

# Diaphragm Vacuum Pumps | MP Standard Duty



Model  
MP 060 E



Model  
MP 055 Z / MP 105 E



Model  
MP 101 Z



## Specifications

| Ilmvac Model                  | MP 060 E                      | MP 055 Z                 | MP 105 E                 | MP 101 Z               |
|-------------------------------|-------------------------------|--------------------------|--------------------------|------------------------|
| Number of heads / stages      | 2 / 1                         | 2 / 2                    | 2 / 1                    | 2 / 2                  |
| Free Air Displacement         |                               |                          |                          |                        |
| m <sup>3</sup> /h(L/min)@50Hz | 0.7(11.7)                     | 0.5(8)                   | 0.9(15)                  | 1.0(16.7)              |
| cfm(L/min)@60Hz               | 0.5(14)                       | 0.3(9.1)                 | 0.6(16.6)                | 0.7(18)                |
| Ultimate pressure, mbar(torr) | 100(75)                       | 5(3.8)                   | 60(45)                   | 8(6)                   |
| Maximum Vacuum, in. Hg        | 27                            | 29.8                     | 28.2                     | 29.7                   |
| Max. overpressure, bar        | ----                          | ----                     | ----                     | ----                   |
| IN / EX hose connector        | DN 6 silencer                 | DN 8                     | DN 8                     | DN 8                   |
| Tubing Needed, I.D. mm(in.)   | 6(0.24)                       | 8(0.32)                  | 8(0.32)                  | 8(0.32)                |
| Intake(EXhaust) Thread NPT    | - (-)                         | - (1/8)                  | 1/8(1/8)                 | 1/4(1/4)               |
| Sound level, dB(A)            | 42                            | 44                       | 44                       | 45                     |
| Motor Power, watts(HP)        | 20(0.03)                      | 68(0.09)                 | 68(0.09)                 | 60(0.08)               |
| Type of motor protection, IP  | 20                            | 42                       | 42                       | 54                     |
| Weight, kg(lbs.)              | 2.3(5.1)                      | 6.25(13.8)               | 6.25(13.8)               | 6.5(14.3)              |
| Overall Dimensions            |                               |                          |                          |                        |
| L x W xH in.(cm)              | 5.7x5x5.4<br>(14.4x12.7x13.6) | 9x6x11<br>(23.5x14x27.7) | 9x6x11<br>(23.5x14x27.7) | 8x9x6<br>(20x24x15)    |
| Ship Weight, lbs.(kg)         | 11(5)                         | 8(17.6)                  | 8(17.6)                  | 9(19.8)                |
| Shipping Carton Dimensions    |                               |                          |                          |                        |
| LxWxH cm(in.)                 | 16x12x7<br>(40x30x17)         | 12x12x16<br>(30x30x40)   | 12x12x16<br>(30x30x40)   | 16x10x10<br>(41x26x25) |

## Ordering Information

|                                      |        |        |        |           |
|--------------------------------------|--------|--------|--------|-----------|
| 230V, 50/60Hz, 1 Ph <sup>1</sup>     | ----   | ---    | ----   | 411522    |
| 115V, 50/60Hz, 1 Ph <sup>2</sup>     | ----   | ----   | ----   | 411522-01 |
| 115/230V, 50/60Hz, 1 Ph <sup>3</sup> | ----   | 411422 | 411421 | ----      |
| 90-260V, 50/60Hz <sup>4</sup>        | 411011 | ----   | ----   | ----      |
| 230/400V, 50/60Hz, 3 Ph <sup>6</sup> | ----   | ----   | ----   | ----      |

## Applications

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| 1. Vacuum Filtration | 18 - 19 |
| 2. Desiccator        | 20 - 21 |

### MP Diaphragm Vacuum Pumps

- Standard Duty
- Oil Free

MP models use aluminium pump heads suitable for pumping non-reactive gases/vapors such as air, noble gases and water vapor. PTFE diaphragms are used because they offer longer lifetime than conventional elastomer diaphragms. The diaphragms consist of a PTFE membrane sandwiched to a strong non-wetted backing.

PEEK valves are used due to their excellent resistance to chemical attack and are extremely hard wearing when compared to elastomer valves. Connectors are made from PA with PTFE tubing.

