

# TLV®

# QuickStation™

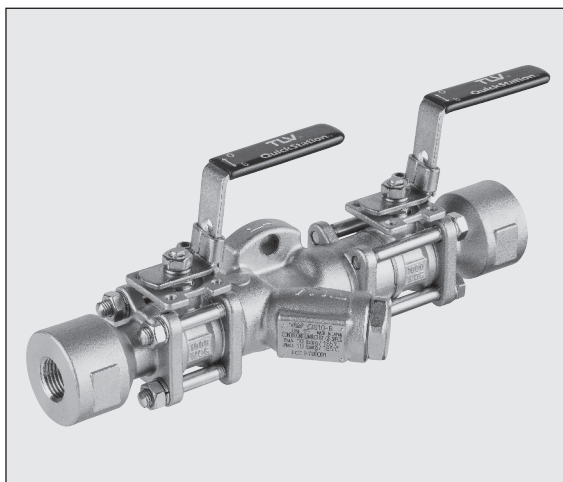
## MODEL QS10 STAINLESS STEEL

### COMPACT STAINLESS STEEL STEAM TRAP STATION WITH BUILT-IN BALL VALVES

#### Features

Compact, reliable steam trap station for steam mains, tracers, and light processes. QuickStation enables condensate drainage from a wide range of applications, and inline replacement of universal flange steam traps in minutes.

1. Two-bolt flange universal connector allows quick trap replacement or cleaning without disturbing piping.
2. All-in-one design, featuring upstream and downstream isolation valves.
3. Built-in check valve with tight closure ensures long service life.
4. Wetted parts are stainless steel and high-grade rubber or resin for high durability and corrosion resistance.
5. Optional elbow-type blowdown valve available for safer condensate blowdown and scale removal.
6. Equipped with handle locks for prevention of valve misoperation.
7. Enables installation of steam traps on horizontal or vertical lines.
8. Models with double upstream isolation valves and with 90° double isolated piping section also available.



#### Specifications

Model	QS10-B	QS10-D	QS10-T	QS10-TD
Connection	Screwed, Socket Welded, Flanged			
Valve Port	Full Bore			
Number of Valves	Primary Side	1	2	3
	Secondary Side	1	1	1
Size	½", ¾", 1" / DN 15, 20, 25			
Maximum Operating Pressure (barg)	PMO	10*		
Maximum Operating Temperature (°C)	TMO	185*		

\* For trap station only; further restricted by mounted trap unit.

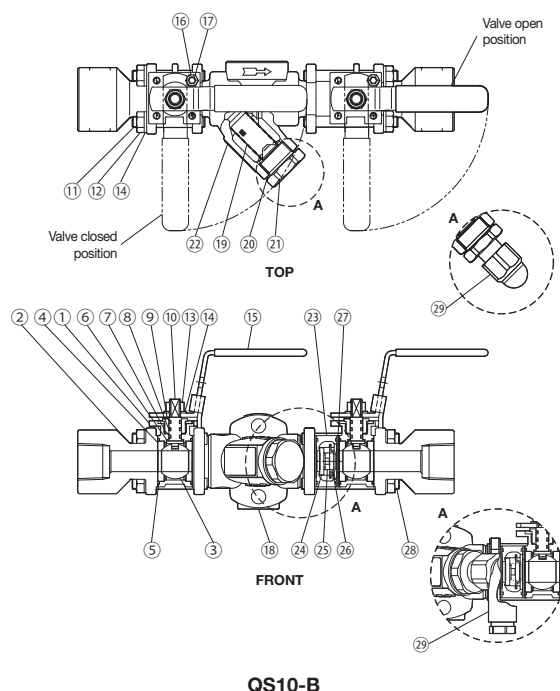
PRESSURE SHELL DESIGN CONDITIONS (NOT OPERATING CONDITIONS): Maximum Allowable Pressure (barg) PMA: 10  
Maximum Allowable Temperature (°C) TMA: 185  
Minimum Allowable Temperature (°C): -40

1 bar = 0.1 MPa

**CAUTION** To avoid abnormal operation, accidents or serious injury, DO NOT use this product outside of the specification range. Local regulations may restrict the use of this product to below the conditions quoted.

