

ARIKE

پترو انرژی نوین اریکه

STEAM TRAP PRODUCTION



Most Advanced and Tomplete Thermodynamic Disc Trap Range.
Thermodynamic steam traps with maintainable seat

More reliable, longer life, gaining higher energy efficiency than ever before

Thermodyne	Model	Max Allowable Temp (°C)	Operating Press.range (Bar)	Protection From Ambient temperature	Air venting	Body Material	EQUAL
	TDS 45	400	barg 42 (psig 45-610)	Air Jacket	--	Carbon Steel (A105)	YARWAY USA
	TDL TDL46L TDL46M TDL46H	425	barg 46 (psig 667)	Air Jacket	Bimetal	Carbon Steel (A105)	TLV P46SRN P46SRM P46SRW
	TDL65	425	barg 65 (psig 950)	Air Jacket	Bimetal	Carbon Steel (A105)	P65SRN TLV JAPAN
	TDX 62	550	barg 62 (psig 900)	Air Jacket	Bimetal	Alloy Steel (A182F11)	SPIRAX SARCO TDS46M
	TDX 46	425	barg 46 (psig 667)	Air Jacket	Bimetal	Carbon Steel (A105)	SPIRAX SARCO TD42H
	TDN	200	barg 03 –13 (psig 5-230)	Steam Jacket	Bimetal	Ductile Cast Iron FCD450	A3N TLV JAPAN
	TDY 131	400	barg 0.3 –40 (psig 4-600)	***	--	Stainless Steel (AISI400)	YARWAY 131 USA
	TDG 50	380	barg 50 (psig 750)	Air Jacket	Bimetal	Carbon Steel (A105)	DOUGLAS DC50 ITALY

* Letters in brackets show pipe connections available: S = screwed, W = socket weld, F = flanged. All Arikeh TD Models with replaceable module.

Full details can be found on individual SDS.

Local regulations may restrict the use of this product to below the conditions quoted. Contact your Arikeh representative or your regional Arikeh office for further details.



DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE. Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury. READ INSTRUCTION MANUAL CAREFULLY.

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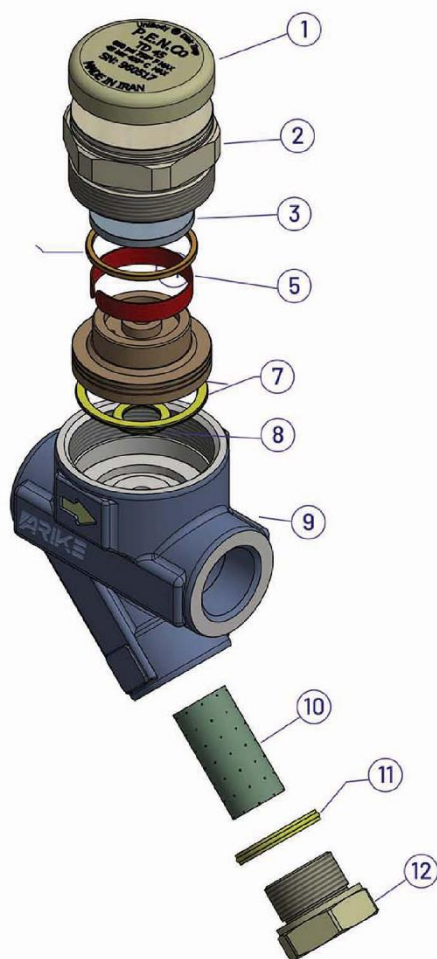
Model

TDL

Thermodynamic DiscTrap With Thermostatic AirVent

Features

- 1-Inline Replaceable valve module.
- 2-Air jacketing reduces no-load cycling.
- 3- Built-in screen for trouble-free service.
- 4-Bimetal ring provides quick thermostatic air venting.
- 5- Hardened stainless steel working surfaces.



Spare Parts

Item	Item
Replaceable Module	1,2,3,4,5,6
Seat Gasket, Seat	6,7,8
Disc	3
Screen	10
Cap Gasket	11

Tightening torques (Installation Instructions)

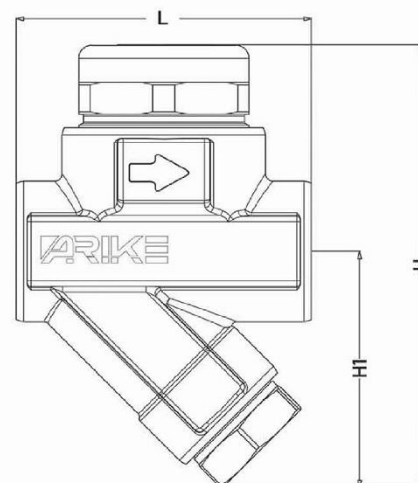
Item	Part	Torque(n.m)
2	Bonnet	250
12	Blank	50

Applicable Codes and Standards:

Performance testing per ANSI/ASME PTC-39.1.
End connections per ANSI B1.20.1 for threaded ends,
per ANSI B16.11 for socket welding ends.
BS EN 26948:1991

