

PARTING & GROOVING

Parting Series

TGB32-TB

Blade Size

1.260" (32mm) Blade Height

Block Shank Size

.750, 1.000 & 1.250"

Blade Inserts

T-ClampUltra+

2-6mm & .125" widths

ID Grooving Series

TTIR/L-TB

ID Grooving Shank Size

.750, 1.000, 1.250 & 1.500"

ID Grooving Inserts

T-ClampUltra+

2-4mm & .125" widths

TCLAMPULTRA+

High Pressure Coolant Line for Parting and Internal Grooving Applications

- » Increased tool life due to 2 coolant channels.
- » Up to 4,900 psi pressure.
- » Compatible with a wide range of T-ClampUltra+ inserts for various materials.

Featuring

COOLBURST
Technology



See it in
action! »



Ingersoll expands CoolBurst parting system to include traditional blades for the popular T-Clamp Ultra+ inserts

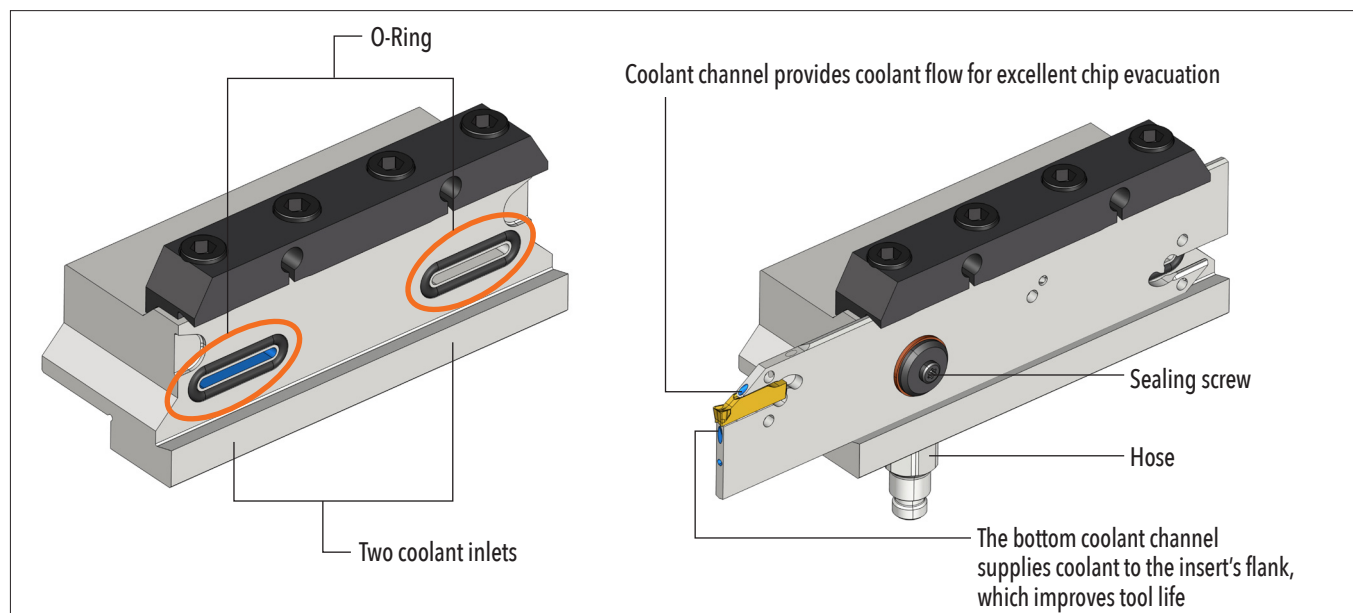
The TGB-TB blades are designed for parting and deep grooving applications. These blades feature two coolant channels – one above the insert for improved chip control, and one below the insert for increased tool life.

When applying high-pressure coolant, the speed and feed rate can be increased which will result in improved productivity and reduced machining time. High-pressure coolant also is ideal for machining difficult-to-cut HRSA materials such as Inconel and titanium.

While high-pressure coolant is recommended for maximum tool life, applying coolant at normal pressure will also result in improved tool life.

