NEW PRODUCT NEWS

T-BÜRST
HIGH PRESSURE

new

New High Pressure Coolant Capable Groove-Turning and Parting Tools

TaeguTec
Member IMC Group

In order to meet the machining needs of difficult-to-cut materials such as titanium, inconel and other heat resistant alloys, TaeguTec is pleased to introduce the T-BURST high pressure coolant tool for groove-turning and parting.

In parting and grooving applications, the ability to supply high pressure coolant generates good chip breaking, reduced cycle times and increased tool life on most materials. On these difficult-to-cut materials, it is hard to ensure effective chip breaking specifically with standard external coolant in low feed rate operations. The T-BURST, by applying high coolant pressure to the insert's cutting edge results in excellent chip breaking capability.
Moreover, the high pressure coolant eliminates built-up-edges and maximizes insert tool life.

The T-BURST high pressure line is available in three tool holder types; TTER/L-TB, TTER/L-SH-TB holders and TQHR/L QUADRUSH tool holders.

Square shank TTER/L-TB holders are available in both 20 and 25 mm while the inserts' width of cut ranges from 3.0-8.0 mm. TTER/L-SH-TB holders come in 12 and 16 mm square shank size and feature side clamping design for fast and easy indexing on Swiss type tooling machines. Square shank QUADRUSH holders are available in 12, 16, 20 and 25 mm while the inserts' width of cut ranges up to 5.2 mm.

The T-BURST tool holders apply through coolant up to 340 bar and achieve improved tool life compared to normal coolant pressure external type tool holders.
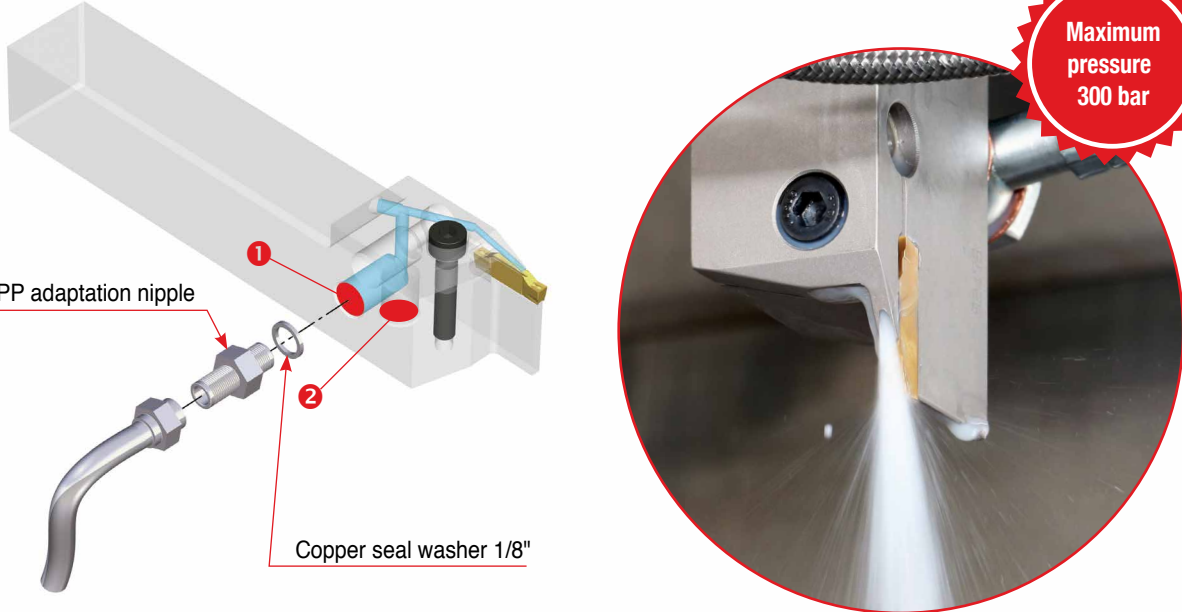
FEATURES

- **Excellent performance on difficult-to-cut materials such as titanium, inconel and other heat resistant alloys**
- **Good chip breaking on exotic materials under low feed rate conditions**
- **Reduced cycle time and higher productivity due to increased cutting speeds and higher feed rates**
- **Increased tool life even under normal coolant pressure**
- **T-BURST holders are capable of up to 340 bar coolant pressure**

