

E.S.E. Valve Co.

Products Catalogue





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E.S.E. Valve Co. Ltd. is founded in 1985. It is a complete, certified manufacturer of steam traps, safety valves, pressure reducing valves and control valves and registered as its current name The Esfahan Steam Equipment Ltd. The company is owned, managed and staffed by expertise engineers, and trained workmanship for design and manufacturing of various types of equipment in steam industries.

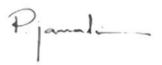
E.S.E. Valve Co. Ltd. is a flexible and continuously developing company who is manufacturing a complete range of steam equipments and consequently able to offer the best type and style suited to meet the requirements of our customer's specifications and applications. Within our-in-house engineering department part of the staff are dedicated to research and development, enabling us to improve our standard range of products and at the same time develop completely new ones to meet the every growing request of our customers.

Correct selection of model and/or size of a valve have a critical role in satisfactory operation. Therefore, it is requested that sufficient care be taken prior to selection of a valve using the technical information and specification provided in this catalogue. Particular attention should be given to the condition of service and application including pressure, temperature, materials, etc.

We hope that you will find our range of products of interest and you should require any further details or additional information concerning E.S.E. Valve Co. Ltd. or its products please do not hesitate to contact us, as we remain at your complete disposal.

Please note that according to continually work on improving our products, all products materials, specification, dimensions, and etc. listed are subject to change without notice.

We hope that you find this catalogue interesting and we thank your continuous support.







CERTIFICATE

Management system as per ISO 9001:2015 - NACI

In accordance with TÜV NORD Iran procedures, it is hereby certified that

ESFAHAN STEAM EQUIPMENT Co.

Nasim 59 Alley, Imam Blvd., Dorcheh, Esfahan, Iran



applies a management system in line with the above standard for the following scope

Design and Production of Steam Line Equipment Including Steam & Water Pressure Reducing Valve, Control Valve, Safety Valve, Diaphragm Valve, Steam Traps and Production of Valve by Customer Order

Certificate Registration No. IR 100 14/0266 Audit Report No. 100 E IR 0367 Valid until 2017-12-21

Certification Bodyat TÜV NORD Iran

Tehran, 2016-10-16

This certification was conducted in accordance with the TÜV NORD Iran auditing and certification procedures and is subject to regular surveillance audits.

TÜV NORD Iran

Apt.4, 6th Floor, Firoozeh Building, No. 22, Firoozeh St., North Sohravardi St., Tehran, Iran



NACI / 101





- Thermostatic ◀
- Thermodynamic ◀
- Inverted Bucket ◀
 - Ball Float 4



Balanced Pressure Thermostatic Steam Traps - 112

تاسیسات بغار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

فروش

Description

This is a Balanced Pressure Thermostatic Steam Trap with strainer. The operating principle is based on the expansion and contraction of a temperature sensitive capsule. The elements are filled with a liquid whose saturation temperature is lower than that of water, at the same pressure. With sub-cooled condensate the elements contract. When steam is formed the pressure inside the element causes expansion to close the valve.

Note: The Integral Blow-down valve is an assembly designed to be fitted to BP112 Thermostatic steam trap as an extra option.

Limiting Conditions

Maximum Body Design Conditions	PN 50
PMO - Maximum Operating Pressure	10 kgf/cm ²
TMO - Maximum Operating Temperature	240° C
PMA - Maximum Allowable Pressure	50 kgf/cm ²
TMA - Maximum Allowable Temperature	400° C
Cold Hydraulic Test Pressure	75 kgf/cm²

Capsule Options

Standard capsule is Sub-cooling 5 for operation at approximately 5°C below steam saturation temperature.

Optionally the capsule can be supplied for sub-cooled 10 for operation at approximately 10°C below steam saturation temperature.

Operating Range

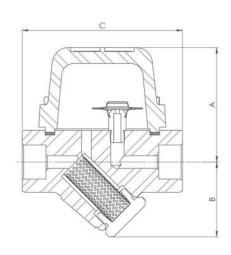
△PMX - Maximum differential pressure 10 kgf/cm²

Sizes and Pipe Connections

 $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1" Screwed (ANSI B1.20.1) - Socket Weld (ANSI B16.11) - Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	C	Weight
1/2"	80	60	110	3
3/4"	80	60	110	3
1"	80	60	110	3





Balanced Pressure Thermostatic Steam Traps - 112

Materials

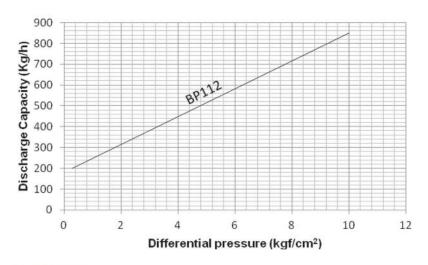
No.	Part	Material
1	Body	ASTM A105
2	Capsule Assembly *	AISI 316
3	Cover Gasket *	Reinforced Exfoliated Graphite
4	Cover	ASTM A105
5	Bolt	ASTM A193 B7
6	Strainer Screen *	AISI 304/316
7	Strainer Cap	AISI 420
8	Blow-Down Cap **	AISI 420
9	Blow-Down Screw **	AISI 420

6 7

Note: (*) Spare Part (**) Optional extra

Capacities

Maximum continual discharge amount (kg/h)



Installation

The steam trap can be installed on horizontal or vertical lines. However avoid installation with the body leaning on one side as it is likely that the cover will contain condensate a two different temperatures causing malfunction and possible distortion of the element. Do not fit the trap upside down since this position will not allow the cleaning of the strainer screen.

How to Order

Example: BP 112 – $\frac{1}{2}$ ", Balanced Pressure Thermostatic Steam Trap Screwed with Blow-down Valve.



Description

This is a Bimetallic Thermostatic Steam Trap with strainer. The operating principle is based on a balance between the steam force (pressure related) trying to open the discharge valve and the bimetal force (temperature related) which acts to close it. At saturated steam temperature the bimetal force keeps the valve closed, while with sub cooled condensate the pressure opens the valve.

Note: The Integral Blow-down Valve is an assembly designed to be fitted to BM112 Thermostatic steam trap as an extra option.



Limiting Conditions

Maximum Body Design Conditions	PN 50
PMO - Maximum Operating Pressure	30 kgf/cm ²
TMO - Maximum Operating Temperature	300° C
PMA - Maximum Allowable Pressure	50 kgf/cm ²
TMA - Maximum Allowable Temperature	400° C
Cold Hydraulic Test Pressure	75 kgf/cm²

Operating Range

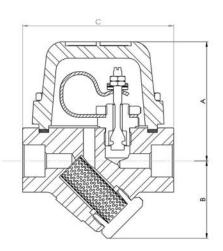
△PMX – Maximum differential pressure 30 kgf/cm²

Sizes and Pipe Connections

 $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1" Screwed (ANSI B1.20.1) - Socket Weld (ANSI B16.11) Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

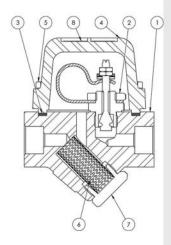
Size	Α	В	С	Weight
1/2"	80	60	110	3
3/4"	80	60	110	3
1"	80	60	110	3





Materials

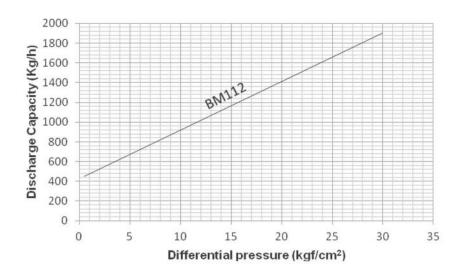
No.	Part	Material
1	Body	ASTM A105
2	Valve Seat Assembly *	AISI 316
3	Cover Gasket *	Reinforced Exfoliated Graphite
4	Cover	ASTM A105
5	Bolt	ASTM A193 B7
6	Strainer Screen *	AISI 304/316
7	Strainer Cap	AISI 420
8	Blow-Down Cap **	AISI 420
9	Blow-Down Screw **	AISI 420



Note: (*) Spare Part (**) Optional extra

Capacities

Maximum continual discharge amount (kg/h)



Installation

The steam trap can be installed on horizontal or vertical lines. Do not fit the trap upside down since this position will not allow the cleaning of the strainer. For the same reason the directory of flow on vertical lines must be downwards.

How to Order

Example: 112 – 1/2", Bimetallic Thermostatic Steam Trap Screwed with Blow-down Valve.

اسيسات بغار بغار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

فروش



This is a Bimetallic Thermostatic Steam Trap with strainer. The operating principle is based on a balance between the steam force (pressure related) trying to open the discharge valve and the bimetal force (temperature related) which acts to close it. At saturated steam temperature the bimetal force keeps the valve closed, while with sub cooled condensate the pressure opens the valve.



Limiting Conditions

Maximum Body Design Conditions	PN 63
PMO - Maximum Operating Pressure	50 kgf/cm ²
TMO - Maximum Operating Temperature	480° C
PMA - Maximum Allowable Pressure	63 kgf/cm ²
TMA - Maximum Allowable Temperature	480° C
Cold Hydraulic Test Pressure	95 kgf/cm ²

Operating Range

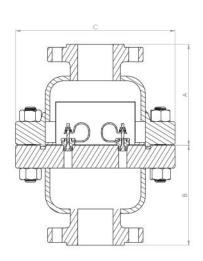
ΔPMX - Maximum differential pressure 50 kgf/cm²

Sizes and Pipe Connections

2", 3" Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

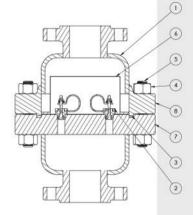
Size	Α	В	С	F-F	Weight
2"	180	180	350	365	90
3"	180	180	350	365	95





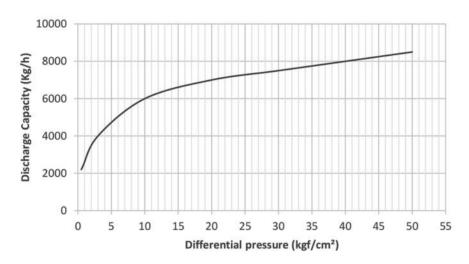
Materials

No.	Part	Material		
1	Body	ASTM A216 WCB		
2	Valve Seat Assembly *	AISI 316		
3	Gasket *	Reinforced exfoliated graphite		
4	Nut	ASTM A193 2H		
5	Bolt	ASTM A193 B7		
6	Strainer screen *	* AISI 304/316		
7	Flange	ASTM A105		
8	Flange	ASTM A105		



Note: (*) Spare Part

Capacities



Installation

The steam trap can be installed on horizontal or vertical lines. Do not fit the trap upside down since this position will not allow the cleaning of the strainer.