Exhaust silencers are included with MP pumps.

### Exhaust Silencer



# Diaphragm Vacuum Pumps | MP Standard Duty



Model  
MP 101 V / MP 201 T

Model  
MP 301 E

Model  
MP 301 Z / MP 601 E

Model  
MP 301 V

| MP 101 V               | MP 201 T               | MP 301 E               | MP 301 Z               | MP 301 V                 | MP 601 E               |
|------------------------|------------------------|------------------------|------------------------|--------------------------|------------------------|
| 4 / 4                  | 4 / 3                  | 1 / 1                  | 2 / 2                  | 4 / 4                    | 2 / 1                  |
| 1.0(16.7)              | 2.0(33)                | 2.3(38)                | 2.3(38)                | 2.3(38)                  | 3.8(63)                |
| 0.7(18)                | 1.3(36)                | 1.5(41)                | 1.5(41)                | 1.5(41)                  | 2.5(70)                |
| 1(0.75)                | 2(1.5)                 | 75(56.3)               | 8(6)                   | 1(0.75)                  | 75(56.3)               |
| 29.9                   | 29.9                   | 27.7                   | 29.7                   | 29.9                     | 27.7                   |
| ----                   | ----                   | ----                   | ----                   | ----                     | ----                   |
| DN 8                   | DN 8                   | DN 8                   | DN 8                   | DN 16 KF / DN 8          | DN 8                   |
| 8(0.32)                | 8(0.32)                | 8(0.32)                | 8(0.32)                | hose connector available | 8(0.32)                |
| 1/4(1/4)               | 1/4(1/4)               | - (-)                  | - (-)                  | - (-)                    | - (1/4)                |
| 45                     | 45                     | 45                     | 45                     | 45                       | 45                     |
| 90(0.12)               | 90(0.12)               | 180(0.25)              | 180(0.25)              | 370(0.5)                 | 180(0.25)              |
| 54                     | 54                     | 54                     | 54                     | 54                       | 54                     |
| 10.3(22.7)             | 10.3(22.7)             | 8.9(19.6)              | 11.2(24.7)             | 18.3(40.3)               | 11.2(24.7)             |
| 8x10x6<br>(20x26x15)   | 8x10x6<br>(20x26x15)   | 10x6x10<br>(26x16x25)  | 9x10x7<br>(23x27x17)   | 9x15x7<br>(23x38x17)     | 9x10x7<br>(23x27x17)   |
| 13(28.7)               | 13(28.7)               | 12(26.5)               | 14(30.9)               | 22(48.5)                 | 14(30.9)               |
| 16x10x10<br>(41x26x25) | 16x10x10<br>(41x26x25) | 14x10x12<br>(35x25x30) | 19x13x12<br>(48x32x30) | 19x13x12<br>(48x32x30)   | 19x13x12<br>(48x32x30) |
| 411544                 | 411543                 | 411711                 | 411722                 | 411744                   | 411721                 |
| 411544-01              | 411543-01              | 411711-01              | 411722-01              | 411744-01                | 411721-01              |
| ----                   | ----                   | ----                   | ----                   | ----                     | ----                   |
| ----                   | ----                   | ----                   | ----                   | ----                     | ----                   |
| ----                   | ----                   | o.r. 8                 | 411722-02              | 411744-02                | 411721-02              |

## For a Complete System

1. With Schuko and UK plug leads
2. With US plug lead
3. With Schuko, UK and US plug leads
4. With AC/DC adapter, Schuko, UK and US plug leads
5. With JP plug lead
6. Requires hard wiring to switched supply
7. With 3 phase 16A CEE plug lead
8. These pumps can be delivered on request

Note: Pumps can be adapted for OEM equipment integration or for all-in-one packages.

### Hose Connectors

| Type                | CAT. No. |
|---------------------|----------|
| DN 8 male 1/8 inch  | 710953   |
| DN 10 male 1/4 inch | 710955   |
| Y - piece           | 829923   |

See page 68.

### KF Connectors

Connectors for vacuum hose & DN KF.

| Type              | CAT. No. |
|-------------------|----------|
| DN 16 KF - 1/4 AL | 710108   |
| DN 25 KF - 1/4 AL | 710700   |



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