





STEAM TRAPS









SELECTION OF STEAM TRAPS

In order to get maximum efficiency and service life from the steam lines and steam related systems, it is crucial to make the correct steam trap selection. The point of view on the steam traps which defines all the traps in the same conception that is "a trap is a trap" may cause un-anticipated and high operating costs and affect the quality of work relatively.

Understanding the importance of the correct steam trap selection is the key factor of the high efficiency and low operating costs for steam systems.

Mechanical Designs:

Mechanical trap operation relies on the movement of open or closed floating parts to activate the valve.

• Float type steam traps with thermostatic air vent use a sealed spherical float which becomes buoyant when the condensate level in the trap rises and actuates the valve. It is unaffected by instantaneous pressure changing.

These type of steam traps specially used where prompt and continuous discharge of condensate is necessary.

Thermostatic Steam Traps:

Thermostatic traps operate with the temperature changes of the condensate, a falling temperature opens the valve and an increasing temperature closes the valve. Valve movement is adjusted by a thermostatic capsule.

• The increase in volume collected by the vaporization of liquid raises the vapour pressure inside the capsule. At some point internal pressure of the capsule becomes greater than the system pressure and the diaphragm is forced to extend in the direction of the valve and close the valve. As the temperature reduces the vapour pressure in the capsule reduces and make diaphragm to relax and open the valve.

Thermodynamic Steam Traps:

These type of steam traps operate by the internal pressure difference of the steam and the condensate.

• Condensate that reaches to the trap raises the disc and open the orifice and flow continuously by the help of the steam pressure which is behind the condensate through the discharge orifice.

The following table is given to prevent the confusion of the steam trap selection and to help selection of the most appropriate product accordingly.

SYMBOLS FOR PRODUCT FEATURES AND QUICK SELECTION



Float Type Steam Traps



Thermodynamic Steam Traps



Thermostatic Steam Traps



Max. Product Pressure





Flange Connections



Horizontal Installation



Vertical Installation



Installation on Both Direction



Condensate



Threaded Connection



Max.Product Temperature



RANGE OF STEAM TRAPS AND OTHER STEAM PRODUCTS

ation	Type of Steam Trap		December 1	Typical	c:	Max. Operating Rates		
Operation	Type of Ste	eam irap	Product Features	Applications	Size	Pressure	Temperature	
Mechanical Steam Traps	Float Type SK-50/ 51/ 55/ 55L/61/70		High discharge capacity. Air venting Maximum heat transfer thanks to constant discharge. Installation both vertically and horizontally	Heat Exchangers Oil tanks Evaporaters Fuel-oil tanks Drying Cylinders Ovens	DN15-50 1/2"-2"	16/25bar	250°C	
Mechanical	Inverted Bucket BT-16		Assured operation and durability. No air troubles. Easy maintenance. No need for seperate strainer.	Tanks Pans Heat Exchangers Drying Cylinders Ovens	DN15-25 1/2"-1"	16bar	220°C	
Thermodynamic	Thermodynamic TDK-45/71/PS		Installation at super heated steam tempeture. High resistance against water hammer. Easy maintenance. Discharge condensate close to steam saturation temperature.	Main steam lines Turbines Marine Applications Presses	DN15-25 1/2"-1"	40/42bar	400°C	
Thermostatic	Thermostatic TKK-2Y/2N/3/21/41/42 HKK-23		Reducing flash steam losses. Operation under back pressure more than 80% of inlet pressure. High resistance against water hammer. Easy maintenance.	Tracing Lines Irons Heating Equipment Presses	DN15-100 1/2"-4"	21/32bar	200/250°C	
Breakers	Bimetallic TK-1		Reducing flash steam losses. Energy Saving. Good air venting. High resistance against water hammer.	Tracing Lines Turbines Marine applications Presses Ovens	DN15-50 1/2"-2"	32bar	400°C	
Vacuum Breakers	Thermostatic	*	Automatically relieving or breaking unwanted vacuum condition, restoring the	Heat Exchangers Heating Coils Calorifiers	DN15	16 bar (Brass)	260°C (Brass)	
	VK-70/71		athmospheric pressure. Brass or stainless steel body.	Jacketed kettles Steam boilers	1/2"	25 bar (S.Steel)	400°C (S.Steel)	
Air Eliminators	Thermostatic TKK-11/61		Modulating discharge Discharge condensate close to steam temperature	Process equipment Kettle cookers Sterilizers Food,chemical and laundry equipment	DN6-15 1/4"-1/2"	10bar	150°C	







RANGE OF STEAM TRAPS AND OTHER STEAM PRODUCTS

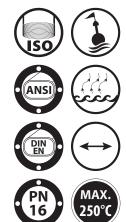
Air Eliminators	Float Type HA-50/51/52/62	Removing air from HVAC systems and is also suitable for non corrosive and/or dangerous liquids. Corrosion-resistant working units.	Cold and hot water systems Air elimination and separation systems.	DN25-50 1"-2"	16bar	200/250°C
Liquid Drainers	Float Type SA-50/51	Modulating discharge. Unaffected by sudden or wide load any pressure changes	Aftercoolers Separators Compressed air and gas mains	DN15-50 1/2"-2"	16bar	250°C
Pipeline Connectors	Float Type (BK-33SK) Thermodynamic (BK-33TD) Thermostatic (BK-33TK) Bimetallic (BK-33SK)	Remainin-line permanently making replacing of new traps easier and quicker.	Saturated and superheated steam lines	DN15-32 1/2"-3/4"	SK-32bar TD-42bar TK-21bar BM-32bar	SK-286°C TD-315°C TK-240°C BM-315°C
	Condensate Connection Manifold KT-13	Steam distribution and generation	Saturated and superheated steam lines	DN15-25 1/2"-1"	41,5bar	425°C
	Steam Seperator SPR-16/25/40	Removing moisture from steam and compressed air pipelines.	Saturated and su- perheated steam lines	DN15-150	16/25/40 bar	200°C
Special Equipment	Steam Trap Test Valve KTV-10	Testing steam traps units to maintain efficient operation.	Saturated and superheated steam lines	1/2"-2"	40bar	210°C
	Pressure Reducing Valve BDV-25	Compact design Highly durable, special designed bellow. Built-in strainer.	Reducing the steam pressure at the point of use on laundry machines, dyeing, food in- dustries, sterilizers	1/2"-1"	25bar	210°C
	Pneumatic Control Valve PKV-50	Small, compact design Actuator and valve body in stainless steel. Normally closed or open actuators. Available with flow direction below seat.	Pressurized air, steam lines	DN15-50 1/2"-2"	16bar	180°C



SK-50 WITH AIR VENT (1")







DESIGN

Product Features

Body Cover Internals and float Connection Types Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and threaded

Operating Conditions

Max. Operating Pressure (PMO)

Max. Permissible Pressure (Body)

Max. Operating Temperature (TMO)

Max. Differential Pressure (ΔP)

4,5-10-14 bar

Operation

SK-50 Float Steam Trap is used for discharging the condensate by a mechanical float system. When the system starts up, thermostatic air vent is activated and discharges the air in the system. After this process, incoming steam will close the air vent. However when condensate reaches the steam trap, the float rises and open the main valve and discharges the condensate. As soon as the condensate discharge is completed and the steam reached into the trap, the float goes down and closes the valve.

Installation

SK-50 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

Condensate Discharge Chart

Red Chart

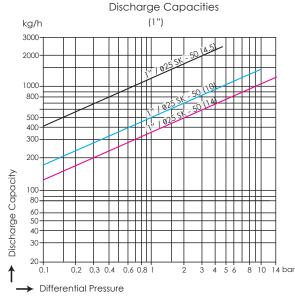
For 14 bar diff. pressure

Blue Chart

For 10 bar diff. pressure

Black Chart

For 4,5 bar diff. pressure



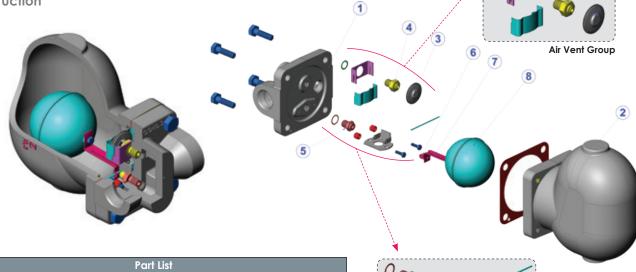
 ΔP = Inlet Pressure - Outlet Pressure







SK-50 WITH AIR VENT (1") Air Vent Group Construction 1



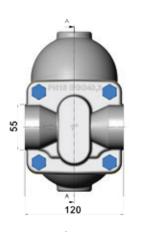
	Part List											
No	Part Name	Material										
1	Cover	Ductile Iron GGG 40.3										
2	Body	Ductile Iron GGG 40.3										
3	Thermostatic Capsule	Stainless Steel										
4	Air Vent Seat	Stainless Steel AISI 304										
5	Float Seat	Stainless Steel AISI 304										
6	Main Valve (Ball)	Stainless Steel AISI 440 C										
7	Float Lever	Stainless Steel AISI 304										
8	Float	Stainless Steel AISI 304										

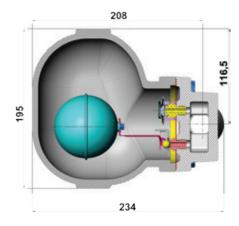


Dimensions

SK-50 1" Threaded

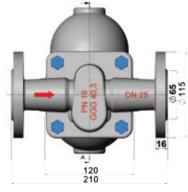
Size	Code
DN 25	703200202007

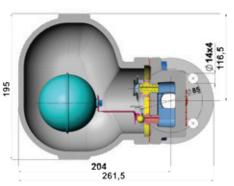




SK-50 DN25 Flanged

Size	Code
1"	703200201007







SK-50 WITH AIR VENT (1 1/4"-2")







DESIGN

Product Features

Body Cover Internals and float Connection Types Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and threaded

Operating Conditions

Max. Operating Pressure (PMO)

Max. Permissible Pressure (Body)

Max. Operating Temperature (TMO)

Max. Differential Pressure (ΔP)

4,5-10-14 bar

Operation

SK-50 Float Steam Trap is used for discharging the condensate by a mechanical float system. When the system starts up, thermostatic air vent is activated and discharges the air in the system. After this process, incoming steam will close the air vent. However when condensate reaches the steam trap, the float rises and open the main valve and discharges the condensate. As soon as the condensate discharge is completed and the steam reached into the trap, the float goes down and closes the valve.

Installation

SK-50 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

Condensate Discharge Chart

Red Chart

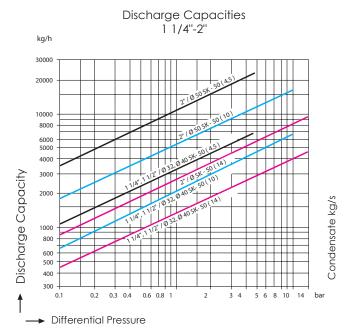
For 14 bar diff. pressure

Blue Chart

For 10 bar diff. pressure

Black Chart

For 4,5 bar diff. pressure



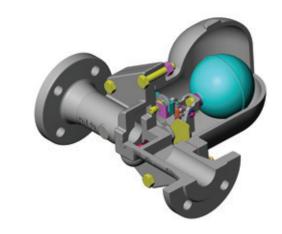




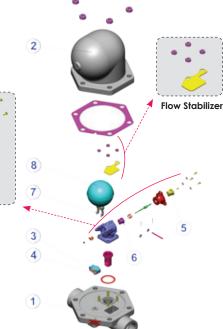


SK-50 WITH AIR VENT (1 1/4" - 2")

Construction

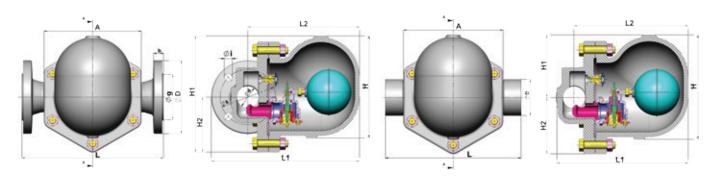






	Part List											
No	Part Name	Material										
1	Cover	Ductile Iron GGG 40.3										
2	Body	Ductile Iron GGG 40.3										
3	Thermostatic Capsule	Stainless Steel										
4	Capsule Seat	Stainless Steel AISI 304										
5	Float Seat	Stainless Steel AISI 304										
6	Main Valve (Ball)	Stainless Steel AISI 440 C										
7	Float Lever	Stainless Steel AISI 304										
8	Float	Stainless Steel AISI 304										

Dimensions

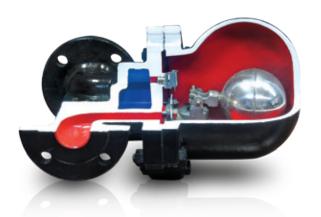


	DIMENSIONS												
							Flan	iged					
Size	Code	ØD (mm)	Øk (mm)	Øg (mm)	b (mm)	Øixn (mm)	A (mm)	H1 (mm)	H2 (mm)	H (mm)	L1 (mm)	L2 (mm)	L (mm)
DN 32	703200202010	140	100	78	20	18x4	190	237.5	107.5	207	277	245	320
DN 40	703200202013	150	110	88	20	18x4	190	237.5	107.5	207	277	245	320
DN 50	703200202016	160	125	102	22	18x4	220	262	124	230	290	252	320
	DIMENSIONS												
		Threaded											

Size	Code		Threaded											
SIZE	Code	ØD (mm)	A (mm)	H1 mm)	H2 (mm)	H (mm)	L1 (mm)	L2 (mm)	L (mm)					
1 1/4"	703200201010	70	190	207	237.5	207	107.5	277	270					
1 1/2"	703200201013	70	190	207	237.5	207	107.5	277	270					
2"	703200201016	80	220	230	230	220	124	290	300					



SK-80 WITH AIR VENT



















DESIGN

Product Features

Body Cover Internals and float Connection Types Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged **Operating Conditions**

Max. Operating Pressure (PMO)
Max. Operating Temperature (TMO)
Max. Differential Pressure (ΔP)

16 bar 250°C

4,5-10-14 bar

Condensate Discharge Chart

Red Chart

For 14 bar diff. pressure **Blue Chart**

For 10 bar diff. pressure

Black Chart

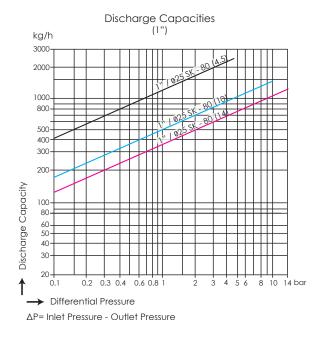
For 4,5 bar diff. pressure

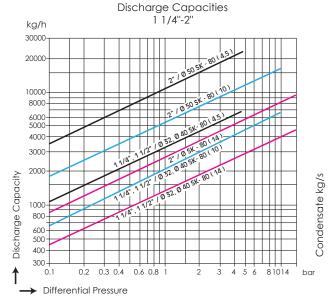
Operation

SK 80 Float Steam Trap is used for discharging the condensate by a mechanical float system. When the system starts up, thermostatic air vent is activated and discharges the air in the system. After this process, incoming steam will close the air vent. However when condensate reaches the steam trap, the float rises and open the main valve and discharges the condensate. As soon as the condensate discharge is completed and the steam reached into the trap, the float goes down and closes the valve.

Installation

SK80 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed.