For the same reason the directory of flow on vertical lines must be downwards.

How to Order

Example: BM112 – 2", Bimetallic Thermostatic Steam Trap Flanged.

High Pressure Thermodynamic Steam Traps - 120

تاسيسات بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

Description

This is a maintainable high pressure thermodynamic steam trap. The 120 is specifically designed for relatively small condensate loads and therefore is ideal for mains drainage applications.

Limiting Conditions

	7 7 7 7
PMO - Maximum Operating Pressure	120 kgf/cm ²
TMO - Maximum Operating Temperature	500° C
PMOB – Maximum Operating Back Pressure - not exceed	50% of Inlet Pressure
Minimum Operating Differential Pressure for Satisfactory Operation	10 kgf/cm²
PMA - Maximum Allowable Pressure	250 kgf/cm ²
TMA - Maximum Allowable Temperature	550° C
Cold Hydraulic Test Pressure	375 kgf/cm ²



Operating Range

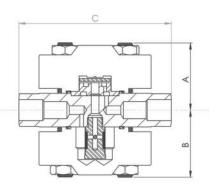
△PMX - Maximum differential pressure 120 kgf/cm²

Sizes and Pipe Connections

 $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1" Socket Weld (ANSI B16.11) - Butt Weld (ANSI B16.25) Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	C	F-F	Weight
1/2 "	70	70	160	210	17
3/4 "	70	70	160	210	17.5
1"	70	70	160	210	18



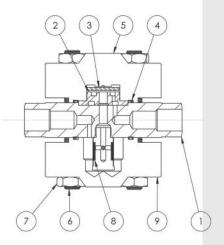


High Pressure Thermodynamic Steam Traps - 120



Materials

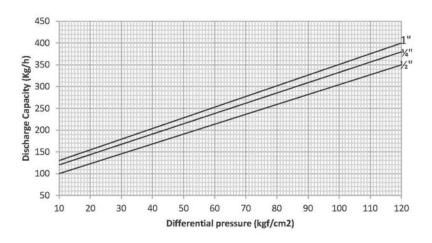
No.	Part	Material	
1	Body	ASTM A182 F22	
2	Seat *	BS 4659 BD2	
3	Disc *	BS 4659 BD2	
4	Cover Gasket *	Reinforced Exfoliated Graphite	
5	Top Cover	ASTM A182 F22	
6	Cover Stud	ASTM A193 B7	
7	Cover Nut	ASTM A193 2H	
8	Strainer Screen Assembly *	AISI 304/316	
9	Bottom Cover	ASTM A182 F22	



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (kg/h)



Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved. This will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment are used at all times.

How to Order

Example: TD120 – 3/4", Thermodynamic Steam Trap Butt Weld.

Thermodynamic Steam Traps - 662

تاسيسات بخار بخار اصفهان **E.S.E. Valve Co. Ltd.** 021 66479486 0912 8448763

Description

This type is a maintainable thermodynamic steam trap. The 662 is specifically designed for relatively small condensate loads and therefore is ideal for mains drainage applications.

Note: The Integral Blow-down valve is an assembly designed to be fitted to 662 Thermodynamic steam traps as an extra option.



Limiting Conditions

Maximum Body Design Conditions	PN63
PMO - Maximum Operating Pressure	42 kgf/cm ²
TMO - Maximum Operating Temperature	400° C
PMOB – Maximum Operating Back Pressure - not exceed	75% of Inlet Pressure
Minimum Operating Differential Pressure for Satisfactory Operation	1 kgf/cm²
PMA - Maximum Allowable Pressure	63 kgf/cm ²
TMA - Maximum Allowable Temperature	400° C
Cold Hydraulic Test Pressure	95 kgf/cm ²

Operating Range

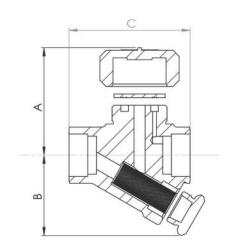
△PMX - Maximum differential pressure 42 kgf/cm²

Sizes and Pipe Connections

1/2 ", 3/4" and 1" Screwed (ANSI B1.20.1) - Socket Weld (ANSI B16.11)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	C	Weight
1/2"	75	80	78	0.8
3/4"	80	90	88	1.0
1"	85	90	98	1.5



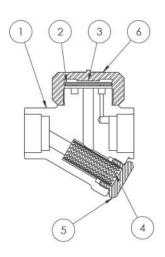


Thermodynamic Steam Traps - 662

Materials

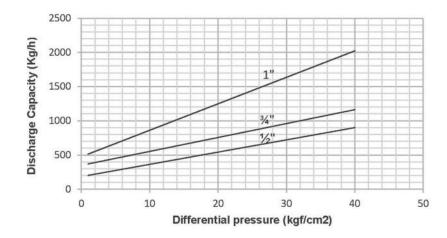
No. Part Material Body AISI 420 1 2 Disc * **AISI 430** 3 Cap **AISI 416** 4 Strainer Screen * AISI 304/316 5 Strainer Cap **AISI 416** ALUMINUM Name Plate 6 AISI 416 7 Blow-Down Cap ** Blow-Down Screw ** 8 **AISI 416**

Note: (*) Spare Part (**) Optional extra



Capacities

Maximum continual discharge amount (kg/h)



Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved. This will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment is used at all times.

How to Order

Example: TD662 1/2", Thermodynamic Steam Trap Screwed with Blow-down Valve.

Flanged Thermodynamic Steam Traps - 662

اسيسات بخار بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

Description

This type is a maintainable thermodynamic steam trap. The 662 is specifically designed for relatively small condensate loads and therefore is ideal for mains drainage applications.

Note: The Integral Blow-down valve is an assembly designed to be fitted to 662 Thermodynamic steam traps as an extra option.



Limiting Conditions

Maximum Body Design Conditions	PN63
PMO - Maximum Operating Pressure	42 kgf/cm ²
TMO - Maximum Operating Temperature	400° C
PMOB – Maximum Operating Back Pressure - not exceed	75% of Inlet Pressure
Minimum Operating Differential Pressure for Satisfactory Operation	1 kgf/cm²
PMA - Maximum Allowable Pressure	63 kgf/cm ²
TMA - Maximum Allowable Temperature	400° C
Cold Hydraulic Test Pressure	95 kgf/cm²

Operating Range

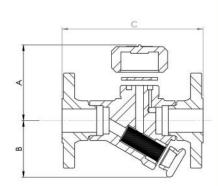
△PMX – Maximum differential pressure 42 kgf/cm²

Sizes and Pipe Connections

1/2 ", 3/4" and 1" Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Siz					Fla	nged		
e	Δ Ι Β	Δ .	Δ Β 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	150#	300#		600#	
			С	Weight	C	Weight	C	Weight
1/2"	75	80	150	2	160	2.5	170	3
3/4"	80	90	150	3	160	3.5	170	4
1"	85	90	160	4	170	4.5	180	5



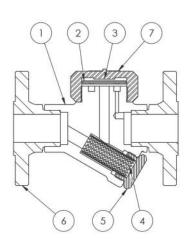


Flanged Thermodynamic Steam Traps - 662

021 66479486 0912 8448763 فروش

Materials

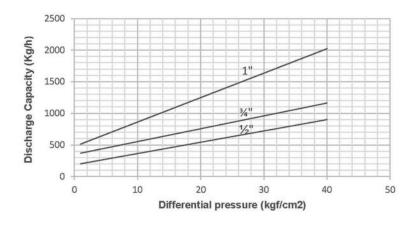
Vo.	Part	Material
1	Body	AISI 420
2	Disc*	AISI 430
3	Cap	AISI 416
4	Strainer Screen *	AISI 304/316
5	Strainer Cap	AISI 416
6	Flange	ASTM A105
7	Name Plate	ALUMINUM
8	Blow-Down Cap **	AISI 416
9	Blow-Down Screw **	AISI 416



Note: (*) Spare Part (**) Optional extra

Capacities

Maximum continual discharge amount (kg/h)



Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved. This will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment is used at all times.

How to Order

Example: TD662 1/2", Flanged Thermodynamic Steam Trap with Blow-down Valve.

اسيسات بخار بخار اصفهان **E.S.E. Valve Co. Ltd.** 021 66479486 0912 8448763

Description

This is an internal removable thermodynamic steam trap with forged alloy steel carbon steel body. The module valve seat is inline replaceable.

Note: The Integral Blow-down valve is an assembly designed to be fitted to 772 F22 Thermodynamic steam traps as an extra option.



Limiting Conditions

Maximum Body Design Conditions	PN 63
PMO - Maximum Operating Pressure	45 kgf/cm ²
TMO - Maximum Operating Temperature	400° C
PMOB - Maximum Operating Back Pressure not exceed	75% of Inlet Pressure
Minimum Operating Differential Pressure for Satisfactory Operation	1 kgf/cm²
PMA - Maximum Allowable Pressure	63 kgf/cm ²
TMA - Maximum Allowable Temperature	400° C
Cold Hydraulic Test Pressure	95 kgf/cm²

Operating Range

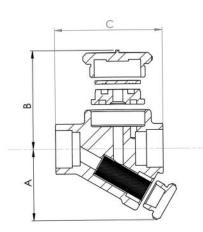
ΔPMX – Maximum differential pressure 45 kgf/cm²

Sizes and Pipe Connections

1/2 ", 3/4" and 1" Screwed (ANSI B1.20.1) - Socket Weld (ANSI B16.11)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	C	Weight
1/2"	70	80	80	0.9
3/4"	75	90	90	1.2
1"	80	90	96	1.6





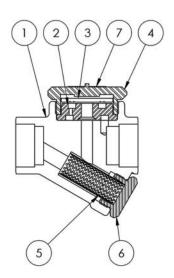
فروش

Internal Removable Thermodynamic Steam Traps - 772

Materials

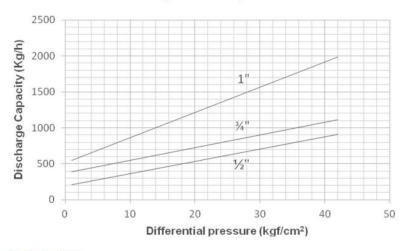
No.	Part	Material
1	Body	ASTM A182 F22
2	seat *	BS 4659 GR BD2
3	Disc*	BS 4659 GR BD2
4	Сар	AISI 420
5	Strainer Screen *	AISI 304/316
6	Strainer Cap	AISI 420
7	Name Plate	ALUMINUM
8	Blow-Down Cap **	AISI 420
9	Blow-Down Screw **	AISI 420





Capacities

Maximum continual discharge amount (kg/h)



Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved. This will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment are used at all times.

How to Order

Example TD772 1/2", Thermodynamic Steam Trap Screwed with Blow-down Valve.

