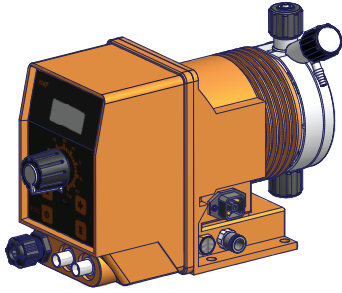


# "KMS" and "KMSA" series metering pumps Data Sheet



- Foot mounted
- Microprocessor technology
- Manual stroke length adjustment
- Manual venting (KMS) or self venting (KMSA) PVDF pump head
- Liquid ends (pump head, injection valve, foot filter, delivery hose).....PVDF
- Enclosure .....PP
- Environment temperature.....10-45°C (55-113°F)
- Chemical temperature.....0-50°C (32-122°F)
- Transportation and storage temperature.....-10-50°C (14-122°F)
- Installation class .....II
- Pollution level .....2
- Audible noise.....73.4db(A)
- Protection degree .....IP65 (% working RU: 85% T<=40°C; 70% T=50°C - without condensing water)



| MODELS   |           |        |  |
|----------|-----------|--------|--|
| KMS Code | KMSA Code | MOD.   | DESCRIPTION  |
| DC       | AD        | KMS DC | Digital constant pump, stand-by input and alarm output and level control.  |
| MF       | AF        | KMS MF | Digital multifunction pump (Constant, Divide, Multiply, PPM, Batch, Volt, mA, %, ml/q) , stand-by and flow sensor input, alarm output and level control. Recovery fault mode, work-pause mode and upkeep mode. |
| ML       | LA        | KMS CL | Proportional pump for free chlorine (Cl2) control (from 0 to 10,00 mg/l) with level control, supplied without chlorine probe. It operates with chlorine cells mod. ECL1 and ECL6/7/12 (not provided).          |
| EN       | AN        | KMS EN | Pump with weekly timer, microprocessor, digital controls, LCD display, level probe and electrovalve control.   |
| PH       | MH        | KMS PH | Proportional pump driven by internal built-in pH meter (0-14 pH) and level control, supplied without pH probe.   |
| RH       | AR        | KMS RH | Proportional pump driven by internal built-in ORP meter (0-1000 mV) and level control, supplied without ORP probe.   |

K MF 2001 K 00 00

| CAPACITIES |                   |                     |       |           |
|------------|-------------------|---------------------|-------|-----------|
|            | KMS               |                     | Hoses | Pump head |
| 2001       | 1 l/h at 20 bar   | 0.26 GPH at 290 PSI | 1/4"  | I         |
| 1802       | 2 l/h at 18 bar   | 0.53 GPH at 261 PSI | 1/4"  | L         |
| 1504       | 4 l/h at 15 bar   | 1.06 GPH at 217 PSI | 3/8"  | L         |
| 1005       | 5 l/h at 10 bar   | 1.32 GPH at 102 PSI | 3/8"  | L         |
| 0808       | 8 l/h at 8 bar    | 2.11 GPH at 116 PSI | 3/8"  | L         |
| 0510       | 10 l/h at 5 bar   | 2.64 GPH at 58 PSI  | 3/8"  | L         |
| 0218       | 18 l/h at 2 bar   | 4.76 GPH at 29 PSI  | 1/2"  | M         |
|            | KMSA              |                     | Hoses | Pump head |
| 1801       | 1 l/h at 18 bar   | 0.26 GPH at 261 PSI | 1/4"  | LA        |
| 1503       | 3 l/h at 15 bar   | 0.79 GPH at 217 PSI | 3/8"  | LA        |
| 103.5      | 3.5 l/h at 10 bar | 0.92 GPH at 102 PSI | 3/8"  | LA        |
| 100.5      | 0.5 l/h at 10 bar | 0.13 GPH at 102 PSI | 3/8"  | JA        |
| 085.5      | 5.5 l/h at 8 bar  | 1.45 GPH at 116 PSI | 3/8"  | LA        |
| 057.5      | 7.5 l/h at 5 bar  | 1.98 GPH at 58 PSI  | 3/8"  | LA        |
| 0213       | 13 l/h at 2 bar   | 3.43 GPH at 29 PSI  | 3/8"  | MA        |