Construction

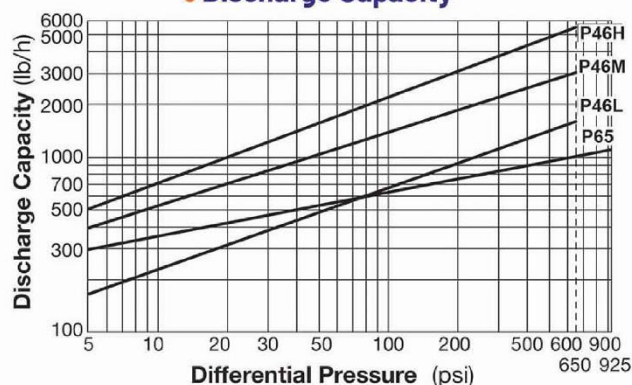
Model	TDL46
Body Material	Carbon Steel (A105)
Connection	Flanged S.Welded Screwed
Size (mm)	15, 20, 25 (1/2" 3/4" 1")
Max. Operating Press.(MPaG) PMO	4.6
Min. Operating Press. (MPaG)	0.03
Max. Operating Temp.(°C) TMO	425
Max. Allowable Press. (MPaG) PMA	8.2 @ 40 C°
Max. Allowable Temp. (Temp°C) TMA	425 @ 5.0 MpaG
Max. Back Pressure	80% of inlet Pressure



TDL46 -Thermodynamic Steam Trap

Trap Size	Dimensions. [mm]	Weight(kg)
In DN	L H H1	TDL 45
1/2"	15 80 120 62	1,2
3/4"	20 88 125(129) 62	1,4 (1,6)
1"	25 88 125(129) 62	1,4 (1,6)

Discharge Capacity



1. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. Recommended Safety Factor: at least 1.5

Parts/ Material

Item	Part	Material
1	Air Jacket	Stainless steel 304
2	Bonnet	Stainless steel 420
3	Disc	Stainless steel 420 HT
4	Ring	Stainless steel 420
5	Bimetal Ring	Bimetal
6	Seat	Stainless steel 420 HT
7	Outer Gasket	Graphite /Stainless steel
8	Inner Gasket	Graphite /Stainless steel
9	Body	ASTM A105
10	Strainer	Stainless steel 316
11	Spiral Gasket	Graphite /Stainless steel
12	Blank Strainer	Stainless steel 304

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Model

TDL

Thermodynamic DiscTrap With Thermostatic AirVent

Features

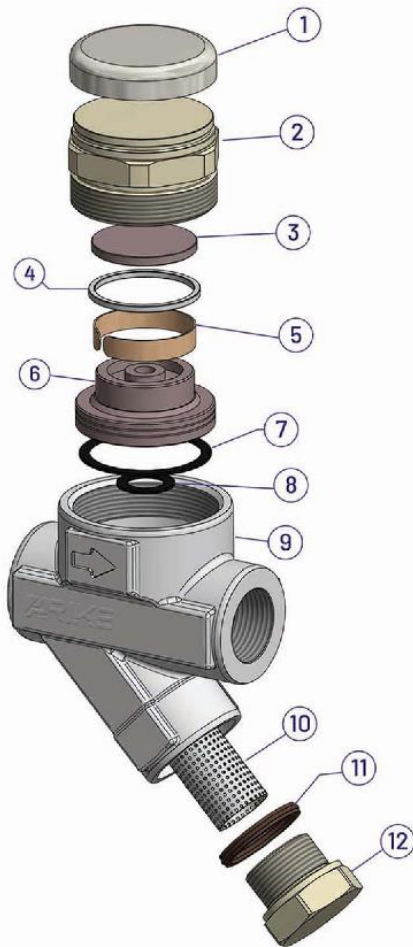
- 1-Inline Replaceable valve module.
- 2-Air jacketing reduces no-load cycling.
- 3- Built-in screen for trouble-free service.
- 4-Bimetal ring provides quick thermostatic air venting.
- 5- Hardened stainless steel working surfaces.

Applicable Codes and Standards:

Performance testing per ANSI/ASME PTC-39.1.
End connections per ANSI B1.20.1 for threaded ends,
per ANSI B16.11 for socket welding ends.
BS EN 26948:1991

Construction

Model	TDL P65	
Body Material	Carbon Steel (A105)	A182 F11
Connection	Flanged	S.Welded Screwed
Size (mm)	15, 20, 25	(1/2" 3/4" 1")
Max. Operating Press. (MPaG) PMO	6.5	
Min. Operating Press. (MPaG)	0.03	
Max. Operating Temp. (°C) TMO	425	
Max. Allowable Press. (MPaG) PMA	10.7 @ 40 C°	11.6 @ 40 C°
Max. Allowable Temp. (Temp°C) TMA	425 @ 6.5 MpaG	425 @ 6.0 MpaG
Max. Back Pressure	80% of inlet Pressure	