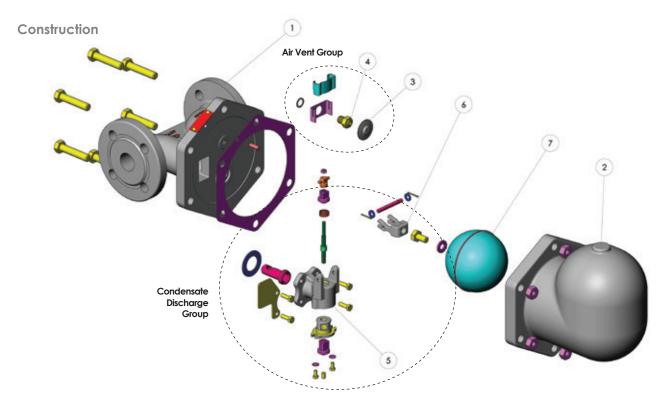




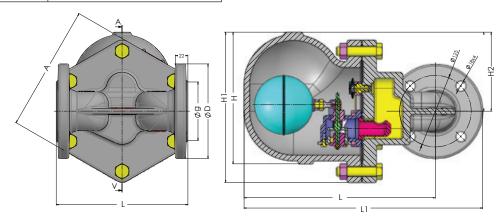




SK-80 WITH AIR VENT



	Part L	ist					
No	Part Name	Material					
1	Body	GGG 40.3 or GSC 25					
2	Cover	GGG 40.3 or GSC 25					
3	Thermostatic Capsule	Stainless Steel					
4	Air Vent Seat	Stainless Steel AISI 304					
5	Valve Assembly	Stainless Steel					
6	Float Lever	Stainless Steel AISI 304					
7	Float	Stainless Steel AISI 304					

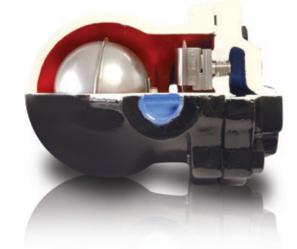


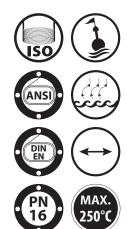
Dimensions

	SK-80 DIMENSIONS											
Size	Codo	FLANGED										
SIZE	Code	A (mm)	H1 (mm)	H2 (mm)	H (mm)	L1 (mm)	L2 (mm)	L (mm)				
DN 25	703200203008	116	-	116,5	195	303,5	246	116				
DN 32	703200203011	190	237.5	107.5	207	385	315	230				
DN 40	703200203014	190	237.5	107.5	207	390	315	230				
DN 50	703200203017	220	262	124	230	417	335	230				



SK-51 WITH AIR VENT











Product Features

Body Cover Internals and float Connection Types Ductile Iron GGG 40.3 Cast Steel GSC 25 Stainless Steel AISI 304 Flanged and threaded

Operating Conditions

Max. Operating Pressure (PMO)
Max. Permissible Pressure (Body)
Max. Operating Temperature (TMO)
Max. Differential Pressure (ΔP)

16 bar 25 bar 250°C 4,5-10-14 bar

Operation

SK-51 Float Steam Trap is used for discharging the condensate by a mechanical float system. When the system starts up, thermostatic air vent is activated and discharges the air in the system. After this process, incoming steam will close the air vent. However when condensate reaches the steam trap, the float rises and open the main valve and discharges the condensate. As soon as the condensate discharge is completed and the steam reached into the trap, the float goes down and closes the valve.

Installation

SK-51 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

Condensate Discharge Chart

Red Chart

For 14 bar diff. pressure

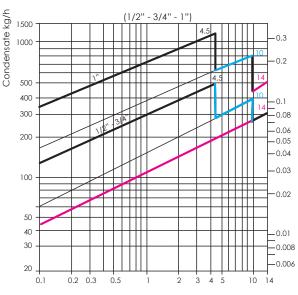
Blue Chart

For 10 bar diff. pressure

Black Chart

For 4,5 bar diff. pressure

Discharge Capacities



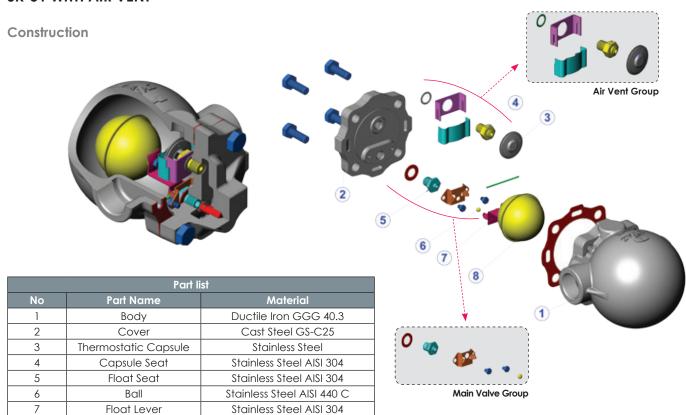
Differential Pressure bar (x 100 = kPa)





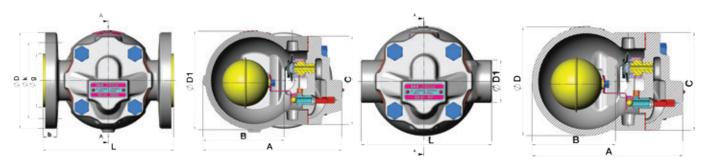


SK-51 WITH AIR VENT



Dimensions

8



Stainless Steel AISI 304

	Dimensions																		
						Flanç	ged										Threaded		
Size	Code	ØD	Øk	Øg	b	Hole	Α	В	C	ØD1	L	Size	Code	Α	В	С	ØD	ØD1	L
		(mm)	(mm)	(mm)	(mm)	Size	(mm)	(mm)	(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
DN 15	703200102001	95	65	46	14	Ø14x4	152.5	81.5	106	95	150	1/2"	703200101001	150	81.5	108	98	40	122
DN 20	703200102004	105	75	56	16	Ø14x4	152.5	81.5	106	98	150	3/4"	703200101004	150	81.5	108	98	40	122
DN 25	703200102011	117	85	65	17	Ø14x4	170	99.5	108	120	160	1"	703200101007	167	92.5	108	120	47	145

All the dimensions in the table are given in "mm".

Float

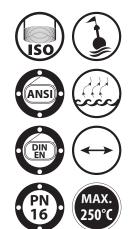
Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



SK-55L WITH SIGHT GLASS

Scan this QR Code





DESIGN

Product Features

Body Cover Internals and float Connection Types Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and threaded

Operating Conditions

kg/h

10000-

8000-6000-5000-

4000-

3000

2000

1000

Max. Operating Pressure (PMO)

Max. Permissible Pressure (Body)

Max. Operating Temperature (TMO)

Max. Differential Pressure (ΔP)

4,5-10

16 bar 25 bar 250°C 4,5-10-14 bar

Operation

SK-55L Float Steam Trap is used for discharging the condensate by a mechanical float system. When the system starts up, thermostatic air vent is activated and dischar-ges the air in the system. After this process, incoming steam will close the air vent. However when condensate reaches the steam trap, the float rises and open the main valve and discharges the condensate. As soon as the condensate discharge is completed and the steam reached into the trap, the float goes down and closes the valve. Condensate level in SK-55L can be seen through the sight glass.

Installation

SK-55L can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left. Will be assumed as right to the left.

Condensate Discharge Chart

Red Chart

For 14 bar diff, pressure

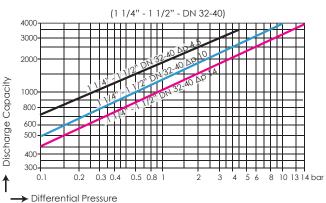
Blue Chart

For 10 bar diff. pressure

Black Chart

For 4,5 bar diff. pressure

Discharge Capacities (2"-DN 50)



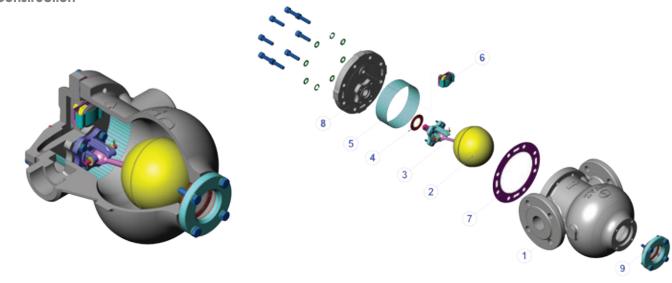






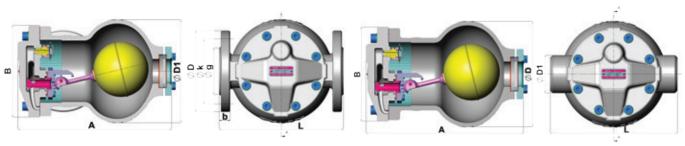
SK-55L WITH SIGHT GLASS

Construction



	Part list										
No	Part Name	Material									
1	Body	Ductile Iron GGG 40.3									
2	Float	Stainless Steel AISI 304									
3	Float Sphere+Lever	Stainless Steel AISI 316									
4	Guide Gasket	Stainless Steel AISI 304									
5	Strainer Screen	Stainless Steel AISI 304									
6	Thermostatic Unit	Stainless Steel AISI 304									
7	Cover Gasket	Pure Graphite									
8	Cover	Ductile Iron GGG 40.3									
9	Sight Glass Unit	Tempered Glass									

Dimensions



								Dimens	sions								
		Flanged										Threaded					
Size	Code	D	Øk	Øg	b	Hole		В	ØD1	L	Size	Code	A	В	ØD	ØD1	L
		(mm)	(mm)	(mm)	(mm)	Size	(mm)	(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)
DN 32	703200202031	140	100	78	20	Ø18x4	284.5	170	190	230	1 1/4"	703200201081	284.5	170	190	68	230
DN 40	703200202034	150	110	86	20	Ø18x4	284.5	170	190	230	1 1/2"	703200201084	284.5	170	190	68	230
DN 50	703200202037	165	125	102	20	Ø18x4	296.5	176	230	230	2"	703200201087	284.5	170	230	80	230

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



SK-61 WITH AIR VENT

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DESIGN

Product Features

Body Cover Internals and float **Connection Types** Stainless Steel AISI 304 Stainless Steel AISI 304 Stainless Steel AISI 304 Flanged and threaded

Operating Conditions

Max. Operating Pressure (PMO) Max. Permissible Pressure (Body) Max. Operating Temperature (TMO) Max. Differential Pressure (ΔP)

16 bar 25 bar 250°C 4,5-10-14 bar

Operation

SK-61 Float Steam Trap is used for discharging the condensate by a mechanical float system. When the system starts up, thermostatic air vent is activated and discharges the air in the system. After this process, incoming steam will close the air vent. However when condensate reaches the steam trap, the float rises and open the main valve and discharges the condensate. As soon as the condensate discharge is completed and the steam reached into the trap, the float goes down and closes the valve.

Installation

SK-61 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

Condensate Discharge Chart

Red Chart

For 14 bar diff. pressure

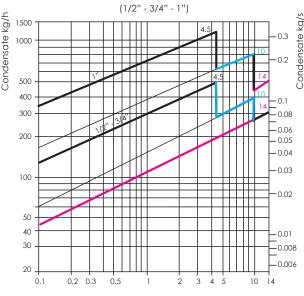
Blue Chart

For 10 bar diff. pressure

Black Chart

For 4,5 bar diff. pressure

Discharge Capacities



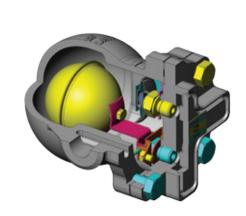


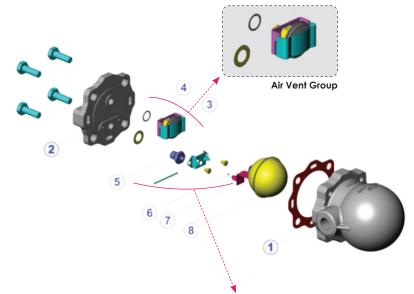




SK-61 WITH AIR VENT

Construction

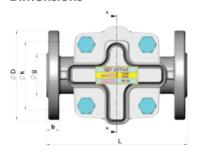


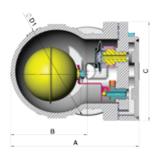


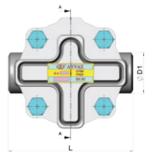
	Part list	
No	Part Name	Material
1	Body	Stainless Steel AISI 304
2	Cover	Stainless Steel AISI 304
3	Thermostatic Capsule	Stainless Steel AISI 304
4	Capsule Seat	Stainless Steel AISI 304
5	Float Seat	Stainless Steel AISI 304
6	Ball	Stainless Steel AISI 440 C
7	Float Lever	Stainless Steel AISI 304
8	Float	Stainless Steel AISI 304

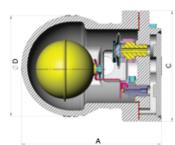


Dimensions









									Dimen	sions									
		Flanged										Threaded							
Size	Code	D	Øk	Øg	b	Hole	Α	В	ØD	ØD1	L	Size	Code	Α	В	С	ØD	ØD1	L
		(mm)	(mm)	(mm)	(mm)	Size	(mm)	(mm)	(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
DN 15	703200105120	95	65	46	14	Ø14x4	136.5	81.5	105	98	150	1/2"	703200105111	136.5	81.5	108	98	40	122
DN 20	703200105123	105	75	56	16	Ø14x4	136.5	81.5	105	98	150	3/4"	703200105114	136.5	81.5	108	98	40	122
DN 25	703200105126	117	85	65	17	Ø14x4	148.5	99.5	108	120	160	1"	703200105117	148.5	92.5	108	120	47	145



SK-70 WITH AIR VENT









DESIGN

Product Features

Body Cover Internals and float Connection Types Cast Steel GS-C25 Cast Steel GS-C25 Stainless Steel AISI 304 Flanged and threaded

Operating Conditions

Operating Pressure Operating Temperature

Max. Operating Temperature (TMO) Max. Permissible Pressure (Body)

Max. Differential Pressure (ΔP)

16 bar 100°C

12,5 bar 250°C

-10/+250 °C 25 bar 4.5-10-14 bar

Operation

SK-61 Float Steam Trap is used for discharging the condensate by a mechanical float system. When the system starts up, thermostatic air vent is activated and discharges the air in the system. After this process, incoming steam will close the air vent. However when condensate reaches the steam trap, the float rises and open the main valve and discharges the condensate. As soon as the condensate discharge is completed and the steam reached into the trap, the float goes down and closes the valve.

Installation

SK-61 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

Condensate Discharge Chart

Red Chart

For 14 bar diff. pressure

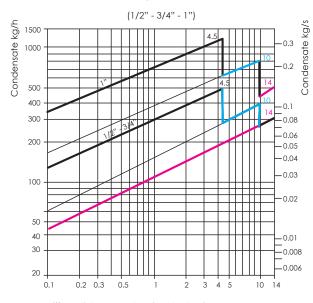
Blue Chart

For 10 bar diff. pressure

Black Chart

For 4,5 bar diff. pressure

Discharge Capacities



Differential Pressure bar (x 100 = kPa)

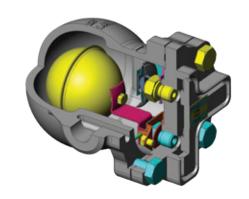


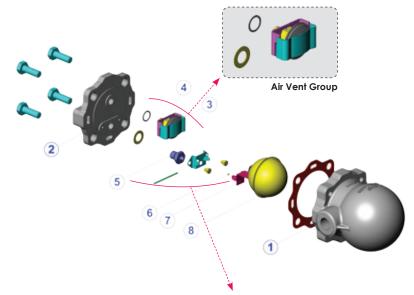




SK-70 WITH AIR VENT

Construction

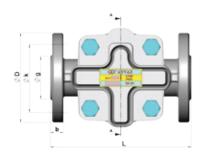


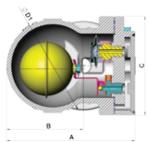


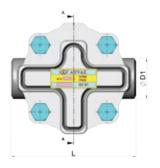
	Part list	
No	Part Name	Material
1	Body	Cast Steel GS-C25
2	Cover	Cast Steel GS-C25
3	Thermostatic Capsule	Stainless Steel AISI 304
4	Thermostatic Seat	Stainless Steel AISI 304
5	Float Seat	Stainless Steel AISI 304
6	Ball	Stainless Steel AISI 440 C
7	Float Lever	Stainless Steel AISI 304
8	Float	Stainless Steel AISI 304

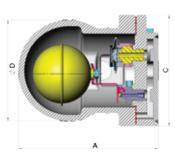


Dimensions









									Dim	ensions									
		Flanged											Threaded						
Size	Code	D	Øk	Øg	b	Hole	Α	В	ØD	ØD1	L	Size	Code	Α	В	С	ØD	ØD1	L
		(mm)	(mm)	(mm)	(mm)	Size	(mm)	(mm)	(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
DN 15	703200105120	95	65	46	14	Ø14x4	136.5	81.5	105	98	150	1/2"	703200105111	136.5	81.5	108	98	40	122
DN 20	703200105123	105	75	56	16	Ø14x4	136.5	81.5	105	98	150	3/4"	703200105114	136.5	81.5	108	98	40	122
DN 25	703200105126	117	85	65	17	Ø14x4	148.5	99.5	108	120	160	1"	703200105117	148.5	92.5	108	120	47	145



BT-16 INVERTED BUCKET STEAM TRAP

























DESIGN

Product Features

Body Cover Internals and float **Connection Types** Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Threaded

Operating Conditions

Max. Operating Pressure (PMO) Max. Operating Temperature (TMO) Max. Differential Pressure (ΔP)

16 bar 220°C 5,4-8,5-15,5bar

Operation

BT-16 Inverted Bucket Steam Trap is used for discharging the condensate by a mechanical bucket system. Steam and condensate enter the trap through an inlet tube. Condensate flows down and around the bottom of the bucket, rising in the body of the trap until it completely encloses the bucket. Steam collects under the bucket, displacing the condensate. The trap's valve is pushed toward the seat by the rising bucket until the pressure differential across the seat snaps the valve closed. Any air under the bucket flows through the vent and the steam and air collect in a chamber at the top of the bucket. Steam trapped in the steam space of the heat exchanger gives up its heat, condenses, and is drained to the trap. As the steam under the bucket is replaced by the condensate from the heat exchanger, the bucket loses its buoyancy and sinks, pulling the valve from the seat.

