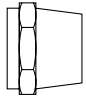


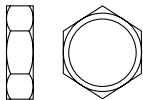
## Tube Fittings

### Standard Nut FJ-CAP Series (0304)



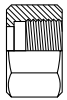
Part No.	Part No.
2FJ-CAP	12FJ-CAP
3FJ-CAP	14FJ-CAP
4FJ-CAP	16FJ-CAP
5FJ-CAP	20FJ-CAP
6FJ-CAP	24FJ-CAP
8FJ-CAP	32FJ-CAP
10FJ-CAP	48FJ-CAP

### Bulkhead Nut BN Series (0306)



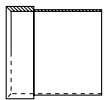
Part No.	Part No.
2BN	12BN
3BN	14BN
4BN	16BN
5BN	20BN
6BN	24BN
8BN	32BN
10BN	

### Nut TN Series (0318)



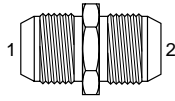
Part No.	Part No.
2TN	12TN
3TN	14TN
4TN	16TN
5TN	20TN
6TN	24TN
8TN	32TN
10TN	

### Sleeve SL Series (0319)



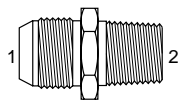
Part No.	Part No.
2SL	12SL
3SL	14SL
4SL	16SL
5SL	20SL
6SL	24SL
8SL	32SL+B1180
10SL	

### Straight Tube Union MJ-MJ Series (2403)



Part No.	Part No.
2MJ-2MJ	12MJ-10MJ
3MJ-3MJ	12MJ-12MJ
4MJ-2MJ	14MJ-12MJ
4MJ-3MJ	14MJ-14MJ
4MJ-4MJ	16MJ-6MJ
5MJ-4MJ	16MJ-8MJ
5MJ-5MJ	16MJ-10MJ
6MJ-4MJ	16MJ-12MJ
6MJ-5MJ	16MJ-14MJ
6MJ-6MJ	16MJ-16MJ
8MJ-4MJ	20MJ-12MJ
8MJ-5MJ	20MJ-16MJ
8MJ-6MJ	20MJ-20MJ
8MJ-8MJ	24MJ-12MJ
10MJ-4MJ	24MJ-16MJ
10MJ-5MJ	24MJ-20MJ
10MJ-6MJ	24MJ-24MJ
10MJ-8MJ	32MJ-16MJ
10MJ-10MJ	32MJ-20MJ
12MJ-4MJ	32MJ-24MJ
12MJ-5MJ	32MJ-32MJ
12MJ-6MJ	40MJ-40MJ
12MJ-8MJ	48MJ-48MJ

### Straight Adapter — Male MJ-MP Series (2404)

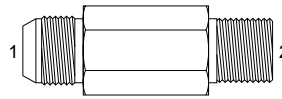


Part No.	Part No.
2MJ-1MP	10MJ-4MP
2MJ-2MP	10MJ-6MP
2MJ-4MP	10MJ-8MP
3MJ-2MP	10MJ-12MP
4MJ-2MP	10MJ-16MP
4MJ-4MP	12MJ-6MP
4MJ-6MP	12MJ-8MP
4MJ-8MP	12MJ-12MP
4MJ-12MP	12MJ-16MP
5MJ-2MP	12MJ-20MP
5MJ-4MP	12MJ-24MP
5MJ-6MP	14MJ-8MP
5MJ-8MP	14MJ-12MP
6MJ-2MP	14MJ-16MP
6MJ-4MP	16MJ-8MP
6MJ-6MP	16MJ-12MP
6MJ-8MP	16MJ-16MP
6MJ-12MP	16MJ-20MP
6MJ-16MP	16MJ-24MP
8MJ-2MP	20MJ-12MP
8MJ-4MP	20MJ-16MP
8MJ-6MP	20MJ-20MP
8MJ-8MP	20MJ-24MP
8MJ-12MP	24MJ-16MP
8MJ-16MP	24MJ-20MP