Features & Benefits

- 2 coolant channels for improved chip control and increased tool life
- Ideal for machining difficult-to-cut materials such as Inconel and titanium
- Allows for increased speed and feed, increasing productivity
- Improved tool life at normal feed rates
- Stable tool life at higher feeds and speeds
- Up to 4,900 psi coolant pressure



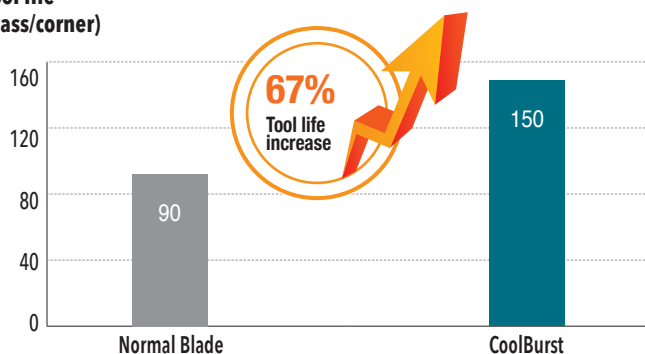
TGB-TB Chip Control Test

Material	Stainless Steel (304)			
Operation	Parting			
Blade	TGB32-3		TGB32-3-TB	
Insert	TDJ3 TT9080		TDJ3 TT9080	
Cutting Speed, v_c (sfm)	655		655	
Feed Rate, f_n (ipr)	.002, .004		.002, .004	
Depth of Cut, a_p (in.)	.197		.197	
Coolant Pressure	145 psi (External Coolant)		1015 psi (Internal High Pressure Coolant)	
Chip Curl	f.002	f.004	f.002	f.004
				

TGB-TB Tool Life Test

Material	Stainless Steel (304)	
Operation	Parting	
Blade	TGB32-3	TGB32-3-TB
Insert	TDJ3 TT9080	TDJ3 TT9080
Cutting Speed, v_c (sfm)	490	490
Feed Rate, f_n (ipr)	.003	.003
Depth of Cut, a_p (in.)	.787	.787
Coolant Pressure	145 psi (External Coolant)	1015 psi (Internal High Pressure Coolant)
Tool Life	90	150

Tool life
(pass/corner)



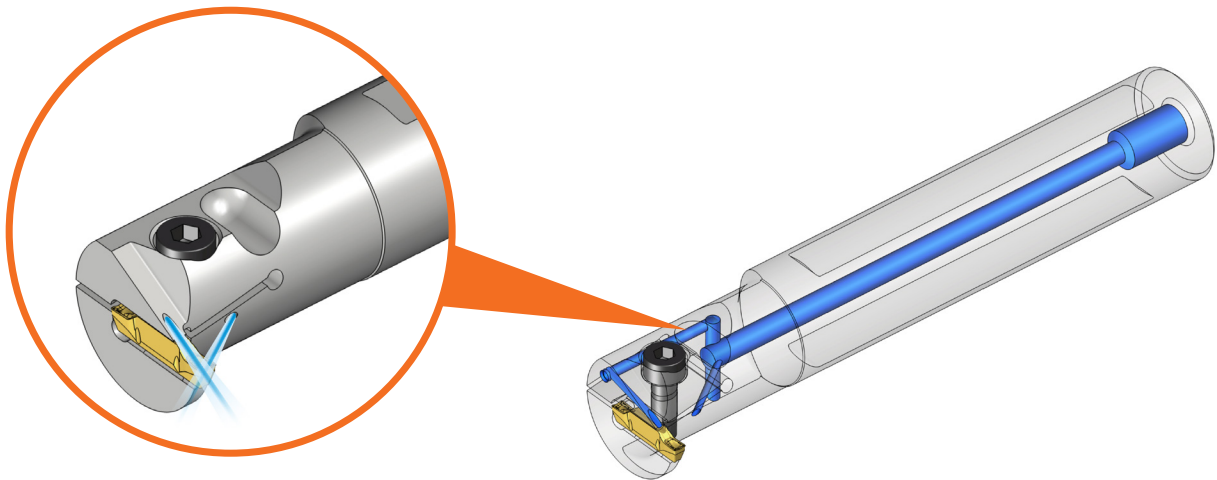
Ingersoll expands CoolBurst with product line for internal grooving

The TTIR/L-TB boring bars for internal grooving and boring features two optimized coolant channels located above and to the side of the insert. With the use of high-pressure coolant, this line provides improved chip control and chip evacuation during internal machining.

Available in shank sizes ranging from Ø.750-1.500", these bars accept 2-4 mm T-Clamp Ultra+ inserts. This line features a unique design that provides insert rigidity that ensures stable tool life.

