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BRITISH TAPERED THREAD OVERLAYS

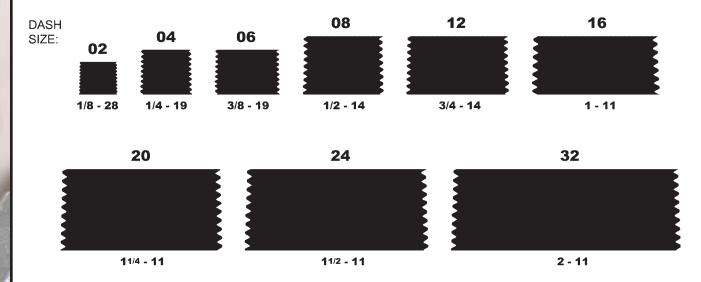


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About Adaptall

Introduction:



Adaptall opened its doors in the spring of 1985, with the hope that there was a market for a rather unique type of threaded connector for the hydraulic hose and fitting industry. A couple of Canadian mailing lists were purchased, a two-page brochure was drafted, and three partners stuffed envelopes and worked late into the evening to launch the company's first marketing campaign. Adaptall's opening inventory was based on guesswork as to what might sell and was modestly valued.

The response from the hose and fitting distributors in Canada was very positive, so four years later a U.S publication and advertising program was initiated with the intent of attracting a similar but larger target market south of the border. Much to Adaptall's surprise, the company set records with an industrial publication for the number of leads generated over a two-year period using a rather modest ad.

In 1992, Adaptall packaged up a supply of samples, a few hundred catalogs, and rented a tiny booth at a Fluid Power (NFPA) trade show in Chicago. The crowds were most receptive to Adaptall's product line, and to this day the company has exhibited in around 25 shows across North America. Since then the company has grown to include a production/manufacturing facility, as well as a U.S distribution centre. Over 20 years later, the company remains committed to its original goals of achieving: a high quality product offering, vast stocks of inventory (in terms of both selection and availability), as well as providing friendly, knowledgeable, and helpful customer service representatives.



Adaptall America was launched in 2002, answering the need for shorter lead times in the U.S as well as increased inventory stocking capabilities. The U.S division has been a tremendous success for the company, and has allowed Adaptall to give more intimate attention to its U.S customers. Located in Twinsburg, Ohio, Adaptall America expects to see continued growth into the future thanks to you, our valued customers!



Initiated in January 1998, Adaptall Manufacturing has benefitted the company by providing custom machining capabilities, dedicated production, quality monitoring/assurance, as well as shortened lead times. Located in Pickering, Ontario, the facility is equipped with both screw machines and modern five-axis CNC technology.

About Adaptall

Industry Associations:

For a few years now, Adaptall Inc. has been registered under the **ISO 9001** classification for international quality control standardization. Adaptall has taken this step to increase product quality and improve business operations. This classification also exists to assure our customers that Adaptall has adhered to a long list of rules and regulations regarding quality control; we worry about it so you don't have to!



Adaptall is also **C-TPAT** and **PIP** compliant, indicating that all cooperative steps have been taken with various government agencies to enhance border security against terrorism, organized crime, and trafficking of various contraband items.



Lastly, Adaptall is a proud member of **NAHAD** – the National Association of Hose and Accessories Distributors.

Quality Policy Statement:

"To have the customers return, NOT the product"

- Consistently meeting customers' expectations is a major objective
- Adopting a disciplined approach to all facets of the business
- Nothing is too small an item to be missed
- Objectives will be met and problems will be solved
- Creative & modern approaches leading to simple, effective solutions
- Long term, mutually beneficial relationships with customers and suppliers
- Provide a friendly work atmosphere for all employees
- Provide a safe working environment for all employees

Sponsorships:

In 2006, Adaptall America had the privilege of witnessing **Chad Hedrick** of Spring, Texas, achieve Olympic glory in Torino, Italy. A world class ice speed skater (long track), Chad also holds dozens of records for inline racing around the world. After dominating the land-based sport, Chad decided to make the transition over to ice – a rather difficult task. Two years later, Chad held the all-around world title (only the third American in 100 years), and two years after that in 2006 he won gold, silver, and bronze at the Torino winter Olympics, becoming the most highly decorated American athlete of the entire games! Adaptall is proud to have supported him through the complete transition and continues to do so as he trains for the next Olympics in Vancouver, Canada.





Adaptall has for years lent considerable financial support to its local **Crime Stoppers**, a program that partners the community, the media, and local law enforcement officials with the goal of combating crime and keeping communities safe.

INSTRUCTIONS

- 1. The thread types for each description are **displayed** hose/tube and/or male side first, then port and/or female side (please refer to the Conversion Adapter Identification Guide for details).
- 2. If both sides of a fitting are the same (both hose/tube or both port) they are displayed alphabetically. For example, a BSPP x NPT nipple has two port threads; according to alphabetization, this description would read: BSPP male x NPT male.
- **3.** Part descriptions are then **arranged** in alphabetical order, with males appearing before females. For example, a male BSPP is typically the first listed while a female SAE O-ring Boss is last.
- **4.** Thread types are displayed first to allow for quick searching along the margin (as opposed to thread gender first which is common).

MALE X MALE (ADAPTERS, UNIONS, NIPPLES, ELBOWS)

DESCRIPTION	STE	EL	BRA	SS	STAINL		M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
ADAPTERS, NIPPLES, UNIONS: BSPP MALE X BSPP MALE BSPP MALE X BSPP MALE (CLOSE NIPPLE) BSPP MALE X BSPP MALE BULKHEAD BSPP MALE X BSPP MALE BULKHEAD (EXTENDED) BSPP MALE X BSPT MALE BSPP MALE X METRIC MALE BSPP MALE X NPT MALE BSPP MALE X SAE O-RING BOSS MALE	9000 9040 9040L 9003 9004 9007 9006	28 37 NL 29 29 30 30	8000 8040 8003 8007	68 NL NL 68	SS9000 SS9000CL SS9003 SS9004 SS9007 SS9006	74 NL 74 NL 74 NL	B1808CL	. NL
BSPT MALE X BSPT MALE BSPT MALE X BSPT MALE (CLOSE NIPPLE) BSPT MALE X BSPT MALE (LONG) BSPT MALE X NPT MALE BSPT MALE X SAE O-RING BOSS MALE	9010 9008 9012	31 30 NL	8010 8010CL 8008 8012	69 NL 69 NL	SS9010 SS1808L SS9008	NL NL 75	B1808H B1808L	82 82
JIC MALE X BSPP MALE JIC MALE X BSPP MALE (EXTRA LONG) JIC MALE X BSPP MALE (LONG) JIC MALE X BSPP MALE (WASHER & O-RING) JIC MALE X BSPP MALE (WASHER & O-RING) (LONG) JIC MALE X BSPT MALE JIC MALE X JIS MALE JIC MALE X JSW MALE (JAPAN STEEL WORKS) JIC MALE X KOBELCO MALE JIC MALE X KOMATSU MALE JIC MALE X METRIC MALE JIC MALE X METRIC MALE JIC MALE X METRIC MALE (PORT/TUBE) DIN 2353 S JIC MALE X METRIC MALE (WASHER & O-RING) JIC MALE X METRIC MALE (WASHER & O-RING) JIC MALE X NISSAN MALE	9005 9005EL 9005L 9002L 9002L 9011 9337 9245 9247 9237 9067 9606 9605 9068 9228	29 30 30 28 28 31 58 55 54 42 61 60 43 52	8005 8011 8067	NL	\$\$9005 \$\$9002 \$\$9011 \$\$9606 \$\$9605	74 74 75 80 80		
JIS MALE X BSPP MALE JIS MALE X BSPT MALE JIS MALE X JIS MALE JIS MALE X NPT MALE JIS MALE X ORFS MALE JIS MALE X SAE O-RING BOSS MALE *NL=Not listed; please call for prices/sizes/availability	9339 9223 9336 9338 6337 9277	NL 51 58 58 27 56	8223	NL	SS9223	NL		

DESCRIPTION	STE	EL	BRAS	SS	STAINI	ESS	M. IR	ON
ADAPTERS, NIPPLES, UNIONS: (cont'd)	PART		PART	PAGE	PART	PAGE	PART	PAGE
KOMATSU MALE X BSPT MALE KOMATSU MALE X KOMATSU MALE KOMATSU MALE X METRIC MALE KOMATSU MALE X ORFS MALE	9233 9236 9395 6237	53 53 NL 27						
METRIC MALE X METRIC MALE METRIC MALE X NPT MALE METRIC MALE X NPT MALE (LONG) METRIC MALE (PORT/TUBE) DIN 2353 S/L X NPT MALE METRIC MALE X SAE O-RING BOSS MALE	9001 9607 9607EL 9607 9608	28 61 NL 61 NL	8607	NL	SS9607	NL		
ORFS MALE X BSPP MALE ORFS MALE X BSPP MALE (WASHER & O-RING) ORFS MALE X BSPP MALE (WASHER & O-RING) (LONG) ORFS MALE X BSPT MALE ORFS MALE X KOBELCO MALE ORFS MALE X METRIC MALE HEAVY (PORT/TUBE) DIN 2353 S ORFS MALE X METRIC MALE LIGHT (PORT/TUBE) DIN 2353 L ORFS MALE X METRIC MALE (WASHER & O-RING)	6005 6002 6002L 6011 6247 6606 6605 6068	NL 24 24 27 27 27 27 25						
45° ELBOWS: BSPP MALE X BSPP MALE (ADJ.) BSPP MALE X BSPT MALE	9051 9054	39 40						
JIC MALE X BSPP MALE (ADJ.) JIC MALE X BSPT MALE JIC MALE X METRIC MALE (ADJ.)	9058 9064 9066	40 42 42			\$\$9058	NL		
JIS MALE X BSPT MALE	9225	51						
ORFS MALE X BSPP MALE (ADJ.)	6058	25						
90° ELBOWS: BSPP MALE X BSPP MALE BSPP MALE X BSPP MALE (ADJ.) BSPP MALE X BSPT MALE BSPP MALE X NPT MALE BSPP MALE X SAE O-RING BOSS MALE (ADJ.)	9055 9052 9057 9070 9077	40 39 40 43 44						
BSPT MALE X BSPT MALE			8055	71				
JIC MALE X BSPP MALE JIC MALE X BSPP MALE (ADJ.) JIC MALE X BSPP MALE (ADJ.) (LONG) JIC MALE X BSPT MALE JIC MALE X METRIC MALE (ADJ.) JIC MALE X METRIC MALE (ADJ.)	9065 9059 9059L 9063 9069 9069L	42 41 41 42 43 43			SS9059 SS9063 SS9069			
JIS MALE X BSPP MALE (ADJ.) JIS MALE X BSPT MALE JIS MALE X SAE O-RING BOSS MALE (ADJ.)	9259 9224 9278	56 51 56						
ORFS MALE X BSPP MALE (ADJ.) ORFS MALE X METRIC MALE (ADJ.) *NL=Not listed; please call for prices/sizes/availability	6059 6069	25 25						

MALE X FEMALE (ADAPTERS, BUSHINGS, EXPANDERS/REDUCERS, ELBOWS)

DESCRIPTION	STE	EL	BRAS	SS	STAIN	ESS	M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
ADAPTERS, BUSHINGS, EXPANDERS/REDUCERS: BSPP MALE X BSP FEMALE (SOLID) (BUSHING) BSPP MALE X BSP FEMALE (SOLID) (EXTENDED BUSHING) BSPP MALE X BSPP FEMALE (SWIVEL) BSPP MALE X BSPT FEMALE (SOLID) BSPP MALE X JIC FEMALE (SWIVEL) BSPP MALE X METRIC FEMALE (SWIVEL) BSPP MALE X NPT FEMALE (SOLID) BSPP MALE X NPT FEMALE (SOLID) BSPP MALE X ORFS FEMALE (SWIVEL) BSPP MALE X ORFS FEMALE (SWIVEL) BSPP MALE X SAE O-RING BOSS FEMALE (SOLID)	9038 9039 9015 9034 9021 9019 9035 9035S 6021 9036	37 37 31 36 32 32 36 36 NL 36	8039 8035	70 70	\$\$9038 \$\$9039 \$\$9015 \$\$9021 \$\$9035	NL 75 75		
BSPT MALE X BSP FEMALE (SOLID) BSPT MALE X BSP FEMALE (SOLID) (BUSHING) BSPT MALE X BSPP FEMALE (SWIVEL) BSPT MALE X BSPT FEMALE (SOLID) (BUSHING) BSPT MALE X NPT FEMALE (SOLID) BSPT MALE X SAE O-RING BOSS FEMALE (SOLID)	9032 9032S 9031 9042 9536	35 NL 35 38 60	8038 8031 8036	70 NL 70	SS9032 SS9042		B1804	81
JIC MALE X BSP FEMALE (SOLID) JIC MALE X BSPP FEMALE (SWIVEL) JIC MALE X BSPP FEMALE (SWIVEL) FLAT-FACE - HIAB JIC MALE X JIC FEMALE (SWIVEL) JIC MALE X JIS FEMALE (SOLID) JIC MALE X KOMATSU FEMALE (SOLID) JIC MALE X METRIC FEMALE (SOLID) JIC MALE X METRIC FEMALE (SWIVEL) JIC MALE X METRIC (FLAT-FACE) FEMALE (SWIVEL) JIC MALE X NISSAN FEMALE (SOLID) JIC MALE X ORFS FEMALE (SOLID)	9009 9240 9210 9020 9220 9230 9622 9022 9022F 9229 6620	31 54 50 32 50 52 61 33 33 52 28			SS9240 SS9020			
JIS MALE X JIS FEMALE (SOLID)	9227B	NL						
KOMATSU MALE X METRIC FEMALE (SOLID)	9390	NL						
METRIC MALE X BSPP FEMALE (SWIVEL) METRIC MALE X BSPT FEMALE (SOLID) METRIC MALE X JIC FEMALE (SWIVEL) METRIC MALE X METRIC FEMALE (SOLID) (BUSHING) METRIC MALE X NPT FEMALE (SOLID) METRIC MALE (PORT/TUBE) DIN 2353 S/L X NPT FEMALE (SOLID) METRIC MALE X SAE O-RING BOSS FEMALE (SOLID)	9018 9234 9024 9638 9235 9635	32 NL 33 62 53 61	8235	NL	SS9638 SS9235			
NPT MALE X BSP FEMALE (SOLID) NPT MALE X BSPP FEMALE (SWIVEL) NPT MALE X BSPT FEMALE (SOLID) NPT MALE X JIC FEMALE (SWIVEL) NPT MALE X METRIC FEMALE (SOLID)	9037 9023 9017 9325	37 33 32 57	8037 8037T 8325	70 NL NL	SS9037 SS9023	77 NL		
*NL=Not listed; please call for prices/sizes/availability								

DESCRIPTION	STEEL		BRA	SS	STAIN	LESS	M. IR	RON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
ADAPTERS, BUSHINGS, EXPANDERS/REDUCERS: (cont'd) ORFS MALE X JIS FEMALE (SOLID) ORFS MALE X KOMATSU FEMALE (SOLID)	6220 6230	26 26						
SAE O-RING BOSS MALE X BSP FEMALE (SOLID)	9120	NL						
45° ELBOWS: BSPP MALE X BSPP FEMALE (SWIVEL) FORGED BSPP MALE X BSPP FEMALE (SWIVEL) TUBE ELB.	9048 9047	NL 39						
BSPT MALE X BSP FEMALE (SOLID) BSPT MALE X BSPT FEMALE (SOLID)			8047	NL			B2804	82
JIC MALE X BSPP FEMALE (SWIVEL)	9260	56						
90° ELBOWS: BSPP MALE X BSPP FEMALE (SWIVEL) BSPP MALE X BSPP FEMALE (SWIVEL) TUBE ELB. BSPP MALE X JIC FEMALE (SWIVEL)	9060 9045 9061	41 38 41						
BSPT MALE X BSP FEMALE (SOLID) BSPT MALE X BSPP FEMALE (SWIVEL)	9062	41	8060	71			B3804	83
JIC MALE X BSPP FEMALE (SWIVEL) JIC MALE X BSPP FEMALE (SWIVEL) TUBE ELB.	9056 9250	40 56						
JIS MALE X JIS FEMALE (SWIVEL)	9292	57						
KOMATSU MALE X KOMATSU FEMALE (SWIVEL)	9392	59						
NPT MALE X BSPP FEMALE (SWIVEL) NPT MALE X BSPP FEMALE (SWIVEL) FLAT-FACE - HIAB	9072 9049	43 NL						

FEMALE X FEMALE (COUPLINGS, UNIONS, ELBOWS)

DESCRIPTION	STE	EL	BRAS	SS	STAINI	ESS	M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
COUPLINGS, UNIONS: BSP FEMALE X BSP FEMALE (SOLID) BSP FEMALE X BSP FEMALE - NO SEAT (SWIVEL) BSP FEMALE X NPT FEMALE (SOLID)	9043 9044	38 38	8043 8044	71 71	SS9043 SS9044	77 NL	B1404 B1404U	81 81
BSPP FEMALE X BSPP FEMALE (SWIVEL)	9025	33			SS9025	NL		
JIC FEMALE X BSPP FEMALE (SWIVEL) JIC FEMALE X JIC FEMALE (SWIVEL) JIC FEMALE X JIS FEMALE (SWIVEL) JIC FEMALE X KOMATSU FEMALE (SWIVEL)	9027 9026 9226 9326	34 34 52 57			SS9026	75		
JIS FEMALE X JIS FEMALE (SWIVEL) *NL=Not listed; please call for prices/sizes/availability	9227	52						