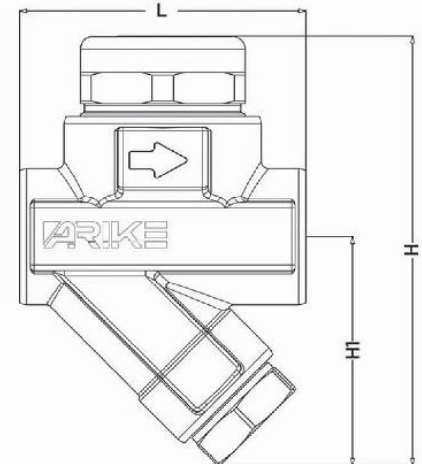


Spare Parts

Item	Item
Replaceable Module	1,2,3,4,5,6
Seat Gasket, Seat	6,7,8
Disc	3
Screen	10
Cap Gasket	11

Tightening torques (Installation Instructions)

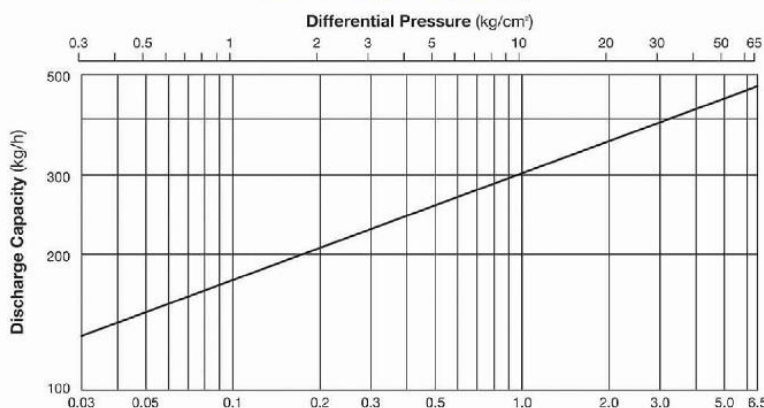
Item	Part	Torque (n.m)
2	Bonnet	250
12	Blank	50



TDL46 - Thermodynamic Steam Trap

Trap Size	Dimensions. [mm]	Weight (kg)
In DN	L H H1	TDL 45
1/2" 15	80 120 62	1,2
3/4" 20		
1" 25	88 125(129)	1,4 (1,6)

Discharge Capacity



1. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. Recommended Safety Factor: at least 1.5

Parts/ Material

Item	Part	Material
1	Air Jacket	Stainless steel 304
2	Bonnet	Stainless steel 420
3	Disc	Stainless steel 420 HT
4	Ring	Stainless steel 420
5	Bimetal Ring	Bimetal
6	Seat	Stainless steel 420 HT
7	Outer Gasket	Graphite /Stainless steel
8	Inner Gasket	Graphite /Stainless steel
9	Body	ASTM A105 / A182
10	Strainer	Stainless steel 316
11	Spiral Gasket	Graphite /Stainless steel
12	Blank Strainer	Stainless steel 304

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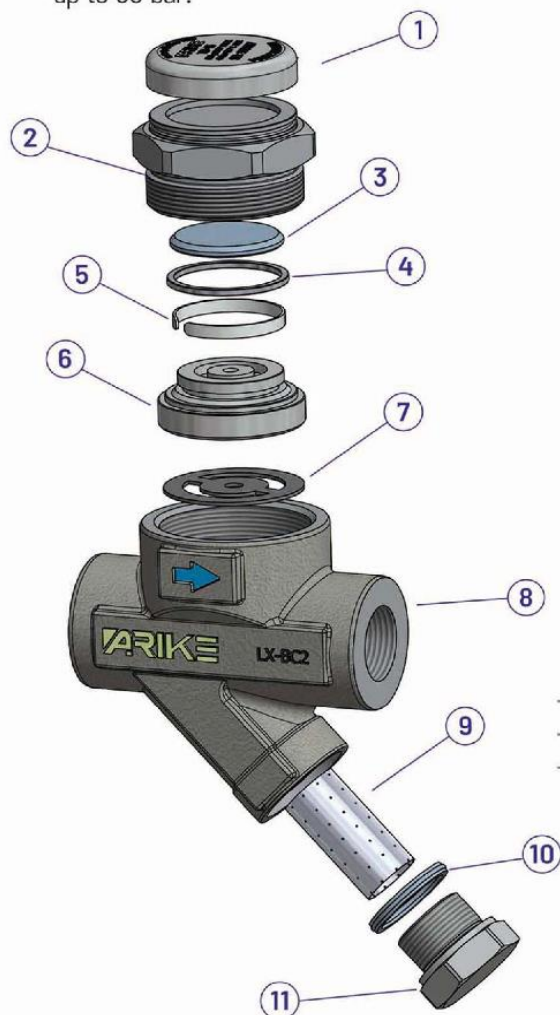


Model
TDX62

Thermodynamic DiscTrap With Thermostatic AirVent

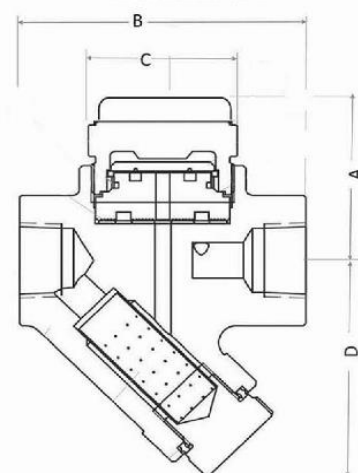
Description

The TDX62 thermodynamic steam trap has been specifically Designed for low capacity applications up to 60 bar.