Features & Benefits

- Ø .750-1.500" shank range accepting 2-4 mm insert widths
- Accepts popular T-Clamp Ultra+ inserts for machining a wide variety of materials
- 2 coolant channels for increased tool life, improved chip control, and improved chip evacuation when internal machining.
- Unique design enhances tool rigidity and clamping force
- Up to 4,900 psi coolant pressure



- ✓ Upper and lower coolant channels
- ✓ Increased clamping force due to the dimple design on top of the holder

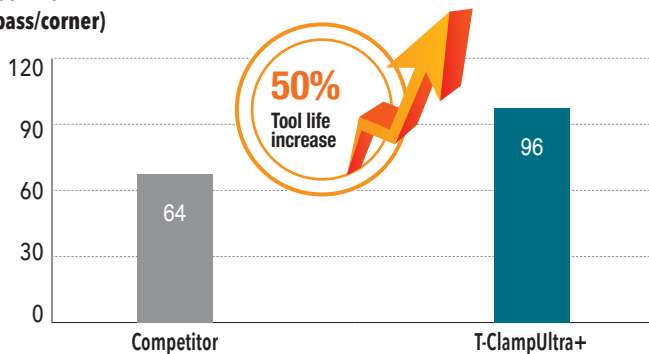
TTIR/L-TB Chip Control Test

Material	Alloy Steel (AISI 4142)							
Operation	Internal Grooving							
ID Grooving Bar	Competitor				TTIR25.4-3-TB			
Insert	Double-Ended Insert for Grooving				TDT3.00E-0.20 TT9080			
Cutting Speed, v_c (sfm)	490				490			
Feed Rate, f_n (ipr)	.002, .003, .004, .005				.002, .003, .004, .005			
Depth of Cut, a_p (in.)	.157				.157			
Coolant Pressure	1015 psi (External Coolant)				1015 psi (Internal High Pressure Coolant)			
	f.002	f.003	f.004	f.005	f.002	f.003	f.004	f.005
Chip Curl								

TTIR/L-TB Tool Life Test

Material	Alloy Steel (AISI 4142)	
Operation	Internal Grooving	
ID Grooving Bar	Competitor	TTIR25.4-3-TB
Insert	Double-Ended Insert for Grooving	TDT3.00E-0.20 TT9080
Cutting Speed, v_c (sfm)	425	425
Feed Rate, f_n (ipr)	.004	.004
Depth of Cut, a_p (in.)	.197	.197
Coolant Pressure	1015 psi (External Coolant)	1015 psi (Internal High Pressure Coolant)
Tool Life	64	96

Tool life
(pass/corner)



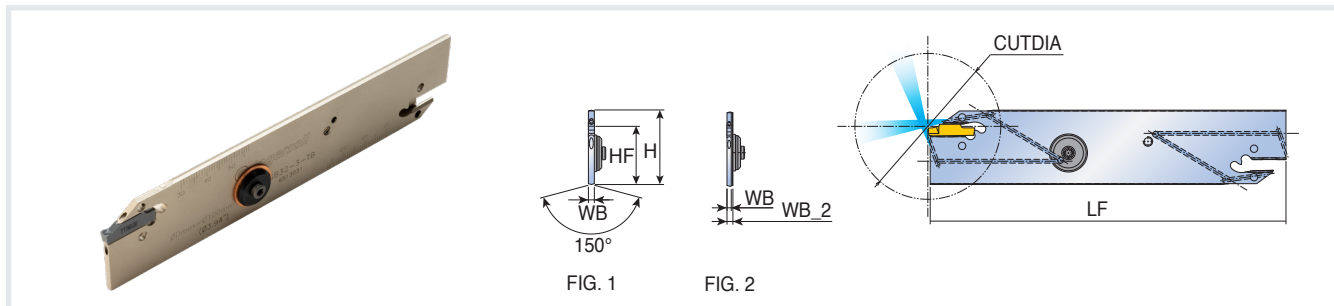
Parting

CoolBurst



Series TGB32-TB

BLADES FOR PARTING AND DEEP GROOVING WITH HIGH PRESSURE COOLANT



Part Number	SSC Insert Seat Size	H Shank Height	HF Functional Height	LF Functional Length	WB Body Width	WB2 Body Width 2	CUTDIA Workpiece Parting Dia. Max,	Figure	Block	Insert
TGB32-2-TB	2	1.260	.980	5.906	.071	.098	1.969	2	TTBU_-32-TB	TDC / J / UF / V TDXU / XT / XC / XY / T TSC / J
TGB32-3-TB	3	1.260	.980	5.906	.098	-	3.937	1		
TGB32-4-TB	4	1.260	.980	5.906	.126	-	3.937	1		
TGB32-5-TB	5	1.260	.980	5.906	.157	-	4.724	1		
TGB32-6-TB	6	1.260	.980	5.906	.205	-	4.724	1		

