## 2.8 Makro/ 5 Piston Metering Pumps

### 2.8.1 Piston Metering Pumps Makro/ 5

The ProMinent<sup>o</sup> Makro/ 5 piston Metering Pump is driven by a dual wound three phase, 3 kW motor, 230/400 V, 50/60 Hz, enclosure rating IP 55, insulation class F.

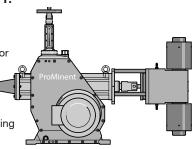
The stroke length is adjustable between 0...50 mm.

The gearbox is housed in a sea water-resistant acrylic resin lacquered cast housing.

The piston liquid end is made of stainless steel 1.4571 and pistons are made of oxide ceramic or stainless steel with a ceramic wear-resistant coating. Dosing reproducibility under defined conditions and when installed correctly, is better than  $\pm$  0.5 % in a stroke length range of between 10 and 100 % (instructions in the operating instructions manual must be followed).

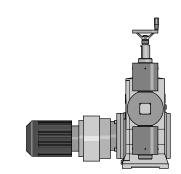
The suction lift varies with the density and viscosity of the dosing chemical, the connection tubing and the pump stroking rate.

For all motor-driven Metering Pumps, for safety reasons, suitable overload protection must be provided during installation. A tensioning key is supplied as standard for re-tensioning packing rings.



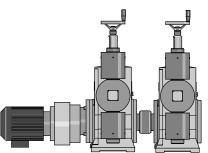
# Capacity with 1500 rpm motor and 50Hz M5KaH

| Bar I/hr |
|----------|----------|----------|----------|----------|
| 320 0038 | 140 0120 | 050 0335 | 025 0658 | 012 1343 |
| 320 0048 | 140 0151 | 050 0419 | 025 0822 | 012 1678 |
| 320 0066 | 140 0207 | 050 0576 | 025 1129 | 012 2305 |
| 320 0085 | 140 0267 | 045 0744 | 023 1458 | 012 2977 |
| 320 0100 | 100 0314 | 035 0872 | 018 1710 | 010 3491 |
| 240 0070 | 080 0214 | 035 0483 | 016 0970 | 006 2269 |
| 240 0088 | 080 0268 | 035 0604 | 016 1212 | 006 2837 |
| 240 0121 | 080 0368 | 035 0829 | 016 1665 | 006 3896 |
| 216 0157 | 070 0476 | 030 1071 | 016 2150 | 006 5031 |
| 170 0184 | 056 0558 | 025 1257 | 016 2522 | 006 6000 |



### ProMinent® Makro/ 5 AK add-on pumps

The ProMinent\* Makro/ 5 AK add-on piston Metering Pump can be used with the ProMinent\* Makro/ 5 HK piston main power end to expand to a duplex or triplex system. (At reduced backpressures up to four add-on power ends can be combined with a single main power end.). The customer can retrofit the add-on power ends on site. If required, the main power end can be fitted with a 3 kW or a 5.5 kW motor. When using add-on power ends a mounting frame should be provided.

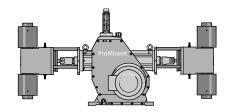


#### ProMinent® Makro/ 5 double head version

HDK (main pump)/AKD (add-on pump)

For the ProMinent\* Makro/ 5 HKD and AKD the same basic instructions as for the simplex pumps apply. It is also fitted, however, with a second liquid end.

The liquid ends operate in push-pull mode.



**NOTE: ALL \$ P.O.A. CONTACT SYDNEY OFFICE** 