### Straight Adapter — Male — (continued) MJ-MP Series (2404)

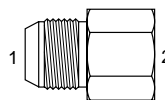
Part No.	Part No.
24MJ-24MP	32MJ-32MP
24MJ-32MP	32MJ-48MP
32MJ-16MP	40MJ-32MP
32MJ-20MP	40MJ-40MP
32MJ-24MP	48MJ-48MP

### Straight Adapter — Extended MJ-MP-L Series (2404-L)



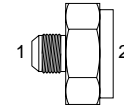
Part No.	Part No.
4MJ-2MP-L	8MJ-6MP-L
4MJ-4MP-L	8MJ-8MP-L
5MJ-2MP-L	10MJ-8MP-L
5MJ-4MP-L	12MJ-12MP-L
6MJ-2MP-L	16MJ-12MP-L
6MJ-4MP-L	16MJ-16MP-L
6MJ-6MP-L	20MJ-20MP-L
6MJ-8MP-L	24MJ-24MP-L
8MJ-4MP-L	32MJ-32MP-L

### Straight Adapter — Female MJ-FP Series (2405)



Part No.	Part No.
2MJ-2FP	10MJ-8FP
3MJ-2FP	10MJ-12FP
3MJ-4FP	10MJ-16FP
4MJ-2FP	12MJ-8FP
4MJ-4FP	12MJ-12FP
4MJ-6FP	12MJ-16FP
4MJ-8FP	14MJ-8FP
5MJ-2FP	14MJ-12FP
5MJ-4FP	14MJ-16FP
5MJ-6FP	16MJ-12FP
5MJ-8FP	16MJ-16FP
6MJ-2FP	16MJ-20FP
6MJ-4FP	20MJ-16FP
6MJ-6FP	20MJ-20FP
6MJ-8FP	20MJ-24FP
6MJ-12FP	24MJ-20FP
8MJ-4FP	24MJ-24FP
8MJ-6FP	32MJ-24FP
8MJ-8FP	32MJ-32FP
8MJ-12FP	40MJ-40FP
10MJ-4FP	

### Tube Reducer MJ-FJ Series (2406)



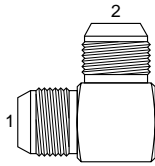
Part No.	Part No.
2MJ-4FJ	8MJ-24FJ
2MJ-6FJ	10MJ-8FJ
3MJ-4FJ	10MJ-12FJ
3MJ-6FJ	10MJ-14FJ
4MJ-5FJ	10MJ-14FJ
4MJ-6FJ	10MJ-20FJ
4MJ-8FJ	10MJ-24FJ
4MJ-10FJ	12MJ-8FJ
4MJ-12FJ	12MJ-10FJ
4MJ-14FJ	12MJ-12FJ
4MJ-16FJ	12MJ-14FJ
5MJ-6FJ	12MJ-14FJ
5MJ-8FJ	12MJ-20FJ
6MJ-4FJ	12MJ-24FJ
6MJ-5FJ	14MJ-14FJ
6MJ-6FJ	14MJ-20FJ
6MJ-8FJ	14MJ-24FJ
6MJ-10FJ	16MJ-10FJ
6MJ-12FJ	16MJ-12FJ
6MJ-14FJ	16MJ-14FJ
6MJ-14FJ	16MJ-20FJ
6MJ-20FJ	16MJ-24FJ
8MJ-5FJ	20MJ-14FJ
8MJ-6FJ	20MJ-24FJ
8MJ-10FJ	20MJ-32FJ
8MJ-12FJ	24MJ-14FJ
8MJ-14FJ	24MJ-20FJ
8MJ-14FJ	24MJ-32FJ
8MJ-20FJ	32MJ-24FJ

### Plug MJ-PLUG Series (2408)

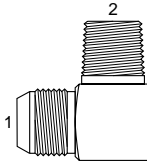


Part No.	Part No.
2MJ-PLUG	12MJ-PLUG
3MJ-PLUG	14MJ-PLUG
4MJ-PLUG	16MJ-PLUG
5MJ-PLUG	20MJ-PLUG
6MJ-PLUG	24MJ-PLUG
8MJ-PLUG	32MJ-PLUG
10MJ-PLUG	