No.	Description	Material	DIN	ASTM/AISI
①	Body	Cast Stainless Steel A351/A351M Gr.CF8	1.4312	—
②	Cover	Cast Stainless Steel A351/A351M Gr.CF8	1.4312	—
③	Ball	Stainless Steel SUS316	1.4401	AISI316
④	Valve Seat	Fluorine Resin R-PTFE	R-PTFE	R-PTFE
⑤	Body Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑥	Thrust Washer	Fluorine Resin PTFE	PTFE	PTFE
⑦	Gland Gasket	Fluorine Resin PTFE	PTFE	PTFE
⑧	O-ring	Fluorine Rubber FPM	FPM	D2000HK
⑨	Gland Nut	Stainless Steel SUS304	1.4301	AISI304
⑩	Valve Stem	Stainless Steel SUS316	1.4401	AISI316
⑪	Inlet Cover Bolt	Stainless Steel SUS304	1.4301	AISI304
⑫	Inlet Cover Nut	Stainless Steel SUS304	1.4301	AISI304
⑬	Handle Nut	Stainless Steel SUS304	1.4301	AISI304
⑭	Spring Washer	Stainless Steel SUS304	1.4301	AISI304
⑮	Handle	Stainless Steel SUS304	1.4301	AISI304
⑯	Handle Stop Bolt	Stainless Steel SUS304	1.4301	AISI304
⑰	Stop Bolt Nut	Stainless Steel SUS304	1.4301	AISI304
⑱	Connector Body	Cast Stainless Steel A351/A351M Gr.CF8	1.4312	—
⑲	Screen Inside/Outside	Stainless Steel SUS304/430	1.4301/1.4016	AISI304/430
⑳	Screen Holder Gasket	Stainless Steel SUS316L	1.4404	AISI316L
㉑	Screen Holder	Cast Stainless Steel A351/A351M Gr.CF8	1.4312	—
㉒	Nameplate	Stainless Steel SUS304	1.4301	AISI304
㉓	Check Valve	Cast Stainless Steel A351/A351M Gr.CF8	1.4312	—
㉔	Disc	Stainless Steel SUS303	1.4305	AISI303
㉕	Coil Spring	Stainless Steel SUS304	1.4301	AISI304
㉖	Spring Holder	Stainless Steel SUS304	1.4301	AISI304
㉗	Spacer	Stainless Steel SUS304	1.4301	AISI304
㉘	Outlet Cover Bolt	Stainless Steel SUS304	1.4301	AISI304
㉙	BD2 Blowdown Valve**	Stainless Steel SUS304	1.4301	AISI304
㉚	Extension***	Cast Stainless Steel A351/A351M Gr.CF8	1.4312	—

\* Equivalent materials \*\* Option \*\*\* Shown on reverse  
Consult TLV for available replacement parts.

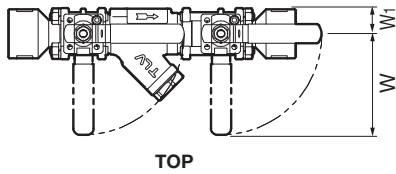


QS10-B

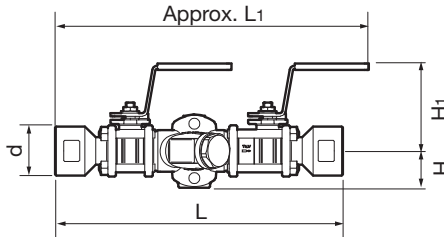
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**Dimensions**

● **QS10-B Screwed**

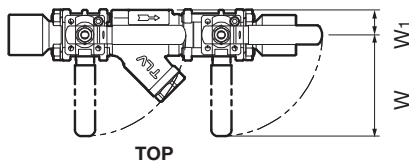


TOP

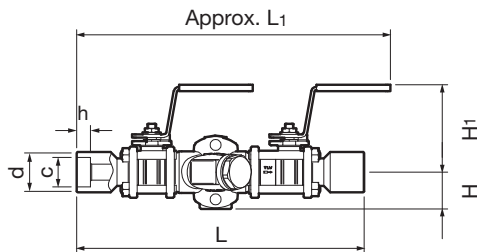


FRONT

● **QS10-B Socket Welded**

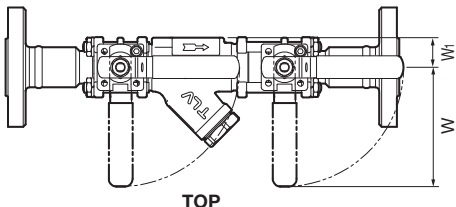


TOP

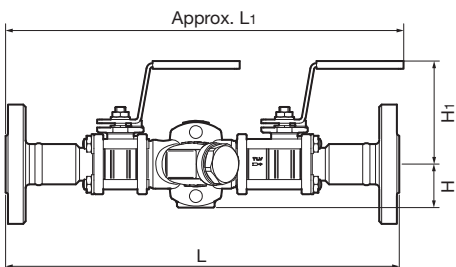


FRONT

● **QS10-B Flanged**



TOP



FRONT

**QS10-B Screwed\*** (mm)

Size	L	L <sub>1</sub> **	φ d	H	H <sub>1</sub>	W***	W <sub>1</sub>	Weight (kg)
½"	270	300	46	35	85	95	23,5	2.8
¾"								2.7
1"								2.6

