

# Non-Return Valves

TRUDESIGN® Non-Return Valves are designed for marine, farming, horticulture and mining industries. Made from UV stabilised glass-reinforced Nylon, these composite material fittings are designed for the harsh marine and agricultural environments. They can be used in line to prevent water backflow or siphoning and have a very low cracking (opening) pressure.

Available in 6 sizes:



## Key Features:

Feature:	Benefit:
Manufactured from a composite UV stabilized, glass-reinforced Nylon 6	High strength, tough and light weight. Can be used in direct sunlight.
High impact and tensile strength	“Water hammer safe” and insensitive to pressure shocks in the pipeline
Stainless steel spring	No corrosion issues or risk of internal valve staying open
Low ‘cracking’ (opening) pressure	Minimal pressure required to open the valve with minimal restriction on flow-rates
In line fitting	Minimal installation room needed and no other fittings required
Printed white arrow (opposite logo side)	Quick and easy identification of water flow direction

## Part Numbers:

Model / Size	Part Number	Part Number PKG
Non-Return Valve ¾"	90804	90845
Non-Return Valve 1"	90805	90846
Non-Return Valve 1 ⅛"	90950	90951
Non-Return Valve 1 ¼"	90806	90847
Non-Return Valve 1 ½"	90807	90848
Non-Return Valve 2"	90812	90849

## Specifications:



Size:	¾" (19mm)	1" (25mm)	1 ⅛" (28mm)	1 ¼" (32mm)	1 ½" (38mm)	2" (50mm)
Weight	21 g (0.7 oz)	34 g (1.2 oz)	46 g (1.6 oz)	50 g (1.8 oz)	67 g (2.4 oz)	119 g (4.2 oz)
Temp. Service	65°C	65°C	65°C	65°C	65°C	65°C
Temp. Max	93°C	93°C	93°C	93°C	93°C	93°C
Pressure Service	0 – 150 psi	0 – 150 psi	0 – 150 psi	0 – 150 psi	0 – 150 psi	0 – 150 psi
Pressure Max	230 psi	230 psi	230 psi	230 psi	230 psi	230 psi
Cracking Pressure	~ 0.41 psi	~ 0.29 psi	~ 0.29 psi	~ 0.26 psi	~ 0.23 psi	~ 0.22 psi
Recommended for flow-rates between *	15 – 42 Litre/min (4 – 11 gpm)	25 – 79 Litre/min (6.5 – 21 gpm)	25 – 79 Litre/min (6.5 – 21 gpm)	32 – 117 Litre/min (8.5 – 31 gpm)	61 – 193 Litre/min (16 – 51 gpm)	87 – 322 Litre/min (23 – 85 gpm)
Pressure loss @ max flow-rate	3.8 psi (262 mbar)	3.8 psi (262 mbar)	3.8 psi (262 mbar)	2.8 psi (193 mbar)	2.3 psi (159 mbar)	2.9 psi (200 mbar)

\* Choosing the right size valve for your application will reduce risks of wear, vibrations and noise. It is better to avoid using a valve either too small (leads to excessive velocity and wear) or too large (leads to vibration, noise and possibly premature wear of a non-return valve plunger that is never fully open).

## Installation:

- Ensure the Non-Return Valve is installed with the water flowing in the same direction as the white arrow.
- Use 2 hose clamps on each end (4 total), ensuring not to over-tighten.
- Recommend use of a filter or strainer in flow path, feed side of the Non-Return Valve. Disconnect piping and check for blockages every 6 months.
- For clear water use only.

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