

# Dosing pump series G™ A

Flow rate up to 170 l/h • Pressure up to 12 bar

- Mechanically actuated diaphragm • Variable eccentric drive mechanism



## Main technical characteristics

- Flow rate up to 170 l/h
- Pressure up to 12 bar
- Mechanically actuated PTFE diaphragm
- Stroke adjustment by variable eccentric minimising pulsation and shock
- Maximum temperature of pumped liquid: 40 °C
- Adjustment of flow rate while running or stopped: from 0 to 100%
- Accuracy: ± 2% of rated flow from 10 to 100% stroke
- Suction lift: up to 4 m water  
2.5 m suction lift for GA 90 to GA 170 models
- High vacuum suction lift option: 9 m water (consult us)
- Maximum suction pressure: 2 bar
- Housing in corrosion resistant glass fibre reinforced by thermoplastical material
- Life lubrication
- Options: double diaphragm, VARIPULSE® or frequency variation
- Integrable into an EH&S protection enclosure



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## Electrical characteristics of motors

### General characteristics:

- Power supply:
  - 230/400 V - 50/60 Hz - three-phase
  - 230 V - 50 or 60 Hz - single-phase
  - 115 V - 50 or 60 Hz - single-phase
- Degree of protection: IP 55, tropicalized, insulation: class F
- In compliance with European and international standards

### Options:

- Motor mounting F130, shaft-end 14x30
- Explosion-proof motors: consult us (only out of EEC, pumps do not comply with ATEX directive)

## Accessories

- The Series G™ A pumps are supplied with the accessories described in the following chart (except for 316L S.S. and slurries versions)
- Available on request: 3 or 4 Function valves, bleed 4 Function valves, pulsation dampeners, safety and back pressure valves, consult us.

## Construction of liquid ends

| Liquid end / Versions           | Polypropylene (PP) | PVDF      | S. Steel (316L) | High Viscosity (HV) |
|---------------------------------|--------------------|-----------|-----------------|---------------------|
| <b>GA 2 to GA 45 Versions</b>   |                    |           |                 |                     |
| Liquid end body                 | PP                 | PVDF      | 316L            | PP                  |
| Valve body                      | PVDF               | PVDF      | 316L            | PP                  |
| Seats                           | Aflas              | PTFE      | 316L            | PTFE                |
| Balls                           | Ceramic            | Ceramic   | 316L            | 316L                |
| Connections                     | PVDF/PP            | PVDF/PP   | 316L            | PP                  |
| Diaphragm                       | PTFE/PVDF*         | PTFE/PVDF | PTFE/316L       | PTFE/PVC            |
| Seals                           | Viton              | Viton     | Viton           | -                   |
| <b>GA 90 to GA 170 Versions</b> |                    |           |                 |                     |
| Liquid end body                 | PP                 | PVDF      | 316L            | PP                  |
| Valve body                      | PP                 | PVDF      | 316L            | PP                  |
| Seats                           | PTFE               | PTFE      | 316L            | PTFE                |
| Balls                           | Ceramic            | Ceramic   | 316L            | 316L                |
| Connections                     | PP/PVC             | PVDF/PVC  | 316L            | PP                  |
| Diaphragm                       | PTFE               | PTFE      | PTFE            | PTFE                |
| Seals                           | -                  | -         | Viton           | -                   |

\* Except on GA 2 to GA 10 = PTFE/PVC

### Other liquid end construction:

- PVC version (GA 90 to GA 170 only): PVC construction with ceramic balls
- Fluorinated liquid version: PVDF construction with PTFE balls
- Slurries version: 316L S.S. construction with 440C balls
- PP/316L mixed version: PP construction with 316L S.S. balls

## ACCESSORIES

For PP, PVDF, PVC, Fluorinated Liquids and Mixed liquid ends:

- GA 2 to GA 45 versions: pumps supplied with 1 injection nozzle, 1 foot valve + weight, 1 PE flexible hose (6 m) 6x8, 1 reinforced PVC hose (6 m) 6x12 and 1 gas connection 1/2" male.
- GA 90 to GA 170 versions: accessories available on request.

For High Viscosity liquid end:

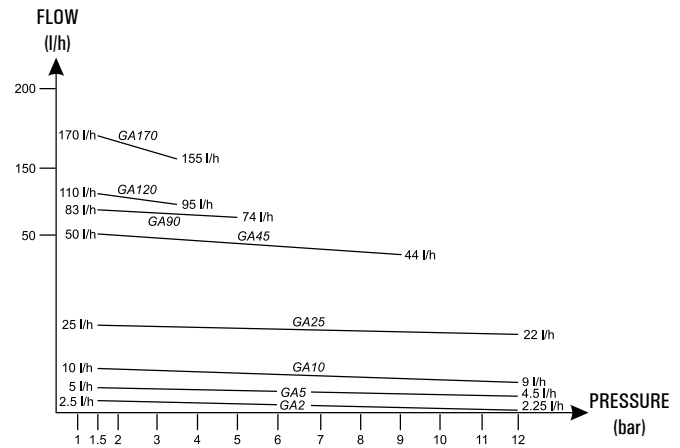
- GA 2 to GA 45 versions: pumps supplied with: Suct. = 2 m hose 15x23 + 1/2" NPT male - Disch. = 3 m hose 0.500" OD, 1 injection nozzle.
- GA 90 to GA 170 versions: pumps supplied with: Suct. = 2 m hose 15x23 + 1/2" NPT male - Disch. = Threaded socket 1/2" NPT male.