Flanged Internal Removable Thermodynamic Steam Traps - 772

بخار بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

Description

This is an internal removable thermodynamic steam trap with forged carbon steel body. The module valve seat is inline replaceable.

Note: The Integral Blow-down valve is an assembly designed to be fitted to 772 Thermodynamic steam traps as an extra option.



Limiting Conditions

PN 50
42 kgf/cm ²
400° C
75% of Inlet Pressure
1 kgf/cm²
50 kgf/cm ²
400° C
75 kgf/cm²

Operating Range

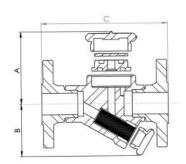
△PMX – Maximum differential pressure 42 kgf/cm²

Sizes and Pipe Connections

1/2 ", 3/4" and 1" Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size A		АВ	Flange					
	Α		150#			300#	600#	
			С	Weight	С	Weight	С	Weight
1/2"	70	80	150	2	160	2.5	170	3
3/4"	75	90	150	3	160	3.5	170	4
1"	80	90	160	4	170	4.5	180	5



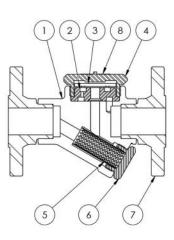


فروش

Flanged Internal Removable Thermodynamic Steam Traps — 772

Materials

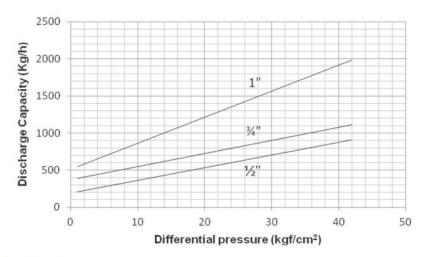
No.	Part	Material
1	Body	ASTM A105
2	Seat *	AISI 420
3	Disc *	AISI 430
4	Cap	AISI 420
5	Strainer Screen *	AISI 304/316
6	Strainer Cap	AISI 420
7	Flange	ASTM A105
8	Name Plate	ALUMINUM
9	Blow-Down Cap **	AISI 420
10	Blow-Down Screw **	AISI 420



Note: (*) Spare Part (**) Optional extra

Capacities

Maximum continual discharge amount (kg/h)



Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved. This will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment are used at all times.

How to Order

Example: TD772 1/2", Flanged Thermodynamic Steam Trap with Blow-down Valve.



E.S.E. Valve Co. Ltd.

021 66479486 0912 8448763





This is an internal removable thermodynamic steam trap with forged alloy steel body. The module valve seat is inline replaceable.

Note: The Integral Blow-down valve is an assembly designed to be fitted to 772 F22 Thermodynamic steam traps as an extra option.



Limiting Conditions

Maximum Body Design Conditions	PN 63
PMO - Maximum Operating Pressure	45 kgf/cm ²
TMO - Maximum Operating Temperature	450 ℃
PMOB - Maximum Operating Back Pressure not exceed	75% of Inlet Pressure
Minimum Operating Differential Pressure for Satisfactory Operation	1 kgf/cm²
PMA - Maximum Allowable Pressure	63 kgf/cm ²
TMA - Maximum Allowable Temperature	450 ℃
Cold Hydraulic Test Pressure	95 kgf/cm²

Operating Range

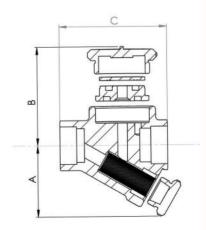
ΔPMX - Maximum differential pressure 45 kgf/cm²

Sizes and Pipe Connections

 $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1" Screwed (ANSI B1.20.1) - Socket Weld (ANSI B16.11) Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	А	В	C	Weight
1/2"	70	80	80	0.9
3/4"	75	90	90	1.2
1"	80	90	96	1.6



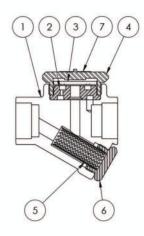


0912 8448763



Materials

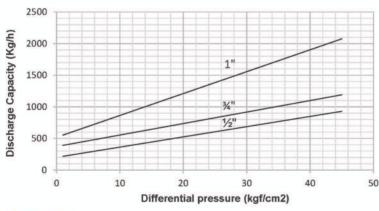
No.	Part	Material
1	Body	ASTM A182 F22
2	Valve Seat *	BS 4659 GR BD2
3	Disc *	BS 4659 GR BD2
4	Cap	AISI 420
5	Strainer Screen *	AISI 304/316
6	Strainer Cap	AISI 420
7	Name Plate	ALUMINUM
8	Blow-Down Cap **	AISI 420
9	Blow-Down Screw **	AISI 420



Note: (*) Spare Part (**) Optional extra

Capacities

Maximum continual discharge amount (kg/h)



Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved. This will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment are used at all times.

How to Order

Example: TD772 F22 1/2", Thermodynamic Steam Trap Screwed with Blow-down Valve.

بخار بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

دەش،

Description

This is an internal removable thermodynamic steam trap with forged alloy steel body. The module valve seat is inline replaceable.

Note: The Integral Blow-down valve is an assembly designed to be fitted to 772 F22 Thermodynamic steam traps as an extra option.



Limiting Conditions

Maximum Body Design Conditions	PN 63
PMO - Maximum Operating Pressure	45 kgf/cm ²
TMO - Maximum Operating Temperature	450 °C
PMOB - Maximum Operating Back Pressure not exceed	75% of Inlet Pressure
Minimum Operating Differential Pressure for Satisfactory Operation	1 kgf/cm²
PMA - Maximum Allowable Pressure	63 kgf/cm ²
TMA - Maximum Allowable Temperature	450 ℃
Cold Hydraulic Test Pressure	95 kgf/cm ²

Operating Range

ΔPMX – Maximum differential pressure 45 kgf/cm²

Sizes and Pipe Connections

1/2 ", 3/4" and 1" Flanged (ANSI B16.5)

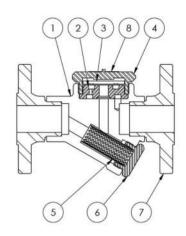
Dimensions / Weights (Approximate) mm and kg

		Flange							
Size	size A B	A B			150# 300#		300#	600#	
			С	Weight	C	Weight	С	Weight	
1/2"	70	80	150	2	160	2.5	170	3	
3/4"	75	90	150	3	160	3.5	170	4	
1"	80	90	160	4	170	4.5	180	5	



Materials

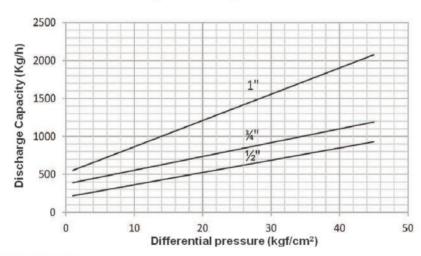
No.	Part	Material
1	Body	ASTM A182 F22
2	Valve Seat *	BS 4659 GR BD2
3	Disc *	BS 4659 GR BD2
4	Сар	AISI 420
5	Strainer Screen *	AISI 304/316
6	Strainer Cap	AISI 420
7	Flange	ASTM A105
8	Name Plate ALUMIN	
9	Blow-Down Cap ** AISI 420	
10	Blow-Down Screw **	AISI 420



Note: (*) Spare Part (**) Optional extra

Capacities

Maximum continual discharge amount (kg/h)



Installation

The trap should preferably be installed in the horizontal plane, with a small drop leg preceding it. Where the trap discharges into a closed return system, a non-return valve should be fitted downstream to prevent return flow. Ensure all connection ports are clear from obstruction. Always open isolation valves slowly until normal operating conditions are achieved. This will avoid system shocks. Check for leaks and correct operation. Always ensure the correct tools, safety procedures and protective equipment are used at all times.

How to Order

Example: TD772 F22 1/2", Thermodynamic Steam Trap Screwed with Blow-down Valve.

Horizontal Inverted Bucket Steam Traps — 222

تاسيسات بخار بخار اصفهان **E.S.E. Valve Co. Ltd.** 021 66479486 0912 8448763



This type of Inverted Bucket Steam Trap is designed for installation in horizontal pipe work with cast iron body and bolted cover. They are maintainable and offer a wide range of capacities. It is suitable for use where trap inlet pressure can vary, where Δp is sometimes positive or negative.



Limiting Conditions

Body Design Conditions	PN16
PMO - Maximum Operating Pressure	14 kgf/cm ²
TMO - Maximum Operating Temperature	200° C
PMA - Maximum Allowable Pressure	16 kgf/cm ²
TMA - Maximum Allowable Temperature	220° C
Cold Hydraulic Test Pressure	24 kgf/cm ²

Operating Range

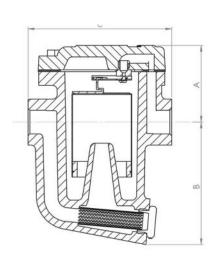
△PMX - Maximum differential pressure 16 kgf/cm²

Sizes and Pipe Connections

 $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1" Screwed (ANSI B1.20.1) - Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	A	В	С	Weight
1/2"	65	115	125	5.5
3/4"	65	115	125	5.5
1"	85	135	155	7.5





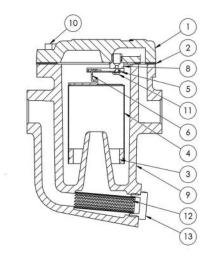
Horizontal Inverted Bucket Steam Traps — 222

021 66479486 0912 8448763

فروش

Materials

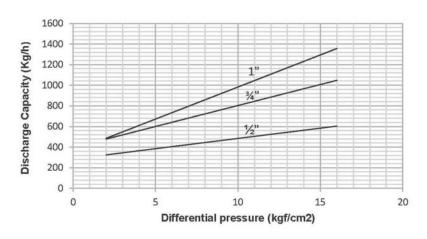
No.	Part Material		
1	Cover	GG 25	
2	Gasket *	Clingrit	
3	Balance Weight *	Gray Cast	
4	Bucket Assembly *	AISI 304	
5	Plug *	AISI 304	
6	Plug Support *	AISI 304	
7	Bolt	AISI 304	
8	Seat *	Seat * AISI 316	
9	Body	ody GG 25	
10	Bolt	C.S.	
11	Valve Plug	AISI 316	
12	Strainer Screen *	AISI 304/316	
13	Strainer Cap	AISI 420	



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (kg/h)



Note: Traps should be selected for the most appropriate working pressure differential and not on the basis of load.

Installation

The trap must be installed with the body upright so that the bucket is rising and falling vertically. The trap should be installed below the drain point so that a water seal can be maintained around the open end of the bucket.

How to Order

Example: IB222 – 1/2", Horizontal Inverted Bucket Steam Trap.