DESCRIPTION	STE	STEEL		SS	STAIN	LESS	M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
COUPLINGS, UNIONS: (cont'd) KOMATSU FEMALE X KOMATSU FEMALE (SWIVEL)	9327	58						
METRIC FEMALE X METRIC FEMALE (SOLID) METRIC FEMALE X NPT FEMALE (SOLID)	9043M 9643	38 62	8045	NL				
45° ELBOWS: BSP FEMALE X BSP FEMALE (SOLID)							B2404	82
BSPP FEMALE X BSPP FEMALE (SWIVEL)	9053	39						
90° ELBOWS: BSP FEMALE X BSP FEMALE (SOLID)	9076	44	8075	71			B3404	83
BSPP FEMALE X BSPP FEMALE (SWIVEL) BSPP FEMALE X BSPP FEMALE (SWIVEL) TUBE ELB.	9075 9050	44 39						
JIC FEMALE X JIC FEMALE (SWIVEL)	9355	59						

^{**}COUPLINGS = SOLID FEMALE, UNIONS = SWIVEL FEMALE

ELBOWS (45° & 90°)

DESCRIPTION	STE	EL	BRA	SS	STAINI	ESS	M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
45° ELBOWS: BSP FEMALE X BSP FEMALE (SOLID)							B2404	82
BSPP MALE X BSPP MALE (ADJ.) BSPP MALE X BSPP FEMALE (SWIVEL) FORGED BSPP MALE X BSPP FEMALE (SWIVEL) TUBE ELB. BSPP MALE X BSPT MALE	9051 9048 9047 9054	39 NL 39 40						
BSPP FEMALE X BSPP FEMALE (SWIVEL) BSPP FEMALE (SWIVEL) X PUSH-ON	9053 9905	39 62						
BSPT MALE X BSP FEMALE (SOLID) BSPT MALE X BSPT FEMALE (SOLID)			8047	NL			B2804	82
JIC MALE X BSPP MALE (ADJ.) JIC MALE X BSPP FEMALE (SWIVEL) JIC MALE X BSPT MALE JIC MALE X KOMATSU FLANGE JIC MALE X METRIC MALE (ADJ.) JIC MALE X METRIC STANDPIPE	9058 9260 9064 9241 9066 9198	40 56 42 54 42 48			\$\$9058	NL		
JIS MALE X BSPT MALE	9225	51						
ORFS MALE X BSPP MALE (ADJ.)	6058	25						
90° ELBOWS: BRASS COMPRESSION X BSPT MALE			169	64				
*NL=Not listed; please call for prices/sizes/availability								

DESCRIPTION	STE	EL	BRA	SS	STAINI	ESS	M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
90° ELBOWS: (cont'd) BRASS POLYTUBE COMPRESSION X BSP FEMALE (SOLID) BRASS POLYTUBE COMPRESSION X BSPT MALE			270 269	65 65				
BSP FEMALE X BSP FEMALE (SOLID)	9076	44	8075	71			B3404	83
BSPP MALE X BSPP MALE BSPP MALE X BSPP MALE (ADJ.) BSPP MALE X BSPP FEMALE (SWIVEL) BSPP MALE X BSPP FEMALE (SWIVEL) TUBE ELB. BSPP MALE X BSPT MALE BSPP MALE X JIC FEMALE (SWIVEL) BSPP MALE X NPT MALE BSPP MALE X SAE O-RING BOSS MALE (ADJ.)	9055 9052 9060 9045 9057 9061 9070 9077	40 39 41 38 40 41 43 44						
BSPP FEMALE X BSPP FEMALE (SWIVEL) BSPP FEMALE X BSPP FEMALE (SWIVEL) TUBE ELB. BSPP FEMALE (SWIVEL) X PUSH-ON	9075 9050 9910	44 39 63						
BSPT MALE X BSP FEMALE (SOLID) BSPT MALE X BSPP FEMALE (SWIVEL) BSPT MALE X BSPT MALE	9062	41	8060 8055	71 71			B3804	83
JIC MALE X BSPP MALE JIC MALE X BSPP MALE (ADJ.) JIC MALE X BSPP MALE (ADJ.) (LONG) JIC MALE X BSPP FEMALE (SWIVEL) JIC MALE X BSPP FEMALE (SWIVEL) TUBE ELB. JIC MALE X BSPT MALE JIC MALE X KOMATSU FLANGE JIC MALE X METRIC MALE (ADJ.) JIC MALE X METRIC STANDPIPE	9065 9059 9059L 9056 9250 9063 9239 9069 9069L 9199	42 41 41 40 56 42 54 43 43			SS9059 SS9063 SS9069	78		
JIC FEMALE X JIC FEMALE (SWIVEL)	9355	59						
JIS MALE X BSPP MALE (ADJ.) JIS MALE X BSPT MALE JIS MALE X JIS FEMALE (SWIVEL) JIS MALE X SAE O-RING BOSS MALE (ADJ.)	9259 9224 9292 9278	56 51 57 56						
KOMATSU MALE X KOMATSU FEMALE (SWIVEL)	9392	59						
NPT MALE X BSPP FEMALE (SWIVEL) NPT MALE X BSPP FEMALE (SWIVEL) FLAT-FACE - HIAB	9072 9049	43 NL						
PUSH TO CONNECT X BSPT MALE PUSH TO CONNECT X BSPT MALE (LONG) PUSH TO CONNECT (BANJO) X BSPT MALE PUSH TO CONNECT ("METERING IN" VALVE) X BSPT MALE			569 569L 569BJ 581	66 67 67 68				
ORFS MALE X BSPP MALE (ADJ.) ORFS MALE X METRIC MALE (ADJ.) *NL=Not listed; please call for prices/sizes/availability	6059 6069	25 25						
notes, preses our for priocordizourarunusmity								

Instructions for Tees & Crosses

Tees & Crosses:

These are described as fittings with entirely identical threads (3 for tees, 4 for crosses). They are all the same gender and thread type. For example, a Male BSPP Tee is a fitting with 3 identical male BSPP threads, while a Female BSPP Cross has 4 identical female BSPP threads.

Branch Tees & Run Tees:

Branch Tees are 3 ended fittings with the common threads located straight across from one another, while Run Tees have the common threads located at 90° from each other. The rules for listing both branch and run tees are the same: if there is one thread type only, the part is listed by the odd thread gender first. For example, a Female JIS Run Tee has 2 male threads and one female (all JIS). Alternatively, if there are 2 thread types, the common threads are listed first, then the odd end (with gender reference). For example, a Male JIC X Male BSPT Run Tee has 2 male JIC threads and one male BSPT thread.

Test Port Tees:

Test port tees are not conversion adapters, rather they are meant to be placed in line with your current hydraulic system allowing for the implementation of a pressure gauge, for example. They consist of a male and female (swivel) that are always identical thread types. Test port thread types and sizes vary from fitting to fitting but are always female.

TEES & CROSSES (BRANCH TEES, BRANCH "Y's", CROSSES, RUN TEES, TEES, TEST PORT TEES)

DESCRIPTION	STE	EL	BRAS	SS	STAINL	.ESS	M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
BRANCH TEES: BRASS COMPRESSION X BSPT MALE BRANCH TEE			172	64				
BRASS POLYTUBE COMPRESSION X BSPT MALE BRANCH TEE			272	66				
BSP FEMALE (SOLID) X BSPT MALE BRANCH TEE			8093	72				
BSPP MALE (ADJ.) BRANCH TEE BSPP MALE X SAE O-RING BOSS MALE BRANCH TEE	9152 9079	46 44						
BSPP FEMALE (SWIVEL) BRANCH TEE	9087	45			SS9087	NL		
BSPT MALE X BSP FEMALE (SOLID) BRANCH TEE			8087	72				
JIC MALE X BSPP MALE (ADJ.) BRANCH TEE JIC MALE X BSPT MALE BRANCH TEE JIC MALE X METRIC MALE (ADJ.) BRANCH TEE	9159 9164 9169	47 47 47						
ORFS MALE X BSPP MALE (ADJ.) BRANCH TEE ORFS MALE X METRIC MALE (ADJ.) BRANCH TEE	6159 6169	26 26						
PUSH TO CONNECT X BSPT MALE BRANCH TEE			572	67				
BRANCH "Y": Push to connect X bspt male branch "Y"			575	67				
CROSSES: BSP FEMALE CROSS (SOLID)	9097	46	8097	73			B5444	NL
BSPP MALE CROSS *NL=Not listed; please call for prices/sizes/availability	9096	NL						

DESCRIPTION	STE	EL	BRASS STAINLESS M. IRO						
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE	
RUN TEES: BRASS COMPRESSION X BSPT MALE RUN TEE			171	64					
BRASS POLYTUBE COMPRESSION X BSPT MALE RUN TEE			271	65					
BSP FEMALE (SOLID) X BSPT MALE RUN TEE			8095	73					
BSPP MALE RUN TEE (SWIVEL) BSPP MALE (ADJ.) RUN TEE BSPP MALE X SAE O-RING BOSS MALE RUN TEE	9095 9151 9078	46 46 44							
BSPP FEMALE (SWIVEL) RUN TEE	9090	45							
BSPT MALE X BSP FEMALE (SOLID) RUN TEE			8090	72					
JIC MALE X BSPP MALE (ADJ.) RUN TEE JIC MALE X BSPT MALE RUN TEE JIC MALE X METRIC MALE (ADJ.) RUN TEE	9158 9163 9168	46 47 47							
JIS FEMALE (SWIVEL) RUN TEE	9291	57							
KOMATSU FEMALE (SWIVEL) RUN TEE	9391	59							
ORFS MALE X BSPP MALE (ADJ.) RUN TEE ORFS MALE X METRIC MALE (ADJ.) RUN TEE	6158 6168	25 26							
PUSH TO CONNECT X BSPT MALE RUN TEE			571	67					
TEES: BSP FEMALE (SOLID) TEE	9086	45	8085	72			B4444	83	
BSPP MALE TEE	9080	45							
BSPP FEMALE (SWIVEL) TEE	9085	45							
BSPT MALE TEE Should read: BSPP			8080	72					
JIC FEMALE (SWIVEL) TEE	9555	60							
TEST PORT TEES: BSPP TEST PORT (SWIVEL) TEE (TP=NPT FEMALE)	9015TP	31	Comir	ng Soc	on!				
JIC TEST PORT (SWIVEL) TEE (TP=METRIC FEMALE)	9020TP	NL	Adaptall will be expanding its offer-						
JIS TEST PORT (SWIVEL) TEE (TP=SAE ORB FEMALE)	9293TP	57	ing of Test Port adapters in a variety of threads. The Test Port itself will also be offered in various threads						
KOMATSU TEST PORT (SWIVEL) TEE (TP=SAE ORB FEMALE)	9634TP	61	allowing for a connection to most existing systems from around the						
ORFS TEST PORT (SWIVEL) TEE (TP=METRIC FEMALE)	6020TP	NL	world.						
*NL=Not listed; please call for prices/sizes/availability									

PLUGS & CAPS (CAPS: SOLID, SWIVEL, TUBE, & PLUGS: COUNTERSUNK, HEX, SEALED, SQUARE-HEAD, TUBE)

DESCRIPTION	STEEL		BRAS	SS	STAINL	.ESS	M. IR	ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
CAPS: BSP CAP (SOLID)			8033	69			B14C	81
BSPP SWIVEL CAP	9033	36			SS9033	76		
JIS CAP (SOLID)	9222	51						
KOBELCO TUBE CAP	9249	55						
KOMATSU CAP (SOLID)	9232	53						
METRIC TUBE CAP (HEAVY) DIN 2353 S METRIC TUBE CAP (LIGHT) DIN 2353 L	9204S 9204L	50 50						
PLUGS: BSPP COUNTERSUNK PLUG (NO SEAL) BSPP COUNTERSUNK SEALED PLUG BSPP HEX PLUG	9028A 9028 9030	NL 34 34	8028Z 8028	NL 69	SS9028 SS9030	76 76		
BSPT COUNTERSUNK PLUG BSPT HEX PLUG BSPT SQUARE HEAD PLUG	9030TCSP 9030T	35 35	8030CSP 8030SQP		SS9030T	76	B18SQP	82
JIS HEX PLUG	9221	51						
JSW (JAPAN STEEL WORKS) TUBE PLUG	9246	55						
KOBELCO TUBE PLUG	9248	55						
KOMATSU HEX PLUG	9231	53						
METRIC COUNTERSUNK PLUG (NO SEAL) METRIC COUNTERSUNK SEALED PLUG METRIC HEX PLUG METRIC TUBE PLUG (HEAVY) DIN 2353 S METRIC TUBE PLUG (LIGHT) DIN 2353 L	9029A 9029 9030M 9203S 9203L	NL 34 35 50 49			SS9029	76		

^{*}NL=Not listed; please call for prices/sizes/availability

MISC. (BRASS COMPRESSION, BRASS POLYTUBE COMPRESSION, KOMATSU FLANGE, METRIC COMPRESSION, PUSH-ON, PUSH TO CONNECT)

DESCRIPTION		STEEL		BRASS		STAINLESS		ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
BRASS COMPRESSION: BRASS COMPRESSION X BSP FEMALE (SOLID) BRASS COMPRESSION X BSPT MALE BRASS COMPRESSION X BSPT MALE (90° ELB.) BRASS COMPRESSION X BSPT MALE BRANCH TEE BRASS COMPRESSION X BSPT MALE RUN TEE			166 168 169 172 171	64 64 64 64 64				
BRASS POLYTUBE COMPRESSION: BRASS POLYTUBE COMPRESSION X BSP FEMALE (SOLID) BRASS POLYTUBE COMPRESSION X BSP FEMALE (90° ELB.) BRASS POLYTUBE COMPRESSION X BSPT MALE BRASS POLYTUBE COMPRESSION X BSPT MALE (90° ELB.) BRASS POLYTUBE COMPRESSION X BSPT MALE BRANCH TEE BRASS POLYTUBE COMPRESSION X BSPT MALE RUN TEE			266 270 268 269 272 271	65 65 65 65 66				
KOMATSU FLANGE: JIC MALE X KOMATSU FLANGE JIC MALE X KOMATSU FLANGE (45° ELB.) JIC MALE X KOMATSU FLANGE (90° ELB.)	9238 9241 9239	54 54 54						
METRIC COMPRESSION: JIC MALE X JSW MALE (JAPAN STEEL WORKS) JIC MALE X KOBELCO MALE JIC MALE X METRIC MALE HEAVY (PORT/TUBE) DIN 2353 S JIC MALE X METRIC MALE LIGHT (PORT/TUBE) DIN 2353 L JIC MALE X METRIC STANDPIPE JIC MALE X METRIC STANDPIPE (45° ELB.) JIC MALE X METRIC STANDPIPE (90° ELB.) JIC (BRAZE) MALE X METRIC BORE JSW (JAPAN STEEL WORKS) TUBE PLUG KOBELCO TUBE CAP KOBELCO TUBE PLUG METRIC MALE (PORT/TUBE) DIN 2353 S/L X NPT	9245 9247 9606 9605 9200 9198 9199 9197 9246 9249 9248	55 55 61 60 48 48 48 48 55 55 55			\$\$9606 \$\$9605 \$\$9200			
METRIC MALE (PORT/TOBE) DIN 2353 S/L X NPT MALE METRIC MALE (PORT/TUBE) DIN 2353 S/L X NPT FEMALE (SOLID) *NL=Not listed; please call for prices/sizes/availability	9635	61						

DESCRIPTION	STE	EL	BRAS	SS	STAINL	STAINLESS		ON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
METRIC COMPRESSION: (cont'd) METRIC TUBE CAP (HEAVY) DIN 2353 S METRIC TUBE CAP (LIGHT) DIN 2353 L METRIC TUBE CUTTING RING - DIN 2353 S/L METRIC TUBE CUTTING RING (EXTRA LIGHT) DIN 2353 LL METRIC TUBE NUT (EXTRA LIGHT) DIN 2353 LL METRIC TUBE NUT (HEAVY) DIN 2353 S METRIC TUBE NUT (LIGHT) DIN 2353 L METRIC TUBE PLUG (HEAVY) DIN 2353 S METRIC TUBE PLUG (LIGHT) DIN 2353 L	9204S 9204L 9202 9202LL 9201LL 9201S 9201L 9203S 9203L	50 49 49 49 49 48 50 49			SS9202 SS9202LL SS9201LL SS9201S SS9201L	NL		
ORFS MALE X KOBELCO MALE ORFS MALE X METRIC MALE HEAVY (PORT/TUBE) DIN 2353 S ORFS MALE X METRIC MALE LIGHT (PORT/TUBE) DIN 2353 L	6247 6606 6605	27 27 27						
PUSH-ON (HOSE BARB): BSPP MALE X PUSH-ON	9920	63	8920	NL	SS9920	NL		
BSPP FEMALE (SWIVEL) X PUSH-ON BSPP FEMALE (SWIVEL) X PUSH-ON (45° ELB.) BSPP FEMALE (SWIVEL) X PUSH-ON (90° ELB.)	9900 9905 9910	62 62 63	8900	73				
BSPT MALE X PUSH-ON	9915	63	8920T	73	SS9920T	NL		
PUSH TO CONNECT (POLYTUBE): PUSH TO CONNECT X BSP FEMALE (SOLID) PUSH TO CONNECT X BSPT MALE PUSH TO CONNECT X BSPT MALE (90° ELB.) PUSH TO CONNECT X BSPT MALE (90° BANJO ELB.) PUSH TO CONNECT X BSPT MALE ("FLOW CONTROL" VALVE) PUSH TO CONNECT X BSPT MALE (90° "METERING IN" VALVE) PUSH TO CONNECT X BSPT MALE BRANCH TEE PUSH TO CONNECT X BSPT MALE BRANCH "Y" PUSH TO CONNECT X BSPT MALE RUN TEE			566 568 569 569L 569BJ 582 581 572 575	66 66 67 67 68 68 67				

^{*}NL=Not listed; please call for prices/sizes/availability

ACCESSORIES (BONDED SEALS, CUTTING RINGS, NUTS, O-RINGS, RETAINING RINGS, SEALING SEATS, WASHERS)

DESCRIPTION	STE	EL	BR	SS	STAINLE	SS	M. I	RON
	PART	PAGE	PART	PAGE	PART	PAGE	PART	PAGE
BONDED SEALS: BONDED SEAL (BRITISH THREAD) BONDED SEAL (METRIC THREAD) BONDED VITON SEAL (BRITISH THREAD) BONDED VITON SEAL (METRIC THREAD)	9500 9500MM 9500V 9500MMV	59 59 60 60			\$\$9500 \$\$9500MM \$\$9500V \$\$9500MMV	79 79 80 80		
CUTTING RINGS: METRIC TUBE CUTTING RING - DIN 2353 S/L METRIC TUBE CUTTING RING (EXTRA LIGHT)	9202 9202LL	49 49			SS9202 SS9202LL	79 NL		
NUTS: BSPP BULKHEAD LOCKNUT	9041	37			SS9041	NL		
METRIC TUBE NUT (EXTRA LIGHT) DIN 2353 LL METRIC TUBE NUT (HEAVY) DIN 2353 S METRIC TUBE NUT (LIGHT) DIN 2353 L	9201LL 9201S 9201L	49 49 48			SS9201LL SS9201S SS9201L	NL 78 78		
O-RINGS: O-RING (BRITISH THREAD) O-RING (ORFS THREAD) O-RING (SAE O-RING BOSS THREAD)	OR ORFS 3-9XX	NL NL NL	OR	NL	OR ORFS 3-9XX	NL NL NL		
RETAINING RINGS: RETAINING RING (BRITISH THREAD)	RR	NL			SSRR	NL		
SEALING SEATS: BSPP FLAT-FACE 30° SEALING SEAT (HIAB)	9777	62						
JIS SEALING SEAT	9999	63						
WASHERS: ALUMINUM WASHER FOR BRITISH THREAD COPPER WASHER FOR BRITISH THREAD COPPER WASHER FOR METRIC THREAD			8400 CWR CWM	73 NL NL				

^{*}NL=Not listed; please call for prices/sizes/availability

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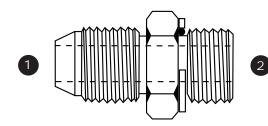
Terms and Definitions

Metric Fittings vs. Metric Threads:

The terminology used to describe the majority of foreign threaded fittings can be confusing to some. **Metric fitting** is a term describing a number of foreign threads including BSP, JIS, Kobelco, Komatsu, and Metric, even though some of these have imperial dimensions. **Metric threads**, however, refers to a specific type of foreign thread and is part of the **Metric fitting** category.

