FITTINGS





Hydraulic Fitting Families

The Continental fitting product line is broken into sections based on the fitting type:

1	2	3	4	5	6	7	8	9	10
B2	SG	S6, SE, DG	ВТ	UC	FG	TP	UT	Specialty	Ferrules
SR1SN	SR12	SR13	HR4	SR1SN	SR5	SR7	DUT	NSFX	SR1SN
DR1SN	ARC12	ARC13		SR2SN	DR5	TR7		Hot Oiler	SR2SN
SFS	SR13	SR15		SR3		NR7		SGUN	SR3
SR2SN	ARC13	ARC15		SR5		BR7		SHJ	SR5
DR2SN	SR15	XCP5S		DR5		SR8		IG	DR5
LR16SC	ARC15	XCP6S		SR6		TR8		IGHT	SR6
LR2SN	LCP4S			HR6		NR8		IGTC	HR6
LCP3	LCP6S			HR4		SR18		FXG	HR4
SR16SC	S4SP			SR14A					SR14A
ARC16SC	S4SH			SFS					SFS
DR16SC	XCP3S			SCP3					SCP3
XR16SC	XCP4S			ACP3					ACP3
SCP3	XCP5S			BOP					ВОР
ACP3	XCP6S								SR13
XCP3									ARC13
XCP4									SR15
SR12									S4SP
ARC12									S4SH
Hot Oiler									XCP6S

Quick-Find™ Fittings

Continental Brand Quick-Find™ Hydraulic Hose and Fitting catalog makes fitting selection very easy with a 5-step process.

Step 1 - Choose the Hose Type

The first step in choosing the correct fitting is selecting the hose type from one of the 9 sections (excluding ferrules).

Note: Some hose may appear in more than one section, depending on the hose dash size and/or whether the desired fitting solution is a one-piece (B2, BT, SG, S6), two-piece (UC, DG) or re-attachable (FG).

Step 2 - Choose the Fitting Description

Once the hose type has been identified, go to the correct section and view the available fittings for that particular hose. Within the content of each section there is a table for each fitting.

The Fitting Description at the top of each table describes the following elements:

JIC 37° Flare (SAE J514) Female 45° Elbow Swivel

Thread Description Gender Elbow Swivel or Non-Swivel

Step 3 - Choose Hose ID and Thread Size

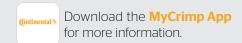
Choose the correct fitting selected in Step 2 based on the Hose ID and Thread Size. In some cases, a fitting may be available in several thread sizes. As an example, a JIC 37° Flare (SAE J514) Female Swivel is available for a Hose ID of $3/8^{\circ}$ and thread sizes $\%_6$ -18 and $\%_4$ -16.

Step 4 - Determine Availability for Hose Type

With the desired fitting identified by Hose ID and thread size in Step 3, confirm the fitting is compatible for a particular hose type by referencing the hose listed in the footer shown on the bottom of the page.

Step 5 - Note the Part Number

The fitting part number can now be noted. The part number is found on the left side of the chart. For UC and DG two-piece fittings, see Section 10 - Ferrules to find the appropriate ferrule.





Hydraulic Fittings Nomenclature



FITTING FAMILY		THREAD DESCRIPTION	HOSE DASH	SIZE	THREAD DASH SIZE		
First 2	Characters	Next 2-7 Characters	Next 2 Characte	ers	Last 2 Characters		
B2 BT Ultra-Crimp™ S6 (1-piece fitting)		Refer to the next page for detailed information.	All hose except S DUT and Galaxy 02 1/8"		See the Thread Reference Chart for converting dash		
SG T7	Thermoplastic		03 3/16"	(4.8 mm) (6.4 mm)	size to thread sizes (starting on page 334).		
T8 FG	(1-piece fitting) Field-Grip™		06 3/8"	(7.9 mm) (9.5 mm) (12.7 mm)	02 03		
UT	(1-piece reattachable fitting) DUT Hose (1-piece reattachable fitting)		10 5/8" (1	15.9 mm) (19 mm)	04 05 06		
UC	Uni-Crimp™ Stem (2-piece fitting)		20 1 1/4" (3	25.4 mm) 31.8 mm) 38.1 mm)	08 10		
DG	Dual-Grip Stem (2-piece internal and external skive fitting)		32 2" (5	50.8 mm) 63.5 mm)	12 14 15		
РВ	Push-On Brass (1-piece fitting)		SAE 100R5, DUT Galaxy Hose:	Γ and	16 18		
SF	Saflex® (1-piece fitting)			(4.8 mm) (6.4 mm)	20 22		
GG	Grease Gun (1-piece fitting)		06 5/16" 08 13/32" ((7.9 mm) 10.3 mm) 12.7 mm)	24 26 28		
			12 5/8" (1 14 3/4" (15.9 mm) (19.1 mm)	30 32		
			20 1 1/8" (2 24 1 3/8"	22.2 mm) 28.6 mm) (35 mm)	33 36 40		
			32 1 ¹³ / ₁₆ "	(46 mm)	42 45 52		