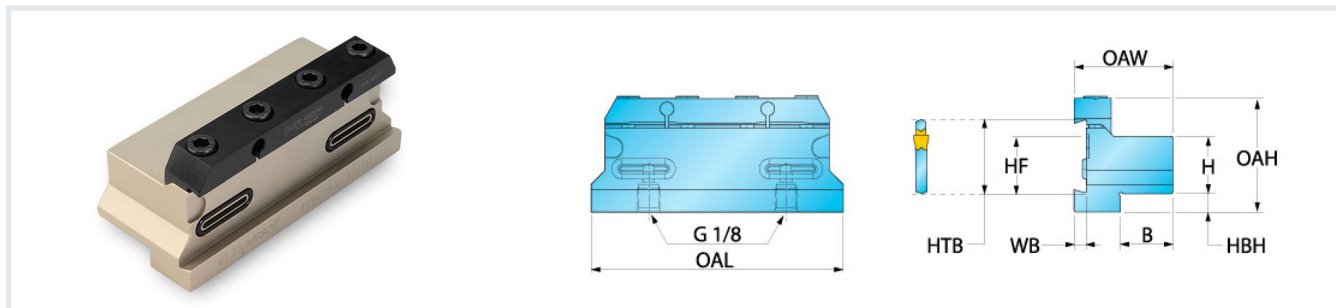
Part Number	1015 PSI Flow Rate (gpm)	1450 PSI Flow Rate (gpm)	2030 PSI Flow Rate (gpm)
TGB32-2-TB	2.6 - 3.2	3.2 - 3.7	4.0 - 4.5
TGB32-3-TB	5.0 - 5.5	6.1 - 6.6	7.1 - 7.7
TGB32-4-TB	6.3 - 6.9	7.7 - 8.2	9.2 - 9.8
TGB32-5-TB	6.3 - 6.9	7.7 - 8.2	9.2 - 9.8
TGB32-6-TB	6.3 - 6.9	7.7 - 8.2	9.2 - 9.8

Hardware

Part Number	 Insert Extractor (sold separately)	 Sealing Screw Set
TGB32-2-TB	EDG-33B	SGC340
TGB32-3-TB	EDG-33B	SGC340
TGB32-4-TB	EDG-33B	SGC340
TGB32-5-TB	EDG-33B	SGC340
TGB32-6-TB	EDG-33B	SGC340

Series TTBU-TB

BLOCKS FOR BLADES WITH HIGH PRESSURE COOLANT



Part Number	H Shank Height	HF Functional Height	HTB Body Height	B Shank Width	HBH Head Bottom Offset Height	OAH Overall Height	WB Body Width	OAL Overall Length	OAW Overall Width
TTBU19-32-TB	.750	.750	1.260	.787	.625	1.400	.209	3.937	1.540
TTBU25.4-32-TB	1.000	1.000	1.260	1.028	.300	1.650	.209	4.331	1.780
TTBU31.8-32-TB	1.250	1.250	1.260	1.142	.207	1.900	.209	4.331	1.900

Hardware

Part Number	 Clamp Screw	 Clamp	 O-Ring	 Wrench for Clamp Screw
TTBU19-32-TB	SRM6X16DIN912	BKU-100	O-RINGID14X2.5	L-W5
TTBU25.4-32-TB	SRM6X16DIN912	BKU-100	O-RINGID14X2.5	L-W5
TTBU31.8-32-TB	SRM6X16DIN912	BKU-100	O-RINGID14X2.5	L-W5