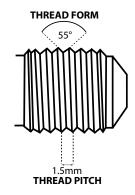
Hose/Tube Side vs. Port Side:

When fittings are classified, they are usually done so tube or hose side first, meaning that the end connecting to a hose or tube is typically listed first. The port side is usually listed second.



Thread Form vs. Thread Pitch:

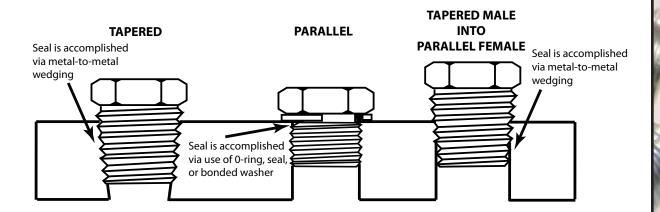
When identifying fittings, another important factor to look at is thread form and thread pitch. **Thread form** refers to the angle (in degrees) that exists between adjacent flanks of a thread. **Thread pitch** however, refers to the distance measured between adjacent thread crests.



Sealing Methods

Tapered vs. Parallel Threads:

A good first step towards thread identification is to determine whether the thread is parallel or tapered. **Parallel** means the thread walls are straight; while **tapered** means the thread walls, if continued lengthwise, would eventually meet. A seal must be used for all parallel fittings in port application.



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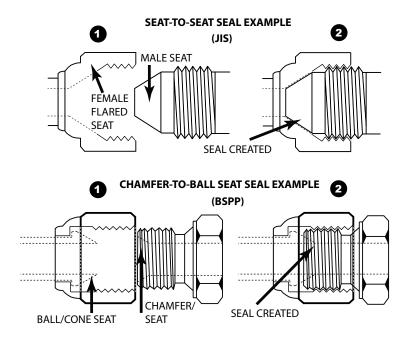
This first step will help you eliminate a number of possible thread types, as well as explain the method of seal. For a parallel thread in port application, the fitting will usually seal at the top of the thread by means of an O-ring or seal. With a tapered thread, the fitting typically seals via metal-to-metal wedging of the threads. It is also possible for some tapered males to thread into certain parallel female threads, however, there are many variables involved so caution should be taken. Sometimes a thread sealant is applied prior to installation to reduce instances of leakage on tapered threads.

Here are some examples of tapered and parallel threads that seal in the examples given:

Tapered Male X Tapered Female (seal via thread wedging)	Parallel Male X Parallel Female (seal via O-ring/bonded seal)	Tapered Male X Parallel Female (seal via thread wedging)
NPT	SAE O-ring Boss	M-NPTF X F-NPSM (fixed female)
BSPT	Kobelco (port)	M-BSPT X F-BSPP (fixed female)
	Metric (port)	
	BSPP (fixed female)	

Flared Seat vs. Ball Seat

The ability to properly identify seats, chamfers, and their corresponding angles can also be a benefit to overall fitting identification. **Flared Seats** refer to the protruding "nose cone" on a male thread, or the internal flare on a female thread. **Ball seats** however refer to the nose cone inside a female thread (<u>swivel only</u>) that seals with the bevel/chamfer on the inside of a male thread. As opposed to other methods of sealing previously mentioned, this form of seal is created between the flared seats or between the chamfer and ball seat, as is the case in the latter example.



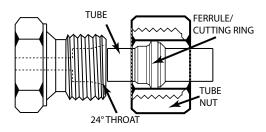
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Here are some examples of seat-to-seat sealing and ball seat-to-chamfer sealing threads:

Flared Seat-to-Flared Seat Sealing Fittings	Ball Seat-to-Chamfer Sealing Fittings
JIC	M-NPTF X F-NPSM (swivel female)
JIS	M-BSPP X F-BSPP (swivel female)
Komatsu	

24° Metric Compression Fittings

Most metric threads available from Adaptall are described as "dual purpose," meaning they are capable of tube application as well as port. This also includes Kobelco fittings which are essentially an L-series metric thread with a 1.5mm thread pitch in all sizes. Most metric and Kobelco threads are tube application capable because of a 24° tapered throat angle that exists inside the male threads. To achieve a tube connection, a tube nut is tightened over the metric threads forcing a ferrule or cutting ring to grip the tube. By having the nut securely fastened, the ferrule squeezes the tube which holds the tube itself in place.



24° fittings and accessories are made in three different series: LL series for low pressure, L series for medium pressure, and S series for high pressure applications.

24° Metric Compression Fittings	
Metric (tube)	
Kobelco (tube)	
Japan Steel Works (tube)	

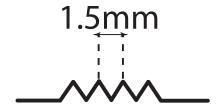
O-ring Face Seal Fittings

Adaptall also stocks O-ring face seal conversion fittings. This is a very common fitting in North America so a detailed explanation is not needed. Essentially ORFS fittings seal between an O-ring located in the face of the straight male thread, and the flat face seat on the female thread.

How to ID Metric Threads

Parallel or tapered?

The first thing you should always do when attempting to identify a foreign thread is to determine if it's parallel or tapered. You can then measure the thread pitch in millimeters by using gauges overtop of the thread crests. For example, this could be 1.5 millimeters. Once this is completed you can proceed to the next step.



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Metric Thread Callout System

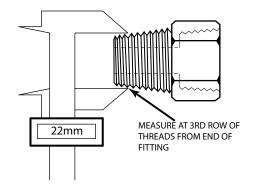
For parallel threads, the next thing to do is to identify the thread O.D (outer diameter) by use of calipers (for tapered threads, see next section). Once you identify the O.D of the metric thread you can combine it with the thread pitch to determine the metric thread "callout." For example, if you identified the thread O.D as 22 millimeters and thread pitch as 1.5 millimeters (from the last example), you would achieve a metric thread callout of M22 X 1.5, or 22mm X 1.5. Refer to the following chart for metric thread "callouts" and their corresponding tube O.D's, tube nut part numbers, cutting ring part numbers, and tube plug/cap part numbers.

SERIES	TUBE O.D.	METRIC Thread	TUBE NUT Part no.	CUTTING RING Part no.	TUBE PLUG Part no.	TUBE CAP Part no.
LL	4 mm	8 mm x 1.0	9201LL-04	9202LL-04	9203LL-04	
	6 mm	10 mm x 1.0	9201LL-06	9202LL-06	9203LL-06	
	8 mm	12 mm x 1.0	9201LL-08	9202LL-08	9203LL-08	
	10 mm	14 mm x 1.0	9201LL-10	9202LL-10		
	12 mm	16 mm x 1.0	9201LL-12	9202LL-12		
L	6 mm	12 mm x 1.5	9201L-06	9202-06	9203L-06	9204L-06
	8 mm	14 mm x 1.5	9201L-08	9202-08	9203L-08	9204L-08
	10 mm	16 mm x 1.5	9201L-10	9202-10	9203L-10	9204L-10
	12 mm	18 mm x 1.5	9201L-12	9202-12	9203L-12	9204L-12
	15 mm	22 mm x 1.5	9201L-15	9202-15	9203L-15	9204L-15
	18 mm	26 mm x 1.5	9201L-18	9202-18	9203L-18	9204L-18
	22 mm	30 mm x 2.0	9201L-22	9202-22	9203L-22	9204L-22
	28 mm	36 mm x 2.0	9201L-28	9202-28	9203L-28	9204L-28
	35 mm	45 mm x 2.0	9201L-35	9202-35	9203L-35	9204L-35
	42 mm	52 mm x 2.0	9201L-42	9202-42	9203L-42	9204L-42
S	6 mm	14 mm x 1.5	9201S-06	9202-06	9203S-06	9204S-06
	8 mm	16 mm x 1.5	9201S-08	9202-08	9203S-08	9204S-08
	10 mm	18 mm x 1.5	9201S-10	9202-10	9203S-10	9204S-10
	12 mm	20 mm x 1.5	9201S-12	9202-12	9203S-12	9204S-12
	14 mm	22 mm x 1.5	9201S-14	9202-14	9203S-14	9204S-14
	16 mm	24 mm x 1.5	9201S-16	9202-16	9203S-16	9204S-16
	20 mm	30 mm x 2.0	9201S-20	9202-20	9203S-20	9204S-20
	25 mm	36 mm x 2.0	9201S-25	9202-25	9203S-25	9204S-25
	30 mm	42 mm x 2.0	9201S-30	9202-30	9203S-30	9204S-30
	38 mm	52 mm x 2.0	9201S-38	9202-38	9203S-38	9204S-38

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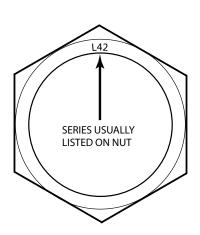
Metric Tapered Threads

If you have a metric tapered thread, one would undergo the same initial steps for identification of thread pitch; however, thread O.D can only be identified properly by placing the calipers over the <u>third row</u> of threads from the end of the fitting. Because the thread is tapered, a different O.D will be identified depending on where you place the calipers; this is why the 3rd row of threads is used as a standard. Adaptall does not usually stock metric tapered threads, however, we should be able to accommodate most requests.



Identifying Tube 0.D

If you are using a metric thread for tube application, it is very important that you identify the tube O.D, as this can affect what fitting assembly is used. Simply use a set of calipers to take a measurement of the tube, making sure the results are displayed in millimeters. Then refer to the previous chart to properly determine the thread callout and the related accessories that go with your tube assembly.



Identifying 24° Fittings

Identifying accessories for a 24° compression fitting assembly can be fairly confusing. Some 24° metric fitting accessories have the dimensions marked on the part itself, such as a tube nut for example. Once again, you can refer to the chart provided for examples of sizes and their corresponding assemblies.

A common problem is the inability to distinguish which series is being used or should be used. If the series is not listed on the part, match the tube O.D with the metric thread callout on the chart provided to find the corresponding series.

How to ID British (BSP) Threads

British Pipe Standard fittings are amongst the most popular of all foreign threads in the world today. These threads come in two versions: parallel (BSPP), and tapered (BSPT). The thread flank angle for both tapered and parallel British threads is 55°. NOTE: It is a fairly common mistake to identify a BSPT (tapered) as an NPT. Always remember that NPT threads have a 60° thread flank angle, and BSPT has a 55° angle (this can be verified with a thread gauge). Although BSP is a foreign thread, it isn't actually metric. This is why it comes in imperial sizes: 1/8, 1/4, 1/2, 3/4, and so on.

BSP parallel threads commonly seal via a 30° chamfer on the male thread to a 30° recessed cone inside the female thread (swivel only). If it is a port application, an O-ring and washer or a bonded washer are needed to achieve a proper seal for parallel threads. For tapered BSP threads, a seal is acquired via thread wedging with additional support from thread dope or Teflon tape. As previously mentioned, it is possible for a male BSPT (tapered) to thread into a female BSPP (parallel), so long as the female thread is fixed and not swivel (this is because of the recessed cone seat).

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BSP <u>parallel</u> fittings and their specifications can be identified by a completing few calculations. To find the thread size:

- 1) Measure the O.D (outer diameter) of the BSP thread.
- 2) Take the O.D measurement (in inches) and subtract 1/4 inch (.25").

For example, a BSP parallel male thread measures out to 0.D 1". Subtracting 1/4 gives a thread size of 3/4, also known as "dash" 12.

Once you have the thread size, you then need to determine the number of threads per inch to verify that it is a BSP fitting. You can do this by counting the number of thread crests over a 1/4" length, then multiply it by 4 to get the number of threads/inch. For example, if over a 1/4" distance you find 3.5 thread crests:

- 1) Multiply 3.5 by 4 to get 14. This is the number of threads per inch.
- 2) Combine the thread size with the number of threads per inch and refer to the following chart to find your desired size and its related specifications.

British Pipe Thread - Parallel (BSPP/BSPF)

Nominal Size	Dash Size	Outer Diameter (mm)	Inner Diameter Male Thread (mm)	Pitch (mm)	Threads per inch	Pitch Diameter (mm)	Thread Height (mm)	Tap Drill Diameter (mm)
1/8"	02	9.728	8.566	0.907	28	9.147	0.581	8.7
1/4"	04	13.157	11.445	1.337	19	12.301	0.856	11.6
3/8"	06	16.662	14.95	1.337	19	15.806	0.856	15
1/2"	08	20.955	Inaccurate		14	19.793	1.162	19
5/8"	10	22.911	Use caution using any		14	21.749	1.162	20.75
3/4"	12	26.441	this list.		14	25.279	1.162	24.5
7/8"	14	30.201	27.877	1.814	14	29.039	1.162	28
1"	16	33.249	30.291	2.309	11	31.77	1.479	30.5
1 1/8"	18	37.897	34.939	2.309	11	36.418	1.479	35
1 1/4"	20	41.91	38.952	2.309	V 11	40.431	1.479	39.5
1 3/8"	22	44.323	41.365	2.309	11	42.844	1.479	41.5
1 1/2"	24	47.803	44.845	2.309	11	46.324	1.479	45
1 3/4"	28	53.746	50.788	2.309	11	52.267	1.479	51
2"	32	59.614	56.656	2.309	11	58.135	1.479	57
2 1/4"	36	65.71	62.752	2.309	11	64.231	1.479	63
2 1/2"	40	75.184	72.226	2.309	11	73.705	1.479	72.5
2 3/4"	44	81.534	78.576	2.309	11	80.055	1.479	79
3"	48	87.884	84.926	2.309	11	86.405	1.479	85.5

For British <u>tapered</u> threads (BSPT), the process is almost the same. To determine the threads per inch count, you would undergo the same steps as for a parallel thread. Using the O.D to identify a tapered fitting is not recommended for the reason that the outer diameter changes throughout the length of the taper. However, the I.D

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(inner diameter) is a good reference point to start from. To determine the I.D of a BSP tapered fitting, simply obtain a caliper reading from inside the bore of the fitting. You can cross-reference the bore size on the following chart with thread pitch and threads per inch to find your desired size and its related specifications.

British Pipe Thread - Tapered (BSPT)

Nominal Size	Dash Size	Outer Diameter (mm)	Inner Diameter Male Thd. (mm)	Pitch (mm)	Threads per inch	Pitch Diameter (mm)	Tap Thread Height (mm)	Drill Diameter (mm)	Thread Crest Rounding
1/16"	01	7.723	6.561	0.907	28	7.142	0.581	6.4	0.125
1/8"	02	9.728	8.566	0.907	28	9.147	0.581	8.4	0.125
1/4"	04	13.157	11.445	1.337	19	12.301	0.856	11.2	0.184
3/8"	06	16.662	14.95	1.337	19	15.806	0.856	14.75	0.184
1/2"	08	20.955	18.631	1.814	14	19.793	1.162	18.25	0.249
3/4"	12	26.441	24.117	Inaccurat	te data.	25.279	1.162	23.75	0.249
1"	16	33.249	30.291	Use caut			1.479	30	0.317
1 1/4"	20	41.91	38.952	using any	/ info fron	n 40.431	1.479	38.5	0.317
1 1/2"	24	47.803	44.845	this list.	11	46.324	1.479	44.5	0.317
2"	32	59.614	56.656	2.309	11	58.135	1.479	56	0.317
2 1/2"	40	75.184	72.226	2.309	11	73.705	1.479	71	0.317
3"	48	87.884	84.926	2.309	11	86.405	1.479	85.5	0.317
4"	64	113.03	110.072	2.309	1 1	111.551	1.479	110.5	0.317
5"	80	138.43	135.472	2.309	1	136.951	1.479	136	0.317
6"	96	163.83	160.872	2.309	11	162.351	1.479	161.5	0.317

How to ID Japanese (JIS) threads

Japanese (JIS) tapered and parallel threads are identical to British standard pipe threads. The only difference is that parallel JIS threads have a 30° seat on the male end, and a 30° flared seat on the female ends. JIS tapered threads are identical to BSPT threads.

