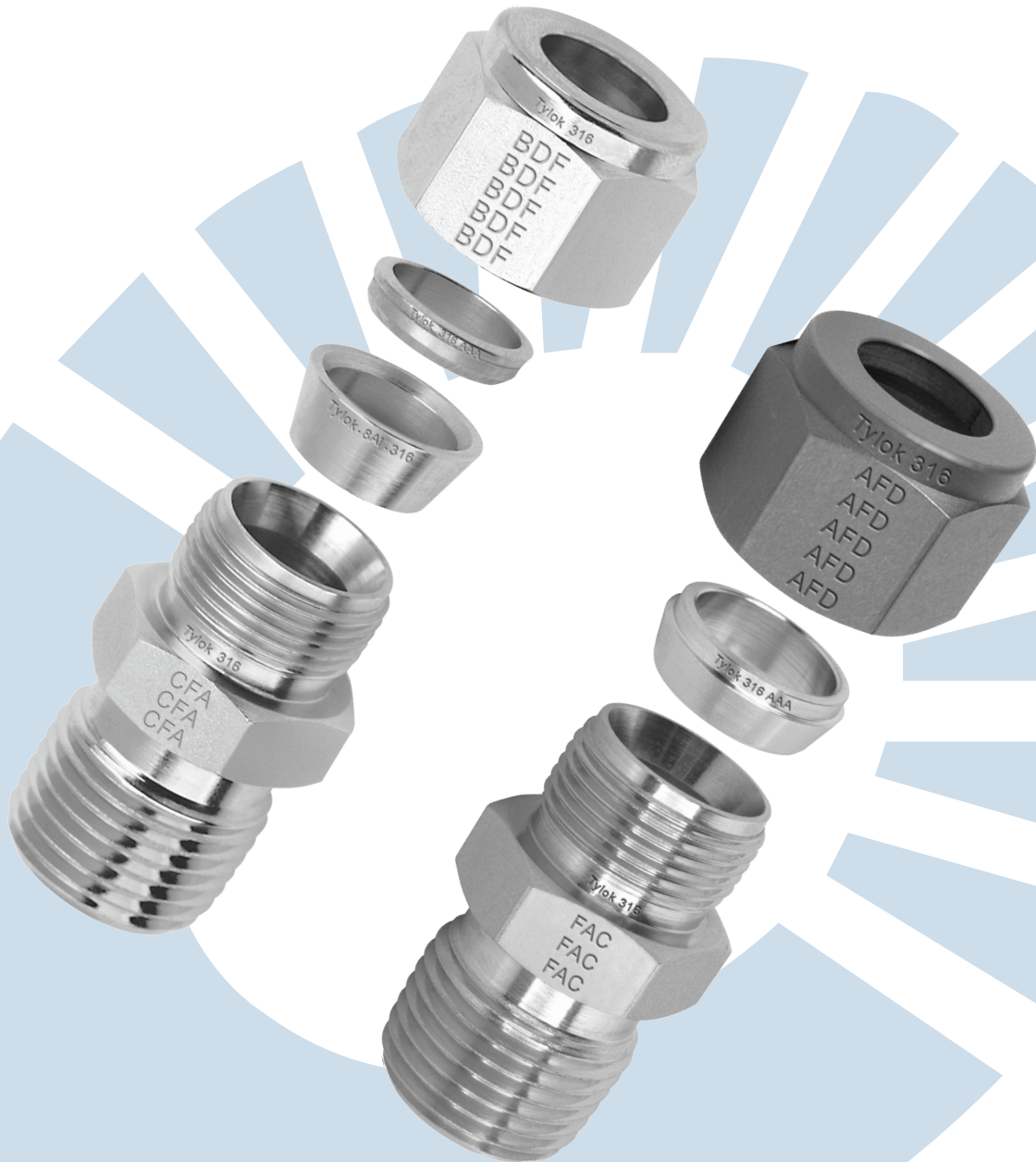






**DATPF
SATPF**

Adapter Tube
to Female Pipe

9



**DATPM
SATPM**

Adapter Tube
to Male NPT

10



**DATPM-STB
SATPM-STB**

Adapter Tube to
Straight Thread Boss

11



**DBHA
SBHA**

Bulkhead
Adapter

12



**DBHFP
SBHFP**

Bulkhead Female
Pipe Connector

13



**DBHMP
SBHMP**

Bulkhead Male
Pipe Connector

14



**DBHU
SBHU**

Bulkhead
Union

15



**DCAP
SCAP**

Cap

16



**DF PLUG
SF PLUG**

Fitting
Plug

17



**DFC
SFC**

Female
Connector

18-19



**DMC
SMC**

Male
Connector

20-21



**DMC-ORS
SMC-ORS**

O-Ring Straight
Thread Male
Connector

22



**DMC-ORT
SMC-ORT**

O-Ring Tapered
Thread Male
Connector

23-24



**DMC-STB
SMC-STB**

Straight Thread
Boss Male
Connector

25



**DMC-RS
SMC-RS**

BSPP Straight Thread
Male Connector

26



**DPCU
SPCU**

Port Connector
Union

27



**DRATT
SRATT**

Reducer Adapter
Tube to Tube

28



**DRPC
SRPC**

Reducing Port
Connector

29



**DRU
SRU**

Reducing
Union

30



**DTBW
STBW**

Tube to Pipe Butt
Weld Connector

31



**DTSW
STSW**

Tube to Tube Socket
Weld Connector

32



**DU
SU**

Union

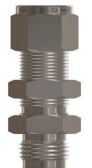
33



**DATANF
SATANF**

Adapter Tube to
JIC Flare

34



**DBUANF
SBUANF**

Bulkhead to JIC
Flare Union

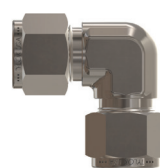
35



**DUANF
SUANF**

Tube to
JIC Flare Union

36



**DELU
SELU**

Union
Elbow

37



**DELU45
SELU45**

Union 45°
Elbow

38

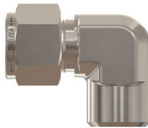
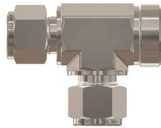
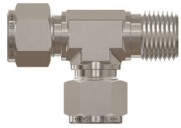
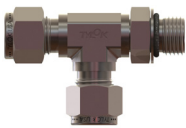
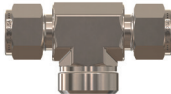
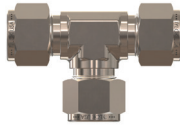
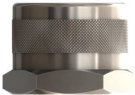


**DFE
SFE**

Female
Elbow

39

Table of Contents

						
DME SME Male Elbow 40	DME45 SME45 Male 45° Elbow 41	DME-STB SME-STB SAE Straight Thread Positionable Elbow 42-43	DTBWE STBWE Tube to Pipe Butt Weld Elbow 44	DTSWE STSWE Tube to Tube Socket Weld Elbow 45	DTFT STFT Female Run Tee 46	DTMT STMT Male Run Tee 47
						
DTMT-STB STMT-STB SAE Straight Thread Positionable Run Tee 48	DTTF STTF Female Branch Tee 49	DTTM STTM Male Branch Tee 50	DTTT STTT Union Tee 51-52	DCR SCR Union Cross 53	TI Barbed Insert 54	DN SN Nut 55
						
DKN SKN Knurled Nut 56	DFC Front Ferrule 57	DRC Rear Ferrule 57	SC Single Ferrule 57	DCSET SCSET Ferrule Sets 58	DNCSET SNCSET Nut Ferrule Sets 58	DGG Gap Gage 59
					LEAK DETECTOR 86	GAP GAGE 87
MDF Mud Daubers 60	INJECTION LANCES 61	DIELECTRIC FITTING 62-63	METRIC FITTINGS 64	COUNTER WALK-IN SOLUTIONS 83	CABINET 88	TUBING 90
					INSTALLATION INSTRUCTIONS 92	GAS & SAFETY 93
					END CONNECTIONS 94	

How to Order

CBC-LOK®/CS-LOK®

CBC-Lok®/CS-Lok® Tube Fittings are ordered as listed in this catalog by inserting the material code before the part number. CBC-Lok®/CS-Lok® Tube Fittings can be identified through the part number as to material, tube size, configuration, and thread connection. The part number describes a complete fitting assembly.

Special Configurations available upon request.

Example: A Stainless Steel Female Run Tee, 3/8" Tube Size to 1/4" Female Pipe to 3/8" Tube is designated as follows:

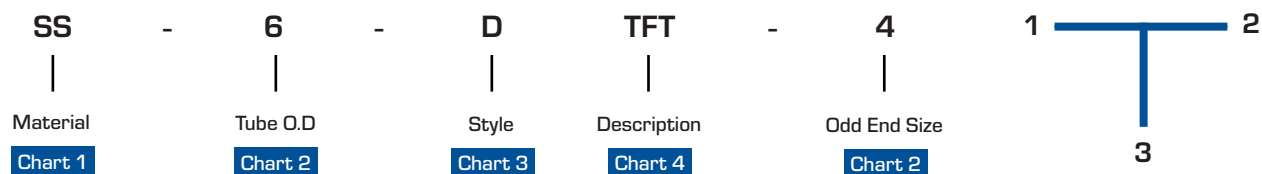


CHART 1- MATERIAL	
B	Brass
SS	Stainless Steel
S	Steel

CHART 3- STYLE	
D	CBC-Lok®
S	CS-Lok®

CHART 2- SIZES						
Fractional (inches)					Metric (millimeters)	
DESIGNATOR	TUBE OR HOSE O.D.	PIPE THREAD (NPT)	AN/STB TUBE SIZE	PIPE THREAD BSPP/BSPT	DESIGNATOR	TUBE O.D.
1	1/16	1/16-27		1/16-28	6	6 mm
2	1/8	1/8-27	5/16-24	1/8-28	8	8 mm
3	3/16				10	10 mm
4	1/4	1/4-18	7/16-20	1/4-19	12	12 mm
5	5/16				18	18 mm
6	3/8	3/8-18	9/16-18	3/8-19		
8	1/2	1/2-14	3/4-16	1/2-14		
10	5/8					
12	3/4	3/4-14	1-1/16-12	3/4-14		
14	7/8					
16	1	1-11 1/2	1-5/16-12	1-11		

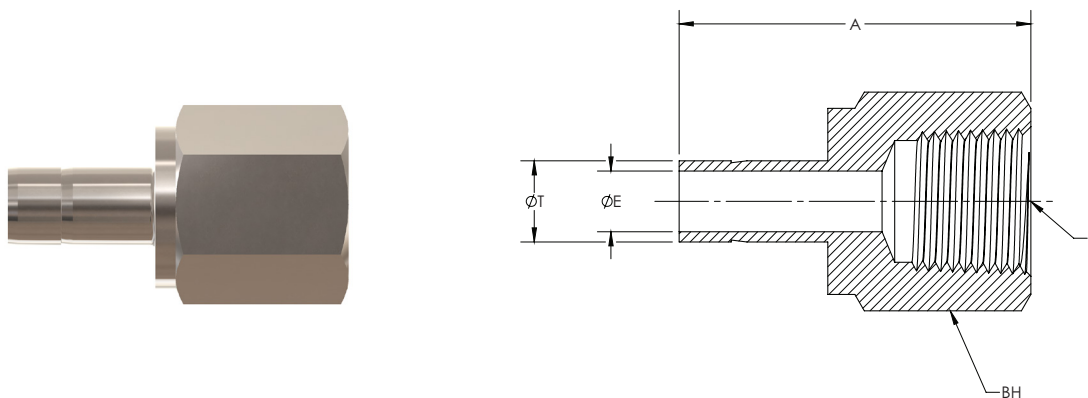
CHART 4- DESCRIPTION	
ATANF	Adapter Tube to JIC
ATPF	Adapter Tube to Female Pipe
ATPM	Adapter Tube to Male Pipe
BHA	Bulkhead Adapter
BHFP	Bulkhead Female Pipe Connector
BHMP	Bulkhead Male Pipe Connector
BHU	Bulkhead Union
BUANF	Bulkhead to JIC Flare Union
CAP	Cap
F PLUG	Fitting Plug
FC	Female Connector
MC	Male Connector
PCU	Port Connector Union
RATT	Reducer Adapter Tube to Tube
RPC	Reducing Port Connector
RU	Reducing Union
TBW	Tube to Pipe Butt Weld Connector
TSW	Tube to Socket Weld Connector
U	Union
UANF	Tube to JIC Flare Union
ELU	Union Elbow
ELU45	Union 45° Elbow
FE	Female Elbow
ME	Male Elbow

CHART 4- DESCRIPTION	
ME-STB	SAE Straight Thread Positionable Elbow
ME45	Male 45° Elbow
TBWE	Tube to Pipe Butt Weld Elbow
TSWE	Tube to Tube Socket Weld Elbow
TFT	Female Run Tee
TMT	Male Run Tee
TMT-STB	SAE Straight Thread Positionable Run Tee
TTF	Female Branch Tee
TTM	Male Branch Tee
TTT	Union Tee
CR	Union Cross
N	Nut
KN	Knurled Nut

CHART 5- MODIFIERS	
BT	Bored Through
BSPT	BSPT Male Connector
CL	Cleaned & Lubricated to ASTM G93 Level C
DN	Silver Plated Nut
HD	Heavy Duty
L	Lanyard
NF	Preswaged Nuts & Ferrules on Adapter End
Q	Body Only
SPCL	Cleaned & Lubricated to CGA G-4.1-2009
ORF-###	Orifice Fittings (### designates orifice size)
ORS	O-Ring Straight Thread Male Connector
ORT	O-Ring Tapered Thread Male Connector
RS	BSPP Male Connector
STB	Straight Thread Boss Male Connector

DATPF/SATPF

Adapter Tube to Female Pipe



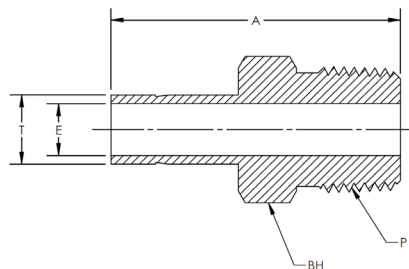
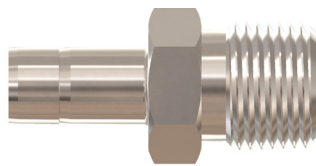
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	E THRU HOLE	BH BODY HEX
2-DATPF-2	2-TA-7-2	2FA2N	2-SATPF-2	2-2 T2HG	1/8	1/8	1.24	0.08	9/16
2-DATPF-4	2-TA-7-4	2FA4N	2-SATPF-4	2-4 T2HG	1/8	1/4	1.39	0.08	3/4
4-DATPF-2	4-TA-7-2	4FA2N	4-SATPF-2	4-2 T2HG	1/4	1/8	1.30	0.17	9/16
4-DATPF-4	4-TA-7-4	4FA4N	4-SATPF-4	4-4 T2HG	1/4	1/4	1.46	0.17	3/4
4-DATPF-6	4-TA-7-6	4FA6N	4-SATPF-6	4-6 T2HG	1/4	3/8	1.55	0.17	7/8
4-DATPF-8	4-TA-7-8	4FA8N	4-SATPF-8	4-8 T2HG	1/4	1/2	1.79	0.17	1-1/16
6-DATPF-2	6-TA-7-2	6FA2N	6-SATPF-2	6-2 T2HG	3/8	1/8	1.35	0.27	9/16
6-DATPF-4	6-TA-7-4	6FA4N	6-SATPF-4	6-4 T2HG	3/8	1/4	1.50	0.27	3/4
6-DATPF-6	6-TA-7-6	6FA6N	6-SATPF-6	6-6 T2HG	3/8	3/8	1.59	0.27	7/8
6-DATPF-8	6-TA-7-8	6FA8N	6-SATPF-8	6-8 T2HG	3/8	1/2	1.84	0.27	1-1/16
8-DATPF-4	8-TA-7-4	8FA4N	8-SATPF-4	8-4 T2HG	1/2	1/4	1.71	0.38	3/4
8-DATPF-6	8-TA-7-6	8FA6N	8-SATPF-6	8-6 T2HG	1/2	3/8	1.79	0.38	7/8
8-DATPF-8	8-TA-7-8	8FA8N	8-SATPF-8	8-8 T2HG	1/2	1/2	2.05	0.38	1-1/16
8-DATPF-12	8-TA-7-12	-	8-SATPF-12	-	1/2	3/4	2.10	0.38	1-5/16
10-DATPF-8	10-TA-7-8	10FA8N	10-SATPF-8	10-8 T2HG	5/8	1/2	2.09	0.47	1-1/16
12-DATPF-8	12-TA-7-8	12FA8N	12-SATPF-8	12-8 T2HG	3/4	1/2	2.08	0.58	1-1/16
12-DATPF-12	12-TA-7-12	12FA12N	12-SATPF-12	12-12 T2HG	3/4	3/4	2.16	0.58	1-5/16
16-DATPF-12	16-TA-7-12	16FA12N	16-SATPF-12	16-12 T2HG	1	3/4	2.39	0.80	1-5/16
16-DATPF-16	16-TA-7-16	16FA16N	16-SATPF-16	16-16 T2HG	1	1	2.53	0.80	1-5/8
20-DATPF-12-NF	20-TA-7-12	20FA12N	-	-	1-1/4	3/4	2.90	0.89	1-5/16
20-DATPF-20-NF	20-TA-7-20	20FA20N	-	-	1-1/4	1-1/4	3.06	1.02	2-1/8

NOTE: Dimensions subject to change, to be used for reference only.

- 1/16", 1/8", and 3/16" adapters come standard without a groove.
- 1-1/4", 1-1/2", and 2" adapters are furnished with preswaged nuts and collets.
- Add "-NF" for preswaged nuts and ferrules.
- Add "-HD" for thick wall adapters with pressures ratings that match max recommended tube.

DATPM/SATPM

Adapter Tube to Male NPT



CBC PART NUMBER	INTERCHANGES WITH			T TUBE O.D.	P PIPE END NPT	A	E THRU HOLE	BH BODY HEX
2-DATPM-2	2-TA-1-2	2MA2N	2-2 T2HF	1/8	1/8	1.16	0.08	7/16
2-DATPM-4	2-TA-1-4	2MA4N	2-4 T2HF	1/8	1/4	1.37	0.08	9/16
4-DATPM-2	4-TA-1-2	4MA2N	4-2 T2HF	1/4	1/8	1.25	0.17	7/16
4-DATPM-4	4-TA-1-4	4MA4N	4-4 T2HF	1/4	1/4	1.46	0.17	9/16
4-DATPM-6	4-TA-1-6	4MA6N	4-6 T2HF	1/4	3/8	1.49	0.17	11/16
4-DATPM-8	4-TA-1-8	4MA8N	4-8 T2HF	1/4	1/2	1.71	0.17	7/8
5-DATPM-4	5-TA-1-4	5MA4N	5-4 T2HF	5/16	1/4	1.50	0.22	9/16
6-DATPM-2	6-TA-1-2	6MA2N	6-2 T2HF	3/8	1/8	1.32	0.19	7/16
6-DATPM-4	6-TA-1-4	6MA4N	6-4 T2HF	3/8	1/4	1.55	0.27	9/16
6-DATPM-6	6-TA-1-6	6MA6N	6-6 T2HF	3/8	3/8	1.56	0.27	11/16
6-DATPM-8	6-TA-1-8	6MA8N	6-8 T2HF	3/8	1/2	1.78	0.27	7/8
8-DATPM-4	8-TA-1-4	8MA4N	8-4 T2HF	1/2	1/4	1.75	0.28	9/16
8-DATPM-6	8-TA-1-6	8MA6N	8-6 T2HF	1/2	3/8	1.78	0.38	11/16
8-DATPM-8	8-TA-1-8	8MA8N	8-8 T2HF	1/2	1/2	2.00	0.38	7/8
8-DATPM-12	8-TA-1-12	-	-	1/2	3/4	2.00	0.38	1-1/16
10-DATPM-6	-	-	-	5/8	3/8	1.84	0.38	11/16
10-DATPM-8	10-TA-1-8	10MA8N	10-8 T2HF	5/8	1/2	2.06	0.47	7/8
12-DATPM-8	12-TA-1-8	12MA8N	12-8 T2HF	3/4	1/2	2.06	0.47	7/8
12-DATPM-12	12-TA-1-12	12MA12N	12-12 T2HF	3/4	3/4	2.06	0.58	1-1/16
12-DATPM-16	12-TA-1-16	12MA16N	12-16 T2HF	3/4	1	2.32	0.58	1-3/8
14-DATPM-8	-	-	-	7/8	1/2	2.13	0.47	15/16
16-DATPM-12	16-TA-1-12	16MA12N	16-12 T2HF	1	3/4	2.31	0.63	1-1/16
16-DATPM-16	16-TA-1-16	16MA16N	16-16 T2HF	1	1	2.60	0.80	1-3/8
20-DATPM-16-NF	20-TA-1-16	-	-	1-1/4	1	3.16	0.88	1-3/8
20-DATPM-20-NF	20-TA-1-20	20MA20N	-	1-1/4	1-1/4	3.16	1.02	1-3/4
20-DATPM-24-NF	-	-	-	1-1/4	1-1/2	3.25	1.02	2-1/8
24-DATPM-24-NF	24-TA-1-24	24MA24N	-	1-1/2	1-1/2	3.72	1.25	2-1/8
32-DATPM-32-NF	32-TA-1-32	32MA32N	-	2	2	4.70	1.72	2-3/4

DATPM-BSPT/SATPM-BSPT

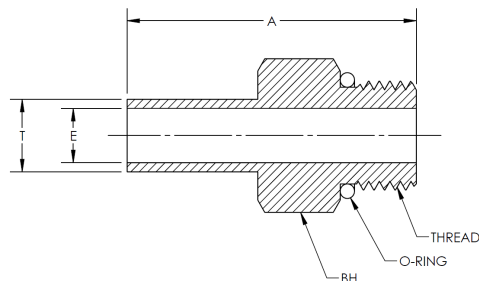
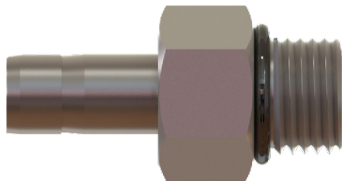
Tube Adapter to BSPT Male Pipe

CBC PART NUMBER	INTERCHANGES WITH			T TUBE O.D.	P PIPE END BSPT	A	E THRU HOLE	BH BODY HEX
2-DATPM-2-BSPT	2-TA-1-2RT	-	-	1/8	1/8	1.16	0.08	7/16
2-DATPM-4-BSPT	2-TA-1-4RT	-	-	1/8	1/4	1.37	0.08	9/16
4-DATPM-2-BSPT	4-TA-1-2RT	4MA2K	4-2K T2HFK	1/4	1/8	1.25	0.17	7/16
4-DATPM-4-BSPT	4-TA-1-4RT	4MA4K	4-4K T2HFK	1/4	1/4	1.46	0.17	9/16
6-DATPM-4-BSPT	6-TA-1-4RT	6MA4K	6-4K T2HFK	3/8	1/4	1.53	0.27	9/16
6-DATPM-6-BSPT	6-TA-1-6RT	6MA6K	6-6K T2HFK	3/8	3/8	1.56	0.27	11/16
6-DATPM-8-BSPT	6-TA-1-8RT	6MA8K	6-8K T2HFK	3/8	1/2	1.78	0.27	7/8
8-DATPM-4-BSPT	8-TA-1-4RT	8MA4K	8-4K T2HFK	1/2	1/4	1.75	0.28	9/16
8-DATPM-6-BSPT	8-TA-1-6RT	8MA6K	8-6K T2HFK	1/2	3/8	1.78	0.37	11/16
8-DATPM-8-BSPT	8-TA-1-8RT	8MA8K	8-8K T2HFK	1/2	1/2	2.00	0.37	7/8
10-DATPM-8-BSPT	-	10MA8K	10-8K T2HFK	5/8	1/2	2.06	0.47	7/8
12-DATPM-12-BSPT	12-TA-1-12RT	-	-	3/4	3/4	2.06	0.58	1-1/16
16-DATPM-16-BSPT	16-TA-1-16RT	-	-	1	1	2.60	0.80	1-3/8
20-DATPM-20-BSPT-NF	20-TA-1-20-RT	-	-	1-1/4	1-1/4	3.16	1.02	1-7/8

NOTE: Dimensions subject to change, to be used for reference only.

DATPM-STB/SATPM-STB

Adapter Tube to Straight Thread Boss



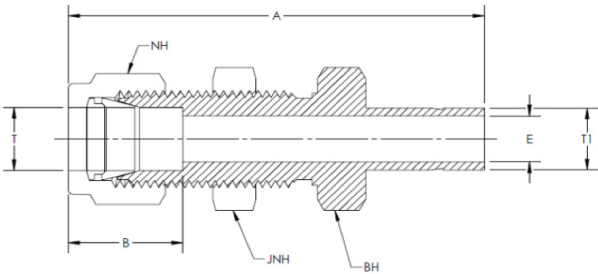
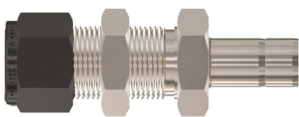
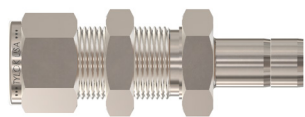
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.	THREAD	A	E THRU HOLE	BH BODY HEX
2-DATPM-2-STB	2-TA-1-2ST	-	2-SATPM-2-STB	-	-	1/8	5/16-24	1.20	0.08	7/16
4-DATPM-4-STB	4-TA-1-4ST	-	4-SATPM-4-STB	-	-	1/4	7/16-20	1.39	0.17	9/16
6-DATPM-4-STB	6-TA-1-4ST	6TUHOA4	6-SATPM-4-STB	6-4 T2HOA	-	3/8	7/16-20	1.46	0.19	9/16
6-DATPM-6-STB	6-TA-1-6ST	-	6-SATPM-6-STB	-	-	3/8	9/16-18	1.52	0.27	11/16
6-DATPM-8-STB	6-TA-1-8ST	6TUHOA8	6-SATPM-8-STB	6-8 T2HOA	-	3/8	3/4-16	1.60	0.27	7/8
8-DATPM-6-STB	8-TA-1-6ST	8TUHOA6	8-SATPM-6-STB	8-6 T2HOA	-	1/2	9/16-18	1.74	0.28	11/16
8-DATPM-8-STB	8-TA-1-8ST	-	8-SATPM-8-STB	-	-	1/2	3/4-16	1.82	0.38	7/8
10-DATPM-10-STB	10-TA-1-10ST	10TUHOA10	10-SATPM-10-STB	10-10 T2HOA	-	5/8	7/8-14	1.94	0.47	1
12-DATPM-12-STB	12-TA-1-12ST	-	12-SATPM-12-STB	-	-	3/4	1-1/16-12	2.10	0.58	1-1/4
16-DATPM-16-STB	16-TA-1-16ST	-	16-SATPM-16-STB	-	-	1	1-5/16-12	2.41	0.80	1-1/2
20-DATPM-20-STB-NF	20-TA-1-20ST	-	-	-	-	1-1/4	1-5/8-12	2.81	1.02	1-7/8
24-DATPM-24-STB-NF	24-TA-1-24ST	24TUHOA24	-	-	-	1-1/2	1-7/8-12	3.28	1.25	2-1/8

NOTE: Dimensions subject to change, to be used for reference only.

- 1/16", 1/8", and 3/16" adapters come standard without a groove.
- 1-1/4", 1-1/2", and 2" adapters are furnished with preswaged nuts and ferrules.
- Add "-NF" for preswaged nuts and ferrules.
- Straight thread connectors adapt to SAE J1926-1 and ISO 1126-1 ports.
- Parts are supplied with FKM Fluorocarbon O-Rings. Other options are available upon request.
- Standard straight thread connectors are designed to withstand SAE J1926-3 pressure ratings.
- Add "-HD" suffix for pressures rated to SAE J1926-2 straight thread ends or adapter ends that meet max wall recommended tubing pressures.

DBHA/SBHA

Bulkhead Adapter

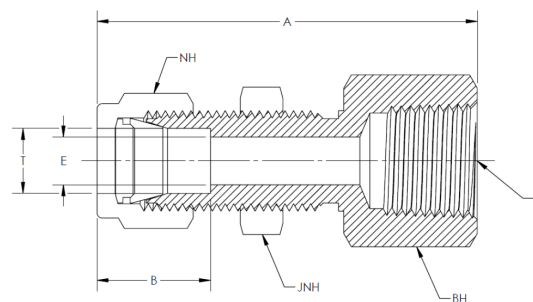
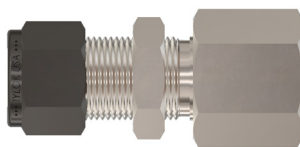
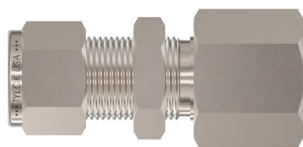


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX	JNH JAM NUT HEX	PANEL HOLE SIZE	MAX HOLE THICK.
4-DBHA-4	400-R1-4	4TUBC4	4-SBHA-4	4-4 T2H2BZ	1/4	1/4	2.20	0.61	0.17	9/16	5/8	5/8	29/64	0.40
6-DBHA-6	600-R1-6	6TUBC6	6-SBHA-6	6-6 T2H2BZ	3/8	3/8	2.41	0.67	0.27	11/16	3/4	3/4	37/64	0.44
8-DBHA-8	800-R1-8	8TUBC8	8-SBHA-8	8-8 T2H2BZ	1/2	1/2	2.87	0.90	0.38	7/8	15/16	15/16	49/64	0.50

- NOTE:** Dimensions subject to change, to be used for reference only.
- 1/16", 1/8", and 3/16" adapters come standard without a groove.
 - 1-1/4", 1-1/2", and 2" adapters are furnished with preswaged nuts and ferrules.
 - Add "-NF" for preswaged nuts and ferrules.
 - Add "-HD" suffix for pressures rated to SAE J1926-2 straight thread ends or adapter ends that meet max wall recommended tubing pressures.

DBHFP/SBHFP

Bulkhead Female Pipe Connector

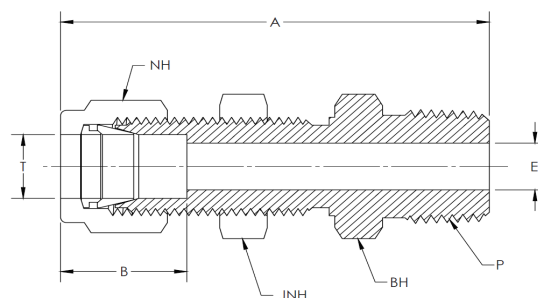
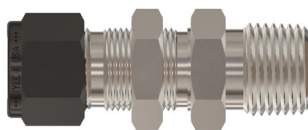
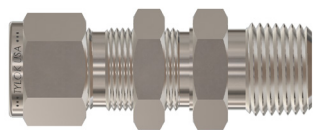


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	B	E THRU HOLE	NH NUT HEX	JNH JAM NUT HEX	BH BODY HEX	PANEL HOLE SIZE	MAX HOLE THICK.
2-DBHFP-2	200-71-2	2FBC2N	2-SBHFP-2	2-2 GH2BZ	1/8	1/8	1.77	0.52	0.09	7/16	1/2	9/16	21/64	0.50
4-DBHFP-2	400-71-2	4FBC2N	4-SBHFP-2	4-2 GH2BZ	1/4	1/8	1.85	0.61	0.19	9/16	5/8	5/8	29/64	0.40
4-DBHFP-4	400-71-4	4FBC4N	4-SBHFP-4	4-4 GH2BZ	1/4	1/4	2.04	0.61	0.19	9/16	5/8	3/4	29/64	0.40
5-DBHFP-2	-	5FBC2N	5-SBHFP-2	-	5/16	1/8	1.96	0.65	0.25	5/8	11/16	11/16	33/64	0.44
6-DBHFP-4	600-71-4	6FBC4N	6-SBHFP-4	6-4 GH2BZ	3/8	1/4	2.17	0.67	0.28	11/16	3/4	3/4	37/64	0.44
6-DBHFP-6	600-71-6	6FBC6N	6-SBHFP-6	6-6 GH2BZ	3/8	3/8	2.23	0.67	0.28	11/16	3/4	7/8	37/64	0.44
8-DBHFP-6	810-71-6	8FBC6N	8-SBHFP-6	8-6 GH2BZ	1/2	3/8	2.43	0.90	0.41	7/8	15/16	15/16	49/64	0.50
8-DBHFP-8	810-71-8	8FBC8N	8-SBHFP-8	8-8 GH2BZ	1/2	1/2	2.62	0.90	0.41	7/8	15/16	1-1/16	49/64	0.50
10-DBHFP-8	-	10FBC8N	10-SBHFP-8	-	5/8	1/2	2.65	0.96	0.50	1	1-1/16	1-1/16	57/64	0.50
16-DBHFP-16	1610-71-16	16FBC16N	16-SBHFP-16	16-16 GH2BZ	1	1	3.68	1.24	0.88	1-1/2	1-5/8	1-5/8	1-21/64	0.75

NOTE: Dimensions subject to change, to be used for reference only.

