



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 03 ATEX 1158

(4) Equipment: Explosion-proof screw plug, type EX-VSM ..

(5) Manufacturer: WISKA Hoppmann & Mulsow GmbH

(6) Address: Kisdorfer Weg 28, 24568 Kaltenkirchen, Germany

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 03-13271.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014:1997 + A1 + A2

EN 50019:2000

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2 G I EEx e II

Zertifizierungsstelle Explosionsschutz

By order:

Dr.-Ing. M. Thedens



Braunschweig, October 7, 2003

SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 1158**

(15) Description of equipment

The explosion-proof screw plug, type EX-VSM ..., is made from brass. It is used to close threaded holes for cable entries in enclosures designed to Increased Safety "e" type of protection.

Technical data

Type name	Nominal size	Thread length [mm]
EX-VSM 18	M18x1.5	8
EX-VSM 20	M20x1.5	8
EX-VSM 24	M24x1.5	9
EX-VSM 25	M25x1.5	9
EX-VSM 30	M30x2	10
EX-VSM 32	M32x1.5	10
Operating temperatures:		-20 °C to +100 °C
Suited for equipment of equipment group II with mechanical risk level:		high
Protection against contact, foreign matter, and water		IP 54 w/o O-ring for the connection thread IP 56 with O-ring for the connection thread in compliance with EN 60529

(16) Test report PTB Ex 03-13271

(17) Special conditions for safe use

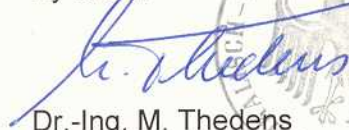
None

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Zertifizierungsstelle Explosionsschutz

By order:



Dr.-Ing. M. Thedens



Braunschweig, October 7, 2003

1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 1158

(Translation)

Equipment: Explosion-protected screw plug, type EX-VSM ..

Marking:  II 2 G EEx e II

Manufacturer: WISKA Hoppmann & Mulsow GmbH

Address: Kisdorfer Weg 28, 24568 Kaltenkirchen, Germany

Description of supplements and modifications

The explosion-protected screw plug, type EX-VSM .., made from brass, has been re-inspected on the basis of Standards EN 60079-0 and EN 60079-7.

The marking will thus change to:

 II 2 G Ex e II

The Technical Data have not changed.

Applied standards

EN 60079-0:2006


EN 60079-7:2007

Test report: PTB Ex 08-18082

Zertifizierungsstelle Explosionsschutz

By order:

Braunschweig, June 27, 2008


Dr.-Ing. M. Thedens
Oberregierungsrat



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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

2nd SUPPLEMENT
according to Directive 94/9/EC Annex III.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 1158
(Translation)

Equipment: Screw plug, type EX-VSM **(-**)

Marking:  **II 2 G Ex e II**

Manufacturer: WISKA Hoppmann & Mulsow GmbH

Address: Kisdorfer Weg 28, 24568 Kaltenkirchen, Germany

Description of supplements and modifications

The screw plug, type EX-VSM .. ,is modified in the following respects:

- 1) The type name changes to EX-VSM **(-**).
- 2) The screw plug can optionally also be made from stainless steel.
- 3) Sizes 36 to 105 are added.
- 4) The operating temperatures change to -40 °C up to +120 °C.
- 5) The protection changes to IP66 and IP68 (5 bar, 30 min).
- 6) The screw plug has been re-examined on the basis of standards EN 60079-0:2012, EN 60079-7:2007 and EN 60079-31:2014.

The marking therefore changes to:

 **II 2 G Ex e IIC Gb**

 **II 2 D Ex tb IIC Db**

Technical data

Type name	Size of connection thread	Length of connection thread [mm]
EX-VSM 16	M16x1.5	8
EX-VSM 18	M18x1.5	8
EX-VSM 20	M20x1.5	8
EX-VSM 24	M24x1.5	9
EX-VSM 25	M25x1.5	9
EX-VSM 30	M30x2	10
EX-VSM 32	M32x1.5	10
EX-VSM 36	M36x2	12
EX-VSM 40	M40x1.5	12
EX-VSM 45	M45x2	12
EX-VSM 50	M50x1.5	12
EX-VSM 56	M56x2	12
EX-VSM 63	M63x1.5	12
EX-VSM 72	M72x2	12
EX-VSM 75	M75x1.5	12
EX-VSM 80	M80x2	12
EX-VSM 105	M105x2	12

Minimum wall thickness for housings with threaded holes	Metal housing 3 mm Plastic housing 4 mm
Minimum wall thickness for housings with through holes	Metal housing 1 mm Plastic housing 2 mm
Suitable for equipment of equipment group II, with mechanical hazard level:	High
Operating temperatures	-40 °C to +120 °C
Ingress protection in accordance with EN 60529	IP66 and IP 68 (5 bar, 30 min)

Type code

EX	-	VS	M	-	**	(-**)
1	2	3	4	5	6	7

- 1 = indicates the operational area
EX = for potentially explosive areas
- 2 = hyphen
- 3 = indicates the product category
VS = screw plug
- 4 = type of connection thread
M = metric connection thread in accordance with ISO 965

- 5 = space
- 6 = nominal size of connection thread
 - 16 = metric thread M16x1.5
 - 18 = metric thread M18x1.5
 - 20 = metric thread M20x1.5
 - 24 = metric thread M24x1.5
 - 25 = metric thread M25x1.5
 - 30 = metric thread M30x2
 - 32 = metric thread M32x1.5
 - 36 = metric thread M36x2
 - 40 = metric thread M40x1.5
 - 45 = metric thread M45x2
 - 50 = metric thread M50x1.5
 - 56 = metric thread M56x2
 - 63 = metric thread M63x1.5
 - 72 = metric thread M72x2
 - 75 = metric thread M75x1.5
 - 80 = metric thread M80x2
 - 105 = metric thread M105x2
- 7 = indicated a special type of material
 - No details = standard product in brass, bright (2.0401 / CuZn39Pb3 / CW614N / CZ 121)
 - Ni = brass, nickel plated
 - Cr = brass, chromium plated
 - A2 = stainless steel 1.4305 (X8CrNiS 18 9 / AISI 303 /303 S 22)
 - A4 = stainless steel 1.4435 (X2CrNiMo 18 14 3 / AISI316L / 316 S 14)

Notes for manufacturing and operation

IP66 and IP68 degree of protection will only be met if the screw plugs are properly fitted. The manufacturer's instructions must be followed.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2014

Test report: PTB Ex 14-11311

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, August 6, 2014


Dr.-Ing. U. Klausmeyer
Direktor und Professor

