Constant Flow Valves

Constant Flow Rate Regardless of Pressure

MARIC FLOW CONTROL
AUSTRALIA

Maric Constant
Flow Valves

50 Years
Est. 1963

Biggest Range of Flow Rates
Best Accuracy
20 Years Life Expectancy

WaterMark
Quality Assured
S37 Standards Australia

AUSTRALIAN MADE

Exported
Globally

Maric Brochure V715

www.maric.com

Maric Flow Control Australia is an Australian owned engineering firm situated in Adelaide, South Australia. Established in 1963, the company manufactures the Maric flow control valves, and exports around 50% of its production through overseas distributors.

Maric flow control valves maintain a constant pre-set flow rate of water, over a wide pressure range. For flow rate sensitive pumps, filters, pump glands and water distribution systems, the installation of these valves can offer many benefits and valuable protection. The technology is based on a precision moulded rubber control ring in the valves body, with an orifice diameter that varies in response to the pressure differential applied to it. The greater the pressure, the smaller the orifice, and vice versa, thereby maintaining a constant flow.

The high quality of all Maric valves is maintained through the use of a quality assurance program based on ISO9001, and is audited by SAI Global, (a division of Standards Australia). This allows the company to be both quality assured and hold a current WaterMark License.

The valves are reliable, compact, self-cleaning and are maintenance free throughout the life of the valve. Flow rate increases generally one half to one percent per year. Therefore depending on the accuracy required by the installation, valve life can be up to 20 years.

Full Product Manual is available online – **www.maric.com**

Product Range

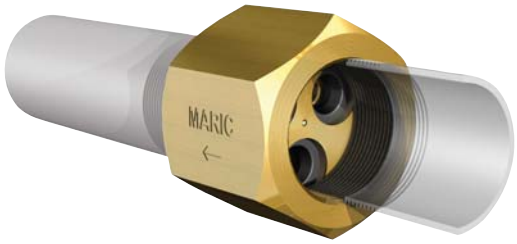
Screwed BSP & NPT

Available in; **Brass**, **Chrome**, **UPVC** & **Stainless steel.**
Select desired flow rate from "flow rates available".
Flow control Check valves available in limited configurations.
Available in **FF** **MF** **FM** - First letter denotes inlet

F.F.

M.F.

F.M



Flow rates available are from 0.2 litres/minute up to the maximum listed below.

Body Size;	1/4"	10mm	15mm	20mm	25mm	32mm	40mm	50mm
Max. Flow L/Minute;	9	9	23	54	114	233	233	342

Wafer Type

For mounting between flanged pipe fittings.
(Table "D" as standard. Other specs to order)

Available in; **Brass, UPVC**, **Gunmetal** & **Stainless Steel.** Wafers are supplied with an o'ring in each face for sealing.

Standard Wafer O.D. is located by flange bolts. Full flange wafers made to order.

Flow rates available are from 0.2 litres/minute up to the maximum listed below.

Body Sizes (mm);	20	25	32	40	50	65	80	100	150	200	250	300
Max. Flow L/Minute;	114	233	233	233	342	456	699	1279	2320	4427	6058	8854

Insert Type

Inserts are out of sight and protected from unauthorised interference.
Available in; **Brass, UPVC** & **Stainless Steel**

Plain insert – various applications including press fitting into OEM's equipment & tapware etc.

Flanged & Special inserts – for numerous applications including water meter flow control. Suitable for 15 to 50 mm water meters.

Flow rates available are from 0.2 litres/minute upwards Specific dimensions and flow rates are available on application.

Flow Rates Available

Figures below show the various flow rates (in litres per minute) available in the respective screwed body sizes. **Note;** the low flow rates are also available in the larger body sizes. Kwyflo flow rate options, (quiet design) are limited to the flows listed in **underlined bold type**.

6mm & 10mm bodies (1/4"& 3/8") (No 6 series control rubbers)

0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.63 0.7 0.8 0.9 1 1.1 1.2 1.3 1.5 1.6 1.8 2 **2.3** 2.5 2.8 3.2 **3.5** 4 **4.5** 5 5.5 6.3 7 8 9

15mm bodies (1/2") (No 15 series control rubbers)

1.8 2 2.3 2.5 2.8 3.2 3.5 4 **4.5** 5 5.5 6.3 **7** 8 **9** 10 **11** 12 13 15 16 18 20 23

20mm bodies (3/4") (No 20 series control rubbers)

8 9 10 11 12 **13** 15 **16** 18 **20** 23 **25** 28 32 36 41 45 49 54 59

25mm bodies (1") (No 25 series control rubbers)

15 16 18 20 23 25 28 **32** 36 **41** 45 **49** 54 **59** 66 73 82 91 102 114

32mm, 40mm & 50mm bodies (1 1/4", 1 1/2" & 2") (No 40 series control rubbers)

114 125 138 150 162 180 199 216 233

When ordering valves,
Please Specify

- **Body Size**
- **FF, MF, FM** or **Wafer**
- **Body Material**
- **Precision** (or otherwise)
- **Flow Rate**

Standard Specifications (Standard **Precision** Performance)

