## All about your flow

VA \& INV Series


The VA Series is characterised by its ability to have its speed adjusted by means of its integral mechanical variator, which adjusts the mechanical output speed of the gearbox. Flow control isn't as accurate as the INV series however provides a decent flow range for applications where accurate flow control isn't necessarily required. Speed adjustment must be done whilst the pump is at standstill, NOT during operation. All VA series units are 3 phase as standard.

The INV Series provides the widest and most accurate control of flow as you can infinitely vary the speed of the motor between its min and max speed points by use of the pre-wired and calibrated inverter panel.

As with the RID series, the INV MAXI DOUBLE 2Q doubles the flow of the INV MAXI 80 \& INV MAXI DOUBLE 2H doubles the head.

As standard the INVs are supplied trolley mounted and with a CE Control Panel with integral inverter, remote control on a 15 m cable with On / Off / Reverse \& Speed Adjustment, Dry-Run Protection \& supplementary 24V NC Contactor for wiring to any additional fluid accessories such as Flow Meters, Pressure Switches or Transducers etc...

Feeding supply for the INV series can be either 230 V single phase (up to 2.2 kW ) or $230-400 \mathrm{~V}$ three phase.

Manual or Spring Loaded By-Passes are available on request for both VA \& INV models.

## Optional extras include:

- Waterproof \& Floating Bi-directional radio controller \& charging station with a 100 m range.
- Supplementary 4-20 mA Connector
- Timing System
- 4 Wheel Trolley


## All about your flow

Performance \& Dimensional Data:

| Tipo | Alimentazione * Feeding * |  | HP | kW | Giri/min Rpm |  | H(m) = Prevalenza / Head |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type |  |  | 0 |  |  |  | 4 | 8 | 12 | 16 | 18 | 20 | 24 | 27 | 32 | 40 |
| VA <br> MINOR 40 | $\begin{gathered} \text { TF } \\ 230-400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ |  |  | 2 | 1.5 | min | 175 | 1320 | 800 | 0 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 350 | 2750 | 2500 | 2100 | 1600 | 800 | 0 |  |  |  |  |  |
|  |  |  |  |  |  | 700 | 5000 | 4700 | 4300 | 3700 | 3000 | 2520 | 1800 | 0 |  |  |  |
|  |  |  | max |  |  | 900 | 6900 | 6200 | 5760 | 5040 | 4200 | 3660 | 3200 | 1800 | 0 |  |  |
| VA MAJOR 60 | $\begin{gathered} \text { TF } \\ 230-400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ |  | 2.5 | 1.87 | min | 175 | 4320 | 3840 | 3000 | 0 |  |  |  |  |  |  |  |
|  |  |  |  |  | 350 | 9000 | 7800 | 6000 | 3700 | 0 |  |  |  |  |  |  |
|  |  |  |  |  | 700 | 18000 | 15000 | 12000 | 8400 | 2500 | 0 |  |  |  |  |  |
|  |  |  | max |  | 900 | 22500 | 19560 | 15000 | 11220 | 3000 | 0 |  |  |  |  |  |
| VA MAXI 80 | $\begin{gathered} \text { TF } \\ 230-400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ |  |  | 5.5 | 4 | min | 150 | 12000 | 10000 | 7500 | 0 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 300 | 24600 | 22200 | 18900 | 12000 | 0 |  |  |  |  |  |  |
|  |  |  |  |  |  | 470 | 36000 | 34200 | 30000 | 24000 | 12000 | 0 |  |  |  |  |  |
|  |  |  | max |  |  | 600 | 43800 | 41400 | 36000 | 30000 | 16000 | 0 |  |  |  |  |  |
| $\begin{gathered} \text { INV } \\ \text { MINI } 3 / 4^{\prime \prime} \end{gathered}$ | $\begin{gathered} \text { MF } \\ 230 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | $\begin{gathered} \text { TF } \\ 400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ |  | 0.75 | 0.56 | min | 180 | 150 | 0 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 600 | 700 | 560 | 390 | 150 | 0 |  |  |  |  |  |  |
|  |  |  |  |  |  | 900 | 1000 | 900 | 840 | 720 | 540 | 450 | 350 | 0 |  |  |  |
|  |  |  | max |  |  | 1400 | 1620 | 1440 | 1320 | 1140 | 1020 | 900 | 800 | 600 | 400 | 0 |  |
| $\begin{gathered} \text { INV } \\ \text { MIDEX } 1 " 1 / 4 \end{gathered}$ | $\begin{gathered} \text { MF } \\ 230 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | $\begin{gathered} \text { TF } \\ 400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | 1 | 0.75 | min | 180 | 600 | 480 | 0 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 600 | 2600 | 2300 | 2000 | 1400 | 800 | 400 | 0 |  |  |  |  |
|  |  |  |  |  |  | 900 | 3840 | 3480 | 3180 | 2760 | 2160 | 1800 | 1600 | 720 | 0 |  |  |
|  |  |  |  |  | max | 1400 | 5760 | 5160 | 4800 | 4320 | 3600 | 3180 | 2800 | 1920 | 1200 | 0 |  |
| $\begin{gathered} \text { INV } \\ \text { MINOR } 40 \end{gathered}$ | $\begin{gathered} \text { MF } \\ 230 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | $\begin{gathered} \mathrm{TF} \\ 400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | 2.5 | 1.87 | min | 50 | 380 | 0 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 175 | 1320 | 800 | 0 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 350 | 2750 | 2500 | 2100 | 1600 | 800 | 0 |  |  |  |  |  |
|  |  |  |  |  |  | 700 | 5000 | 4700 | 4300 | 3700 | 3000 | 2520 | 1800 | 0 |  |  |  |
|  |  |  |  |  | max | 900 | 6900 | 6200 | 5760 | 5040 | 4200 | 3660 | 3200 | 1800 | 0 |  |  |
| INV MAJOR 60 | $\begin{gathered} M F \\ 230 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | $\begin{gathered} \text { TF } \\ 400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | 3 | 2.2 | min | 50 | 1230 | 0 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 175 | 4320 | 3840 | 3000 | 0 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 350 | 9000 | 7800 | 6000 | 3700 | 0 |  |  |  |  |  |  |
|  |  |  |  |  |  | 700 | 18000 | 15000 | 12000 | 8400 | 2500 | 0 |  |  |  |  |  |
|  |  |  |  |  | max | 900 | 22500 | 19560 | 15000 | 11220 | 3000 | 0 |  |  |  |  |  |
| $\begin{gathered} \text { INV } \\ \text { MAXI } 80 \end{gathered}$ | $\begin{gathered} \text { TF } \\ 230 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | $\begin{gathered} \text { TF } \\ 400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | 5.5 | 4 | min | 50 | 3800 | 0 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 150 | 12000 | 10000 | 7500 | 0 |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 300 | 24600 | 22200 | 18900 | 12000 | 0 |  |  |  |  |  |  |
|  |  |  |  |  |  | 470 | 36000 | 34200 | 30000 | 24000 | 12000 | 0 |  |  |  |  |  |
|  |  |  |  |  | max | 600 | 43800 | 41400 | 36000 | 30000 | 16000 | 0 |  |  |  |  |  |
| INV MAXI Double 2Q | $\begin{aligned} & \text { TF } \\ & 230 \mathrm{~V} \\ & 50 \mathrm{~Hz} \end{aligned}$ | $\begin{gathered} \text { TF } \\ 400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | 7.5 | 5.5 | min | 50 | 7600 | 0 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 175 | 27000 | 24000 | 20000 | 13000 | 0 |  |  |  |  |  |  |
|  |  |  |  |  |  | 235 | 36000 | 33000 | 27500 | 20500 | 10000 | 0 |  |  |  |  |  |
|  |  |  |  |  |  | 350 | 54000 | 48500 | 41500 | 33000 | 22000 | 14000 | 0 |  |  |  |  |
|  |  |  |  |  | max | 470 | 72000 | 65000 | 56000 | 45000 | 30000 | 20000 | 0 |  |  |  |  |
| INV MAXI <br> Double 2H | $\begin{gathered} \mathrm{TF} \\ 230 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | $\begin{gathered} \text { TF } \\ 400 \mathrm{~V} \\ 50 \mathrm{~Hz} \end{gathered}$ | 7.5 | 5.5 | min | 50 | 3800 | 2000 | 0 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 175 | 14100 | 13500 | 12600 | 11400 | 9700 | 8600 | 7400 | 4500 | 0 |  |  |
|  |  |  |  |  |  | 235 | 19200 | 18500 | 17500 | 16200 | 14300 | 13200 | 12000 | 9000 | 5900 | 0 |  |
|  |  |  |  |  |  | 350 | 27600 | 26700 | 25500 | 24000 | 22200 | 21000 | 20000 | 17200 | 14800 | 9700 | 0 |
|  |  |  |  |  | max | 470 | 36000 | 35000 | 33600 | 32000 | 29700 | 28400 | 27000 | 23600 | 20600 | 14300 | 0 |

