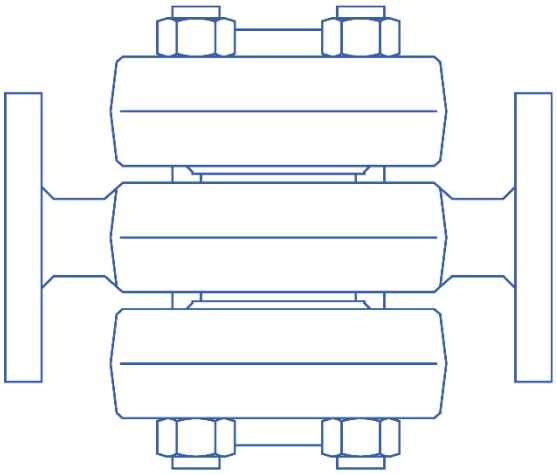
ARIKE TDH 120

High Pressure Thermodynamic Steam Trap with Replaceable Seat



Model TDH 120

Description

The Thermodynamic steam trap cycles periodically to discharge condensate very near to steam temperature. It is unaffected by water hammer or superheat.
The TDH120 is a maintainable high pressure thermodynamic steam trap with integral strainer and replaceable seat to ease maintenance. It has low capacity specifically designed for superheated mains drainage applications up to 250 bar g (3 625 psi g).

Standards

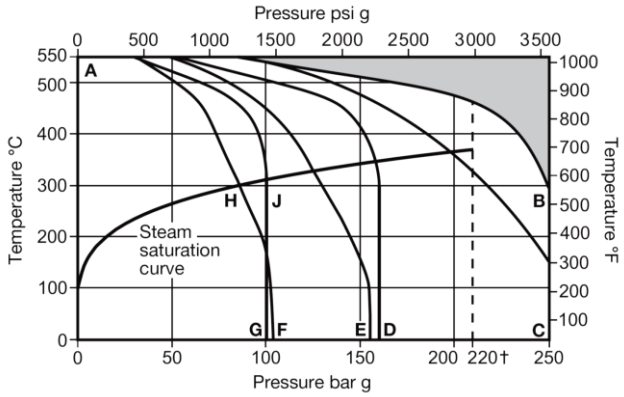
This product fully complies with the requirements of the European Pressure Equipment Directive 97/23 / EC.

Certification

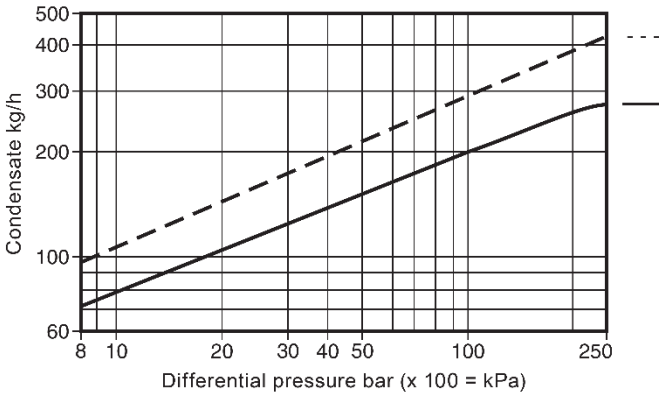
This product is available with certification to EN 10204 3.1. **Note:** All certification / inspection requirements must be stated at the time of order placement.

TDH 120	
Sizes	½", ¾" & 1"
Connections	SW to ANSI B 16.11 Class 6000
Construction	Forged Alloy Steel
Options	Buttweld and ANSI 1500/900 RF connections

Pressure/ temperature limits (ISO 6552)



The product **must not** be used in this region.



Note: If the product is used at pressures above 170 bar g we would recommend regular inspection of the seat.