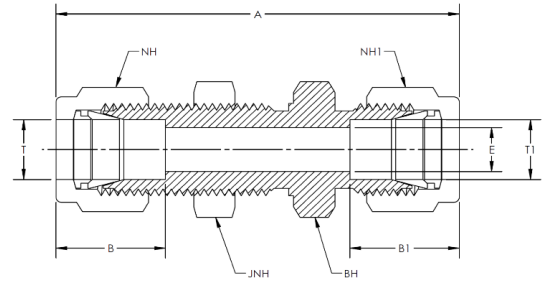
DBHMP/SBHMP

Bulkhead Male Pipe Connector



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	B	E THRU HOLE	NH NUT HEX	JNH JAM NUT HEX	BH BODY HEX	PANEL HOLE SIZE	MAX HOLE THICK.
2-DBHMP-2	200-11-2	2MBC2N	2-SBHMP-2	2-2 FH2BZ	1/8	1/8	1.83	0.52	0.09	7/16	1/2	1/2	21/64	0.50
4-DBHMP-2	400-11-2	4MBC2N	4-SBHMP-2	4-2 FH2BZ	1/4	1/8	1.95	0.61	0.19	9/16	5/8	5/8	29/64	0.40
4-DBHMP-4	400-11-4	4MBC4N	4-SBHMP-4	4-4 FH2BZ	1/4	1/4	2.13	0.61	0.19	9/16	5/8	5/8	29/64	0.40
4-DBHMP-6	-	4MBC6N	4-SBHMP-6	4-6 FH2BZ	1/4	3/8	2.17	0.61	0.19	9/16	5/8	11/16	29/64	0.40
4-DBHMP-8	-	4MBC8N	4-SBHMP-8	4-8 FH2BZ	1/4	1/2	2.38	0.61	0.19	9/16	5/8	3/4	29/64	0.40
6-DBHMP-4	600-11-4	6MBC4N	6-SBHMP-4	6-4 FH2BZ	3/8	1/4	2.26	0.67	0.28	11/16	3/4	7/8	37/64	0.44
6-DBHMP-6	600-11-6	6MBC6N	6-SBHMP-6	6-6 FH2BZ	3/8	3/8	2.26	0.67	0.28	11/16	3/4	3/4	37/64	0.44
6-DBHMP-8	600-11-8	6MBC8N	6-SBHMP-8	6-8 FH2BZ	3/8	1/2	2.51	0.67	0.28	11/16	3/4	7/8	37/64	0.44
8-DBHMP-4	-	8MBC4N	8-SBHMP-4	8-4 FH2BZ	1/2	1/4	2.49	0.90	0.28	7/8	15/16	15/16	49/64	0.50
8-DBHMP-6	810-11-6	8MBC6N	8-SBHMP-6	8-6 FH2BZ	1/2	3/8	2.49	0.90	0.38	7/8	15/16	15/16	49/64	0.50
8-DBHMP-8	810-11-8	8MBC8N	8-SBHMP-8	8-8 FH2BZ	1/2	1/2	2.71	0.90	0.41	7/8	15/16	15/16	49/64	0.50
12-DBHMP-12	1210-11-12	12MBC12N	12-SBHMP-12	12-12 FH2BZ	3/4	3/4	3.00	0.96	0.63	1-1/8	1-3/16	1-3/16	1-1/64	0.66
12-DBHMP-16	-	-	12-SBHMP-16	-	3/4	1	3.26	0.96	0.63	1-1/8	1-3/16	1-3/8	1-1/64	0.66
16-DBHMP-16	1610-11-16	16MBC16N	16-SBHMP-16	16-16 FH2BZ	1	1	3.67	1.02	0.88	1-1/2	1-5/8	1-5/8	1-21/64	0.75

NOTE: Dimensions subject to change, to be used for reference only.

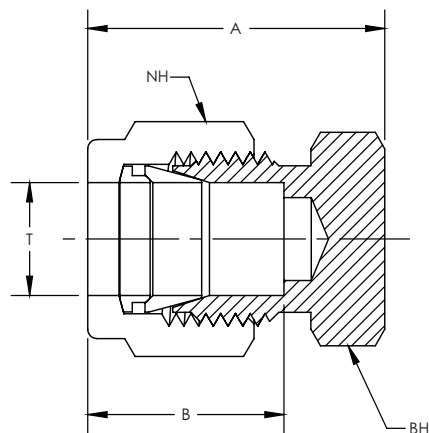
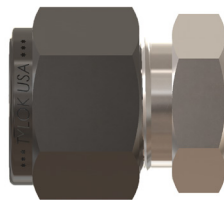
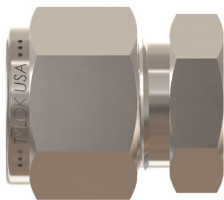


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	B	B1	E THRU HOLE	NH NUT HEX	NH1 NUT HEX	BH BODY HEX	JNH JAM NUT HEX	PANEL HOLE SIZE	MAX HOLE THICK.
1-DBHU-1	100-61	1BC1	1-SBHU-1	1-1 WBZ	1/16	1/16	1.24	0.35	0.35	0.05	5/16	5/16	5/16	5/16	13/64	0.12
2-DBHU-2	200-61	2BC2	2-SBHU-2	2-2 WBZ	1/8	1/8	2.02	0.52	0.52	0.09	7/16	7/16	1/2	1/2	21/64	0.50
3-DBHU-3	300-61	3BC3	3-SBHU-3	3-3 WBZ	3/16	3/16	2.11	0.54	0.54	0.13	1/2	1/2	9/16	9/16	25/64	0.50
4-DBHU-4	400-61	4BC4	4-SBHU-4	4-4 WBZ	1/4	1/4	2.27	0.61	0.61	0.19	9/16	9/16	5/8	5/8	29/64	0.40
4-DBHU-6	-	-	4-SBHU-6	-	1/4	3/8	2.33	0.61	0.67	0.19	9/16	11/16	5/8	5/8	29/64	0.40
5-DBHU-5	500-61	5BC5	5-SBHU-5	5-5 WBZ	5/16	5/16	2.39	0.65	0.65	0.25	5/8	5/8	11/16	11/16	33/64	0.44
6-DBHU-6	600-61	6BC6	6-SBHU-6	6-6 WBZ	3/8	3/8	2.45	0.67	0.67	0.28	11/16	11/16	3/4	3/4	37/64	0.44
8-DBHU-8	810-61	8BC8	8-SBHU-8	8-8 WBZ	1/2	1/2	2.80	0.90	0.90	0.41	7/8	7/8	15/16	15/16	49/64	0.50
10-DBHU-10	1010-61	10BC10	10-SBHU-10	10-10 WBZ	5/8	5/8	2.86	0.96	0.96	0.50	1	1	1-1/16	1-1/16	57/64	0.50
12-DBHU-12	1210-61	12BC12	12-SBHU-12	12-12 WBZ	3/4	3/4	3.11	0.96	0.96	0.63	1-1/8	1-1/8	1-3/16	1-3/16	1-1/64	0.66
14-DBHU-14	1410-61	14BC14	14-DBHU-14	14-14 WBZ	7/8	7/8	3.33	1.02	1.02	0.72	1-1/4	1-1/4	1-3/8	1-3/8	1-9/64	0.66
16-DBHU-16	1610-61	16BC16	16-SBHU-16	16-16 WBZ	1	1	3.77	1.24	1.24	0.88	1-1/2	1-1/2	1-5/8	1-5/8	1-21/64	0.75
20-DBHU-20	2000-61	-	-	-	1-1/4	1-1/4	4.85	1.62	1.62	1.09	1-7/8	1-7/8	1-7/8	1-7/8	1-41/64	0.75
24-DBHU-24	2400-61	-	-	-	1-1/2	1-1/2	5.48	1.97	1.97	1.34	2-1/4	2-1/4	2-1/4	2-1/4	1-61/64	0.75
32-DBHU-32	3200-61	-	-	-	2	2	7.10	2.66	2.66	1.81	3	3	2-3/4	2-3/4	2-41/64	0.75

NOTE: Dimensions subject to change, to be used for reference only.

DCAP/SCAP

Cap

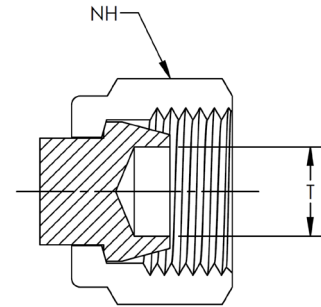


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	A	B	NH NUT HEX	BH BODY HEX
1-DCAP	100-C	1BLEN1	1-SCAP	1 PNBZ	1/16	0.59	0.35	5/16	5/16
2-DCAP	200-C	2BLEN2	2-SCAP	2 PNBZ	1/8	0.79	0.52	7/16	7/16
3-DCAP	300-C	3BLEN3	3-SCAP	3 PNBZ	3/16	0.84	0.54	1/2	7/16
4-DCAP	400-C	4BLEN4	4-SCAP	4 PNBZ	1/4	0.92	0.61	9/16	1/2
5-DCAP	500-C	5BLEN5	5-SCAP	5 PNBZ	5/16	0.96	0.65	5/8	9/16
6-DCAP	600-C	6BLEN6	6-SCAP	6 PNBZ	3/8	1.01	0.67	11/16	5/8
8-DCAP	810-C	8BLEN8	8-SCAP	8 PNBZ	1/2	1.21	0.90	7/8	13/16
10-DCAP	1010-C	10BLEN10	10-SCAP	10 PNBZ	5/8	1.24	0.96	1	15/16
12-DCAP	1210-C	12BLEN12	12-SCAP	12 PNBZ	3/4	1.27	0.96	1-1/8	1-1/16
14-DCAP	1410-C	14BLEN14	14-SCAP	14 PNBZ	7/8	1.37	1.02	1-1/4	1-3/16
16-DCAP	1610-C	16BLEN16	16-SCAP	16 PNBZ	1	1.61	1.24	1-1/2	1-3/8
B-18-DCAP	B-1810-C	-	-	-	1-1/8	1.61	1.25	1-3/4	1-5/8
20-DCAP	2000-C	20BLEN20	-	-	1-1/4	2.10	1.62	1-7/8	1-3/4
24-DCAP	2400-C	24BLEN24	-	-	1-1/2	2.54	1.97	2-1/4	2-1/8
32-DCAP	3200-C	32BLEN32	-	-	2	3.41	2.66	3	2-3/4

NOTE: Dimensions subject to change, to be used for reference only.

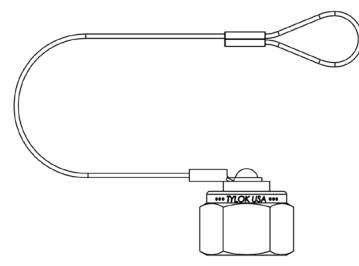
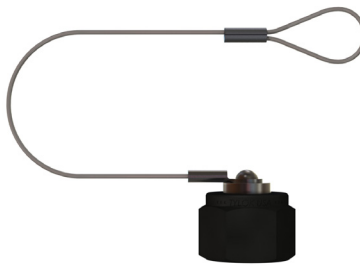
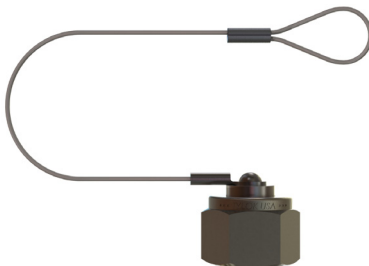
DF PLUG/SF PLUG

Plug



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.	NH NUT HEX
1-DF PLUG	100-P	1BLP1	SF PLUG-1	1 FNZ		1/16	5/16
2-DF PLUG	200-P	2BLP2	SF PLUG-2	2 FNZ		1/8	7/16
3-DF PLUG	300-P	3BLP3	SF PLUG-3	3 FNZ		3/16	1/2
4-DF PLUG	400-P	4BLP4	SF PLUG-4	4 FNZ		1/4	9/16
5-DF PLUG	500-P	5BLP5	SF PLUG-5	5 FNZ		5/16	5/8
6-DF PLUG	600-P	6BLP6	SF PLUG-6	6 FNZ		3/8	11/16
8-DF PLUG	810-P	8BLP8	SF PLUG-8	8 FNZ		1/2	7/8
10-DF PLUG	1010-P	10BLP10	SF PLUG-10	10 FNZ		5/8	1
12-DF PLUG	1210-P	12BLP12	SF PLUG-12	12 FNZ		3/4	1-1/8
14-DF PLUG	1410-P	14BLP14	SF PLUG-14	14 FNZ		7/8	1-1/4
16-DF PLUG	1610-P	16BLP16	SF PLUG-16	16 FNZ		1	1-1/2
18-B-DF PLUG	B-1810-P	-	-	-		1-1/8	1-3/4
20-DF PLUG	2000-P	20BLP20	-	-		1-1/4	1-7/8
24-DF PLUG	2400-P	24BLP24	-	-		1-1/2	2-1/4
32-DF PLUG	3200-P	32BLP32	-	-		2	3

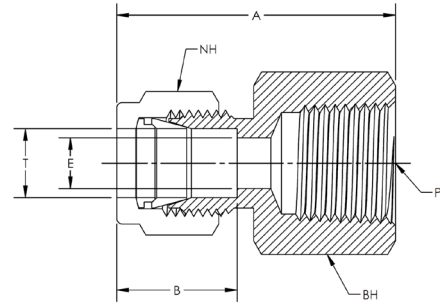
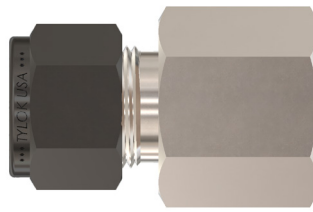
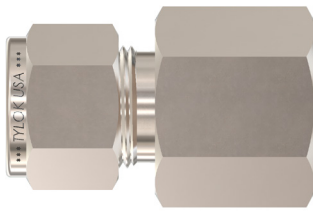
NOTE: Dimensions subject to change, to be used for reference only.



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	T TUBE O.D.	NH NUT HEX
4-DF PLUG-L	400-P-0013		4-SF PLUG-L	1/4	9/16
5-DF PLUG-L	-		5-SF PLUG-L	5/16	5/8
6-DF PLUG-L	600-P-0012		6-SF PLUG-L	3/8	11/16
8-DF PLUG-L	810-P-0006		8-SF PLUG-L	1/2	7/8
10-DF PLUG-L	-		10-SF PLUG-L	5/8	1
12-DF PLUG-L	1210-P-0005		12-SF PLUG-L	3/4	1-1/8
14-DF PLUG-L	-		14-SF PLUG-L	7/8	1-1/4
16-DF PLUG-L	-		16-SF PLUG-L	1	1-1/2

DFC/SFC

Female Connector

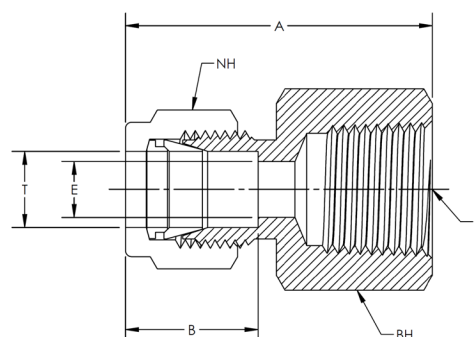
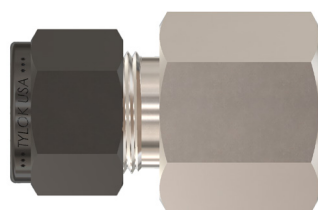
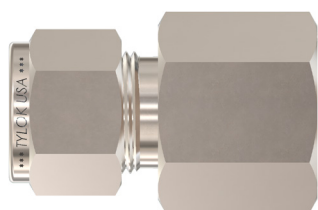


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
2-DFC-2	200-7-2	2FSC2N	2-SFC-2	2-2 GBZ	1/8	1/8	1.15	0.52	0.09	7/16	9/16
2-DFC-4	200-7-4	2FSC4N	2-SFC-4	2-4 GBZ	1/8	1/4	1.33	0.52	0.09	7/16	3/4
2-DFC-6	-	-	2-SFC-6	-	1/8	3/8	1.40	0.52	0.09	7/16	7/8
3-DFC-2	300-7-2	3FSC2N	3-SFC-2	3-2 GBZ	3/16	1/8	1.17	0.54	0.13	1/2	9/16
3-DFC-4	-	3FSC4N	3-SFC-4	3-4 GBZ	3/16	1/4	1.35	0.54	0.13	1/2	3/4
4-DFC-2	400-7-2	4FSC2N	4-SFC-2	4-2 GBZ	1/4	1/8	1.23	0.61	0.19	9/16	9/16
4-DFC-4	400-7-4	4FSC4N	4-SFC-4	4-4 GBZ	1/4	1/4	1.42	0.61	0.19	9/16	3/4
4-DFC-6	400-7-6	4FSC6N	4-SFC-6	6-4 GBZ	1/4	3/8	1.48	0.61	0.19	9/16	7/8
4-DFC-8	400-7-8	4FSC8N	4-SFC-8	4-8 GBZ	1/4	1/2	1.67	0.61	0.19	9/16	1-1/16
5-DFC-2	500-7-2	5FSC2N	5-SFC-2	5-2 GBZ	5/16	1/8	1.28	0.65	0.25	5/8	9/16
5-DFC-4	500-7-4	5FSC4N	5-SFC-4	5-4 GBZ	5/16	1/4	1.47	0.65	0.25	5/8	3/4
5-DFC-6	-	5FSC6N	5-SFC-6	5- GBZ	5/16	3/8	1.53	0.65	0.25	5/8	7/8
5-DFC-8	-	-	5-SFC-8	-	5/16	1/2	1.72	0.65	0.25	5/8	1-1/16
6-DFC-2	600-7-2	6FSC2N	6-SFC-2	6-2 GBZ	3/8	1/8	1.29	0.67	0.28	11/16	5/8
6-DFC-4	600-7-4	6FSC4N	6-SFC-4	6-4 GBZ	3/8	1/4	1.48	0.67	0.28	11/16	3/4
6-DFC-6	600-7-6	6FSC6N	6-SFC-6	6-6 GBZ	3/8	3/8	1.54	0.67	0.28	11/16	7/8
6-DFC-8	600-7-8	6FSC8N	6-SFC-8	6-8 GBZ	3/8	1/2	1.73	0.67	0.28	11/16	1-1/16
6-DFC-12	600-7-12	6FSC12N	6-SFC-12	6-12 GBZ	3/8	3/4	1.88	0.67	0.28	11/16	1-5/16
8-DFC-4	810-7-4	8FSC4N	8-SFC-4	8-4 GBZ	1/2	1/4	1.59	0.90	0.41	7/8	13/16
8-DFC-6	810-7-6	8FSC6N	8-SFC-6	8-6 GBZ	1/2	3/8	1.65	0.90	0.41	7/8	7/8
8-DFC-8	810-7-8	8FSC8N	8-SFC-8	8-8 GBZ	1/2	1/2	1.84	0.90	0.41	7/8	1-1/16
8-DFC-12	810-7-12	8FSC12N	8-SFC-12	8-12 GBZ	1/2	3/4	1.90	0.90	0.41	7/8	1-5/16
8-DFC-16	810-7-16	-	8-SFC-16	-	1/2	1	2.28	0.90	0.41	7/8	1-5/8
10-DFC-6	1010-7-6	10FSC6N	10-SFC-6	10-6 GBZ	5/8	3/8	1.65	0.96	0.50	1	15/16
10-DFC-8	1010-7-8	10FSC8N	10-SFC-8	10-8 GBZ	5/8	1/2	1.84	0.96	0.50	1	1-1/16
10-DFC-12	1010-7-12	10FSC12N	10-SFC-12	10-12 GBZ	5/8	3/4	1.90	0.96	0.50	1	1-5/16
12-DFC-6	1210-7-6	-	12-SFC-6	-	3/4	3/8	1.67	0.96	0.56	1-1/8	1-1/16
12-DFC-8	1210-7-8	12FSC8N	12-SFC-8	12-8 GBZ	3/4	1/2	1.84	0.96	0.63	1-1/8	-
12-DFC-12	1210-7-12	12FSC12N	12-SFC-12	12-12 GBZ	3/4	3/4	1.90	0.96	0.63	1-1/8	1-5/16
12-DFC-16	1210-7-16	-	12-SFC-16	-	3/4	1	2.28	0.96	0.63	1-1/8	1-5/8
14-DFC-8	-	-	14-SFC-8	-	7/8	1/2	1.84	1.02	0.69	1-1/4	1-3/16
14-DFC-12	1410-7-12	14FSC12N	14-SFC-12	14-12 GBZ	7/8	3/4	1.96	1.02	0.72	1-1/4	1-3/8
16-DFC-6	-	-	16-SFC-6	-	1	3/8	2.15	1.24	0.56	1-1/2	1-3/8
16-DFC-8	-	-	16-SFC-8	-	1	1/2	2.15	1.24	0.69	1-1/2	1-3/8
16-DFC-12	1610-7-12	16FSC12N	16-SFC-12	16-12 GBZ	1	3/4	2.12	1.24	0.88	1-1/2	-
16-DFC-16	1610-7-16	16FSC16N	16-SFC-16	16-16 GBZ	1	1	2.46	1.24	0.88	1-1/2	1-5/8
20-DFC-20	2000-7-20	20FSC20N	-	-	1-1/4	1-1/4	2.94	1.62	1.09	1-7/8	2-1/8
24-DFC-24	2400-7-24	24FSC24N	-	-	1-1/2	1-1/2	3.28	1.97	1.34	2-1/4	2-3/8
32-DFC-32	3200-7-32	32FSC32N	-	-	2	2	4.00	2.66	1.81	3	2-7/8

NOTE: Dimensions subject to change, to be used for reference only.

DFC-BSPT/SFC-BSPT

BSPT Female Connector

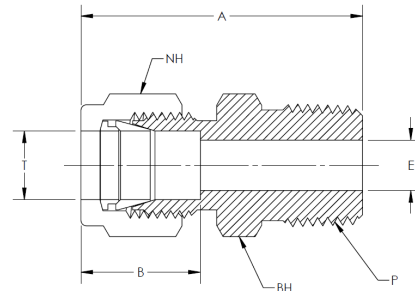
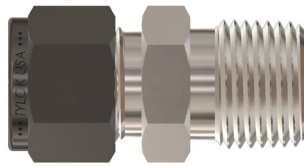
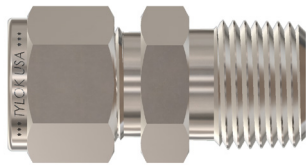


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.	P PIPE END BSPT	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
4-DFC-4-BSPT	400-7-4RT	4FSC4K	4-SFC-4-BSPT	4-4K GBZ		1/4	1/4	1.41	0.61	0.19	9/16	3/4
4-DFC-6-BSPT	400-7-6RT	4FSC6K	4-SFC-6-BSPT	4-6K GBZ		1/4	3/8	1.48	0.61	0.19	9/16	7/8
4-DFC-8-BSPT	400-7-8RT	4FSC8K	4-SFC-8-BSPT	4-8K GBZ		1/4	1/2	1.67	0.61	0.19	9/16	1-1/16
6-DFC-4-BSPT	600-7-4RT	6FSC4K	6-SFC-4-BSPT	6-4K GBZ		3/8	1/4	1.48	0.67	0.28	11/16	3/4
6-DFC-6-BSPT	600-7-6RT	6FSC6K	6-SFC-6-BSPT	6-6K GBZ		3/8	3/8	1.54	0.67	0.28	11/16	7/8
6-DFC-8-BSPT	600-7-8RT	6FSC8K	6-SFC-8-BSPT	6-8K GBZ		3/8	1/2	1.73	0.67	0.28	11/16	1-1/16
8-DFC-4-BSPT	810-7-4RT	8FSC4K	8-SFC-4-BSPT	8-4K GBZ		1/2	1/4	1.59	0.90	0.41	7/8	13/16
8-DFC-6-BSPT	810-7-6RT	8FSC6K	8-SFC-6-BSPT	8-6K GBZ		1/2	3/8	1.65	0.90	0.41	7/8	7/8
8-DFC-8-BSPT	810-7-8RT	8FSC8K	8-SFC-8-BSPT	8-8K GBZ		1/2	1/2	1.84	0.90	0.41	7/8	1-1/16
12-DFC-12-BSPT	1210-7-12RT	-	12-SFC-12-BSPT	-		3/4	3/4	1.90	0.96	0.63	1-1/8	1-5/16
16-DFC-16-BSPT	1610-7-16RT	-	16-SFC-16-BSPT	-		1	1	2.46	1.24	0.88	1-1/2	1-5/8
20-DFC-20-BSPT	2000-7-20RT	-	-	-		1-1/4	1-1/4	2.94	1.62	1.09	1-7/8	2-1/8

NOTE: Dimensions subject to change, to be used for reference only.

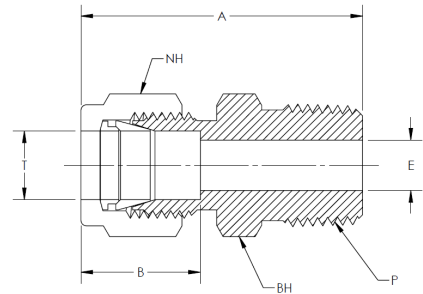
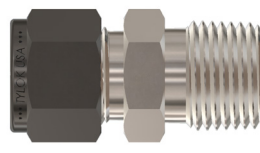
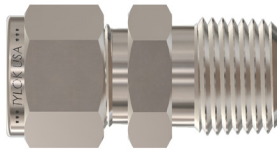
DMC/SMC

NPT Male Connector



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
1-DMC-1	100-1-1	1MSC1N	1-SMC-1	1-1 FBZ	1/16	1/16	0.94	0.35	0.05	5/16	5/16
1-DMC-2	100-1-2	1MSC2N	1-SMC-2	1-2 FBZ	1/16	1/8	1.03	0.35	0.05	5/16	7/16
2-DMC-1	200-1-1	2MSC1N	2-SMC-1	2-1 FBZ	1/8	1/16	1.17	0.52	0.09	7/16	7/16
2-DMC-2	200-1-2	2MSC2N	2-SMC-2	2-2 FBZ	1/8	1/8	1.20	0.52	0.09	7/16	7/16
2-DMC-4	200-1-3	2MSC4N	2-SMC-4	2-4 FBZ	1/8	1/4	1.40	0.52	0.09	7/16	9/16
2-DMC-6	200-1-6	2MSC6N	2-SMC-6	2-6 FBZ	1/8	3/8	1.41	0.52	0.09	7/16	11/16
2-DMC-8	200-1-8	2MSC8N	2-SMC-8	2-8 FBZ	1/8	1/2	1.66	0.52	0.09	7/16	7/8
3-DMC-2	300-1-2	3MSC2N	3-SMC-2	3-2 FBZ	3/16	1/8	1.23	0.54	0.13	1/2	7/16
3-DMC-4	300-1-4	3MSC4N	3-SMC-4	3-4 FBZ	3/16	1/4	1.43	0.54	0.13	1/2	9/16
4-DMC-1	400-1-1	4MSC1N	4-SMC-1	4-1 FBZ	1/4	1/16	1.29	0.61	0.13	9/16	1/2
4-DMC-2	400-1-2	4MSC2N	4-SMC-2	4-2 FBZ	1/4	1/8	1.29	0.61	0.19	9/16	1/2
4-DMC-4	400-1-4	4MSC4N	4-SMC-4	4-4 FBZ	1/4	1/4	1.49	0.61	0.19	9/16	9/16
4-DMC-6	400-1-6	4MSC6N	4-SMC-6	4-6 FBZ	1/4	3/8	1.51	0.61	0.19	9/16	11/16
4-DMC-8	400-1-8	4MSC8N	4-SMC-8	4-8 FBZ	1/4	1/2	1.76	0.61	0.19	9/16	7/8
4-DMC-12	400-1-12	4MSC12N	4-SMC-12	4-12 FBZ	1/4	3/4	1.82	0.61	0.19	9/16	1-1/16
5-DMC-2	500-1-2	5MSC2N	5-SMC-2	5-2 FBZ	5/16	1/8	1.34	0.65	0.19	5/8	9/16
5-DMC-4	500-1-4	5MSC4N	5-SMC-4	5-4 FBZ	5/16	1/4	1.52	0.65	0.25	5/8	9/16
5-DMC-6	500-1-6	5MSC6N	5-SMC-6	5-6 FBZ	5/16	3/8	1.54	0.65	0.25	5/8	11/16
5-DMC-8	500-1-8	5MSC8N	5-SMC-8	5-8 FBZ	5/16	1/2	1.80	0.65	0.25	5/8	7/8
6-DMC-2	600-1-2	6MSC2N	6-SMC-2	6-2 FBZ	3/8	1/8	1.39	0.67	0.19	11/16	5/8
6-DMC-4	600-1-4	6MSC4N	6-SMC-4	6-4 FBZ	3/8	1/4	1.57	0.67	0.28	11/16	5/8
6-DMC-6	600-1-6	6MSC6N	6-SMC-6	6-6 FBZ	3/8	3/8	1.57	0.67	0.28	11/16	11/16
6-DMC-8	600-1-8	6MSC8N	6-SMC-8	6-8 FBZ	3/8	1/2	1.82	0.67	0.28	11/16	7/8
6-DMC-12	600-1-12	6MSC12N	6-SMC-12	6-12 FBZ	3/8	3/4	1.88	0.67	0.28	11/16	1-1/16
6-DMC-16	600-1-16	-	6-SMC-16	-	3/8	1	2.14	0.67	0.28	11/16	1-3/8
8-DMC-2	810-1-2	8MSC2N	8-SMC-2	8-2 FBZ	1/2	1/8	1.53	0.90	0.19	7/8	13/16
8-DMC-4	810-1-4	8MSC4N	8-SMC-4	8-4 FBZ	1/2	1/4	1.71	0.90	0.28	7/8	13/16
8-DMC-6	810-1-6	8MSC6N	8-SMC-6	8-6 FBZ	1/2	3/8	1.71	0.90	0.38	7/8	13/16
8-DMC-8	810-1-8	8MSC8N	8-SMC-8	8-8 FBZ	1/2	1/2	1.93	0.90	0.41	7/8	7/8
8-DMC-12	810-1-12	8MSC12N	8-SMC-12	8-12 FBZ	1/2	3/4	1.99	0.90	0.41	7/8	1-1/16
8-DMC-16	810-1-16	8MSC16N	8-SMC-16	8-16 FBZ	1/2	1	2.25	0.90	0.41	1	1-3/8
10-DMC-4	1010-1-4	-	10-SMC-4	-	5/8	1/4	1.74	0.96	0.28	1	15/16
10-DMC-6	1010-1-6	10MSC6N	10-SMC-6	10-6 FBZ	5/8	3/8	1.74	0.96	0.38	1	15/16
10-DMC-8	1010-1-8	10MSC8N	10-SMC-8	10-8 FBZ	5/8	1/2	1.93	0.96	0.47	1	15/16
10-DMC-12	1010-1-12	10MSC12N	10-SMC-12	10-12 FBZ	5/8	3/4	1.99	0.96	0.50	1	1-1/16
10-DMC-16	-	-	10-SMC-16	-	5/8	1	2.20	0.96	0.50	1	1-3/8
12-DMC-4	1210-1-4	-	12-SMC-4	-	3/4	1/4	1.80	0.96	0.28	1-1/8	1-1/16
12-DMC-6	1210-1-6	-	12-SMC-6	-	3/4	3/8	1.80	0.96	0.38	1-1/8	1-1/16
12-DMC-8	1210-1-8	12MSC8N	12-SMC-8	12-8 FBZ	3/4	1/2	1.99	0.96	0.47	1-1/8	1-1/16
12-DMC-12	1210-1-12	12MSC12N	12-SMC-12	12-12 FBZ	3/4	3/4	1.99	0.96	0.63	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.	P PIPE END NPT	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
12-DMC-16	1210-1-16	12MSC16N	12-SMC-16	12-16 FBZ		3/4	1	2.25	0.96	0.63	1-1/8	1-3/8
14-DMC-6	-	-	14-SMC-6	-		7/8	3/8	1.80	1.02	0.38	1-1/4	1-3/16
14-DMC-8	1410-1-8	-	14-SMC-8	-		7/8	1/2	1.99	1.02	0.47	1-1/4	1-3/16
14-DMC-12	1410-1-12	14MSC12N	14-SMC-12	14-12 FBZ		7/8	3/4	1.99	1.02	0.63	1-1/4	1-3/16
14-DMC-16	1410-1-16	14MSC16N	14-SMC-16	14-16 FBZ		1	1	2.25	1.02	0.72	1-1/4	1-3/8
16-DMC-8	1610-1-8	16MSC8N	16-SMC-8	16-8 FBZ		1	1/2	2.26	1.24	0.47	1-1/2	1-3/8
16-DMC-12	1610-1-12	16MSC12N	16-SMC-12	16-12 FBZ		1	3/4	2.26	1.24	0.63	1-1/2	1-3/8
16-DMC-16	1610-1-16	16MSC16N	16-SMC-16	16-16 FBZ		1	1	2.45	1.24	0.88	1-1/2	1-3/8
16-DMC-20	1610-1-20	-	16-SMC-20	-		1	1-1/4	2.56	1.24	0.88	1-1/2	1-3/4
16-DMC-24	1610-1-24	-	16-SMC-24	-		1	1-1/2	2.77	1.24	0.88	1-1/2	2-1/8
B-18-DMC-12	B-1810-1-12	-	-	-		1-1/8	3/4	2.27	1.25	0.63	1-3/4	1-5/8
B-18-DMC-16	B-1810-1-16	-	-	-		1-1/8	1	2.45	1.25	0.88	1-3/4	1-5/8
20-DMC-16	2000-1-16	-	-	-		1-1/4	1	3.04	1.62	0.88	1-7/8	1-3/4
20-DMC-20	2000-1-20	20MSC20N	-	-		1-1/4	1-1/4	3.04	1.62	1.09	1-7/8	1-3/4
20-DMC-24	2000-1-24	-	-	-		1-1/4	1-1/2	3.13	1.62	1.09	1-7/8	2-1/8
24-DMC-12	-	-	-	-		1-1/2	3/4	3.22	1.97	0.63	2-1/4	2-1/8
24-DMC-16	2400-1-16	-	-	-		1-1/2	1	3.41	1.97	0.88	2-1/4	2-1/8
24-DMC-20	2400-1-20	-	-	-		1-1/2	1-1/4	3.41	1.97	1.09	2-1/4	2-1/8
24-DMC-24	2400-1-24	24MSC24N	-	-		1-1/2	1-1/2	3.50	1.97	1.34	2-1/4	2-1/8
32-DMC-32	3200-1-32	32MSC32N	-	-		2	2	4.47	2.66	1.81	3	2-3/4

DMC-BSPT/SMC-BSPT

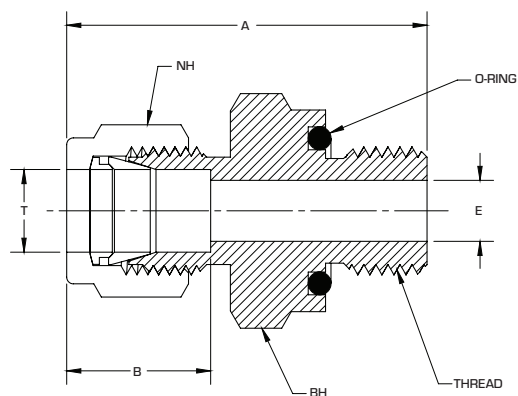
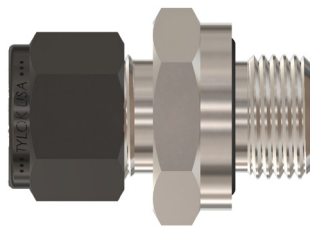
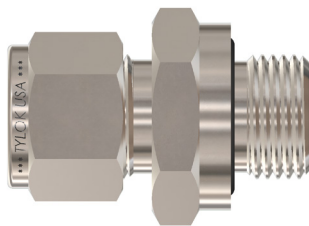
BSPT Male Connector

CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.	P PIPE END BSPT	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
4-DMC-4-BSPT	400-1-4RT	4MSC4K	4-SMC-4-BSPT	4-4K FBZ		1/4	1/4	1.49	0.61	0.19	9/16	9/16
6-DMC-6-BSPT	600-1-6RT	6MSC6K	6-SMC-6-BSPT	6-6K-FBZ		3/8	3/8	1.57	0.67	0.66	11/16	11/16
8-DMC-8-BSPT	810-1-8RT	8MSC8K	8-SMC-8-BSPT	8-8K FBZ		1/2	1/2	1.93	0.90	0.90	7/8	7/8
12-DMC-12-BSPT	1210-1-12RT	-	12-SMC-12-BSPT	-		3/4	3/4	1.99	0.96	0.96	1-1/8	1-1/16
16-DMC-16-BSPT	1610-1-16RT	-	16-SMC-16-BSPT	-		1	1	2.45	1.24	1.23	1-1/2	1-3/8
20-DMC-20-BSPT	2000-1-20RT	-	-	-		1-1/4	1-1/4	3.04	1.62	1.62	1-7/8	1-3/4
24-DMC-24-BSPT	2400-1-24RT	-	-	-		1-1/2	1-1/2	3.50	1.97	1.34	2-1/4	2-1/8

NOTE: Dimensions subject to change, to be used for reference only.