Warning - Selection of Fitting

Selection of the proper fittings for the application is essential to the proper operation and safe use of the hose and related equipment. Inadequate attention to the selection of the hose fitting for the application can result in hose leakage, bursting or other failures, which can cause serious bodily injury or property damage from spraying fluids or flying projectiles. Some of the factors involved in the selection of the proper hose ends are:

> Fluid Compatibility -> Pressure -> Temperature -> Installation Design -> Hose Size -> Corrosion Requirements

If there are any questions as to what fitting should be used, Continental recommends that you consult the Continental Hydraulics Application Group for assistance.

FITTINGS

Proper Assembly of Continental Hose and Fittings

Continental hose, fittings and crimping equipment work together to provide an efficient and reliable hose connection. Continental hose and fittings are part of an engineered system and are to be assembled in accordance with Continental specifications. Using non-Continental components may produce an assembly that does not meet rated performance. Continental DOES NOT WARRANT, EXPRESSLY OR BY IMPLICATION, HOSE ASSEMBLIES THAT DO NOT INCORPORATE Continental HOSE AND FITTINGS, OR ARE NOT CRIMPED IN ACCORDANCE WITH Continental's PROCESS SPECIFICATIONS.

Buyers may elect to attach additional or non-standard parts or equipment, or to use different manufacturing specifications, as necessary to meet the requirements of the buyer or customer's application. In such cases, the buyer has sole responsibility to qualify the hose for these applications as necessary to ensure performance capability.

For guidance in the assembly of Continental hose and couplings, please refer to the Continental Crimp Specifications Manual. Information in this catalog is believed to be accurate, but is not warranted, and is subject to change without prior notice.

For the most current available product information, check **www.continental-industry.com**.

Hydraulic Fittings Nomenclature

Thr	ead	Thread Description	Gender	Swivel	Elbow	Thre	ead	Thread Description	Gender	Swivel	Elbow
JC	FX		Female	Swivel		OF	FX		Female	Swivel	
JC	FX45	_	Female	Swivel	45° Elbow	OF	FX45	-	Female	Swivel	45° Elbow
JC	FX90	_	Female	Swivel	90° Elbow	OF	FX90	_	Female	Swivel	90° Elbow
JC	FX90L	JIC 37° Flare (SAE J514)	Female	Swivel	90° Elbow (Long Drop-Tube)	OF	FX90L	O-Ring Face Seal (SAE J1453 ORS/ORFS)	Female	Swivel	90° Elbow (Long Drop-Tube)
JC	FX90S		Female	Swivel	90° Elbow (Short Drop-Tube)	OF	FX90S	-	Female	Swivel	90° Elbow (Short Drop-Tube)
JC	М	_	Male			OF	М	_	Male		
SF	FX		Female	Swivel		ОВ	М		Male		
SF	FX45		Female	Swivel	45° Elbow	ОВ	MX	O-Ring Boss Straight Thread (SAE J514)	Male	Swivel	
SF	FX90	=	Female	Swivel	90° Elbow	ОВ	MX90B	- TTITEdu (SAE JOT4)	Male	Swivel	90° Block Elbow
CE	EVOOL	- CAE 4Eº JE12 El		Control	90° Elbow	FL					
SF	FX90L	SAE 45° J512 Flare	Female	Swivel	(Long Drop-Tube)	FL	22	-			22.5° Elbow
CE	FVOOC	_	F	Control	90° Elbow	FL	30	-			30° Elbow
SF	FX90S		Female	Swivel	(Short Drop-Tube)	FL	45	-			45° Elbow
SF	M	_	Male			FL	60	Code 61 Flange (SAE J518)			60° Elbow
SI	F		Female			FL	67	- (JAL 33 10)			67° Elbow
SI	М		Male			FL	90				90° Elbow
SI	MX	SAE 45° Inverted Flare	Male	Swivel		FL	110				110° Elbow
SI	MX45		Male	Swivel	45° Elbow	FL	135				135° Elbow
SI	MX90		Male	Swivel	90° Elbow	FL	90EOC	Engine Oil Connection			90° Elbow
NP	F		Female			FH					
NP	FX		Female	Swivel		FH	22				22.5° Elbow
NP	M	- NPTF	Male			FH	30				30° Elbow
NP	M90	- NPTF	Male		90° Elbow	FH	45	Code 62 Flange (SAE J518)			45° Elbow
NP	MX		Male	Swivel		FH	60	- (JAL 33 10)			60° Elbow
NP	MX90B	_	Male	Swivel	90° Block Elbow	FH	67				67° Elbow
NP	MAPI	NPTF Oil Field Connection	Male			FH	90	-			90° Elbow
НМ		Hose Mender				CF					
NS	FX	NPSM	Female	Swivel		CF	22	_			22.5° Elbow
СТ	N.4	SAE J514 Flareless	N 4-1-			CF	30				30° Elbow
FT	М	Tube Fittings	Male			CF	45	Caterpillar® Flange			45° Elbow
GT	F	Grease Trap	Female			CF	60	-			60° Elbow
SP		Characteries a				CF	67				67° Elbow
SP	45	- Standpipe			45° Elbow	CF	90				90° Elbow

