

# پیشگامان صنعت و ایمنی پرگاس

PISHGAMAN SANAAT & IMENI PERGAS



## طراح، مشاور و مجری سیستم‌های ایمنی و تاسیساتی

دارای صلاحیت سازمان آتش‌نشانی تهران

اخذ تاییدیه آتش‌نشانی

برای اطلاعات بیشتر اسکن کنید



تهران . خیابان سعدی شمالی . خیابان

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## MD-MMD

Centrifugal Pumps in cast iron

### الکتروپمپ های سانتریفوژ چدنی

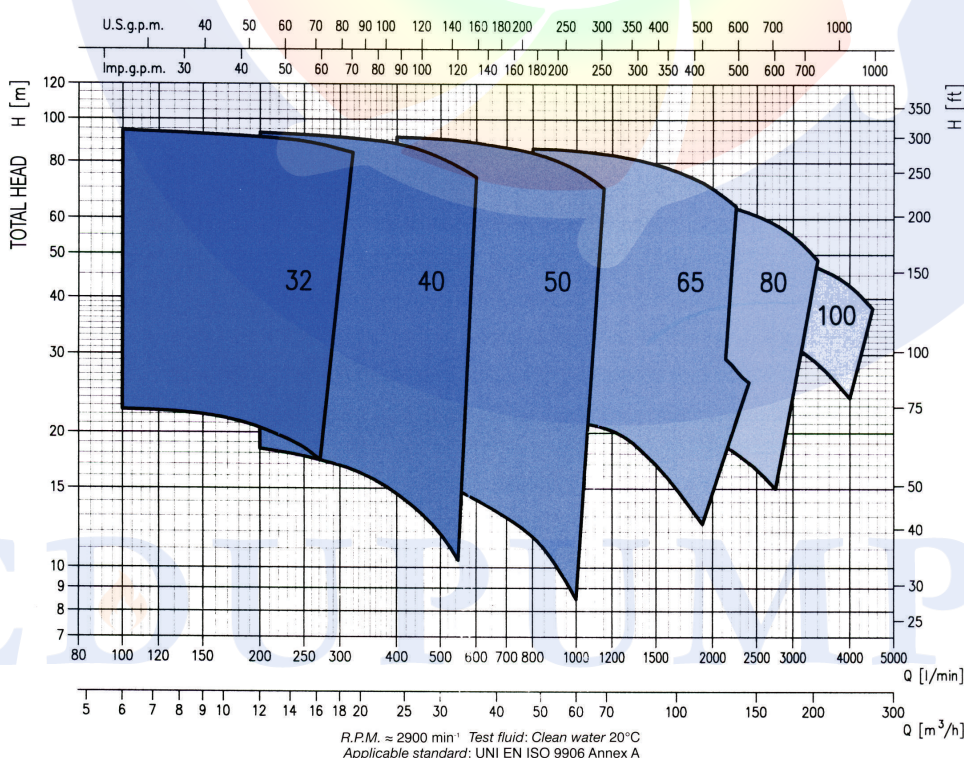
مناسب برای افزایش فشار، سیستمهای گرمایشی، تهویه مطبوع، سیستمهای شستشو و بسیاری از مصارف صنعتی دیگر

|         |                  |                 |
|---------|------------------|-----------------|
| MD      | 32 - 200 / 7.5   | M               |
| ↓       | ↓                | ↓               |
| نوع مدل | سایز دهانه خروجی | کد قطر پروانه   |
|         |                  | توان موتور (kW) |
|         |                  | قطر برای تکفاز  |

| پمپ                                       |                 |                   |
|-------------------------------------------|-----------------|-------------------|
| آب تمیز                                   | نوع مایع        | مشخصات سیال       |
| MD 90<br>MMD -10 ~ +130                   | حداکثر دما (°C) |                   |
|                                           | 10              | حداکثر فشار (Bar) |
| سانتریفوژ بسته                            | پروانه          | ساختار            |
| مکانیکال سیل                              | نوع آببندی      |                   |
| بلبرینگ دور بسته                          | یاتاقان         | اتصالات لوله      |
| 50-65-80-100-125-150-200-250              | مکش (mm)        |                   |
| 32-40-50-65-80-100-125-150-200            | رانش (mm)       | جنس               |
| چدن                                       | پوسته           |                   |
| چدن / برنز                                | پروانه          |                   |
| MMD Sic/Sic/EPDM<br>MD Carbon/Ceramic/NBR | مکانیکال سیل    |                   |
| استیل 304                                 | شفت             |                   |
| چدن                                       | واسطه           |                   |

| موتور                                               |                    |
|-----------------------------------------------------|--------------------|
| MD 2900<br>MMD 1500-2900                            | دور موتور (rpm)    |
| F                                                   | کلاس عایق بندی     |
| MD IP55<br>MMD IP54                                 | درجه محافظت        |
| توکار                                               | خازن               |
| 50                                                  | فرکانس (Hz)        |
| آلومینیوم                                           | جنس پوسته          |
| برای موتورهای تکفاز در نظر گرفته شده است.           | محافظ حرارتی       |
| برای موتورهای سه فاز توسط مصرف کننده تامین می گردد. | اتوماتیک اضافه بار |
| آلومینیوم / استیل                                   | پایه نگهدارنده     |