✻ **New TTER/L-SH-TB holder – with side clamping system for Swiss type CNC lathes**
  - **Insert mounting from both the left and right sides of the holder**
  - **Simplified insert clamping without removing the holder from the machine**
  - **Fast and easy mounting on Swiss type machines**

T-BURST

Assembly guide

With the coolant outlet located on the upper jaw, directly over the insert, high pressure coolant flow is supplied to the insert's cutting edge from the tool holder's internal coolant channel therefore allowing effective cooling, increased tool life while preventing built-up-edges.

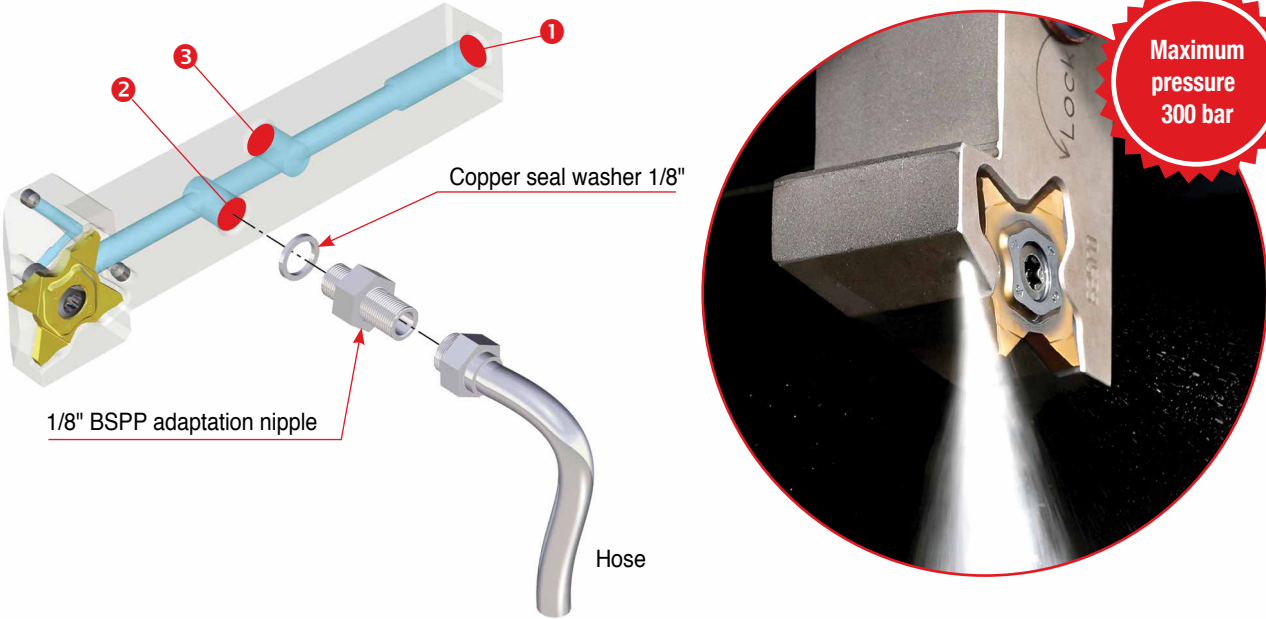* 2525 holder type

1/8" BSPP adaptation nipple

① ②

Copper seal washer 1/8"

Maximum pressure 300 bar

* 2020 holder type has 3 coolant inlets.

QUADRUSH T-BURST is designed with three coolant inlets for adaptability to different machine types.

② ③ ①

Copper seal washer 1/8"

1/8" BSPP adaptation nipple

Hose

Maximum pressure 300 bar

T-BURST
TTER/L-SH-TB

With the introduction of the innovative side clamping mechanism on the existing "SH" type holders combined with high-pressure coolant flow (maximum 340 bar) to the insert's cutting edge, insert mounting can now be done directly from the machine. No more holder removal from the tooling post. This is especially convenient on Swiss type lathes.