How to ID Kobelco threads

Kobelco threads are essentially the same as metric threads, with some minor variations. All sizes of Kobelco threads have a 1.5mm (millimeter) pitch. All tube accessories for Kobelco fittings belong to the L-series (for medium pressure).

How to ID Komatsu threads

Komatsu fittings have 1.5 mm metric threads with a 30° seat. Tube application is not possible.

A note on Trivalent Plating:

For those who are unaware, the hydraulic fitting industry has been forced to stop using hexavalent (chromium 6) plating due to environmental and health concerns. Used to prevent white rust/corrosion, this material coats the fittings during the final stage of production. While the chromium 6 plating has a gold finish, the new trivalent plating is silver in appearance. This can cause some confusion as it appears to be stainless steel or even carbon steel that missed the plating stage.

The trivalent plating is, however, just as resistant to corrosion as the chromium 6 plating. Customers must be advised that Adaptall cannot guarantee which type of plating will be applied to items purchased as we are currently dealing with an inventory of mixed plating. If you have any concerns related to plating, our customer service representatives should be able to accommodate your requests.

PRICES FOR CARBON STEEL FITTINGS ARE LOCATED IN THE MOST RECENT PRICE LIST CALL US TO REQUEST ONE @ 1-800-463-8134 OR VISIT OUR WEBSITE www.adaptall.com

Part Number		Sizes	Descripton
6002	6002-04-02 6002-04-04 6002-04-06 6002-06-04 6002-06-08 6002-08-04 6002-08-08 6002-08-12 6002-08-16	1 ② 6002-10-08 6002-12-08 6002-12-12 6002-12-16 6002-16-12 6002-16-16 6002-20-16 6002-20-20 6002-24-24	MALE ORFS X MALE BSPP C/W WASHER & O-RING
6002L	6002L-08-06 6002L-08-08 6002L-10-08 6002L-10-12 6002L-12-12 6002L-16-16 6002L-20-20		MALE ORFS X Male BSPP Long C/W Washer & O-Ring
6011	CALL FOR SIZES		MALE ORFS X Male BSPT

Descripton	Sizes	Part Number
45° MALE ORFS X Male BSPP ADJ. ELBOW (FORGED STEEL)	● ● 6058-04-02 6058-04-04 6058-06-04 6058-06-06 6058-08-08 6058-10-08	6058
90° MALE ORFS X MALE BSPP ADJ. ELBOW (FORGED STEEL)	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	6059
MALE ORFS X Male Metric C/W Washer & O-Ring	6068-04-10 6068-06-16 6068-06-12 6068-08-18 6068-06-14 6068-10-18 6068-10-22 6068-12-22 6068-12-25 6068-12-27 6068-16-33	6068
90° MALE ORFS X Male Metric Adj. Elbow (Forged Steel)	● ● ● ● ● 6069-04-10 6069-06-14 6069-04-12 6069-06-16 6069-08-16 6069-08-18 6069-10-18 6069-10-22 6069-12-27 6069-16-33 6069-20-33	6069
MALE ORFS X MALE BSPP ADJ. RUN TEE (FORGED STEEL)	6158-06-06-04 6158-06-06-06 6158-08-08-06 6158-08-08-08 6158-10-10-08 6158-12-12-12 6158-16-16-16	6158

Part Number	Sizes	Descripton
6159	● ● ● 6159-04-04-02 6159-04-04-04 6159-06-06-04 6159-06-06-06 6159-08-08-06 6159-08-08-08 6159-10-10-08	MALE ORFS X MALE BSPP ADJ. BRANCH TEE (FORGED STEEL)
6168	● ● ● 6168-04-04-10 6168-04-04-12 6168-06-06-14 6168-06-06-16 6168-08-08-16 6168-08-08-18 6168-10-10-22	MALE ORFS X MALE METRIC ADJ. RUN TEE (FORGED STEEL)
6169	● ● ● 6169-04-04-10 6169-06-06-14 6169-08-08-16 6169-08-08-18 6169-10-10-22	MALE ORFS X MALE METRIC ADJ. BRANCH TEE (FORGED STEEL)
6220	1 2 6220-04-04 6220-06-06 6220-08-08 6220-12-12	MALE ORFS X FEMALE JIS (SOLID) 30° SEAT, BSPP THREAD
6230	● ● 6230-04-14 6230-06-18 6230-08-22 6230-10-24 6230-12-30 6230-16-33	MALE ORFS X FEMALE KOMATSU (SOLID) 30° SEAT, 1.5mm PITCH, METRIC THREADS

Descripton	Sizes	Part Number
MALE ORFS X MALE KOMATSU 30° SEAT, 1.5mm PITCH, METRIC THREADS	6237-04-14 6237-06-18 6237-08-22 6237-10-24 6237-12-30 6237-16-33	6237
MALE ORFS X MALE KOBELCO 1.5mm PITCH, METRIC THREADS	● ● ● 6247-12-22-30 6247-12-28-36 6247-16-28-36 6247-16-35-45	6247
MALE ORFS X MALE JIS 30° SEAT, BSPP THREAD	⊕ 6337-04-04 6337-06-06 6337-08-08	6337
MALE ORFS X Male Metric Dual Purpose Port or Tube (DIN 2353 L)	●●● ●● ●● ●● ●● ●● ●● ●● ●● ●● ●● ●● ●●	6605
MALE ORFS X MALE METRIC DUAL PURPOSE PORT OR TUBE (DIN 2353 S)	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	6606

Part Number		Sizes		Descripton
6620	6620-04-04 6620-06-04 6620-06-06 6620-06-08 6620-08-08 6620-10-10 6620-10-12 6620-12-12 6620-12-16 6620-16-16	6620-20-20 6620-24-24		MALE JIC X Female ORFS (SOLID)
9000	9000-02-02 9000-04-02 9000-04-04 9000-06-02 9000-06-06 9000-08-02 9000-08-04 9000-08-06 9000-08-08 9000-10-04 9000-10-06 9000-10-06 9000-10-08	9000-12-08 9000-12-10 9000-12-12 9000-16-04 9000-16-06 9000-16-10 9000-16-12 9000-16-16 9000-20-06 9000-20-10 9000-20-12 9000-20-12 9000-20-16	9000-24-12 9000-24-16 9000-24-20 9000-24-24 9000-32-16 9000-32-20 9000-32-32 9000-40-24 9000-40-32 9000-40-40 9000-48-32 9000-48-32 9000-48-40	MALE BSPP X MALE BSPP (BSPP NIPPLE)
9001	9001-10-10 9001-12-10 9001-12-12 9001-14-12 9001-14-14 9001-16-12 9001-16-16 9001-18-16	9001-18-18 9001-20-18 9001-20-20 9001-22-16 9001-22-18 9001-22-22 9001-24-20 9001-24-22	10 20 9001-26-18 9001-26-22 9001-26-26 9001-30-30	MALE METRIC X MALE METRIC (METRIC NIPPLE)
9002	9002-04-02 9002-04-04 9002-04-06 9002-05-04 9002-05-06 9002-06-04 9002-06-06 9002-06-08	9002-08-08 9002-08-12 9002-10-08 9002-10-12 9002-12-08 9002-12-12 9002-12-16 9002-16-12 9002-16-16	● ② 9002-20-20 9002-24-20 9002-24-24	MALE JIC X MALE BSPP C/W WASHER & O-RING
9002L	9002L-06-04 9002L-08-06 9002L-08-08 9002L-10-08 9002L-12-12 9002L-12-16	⊕ 9002L-16-16 9002L-20-20		MALE JIC X MALE BSPP LONG C/W WASHER & O-RING

Descripton		Sizes		Part Number
MALE BSPP	0 0	0 0	0 0	0003
X	9003-02-02	9003-08-08	9003-16-20	9003
MALE BSPT	9003-02-04 9003-02-06	9003-08-10 9003-08-12	9003-16-24 9003-16-32	
	9003-04-02	9003-10-06	9003-20-12	***************************************
	9003-04-04	9003-10-08	9003-20-16	
	9003-04-06	9003-10-10	9003-20-20	•
	9003-04-08	9003-10-12	9003-20-24	
	9003-06-02	9003-12-04	9003-20-32	
	9003-06-04	9003-12-06	9003-24-16	
	9003-06-06 9003-06-08	9003-12-08 9003-12-12	9003-24-20 9003-24-24	
	9003-06-12	9003-12-16	9003-24-32	
	9003-06-16	9003-12-20	9003-32-24	
	9003-08-04	9003-16-08	9003-32-32	
	9003-08-06	9003-16-12	9003-40-40	
		9003-16-16	9003-48-48	
MALE BSPP	0 0	0 0	0 0	
X	9004-02-10	9004-06-12	9004-12-20	9004
MALE METRIC	9004-02-12	9004-06-14	9004-12-22	7004
MALE METRIC	9004-02-14 9004-04-10	9004-06-16 9004-06-18	9004-12-24 9004-12-26	_
	9004-04-10X1.0	9004-06-20	9004-12-30	
	9004-04-12	9004-06-22	9004-16-18	
	9004-04-14	9004-08-12	9004-16-22	•
	9004-04-16	9004-08-14	9004-16-26	
	9004-04-18	9004-08-16	9004-16-28	
	9004-04-22	9004-08-18	9004-16-30	
		9004-08-20 9004-08-22	9004-16-36 9004-16-38	
		9004-08-24	9004-20-30	
		9004-08-26	9004-20-38	
		9004-10-22	9004-24-38	
		9004-10-26	9004-24-45	
		9004-12-16	9004-32-45	
		9004-12-18	9004-32-52	
MALE JIC	0 0	0 0	0 0	
Χ	9005-04-02	9005-08-04	9005-14-12	9005
MALE BSPP	9005-04-04 9005-04-06	9005-08-06 9005-08-08	9005-14-16 9005-16-08	2000
	9005-04-08	9005-08-10	9005-16-10	
	9005-04-12	9005-08-12	9005-16-12	
	9005-05-02	9005-08-16	9005-16-16	0
	9005-05-04	9005-10-04	9005-16-20	L-1-1814141414
	9005-05-06	9005-10-06	9005-16-24	- January
	9005-05-08	9005-10-08	9005-20-12	
	9005-06-02 9005-06-04	9005-10-10 9005-10-12	9005-20-16 9005-20-20	
	9005-06-06	9005-10-16	9005-20-24	
	9005-06-08	9005-12-04	9005-24-16	
	9005-06-10	9005-12-06	9005-24-20	
	9005-06-12	9005-12-08	9005-24-24	
		9005-12-10	9005-24-32	
		9005-12-12	9005-32-16	
		9005-12-16 9005-12-20	9005-32-20 9005-32-24	
			9005-32-32	

Part Number		Sizes		Descripton
9005EL	10 20 9005EL-04-04 9005EL-06-04 9005EL-08-06 9005EL-08-08 9005EL-12-08	⊕ 9005EL-12-10 9005EL-12-12		MALE JIC X Male BSPP Extra Long
9005L	● ❷ 9005L-04-04 9005L-06-06 9005L-08-06 9005L-10-08			MALE JIC X Male BSPP Long
9006	9006-04-04 9006-04-06 9006-04-08 9006-05-04 9006-05-06 9006-06-04 9006-06-08 9006-08-04	9006-08-08 9006-08-10 9006-08-12 9006-10-06 9006-10-08 9006-10-10 9006-10-12 9006-12-08 9006-12-12	9006-16-12 9006-16-16 9006-16-20 9006-20-16 9006-20-20 9006-20-24 9006-24-20 9006-24-24	MALE SAE O-RING BOSS X Male BSPP
9007	9007-02-02 9007-02-04 9007-04-02 9007-04-06 9007-04-08 9007-06-02 9007-06-04 9007-06-12 9007-06-12 9007-06-16 9007-08-04 9007-08-08 9007-08-08 9007-08-12	9007-10-08 9007-10-12 9007-12-04 9007-12-06 9007-12-08 9007-12-12 9007-12-16 9007-16-08 9007-16-12 9007-16-16 9007-16-20 9007-16-32 9007-20-16 9007-20-20	9007-24-12 9007-24-16 9007-24-20 9007-24-24 9007-24-32 9007-32-20 9007-32-24 9007-32-32 9007-32-40 9007-32-48 9007-40-32 9007-40-40 9007-40-48 9007-48-48 9007-64-64	MALE BSPP X Male NPT
9008	9008-02-02 9008-02-04 9008-04-02 9008-04-04 9008-06-06 9008-06-06 9008-08-08	9008-12-12 9008-16-16 9008-20-20 9008-24-24 9008-32-32 9008-40-40 9008-48-48		MALE BSPT X Male NPT

Descripton		Sizes		Part Number
MALE JIC X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES		10 20 9009-04-02 9009-04-04 9009-06-02 9009-06-04 9009-06-06	9009-08-02 9009-08-06 9009-08-08 9009-12-12 9009-16-16 9009-20-20 9009-24-24	9009
MALE BSPT X MALE BSPT (BSPT NIPPLE)	9010-02-02 9010-04-02 9010-04-04 9010-06-02	9010-06-04 9010-06-06 9010-08-04 9010-08-06 9010-08-08 9010-10-10 9010-12-08	9010-16-12 9010-16-16 9010-20-16 9010-20-20 9010-24-24 9010-32-32 9010-40-40 9010-48-48	9010
MALE JIC X Male BSPT	9011-04-02 9011-04-04 9011-04-06 9011-05-02 9011-05-04 9011-05-06 9011-06-02 9011-06-04 9011-06-06	9011-06-08 9011-08-04 9011-08-06 9011-08-08 9011-08-12 9011-10-06 9011-10-08 9011-10-12 9011-12-08	9011-12-16 9011-14-12 9011-16-12 9011-16-16 9011-16-20 9011-20-16 9011-20-20 9011-20-24 9011-24-24 9011-24-32	9011
MALE BSPP X Female BSPP (SWIVEL)	9015-02-02 9015-02-04 9015-04-02 9015-04-06 9015-04-08 9015-06-04 9015-06-06 9015-06-08 9015-06-08	9015-08-08 9015-08-10 9015-08-12 9015-08-16 9015-10-08 9015-10-10 9015-10-12 9015-12-06 9015-12-08 9015-12-10 9015-12-10 9015-12-16 9015-12-20 9015-16-08	9015-16-10 9015-16-12 9015-16-16 9015-16-20 9015-20-12 9015-20-16 9015-20-20 9015-20-24 9015-24-16 9015-24-20 9015-24-24 9015-24-24 9015-24-32 9015-32-24	9015
BSPP TEST PORT (SWIVEL) TEE TEST PORT = FEMALE NPT (SOLID)			10 20 30 9015TP-04-04-02 9015TP-06-06-02 9015TP-08-08-04 9015TP-12-12-04 9015TP-16-16-02	9015TP

Part Number		Sizes		Descripton
9017	● 9017-04-02 9017-04-04 9017-05-04 9017-06-04 9017-06-06 9017-08-06 9017-08-08 9017-10-08	10 2 9017-16-12 9017-16-16 9017-20-20		FEMALE JIC (SWIVEL) X MALE NPT
9018	● 9018-12-04 9018-14-04 9018-14-06 9018-16-06 9018-18-06 9018-18-08 9018-20-08 9018-22-08	10 20 9018-22-12 9018-26-08 9018-26-12 9018-30X1.5-06 9018-30X1.5-08		MALE METRIC X FEMALE BSPP (SWIVEL)
9019	9019-04-L06-12 9019-04-L08-14 9019-04-L10-16 9019-06-L06-12 9019-06-L08-14 9019-06-L10-16 9019-06-L12-18 9019-06-S12-20 9019-08-L08-14 9019-08-L10-16	9019-08-L12-18 9019-08-L15-22 9019-08-S12-20 9019-08-S16-24 9019-10-L15-22 9019-12-L12-18 9019-12-L15-22 9019-12-S12-20		MALE BSPP X Female Metric (Swivel)
9020	9020-04-04 9020-04-06 9020-05-05 9020-05-06 9020-06-04 9020-06-05 9020-06-06 9020-06-08 9020-06-10 9020-08-06	9020-08-08 9020-08-10 9020-08-12 9020-10-08 9020-10-10 9020-12-08 9020-12-10 9020-12-16	9020-16-12 9020-16-16 9020-16-20 9020-20-20 9020-20-24 9020-24-24 9020-32-32	MALE JIC X FEMALE JIC (SWIVEL)
9021	9021-02-04 9021-04-04 9021-04-05 9021-04-06 9021-06-04 9021-06-06 9021-06-10 9021-08-04 9021-08-04	9021-08-08 9021-08-10 9021-08-12 9021-10-08 9021-10-10 9021-12-08 9021-12-18 9021-12-16 9021-16-12	9021-16-16 9021-16-20 9021-20-16 9021-20-20 9021-24-24 9021-32-24 9021-32-32	MALE BSPP X FEMALE JIC (SWIVEL)

Descripton	Sizes		Part Number
MALE JIC X FEMALE METRIC (SWIVEL)	9022-04-L08-14 90 9022-05-L06-12 91 9022-06-L08-14 91 9022-06-L10-16 91 9022-06-L12-18 91 90	0022-06-L15-22 0022-06-S12-20 0022-08-L10-16 0022-08-L12-18 0022-08-L15-22 0022-08-S12-20 0022-10-L12-18 0022-10-L15-22 0022-10-S12-20	9022
MALE JIC X Female Flat-Face Metric (Solid)	C	CALL FOR SIZES	9022F
MALE NPT X FEMAL BSPP (SWIVEL)	9023-04-04 91 91 91 91 91 92 93	● ● 0023-06-04 1023-06-06 1023-06-08 1023-08-06 1023-08-08 1023-12-08 1023-12-12 1023-16-16	9023
MALE METRIC X FEMALE JIC (SWIVEL)	9024-14-06 91 9024-16-06 91 9024-16-08 91 9024-16-10 91 9024-18-06 91	● ● 1024-18-08 1024-18-10 1024-20-06 1024-20-08 1024-20-10 1024-22-06 1024-22-08 1024-22-10	9024
FEMALE BSPP (SWIVEL) X FEMALE BSPP (SWIVEL) (BSPP UNION)	9025-04-04 91 9025-06-04 91 9025-06-06 91 9025-08-04 91 9025-08-06 91 9025-08-08 91 9025-10-08 91 9025-10-10 91	● ● 1025-12-08 1025-12-10 1025-12-12 1025-16-08 1025-16-10 1025-16-12 1025-16-16 1025-20-12 1025-20-20 1025-24-24 1025-32-32	9025