Installation

SK-61 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

Condensate Discharge Chart

Red Chart

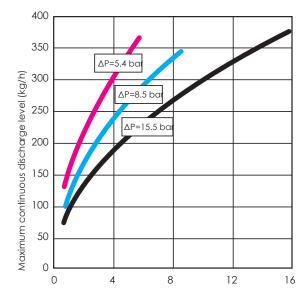
For 14 bar diff. pressure

Blue Chart

For 10 bar diff. pressure

Black Chart

For 4,5 bar diff. pressure



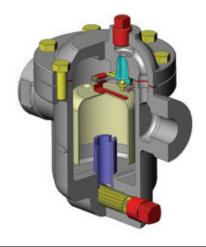




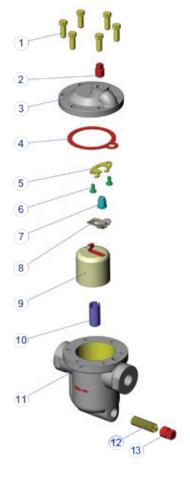


BT-16 INVERTED BUCKET STEAM TRAP

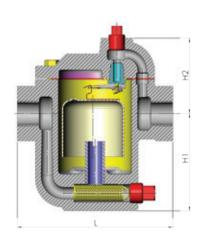
Construction



	Part	list
No	Part Name	Material
1	Cover Nut	Stainless Steel AISI 304
2	Plug	Ductile Iron GG 25
3	Cover	Ductile Iron GG 25
4	Gasket	Klingerit Without Asbestos
5	Guide	Stainless Steel AISI 304
6	Nut	Stainless Steel AISI 304
7	Bucket Seat	Stainless Steel AISI 304
8	Ball Guide	Stainless Steel AISI 304
9	Bucket	Stainless Steel AISI 304
10	Adjustment Nut	Stainless Steel AISI 304
11	Body	Ductile Iron GG 25
12	Strainer	Stainless Steel AISI 304
13	Strainer Plug	Stainless Steel AISI 304



Dimensions





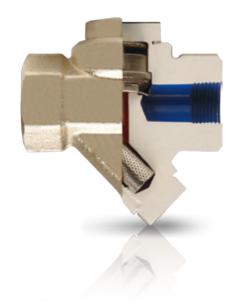
Dimensions											
Size	Code	Threaded									
Size	Code	H1 (mm)	H2 (mm)	L (mm)							
1/2"	708205502000	78	65	127							
3/4"	708205502005	78	65	127							
1"	708205502010	100	65	127							

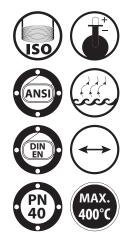


TDK-45

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DESIGN

Product Features
Body

Cover Internals and float Connection Types Forged Steel C22.8 St 37, Structural Steel Stainless Steel AISI 304/420 Flanged, threaded, socket

Operating Conditions

Max. Operating Pressure (PMO)
Max. Operating Temperature (TMO)
Max. Differential Pressure (ΔP)

40 bar 400°C 32 bar

Operation

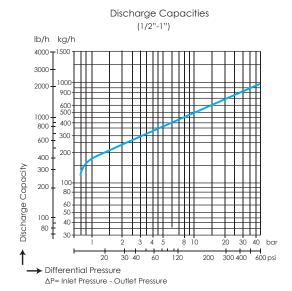
At start-up, the disc is pushed off its seat by any air or condensate entering the trap. When the steam enters the trap, it passes through the reduced area at the face of the disc, increasing in velocity and, therefore, decreasing in pressure. Some of the steam is discharged directly into the outlet stream, but a portion of it passes to a control chamber above the disc. The disc snaps shut because the pressure in the control chamber above acts on the whole disc, while the inlet pressure of the high-velocity steam acts only on a small area of the disc. A small bleed groove across the disc allows the steam and air to bleed out of the control chamber over time. When the force above the disc is overcome by the force of incoming steam, condensate or air on the face of the disc, thet rap opens, discharging condensate that has accumulated during the cycle.

Installation

TDK-45 can be installed horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

Condensate Discharge Chart

Discharge Capacity of TDK-45 Thermostatic Steam Trap from 1/2" to 1".



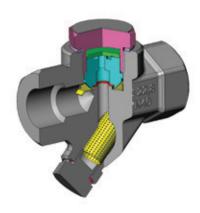






TDK-45

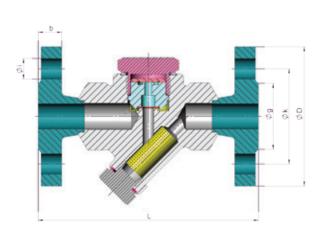
Construction

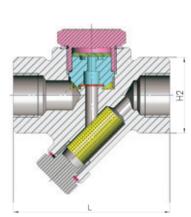


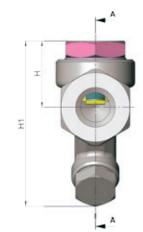
	Part list	
No	Part Name	Material
1	Cover	Cadmium Coated St.37
2	Cover Gasket	Stainless Steel AISI 304
3	Disc	Stainless Steel AISI 420
4	Seat	Stainless Steel AISI 420
5	Seat Gasket	Stainless Steel AISI 304
6	Body	Forged Steel
7	Strainer Screen	Stainless Steel AISI 304
8	Discharge Bolt	Stainless Steel AISI 304

1 (2) 3 (4) (5). 6

Dimensions







	Dimensions												
		Flanged								Threaded			
Size	Code	ØD	Øk	Øg	Øixn	b	L	Size	Code	Н	H1	H2	L1
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)			(mm)	(mm)	(mm)	(mm)
DN 15	703300102000	95	65	45	Ø14x4	16	150	1/2"	703300101000	40	100	42	95
DN 20	703300102001	105	75	58	Ø14x4	18	150	3/4"	703300101001	40	100	42	95
DN 25	703300102002	115	85	68	Ø14x4	18	160	1"	703300101002	40	100	42	95



TDK-PS

Scan this QR Code











DESIGN

Product Features

Body

Cover Internals and float **Connection Types**

ASTM A743 CA40F Corrosion Resistant Alloy Stainless Steel AISI 304 Stainless Steel AISI 304 Threaded and Socket

Operating Conditions

Max. Operating Pressure (PMO) 42 bar Max. Operating Temperature (TMO) 400°C

Operation

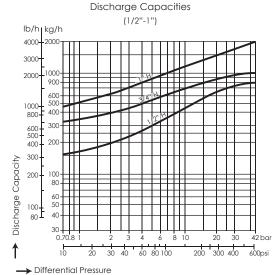
At start-up, the disc is pushed off its seat by any air or condensate entering the trap. When the steam enters the trap, it passes through the reduced area at the face of the disc, increasing in velocity and, therefore, decreasing in pressure. Some of the steam is discharged directly into the outlet stream, but a portion of it passes to a control chamber above the disc. The disc snaps shut because the pressure in the control chamber above acts on the whole disc, while the inlet pressure of the high-velocity steam acts only on a small area of the disc. A small bleed groove across the disc allows the steam and air to bleed out of the control chamber over time. When the force above the disc is overcome by the force of incoming steam, condensate or air on the face of the disc, the trap opens, discharging condensate that has accumulated during the cycle.

Installation

TDK-PS can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be con-sidered closely in order to maintain health and safety.

Condensate Discharge Chart

Discharge Capacity of TDK-PS Thermostatic Steam Trap from 1/2" to 1".









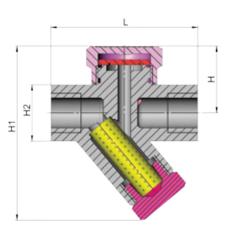
TDK-PS

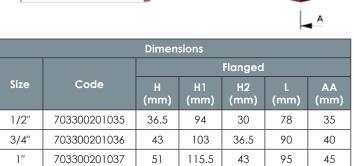
Construction



	Part list	
No	Part Name	Material
1	Cover	Stainless Steel AISI 304
2	Disc	Stainless Steel AISI 420
3	Body	ASTM A743 CA40F Corrosion Resistant Alloy
4	Strainer Screen	Stainless Steel AISI 304
5	Discharge Bolt	Stainless Steel AISI 304

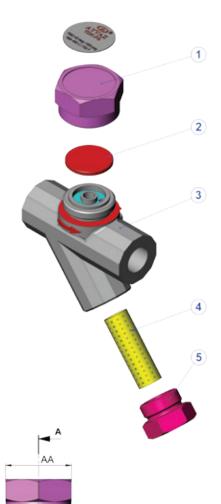
Dimensions





All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.





TDK-71

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DESIGN

Product Features

Body

Cover Internals and float **Connection Types**

ASTM A743 CA40F Corrosion Resistant Alloy Stainless Steel AISI 304 Stainless Steel AISI 304 Threaded

Operating Conditions

Max. Operating Pressure (PMO) 42 bar Max. Operating Temperature (TMO) 400°C

Operation

At start-up, the disc is pushed off its seat by any air or condensate entering the trap. When the steam enters the trap, it passes through the reduced area at the face of the disc, increasing in velocity and, therefore, decreasing in pressure. Some of the steam is discharged directly into the outlet stream, but a portion of it passes to a control chamber above the disc. The disc snaps shut because the pressure in the control chamber above acts on the whole disc, while the inlet pressure of the high-velocity steam acts only on a small area of the disc.

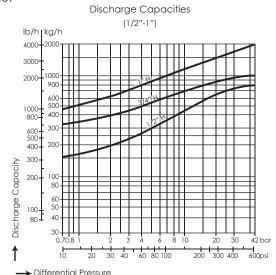
A small bleed groove across the disc allows the steam and air to bleed out of the control chamber over time. When the force above the disc is overcome by the force of incoming steam, condensate or air on the face of the disc, the trap opens, discharging condensate that has accumulated during the cycle.

Installation

TDK-71 can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

Condensate Discharge Chart

Discharge Capacity of TDK-PS Thermostatic Steam Trap from 1/2" to 1".







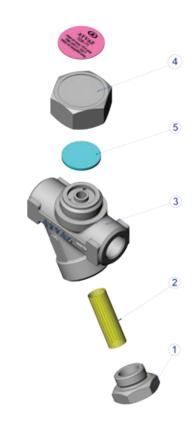


TDK-71

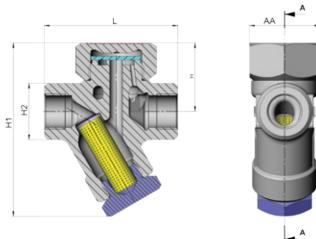
Construction



	Part list	
No	Part Name	Material
1	Discharge Bolt	Stainless Steel AISI 304
2	Strainer Screen	Stainless Steel AISI 304
3	Body	ASTM A743 CA40F Corrosion resistant alloy
4	Cover	Stainless Steel AISI 304
5	Disc	Stainless Steel AISI 420



Dimensions



	Dimensions											
		Threaded										
Size	Code	H H1 H2 L (mm) (mm) (mm)										
1/2"	708210111020	41	95	33	78	41						
3/4"	708210111030	43	110	39	90	41						
1"	708210111040	52	124	45	95	55						



TK-1 BI-METALLIC STEAM TRAP

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DESIGN

Product Features

Body

Cover Internals and float Connection Types ASTM A743 CA40F Corrosion Resistant Alloy Stainless Steel AISI 304 Stainless Steel AISI 304 Threaded **Operating Conditions**

Max. Operating Pressure (PMO) 42 bar Max. Operating Temperature (TMO) 400°C

Operation

In bimetallic traps the valve is operated by metal strips made of alloys with different coefficients of expansion that are bonded together. At start-up, the trap is cold and the bimetallic element is relaxed. The valve is wide open. When steam enters the trap, it surrounds and heats the strips, which begin to expand at different rates. The element pulls directly on the valve stem, closing the valve against the pressure differential. As heat radiates from the trap, the strips begin to cool. When the element has cooled sufficiently, it relaxes and opens the valve.

Installation

TK-1 can be installed both vertically and horizontallywith the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

Condensate Discharge Chart

Red Charl

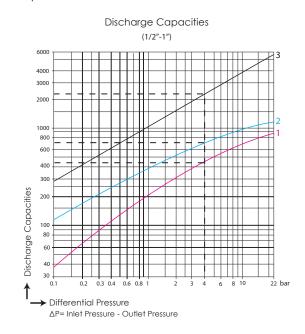
 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at the temperature which is max 20°C lower than steam saturation temperature.

Black Chart

 Δp = Cold Condansate Discharge at the temperature which is max 30°C lower than steam saturation temperature.



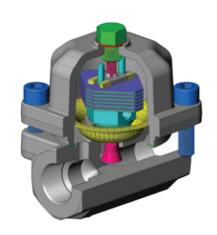




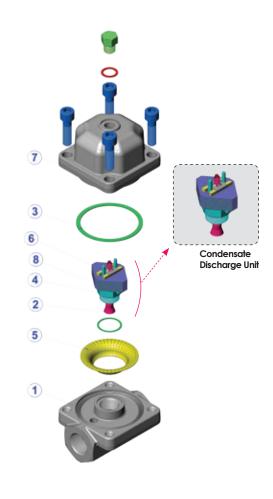


TK-1 BI-METALLIC STEAM TRAP

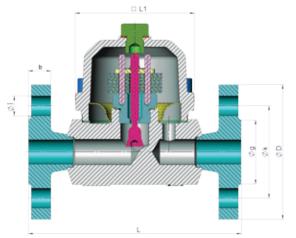
Construction

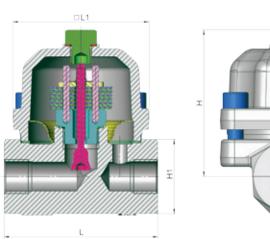


	Part list										
No	Part Name	Material									
1	Body	Forged Steel									
2	Valve	Stainless Steel AISI 304									
3	Cover Gasket	Klingerite									
4	Seat	Stainless Steel AISI 304									
5	Strainer Screen	Stainless Steel AISI 304									
6	Bi-Metalic Plate Stem	Stainless Steel									
7	Cover	Forged Steel									
8	Bi-Metalic Plates	Stainless Steel AISI 304									



Dimensions





	•		L				-		L	-			•	
					Flanged							Three	aded	
Size	Code	ØD (mm)	Øk (mm)	Øg (mm)	Øixn (mm)	b (mm)	L (mm)	L1 (mm)	Size	Code	H (mm)	H1 (mm)	L (mm)	L1 (mm)
DN15	703400102000	95	65	45	14x4	16	150	84	1/2"	703400101000	90.5	46	95	84
DN20	703400102001	105	75	58	14x4	18	150	84	3/4"	703400101001	90.5	46	95	84
DN25	703400102002	115	85	68	14x4	18	160	84	1"	703400101002	90.5	46	95	84
DN32	703400102003	140	100	78	18x4	18	175	84	1 1/4"	703400101003	90.5	46	175	84
DN40	703400102004	150	110	88	18x4	18	185	84	1 1/2"	703400101004	90.5	46	185	84
DN50	703400102005	165	125	102	18x4	20	195	84	2"	703400101005	90.5	46	195	84

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



TKK-2Y

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DESIGN

Product Features

Body and Cover Strainer, Seat Thermosatic Capsule Check Valve Connection Types Forged Steel Stainless Steel AISI 304 Stainless Steel AISI 304 Stainless Steel AISI 304 Flanged, Threaded, Socket

Operating Conditions

Max. Operating Pressure (PMO) 32 bar Max. Operating Temperature (TMO) 250°C Max. Differential Pressure (ΔP) 22 bar

Operation

Thermostatic steam traps operate according to the thermostatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the condensate. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

TKK-2Y can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

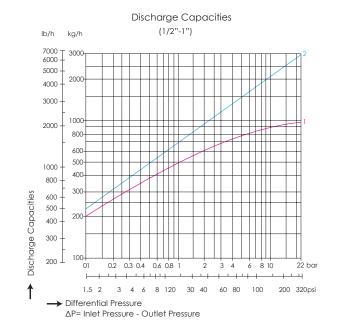
Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.