Body design conditions	PN250	
PMA Maximum allowable pressure	250 bar g @ 300°C (3 625 psi g @ 572°F)	
TMA Maximum allowable temperature	550°C @ 80 bar g (1 022°F @ 1 160 psi g)	
Minimum allowable temperature	-29°C (-20°F)	
PMO Maximum operating pressure for saturated steam service	220 bar g @ 374°C (3 190 psi g @ 705°F)	
TMO Maximum operating temperature	550°C @ 80 bar g (1 022°F @ 1 160 psi g)	
Minimum operating temperature	0°C	(32°F)
Note: For lower operating temperatures consult Spirax Sarco.		
PMOB Maximum operating backpressure should not exceed 50% of the upstream pressure		
Minimum operating differential pressure	8 bar g	(116 psi g)
Designed for a maximum cold hydraulic test pressure of	375 bar g	(5 437 psi g)

Model TDH 120

The spare parts available are shown in solid outline. Parts drawn in broken line are not supplied as spares.

Available spares

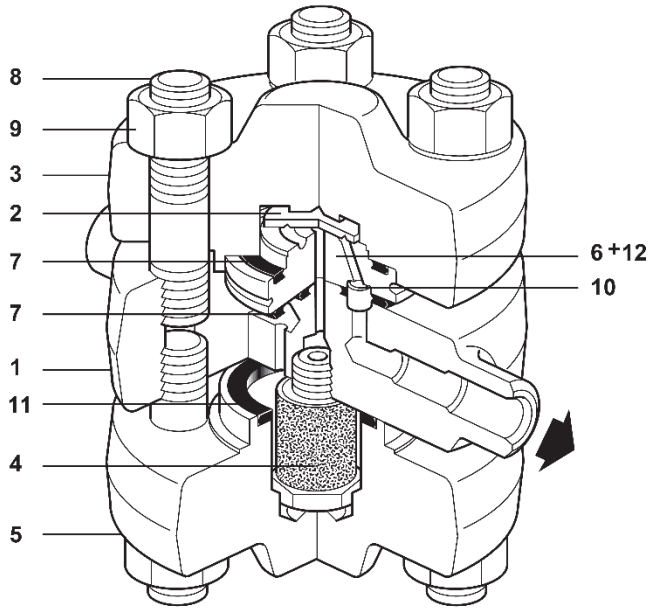
Set of cover studs and nuts	**8** (8 off), **9** (8 off)
Strainer screen and gasket	**4**, **11**
Set of gaskets	**7** (2 off), **10**, **11**
Maintenance kit	**2**, **4**, **7** (2 off), **10**, **11**, **6 +12**

How to order spares

Always order spares by using the description given in the column headed 'Available spares'

and state the size and type of trap.

Example: 1 - Seat and disc assembly for a Spirax Sarco DN15 TD120M high pressure thermodynamic steam trap.



Material

No.	Part	Material	
1	Body	Alloy steel	ASTM A182 F22
2	Disc	Steel	BS EN ISO 4957
3	Top cover	Alloy steel	ASTM A182 F22
4	Strainer screen assembly	Stainless steel	BS 970 304 S15/ Sintered stainless
5	Bottom cover	Alloy steel	ASTM A182 F22
6 *	Seat	Steel	BS 4659 Gr. BD2
7	Cover gasket	Spirally wound stainless steel with exfoliated graphite filler	
8	Cover studs	Steel	ASTM A193 Gr. B16
9	Cover nuts	Steel	ASTM A194 Gr.4
10	Inner seat gasket	Spirally wound stainless steel with exfoliated graphite filler	
11	Cover gasket	Spirally wound stainless steel with exfoliated graphite filler	
12 *	Ferrule	Stainless steel	

