

## TEST CERTIFICATE



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Test certificate no. 220011170-15-01

### Client

Krasemann GmbH & Co. KG  
Max-Planck-Strasse 2  
46414 Rhede

Order date: 17/03/2015  
Receipt of samples: 13/03/2015  
Test date: 18 to 27/03/2015  
MPA NRW no.: 81/15

### Order

Testing the watertightness of the “KRASO cable penetration, type KDS 150” sealing system.

### Sample type

“KRASO cable penetration, type KDS 150”

### Number of samples

1 unit

### Underlying requirements

Test according to customer specifications.

The results of the tests relate solely to the samples/test object referred to above.  
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This test certificate comprises 2 pages and 1 appendix

certified as true translation  
of the original  
PTS GmbH  
1A, rue de la Laiterie  
L-9910 Troisvierges  
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CR  
26.03.25

## TEST CERTIFICATE



Test certificate no. 220011170-15-01 dated 22/04/2015

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### 1. Sampling process

The sample was submitted by the client to the MPA NRW Dortmund for testing on 13/03/2015.

### 2. Test setup

To test the leak-tightness of the sealing system, the "KRASO cable penetration, type KDS 150" was fastened to a concrete slab (600 mm x 600 mm). The thickness of the concrete slab was 300 mm. The concrete slab had an opening with a diameter of 150 mm, over which a clamping bell was placed. Other details are listed in Appendix 1.

### 3. Test procedure

The tests listed below were carried out straight after one another:

#### Test sequence 1:

Build-up of an internal water pressure of 3.5 bar  
(Starting at 0.5 bar and increasing the pressure at a rate of 0.2 bar/2 hrs up to 3.5 bar)

#### Test sequence 2:

4 cycles  
(15 min at a water pressure of 3.5 bar and 5 min unpressurised)

#### Test sequence 3:

7 days at a water pressure of 3.5 bar

### 4. Result

No pressure drop or leakage was able to be detected over the entire test duration.

Dortmund, 22/04/2015

On behalf of

[Signature]

[Stamp]

E. Lipinski  
Person responsible

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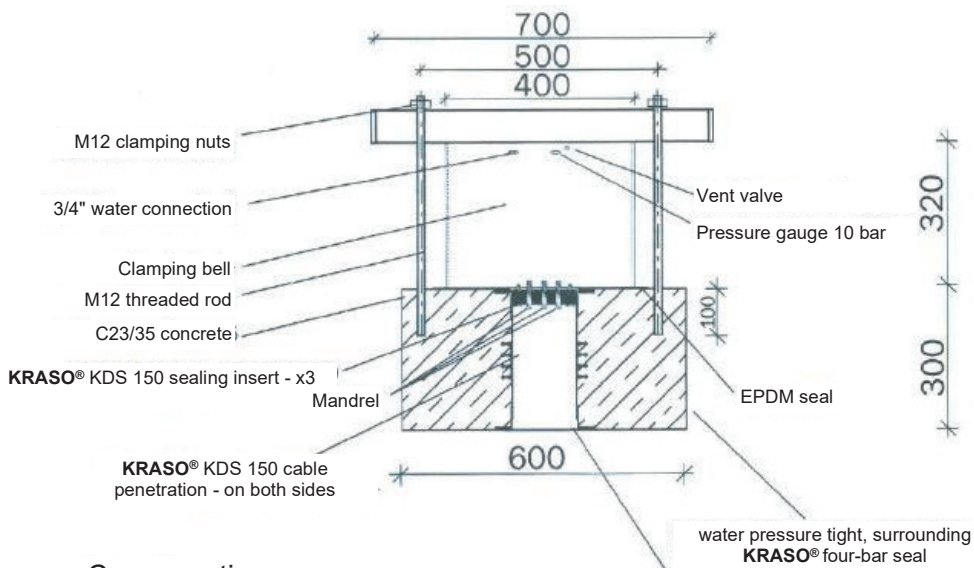
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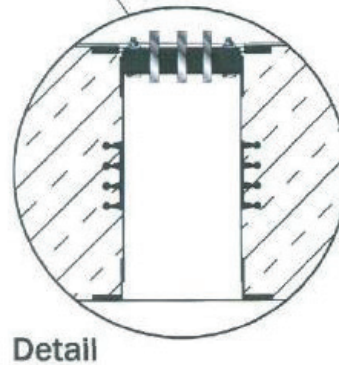
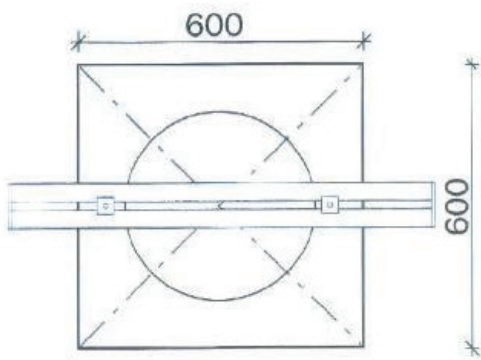
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Appendix 1 of 1

### Appendix 1



### Cross-section



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Test drawing	
Name:	KRASO® cable penetration, type KDS 150 – on both sides - KRASO® sealing insert, type KDS 150 - x3 -
Draft:	Jürgen Krasemann
Modified:	
Approved on:	
Drawn:	Nicole Bauer 17/03/2015
Scale:	1: 10 Dimensions in mm