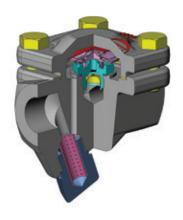






TKK-2Y

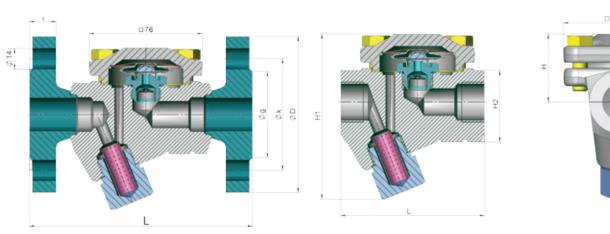
Construction



	Part list											
No	Part Name	Material										
1	Body	Forged Steel										
2	Cover	Forged Steel										
3	Discharge Bolt	Stainless Steel AISI 304										
4	Thermostatic Capsule	Hastelloy										
5	Seat	Stainless Steel AISI 304										
6	Non-Return Valve	Stainless Steel AISI 304										
7	Strainer Screen	Stainless Steel AISI 304										



Dimensions



				Flan	iged						Three	aded	
Size	Code	ØD (mm)	Øk (mm)	Øg (mm)	Øixn (mm)	b (mm)	L (mm)	Size	Code	H (mm)	H1 (mm)	H2 (mm)	L (mm)
DN 15	703100102000	95	65	45	Ø14x4	16	150	1/2"	703100101000	45	97	40	95
DN 20	703100102001	105	75	58	Ø14x4	18	150	3/4"	703100101001	45	97	40	95
DN 25	703100102002	115	85	68	Ø14x4	18	160	1"	703100101002	45	97	40	95



TKK-2N

Scan this QR Code







DESIGN

Product Features

Body and Cover Strainer, Seat Thermosatic Capsule Check Valve Connection Types Forged Steel Stainless Steel AISI 304 Hastelloy Stainless Steel AISI 304 Flanged, Threaded, Socket

Operating Conditions

Max. Operating Pressure (PMO) 32 bar Max. Operating Temperature (TMO) 250°C Max. Differential Pressure (ΔP) 12 bar

Operation

Thermostatic steam traps operate according to the thermostatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the condensate. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

TKK-2N can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

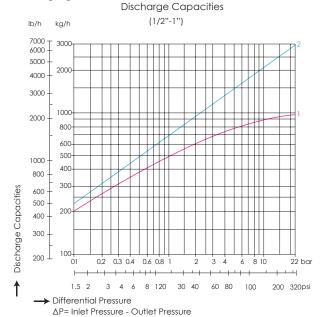
Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.



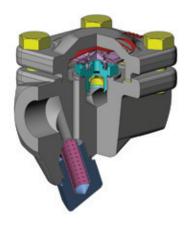






TKK-2N

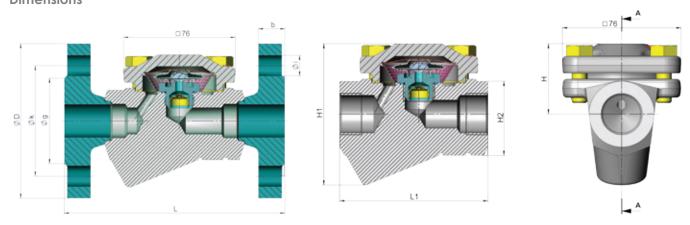
Construction



	Part list										
No	Part Name	Material									
1	Body	Forged Steel									
2	Cover	Forged Steel									
3	Strainer Screen	Stainless Steel AISI 304									
4	Thermostatic Capsule	Hastelloy									
5	Seat	Stainless Steel AISI 304									
6	Non-Return Valve	Stainless Steel AISI 304									



Dimensions



				Flan	ged					Threaded			
Size	Code	ØD (mm)	Øk (mm)	Øg (mm)	Øixn (mm)	b (mm)	L (mm)	Size	Code	H (mm)	H1 (mm)	H2 (mm)	L1 (mm)
		(111111)	(111111)	(111111)	(111111)	(111111)	(111111)			(111111)	(111111)	(111111)	(111111)
DN 15	703100102000	95	65	45	Ø14x4	16	150	1/2"	703100101000	45	92	47.5	95
DN 20	703100102001	105	75	58	Ø14x4	18	150	3/4"	703100101001	45	92	47.5	95
DN 25	703100102002	115	85	68	Ø14x4	18	160	1"	703100101002	45	92	47.5	95



TKK-3 WITH 3 CAPSULES

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DESIGN

Product Features

Body and Cover Strainer, Seat Thermosatic Capsule Check Valve Connection Types Forged Steel Stainless Steel AISI 304 Hastelloy Stainless Steel AISI 304 Flanged, Threaded, Socket

Operating Conditions

Max. Operating Pressure (PMO) 32 bar Max. Operating Temperature (TMO) 250°C Max. Differential Pressure (ΔP) 12 bar

Operation

Thermostatic steam traps operate according to the thermostatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the condensate. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

TKK-2N can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

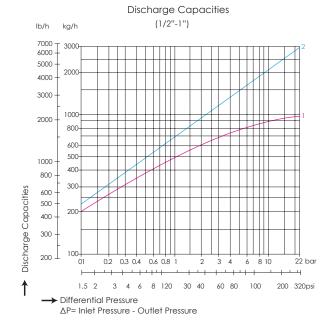
Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.



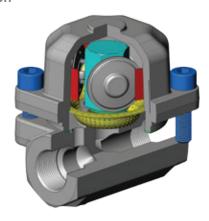


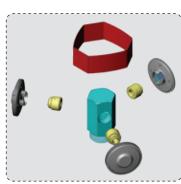




TKK-3 WITH 3 CAPSULES

Construction





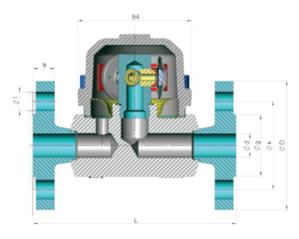


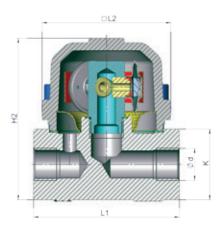


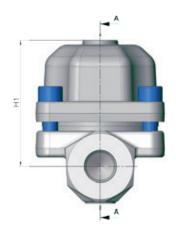
	Part list											
No	Part Name	Material										
1	Body	Forged Steel C 22.8										
2	Seat Gasket	Stainless Steel AISI 304										
3	Seat	Stainless Steel AISI 304										
4	Cover	Forged Steel C 22.8										
5	Spring	Stainless Steel AISI 304										
6	Thermostatic Unit	Stainless Steel AISI 304										
7	Screen	Stainless Steel AISI 304										











		Threaded					Flanged									
Size	Code	H1 (mm)	H2 (mm)	Ød (mm)	K (mm)	L1 (mm)	L2 (mm)	Size	Code	ØD (mm)	Øk (mm)	Øg (mm)	Ød (mm)	b (mm)	Øixn (mm)	L (mm)
1/2"	703100701000	82	106	1/2"	46	95	84	DN15	703100702000	95	65	45	17.3	16	14x4	150
3/4"	703100701001	82	106	3/4"	46	95	84	DN20	703100702001	105	75	58	22.3	18	14x4	150
1"	703100701002	82	106	1"	46	95	84	DN25	703100702002	115	85	68	28.5	18	14x4	160
11/4"	703100701003	82	107	11/4"	50	175	84	DN32	703100702003	140	100	78	37.2	18	14x4	175
11/2"	703100701004	82	112	1½"	60	185	84	DN40	703100702004	150	110	88	43.1	18	14x4	185
2"	703100701005	82	117	2''	70	195	84	DN50	703100702005	165	125	102	54.5	20	14x4	195



TKK-21

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DESIGN

Product Features

Body and Cover Strainer, Seat Thermosatic Capsule Connection Types Forged Steel Stainless Steel AISI 304 Hastelloy Threaded, socket

Operating Conditions

Max. Operating Pressure (PMO) 21 bar Max. Operating Temperature (TMO) 200°C

Operation

Thermosatic steam traps operate according to the thermosatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the condensate. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

TKK-21 can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

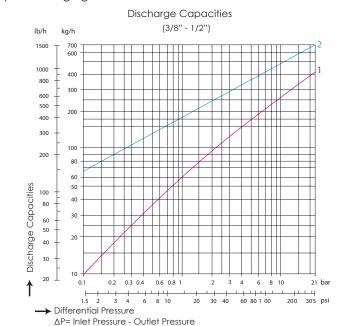
Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.



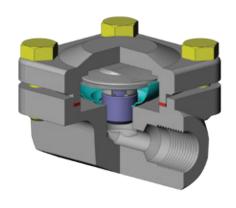




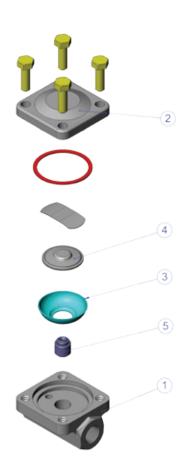


TKK-21

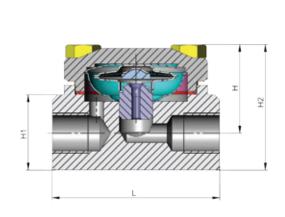
Construction

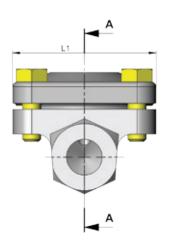


Part list										
No	Part Name	Material								
1	Body	Forged Steel								
2	Cover	Forged Steel								
3	Strainer Screen	Stainless Steel AISI 304								
4	Thermostatic Capsule	Hastelloy								
5	Capsule Seat	Stainless Steel AISI 304								



Dimensions





Size	Code	Threaded								
Size	Code	H (mm)	H1 (mm)	H2 (mm)	L (mm)	L1 (mm)				
3/8"	703100201000	93	41	150	70	60				
1/2"	703100201001	93	41	150	70	60				



TKK-41/42

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DESIGN

Product Features Body and Cover

Strainer, Seat Thermosatic Capsule Connection Types

Stainless Steel AISI 316 (TKK-41) Stainless Steel AISI 316 (TKK-42) Stainless Steel AISI 304 Hastelloy Threaded, Socket

Operating Conditions

Max. Operating Pressure (PMO) 21 bar Max. Operating Temperature (TMO) 200°C

Operation

Thermostatic steam traps operate according to the thermostatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the condensate. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

TKK-41-42 can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

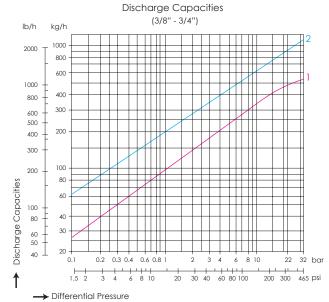
Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.



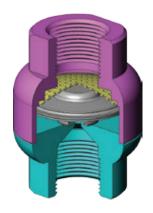




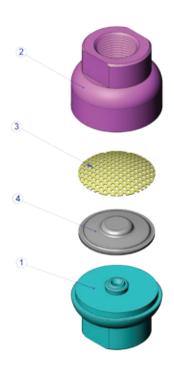


TKK-41/42

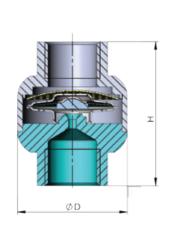
Construction

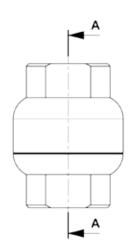


	Part list							
No	Part Name	Material						
1	Body	Stainless Steel AISI 304 (TKK-41) Stainless Steel AISI 316 (TKK-42)						
2	Cover	Stainless Steel AISI 304 (TKK-41) Stainless Steel AISI 316 (TKK-42)						
3	Strainer Screen	Stainless Steel AISI 304						
4	Thermostatic Capsule	Hastelloy						



Dimensions





c:	Cada	Threaded					
Size	Code	ØD (mm)	H (mm)				
TKK-41							
3/8"	703100501000	55	42				
1/2"	703100501001	55	42				
3/4" 703100501002		55	42				
	T	KK-42					
1/4"	703100600990	65	42				
3/8"	703100601000	65	42				
1/2"	703100601001	65	42				
3/4"	703100601002	65	42				
1"	703100601003	65	42				



HK-23 SUPER CONDENSATE RELEASER























DESIGN

Product Features

Body Cover Internals Thermosatic Capsule Connection Types Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Hastelloy & Stainless Steel Flanged **Operating Conditions**

Max. Operating Pressure (PMO) 21 bar Max. Operating Temperature (TMO) 250°C

Operation

Thermostatic steam traps operate according to the Thermostatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the condensate. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

HK-23 can be installed both vertically and horizontally with the pipeline. Horizontal installation is more suitable for service life and sufficient operation of the steam trap. Also this installation position is more effective for impurity. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.

Discharge Capacities (2"-4") lb/h t/h 1 000 000T 400 800 000 600 000-500 000-Z 400 000-300 000-200 000 160 000 120 000 100 000 80 000 Discharge Capacity 60 000 50 000 40 000 30 000-20 000-30 000-12 000 1 10 000 8 000-20 30 405060 80 100 200 psi

→ Differential Pressure

ΔP= Inlet Pressure - Outlet Pressure

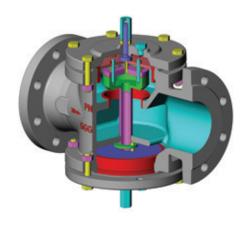






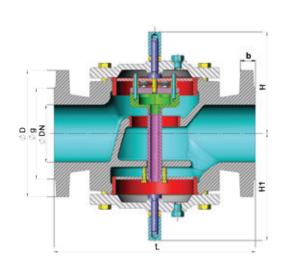
HK-23 SUPER CONDENSATE RELEASER

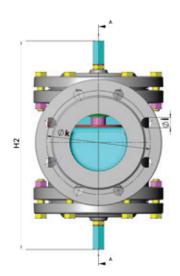
Construction



Part list						
No	Part Name	Material				
1	Body	Ductile Iron GGG 40.3				
2	Cover	Ductile Iron GGG 40.3				
3	Cover Gasket	Klingerite (No Asbestos)				
4	Thermostatic Capsule	Hastelloy				
5	Capsule Seat	Stainless Steel AISI 304				
6	Adjusting Screw	Stainless Steel AISI 304				

Dimensions





Size	Code	Flanged								
		H (mm)	H1 (mm)	H2 (mm)	L (mm)	ØD (mm)	b (mm)	Øk (mm)	Øg (mm)	Øixn (mm)
50	703100902000	205	-	-	230	165	20	125	102	Ø18x4
65	703100902001	173.5	173.5	347	290	185	20	145	122	Ø18x4
80	703100902002	173.5	173.5	347	310	200	22	160	138	Ø18x4
100	703100902003	177	186	363	350	220	26	180	158	Ø18x8



VK-70

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DESIGN

Product Features

Body Brass Cover Brass

Internals Stainless Steel AISI 304

Connection Types Threaded

Operating Conditions

Max. Operating Pressure (PMO) 16 bar Max. Operating Temperature (TMO) 260°C

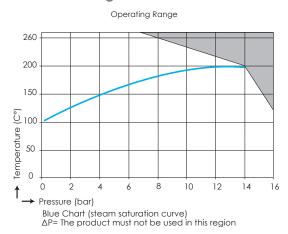
Operation

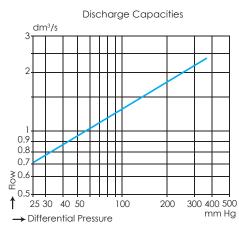
Vacuum breakers are used to prevent the vacuum that occurs on pipelines and the steam related equipment in order to maintain efficiency of discharging from the system. Stainless steel ball provides a complete sealing with pressure sensitivity. During the cooling, steam starts condensating as a result of reduced pressure, ball remains on the seat until back pressure drops under the inlet pressure. At the vacuum point, ball leaves the seat and prevents the vacuum by levelling the pressure on both sides.