Tightening torques (Installation Instructions)

In	S	Torque(n.m)
2	Bonnet	250-270
11	Blank	105-110



Applicable Codes and Standards:

Performance testing per ANSI/ASME PTC-39.1.

End connections per ANSI B1.20.1 for threaded ends,
per ANSI B16.11 for socket welding ends.

Parts/ Material

Item	Part	Material
1	Air Jacket	Stainless steel 304
2	Bonnet	Stainless steel 420
3	Disc	Stainless steel 420 HT
4	Ring	Stainless steel 420
5	Bimetal Ring	Bimetal
6	Seat	Stainless steel 420 HT
7	Gasket	Graphite /Stainless steel
8	Body	ASTM A182 F11
9	Strainer	Stainless steel 316
10	Spiral Gasket	Graphite /Stainless steel
11	Blank Strainer	Stainless steel 304

TDX62 -Thermodynamic Steam Trap

Size	A	B		C	D	Weights	
		Screwe	Socket weld			Screwe	Socket weld
1/2" DN 15	58	78	92	61	59	1.38	1.49
3/4" DN 20	61	95	92	61	63	1.64	1.64
1" DN 25	65	95	92	61	67	1.90	1.90

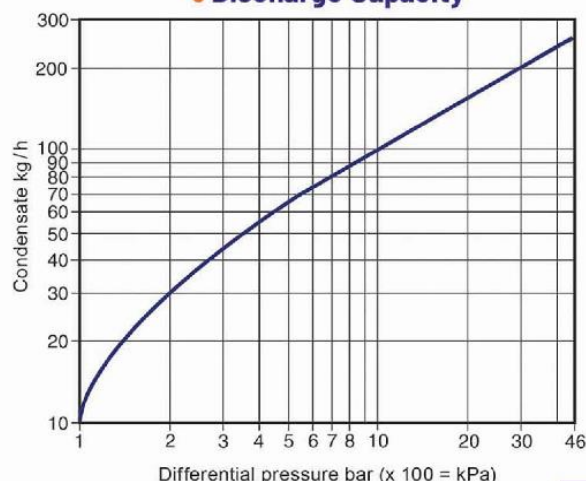
Speification

Body design conditions	PN100 and ASME Class 600
PMA Maximum allowable pressure	100 bar g @ 50°C
TMA Maximum allowable temperature	500°C @ 58.3 bar g
Minimum allowable temperature	-50°C
PMO Maximum operating pressure	46 bar g
TMO Maximum operating temperature	500°C @ 46 bar g
Minimum operating pressure	1.5 bar g
Maximum operating back pressure	80% of the upstream pressure
Designed for a maximum cold hydraulic test	pressure of 150 bar g

Spare Parts

Item	Item
Replaceable Module	1,2,3,4,5,6
Seat Gasket , Seat	6,7
Disc	3
Strainer	9
Cap Gasket	10

Discharge Capacity



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Model
TDS45

Model TDS45

Thermodynamic Disc Trap

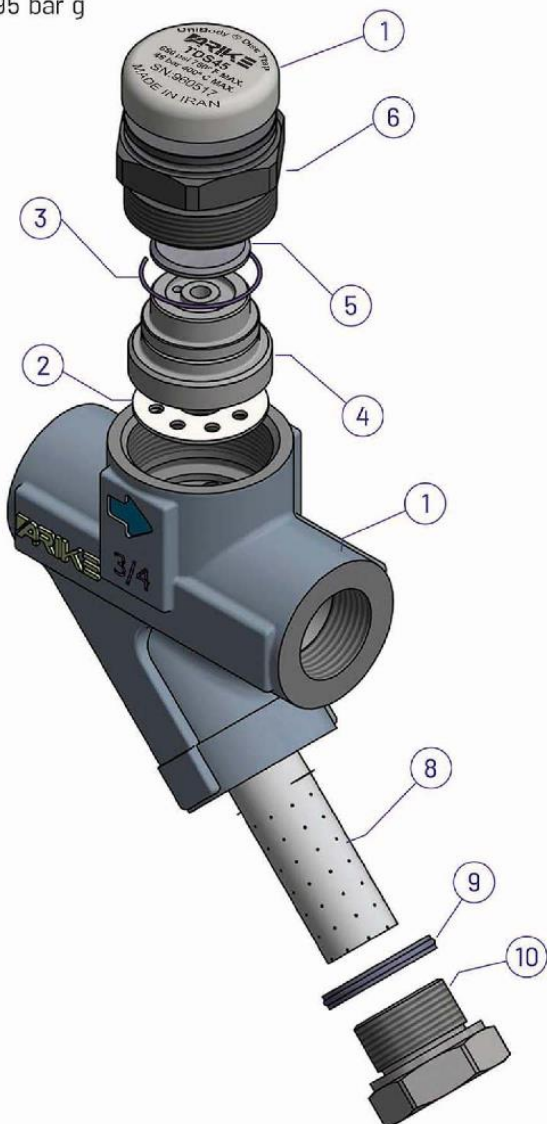
Rating TDS 45

Design: 650 psig, 750°F

Operating: 40 to 650 psig, 750°F (3 to 45 bar/400°C).