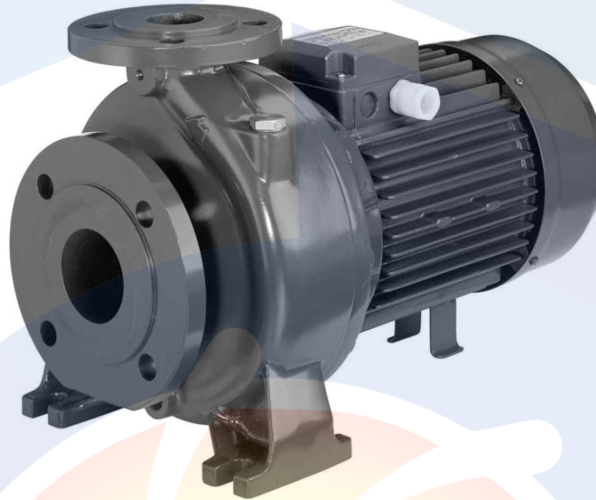
PERFORMANCE CHART MD/MMD SERIES 2 POLES



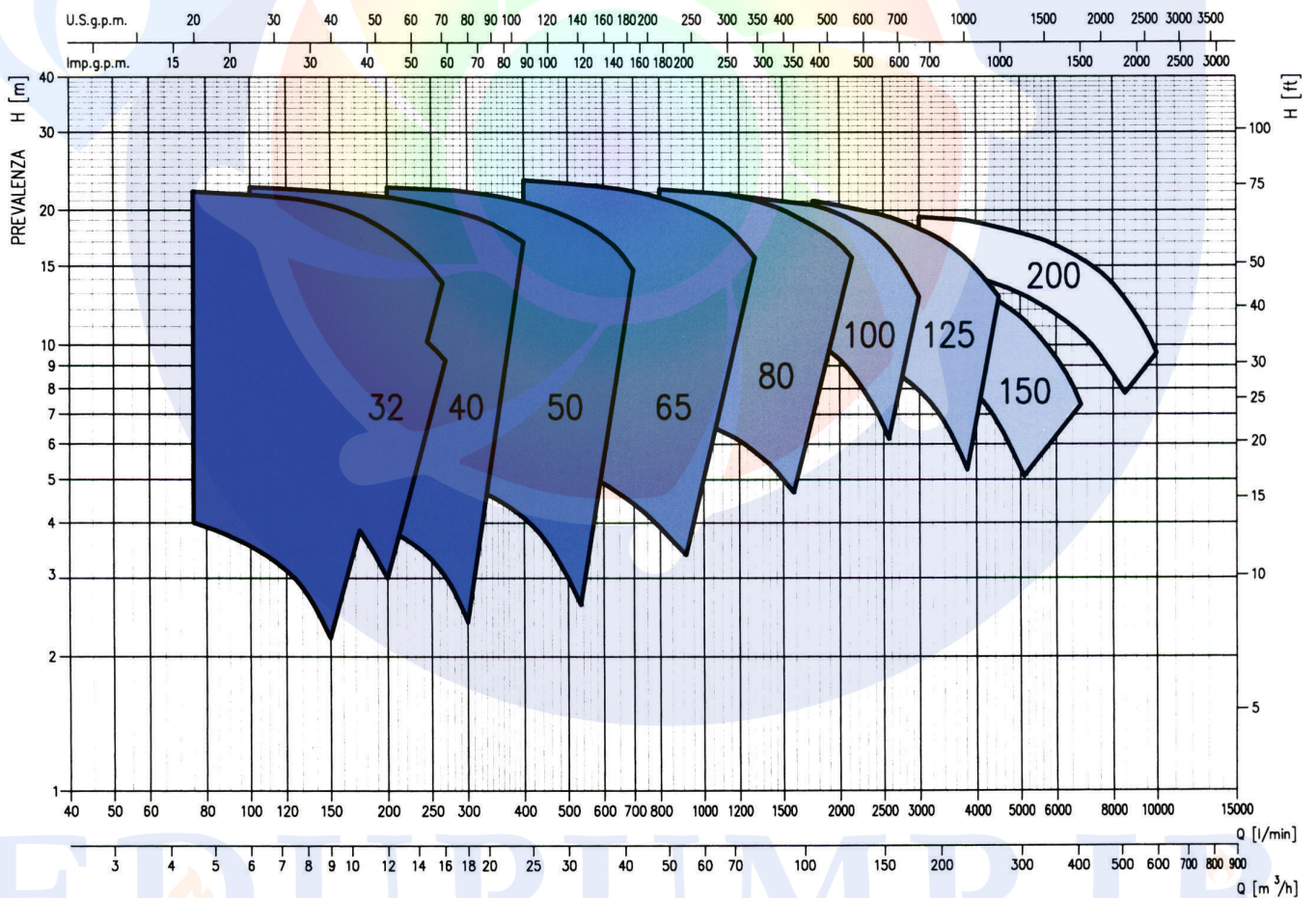
## MD-MMD

Centrifugal Pumps in cast iron

1450 RPM



PERFORMANCE CHART MMD4 SERIES 4 POLES



R.P.M.  $\approx 1450 \text{ min}^{-1}$

test fluid: Clean water 20°C

Applicable standard: UNI EN ISO 9906 Annex A

## PERFORMANCE TABLE

جدول فنی

| Pump type          | Motor |      | Q=Capacity   |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------|-------|------|--------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                    |       |      | l/min        | 0   | 50   | 75   | 100  | 125  | 150  | 175  | 200  | 225  | 250  | 275  | 300  | 350  | 400  | 450  | 500  | 550  | 600  | 650  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1750 | 2000 | 2250 |
|                    | m/h   | 0    | 3            | 4.5 | 6    | 7.5  | 9    | 10.5 | 12   | 13.5 | 15   | 16.5 | 18   | 21   | 24   | 27   | 30   | 33   | 36   | 39   | 42   | 48   | 54   | 60   | 66   | 72   | 78   | 84   | 90   | 105  | 120  | 135  |      |      |
|                    | kW    | HP   | H=Total head |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MMD4 32-125/0,25 R | 0.25  | 0.33 | 4.8          | 4.4 | 4    | 3.5  | 3    | 2.2  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 32-125/0,25   | 0.25  | 0.33 | 6.3          | 6.2 | 6.1  | 5.8  | 5.3  | 4.6  | 3.8  | 3    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 32-160/0,37   | 0.37  | 0.5  | 9.6          | -   | 9.2  | 8.9  | 8.3  | 7.7  | 6.8  | 5.8  | 4.7  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 32-200/0,75   | 0.75  | 1.0  | 13.5         | -   | 12.8 | 12.4 | 11.9 | 11.3 | 10.6 | 9.8  | 8.9  | 8    | 7    | 6    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 32-200/0,92   | 0.92  | 1.25 | 15           | -   | 14.6 | 14.3 | 13.8 | 13.3 | 12.7 | 11.8 | 10.9 | 10   | 9    | 8    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 32-250/1,1    | 1.1   | 1.5  | 19           | -   | 18.5 | 18   | 17.5 | 17   | 15.9 | 14.5 | 12.8 | 11   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 32-250/1,5    | 1.5   | 2    | 22.5         | -   | 22   | 21.6 | 21.2 | 20.5 | 19.4 | 18   | 16.5 | 15   | 13*  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 40-125/0,25   | 0.25  | 0.33 | 4.8          | -   | -    | 4.6  | 4.5  | 4.3  | 4.1  | 3.9  | 3.6  | 3.3  | 2.9  | 2.4  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 40-125/0,37   | 0.37  | 0.5  | 6.4          | -   | -    | 6.3  | 6.2  | 6.1  | 6    | 5.8  | 5.5  | 5.2  | 4.9  | 4.4  | 3*   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 40-160/0,55   | 0.55  | 0.75 | 9.2          | -   | -    | 8.8  | 8.6  | 8.4  | 8.1  | 7.7  | 7.3  | 6.9  | 6.4  | 5.9  | 4.4  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 40-200/1,1 R  | 1.1   | 1.5  | 12.9         | -   | -    | 12.7 | 12.5 | 12.1 | 11.7 | 11.2 | 10.7 | 10.1 | 9.5  | 8.5  | 6.8  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 40-200/1,1    | 1.1   | 1.5  | 14.5         | -   | -    | 14.2 | 14   | 13.8 | 13.4 | 13   | 12.5 | 11.8 | 11   | 10.2 | 8.3  | 6    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 40-250/1,5    | 1.5   | 2    | 18.7         | -   | -    | 18.3 | 18   | 17.7 | 17.4 | 17   | 16.7 | 16.2 | 15.6 | 15   | 13.7 | 12   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 40-250/2,2    | 2.2   | 3    | 23.2         | -   | -    | 22.5 | 22.3 | 22   | 21.7 | 21.4 | 21.2 | 20.5 | 20.2 | 19.5 | 18.5 | 17   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-125/0,37   | 0.37  | 0.5  | 5.4          | -   | -    | -    | -    | 5.3  | 5.3  | 5.2  | 5.1  | 5    | 4.9  | 4.8  | 4.5  | 4.1  | 3.6  | 3    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-125/0,55   | 0.55  | 0.75 | 6.5          | -   | -    | -    | -    | 6.4  | 6.3  | 6.3  | 6.2  | 6.1  | 6    | 5.9  | 5.5  | 5.2  | 4.9  | 4.4  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-160/0,75   | 0.75  | 1.0  | 8.3          | -   | -    | -    | -    | -    | 8.1  | 8    | 7.9  | 7.8  | 7.7  | 7.4  | 7    | 6.6  | 6    | 5.1  | 4    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-160/0,92   | 0.92  | 1.25 | 9.1          | -   | -    | -    | -    | -    | 9    | 8.9  | 8.9  | 8.8  | 8.7  | 8.4  | 8.1  | 7.7  | 7.2  | 6.4  | 5.5  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-200/1,1    | 1.1   | 1.5  | 12.6         | -   | -    | -    | -    | -    | -    | 12.3 | 12.2 | 12   | 11.8 | 1.5  | 10.8 | 10   | 9    | 8    | 7    | 5.8  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-200/1,5    | 1.5   | 2    | 14.3         | -   | -    | -    | -    | -    | 14.1 | 14   | 13.9 | 13.7 | 13.5 | 12.8 | 12   | 11.3 | 10.2 | 9    | 7.8  | 6.4  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-250/2,2    | 2.2   | 3    | 19.5         | -   | -    | -    | -    | -    | 18.5 | 18.3 | 18.1 | 17.8 | 17.5 | 17   | 16.2 | 15.5 | 14.5 | 13.5 | 12.5 | 11.3 | 10   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 50-250/3      | 3     | 4    | 23           | -   | -    | -    | -    | -    | 22.5 | 22.4 | 22.3 | 22.2 | 22   | 21.5 | 20.9 | 20.2 | 19.4 | 18.5 | 17.5 | 16.3 | 14.7 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| MMD4 65-125/0,75   | 0.75  | 1.0  | 6            | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 5.8  | 5.7  | 5.6  | 5.5  | 5.3  | 5.1  | 4.9  | 4.6  | 4.4  | 3.9  | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| MMD4 65-160/1,1    | 1.1   | 1.5  | 8.6          | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 8.5  | 8.5  | 8.4  | 8.3  | 8.2  | 8.1  | 8    | 7.8  | 7.4  | 6.8  | 5.8  | 5    | -    | -    | -    | -    | -    | -    | -    | -    |      |