## Performances

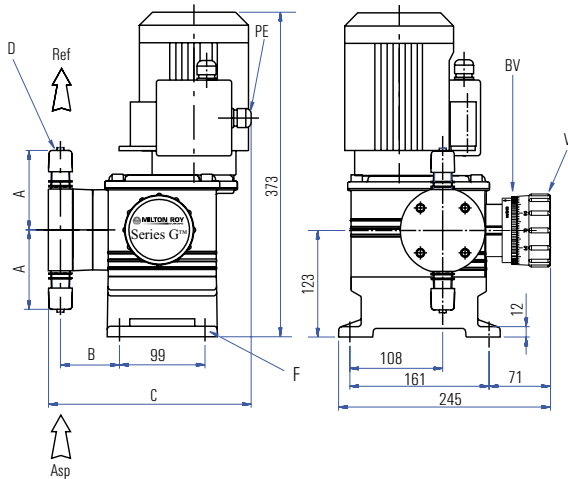
| Type   | Flow max. (l/h)<br>(1)(2) | Pressure max. (bar) | Stroke length (mm) | Stroke speed (spm)<br>(2) | Motor speed (rpm) <sup>(2)</sup> | Motor power (W) |      |
|--------|---------------------------|---------------------|--------------------|---------------------------|----------------------------------|-----------------|------|
|        |                           |                     |                    |                           |                                  | 1-ph            | 3-ph |
| GA 2   | 2.5                       | 12                  | 4                  | 36                        | 1500                             | 180             | 90   |
| GA 5   | 5                         | 12                  | 4                  | 72                        | 3000                             | 180             | 120  |
| GA 10  | 10                        | 12                  | 4                  | 144                       | 3000                             | 180             | 120  |
| GA 25  | 25                        | 12                  | 6                  | 72                        | 3000                             | 180             | 120  |
| GA 45  | 50                        | 10                  | 6                  | 144                       | 3000                             | 180             | 120  |
| GA 90  | 83                        | 5                   | 6                  | 72                        | 3000                             | 180             | 120  |
| GA 120 | 110                       | 3.5                 | 4                  | 144                       | 3000                             | 180             | 120  |
| GA 170 | 170                       | 3.5                 | 6                  | 144                       | 3000                             | 180             | 120  |

(1) Maximum flow at 1.5 bar

(2) Values with motor at 50 Hz (multiply by 1.2 for 60 Hz)



## Dimensions and connections



Asp : Suction  
Ref : Discharge  
V : Stroke adjustment  
BV : Stroke adjustment locking

PE : Motor gland  
F : 4 holes  $\phi$  9  
D : Connections

| Types          | Dimensions | Versions    | PP/PVDF/PVC/Mixed | 316L | HV  |     |
|----------------|------------|-------------|-------------------|------|-----|-----|
|                | (mm)       | Connections | T                 | N    | H   |     |
| GA 2           | A          |             | 91                | 102  | 105 |     |
| GA 5           | B          |             | 68                | 68   | 83  |     |
| GA 10          | C          |             | 234               | 236  | 253 |     |
| GA 25<br>GA 45 | A          |             | 91                | 102  | 108 |     |
|                | B          |             | 69                | 68   | 73  |     |
|                | C          |             | 235               | 236  | 243 |     |
|                | (mm)       | Connections | P                 | Q    | N   | H   |
| GA 90          | A          |             | 109               | 143  | 123 | 110 |
| GA 120         | B          |             | 98                | 98   | 98  | 98  |
| GA 170         | C          |             | 266               | 270  | 273 | 266 |

### Connections:

T = PE flexible hose 6x8, reinforced PVC hose 6x12 and connections 1/2" male  
N = Threaded socket 1/2" BSP female  
H = GA 2 to GA 45: Suct. = vinyl hose 15x23 - Disch. = PE tubing 9x12  
H = GA 90 to GA 170: Suct. = vinyl hose 15x23 - Disch. = 1/2" male  
P = Threaded socket 1/2" NPT male  
Q = Female socket for DN15 rigid tubing (PVC)

## Weight and packing

| Versions                | Net weight <sup>(1)</sup> (kg) | Gross weight <sup>(1)</sup> (kg) | Packing <sup>(2)</sup> (L x W x H - mm) |
|-------------------------|--------------------------------|----------------------------------|---|
| GA 2 to GA 170 (PP)     | 7                              | 9                                | 400 x 300 x 490                         |
| GA 2 to GA 45 (316L)    | 8                              | 10                               | 400 x 300 x 490                         |
| GA 120 to GA 170 (316L) | 12                             | 14                               | 400 x 300 x 490                         |

(1) Approximately - (2) Standard cardboard packing



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Your partner in Germany:



Mess- und Dosiertechnik GmbH

Dämgesstr. 6, 41238 Mönchengladbach

Telefon: +49 (0) 2166 - 18 99 90

Telefax: +49 (0) 2166 - 18 99 91

Email: [mail@medotec.de](mailto:mail@medotec.de)

[www.medotec.de](http://www.medotec.de)