DMC-ORS/SMC-ORS

O-Ring Straight Thread Male Connector

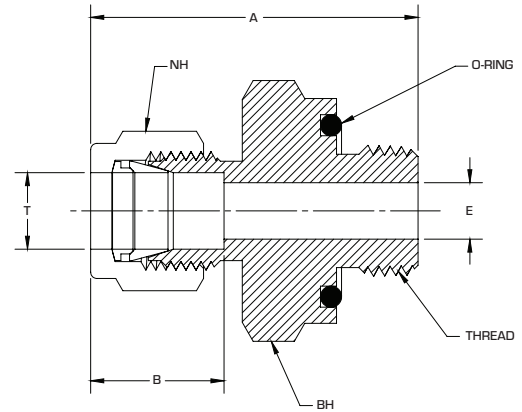
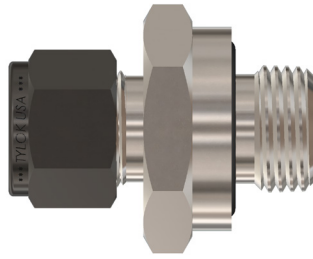
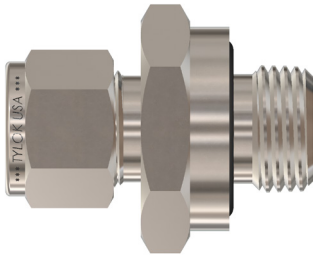


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	THREAD	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX	O-RING
2-DMC-ORS	200-1-OR	M2SC2	2-SMC-ORS	2-2 ZHBA5	1/8	5/16-24	1.30	0.52	0.09	7/16	9/16	AS-011
4-DMC-ORS	400-1-OR	M2SC4	4-SMC-ORS	4-4 ZHBA5	1/4	7/16-20	1.51	0.61	0.19	9/16	3/4	AS-111
6-DMC-ORS	600-1-OR	M2SC6	6-SMC-ORS	6-6 ZHBA5	3/8	9/16-18	1.67	0.67	0.28	11/16	15/16	AS-113
8-DMC-ORS	810-1-OR	M2SC8	8-SMC-ORS	8-8 ZHBA5	1/2	3/4-16	1.80	0.90	0.41	7/8	1-1/8	AS-116
12-DMC-ORS	1210-1-OR	12M2SC12	12-SMC-ORS	12-12 ZHBA5	3/4	1-1/16-12	2.06	0.96	0.63	1-1/8	1-1/2	AS-215
16-DMC-ORS	1610-1-OR	16M2SC16	16-SMC-ORS	16-16 ZHBA5	1	1-5/16-12	2.30	1.24	0.88	1-1/2	1-3/4	AS-219

NOTE: Dimensions subject to change, to be used for reference only
Standard O-Ring material is Buna-N, 70 durometer.

DMC-ORT/SMC-ORT

O-Ring Tapered Thread Male Connector

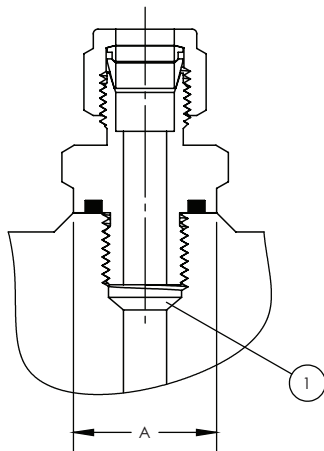


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX	O-RING
4-DMC-2-ORT	400-1-2-OR	4M3SC2	4-SMC-2-ORT	4-2 ZHBF5	1/4	1/8	1.38	0.61	0.19	9/16	3/4	AS-111
4-DMC-4-ORT	400-1-4-OR	4M3SC4	4-SMC-4-ORT	4-4 ZHBF5	1/4	1/4	1.51	0.61	0.19	9/16	15/16	AS-113
6-DMC-6-ORT	600-1-6-OR	6M3SC6	6-SMC-6-ORT	6-6 ZHBF5	3/8	3/8	1.64	0.67	0.28	11/16	1-1/8	AS-116
6-DMC-8-ORT	600-1-8-OR	6M3SC8	6-SMC-8-ORT	6-8 ZHBF5	3/8	1/2	1.86	0.67	0.28	11/16	1-5/16	AS-212
8-DMC-4-ORT	-	8M3SC4	8-SMC-4-ORT	8-4 ZHBF5	1/2	1/4	1.68	0.90	0.28	7/8	15/16	AS-113
8-DMC-8-ORT	810-1-8-OR	8M3SC8	8-SMC-8-ORT	8-8 ZHBF5	1/2	1/2	1.96	0.90	0.41	7/8	1-5/16	AS-212

NOTE: Dimensions subject to change, to be used for reference only.

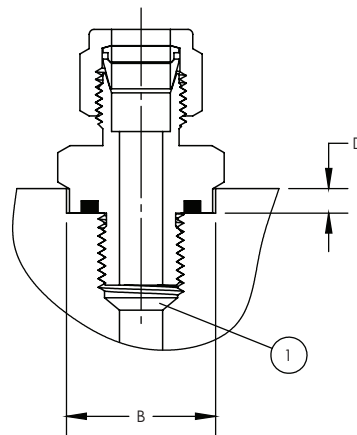
MOUNTING DIMENSIONS

for ORS/ORT Fittings



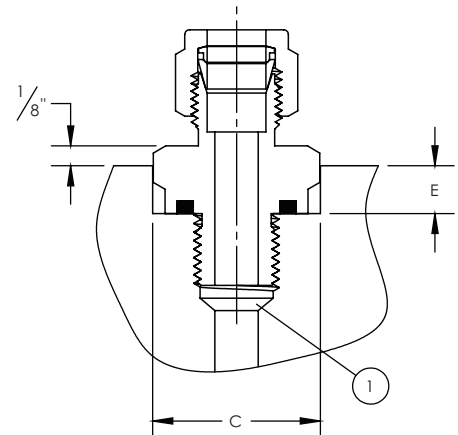
RAISED SURFACE

Minimum diameter is larger than the O-Ring sealing diameter to prevent O-Ring extrusion.



RECESSED HOLE (SHOULDER CLEARANCE)

Minimum diameter allows clearance for round shoulder of fitting into recess.



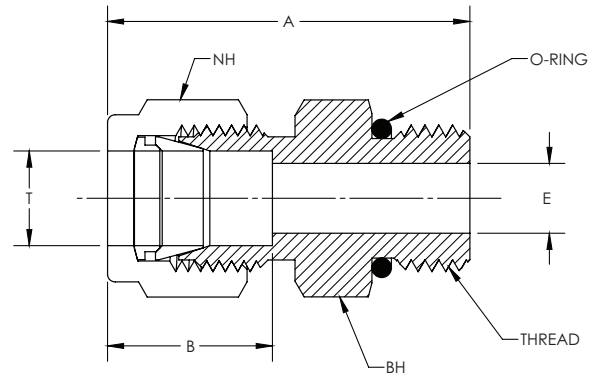
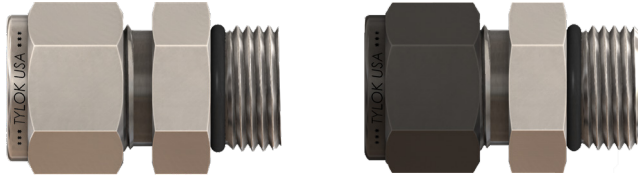
RECESSED HOLE (HEX CLEARANCE)

Minimum diameter allows clearance for hex of fitting into recess.

	NPT SIZE	A MIN DIA	B MIN DIA	C MIN DIA	D MAX DEPTH	E MAX DEPTH
5/16-24	-	0.50	0.59	0.66	0.09	0.16
5/16-24	-	0.50	0.59	0.66	0.09	0.22
-	1/8	0.69	0.78	0.88	0.16	0.28
3/8-24	-	0.56	0.66	0.75	0.09	0.22
7/16-20	-	0.69	0.78	0.88	0.16	0.28
-	1/8	0.69	0.78	0.88	0.16	0.28
-	1/4	0.87	0.97	1.09	0.16	0.31
1/2-20	-	0.75	0.91	1.03	0.16	0.31
9/16-18	-	0.81	0.97	1.09	0.16	0.31
-	1/4	0.87	0.97	1.09	0.16	0.31
-	3/8	1.00	1.16	1.31	0.16	0.34
-	1/2	1.22	1.34	1.53	0.22	0.44
3/4-16	-	1.00	1.16	1.31	0.16	0.34
-	1/2	1.22	1.34	1.53	0.22	0.44
1-1/16-12	-	1.41	1.53	1.75	0.22	0.50
1-5/16-12	-	1.69	1.78	2.03	0.22	0.56

DMC-STB/SMC-STB

Straight Thread Boss Male Connector



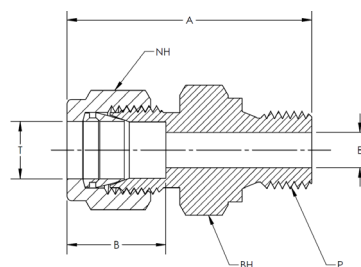
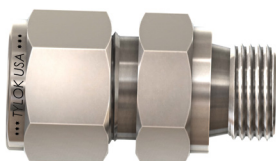
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	THREAD	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
2-DMC-2-STB	200-1-2ST	2M1SC2	2-SMC-2-STB	2-2 ZHBA	1/8	5/16-24	1.19	0.52	0.06	7/16	7/16
4-DMC-2-STB	400-1-2ST	-	4-SMC-2-STB	-	1/4	5/16-24	1.27	0.61	0.06	9/16	1/2
4-DMC-4-STB	400-1-4ST	4M1SC4	4-SMC-4-STB	4-4 ZHBA	1/4	7/16-20	1.34	0.61	0.17	9/16	9/16
4-DMC-6-STB	400-1-6ST	4M1SC6	4-SMC-6-STB	4-6 ZHBA	1/4	9/16-18	1.40	0.61	0.19	9/16	11/16
4-DMC-8-STB	400-1-8ST	4M1SC8	4-SMC-8-STB	4-8 ZHBA	1/4	3/4-16	1.48	0.61	0.19	9/16	7/8
6-DMC-2-STB	-	-	6-SMC-2-STB	-	3/8	5/16-24	1.30	0.67	0.06	11/16	5/8
6-DMC-4-STB	600-1-4ST	6M1SC4	6-SMC-4-STB	6-4 ZHBA	3/8	7/16-20	1.40	0.67	0.17	11/16	5/8
6-DMC-6-STB	600-1-6ST	6M1SC6	6-SMC-6-STB	6-6 ZHBA	3/8	9/16-18	1.46	0.67	0.28	11/16	11/16
6-DMC-8-STB	600-1-8ST	6M1SC8	6-SMC-8-STB	6-8 ZHBA	3/8	3/4-16	1.54	0.67	0.28	11/16	7/8
8-DMC-6-STB	810-1-6ST	8M1CS6	8-SMC-6-STB	8-6 ZHBA	1/2	9/16-18	1.54	0.90	0.28	7/8	13/16
8-DMC-8-STB	810-1-8ST	8M1SC8	8-SMC-8-STB	8-8 ZHBA	1/2	3/4-16	1.65	0.90	0.39	7/8	7/8
8-DMC-10-STB	810-1-10ST	-	8-SMC-10-STB	-	1/2	7/8-14	1.77	0.90	0.41	7/8	1
10-DMC-8-STB	1010-1-8ST	-	10-SMC-8-STB	-	5/8	3/4-16	1.65	0.96	0.39	1	15/16
10-DMC-10-STB	1010-1-10ST	10M1SC10	10-SMC-10-STB	10-10 ZHBA	5/8	7/8-14	1.78	0.96	0.48	1	1
12-DMC-8-STB	1210-1-8ST	-	12-SMC-8-STB	-	3/4	3/4-16	1.81	0.96	0.39	1-1/8	1-1/16
12-DMC-12-STB	1210-1-12ST	12M1SC12	12-SMC-12-STB	12-12 ZHBA	3/4	1-1/16-12	1.93	0.96	0.61	1-1/8	1-1/4
16-DMC-12-STB	1610-1-12ST	16M1SC12	16-SMC-12-STB	16-12 ZHBA	1	1-1/16-12	2.10	1.24	0.61	1-1/2	1-3/8
16-DMC-16-STB	1610-1-16ST	16M1SC16	16-SMC-16-STB	16-16 ZHBA	1	1-5/16-12	2.14	1.24	0.84	1-1/2	1-1/2
16-DMC-20-STB	1610-1-20ST	-	16-SMC-20-STB	-	1	1-5/8-12	2.14	1.24	0.88	1-1/2	1-7/8
20-DMC-16-STB	2000-1-16ST	-	-	-	1-1/4	1-5/16-12	2.69	1.62	0.84	1-7/8	1-3/4
20-DMC-20-STB	2000-1-20ST	20M1SC20	-	-	1-1/4	1-5/8-12	2.69	1.62	1.08	1-7/8	1-7/8
24-DMC-24-STB	2400-1-24ST	24M1SC24	-	-	1-1/2	1-7/8-12	3.06	1.97	1.31	2-1/4	2-1/8
32-DMC-32-STB	3200-1-32ST	32M1SC32	-	-	2	2-1/2-12	4.00	2.66	1.77	3	2-3/4

NOTE: Dimensions subject to change, to be used for reference only.

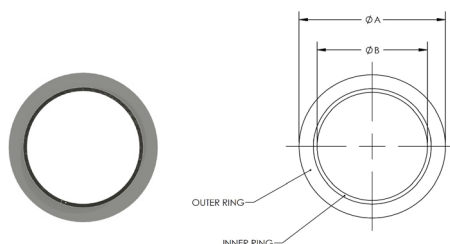
- Straight thread connectors adapt to SAE J1926-1 and ISO 1126-1 ports.
- Parts are supplied with FKM Fluorocarbon O-Rings. Other options are available upon request.
- Standard straight thread connectors are designed to withstand SAE J1926-3 pressure ratings.
- Add "HD" suffix for straight thread connectors designed to withstand SAE J1926-2 pressure ratings.

DMC-RS/SMC-RS

BSPP Straight Thread Male Connector



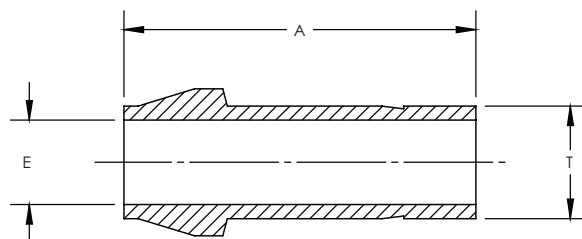
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P BSPP THREAD SIZE	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
2-DMC-2-RS	200-1-2RS	2MSC2R	2-SMC-2-RS	2-2R FBZ	1/8	1/8	1.31	0.52	0.09	7/16	9/16
2-DMC-4-RS	200-1-4RS	2MSC4R	2-SMC-4-RS	2-4R FBZ	1/8	1/4	1.50	0.52	0.09	7/16	3/4
2-DMC-6-RS	200-1-6RS	2MSC6R	2-SMC-6-RS	2-6R FBZ	1/8	3/8	1.53	0.52	0.09	7/16	7/8
4-DMC-2-RS	400-1-2RS	4MSC2R	4-SMC-2-RS	4-2R FBZ	1/4	1/8	1.40	0.61	0.16	9/16	9/16
4-DMC-4-RS	400-1-4RS	4MSC4R	4-SMC-4-RS	4-4R FBZ	1/4	1/4	1.59	0.61	0.19	9/16	3/4
4-DMC-6-RS	400-1-6RS	4MSC6R	4-SMC-6-RS	4-6R FBZ	1/4	3/8	1.62	0.61	0.19	9/16	7/8
4-DMC-8-RS	400-1-8RS	4MSC8R	4-SMC-8-RS	4-8R FBZ	1/4	1/2	1.70	0.61	0.19	9/16	1-1/16
6-DMC-2-RS	600-1-2RS	6MSC2R	6-SMC-2-RS	6-2R FBZ	3/8	1/8	1.49	0.67	0.16	11/16	5/8
6-DMC-4-RS	600-1-4RS	6MSC4R	6-SMC-4-RS	6-4R FBZ	3/8	1/4	1.65	0.67	0.23	11/16	3/4
6-DMC-6-RS	600-1-6RS	6MSC6R	6-SMC-6-RS	6-6R FBZ	3/8	3/8	1.68	0.67	0.28	11/16	7/8
6-DMC-8-RS	600-1-8RS	6MSC8R	6-SMC-8-RS	6-8R FBZ	3/8	1/2	1.76	0.67	0.28	11/16	1-1/16
8-DMC-4-RS	810-1-4RS	8MSC4R	8-SMC-4-RS	8-4R FBZ	1/2	1/4	1.76	0.90	0.23	7/8	13/16
8-DMC-6-RS	810-1-6RS	8MSC6R	8-SMC-6-RS	8-6R FBZ	1/2	3/8	1.79	0.90	0.31	7/8	7/8
8-DMC-8-RS	810-1-8RS	8MSC8R	8-SMC-8-RS	8-8R FBZ	1/2	1/2	1.87	0.90	0.38	7/8	1-1/16
12-DMC-8-RS	1210-1-8RS	12MSC8R	12-SMC-8-RS	12-8R FBZ	3/4	1/2	1.92	0.96	0.38	1-1/8	1-1/16
12-DMC-12-RS	1210-1-12RS	12MSC12R	12-SMC-12-RS	12-12R FBZ	3/4	3/4	2.05	0.96	0.58	1-1/8	1-5/16
16-DMC-8-RS	1610-1-8RS	16MSC8R	16-SMC-8-RS	16-8R FBZ	1	1/2	2.19	1.24	0.38	1-1/2	1-3/8
16-DMC-12-RS	1610-1-12RS	16MSC12R	16-SMC-12-RS	16-12R FBZ	1	3/4	2.27	1.24	0.58	1-1/2	1-3/8
16-DMC-16-RS	1610-1-16RS	16MSC16R	16-SMC-16-RS	16-16R FBZ	1	1	2.35	1.24	0.78	1-1/2	1-5/8
20-DMC-20-RS	2000-1-20RS	20MSC20R	-	-	1-1/4	1-1/4	3.12	1.62	1.13	1-7/8	2
24-DMC-24-RS	2400-1-24RS	24MSC24R	-	-	1-1/2	1-1/2	3.58	1.97	1.25	2-1/4	2-1/4



PART NUMBER	INTERCHANGES WITH		B BSPP THREAD SIZE	A	B	THICKNESS	PRESSURE RATING (PSIG)
SS-RSGK-2-F	SS-2-RS-2V	M30201-SS	1/8	0.63	0.41	0.41	5300
SS-RSGK-4-F	SS-4-RS-2V	M30202-SS	1/4	0.81	0.54	0.54	5500
SS-RSGK-6-F	SS-6-RS-2V	M30203-SS	3/8	0.94	0.68	0.68	4400
SS-RSGK-8-F	SS-8-RS-2V	M30204-SS	1/2	1.13	0.85	0.85	4000
SS-RSGK-10-F	-	-	5/8	1.25	0.92	0.92	4500
SS-RSGK-12-F	SS-12-RS-2V	M30206-SS	3/4	1.38	1.07	1.07	3800
SS-RSGK-16-F	SS-16-RS-2V	M30208-SS	1	1.69	1.33	1.33	2800
SS-RSGK-20-F	SS-20-RS-2V	-	1-1/4	2.06	1.69	1.69	2400
SS-RSGK-24-F	SS-24-RS-2V	-	1-1/2	2.31	1.91	1.91	2500

Note: Dimensions subject to change, to be used for reference only.

- BSPP threaded end requires a sealing washer.
- Standard materials are Stainless Steel Outer Ring and FKM Fluorocarbon Inner Ring.
- Pressure ratings are based on ASME B31.3 min wall calculations with a stress value of 20,000 psi.
- For Carbon Steel Outer Ring, replace "SS" with "S".
- For NBR (Buna-N) Inner Ring, replace "F" with "B".



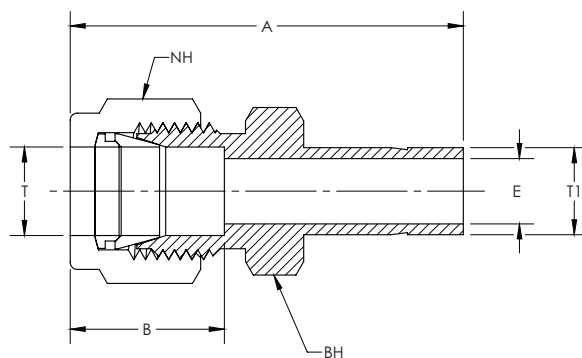
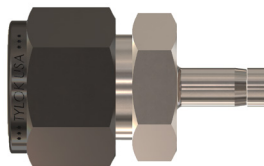
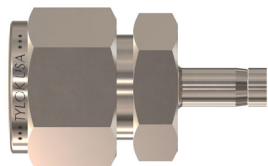
CBC PART NUMBER	INTERCHANGES WITH			CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	A	E THRU HOLE
2-DPCU	201-PC	2PC2		2-SPCU	2-2 ZPC	1/8	0.95	0.08
4-DPCU	401-PC	4PC4		4-SPCU	4-4 ZPC	1/4	1.06	0.17
6-DPCU	601-PC	6PC6		6-SPCU	6-6 ZPC	3/8	1.17	0.27
8-DPCU	811-PC	8PC8		8-SPCU	8-8 ZPC	1/2	1.59	0.38
10-DPCU	1011-PC	-		10-SPCU	10-10 ZPC	5/8	1.66	0.47
12-DPCU	1211-PC	12PC12		12-SPCU	12-12 ZPC	3/4	1.66	0.58
16-DPCU	1611-PC	16PC16		16-SPCU	16-16 ZPC	1	2.09	0.80
20-DPCU-NF	2000-PC	-		-	-	1-1/4	2.72	1.02
24-DPCU-NF	2400-PC	-		-	-	1-1/2	3.31	1.25
32-DPCU-NF	3200-PC	-		-	-	2	4.56	1.72

NOTE: Dimensions subject to change, to be used for reference only.

- 1/16", 1/8", and 3/16" adapters come standard without a groove.
- 1-1/4", 1 1/2", and 2" adapters are furnished with preswaged nuts and ferrules.
- Add "-NF" for preswaged nuts and ferrules.
- Add "-HD" for thick wall adapters with pressures ratings that match max recommended tube.

DRATT/SRATT

Reducer Adapter Tube to Tube



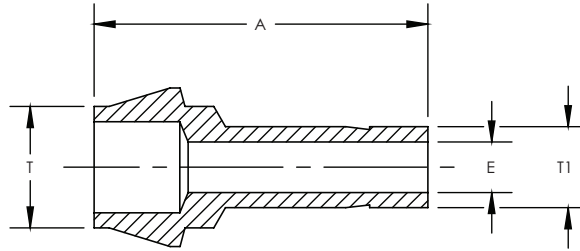
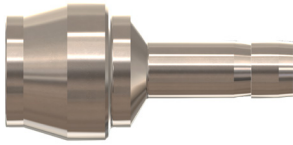
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
1-DRATT-2	100-R-2	2TUR1	1-SRATT-2	2-1 TRBZ	1/16	1/8	1.15	0.35	0.05	5/16	5/16
2-DRATT-1	200-R-1	1TUR2	2-SRATT-1	1-2 TRBZ	1/8	1/16	1.14	0.52	0.03	7/16	7/16
2-DRATT-2	200-R-2	2TUR2	2-SRATT-2	2-2 TRBZ	1/8	1/8	1.32	0.52	0.08	7/16	7/16
2-DRATT-4	200-R-4	4TUR2	2-SRATT-4	4-2 TRBZ	1/8	1/4	1.42	0.52	0.09	7/16	7/16
2-DRATT-6	200-R-6	6TUR2	2-SRATT-6	6-2 TRBZ	1/8	3/8	1.48	0.52	0.09	7/16	7/16
3-DRATT-4	300-R-4	4TUR3	3-SRATT-4	4-3 TRBZ	3/16	1/4	1.46	0.54	0.13	1/2	7/16
4-DRATT-2	400-R-2	2TUR4	4-SRATT-2	2-4 TRBZ	1/4	1/8	1.45	0.61	0.08	9/16	1/2
4-DRATT-4	400-R-4	4TUR4	4-SRATT-4	4-4 TRBZ	1/4	1/4	1.54	0.61	0.17	9/16	1/2
4-DRATT-6	400-R-6	6TUR4	4-SRATT-6	6-4 TRBZ	1/4	3/8	1.60	0.61	0.19	9/16	1/2
4-DRATT-8	400-R-8	8TUR4	4-SRATT-8	8-4 TRBZ	1/4	1/2	1.82	0.61	0.19	9/16	9/16
5-DRATT-6	500-R-6	6TUR5	5-SRATT-6	6-5 TRBZ	5/16	3/8	1.65	0.65	0.25	5/8	9/16
6-DRATT-4	600-R-4	4TUR6	6-SRATT-4	4-6 TRBZ	3/8	1/4	1.63	0.67	0.17	11/16	5/8
6-DRATT-6	600-R-6	6TUR6	6-SRATT-6	6-6 TRBZ	3/8	3/8	1.70	0.67	0.27	11/16	5/8
6-DRATT-8	600-R-8	8TUR6	6-SRATT-8	8-6 TRBZ	3/8	1/2	1.92	0.67	0.28	11/16	5/8
6-DRATT-10	600-R-10	10TUR6	6-SRATT-10	10-6 TRBZ	3/8	5/8	1.98	0.67	0.28	11/16	11/16
6-DRATT-12	600-R-12	12TUR6	6-SRATT-12	12-6 TRBZ	3/8	3/4	1.98	0.67	0.28	11/16	13/16
8-DRATT-4	810-R-4	4TUR8	8-SRATT-4	4-8 TRBZ	1/2	1/4	1.77	0.90	0.17	7/8	13/16
8-DRATT-6	810-R-6	6TUR8	8-SRATT-6	6-8 TRBZ	1/2	3/8	1.84	0.90	0.27	7/8	13/16
8-DRATT-8	810-R-8	-	8-SRATT-8	8-8 TRBZ	1/2	1/2	2.06	0.90	0.38	7/8	13/16
8-DRATT-10	810-R-10	10TUR8	8-SRATT-10	10-8 TRBZ	1/2	5/8	2.12	0.90	0.41	7/8	13/16
8-DRATT-12	810-R-12	12TUR8	8-SRATT-12	12-8 TRBZ	1/2	3/4	2.12	0.90	0.41	7/8	13/16
8-DRATT-14	810-R-14	-	8-SRATT-14	14-8 TRBZ	1/2	7/8	2.21	0.90	0.41	7/8	15/16
8-DRATT-16	810-R-16	16TUR8	8-SRATT-16	16-8 TRBZ	1/2	1	2.37	0.90	0.41	7/8	1-1/16
10-DRATT-12	1010-R-12	12TUR10	10-SRATT-12	12-10 TRBZ	5/8	3/4	2.15	0.96	0.50	1	15/16
10-DRATT-14	1010-R-14	14TUR10	10-SRATT-14	14-10 TRBZ	5/8	7/8	2.21	0.96	0.50	1	15/16
10-DRATT-16	1010-R-16	16TUR10	10-SRATT-16	16-10 TRBZ	5/8	1	2.40	0.96	0.50	1	1-1/16
12-DRATT-8	1210-R-8	8TUR12	12-SRATT-8	8-12 TRBZ	3/4	1/2	2.15	0.96	0.38	1-1/8	1-1/16
12-DRATT-16	1210-R-16	16TUR12	12-SRATT-16	16-12 TRBZ	3/4	1	2.46	0.96	0.63	1-1/8	1-1/16
14-DRATT-16	1410-R-16	16TUR14	14-SRATT-16	16-14 TRBZ	7/8	1	2.54	1.02	0.72	1-1/4	1-3/16
16-DRATT-16	1610-R-16	16TUR16	16-SRATT-16	16-16 TRBZ	1	1	2.82	1.24	0.80	1-1/2	1-3/8
16-DRATT-20-NF	1610-R-20	20TUR16	-	-	1	1-1/4	3.17	1.24	0.88	1-1/2	1-7/8
16-DRATT-24-NF	1610-R-24	24TUR16	-	-	1	1-1/2	3.51	1.24	0.88	1-1/2	2-1/4
16-DRATT-32-NF	1610-R-32	32TUR16	-	-	1	2	4.43	1.24	0.88	1-1/2	3
20-DRATT-16	2000-R-16	16TUR20	-	-	1-1/4	1	3.41	1.62	0.80	1-7/8	1-3/4
20-DRATT-24-NF	2000-R-24	23TUR20	-	-	1-1/4	1-1/2	4.10	1.62	1.09	1-7/8	1-3/4
20-DRATT-32-NF	2000-R-32	32TUR20	-	-	1-1/4	2	4.93	1.62	1.09	1-7/8	2-1/8
24-DRATT-32-NF	2400-R-32	32TUR24	-	-	1-1/2	2	5.17	1.97	1.34	2-1/4	2-1/8

NOTE: Dimensions subject to change, to be used for reference only.

- 1/16", 1/8", and 3/16" adapters come standard without a groove.
- 1-1/4", 1-1/2", and 2" adapters are furnished with preswaged nuts and ferrules.
- Add "-NF" for preswaged nuts and ferrules on the adapter end to the end of the part number.
- Add "-HD" for thick wall adapters with pressures ratings that match max recommended tube to the end of the part number.

DRPC/SRPC

Reducing Port Connector



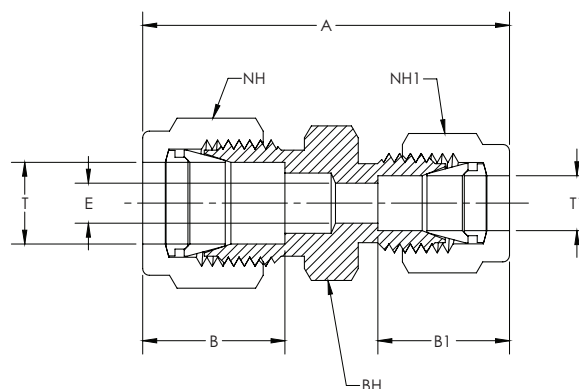
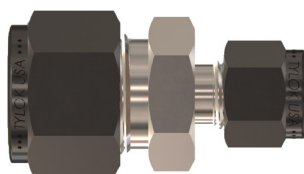
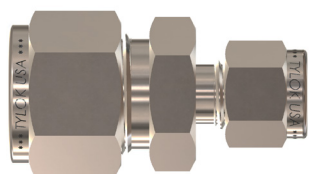
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	E THRU HOLE
4-DRPC-2	401-PC-2	2PC4	4-SRPC-2	2-4 ZPC	1/4	1/8	0.94	0.08
6-DRPC-4	601-PC-4	4PC6	6-SRPC-4	4-6 ZPC	3/8	1/4	1.03	0.17
8-DRPC-4	811-PC-4	4PC8	8-SRPC-4	4-8 ZPC	1/2	1/4	1.23	0.17
8-DRPC-6	811-PC-6	6PC8	8-SRPC-6	6-8 ZPC	1/2	3/8	1.28	0.27
12-DRPC-8	1211-PC-8	8PC12	12-SRPC-8	8-12 ZPC	3/4	1/2	1.53	0.38
16-DRPC-8	1611-PC-8	-	16-SRPC-8	-	1	1/2	1.78	0.38

NOTE: Dimensions subject to change, to be used for reference only.

- 1/16", 1/8", and 3/16" adapters come standard without a groove.
- 1-1/4", 1-1/2", and 2" adapters are furnished with preswaged nuts and ferrules.
- Add "-NF" for preswaged nuts and ferrules.
- Add "-HD" for thick wall adapters with pressures ratings that match max recommended tube.