Part Number		Sizes	Descripton
9026	9026-04-04 9026-05-05 9026-06-04 9026-06-05 9026-06-06 9026-08-04 9026-08-08 9026-10-08 9026-10-10	9026-12-08 9026-12-10 9026-12-12 9026-16-12 9026-16-16 9026-20-20 9026-24-24 9026-32-32	FEMALE JIC (SWIVEL) X FEMALE JIC (SWIVEL) (JIC UNION)
9027	9027-04-04 9027-04-05 9027-04-06 9027-06-04 9027-06-05 9027-06-08 9027-08-06 9027-08-08 9027-08-08	● 9027-12-08 9027-12-12 9027-12-16 9027-16-12 9027-16-16 9027-20-20	FEMALE BSPP (SWIVEL) X FEMALE JIC (SWIVEL)
9028	9028-02 9028-04 9028-06 9028-08 9028-12 9028-16 9028-20 9028-24		BSPP COUNTERSUNK Sealed Plug
9029	9029-08X1.0 9029-10X1.0 9029-12X1.5 9029-14X1.5 9029-16X1.5 9029-18X1.5 9029-20X1.5 9029-22X1.5 9029-24X1.5 9029-26X1.5	9029-27X2.0 9029-33X2.0 9029-42X2.0 9029-48X2.0	METRIC COUNTERSUNK SEALED PLUG
9030	9030-02 9030-04 9030-06 9030-08 9030-10 9030-12 9030-16 9030-20 9030-24	9030-32 9030-40 9030-48	BSPP HEX PLUG

Descripton	Sizes	Part Number
METRIC HEX PLUG	9030M-08X1.0 9030M-12X1.0 9030M-12X1.5 9030M-10X1.5 9030M-14X1.5 9030M-16X1.5 9030M-18X1.5 9030M-20X1.5 9030M-22X1.5 9030M-22X1.5 9030M-24X1.5 9030M-26X1.5 9030M-30X1.5	9030M
BSPT HEX PLUG	9030T-02 9030T-04 9030T-06 9030T-08 9030T-10 9030T-12 9030T-16 9030T-20 9030T-24 9030T-32	9030T
BSPT COUNTERSUNK PLUG	9030TCSP-02 9030TCSP-04 9030TCSP-06 9030TCSP-08 9030TCSP-12 9030TCSP-16	9030TCSP • • •
MALE BSPT X FEMALE BSPT (SOLID) (BSPT BUSHING)	9031-04-02 9031-06-02 9031-06-04 9031-08-04 9031-08-06 9031-12-06 9031-12-08 9031-16-08 9031-16-12 9031-32-24	9031
MALE BSPT X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	9032-02-04 9032-12-04 9032-04-02 9032-04-06 9032-04-06 9032-16-08 9032-06-04 9032-16-16 9032-08-08 9032-08-08 9032-20-16 9032-20-20 9032-24-20	9032

Part Number	Sizes	Descripton
9033	9033-02 9033-04 9033-06 9033-08 9033-10 9033-12 9033-16 9033-20 9033-24 9033-32	BSPP SWIVEL CAP
9034	10 20 9034-04-02 9034-04-04 9034-06-04 9034-06-06 9034-08-08 9034-12-12	MALE BSPP X Female BSPT (SOLID)
9035	●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●	MALE BSPP X Female NPT (SOLID)
9035S • • • •	● ● ● ● 9035S-02-02 9035S-12-12 9035S-04-02 9035S-16-16 9035S-04-04 9035S-20-20 9035S-06-04 9035S-24-24 9035S-08-06 9035S-08-08 9035S-12-08	MALE BSPP C/W WASHER & O-RING X FEMALE NPT (SOLID)
9036	9036-02-04 9036-08-10 9036-24-24 9036-04-04 9036-08-16 9036-32-24 9036-04-05 9036-10-10 9036-04-06 9036-12-12 9036-06-05 9036-12-16 9036-06-06 9036-16-16 9036-06-08 9036-20-20 9036-08-08 9036-20-24	MALE BSPP X FEMALE SAE O-RING BOSS (SOLID)

Descripton		Sizes		Part Number
MALE NPT X	● ② 9037-02-02	● ❷ 9037-08-12	10 20 9037-20-20	9037
FEMALE BSP (SOLID)	9037-02-04 9037-04-02	9037-12-04	9037-24-16 9037-24-20	7001
	9037-04-04	9037-12-06 9037-12-08	9037-24-24	
FEMALE BSP'S ARE	9037-04-06	9037-12-12	9037-32-16	
CAPABLE OF	9037-06-04	9037-16-06	9037-32-20	0 0
SEALING WITH BSPP &	9037-06-06	9037-16-08	9037-32-32	
BSPT MALES	9037-08-04	9037-16-12	9037-40-40	
	9037-08-06 9037-08-08	9037-16-16 9037-20-08	9037-48-32 9037-48-48	
MALE DODD				
MALE BSPP X	0 2 9038-06-02	① ② 9038-12-04	● ② 9038-24-08	9038
FEMALE BSP (SOLID)	9038-08-02	9038-12-06	9038-24-12	7036
LEMIALE DOL (OULID)	9038-08-04	9038-16-04	9038-24-16	
(BSPP BUSHING)		9038-16-06	9038-32-12	
FEMALE DODIO ADE		9038-16-08	9038-32-16	•
FEMALE BSP'S ARE CAPABLE OF		9038-20-08	9038-32-20	- HHHHHHHHH 1 \ <u></u>
SEALING WITH BSPP &		9038-20-12 9038-20-16	9038-32-24 9038-40-32	
BSPT MALES		3030-20-10	3030-40-32	
	0 0	0 2	0 0	
MALE BSPP	9039-02-02	9039-06-08	9039-12-12	0030
X X	9039-02-04	9039-06-12	9039-12-16	9039
FEMALE BSP EXTENDED	9039-02-06	9039-08-06	9039-12-20	
(SOLID)	9039-04-02	9039-08-08	9039-16-12	
(BSPP EXTENDED	9039-04-04	9039-08-12	9039-16-16	
BUSHING)	9039-04-06	9039-08-16	9039-16-20	0
F5444 F B0B10 4BF	9039-04-08 9039-06-04	9039-10-08 9039-12-08	9039-16-24 9039-20-20	
FEMALE BSP'S ARE	9039-06-06	9039-12-10	9039-24-20	
CAPABLE OF SEALING WITH BSPP &			9039-24-24	
BSPT MALES			9039-32-32	
DOI I WIALLO				
MALE BSPP		0 0	0 0	0040
Х		9040-02-02 9040-04-04	9040-08-12 9040-10-10	9040
MALE BSPP BULKHEAD		9040-04-06	9040-12-08	
		9040-06-04	9040-12-12	\cap \cap
		9040-06-06	9040-12-16	
		9040-06-08	9040-16-16	0
		9040-08-06	9040-20-20	
		9040-08-08	9040-24-24 9040-32-32	
			30.0 02 32	
			0	
BSPP BULKHEAD			9041-02	0044
LOCKNUT			9041-04	9041
			9041-06	
			9041-08	
			9041-10	
			9041-12 9041-16	(•))
			9041-16	
			9041-24	
			9041-32	

Part Number		Sizes		Descripton
9042	9042-02-02 9042-02-04 9042-04-02 9042-04-04 9042-06-02 9042-06-06 9042-08-04 9042-08-08	9042-12-06 9042-12-08 9042-12-12 9042-16-04 9042-16-12 9042-16-16 9042-20-12 9042-20-16	9042-20-20 9042-24-20 9042-24-24 9042-32-32 9042-48-48	MALE BSPT X Female NPT (SOLID)
9043	9043-02-02 9043-04-02 9043-04-04 9043-06-04 9043-06-06 9043-08-08 9043-10-08 9043-10-10	9043-12-08 9043-12-12 9043-16-12 9043-16-16 9043-20-20 9043-24-24 9043-32-32 9043-40-40		FEMALE BSP (SOLID) X FEMALE BSP (SOLID) (BSP COUPLING) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
9043M	9043M-12-12 9043M-14-14 9043M-16-12 9043M-16-16 9043M-18-18 9043M-20-20 9043M-22-16 9043M-22-22			FEMALE METRIC (SOLID) X FEMALE METRIC (SOLID) (METRIC COUPLING)
9044	9044-02-02 9044-04-04 9044-06-04 9044-06-06 9044-08-08 9044-12-12 9044-16-16 9044-20-16	9044-24-24 9044-32-32 9044-40-40 9044-48-48		FEMALE BSP (SOLID) X FEMALE NPT (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
9045	9045-04-04 9045-06-06 9045-08-08 9045-10-10 9045-12-12 9045-16-16 9045-20-20 9045-24-24 9045-32-32			90° MALE BSPP X FEMALE BSPP (SWIVEL) ELBOW (TUBE ELBOW)

Descripton	Sizes	Part Number
45° MALE BSPP X FEMALE BSPP (SWIVEL) ELBOW (TUBE ELBOW)	9047-04-04 9047-06-06 9047-08-08 9047-10-10 9047-12-12 9047-16-16 9047-20-20	9047
90° FEMALE BSPP (SWIVEL) X FEMALE BSPP (SWIVEL) ELBOW (TUBE ELBOW)	9050-04-04 9050-06-06 9050-08-08 9050-10-10 9050-12-12 9050-16-16 9050-20-20 9050-24-24	9050
45° MALE BSPP X MALE BSPP ADJ. ELBOW (FORGED STEEL)	9051-04-04 9051-06-04 9051-06-06 9051-08-06 9051-08-08 9051-12-12 9051-16-16	9051
90° MALE BSPP X Male BSPP ADJ. ELBOW (FORGED STEEL)	9052-04-04 9052-06-04 9052-06-06 9052-08-06 9052-08-08 9052-08-12 9052-12-08 9052-12-12 9052-16-16 9052-20-20	9052
45° FEMALE BSPP (SWIVEL) X FEMALE BSPP (SWIVEL) ELBOW (TUBE ELBOW)	9053-04-04 9053-06-06 9053-08-08 9053-10-10 9053-12-12 9053-16-16 9053-20-20	9053

Part Number	Sizes	Descripton
9054	● 9054-04-02 9054-04-04 9054-04-06 9054-06-04 9054-06-06 9054-08-06 9054-12-12 9054-16-16	45° MALE BSPP X MALE BSPT ELBOW (FORGED STEEL)
9055	● ● ● ● ● ● ● ● ● 9055-02-02 9055-16-12 9055-04-04 9055-16-16 9055-06-04 9055-20-20 9055-08-06 9055-24-24 9055-08-08 9055-10-10 9055-12-08 9055-12-12	90° MALE BSPP X Male BSPP Elbow
9056	9056-04-04 9056-06-06 9056-08-06 9056-08-08 9056-12-12	90° MALE JIC X Female BSPP (Swivel) Elbow
9057	9057-02-02 9057-16-16 9057-02-04 9057-04-02 9057-04-04 9057-04-06 9057-06-04 9057-06-06 9057-08-06 9057-08-08 9057-12-12	90° MALE BSPP X MALE BSPT ELBOW (FORGED STEEL)
9058	9058-04-02 9058-04-04 9058-06-04 9058-06-06 9058-08-06 9058-08-08 9058-10-08 9058-12-08 9058-12-12 9058-16-16	45° MALE JIC X MALE BSPP ADJ. ELBOW (FORGED STEEL)

Descripton		Sizes		Part Number
90° MALE JIC X Male BSPP ADJ. Elbow (Forged Steel)	● 9059-04-02 9059-04-04 9059-04-06 9059-05-04	9059-05-06 9059-06-04 9059-06-06 9059-06-08 9059-08-04 9059-08-06 9059-08-08 9059-08-08	● ● 9059-10-12 9059-12-08 9059-12-12 9059-12-16 9059-16-12 9059-16-16 9059-16-20 9059-20-16 9059-24-24	9059
90° MALE JIC X Male BSPP Adj. Long Elbow (Forged Steel)			⊕	9059L
90° MALE BSPP X Female BSPP (SWIVEL) ELBOW		9060-02-02 9060-04-04 9060-04-06 9060-06-04 9060-06-06	9060-06-08 9060-08-06 9060-08-08 9060-10-10 9060-12-12 9060-16-12 9060-16-16 9060-20-20 9060-24-24 9060-32-32	9060
90° MALE BSPP X Female Jic (Swivel) Elbow			9061-04-04 9061-04-06 9061-06-06 9061-06-08 9061-08-06 9061-08-08 9061-08-10 9061-10-10	9061
90° MALE BSPT X Female BSPP (Swivel) Elbow			9062-02-02 9062-04-04 9062-06-06 9062-08-08 9062-12-12 9062-16-16	9062

Part Number		Sizes		Descripton
9063	9063-04-02 9063-04-04 9063-05-02 9063-05-04 9063-06-04 9063-06-06 9063-06-08 9063-08-08	9063-10-08 9063-12-08 9063-12-12 9063-12-16 9063-16-12 9063-16-16 9063-20-20 9063-24-24 9063-32-32		90° MALE JIC X MALE BSPT ELBOW (FORGED STEEL)
9064	9064-04-02 9064-04-04 9064-06-04 9064-06-06 9064-08-06 9064-08-08 9064-10-08 9064-12-12 9064-16-16	⊕ 9064-20-20		45° MALE JIC X MALE BSPT ELBOW (FORGED STEEL)
9065	9065-04-04 9065-06-04 9065-06-06 9065-08-06 9065-08-08 9065-10-08 9065-10-12 9065-12-12	● 9065-16-16 9065-20-20		90° MALE JIC X Male BSPP Elbow
9066	9066-04-10 9066-06-14 9066-08-16 9066-08-18 9066-10-18 9066-10-22 9066-12-22			45° MALE JIC X Male Metric adj. Elbow (Forged Steel)
9067	9067-04-12 9067-04-14 9067-06-12 9067-06-14 9067-06-16 9067-06-18 9067-06-20 9067-06-22 9067-08-12	9067-08-14 9067-08-16 9067-08-18 9067-08-20 9067-08-22 9067-10-16 9067-10-18 9067-10-20 9067-10-22	9067-10-26 9067-12-26	MALE JIC X Male Metric

Descripton		Sizes		Part Number
MALE JIC X Male Metric C/W Washer & O-Ring	9068-04-10 9068-04-12 9068-04-14	9068-05-12 9068-05-16 9068-06-12 9068-06-14 9068-06-16 9068-08-14 9068-08-18 9068-08-18 9068-08-22	9068-10-20 9068-10-22 9068-12-22 9068-12-26 9068-12-27 9068-16-27 9068-16-33 9068-20-33 9068-20-42 9068-24-48	9068
90° MALE JIC X Male Metric Adj. Elbow (Forged Steel)	9069-04-10 9069-04-12 9069-04-14	9069-05-10 9069-05-12 9069-05-14 9069-06-12 9069-06-14 9069-06-16 9069-06-18 9069-08-16 9069-08-18 9069-08-20 9069-08-20	9069-10-18 9069-10-20 9069-10-22 9069-12-22 9069-12-26 9069-12-27 9069-12-30X1.5 9069-16-27 9069-16-33 9069-20-42 9069-24-48	9069
90° MALE JIC X Male Metric Adj. Long Elbow (Forged Steel)			1 ❷ 9069L-08-18 9069L-10-22	9069L
90° MALE BSPP X MALE NPT ELBOW (FORGED STEEL)			9070-02-02 9070-04-04 9070-06-06 9070-08-08 9070-12-12 9070-16-16	9070
90° MALE NPT X Female BSPP (SWIVEL) Elbow			9072-02-02 9072-04-04 9072-06-06 9072-08-08 9072-12-12 9072-16-16 9072-20-20 9072-24-24	9072

Part Number	Sizes	Descripton
9075	9075-02-02 9075-04-04 9075-06-06 9075-08-08 9075-10-10 9075-12-12 9075-16-16 9075-20-20 9075-24-24 9075-32-32	90° FEMALE BSPP (SWIVEL) X FEMALE BSPP (SWIVEL) ELBOW
9076	10 20 9076-04-04 9076-06-06 9076-08-08 9076-12-12 9076-16-16	90° FEMALE BSP (SOLID) X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
9077	9077-02-04 9077-04-06 9077-06-06 9077-06-08 9077-08-08 9077-08-10 9077-12-12	90° MALE BSPP X MALE SAE O-RING BOSS ADJ. ELBOW (FORGED STEEL)
9078	● ● ● 9078-02-02-04 9078-04-04-06 9078-06-06-08 9078-08-08-10 9078-12-12-10 9078-12-12-12 9078-16-16-16	MALE BSPP X MALE SAE O-RING BOSS RUN TEE (FORGED STEEL)
9079	● ● ● ● 9079-02-02-04 9079-04-04-06 9079-06-06-08 9079-08-08-08 9079-08-08-10 9079-12-12-12 9079-16-16-16	MALE BSPP X MALE SAE O-RING BOSS BRANCH TEE (FORGED STEEL)

Descripton	Sizes	Part Number
MALE BSPP TEE	9080-02-02-02 9080-04-04-04 9080-06-06-06 9080-08-08-08 9080-10-10-10 9080-12-12-12 9080-16-16-16 9080-20-20-20 9080-24-24-24 9080-32-32-32	9080
FEMALE BSPP (SWIVEL) TEE	● ● ● 9085-02-02-02 9085-04-04-04 9085-06-06-06 9085-08-08-08 9085-10-10-10 9085-12-12-12 9085-16-16-16 9085-20-20-20 9085-24-24-24 9085-32-32-32	9085
FEMALE BSP (SOLID) TEE FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	10 20 30 9 9 9 9 9 9 9 9 9 9	9086
FEMALE BSPP (SWIVEL) Branch Tee	10 20 30 30 30 30 30 30 30 3	9087
FEMALE BSPP (SWIVEL) Run Tee	● ● ● 9090-02-02-02 9090-04-04-04 9090-06-06-06 9090-08-08-08 9090-10-10-10 9090-12-12-12 9090-16-16-16 9090-20-20-20	9090

Part Number	Sizes	Descripton
9095	9095-02-02-02 9095-04-04-04 9095-06-06-06 9095-08-08-08 9095-10-10-10 9095-12-12-12 9095-16-16-16 9095-20-20-20	MALE BSPP RUN TEE (SWIVEL)
9097	9097-04 9097-08 9097-16 9097-20	FEMALE BSP (SOLID) CROSS FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
9151	9151-04-04-04 9151-06-06-04 9151-06-06-06 9151-08-08-06 9151-08-08-08 9151-12-12-12	MALE BSPP ADJ. RUN TEE (FORGED STEEL)
9152	9152-04-04-04 9152-06-06-04 9152-06-06-06 9152-08-08-06 9152-08-08-08 9152-12-12-12	MALE BSPP ADJ. BRANCH TEE (FORGED STEEL))
9158	1	MALE JIC X MALE BSPP ADJ. RUN TEE (FORGED STEEL)

Descripton	Sizes	Part Number
MALE JIC X Male BSPP ADJ Branch Tee (Forged Steel)	9159-04-04-04 9159-05-05-04 9159-06-06-04 9159-06-06-06 9159-08-08-08 9159-10-10-08 9159-12-12-12	9159
MALE JIC X MALE BSPT RUN TEE (FORGED STEEL)	10 @ € 9163-04-04-04 9163-06-06-04 9163-08-08-06 9163-10-10-08 9163-12-12-12	9163
MALE JIC X MALE BSPT BRANCH TEE (FORGED STEEL)	9164-04-04-04 9164-06-06-04 9164-08-08-06 9164-10-10-08 9164-12-12-12	9164
MALE JIC X Male Metric adj. Run Tee (Forged Steel)	9168-04-04-10 9168-04-04-12 9168-06-06-14 9168-08-08-16 9168-08-08-18 9168-10-10-22 9168-12-12-27 9168-16-16-33	9168
MALE JIC X MALE METRIC ADJ. BRANCH TEE (FORGED STEEL)	9169-04-04-10 9169-04-04-12 9169-06-06-14 9169-08-08-16 9169-08-08-18 9169-10-10-22 9169-12-12-27 9169-16-16-33	9169





TO: Specialists in fluid connectors, hose assembly services, lubrication, and pneumatics.

