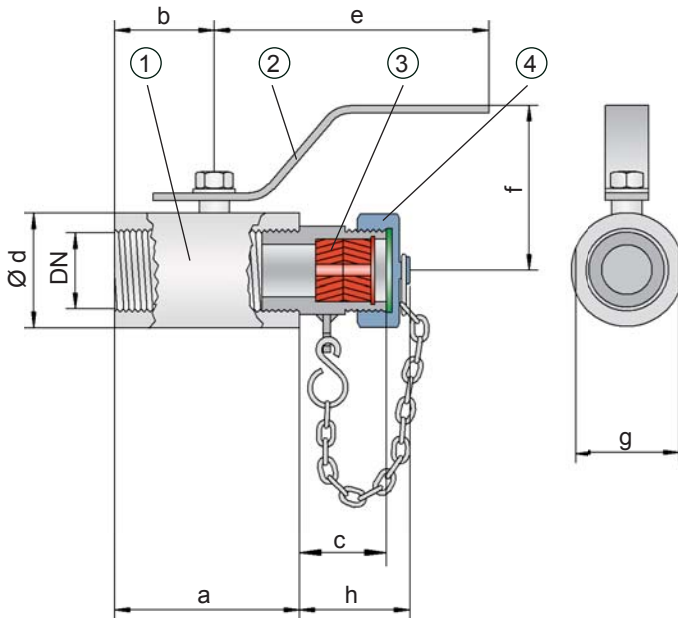


Condensate Drain Valve deflagration proof

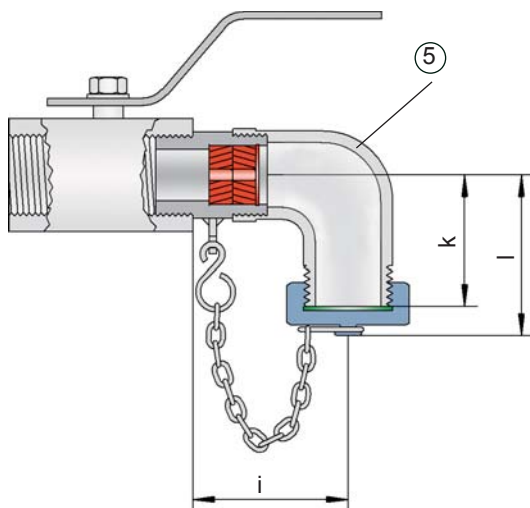
PROTEGO® ZE/TK



ZE/TK-1



ZE/TK-2



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 may condense and therefore flammable product vapour/air mixtures could develop. Furthermore the drain valves can be used for the venting of tanks, parts of plants and lines 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) and female threaded connection (e.g. pipe thread G½" up to G1") and the flame arrester (3) with cover (4).

As an option a elbow fitting (5) is available as outlet.

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

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

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

Flame transmission protection is guaranteed against atmospheric deflagrations of product vapour/air mixtures of explosion groups up to IIB (NEC groups D to C) up to a service temperature of +60°C / 140°F and an absolute 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.

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 on 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 vapour/air mixtures. This applies mainly 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
----------------------------	-----



for safety and environment