DRU/SRU

Reducer Union

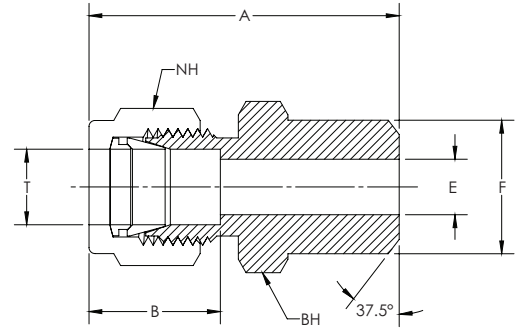
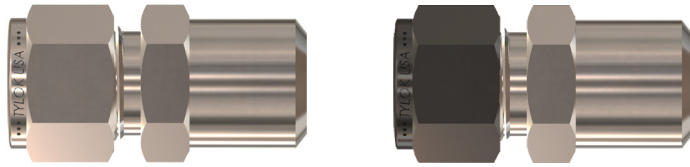


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	B	B1	E THRU HOLE	NH NUT HEX	NH1 NUT HEX	BH BODY HEX
2-DRU-1	200-6-1	2RU1	2-SRU-1	2-1 HBZ	1/8	1/16	1.23	0.52	0.35	0.05	7/16	5/16	7/16
4-DRU-1	400-6-1	4RU1	4-SRU-1	4-1 HBZ	1/4	1/16	1.35	0.61	0.35	0.05	9/16	5/16	1/2
4-DRU-2	400-6-2	4RU2	4-SRU-2	4-2 HBZ	1/4	1/8	1.52	0.61	0.52	0.09	9/16	7/16	1/2
4-DRU-3	400-6-3	4RU3	4-SRU-3	4-3 HBZ	1/4	3/16	1.55	0.61	0.54	0.13	9/16	1/2	1/2
5-DRU-2	500-6-2	5RU2	5-SRU-2	5-2 HBZ	5/16	1/8	1.59	0.65	0.52	0.09	5/8	7/16	9/16
5-DRU-4	500-6-4	5RU4	5-SRU-4	5-4 HBZ	5/16	1/4	1.68	0.65	0.61	0.19	5/8	9/16	9/16
6-DRU-1	600-6-1	6RU1	6-SRU-1	6-1 HBZ	3/8	1/16	1.45	0.67	0.35	0.05	11/16	5/16	5/8
6-DRU-2	600-6-2	6RU2	6-SRU-2	6-2 HBZ	3/8	1/8	1.62	0.67	0.52	0.09	11/16	7/16	5/8
6-DRU-4	600-6-4	6RU4	6-SRU-4	6-4 HBZ	3/8	1/4	1.71	0.67	0.61	0.19	11/16	9/16	5/8
6-DRU-5	600-6-5	6RU5	6-SRU-5	6-5 HBZ	3/8	5/16	1.76	0.67	0.65	0.25	11/16	5/8	5/8
8-DRU-2	810-6-2	8RU2	8-SRU-2	8-2 HBZ	1/2	1/8	1.79	0.90	0.52	0.09	7/8	7/16	13/16
8-DRU-4	810-6-4	8RU4	8-SRU-4	8-4 HBZ	1/2	1/4	1.85	0.90	0.61	0.19	7/8	9/16	13/16
8-DRU-5	-	-	8-SRU-5	-	1/2	5/16	1.87	0.90	0.65	0.25	7/8	5/8	13/16
8-DRU-6	810-6-6	8RU6	8-SRU-6	8-6 HBZ	1/2	3/8	1.91	0.90	0.67	0.28	7/8	11/16	13/16
10-DRU-6	1010-6-6	10RU6	10-SRU-6	10-6 HBZ	5/8	3/8	1.94	0.96	0.67	0.28	1	11/16	15/16
10-DRU-8	1010-6-8	10RU8	10-SRU-8	10-8 HBZ	5/8	1/2	2.05	0.96	0.90	0.41	1	7/8	15/16
12-DRU-4	1210-6-4	12RU4	12-SRU-4	12-4 HBZ	3/4	1/4	1.94	0.96	0.61	0.19	1-1/8	9/16	1-1/16
12-DRU-6	1210-6-6	12RU6	12-SRU-6	12-6 HBZ	3/4	3/8	2.00	0.96	0.67	0.28	1-1/8	11/16	1-1/16
12-DRU-8	1210-6-8	12RU8	12-SRU-8	12-8 HBZ	3/4	1/2	2.11	0.96	0.90	0.41	1-1/8	7/8	1-1/16
12-DRU-10	1210-6-10	12RU10	12-SRU-10	12-10 HBZ	3/4	5/8	2.11	0.96	0.96	0.50	1-1/8	1	1-1/16
16-DRU-6	-	-	16-SRU-6	-	1	3/8	2.31	1.24	0.67	0.28	1-1/2	11/16	1-3/8
16-DRU-8	1610-6-8	16RU8	16-SRU-8	16-8 HBZ	1	1/2	2.48	1.24	0.90	0.41	1-1/2	7/8	1-3/8
16-DRU-12	1610-6-12	16RU12	16-SRU-12	16-12 HBZ	1	3/4	2.49	1.24	0.96	0.63	1-1/2	1-1/8	1-3/8
20-DRU-16	2000-6-16	20RU16	-	20-16 HBZ	1-1/4	1	3.17	1.62	1.24	0.88	1-7/8	1-1/2	1-3/4
24-DRU-16	2400-6-16	24RU16	-	24-16 HBZ	1-1/2	1	3.52	1.97	1.24	0.88	2-1/4	1-1/2	2-1/8

NOTE: Dimensions subject to change, to be used for reference only.

DTBW/STBW

Tube to Pipe Butt Weld Connector



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE OD	P PIPE SIZE	A	B	E THRU HOLE	F	NH NUT HEX	BW HEX FLAT
2-DTBW-2	200-1-2W	2-1/8 ZHLW2	2-STBW-2	2-1/8 ZHBW2		1/8	1/8	1.20	0.52	0.09	0.405	7/16	7/16
3-DTBW-2	300-1-2W	3-1/8 ZHLW2	3-STBW-2	3-1/8 ZHBW2		3/16	1/8	1.23	0.54	0.12	0.405	1/2	7/16
4-DTBW-2	400-1-2W	4-1/8 ZHLW2	4-STBW-2	4-1/8 ZHBW2		1/4	1/8	1.29	0.61	0.19	0.405	9/16	1/2
4-DTBW-4	400-1-4W	4-1/4 ZHLW2	4-STBW-4	4-1/4 ZHBW2		1/4	1/4	1.49	0.61	0.19	0.540	9/16	9/16
5-DTBW-2	500-1-2W	5-1/8 ZHLW2	5-STBW-2	5-1/8 ZHBW2		5/16	1/8	1.34	0.65	0.21	0.405	5/8	9/16
5-DTBW-4	500-1-4W	5-1/4 ZHLW2	5-STBW-4	5-1/4 ZHBW2		5/16	1/4	1.52	0.65	0.25	0.540	5/8	9/16
6-DTBW-4	600-1-4W	6-1/4 ZHLW2	6-STBW-4	6-1/4 ZHBW2		3/8	1/4	1.57	0.67	0.28	0.540	11/16	5/8
6-DTBW-6	600-1-6W	6-3/8 ZHLW2	6-STBW-6	6-3/8 ZHBW2		3/8	3/8	1.57	0.67	0.28	0.675	11/16	11/16
6-DTBW-8	600-1-8W	6-1/2 ZHLW2	6-STBW-8	6-1/2 ZHBW2		3/8	1/2	1.82	0.67	0.28	0.840	11/16	7/8
6-DTBW-12	600-1-12W	6-3/4 ZHLW2	6-STBW-12	6-3/4 ZHBW2		3/8	3/4	1.88	0.67	0.28	1.050	11/16	1-1/16
8-DTBW-6	810-1-6W	8-3/8 ZHLW2	8-STBW-6	8-3/8 ZHBW2		1/2	3/8	1.71	0.96	0.41	0.675	7/8	13/16
8-DTBW-8	810-1-8W	8-1/2 ZHLW2	8-STBW-8	8-1/2 ZHBW2		1/2	1/2	1.93	0.96	0.41	0.840	7/8	7/8
8-DTBW-12	810-1-12W	8-3/4 ZHLW2	8-STBW-12	8-3/4 ZHBW2		1/2	3/4	1.99	0.96	0.41	1.050	7/8	1-1/16
8-DTBW-16	810-1-16W	-	8-STBW-16	-		1/2	1	2.25	0.96	0.41	1.315	7/8	1-3/8
10-DTBW-8	1010-1-8W	10-1/2 ZHLW2	10-STBW-8	10-1/2 ZHBW2		5/8	1/2	1.93	0.96	0.50	0.840	1	15/16
12-DTBW-8	1210-1-8W	-	12-STBW-8	-		3/4	1/2	1.99	0.96	0.55	0.840	1-1/8	1-1/16
12-DTBW-12	1210-1-12W	12-3/4 ZHLW2	12-STBW-12	12-3/4 ZHBW2		3/4	3/4	1.99	0.96	0.63	1.050	1-1/8	1-1/16
16-DTBW-12	1610-1-12W	-	16-STBW-12	-		1	3/4	2.24	1.24	0.73	1.050	1-1/2	1-3/8
16-DTBW-16	1610-1-16W	16-1 ZHLW2	16-STBW-16	16-1 ZHBW2		1	1	2.45	1.24	0.88	1.315	1-1/2	1-3/8
20-DTBW-20	2000-1-20W	-	-	-		1-1/4	1-1/4	3.04	1.62	1.09	1.660	1-7/8	1-3/4
24-DTBW-24	2400-1-24W	-	-	-		1-1/2	1-1/2	3.50	1.97	1.34	1.900	2-1/4	2-1/8
32-DTBW-32	3200-1-32W	-	-	-		2	2	4.47	2.66	1.81	2.375	3	2-3/4

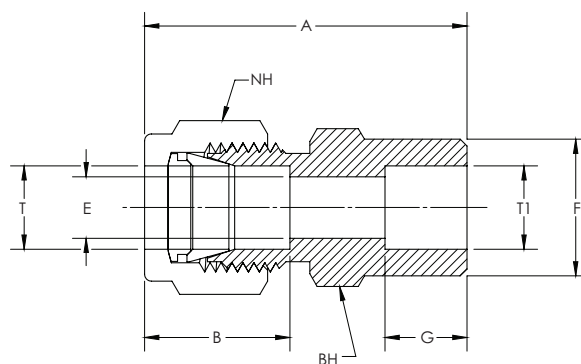
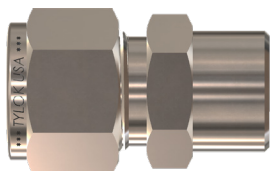
NOTE: Dimensions subject to change, to be used for reference only.

Wall Thickness at weld end is based on schedule 80 pipe.

- Fittings may have a larger ID on weld end.
- Carbon steel bodies are not plated.

DTSW/STSW

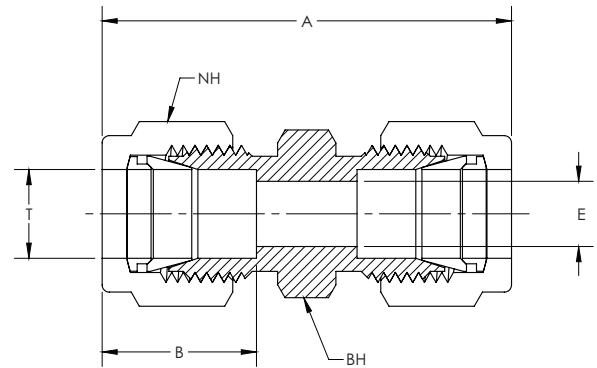
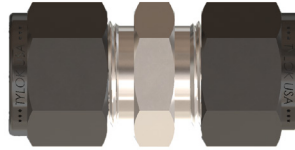
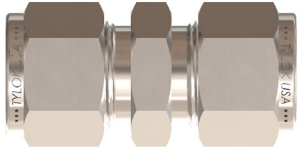
Tube to Tube Socket Weld Connector



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE OD	T1 SOCKET WELD	A	B	E THRU HOLE	F	G	NH NUT HEX	BH HEX FLAT
2-DTSW-2	200-6-2W	2-2 ZHLW	2-STSW-2	2-2 ZHBW	1/8	1/8	1.14	0.52	0.09	0.29	0.10	7/16	7/16
4-DTSW-4	400-6-4W	4-4 ZHLW	4-STSW-4	4-4 ZHBW	1/4	1/4	1.32	0.61	0.19	0.48	0.28	9/16	1/2
6-DTSW-6	600-6-6W	6-6 ZHLW	6-STSW-6	6-6 ZHBW	3/8	3/8	1.48	0.67	0.28	0.60	0.31	11/16	5/8
8-DTSW-8	810-6-8W	8-8 ZHLW	8-STSW-8	8-8 ZHBW	1/2	1/2	1.62	0.90	0.41	0.73	0.38	7/8	13/16
10-DTSW-10	-	10-10 ZHLW	10-STSW-10	10-10 ZHBW	5/8	5/8	1.65	0.96	0.50	0.92	0.44	1	15/16
12-DTSW-12	1210-6-12W1	2-12 ZHLW	12-STSW-12	12-12 ZHBW	3/4	3/4	1.71	0.96	0.63	1.04	0.44	1-1/8	1-1/16
16-DTSW-16	1610-6-16W1	6-16 ZHLW	16-STSW-16	16-16 ZHBW	1	1	2.07	1.24	0.88	1.36	0.62	1-1/2	1-3/8

NOTE: Dimensions subject to change, to be used for reference only.

- Carbon steel bodies are not plated.

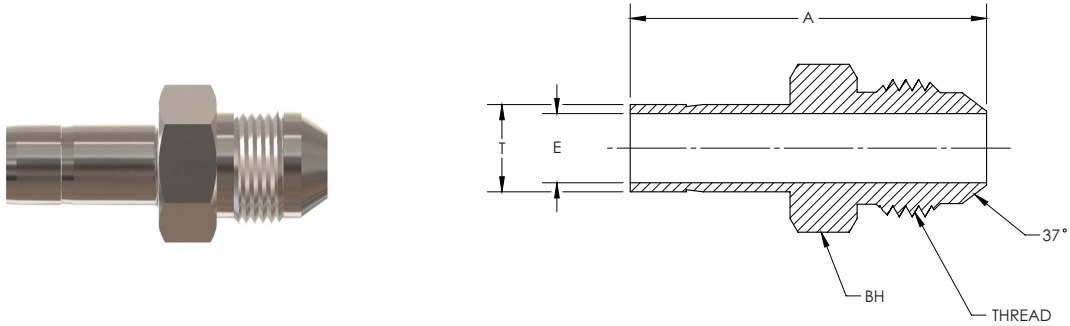


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
1-DU	100-6	1SC1	1-SU	1-1 HBZ		1/16	0.99	0.35	0.05	5/16	5/16
2-DU	200-6	2SC2	2-SU	2-2 HBZ		1/8	1.40	0.52	0.09	7/16	7/16
3-DU	300-6	3SC3	3-SU	3-3 HBZ		3/16	1.47	0.54	0.13	1/2	7/16
4-DU	400-6	4SC4	4-SU	4-4 HBZ		1/4	1.61	0.61	0.19	9/16	1/2
5-DU	500-6	5SC5	5-SU	5-5 HBZ		5/16	1.69	0.65	0.25	5/8	9/16
6-DU	600-6	6SC6	6-SU	6-6 HBZ		3/8	1.77	0.67	0.28	11/16	5/8
8-DU	810-6	8SC8	8-SU	8-8 HBZ		1/2	2.02	0.90	0.41	7/8	13/16
10-DU	1010-6	10SC10	10-SU	10-10 HBZ		5/8	2.05	0.96	0.50	1	15/16
12-DU	1210-6	12SC12	12-SU	12-12 HBZ		3/4	2.11	0.96	0.63	1-1/8	1-1/16
14-DU	1410-6	14SC14	14-SU	14-14 HBZ		7/8	2.17	1.02	0.72	1-1/4	1-3/16
16-DU	1610-6	16SC16	16-SU	16-16 HBZ		1	2.55	1.24	0.88	1-1/2	1-3/8
B-18-DU	B-1810-6	-	-	-		1-1/8	2.55	1.25	0.97	1-3/4	1-5/8
20-DU	2000-6	20SC20	-	-		1-1/4	3.63	1.62	1.09	1-7/8	1-3/4
24-DU	2400-6	24SC24	-	-		1-1/2	4.25	1.97	1.34	2-1/4	2-1/8
32-DU	3200-6	32SC32	-	-		2	5.88	2.66	1.81	3	2-3/4

NOTE: Dimensions subject to change, to be used for reference only.

DATANF

Adapter Tube to JIC Flare



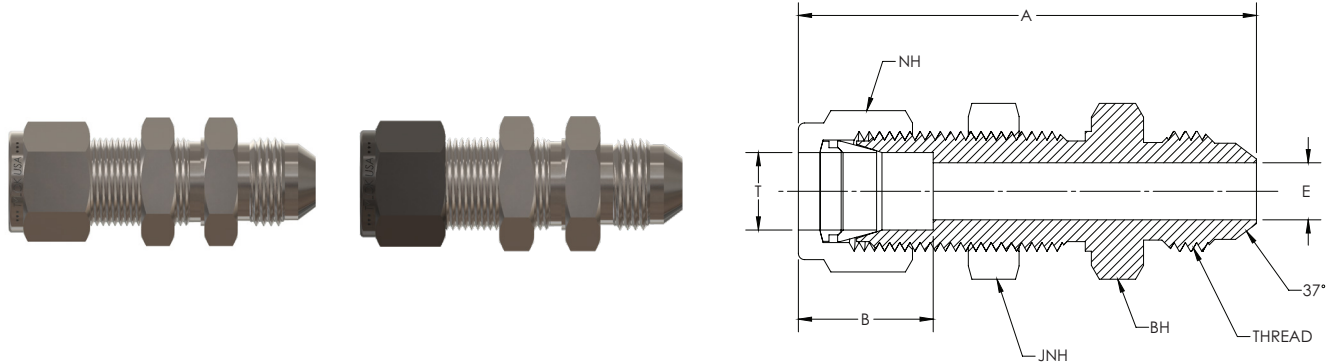
CBC PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	JIC FLARE SIZE	THREAD	A	E THRU HOLE	BH BODY HEX
4-DATANF-4	4-TA-1-4AN	1/4	1/4	7/16-20	1.46	0.17	1/2
6-DATANF-4	6-TA-1-4AN	3/8	1/4	7/16-20	1.53	0.17	1/2
6-DATANF-6	6-TA-1-6AN	3/8	3/8	9/16-18	1.56	0.27	5/8
8-DATANF-8	8-TA-1-8AN	1/2	1/2	3/4-16	1.91	0.38	13/16
12-DATANF-12	12-TA-1-12AN	3/4	3/4	1-1/16-12	2.21	0.58	1-1/8
16-DATANF-16	16-TA-1-16AN	1	1	1-5/16-12	2.58	0.80	1-3/8
20-DATANF-20-NF	20-TA-1-20AN	1-1/4	1-1/4	1-5/8-12	3.40	0.95	1-11/16

NOTE: Dimensions subject to change, to be used for reference only.

- 1/16", 1/8", and 3/16" adapters comes standard without a groove.
- 1-1/4", 1-1/2", and 2" adapters are furnished with preswaged nuts and ferrules.
- Add "-NF" to the end of any part number for adapters with nut and preswaged ferrules.
- Add "HD" for thick wall adapters with pressure ratings that match max recommended tube.

DBUANF/SBUANF

Bulkhead to JIC Flare Union

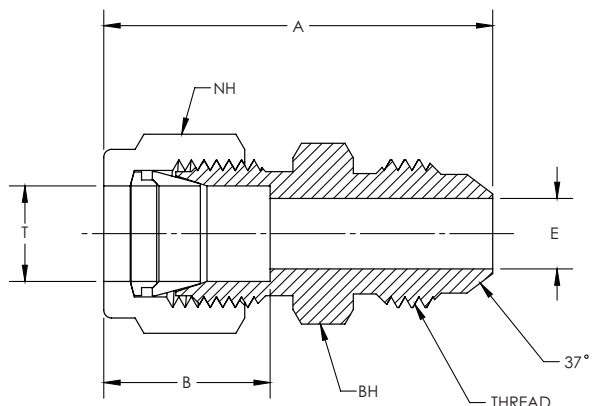
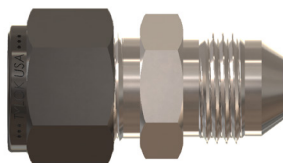
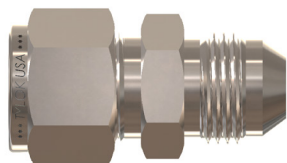


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	JIC TUBE FLARE	THREAD	A	B	E THRU HOLE	JNH JAM NUT HEX	NH NUT HEX	BH BODY HEX	PANEL HOLE	MAX PANEL THICK.
4-DBUANF-4	400-61-4AN	4XABC4	4-SBUANF-4	4-4 XH2BZ	1/4	1/4	7/16-20	2.12	0.61	0.17	5/8	9/16	5/8	29/64	29/64
6-DBUANF-6	600-61-6AN	6XABC6	6-SBUANF-6	6-6 XH2BZ	3/8	3/8	9/16-18	2.26	0.67	0.28	3/4	11/16	3/4	37/64	37/64
8-DBUANF-8	810-61-8AN	8XABC8	8-SBUANF-8	8-8 XH2BZ	1/2	1/2	3/4-16	2.59	0.90	0.39	15/16	7/8	15/16	49/64	49/64
12-DBUANF-12	1210-61-12AN	12XABC12	12-SBUANF-12	12-12 XH2BZ	3/4	3/4	1-1/16-12	3.12	0.96	0.61	1-3/16	1-1/8	1-3/16	1-1/64	1-1/64
16-DBUANF-16	1610-61-16AN	16XABC16	16-SBUANF-16	16-16 XH2BZ	1	1	1-5/6-12	3.65	1.24	0.85	1-5/8	1-1/2	1-5/8	1-21/64	1-21/64

NOTE: Dimensions subject to change, to be used for reference only.

DUANF/SUANF

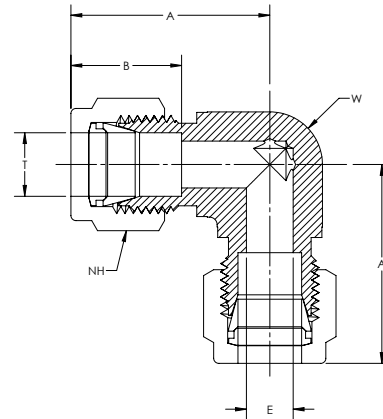
Tube to JIC Flare Union



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	JIC FLARE SIZE	THREAD	A	B	E THRU HOLE	NH NUT HEX	BH BODY HEX
2-DUANF-2	200-6-2AN	2XASC2	2-SUANF-2	2-2 XHBZ	1/8	1/8	5/16-24	1.25	0.52	0.06	7/16	7/16
2-DUANF-4	200-6-4AN	4XASC2	2-SUANF-4	4-2 XHBZ	1/8	1/4	7/16-20	1.39	0.52	0.09	7/16	1/2
4-DUANF-4	400-6-4AN	4XASC4	4-SUANF-4	4-4 XHBZ	1/4	1/4	7/16-20	1.48	0.61	0.17	9/16	1/2
5-DUANF-5	500-6-5AN	5XASC5	5-SUANF-5	5-5 XHBZ	5/16	5/16	1/2-20	1.53	0.65	0.23	5/8	9/16
5-DUANF-6	-	-	5-SUANF-6	-	5/16	3/8	9/16-18	1.54	0.65	0.23	5/8	5/8
6-DUANF-4	600-6-4AN	4XASC6	6-SUANF-4	4-6 XHBZ	3/8	1/4	7/16-20	1.56	0.67	0.17	11/16	5/8
6-DUANF-6	600-6-6AN	6XASC6	6-SUANF-6	6-6 XHBZ	3/8	3/8	9/16-18	1.56	0.67	0.30	11/16	5/8
8-DUANF-8	810-6-8AN	8XASC8	8-SUANF-8	8-8 XHBZ	1/2	1/2	3/4-16	1.80	0.90	0.39	7/8	13/16
10-DUANF-10	1010-6-10AN	10XASC10	10-SUANF-10	10-10 XHBZ	5/8	5/8	7/8-14	1.93	0.96	0.48	1	15/16
12-DUANF-12	1210-6-12AN	12XASC12	12-SUANF-12	12-12 XHBZ	3/4	3/4	1-1/16-12	2.10	0.96	0.61	1-1/8	1-1/8
16-DUANF-16	1610-6-16AN	16XASC16	16-SUANF-16	16-16 XHBZ	1	1	1-5/16-12	2.10	1.24	0.85	1-1/2	1-3/8
20-DUANF-20	2000-6-20AN	-	-	-	1-1/4	1-1/4	1-5/8-12	3.94	1.62	1.08	1-7/8	1-3/4

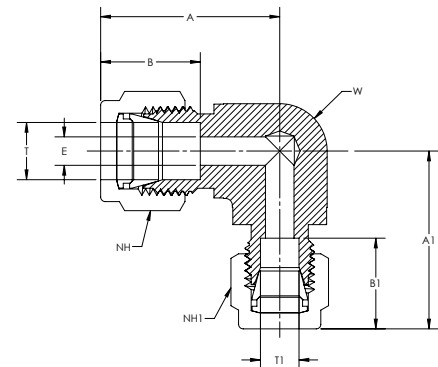
NOTE: Dimensions subject to change, to be used for reference only.

- 1/16", 1/8", and 3/16" adapters come standard without a groove.
- 1-1/4", 1-1/2", and 2" adapters are furnished with preswaged nuts and ferrules.



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	A	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
1-DELU-1	100-9	1EE1	1-SELU-1	1-1 EBZ	1/16	0.80	0.35	0.05	5/16	3/8
2-DELU-2	200-9	2EE2	2-SELU-2	2-2 EBZ	1/8	0.98	0.52	0.09	7/16	3/8
3-DELU-3	300-9	3EE3	3-SELU-3	3-3 EBZ	3/16	1.00	0.54	0.13	1/2	1/2
4-DELU-4	400-9	4EE4	4-SELU-4	4-4 EBZ	1/4	1.06	0.61	0.19	9/16	1/2
5-DELU-5	500-9	5EE5	5-SELU-5	5-5 EBZ	5/16	1.18	0.65	0.25	5/8	5/8
6-DELU-6	600-9	6EE6	6-SELU-6	6-6 EBZ	3/8	1.20	0.67	0.28	11/16	5/8
8-DELU-8	810-9	8EE8	8-SELU-8	8-8 EBZ	1/2	1.42	0.90	0.41	7/8	13/16
10-DELU-10	1010-9	10EE10	10-SELU-10	10-10 EBZ	5/8	1.50	0.96	0.50	1	15/16
12-DELU-12	1210-9	12EE12	12-SELU-12	12-12 EBZ	3/4	1.57	0.96	0.63	1-1/8	1-1/16
14-DELU-14	1410-9	14EE14	14-SELU-14	14-14 EBZ	7/8	1.76	1.02	0.72	1-1/4	1-3/8
16-DELU-16	1610-9	16EE16	16-SELU-16	16-16 EBZ	1	1.93	1.24	0.88	1-1/2	1-3/8
20-DELU-20	2000-9	20EE20	-	-	1-1/4	2.67	1.62	1.09	1-7/8	1-11/16
24-DELU-24	2400-9	24EE24	-	-	1-1/2	3.10	1.97	1.34	2-1/4	2
32-DELU-32	3200-9	32EE32	-	-	2	4.22	2.66	1.81	3	2-3/4

NOTE: Dimensions subject to change, to be used for reference only.

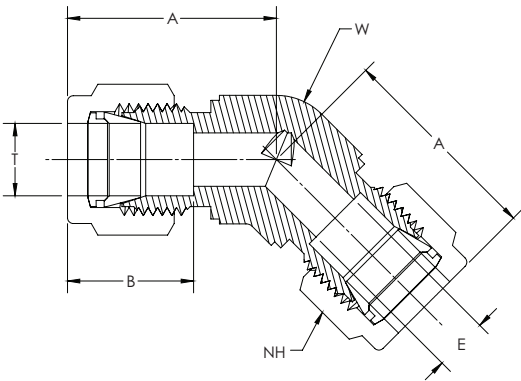


CBC PART NUMBER	INTERCHANGES WITH	CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	A1	B	B1	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
2-DELU-1	-	2-SELU-1	-	1/8	1/16	0.98	0.81	0.52	0.35	0.05	5/16	1/2
4-DELU-2	-	4-SELU-2	4-2 EBZ	1/4	1/8	1.06	0.98	0.61	0.52	0.09	7/16	1/2
6-DELU-4	600-9-4	6-SELU-4	6-4 EBZ	3/8	1/4	1.20	1.18	0.67	0.61	0.13	9/16	5/8
8-DELU-4	810-9-4	8-SELU-4	8-4 EBZ	1/2	1/4	1.42	1.31	0.90	0.61	0.19	9/16	13/16
8-DELU-6	-	8-SELU-6	8-6 EBZ	1/2	3/8	1.42	1.29	0.90	0.67	0.28	11/16	13/16

NOTE: Dimensions subject to change, to be used for reference only.

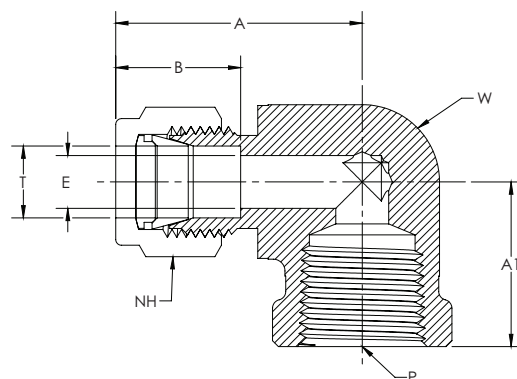
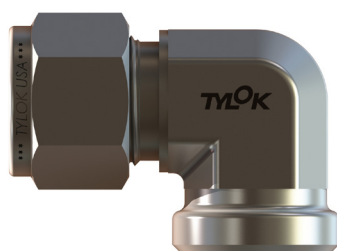
DELU45/SELU45

Union 45° Elbow



CBC PART NUMBER	INTERCHANGES WITH	CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	A	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
4-DELU45-4	400-95	4-SELU45-4	-	1/4	0.97	0.61	0.19	9/16	1/2
6-DELU45-6	-	6-SELU45-6	-	3/8	1.11	0.67	0.28	11/16	5/8
8-DELU45-8	810-95	8-SELU45-8	-	1/2	1.26	0.90	0.41	7/8	13/16
12-DELU45-12	-	12-SELU45-12	-	3/4	1.33	0.96	0.63	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.

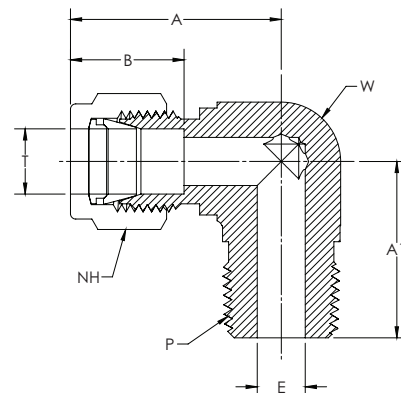


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	A1	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
2-DFE-2	200-8-2	2FEL2N	2-SFE-2	2-2 DBZ	1/8	1/8	0.98	0.75	0.52	0.09	7/16	1/2
B-2-DFE-2	200-8-2	2FEL2N	B-2-SFE-2	2-2 DBZ	1/8	1/8	1.05	0.75	0.52	0.09	7/16	5/8
2-DFE-4	200-8-4	2FEL4N	2-SFE-4	2-4 DBZ	1/8	1/4	1.09	0.88	0.52	0.09	7/16	11/16
B-2-DFE-4	200-8-4	2FEL4N	B-2-SFE-4	2-4 DBZ	1/8	1/4	1.16	0.88	0.52	0.09	7/16	13/16
4-DFE-2	400-8-2	4FEL2N	4-SFE-2	4-2 DBZ	1/4	1/8	1.06	0.75	0.61	0.19	9/16	1/2
B-4-DFE-2	400-8-2	4FEL2N	B-4-SFE-2	4-2 DBZ	1/4	1/8	1.14	0.75	0.61	0.19	9/16	5/8
4-DFE-4	400-8-4	4FEL4N	4-SFE-4	4-4 DBZ	1/4	1/4	1.17	0.88	0.61	0.19	9/16	11/16
B-4-DFE-4	400-8-4	4FEL4N	B-4-SFE-4	4-4 DBZ	1/4	1/4	1.25	0.88	0.61	0.19	9/16	13/16
4-DFE-6	400-8-6	4FEL6N	4-SFE-6	4-6 DBZ	1/4	3/8	1.25	0.88	0.61	0.19	9/16	13/16
4-DFE-8	400-8-8	4FEL8N	4-SFE-8	4-8 DBZ	1/4	1/2	1.40	1.13	0.61	0.19	9/16	1-1/16
5-DFE-2	500-8-2	5FEL2N	5-SFE-2	5-2 DBZ	5/16	1/8	1.18	0.75	0.65	0.25	5/8	5/8
5-DFE-4	500-8-4	5FEL4N	5-SFE-4	5-4 DBZ	5/16	1/4	1.22	0.88	0.65	0.25	5/8	11/16
B-5-DFE-4	500-8-4	5FEL4N	B-5-SFE-4	5-4 DBZ	5/16	1/4	1.30	0.88	0.65	0.25	5/8	13/16
6-DFE-2	600-8-2	6FEL2N	6-SFE-2	6-2 DBZ	3/8	1/8	1.20	0.75	0.67	0.28	11/16	5/8
6-DFE-4	600-8-4	6FEL4N	6-SFE-4	6-4 DBZ	3/8	1/4	1.24	0.88	0.67	0.28	11/16	11/16
B-6-DFE-4	600-8-4	6FEL4N	B-6-SFE-4	6-4 DBZ	3/8	1/4	1.32	0.88	0.67	0.28	11/16	13/16
6-DFE-6	600-8-6	6FEL6N	6-SFE-6	6-6 DBZ	3/8	3/8	1.32	0.88	0.67	0.28	11/16	13/16
6-DFE-8	600-8-8	6FEL8N	6-SFE-8	6-8 DBZ	3/8	1/2	1.47	1.13	0.67	0.28	11/16	1-1/16
8-DFE-2	-		8-SFE-2		1/2	1/8	1.42	0.88	0.90	0.33	7/8	13/16
8-DFE-4	810-8-4	8FEL4N	8-SFE-4	8-4 DBZ	1/2	1/4	1.42	0.88	0.90	0.41	7/8	13/16
8-DFE-6	810-8-6	8FEL6N	8-SFE-6	8-6 DBZ	1/2	3/8	1.42	0.88	0.90	0.41	7/8	13/16
8-DFE-8	810-8-8	8FEL8N	8-SFE-8	8-8 DBZ	1/2	1/2	1.57	1.13	0.90	0.41	7/8	1-1/16
8-DFE-12	810-8-12		8-SFE-12		1/2	3/4	1.76	1.25	0.90	0.41	7/8	1-3/8
10-DFE-6	1010-8-6	10FEL6N	10-SFE-6	10-6 DBZ	5/8	3/8	1.50	0.88	0.96	0.50	1	15/16
10-DFE-8	1010-8-8	10FEL8N	10-SFE-8	10-8 DBZ	5/8	1/2	1.57	1.13	0.96	0.50	1	1-1/16
12-DFE-8	1210-8-8	12FEL8N	12-SFE-8	12-8 DBZ	3/4	1/2	1.57	1.13	0.96	0.63	1-1/8	1-1/16
12-DFE-12	1210-8-12	12FEL12N	12-SFE-12	12-12 DBZ	3/4	3/4	1.76	1.25	0.96	0.63	1-1/8	1-3/8
14-DFE-12	1410-8-12	14FEL12N	14-SFE-12	14-12 DBZ	7/8	3/4	1.76	1.25	1.02	0.72	1-1/4	1-3/8
16-DFE-16	1610-8-16	16FEL16N	16-SFE-16	16-16 DBZ	1	1	2.12	1.50	1.24	0.88	1-1/2	1-5/8

NOTE: Dimensions subject to change, to be used for reference only.