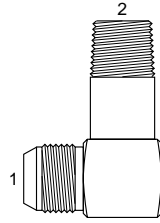
Tube Fittings — *continued*

 90° Tube Elbow  
**MJ-MJ90 Series (2500)**


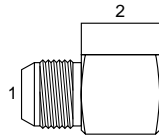
Part No.	Part No.
2MJ-2MJ90	10MJ-8MJ90
3MJ-3MJ90	10MJ-10MJ90
4MJ-4MJ90	12MJ-8MJ90
5MJ-4MJ90	12MJ-10MJ90
5MJ-5MJ90	12MJ-12MJ90
6MJ-4MJ90	14MJ-14MJ90
6MJ-5MJ90	16MJ-12MJ90
6MJ-6MJ90	16MJ-16MJ90
8MJ-4MJ90	20MJ-20MJ90
8MJ-6MJ90	24MJ-24MJ90
8MJ-8MJ90	32MJ-32MJ90

 90° Male Elbow  
**MJ-MP90 Series (2501)**


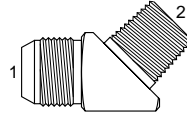
Part No.	Part No.
2MJ-2MP90	10MJ-12MP90
2MJ-4MP90	10MJ-16MP90
3MJ-2MP90	12MJ-6MP90
4MJ-2MP90	12MJ-8MP90
4MJ-4MP90	12MJ-12MP90
4MJ-6MP90	12MJ-16MP90
4MJ-8MP90	12MJ-20MP90
4MJ-12MP90	14MJ-8MP90
5MJ-2MP90	14MJ-12MP90
5MJ-4MP90	14MJ-16MP90
5MJ-6MP90	16MJ-8MP90
5MJ-8MP90	16MJ-12MP90
6MJ-2MP90	16MJ-16MP90
6MJ-4MP90	16MJ-20MP90
6MJ-6MP90	16MJ-24MP90
6MJ-8MP90	20MJ-12MP90
6MJ-12MP90	20MJ-16MP90
8MJ-2MP90	20MJ-20MP90
8MJ-4MP90	20MJ-24MP90
8MJ-6MP90	24MJ-16MP90
8MJ-8MP90	24MJ-20MP90
8MJ-12MP90	24MJ-24MP90
8MJ-16MP90	32MJ-24MP90
10MJ-6MP90	32MJ-32MP90
10MJ-8MP90	40MJ-40MP90

 90° Male Elbow  
 — **Extended**  
**MJ-MP90 Series (2501-L)**


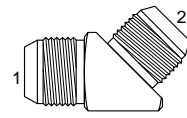
Part No.	Part No.
4MJ-2MP90-L	8MJ-12MP90-L
4MJ-4MP90-L	10MJ-8MP90-L
5MJ-2MP90-L	10MJ-12MP90-L
5MJ-4MP90-L	12MJ-8MP90-L
6MJ-2MP90-L	12MJ-12MP90-L
6MJ-4MP90-L	12MJ-16MP90-L
6MJ-6MP90-L	14MJ-12MP90-L
6MJ-8MP90-L	16MJ-12MP90-L
8MJ-4MP90-L	16MJ-16MP90-L
8MJ-6MP90-L	20MJ-20MP90-L
8MJ-8MP90-L	24MJ-24MP90-L

 90° Female Elbow  
**MJ-FP90 Series (2502)**


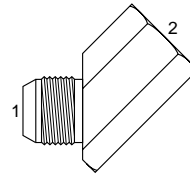
Part No.	Part No.
4MJ-2FP90	8MJ-12FP90
4MJ-4FP90	10MJ-6FP90
4MJ-6FP90	10MJ-8FP90
4MJ-8FP90	10MJ-12FP90
5MJ-2FP90	12MJ-8FP90
5MJ-4FP90	12MJ-12FP90
5MJ-6FP90	12MJ-16FP90
6MJ-2FP90	14MJ-12FP90
6MJ-4FP90	16MJ-12FP90
6MJ-6FP90	16MJ-16FP90
6MJ-8FP90	16MJ-20FP90
8MJ-4FP90	20MJ-20FP90
8MJ-6FP90	24MJ-24FP90
8MJ-8FP90	32MJ-32FP90