Continued on the next page.



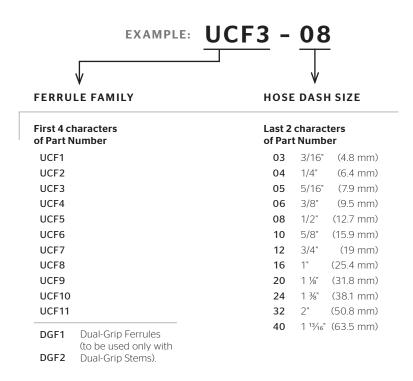


Hydraulic Fittings Nomenclature Continued

Thread		Thread Description	Gender	Swivel	Elbow
KF					
KF	45	Komatsu Flange			45° Elbow
KF	90				90° Elbow
BP			Female	Swivel	
BP		BSPP (British	Female	Swivel	45° Elbow
BP		Standard Pipe Parallel)	Female	Swivel	90° Elbow
BP			Male	Swivel	
BT	М	BSPT (British Standard Pipe Tapered)	Male		
BF	FX	BSP Flat Seat (British Standard Pipe)	Female	Swivel	
DL	FX		Female	Swivel	
DL	FX45	DIN 2.4º Liabt	Female	Swivel	45° Elbow
DL	FX90	DIN 24° Light	Female	Swivel	90° Elbow
DL	М		Male		

Thread	Thread Description	Gender	Swivel	Elbow
DH FX		Female	Swivel	
DH FX45	- DIN 2.4° Hoovay	Female	Swivel	45° Elbow
DH FX90	- DIN 24° Heavy	Female	Swivel	90° Elbow
DH M		Male		
DN FX45	- DIN 60	Female	Swivel	45° Elbow
DN FX90	DIIN 60	Female	Swivel	90° Elbow
KM		Female	Swivel	
KM	 Komatsu 30° Flare (Metric Threads) 	Female	Swivel	45° Elbow
KM	- (Wethe Threads)	Female	Swivel	90° Elbow
JS FX	JIS 30° (Parallel Pipe Thread)	Female	Swivel	
PTT FX	PTT 30° (for DUT hose)	Female	Swivel	

Hydraulic Ferrule Nomenclature



SECTION 4 - BT FITTINGS

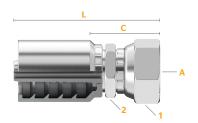
This section lists all fittings compatible with the following hose:

Hose	Description	Compatible Dash Size
HR4	SAE 100R4	All hose dash sizes

How to Use the Fittings Table

The fittings in this section will follow a similar table structure to the one seen on this page.

Fitting dimensions and attributes are explained below.