Series TTIR/L-TB

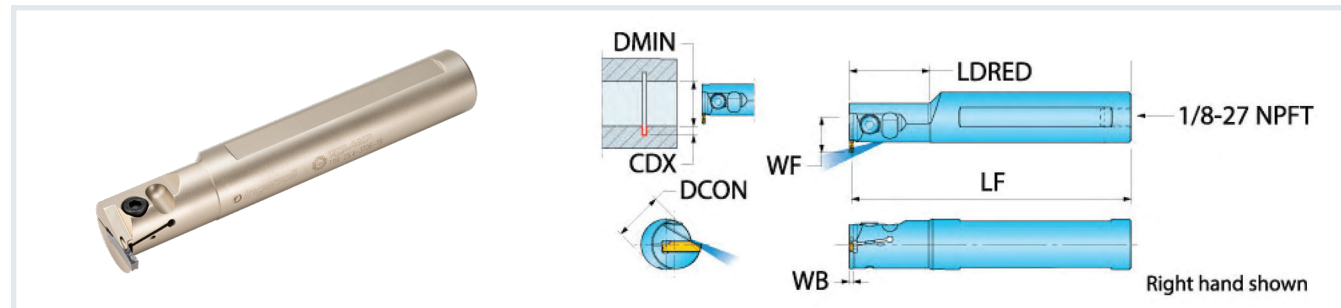
Groove

Groove & Turn

CoolBurst



INTERNAL GROOVING AND TURNING HOLDERS WITH PRESSURE COOLANT



Part Number	SSC Insert Seat Size	DCON Shank Dia.	LF Functional Length	LDRED Reduced Body Dia. Length.	WF Functional Width	WB Body Width	CDX Cutting Depth Max.	DMIN Minimum Bore Dia.	Insert
TTIR/L19-2T06-TB	2	.750	5.000	1.575	.664	.071	.250	1.063	TDC / J / UF / V TDXU / XT / XC / XY / T / TSC / J
TTIR/L19-3T06-TB	3	.750	5.000	1.575	.664	.094	.250	1.063	
TTIR19-4T06-TB	4	.750	5.000	1.575	.664	.118	.250	1.063	
TTIR/L25.4-2T06-TB	2	1.000	6.000	1.575	.789	.071	.250	1.142	
TTIR/L25.4-3T06-TB	3	1.000	6.000	1.575	.789	.094	.250	1.142	
TTIR25.4-4T06-TB	4	1.000	6.000	1.575	.789	.118	.250	1.142	
TTIR/L31.8-3T06-TB	3	1.250	6.000	2.362	1.058	.094	.394	1.575	
TTIR31.8-4T10-TB	4	1.250	6.000	2.362	1.058	.118	.394	1.575	
TTIR38.1-3T12-TB	3	1.500	6.000	2.362	1.299	.094	.472	1.969	
TTIR38.1-4T12-TB	4	1.500	6.000	2.362	1.299	.118	.472	1.969	

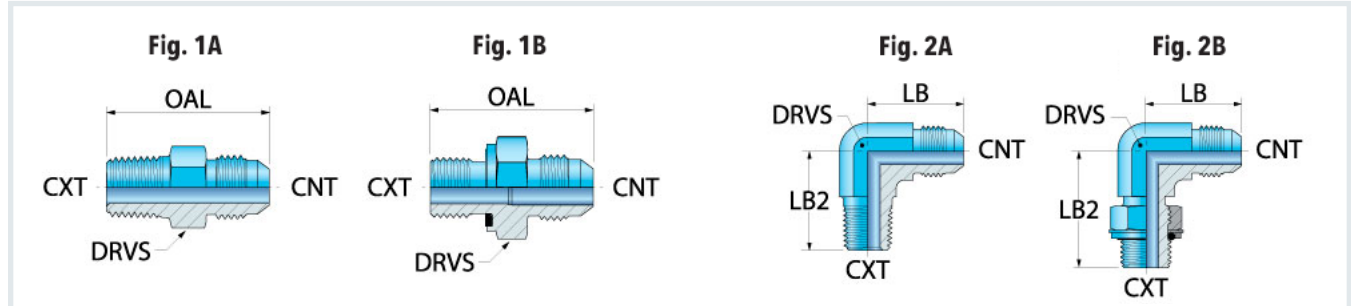
Part Number	1015 PSI Flow Rate (gpm)	1450 PSI Flow Rate (gpm)	2030 PSI Flow Rate (gpm)
TTIR/L19-2T06-TB	3.2 - 3.7	4.0 - 4.5	4.8 - 5.3
TTIR/L19-3T06-TB	3.7 - 4.2	4.5 - 5.0	5.5 - 6.1
TTIR19-4T06-TB	6.3 - 6.9	7.7 - 8.2	9.2 - 9.8
TTIR/L25.4-2T06-TB	3.2 - 3.7	4.0 - 4.5	4.8 - 5.3
TTIR/L25.4-3T06-TB	3.7 - 4.2	4.5 - 5.0	5.5 - 6.1
TTIR25.4-4T06-TB	6.3 - 6.9	7.7 - 8.2	9.2 - 9.8
TTIR/L31.8-3T06-TB	3.7 - 4.2	4.5 - 5.0	5.5 - 6.1
TTIR31.8-4T10-TB	6.3 - 6.9	7.7 - 8.2	9.2 - 9.8
TTIR38.1-4T12-TB	6.3 - 6.9	7.7 - 8.2	9.2 - 9.8

