

WRAS[®]

Water Regulations Advisory Scheme

This certifies that

YUHUAN KINGJOY METAL PRODUCTS CO. LTD.

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations/Scottish Water Byelaws.

KINGJOY KJ80614106, KJ8074117, KJ8064107 & KJ8074119 THERMOSTATIC BLENDING VALVES

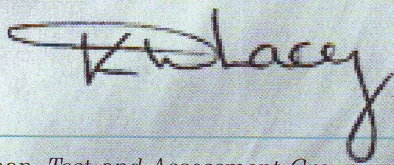
This certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)

The product so mentioned will be listed in the Water Fittings and Materials Directory for a period until:

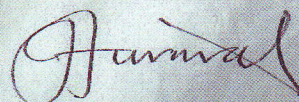
31 OCTOBER 2017

1210007

Certificate No.



Chairman, Test and Assessment Group



Secretary

WRAS
APPROVED
PRODUCT

Approval No: 1210007

5th November 2012

Yuhuan Kingjoy Metal Products Co Ltd
Xiafan Industrial Park
Qinggang Village
Yuhuan
Taizhou
Zhejiang
China

Dear Sir

VALVES

1. Samples of the fittings or units described below have been subjected to relevant tests and examinations contained in the "Regulators' specifications", and after considering the test reports the Technical Committee's Product Assessment Group (PAG) of the Water Regulations Advisory Scheme (WRAS or "the Scheme") finds that the fittings or units so described comply with, and their use when correctly installed, does not contravene the requirements of The Water Supply (Water Fittings) Regulations 1999, The Water Byelaws 2004 Scotland, and Water Supply (Water Fittings) Regulations (Northern Ireland) 2009.

1210007

VALVES

2010

Blending - Thermostatic

IRN R001, R010, R040

Tradename:

Range of concealed thermostatic blending valves (cast brass bodies) incorporating quarter turn ceramic disc headworks to control the flow and either square or dome operating members.

Temperature is controlled independently via a thermostatic cartridge and either square or dome operating members. Both inlets incorporate a single check valve cartridge (suitable for backflow protection against Fluid Category 2) and stainless steel strainers.

Maximum working pressure 10.0 Bar (BSP connections).

Maximum operating temperature - 46°C

Size: $\frac{3}{4}$ " BSP Female inlets

Model: KJ8064106 – two handle with square operating members and faceplate.
KJ8074117 – two handle with dome operating members and faceplate.
KJ8064107 – three handle with square operating members and faceplate.
KJ8074119 – three handle with dome operating members and faceplate.

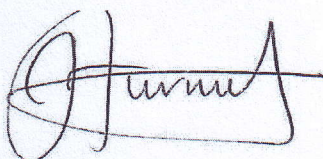
Marking: Kingjoy on operating member.
H & C on body

Manufacturer: Yuhuan Kingjoy Metal Products Co. Ltd.

2. Installation Requirements & Notes are set out on Page 3.
3. Fittings or units (and any non-metallic components contained within them) are re-assessed and, where necessary, retested every 5 years. You will be advised when your product is due for re-assessment. The extent of any retesting required for a product will be at the discretion of the Technical Manager.
4. **Acceptance for listing entitles you to identify your product with the Scheme's "WRAS" Mark. The use of the Mark will make the identification easier of the approved products by Water Undertakers.** Copies of the 'Mark' are available on request for the purposes of producing artwork.
5. Manufacturers or applicants may only quote in their sales literature, terms used in this letter when indicating the decision of the Group in respect to their fittings or units, namely that the **Product Assessment Group of the Scheme finds that the use of these fittings or units, when correctly installed, will not contravene the requirements of The Water Supply (Water Fittings) Regulations 1999, The Water Byelaws 2004 Scotland or The Water Regulations (Northern Ireland) 2009 and that a reference to the fittings or units will be included in the Scheme's Water Fittings and Materials Directory:** this may be abbreviated to "Water Regulations Advisory Scheme - Approved Product" or "WRAS - Approved Product".
6. Since the incorrect installation of water fittings could result in contravention of the Regulations or Byelaws requirements, **the attention of your customers should be drawn to any Installation Requirements for Regulations or Byelaws compliances set out on Page 3.**
7. Would you please supply the Scheme with a copy of any of your company's literature which may or will make reference to the Scheme's decisions about the products and/or quotes any of the installation requirements.
8. A condition of listing is that **no modification to the fittings or units described above shall be made without first notifying the Scheme** and submitting to the Scheme details of the modification and, if so required, samples of the fittings or units as so modified for consideration by the Scheme's Product Assessment Group. Failure to comply with this condition may result in the removal from the Water Fittings and Materials Directory of the entry relating to the fittings or units in question.
9. Your products are required to be replicas of the samples described above, and the right is reserved to carry out quality surveillance inspections of your production arrangements, reasonable written notice of which will be given.

10. Please note that the use of the items described in any particular area of supply is at the discretion of the local Water Undertaking.
11. Manufacturers or factors having appliances or units referred to in the Scheme's Directory which incorporate individually approved components and materials are asked to ensure that such components and materials continue to be approved and/or listed in the Directory, during the current period of approval of their appliance. This may require modifications to approved appliances to ensure their retention in the Scheme's Directory. The Scheme must be informed of any such modifications, (see paragraph 8).
12. You are asked to verify the details of your product as set out in Paragraph 1 and advise us of any discrepancies.

Yours sincerely



Jason Furnival
Secretary, Product Assessment Group

INSTALLATION REQUIREMENTS & NOTES

You are advised to draw customers' attention to the installation requirements and notes set out below which must be followed to ensure that the fittings described above are installed in accordance with the requirements of the Regulations and Byelaws:

IRN R001

See text of entry for Installation Requirements or Notes.

IRN R010 Schedule 2-15 (1)

Water supplies shall be at reasonably balanced pressures from a common source (e.g. hot and cold supplies both from the same storage or both from a supply pipe). Where the fitting is supplied from unbalanced supplies (e.g. hot and cold supplies from separate sources) a **'Listed' single check valve** or some other no less effective backflow prevention device shall be fitted immediately upstream of both hot and cold water inlets.

IRN R040 Schedule 2-15 (1)

The fitting, or outlet supplied by the fitting, shall be installed so that its outlet discharges above the spill-over level of any fixed appliance as indicated below: -

For backflow protection in domestic premises or installations up to, and including, Fluid Category 3.

1. Size of tap or combination fitting.	2. Vertical distance of outlet above spill-over level.
1. not exceeding ½in	20mm
2. exceeding ½in but not exceeding ¾in	25mm
3. exceeding ¾in	70mm

If the fitting cannot be installed as indicated in the table it shall be installed: -

- a) with an approved double check valve assembly or some other no less effective backflow prevention device immediately upstream of the inlet; or
- b) so that it draws water by gravity only from a cistern, or cylinder having a permanently open vent pipe, and the distributing pipe supplies no other fittings (other than a draining tap) at a lower level.

For backflow protection in premises or installations up to, and including Fluid Category 5

The vertical distance of the outlet above the spill-over level shall be not less than 20 mm or twice the diameter of the inlet pipe to the fitting, whichever is the greater.

If the fitting cannot be installed as indicated it shall be installed with a backflow prevention arrangement suitable for the Fluid Category.

Taps incorporating a hose union outlet

If the outlet of the tap assembly is designed to accommodate the attachment of a flexible hose and therefore potentially compromise the required AUK3 air gap, alternative Fluid Category 5 backflow protection is required, as the AUK3 air gap provided by the tap would not apply.