Fitting Name

Fitting Description

							($\langle \rangle$		\longleftrightarrow		(O)
Part Number	Product Number	SAP Number	Hose ID	Thread Size (A)		ex <mark>1</mark> ch Size		x <mark>2</mark> ch Size	Cut-0	Off (C)	Leng	gth (L)
			in.		in.	mm	in.	mm	in.	mm	in.	mm
BT-JCFX-1212	37400-1212	21007489	3/4	1 1/16 -12	1 1/4	32	1 1/16	27	1.74	44.2	3.29	83.6
BT-JCFX-1616	37400-1616	21007491	1	1 1/16 -12	1 ½	38	1 1/4	32	1.96	49.8	3.74	94.9
BT-JCFX-2020 [™]	37400-2020	21007492	1 1/4	1 % -12	2	50	1 %	41	2.15	54.6	4.20	106.6

Fitting Dimensions and Attributes

Part Number See Hydraulic Fittings Nomenclature on page 128 for a breakdown of part number attributes

Hose ID The compatible Hose ID **Tube ID** The compatible Tube ID

Thread Size The thread size or sizes available for a particular fitting dash size (indicated by A in the fitting image)

Hex Size The wrench size for one or both nuts on the fitting (indicated by 1 or 2 in the fitting image)

 $\textbf{Drop} \ \ \text{The length of the elbow (indicated by } \ \ \textbf{D} \ \ \text{in the fitting image)}$

Cut-Off The amount of hose to be cut for a correct assembly length (indicated by **C** in the fitting image)

Length The overall length of the fitting

Skive Type For applicable fittings, a skive type will be indicated as Skive, Non-Skive or Dual-Grip

Choose fittings carefully, considering the working pressure of both the hose and fitting. The maximum working pressure of the hose assembly is the lesser of the rated working pressure of the hose and the fitting. See page 333 for the Fittings Working Pressure Guide.

BT Fittings Overview

A complete overview of all BT fittings found in this section.





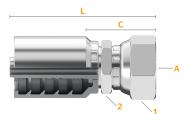






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BT-FL90

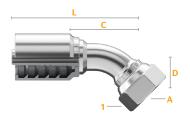


JIC 37° Flare (SAE J514)

Female / Swivel

					(_>	<	_>	(→)	(<u>(O</u>)
Part Number	Product Number	SAP Number	Hose ID	Thread Size (A)		Hex 1 Wrench Size		Hex 2 Wrench Size		Off (C)	Leng	jth (L)
			in.		in.	mm	in.	mm	in.	mm	in.	mm
BT-JCFX-1210	37400-1210	21007488	3/4	7/8-14	1 1/4	32	1 1/16	27	1.63	41.4	3.18	80.8
BT-JCFX-1212	37400-1212	21007489	3/4	1 1/16-12	1 1/4	32	1 1/16	27	1.74	44.2	3.29	83.6
BT-JCFX-1216	37400-1216	21007490	3/4	1 1/16 -12	1 ½	38	1 1/4	32	1.89	48.1	3.45	87.5
BT-JCFX-1616	37400-1616	21007491	1	1 1/16 -12	1 ½	38	1 1/4	32	1.96	49.8	3.74	94.9
BT-JCFX-2020 ^T	37400-2020	21007492	1 1/4	1 % -12	2	50	1 %	41	2.15	54.6	4.20	106.6
BT-JCFX-2424 ^T	37400-2424	21007493	1 ½	1 % -12	2 3/16	55	2	50	2.42	61.4	4.75	120.6
BT-JCFX-3232 [™]	37400-3232	21007494	2	2½-12	2 13/16	70	2 %	65	2.88	73.1	5.71	145.1

 $[\]label{thm:continuity} T=Thrust-Wire\ Nut\ \ (See\ Fitting\ Identification\ in\ Appendix\ for\ more\ information.)$



JIC 37° Flare (SAE J514)