Three coolant inlets strategically located along the tool holder means adaptability to different machine types.
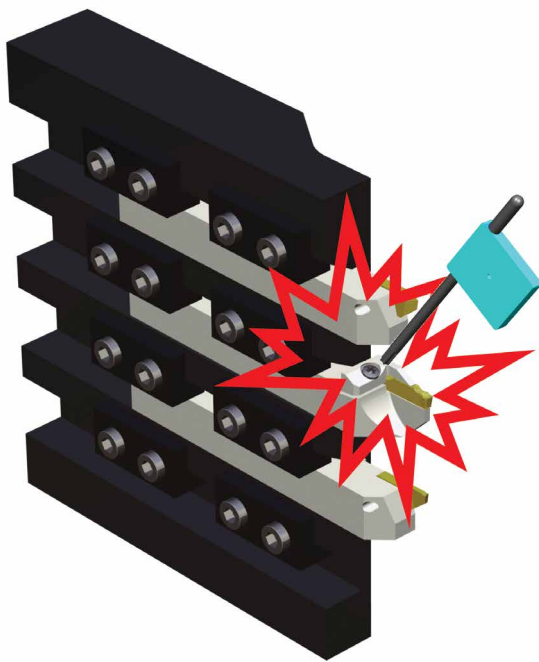
Conventional	TaeguTec new side clamping
The minimal space on Swiss type machines makes indexing an awkward task with conventional screw clamping type holders.	With TaeguTec's new side clamping design, trouble free insert indexing from either the left or right side of the holder makes tooling down time no problem at all.
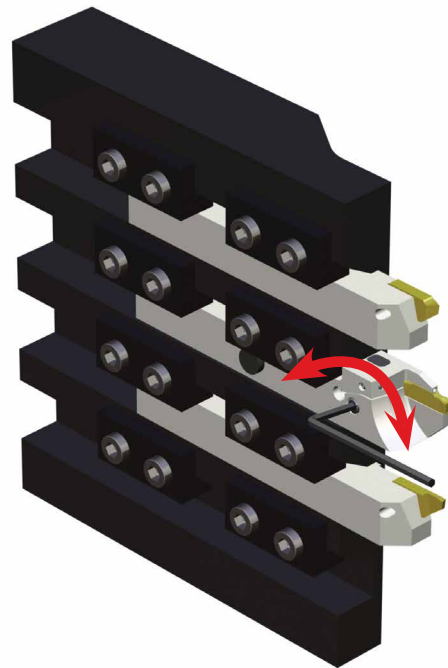
TTER/L-SH-TB