DME/SME

Male Elbow

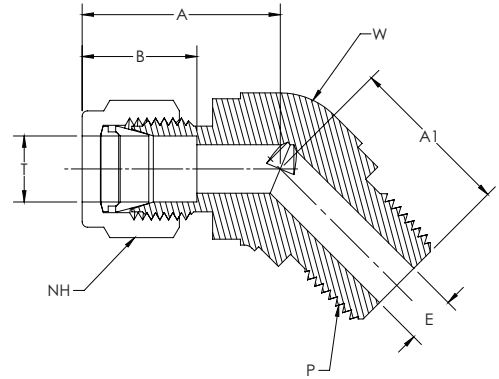
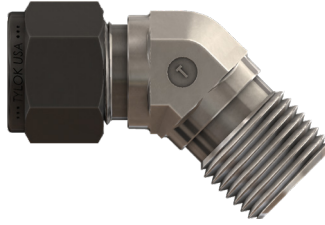
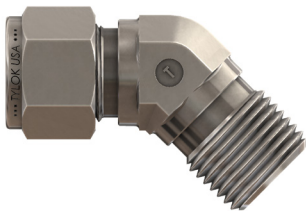


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	A1	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
1-DME-1	100-2-1	1MSEL1N	1-SME-1	1-1 CBZ	1/16	1/16	0.80	0.74	0.35	0.05	5/16	1/2
1-DME-2	100-2-2	1MSEL2N	1-SME-2	1-2 CBZ	1/16	1/8	0.80	0.74	0.35	0.05	5/16	1/2
2-DME-1	200-2-1	2MSEL1N	2-SME-1	2-1 CBZ	1/8	1/16	0.98	0.74	0.52	0.09	7/16	1/2
2-DME-2	200-2-2	2MSEL2N	2-SME-2	2-2 CBZ	1/8	1/8	0.98	0.74	0.52	0.09	7/16	1/2
2-DME-4	200-2-4	2MSEL4N	2-SME-4	2-4 CBZ	1/8	1/4	0.98	0.93	0.52	0.09	7/16	1/2
2-DME-6	200-2-6	-	2-SME-6	-	1/8	3/8	1.34	1.03	0.52	0.09	7/16	11/16
3-DME-2	300-2-2	3MSEL2N	3-SME-2	3-2 CBZ	3/16	1/8	1.00	0.74	0.54	0.13	1/2	1/2
3-DME-4	300-2-4	3MSEL4N	3-SME-4	3-4 CBZ	3/16	1/4	1.00	0.93	0.54	0.13	1/2	1/2
4-DME-1	400-2-1	4MSEL1N	4-SME-1	4-1 CBZ	1/4	1/16	1.06	0.74	0.61	0.13	9/16	1/2
4-DME-2	400-2-2	4MSEL2N	4-SME-2	4-2 CBZ	1/4	1/8	1.06	0.74	0.61	0.19	9/16	1/2
4-DME-4	400-2-4	4MSEL4N	4-SME-4	4-4 CBZ	1/4	1/4	1.06	0.93	0.61	0.19	9/16	1/2
4-DME-6	400-2-6	4MSEL6N	4-SME-6	4-6 CBZ	1/4	3/8	1.17	1.03	0.61	0.19	9/16	11/16
4-DME-8	400-2-8	4MSEL8N	4-SME-8	4-8 CBZ	1/4	1/2	1.25	1.30	0.61	0.19	9/16	13/16
4-DME-12	400-2-12	-	4-SME-12	-	1/4	3/4	1.40	1.45	0.61	0.19	9/16	1-1/16
5-DME-2	500-2-2	5MSEL2N	5-SME-2	5-2 CBZ	5/16	1/8	1.18	0.82	0.65	0.19	5/8	5/8
5-DME-4	500-2-4	5MSEL4N	5-SME-4	5-4 CBZ	5/16	1/4	1.18	1.00	0.65	0.25	5/8	5/8
5-DME-6	500-2-6	-	5-SME-6	-	5/16	3/8	1.22	1.03	0.65	0.25	5/8	11/16
6-DME-2	600-2-2	6MSEL2N	6-SME-2	6-2 CBZ	3/8	1/8	1.20	0.82	0.67	0.19	11/16	5/8
6-DME-4	600-2-4	6MSEL4N	6-SME-4	6-4 CBZ	3/8	1/4	1.20	1.00	0.67	0.28	11/16	5/8
6-DME-6	600-2-6	6MSEL6N	6-SME-6	6-6 CBZ	3/8	3/8	1.24	1.03	0.67	0.28	11/16	11/16
6-DME-8	600-2-8	6MSEL8N	6-SME-8	6-8 CBZ	3/8	1/2	1.32	1.30	0.67	0.28	11/16	13/16
6-DME-12	600-2-12	6MSEL12N	6-SME-12	6-12 CBZ	3/8	3/4	1.47	1.45	0.67	0.28	11/16	1-1/16
6-DME-16	600-2-16	-	6-SME-16	-	3/8	1	1.65	1.83	0.67	0.28	11/16	1-3/8
8-DME-2	810-2-2	-	8-SME-2	-	1/2	1/8	1.42	0.92	0.90	0.19	7/8	13/16
8-DME-4	810-2-4	8MSEL4N	8-SME-4	8-4 CBZ	1/2	1/4	1.42	1.11	0.90	0.28	7/8	13/16
8-DME-6	810-2-6	8MSEL6N	8-SME-6	8-6 CBZ	1/2	3/8	1.42	1.11	0.90	0.38	7/8	13/16
8-DME-8	810-2-8	8MSEL8N	8-SME-8	8-8 CBZ	1/2	1/2	1.42	1.30	0.90	0.41	7/8	13/16
8-DME-12	810-2-12	8MSEL12N	8-SME-12	8-12 CBZ	1/2	3/4	1.57	1.45	0.90	0.41	7/8	1-1/16
8-DME-16	810-2-16	-	8-SME-16	-	1/2	1	1.76	1.83	0.90	0.41	7/8	1-3/8
10-DME-4	1010-2-4	-	10-SME-4	-	5/8	1/4	1.50	1.19	0.96	0.28	1	15/16
10-DME-6	1010-2-6	10MSEL6N	10-SME-6	10-6 CBZ	5/8	3/8	1.50	1.19	0.96	0.38	1	15/16
10-DME-8	1010-2-8	10MSEL8N	10-SME-8	10-8 CBZ	5/8	1/2	1.50	1.38	0.96	0.47	1	15/16
10-DME-12	1010-2-12	10MSEL12N	10-SME-12	10-12 CBZ	5/8	3/4	1.57	1.45	0.96	0.50	1	1-1/16
12-DME-4	1210-2-4	-	12-SME-4	-	3/4	1/4	1.57	1.25	0.96	0.28	1-1/8	1-1/16
12-DME-6	1210-2-6	-	12-SME-6	-	3/4	3/8	1.57	1.25	0.96	0.38	1-1/8	1-1/16
12-DME-8	1210-2-8	12MSEL8N	12-SME-8	12-8 CBZ	3/4	1/2	1.57	1.45	0.96	0.47	1-1/8	1-1/16
12-DME-12	1210-2-12	12MSEL12N	12-SME-12	12-12 CBZ	3/4	3/4	1.57	1.45	0.96	0.63	1-1/8	1-1/16
12-DME-16	1210-2-16	12MSEL16N	12-SME-16	-	3/4	1	1.76	1.83	0.96	0.63	1-1/8	1-3/8
14-DME-8	1410-2-8	14MSEL8N	14-SME-8	-	7/8	1/2	1.76	1.64	1.02	0.47	1-1/4	1-3/8
14-DME-12	1410-2-12	14MSEL12N	14-SME-12	14-12 CBZ	7/8	3/4	1.76	1.64	1.02	0.63	1-1/4	1-3/8
16-DME-8	1610-2-8	16MSEL8N	16-SME-8	-	1	1/2	1.95	1.64	1.24	0.47	1-1/2	1-3/8
16-DME-12	1610-2-12	16MSEL12N	16-SME-12	16-12 CBZ	1	3/4	1.95	1.64	1.24	0.63	1-1/2	1-3/8
16-DME-16	1610-2-16	16MSEL16N	16-SME-16	16-16 CBZ	1	1	1.95	1.83	1.24	0.88	1-1/2	1-3/8
20-DME-20	2000-2-20	20MSEL20N	-	-	1-1/4	1-1/4	2.67	2.00	1.62	1.09	1-7/8	1-11/16
24-DME-24	2400-2-24	24MSEL24N	-	-	1-1/2	1-1/2	3.10	2.25	1.97	1.34	2-1/4	2

NOTE: Dimensions subject to change, to be used for reference only.

DME45/SME45

Male 45° Elbow

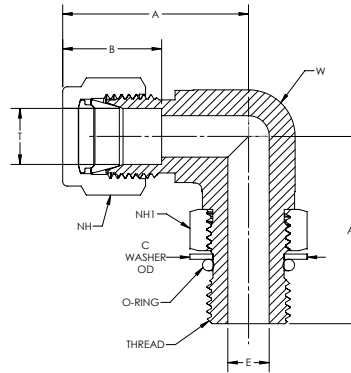


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	A1	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
4-DME45-2	400-5-2	4MVEL2N	4-SME45-2	4-2 VBZ	1/4	1/8	0.97	0.65	0.61	0.19	9/16	1/2
4-DME45-4	400-5-4	4MVEL4N	4-SME45-4	4-4 VBZ	1/4	1/4	0.97	0.83	0.61	0.19	9/16	1/2
6-DME45-4	600-5-4	6MVEL4N	6-SME45-4	6-4 VBZ	3/8	1/4	1.11	0.90	0.67	0.28	11/16	5/8
6-DME45-6	600-5-6	6MVEL6N	6-SME45-6	6-6 VBZ	3/8	3/8	1.15	0.95	0.67	0.28	11/16	13/16
8-DME45-8	810-5-8	-	8-SME45-8	-	1/2	1/2	1.26	1.14	0.90	0.41	7/8	13/16

NOTE: Dimensions subject to change, to be used for reference only.

DME-STB/SME-STB

SAE Straight Thread Positionable Elbow



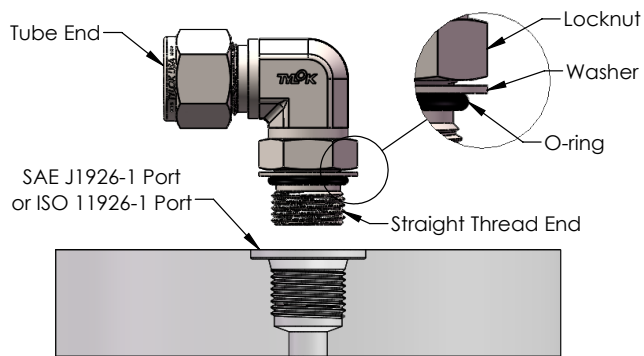
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	THREAD	A	A1	B	C	E THRU HOLE	NH NUT HEX	NH1 NUT HEX	W BODY WIDTH
4-DME-4-STB	400-2-4ST	4M5SEL4	4-SME-4-STB	4-4 C5BZ	1/4	7/16-20	1.12	1.12	0.61	0.65	0.17	9/16	9/16	1/2
4-DME-6-STB	400-2-6ST	-	4-SME-6-STB	-	1/4	9/16-18	1.20	1.27	0.61	0.79	0.19	9/16	11/16	5/8
5-DME-5-STB	500-2-5ST	-	5-SME-5-STB	-	5/16	1/2-20	1.19	1.27	0.65	0.72	0.23	5/8	5/8	5/8
6-DME-4-STB	600-2-4ST	-	6-SME-4-STB	-	3/8	7/16-20	1.26	1.27	0.67	0.65	0.17	11/16	9/16	5/8
6-DME-6-STB	600-2-6ST	6M5SEL6	6-SME-6-STB	6-6 C5BZ	3/8	9/16-18	1.26	1.27	0.67	0.79	0.28	11/16	11/16	5/8
6-DME-8-STB	600-2-8ST	-	6-SME-8-STB	-	3/8	3/4-16	1.37	1.49	0.67	1.01	0.28	11/16	7/8	13/16
8-DME-6-STB	810-2-6ST	-	8-SME-6-STB	-	1/2	9/16-18	1.48	1.49	0.90	0.79	0.30	7/8	11/16	13/16
8-DME-8-STB	810-2-8ST	8M5SEL8	8-SME-8-STB	8-8 C5BZ	1/2	3/4-16	1.48	1.49	0.90	1.01	0.39	7/8	7/8	13/16
10-DME-8-STB	-	-	10-SME-8-STB	-	5/8	3/4-16	1.63	1.75	0.96	1.01	0.39	1	7/8	1-1/16
10-DME-10-STB	1010-2-10ST	-	10-SME-10-STB	-	5/8	7/8-14	1.63	1.83	0.96	1.16	0.48	1	1	1-1/16
10-DME-12-STB	-	-	10-SME-12-STB	-	5/8	1-1/16-12	1.63	1.92	0.96	1.44	0.50	1	1-1/4	1-1/16
12-DME-8-STB	-	-	12-SME-8-STB	-	3/4	3/4-16	1.63	1.75	0.96	1.01	0.39	1-1/8	7/8	1-1/16
12-DME-12-STB	1210-2-12ST	12M5SEL12	12-SME-12-STB	12-12-C5BZ	3/4	1-1/16-12	1.63	1.92	0.96	1.44	0.61	1-1/8	1-1/4	1-1/16
16-DME-16-STB	-	16M5SEL16	16-SME-16-STB	16-16 C5BZ	1	1-5/16-12	1.99	2.11	1.24	1.73	0.84	1-1/2	1-1/2	1-3/8
20-DME-20-STB	2000-2-20ST	-	-	-	1-1/4	1-5/8-12	2.67	2.29	1.62	2.16	1.08	1-7/8	1-7/8	1-11/16
24-DME-24-STB	2400-2-24ST	24M5SEL24	-	-	1-1/2	1-7/8-12	3.07	2.45	1.97	2.45	1.31	2-1/4	2-1/8	2

NOTE: Dimensions subject to change, to be used for reference only.

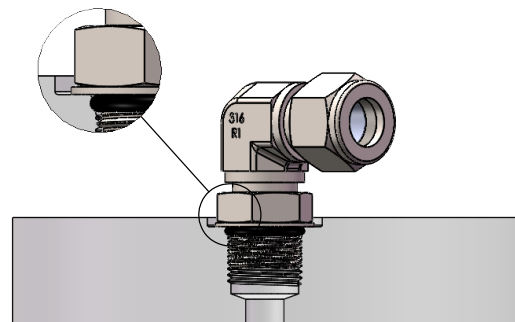
- Straight thread connectors adapt to SAE J1926-1 and ISO 1126-1 ports.
- Parts are supplied with FKM Fluorocarbon O-Rings. Other options are available upon request.
- Standard straight thread connectors are designed to withstand SAE J1926-3 pressure ratings.
- Add "-HD" suffix for straight thread connectors designed to withstand SAE J1926-2 pressure ratings.

INSTALLATION INSTRUCTIONS

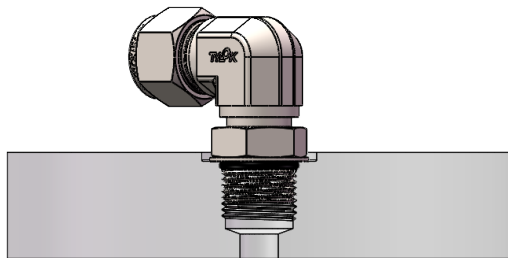
for Positionable STB



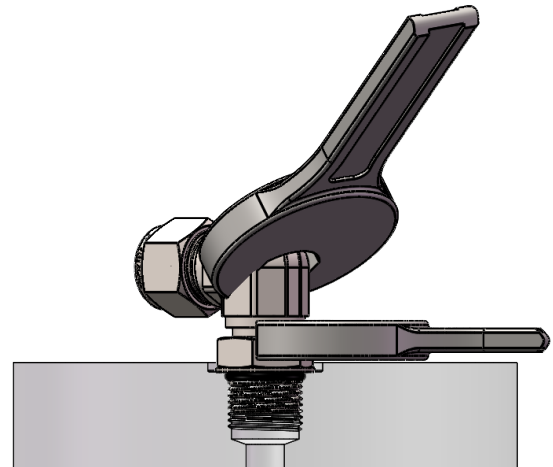
1. Lubricate O-Ring with system compatible lubricant. FKM O-rings are standard, other options are available upon request.



2. Screw the Straight Thread End into Port until the washer contacts the face of the port and the O-ring squeezes into the tapered section.



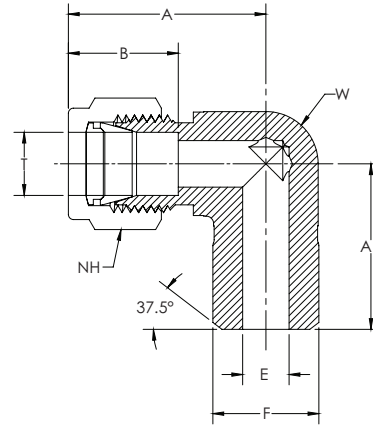
3. Unscrew the fitting (1 turn max) until the tube end is facing the desired direction.



4. Hold the fitting in place and tighten the locknut into place until the washer is properly compressed into the tapered port. Consult SAE J1926 specifications for recommended installation torques.

DTBWE/STBWE

Tube to Pipe Butt Weld Elbow



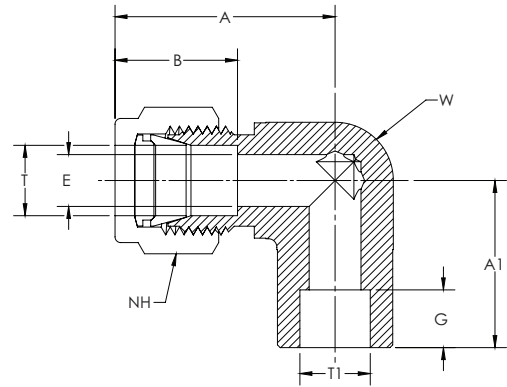
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE OD	P PIPE SIZE	A	A1	B	F	E THRU HOLE	NH1 NUT HEX	W WRENCH FLAT
4-DTBWE-2	400-2-2W	4-1/8 ZELW2	4-STBWE-2	4-1/8 ZEBW2	1/4	1/4	1.06	0.90	0.61	0.405	0.19	9/16	1/2
4-DTBWE-4	400-2-4W	4-1/4 ZELW2	4-STBWE-4	4-1/4 ZEBW2	1/4	1/4	1.06	0.90	0.61	0.540	0.19	9/16	1/2
6-DTBWE-4	600-2-4W	6-1/4 ZELW2	6-STBWE-4	6-1/4 ZEBW2	3/8	3/8	1.20	1.00	0.67	0.540	0.28	11/16	5/8
8-DTBWE-8	810-2-8W	8-1/2 ZELW2	8-STBWE-8	8-1/2 ZEBW2	1/2	1/2	1.42	1.31	0.90	0.840	0.41	7/8	13/16
12-DTBWE-12	1210-2-12W	12-3/4 ZELW2	12-STBWE-12	12-3/4 ZEBW2	3/4	3/4	1.57	1.48	0.96	1.050	0.63	1-1/8	1-1/16
16-DTBWE-16	1610-2-16W	16-1 ZELW2	16-STBWE-16	16-1 ZEBW2	1	1	1.94	1.84	1.24	1.315	0.88	1-1/2	1-3/8

NOTE: Dimensions subject to change, to be used for reference only.

- Wall Thickness at weld end is based on schedule 80 pipe.
- Fittings may have a larger ID on weld end.
- Carbon Steel bodies are not plated.

DTSWE/STSWE

Tube to Tube Socket Weld Elbow



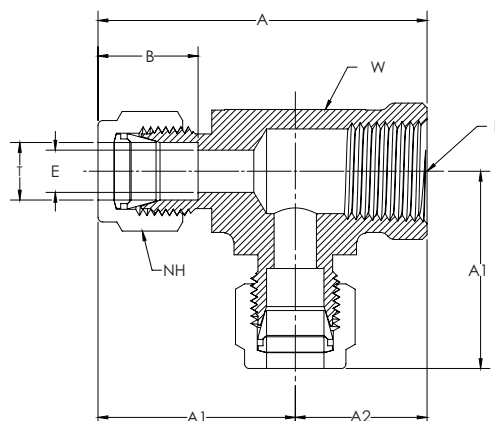
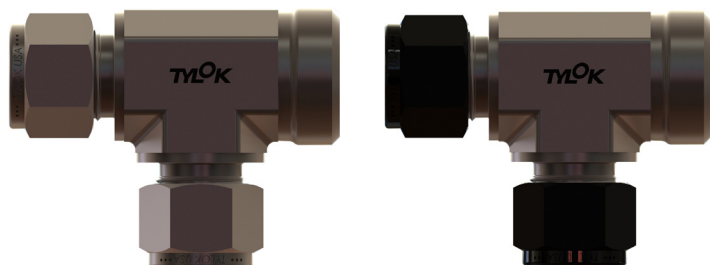
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE OD	P PIPE SIZE	A	A1	B	G	H	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
4-DTSWE-4	400-9-4W	4-4 ZELW	4-STSW-4	4-4 ZEBW		1/4	1/4	1.06	0.77	0.61	0.28	0.50	0.19	9/16	1/2
6-DTSWE-6	600-9-6W	6-6 ZELW	6-STSW-6	6-6 ZEBW		3/8	3/8	1.20	0.91	0.67	0.31	0.63	0.28	11/16	5/8
8-DTSWE-8	810-9-8W	8-8 ZELW	8-STSW-8	8-8 ZEBW		1/2	1/2	1.42	1.02	0.90	0.38	0.81	0.41	7/8	13/16
12-DTSWE-12	1210-9-12W	12-12 ZELW	12-STSW-12	12-12 ZEBW		3/4	3/4	1.57	1.17	0.96	0.44	1.06	0.63	1-1/8	1-1/16
16-DTSWE-16	1610-9-16W	16-16 ZELW	16-STSW-16	16-16 ZEBW		1	1	1.93	1.44	0.88	0.62	1.38	0.88	1-1/2	1-3/8

NOTE: Dimensions subject to change, to be used for reference only.

- Carbon Steel bodies are not plated.

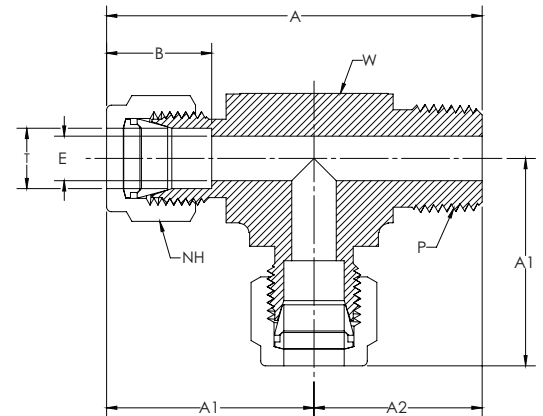
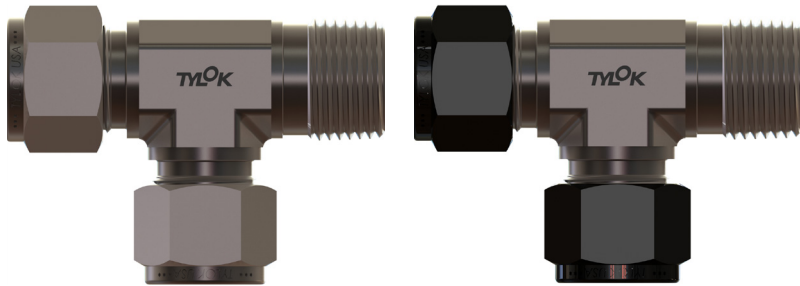
DTFT/STFT

Female Run Tee



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	A1	A2	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
2-DTFT-2	200-3TFT	2FRT2N	2-STFT-2	2-2-2 MBZ	1/8	1/8	1.80	1.05	0.75	0.52	0.09	7/16	5/8
4-DTFT-2	400-3TFT	4FRT2N	4-STFT-2	4-2-4 MBZ	1/4	1/8	1.89	1.14	0.75	0.61	0.19	9/16	5/8
4-DTFT-4	400-3-4TFT	4FRT4N	4-STFT-4	4-4-4 MBZ	1/4	1/4	2.13	1.25	0.88	0.61	0.19	9/16	13/16
6-DTFT-4	600-3TFT	6FRT4N	6-STFT-4	6-4-6 MBZ	3/8	1/4	2.19	1.32	0.88	0.67	0.28	11/16	13/16
6-DTFT-6	600-3-3TFT	-	6-STFT-6	-	3/8	3/8	2.19	1.32	0.88	0.67	0.28	11/16	13/16
B-6-DTFT-6	600-3-3TFT	-	B-6-STFT-6	-	3/8	3/8	2.30	1.43	0.88	0.67	0.28	11/16	1
8-DTFT-4	-	8FRT4N	8-STFT-4	8-4-8 MBZ	1/2	1/4	2.30	1.42	0.88	0.90	0.41	7/8	13/16
8-DTFT-6	810-3TFT	8FRT6N	8-STFT-6	8-6-8 MBZ	1/2	3/8	2.30	1.42	0.88	0.90	0.41	7/8	13/16
B-8-DTFT-6	810-3TFT	8FRT6N	B-8-STFT-6	8-6-8 MBZ	1/2	3/8	2.57	1.57	1.00	0.90	0.41	7/8	1-1/16
8-DTFT-8	810-3-3TFT	8FRT6N	8-STFT-8	8-8-8 MBZ	1/2	1/2	2.70	1.57	1.13	0.90	0.41	7/8	1-1/16
10-DTFT-8	-	10FRT8N	10-STFT-8	10-8-10 MBZ	5/8	1/2	2.69	1.57	1.13	0.96	0.50	1	1-1/16
12-DTFT-12	1210-3TFT	12FRT12N	12-STFT-12	12-12-12 MBZ	3/4	3/4	3.01	1.76	1.25	0.96	0.63	1-1/8	1-3/8
16-DTFT-12	1610-3-12TFT	16FRT12N	16-STFT-12	16-12-16 MBZ	1	3/4	3.20	1.95	1.25	1.24	0.88	1-1/2	1-3/8
16-DTFT-16	1610-3TFT	16FRT16N	16-STFT-16	16-16-16 MBZ	1	1	3.62	2.12	1.50	1.24	0.88	1-1/2	1-5/8

NOTE: Dimensions subject to change, to be used for reference only.

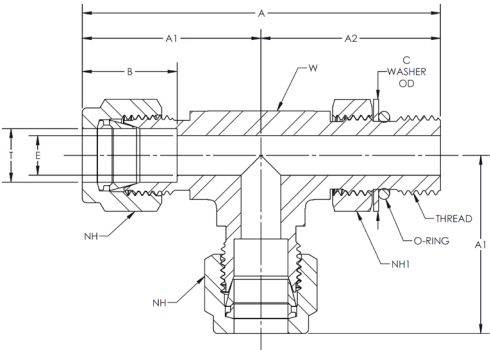
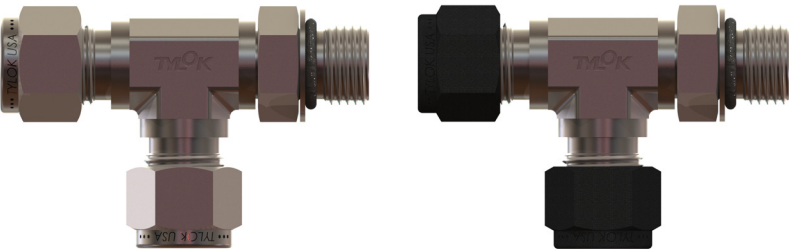


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	A1	A2	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
2-DTMT-2	200-3TMT	2MRT2N	2-STMT-2	2-2-2 RBZ	1/8	1/8	1.72	0.98	0.74	0.52	0.09	7/16	1/2
2-DTMT-4	200-3-4TMT	2MRT4N	2-STMT-4	2-4-2 RBZ	1/8	1/4	1.99	1.05	0.94	0.52	0.09	7/16	5/8
4-DTMT-2	400-3TMT	4MRT2N	4-STMT-2	4-2-4 RBZ	1/4	1/8	1.81	1.06	0.74	0.61	0.19	9/16	1/2
4-DTMT-4	400-3-4TMT	4MRT4N	4-STMT-4	4-4-4 RBZ	1/4	1/4	2.08	1.14	0.94	0.61	0.19	9/16	5/8
5-DTMT-2	500-3TMT	5MRT2N	5-STMT-2	5-2-5 RBZ	5/16	1/8	2.01	1.19	0.82	0.65	0.19	5/8	5/8
6-DTMT-4	600-3TMT	6MRT4N	6-STMT-4	6-4-6 RBZ	3/8	1/4	2.15	1.21	0.94	0.67	0.28	11/16	5/8
6-DTMT-6	600-3-6TMT	6MRT6N	6-STMT-6	6-6-6 RBZ	3/8	3/8	2.38	1.32	1.06	0.67	0.28	11/16	13/16
8-DTMT-6	810-3TMT	8MRT6N	8-STMT-6	8-6-8 RBZ	1/2	3/8	2.48	1.42	1.06	0.90	0.41	7/8	13/16
8-DTMT-8	810-3-3TMT	8MRT8N	8-STMT-8	8-8-8 RBZ	1/2	1/2	2.72	1.42	1.30	0.90	0.41	7/8	13/16
B-8-DTMT-8	810-3-3TMT	8MRT8N	B-8-STMT-8	8-8-8 RBZ	1/2	1/2	2.95	1.57	1.38	0.90	0.41	7/8	1-1/16
10-DTMT-8	1010-3TMT	10MRT8N	10-STMT-8	10-8-10 RBZ	5/8	1/2	2.94	1.57	1.38	0.96	0.47	1	1-1/16
12-DTMT-12	1210-3TMT	12MRT12N	12-STMT-12	12-12-12 RBZ	3/4	3/4	2.95	1.57	1.38	0.93	0.63	1-1/8	1-1/16
14-DTMT-6	-	-	14-STMT-6	-	7/8	3/8	3.21	1.76	1.45	1.02	0.38	1-1/4	1-3/8
14-DTMT-8	-	-	14-STMT-8	-	7/8	1/2	3.26	1.76	1.50	1.02	0.47	1-1/4	1-3/8

NOTE: Dimensions subject to change, to be used for reference only.

DTMT-STB/STMT-STB

Positionable Run Tee, SAE Straight Thread



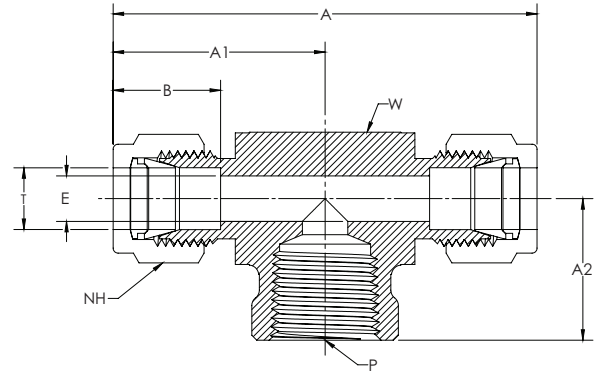
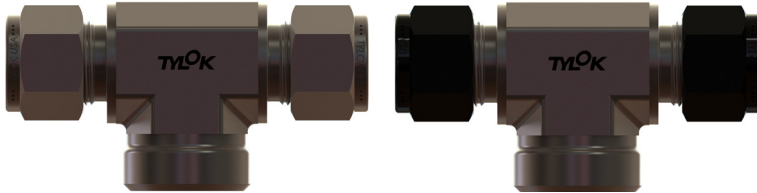
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	THREAD	A	A1	A2	B	C	E THRU HOLE	NH NUT HEX	NH1 NUT HEX	W WRENCH FLAT
4-DTMT-4-STB	400-3TST	4M5RT4	4-STMT-4-STB	4-4-4 R5BZ	4	7/16/20	2.24	1.12	1.12	0.61	0.65	0.19	9/16	9/16	1/2
6-DTMT-6-STB	600-3TST	6M5RT6	6-STMT-6-STB	6-6-6 R5BZ	6	9/16-18	2.53	1.26	1.27	0.67	0.79	0.28	11/16	11/16	5/8
8-DTMT-8-STB	810-3TST	8M5RT8	8-STMT-8-STB	8-8-8 R5BZ	8	3/4-16	2.97	1.48	1.49	0.90	1.01	0.41	7/8	7/8	5/8

NOTE: Dimensions subject to change, to be used for reference only.

- Standard O-ring material is FKM. Other options are available upon request.
- Adapts to SAE J1926-1 and ISO 11926-1 straight thread boss.