[^0]
## \$ All about your flow

INV MINI 3/4"


VA MINOR 40
INV MINOR 40


VA MAXI 80
INV MAXI 80


## All about your flow

VA Series Rotational Speed Reference Table:

|  | Rotational Speed |  |  |
| :---: | :---: | :---: | :---: |
|  | VA MINOR (*) VA MAJOR-B (*) | VA MAJOR-M | VA MAXI (*) |
| 0 | 900 | 210 | 600 |
| 2 | 855 | 250 | 520 |
| 3 | 830 | 275 | 480 |
| 6 | 750 | 360 | 380 |
| 9 | 670 | 460 | 275 |
| 12 | 600 | 565 | 190 |
| 14 | 555 | 645 | - |
| 16 | 510 | 725 | - |
| 18 | 465 | 810 | - |
| 20 | 425 | 900 | - |
| 24 | 345 | - | - |
| 30 | 235 | - | - |
| 33 | 190 | - | - |

(*) Refers to the black arrow position and the graduated scale.

## $>$ All about your flow

topflo

VA MINOR 40 MAJOR 60 MAXI 80


INV MINI 3/4" MIDEX 1"1/4


| Tipo / Type | Peso / Weight | A | B | C | D | E | F | G | H | I | L | Lp | M | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VA MINOR 40 | 63 kg | 164 | 96 | 20 | 60 | 260 | $\emptyset 11$ | 109 | 264 | 440 | 1030 | 640 | 117 | 137 |
| VA MAJOR 60 | 67 kg | 164 | 96 | 55 | 70 | 295 | $\emptyset 11$ | 109 | 264 | 440 | 1065 | 675 | 117 | 137 |
| VA MAXI 80 | 109 kg | 200 | 120 | 115 | 90 | 305 | M12 | 132 | 337 | 440 | 1125 | 770 | 136 | 172.5 |
| INV MINI 3/4" | 17 kg | - | - | - | 26 | - | - | 175 | 550 | 340 | 790 | - | 285 | - |
| INV MIDEX 1"1/4 | 23 kg | - | - | 15 | 38 | - | - | 175 | 550 | 340 | 805 | - | 285 | - |
| INV MINOR 40 | 45 kg | - | - | 70 | 60 | - | - | 268 | 610 | 440 | 1050 | - | 285 | - |
| INV MAJOR 60 | 55 kg | - | - | 135 | 70 | - | - | 275 | 610 | 440 | 1145 | - | 285 | - |
| INV MAXI 80 | 95 kg | - | - | 160 | 90 | - | - | 295 | 610 | 440 | 1200 | - | 285 | - |
| INV MAXI Double | 185/200 kg | Refer to RID dimensions |  |  |  |  |  |  |  |  |  |  |  |  |


[^0]:    * MF = monofase $/$ single-phase - TF $=$ trifase $/$ three-phase