\* DIN EN 10226; other standards available

\*\* At full-open position \*\*\* At full-close position

**QS10-B Socket Welded\*** (mm)

DN	L	L <sub>1</sub> **	H	H <sub>1</sub>	W***	W <sub>1</sub>	φ d	φ c	h	Weight (kg)
15	270	300	35	85	95	23.5	30	21.8	13	2.8
20							36	27.2		2.7
25							44	33.9		2.6

\* ASME B16.11-2005, other standards available

\*\* At full-open position \*\*\* At full-close position

**QS10-B Flanged** (mm)

DN	L			L <sub>1</sub> *		
	DIN EN 1092-1	ASME Class		DIN EN 1092-1	ASME Class	
	PN40	150RF	300RF	PN40	150RF	300RF
15	312	337	337	320	330	330
20		357	357		340	340
25	322	377	377	325	350	350

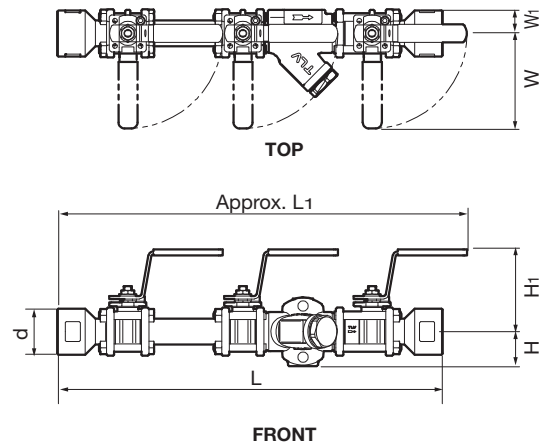
DN	H	H <sub>1</sub>	W**	W <sub>1</sub>	Weight*** (kg)
15	35	85	95	23.5	4.4
20					5.0
25					5.4

Other standards available, but length and weight may vary

\* At full-open position \*\* At full-close position \*\*\* Weight is for DIN PN 40

**Dimensions**

● **QS10-D Screwed**



**QS10-D Screwed\***

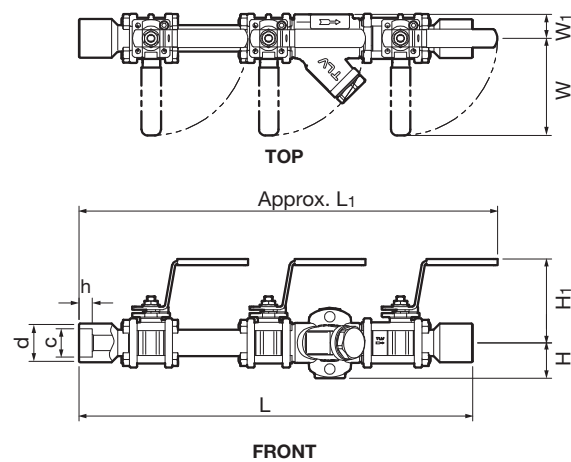
(mm)

Size	L	L <sub>1</sub> **	$\phi$ d	H	H <sub>1</sub>	W***	W <sub>1</sub>	Weight (kg)
1/2"	385	415	46	35	85	95	23.5	3.6
3/4"								3.5
1"								3.4