Back pressure to 80% of inlet, Pisa.

Designed for a maximum cold hydraulic test pressure of 95 bar g



Thermodynamic Trap :

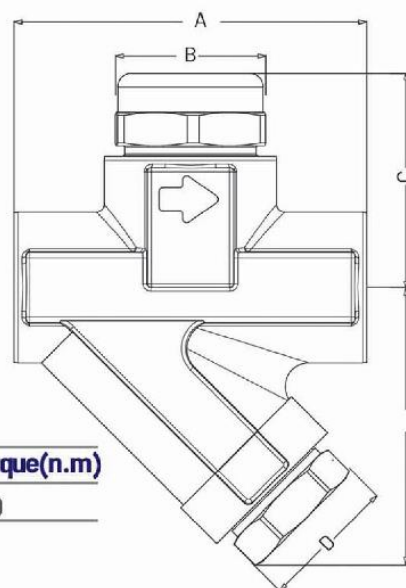
- Easy to check cyclic operation
- Designed to fail open
- Self-draining (vertically mounted)
- Energy efficient sub cooled operation
- Hardened, rugged stainless steel internals
- Installation in any position
- Single moving part
- Unaffected by freezing
- Unaffected by water hammer
- Designed for superheat

Spare Parts

Item	Item
Replaceable Module	2,3,4,5,6,7
Seat Gasket , Seat	2,4
Disc	5
Screen	8
Cap Gasket	9

Tightening torques (Installation Instructions)

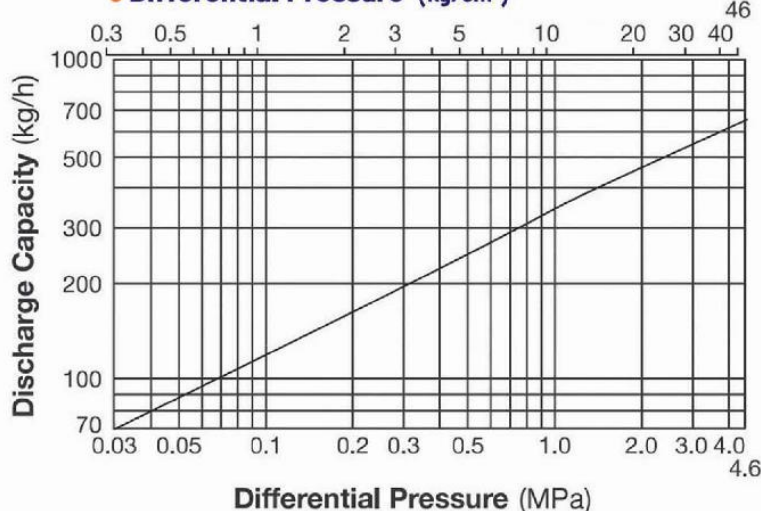
Item	Part	Torque(n.m)
6	Bonnet	450
10	Blank Strainer Cap	50



Thermodynamic Steam Trap Dimensions and Weights

Trap Size		Nominal Dimensions. [mm]						Weight(kg)
In	DN	A	B	C	D	E	K	TD45HP
1/2"	15	80	38	54	27	73	1/2 NPT	1.1
3/4"	20	90	38	54	30	83	3/4 NPT	1.3
1"	25	100	38	54	30	86	1 NPT	1.5

Differential Pressure (kg/cm²)



Parts/ Material

Item	Part	Material
1	Body	ASTM A105
2	Seat Gasket	Stainless steel/Graphoil
3	Retaining Ring	Stainless steel
4	Seat	Stainless steel 420 HT
5	Disc	Stainless steel 420 HT
6	Bonnet	Stainless steel 420
7	Air Jacket	Stainless steel 304
8	Screen	Stainless steel 304
9	Cap Gasket	Stainless steel/Graphoil
10	Blank Strainer Cap	Stainless steel 304

*Selected according to working conditions.

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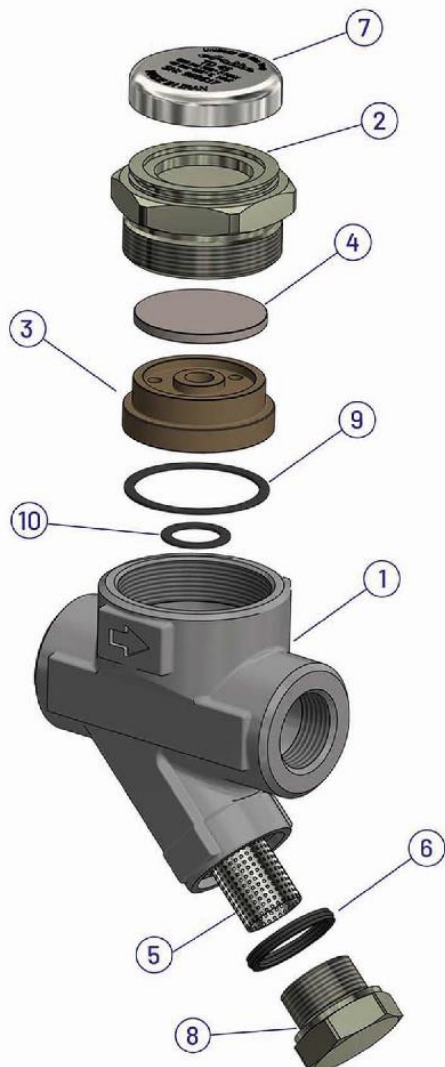
STEAM TRAP PRODUCTION



