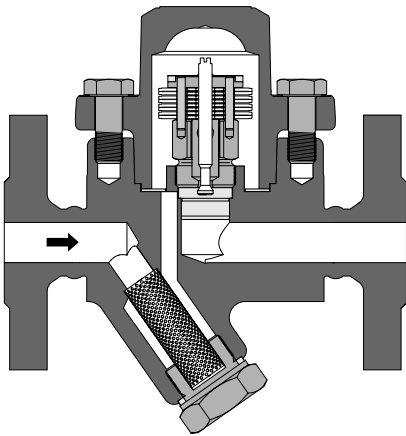


UBK 46, flange



Connections

- Flange EN 1092-1 B1, PN 40
- Flange ASME B 16.5, Class 150 RF
- Flange ASME B 16.5, Class 150 RFS
- Flange ASME B 16.5, Class 300 RF
- Flange ASME B 16.5, Class 300 RFS
- Screwed socket ISO 228-1, G
- Screwed socket DIN B 16.11, NPT
- Socket-weld end DIN EN 12760/ASME B 16.11, Class 3000

RHOMBUSline, Stream Trap

UBK 46

PN40/CL300

DN 15, 20, 25, NPS ½", ¾", 1"

Description

Thermostatic/thermodynamic steam trap (for banking-up condensate) with adjustable discharge temperature, which discharges condensate from the system without flash steam and at a constant and adjustable discharge temperature.

Design: With corrosion-resistant, water-hammer resistant duo stainless steel Thermovit regulator and Y-type dirt trap with large surface area.

Main application: Steam heat tracing systems.

Optional extras

- Non-standard length 172 mm
- Drainage valve (fitted)

Fluids

The equipment is designed for the following fluids (in accordance with the EU Pressure Equipment Directive or Pressure Equipment (Safety) Regulations in the UK):

UBK 46

- Group 2 fluids

Use in potentially explosive atmospheres

The equipment does not have its own potential source of ignition (as per ATEX Directive). Please note the following:

During operation, avoid excessive surface temperatures caused by the fluid.

The equipment itself does not generate higher surface temperatures.

Once installed, static electricity may arise between the equipment and the connected system. If the equipment is used in potentially explosive atmospheres, the plant manufacturer or owner is responsible for discharging or preventing possible static charge.

If it is possible for fluid to escape, e.g. through actuating mechanisms or leaks in threaded joints, the plant manufacturer or owner must take this into consideration when dividing the area into zones.

Function

The equipment regulates the flow of fluid using a Thermovit regulator. The Thermovit regulator is screwed onto the body.

The Thermovit regulator consists of several bimetallic plates stacked on top of one another. As the fluid temperature rises, these plates expand and cause the nozzle stems to move. The flow orifice closes.

When the system is cold, the Thermovit regulator opens.

Material

Component	EN	ASTM/ASME
Body, cover and sealing plug	1.0460	SA105
Screws	1.7225	SA193 B7
Body gasket	Graphite/CrNi	
Thermovit regulator	Stainless steel	
Other internal parts	Stainless steel	

Pressure and temperature ratings

UBK 46 flange PN40

p Pressure ¹⁾	barg	40.0	37.1	33.3	27.6	25.7	17.1
T Temperature ¹⁾	°C	-10 — 20	100	200	300	350	420
Δ PMX Max. admissible differential pressure	bar	32					

¹⁾ Ratings for strength of body/cover to EN 1092-1

UBK 46 flange CL150

p Pressure ¹⁾	barg	19.6	17.7	13.8	10.2	8.4	5.5
T Temperature ¹⁾	°C	-29 — 38	100	200	300	350	425
Δ PMX Max. admissible differential pressure	bar	19.6					

p Pressure ¹⁾	psig	285	260	200	140	110	80
T Temperature ¹⁾	°F	-20 — 100	200	400	600	700	800
Δ PMX Max. admissible differential pressure	psi	284					

¹⁾ Ratings for strength of body/cover to ASME B16.5

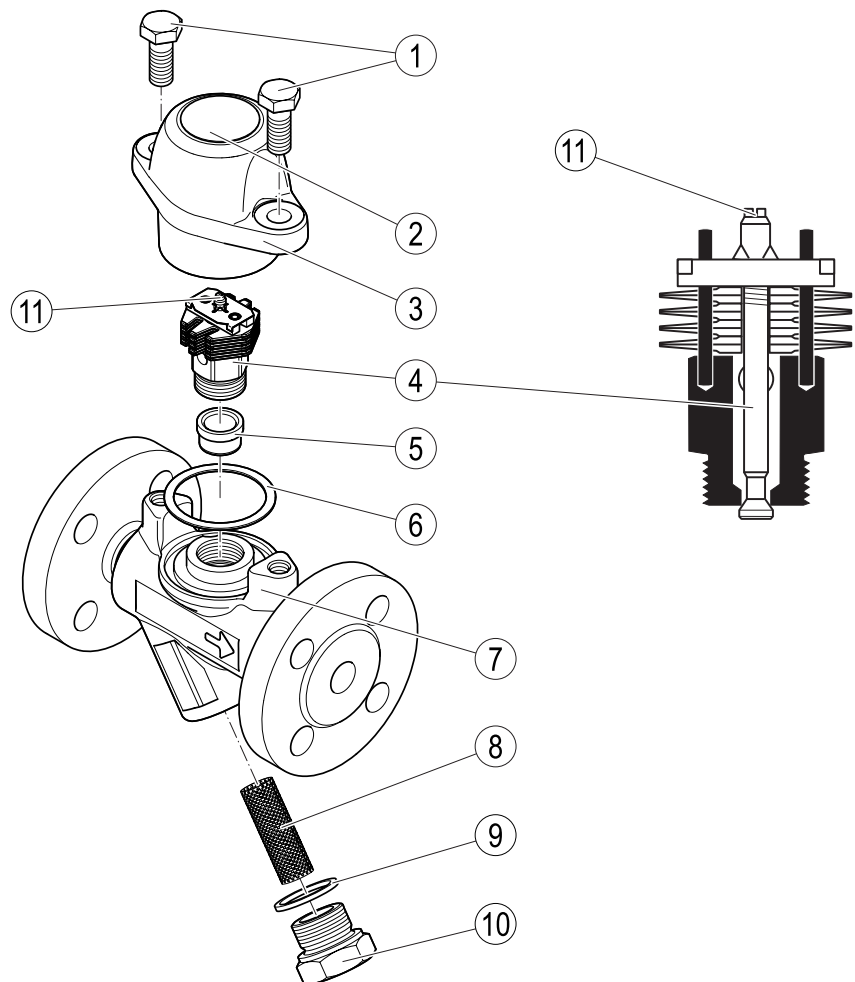
UBK 46 flange CL300, screwed socket G, screwed socket NPT, socket-weld end EN, socket-weld end ASME