| MMD4 65-160/1,5    | 1.5   | 2    | 10.3         | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | 10.2 | 10.1 | 10   | 9.9  | 9.8  | 9.6  | 9.4  | 9.2  | 9    | 8.4  | 7.5  | 6.5  | -    | -    | -    | -    | -    | -    | -    | -    |      |
| MMD4 65-200/2,2    | 2.2   | 3    | 12.6         | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 12.5 | 12.4 | 12.3 | 12.2 | 12.1 | 12   | 11.7 | 11.1 | 10.5 | 9.6  | 8.5  | -    | -    | -    | -    | -    | -    | -    |      |
| MMD4 65-200/3      | 3     | 4    | 15.4         | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 15.3 | 15.3 | 15.2 | 15.1 | 15   | 14.8 | 14.6 | 14.3 | 13.6 | 12.8 | 12   | 11   | -    | -    | -    | -    | -    | -    |      |
| MMD4 65-250/4      | 4     | 5.5  | 20           | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 19.5 | 19.3 | 19.1 | 18.8 | 18.5 | 17.5 | 16.5 | 15.5 | 14   | 12.5 | 10.4 | -    | -    | -    | -    | -    | -    |      |
| MMD4 65-250/5,5    | 5.5   | 7.5  | 23.3         | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 23   | 22.8 | 22.6 | 22.4 | 20.6 | 19.7 | 18.7 | 17.3 | 15.7 | 14   | -    | -    | -    | -    |      |
| MMD4 80-160/1,5    | 1.5   | 2    | 8            | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 7.7  | 7.6  | 7.5  | 7.3  | 7    | 6.7  | 6.4  | 6.1  | 5.7  | 5.4  | 5    | -    | -    |      |
| MMD4 80-160/2,2    | 2.2   | 3    | 10           | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 9.7  | 9.6  | 9.5  | 9.3  | 9    | 8.8  | 8.5  | 8.2  | 7.9  | 7.5  | 7.1  | 6    | -    |      |
| MMD4 80-200/3      | 3     | 4    | 12.8         | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 12   | 11.9 | 11.7 | 11.5 | 11.3 | 11   | 10.5 | 10   | 9.5  | 9    | 8.5  | 7    | -    |      |
| MMD4 80-200/4      | 4     | 5.5  | 14.9         | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 14.4 | 14.3 | 14.2 | 14   | 13.8 | 13.5 | 13.1 | 12.6 | 12.2 | 11.6 | 11   | 9    | 6.5  |      |
| MMD4 80-250/5,5    | 5.5   | 7.5  | 20           | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 19.2 | 18.9 | 18.5 | 18   | 17.6 | 17.1 | 16.5 | 16   | 14   | 12   | -    | -    |      |
| MMD4 80-250/7,5    | 7.5   | 10   | 23.5         | -   | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 22.3 | 22.1 | 21.9 | 21.7 | 21.3 | 21   | 20.5 | 20   | 18.5 | 16.9 | 14.5 |