Installation

VK-70 can be installed both vertically with the pipeline. Flow direction indicator arrow on the product body, should be examined carefully. Check the minimum pressure and temperature values, if the pressure of the system is higher than the maximum value of the product, use of additional satefy tools may be required in order to prevent the excess pressure.

Condensate Discharge Chart





Flow Coefficient KV=0.52 $\Delta P,$ Required to open Vacuum Breaker 4.6 mm Hg

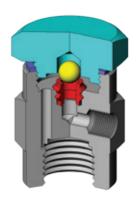




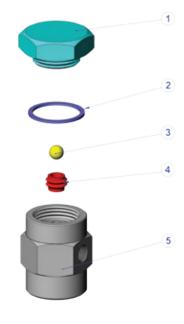


VK-70

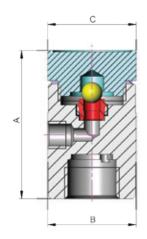
Construction

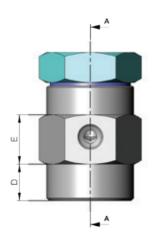


Part list							
No	Part Name	Material					
1	Cover	Brass MS 58					
2	Gasket	Stainless Steel AISI 304					
3	Ball	Stainless Steel AISI 440C					
4	Seat	Stainless Steel AISI 304					
5	Body	Brass MS 58					



Dimensions





	Size	Code	Threaded				
	SIZE		A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
	1/2"	703100801000	55	AA34	AA34	14	19



VK-71

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DESIGN

Product Features

Body Cover Internals **Connection Types** Stainless Steel AISI 304 Stainless Steel AISI 304 Stainless Steel AISI 304 Threaded

Operating Conditions

Max. Operating Pressure (PMO) 25 bar Max. Operating Temperature (TMO) 400°C

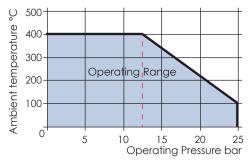
Operation

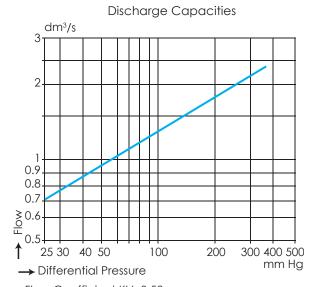
Vacuum breakers are used to prevent the vacuum that occurs on pipelines and the steam related equipment in order to maintain efficiency of discharging from the system. Stainless steel ball provides a complete sealing with pressure sensitivity. During the cooling, steam starts condensating as a result of reduced pressure, ball remains on the seat until back pressure drops under the inlet pressure. At the vacuum point, ball leaves the seat and prevents the vacuum by levelling the pressure on both sides.

Installation

VK-71 can be installed both vertically with the pipeline. Flow direction indicator arrow on the product body, should be examined carefully. Check the minimum pressure and temperature values, if the pressure of the system is higher than the maximum value of the product, use of additional satefy tools may be required in order to prevent the excess pressure.

Condensate Discharge Chart





Flow Coefficient KV=0.52 Δ P, Required to open Vacuum Breaker 4.6 mm Hg

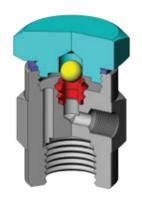




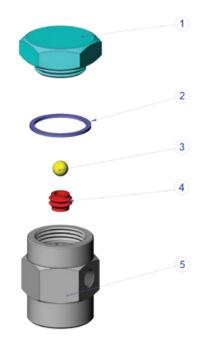


VK-71

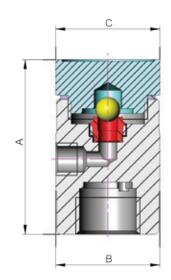
Construction

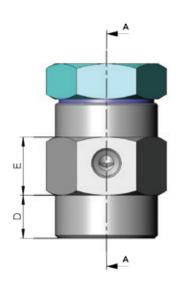


Part list									
No	Part Name	Material							
1	Cover	Stainless Steel AISI 304							
2	Gasket	Stainless Steel AISI 304							
3	Ball	Stainless Steel AISI 440C							
4	Seat	Stainless Steel AISI 304							
5	Body	Stainless Steel AISI 304							



Dimensions





	Size	Codo	Threaded					
	Size	Code	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	
	1/2"	703100801000	57	AA34	AA34	14	19	



TKK-11 AIR ELIMINATOR

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Product Features

Body and Cover Thermostatic Capsule

Internals

Connection Types

Brass Hastelloy

Stainless Steel AISI 304

Threaded

Operating Conditions

Max. Operating Pressure (PMO)
Max. Operating Temperature (TMO)

10 bar 150°C

Operation

Thermostatic air drainers operate according to the Thermostatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the air. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

TKK-11 can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

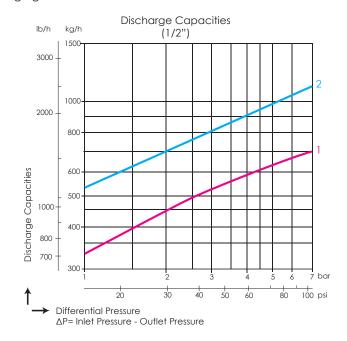
Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.



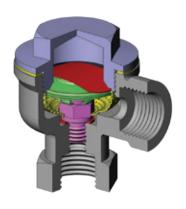






TKK-11 AIR ELIMINATOR

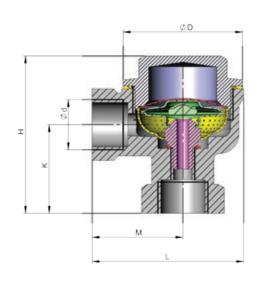
Construction

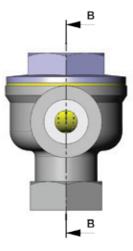


	Part list						
No Part Name		Material					
1	Body	Brass					
2	Seat Gasket	Stainless Steel AISI 304					
3	Seat	Stainless Steel AISI 304					
4	Washer	Stainless Steel AISI 304					
5	Thermostatic Capsule	Hastelloy					
6	Spring	Stainless Steel AISI 304					
7	Cover Gasket	Klingerit					
8	Cover	Brass					



Dimensions





		Threaded						
Size	Code	Ød (mm)	ØD (mm)	H (mm)	K (mm)	M (mm)	L (mm)	
1/4"	703100401001	1/4"	50	66	37	38	63	
3/8"	703100401002	3/8"	50	66	37	38	63	
1/2"	703100401000	1/2"	50	66	37	38	63	



TKK-61 AIR ELIMINATOR









Product Features
Body and Cover
Thermostatic Capsule
Internals

Thermostatic Capsule Hastelloy
Internals Stainless Steel AISI 304
Connection Types Threaded

Brass

Operating Conditions
Max. Operating Pressure (PMO)
Max. Operating Temperature (TMO)
150°C

Operation

Thermostatic air drainers operate according to the Thermostatic attitude of a capsule which is placed into the trap. Capsule contains a special liquid inside which has lower vapourisation temperature than water. When the system starts up the cold condensate drops down the temperature of the capsule. Compressed capsule pushes the disc upward and discharges the air. With the increasing condensate temperature, liquid in the capsule starts vaporisation. Expanded capsule pushes the disc towards the seat and stops discharging.

Installation

TKK-61 can be installed both vertically and horizontally with the pipeline. Flow direction indicator arrow on the product body should be examined carefully. In case discharging of condensate into the atmosphere, temperature of the released condensate which is around 100°C must be considered closely in order to maintain health and safety.

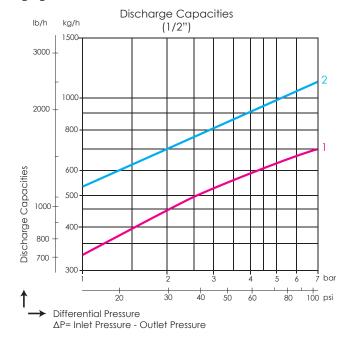
Condensate Discharge Chart

Red Chart

 Δp = Condansate Discharge at the temperature which is max 10°C lower than steam saturation temperature.

Blue Chart

 Δp = Cold Condansate Discharge at 20°C.



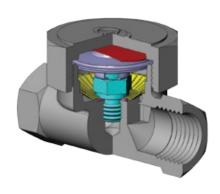




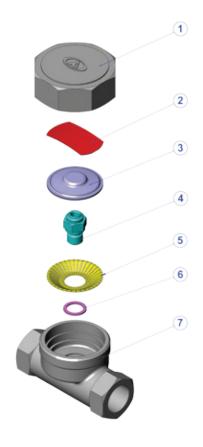


TKK-61 AIR ELIMINATOR

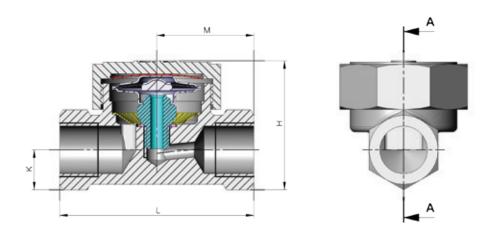
Construction



	Part list						
No Part Name		Material					
1 Cover		Brass					
2	Spring	Stainless Steel AISI 304					
3	Thermostatic Capsule	Hastelloy					
4	Seat	Stainless Steel AISI 304					
5	Strainer	Stainless Steel AISI 304					
6	Seat Gasket	Stainless Steel AISI 304					
7 Body		Brass					



Dimensions



	Size Code		THREADED					
	size	Code	H (mm)	L (mm)	M (mm)	K (mm)		
	1/2"	703100301001	48	76	38	13		



HA-50 AIR ELIMINATOR (1")























Product Features

Body Cover Internals and float **Connection Types**

Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and Threaded **Operating Conditions**

Max. Operating Pressure (PMO) 16 bar Max. Operating Temperature (TMO) 250°C

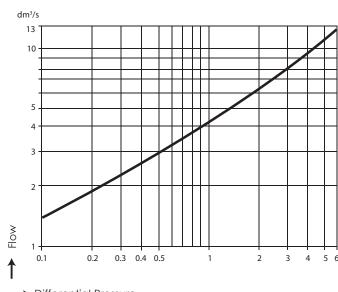
Operation

HA-50 is used to eliminate the air and gases occur in hot, cold water and other liquid systems. During the operation if air gets inside of HA-50, float remains down and remove the valve from the seat and starts discharging the air from the system. When the air is removed, condensate starts entering inside, then the float moves up and pushes the valve towards the seat and stopes discharging.

Installation

HA-50 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

Discharge Capacities



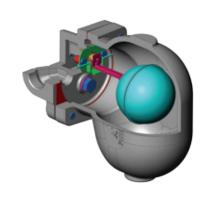


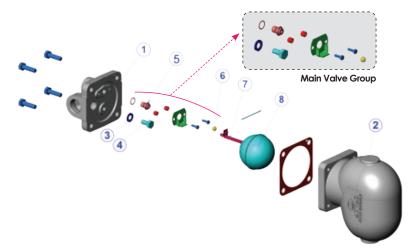




HA-50 AIR ELIMINATOR (1")

Construction



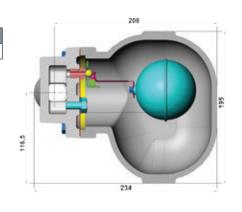


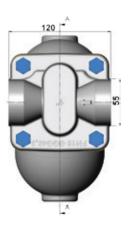
	Part List									
No	Part Name	Material								
1	Cover	Ductile Iron GGG 40.3								
2	Body	Ductile Iron GGG 40.3								
3	Gasket	Stainless Steel								
4	Bolt	Stainless Steel								
5	Float Seat	Stainless Steel AISI 304								
6	Main Valve (Ball)	Stainless Steel AISI 440 C								
7	Float Lever	Stainless Steel AISI 304								
8	Float	Stainless Steel AISI 304								

Dimensions

HA-50, Threaded

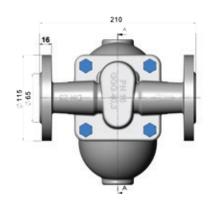
Size	Code
1"	703250201007





HA-50, Flanged

DN 25	70325020200)7	
		9 14x4	
		3.	
		116,5	
		±	





HA-51 AIR ELIMINATOR





















Product Features

Body Cover Internals and float Connection Types Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and Threaded **Operating Conditions**

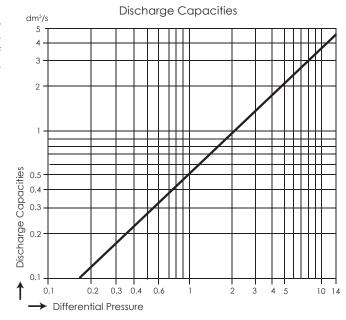
Max. Operating Pressure (PMO) 16 bar Max. Operating Temperature (TMO) 250°C

Operation

HA-51 is used to eliminate the air and gases occur in hot, cold water and other liquid systems. During the operation if air gets inside of HA-51, float remains down and remove the valve from the seat and starts discharging the air from the system. When the air is removed, condensate starts entering inside, then the float moves up and pushes the valve towards the seat and stopes discharging.

Installation

HA-51 can be used vertically as the inlet to stay up the top and the outlet to remain at the bottom. It can also be installed horizontally from right to the left or opposite way. If it is not indicated differently in the order sheet, it will be assumed as right to the left.

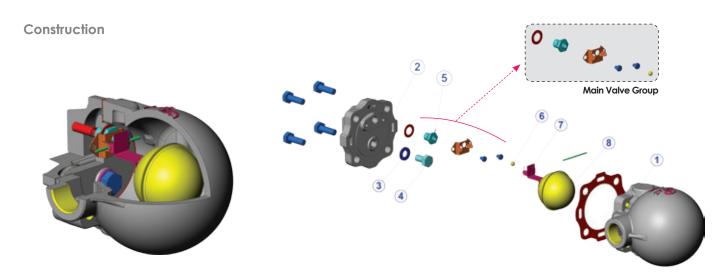






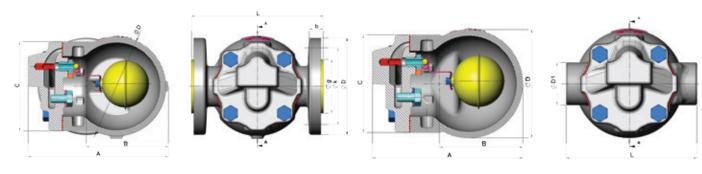


HA-51 AIR DRAINER



	Part List								
No	Part Name	Material							
1	Body	Ductile Iron GGG 40.3							
2	Cover	Ductile Iron GGG 40.3							
3	Gasket	Stainless Steel							
4	Bolt	Stainless Steel							
5	Float Seat	Stainless Steel AISI 304							
6	Main Valve Ball	Stainless Steel AISI 440 C							
7	Float Lever	Stainless Steel AISI 304							
8	Float	Stainless Steel AISI 304							

Dimensions



	DIMENSIONS											
		Flanged										
Size	Code	ØD (mm)	Øk (mm	Øg) (mm)	b (mm)	Hole Size	A (mm)	B (mm	C) (mm)	ØD1 (mm)	L (mm)	
DN 15	70380102001	95	65	46	14	Ø14x4	152.5	81.5	105	98	150	
DN 20	70380102004	105	75	56	16	Ø14x4	152.5	81.5	105	98	150	
DN 25	70380102008	117	85	65	17	Ø14x4	170	99.5	108	120	160	
						Three	aded					
Size	Code	Α		В		С	ØD		ØD1		L	
		(mm	1)	(mm)		(mm)	(mm	1)	(mm)		(mm)	
1/2"	703250101001	150)	81.5		108	98		40		122	
3/4"	703250101004	150)	81.5		108	98		40		122	
1"	703250101011	167	'	92.5		108 120)	47		145	

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



HA-52/62 AIR ELIMINATOR











Scan this QR Code



DESIGN

Product FeaturesBody and Cover

Internals and float Connection Types Ductile Iron GGG 40.3 (HA-52) Stainless Steel AISI 316 (HA-62) Stainless Steel AISI 304 Threaded

Operating Conditions

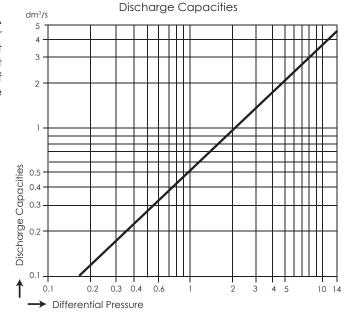
Max. Operating Pressure (PMO) 16 bar Max. Operating Temperature (TMO) 200°C

Operation

HA 52/62 is used to eliminate the air and gases occur in hot,cold water and other liquid systems. During the operation if air gets inside of HA 52/62, float remains down and remove the valve from the seat and starts discharging the air from the system. When the air is removed, condensate starts entering inside, then the float moves up and pushes the valve towards the seat and stopes discharging.