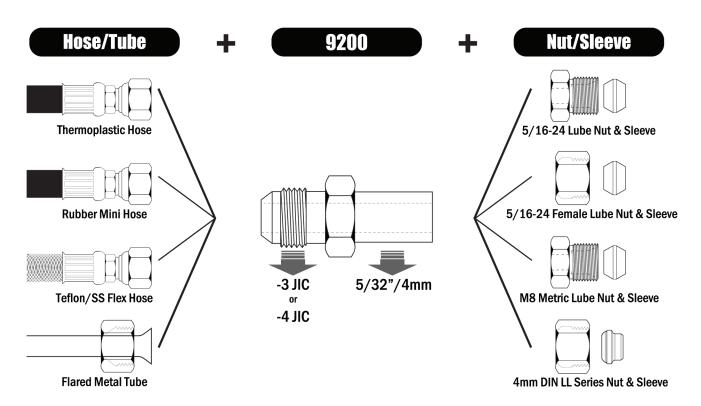
Introducing a new addition to our 9200 series adapters! This unique series just got better. We have added sizes 03-04 and 04-04 to our male JIC/metric standpipe adapter product line. Why?...

Here's why...

Major North American and Foreign lubrication system providers use this size extensively, for hose and tube connections. This size is also commonly found in pneumatic applications. For years it has been difficult to produce these mini size hoses and keep specialized inventory and equipment to do so.

Odap With our new sizes, you can simply produce standard hoses of your choice, add our adapter, plus the applicable nut and sleeve.

Here's how...



...All of these fit on the same adapter!

This means reduced inventory for you, and re-usability for reduced costs. Stocked in plated carbon steel and available in stainless steel and brass upon request! So, no more pre-made hoses which limit your applications. Less overall inventory cost and best of all, great service for your customers realizing profits for you the distributor!

25 YEARS AND STILL INNOVATING

Part Number	Sizes	Descripton
9197	CALL FOR SIZES	BRAZE MALE JIC X METRIC BORE
9198	CALL FOR SIZES	45° MALE JIC X Metric Standpipe Elbow
9199	CALL FOR SIZES	90° MALE JIC X Metric Standpipe Elbow
9200	9200-04-06 9200-08-14 9200-12-25 9200-04-08 9200-08-15 9200-16-25 9200-04-10 9200-08-16 9200-16-28 9200-05-12 9200-10-16 9200-16-30 9200-06-08 9200-10-18 9200-20-28 9200-06-10 9200-10-20 9200-20-35 9200-06-12 9200-12-16 9200-20-38 9200-06-14 9200-12-18 9200-24-35 9200-08-10 9200-12-20 9200-24-35 9200-08-12 9200-12-20 9200-24-38 9200-08-12 9200-12-22 9200-24-42	MALE JIC X METRIC STANDPIPE
9201L	9201L-06 9201L-28-36X1.5 9201L-08 9201L-35 9201L-10 9201L-42 9201L-12 9201L-15 9201L-18 9201L-22 9201L-22-30X1.5 9201L-28	METRIC LIGHT SERIES TUBE NUT (DIN 2353 L)

Descripton	Sizes	Part Number
METRIC EXTRA LIGHT SERIES TUBE NUT (DIN 2353 LL)	9201LL-04 9201LL-06 9201LL-08 9201LL-10 9201LL-12	9201LL
METRIC HEAVY SERIES TUBE NUT (DIN 2353 S)	9201S-06 9201S-08 9201S-10 9201S-12 9201S-14 9201S-16 9201S-20 9201S-25 9201S-30 9201S-30	9201S
METRIC TUBE CUTTING RING (DIN 2353 S OR L)	9202-06 9202-16 9202-08 9202-18 9202-10 9202-20 9202-12 9202-22 9202-14 9202-25 9202-15 9202-28 9202-35 9202-35 9202-38 9202-42	9202
METRIC EXTRA LIGHT SERIES TUBE CUTTING RING (DIN 2353 LL)	9202LL-04 9202LL-06 9202LL-08 9202LL-10 9202LL-12	9202LL •
METRIC LIGHT SERIES TUBE PLUG (DIN 2353 L)	9203L-06 9203L-15 9203L-08 9203L-18 9203L-10 9203L-22 9203L-12 9203L-28 9203L-35 9203L-42	9203L

Part Number		Sizes	Descripton
9203S	9203S-06 9203S-08 9203S-10 9203S-12 9203S-14 9203S-16 9203S-20 9203S-25 9203S-30 9203S-38		METRIC HEAVY SERIES TUBE PLUG (DIN 2353 S)
9204L	9204L-06 9204L-08 9204L-10 9204L-12 9204L-15 9204L-18 9204L-22 9204L-28 9204L-35		METRIC LIGHT SERIES TUBE CAP (DIN 2353 L)
9204S	9204S-06 9204S-08 9204S-10 9204S-12 9204S-14 9204S-16 9204S-20 9204S-25 9204S-30	9204S-38	METRIC HEAVY SERIES TUBE CAP (DIN 2353 S)
9210	9210-04-04 9210-06-04 9210-06-06 9210-06-08 9210-08-06 9210-08-08* 9210-08-10 9210-08-12 9210-08-12	9210-10-10 9210-10-12 9210-12-12 9210-12-16 9210-16-16 *= SOLID FEMALE ONLY	MALE JIC X Female Flat-Face BSPP - Hiab (Swivel)
9220	9220-04-02 9220-04-04 9220-06-04 9220-06-06 9220-08-06 9220-08-08 9220-10-10 9220-12-12 9220-16-16	● ❷ 9220-20-20 9220-24-24 9220-32-32	MALE JIC X FEMALE JIS (SOLID) 30° SEAT, BSPP THREAD

Descripton	Sizes	Part Number
JIS HEX PLUG 30° SEAT, BSPP THREAD	9221-02 9221-06 9221-04 9221-08 9221-10 9221-12 9221-16 9221-20 9221-24 9221-32	9221
JIS CAP (SOLID) 30° SEAT, BSPP THREAD	9222-02 9222-04 9222-06 9222-08 9222-10 9222-12 9222-16 9222-20 9222-24	9222
MALE JIS 30° SEAT, BSPP THREAD X MALE BSPT	9223-04-04 9223-04-06 9223-06-04 9223-06-06 9223-08-06 9223-08-08 9223-12-08 9223-12-12	9223
90° MALE JIS 30° SEAT, BSPP THREAD X MALE BSPT ELBOW (FORGED STEEL)	1 ② 9224-04-04 9224-06-06 9224-08-08 9224-12-12 9224-16-16	9224
45° MALE JIS 30° SEAT, BSPP THREAD X MALE BSPT ELBOW (FORGED STEEL)	9225-04-04 9225-06-06 9225-08-08 9225-12-12 9225-16-16	9225

Part Number	Sizes	Descripton
9226	9226-04-04 9226-06-06 9226-08-08	FEMALE JIC (SWIVEL) X FEMALE JIS (SWIVEL) 30° SEAT, BSPP THREAD
9227	● ❷ 9227-06-06 9227-08-08	FEMALE JIS (SWIVEL) X FEMALE JIS (SWIVEL) 30° SEAT, BSPP THREAD (JIS UNION)
9228	CALL FOR SIZES	MALE JIC X Male Nissan 50° Seat, Metric Thread
9229	CALL FOR SIZES	MALE JIC X FEMALE NISSAN (SOLID) 50° SEAT, METRIC THREAD
9230	9230-04-12 9230-04-14 9230-06-16 9230-08-18 9230-08-22 9230-10-24 9230-12-30 9230-16-33	MALE JIC X FEMALE KOMATSU (SOLID) 30° SEAT, 1.5mm PITCH, METRIC THREADS

Descripton	Sizes		Part Number
KOMATSU HEX PLUG 30° SEAT, 1.5mm PITCH, METRIC THREADS	9231-14 9231-16	9231-18 9231-22 9231-24 9231-30 9231-33 9231-36 9231-42	9231
KOMATSU CAP (SOLID) 30° SEAT, 1.5mm PITCH, METRIC THREADS		9232-14 9232-16 9232-18 9232-22 9232-24 9232-30 9232-33 9232-42	9232
MALE KOMATSU 30° SEAT, 1.5mm PITCH, METRIC THREADS X MALE BSPT		1 2 9233-14-02 9233-16-04	9233
MALE METRIC X Female NPT (SOLID)	9235-04X.70-02 9235-14-04 9235-06X.75-02 9235-14-06 9235-06X.75-04 9235-16-04 9235-08X1.0-02 9235-16-08 9235-10-02 9235-18-04 9235-10-04 9235-10-02 9235-18-06 9235-10X1.25-02 9235-18-08 9235-10X1.5-02 9235-20-04 9235-12-02 9235-20-06 9235-12-04 9235-12-04 9235-12-06 9235-12-06 9235-12X1.0-04 9235-22-08 9235-12X1.0-04 9235-22-12 9235-12X1.0-04 9235-22-12 9235-12X1.0-04 9235-22-12 9235-12X1.0-04 9235-24-12	9235-26-04 9235-26-08 9235-26-12 9235-27-12 9235-30-12 9235-30X1.5-06 9235-30X1.5-08 9235-33-16 9235-33X1.5-08 9235-40-24 9235-42-16 9235-42-16 9235-42-16 9235-42-16	9235
MALE KOMATSU X MALE KOMATSU 30° SEAT, 1.5mm PITCH, METRIC THREADS (KOMATSU UNION)		9236-14-14 9236-18-18 9236-22-22 9236-24-24 9236-30-30 9236-33-33	9236

Part Number	Sizes	Descripton
9237	10 20 9237-04-14 9237-06-16 9237-06-18 9237-08-22 9237-10-24 9237-12-30 9237-16-33	MALE JIC X MALE KOMATSU 30° SEAT, 1.5mm PITCH, METRIC THREADS
9238	CALL FOR SIZES	MALE JIC X Komatsu Flange
9239	CALL FOR SIZES	90° MALE JIC X Komatsu Flange Elbow (Tube Elbow)
9240	••• ••• 9240-04-02 9240-08-08 9240-16-16 9240-04-04 9240-08-10 9240-20-20 9240-04-06 9240-08-12 9240-24-24 9240-04-08 9240-10-06 9240-32-32 9240-05-04 9240-10-08 9240-32-32 9240-05-06 9240-10-10 9240-10-12 9240-06-04 9240-10-12 9240-12-12 9240-06-06 9240-12-16 9240-12-16 9240-08-06 9240-16-12	MALE JIC X FEMALE BSPP (SWIVEL)
9241	CALL FOR SIZES	45° MALE JIC X Komatsu Flange Elbow (Tube Elbow)

Descripton	Sizes	Part Number
MALE JIC X MALE JSW (JAPAN STEEL WORKS)	10 @ ⊕ 9245-12-25-34 9245-16-30-40 9245-20-38-48	9245
JSW TUBE PLUG (JAPAN STEEL WORKS)	1 ② 9246-25-34	9246
MALE JIC X MALE KOBELCO 1.5mm PITCH, METRIC THREADS	9 9 9 9 9 9 9 9 9 9	9247
KOBELCO TUBE PLUG 1.5mm PITCH, METRIC THREADS	1 2 9248-22-30 9248-28-36 9248-35-45	9248
KOBELCO TUBE CAP 1.5mm PITCH, METRIC THREADS	1 2 9249-22-30 9249-28-36 9249-35-45	9249

Part Number	Sizes	Descripton
9250	9250-04-04 9250-06-06 9250-08-08 9250-10-10 9250-12-12 9250-16-16	90° MALE JIC X FEMALE BSPP (SWIVEL) ELBOW (TUBE ELBOW)
9259	● 9259-06-06 9259-08-08	90° MALE JIS 30° SEAT, BSPP THREAD X MALE BSPP ADJ. ELBOW (FORGED STEEL)
9260	9260-04-04 9260-06-06 9260-08-08 9260-10-10 9260-12-12 9260-16-16	45° MALE JIC X FEMALE BSPP (SWIVEL) ELBOW (TUBE ELBOW)
9277	10 20 9277-04-06 9277-06-04 9277-06-06 9277-08-06	MALE JIS 30° SEAT, BSPP THREAD X MALE SAE O-RING BOSS
9278	9278-04-04 9278-08-06	90° MALE JIS 30° SEAT, BSPP THREAD X MALE SAE O-RING BOSS ADJ. ELBOW

Descripton	Sizes	Part Number
FEMALE JIS (SWIVEL) RUN TEE 30° SEAT, BSPP THREAD (FORGED STEEL)	9291-04-04-04 9291-06-06-06 9291-08-08-08 9291-12-12-12	9291 • • • • •
90° MALE JIS X FEMALE JIS (SWIVEL) ELBOW 30° SEAT, BSPP THREAD (FORGED STEEL)	9292-04-04 9292-06-06 9292-08-08 9292-12-12	9292
JIS TEST PORT (SWIVEL) TEE 30° SEAT, BSPP THREAD	9293TP-04-04 9293TP-06-06 9293TP-08-08 TEST PORT = FEMALE 10X1.0mm METRIC (SOLID)	9293TP
MALE NPT X Female Metric (Solid)	9325-02-06X1.0 9325-02-12X1.5 9325-08-20X1.5 9325-02-08X1.0 9325-04-10X1.0 9325-08-22X1.5 9325-02-10X1.0 9325-04-12X1.5 9325-08-24X1.5 9325-02-10X1.25 9325-04-14X1.5 9325-12-18X1.5 9325-02-10X1.5 9325-04-16X1.5 9325-12-20X1.5 9325-02-12X1.0 9325-06-14X1.5 9325-12-26X1.5 9325-06-16X1.5 9325-12-30X1.5 9325-06-18X1.5 9325-12-30X2.0 9325-08-14X1.5 9325-12-30X1.5 9325-08-18X1.5 9325-20-30X1.5	9325
FEMALE JIC (SWIVEL) X FEMALE KOMATSU (SWIVEL) 30° SEAT, 1.5mm PITCH, METRIC THREADS	9326-04-14 9326-06-18 9326-08-22 9326-10-24 9326-12-30	9326

Part Number	Sizes	Descripton
9327	9327-14-14 9327-18-18 9327-22-22 9327-24-24 9327-30-30	FEMALE KOMATSU (SWIVEL) X FEMALE KOMATSU (SWIVEL) 30° SEAT, 1.5mm PITCH, METRIC THREADS (KOMATSU UNION)
9335	9335-08X1.0-04 9335-12X1.0-04 9335-14-06 9335-16-06 9335-18-08 9335-21-06 9335-22-12 9335-26-12 9335-27-12 9335-33-16	MALE METRIC X Female Sae O-Ring Boss (Solid)
9336	9336-02-02 9336-04-04 9336-06-06 9336-08-08 9336-12-12 9336-16-16 9336-20-20	MALE JIS X MALE JIS 30° SEAT, BSPP THREAD (JIS UNION)
9337	9337-04-02 9337-04-04 9337-06-06 9337-08-08 9337-12-12 9337-16-16	MALE JIC X MALE JIS 30° SEAT, BSPP THREAD
9338	CALL FOR SIZES	MALE JIS 30° SEAT, BSPP THREAD X MALE NPT