Model
TDG50

• Features

- 1- Inline Replaceable valve module.
- 2- Aie jacketing reduces no-load cycling.
- 3- Built - in screen for trouble- free service.
- 4- Hardened stainless steel working surfaces.



• Spare Parts

Item	Part	Material
Replaceable Module	2,3,4,7,9,10	
Seat Gasket , Seat	3,4,9,10	
Disc	4	
Screen	5	
Cap Gasket	6	

• Parts/ Material

Item	Part	Material
2	Body	ASTM A105
3	Cover	AISI 303
4	Seat	AISI 420
5	Disc	AISI 420
6	Screen	AISI 304
7	Gasket	316/GRAPHITE
8	Insulating cap	AISI 304
9	Strainer cap	AISI 304
10	Outer Gasket	316/GRAPHITE
	Inner Gasket	316/GRAPHITE

• Applicable Codes and Standards:

Performance testing per ANSI/ASME PTC-39.1.

End connections per ANSI B1.20.1 for threaded ends,
per ANSI B16.11 for socket welding ends.

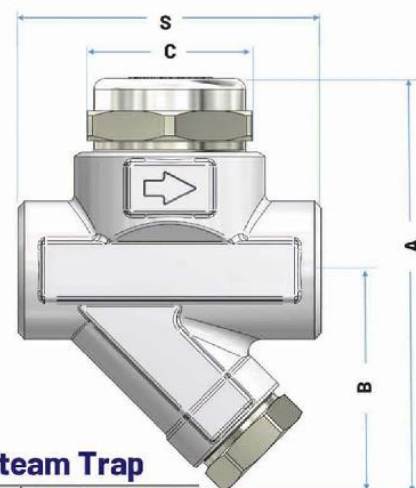
BS EN 26948:1991

• Speification

Model	TDG 50
Body Material	Carbon Steel (A105)
Connection	Flanged S.WeldedScrewed
Size (in)	1/2" , 3/4" , 1"
Max. Working Press. (bar) PMO	50 bar
Min. Working Press. (bar)	0.25 bar
Max. Working Temp. (°C) TMO	350
Max. Allowable Press. (bar) PMA	100 Bar
Max. Allowable Temp. (°C) TMA	390 °C
Max. Back Pressure	75% of inlet Pressure

• Tightening torques (Installation Instructions)

In	S	Torque(n.m)
2	Cover	250
8	Strainer Cap	50

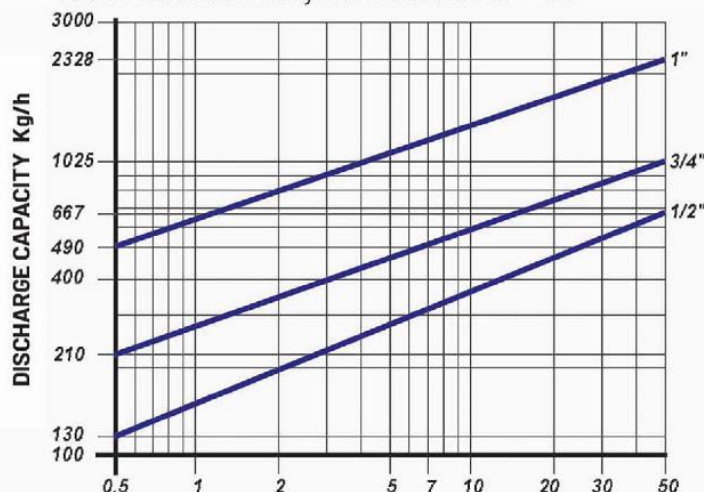


• TDG 50 -Thermodynamic Steam Trap

Trap Size		Dimensions. [mm]				Weight(kg)
In	DN	S	A	B	C	TDG50
1/2"	15	85	108	55	48	0.8
3/4"	20	100	120	60	54	1.3
1"	25	108	130	70	62	3.4

• Discharge Capacity

1. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. Recommended Safety Factor: at least 1.2 - 1.5