DTTF/STTF

Female Branch Tee

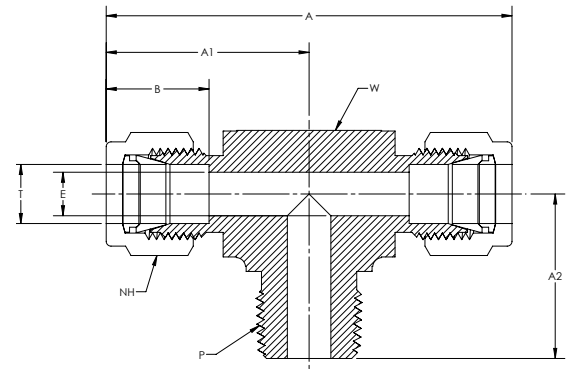


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	A1	A2	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
2-DTTF-2	200-3TTF	2FBT2N	2-STTF-2	2-2-2 OBZ	1/8	1/8	2.12	1.06	0.75	0.52	0.09	7/16	5/8
4-DTTF-2	400-3TTF	4FBT2N	4-STTF-2	4-4-2 OBZ	1/4	1/8	2.28	1.14	0.75	0.61	0.19	9/16	5/8
4-DTTF-4	400-3-4TTF	4FBT4N	4-STTF-4	4-4-4 OBZ	1/4	1/4	2.51	1.25	0.88	0.61	0.19	9/16	13/16
4-DTTF-6	-	-	4-STTF-6	-	1/4	3/8	2.50	1.25	0.88	0.61	0.19	9/16	13/16
B-4 DTTF-6	-	-	B-4 STTF-6	-	1/4	3/8	2.78	1.39	1.13	0.61	0.19	9/16	1-1/16
4-DTTF-8	-	-	4-STTF-8	-	1/4	1/2	2.84	1.42	1.12	0.61	0.19	9/16	1-1/16
5-DTTF-2	-	5FBT2N	5-STTF-2	5-5-2 OBZ	5/16	1/8	2.38	1.19	0.75	0.65	0.25	5/8	5/8
6-DTTF-4	600-3TTF	6FBT4N	6-STTF-4	6-6-4 OBZ	3/8	1/4	2.62	1.31	0.88	0.67	0.28	11/16	13/16
6-DTTF-6	600-3-6TTF	-	6-STTF-6	-	3/8	3/8	2.62	1.31	0.88	0.67	0.28	11/16	13/16
B-6-DTTF-6	B-600-3-6TTF	-	B-6-STTF-6	-	3/8	3/8	2.84	1.42	1.12	0.67	0.28	11/16	1-1/16
6-DTTF-8	600-3-8TTF	-	6-STTF-8	-	3/8	1/2	2.84	1.42	1.12	0.67	0.28	11/16	1-1/16
8-DTTF-4	810-3-4TTF	8FBT4N	8-STTF-4	8-8-4 OBZ	1/2	1/4	2.84	1.42	0.88	0.90	0.41	7/8	13/16
8-DTTF-6	810-3TTF	8FBT6N	8-STTF-6	8-8-6 OBZ	1/2	3/8	2.84	1.42	0.88	0.90	0.41	7/8	13/16
B-8-DTTF-6	810-3TTF	8FBT6N	B-8-STTF-6	8-8-6 OBZ	1/2	3/8	3.14	1.57	1.13	0.90	0.41	7/8	1-1/16
8-DTTF-8	810-3-8TTF	8FBT8N	8-STTF-8	8-8-8 OBZ	1/2	1/2	3.14	1.57	1.13	0.90	0.41	7/8	1-1/16
10-DTTF-8	1010-3TTF	10FBT8N	10-STTF-8	10-10-8 OBZ	5/8	1/2	3.14	1.57	1.13	0.96	0.50	1	1-1/16
12-DTTF-12	1210-3TTF	12FBT12N	12-STTF-12	12-12-12 OBZ	3/4	3/4	3.52	1.76	1.25	0.96	0.63	1-1/8	1-3/8
14-DTTF-6	-	-	14-STTF-6	-	7/8	3/8	3.52	1.76	1.25	1.02	0.72	1-1/4	1-3/8
14-DTTF-12	-	14FBT12N	14-STTF-12	14-14-12 OBZ	7/8	3/4	3.52	1.76	1.25	1.02	0.72	1-1/4	1-3/8
16-DTTF-12	1610-3-12TTF	16FBT12N	16-STTF-12	16-16-12 OBZ	1	3/4	3.88	1.94	1.25	1.24	0.88	1-1/2	1-3/8
16-DTTF-16	1610-3TTF	16FBT16N	16-STTF-16	16-16-16 OBZ	1	1	4.24	2.12	1.50	1.24	0.88	1-1/2	1-5/8

NOTE: Dimensions subject to change, to be used for reference only.

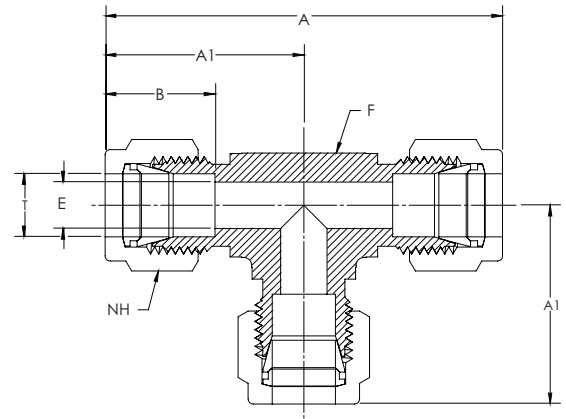
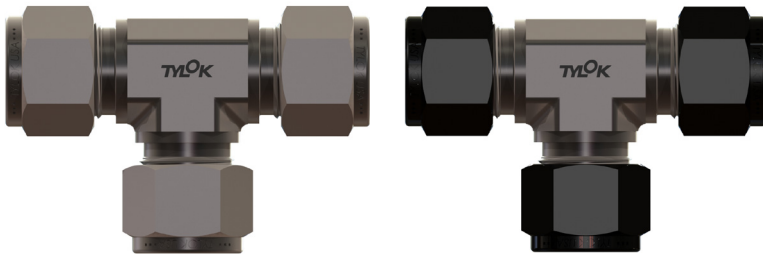
DTTM/STTM

Male Branch Tee



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	P PIPE END NPT	A	A1	A2	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
2-DTTM-2	200-3TTM	2MBT2N	2-STTM-2	2-2-2 SBZ	1/8	1/8	1.95	0.98	0.74	0.52	0.09	7/16	1/2
2-DTTM-4	200-3-4TTM	2MBT4N	2-STTM-4	2-2-4 SBZ	1/8	1/4	2.11	1.05	0.94	0.52	0.09	7/16	5/8
3-DTTM-2	300-3TTM	3MBT2N	3-STTM-2	3-3-2 SBZ	3/16	1/8	2.00	1.00	0.74	0.54	0.13	1/2	1/2
4-DTTM-2	400-3TTM	4MBT2N	4-STTM-2	4-4-2 SBZ	1/4	1/8	2.13	1.06	0.74	0.61	0.19	9/16	1/2
4-DTTM-4	400-3-4TTM	4MBT4N	4-STTM-4	4-4-4 SBZ	1/4	1/4	2.29	1.14	0.94	0.61	0.19	9/16	5/8
5-DTTM-2	500-3TTM	5MBT2N	5-STTM-2	5-5-2 SBZ	5/16	1/8	2.38	1.19	0.82	0.65	0.19	5/8	5/8
5-DTTM-4	-	5MBT4N	5-STTM-4	5-5-4 SBZ	5/16	1/4	2.38	1.19	0.94	0.65	0.25	5/8	5/8
6-DTTM-4	600-3TTM	6MBT4N	6-STTM-4	6-6-4 SBZ	3/8	1/4	2.42	1.21	0.94	0.67	0.28	11/16	5/8
6-DTTM-6	600-3-6TTM	6MBT6N	6-STTM-6	6-6-6 SBZ	3/8	3/8	2.63	1.32	1.06	0.67	0.28	11/16	13/16
8-DTTM-4	810-3-4TTM	-	8-STTM-4	-	1/2	1/4	2.84	1.42	1.11	0.90	0.28	7/8	13/16
8-DTTM-6	810-3TTM	8MBT6N	8-STTM-6	8-8-6 SBZ	1/2	3/8	2.84	1.42	1.11	0.90	0.38	7/8	13/16
B-8-DTTM-6	810-3TTM	8MBT6N	B-8-STTM-6	8-8-6 SBZ	1/2	3/8	2.84	1.42	1.06	0.90	0.38	7/8	13/16
8-DTTM-8	810-3-8TTM	8MBT8N	8-STTM-8	8-8-8 SBZ	1/2	1/2	2.84	1.42	1.30	0.90	0.41	7/8	13/16
B-8-DTTM-8	810-3-8TTM	8MBT8N	B-8-DTTM-8	8-8-8 SBZ	1/2	1/2	3.14	1.57	1.38	0.90	0.41	7/8	1-1/16
10-DTTM-8	1010-3TTM	10MBT8N	10-STTM-8	10-10-8 SBZ	5/8	1/2	3.14	1.57	1.38	0.96	0.47	1	1-1/16
12-DTTM-12	1210-3TTM	12MBT12N	12-STTM-12	12-12-12 SBZ	3/4	3/4	3.14	1.57	1.38	0.96	0.63	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.

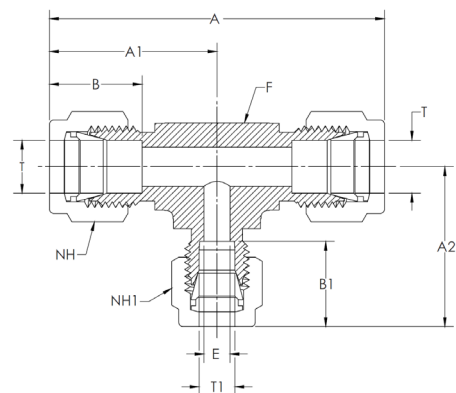
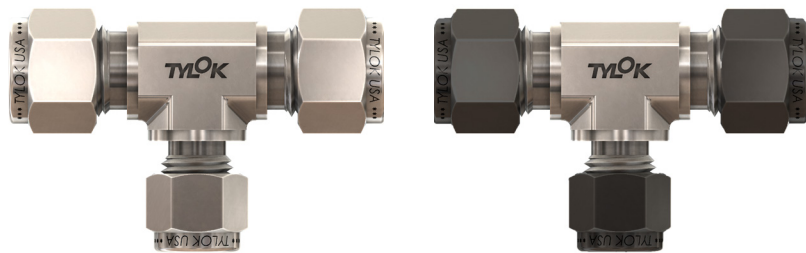


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	A	A1	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
1-DTTT-1	100-3	1ET1	1-STTT-1	1-1-1 JBZ	1/16	1.40	0.70	0.35	0.05	5/16	3/8
2-DTTT-2	200-3	2ET2	2-STTT-2	2-2-2 JBZ	1/8	1.76	0.88	0.52	0.09	7/16	3/8
3-DTTT-3	300-3	3ET3	3-STTT-3	3-3-3 JBZ	3/16	2.00	1.00	0.54	0.13	1/2	1/2
4-DTTT-4	400-3	4ET4	4-STTT-4	4-4-4 JBZ	1/4	2.12	1.06	0.61	0.19	9/16	1/2
5-DTTT-5	500-3	5ET5	5-STTT-5	5-5-5 JBZ	5/16	2.38	1.19	0.65	0.25	5/8	5/8
6-DTTT-6	600-3	6ET6	6-STTT-6	6-6-6 JBZ	3/8	2.40	1.20	0.67	0.28	11/16	5/8
8-DTTT-8	810-3	8ET8	8-STTT-8	8-8-8 JBZ	1/2	2.84	1.42	0.90	0.41	7/8	13/16
10-DTTT-10	1010-3	10ET10	10-STTT-10	10-10-10 JBZ	5/8	3.06	1.53	0.96	0.50	1	1
12-DTTT-12	1210-3	12ET12	12-STTT-12	12-12-12 JBZ	3/4	3.14	1.57	0.96	0.63	1-1/8	1-1/16
14-DTTT-14	1410-3	14ET14	14-STTT-14	14-14-14 JBZ	7/8	3.52	1.76	1.02	0.72	1-1/4	1-3/8
16-DTTT-16	1610-3	16ET16	16-STTT-16	16-16-16 JBZ	1	3.88	1.94	1.24	0.88	1-1/2	1-3/8
20-DTTT-20	2000-3	20ET20	-	-	1-1/4	5.34	2.67	1.62	1.09	1-7/8	1-1/16
24-DTTT-24	2400-3	24ET24	-	-	1-1/2	6.20	3.10	1.97	1.34	2-1/4	2
32-DTTT-32	3200-3	32ET32	-	-	2	8.44	4.22	2.66	1.81	3	2-3/4

NOTE: Dimensions subject to change, to be used for reference only.

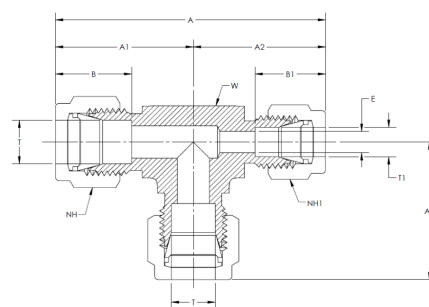
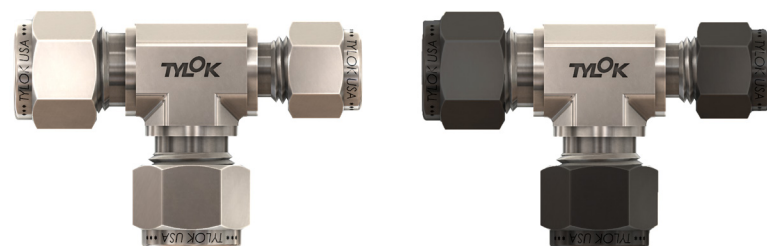
DTTT/STTT

Reducing Branch Tee, Reducing Run Tee



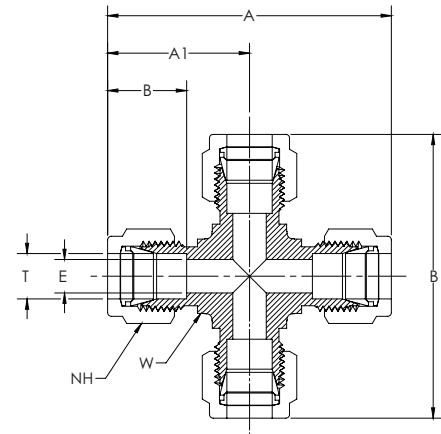
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	A1	A2	B	B1	E THRU HOLE	NH NUT HEX	NH1 NUT HEX	W WRENCH FLAT
4-DTTT-4-2	400-3-4-2	4-4-2 JLZ	4-STTT-4-2	4-4-2 JBZ	1/4	1/8	2.13	1.06	0.98	0.61	0.52	0.19	9/16	5/16	1/2
6-DTTT-6-4	600-3-6-4	6-6-4 JLZ	6-STTT-6-4	6-6-4 JBZ	3/8	1/4	2.42	1.21	1.14	0.67	0.61	0.19	11/16	7/16	5/8
8-DTTT-8-4	810-3-8-4	8-8-4 JLZ	8-STTT-8-4	8-8-4 JBZ	1/2	1/4	2.84	1.42	1.25	0.90	0.61	0.19	7/8	9/16	13/16
8-DTTT-8-6	810-3-8-6	8-8-6 JLZ	8-STTT-8-6	8-8-6 JBZ	1/2	3/8	2.84	1.42	1.32	0.90	0.67	0.28	7/8	11/16	13/16
12-DTTT-12-6	1210-3-12-6	12-12-6 JLZ	12-STTT-12-6	12-12-6 JBZ	3/4	3/8	3.14	1.57	1.47	0.96	0.67	0.28	1-1/8	9/16	1-1/16
12-DTTT-12-8	1210-3-12-8	12-12-8 JLZ	12-STTT-12-8	12-12-8 JBZ	3/4	1/2	3.14	1.57	1.57	0.96	0.90	0.41	1-1/8	11/16	1-1/16
16-DTTT-16-4	1610-3-16-4	16-16-4 JLZ	16-STTT-16-4	16-16-4 JBZ	1	1/4	3.89	1.95	1.59	1.24	0.61	0.19	1-1/2	9/16	1-3/8
16-DTTT-16-6	1610-3-16-6	16-16-6 JLZ	16-STTT-16-6	16-16-6 JBZ	1	3/8	3.89	1.95	1.65	1.24	0.67	0.28	1-1/2	11/16	1-3/8
16-DTTT-16-8	1610-3-16-8	16-16-8 JLZ	16-STTT-16-8	16-16-8 JBZ	1	1/2	3.89	1.95	1.76	1.24	0.90	0.41	1-1/2	7/8	1-3/8
16-DTTT-16-12	1610-3-16-12	16-16-12 JLZ	16-STTT-16-12	16-16-12 JBZ	1	3/4	3.89	1.95	1.58	1.24	0.96	0.63	1-1/2	1-1/8	1-3/8
20-DTTT-20-16	2000-3-20-16	-	-	-	1-1/4	1	5.34	2.17	1.62	1.62	1.24	0.88	1-7/8	1-1/2	1-11/16
24-DTTT-24-16	2400-3-24-16	-	-	-	1-1/2	1	6.20	2.36	1.97	1.97	1.24	0.88	2-1/4	1-1/2	2

NOTE: Dimensions subject to change, to be used for reference only.



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	T1 TUBE O.D.	A	A1	A2	B	B1	E THRU HOLE	NH NUT HEX	NH1 NUT HEX	W WRENCH FLAT
6-DTTT-4-6	600-3-4-6	6-4-6 JLZ	6-STTT-4-6	6-4-6 JBZ	3/8	1/4	2.35	1.21	1.14	0.67	0.61	0.19	11/16	9/16	5/8

NOTE: Dimensions subject to change, to be used for reference only.

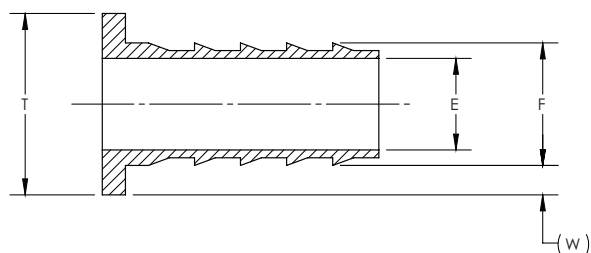
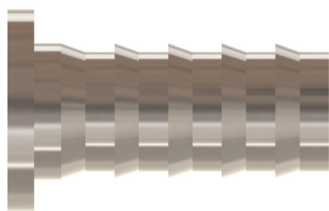


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	A	A1	B	E THRU HOLE	NH NUT HEX	W WRENCH FLAT
2-DCR	200-4	2ECR2	2-SCR	2 KBZ	1/8	1.76	0.88	0.52	0.09	7/16	3/8
4-DCR	400-4	4ECR4	4-SCR	4 KBZ	1/4	2.11	1.06	0.61	0.19	9/16	1/2
B-4-DCR	400-4	4ECR4	B-4-SCR	B-4 KBZ	1/4	2.33	1.17	0.61	0.19	9/16	5/8
6-DCR	600-4	6ECR6	6-SCR	6 KBZ	3/8	2.40	1.20	0.67	0.28	11/16	5/8
8-DCR	810-4	8ECR8	8-SCR	8 KBZ	1/2	2.83	1.41	0.90	0.41	7/8	13/16
12-DCR	1210-4	12ECR12	12-SCR	12 KBZ	3/4	3.14	1.57	0.96	0.63	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.

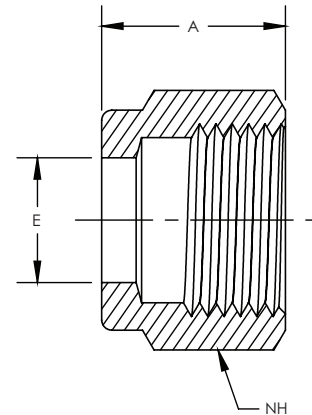
TI

Tubing Insert



CBC PART NUMBER	INTERCHANGES WITH	CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	E THRU HOLE	W REF	F TUBE ID
3-TI-2	305-2	-	-	3/16	0.09	0.031	1/8
4-TI-206	-	-	-	1/4	0.16	0.022	0.206
4-TI-3	405-3	-	-	1/4	0.14	0.031	3/16
4-TI-170	405-170	-	-	1/4	0.11	0.040	0.17
4-TI-2	405-2	-	-	1/4	0.09	0.062	1/8
5-TI-4	505-4	-	-	5/16	0.19	0.031	1/4
5-TI-3	505-3	-	-	5/16	0.13	0.062	3/16
5-TI-2	505-2	-	-	5/16	0.09	0.094	1/8
6-TI-277	605-277	-	-	3/8	0.22	0.049	0.277
6-TI-4	605-4	-	-	3/8	0.19	0.062	1/4
6-TI-3	605-3	-	-	3/8	0.13	0.094	3/16
8-TI-6	815-6	-	-	1/2	0.31	0.062	3/8
8-TI-4	815-4	-	-	1/2	0.19	0.125	1/4
10-TI-8	1015-8	-	-	5/8	0.44	0.062	1/2
10-TI-6	1015-6	-	-	5/8	0.31	0.125	3/8
12-TI-10	1215-10	-	-	3/4	0.56	0.062	5/8
12-TI-8	1215-8	-	-	3/4	0.44	0.125	1/2
16-TI-12	1615-12	-	-	1	0.69	0.125	3/4

NOTE: Dimensions subject to change, to be used for reference only.



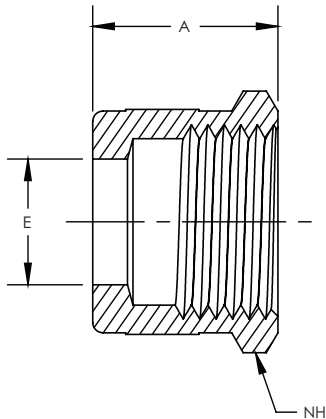
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.	A	NH NUT HEX
DN-1	102-1	1NU1	SN-1	1 BZ	1/16	0.31	5/16
DN-2	202-1	2NU2	SN-2	2 BZ	1/8	0.47	7/16
DN-3	302-1	3NU3	SN-3	3 BZ	3/16	0.47	1/2
DN-4	402-1	4NU4	SN-4	4 BZ	1/4	0.50	9/16
DN-5	502-1	5NU5	SN-5	5 BZ	5/16	0.53	5/8
DN-6	602-1	6NU6	SN-6	6 BZ	3/8	0.56	11/16
DN-8	812-1	8NU8	SN-8	8 BZ	1/2	0.69	7/8
DN-10	1012-1	10NU10	SN-10	10 BZ	5/8	0.69	1
DN-12	1212-1	12NU12	SN-12	12 BZ	3/4	0.69	1-1/8
DN-14	1412-1	14NU14	SN-14	14 BZ	7/8	0.69	1-1/4
DN-16	1612-1	16NU16	SN-16	16 BZ	1	0.81	1-1/2
B-DN-18	B-1812-1	-	-	-	1-1/8	0.81	1-3/4
DN-20	2002-1	20NU20	-	-	1-1/4	1.25	1-7/8
DN-24	2402-1	24NU24	-	-	1-1/2	1.50	2-1/4
DN-32	3202-1	32NU32	-	-	2	2.06	3

NOTE: Dimensions subject to change, to be used for reference only.

- CBC-Lok® nut inside surfaces are silver plated to reduce galling and lower installation torque.
- CS-Lok® nuts are coated with molybdenum disulfide to reduce galling and lower installation torque.

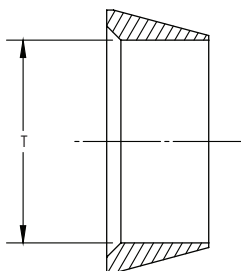
DKN/SKN

Knurled Nut



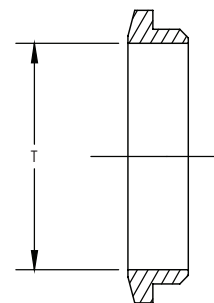
CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.	A	NH NUT HEX
DKN-1	102-1K	1 BZP	SKN-1	1 BZP		1/16	0.31	5/16
DKN-2	202-1K	2 BZP	SKN-2	2 BZP		1/8	0.47	7/16
DKN-3	302-1K	3 BZP	SKN-3	3 BZP		3/16	0.47	1/2
DKN-4	402-1K	4 BZP	SKN-4	4 BZP		1/4	0.50	9/16
DKN-5	502-1K	5 BZP	SKN-5	5 BZP		5/16	0.53	5/8
DKN-6	602-1K	6 BZP	SKN-6	6 BZP		3/8	0.56	11/16
DKN-8	812-1K	8 BZP	SKN-8	8 BZP		1/2	0.69	7/8
DKN-10	1012-1K	10 BZP	SKN-10	10 BZP		5/8	0.69	1
DKN-12	1212-1K	-	SKN-12	-		3/4	0.69	1 1/8
DKN-14	1412-1K	-	SKN-14	-		7/8	0.69	1 1/4
DKN-16	1612-1K	-	SKN-16	-		1	0.81	1 1/2

NOTE: Dimensions subject to change, to be used for reference only.



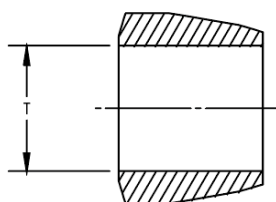
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D.
DFC-1	103-1	1FF1	1/16
DFC-2	203-1	2FF2	1/8
DFC-3	303-1	3FF3	3/16
DFC-4	403-1	4FF4	1/4
DFC-5	503-1	5FF5	5/16
DFC-6	603-1	6FF6	3/8
DFC-8	813-1	8FF8	1/2
DFC-10	1013-1	10FF10	5/8
DFC-12	1213-1	12FF12	3/4
DFC-14	1413-1	14FF14	7/8
DFC-16	1613-1	16FF16	1
B-DFC-18	B-1813-1	-	1-1/8
DFC-20	2003-1	20FF20	1-1/4
DFC-24	2403-1	24FF24	1-1/2
DFC-32	3202-1	32FF32	2

NOTE: Dimensions subject to change, to be used for reference only.

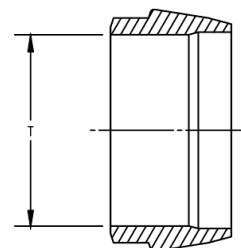


CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D.
DRC-1	104-1	1BF1	1/16
DRC-2	204-1	2BF2	1/8
DRC-3	304-1	3BF3	3/16
DRC-4	404-1	4BF4	1/4
DRC-5	504-1	5BF5	5/16
DRC-6	604-1	6BF6	3/8
DRC-8	814-1	8BF8	1/2
DRC-10	1014-1	10BF10	5/8
DRC-12	1214-1	12BF12	3/4
DRC-14	1414-1	14BF14	7/8
DRC-16	1614-1	16BF16	1
B-DRC-18	B-1814-1	-	1-1/8
DRC-20	2004-1	20BF20	1-1/4
DRC-24	2404-1	24BF24	1-1/2
DRC-32	3204-1	32BF32	2

NOTE: Dimensions subject to change, to be used for reference only.



For sizes 1, 2, 3, 4, 5, and 6
(sizes 1/16" through 3/8")



For sizes 8, 10, 12, 14, and 16
(sizes 1/2" through 1")

CS PART NUMBER	INTERCHANGES WITH	T TUBE O.D.
SC-1	1 TZ	1/16
SC-2	2 TZ	1/8
SC-3	3 TZ	3/16
SC-4	4 TZ	1/4
SC-5	5 TZ	5/16
SC-6	6 TZ	3/8
SC-8	8 TZ	1/2
SC-10	10 TZ	5/8
SC-12	12 TZ	3/4
SC-14	14 TZ	7/8
SC-16	16 TZ	1

NOTE: Dimensions subject to change, to be used for reference only.

NUT/FERRULE & FERRULE SETS



CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.
DCSET-4	400-SET	4 ALOK-*.SET	SCSET-4	4-CPI-*.SET		1/4
DCSET-6	600-SET	6 ALOK-*.SET	SCSET-6	6-CPI-*.SET		3/8
DCSET-8	810-SET	8 ALOK-*.SET	SCSET-8	8-CPI-*.SET		1/2
DCSET-12	-	12 ALOK-*.SET	SCSET-12	12-CPI-*.SET		3/4
DCSET-16	-	16 ALOK-*.SET	SCSET-16	16-CPI-*.SET		1

NOTE: Dimensions subject to change, to be used for reference only.

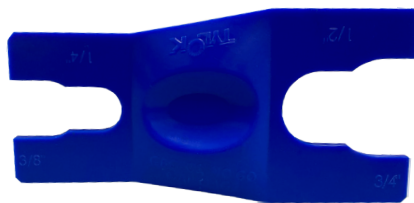


CBC PART NUMBER	INTERCHANGES WITH		CS PART NUMBER	INTERCHANGES WITH		T TUBE O.D.
DNCSET-4	400-NFSET	-	SNCSET-4	-		1/4
DNCSET-6	600-NFSET	-	SNCSET-6	-		3/8
DNCSET-8	810-NFSET	-	SNCSET-8	-		1/2
DNCSET-12	-	-	SNCSET-12	-		3/4
DNCSET-16	-	-	SNCSET-16	-		1

NOTE: Dimensions subject to change, to be used for reference only.

COMPONENT REPLACEMENT PARTS

Ferrule sets and Nut/Ferrule sets make for easy storage and handling. CBC-Lok® & CS-Lok® components are precision made and should be handled with care. The components can be ordered on an arbor, which aids in careful handling and prevents them from coming off. Pinch the end of the arbor to release the components.



CBC PART NUMBER	T TUBE O.D.
1-DGG	1/16
2-DGG	1/8
3-DGG	3/16
4-DGG	1/4
5-DGG	5/16
6-DGG	3/8
8-DGG	1/2
10-DGG	5/8
12-DGG	3/4
14-DGG	7/8
16-DGG	1
468-DGG	1/4, 3/8, 1/2, 6mm, 12mm
ABS-46812-DGG	1/4, 3/8, 1/2, 3/4



When fitting is properly tightened, gap gage should not fit between nut and shoulder of body.

TYLOK PRE-SET TOOL

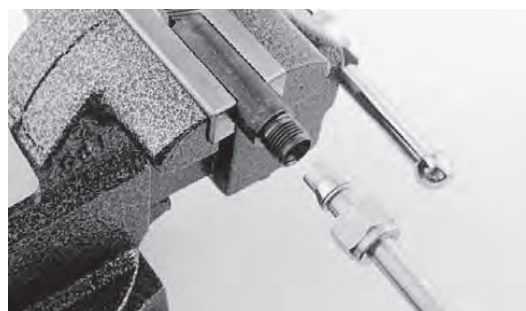
The CBC-Lok®/CS-Lok® product line offers a Pre-Set Tool when fittings need to be installed in hard to reach places. The Pre-Set Tool is designed to be used in any tabletop vise. After tightening the nut the specified number of turns, as stated in the included installation instructions, loosen the nut from the Pre-Set Tool. Once the ferrules have swaged into the tubing surface, the assembly is ready for installation. When ordering the CBC-Lok/CS-Lok Pre-Set Tool, reference the part number in the chart. The Pre-Set Tool is hardened for maximum durability. The Pre-Set Tool can be used repeatedly to set the ferrules onto the tubing for easy installation.



PART NUMBER	TUBE SIZE
1-DPST	1/16
2-DPST	1/8
3-DPST	3/16
4-DPST	1/4
5-DPST	5/16
6-DPST	3/8
8-DPST	1/2
10-DSPT	5/8
12-DSPT	3/4
14-DPST	7/8
16-DPST	1



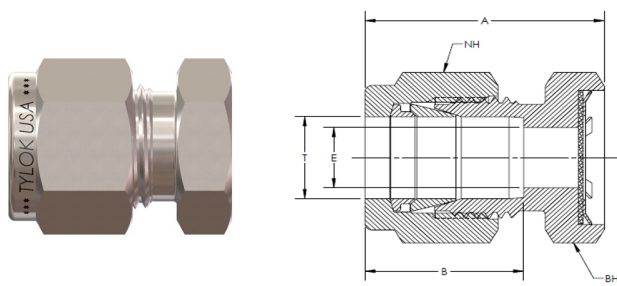
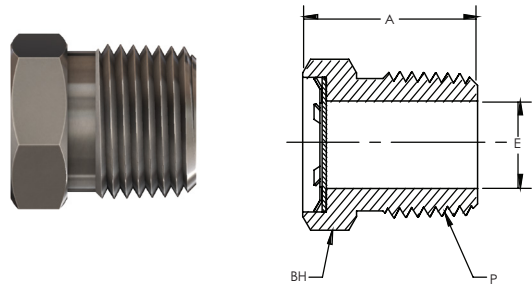
Place Pre-Set Tool in a vice and tighten nut specified number of turns.



Back nut off of Pre-Set Tool. Notice the ferrules have swaged into the tubing. Now take the tubing to installation area.

MDF

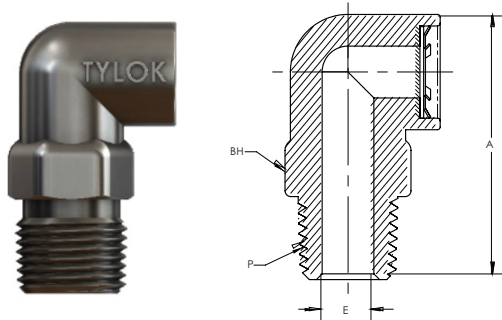
Mud Daubers



CBC PART NUMBER	INTERCHANGES WITH		PIPE WELD SIZE	A	E THRU HOLE	BH BODY HEX
4-1MDF	MD-4	MDF	1/4	.81	.28	9/16
6-1MDF	MD-6	MDF	3/8	.81	.41	11/16
8-1MDF	MD-8	MDF	1/2	1.03	.50	7/8

CBC PART NUMBER	INTERCHANGES WITH		T	A	B	E THRU HOLE	BH BODY HEX	NH NUT HEX
SS-4-DMDF	SS-400-C-MD		1/4	0.95	0.61	0.19	9/16	9/16
SS-6-DMDF	SS-600-C-MD		3/8	1.01	0.67	0.28	11/16	11/16
SS-8-DMDF	SS-810-C-MD		1/2	1.12	0.90	0.41	7/8	7/8

* Also available in single ferrule



CBC PART NUMBER	INTERCHANGES WITH		PIPE WELD SIZE	A	E THRU HOLE	BH BODY HEX
PP-4-2MDF	-	-	1/4	1.44	.28	5/8
PP-6-2MDF	-	-	3/8	1.44	.28	11/16

- Tylok Mud Daubers, also known as Vent Protector fittings, protect open ends of tubing, instruments, outlet vents and exhaust lines.
- Each Vent Protector has a 300 series stainless steel 40-mesh wire screen to prevent obstructive foreign objects, such as insects, from entering and clogging a system.
- Straight Vent Protectors are available in stainless steel. Add an SS in front of part number to specify the desired material.
- Angled Vent Protectors are available in Polypropylene (PP) only.