Descripton	Sizes	Part Number
90° FEMALE JIC (SWIVEL) X FEMALE JIC (SWIVEL) ELBOW	● ● 9355-04-04 9355-05-05 9355-06-06 9355-08-08 9355-10-10 9355-12-12 9355-16-16	9355
FEMALE KOMATSU (SWIVEL) RUN TEE 30° SEAT, 1.5mm PITCH, METRIC THREADS (FORGED STEEL)	1 2 3 9 391-14-14-14 9391-16-16-16 9391-18-18-18 9391-22-22-22 9391-24-24-24 9391-30-30-30 9391-33-33-33	9391
90° MALE KOMATSU X FEMALE KOMATSU (SWIVEL) ELBOW 30° SEAT, 1.5mm PITCH, METRIC THREADS (FORGED STEEL)	9392-14-14 9392-16-16 9392-18-18 9392-22-22 9392-24-24 9392-30-30 9392-33-33	9392
BONDED SEAL FOR BRITISH THREAD	9500-02 9500-10 9500-04 9500-12 9500-06 9500-16 9500-08 9500-20 9500-24 9500-28 9500-32 9500-40 9500-48	9500
BONDED SEAL FOR METRIC THREAD	9500-04MM 9500-24MM 9500-06MM 9500-26MM 9500-08MM 9500-27MM 9500-10MM 9500-30MM 9500-12MM 9500-33MM 9500-14MM 9500-36MM 9500-16MM 9500-42MM 9500-18MM 9500-45MM 9500-20MM 9500-50MM	9500MM

Part Number	Sizes	Descripton
9500MMV	9500-12MMV 9500-14MMV	BONDED VITON SEAL FOR METRIC THREAD
9500V	9500-02V 9500-24V 9500-04V 9500-08V 9500-12V 9500-12V 9500-16V 9500-20V	BONDED VITON SEAL FOR BRITISH THREAD
9536	10 2 9536-02-04 9536-04-06 9536-06-08 9536-08-10 9536-12-12 9536-16-16	MALE BSPT X Female sae O-ring Boss (solid)
9555	● ● ● 9555-04-04-04 9555-05-05-05 9555-06-06-06 9555-10-10-10 9555-12-12-12 9555-16-16-16 9555-20-20-20	FEMALE JIC (SWIVEL) TEE
9605	9605-04-08X1.0* 9605-06-L10-16 9605-9605-96-10-16 9605-04-08X1.25* 9605-06-L12-18 9605-96-12-18 9605-04-10X1.25* 9605-06-L15-22 9605-96-12-22 9605-04-10X1.5* 9605-06-LL06-10 9605-96-12 9605-04-12X1.0* 9605-06-LL08-12 9605-96-12 9605-04-L06-12 9605-08-12X1.25* 9605-9605-08-10-16 9605-04-L08-14 9605-08-L12-18 9605-9605-08-112-18 9605-04-L10-16 9605-08-L15-22 9605-9605-04-L10-14 9605-04-LL08-12 9605-08-L15-22 9605-9605-04-L10-14 9605-04-L10-14 9605-10-25X1.5* 9605-9605-05-12X1.0* 9605-05-12X1.25* 9605-10-L18-26 9605-9605-06-10X1.5*	MALE JIC 12-L15-22 12-L18-24X1.5 12-L18-26 12-L22-30 12-L22-30X1.5 16-L18-26 16-L22-30X1.5 16-L28-36 20-33X2.0* 20-48X2.0* 20-50X1.5* 20-L27-38X1.5 20-L27-38X1.5 24-L42-52 MALE METRIC DUAL PURPOSE PORT OR TUBE (DIN 2353 L) *=PORT ONLY; THREAD DIMENSIONS (1) & (3) APPLY ONLY.

Descripton		Sizes		Part Number
MALE JIC X MALE METRIC DUAL PURPOSE PORT OR TUBE (DIN 2353 S)	● ● ● 9606-04-S06-14 9606-04-S08-16 9606-04-S10-18	9606-06-S08-16 9606-06-S10-18 9606-06-S12-20 9606-06-S14-22 9606-08-S10-18 9606-08-S12-20 9606-08-S14-22 9606-08-S14-22 9606-10-S12-20 9606-10-S14-22	● ● ● 9606-10-S16-24 9606-12-S16-24 9606-12-S20-30 9606-16-S20-30 9606-16-S20-36 9606-16-S30-42 9606-20-S30-42 9606-20-S38-52 9606-24-S38-52	9606
MALE NPT X MALE METRIC DUAL PURPOSE PORT OR TUBE (DIN 2353 S OR L) *=PORT ONLY; THREAD DIMENSIONS (1) & (3) APPLY ONLY.		10 20 30 9607-02-12* 9607-02-1L06-10 9607-04-08X1.25* 9607-04-10X1.0* 9607-04-12× 9607-04-12X1.25* 9607-04-14*	● ● ● 9607-06-12X1.25* 9607-06-18* 9607-08-12X1.25* 9607-08-16* 9607-08-22* 9607-08-S12-20 9607-16-30* 9607-24-S30-42	9607
MALE JIC X FEMALE METRIC (SOLID)			10 20 9622-04-06X1.0 9622-04-08X1.0 9622-04-10X1.0	9622
=FEMALE NPT FOR TEST PORT (ALL OTHERS FEMALE SAE O-RING BOSS)			● ● ● 9634TP-14-14-02 9634TP-18-18-04 9634TP-22-22-06 9634TP-24-24-06 9634TP-30-30-06 9634TP-33-33-08	9634TP
MALE METRIC DUAL PURPOSE PORT OR TUBE (DIN 2353 S OR L) X FEMALE NPT (SOLID)		● ● ● 9635-12-L06-04 9635-12-L06-06 9635-14-L08-04 9635-16-L10-06	9635-18-L12-04 9635-18-L12-06 9635-18-L12-08 9635-20-S12-04 9635-22-L15-08 9635-22-L15-12 9635-24-S16-12 9635-24-S16-12 9635-42-S30-16 9635-42-S30-20	9635

Part Number	Sizes	Descripton
9638	9638-08X1.0-06X1.0 9638-24X1.5-20X1.5 9638-10X1.0-08X1.0 9638-26X1.5-22X1.5 9638-14X1.5-10X1.0 9638-27X2.0-18X1.5 9638-16X1.5-12X1.5 9638-30X2.0-26X1.5 9638-18X1.5-16X1.5 9638-33X2.0-14X1.5 9638-18X1.5-27X2.0 9638-30X2.0 9638-42X2.0-14X1.5 9638-20X1.5-16X1.5 9638-42X2.0-42X2.0 9638-22X1.5-14X1.5 9638-22X1.5-18X1.5	MALE METRIC X FEMALE METRIC (SOLID) (METRIC BUSHING)
9643	● 9643-02-06X1.0 9643-02-08X1.0 9643-02-10X1.0 9643-04-12X1.5 9643-04-14X1.5 9643-04-16X1.5	FEMALE NPT (SOLID) X FEMALE METRIC (SOLID)
9777 O-RING	9777-06 9777-08 9777-12	BSPP FLAT-FACE 30° SEALING SEAT (HIAB)
9900	9900-04-04 9900-06-06 9900-08-08 9900-10-10 9900-12-12 9900-16-16	FEMALE BSPP (SWIVEL) X Push-on Hose Barb
9905	9905-04-04 9905-06-06 9905-08-08 9905-10-10 9905-12-12 9905-16-16	45° FEMALE BSPP (SWIVEL) X Push-on Hose Barb Elbow

Descripton	Sizes	Part Number
90° FEMALE BSPP (SWIVEL) X Push-on Hose Barb Elbow	9910-04-04 9910-06-06 9910-08-08 9910-10-10 9910-12-12 9910-16-16	9910
MALE BSPT X Push-on Hose Barb	9915-04-04 9915-06-06 9915-06-08 9915-08-06 9915-08-08 9915-12-12 9915-16-16	9915
MALE BSPP X Push-on Hose Barb	9920-04-04 9920-06-06 9920-08-08 9920-12-12 9920-16-16	9920
JIS SEALING SEAT (USED TO CONVERT A MALE BSPP TO JIS)	9999-02 9999-04 9999-06 9999-08 9999-10 9999-12 9999-16 9999-20 9999-24	9999

BRASS COMPRESSION FITTINGS: FOR USE WITH "INCH" COPPER TUBING TO BSP & BSPT THREADS

ALL BRASS COMPRESSION FITTINGS ARE P.O.R

Part Number		Sizes	Descripton
166	● ● 166-04-02 166-04-04 166-05-02 166-05-04 166-06-04 166-06-06 166-08-08		BRASS COMPRESSION X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
168	168-04-02 168-04-04 168-04-06 168-05-02 168-05-04 168-06-04 168-06-06 168-06-08	168-08-04 168-08-06 168-08-08	BRASS COMPRESSION X MALE BSPT
169	169-04-02 169-04-04 169-04-06 169-05-02 169-05-04 169-06-04 169-06-06 169-06-08	169-08-04 169-08-06 169-08-08	90° BRASS COMPRESSION X Male BSPT Elbow
171	171-04-02 171-04-04 171-05-02 171-05-04 171-06-04 171-06-06 171-08-06		BRASS COMPRESSION X MALE BSPT RUN TEE
172	172-04-02 172-04-04 172-05-02 172-05-04 172-06-04 172-06-06 172-08-06		BRASS COMPRESSION X Male BSPT Branch Tee

BRASS POLYTUBE COMPRESSION FITTINGS: FOR USE WITH "INCH" NYLON OR POLYETHYLENE TUBING TO BSP & BSPT THREADS ALL BRASS POLYTUBE COMPRESSION FITTINGS ARE P.O.R

Descripton	Sizes	Part Number
BRASS POLYTUBE COMPRESSION X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	10 2 266-04-02 266-04-04 266-05-04 266-06-04 266-06-06 266-08-06	266
BRASS POLYTUBE COMPRESSION X Male BSPT	268-04-02 268-05-04 268-04-04 268-05-06 268-04-06 268-06-02 268-05-02 268-06-04 268-06-06 268-06-08 268-08-04 268-08-08 268-08-08	268
90° BRASS POLYTUBE COMPRESSION X Male BSPT ELBOW	269-04-02 269-05-04 269-05-06 269-04-06 269-06-02 269-06-04 269-05-06 269-06-08 269-06-08 269-08-04 269-08-06 269-08-06 269-08-08 269-08-08 269-08-08	269
90° BRASS POLYTUBE COMPRESSION X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	270-04-02 270-04-04 270-05-04 270-06-04 270-06-06 270-08-06	270
BRASS POLYTUBE COMPRESSION X Male BSPT RUN TEE	271-04-02 271-04-04 271-05-02 271-05-04 271-06-04 271-06-06 271-08-06 271-08-08	271

Part Number	Sizes	Descripton
272	1	BRASS POLYTUBE COMPRESSION X
	272-05-02 272-05-04 272-06-04 272-06-06 272-08-06 272-08-08	MALE BSPT BRANCH TEE
②		

BRASS PUSH TO CONNECT FITTINGS: FOR USE WITH "INCH" POLYETHYLENE TUBING TO BSP & BSPT THREADS ALL BRASS PUSH TO CONNECT FITTINGS ARE P.O.R

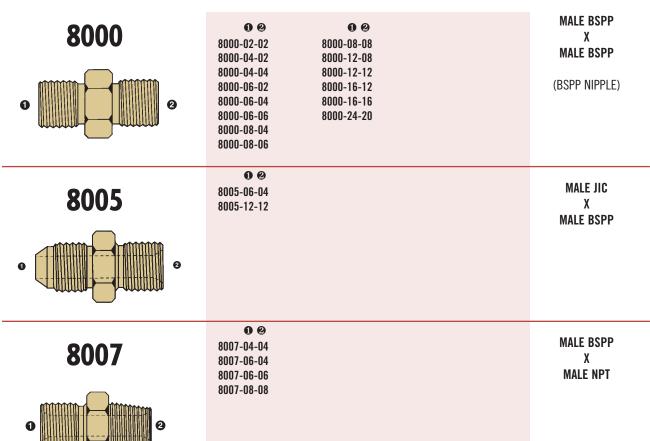
WARNING:

- Push to connect fittings are to be used in pneumatic applications ONLY.
- NEVER use them with liquids.
- Maximum recommended working pressure: 150 PSI.
- Temperature range: -40°F to 175°F.

566	566-04-02 566-04-04 566-05-02 566-05-04 566-05-06 566-06-04 566-06-06 566-06-08		POLYTUBE PUSH TO CONNECT X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
568	568-02-02 568-04-02 568-04-04 568-04-06 568-05-02 568-05-04 568-06-02	10 20 568-06-04 568-06-06 568-06-08 568-08-04 568-08-06 568-08-08	POLYTUBE PUSH TO CONNECT X Male BSPT
569	569-04-02 569-04-04 569-05-02 569-05-04 569-05-06 569-06-02 569-06-04 569-06-06 569-06-08	10 20 569-08-04 569-08-06 569-08-08	90° POLYTUBE PUSH TO CONNECT X Male BSPT Elbow

Descripton	Sizes	Part Number
90° BANJO POLYTUBE PUSH TO CONNECT X Male BSPT Elbow	● ● 569BJ-04-02 569BJ-04-04 569BJ-04-06 569BJ-05-02 569BJ-05-04 569BJ-06-04 569BJ-06-06	569BJ
90° POLYTUBE PUSH TO CONNECT X Male BSPT (Long) Elbow	● ● 569L-04-02 569L-04-04 569L-05-02 569L-05-04 569L-06-04 569L-06-06 569L-08-06	569L
POLYTUBE PUSH TO CONNECT X Male BSPT Run Tee	10 20 571-04-02 571-04-04 571-05-02 571-05-04 571-06-02 571-06-04 571-06-06	571 • • • • • • • • • • • • • • • • • • •
POLYTUBE PUSH TO CONNECT X Male BSPT Branch Tee	10 20 572-04-02 572-04-04 572-05-02 572-05-04 572-06-04 572-06-06 572-08-04 572-08-08	572 • • • • • • • • • • • • • • • • • • •
POLYTUBE PUSH TO CONNECT X Male BSPT Branch "Y"	10 20 575-04-02 575-04-04 575-05-02 575-05-04 575-06-04 575-06-06	575

Part Number		Sizes	Descripton
581	10 20 581-04-02 581-04-04 581-05-02 581-06-02 581-06-04 581-06-06		90° POLYTUBE PUSH TO CONNECT "METERING IN" VALVE X Male BSPT
582	582-04-02 582-04-04 582-05-02 582-05-04 582-06-02 582-06-04 582-06-06		STRAIGHT POLYTUBE PUSH TO CONNECT "FLOW CONTROL VALVE" X MALE BSPT
RASS CONVERSION ADAPTERS LL BRASS CONVERSION ADA	IPTERS ARE P.O.	۲	
8000	10 2 8000-02-02	⊕ 8000-08-08	MALE BSPP X Male rspp



Descripton	Sizes	Part Number
MALE BSPT X Male NPT	8008-02-02 8008-02-04 8008-04-04 8008-06-06 8008-08-08 8008-12-12 8008-16-16	8008
MALE BSPT X MALE BSPT (BSPT NIPPLE)	10 20 30 30 30 30 30 30 30 3	8010
BSPP COUNTERSUNK SEALED PLUG	8028-02 8028-04 8028-06 8028-08	8028
BSPT COUNTERSUNK PLUG	8030CSP-02 8030CSP-04 8030CSP-06 8030CSP-08 8030CSP-12 8030CSP-16	8030CSP ———————————————————————————————————
BSP CAP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	8033-02 8033-04 8033-06 8033-08 8033-12	8033

Part Number	Sizes	Descripton
8035	● ❷ 8035-04-04 8035-08-08	MALE BSPP X Female NPT (Solid)
8036	● ● 8036-02-02 8036-04-04 8036-06-06 8036-08-08 8036-12-12 8036-16-16 8036-20-20	MALE BSPT X Female NPT (Solid)
8037	10 20 8037-02-02 8037-04-04 8037-06-06 8037-08-08 8037-12-12	MALE NPT X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
8038	10 20 8038-02-02 8038-04-02 8038-04-06 8038-06-02 8038-06-04 8038-06-06 8038-08-04 8038-08-04 8038-08-06 8038-12-08 8038-16-12	MALE BSPT X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
8039	● ● ● ● 8039-02-02 8039-08-04 8039-02-04 8039-08-06 8039-04-02 8039-08-08 8039-04-04 8039-12-04 8039-04-06 8039-06-02 8039-12-08 8039-06-04 8039-06-06 8039-06-08 8039-08-02	MALE BSPP X FEMALE BSP (SOLID) (BSPP BUSHING) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES

Descripton	Sizes	Part Number
FEMALE BSP (SOLID) X FEMALE BSP (SOLID) (BSP COUPLING) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	8043-02-02 8043-04-02 8043-04-02 8043-06-02 8043-06-04 8043-06-06 8043-08-06 8043-08-08 8043-12-12 8043-32-32	8043
FEMALE BSP (SOLID) X FEMALE NPT (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	● ● 8044-02-02 8044-04-04 8044-06-04 8044-06-06 8044-08-08 8044-16-16 8044-20-20 8044-24-24 8044-32-32 8044-48-40	8044
90° MALE BSPT X Male BSPT Elbow	1 2 8055-02-02 8055-04-04 8055-06-06 8055-08-08 8055-12-12	8055
90° MALE BSPT X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	10 2 8060-02-02 8060-04-04 8060-06-06 8060-08-08 8060-12-12	8060
90° FEMALE BSP (SOLID) X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	● ❷ 8075-02-02 8075-04-04 8075-06-06 8075-08-08 8075-12-12	8075

Part Number	Sizes	Descripton
8080	● ● ● ● 8 8080-02-02-02 8080-04-04-04 8080-06-06-06 8080-08-08-08 8080-12-12-12	MALE BSPT TEE
8085	● ● ● 8 8085-02-02-02 8085-04-04-04 8085-06-06-06 8085-08-08-08 8085-12-12-12	FEMALE BSP (SOLID) TEE FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
8087	● ❷ ❸ 8087-04-04	BSPT MALE X FEMALE BSP (SOLID) BRANCH TEE FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
8090	1	BSPT MALE X FEMALE BSP (SOLID) RUN TEE FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
8093	● ● ● 8093-02-02-02 8093-04-04-04 8093-06-06-06 8093-08-08-08 8093-12-12-12	BSP FEMALE (SOLID) X MALE BSPT BRANCH TEE FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES

Descripton	Sizes	Part Number
BSP FEMALE (SOLID) X MALE BSPT RUN TEE FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	● ● ● 8095-02-02-02 8095-04-04-04 8095-06-06-06 8095-08-08-08	8095
FEMALE BSP (SOLID) CROSS FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	8097
ALUMINUM WASHER For British Thread	8400-02 8400-04 8400-06 8400-08	8400
FEMALE BSPP (SWIVEL) X Push-on Hose Barb	● ● 8900-04-04 8900-06-06 8900-08-08 8900-12-12	8900
MALE BSPT X Push-on Hose Barb	8920T-02-03 8920T-06-08 8920T-02-04 8920T-08-06 8920T-02-05 8920T-08-08 8920T-04-03 8920T-08-12 8920T-04-04 8920T-12-08 8920T-04-06 8920T-12-12 8920T-04-08 8920T-16-16 8920T-06-04 8920T-20-20 8920T-06-06 8920T-24-24	8920T • • • •

A note on Stainless Steel fittings:

Many other Stainless Steel configurations and sizes are available upon request. Normal production can usually be achieved within two weeks.