Installation

HA 52/62 is installed vertically with the pipelinem system. A pressure balancer (stabilizer) line is required for constant air discharge. Air eliminator should be installed at the highest point of the system. In case that pressure balancing is not made, it is suggested to joint a balance valve to the top of the air drainer where the balancing line is supposed to be connected.



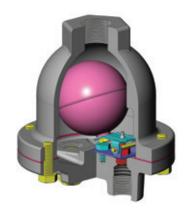






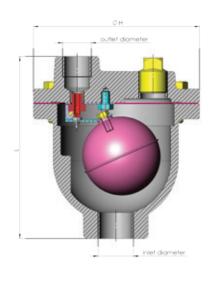
HA-52/62 AIR ELIMINATOR

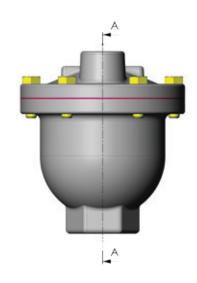
Construction



	Part list									
No	Part Name	Material								
1	Cover	Ductile Iron GGG 40.3 (HA-52) Stainless Steel AISI 316 (HA-62)								
2	Gasket	Graphite								
3	Body	Ductile Iron GGG 40.3 (HA-52) Stainless Steel AISI 316 (HA-62)								
4	Float	Stainless Steel AISI 440C								
5	Float Lever	Stainless Steel AISI 304								
6	Balancing Plug	Carbon Steel St. 37.2								
7	Seat	Stainless Steel AISI 304								

Dimensions





	Dimensions								
	Codo	Threaded							
	Code	Inlet Diameter	Outlet Diameter	H (mm)	L (mm)				
HA-52	703250103001	3/4"	1/2"	122	134				
HA-62	703250103017	3/4"	1/2"	122	134				



SA-50 LIQUID DRAINER (1")







DESIGN

Product Features
Body
Cover
Internals and float

Connection Types

Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and Threaded

Operating Conditions

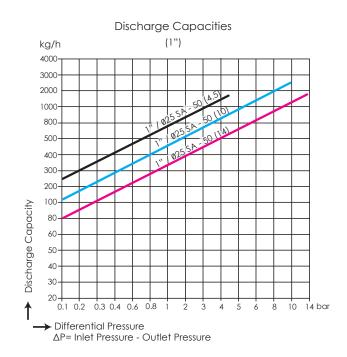
Max. Operating Pressure (PMO) 16 bar Max. Operating Temperature (TMO) 250°C

Operation

SA-50 is used for liquid draining in gas or air lines and maintain efficiency of the system. When the system starts up, water and air enter inside of the drainer together. As the water level rises, the ball float cracks the valve to drain liquid at the same rate that it reaches the trap. Changes in the rate of flow to the trap adjust the float level and the degree of opening of the valve.

Installation

SA-50 can be installed both vertically and horizontally with the pipeline. The pieline should be constructed with a grade in order to maintain the fluid to flow into the liquid drainer constatntly without any difficulty. If a large amount of condensate occurs, the air may stuck in the body of the liquid drainer. In order to prevent air stucks a balance pipe can be connected with the drainer, so condensate can flow into the drainer easily.





Main Valve Group

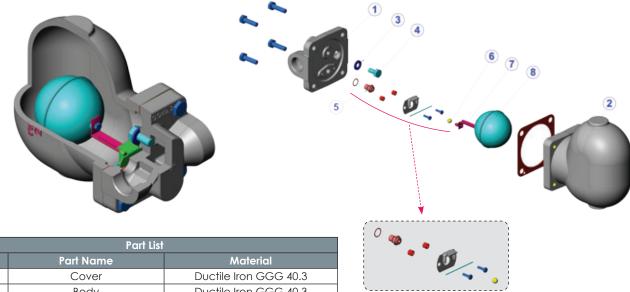




FLOAT TYPE LIQUID DRAINERS

SA-50 LIQUID DRAINER (1")

Construction

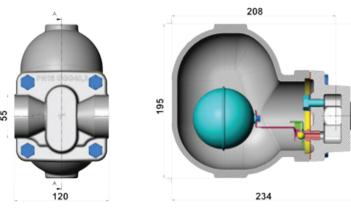


	Part List					
No	Part Name	Material				
1	Cover	Ductile Iron GGG 40.3				
2	Body	Ductile Iron GGG 40.3				
3	Gasket	Stainless Steel				
4	Bolt	Stainless Steel				
5	Float Seat	Stainless Steel AISI 304				
6	Main Valve (Ball)	Stainless Steel AISI 440 C				
7	Float Lever	Stainless Steel AISI 304				
8	Float	Stainless Steel AISI 304				

Dimensions

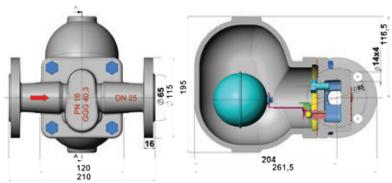
SA-50 1" Threaded

Size	Code
1"	703280201007



SA-50 DN25 Flanged

Size	Code
DN 25	703280202007

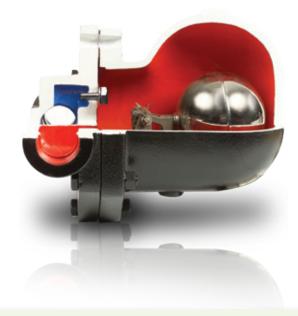




SA-50 LIQUID DRAINER (1 1/4"-2")

Scan this QR Code





















DESIGN

Product Features

Body Cover Internals and float Connection Types Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and Threaded **Operating Conditions**

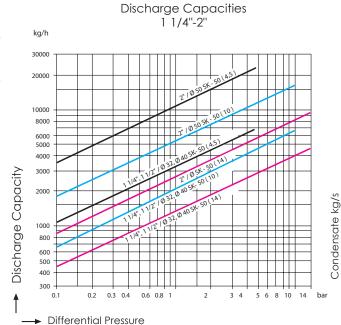
Max. Operating Pressure (PMO) 16 bar Max. Operating Temperature (TMO) 250°C

Operation

SA-50 is used for liquid draining in gas or air lines and maintain efficiency of the system. When the system starts up, water and air enter inside of the drainer together. As the water level rises, the ball float cracks the valve to drain liquid at the same rate that it reaches the trap. Changes in the rate of flow to the trap adjust the float level and the degree of opening of the valve.

Installation

SA-50 can be installed both vertically and horizontally with the pipeline. The pieline should be constructed with a grade in order to maintain the fluid to flow into the liquid drainer constatntly without any difficulty. If a large amount of condensate occurs, the air may stuck in the body of the liquid drainer. In order to prevent air stucks a balance pipe can be connected with the drainer, so condensate can flow into the drainer easily.

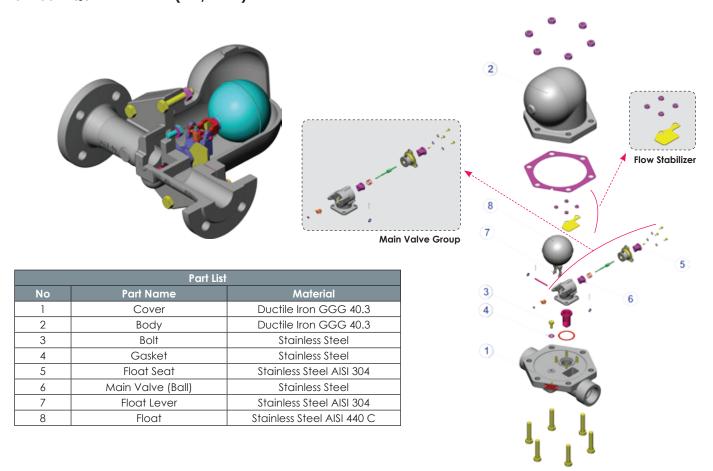




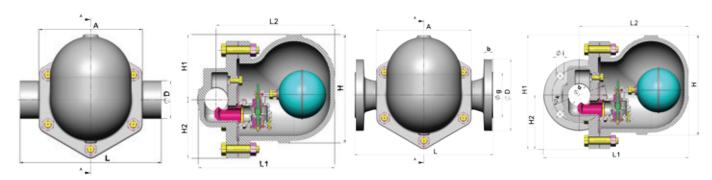




SA-50 LIQUID DRAINER (1 1/4"-2")



Dimensions



	DIMENSIONS												
		Flanged											
Size	Code	ØD (mm)	Øk (mm)	Øg (mm)	b (mm)	Øixn (mm)	A (mm)	H1 (mm)	H2 (mm)	H (mm)	L1 (mm)	L2 (mm)	L (mm)
DN 32	703280202010	140	100	78	20	18x4	190	237.5	107.5	207	277	245	320
DN 40	703280202013	150	110	88	20	18x4	190	237.5	107.5	207	277	245	320
DN 50	703280202016	160	125	102	22	18x4	220	262	124	230	290	252	320
Size	Code	Threaded											
SIZE	Code	ØD (mr	n) /	4 (mm)	H1 mm	n)	12 (mm)	H (mm	n) L	1 (mm)	L2 (mn	n)	L (mm)
1 1/4"	703280201010	70		190	207		237.5	207		107.5	277		270
1 1/2"	703280201013	70		190	207	207		207		107.5	277		270
2"	703280201016	80		220	230		230	220		124	290		300

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



SA-51 LIQUID DRAINER





DESIGN

Product Features
Body
Cover
Internals and float

Connection Types

Ductile Iron GGG 40.3 Ductile Iron GGG 40.3 Stainless Steel AISI 304 Flanged and Threaded

Operating Conditions

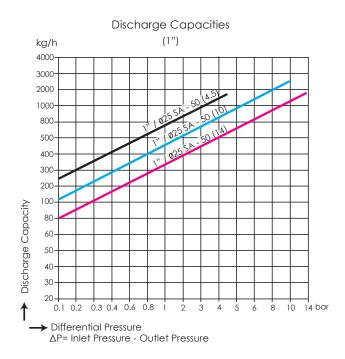
Max. Operating Pressure (PMO) 16 bar Max. Operating Temperature (TMO) 250°C

Operation

SA-51 is used for liquid draining in gas or air lines and maintain efficiency of the system. When the system starts up, water and air enter inside of the drainer together. As the water level rises, the ball float cracks the valve to drain liquid at the same rate that it reaches the trap. Changes in the rate of flow to the trap adjust the float level and the degree of opening of the valve.

Installation

SA-51 can be installed both vertically and horizontally with the pipeline. The pieline should be constructed with a grade in order to maintain the fluid to flow into the liquid drainer constatntly without any difficulty. If a large amount of condensate occurs, the air may stuck in the body of the liquid drainer. In order to prevent air stucks a balance pipe can be connected with the drainer, so condensate can flow into the drainer easily.



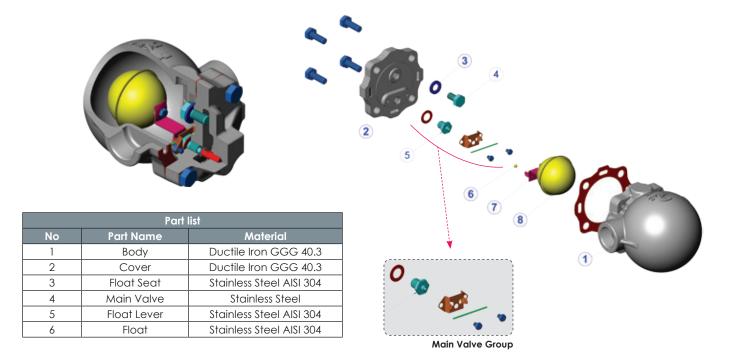




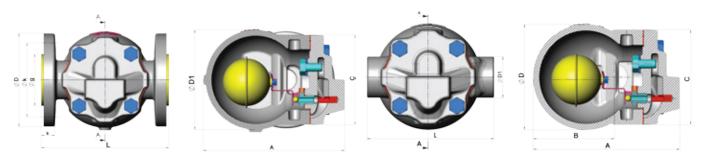


SA-51 LIQUID DRAINER

Construction



Dimensions



	DIMENSIONS												
	Code		Flanged										
Size		ØD (mm)	Øk (mm)	Øg (mm)	b (mm)	Øixn (mm)	A (mm)	B (mm)	C (mm)	ØD1 (mm)	L (mm)		
DN 15	70380102001	95	65	46	14	Ø14x4	152.5	81.5	105	98	150		
DN 20	70380102004	105	75	56	16	Ø14x4	152.5	81.5	105	98	150		
DN 25	70380102008	117	85	65	17	Ø14x4	170	99.5	108	120	160		
			Threaded										
Size	Code	Α		В		С	ØD		ØD1		L		
		(mm)		(mm)	((mm)	(mm)		(mm)		(mm)		
1/2"	70380101001	150)	81.5		108	98		40		122		
3/4"	70380101004	150)	81.5	81.5 108		98		40		122		
1"	70380101011	167	,	92.5		108	120		47		145		

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



BK-33/SK (FLOAT TYPE)



















DESIGN

Product Features
Body and Cover
Internals and Float
Thermostatic Unit
Hand Wheel
Connections

Stainless Steel AISI 304 Stainless Steel AISI 304 Stainless Steel AISI 304 Carbon Steel Threaded/Socket Operating Conditions
Max. Operating Pressure
Max. Operating Temp.
Differential Pressure

32 bar 286°C 4,5/10/14 bar

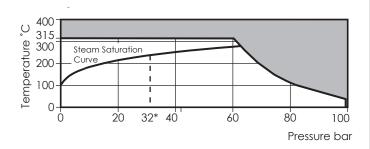
Operation

BK-33 pipe connector has been developed to be used with the steam traps in steam lines. Operates constant discharging at saturation temperature especially where the condensate amount is not fixed. Beside of the float that operates the liquid discharging, air discharging is controlled by the existing thermostatic capsule. In case, that the float loses its functionality, thermostatic capsule fulfils the task of condensate discharging.

Installation

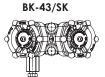
BK-33 SK, float type steam trap can easily be installed to the pipe connector. Usually, float type steam traps are installed horizontally to the steam lines. The flow through the pipe connector should be in the arrow direction.