Side clamping holders for Swiss type machines

The tool holder is designed as a R/L holder. If the clamping screw is indexed on the left side, the pin plug is indexed on the right side to prevent chip entry. Indexing can also be done on the opposite side; if the clamping screw is indexed on the right side, the pin plug must be indexed on the left side.
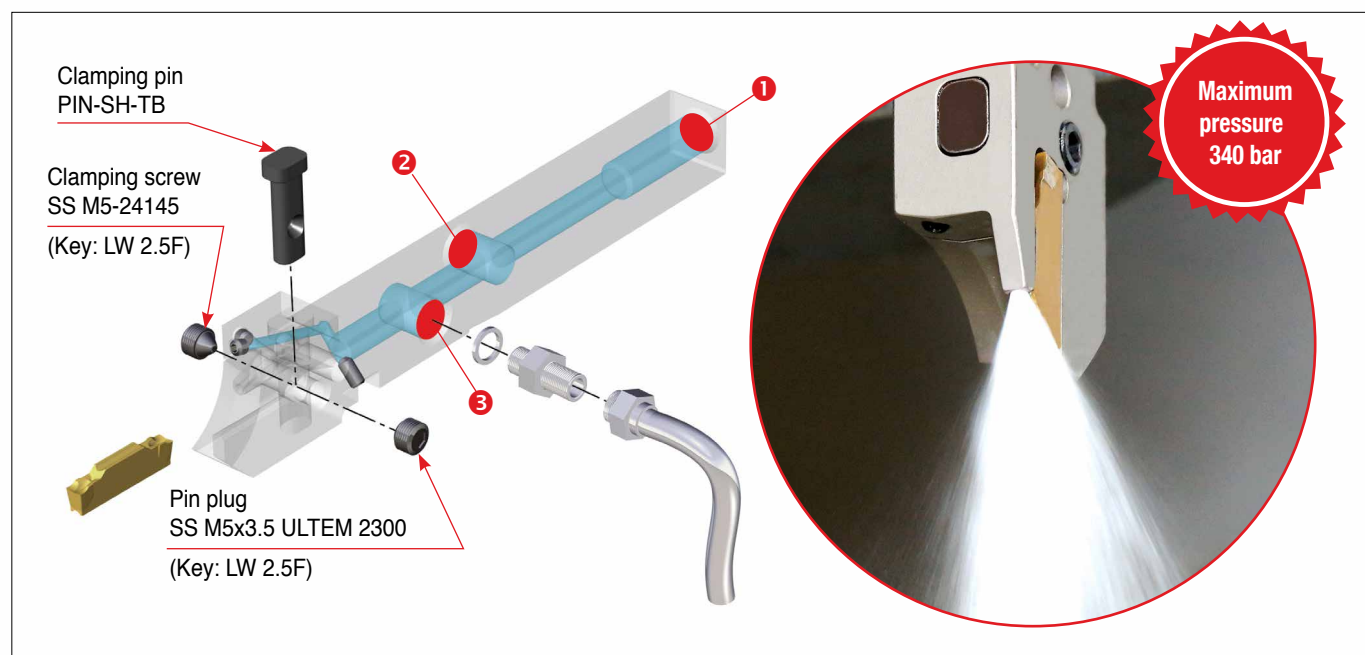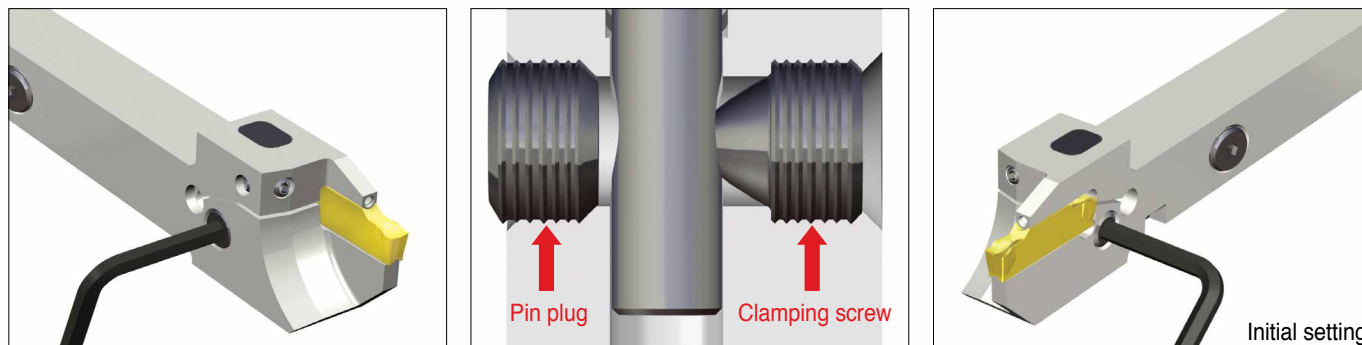
Pin plug   Clamping screw

Initial setting

Clamping pin
PIN-SH-TB

Clamping screw
SS M5-24145
(Key: LW 2.5F)

Pin plug
SS M5x3.5 ULTEM 2300
(Key: LW 2.5F)

❶ ❷ ❸

Maximum pressure 340 bar

TTER/L-TB

Grooving and turning with channels for high pressure coolant

G 1/8" BSPP

Tmax   G 1/8" BSPP

Coolant inlet (G 1/8" BSPP)

* 2020 holder type (3 coolant inlet)