Vertical Inverted Bucket Steam Traps — 332

تاسیسات بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

فروش

Description

This type of Inverted Bucket Steam Trap is designed for installation in vertical pipe work with cast iron body and bolted cover. They are maintainable and offer a wide range of capacities. It is suitable for use where trap inlet pressure can vary, where Δp is sometimes positive or negative.



Body Design Conditions	PN16
PMO - Maximum Operating Pressure	14 kgf/cm ²
TMO - Maximum Operating Temperature	200° C
PMA - Maximum Allowable Pressure	16 kgf/cm ²
TMA - Maximum Allowable Temperature	220° C
Cold Hydraulic Test Pressure	24 kgf/cm ²



Operating Range

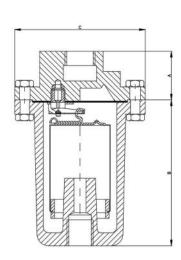
△PMX - Maximum differential pressure 16 kgf/cm²

Sizes and Pipe Connections

 $\frac{1}{2}$ ", $\frac{3}{4}$ " and 1" Screwed (ANSI B1.20.1) – Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	C	Weight
1/2"	40	125	110	3.5
3/4"	50	150	135	5.5
1"	50	150	135	5.5



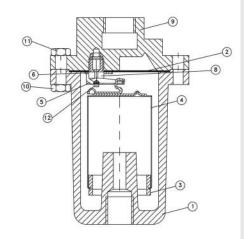


Vertical Inverted Bucket Steam Traps - 332

فروش

Materials

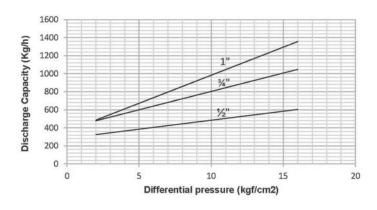
No.	Part	Material
1	Cover	GG 25
2	Gasket *	Clingrit
3	Balance Weight *	Gray Cast
4	Bucket Assembly *	AISI 304
5	Plug *	AISI 304
6	Plug Support *	AISI 304
7	Bolt	AISI 304
8	Seat *	AISI 316
9	Body	GG 25
10	Nut	C.S.
11	Bolt	C.S.
12	Valve Plug *	AISI 316



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (kg/h)



Note: Traps should be selected for the most appropriate working pressure differential and not on the basis of load.

Installation

The trap must be installed with the body upright so that the bucket is rising and falling vertically. The inlet should be at the bottom with the trap installed below the drain point so that a water seal can be maintained around the open end of the bucket.

How to Order

Example: IB332 – ¾", Vertical Inverted Bucket Steam Trap.

تاسيسات بغار بغار داصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763



This type of ball float heavy duty steam trap is designed for using the place where much amount of drain is expected such as heat exchangers, dryers or headers. These traps have simple constructions and reliable operations due to their lever float type, with cast iron body.

It is available in two models:

- 442F With a manually adjustable air venting needle valve
- 442FT With integral automatic air venting facility



Limiting Conditions

Body Design Conditions	PN10
PMO - Maximum Operating Pressure	5 kgf/cm ²
TMO - Maximum Operating Temperature	150° C
PMA - Maximum Allowable Pressure	10 kgf/cm
TMA - Maximum Allowable Temperature	180° C
Cold Hydraulic Test Pressure	15 kgf/cm ²

Operating Range

△PMX - Maximum differential pressure

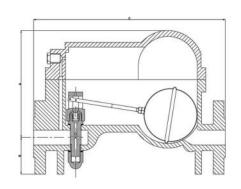
Model	ΔPMX
442F	5 kgf/cm ²
442FT	5 kgf/cm ²

Sizes and Pipe Connections

DN 25,32,40,50 Flanged (JIS B 2212)

Dimensions / Weights (Approximate) mm and kg

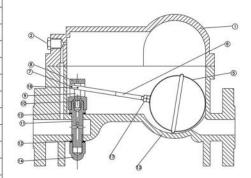
Size	C	В	Α	Weight
DN25	320	60	130	15.5
DN32	320	60	130	15.5
DN40	370	70	200	20.5
DN50	370	70	200	20.5





Materials

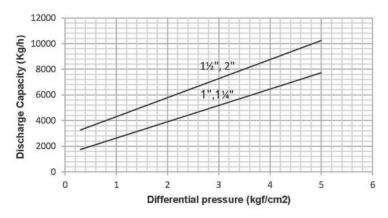
1	Bonnet	GG 25	
2	Adjusting Air Vent	Brass	
3	Bolt	C.S.	
4	Nut	C.S.	
5	Ball Float *	AISI 304	
6	Stem *	AISI 304	
7	Pin	AISI 304	
8	Cap *	Gray Cast	
9	Plug *	Brass	
10	Seat *	Brass	
11	Support *	Gray Cast	
12	Gasket *	Clingrit	
13	Body	GG 25	
14	Luck Nut *	Brass	
15	Name Plate	Aluminum	
16	Pin	AISI 304	
17	Nut	AISI 304	
18	Pin	Aluminum	



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Capacities shown are based on discharge at saturation temperature. In 442FT when discharging sub-cooled condensate, the air vent provides extra capacity. Under start up conditions the thermostatic air vent will be open, and will provide additional condensate capacity to outlet.

Installation

The trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

How to Order

Example: FT442 - DN40 - Ball Float Thermostatic Steam Trap.

اسيسات بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

Description

This type is a cast iron ball float steam trap with horizontal connection.

It is available in two models:

- 552F With a manually adjustable air venting needle valve
- · 552FT With integral automatic air venting facility



Limiting Conditions

Body Design Conditions	PN16
PMO - Maximum Operating Pressure	10 kgf/cm ²
TMO - Maximum Operating Temperature	180° C
PMA - Maximum Allowable Pressure	16 kgf/cm ²
TMA - Maximum Allowable Temperature	220° C
Cold Hydraulic Test Pressure	24 kgf/cm ²

Operating Range

△PMX – Maximum differential pressure

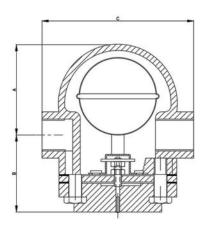
Model	ΔPMX
552F	10 kgf/cm ²
552FT	10 kgf/cm ²

Sizes and Pipe Connections

1/2 " and 3/4" Screwed (ANSI B1.20.1) - Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	А	В	C	Weight
1/2 "	75	65	120	2.5
3/4"	75	65	120	2.5

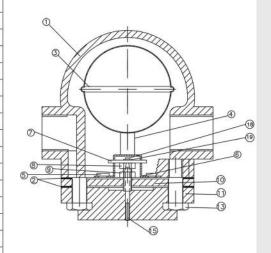






فروش Materials

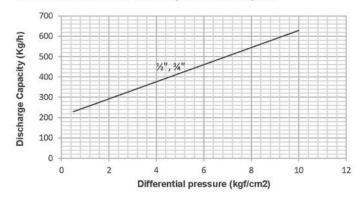
No.	Part	Material	
1	Cover	GG 25	
2	Gasket *	Clingrit	
3	Ball Float *	AISI 304	
4	Lever *	AISI 304	
5	Bolt	AISI 304	
6	U Support *	AISI 304	
7	Pivot Pin *	AISI 304	
8	Seat *	AISI 304	
9	Adjusting Nut *	AISI 304	
10	Spacer	GG 25	
11	Body	GG 25	
12	Bolt	AISI 304	
13	Bolt	C.S.	
14	Nut	C.S.	
15	Air Vent Bolt *	Brass	
16	Name Plate	Aluminum	
17	Pin	Aluminum	
18	Valve Plug *	AISI 316	
19	Luck Washer *	AISI 304	



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Capacities shown are based on discharge at saturation temperature. In 552FT when discharging sub-cooled condensate, the air vent provides extra capacity. Under start up conditions the thermostatic air vent will be open, and will provide additional condensate capacity to outlet.

Installation

The trap must be fitted with the float arm in a horizontal plane that is rises and falls vertically. Therefore the arrow on nameplate must point downwards.

How to Order

Example: FT552 - 1/2", Ball Float Thermostatic Steam Trap.

اسيسات بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

فروش

Description

This type of ball float steam trap with integral automatic air venting facility is designed for using the place where much amount of drain is expected such as heat exchangers, dryers or heaters. This trap has simple construction and reliable operation due to their lever float type, with Cast Steel body. It is available in horizontal flanged connections.



Body Design Conditions	PN40
PMO - Maximum Operating Pressure	32 kgf/cm ²
TMO - Maximum Operating Temperature	300° C
PMA - Maximum Allowable Pressure	40 kgf/cm ²
TMA - Maximum Allowable Temperature	350° C
Cold Hydraulic Test Pressure	60 kgf/cm ²

Operating Range

△PMX - Maximum differential pressure

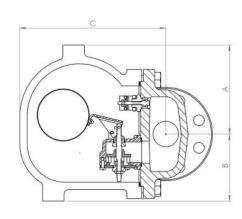
Model	△PMX
882FT - 10	10 kgf/cm ²
882FT - 20	20 kgf/cm ²
882FT - 32	32 kgf/cm ²

Sizes and Pipe Connections

DN 40, 50 Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

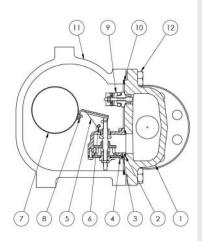
Size	Α	В	С	F-F	Weight
DN40	160	120	260	320	40
DN50	160	120	260	320	42





فروش Materials

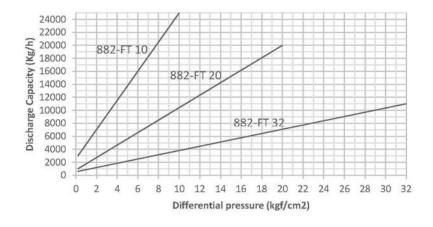
No.	Part	Material	
1	Body	ASTM A216 WCB	
2	Valve Seat Gasket *	Reinforced Exfoliated Graphite	
3	Valve Seat Assembly *	AISI 316	
4	Bolt	Stainless Steel	
5	Lever *	AISI 316	
6	Pivot Pin	Stainless Steel	
7	Ball Float *	AISI 316	
8	Nut	Stainless Steel	
9	Air Vent Assembly *	AISI 316	
10	Cover Gasket *	Reinforced Exfoliated Graphit	
11	Cover	ASTM A216 WCB	
12	Bolt M16x1.5x50	ASTM F568M 10.9	



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Capacities shown are based on discharge at saturation temperature. In 882FT when discharging sub-cooled condensate, the air vent provides extra capacity. Under start up conditions, the air venting will be open, and will provide additional condensate capacity to outlet.

Installation

The trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

How to Order

Example: FT882 - DN40 - 20, Ball Float Steam Trap.