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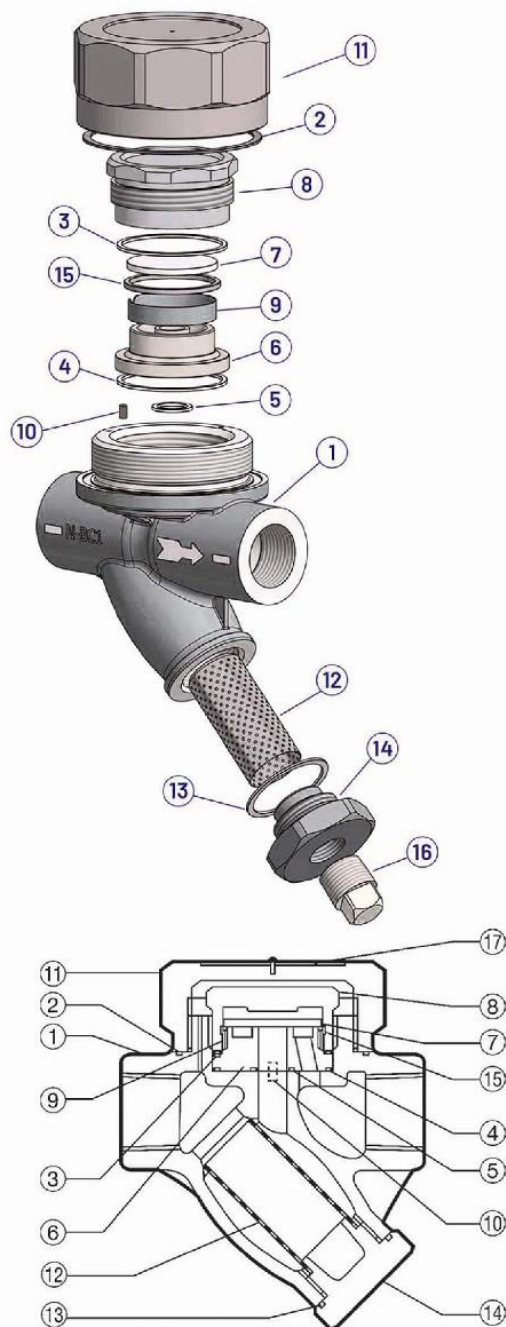
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Model
TDN

Thermodynamic DiscTrap With Thermostatic AirVent

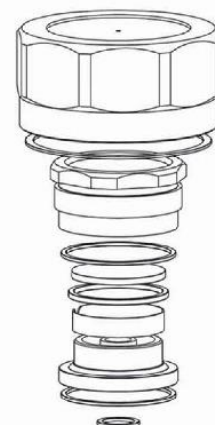


• Applicable Codes and Standards:

Performance testing per ANSI/ASME PTC-39.1.
End connections per ANSI B1.20.1 for threaded ends,
per ANSI B16.11 for socket welding ends.
BS EN 26948:1991

• Construction

No.	M*	R*	Description
1	-	-	Body
2	✓	✓	Outer Cover
3	-	✓	Inner Cover Gasket**
4	-	✓	Outer Module Gasket***
5	-	✓	Inner Module Gasket***
6	-	✓	Module Valve Seat
7	-	✓	Disc
8	-	✓	Inner Cover
9	-	✓	Air Vent Ring
10	-	✓	Guide Pin
11	-	-	Outer Cover
12	-	✓	Screen
13	✓	✓	Screen Holder Gasket
14	-	-	Screen Holder
15	-	✓	Disc Holder Ring
16	-	-	Cover Bolt
17	-	-	Nameplate



• Tightening torques

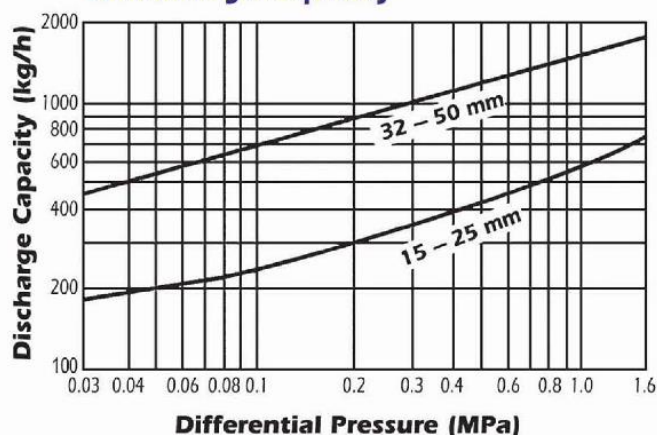
(Installation Instructions)

Item	Part	Torque(n.m)
11	Outer Cover	220
8	Inner Cover	220
14	Screen Holder	80

Spare Parts

Item	
Replaceable Module	3,4,5,6,7,8,9,15
Seat Gasket , Seat	4,5,6
Disc	7
Screen	12
Cap Gasket	14

• Discharge Capacity



1. Differential pressure is the difference between the inlet and outlet pressure of the trap.

2. Recommended Safety Factor: at least 1.25 - 1.5

1MPa=10.197 kg/Cm²



DO NOT DISASSEMBLE OR REMOVE THIS PRODUCT WHILE IT IS UNDER PRESSURE.

Allow internal pressure of this product to equal atmospheric pressure and its surface to cool to room temperature before disassembling or removing. Failure to do so could cause burns or other injury.