Right hand shown
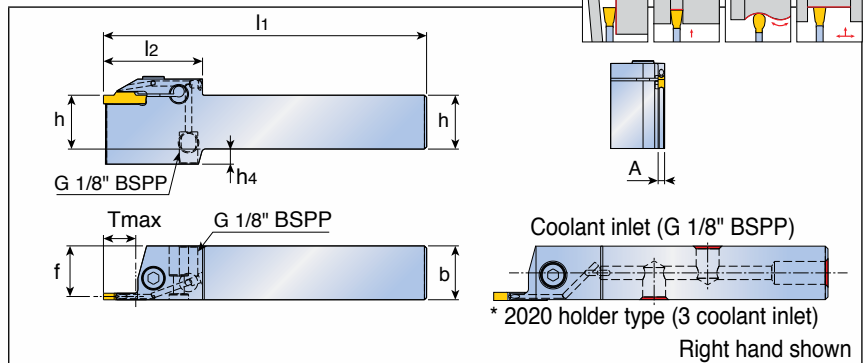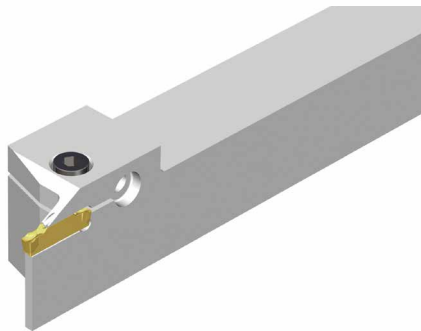
Designation		Insert seat size	Dimension (mm)								Torque (N.m)	Insert
			h	b	l1	f	l2	A	h4	Tmax		
TTER/L	**2020-3-TB**	3	20	20	125	18.8	43	2.4	-	12.0	5.5	TDC / J / T TDXU / XT TSC / J
	2020-4-TB	4	20	20	125	18.5	46	3.0	-	15.0	8.0	
	2525-3-TB	3	25	25	150	23.8	43	2.4	-	12.0	5.5	
	2525-4-TB	4	25	25	150	23.5	46	3.0	-	15.0	8.0	
	2525-5-TB	5	25	25	150	23.1	49	4.0	-	20.0	8.0	
	2525-6-TB	6	25	25	150	22.6	52	5.0	7	20.0	12.0	
	2525-8-TB	8	25	25	150	22.1	58	6.0	7	25.0	12.0	

	70 bar flow rate (liters/min)	100 bar flow rate (liters/min)	140 bar flow rate (liters/min)
TTER/L 2020-3-TB	5-7	7-9	9-11
TTER/L 2020-4-TB	6-8	10-12	12-14
TTER/L 2525-3-TB	6-8	8-10	10-12
TTER/L 2525-4-TB	10-12	14-16	16-18
TTER/L 2525-5-TB	13-16	19-21	22-24
TTER/L 2525-6-TB	13-16	19-21	22-24
TTER/L 2525-8-TB	13-16	19-21	22-24

Spare parts

Designation	Screw	Wrench	Plug	Wrench for plug	
TTER/L 2020-3-TB	SH M5X0.8X20	L-W4	PT 0.125X8-L5.5	L-W5	
TTER/L 2020-4-TB	SH M6X1.0X20	L-W5	PT 0.125X8-L5.5	L-W5	
TTER/L 2525-3-TB	SH M5X0.8X20	L-W4	PLG G1/8-T8.0-L12.3	L-W5	
TTER/L 2525-4 / 5-TB	SH M6X1.0X20	L-W5	PLG G1/8-T8.0-L12.3	L-W5	
TTER/L 2525-6 / 7-TB	SH M8X1.25X20	L-W6	PLG G1/8-T8.0-L12.3	L-W5	

TTER/L-3SH-TB

Side lock holders with channels for high pressure coolant on Swiss type automatic machines