NOTE: Dimensions subject to change, to be used for reference only.

Tylok is now offering customized stainless steel AOD injection lance assemblies for refractory tube applications found in most steel mills.

AOD (Argon Oxygen Decarburization) is used during the refining process to produce steel with low carbon properties and low silicon levels, while creating a metal more weldable and more corrosion and heat resistant. It brings the tightest chemistry control to deliver the highest levels of metal purity. Most injection lances are replaced daily and in fact considered disposable items in most mills.

Tylok is now offering customized burner tubes suitable for most steel mills. The injection lances are available in 1/4", 3/8" and 1/2" diameters and offered in a variety of custom lengths.



Size	Part Number	Length Options (in.)	Degree Options
1/4	SS-4-INJ-LANCE-4MNPT-36	24", 36"	90"
3/8	SS-6-INJ-LANCE-6MNPT-36		
1/2	SS-8-INJ-LANCE-8MNPT-36		

Example: SS-4-INJ-LANCE-4MNPT is the straight version
SS-4-INJ-LANCE-4MNPT-36-90 is the 90 degree version

Dielectric Fitting

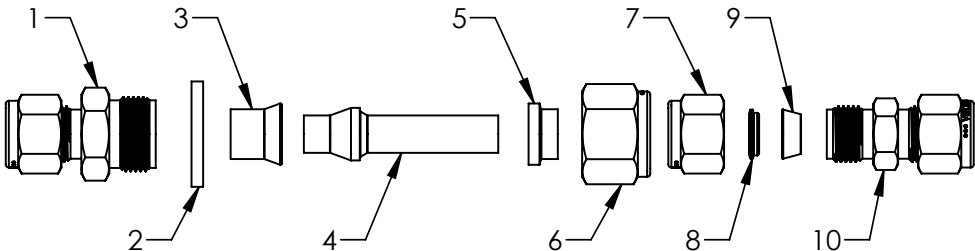
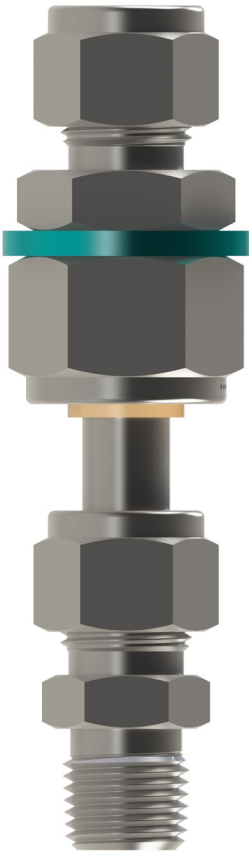
Tylok Dielectric Fittings are insulated connections used to protect sensitive electrical components from electrical current potentially carried through tubing systems.

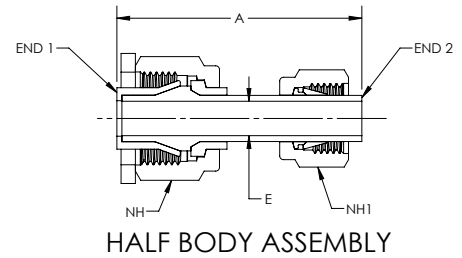
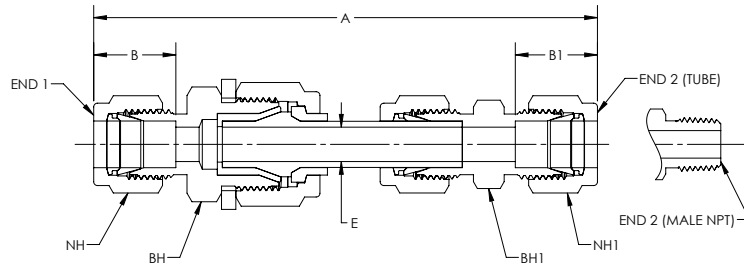
A typical application for a dielectric fitting is in the transmission of natural gas. The dielectric fitting insulates electric current flow that results from static electricity, ground currents, stray currents from instruments, etc.

Tylok dielectric fittings have a dielectric resistance above 10×10^7 Ohms at 10 Volts (dc) when at room temperature (70°F / 20°C).

Specifications	6 Series	10 Series
Pressure Rating (room temperature)	5000 psig (344 bar)	3500 psig (241 bar)
Temperature Rating	-40 to 200 °F (-40 to 93 °C)	

Item	Component	Materials
1	End 1	Stainless Steel
2	Stop Ring	Aluminum
3	Fitting Insulator	PEEK
4	Adapter	Stainless Steel
5	Nut Insulator	PEEK
6	Nut	Stainless Steel
7	CBC-Lok Nut	Stainless Steel
8	CBC-Lok Rear Collet	Stainless Steel
9	CBC-Lok Front Collet	Stainless Steel
10	End 2	Stainless Steel





Part Number	End 1	End 2	A	B	B1	E	NH	NH1	BH	BH1
SS-6-6D-8-DE*	1/2" Tube Port Insulator	3/8" CBC-Lok Tube Adapter	2.05	-	-	0.28	7/8	11/16	-	-
SS-4-6DU-4-DE	1/4" CBC-Lok	1/4" CBC-Lok	4.02	0.61	0.61	0.19	9/16	9/16	13/16	5/8
SS-4-6SU-4-DE	1/4" CS-Lok	1/4" CS-Lok	4.02	0.61	0.61	0.19	9/16	9/16	13/16	5/8
SS-6-6DU-6-DE	3/8" CBC-Lok	3/8" CBC-Lok	4.14	0.67	0.67	0.28	11/16	11/16	13/16	5/8
SS-6-6SU-6-DE	3/8" CS-Lok	3/8" CS-Lok	4.14	0.67	0.67	0.28	11/16	11/16	13/16	5/8
SS-8-6DU-8-DE	1/2" CBC-Lok	1/2" CBC-Lok	4.38	0.90	0.90	0.28	7/8	7/8	13/16	13/16
SS-8-6SU-8-DE	1/2" CS-Lok	1/2" CS-Lok	4.38	0.90	0.90	0.28	7/8	7/8	13/16	13/16
SS-4-6DMC-4-DE	1/4" CBC-Lok	1/4" Male NPT	3.93	0.61	-	0.19	9/16	9/16	13/16	5/8
SS-4-6SMC-4-DE	1/4" CS-Lok	1/4" Male NPT	3.93	0.61	-	0.19	9/16	9/16	13/16	5/8
SS-6-6DMC-4-DE	3/8" CBC-Lok	1/4" Male NPT	3.99	0.67	-	0.28	11/16	11/16	13/16	5/8
SS-6-6SMC-4-DE	3/8" CS-Lok	1/4" Male NPT	3.99	0.67	-	0.28	11/16	11/16	13/16	5/8
SS-6-6DMC-6-DE	3/8" CBC-Lok	3/8" Male NPT	3.99	0.67	-	0.28	11/16	11/16	13/16	11/16
SS-6-6SMC-6-DE	3/8" CS-Lok	3/8" Male NPT	3.99	0.67	-	0.28	11/16	11/16	13/16	11/16
SS-8-6DMC-6-DE	1/2" CBC-Lok	3/8" Male NPT	4.09	0.90	-	0.28	7/8	7/8	13/16	11/16
SS-8-6SMC-6-DE	1/2" CS-Lok	3/8" Male NPT	4.09	0.90	-	0.28	7/8	7/8	13/16	11/16
SS-8-8D-12-DE*	3/4" Tube Port Insulator	1/2" CBC-Lok Tube Adapter	2.01	-	-	0.38	1-1/8	1-1/8	-	-

*Half Body Assemblies

How To Order

SS - 6 B - 6 DU - 6 B - DE
 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
 End 2 Material End 1 Size End 1 Material if Brass Adaptive Orifice Designation Configuration End 2 Size End 2 Material if Brass Dielectric Designation

Chart 1

Chart 1

Chart 2

Chart 3

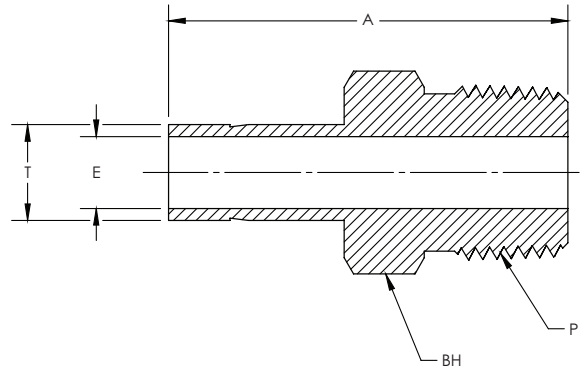
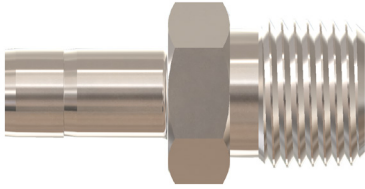
Chart 1

Chart 1- Material	
B	Brass
SS	Stainless Steel

Note: Adapter component only available in Stainless Steel

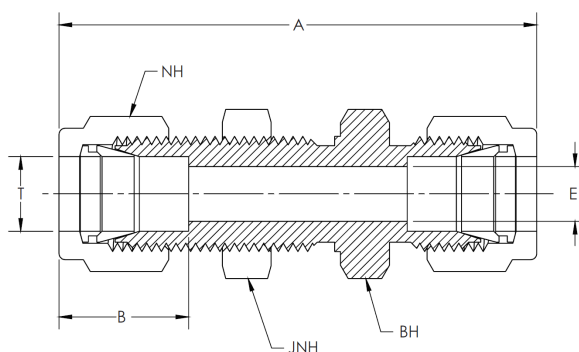
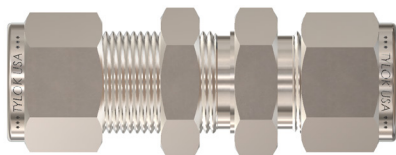
Chart 2 - Adapter Orifice Designation	
Size 6	0.28"
Size 8	0.38"

Chart 3 - Configuration	
DU	Union
DRU	Reducing Union
DELU	Union Elbow
DMC	Male Connector
DME	Male Elbow
DFC	Female Connector
DFE	Female Elbow



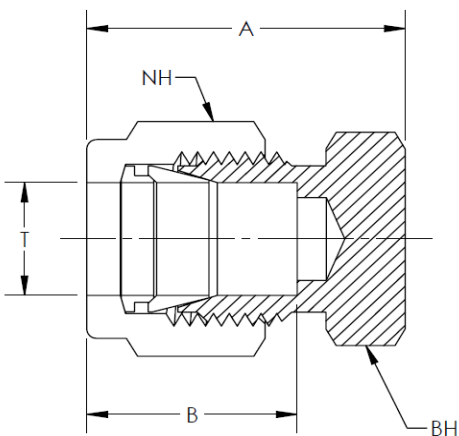
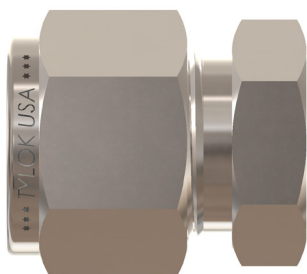
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	P PIPE END NPT (in.)	A (mm.)	E THRU HOLE (mm.)	BH BODY HEX (in.)
6MM-DATPM-2	6-MTA-1-2	M6MA1/8N	6	1/8	32.8	4.1	7/16
6MM-DATPM-4	6-MTA-1-4	M6MA1/4N	6	1/4	38.1	4.1	9/16
8MM-DATPM-4	8-MTA-1-4	M8MA1/4N	8	1/4	39.1	5.6	9/16
8MM-DATPM-6	8-MTA-1-6	M8MA3/8N	8	3/8	39.9	5.6	11/16
10MM-DATPM-4	10-MTA-1-4	M10MA1/4N	10	1/4	39.9	7.1	9/16
10MM-DATPM-6	10-MTA-1-6	M10MA3/8N	10	3/8	40.6	7.1	11/16
10MM-DATPM-8	10-MTA-1-8	M10MA1/2N	10	1/2	46.2	7.1	7/8
12MM-DATPM-4	12-MTA-1-4	M12MA1/4N	12	1/4	46.5	7.1	9/16
12MM-DATPM-8	12-MTA-1-8	M12MA1/2N	12	1/2	52.1	8.8	7/8

NOTE: Dimensions subject to change, to be used for reference only.



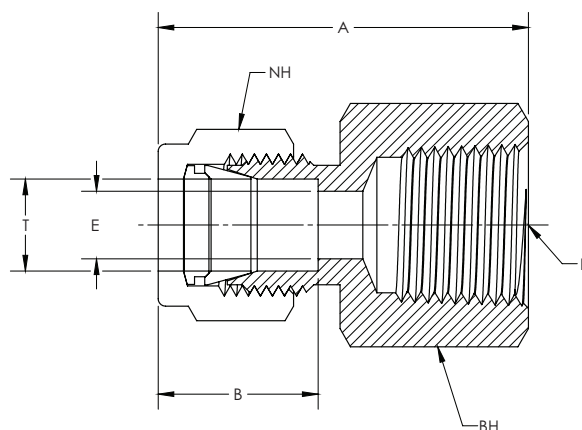
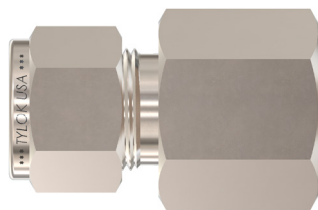
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	T1 TUBE O.D. (mm.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)	JNH JAM NUT HEX (in.)	PANEL HOLE (mm.)	MAX PANEL THICKNESS (mm.)
6MM-DBHU	6M0-61	BCM6	6	6	57.7	15.3	4.8	9/16	5/8	5/8	11.5	10.2
8MM-DBHU	8M0-61	BCM8	8	8	61.0	16.2	6.4	5/8	11/16	11/16	13.1	11.2
10MM-DBHU	10M0-61	BCM10	10	10	63.7	17.2	7.9	3/4	7/8	7/8	16.3	11.2
12MM-DBHU	12M0-61	BCM12	12	12	71.0	22.8	9.5	7/8	15/16	15/16	19.5	12.7
18MM-DBHU	18M0-61	BCM18	18	18	78.9	24.4	15.1	1-1/8	1-3/16	1-3/16	26.0	16.8

NOTE: Dimensions subject to change, to be used for reference only.



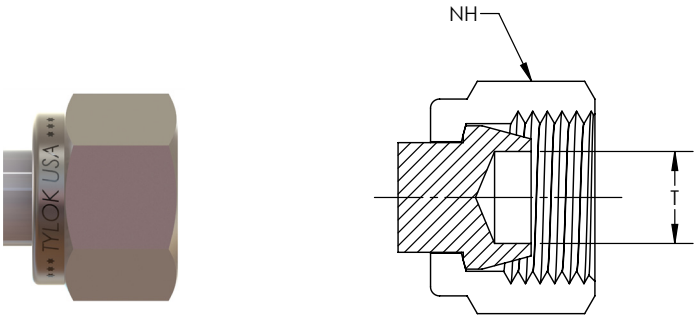
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	A (mm.)	B (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DCAP	6M0-C	BLENM6	6	23.1	15.3	9/16	9/16
8MM-DCAP	8M0-C	BLENM8	8	24.5	16.2	5/8	9/16
10MM-DCAP	10M0-C	BLENM10	10	26.6	17.2	3/4	11/16
12MM-DCAP	12M0-C	BLENM12	12	30.6	22.8	7/8	7/8
18MM-DCAP	18M0-C	BLENM18	18	32.2	24.4	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.



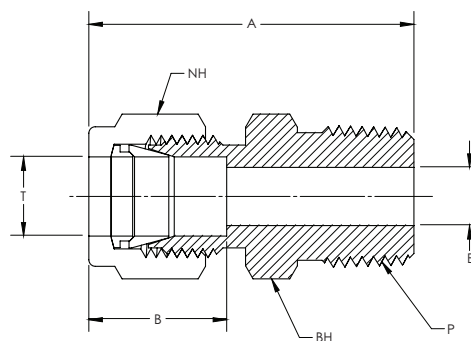
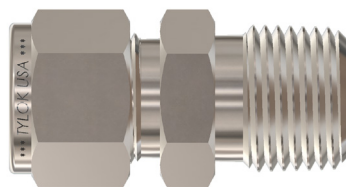
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	P PIPE END NPT (in.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DFC-2	6M0-7-2	M6FSC1/8N	6	1/8	31.3	15.3	4.8	9/16	9/16
6MM-DFC-4	6M0-7-4	M6FSC1/4N	6	1/4	35.8	15.3	4.8	9/16	3/4
6MM-DFC-6	6M0-7-6	M6FSC3/8N	6	3/8	37.6	15.3	4.8	9/16	7/8
6MM-DFC-8	6M0-7-8	M6FSC1/2N	6	1/2	42.5	15.3	4.8	9/16	1-1/16
8MM-DFC-2	8M0-7-2	M8FSC1/8N	8	1/8	32.1	16.2	6.4	5/8	9/16
8MM-DFC-4	8M0-7-4	M8FSC1/4N	8	1/4	37.0	16.2	6.4	5/8	3/4
8MM-DFC-6	8M0-7-6	M8FSC3/8N	8	3/8	38.5	16.2	6.4	5/8	7/8
8MM-DFC-8	8M0-7-8	-	8	1/2	43.3	16.2	6.4	5/8	1-1/16
10MM-DFC-4	10M0-7-4	M10FSC1/4N	10	1/8	37.8	17.2	7.9	3/4	3/4
10MM-DFC-6	10M0-7-6	M10FSC3/8N	10	3/8	39.4	17.2	7.9	3/4	7/8
10MM-DFC-8	10M0-7-8	M10FSC1/2N	10	1/2	44.2	17.2	7.9	3/4	1-1/16
12MM-DFC-4	12M0-7-4	M12FSC1/4N	12	1/8	40.3	22.8	9.5	7/8	7/8
12MM-DFC-6	12M0-7-6	M12FSC3/8N	12	3/8	41.9	22.8	9.5	7/8	7/8
12MM-DFC-8	12M0-7-8	M12FSC1/2N	12	1/2	46.7	22.8	9.5	7/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.



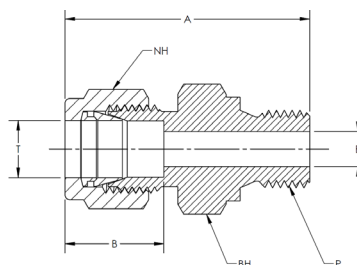
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	NH NUT HEX (in.)
6MM-DFPLUG	6MO-P	BLPM6	6	9/16
8MM-DFPLUG	8MO-P	BLPM8	8	5/8
10MM-DFPLUG	10MO-P	BLPM10	10	3/4
12MM-DFPLUG	12MO-P	BLPM12	12	7/8
18MM-DFPLUG	18MO-P	BLPM18	16	1-1/8

NOTE: Dimensions subject to change, to be used for reference only.



CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	P PIPE END NPT (in.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DMC-2	6M0-1-2	M6MSC1/8N	6	1/8	32.8	15.3	4.8	9/16	9/16
6MM-DMC-4	6M0-1-4	M6MSC1/4N	6	1/4	37.9	15.3	4.8	9/16	9/16
6MM-DMC-6	6M0-1-6	M6MSC3/8N	6	3/8	38.4	15.3	4.8	9/16	11/16
6MM-DMC-8	6M0-1-8	M6MSC1/2N	6	1/2	44.7	15.3	4.8	9/16	7/8
8MM-DMC-2	8M0-1-2	M8MSC1/8N	8	1/8	34.2	16.2	4.8	5/8	9/16
8MM-DMC-4	8M0-1-4	M8MSC1/4N	8	1/4	38.7	16.2	6.4	5/8	9/16
8MM-DMC-6	8M0-1-6	M8MSC3/8N	8	3/8	39.3	16.2	6.4	5/8	11/16
8MM-DMC-8	8M0-1-8	M8MSC1/2N	8	1/2	45.6	16.2	6.4	5/8	7/8
10MM-DMC-2	10M0-1-2	M10MSC1/8N	10	1/8	36.3	17.2	4.8	3/4	11/16
10MM-DMC-4	10M0-1-4	M10MSC1/4N	10	1/4	40.9	17.2	7.1	3/4	11/16
10MM-DMC-6	10M0-1-6	M10MSC3/8N	10	3/8	40.9	17.2	7.9	3/4	11/16
10MM-DMC-8	10M0-1-8	M10MSC1/2N	10	1/2	46.5	17.2	7.9	3/4	7/8
10MM-DMC-12	10M0-1-12	M10MSC3/4N	10	3/4	48.0	17.2	7.9	3/4	1-1/16
12MM-DMC-2	12M0-1-2	-	12	1/8	38.8	22.8	4.8	7/8	7/8
12MM-DMC-4	12M0-1-4	M12MSC1/4N	12	1/4	43.4	22.8	7.1	7/8	7/8
12MM-DMC-6	12M0-1-6	M12MSC3/8N	12	3/8	43.4	22.8	9.5	7/8	7/8
12MM-DMC-8	12M0-1-8	M12MSC1/2N	12	1/2	49.0	22.8	9.5	7/8	7/8
12MM-DMC-12	12M0-1-12	M12MSC3/4N	12	3/4	50.5	22.8	9.5	7/8	1-1/16
18MM-DMC-8	18M0-1-8	M18MSC1/2N	18	1/2	50.5	24.4	11.9	1-1/8	1-1/16
18MM-DMC-12	18M0-1-12	M18MSC3/4N	18	3/4	50.5	24.4	15.1	1-1/8	1-1/16

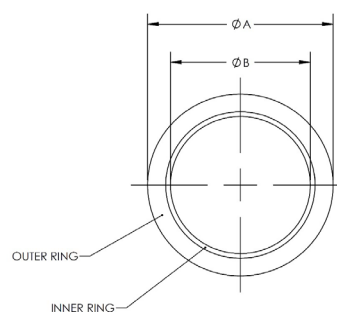
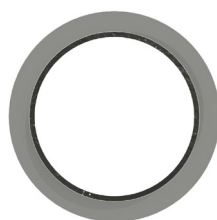
NOTE: Dimensions subject to change, to be used for reference only.



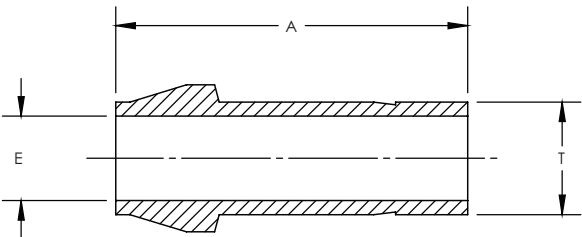
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	P BSPP THREAD SIZE (in.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DMC-2-RS	6M0-1-2RS	M6MSC1/8R	6	1/8	35.6	15.3	4.0	9/16	9/16
6MM-DMC-4-RS	6M0-1-4RS	M6MSC1/4R	6	1/4	40.4	15.3	4.8	9/16	3/4
6MM-DMC-6-RS	6M0-1-6RS	M6MSC3/8R	6	3/8	41.1	15.3	4.8	9/16	7/8
6MM-DMC-8-RS	6M0-1-8RS	M6MSC1/2R	6	1/2	43.2	15.3	4.8	9/16	1-1/16
8MM-DMC-2-RS	8M0-1-2RS	M8MSC1/8R	8	1/8	36.6	16.2	4.0	5/8	9/16
8MM-DMC-4-RS	8M0-1-4RS	M8MSC1/4R	8	1/4	41.4	16.2	5.9	5/8	3/4
8MM-DMC-6-RS	8M0-1-6RS	M8MSC3/8R	8	3/8	42.2	16.2	6.4	5/8	7/8
8MM-DMC-8-RS	8M0-1-8RS	M8MSC1/2R	8	1/2	44.2	16.2	6.4	5/8	1-1/16
10MM-DMC-4-RS	10M0-1-4RS	M10MSC1/4R	10	1/4	42.2	17.2	5.9	3/4	3/4
10MM-DMC-6-RS	10M0-1-6RS	M10MSC3/8R	10	3/8	42.9	17.2	7.9	3/4	7/8
10MM-DMC-8-RS	10M0-1-8RS	M10MSC1/2R	10	1/2	45.0	17.2	7.9	3/4	1-1/16
12MM-DMC-4-RS	12M0-1-4RS	M12MSC1/4R	12	1/4	44.5	22.8	5.9	7/8	7/8
12MM-DMC-6-RS	12M0-1-6RS	M12MSC3/8R	12	3/8	45.5	22.8	7.9	7/8	7/8
12MM-DMC-8-RS	12M0-1-8RS	M12MSC1/2R	12	1/2	47.5	22.8	9.5	7/8	1-1/16
12MM-DMC-12-RS	12M0-1-12RS	M12MSC3/4R	12	3/4	52.1	22.8	9.5	7/8	1-5/16
18MM-DMC-8-RS	18M0-1-8RS	M18MSC1/2R	18	1/2	48.8	24.4	11.9	1-1/8	1-1/16
18MM-DMC-12-RS	18M0-1-12RS	M18MSC3/4R	18	3/4	52.1	24.4	15.1	1-1/8	1-5/16

NOTE: Dimensions subject to change, to be used for reference only.

- BSPP threaded end requires a sealing washer.

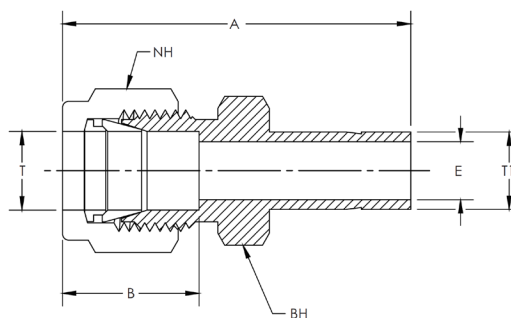
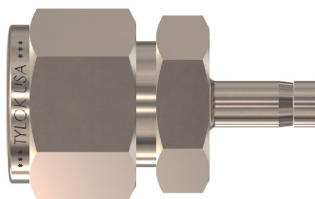


PART NUMBER	INTERCHANGES WITH		B BSPP THREAD SIZE	A	B	THICKNESS	PRESSURE RATING (PSIG)
SS-RSGK-2-F	SS-2-RS-2V	M30201-SS	1/8	0.63	0.41	0.41	5300
SS-RSGK-4-F	SS-4-RS-2V	M30202-SS	1/4	0.81	0.54	0.54	5500
SS-RSGK-6-F	SS-6-RS-2V	M30203-SS	3/8	0.94	0.68	0.68	4400
SS-RSGK-8-F	SS-8-RS-2V	M30204-SS	1/2	1.13	0.85	0.85	4000
SS-RSGK-10-F	-	-	5/8	1.25	0.92	0.92	4500
SS-RSGK-12-F	SS-12-RS-2V	M30206-SS	3/4	1.38	1.07	1.07	3800
SS-RSGK-16-F	SS-16-RS-2V	M30208-SS	1	1.69	1.33	1.33	2800
SS-RSGK-20-F	SS-20-RS-2V	-	1-1/4	2.06	1.69	1.69	2400
SS-RSGK-24-F	SS-24-RS-2V	-	1-1/2	2.31	1.91	1.91	2500



CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	A (mm.)	E THRU HOLE (mm.)
6MM-DPCU	6M1-PC	PCM6	6	25.0	4.1
8MM-DPCU	8M1-PC	PCM8	8	26.0	5.6
10MM-DPCU	10M1-PC	PCM10	10	27.1	7.1
12MM-DPCU	12M1-PC	PCM12	12	36.2	8.8
18MM-DPCU	18M1-PC	PCM18	18	37.8	13.9

NOTE: Dimensions subject to change, to be used for reference only.

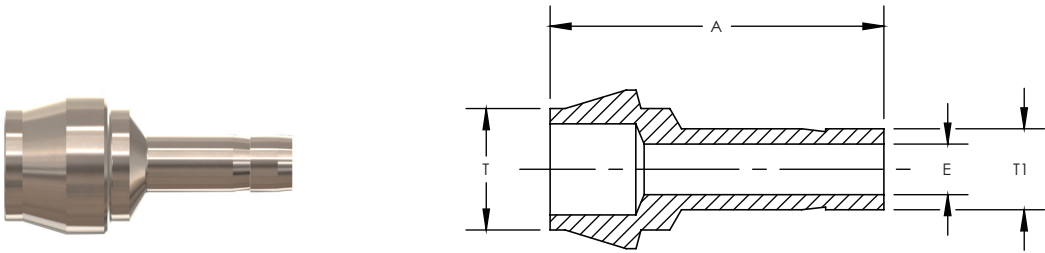


CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	T1 TUBE O.D. (mm.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DRATT-8MM	6MO-R-8M	M8TURM6	6	8	39.9	15.3	4.8	9/16	9/16
6MM-DRATT-10MM	6MO-R-10M	M10TURM6	6	10	40.7	15.3	4.8	9/16	9/16
6MM-DRATT-12MM	6MO-R-12M	M12TURM6	6	12	46.3	15.3	4.8	9/16	9/16
6MM-DRATT-18MM	6MO-R-18M	-	6	18	49.6	15.3	4.8	9/16	7/8
8MM-DRATT-6MM	8MO-R-6M	M6TURM8	8	6	40.3	16.2	4.1	5/8	9/16
8MM-DRATT-10MM	8MO-R-10M	M10TURM8	8	10	42.0	16.2	6.4	5/8	9/16
8MM-DRATT-12MM	8MO-R-12M	M12TURM8	8	12	47.6	16.2	6.4	5/8	9/16
10MM-DRATT-6MM	10MO-R-6M	M6TURM10	10	6	42.4	17.2	4.1	3/4	11/16
10MM-DRATT-8MM	10MO-R-8M	M8TURM10	10	8	43.4	17.2	5.6	3/4	11/16
10MM-DRATT-12MM	10MO-R-12M	M12TURM10	10	12	49.8	17.2	7.9	3/4	11/16
10MM-DRATT-18MM	10MO-R-18M	-	10	18	51.3	17.2	7.9	3/4	7/8
12MM-DRATT-6MM	12MO-R-6M	M6TURM12	12	6	44.9	22.8	4.1	7/8	7/8
12MM-DRATT-8MM	12MO-R-8M	-	12	8	45.9	22.8	5.6	7/8	7/8
12MM-DRATT-10MM	12MO-R-10M	M10TURM12	12	10	46.7	22.8	7.1	7/8	7/8
12MM-DRATT-18MM	12MO-R-18M	M18TURM12	12	18	53.8	22.8	9.5	7/8	7/8
18MM-DRATT-12MM	18MO-R-12M	M12TURM18	18	12	54.6	24.4	8.8	1-1/8	1-1/16

Metric to Fractional

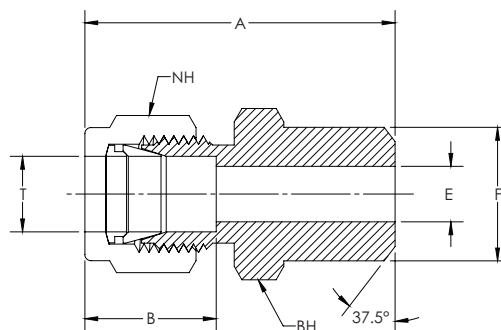
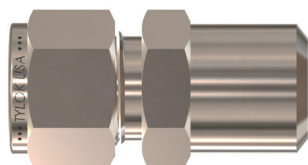
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	T1 TUBE O.D. (in.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DRATT-2	6MO-R-2	-	6	1/8	36.9	15.3	2.0	9/16	9/16
6MM-DRATT-4	6MO-R-4	4TUCM6	6	1/4	39.2	15.3	4.4	9/16	9/16
6MM-DRATT-5	6MO-R-5	5TUCM6	6	5/16	39.9	15.3	4.8	9/16	9/16
6MM-DRATT-6	6MO-R-6	6TUCM6	6	3/8	40.7	15.3	4.8	9/16	9/16
6MM-DRATT-8	6MO-R-8	8TUCM6	6	1/2	46.3	15.3	4.8	9/16	9/16
8MM-DRATT-4	8MO-R-4	-	8	1/4	40.3	16.2	4.4	5/8	9/16
8MM-DRATT-6	8MO-R-6	6TUCM8	8	3/8	42.0	16.2	6.4	5/8	9/16
8MM-DRATT-8	8MO-R-8	8TUCM8	8	1/2	47.6	16.2	6.4	5/8	9/16
10MM-DRATT-6	10MO-R-6	6TUCM10	10	3/8	44.2	17.2	6.8	3/4	11/16
10MM-DRATT-8	10MO-R-8	8TUCM10	10	1/2	49.8	17.2	7.9	3/4	11/16
12MM-DRATT-8	12MO-R-8	8TUCM12	12	1/2	52.3	22.8	9.3	7/8	7/8
12MM-DRATT-12	12MO-R-12	12TUCM12	12	3/4	53.8	22.8	9.5	7/8	7/8
18MM-DRATT-12	18MO-R-12	12TUCM18	18	3/4	56.1	24.4	14.7	1-1/8	1-1/16
18MM-DRATT-16	18MO-R-16	-	18	1	62.4	24.4	15.1	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.



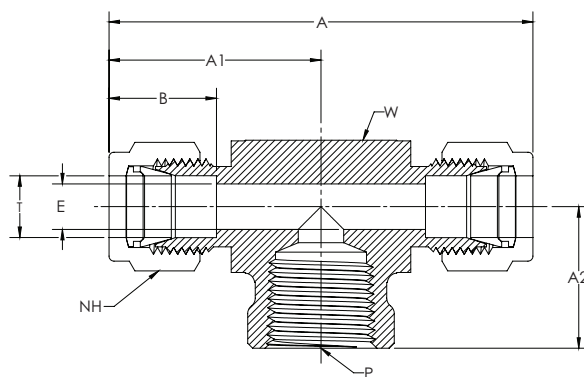
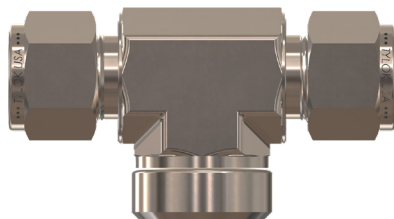
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	T1 TUBE O.D. (mm.)	A (mm.)	E THRU HOLE (mm.)
8MM-DRPC-6MM	8M1-PC-6M	M6PCM8	8	6	25.4	4.1
10MM-DRPC-6MM	10M1-PC-6M	M6PCM10	10	6	25.8	4.1
10MM-DRPC-8MM	10M1-PC-8M	M8PCM10	10	8	26.3	5.6
12MM-DRPC-6MM	12M1-PC-6M	-	12	6	29.6	4.1
12MM-DRPC-8MM	12M1-PC-8M	M8PCM12	12	8	30.1	5.6
12MM-DRPC-10MM	12M1-PC-10M	-	12	10	30.6	7.1

NOTE: Dimensions subject to change, to be used for reference only.