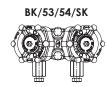
Pressure and Temperature Limitations



BK BK-33/SK







Туре	Definition	Flow Direction
BK-33 SK	Pipe connector with 2 stop valves + Thermostatic steam trap + Discharging valve	Left to right
BK-43 SK	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Left to right
BK-53 SK	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Left to right
BK-54 SK	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Right to left

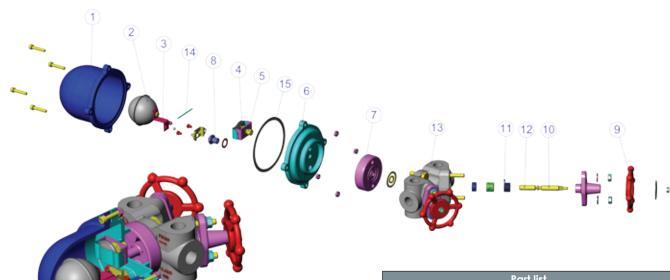




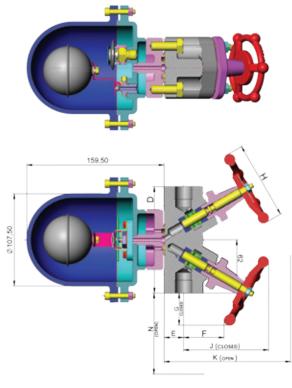


BK-33/SK (FLOAT TYPE)

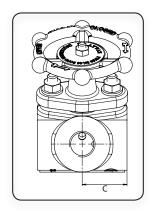
Construction



Dimensions



	Part lis	·t
No	Part Name	Material
1	Float Cover	Stainless Steel AISI 304
2	Float	Stainless Steel AISI 304
3	Float Lever	Stainless Steel AISI 304
4	Thermostatic Capsule	Stainless Steel AISI 304
5	Thermostatic Unit Seat	Stainless Steel AISI 304
6	Body-A	Stainless Steel AISI 304
7	Body-B	Stainless Steel AISI 304
8	Float Seat	Stainless Steel AISI 304
9	Hand Wheel	Carbon Steel C 22.8
10	Steam-A	Stainless Steel AISI 304
11	Bearing	Carbon Steel St. 37.2
12	Stem-B	Stainless Steel AISI 304
13	Body	Stainless Steel AISI 304 L
14	Float Stem	Stainless Steel AISI 304
15	Cover Gasket	Graphite



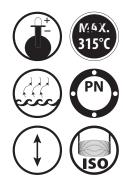
					THREADED									
Size	BK-33 SK	BK-43 SK	BK-53 SK	BK-54 SK	С	D	Е	F	G	Н	J	K	L	N
					(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
1/2"	703450214111	703450224111	703450234111	703450244111	36	125	25	50	35	90	99	115	22	50
3/4"	703450214112	703450224112	703450234112	703450244112	36	125	25	50	35	90	99	115	22	50



BK-33/TD (THERMODYNAMIC)







DESIGN

Product Features

Body Stainless Steel AISI 304
Seat and Disc Stainless Steel AISI 420
Internals Stainless Steel
Hand Wheel Carbon Steel
Connections Threaded, Socket

Operating Conditions Max. Operating Pressure Max. Operating Temp.

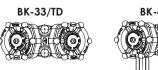
42 bar (250°C) 315°C

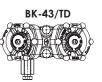
Operation

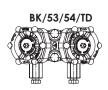
In operating conditions, opposite pressure should not exceed the 80% of the front pressure. According to condensate load, BK-33 TD may discharge intermittently. Designed for the steam pressure up to 42 bar and quick discharging. BK-33TD can easily be disassembled individually and be maintained.

Installation

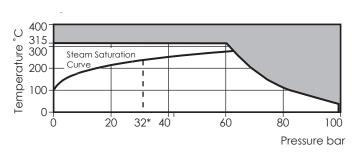
BK-33 TD, thermodynamic steam trap can easily be installed to the pipe connector. Ideally, steam trap should be installed on a horizontal pipeline. The flow through the pipe connector should be in the arrow direction. The connection distance of the steam trap must be on the horizontal plate.







Pressure and Temperature Limitations



Туре	Definition	Flow Direction
BK-33 TD	Pipe connector with 2 stop valves + Thermodynamic steam trap	Left to right
BK-43 TD	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve	Left to right
BK-53 TD	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Left to right
BK-54 TD	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Right to left

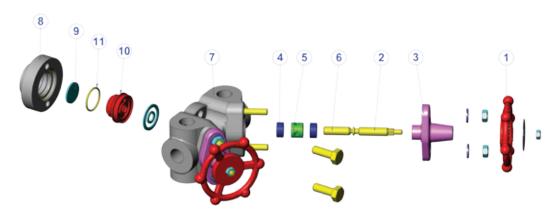




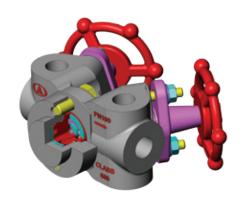


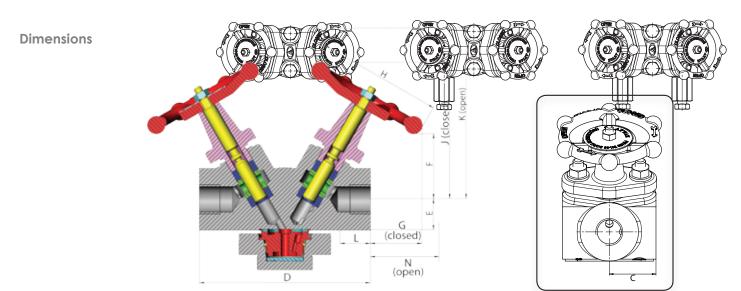
BK-33/TD (THERMODYNAMIC)

Construction



	Part list					
No	Part Name	Material				
1	Hand Wheel	Carbon Steel C 22.8				
2	Steam-A Stainless Steel AISI 30					
3	Cover Carbon Steel C 22.8					
4	Stem Gasket	Graphite				
5	Bearing	Carbon Steel St 37.2				
6	Stem-B	Stainless Steel AISI 304				
7	Body	Stainless Steel AISI 304L				
8	Seat Guide	Stainless Steel AISI 304				
9	Disc	Stainless Steel AISI 420				
10	Seat	Stainless Steel AISI 420				
11	O-rina	Silicone				





									THRE	ADED				
Size	BK-33 SK	BK-43 SK	BK-53 SK	BK-54 SK	С	D	Е	F	G	H	J	K	L	N
					(mm)									
1/2"	703450214111	703450224111	703450234111	703450244111	36	125	25	50	35	90	99	115	22	50
3/4"	703450214112	703450224112	703450234112	703450244112	36	125	25	50	35	90	99	115	22	50



BK-33/TK (THERMOSTATIC)















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DESIGN

Product Features

Body and Cover Capsule Internals

Volan Connections Stainless Steel AISI 304

Stainless Steel Stainless Steel Carbon Steel Threaded/Socket **Operating Conditions**

Max. Operating Pressure (PMO) Max. Operating Temp. (TMO) Differential Pressure 21 bar 240°C 21 bar

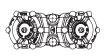
Operation

Steam saturation curve is followed with a static difference by the thermostatic element which is highly resistant against corrosion. It is aimed to discharge condensate and non-condensable gases in the steam lines. Resistant against the corrosion and not effected by water hammer. Condensate discharging is constant.

Installation

BK-33 TK, thermostatic steam trap can easily be installed to the pipe connector. Thermostatic steam traps may be installed bot vertically or horizontally to the steam lines. The flow through the pipe connector should be in the arrow direction.

BK-33/TK

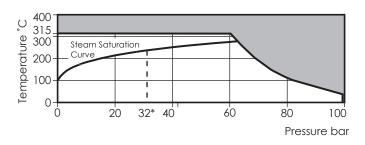


BK-43/TK





Pressure and Temperature Limitations



Туре	Definition	Flow Direction
BK-33 TK	Pipe connector with 2 stop valves + Thermodynamic steam trap	Left to right
BK-43 TK	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve	Left to right
BK-53 TK	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Left to right
BK-54 TK	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Right to left

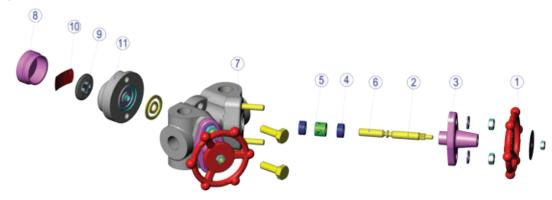




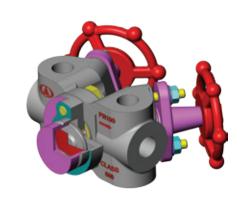


BK-33/TK (THERMOSTATIC)

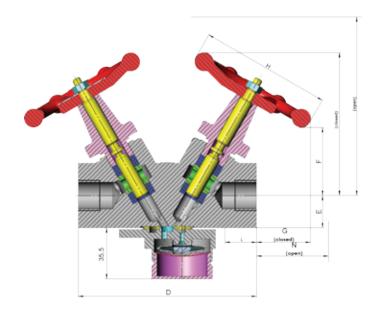
Construction



	Part list											
No	Part Name	Material										
1	Hand Wheel	Carbon Steel C 22.8										
2	Steam-A	Stainless Steel AISI 304										
3	Cover	Carbon Steel C 22.8										
4	Stem Gasket	Graphite										
5	Bearing	Carbon Steel St 37.2										
6	Stem-B	Stainless Steel AISI 304										
7	Body	Stainless Steel AISI 304L										
8	Cover	Stainless Steel AISI 304										
9	Capsule	Hastelloy										
10	Spring	Stainless Steel AISI 304										
11	Cover Body	Stainless Steel AISI 304										



Dimensions



									THRE	ADED				
Size	BK-33 TK	BK-43 TK	BK-53 TK	BK-54 TK	С	D	E	F	G	Н	J	K	L	N
					(mm)									
1/2"	703450213111	703450223111	703450233111	703450243111	36	125	25	50	35	90	99	115	22	50
3/4"	703450213112	703450223112	703450233112	703450243112	36	125	25	50	35	90	99	115	22	50



BK-33/BM (BI-METALLIC)















DESIGN

Product Features

Body Stainless Bi-metallic Plates Internals Volan Connections Stainless Steel AISI 304 Stainless Steel AISI 304 Stainless Steel AISI 304 Carbon Steel Threaded, Socket **Operating Conditions**

Max. Operating Pressure (PMO) Max. Operating Temp. (TMO) Differential Pressure 32 bar 315°C 32 bar

Operation

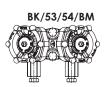
BK-33 pipe connector has been developed to be used with the steam traps in steam lines. Operates constant discharging at saturation temperature especially where the condensate amount is not fixed. Beside of the float that operates the liquid discharging, air discharging is controlled by the existing thermostatic capsule. In case, that the float loses its functionality, thermostatic capsule fulfils the task of condensate discharging.

Installation

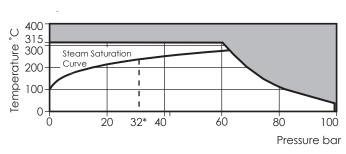
BK-33 BM, bi-metallic steam trap can easily be installed to the pipe connector. Ideally, steam trap should be installed on a horizontal pipeline. The flow through the pipe connector should be in the arrow direction. The connection distance of the steam trap must be on the horizontal plate.

BK-33/BM





Pressure and Temperature Limitations



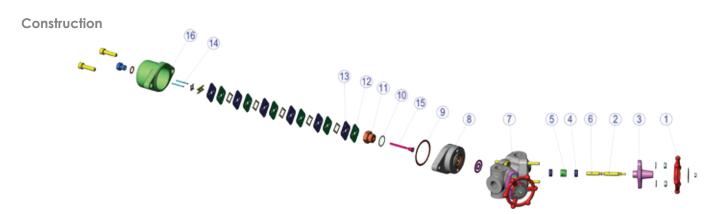
Туре	Definition	Flow Direction
BK-33 BM	Pipe connector with 2 stop valves + Thermodynamic steam trap	Left to right
BK-43 BM	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve	Left to right
BK-53 BM	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Left to right
BK-54 BM	Pipe connector with 2 stop valves + Thermodynamic steam trap + Discharging valve + Test valve	Right to left





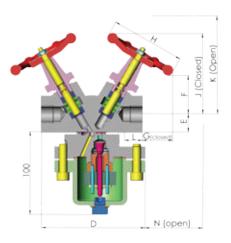


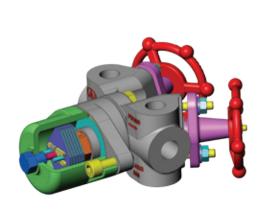
BK-33/BM (BI-METALLIC)

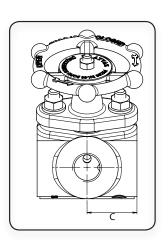


Part list										
No	Part Name	Material								
1	Hand Wheel	Carbon Steel C 22.8								
2	Steam-A	Stainless Steel AISI 304								
3	Cover	Carbon Steel C 22.8								
4	Stem Gasket	Graphite								
5	Bearing	Carbon Steel St 37.2								
6	Stem-B	Stainless Steel AISI 304								
7	Body	Stainless Steel AISI 304L								
8	Bi-metal Trap Body	Stainless Steel AISI 304L								
9	Cover Gasket	Klingerite								
10	Seat Gasket	Stainless Steel AISI 304								
11	Seat	Stainless Steel AISI 304								
12	Bi-metal Plate (small)	Stainless Steel AISI 304								
13	Bi-Metal Plate (Big)	Stainless Steel AISI 304								
14	Bi-metal Plate Stem	Stainless Steel AISI 304								
15	Control Unit Valve	Stainless Steel AISI 304								
16	Bi-metal Trap Cover	Stainless Steel AISI 304L								

Dimensions







					THREADED									
Size	BK-33 TK	BK-43 TK	BK-53 TK	BK-54 TK	С	D	E	F	G	Н	٦	K	L	N
					(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
1/2"	703450211111	703450223111	703450231111	703450241111	36	125	25	50	35	90	99	115	22	50
3/4"	703450211112	703450223112	703450231112	703450241112	36	125	25	50	35	90	99	115	22	50

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



CONDENSATE CONNECTION MANIFOLDS

KT-13











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DESIGN

Product Features

Body Stainless Bi-metallic Plates Internals Volan

Connections

Stainless Steel AISI 304 Stainless Steel AISI 304 Stainless Steel AISI 304 Carbon Steel

Threaded, Socket

Operating Conditions

Max. Operating Pressure (PMO) Max. Operating Temp. (TMO) Differential Pressure

32 bar 315°C 32 bar

Operation

KT-13 is used for both steam distribution and condensate generation. Piston valves must be completely open or closed during the operation. These valves are not designed for flow control. Because of the wide sealing area of the piston valves, usage of an additional valve for sealing is not necessary.

Installation

KT-13 condensate manifolds are designed for vertical installation. It is suggested to insulate the condensate manifolds in order to prevent heat loses and to protect the users.

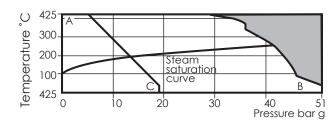
Steam Distribution

Suggested installation is to connect the steam entry to the top of the condensate manifold. A steam trap unit should be placed at the bottom. The discharge from this steam trap unit should return to the condensate line properly. If discharging will be done to the atmosphere, a diffuser must be used.

Condensate Generating

It is suggested to install the KT-13 as the condensate exit to come up to the top side. A stop valve for blowing off should be place underneath the condensate generator. Usage of diffuser is suggested as well.