Clamping pin   Coolant inlet

Right hand shown
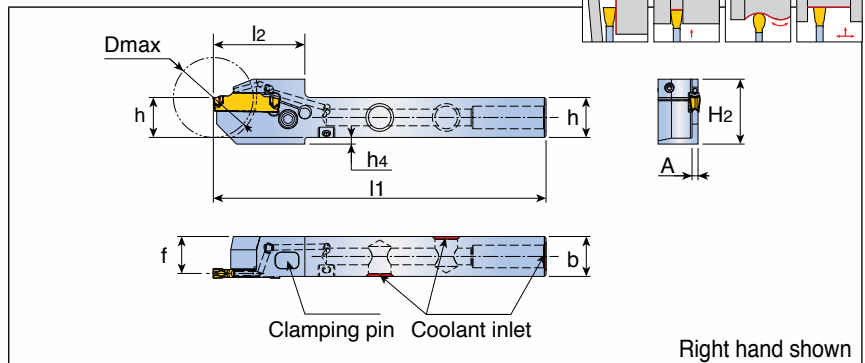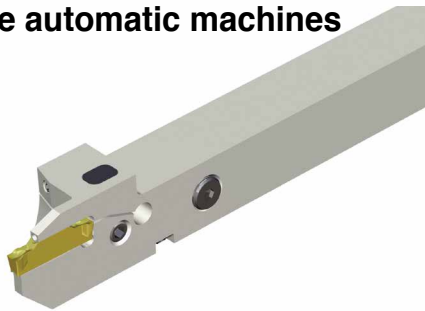
Designation	Insert seat size	Dimension (mm)									Coolant inlet	Insert
		h	b	l1	f	l2	A	h4	H2	Dmax		
TTER/L 12-24-3SH-TB	3	12	12	125	11.1	27.5	2.4	2	19.5	24	UNF 5/16	TDC / J / T TDXU / XT
16-32-3SH-TB	3	16	16	125	15.1	27.5	2.4	2	21.5	32	UNF 5/16	TSC / J

	70 bar flow rate (liters/min)	100 bar flow rate (liters/min)	140 bar flow rate (liters/min)
TTER/L-3SH-TB	6.4	9.7	11.9

Spare parts

Designation	Clamping pin	Clamping screw	Pin plug	Wrench for clamping screw & pin plug	Inlet plug	Wrench for inlet plug
TTER/L 12-24-3SH-TB	PIN-SH-TB	SS M5-24145	SS M5X3.5 ULTEM 2300	L-W 2.5F	PT 5/16 UNF	L-W 5/32"
TTER/L 16-32-3SH-TB	PIN-SH-TB	SS M5-24145	SS M5X3.5 ULTEM 2300	L-W 2.5F	PT 5/16 UNF	L-W 5/32"

TQHR/L-TB

Grooving and turning with channels for high pressure coolant

Coolant outlet   Coolant inlet

Right hand shown
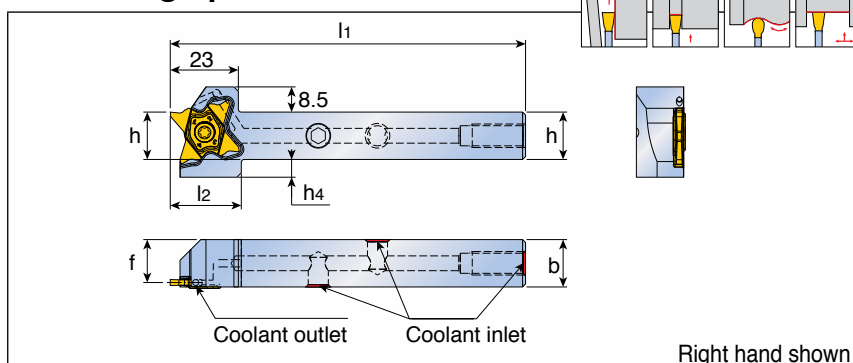
Designation		Dimension (mm)						Coolant inlet	Insert
		h	b	l_1	f	l_2	h_4		
TQHR/L	**12-27-TB**	12	12	120	10.5	24	8	UNF 5/16	
	16-27-TB	16	16	120	14.5	24	6	UNF 5/16	TQ□ 27…
	20-27-TB	20	20	120	18.5	24	2	G1/8 BSPP	
	25-27-TB	25	25	135	23.5	-	-	G1/8 BSPP	

	70 bar flow rate (liters/min)	100 bar flow rate (liters/min)	140 bar flow rate (liters/min)
TQHR/L -TB	9-11	11-13	12-14

Spare parts

Designation	Screw	Wrench	Inlet plug	Wrench for inlet plug
TQHR/L 12-27-TB	TS 50125I [1] TS 50125IL [2]	T 10/20	PT 5/16 UNF	L-W 5/32″
TQHR/L 16-27-TB		T 10/20	PT 5/16 UNF	L-W 5/32″
TQHR/L 20-27-TB		T 10/20	PT 0.125X8-5.5L	L-W 5
TQHR/L 25-27-TB		T 10/20	PT 0.125X8-5.5L	L-W 5