| Pump type           | Motore |      | Q=Capacity   |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |      |      |      |      |       |  |  |  |  |
|---------------------|--------|------|--------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|------|------|------|------|-------|--|--|--|--|
|                     |        |      | l/min        | 0    | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1750 | 2000 | 2250 | 2500 | 2750  | 3000 | 3500 | 3700 | 4000 | 4500  | 5000 | 5500 | 6500 | 7000 | 8000 | 8500 | 9000 | 9500 | 10000 |  |  |  |  |
|                     | m³/h   | 0    | 54           | 60   | 66   | 72   | 78   | 84   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 210   | 222  | 240  | 270  | 300  | 330   | 390  | 420  | 480  | 510  | 540  | 570  | 600  |      |       |  |  |  |  |
|                     | kW     | HP   | H=Total head |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |       |      |      |      |      |      |      |      |      |       |  |  |  |  |
| MMD4 100-200/4      | 4      | 5.5  | 13           | 12.3 | 12.2 | 12   | 11.8 | 11.6 | 11.4 | 11.2 | 10.3 | 9.3  | 8    | 6.6  | 4.8* | -     | -    | -    | -    | -    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 100-200/5,5    | 5.5    | 7.5  | 14.7         | 14.5 | 14.4 | 14.2 | 14   | 13.8 | 13.6 | 13.4 | 12.8 | 12   | 11   | 9.8  | 8.5  | -     | -    | -    | -    | -    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 100-250/7,5    | 7.5    | 10   | 20           | -    | 19.5 | 19.3 | 19.1 | 18.9 | 18.7 | 18.5 | 17.5 | 16.5 | 15.2 | 14   | 12   | -     | -    | -    | -    | -    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 100-250/9,2    | 9.2    | 12.5 | 22.4         | -    | 22   | 21.9 | 21.8 | 21.7 | 21.6 | 21.5 | 20.5 | 19.5 | 18.5 | 17   | 15   | 12.8* | -    | -    | -    | -    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 125-200/5,5    | 5.5    | 5.5  | 11.2         | -    | -    | -    | -    | -    | -    | 10.5 | 10.3 | 9.9  | 9.5  | 9.1  | 8.5  | 7.9   | 6.4  | 5.7  | -    | -    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 125-200/7,5 R  | 7.5    | 10   | 12.4         | -    | -    | -    | -    | -    | -    | 11.8 | 11.6 | 11.3 | 11   | 10.6 | 10.2 | 9.6   | 8.3  | 7.7  | 6.7  | -    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 125-200/7,5    | 7.5    | 10   | 13.7         | -    | -    | -    | -    | -    | -    | -    | 12.9 | 12.7 | 12.4 | 12.1 | 11.7 | 11.2  | 10.1 | 9.6  | 8.7  | 7.1* | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 125-200/9,2    | 9.2    | 12.5 | 15           | -    | -    | -    | -    | -    | -    | -    | 14.3 | 14.1 | 13.8 | 13.6 | 13.2 | 12.8  | 11.8 | 11.3 | 10.6 | 9.2  | 7.6** | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 125-250/11     | 11     | 15   | 18.6         | -    | -    | -    | -    | -    | -    | -    | 17.2 | 16.7 | 16.2 | 15.5 | 14.8 | 13.9  | 12   | 11.3 | 10   | -    | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 125-250/15     | 15     | 20   | 22           | -    | -    | -    | -    | -    | -    | -    | 21   | 20.5 | 20.1 | 19.5 | 18.9 | 18.2  | 16.6 | 16   | 14.8 | 12.8 | -     | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 150-200/7,5    | 7.5    | 10   | 11.6         | -    | -    | -    | -    | -    | -    | -    | -    | 11   | 10.7 | 10.4 | 10.1 | 9.7   | 8.8  | 8.4  | 7.8  | 6.6  | 5.3   | -    | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 150-200/9,2    | 9.2    | 12.5 | 12.5         | -    | -    | -    | -    | -    | -    | -    | -    | 12   | 11.8 | 11.6 | 11.2 | 10.9  | 10.2 | 9.8  | 9.2  | 8    | 6.8   | 5.6  | -    | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 150-200/11     | 11     | 15   | 14.5         | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 13.7 | 13.5 | 13.2  | 12.5 | 12.2 | 11.7 | 10.8 | 9.8   | 8.7  | 6.1  | -    | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 150-200/15     | 15     | 20   | 15.8         | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 15.2 | 14.9 | 14.7  | 14.2 | 13.8 | 13.4 | 12.5 | 11.6  | 10.5 | 8.2  | 6.8  | -    | -    | -    | -    | -    | -     |  |  |  |  |
| MMD4 200-250/18,5 R | 18.5   | 25   | 16           | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 14.9  | 14.5 | 14.3 | 14.1 | 13.6 | 13    | 12.3 | 11   | 10.3 | 8.6  | 7.8  | -    | -    | -    | -     |  |  |  |  |
| MMD4 200-250/18,5   | 18.5   | 25   | 16.9         | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 15.9  | 15.5 | 15.3 | 15.2 | 14.7 | 14.2  | 13.6 | 12.3 | 11.6 | 10   | 9.1  | 8.2  | -    | -    | -     |  |  |  |  |
| MMD4 200-250/22 R   | 22     | 30   | 19.3         | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -     | 18   | 17.8 | 17.6 | 17.1 | 16.6  | 16   | 14.7 | 13.9 | 12.2 | 11.2 | 10.1 | 9    | -    | -     |  |  |  |  |
| MMD4 200-250/22     | 22     | 30   | 20.4         | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -     | 19.1 | 18.9 | 18.8 | 18.3 | 17.8  | 17.3 | 16   | 15.3 | 13.7 | 12.7 | 11.7 | 10.7 | 9.6  | -     |  |  |  |  |

