**OEM Automatic Ltd**
Address: Whiteacres, Whetstone Leicester, LE8 6ZG
0116 284 9900 | Orders@oem.co.uk | www.oem.co.uk

# NAFSA - VM SERIES

VM50
VM50 24Vdc



- Magnetic holding under no power
- Class B winding (130ºC)
- 100% duty cycle
- Up to 2000N force
- Customer specific version available

### PRODUCT DESCRIPTION

The VM series holds under no power through use of a permanent magnet.

When the voltage is applied, the holding force is removed.

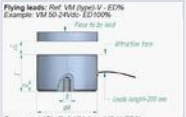
Please ensure safe operating conditions are met when using this type of holding electromagnet.

# TECHNICAL DATA

| | |
|---|---|
| **Duty cycle** | 100 % |
| **Insulation class** | B(130ºC) |
| **IP class** | IP65 |
| **Power** | 10 W |
| **Total weight** | 440 g |
| **Voltage dc max** | 24 V |
| **Voltage type** | DC |

| TYPE | P at 20ºC (W) | Thickness of the piece to hold (mm) | Air gap (mm) $\delta_L$ | | | |
|---|---|---|---|---|---|---|
| | | | 0 | 0.1 | 0.2 | |
| VM20 | 2.6 | 1<br>3<br>10 | 18<br>18<br>18 | 5<br>5<br>5 | 1<br>1<br>1 | Magnetic Force Fm (N) |
| VM25 | 4.3 | 1<br>3<br>10 | 20<br>23<br>29 | 7<br>7<br>10 | 3<br>4<br>7 | |
| VM30 | 4.5 | 1<br>3<br>10 | 24<br>45<br>52 | 10<br>10<br>14 | 5<br>6<br>7 | |
| VM40 | 7 | 1<br>3<br>10 | 39<br>108<br>128 | 29<br>57<br>58 | 22<br>29<br>37 | |
| VM50 | 10 | 1<br>3<br>10 | 43<br>129<br>226 | 30<br>110<br>125 | 28<br>75<br>80 | |
| VM65 | 14 | 1<br>3<br>10 | 44<br>268<br>374 | 35<br>203<br>238 | 25<br>140<br>145 | |
| VM80 | 18 | 1<br>3<br>10 | 44<br>294<br>588 | 35<br>267<br>362 | 25<br>217<br>256 | |
| VM100 | 25 | 1<br>3<br>10 | 45<br>299<br>1000 | 35<br>282<br>745 | 25<br>262<br>519 | |
| VM150 | 45 | 1<br>3<br>10 | 93<br>415<br>2000 | 75<br>350<br>1500 | 60<br>320<br>1300 | |

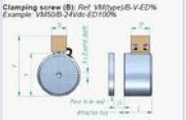
**Flying leads:** *Ref. VM (type)-V - ED%*
*Example: VM 50-24Vdc- ED100%*




**Connector (C):** *Ref. VM (type)/C-V-ED%*
*Example: VM65/C- 24Vdc ED100%*
Connection:
see documentation that is enclosed with the material




**Clamping screw (B):** *Ref. VM(type)/B-V-ED%*
*Example: VM50/B- 24Vdc-ED100%*




**Important:** the clamping screw does not have to exceed measure D

| TYPE | øA (-0,3) | B | C±0,1 | D | E | F | Weight(Kg) |
|---|---|---|---|---|---|---|---|
| **VM 20** | 20 | M-3 | 25 | 5 | — | — | 0.04 |
| **VM 25** | 25 | M-4 | 27 | 5 | — | 40 | 0.06 |
| **VM 30** | 30 | M-4 | 28 | 5 | — | 45 | 0.17 |
| **VM 40** | 40 | M-5 | 30 | 6 | — | 55 | 0.24 |
| **VM 50** | 50 | M-5 | 35 | 6 | — | 65 | 0.44 |
| **VM 65** | 65 | M-8 | 40 | 8 | 112 | 80 | 0.74 |
| **VM 85** | 80 | M-8 | 45 | 8 | 127 | 95 | 1.42 |
| **VM 100** | 100 | M-10 | 50 | 10 | 147 | 115 | 2.26 |
| **VM 150** | 150 | M-16 | 65 | 15 | 197 | 155 | 6.60 |