| LIQUID ENDS |                 |              |               |                       |           |                    |         |                      |
|-------------|-----------------|--------------|---------------|-----------------------|-----------|--------------------|---------|----------------------|
|             | HEAD            | ORINGS       | VALVE         |                       | DIAPHRAGM | HOSES <sup>1</sup> |         | VISCOSITY<br>Max CPS |
|             |                 |              | Body          | Balls                 |           | Delivery           | Suction |                      |
| K           | PVDF            | FKM B        | PVDF          | Ceramic               | PTFE      | PVDF               | PVC     | 100                  |
| P           | PVDF            | EPDM         | PVDF          | Ceramic               | PTFE      | PVDF               | PVC     | 100                  |
| Y           | PVDF            | Nytrile      | PVDF          | Ceramic               | PTFE      | PVDF               | PVC     | 100                  |
| V           | PP              | FKM B        | PP            | Ceramic               | PTFE      | PVDF               | PVC     | 100                  |
| D           | PP              | EPDM         | PP            | Ceramic               | PTFE      | PE                 | PVC     | 100                  |
| W           | PP              | Nytrile      | PP            | Ceramic               | PTFE      | PE                 | PVC     | 100                  |
| J           | PVDF            | FKM B + PTFE | PVDF          | Ceramic               | PTFE      | PVDF               | PVC     | 100                  |
| S           | PVDF            | Silicone     | PVDF          | Ceramic               | PTFE      | PVDF               | PVC     | 100                  |
| A           | Acrylic         | FKM B        | PVDF          | Ceramic               | PTFE      | PVDF               | PVC     | 100                  |
| Z           | SS <sup>3</sup> | FKM B        | SS            | SS                    | PTFE      | N/A                | N/A     | 100                  |
| \$          | Acrylic         | FKM B        | Polypropylene | SS + Hastelloy spring | PTFE      | Polyethylen        | PVC     | 8000 <sup>2</sup>    |

<sup>1</sup> Size may be different from standard.  
<sup>2</sup> Using high viscosity pump head mod. \$, pump output may results lower in some applications.  
<sup>3</sup> Specify on order, the external thread of the valves: conical, cylindrical or NPT. Stainless Steel pump does not fit installation kit (accessories and hoses). Refer to "SS Accessories" table for fittings.

| POWER SUPPLY |                         |
|--------------|-------------------------|
| 00           | 230 VAC Schuko plug     |
| 05           | 230 VAC australian plug |
| 01           | 230 VAC without plug    |
| 03           | 115 VAC US plug         |
| 04           | 24 VAC without plug     |
| 05           | 12 VDC *                |
| 07           | 24 VDC                  |

\* On some models only.

| SS ACCESSORIES <sup>3</sup> |          |
|-----------------------------|----------|
| Pump head                   | Fittings |
| Li                          | 3/8"     |
| Mi                          | 1/2"     |
| Ni                          | 1/2"     |
| Si                          | 3/4"     |
| Ti                          | 3/4"     |

# "KMS" and "KMSA" series metering pumps Data Sheet

## Technical features

| KMS MODELS  |                  |                    |                                 |   |   |  |  |                   |
|-------------|------------------|--------------------|---------------------------------|---|---|--|--|-------------------|
| Models      | Strokes speed    |                    | Stroke length range reliability | Power consumption at max flow (230 VAC) | Power consumption at max flow (115 VAC) | Power consumption at max flow (24 VAC) | Power consumption at max flow (12 VAC) | Weight            |
|             | min strokes hour | max strokes minute |                                 |   |   |  |  |                   |
| 2001        | 1                | 180                | from 30% to 100%                | 19 Watt                                 | 24 Watt                                 | 12 Watt                                | 8.8 Watt                               | 4.1 Kg (9.02 Lbs) |
| 1802        | 1                | 180                |                                 |   |   |  |  |                   |
| 1504        | 1                | 180                |                                 |   |   |  |  |                   |
| 1005        | 1                | 180                |                                 |   |   |  |  |                   |
| 0808        | 1                | 180                |                                 |   |   |  |  |                   |
| 0510        | 1                | 180                |                                 |   |   |  |  |                   |
| 0218        | 1                | 180                |                                 |   |   |  |  |                   |
| KMSA MODELS |                  |                    |                                 |   |   |  |  |                   |
| 1801        | 1                | 180                | from 30% to 100%                | 19 Watt                                 | 24 Watt                                 | 12 Watt                                | 8.8 Watt                               | 4.1 Kg (9.02 Lbs) |
| 1503        | 1                | 180                |                                 |   |   |  |  |                   |
| 103.5       | 1                | 180                |                                 |   |   |  |  |                   |
| 100.5       | 1                | 180                |                                 |   |   |  |  |                   |
| 085.5       | 1                | 180                |                                 |   |   |  |  |                   |
| 057.5       | 1                | 180                |                                 |   |   |  |  |                   |
| 0213        | 1                | 180                |                                 |   |   |  |  |                   |