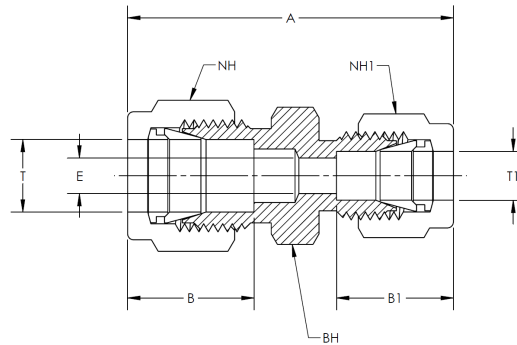
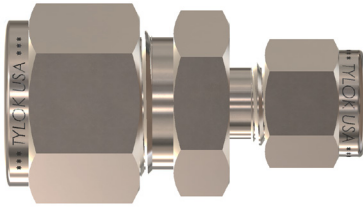
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	PIPE WELD SIZE (mm.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH1 NUT HEX (in.)	BH BODY HEX (in.)
6MM-DTBW-4	6M0-1-4W	ZHLW2 6-1/4	6	1/4	37.9	15.3	4.8	9/16	9/16
8MM-DTBW-4	8M0-1-4W	ZHLW2 8-1/4	8	1/4	38.7	16.2	6.4	5/8	9/16
8MM-DTBW-8	8M0-1-8W	ZHLW2 8-1/2	8	1/2	45.6	16.2	6.4	5/8	7/8
10MM-DTBW-4	10M0-1-4W	ZHLW2 10-1/4	10	1/4	40.9	17.2	7.9	3/4	11/16
10MM-DTBW-6	10M0-1-6W	ZHLW2 10-3/8	10	3/8	40.9	17.2	7.9	3/4	11/16
10MM-DTBW-8	10M0-1-8W	ZHLW2 10-1/2	10	1/2	46.5	17.2	7.9	3/4	7/8
12MM-DTBW-4	12M0-1-4W	ZHLW2 12-1/4	12	1/4	43.4	22.8	9.5	7/8	7/8
12MM-DTBW-6	12M0-1-6W	ZHLW2 12-3/8	12	3/8	43.4	22.8	9.5	7/8	7/8
12MM-DTBW-8	12M0-1-8W	ZHLW2 12-1/2	12	1/2	49.0	22.8	9.5	7/8	7/8
12MM-DTBW-12	12M0-1-12W	-	12	3/4	50.5	22.8	9.5	7/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.



CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	P PIPE END NPT (in.)	A (mm.)	A1 (mm.)	A2 (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	W WRENCH FLAT (in.)
6MM-DTTF-2	6M0-3TTF	M6FBT1/8N	6	1/8	59.7	29.9	19.0	15.3	4.8	9/16	5/8
6MM-DTTF-4	6M0-3-4TTF	M6FBT1/4N	6	1/4	59.6	29.8	22.4	16.2	4.8	9/16	13/16
8MM-DTTF-2	8M0-3TTF	M8FBT1/8N	8	1/8	59.8	29.9	19.0	16.2	6.4	5/8	5/8
8MM-DTTF-4	8M0-3-4TTF	-	8	1/4	61.2	30.6	22.4	17.2	6.4	5/8	13/16
10MM-DTTF-4	10M0-3TTF	M10FBT1/4N	10	1/4	67.0	33.5	22.4	17.2	7.9	3/4	13/16
12MM-DTTF-4	12M0-3-4TTF	M12FBT1/4N	12	1/4	71.9	36.0	22.4	17.2	9.5	7/8	13/16
12MM-DTTF-6	12M0-3TTF	M12FBT3/8N	12	3/8	71.9	36.0	22.4	22.8	9.5	7/8	13/16
12MM-DTTF-8	12M0-3-8TTF	M12FBT1/2N	12	1/2	79.6	39.8	28.4	22.8	9.5	7/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.

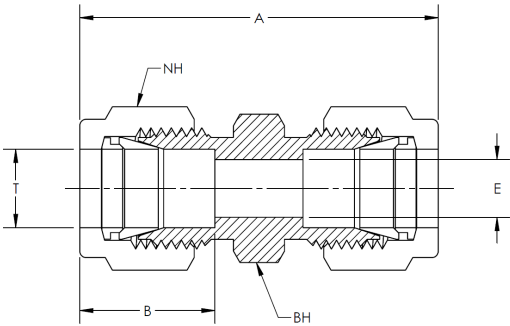
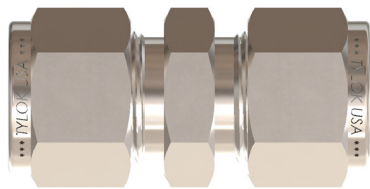


CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	T1 TUBE O.D. (mm.)	A (mm.)	B (mm.)	B1 (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	NH1 NUT HEX (in.)	BH BODY HEX (in.)
8MM-DRU-6MM	8M0-6-6M	M8RUM6	8	6	42.3	16.2	15.3	4.8	5/8	9/16	9/16
10MM-DRU-6MM	10M0-6-6M	M10RUM6	10	6	44.5	17.2	15.3	4.8	3/4	9/16	11/16
10MM-DRU-8MM	10M0-6-8M	M10RUM8	10	8	45.1	17.2	16.2	6.4	3/4	5/8	11/16
12MM-DRU-6MM	12M0-6-6M	M12RUM6	12	6	47.0	22.8	15.3	4.8	7/8	9/16	7/8
12MM-DRU-8MM	12M0-6-8M	M12RUM8	12	8	47.8	22.8	16.2	6.4	7/8	5/8	7/8
12MM-DRU-10MM	12M0-6-10M	M12RUM10	12	10	48.7	22.8	17.2	7.9	7/8	3/4	7/8
18MM-DRU-12MM	18M0-6-12M	M18RUM12	18	12	53.5	24.4	22.8	9.5	1-1/8	7/8	1-1/16

Metric to Fractional

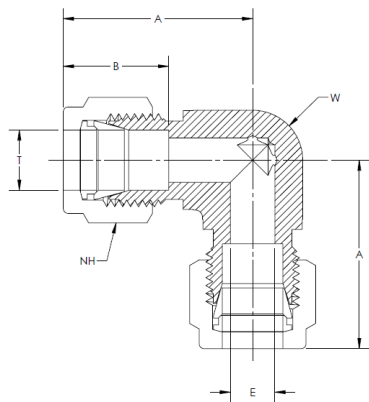
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	T1 TUBE O.D. (in.)	A (mm.)	B (mm.)	B1 (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	NH1 NUT HEX (in.)	BH BODY HEX (in.)
6MM-DRU-1	6M0-6-1	-	6	1/16	34.3	15.3	8.7	1.3	9/16	5/16	9/16
6MM-DRU-2	6M0-6-2	M6CU2	6	1/8	38.5	15.3	13.1	2.4	9/16	7/16	9/16
6MM-DRU-4	6M0-6-4	M6CU4	6	1/4	41.0	15.3	15.4	4.8	9/16	9/16	1/2
6MM-DRU-5	6M0-6-5	M6CU5	6	5/16	42.3	15.3	16.5	4.8	9/16	5/8	9/16
6MM-DRU-6	6M0-6-6	-	6	3/8	43.2	15.3	17.0	4.8	9/16	11/16	5/8
8MM-DRU-4	8M0-6-4	M8CU4	8	1/4	42.3	16.2	15.4	4.8	5/8	9/16	9/16
8MM-DRU-6	8M0-6-6	M8CU6	8	3/8	44.3	16.2	17.0	6.4	5/8	11/16	5/8
10MM-DRU-2	10M0-6-2	M10CU2	10	1/8	41.8	17.2	13.1	2.4	3/4	7/16	11/16
10MM-DRU-4	10M0-6-4	M10CU4	10	1/4	44.5	17.2	15.4	4.8	3/4	9/16	11/16
10MM-DRU-5	10M0-6-5	-	10	5/16	45.1	17.2	16.5	6.4	3/4	5/8	11/16
10MM-DRU-6	10M0-6-6	M10CU6	10	3/8	45.9	17.2	17.0	7.1	3/4	11/16	11/16
12MM-DRU-4	12M0-6-4	-	12	1/4	47.0	22.8	15.4	4.8	7/8	9/16	7/8
12MM-DRU-5	12M0-6-5	-	12	5/16	47.8	22.8	16.5	6.4	7/8	5/8	7/8
12MM-DRU-6	12M0-6-6	M12CU6	12	3/8	48.4	22.8	17.0	7.1	7/8	11/16	7/8
12MM-DRU-8	12M0-6-8	M12CU8	12	1/2	51.2	22.8	22.9	9.5	7/8	7/8	7/8
18MM-DRU-12	18M0-6-12	M18CU12	18	3/4	53.5	24.4	24.5	15.1	1-1/8	-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.



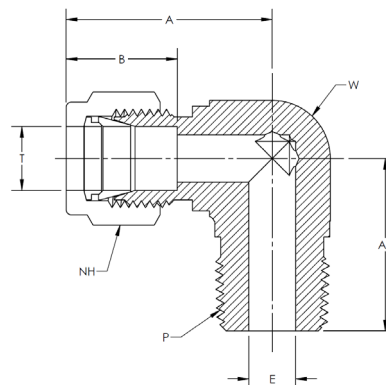
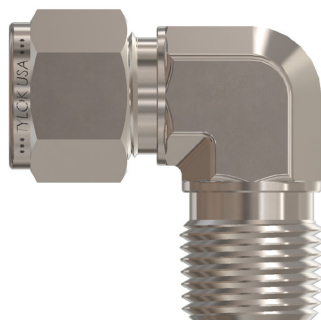
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DU	6M0-6	SCM6	6	41.0	15.3	4.8	9/16	9/16
8MM-DU	8M0-6	SCM8	8	43.2	16.2	6.4	5/8	9/16
10MM-DU	10M0-6	SCM10	10	46.2	17.2	7.9	3/4	11/16
12MM-DU	12M0-6	SCM12	12	51.2	22.8	9.5	7/8	7/8
18MM-DU	18M0-6	SCM18	18	53.5	24.4	15.1	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.



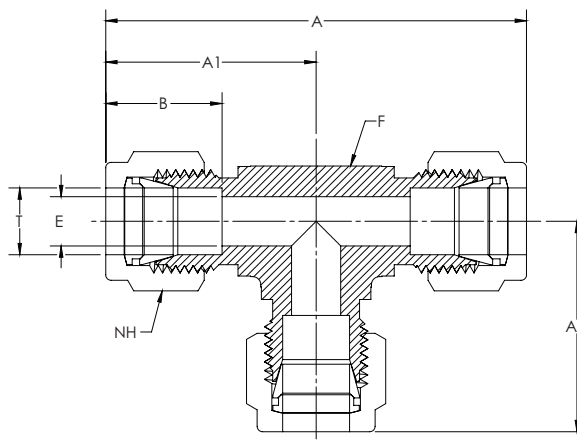
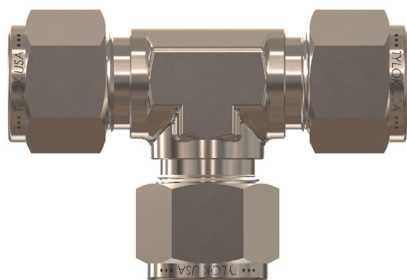
CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	A (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	W WRENCH FLAT (in.)
6MM-DELU	6M0-9	EEM6	6	27.0	15.3	4.8	9/16	1/2
8MM-DELU	8M0-9	EEM8	8	28.8	16.2	6.4	5/8	9/16
10MM-DELU	10M0-9	EEM10	10	33.0	17.2	7.9	3/4	13/16
12MM-DELU	12M0-9	EEM12	12	36.0	22.8	9.5	7/8	13/16
18MM-DELU	18M0-9	EEM18	18	39.8	24.4	15.1	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.

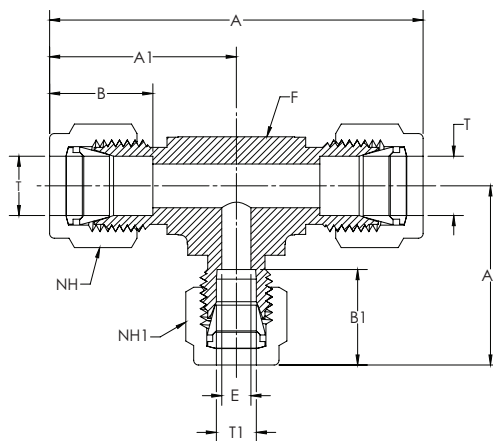


CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)	P PIPE END NPT (in.)	A (mm.)	A1 (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	BH BODY HEX (in.)
6MM-DME-2	6MO-2-2	M6MSEL1/8N	6	1/8	27.0	18.8	15.3	4.8	9/16	1/2
6MM-DME-4	6MO-2-4	M6MSEL1/4N	6	1/4	27.0	23.4	15.3	4.8	9/16	1/2
6MM-DME-6	6MO-2-6	M6MSEL3/8N	6	3/8	29.8	26.2	15.3	4.8	9/16	11/16
6MM-DME-8	6MO-2-8	M6MSEL1/2N	6	1/2	31.8	33.0	15.3	4.8	9/16	13/16
8MM-DME-2	8MO-2-2	M8MSEL1/8N	8	1/8	28.8	19.8	16.2	4.8	5/8	5/8
8MM-DME-4	8MO-2-4	M8MSEL1/4N	8	1/4	28.8	24.4	16.2	6.4	5/8	5/8
8MM-DME-6	8MO-2-6	M8MSEL3/8N	8	3/8	30.6	26.2	16.2	6.4	5/8	11/16
8MM-DME-8	8MO-2-8	M8MSEL1/2N	8	1/2	32.6	33.0	16.2	6.4	5/8	13/16
10MM-DME-2	10MO-2-2	M10MSEL1/8N	10	1/8	33.0	23.4	17.2	4.8	3/4	13/16
10MM-DME-4	10MO-2-4	M10MSEL1/4N	10	1/4	33.0	27.9	17.2	7.1	3/4	13/16
10MM-DME-6	10MO-2-6	M10MSEL3/8N	10	3/8	33.0	27.9	17.2	7.9	3/4	13/16
10MM-DME-8	10MO-2-8	M10MSEL1/2N	10	1/2	33.5	33.0	17.2	7.9	3/4	13/16
12MM-DME-4	12MO-2-4	M12MSEL1/4N	12	1/4	36.0	28.2	22.8	7.1	7/8	13/16
12MM-DME-6	12MO-2-6	M12MSEL3/8N	12	3/8	36.0	28.2	22.8	9.5	7/8	13/16
12MM-DME-8	12MO-2-8	M12MSEL1/2N	12	1/2	36.0	33.0	22.8	9.5	7/8	13/16
12MM-DME-12	12MO-2-12	M12MSEL3/4N	12	3/4	39.8	36.8	22.8	9.5	7/8	1-1/16
18MM-DME-8	18MO-2-8	M18MSEL1/2N	18	1/2	39.8	36.8	24.4	11.9	1-1/8	1-1/16
18MM-DME-12	18MO-2-12	M18MSEL3/4N	18	3/4	39.8	36.8	24.4	15.1	1-1/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.

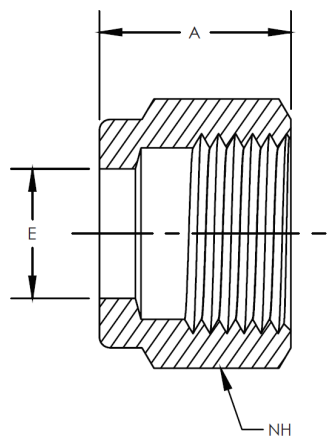


CBC PART NUMBER	INTERCHANGES WITH	T TUBE O.D. (mm.)	A (mm.)	A1 (mm.)	B (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	W WRENCH FLAT (in.)
6MM-DTTT	6M0-3 ETM6	6	53.9	27.0	15.3	4.8	9/16	1/2
8MM-DTTT	8M0-3 ETM8	8	59.7	29.9	16.2	6.4	5/8	5/8
10MM-DTTT	10M0-3 ETM10	10	66.0	33.0	17.2	7.9	3/4	13/16
12MM-DTTT	12M0-3 ETM12	12	72.0	36.0	22.8	9.5	7/8	13/16
18MM-DTTT	18M0-3 ETM18	18	79.6	39.8	24.4	15.1	1-1/8	1-1/16



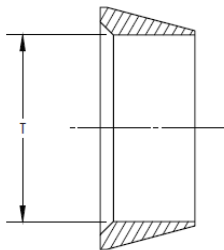
CBC PART NUMBER	INTERCHANGES WITH	T TUBE O.D. (mm.)	T1 TUBE O.D. (mm.)	A (mm.)	A1 (mm.)	A2 (mm.)	B (mm.)	B2 (mm.)	E THRU HOLE (mm.)	NH NUT HEX (in.)	NH1 NUT HEX (in.)	W WRENCH FLAT (in.)
8MM-DTTT-8MM-6MM	8M0-3-8M-6M	8	6	59.9	29.9	29.0	16.2	15.3	4.8	5/8	9/16	5/8
10MM-DTTT-10MM-6MM	10M0-3-10M-6M	10	6	66.0	33.0	31.8	17.2	15.3	4.8	3/4	9/16	13/16
12MM-DTTT-12MM-6MM	12M0-3-12M-6M	12	6	72.0	36.0	31.8	22.8	15.3	4.8	7/8	9/16	13/16
18MM-DTTT-18MM-12MM	18M0-3-18M-12M	18	12	79.8	39.9	39.9	24.4	22.8	9.5	1-1/8	7/8	1-1/16

NOTE: Dimensions subject to change, to be used for reference only.

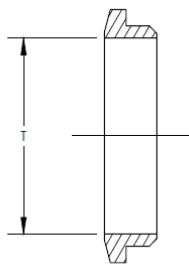


CBC PART NUMBER	INTERCHANGES WITH			T TUBE O.D. (mm.)	A (mm.)	NH NUT HEX (in.)
DN-6MM	6M2-1	NUM6		6	12.7	9/16
DN-8MM	8M2-1	NUM8		8	13.5	5/8
DN-10MM	10M2-1	NUM10		10	15.1	3/4
DN-12MM	12M2-1	NUM12		12	17.4	7/8
DN-18MM	18M2-1	NUM18		18	17.4	1-1/8

NOTE: Dimensions subject to change, to be used for reference only.



CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)
DFC-6MM	6M3-1	FFM6	6
DFC-8MM	8M3-1	FFM8	8
DFC-10MM	10M3-1	FFM10	10
DFC-12MM	12M3-1	FFM12	12
DFC-18MM	18M3-1	FFM18	18



CBC PART NUMBER	INTERCHANGES WITH		T TUBE O.D. (mm.)
DRC-6MM	6M4-1	BFM6	6
DRC-8MM	8M4-1	BFM8	8
DRC-10MM	10M4-1	BFM10	10
DRC-12MM	12M4-1	BFM12	12
DRC-18MM	18M4-1	BFM18	18

NOTE: Dimensions subject to change, to be used for reference only.

Promotional Products

Leak Detector & Thread Lubricant

TYSKY LIQUID LEAK DETECTOR

- Temperature rating: Can be used over a temperature range of 27° to 200°F (-2 to 93°C).
- Low Temperature rating: Can be used over a temperature range of -65° to 200°F (-54 to 93°C).

Specifications: Meets the performance requirements of:

- MIL-PF25567 Leak Detector Compound, Oxygen Systems, Type I, 0 to 70°C (33 to 158°F)
- NFPA 52 Section 6-12.2 Leak Testing Compressed Natural Gas Vehicular Fuel System
- EPA Part 60, Appendix A, Method 21, Section 4.3.3 Alternative Screening Procedures Using Soap Solutions
- Nontoxic, noncorrosive, nonflammable
- Tylok Liquid Leak Detector detects gas leaks in hard to reach areas.
- Safe for oxygen systems
- Sustainable bubble action works even on very small leaks and vertical surfaces
- Flexible tube extends for hard to reach areas
- Formulas dries clean, without staining

Part Numbers	Description
Leak Detector-8oz	8oz. Bottle
Leak Detector COOL-8oz	
Leak Detector-GAL	1 Gallon
Leak Detector COOL-GAL	
Leak Detector-55G	55 Gallon Drum
Leak Detector COOL-55G	



TYLUBE THREAD LUBRICANT

TyLube is an anti-gall compound to be used on stainless steel, steel and nickel-based alloys. Temperature range to 500°F. Not recommended for plastic and aluminum products. TyLube is made from distilled water with inert Ingredients and contains no silicones, heavy metals, chlorine or sulfur. Safe for oxygen applications.

For a complete list of ingredients, check out the SDS on www.tylok.com/tylube to be sure of its compatibility with your installation.

Part Numbers	Description
TYLUBE-8OZ	8oz. bottle
TYLUBE-100	100 ct. box
TYLUBE-1ML	1ml packet



Promotional Products

Gap Gauges



CBC PART NUMBER	T TUBE O.D.
1-DGG	1/16
2-DGG	1/8
3-DGG	3/16
4-DGG	1/4
5-DGG	5/16
6-DGG	3/8
8-DGG	1/2
10-DGG	5/8
12-DGG	3/4
14-DGG	7/8
16-DGG	1
468-DGG	1/4, 3/8, 1/2, 6mm, 12mm
ABS-46812-DGG	1/4, 3/8, 1/2, 3/4



When fitting is properly tightened, gap gage should not fit between nut and shoulder of body.

Instrumentation Tubing

Suggested Allowable Working Pressure Tables

Values in the black cells with white text are not recommended for gas services. Maximum suggested working pressures are based on ASME B31.3 equations using the following values:

Stainless Steel Welded Tube De-rating factors:

	Stress Value (psi)	Fractional Tube Specifications	Metric Tube Specifications
Stainless Steel	20,000	ASTM A269	ISO 1127 3 to 12 mm O.D. D4 T4 tolerance 14 mm O.D and larger: D4 T3 tolerance
Carbon Steel	15,700	ASTM A179	-
Copper	6,000	ASTM B75	-

Double-Welded	0.85
Single-Welded	0.80

FRACTIONAL TUBE (psig)

Stainless Steel																
Tube Size O.D.	Tube Wall Thickness (inches)															
	.010	.012	.014	.016	.020	.028	.035	.049	.065	.083	.095	.109	.120	.134	.156	.188
1/16"	5600	6800	8100	9400	12000											
1/8"						8500	10900									
3/16"						5400	7000	10200								
1/4"						4000	5100	7500	10200							
5/16"							4000	5800	8000							
3/8"							3300	4800	6500							
1/2"							2600	3700	5100	6700						
5/8"								2900	4000	5200	6000					
3/4"								2400	3300	4200	4900	5800				
7/8"								2000	2800	3600	4200	4800				
1"									2400	3100	3600	4200	4700			
1-1/4"										2400	2800	3300	3600	4100	4900	
1-1/2"											2300	2700	3000	3400	4000	4900
2"												2000	2200	2500	2900	3600

Carbon Steel								
Tube Size O.D.	Tube Wall Thickness (inches)							
	.028	.035	.049	.065	.083	.095	.109	.120
1/8"	8000	10200						
3/16"	5100	6600	9600					
1/4"	3700	4800	7000	9600				
5/16"		3700	5500	7500				
3/8"		3100	4500	6200				
1/2"		2300	3200	4500	5900			
5/8"			2600	3500	4600	5300		
3/4"			2100	2900	3700	4300	5100	
7/8"			1800	2400	3200	3700	4300	
1"			1500	2100	2700	3200	3700	4100

Copper								
Tube Size O.D.	Tube Wall Thickness (inches)							
	.028	.035	.049	.065	.083	.095	.109	.120
1/8"	2700	3600						
3/16"	1800	2300	3400					
1/4"	1300	1600	2500	3500				
5/16"		1300	1900	2700				
3/8"		1000	1600	2200				
1/2"		800	1100	1600	2100			
5/8"			900	1200	1600	1900		
3/4"			700	1000	1300	1500	1800	
7/8"			600	800	1100	1300	1500	
1"			500	700	900	1100	1300	1500

METRIC TUBE (bar)

Stainless Steel											
Tube Size O.D.	Tube Wall Thickness (mm)										
	0.8	1.0	1.2	1.5	1.8	2.0	2.2	2.5	2.8	3.0	
3	670										
6	310	420	540	710							
8		310	390	520							
10		240	300	400	510	580					
12		200	250	330	410	470					
14		160	200	270	340	380	430				
15		150	190	250	310	360	400				
16			170	230	290	330	370				
18			150	200	260	290	320	370			
20			140	180	230	260	290	330	380		
22			120	160	200	230	260	300	340		
25					180	200	230	260	290	320	

TUBE PRESSURE DE-RATING FACTORS ELEVATED TEMPERATURES

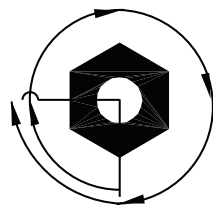
Temperatures		Tubing Material			
°F	°C	Carbon	304 SS	316 SS	Copper
100	38				1.00
150	66				0.85
200	93	0.95	1.00	1.00	0.80
250	121				0.80
300	149	0.90	1.00	1.00	0.78
350	177				0.66
400	204	0.87*	0.93	0.96	0.50
500	260		0.87	0.89	
600	316		0.82	0.85	
700	371		0.8	0.81	
800	427		0.76	0.79	
900	482		0.73	0.77	
1000	538		0.69	0.76	

* Based on 375°F (190°C) max

Installation Instructions

CBC-LOK®/CS-LOK® INSTALLATION INSTRUCTIONS

CBC-Lok®/CS-Lok® Tube Fittings come completely assembled & ready for use, no disassembly required. Although there are some general guidelines to follow, no special preparation of the tubing is necessary. In overhead applications, Tylok recommends using a Pre-Set Tool.

Size		Tighten # Turn[s]		
1	1/16"	3/4	SIZE #1 thru #3	
2	1/8"			
3	3/16"			
4	1/4"	1-1/4	SIZE #4 thru #16	
5	5/16"			
6	3/8"			
8	1/2"			
10	5/8"			
12	3/4"			
14	7/8"			
16	1"			

Finger tight plus 3/4 turn	Finger tight plus 1-1/4 turn
-------------------------------	---------------------------------

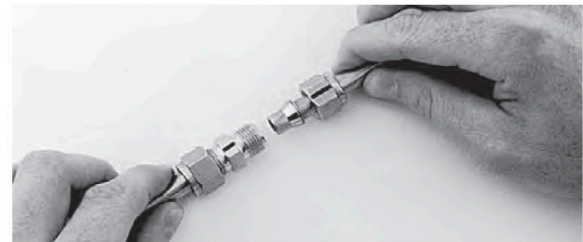
NOTE: DF Plugs, -NF (Nut & Ferrule Pre-Assemblies) require only 1/4 turn make-up.



Simply insert the tubing into the assembly, making sure the tubing seats firmly against the shoulder of the body and the nut is finger tight. High pressure applications and high safety-factor systems. Further tighten the nut until the tube will not turn by hand or move axially in the fitting.



Tighten nut with wrench the additional number of turns indicated above, while holding the fitting body with a second wrench.



TO REMOVE TUBE & RE-CONNECT TUBE FITTING

Mark the location of the nut with reference to the body before disassembly. Back off the nut until it is clear of the body and remove the tubing from the fitting. For assembly, re-insert the tubing into the body until it is seated. With proper size wrench, re-tighten nut to original location by realigning previous marks. A noticeable amount of torque will develop when the nut is turned to original position. Next, rotate the nut slightly past original position to fully re-set the seal.

TUBING SELECTION GUIDELINES

General

- Free of nicks, scratches, and imperfections
- Suitable for bending and flaring
- Square cut ends

Stainless Steel

- Types 304, 304L, 316, 316L, 317, or 317L per ASTM A213, ASTM A269, or equivalent.
- Fully Annealed, Seamless or Welded Redrawn, Maximum hardness of 80 HRB.

Copper

- Seamless ASTM B75 Soft Annealed, ASTM B88 K or L Temper O, or equivalent.

Carbon Steel

- ASTM A179 or equivalent, maximum hardness of 72 HRB.

GAS SERVICE

Gases are generally less viscous than liquids allowing them to leak through imperfect seals. Tylok recommends tubing with minimal surface imperfections (nicks, scratches, etc.) and heavier walls for gas service applications. Heavy wall tubing offers more resistance to ferrules during installation which promotes a skiving effect that smooths out surface defects that would otherwise be leak paths. Thin wall tubing offers less resistance which promotes flexing rather than skiving resulting in a seal that may not be suitable for gas service. Refer to tubing pressure tables in this catalog for wall thickness recommended for gas services.

PRECAUTIONS FOR WELD END

For best results when using Tylok tube fittings with weld ends, certain precautions should be taken:

- Remove the nut & ferrules from the fitting.
- Protect exposed threads & sealing surfaces from spatter.
- Use a heat sink to dissipate heat.
- Tack weld symmetrically to maintain alignment.
- When finishing welding remove weld spatter protection and make sure nuts and ferrules are in the proper orientation before assembling.

SAFETY GUIDELINES

- Depressurize fluid systems before connecting, disconnecting or remaking a fitting.
- Follow Tylok's guidelines for proper fitting installation.
- Consult the factory before attempting to interchange Tylok fitting components.
- Don't exceed the recommended pressure ratings of system components.
- Use thread sealants when installing tapered pipe threads.
- Select fitting and tubing materials for best results.
- Never use a fitting to bleed pressure from a system.

HEAT TRACEABILITY

Tylok Tube Fittings are heat code traceable back to mill heat of the material they were made from. Contact the factory for material certification requests.

RAW MATERIAL SPECIFICATIONS

Fitting Material	Bar Stock	Forging
Brass	ASTM B16 ASTM B453	ASTM B283
Stainless Steel	ASTM A276 ASTM A479 ASME SA-479 Type 316-SS	ASTM A182 ASME SA-182 Type 316-SS
Steel	ASTM A108	

* Reference Tubing Selection & Preparation

NOTICE

In designing a system incorporating tube fittings and valves, it is the designer's or user's obligation & responsibility to determine the appropriate fittings and valves to be used for each application and to insure proper installation and maintenance.

QUALITY CONTROL

All components are manufactured & inspected to meet strict quality control standards in each phase of production. All employees are thoroughly trained to follow procedures, in accordance with the ISO 9001 Quality Standard, to ensure a quality product from the start of each job through completion.

End Connections

Suggested Allowable Working Pressure Tables



CBC-LOK/CS-LOK TUBE ADAPTERS

Fractional (PSIG)				Metric (BAR)	
Size	Tube Size	Stainless Steel & Carbon Steel	Brass	Tube Size	Stainless Steel & Carbon Steel
1	1/16	7200	2600	3mm	370
2	1/8	6400	3200	6mm	390
3	3/16	6000	3000	8mm	390
4	1/4	5900	2900	10mm	390
5	5/16	5800	2700	12mm	360
6	3/8	5800	2200	15mm	340
8	1/2	4900	2100	16mm	340
10	5/8	5000	1900	18mm	310
12	3/4	4600	1800	20mm	310
14	7/8	4300	1500	22mm	340
16	1	4100	1500	25mm	280
20	1-1/4	4900	-		
24	1-1/2	4900	-		
32	2	3600	-		

NOTE: Ratings calculated in accordance with ASME B31.3 (stress values of 10,000 psi for brass and 20,000 psi for stainless and carbon steel).



STB FITTINGS (PSIG)

Stainless Steel & Carbon Steel			
Size	Thread	Straights	Positionable
2	5/16-24	5076	5076
3	3/8-24	5076	5076
4	7/16-20	5076	4568
5	1/2-20	5076	4568
6	9/16-18	5076	4061
8	3/4-16	4568	4061
10	7/8-14	3626	3045
12	1-1/16-12	3626	3045
14	1-3/16-12	3045	2538
16	1-5/16-12	3045	2538
20	1-5/8-12	2538	2030
24	1-7/8-12	2538	2030
32	2-1/2-12	2030	1522

NOTE: Pressure ratings per SAE J1926-3 for light-duty stud ends.



JIC 37° FLARE (PSIG)

Stainless Steel & Carbon Steel		
Size	Thread	PSIG
2	5/16-24	5000
3	3/8-24	5000
4	7/16-20	5000
5	1/2-20	5000
6	9/16-18	5000
8	3/4-16	4500
10	7/8-14	3500
12	1-1/16-12	3500
14	1-3/16-12	3000
16	1-5/16-12	3000
20	1-5/8-12	2500
24	1-7/8-12	2000
32	2-1/2-12	1500

NOTE: Pressure ratings per SAE J514.



NPT & BSPT PIPE THREADS

PSIG					
Size	Thread	Stainless Steel & Carbon Steel		Brass	
		Male	Female	Male	Female
1	1/16	11000	6700	5500	3300
2	1/8	10000	6500	5000	3200
4	1/4	8000	6600	4000	3300
6	3/8	7800	5300	3900	2600
8	1/2	7700	4900	3800	2400
12	3/4	7300	4600	3600	2300
16	1	5300	4400	2600	2200
20	1-1/4	6000	5000	3000	2500
24	1-1/2	5000	4600	2500	2300
32	2	3900	3900	1900	1900

NOTE: Pressure ratings calculated in accordance with ASME B31.3 with NPT threads per ASME B1.20.1 and BSPT threads per ISO 7-1.

THERMOCOUPLE BORE THROUGH

Sizes	De-Rating Factor
1/2" & Smaller	0.75
Over 1/2" up to & including 3/4"	0.50
Larger than 3/4"	0.25

NOTE: Multiply tube pressure rating (see Suggested Allowable Working Pressure tables) by de-rating factor to determine safe working pressure.

FITTING TEMPERATURE RATINGS

316 Stainless	Brass	Steel
-325°F to 1000°F (-198°C to 648°C)	-40°F to 400°F (-40°C to 204°C)	-65°F to 375°F (-54°C to 190°C)