Double Ball Float Steam Traps - 882

تاسيسات بخار اصفهان **E.S.E. Valve Co. Ltd.** 021 66479486 0912 8448763

فروش

Description

This type of ball float steam trap with integral automatic air venting facility is designed for using the place where much amount of drain is expected such as heat exchangers, dryers or heaters. This trap has simple construction and reliable operation due to their lever float type, with Cast Steel body. It is available in horizontal flanged connections.



Limiting Conditions

Body Design Conditions	PN40
PMO - Maximum Operating Pressure	32 kgf/cm ²
TMO - Maximum Operating Temperature	300° C
PMA - Maximum Allowable Pressure	40 kgf/cm ²
TMA - Maximum Allowable Temperature	350° C
Cold Hydraulic Test Pressure	60 kgf/cm ²

Operating Range

ΔPMX - Maximum differential pressure

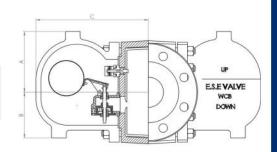
Model	ΔPMX 10 kgf/cm² 20 kgf/cm² 32 kgf/cm²	
882FT - 10		
882FT - 20		
882FT - 32		

Sizes and Pipe Connections

DN 80, 100 Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	С	F-F	Weight
DN80	160	120	290	400	60
DN100	160	120	290	400	62

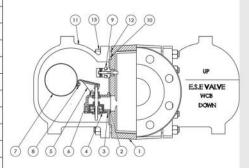




Double Ball Float Steam Traps - 882

Materials

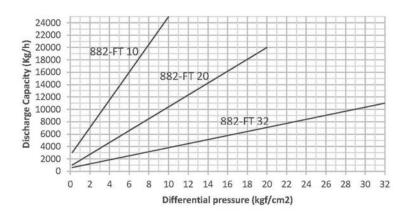
No.	Part	Material
1	Body	ASTM A216 WCB
2	Valve Seat Gasket *	Reinforced Exfoliated Graphite
3	Valve Seat Assembly *	AISI 316
4	Bolt	Stainless Steel
5	Lever*	AISI 316
6	Pivot Pin	Stainless Steel
7	Ball Float *	AISI 316
8	Nut	Stainless Steel
9	Air Vent Assembly *	AISI 316
10	Cover Gasket *	Reinforced Exfoliated Graphite
11	Cover	ASTM A216 WCB
12	Cover Stud	ASTM F568M 10.9
13	Cover Nut	ASTM F568M 10.9



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Capacities shown are based on discharge at saturation temperature. In 882FT when discharging sub-cooled condensate, the air vent provides extra capacity. Under start up conditions, the air venting will be open, and will provide additional condensate capacity to outlet.

Installation

The trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

How to Order

Example: FT882 - DN80 - 20, Double Ball Float Steam Trap.

4D Ball Float Steam Traps - 882

E.S.E. Valve Co. Ltd.





This type of ball float steam trap with integral automatic air venting facility is designed for using the place where much amount of drain is expected such as heat exchangers, dryers or heaters. This trap has simple construction and reliable operation due to their lever float type, with Cast Steel body. It is available in horizontal flanged connections.



Body Design Conditions	PN40
PMO - Maximum Operating Pressure	32 kgf/cm ²
TMO - Maximum Operating Temperature	300° C
PMA - Maximum Allowable Pressure	40 kgf/cm ²
TMA - Maximum Allowable Temperature	350° C
Cold Hydraulic Test Pressure	60 kgf/cm ²



Operating Range

ΔPMX - Maximum differential pressure

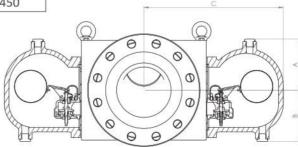
Model	ΔΡΜΧ
882FT - 10	10 kgf/cm ²
882FT - 20	20 kgf/cm ²
882FT - 32	32 kgf/cm ²

Sizes and Pipe Connections

DN 150, 200 Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	С	F-F	Weight
DN150	160	120	400	1650	435
DN200	160	120	400	1650	450

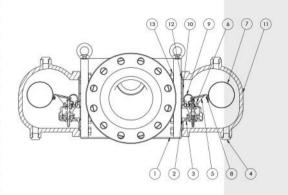




4D Ball Float Steam Traps - 882

Materials

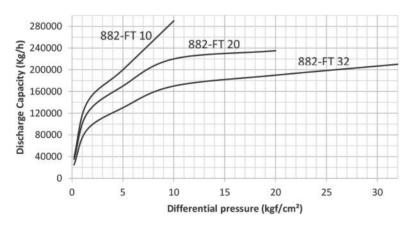
No.	Part	Material
1	Body	ASTM A216 WCB
2	Valve Seat Gasket *	Reinforced exfoliated graphite
3	Valve Seat Assembly *	AISI 316
4	Plug	Stainless Steel
5	Lever *	AISI 316
6	Pivot Pin	Stainless Steel
7	Ball float *	AISI 316
8	Nut	Stainless Steel
9	Air vent Assembly *	AISI 316
10	Cover Gasket *	Reinforced exfoliated graphite
11	Cover	ASTM A216 WCB
12	Cover Stud	ASTM F568M 10.9
13	Cover Nut	ASTM F568M 10.9



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Capacities shown are based on discharge at saturation temperature. In 882FT when discharging sub-cooled condensate, the air vent provides extra capacity. Under start up conditions, the air venting will be open, and will provide additional condensate capacity to outlet.

Installation

The trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

How to Order

Example: FT882 - DN150 - 20, 4D Ball Float Steam Trap.

Ball Float Steam Traps - 992



E.S.E. Valve Co. Ltd

021 66479486 0912 8448763

فروش



This type of ball float steam trap with integral automatic air venting facility is designed for using the place where much amount of drain is expected such as heat exchangers, dryers or heaters. This trap has simple construction and reliable operation due to their lever float type, with Cast Steel body. It is available in horizontal flanged connections.



Limiting Conditions

Body Design Conditions	PN25
PMO - Maximum Operating Pressure	14 kgf/cm ²
TMO - Maximum Operating Temperature	300° C
PMA - Maximum Allowable Pressure	25 kgf/cm ²
TMA - Maximum Allowable Temperature	350° C
Cold Hydraulic Test Pressure	38 kgf/cm ²

Operating Range

△PMX – Maximum differential pressure

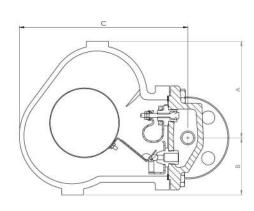
Model	ΔPMX
992FT - 5	5 kgf/cm ²
992FT - 14	14 kgf/cm ²

Sizes and Pipe Connections

DN 15, 20, 25 Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

Size	Α	В	С	F-F	Weight
DN15	140	80	240	210	17
DN20	140	80	240	210	17.5
DN25	140	80	240	210	18

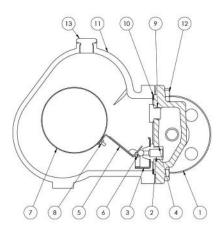




Ball Float Steam Traps - 992

Materials

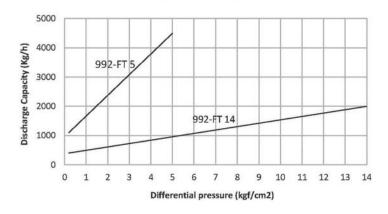
No.	Part	Material		
1	Body	ASTM A216 WCB		
2	Seat *	AISI 316		
3	Support *	AISI 316		
4	Bolt	Stainless Steel		
5	Lever *	AISI 316		
6	Pivot Pin	Stainless Steel		
7	Ball Float *	AISI 316		
8	Nut	Stainless Steel		
9	Air Vent Assembly*	AISI 316		
10	Cover Gasket *	Reinforced Exfoliated Graphi		
11	Cover	ASTM A216 WCB		
12	Bolt M12x1.5x40	ASTM F568M 10.9		



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Capacities shown are based on discharge at saturation temperature. In 992FT when discharging sub-cooled condensate, the air vent provides extra capacity. Under start up conditions, the air venting will be open, and will provide additional condensate capacity to outlet.

Installation

The trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

How to Order

Example: FT992 - DN20 - 14, Ball Float Steam Trap.





This is a range of float type automatic liquid drainers for air and gas systems. It is designed for using the place where much amount of drain is expected such as separator on air main, after cooler, inter cooler, air cooler, air receiver dryers, oil coolers and many more. This trap has simple construction and reliable operation due to their lever float type, with Cast Steel body. It is available in horizontal flanged connections.



Limiting Conditions

Body Design Conditions	PN40
PMO - Maximum Operating Pressure	32 kgf/cm ²
TMO - Maximum Operating Temperature	300° C
PMA - Maximum Allowable Pressure	40 kgf/cm ²
TMA - Maximum Allowable Temperature	350° C
Cold Hydraulic Test Pressure	60 kgf/cm ²

Operating Range

△PMX – Maximum differential pressure

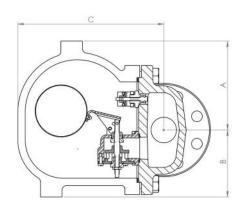
Model	△PMX
882AT - 10	10 kgf/cm²
882AT - 20	20 kgf/cm ²
882AT - 32	32 kgf/cm ²

Sizes and Pipe Connections

DN 40, 50 Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

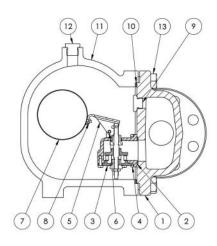
Size	Α	В	С	F-F	Weight
DN40	160	120	260	320	40
DN50	160	120	260	320	42





Materials

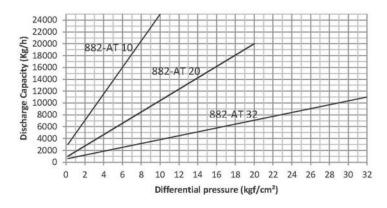
No.	Part	Material
1	Body	ASTM A216 WCB
2	Valve Seat Gasket *	Reinforced Exfoliated Graphite
3	Valve Seat Assembly *	AISI 316
4	Bolt	Stainless Steel
5	Lever *	AISI 316
6	Pivot Pin	Stainless Steel
7	Ball Float *	AISI 316
8	Nut	Stainless Steel
9	Plug	Stainless Steel
10	Cover Gasket *	Reinforced Exfoliated Graphite
11	Cover	ASTM A216 WCB
12	Air Balance Plug	ASTM A105
13	Bolt M16x1.5x50	ASTM F568M 10.9



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Water entering the trap lifts the float and opens the discharge valve. This adjusts the valve opening so that there is a continuous flow of water through the trap. There are no pressure fluctuations as the trap opens and closes.