• [1] For TQHL   • [2] For TQHR

Accessories

Hose

BS

L

Th   Th1

Fig.1

BB

L

Fig.2
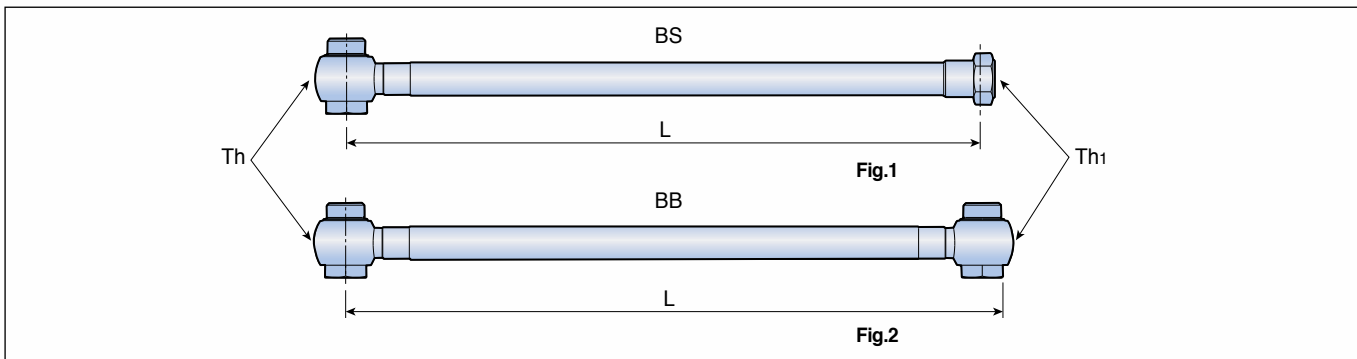
Designation		Dimension (mm)				Fig.
		L(mm)	Th	Th1	Max. pressure(Bar)	
TB HOSE	**G1/8-7-16-200BS**	200	G1/8"-28 BSPP	7/16"-20 UNF (Flare 37°)	260	1
	G1/8-7/16-250BS	250	G1/8"-28 BSPP	7/16"-20 UNF (Flare 37°)	260	1
	G1/8-G1/8-200BB	200	G1/8"-28 BSPP	G1/8"-28 BSPP	260	2
	G1/8-G1/8-250BB	250	G1/8"-28 BSPP	G1/8"-28 BSPP	260	2
	5/16-7/16-200BS	200	5/16"-24 UNF	7/16"-20 UNF (Flare 37°)	200	1
	5/16-G1/8-200BS	200	5/16"-24 UNF	G1/8"-28 BSPP	200	1

● Hose is ordered separately

Adapter

HEX 9/16"

G1/8"-28 BSPP

7/16"-20UNF
(Flare 37°)

37°

4

13.8

14

7.1

28.75
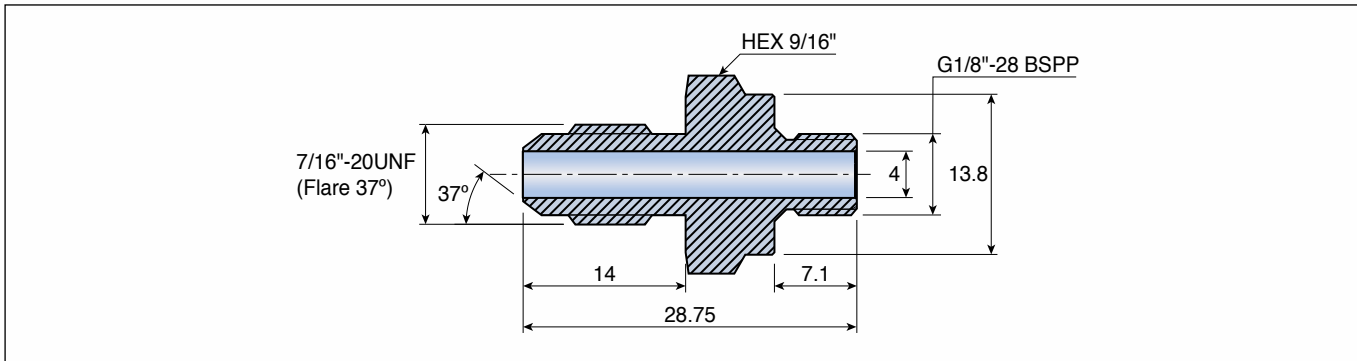
Designation
TB NIPPLE G1/8-7/16 UNF