Female / 45° Elbow / Swivel

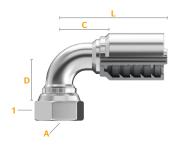
					_	_/			(フ	<u>,_(</u>	.0
Part Number	Product Number	SAP Number	Hose ID	Thread Size (A)	Hex 1 Wrench Size		Drop (D)		Cut-Off (C)) Length	
			in.		in.	mm	in.	mm	in.	mm	in.	mm
BT-JCFX45-1212	37420-1212	21007495	3/4	1 1/16 -12	1 1/4	32	0.83	21.0	2.64	67.0	4.19	106.5
BT-JCFX45-1616	37420-1616	21007496	1	1 1/16 -12	1 ½	38	0.95	24.0	3.11	79.0	4.89	124.1
BT-JCFX45-2020 ^T	37420-2020	21007497	1 1/4	1 % -12	2	50	1.46	37.1	3.82	97.0	5.87	149.0
BT-JCFX45-2424 [™]	37420-2424	21007498	1 ½	1 % -12	2 3/16	55	1.69	42.9	4.45	113.0	6.78	172.2

T=Thrust-Wire Nut (See Fitting Identification in Appendix for more information.)

For a detailed list, please refer to your Crimp Specifications Manual.

JIC 37° Flare (SAE J514)

Female / 90° Elbow / Swivel

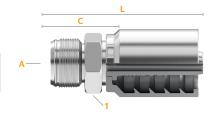


					((1)	(+	→)	_(<u>O</u>
Part Number	Product Number	SAP Number	Hose ID	Thread Size (A)	He Wrend	x <mark>1</mark> ch Size	Elbow Type*	Dro	p (D)	Cut-0	Off (C)	Leng	ıth (L)
			in.	in.	in.	mm		in.	mm	in.	mm	in.	mm
BT-JCFX90-1212	37425-1212	21007499	3/4	1 1/16-12	1 1/4	32		2.13	54.0	2.05	52.0	3.60	91.4
BT-JCFX90L-1212	37440-1212	21007501	3/4	1 1/16-12	1 1/4	32	LT	3.74	95.0	2.13	54.0	3.68	93.4
BT-JCFX90S-1212	37445-1212	21007500	3/4	1 1/16-12	1 1/4	32	ST	1.81	46.0	2.28	58.0	3.84	97.4
BT-JCFX90-1616	37425-1616	21007502	1	1 1/16 -12	1 ½	38		2.81	71.4	2.89	73.4	4.67	118.5
BT-JCFX90L-1616	37440-1616	21007504	1	1 1/16 -12	1 ½	38	LT	4.49	114.0	3.11	79.0	4.89	124.1
BT-JCFX90S-1616	37445-1616	21007503	1	1 1/16 -12	1 ½	38	ST	2.21	56.0	2.91	74.0	4.69	119.1
BT-JCFX90-2020 [™]	37425-2020	21007505	1 1/4	1 % -12	2	50		3.07	78.0	3.23	82.0	5.28	134.0
BT-JCFX90-2424 [™]	37425-2424	21007506	1 ½	1 1/8 -12	2 ¾6	55		3.62	91.9	3.94	100.0	6.27	159.1
UC-JCFX90-3232 [™]	37425-3232	21007507	2	2 ½ -12	2 13/16	70		5.51	140.0	5.08	129.0	7.91	201.0

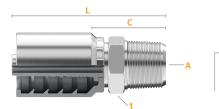
T=Thrust-Wire Nut (See Fitting Identification in Appendix for more information.) *Elbow Type: LT=Long Tube ST=Short Tube

JIC 37° Flare (SAE J514)

Male

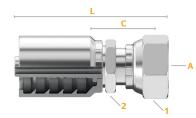


)	(.	D)
Part Number	Product Number	SAP Number	Hose ID	Thread Size (A)	Hex 1 Wrench Size		Cut-Off (C)		Length (L)	
			in.		in.	mm	in.	mm	in.	mm
BT-JCM-1212	37450-1212	21007508	3/4	1 1/16 - 12	1 1/16	27	1.48	37.7	3.04	77.1
BT-JCM-1616	37450-1616	21007509	1	1 1/16 -12	1 1/16	36	1.67	42.4	3.45	87.5
BT-JCM-2020	37450-2020	21007510	1 1/4	1 % -12	1 13/16	46	1.91	48.6	3.96	100.5
BT-JCM-2424	37450-2424	21007511	1 ½	1 % -12	2	50	2.08	52.7	4.40	111.8



