

# WRAS<sup>®</sup>

Water Regulations Advisory Scheme

*This certifies that*

DANFOSS A/S

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

EV220A 6B, -10B, -12B, 14B, -18B, -22B, RANGE OF  
NORMALLY CLOSED IN-LINE SOLENOID VALVES.  
SIZE: ¼", 3/8", ½", ¾", 1"

*Reference should be made to the accompanying acceptance letter for installation requirements*

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

19 OCTOBER 2009

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0410045

*Certificate No.*



*Chairman, Test and Assessment Group*



*Secretary*

**WRAS**  
APPROVED  
PRODUCT

Ref. No: 0410045  
Sample No: 04267

22 October 2004

Mr Preben Kreilgaard  
Danfoss AS  
DK 6430 Nordborg  
Denmark

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 Test and Assessment Group (TAG) 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, Water Byelaws 2003 Scotland, and Water Regulations Northern Ireland.

**0410045**

### VALVES

**2230**

Solenoid - Metal

IRN R001

Tradename:

Range of normally closed in-line solenoid valves (brass body) with an EPDM diaphragm and seat. Maximum operating pressure 16.0 bar.

Size: 1/4", 3/8", 1/2", 3/4", 1".

Product Designation: EV220A 6B, -10B, -12B, -14B, -18B, -22B.

Marking: 'Danfoss' and technical data printed on coil. Adhesive label on body stating product type, temperature and pressure range.

Manufacturer: Danfoss A/S.

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 **Test and 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, Water Byelaws 2003 Scotland or Water Regulations Northern Ireland 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 Test and 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 reminded (see Form F1, paragraph 5.11) that **you must remove your samples** from the Fittings Testing Laboratory **within four weeks of the date of this letter**, after which date the right is reserved to dispose of the samples.
13. You are asked to verify the details of your product as set out in Paragraph 1 and advise us of any discrepancies.

Yours faithfully



H. R. Wigmore  
Secretary, Test and Assessment Group

#### **INSTALLATION REQUIREMENTS & NOTES**

You are advised to draw customers' attention to the fact:

#### **IRN R001**

See text of entry for Installation Requirements or Notes.

TAG.0410045

Issue No. 3

Date of Issue: 10.2.95

Our Ref: HRW/0410045

Form D1

Sample No: 04267

Description: VALVES

The examination and testing of the above items is now completed and I would appreciate your advice regarding disposal of the samples.

Will you please indicate your intentions by completing and returning the slip below:

PLEASE NOTE THAT IF THE SAMPLES ARE NOT COLLECTED WITHIN 4 WEEKS OF THE DATE OF THIS LETTER, **THEY WILL BE DISPOSED OF.**

**PLEASE GIVE 24 HRS NOTICE OF COLLECTION AND ARRANGE COLLECTION BETWEEN EITHER 10:00 AND 12:00 OR 14:00 AND 16:00.**

To: The Technical Manager  
WRc Evaluation and Testing Centre Ltd  
Unit 30 Fern Close  
Pen-y-Fan Industrial Estate  
Oakdale  
Gwent  
NP11 3EH

From: Mr Preben Kreilgaard  
Danfoss AS  
DK 6430 Nordborg  
Denmark

Sample No: 04267

Description: VALVES

~~\* (a) We are making arrangements to collect within 4 weeks.~~

\* (b) We hereby authorise you to dispose of the samples.

\* Please delete as appropriate

Yours faithfully

Signed:



Date: 2004-10-24.

Mr Preben Kreilgaard  
Danfoss AS  
DK 6430 Nordborg  
Denmark

Dear Sir

**RE: WATER REGULATIONS ADVISORY SCHEME'S (WRAS) APPROVED PRODUCTS  
USING THE SCHEME'S APPROVED LOGO.**

We would respectfully draw your attention to the fact that all manufacturers and or factors who have products approved by the Scheme may if they so wish use the Scheme's approved logo. We would also request that wherever possible all products approved by the Scheme should include this logo within the finished production sample.

It is not mandatory that all products approved by the Scheme include the approved logo, however we must bring your attention to the fact that certain associations within the UK, will now only accept products that carry the WRAS logo.

I am attaching the WRAS logo artwork for your information.

Should you require any further information regarding this matter do not hesitate to contact me.

Yours sincerely



H. R. Wigmore  
Secretary, Test and Assessment Group