Installation

The trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

Note: An equalizing line should be installed. This will equalize the pressure to the trap, eliminate gas binding and permit a smooth uninterrupted flow of condensate to the trap; the equalizing line connection to the tank must be above the level of any possible accumulation of condensate.

How to Order

Example: AT882 - DN50 - 10, Ball Float Air Trap.

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This is a range of float type automatic liquid drainers for air and gas systems. It is designed for using the place where much amount of drain is expected such as separator on air main, after cooler, inter cooler, air cooler, air receiver dryers, oil coolers and many more. This trap has simple construction and reliable operation due to their lever float type, with Cast Steel bodies. It is available in horizontal flanged connections.



Limiting Conditions

Body Design Conditions	PN25
PMO - Maximum Operating Pressure	14 kgf/cm ²
TMO - Maximum Operating Temperature	300° C
PMA - Maximum Allowable Pressure	25 kgf/cm ²
TMA - Maximum Allowable Temperature	350° C
Cold Hydraulic Test Pressure	38 kgf/cm ²

Operating Range

△PMX - Maximum differential pressure

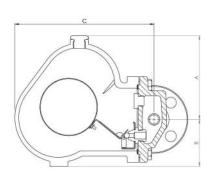
Model	ΔPMX
992AT - 5	5 kgf/cm²
992AT - 14	14 kgf/cm²

Sizes and Pipe Connections

DN 15, 20, 25 Flanged (ANSI B16.5)

Dimensions / Weights (Approximate) mm and kg

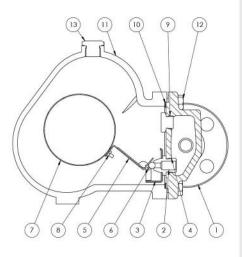
Size	Α	В	С	F-F	Weight
DN15	140	80	240	210	17
DN20	140	80	240	210	17.5
DN25	140	80	240	210	18





Materials

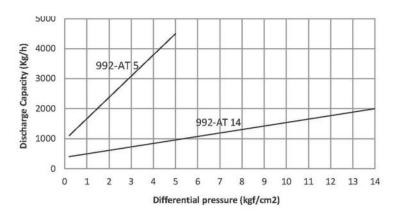
No.	Part	Material
1	Body	ASTM A216 WCB
2	Seat *	AISI 316
3	Support *	AISI 316
4	Bolt	Stainless Steel
5	Lever *	AISI 316
6	Pivot Pin	Stainless Steel
7	Ball Float *	AISI 316
8	Nut	Stainless Steel
9	Plug	Stainless Steel
10	Cover Gasket *	Reinforced Exfoliated Graphite
11	Cover	ASTM A216 WCB
12	Bolt M12x1.5x40	ASTM F568M 10.9
13	Air Balance Plug	ASTM A105



Note: (*) Spare Part

Capacities

Maximum continual discharge amount (Kg/h)



Note: Water entering the trap lifts the float and opens the discharge valve. This adjusts the valve opening so that there is a continuous flow of water through the trap. There are no pressure fluctuations as the trap opens and closes.

Installation

The trap should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the trap body.

Note: An equalizing line should be installed. This will equalize the pressure to the trap, eliminate gas binding and permit a smooth uninterrupted flow of condensate to the trap; the equalizing line connection to the tank must be above the level of any possible accumulation of condensate.

How to Order

Example: FT992 - DN20 - 14, Ball Float Air Trap.















Single Spring Safety Valves - SF2

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Description

The SF2 type is a single spring flanged safety valve suitable for Steam, Hot and Cold water.



Body Design Condition	PN16
Maximum Design Temperature	225 °C
Maximum Cold Hydraulic Test Pressure	30 kgf/cm ²
Maximum Allowable Pressure	15 kgf/cm ²
Minimum Allowable Pressure	3 kgf/cm ²



Operating Range

3 to 15 kgf/cm² by the order.

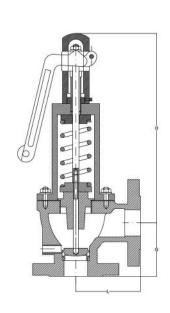
Note: 10 kgf/cm² set pressure is always available. The other pressure sets will be available by the order.

Sizes and Pipe Connections

DN 40 and 50 Flanged (DIN 2502)

Dimensions / Weights (Approximate) mm and kg

Connection		Connection		EE	Mainlet	
Inlet	Outlet	L	G	Н	Weight	
DN 40	DN 40	120	100	325	16	
DN 50	DN 50	120	100	330	17	

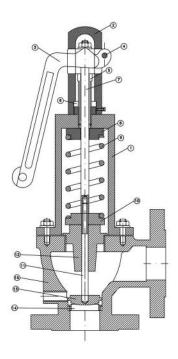




Single Spring Safety Valves - SF2

Materials

No.	Part	Material	
1	Bonnet	GG 25	
2	Cap	Gray Cast	
3	Lever	Gray Cast	
4	Pin	C.S.	
5	Adjusting Bolt	Brass	
6	Adjusting Nut	Brass	
7	Spindle	C.S.	
8	Spring Washer Up	Gray Cast	
9	Spring	Cadmium Plated	
10	Spring Washer Down	G.G. 25	
11	Disc Rod	AISI 304	
12	Guide	Brass	
13	Disc	AISI 304	
14	Seat	AISI 304	
15	Body	GG 25	



Safety Valves Capacities for Steam (kg/h)

Size	Set pressure kgf/cm ²							
Size	3	4	6	8	10	15		
DN 40	800	1000	1400	1800	2200	3200		
DN 50	1100	1400	2000	2600	3100	4600		

Safety Valves Capacities for Hot and Cold Water (kg/h 103)

Size		S	et pressu	ıre kgf/cı	m²	
SIZE	3	4	6	8	10	15
DN 40	6	7	8	10	12	15
DN 50	10	11	14	17	19	24

Calculation Formula for Relieving Capacity

Considering thermal input of the vessel

 $W = 0.840 \times 10^{-3} Q$ W = Relieving capacity (kg/h) Q = Thermal input (kcal/h)

Installation

The safety valve should always be fitted with the center line of the spring housing vertically above the valve. Note: The condensed drain must be fitted.

How to Order

Example: SF2 - DN40, Set Pressure 6 kgf/cm² for cold water.

Double Spring Safety Valves - SF2U

Description

The SF2U type is a double spring flanged safety valve suitable for Steam, Hot and Cold water.

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Body Design Condition	PN16
Maximum Design Temperature	225 °C
Maximum Cold Hydraulic Test Pressure	30 kgf/cm ²
Maximum Allowable Pressure	15 kgf/cm ²
Minimum Allowable Pressure	3 kgf/cm ²



Operating Range

3 to 15 kgf/cm² by the order.

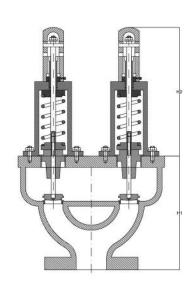
Note: 10 kgf/cm² set pressure is always available. The other pressure sets will be available by the order.

Sizes and Pipe Connections

DN 65X80 Flanged (DIN 2502)

Dimensions / Weights (Approximate) mm and kg

Conn	ection	LIa	LI2	Weight
Inlet	Outlet	пт	H2	
DN 65	DN 80	225	325	42

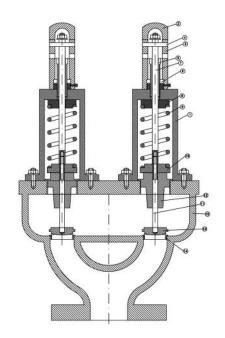




Double Spring Safety Valves - SF2U

Materials

No.	Part	Material	
1	Bonnet	GG 25	
2	Cap	Gray Cast	
3	Lever	Gray Cast	
4	Pin	C.S.	
5	Adjusting Bolt	Brass	
6	Adjusting Nut	Brass	
7	Spindle	C.S.	
8	Spring Washer Up	Gray Cast	
9	Spring	Cadmium plated	
10	Spring Washer Down	G.G. 25	
11	Disc Rod	AISI 304	
12	Guide	Brass	
13	Disc	AISI 304	
14	Seat	AISI 304	
15	Body	GG 25	



Safety Valves Capacities for Steam (kg/h)

Size	Set pressure kgf/cm ²							
Size	3	4	6	8	10	15		
DN 65X80	1600	1800	2600	3300	4100	5900		

Safety Valves Capacities for Hot and Cold Water (kg/h 103)

Sizo	Set pressure kgf/cm ²						
3126	3	4	6	8	10	15	
DN 65X80	12	14	16	20	24	30	

Calculation Formula for Relieving Capacity

Considering thermal input of the vessel

 $W = 0.840 \times 10^{-3} Q$ W = Relieving capacity (kg/h) Q = Thermal input (kcal/h)

Installation

The safety valve should always be fitted with the center line of the spring housing vertically above the valve. Note: The condensed drain must be fitted.

How to Order

Example: SF2U - DN65X80, Set Pressure 6 kgf/cm² for steam.

Double Spring Safety Valves - SF9

Description

The SF9 type is a double spring flanged safety valve suitable for Steam, Hot and Cold water.

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Limiting Conditions

Body Design Condition	PN40
Maximum Design Temperature	300 ℃
Maximum Cold Hydraulic Test Pressure	60 kgf/cm ²
Maximum Allowable Pressure	25 kgf/cm ²
Minimum Allowable Pressure	3 kgf/cm ²



Operation Range

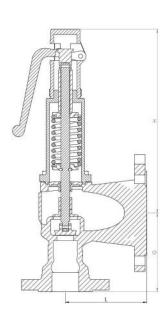
3 to 25 kgf/cm² by the order.

Sizes and Pipe Connections

DN 50X100 Flanged (DIN 2502)

Dimensions / Weights (Approximate) mm and Kg

Conn	Connection		_	ш	Woight	
Inlet	Outlet	t L		п	Weight	
DN 50	DN 100	155	150	350	31	

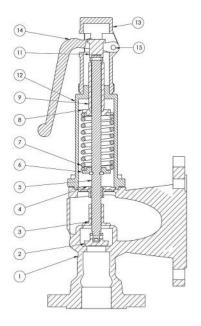




Double Spring Safety Valves - SF9

Materials

No.	Part	Material		
1	Body	AISI 420		
2	Disc	AISI 316		
3	Reaction Disc	AISI 316		
4	Guide	AISI 304		
5	Spindle	AISI 304		
6	Spring Washer Down	AISI 304		
7	Spring	AISI 320		
8	Spring Washer Up	AISI 304		
9	Adjusting Bolt	AISI 304		
10	Adjusting Nut	AISI 304		
11	Lifting Device	AISI 304		
12	Bonnet	GGG 40		
13	Cap	GGG 40		
14	Lever	GGG 40		
15	Pin	AISI 304		



Safety Valves Capacities for Steam (kg/h)

Cizo	Set pressure kgf/cm ²						
Size	3	5	10	15	20	25	
DN 50X100	1600	1800	3200	4500	5800	7200	

Safety Valves Capacities for Hot and Cold Water (kg/h 103)

Cizo	Set pressure kgf/cm ²						
Size	3	5	10	15	20	25	
DN 50X100	12	16	24	30	42	50	

Calculation Formula for Relieving Capacity

Considering thermal input of the vessel

 $W = 0.840 \times 10^{-3} Q$ W = Relieving capacity (kg/h) Q = Thermal input (kcal/h)

Instalation

The safety valve should always be fitted with the center line of the spring housing vertically above the valve. Note: The condensed drain must be fitted.