\* DIN EN 10226; other standards available

\*\* At full-open position \*\*\* At full-close position

● **QS10-D Socket Welded**



**QS10-D Socket Welded\***

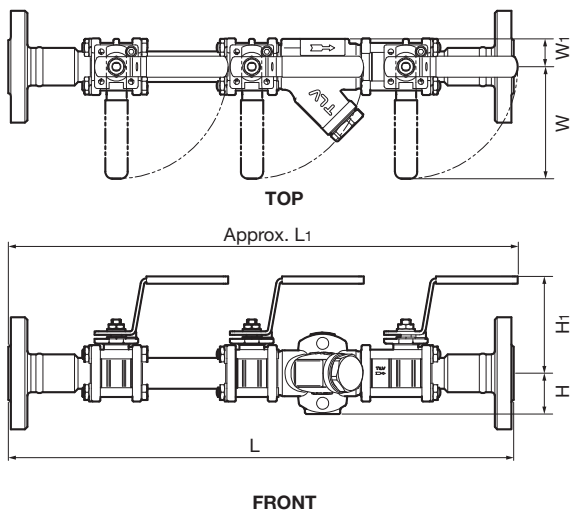
(mm)

DN	L	L <sub>1</sub> **	H	H <sub>1</sub>	W***	W <sub>1</sub>	$\phi$ d	$\phi$ c	h	Weight (kg)
15	385	415	35	85	95	23.5	30	21.8	13	3.6
20							36	27.2		3.5
25							44	33.9		3.4

\* ASME B16.11-2005, other standards available

\*\* At full-open position \*\*\* At full-close position

● **QS10-D Flanged**



**QS10-D Flanged**

(mm)

DN	L			L <sub>1</sub> *		
	DIN EN 1092-1	ASME Class		DIN EN 1092-1	ASME Class	
	PN40	150RF	300RF	PN40	150RF	300RF
15	427	452	452	430	445	445
20		472	472		455	455
25	437	492	492	435	465	465

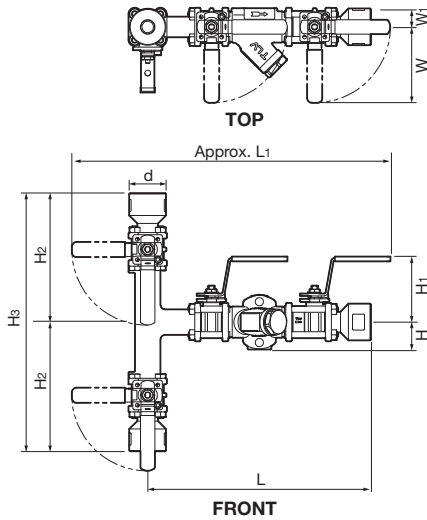
DN	H	H <sub>1</sub>	W**	W <sub>1</sub>	Weight*** (kg)
15	35	85	95	23.5	5.2
20					5.8
25					6.2

Other standards available, but length and weight may vary

\* At full-open position \*\* At full-close position \*\*\* Weight is for DIN PN 40

**Dimensions**

● **QS10-T Screwed**

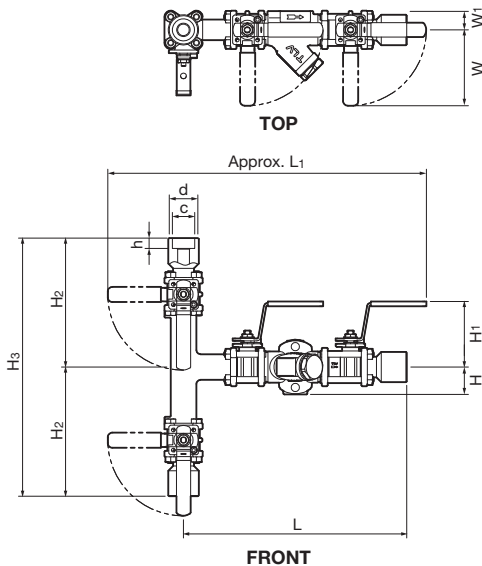


**QS10-T Screwed\*** (mm)

Size	L	L1**	φ d	H	H1	H2	H3	W***	W1	Weight (kg)
1/2"	280	400	46	35	85	161,5	323	95	23.5	5.0
3/4"										4.9
1"										4.8

\* DIN EN 10226; other standards available \*\* Maximum possible length \*\*\* At full-close position

● **QS10-T Socket Welded**



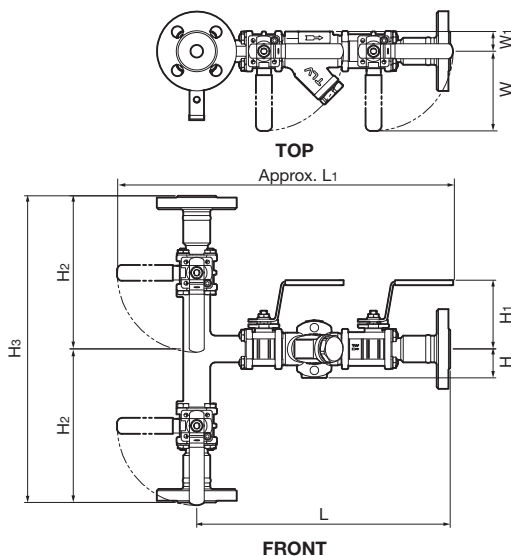
**QS10-T Socket Welded\*** (mm)