\*Suction head has not to exceed 2 m

\*\*Positive 1 m suction head

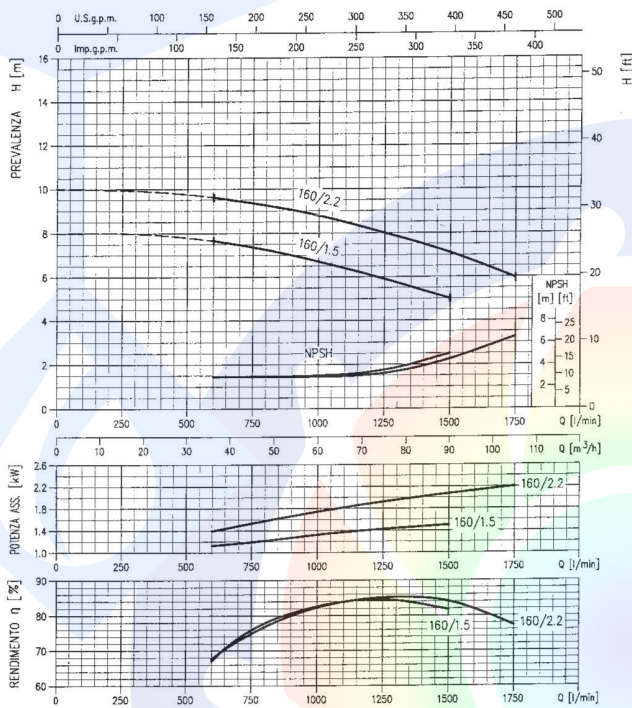


1450 RPM

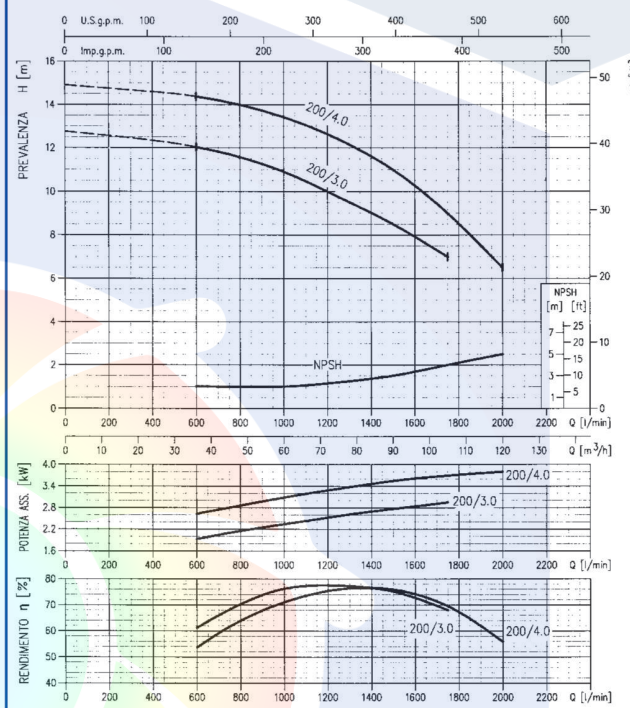
## PERFORMANCE CURVES

MMD4 / 4 POLES

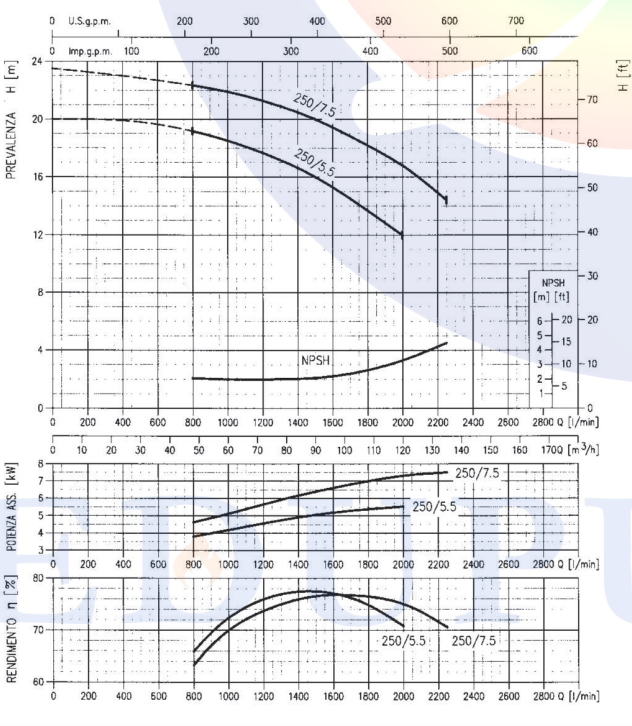
### MMD4 80-160



### MMD4 80-200



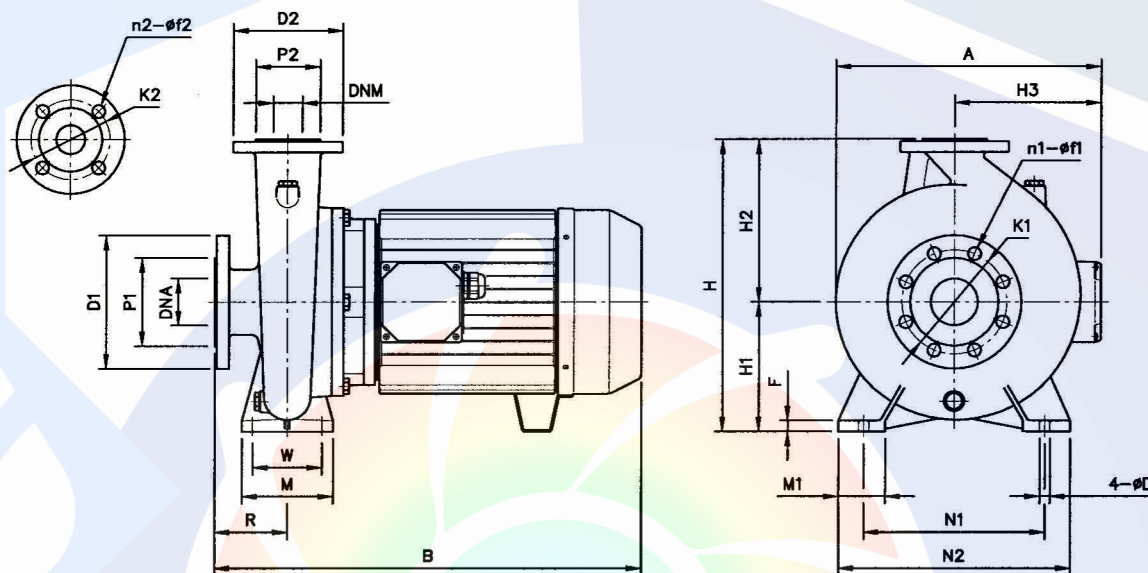
### MMD4 80-250



## MD-MMD

Centrifugal Pumps in cast iron

1450 RPM



MMD 4 POLES

DIMENSIONAL TABLE

جدول ابعادی

| Pump type          | Dimensions (mm) |    |    |     |     |     |     |    |    |     |     |     |     |     |     |     |     |     |     |     |     |     |    |     |      |    | Weight [kg] |
|--------------------|-----------------|----|----|-----|-----|-----|-----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|------|----|-------------|
|                    | DNA             | n1 | f1 | P1  | K1  | D1  | DNM | n2 | f2 | P2  | K2  | D2  | H   | H1  | H2  | H3  | R   | W   | N1  | M   | N2  | M1  | F  | A   | B    | D  |             |
| MMD4 80-160/1.5    | 100             | 8  | 18 | 158 | 180 | 220 | 80  | 4  | 18 | 138 | 160 | 200 | 405 | 180 | 225 | 149 | 125 | 95  | 250 | 125 | 320 | 65  | 14 | 330 | 510  | 14 | 45          |
| MMD4 80-160/2.2    | 100             | 8  | 18 | 158 | 180 | 220 | 80  | 4  | 18 | 138 | 160 | 200 | 405 | 180 | 225 | 159 | 125 | 95  | 250 | 125 | 320 | 65  | 14 | 330 | 550  | 14 | 51          |
| MMD4 80-200/3.0    | 100             | 8  | 18 | 158 | 180 | 220 | 80  | 4  | 18 | 138 | 160 | 200 | 430 | 180 | 250 | 159 | 125 | 95  | 280 | 125 | 345 | 65  | 12 | 355 | 550  | 14 | 66          |
| MMD4 80-250/4.0    | 100             | 8  | 18 | 158 | 180 | 220 | 80  | 4  | 18 | 138 | 160 | 200 | 430 | 180 | 250 | 159 | 125 | 95  | 280 | 125 | 345 | 65  | 12 | 355 | 560  | 14 | 73          |
| MMD4 80-250/5.5    | 100             | 8  | 18 | 158 | 180 | 220 | 80  | 4  | 18 | 138 | 160 | 200 | 480 | 200 | 280 | 184 | 125 | 120 | 315 | 160 | 400 | 80  | 14 | 400 | 665  | 18 | 96          |
| MMD4 80-250/7.5    | 100             | 8  | 18 | 158 | 180 | 220 | 80  | 4  | 18 | 138 | 160 | 200 | 480 | 200 | 280 | 184 | 125 | 120 | 315 | 160 | 400 | 80  | 14 | 400 | 665  | 18 | 106         |
