



Type certificate no. IS/VT/09/010

The TÜV Technische Überwachung Hessen GmbH
certifies that the

Spray protection ring (0165-50)

manufactured by
BETEK Sicherheitstechnik GmbH
Siemensstraße 11
63128 Dietzenbach
Germany

has cleared the type test at a pressure of 50 bar. The type test took place using water at an ambient temperature.

The spray protection ring is recorded as Spray Control® under the order number 2-0165-50 and it fulfills all the specifications mentioned below.

TÜV Technische Überwachung Hessen GmbH
Rüdesheimer Straße 119
64285 Darmstadt
Germany

8th October 2009

A handwritten signature in blue ink, appearing to read 'Lars Komrowski'.

Dipl.-Ing. Lars Komrowski



Spray protection ring specifications:

The type 0165-50 spray protection ring consists of a circular steel ring made up of stainless steel (material no.: 1.4404). A steel net consisting of four layers of smooth wire netting (material no.: 1.4404) is found on the inside. The steel ring is fastened to the flanged joint using a swing top (material no.: 1.4404 and material no.: 1.4310) with four hooked fixtures. The fastening is in accordance with the assembly instructions "spray control®" dated 18/09/2009. The spray protection ring is designed for a flange diameter of 165 mm. The ring height of the spray protection ring is 50 mm and the strength of the ring jacket is 0.5 mm. The dimensions of the spray protection ring comply with the technical drawings "Spritzschutz Spray Control®" (Spray Protection Spray Control®) dated 20/08/2004 and no. 1961/11 dated 23/11/2004 for the measurements of the swing top (adjusting link). The "Protokoll: Überwachung Herstellung und Materialbeschaffenheit" (protocol: monitoring, production and material properties) dated 18/09/2009 is used in quality testing.

Test details can be found in the test documentation no. IS/VT/09/010.



Test documentation no. IS/VT/09/010

of certificate no. IS/VT/09/010 of the TÜV Technische Überwachung Hessen GmbH

Spray protection ring (0165-50)

manufactured by
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Siemensstraße 11
63128 Dietzenbach
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dated 8th October 2009

The following tests were carried out on the spray protection ring:

- a) Testing during selective loading
(= high free stream velocity)

A 2 mm fine crack was made on the seal (Klingsil® C-4400, material aramid fibers, strength 2 mm) of the flanged joint (165 mm). A water pressure of 100 bar overpressure was created during the test. The spray protection ring withstood it.

- b) Testing during loading with high pressure on the spray protection ring
(= high volume flow)

A 90° piece was removed from the seal (Klingsil® C-4400, material aramid fibers, and strength 2 mm) of the flanged joint (165 mm). A water pressure of 50 bar overpressure was created during the test. The spray protection ring withstood it.

Both the tests took place on three spray protection rings with water at an ambient temperature for a time period of one minute. The spray protection ring was fitted on to the flanged joint with prepared seals in accordance with the assembly instructions. Damages that could lead to a functional breakdown under stress conditions over a longer period of time were not detected.

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