Pressure And Temperature Limitations



Product should not be used in this area

*PMO: Max. suggested operating pressure for saturated steam





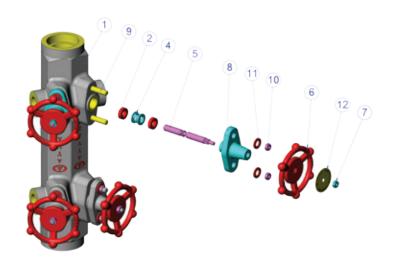


CONDENSATE CONNECTION MANIFOLDS

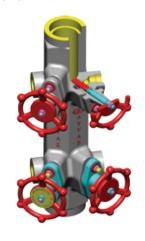
KT-13

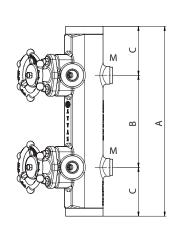
Construction

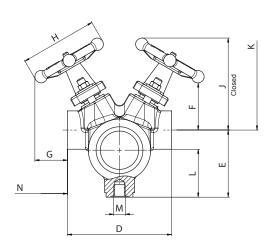
	Part list						
No	Part Name	Material					
1	Body	Carbon Steel					
2	Lower Gasket Graphite and stainless s						
3	Upper Gasket	Graphite and stainless steel					
4	Bush	Stainless Steel					
5	Piston	Stainless Steel					
6	Hand Wheel	Carbon Steel					
7	Nut	Stainless Steel					
8	Cover	Carbon Steel					
9	Pin	Stainless Steel					
10	Nut	Stainless Steel					
11	Gasket	Stainless Steel					
12	Label	Stainless Steel					



Dimensions







			THREADED											
Size	Code	Α	В	С	D	E	F	G	Н	J	K	L	M	N
		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
						BSP Th	readed							
1/2"	703450110111	330	160	85	110	71	60	45	96	110	130	51	M12	55
3/4"	703450110112	330	160	85	110	71	60	45	96	110	130	51	M12	55
1"	703450110113	330	160	85	110	71	60	45	96	110	130	51	M12	55
	NPT Threaded													
1/2"	703450110121	330	160	85	110	71	60	45	96	110	130	51	M12	55
3/4"	703450110122	330	160	85	110	71	60	45	96	110	130	51	M12	55
1"	703450110123	330	160	85	110	71	60	45	96	110	130	51	M12	55



STEAM SEPERATORS

SPR-16/25/40









DESIGN

Product Features

Body

Internals Connections

Carbon Steel Stainless Steel (Optional) Stainless Steel AISI 304 Flanged

Operating Conditions

Max. Operating Pressure (PMO) Max. Operating Temp. (TMO)

16/25/40 200°C

Operation

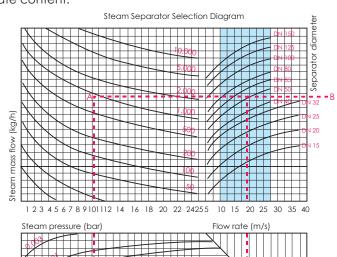
Steam separators, as their name implies, separate steam from entrained condensate, or "dry" the steam. They are most often used in front of equipment that requires especially dry steam, such as platen presses or autoclaves. They are also common on secondary steam lines where condensate has been collected and "flashed" into steam at a lower pressure. Flash steam, by nature, has a high entrained condensate content.

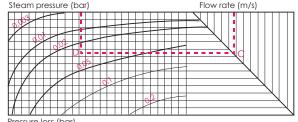
Installation

The SPR 16-25-40 Steam Separator must be installed in a vertical position as the system connection to be underneath.

HOW TO USE THE DIAGRAM

- Draw A-D line for the steam pressure of 10 bar and the mass flow of 1000 kg/h.
- Extend A-B line horizontally.
- Any separator is intersecting with the A-b line in the blue area would work with approximately 100% efficiency.
- Flow rate is determined by vertical line of B-C line (19 m/s.)
- Pressure drop is detected with intersecting the lines of A-B and C-D.
- Separator should be selected in the accordance with line diameter, velocity and pressure drop.











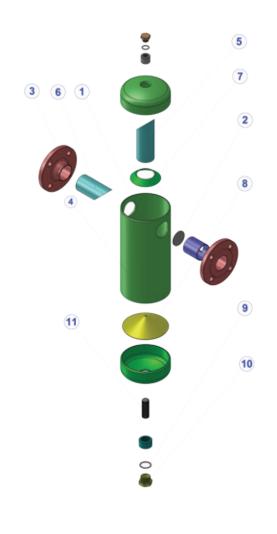
STEAM SEPERATORS

SPR-16/25/40

Construction



	Part list							
No	Part Name	Material						
1	Intermediate Pipe	Carbon Steel						
2	Metal Cover	Carbon Steel						
3	Flange	Carbon Steel C22.8						
4	Body (Seamless Tube)	Carbon Steel						
5	Spreader-Gathering Conical Cyclone	Carbon Steel						
6	Filter Pipe	Carbon Steel						
7	Special Particle holder filter	Stainless Steel AISI 304						
8	Liquid-Gaseous seperator plate	Stainless Steel AISI 304						
9	Gasket	Brass						
10	Filter Cleaning Cork	Carbon Steel C22.8						
11	Steam Trap Protection Filter	Stainless Steel AISI 304						



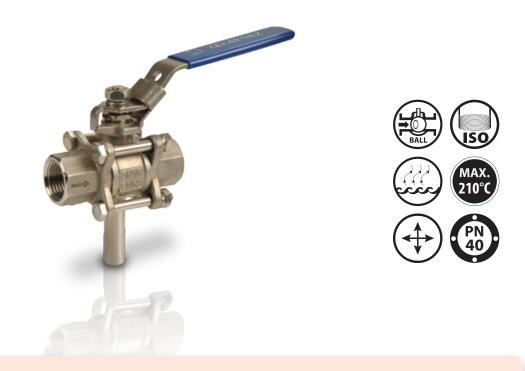
Dimensions

	Dimensions									
			Ī	hreade	d		Code	Code	Code	
Size		H	L	M	øi	ØF	PN 16	PN 25	PN 40	
		(mm)	(mm)	(mm)	(mm)	(mm)				
DN 15	1/2"	356	180	88,9	95	48,3	708400000415	708400100424	708400200415	
DN 20	1/2"x1/2"	411	230	114,3	105	60,3	708400000420	708400100430	708400200420	
DN 25	1/2"x1/2"	427	230	114,3	115	76,1	708400000425	708400100432	708400200425	
DN 32	1/2'x1/2"	440	250	139,7	140	88,9	708400000432	708400100433	708400200432	
DN 40	1/2'x1/2"	486	300	168,3	150	114,3	708400000436	708400100434	708400200436	
DN 50	1/2"x1/2"	540	300	168,3	165	114,3	708400000440	708400100436	708400200440	
DN 65	1/2"x3/4"	645	400	219,1	185	139,7	708400000444	708400100440	708400200444	
DN 80	1/2"x3/4"	724	450	273	200	168,3	708400000448	708400100444	708400200448	
DN 100	1/2'x1"	795	500	323,9	235	219,1	708400000452	708400100448	708400200450	
DN 125	1/2'x1"	965	600	355,6	250	273	708400000450	708400100452	708400200452	
DN 150	1/2'x1"	1175	600	406,4	285	323,8	708400000454	708400100456	708400200454	



TEST VALVES

KTV-10 STEAM TRAP TEST VALVE



DESIGN

Scan this QR Code

Pr	od	uct	Fe	atu	ires
----	----	-----	----	-----	------

Body Material Ball Material **Body Gasket** Ball Seat

Connection Type

Operating Conditions

Nominal Pressure (PN) Max. Oper. Temp. (TMO) Stainless Steel AISI 304 Stainless Steel AISI 304

PTFE

R-PTFE (15%) Threaded

PTFE R-PTFE (15%) Threaded

Stainless Steel AISI 316

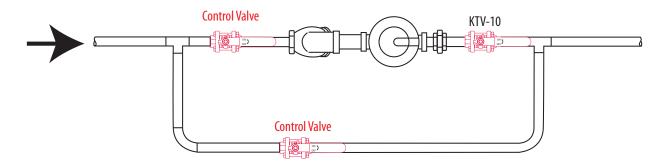
Stainless Steel AISI 316

40 bar 40 bar -50/+210°C -50/+210°C

Operation

The trap test valve is generally placed either after the steam trap or two valves are used on both the inlet an outlet of the trap. If the valve is only required for trap testing and no bleed upstream or isolation is required than only one test valve would be used on the discharge side of the trap. If the design is such that both upstream and down stream isolation with bleed and test capability is needed, then two valves would be required.

Connection





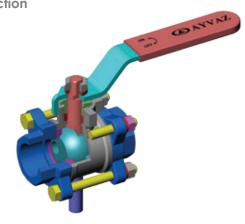


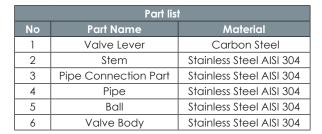


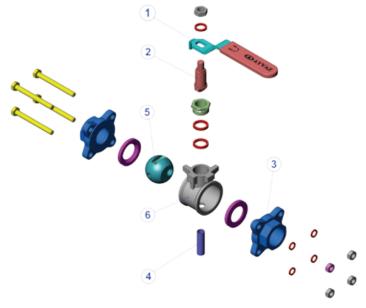
TEST VALVES

KTV-10 STEAM TRAP TEST VALVE

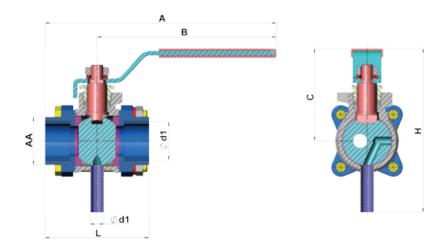
Construction







Dimensions



				Threaded					
Size	Code	Ød	A (mm)	B (mm)	C (mm)	H (mm)	Ød1 (mm)	L (mm)	AA (mm)
1/2"	703989001000	1/2"	155	118	56	111	12	73,5	27
3/4"	703989001002	3/4"	159	118	61	120	12	81	35
1"	703989001004	1"	201	118	80	142	12	90	41,5
1 1/4"	703989001006	1 1/4"	217	166	80	146	20	102,5	51
1 1/2"	703989001008	1 1/2"	251	191	88,5	160	20	120	58
2"	703989001010	2"	259	191	88,5	176	20	137,5	71

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.



PRESSURE REDUCING VALVES

BDV-25

Scan this QR Code













DESIGN

Product Features

Body Shaft, Seat, Strainer Internals Connections Ductile Iron GGG 40.3 Stainless Steel AISI 304 Stainless Steel AISI 304 Threaded

Operating Conditions

Max Inlet Pressure Max. Outlet Pressure Set Pressure 19 bar 8.6 bar 0,14-1,7 bar 1,4-4,0 bar 3,5-8,6 bar

Max. Operating Temp.

3,5-8,6 bar 210°C

Operation

Pressure reducing valve is a device which reduces and stabilizes the upstream pressure to an adjusted downstream pressure. When the entering pressure from the public mains is too high and variable, pressure reducing valve stabilizes the downstream pressure to the adjusted one. Possible variations of the upstream pressure do not influence the adjusted downstream pressure. This range of pressure reducing valves allows the operator to adjust the downstream pressure to a set figure.

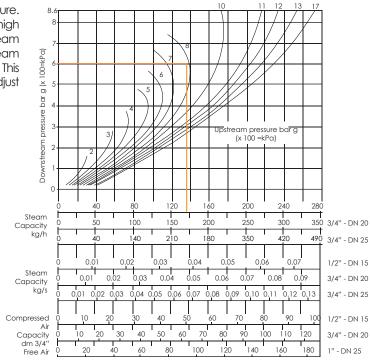
Installation

BDV 25 must be installed on a horizontal pipeline with the flow direction as indicated by the arrow on the product body.

How to use the chart?

The curves numbered 2,3,4,5,etc. Represent upstream pressures. Downstream pressures are read along the vertical line on the left hand side of the chart.

Example: required reducing valve to pass 120 kg/h reducing from 8 to 6 bar. From the downstream pressure of 6 bar on the left hand side of the chart to be extended out horizontally until the line. Meets the curve of 8 bar upstream line. Orthographic projection of this point is read as the capacity of the product.







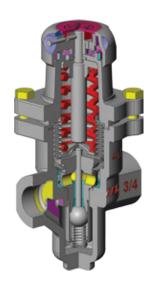


PRESSURE REDUCING VALVES

BDV-25

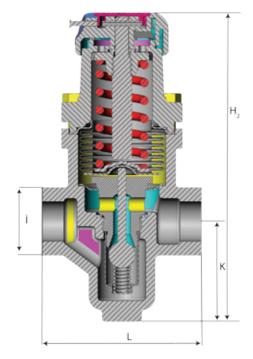
Construction

	Part list						
No	Part Name	Material					
1	Body	Ductile Iron GGG 40.3					
2	Valve Spring	Stainless Steel AISI 316					
3	Strainer	Stainless Steel AISI 316					
4	Valve	Stainless Steel AISI 420					
5	Seat	Stainless Steel AISI 431					
6	Bellow	Stainless Steel AISI 316					
7	Pressure Adjustment Spring	Stainless Steel					
8	Lock Pin	Tool steel					
9	Spring Adjustment Cover	Poly-propylene					
10	Pressure Adjustment Cover	Poly-propylene					
11	Pressure Adjustment Stem	Stainless Steel AISI 316					
12	Upper Cover	Aluminium					
13	Cover Gasket	Graphite					
14	Valve Pressure Stem	Stainless Steel AISI 316L					





Dimensions



Size	Code	Threaded						
3120	Code	H (mm)	L (mm)	K (mm)	Øİ (mm)			
1/2"	703750100000	186,5	83	65	36			
3/4"	703750100001	186,5	96	65	41			
1"	703750100002	186,5	108	65	45			



ON/OFF VALVE

PKV-50 PNEUMATIC CONTROL ON/OFF VALVE











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Product Features

Body Gasket Connection Type Stainless Steel AISI 316 PTFE Threaded **Operating Conditions**

Max. Operating Pressure (PMO) 1
Max. Operating Temperature (TMO) 1

16 bar 180°C

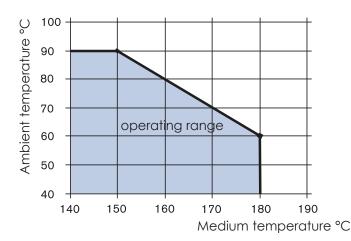
Operation

The externally piloted angle-seat valve is operated with a single acting piston actuator. The pneumatic piston actuator is constructed from stainless steel and incorporates a proven self adjusting packing gland, to ensure high media leak tightness. The body is made from a high quality stainless steel casting, with a flow optimized design enabling high flow rates.

Installation

Assembly direction should be selected correctly according to the corresponding condition. Before usage, valve must be kept as closed position. Length of the PU pipemust be long enough for proper operation.

Operating Range







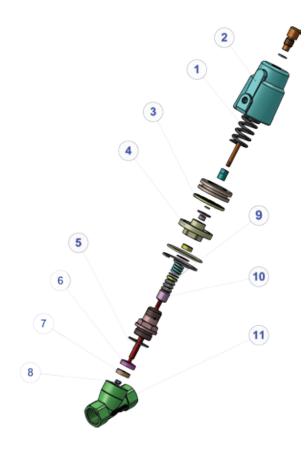


ON/OFF VALVE

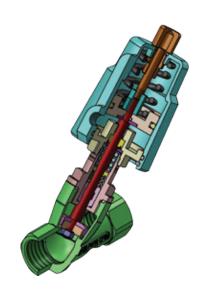
PKV-50 PNEUMATIC CONTROL ON/OFF VALVE

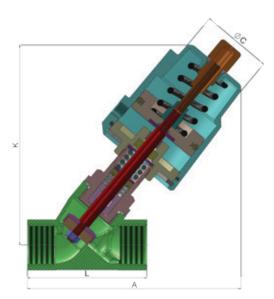
Construction

	Part list						
No	Part Name	Material					
1	Spring	Carbon Steel					
2	Cylinder	Stainless Steel AISI 316					
3	Piston Seal	FPM					
4	Cover	Stainless Steel AISI 316					
5	Valve Rod	Stainless Steel AISI 316					
6	Valve Core	Stainless Steel AISI 316					
7	Core Seal	PTFE					
8	Hex Nut	Stainless Steel AISI 316					
9	Rod Seal	PTFE					
10	O-Ring	Viton					
11	Body	Stainless Steel AISI 316					



Dimensions





Size	Code	Threaded						
3120	Code	K (mm)	L (mm)	A (mm)	C (mm)			
1/2"	708040010005	124	68	131	60			
3/4"	708040010010	128	75	136	60			
1"	708040010015	162	90	169	75			
1 1/4"	708040010020	220	116	229	112			
1 1/2"	708040010025	220	116	230	112			
2"	708040010030	232	138	244	112			

All the dimensions in the table are given in "mm".

Subject to technical alterations and deviations resulting from the manufacturing process without giving any notification.