DN	L	L1**	H	H1	H2	H3
15	280	400	35	85	161.5	323
20						
25						

DN	W***	W1	φ d	φ c	h	Weight (kg)
15	95	23.5	30	21.8	13	5.0
20			36	27.2		4.9
25			44	33.9		4.8

\* ASME B16.11-2005, other standards available \*\* Maximum possible length \*\*\* At full-close position

● **QS10-T Flanged**



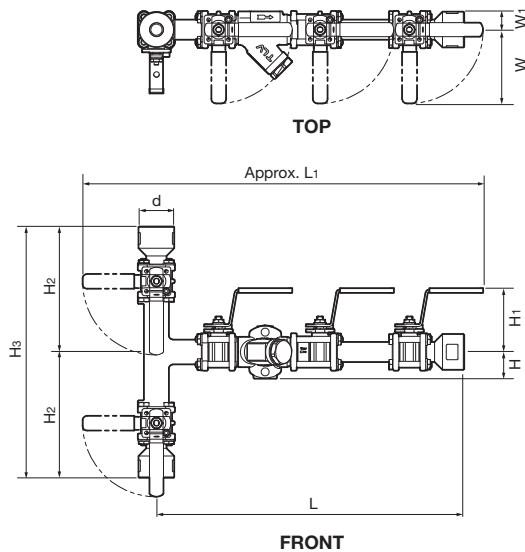
**QS10-T Flanged** (mm)

DN	L		L1*	H	H1	H2	H3	W**	W1	Weight*** (kg)	
	DIN EN 1092-1	ASME Class									
	PN40	150RF 300RF									
15	301	313.5	313.5	400	35	85	181.5	363	95	23.5	6.6
20		323.5	323.5								7.2
25		333.5	333.5								186.5

Other standards available, but length and weight may vary \* Maximum possible length \*\* At full-close position \*\*\* Weight is for DIN PN 40

**Dimensions**

● **QS10-TD Screwed**



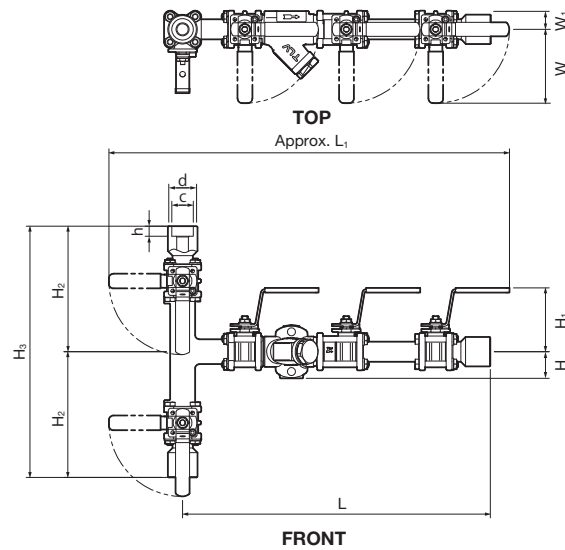
**QS10-TD Screwed\***

(mm)

Size	L	L1**	φ d	H	H1	H2	H3	W***	W1	Weight (kg)
1/2"	400	520	46	35	85	161.5	323	95	23.5	5.8
3/4"										5.7
1"										5.6

\* DIN EN 10226; other standards available \*\* Maximum possible length \*\*\* At full-close position

● **QS10-TD Socket Welded**



**QS10-TD Socket Welded\***

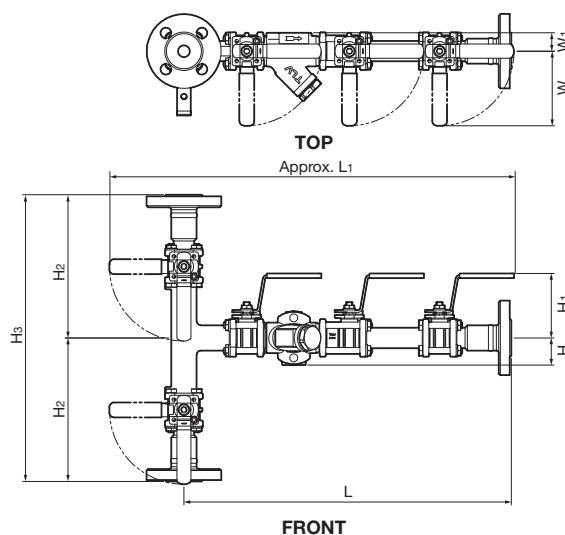
(mm)