ALL STAINLESS STEEL FITTINGS ARE P.O.R

Part Number		Sizes		Descripton
\$\$9000 • • • • • •	\$\$9000-02-02 \$\$9000-04-04 \$\$9000-06-06 \$\$9000-08-08 \$\$9000-10-08 \$\$9000-12-12 \$\$9000-16-16 \$\$9000-20-20	● ❷ \$\$9000-24-24 \$\$9000-32-32		MALE BSPP X MALE BSPP (BSPP NIPPLE)
\$\$9002 • • • • •	\$\$9002-04-02 \$\$9002-04-04 \$\$9002-04-06 \$\$9002-06-04 \$\$9002-06-06 \$\$9002-06-08 \$\$9002-08-04	\$\$9002-08-08 \$\$9002-08-12 \$\$9002-10-08 \$\$9002-12-08 \$\$9002-12-12 \$\$9002-16-16 \$\$9002-16-16	● SS9002-16-20 SS9002-20-20 SS9002-24-24	MALE JIC X MALE BSPP C/W WASHER & O-RING
\$\$9003 • • • • • • • • • • • • • • • • • • •	\$\$9003-04-04 \$\$9003-06-04 \$\$9003-06-06 \$\$9003-08-06 \$\$9003-08-08 \$\$9003-12-12			MALE BSPP X Male BSPT
\$\$9005	\$\$9005-04-02 \$\$9005-04-04 \$\$9005-06-04 \$\$9005-06-06 \$\$9005-06-08 \$\$9005-08-06 \$\$9005-08-08 \$\$9005-10-08	⊕ SS9005-16-16		MALE JIC X MALE BSPP
\$\$9007 •	\$\$9007-02-02 \$\$9007-04-04 \$\$9007-06-04 \$\$9007-06-06 \$\$9007-08-06 \$\$9007-08-08 \$\$9007-12-12 \$\$9007-16-16 \$\$9007-20-16	10 20 SS9007-20-20 SS9007-24-24 SS9007-32-32		MALE BSPP X Male NPT

Descripton	Sizes	Part Number
MALE BSPT X Male NPT	\$\$9008-04-04 \$\$9008-06-06 \$\$9008-08-08 \$\$9008-12-12 \$\$9008-16-16 \$\$9008-20-20	\$\$9008 •
MALE JIC X Male BSPT	\$\mathbb{O}\$ \$\$\mathbb{O}\$ \$\$\	\$\$9011 •
MALE BSPP X Female BSPP (SWIVEL)	\$\$9015-04-04 \$\$9015-06-06 \$\$9015-08-08 \$\$9015-12-12 \$\$9015-16-16 \$\$9015-20-20 \$\$9015-24-24	\$\$9015
MALE BSPP X Female JIC (SWIVEL)	\$\$9021-04-04 \$\$9021-06-06 \$\$9021-08-08 \$\$9021-12-12 \$\$9021-16-16	\$\$9021 •
FEMALE JIC (SWIVEL) X FEMALE JIC (SWIVEL) (JIC UNION)	\$\$9026-04-04 \$\$9026-06-06 \$\$9026-08-08 \$\$9026-10-10 \$\$9026-12-12	\$\$9026 •

Part Number	Sizes	Descripton
SS9028 •••••••••••••••••••••••••••••••••••	\$\$9028-02 \$\$9028-04 \$\$9028-06 \$\$9028-08 \$\$9028-12 \$\$9028-16 \$\$9028-20	BSPP COUNTERSUNK SEALED PLUG C/W VITON SEAL
SS9029	\$\$9029-10X1.0 \$\$9029-42X2.0 \$\$9029-12X1.5 \$\$9029-48X2.0 \$\$9029-14X1.5 \$\$9029-16X1.5 \$\$9029-18X1.5 \$\$9029-20X1.5 \$\$9029-22X1.5 \$\$9029-27X2.0 \$\$\$9029-33X2.0	METRIC COUNTERSUNK SEALED PLUG C/W VITON SEAL
\$\$9030 •	\$\$9030-02 \$\$9030-04 \$\$9030-06 \$\$9030-12 \$\$9030-16 \$\$9030-20 \$\$9030-24	BSPP HEX PLUG
\$\$9030T	\$\$9030T-02 \$\$9030T-04 \$\$9030T-06 \$\$9030T-08 \$\$9030T-12 \$\$9030T-16 \$\$9030T-20 \$\$9030T-24	BSPT HEX PLUG
\$\$9033	\$\$9033-02 \$\$9033-04 \$\$9033-06 \$\$9033-08 \$\$9033-12 \$\$9033-16 \$\$9033-20 \$\$9033-24	BSPP SWIVEL CAP

Descripton	Sizes	Part Number
MALE BSPP X Female NPT (SOLID)	SS9035-02-02 SS9035-04-04 SS9035-04-02 SS9035-06-04 SS9035-06-06 SS9035-08-06 SS9035-12-12 SS9035-16-16 SS9035-20-20 SS9035-24-24 SS9035-32-32	\$\$9035 •
MALE NPT X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	\$\mathbb{\text{0}}\$ \$\$9037-02-02 \$\$9037-04-04 \$\$9037-06-06 \$\$9037-08-08 \$\$9037-12-12 \$\$9037-16-16 \$\$9037-20-20 \$\$\$9037-24-24	\$\$9037 • • •
MALE BSPT X Female NPT (Solid)	10 ② SS9042-02-02 SS9042-04-04 SS9042-06-06 SS9042-08-08 SS9042-12-12	\$\$9042 • • • •
FEMALE BSP (SOLID) X FEMALE BSP (SOLID) (BSP COUPLING) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	SS9043-02-02 SS9043-04-04 SS9043-06-06 SS9043-08-08 SS9043-12-12 SS9043-16-16 SS9043-20-20 SS9043-24-24	\$\$9043 •
90° MALE JIC X Male BSPP Adj. Elbow	\$\begin{array}{cccccccccccccccccccccccccccccccccccc	SS9059 •

Part Number	Sizes	Descripton
\$\$9063 •	SS9063-04-02 SS9063-04-04 SS9063-06-04 SS9063-06-06 SS9063-08-08 SS9063-10-08 SS9063-12-12 SS9063-16-16	90° MALE JIC X Male BSPT Elbow
\$\$9069	SS9069-04-10 SS9069-04-12 SS9069-06-14 SS9069-06-16 SS9069-08-18	90° MALE JIC X Male Metric adj. Elbow
\$\$9200 •	● ● ● ● ● ● SS9200-04-06 SS9200-08-16 SS9200-20-38 SS9200-04-08 SS9200-12-18 SS9200-24-42 SS9200-04-10 SS9200-12-20 SS9200-12-22 SS9200-06-08 SS9200-12-22 SS9200-12-25 SS9200-06-10 SS9200-12-25 SS9200-16-25 SS9200-08-10 SS9200-16-28 SS9200-16-28 SS9200-08-12 SS9200-16-30 SS9200-08-14 SS9200-08-15 SS9200-20-35	X
\$\$9201L	\$\$9201L-06 \$\$9201L-08 \$\$9201L-10 \$\$9201L-12 \$\$9201L-15 \$\$9201L-18 \$\$9201L-22 \$\$9201L-28 \$\$9201L-35 \$\$9201L-42	METRIC LIGHT SERIES TUBE NUT (DIN 2353 L)
SS9201S	\$\$9201\$-06 \$\$9201\$-08 \$\$9201\$-10 \$\$9201\$-12 \$\$9201\$-14 \$\$9201\$-16 \$\$9201\$-20 \$\$9201\$-25 \$\$9201\$-30 \$\$9201\$-38	METRIC HEAVY SERIES TUBE NUT (DIN 2353 S)

Descripton	Sizes	Part Number
METRIC TUBE CUTTING RING (DIN 2353 S OR L)	\$\ \text{SS9202-06} \text{SS9202-16} \text{SS9202-18} \text{SS9202-18} \text{SS9202-10} \text{SS9202-20} \text{SS9202-12} \text{SS9202-12} \text{SS9202-22} \text{SS9202-14} \text{SS9202-25} \text{SS9202-28} \text{SS9202-30} \text{SS9202-35} \text{SS9202-35} \text{SS9202-38} \text{SS9202-42} \text{SS9202-42} \text{SS9202-42} \text{SS9202-42} \text{SS9202-42} \text{SS9202-42} \text{SS9202-42} \qqq \qqq \qqq \qqq \qqq \qqq \qqq \qqq \q	\$\$9202 •
MALE METRIC X Female NPT (SOLID)	\$\\ \text{S9235-10-02}\$\$\$9235-12-04\$\$\$9235-14-04\$\$\$9235-18-06\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$	\$\$9235 •
MALE JIC X Female BSPP (SWIVEL)	\$\ \text{S9240-04-04} \\ \$\$9240-06-06 \\ \$\$9240-08-06 \\ \$\$9240-08-08 \\ \$\$\$9240-12-12 \\ \$\$\$9240-16-16	\$\$9240 •
BONDED SEAL FOR British Thread	\$\$9500-02 \$\$9500-04 \$\$9500-06 \$\$9500-08 \$\$9500-12 \$\$9500-16 \$\$9500-20 \$\$9500-24 \$\$9500-32	SS9500
BONDED SEAL FOR METRIC THREAD	\$\$\\ \text{SS9500-06MM} \text{SS9500-10MM} \text{SS9500-12MM} \text{SS9500-12MM} \text{SS9500-14MM} \text{SS9500-16MM} \text{SS9500-16MM} \text{SS9500-20MM} \text{SS9500-26MM} \text{SS9500-30MM} \text{SS9500-33MM} \text{SS9500-33MM}	SS9500MM

Part Number	Sizes	Descripton
SS9500V	\$\$9500-02V \$\$9500-04V \$\$9500-06V \$\$9500-08V \$\$9500-12V \$\$\$9500-16V	BONDED VITON SEAL FOR BRITISH THREAD
SS9500MMV	\$\$9500-10MMV \$\$9500-16MMV \$\$9500-20MMV \$\$9500-26MMV \$\$9500-33MMV	BONDED VITON SEAL FOR METRIC THREAD
\$\$9605	\$\mathbb{O} \mathbb{O}	MALE JIC X Male Metric Dual Purpose Port or Tube (DIN 2353 L)
\$\$9606	\$\mathrm{\text{0}}{\text{0}}\$ \text{0}{\text{0}}\$ \text{0}\$	MALE JIC X Male Metric Dual Purpose Port or Tube (DIN 2353 S)



Malleable Iron

A note on Malleable Iron pipe fittings:

MATERIAL: Adaptall's malleable iron fittings are specified to BS310-BS340/12.

FINISH: Malleable iron fittings are varnished for protection during storage and transit. Most patterns are

also available in hot dip galvanized.

THREADS: Both male and female threads are specified to ISO-R7 = BS21 : 1957.

SIZES: Most patterns are available up to 6" on request.

PRESSURE: MAXIMUM working pressures and temperatures; DO NOT EXCEED!

Galvanized fittings are not normal stock but can be supplied on request.

FOR CURRENT PRICING ON MALLEABLE IRON FITTINGS PLEASE CALL US @ 1-800-463-8134

Descripton		Sizes		Part Number
BSP CAP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES		● B14C-04 B14C-06 B14C-08	B14C-12 B14C-16 B14C-20 B14C-24 B14C-32 B14C-40	B14C
FEMALE BSP (SOLID) X FEMALE BSP (SOLID) (BSP COUPLING) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	B1404-04-04 B1404-06-04 B1404-06-06 B1404-08-04 B1404-08-06 B1404-08-08 B1404-12-08 B1404-12-12	B1404-16-08 B1404-16-12 B1404-16-16 B1404-20-16 B1404-20-20 B1404-24-20 B1404-24-24 B1404-32-12	B1404-32-16 B1404-32-20 B1404-32-24 B1404-32-32 B1404-40-32 B1404-40-40 B1404-48-40 B1404-48-48	B1404 •
FEMALE BSP (SWIVEL) X FEMALE BSP (SWIVEL) - NO SEAT (BSP UNION) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES		10 2 B1404U-04-04 B1404U-06-06 B1404U-08-08	10 20 B1404U-12-12 B1404U-16-16 B1404U-20-20 B1404U-24-24 B1404U-32-32 B1404U-48-48	B1404U • • •
MALE BSPT X FEMALE BSP (SOLID) FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	■ ● B1804-04-02 B1804-06-02 B1804-06-04 B1804-08-02 B1804-08-04 B1804-08-06 B1804-12-04 B1804-12-06	■ ● B1804-12-08 B1804-16-06 B1804-16-08 B1804-16-12 B1804-20-08 B1804-20-12 B1804-20-16 B1804-24-16	■ ● B1804-24-20 B1804-32-16 B1804-32-20 B1804-32-24 B1804-40-20 B1804-40-24 B1804-40-32 B1804-48-24 B1804-48-32 B1804-48-40	B1804 • •

Malleable Iron

Part Number	Sizes			Descripton
B1808H • •	■ ● B1808H-02-02 B1808H-04-02 B1808H-04-04 B1808H-06-02 B1808H-06-04 B1808H-08-04 B1808H-08-06 B1808H-08-06	■ B1808H-12-08 B1808H-12-12 B1808H-16-08 B1808H-16-12 B1808H-16-16 B1808H-20-12 B1808H-20-16 B1808H-20-20 B1808H-24-16 B1808H-24-20	● ● B1808H-24-24 B1808H-32-20 B1808H-32-24 B1808H-32-32 B1808H-40-32	MALE BSPT X MALE BSPT (BSPT NIPPLE)
B1808L •	CALL FOR SIZES			MALE BSPT X MALE BSPT LONG (BSPT EXTENDED NIPPLE)
B18SQP	B18SQP-04 B18SQP-06 B18SQP-08 B18SQP-12 B18SQP-16 B18SQP-20 B18SQP-24 B18SQP-32 B18SQP-40 B18SQP-48			BSPT SQUARE HEAD PLUG
B2404	10 20 B2404-08-08 B2404-12-12 B2404-16-16 B2404-20-20 B2404-24-24 B2404-32-32			45° FEMALE BSP (SOLID) X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES
B2804	⊕ ⊕ B2804-06-06 B2804-08-08 B2804-12-12 B2804-16-16 B2804-20-20			45° MALE BSPT X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES

Malleable Iron

Descripton		Sizes		Part Number
90° FEMALE BSP (SOLID) X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES	1 ② B3404-02-02 B3404-04-04	B3404-06-04 B3404-06-06 B3404-08-06 B3404-08-08 B3404-12-06 B3404-12-12 B3404-16-08 B3404-16-12	10 20 B3404-16-16 B3404-20-12 B3404-20-16 B3404-20-20 B3404-24-16 B3404-24-24 B3404-32-32 B3404-40-40 B3404-48-48	B3404 °
90° MALE BSPT X FEMALE BSP (SOLID) ELBOW FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES			B3804-04-04 B3804-06-06 B3804-08-08 B3804-12-12 B3804-16-16 B3804-20-20 B3804-24-24 B3804-32-32 B3804-40-40 B3804-48-48	B3804
FEMALE BSP (SOLID) TEE FEMALE BSP'S ARE CAPABLE OF SEALING WITH BSPP & BSPT MALES			B4444-04 B4444-06 B4444-12 B4444-16 B4444-20 B4444-24 B4444-32 B4444-40 B4444-48	B4444 • • • • •



Warranty, Terms & Conditions

Warranty

adaptall. warrants it's products to be free of defects in material and workmanship. No warranty of merchantability or other warranty, express or implied, is made.

Liability for and the exclusive remedy for defective materials or workmanship is limited to replacement or repair of defective products returned within 60 days after receipt. No allowance will be made for repairs performed by the purchaser or on his order. **adaptall** is not liable for consequential or other damages or any expense incurred through the use of it's products.

All design and dimensional data are subject to change without notice. Working pressures, corrosion data and other technical information have been prepared from actual test results and other data considered to be reliable. However, no responsibility can be assumed for the accuracy of this information under varied field conditions and should be considered as a recommendation only and not a guarantee.

Terms & Conditions

- Prices subject to change without prior notice.
- F.O.B. our plant.
- All taxes and government surcharges are extra where applicable.
- No returns without prior written consent.
- All sales to U.S.customers are payable in U.S. funds.
- Minimum billing: \$25.00 plus taxes.

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METRIC PARALLEL THREAD OVERLAYS













Toll Free Phone: 1-800-463-8134

Toll Free Fax: 1-800-994-5699

adaptallamerica

9047 Dutton Drive Twinsburg, Ohio 44087 adaptall

150 Brunel Road Mississauga, Ontario L4Z 1T5

www.adaptall.com