● Adapter is ordered separately

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Accessories

Seal washer
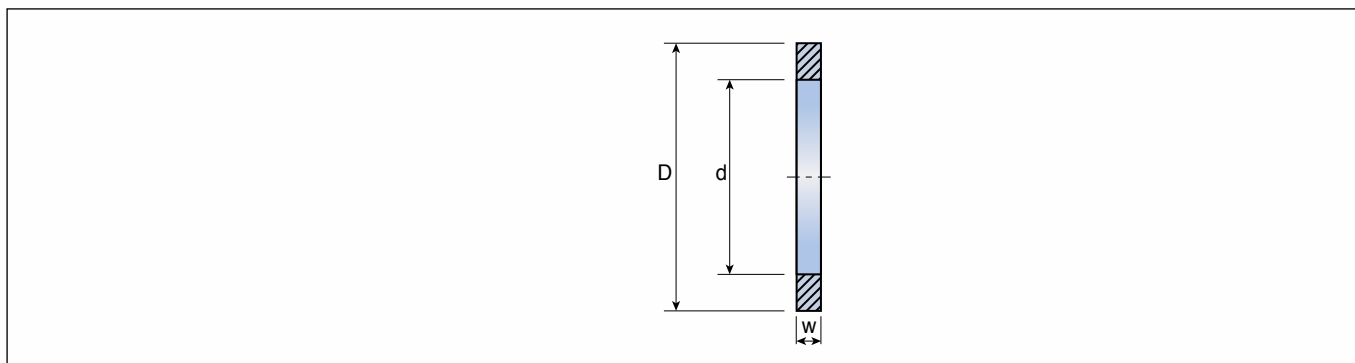
Designation		Dimension (mm)						
		D	d	w				
TB COPPER	SEAL 1/8"	15	10	1				
	SEAL 5/16"	12	8	1				

• Seal washer is ordered separately

Connector
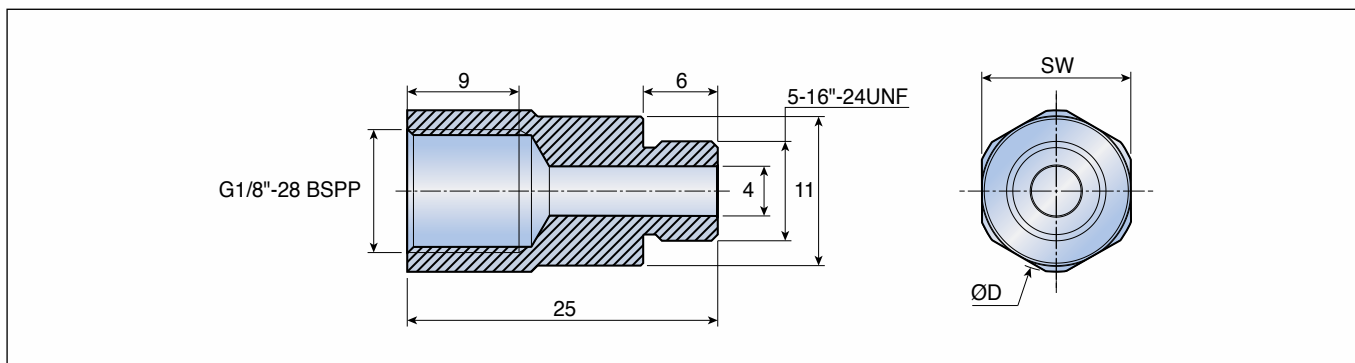
Designation		Dimension (mm)					
		D	SW				
TB CONECTOR	5/16"-G1/8"	13	12				
	5/16"-G1/8"-12	12	11				

• Connector is ordered separately

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