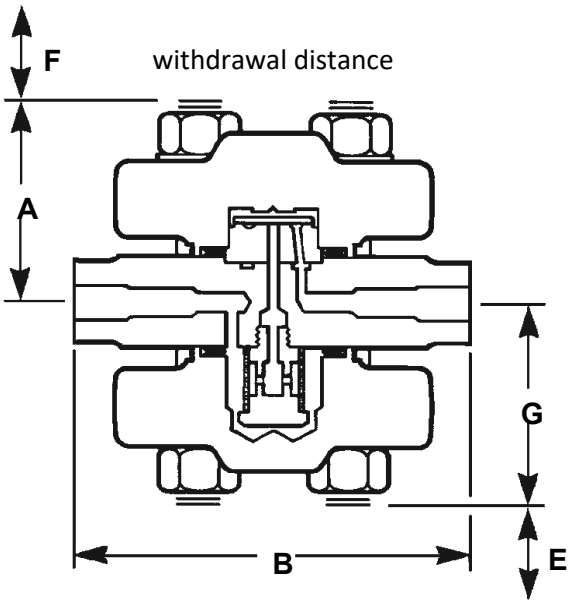


Table 1 Recommended tightening torques

Item	Part	Or mm		N m	(lbf ft)
4		22 A /F		**25 – 35**	**(18 - 26)**
8	Stud		M16	**85 – 90**	**(62.5 - 66)**
9	Nut	23 A /F	M16	**160 – 180**	**(118 - 132)**

Dimensions in *(mm)* and *(kg)*

Size DN	A	B	E	F	G	Weight
½"	*15*	*78*	*158*	*55*	*55*	*78*	*10.5 kg*
¾"	*20*	*80*	*158*	*55*	*55*	*80*	*10.5 kg*
1"	*25*	*80*	*158*	*55*	*55*	*80*	*10.5 kg*

PENCO
Petro Energy Novin Arike

MOST ADVANCED AND COMPLETE THERMODYNAMIC DISC RANGE.

Thermodynamic steam traps with maintainable seat

Arike manufactures a wide variety of Thermodynamic Traps in all pressure-and temperature ranges, and with multiple configurations to effectively drain condensate from steam mains, tracer lines and steam turbines. Select the model that fits your needs from low to supercritical pressure applications.

Model	Thermodyne		Max Allowable Temp (°C)	Operating Press. Range (bar)	Protection From Ambient temperature	Air venting	Body Material	EQUAL
Renewal capsules without removing the bodies from the line								
TDS	45		400	42	Air Jacket	--	Carbon Steel (A105)	YARWAY (USA) 711-721
	42		400	42	Air Jacket	--	ASTM A743 Gr CA 40	SPIRAX (ENGLAND) TD 42 / TLV (JAPAN) P46S
Wide range of pressure discharge capacities								
TDL	P46L P46H P46M / P65		425 / 425	46 / 65	Air Jacket	Bimetal	Carbon Steel (A105)	TLV-JAPAN P46SRN P46SRM P46SRW P65SRN
TDX	62 / 46		550 / 425	62 / 46	Air Jacket	Bimetal	(A182 F11) Carbon Steel (A105)	SPIRAX (ENGLAND) TDS46M TD42H
	62LM		482	8-62	Air Jacket	--	ASTM A276 WC6	SPIRAX (ENGLAND) TD62
TDG	50		380	50	Air Jacket	Bimetal	Carbon Steel (A105)	DOUGLAS DC 50 (ITALIA)
Introduction for specific applications								
TDN	13		200	0.3 – 13	Steam Jacket	Bimetal	Ductile Cast Iron FCD450	TLV (JAPAN) A3N
TDY	131		400	0.3 – 40	---	--	Stainless Steel (AISI400)	YARWAY (USA) 131
Ideal for use on high-temperature / high-pressure steam mains								
TDH	120		550°C @ 80 bar	220 bar @ 374°C	---	--	A182F22	SPIRAX (ENGLAND) TD120M
	150		482	103	---	--	A182F11	YARWAY (USA) 515 D3

*connections available: S = screwed, W = socket weld, F = flanged. All Arikeh TD Models with replaceable module.
Full details can be found on individual SDS.

ARIKE
Steam Trap Specialist

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دفتر مرکزی : اصفهان، سپاهان شهر، بلوار غدیر، مجتمع آتایار، 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)