NPTF Male

Part Number	Product Number	SAP Number	Hose ID	Thread Size (A)	Hex <mark>1</mark> Wrench Size		ize Cut-Off (C)		Length (L)	
			in.		in.	mm	in.	mm	in.	mm
BT-NPM-1212	37615-1212	21007512	3/4	3/4 -14	1 1/16	27	1.36	34.6	2.92	74.1
BT-NPM-1616	37615-1616	21007513	1	1-11 ½	1 1/16	36	1.73	43.9	3.51	89.0
BT-NPM-2020	37615-2020	21007514	1 1/4	1 1/4 -11 1/2	1 13/16	46	1.95	49.5	4.00	101.5
BT-NPM-2424	37615-2424	21007515	1 ½	1 ½ -11 ½	2	50	2.01	51.0	4.34	110.1
BT-NPM-3232	37615-3232	21007516	2	2-11 ½	2 %16	65	2.14	54.5	4.98	126.4



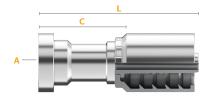
O-Ring Face Seal (SAE J1453 ORS/ORFS)

Female / Swivel

	`2	1								\longleftrightarrow			
Part Number	Product Number	SAP Number	Hose ID	Thread Size (A)	Hex 1 Wrench Size		Hex <mark>2</mark> Wrench Size		Cut-Off (C)		Length (L)		
			in.		in.	mm	in.	mm	in.	mm	in.	mm	
BT-OFFX-1212	37700-1212	21007517	3/4	1 1/16-12	1 1/16	36	1 ¾6	30	1.67	42.3	3.22	81.8	
BT-OFFX-1616	37700-1616	21007518	1	1 1/16 -12	1 %	41	1 1/16	36	1.95	49.4	3.72	94.5	
BT-OFFX-2020	37700-2020	21007519	1 1/4	1 11/16 -12	2	50	1 %	41	2.08	52.9	4.13	104.9	
BT-OFFX-2424	37700-2424	21007520	1 ½	2-12	2 %	60	2	50	2.23	56.7	4.56	115.8	

BT Fittings

Code 61 Flange (SAE J518)

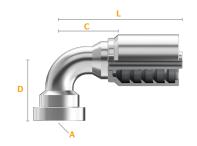


					Flange Diameter (A)		Cut-Off (C)		Length (L)	
Part Number	Product Number	SAP Number	Hose ID	Flange Size						
			in.		in.	mm	in.	mm	in.	mm
BT-FL-1212	37320-1212	21007426	3/4	3/4	1.50	38.1	1.67	42.4	3.22	81.9
BT-FL-1616	37320-1616	21007427	1	1	1.75	44.5	2.02	51.3	3.80	96.4
BT-FL-2020	37320-2020	21007428	1 1/4	1 1/4	2.00	50.8	2.19	55.6	4.24	107.6
BT-FL-2424	37320-2424	21007429	1 ½	1 ½	2.37	60.3	2.31	58.7	4.64	117.8
BT-FL-3232	37320-3232	21007480	2	2	2.81	71.4	2.76	70.1	5.59	142.1
BT-FL-4040	37320-4040	21007481	2 ½	2 ½	3.31	84.1	2.24	56.9	5.49	139.4

Code 61 Flange (SAE J518)

90° Elbow

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					(\bigcirc		$\overline{\longleftrightarrow}$			
Part Number	Product Number	SAP Number	Hose ID	Flange Size	Flange Diameter (A)		Drop (D)		Cut-Off (C)		Length (L)	
			in.		in.	mm	in.	mm	in.	mm	in.	mm
BT-FL90-1212	37350-1212	21007482	3/4	3/4	1.50	38.1	2.36	59.9	2.28	57.9	3.83	97.4
BT-FL90-1616	37350-1616	21007483	1	1	1.75	44.5	2.64	67.1	2.80	71.1	4.58	116.2
BT-FL90-2020	37350-2020	21007484	1 1/4	1 1/4	2.00	50.8	3.31	84.1	3.46	87.9	5.51	139.9
BT-FL90-2424	37350-2424	21007485	1 ½	1 ½	2.37	60.3	3.58	90.9	4.13	104.9	6.46	164.0
BT-FL90-3232	37350-3232	21007486	2	2	2.81	71.4	5.12	130.0	5.08	129.0	7.91	201.0
BT-FL90-4040	37350-4040	21007487	2 ½	2 ½	3.31	84.1	5.75	146.0	6.30	160.0	9.55	242.5