Hardware

Part Number	 Clamp Screw	 Wrench for Clamp Screw
TTIR/L19...	SHM5X0.8X12	L-W4
TTIR/L25.4...	SHM5X0.8X16	
TTIR/L31.8...		
TTIR38.1...		

COOLBURST™

CONNECTORS

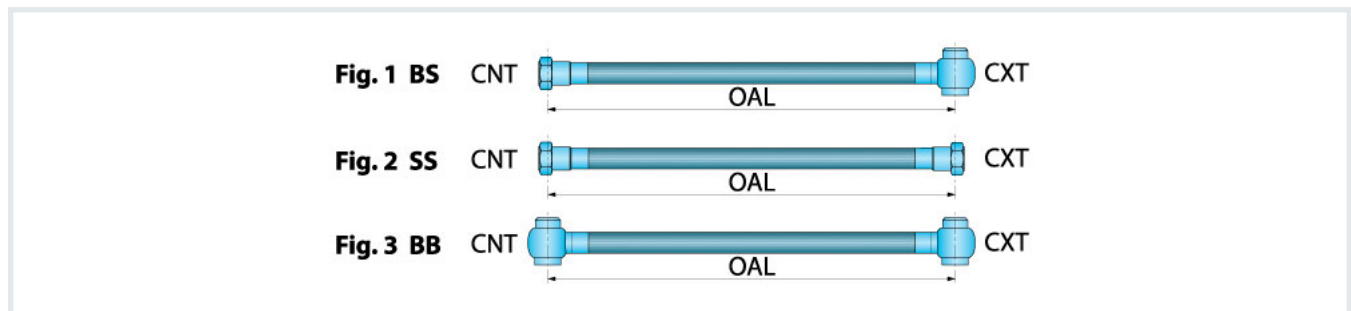


Part Number	CNT Coolant Entry Thread Size	CXT Coolant Exit Thread Size	DRVS Drive Size	OAL Overall Length	CP Coolant Pressure	Figure
TB-4-FTX-S	7/16-20 UNF (1/4 37° Flare)	1/8-27 NPTF	1/2" Over Flats	1.22	6000	1A
TB-4F42EDMX-S	7/16-20 UNF (1/4 37° Flare)	G1/8-28 BSPP	14mm Over Flats	30.20mm	7200	1B

Part Number	CNT Coolant Entry Thread Size	CXT Coolant Exit Thread Size	DRVS Drive Size	LB Body Length	LB2 Body Length 2	CP Coolant Pressure	Figure
TB-4-CTX-S	7/16-20 UNF (1/4 37° Flare)	1/8-27 NPTF	7/16" Over Flats	0.89	0.78	6000	2A
TB-4C40MX-S	7/16-20 UNF (1/4 37° Flare)	G1/8-28 BSPP	11mm Over Flats	22.60mm	26.50mm	3600	2B

COOLBURST™

HOSES



Part Number	CNT Coolant Entry Thread Size	CXT Coolant Exit Thread Size	OAL Overall Length	CP Coolant Pressure	Figure
TB-HOSE-G1/8-7/16-200BS	7/16-20 UNF (1/4 37° Flare)	G1/8-28 BSPP	200mm	2900	1
TB-HOSE-G1/8-7/16-250BS	7/16-20 UNF (1/4 37° Flare)	G1/8-28 BSPP	250mm	2900	1
TB-HOSE-7/16-7/16-10.0SS	7/16-20 UNF (1/4 37° Flare)	7/16-20 UNF (1/4 37° Flare)	10"	3000	2
TB-HOSE-7/16-7/16-8.0SS	7/16-20 UNF (1/4 37° Flare)	7/16-20 UNF (1/4 37° Flare)	8"	3000	2
TB-HOSE-G1/8-G1/8-200BB	G1/8-28 BSPP	G1/8-28 BSPP	200mm	2900	3
TB-HOSE-G1/8-G1/8-250BB	G1/8-28 BSPP	G1/8-28 BSPP	250mm	2900	3