| CAPACITY KMS MODELS |          |         |         |         |               |      |                  |     |           |
|---------------------|----------|---------|---------|---------|---------------|------|------------------|-----|-----------|
| Model               | FLOW     |         |         |         | cc per STROKE |      | Maximum pressure |     | Pump Head |
|                     | min cc/h | max l/h | Min GPH | Max GPH | min           | max  | bar              | PSI |           |
| 2001                | 0.03     | 1       | 0.01    | 0.26    | 0.03          | 0.09 | 20               | 290 | I         |
| 1802                | 0.06     | 2       | 0.02    | 0.53    | 0.06          | 0.19 | 18               | 261 | L         |
| 1504                | 0.11     | 4       | 0.03    | 1.06    | 0.11          | 0.37 | 15               | 217 | L         |
| 1005                | 0.14     | 5       | 0.04    | 1.32    | 0.14          | 0.46 | 10               | 145 | L         |
| 0808                | 0.22     | 8       | 0.06    | 2.11    | 0.22          | 0.74 | 8                | 116 | L         |
| 0510                | 0.28     | 10      | 0.07    | 2.64    | 0.28          | 0.93 | 5                | 58  | L         |
| 0218                | 0.50     | 18      | 0.13    | 4.75    | 0.5           | 1.67 | 2                | 29  | M         |

| CAPACITY KMSA MODELS |          |         |         |         |               |      |                  |     |           |
|----------------------|----------|---------|---------|---------|---------------|------|------------------|-----|-----------|
| Model                | FLOW     |         |         |         | cc per STROKE |      | Maximum pressure |     | Pump Head |
|                      | min cc/h | max l/h | Min GPH | Max GPH | min           | max  | bar              | PSI |           |
| 1801                 | 0.03     | 1       | 0.01    | 0.26    | 0.03          | 0.09 | 18               | 261 | LA        |
| 1503                 | 0.08     | 3       | 0.02    | 0.79    | 0.08          | 0.28 | 15               | 217 | LA        |
| 103.5                | 0.10     | 3.5     | 0.03    | 0.92    | 0.1           | 0.32 | 10               | 145 | LA        |
| 100.5                | 0.02     | 0.5     | 0.01    | 0.13    | 0.02          | 0.05 | 10               | 145 | JA        |
| 085.5                | 0.15     | 5.5     | 0.04    | 1.45    | 0.15          | 0.51 | 8                | 116 | LA        |
| 057.5                | 0.21     | 7.5     | 0.06    | 1.98    | 0.21          | 0.69 | 5                | 58  | LA        |
| 0213                 | 0.37     | 13      | 0.1     | 3.43    | 0.36          | 1.2  | 2                | 29  | MA        |

| QUANTITY | PACKAGE CONTENT                           |
|----------|---|
| n. 1     | Assembly kit                              |
| n. 1     | 5 X 20 delayed fuse                       |
| n. 1     | Level probe with axial foot filter (PVDF) |
| n. 1     | 0,3 Bar injection valve (PVDF)            |
| m 2      | Delivery hose                             |
| m 2      | Suction hose                              |
| m 2      | Discharge hose                            |
| m 2,5    | Input signal cable                        |
| m 2      | Alarm/Stand-by cable (MF model)           |
| n.1      | Operating manual                          |

| POWER SUPPLY                     | FUSE   |
|----------------------------------|--------|
| 230 VAC (190-265 VAC) - 50/60 Hz | 1 A    |
| 115 VAC (90-135 VAC) - 50/60 Hz  | 500 mA |
| 24 VAC (20-32 VAC) - 50/60 Hz    | 2A     |
| 12 VDC (10-16 VDC)               | 3.15A  |

# "KMS" and "KMSA" series metering pumps Data Sheet

## Dimension

mm [inches]