READ INSTRUCTION MANUAL CAREFULLY

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STEAM TRAP PRODUCTION



Model
TDY131

Thermodynamic DiscTrap

• RATINGS

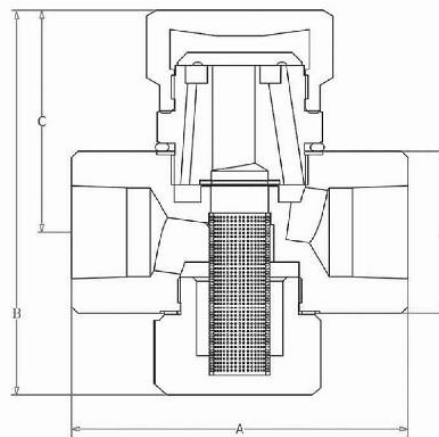
OPERATING PRESSURES AND TEMPERATURES

Arike series TDY131, Impulse Steam Traps will operate at all pressures from 4 to 600 psi at trap inlet, temperatures to 750 F. Sizes 1/2" and 3/4" in Series 31 and 131 traps, operate against back pressures at trap outlet to 70% of pressure at trap inlet (1" size to 60%).

Back pressure ratings are based on absolute pressure when Trap is discharging.

• Tightening torques (Installation Instructions)

Trap Size	Parte	N.m
1/2"	Trap Bonnet	61-68
	Strainer Bonnet	129-136
	Seat	129-136
3/4"	Trap Bonnet	75-82
	Strainer Bonnet	156-163
	Seat	183-190
1"	Trap Bonnet	109-115
	Strainer Bonnet	183-190
	Seat	210-217



• Parts/ Material

Item	Part	Material
1	Body	400 Series S/S
2	Trap bonnet	400 Series S/S
3	Seat	400 Series S/S
4	Disc	400 Series S/S
5	Body Gasket	Graphite /Stainless steel
6	Seat Gasket	MONEL
7	Screen	300 Series S/S
8	Strainer Gasket	Graphite /Stainless steel
9	Strainer bonnet	400 Series S/S

• Features

- 1-Inline Replaceable valve module.
- 2- Easy to check cyclic operation
- 3- Built - in screen for trouble- free service.
- 4- Self-draining (vertically mounted)
- 5- Hardened stainless steel working surfaces.
- 6- Hardened, rugged stainless steel internals
- 7- Unaffected by water hammer

• Trap Sizing

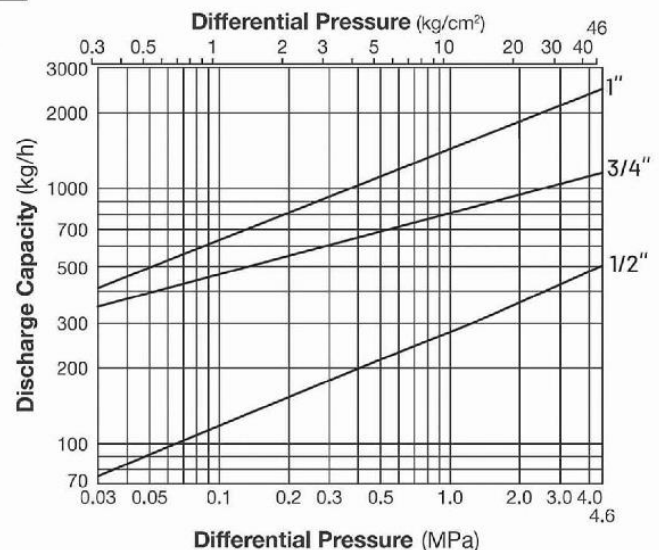
Determine trap capacity required by multiplying the maximum calculated condensate load by a safety load Factor (of 2). Then select the trap having this rated capacity for the gauge pressure (psi) at the trap inlet. See Capacity Table.

• TDG 50 -Thermodynamic Steam Trap

Trap Size		Dimensions. [mm]				Weight(kg)
In	DN	A	B	C	D	TDY131
1/2"	15	73	82	46	35	1,1
3/4"	20	85	105	55	42	1,5
1"	25	98	120	67	51	2,3

• Spare Parts

Item	Item
Replaceable Module	2,3,4,5,6
Screen	10
Cap Gasket	11



1. Differential pressure is the difference between the inlet and outlet pressure of the trap.
2. Recommended Safety Factor: at least 1.5



پتروانرژی نوین اریکه
STEAM TRAP PRODUCTION



TDS45



TDL46



TDY131



TDX62



TDG50



دفتر مرکزی : اصفهان ، سپاهان شهر ، بلوار غدیر ، مجتمع آتاپار ، واحد 32i
تلفن : ۳۶۵۱۷۱۷۱ - ۳۶۵۱۳۰۰۰ (۰۳۱) فکس : ۳۶۵۱۸۱۵۱ (۰۳۱)

کارخانه : اصفهان ، شهرک صنعتی مبارکه ، خیابان ۱۲ فرعی دوم
تلفن : ۵۲۳۷۳۳۰۰ - ۵۲۳۷۰۰۰۰ (۰۳۱) فکس : ۵۲۳۷۳۶۳۳ (۰۳۱)

 www.petronovin.com