| MMD4 100-200/4.0   | 125             | 8  | 18 | 188 | 210 | 250 | 100 | 8  | 18 | 158 | 180 | 220 | 480 | 200 | 280 | 159 | 125 | 120 | 280 | 160 | 360 | 80  | 14 | 385 | 560  | 18 | 78          |
| MMD4 100-200/5.5   | 125             | 8  | 18 | 188 | 210 | 250 | 100 | 8  | 18 | 158 | 180 | 220 | 480 | 200 | 280 | 184 | 125 | 120 | 280 | 160 | 360 | 80  | 14 | 385 | 665  | 18 | 90          |
| MMD4 100-250/7.5   | 125             | 8  | 18 | 188 | 210 | 250 | 100 | 8  | 18 | 158 | 180 | 220 | 505 | 225 | 280 | 184 | 140 | 120 | 315 | 160 | 400 | 80  | 14 | 420 | 675  | 18 | 112         |
| MMD4 100-250/9.2   | 125             | 8  | 18 | 188 | 210 | 250 | 100 | 8  | 18 | 158 | 180 | 220 | 505 | 225 | 280 | 184 | 140 | 120 | 315 | 160 | 400 | 80  | 14 | 420 | 675  | 18 | 118         |
| MMD4 125-200/5.5   | 150             | 8  | 22 | 212 | 240 | 285 | 125 | 8  | 18 | 188 | 210 | 250 | 565 | 250 | 315 | 255 | 140 | 120 | 315 | 160 | 400 | 80  | 14 | 470 | 700  | 18 | 124         |
| MMD4 125-200/7.5R  | 150             | 8  | 22 | 212 | 240 | 285 | 125 | 8  | 18 | 188 | 210 | 250 | 565 | 250 | 315 | 255 | 140 | 120 | 315 | 160 | 400 | 80  | 14 | 470 | 700  | 18 | 134         |
| MMD4 125-200/7.5   | 150             | 8  | 22 | 212 | 240 | 285 | 125 | 8  | 18 | 188 | 210 | 250 | 565 | 250 | 315 | 255 | 140 | 120 | 315 | 160 | 400 | 80  | 14 | 470 | 700  | 18 | 134         |
| MMD4 125-200/9.2   | 150             | 8  | 22 | 212 | 240 | 285 | 125 | 8  | 18 | 188 | 210 | 250 | 565 | 250 | 315 | 255 | 140 | 120 | 315 | 160 | 400 | 80  | 14 | 470 | 770  | 18 | 140         |
| MMD4 125-250/11    | 150             | 8  | 22 | 212 | 240 | 285 | 125 | 8  | 18 | 188 | 210 | 250 | 605 | 250 | 355 | 255 | 140 | 120 | 315 | 160 | 400 | 80  | 16 | 470 | 700  | 18 | 162         |
| MMD4 125-250/15    | 150             | 8  | 22 | 212 | 240 | 285 | 125 | 8  | 18 | 188 | 210 | 250 | 605 | 250 | 355 | 255 | 140 | 120 | 315 | 160 | 400 | 80  | 16 | 470 | 855  | 18 | 190         |
