



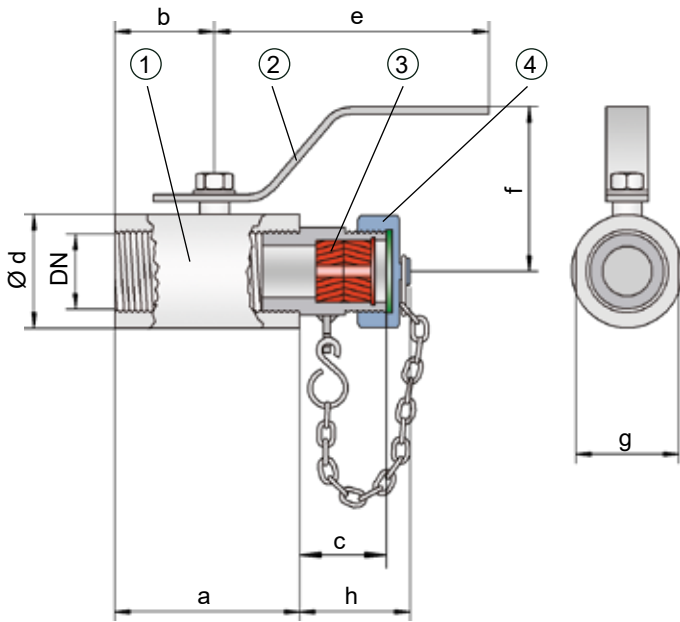
Condensate Drain Valve

Deflagration-proof

PROTEGO® ZE/TK



ZE/TK-1



Function and Description

The PROTEGO® ZE/TK condensate drain valve is used for flame transmission-proof condensate drainage of devices or plant equipment (e.g., tanks, pipelines, etc.) where flammable liquids can form condensate and flammable product vapor/ air mixtures could develop. They can also be used for the venting of tanks, plant components, and pipes that transport or process flammable liquids. The drain valve incorporates an end-of-line deflagration flame arrester.

The condensate drain valve PROTEGO® ZE/TK consists of the ball valve (1) with hand lever (2), a female threaded connection (e.g., pipe thread G½" up to G1"), and the flame arrester (3) with cover (4).

The elbow fitting (5) is also available as an optional outlet.

The flame arrester (3) consists of the flame arrester casing and FLAMEFILTER®.

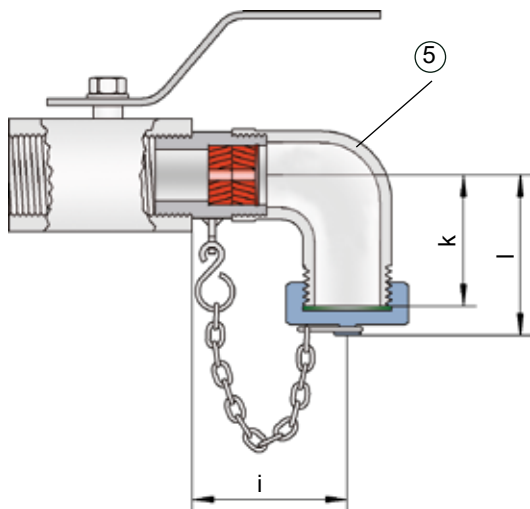
The ball valve is opened with the hand lever. When draining condensate, a suitable container is required. When draining flammable and/or toxic products, observe the appropriate safety provisions.

The simple and sturdy design is suitable for nearly all flammable liquids and can be installed in any position.

Flame transmission protection is guaranteed against atmospheric deflagrations of product vapor/air mixtures of explosion groups up to IIB (NEC groups D to C) up to an operating temperature of +60°C/140°F and an operating pressure up to 1.1 bar/15.9 psi.

Type-approved in accordance with the current ATEX Directive and EN ISO 16852, as well as other international standards.

ZE/TK-2



Designs and Specifications

There are two designs available:

Condensate drain valve, standard design **ZE/TK - 1**

Condensate drain valve with elbow **ZE/TK - 2**

Special designs are available upon request.

Table 1: Dimensions

Dimensions in mm / inches

DN	a	b	c	Ød	e	f	g	h	i	k	l
15 / G½"	60 / 2.36	30 / 1.18	33 / 1.30	32 / 1.26	110 / 4.33	55 / 2.17	27 / 1.06	45 / 1.77	54 / 2.13	38 / 1.50	67 / 2.64
20 / G¾"	65 / 2.56	35 / 1.38	33 / 1.30	38 / 1.50	110 / 4.33	60 / 2.36	34 / 1.34	45 / 1.77	54 / 2.13	38 / 1.50	67 / 2.64
25 / G1"	73 / 2.87	40 / 1.57	33 / 1.30	45 / 1.77	110 / 4.33	65 / 2.56	41 / 1.61	45 / 1.77	54 / 2.13	38 / 1.50	67 / 2.64

Table 2: Explosion group

MESG	Expl. Gr. (IEC/CEN)	Gas Group (NEC)
≥ 0,50 mm	IIB	B

Table 3: Material

Ball valve	Stainless Steel
Elbow	Stainless Steel
Cover	Stainless Steel
FLAMEFILTER®	Stainless Steel

The valves must be sufficiently resistant to corrosion through the gas/air mixtures or product vapor/air mixtures. This applies especially to the FLAMEFILTER®. If necessary, designs in special stainless steel quality should be selected.

Table 4: Type of connection

Pipe thread DIN ISO 228 T1	DIN
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