p Pressure ¹⁾	barg	51.1	46.6	43.8	39.8	37.6	28.8
T Temperature ¹⁾	°C	-29 — 38	100	200	300	350	425
Δ PMX Max. admissible differential pressure	bar	32					

p Pressure ¹⁾	psig	740	680	635	570	530	410
T Temperature ¹⁾	°F	-20 — 100	200	400	600	700	800
Δ PMX Max. admissible differential pressure	psi	465					

¹⁾ Ratings for strength of body/cover to ASME B16.5

Component parts



No.	Designation
1	Screw (M 10 × 25)
2	Name plate
3	Cover
4	Thermovit regulator
5	Bushing (interference fit)
6	Body gasket (A 40 × 48 × 2)
7	Body
8	Strainer
9	Sealing ring (A 24 × 29)
10	Sealing plug
11	Setting screw

RHOMBUSline
Steam Trap
UBK 46

How to order

GESTRA Steam Trap

Type: UBK 46 (1.0460)

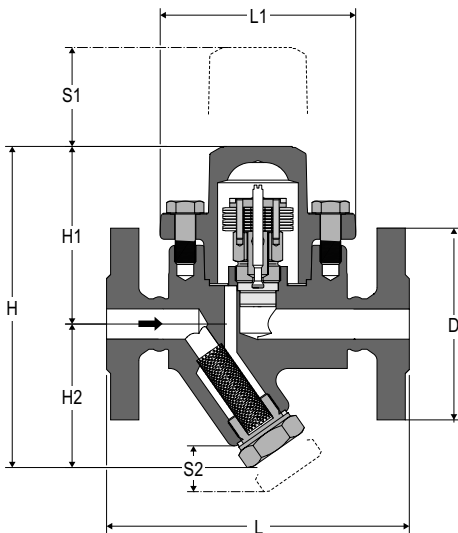
Connection: Flange/socket-weld end/screwed socket

Nominal size: DN 15, 20, 25

NPS ½", ¾", 1"

Pressure rating: PN40/CL150/CL300

Regulator: Standard



Acceptance inspections

An inspection certificate to EN 10204 can be provided as verification of material and construction tests. All inspection requirements must be included in the request for a quote or in the order. Once a product has been delivered, inspection certificates can no longer be issued. The standard test scope and costs of the above-mentioned test certificates can be found in our price list "Test and Inspection Charges for Standard Equipment". If you require a different inspection scope, please request a separate quote.

Directives and standards

You can find details on the conformity of the equipment and the applicable standards and directives in the Declaration of Conformity and associated certificates or approvals.

Please note our general terms of business.

Dimensions and weights

All equipment

	mm	in"
H	158	6.2"
H1	88	3.5"
H2	70	2.8"
L1	96	3.8"
S1 Cover service dimensions	70	2.8"
S2 Sealing plug service dimensions	30	1.2"

UBK 46 flange

Nominal size	PN40			CL150			CL300			
	DN	15	20	25	15	20	25	15	20	25
	NPS	½"	¾"	1"	½"	¾"	1"	½"	¾"	1"
L Length	mm	150		160	150		160	150		160
	in"	5.9"		6.3"	5.9"		6.3"	5.9"		6.3"
D flange Ø	mm	95	105	115	88.9	98.4	107.9	95.2	117.5	123.8
	in"	3.7"	4.1"	4.5"	3.5"	3.9"	4.2"	3.7"	4.6"	4.9"
Weight	kg	3.7	4.3	4.8	3.7	4.3	4.8	3.7	4.3	4.8
	lb	8.2	9.5	10.6	8.2	9.5	10.6	8.2	9.5	10.6

UBK 46 screwed socket G, screwed socket NPT, socket-weld end EN, socket-weld end ASME

Nominal size	DN	15		20		25	
	NPS	½"		¾"		1"	
L Length	mm	95					
	in"	3.7"					
Weight	kg	2.2		2.1		2.0	
	lb	4.9		4.6		4.4	

Flowrates, opening temperatures

The flowrates shown in the table are achieved at the factory settings and with discharge to atmospheric pressure.

Max. service pressure	barg	1	2	4	8	12	16	20	26	32
Opening temperature at factory setting	°C	60	64	72	84	93	102	110	118	128
Capacity with t 10 K at below opening temperature	kg/h	30	60	90	120	130	140	150	160	170
Cold condensate capacity at 20 °C (start-up capacity)	kg/h	250	320	480	760	1020	1280	1500	1780	2040

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