How to Order

Example: SF9 – DN50X100, Set Pressure 15 kgf/cm² for steam.

POP Safety Valves - SV1

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Description

The SV1 type is a pop screwed safety valve suitable for Steam and Hot water.



Limiting Conditions

Body Design Condition	PN6
Maximum Design Temperature	125 °C
Maximum Cold Hydraulic Test Pressure	150 psi
Maximum Allowable Pressure	30 psi
Minimum Allowable Pressure	10 psi

Operating Range

10 to 30 psi by the order.

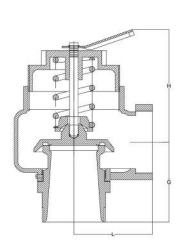
Note: 20 psi set pressure is always available. The other pressure sets will be available by the order.

Sizes and Pipe Connections

Inlet PT 3", Male (DIN 2999). Outlet PT 3", Female (DIN 2999).

Dimensions / Weights (Approximate) mm and kg

Conn	Connection			ш	Wajaht
Inlet	Outlet	L	G	п	Weigh
3"	3"	110	110	120	9

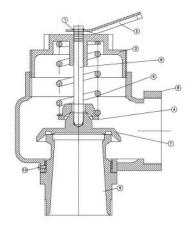




POP Safety Valves - SV1

Materials

No.	Part	Material		
1	Retaining Rings	C.S.		
2	Lever	C.S.		
3	Bonnet	Brass		
4	Spring Washer Down	Gray Cast		
5	Spring	Cadmium Plated		
6	Spindle	AISI 316		
7	Disc	AISI 316		
8	Body	GG 25		
9	Seat	AISI 316		
10	Pertaining Rings	AISI 304		



Safety Valves Capacities for Steam (kg/h)

Size		Set	pressure psi		
Size	10	15	20	25	30
3"	1550	1750	2000	2250	2500

Installation

The safety valve should always be fitted with the center line of the spring housing vertically above the valve.

Note: The condensed drain must be fitted.

How to Order

Example: SV1 – 3", Set Pressure 20 psi.



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- Direct Acting for Steam •
- Direct Acting for Water •



Pressure Reducing Valves for Steam - PR15

E.S.E. Valve C

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Description

The PR15 is a Cast Iron direct acting below sealed pressure reducing valve. The standard version has an silicon rubber diaphragm and a stainless steel disc and seatring.

Note: To protect the actuator diaphragm on steam applications a water seal pot must be installed in the downstream pressure signal line to the actuator.

Limiting Conditions

Body Design Condition	PN16
Maximum Design Temperature	225 °C
Maximum Cold Hydraulic Test Pressure	30 kgf/cm ²
Maximum Differential Pressure (Δp)	14 kgf/cm ²
Minimum Ambient Temperature	0 °C

Operating Range

Valve Type	Diaphragm Type	Pressure Range (kgf/cm²)
PR15 - S4	PR 4di	0.6 - 2.5 *
PR15 - S2	PR 2di	2 - 5 **
PR15 - S1	PR 1di	4.5 - 9 ***

^{*} DN25 and DN32 Range 0.6 – 1.8 kgf/cm², DN40 and DN50 Range 0.6 – 2.5 kgf/cm² , DN65 and DN80 Range 0.8 – 2.8 kgf/cm²

Sizes and Pipe Connections

DN 25, 32, 40, 50, 65, 80 Flanged (DIN 2502)

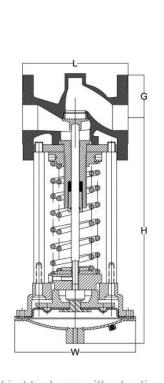
Dimensions (Approximate) mm

	Flar	nged	Operating Range				ange	
Size	PN16		S	1	S	2	S	4
	L	G	Н	W	Н	W	Н	W
DN 25	160	60	330	125	315	185	350	265
DN 32	160	70	340	125	315	185	350	265
DN 40	205	75	350	125	315	185	350	265
DN 50	205	80	350	125	315	185	350	265
DN 65	320	90	550	125	550	185	550	265
DN 80	320	100	550	125	550	185	550	265

Constructions are a bit different according the sizes.

Weights (Approximate) kg

Valve Type	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
PR15 - S1	12	14	16	18	32	32
PR15 - S2	13.5	14.5	17	18.5	32	32
PR15 - S4	17.5	18.5	20.5	22	35	37





^{**} DN25, DN65 and DN80 Range 2.5 – 5.5 kgf/cm², DN32 and DN40 Range 1.5 – 5 kgf/cm² , DN50 Range 2 – 5 kgf/cm²

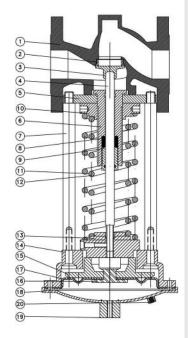
^{***} DN25 to DN80 Range 4.5 - 9 kgf/cm²



Pressure Reducing Valves for Steam - PR15

Materials

No.	Part	Material	
1	Body	GG 25	
2	Seat	AISI 304	
3	Disc	AISI 304	
4	Disc Rod	AISI 304	
5	Gasket	Clingrit	
6	Adjusting Bolt	Brass	
7	Scale	C.S.	
8	Packing	Graphite or Teflon	
9	Glande	Brass	
10	Adjusting Nut	Brass	
11	Spring Out *	Cadmium Plate	
12	Spring In *	Cadmium Plate	
13	Spring Seat	Gray Cast	
14	Casing	Gray Cast	
15	Diaphragm Plate	Gray Cast	
16	Diaphragm Support	Aluminum	
17	Diaphragm *	Silicon Rubber	
18	Upper Casing	C.S.	
19	Actuator Stem Screw	C.S.	
20	Adjusting Air Vent	Brass	



Note: (*) Spare Part

Cv Values

Size	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Cv	8	12	20	32	50	72

Note: The capacity of E.S.E valves is expressed as the flow co-efficient Cv. The flow co-efficient value Kvs is extensively used in Europe.

Its relationship to the Cv unit is given by Cv=1.167 Kvs.

Installation

The valve should be mounted vertically downwards in a horizontal pipeline with the direction of flow as indicated by the arrow on the valve body. Full installation and maintenance instructions are supplied with the product.

How to Order

Example: PR15 - DN25 - S4, direct acting Pressure Reducing Valve.

Pressure Reducing Valves for Water - 223

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Description

The 223 type is a direct pressure reducing valve suitable for water. The 223 type can be used for the pressure regulation on the feed water from an elevated water tank of middle or high building to each floor or pressure regulation of feed water connected directly with a pump without the elevated water tank system, etc. in construction facilities.



Limiting Conditions

Body Design Condition	PN16
Maximum Design Temperature	60 °C
Maximum Cold Hydraulic Test Pressure	30 kgf/cm ²
Minimum Ambient Temperature	5 °C

Operating Range

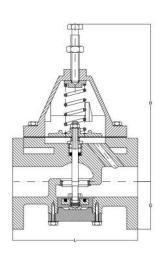
Adjustable Downstream Pressure 2 - 7 kgf/cm²

Sizes and Pipe Connections

DN 40, 50, 80 Flanged (DIN 2502)

Dimensions / Weights (Approximate) mm and kg

DN	L	G	Н	Weight
40	205	75	235	14.5
50	205	85	240	15.5
80	325	100	325	29.5





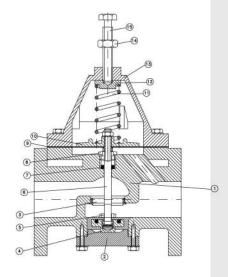
Pressure Reducing Valves for Water - 223

021 66479486 0912 8448763

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Materials

No.	Part	Material		
1	Body	GG 25		
2	Cap Down	Gray Cast		
3	Seat	AISI 304		
4	Cap Disc	AISI 304		
5	Glande 2	AISI 304		
6	Spindle	AISI 304		
5	Packing	Graphite or Teflon		
6	Glande *	Brass		
7	Diaphragm	Nylon Insert		
8	Spring Washer Down	Gray Cast		
9	Spring *	Cadmium Plate		
10	Spring Washer Up	Gray Cast		
11	Bonnet	GG 25		
12	Adjusting Bolt	C.S.		
13	Adjusting Nut	C.S.		



Note: (*) Spare Part

Capacities

Size	DN 40	DN 50	DN 80
Cv	8	12	31

Note: The capacity of E.S.E valves is expressed as the flow co-efficient Cv. The flow co-efficient value Kvs is extensively used in Europe. Its relationship to the Cv unit is given by Cv=1.167 Kvs.

Installation

The valve should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the valve body.

How to Order

Example: 223 - DN40, Pressure Reducing Valve.



E.S.E Valve Co. Ltd

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- Pneumatic (On-Off)
- Pneumatic (Proportional) •



Pneumatic Diaphragm Control Valves (On-Off)-51C

021 66479486 0912 8448763



Description

The 51C type is a range of two-way cast iron single seat globe valves with pneumatic actuator in sizes DN25 to DN80 available with flanged connections, suitable for steam and liquid.

The 51C type provide characterized on/off flow control, which contains two types, Normal Close (N.C.) and Normal Open (N.O.). The pneumatic actuators are a range of single spring shut-off actuators having 3 diaphragm sizes for matching the requirements of various differential air pressures. Each actuator is fitted with a combined mechanical stroke indicator.