DN	L	L1**	H	H1	H2	H3
15	400	520	35	85	161.5	323
20						
25						

DN	W***	W1	φ d	φ c	h	Weight (kg)
15	95	23.5	30	21.8	13	5.8
20			36	27.2		5.7
25			44	33.9		5.6

\* ASME B16.11-2005, other standards available \*\* Maximum possible length \*\*\* At full-close position

● **QS10-TD Flanged**



**QS10-TD Flanged**

(mm)

DN	L			L1*	H	H1	H2	H3	W**	W1	Weight*** (kg)
	DIN EN 1092-1	ASME Class									
	PN40	150RF	300RF								
15	416	428.5	428.5	520	35	85	181.5	363	95	23.5	7.4
20		438.5	438.5				186.5	373			8.0
25		448.5	448.5				186.5	373			8.4

Other standards available, but length and weight may vary \* Maximum possible length \*\* At full-close position \*\*\* Weight is for DIN PN 40

## Mounted Steam Trap Units

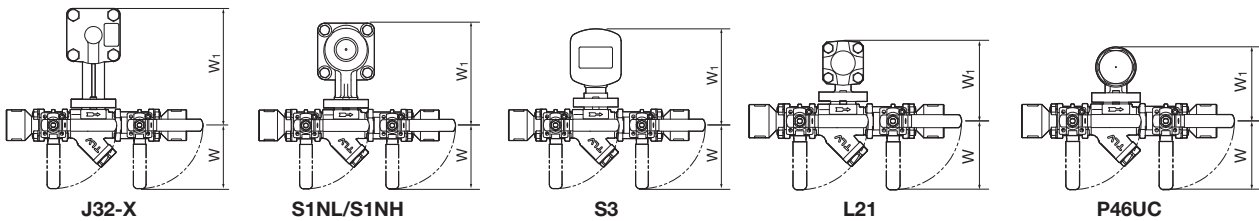
QuickStation QS10 accommodates steam trap units for condensate drainage from a wide range of applications, including process use and steam mains.

### Dimensions with Mounted Steam Trap Units

(mm)

Model	W*	W1**	Weight (kg)***
J32-X	95	175	5.0
S1NL/S1NH		155	4.9
S3		145	3.8
L21		110	3.9
P46UC		105	3.8

\* At full-close position \*\* At full-open position \*\*\* Combined weight of QS10-B with mounted trap unit



### Steam Trap Unit Specifications\*

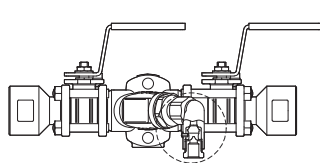
Model	J32-X	S1NL/S1NH	S3	L21	P46UC
Steam Trap Type	Free Float	Free Float	Free Float	Thermostatic	Thermodynamic
PMO (barg)	32	21	21	21	46
TMO (°C)	240	220/400	400	235	425
Max. Discharge Capacity** (kg/h)	670	200	215	760	740
Trap Image					

\* For more information, see the QuickTrap specifications data sheet for the steam trap employing the desired trap unit (trap unit - QuickTrap data sheet): J32-X - FJ32-X; S3 - FS3; L21 - FL21/FL32; P46UC - FP46UC. Contact TLV for details on S1NL/S1NH.

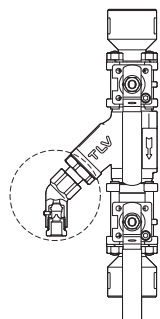
\*\* Capacities shown here will vary depending on orifice numbers, type of X-element and/or pressure differential.

Note: The operating pressure and temperature range of the trap unit is limited to that of the QuickStation.

## Options



BD2N (Horizontal type)



BD2V (Vertical type)

BD2N (Horizontal type)  
BD2V (Vertical type)

The BD2 blowdown valve, installed in place of the screen holder, uses internal pressure to blow out condensate/steam, dirt and scale to the atmosphere.

Manufacturer

**TLV** CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001

ISO 9001  
ISO 14001