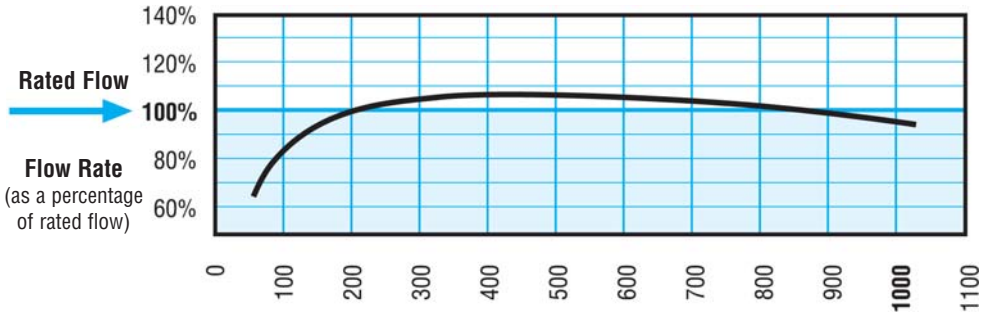
Pressure Differential Range; 140 – 1000 kPa

Flow Rate Accuracy; + / - 10%

Headloss 140 kPa at rated flow. (At lower than rated flows headloss reduces significantly.)

Temperature Range; 0 – 60°C (50°C for UPVC)

Performance Curve; Typical of **PRECISION** valves irrespective of body size or flow rate



Control Rubber Options

Rubber Type	Abbreviation	Rubber Material	Pressure Differential Range		Flow Accuracy	Max Temp
Precision (standard)	"P"	Nitrile	1.4 – 10 bar	(20 – 150psi)	+/-10%	60C
Kwyflo	"K"	Nitrile	1.4 – 10 bar	(20 – 150psi)	+/-20%	60C
Low Pressure	"LP"	Nitrile	0.4 – 4 bar	(6 – 60psi)	+/-20%	60C
High Pressure (1)	"N6"	Nitrile	1.4 – 15 bar	(20 – 215psi)	+/-20%	60C
High Pressure (2)	"N7"	Nitrile	1.7 – 20 bar	(25 – 290psi)	+/-20%	60C
EPDM	"EP"	EPDM	1.4 – 15 bar	(20 – 215psi)	+/-20%	100C
EPDM High Pressure 2	"E7"	EPDM	1.7 – 20 bar	(25 – 290psi)	+/-20%	100C
Viton	"V"	Viton	1.4 – 10 bar	(20 – 150psi)	+/-20%	200C

Understanding Headloss or Pressure Differential (P.D.) across valve.

QUESTION; What will the headloss across the Maric valve be?

ANSWER; At least 140 kPa, or, between 140 and 1000 kPa, at full flow, if the system is designed and operating correctly. This is because the function of our **PRECISION** valves is to control flow when Pressure Differential across the valve is within this range. Therefore, to achieve full rated flow (accurate to within ±10 %), the installation must provide for inlet to be at least 140 kPa above outlet pressure. At lower than rated flows, headloss reduces significantly.

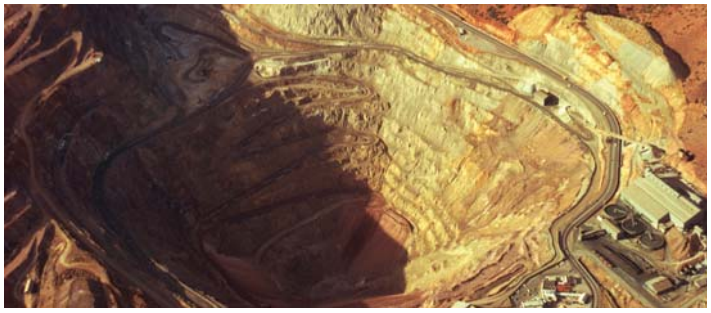
For full **Product Manual** and list of international **Distributors**, refer to our website **www.maric.com**

Benefits of using Maric flow control valves

MINING; **Centrifugal Pumps**

- Maximise gland packing life through carefully controlled gland-water flow
- Minimise dilution of slurry
- Ensure availability of gland-water to all glands on a common gland-water line
- Save valuable water supplies

- **Also** used in fire fighting equipment, safety showers & dust suppression



WATER AUTHORITIES

- Severely restricting flow encourages payment of overdue water bills
- Improve mains distribution pressure
- Extend water meter life
- Enable agreed maximum flow to consumers tanks.
- Enable economical distribution to sparsely populated areas
- Enforce water restriction
- Reduce infrastructure costs

WATER TREATMENT

- Prevent media loss during back-flushing of media filters
- Protect delicate filters from excessive flow rates
- Enable controlled flow rate of sampling water to analysing equipment
- Ensure 100% bacteria kill in ultraviolet water sterilisation

CENTRIFUGAL PUMP PROTECTION

Extend pump life by;

- Keeping pump on its curve by limiting maximum flow rate
- Prevent up-thrust damage (common on high draw-down submersibles)
- Prevent cavitation damage
- Prevent over-pumping beyond the supply capacity
- Maximise gland packing life through carefully controlled gland-water flow

OTHER INDUSTRIAL APPLICATIONS

- Vacuum Pumps “Liquid Ring” - operator convenience, prevent overheating and overloading
- Fire-fighting – guarantee pressure and flow to all hydrants, control flow of water and foaming agent to ensure correct dose ratio
- Dust Suppression - minimise dust and erosion
- Distilleries - ensure correct cooling of condensers
- Safety showers & eye-wash equipment - ensure safe operation

DISTRIBUTED BY:

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www.maric.com
Telephone: 08 8431 2281
(+61 8 8431 2281)
Facsimile: 08 8431 2025