

# PRODUCT DATA SHEET



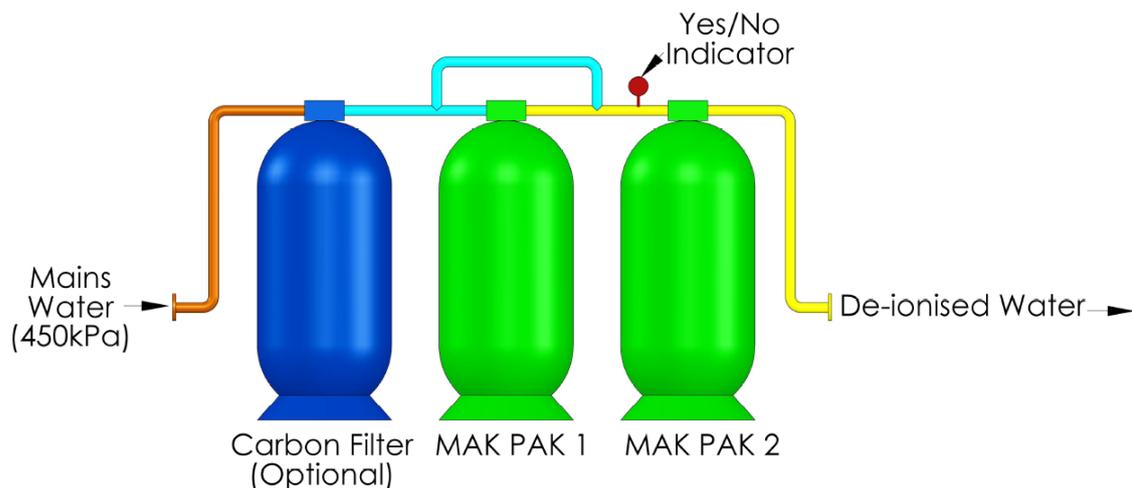
## Water Deionisation Filter (MAKPAK)

water | wastewater | sewage

### OVERVIEW

MAK Water's deionisation (MAKPAK) solutions are designed to treat mains supplied potable water, with typical conductivity of  $< 60 \mu\text{S}/\text{cm}$ , to produce high purity deionised water with conductivity  $< 3 \mu\text{S}/\text{cm}$ .

The standard treatment process involves two mixed bed ion exchange vessels in series with a yes/no indicator positioned between vessel one and vessel two. When the conductivity of the water output from vessel one rises above  $3 \mu\text{S}/\text{cm}$ , an alarm and visual indicator will alert an operator to take vessel one off line for change out, leaving the second vessel to stay online to continue treating. Optional pricing can be given for a single ion exchange vessel. Activated carbon can be added as a pre-treatment option to remove free chlorine from the feed water, thereby extending the life of the resin. The MAKPAKs are supplied as individual components and can be installed on site by MAK Water or a registered plumber.



### STANDARD SPECIFICATIONS

Parameter	Units	Specification
Treated Water Volume		75,000 L per vessel (based on $60 \mu\text{m}/\text{cm}^2$ feed water)
Vessel Size	mm	1,500 H 300 D
Flow Rate	L/hr	1,300 (nominal)
Feed Water Conductivity	$\mu\text{S}/\text{cm}$	$< 60$ (typical)
Treated Water Conductivity	$\mu\text{S}/\text{cm}$	$< 3$ (typical)
Raw Water Temperature	$^{\circ}\text{C}$	15 ~ 35
Feed Water Inlet Pressure	kPa	$> 150 < 500$ (typical)
Treated Water Discharge Pressure Drop	kPa	$\sim 50$ (typical)
Power Supply	-	Single phase, 240 V

# STANDARD INCLUSIONS + OPTIONS

✓ = Standard Supply, o = Optional Supply, - = Not Applicable

Equipment	MAKPAK
Two MAKPAK Deionisation Vessles	✓
Header Pipework and Barrel Union	✓
Manual Isolation Valves	✓
Pre-treatment – Activated Carbon	o

Instrumentation	Standard Package
Yes / No Indicator	✓
Pressure Gauges	o
Flow Gauges (Rotameters)	o
Pressure Transmitters (4-20 mA)	-
Flow Transmitters (4-20 mA)	o
Conductivity Transmitter (4-20 mA)	o

**NOTE: OUTPUT FROM 4-20 mA TRANSMITTERS TO BE CONNECTED TO CONTROL SYSTEM BY OTHERS.**

## MODEL SELECTION

Water Deionisation Plant

- |        |  |
|--------|--|
| 1      | One MAKPAK Vessel                                    |
| 2      | Two MAKPAK Vessels                                   |
| ↓      | <b>X</b> Pre MAKPAK treatment – None/standard supply |
| ↓      | <b>G</b> Pre MAKPAK treatment – Activated carbon     |
| ↓      | <b>C</b> Custom pre-treatment                        |
| ↓      | <b>X</b> Standard instrument package                 |
| ↓      | <b>C</b> Custom instrumentation package              |
| ↓      |  |
| MAKPAK | -   -   -  |

**NEED A QUOTE?**

COMPLETE THIS TABLE AND EMAIL TO...

[sales@makwater.com.au](mailto:sales@makwater.com.au)



**Disclaimer:** MAK Water is continuously updating and improving its products and services, so please contact us for more detailed information or to confirm specifications. MAK Water takes no responsibility for any errors resulting from the use of information contained within this document.

PDS-MAKPAK-002