| MMD4 150-200/7.5   | 200             | 8  | 22 | 268 | 295 | 340 | 150 | 8  | 22 | 212 | 240 | 285 | 680 | 280 | 400 | 295 | 160 | 155 | 450 | 200 | 550 | 100 | 22 | 550 | 855  | 24 | 167         |
| MMD4 150-200/9.2   | 200             | 8  | 22 | 268 | 295 | 340 | 150 | 8  | 22 | 212 | 240 | 285 | 680 | 280 | 400 | 295 | 160 | 155 | 450 | 200 | 550 | 100 | 22 | 550 | 855  | 24 | 173         |
| MMD4 150-200/11    | 200             | 8  | 22 | 268 | 295 | 340 | 150 | 8  | 22 | 212 | 240 | 285 | 680 | 280 | 400 | 295 | 160 | 155 | 450 | 200 | 550 | 100 | 22 | 550 | 855  | 24 | 175         |
| MMD4 150-200/15    | 200             | 8  | 22 | 268 | 295 | 340 | 150 | 8  | 22 | 212 | 240 | 285 | 680 | 280 | 400 | 295 | 160 | 155 | 450 | 200 | 550 | 100 | 22 | 550 | 875  | 24 | 203         |
| MMD4 200-250/18.5R | 250             | 12 | 22 | 320 | 295 | 395 | 200 | 8  | 22 | 268 | 295 | 340 | 765 | 315 | 450 | 295 | 200 | 155 | 450 | 200 | 550 | 100 | 22 | 630 | 1000 | 24 | 278         |
| MMD4 200-250/18.5  | 250             | 12 | 22 | 320 | 295 | 395 | 200 | 8  | 22 | 268 | 295 | 340 | 765 | 315 | 450 | 295 | 200 | 155 | 450 | 200 | 550 | 100 | 22 | 630 | 1000 | 24 | 278         |
| MMD4 200-250/22R   | 250             | 12 | 22 | 320 | 295 | 395 | 200 | 8  | 22 | 268 | 295 | 340 | 765 | 315 | 450 | 295 | 200 | 155 | 450 | 200 | 550 | 100 | 22 | 630 | 1000 | 24 | 300         |
| MMD4 200-250/22    | 250             | 12 | 22 | 320 | 295 | 395 | 200 | 8  | 22 | 268 | 295 | 340 | 765 | 315 | 450 | 295 | 200 | 155 | 450 | 200 | 550 | 100 | 22 | 630 | 1000 | 24 | 300         |

# شرکت پیشگامان صنعت و ایمنی پرگاس



گروه تخصصی اطفاء حریق

 [Edufire.ir](http://Edufire.ir)

 [Edufire.ir](https://www.instagram.com/Edufire.ir)



گروه تخصصی سیستم‌های پمپاژ

 [Edupump.ir](http://Edupump.ir)

 [Edupump.ir](https://www.instagram.com/Edupump.ir)



گروه تخصصی اعلان حریق

 [Edualarm.ir](http://Edualarm.ir)

 [Edualarm.ir](https://www.instagram.com/Edualarm.ir)



گروه تخصصی تاسیسات مکانیکی

 [Eduhvac.ir](http://Eduhvac.ir)

 [Eduhvac.ir](https://www.instagram.com/Eduhvac.ir)

