110 | 30211 | 28,7 | 115,4 | 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.