Limiting Conditions

Body Design Condition	PN16
Maximum Dasima Tananaratura	Yoke A 180 °C
Maximum Design Temperature	Yoke B 300 °C
Maximum Cold Hydraulic Test Pressure	20 kgf/cm²
Maximum Operating Pressure	10 kgf/cm ²

Technical Data

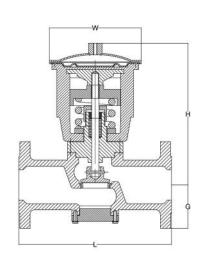
Applicable Fluid	Steam, Liquid				
Operating	Direct Acti	Nori	mal Close		
Operating	Direct Acti	Norr	Normal Open		
Type of Valve	Single Seated				
Characteristics	On-Off				
Leakage	Metal to Metal (0.01 % of Cv)				
Air Supply Actuator Connection	1/4" PT				
Actuating	Pneumatic				
Air Operating Page	1 di	2 di	4 di		
Air Operating Range	45 - 70 psi	30 - 70 psi	3 - 15 psi		
Flow Characteristics	Fast Acting				
Valsa Tura	A: for Fluid Temp. 180 °C				
Yoke Type	B: for Fluid Temp. 300 °C				

Sizes and Pipe Connections

DN 25, 32, 40, 50, 65, 80 Flanged (DIN 2502)

Dimensions (Approximate) mm

	Туре	of Actu	ators	Operation	ng Type		
	S1	S2	S4	N.C.	N.O.		
Size	W	W	W	L	L	Н	G
DN 25	125	(100)	265	125	160	185	60
DN 32	125	1961	265	125	160	185	70
DN 40	-	185	265	205	205	320	75
DN 50		185	265	205	205	320	85
DN 65	-	185	265	320	320	340	95
DN 80		185	265	320	320	340	100





Pneumatic Diaphragm Control Valves (On-Off)-51C

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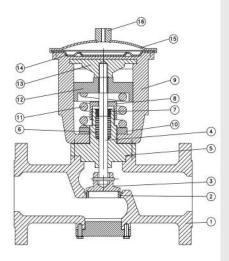


Weights (Approximate) kg

	1	Normal Clo	se	Normal Open		
Size	S1	S2	S4	S2	S4	
DN 25	6		10.5	7	10	
DN 32	7	-	11.5	9	11	
DN 40	-	16.5	22	16.5	22	
DN 50	-	17.5	23	-	23	
DN 65	17/2	26	31	85	31	
DN 80	-	27	32	-	32	

Materials

No.	Part	Material
1	Body	GG 25
2	Seat	AISI 430
3	Plug	AISI 430
4	Stem	AISI 430
5	Bonnet	Gray Cast
6	Packing	Graphite or Teflon
7	Boss	Brass
8	Packing Flange	Brass
9	Yoke	GG 25
10	Yoke Lock Nut	Brass
11	Spring *	Cadmium Plate
12	Spring Washer Up	Gray Cast
13	Diaphragm Plate	Gray Cast
14	Diaphragm *	Nylon Insert
15	Upper Diaphragm Casing	C.S.
16	Actuator Stem Screw	C.S.



Note: (*) Spare Part

Cv Values

Size	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Cv	10	12	20	31	52	69

Note: The capacity of E.S.E valves is expressed as the flow co-efficient Cv. The flow co-efficient value Kvs is extensively used in Europe. Its relationship to the Cv unit is given by Cv=1.167 Kvs.

Installation

The valve should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the valve body. The air supply should be installed in the ¼" PT air supply connection on top of the actuator.

How to Order

Example: 51C - DN25 - S2 - N.C., Diaphragm Control Valve with yoke A.

Pneumatic Diaphragm Control Valves (Proportional) - 51E

Description

The 51E type is a range of two-way cast iron single seat globe valves with proportional pneumatic actuator in sizes DN25 to DN80 available with flanged connections, suitable for steam and liquid.

The 51E type provide characterized modulating flow control, which contains two types, Normal Close (N.C.) and Normal Open (N.O.).

The pneumatic actuators are a range of single spring linear actuators having a diaphragm for 3-15 psi (0.2-1 bar) air pressure.

Each actuator is fitted with a combined mechanical stroke indicator. For control with pneumatic actuators an I/P transducer is required.

Limiting Conditions

Body Design Condition	PN16
Maximum Dasian Tananayatuwa	PTFE Packing 180 °C
Maximum Design Temperature	Graphite Packing 300 °C
Maximum Cold Hydraulic Test Pressure	20 kgf/cm ²
Maximum Operating Pressure	10 kgf/cm ²

Technical Data

Applicable Fluid	Stea	am, Liquid	
Oncorption	Linean	Normal Close	
Operating	Linear	Normal Open	
Type of Valve	Sing	gle Seated	
Characteristics	Proportional		
Air Operating Range	3 – 15 psi (0.2 – 1 bar)		
Leakage	Metal to Metal (0.01 % of Cv)		
Air Supply Actuator Connection	1/4" PT		
Actuating	Pneumatic		
Stem Seal	PTFE Packing 180 °C		
Stem Seal	Graphite Packing 300 °C		
Plug Design	Parabolic		

Sizes and Pipe Connections

DN 25, 32, 40, 50, 65, 80 Flanged (DIN 2502)

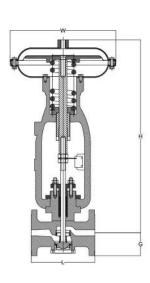
Dimensions (Approximate) mm

	Operating Type							
Size		N.C.	N.O.	N.C.	N.O.			
17	W	L	L	Н	Н	G		
DN 25	265	120	160	455	490	60		
DN 32	265	120	160	455	490	70		
DN 40	265	205	205	455	505	75		
DN 50	265	205	205	495	550	85		
DN 65	265	325	325	550	550	95		
DN 80	265	325	325	550	550	100		

Constructions are a bit different according the sizes.



فروش





Pneumatic Diaphragm Control Valves (Proportional) - 51E

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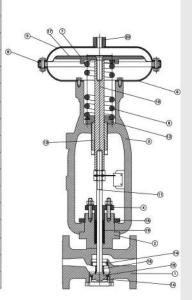
فروش

Weights (Approximate) kg

Size	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Normal Open	20	21.5	24.5	26.5	36	36
Normal Close	19.5	19	24	26	35.5	36

Materials

No.	Part	Material	
1	Body	GG 25	
2	Bonnet	Gray Cast	
3	Yoke	GG 25	
4	Packing Flange	Gray Cast	
5	Upper Diaphragm Casing	C.S.	
6	Lower Diaphragm Casing	C.S.	
7	Diaphragm Plate	Gray Cast	
8	Casing Ring	Gray Cast	
9	Spring *	Cadmium Plate	
10	Actuator Stem	C.S.	
11	Valve Stem	AISI 304	
12	Lower Spring Bottom	Gray Cast	
13	Spring Adjuster	Brass	
14	Seat Ring	AISI 304	
15	Valve Plug	AISI 304	
16	Yoke Luck Nut	Brass	
17	Diaphragm *	Nylon Insert	
18	Plug Nut	AISI 304	
19	Packing	Graphite or Teflon	
20	Actuator Stem Screw	C.S.	



Note: (*) Spare Part

Cv Values

Size	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Normal Open	8	10	18	28	42	51
Normal Close	8	10	18	28	42	51

Note: The capacity of E.S.E valves is expressed as the flow co-efficient Cv. The flow co-efficient value Kvs is extensively used in Europe. Its relationship to the Cv unit is given by Cv=1.167 Kvs.

Installation

The valve should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the valve body. The air supply should be installed in the ¼"PT air supply connection on top of the actuator.

How to Order

Example: 51E - DN25 - N.C., Diaphragm Control Valve with PTFE packing.

Pneumatic Diaphragm Control Valves (Proportional)-51Y

تاسيسات بخار اصفهان E.S.E. Valve Co. Ltd. 021 66479486 0912 8448763

فروش

Description

The 51Y type is a range of three-way cast iron single seat globe valves with proportional pneumatic actuator in sizes DN25 to DN80 available with flanged connections, suitable for steam, water and oil.

The pneumatic actuators are a range of single spring linear actuators having a diaphragm for 3-15 psi (0.2-1 bar) air pressure.

Each actuator is fitted with a combined mechanical stroke indicator. For control with pneumatic actuators an I/P transducer is required.

It can be assembled with Motor actuator with various specification.

Limiting Conditions

Body Design Condition	PN16
Maximum Design Temperature	300 ℃
Maximum Cold Hydraulic Test Pressure	20 kgf/cm²
Maximum Operating Pressure	10 kgf/cm ²

Technical Data

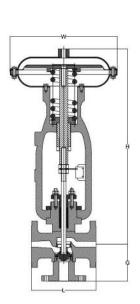
Applicable Fluid	Steam, Water and Oil		
Operating	Linear		
Type of Valve	Three-way Mixing / Diverting Type		
Characteristics	Proportional		
Air Operating Range	3 – 15 psi (0.2 – 1 bar)		
Air Supply Actuator Connection	1/4" PT		
Actuating	Pneumatic		
Stem Seal	Graphite Packing		
Plug Design	Parabolic		

Sizes and Pipe Connections

DN 25, 32, 40, 50, 65, 80 Flanged (DIN 2502)

Dimensions / Weights (Approximate) mm and Kg

Size DN 25	W	L	Н	G	Weight 20.5	
	265	120	455	90		
DN 32	265	120	455	100	21.5	
DN 40	265	205	455	120	25	
DN 50	265	205	495	125	29	
DN 65	265	325	550	155	41	
DN 80	265	325	550	155	43	



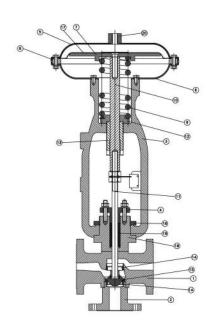




Pneumatic Diaphragm Control Valves (Proportional)-51Y

Materials

No.	Part	Material		
1	Body	GG 25		
2	Bottom Flange	Gray Cast		
3	Yoke	GG 25		
4	Packing Flange	Gray Cast		
5	Upper Diaphragm Casing	C.S.		
6	Lower Diaphragm Casing	C.S.		
7	Diaphragm Plate	Gray Cast		
8	Casing Ring	Gray Cast		
9	Spring *	Cadmium Plate		
10	Actuator Stem	C.S.		
11	Valve Stem	AISI 304		
12	Lower Spring Bottom	Gray Cast		
13	Spring Adjuster	Brass		
14	Seat Ring	AISI 304		
15	Valve Plug	AISI 304		
16	Yoke Luck Nut	Brass		
17	Diaphragm *	Nylon Insert		
18	Bonnet	AISI 304		
19	Packing	Graphite or Teflon		
20	Actuator Stem Screw	C.S.		



Note: (*) Spare Part

Cv Values

Size	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
Cv	8	10	18	28	42	51

Note: The capacity of E.S.E valves is expressed as the flow co-efficient Cv. The flow co-efficient value Kvs is extensively used in Europe. Its relationship to the Cv unit is given by Cv=1.167 Kvs.

Installation

The valve should be installed in a horizontal pipeline with the direction of flow as indicated by the arrow on the valve body. The air supply should be installed in the ¼"PT air supply connection on top of the actuator.

How to Order

Example: 51Y - DN25, Diaphragm Control Valve for hot oil with air actuator.