 45° Male Elbow  
**MJ-MP45 Series (2503)**


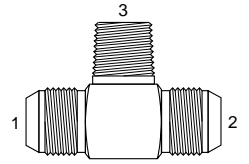
Part No.	Part No.
2MJ-2MP45	10MJ-6MP45
3MJ-2MP45	10MJ-8MP45
4MJ-2MP45	10MJ-12MP45
4MJ-4MP45	12MJ-8MP45
4MJ-6MP45	12MJ-12MP45
4MJ-8MP45	12MJ-16MP45
5MJ-2MP45	14MJ-12MP45
5MJ-4MP45	16MJ-8MP45
5MJ-6MP45	16MJ-12MP45
6MJ-2MP45	16MJ-16MP45
6MJ-4MP45	16MJ-20MP45
6MJ-6MP45	20MJ-16MP45
6MJ-8MP45	20MJ-20MP45
6MJ-12MP45	20MJ-24MP45
8MJ-4MP45	24MJ-20MP45
8MJ-6MP45	24MJ-24MP45
8MJ-8MP45	32MJ-32MP45
8MJ-12MP45	40MJ-40MP45

 45° Male Elbow  
**MJ-MJ45 Series (2504)**


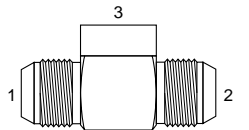
Part No.	Part No.
4MJ-4MJ45	10MJ-10MJ45
6MJ-4MJ45	12MJ-12MJ45
6MJ-6MJ45	16MJ-16MJ45
8MJ-8MJ45	20MJ-20MJ45

 45° Female Elbow  
**MJ-FP45 Series (2505)**


Part No.	Part No.
4MJ-4FP45	10MJ-8FP45
6MJ-4FP45	12MJ-12FP45
6MJ-6FP45	16MJ-16FP45
8MJ-6FP45	20MJ-20FP45
8MJ-8FP45	32MJ-32FP45

 Side Tee  
 — **Male**  
**MJ-MJ-MP Series (2601)**


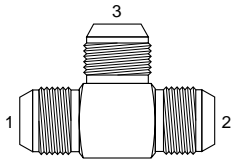
Part No.	Part No.
3MJ-3MJ-2MP	10MJ-10MJ-6MP
4MJ-4MJ-2MP	10MJ-10MJ-8MP
4MJ-4MJ-4MP	10MJ-10MJ-12MP
4MJ-4MJ-6MP	12MJ-6MJ-12MP
5MJ-5MJ-2MP	12MJ-12MJ-8MP
5MJ-5MJ-4MP	12MJ-12MJ-12MP
6MJ-6MJ-2MP	12MJ-12MJ-16MP
6MJ-6MJ-4MP	12MJ-16MJ-20MP
6MJ-6MJ-6MP	14MJ-14MJ-12MP
6MJ-6MJ-8MP	16MJ-12MJ-16MP
6MJ-10MJ-12MP	16MJ-16MJ-12MP
8MJ-4MJ-8MP	16MJ-16MJ-16MP
8MJ-8MJ-4MP	20MJ-20MJ-16MP
8MJ-8MJ-6MP	20MJ-20MJ-20MP
8MJ-8MJ-8MP	24MJ-24MJ-24MP
8MJ-8MJ-12MP	32MJ-32MJ-32MP

 Side Tee  
 — **Female**  
**MJ-MJ-FP Series (2602)**


Part No.	Part No.
2MJ-2MJ-2FP	10MJ-10MJ-8FP
3MJ-3MJ-2FP	10MJ-10MJ-12FP
4MJ-4MJ-2FP	12MJ-12MJ-8FP
4MJ-4MJ-4FP	12MJ-12MJ-12FP
5MJ-5MJ-2FP	12MJ-12MJ-16FP
5MJ-5MJ-4FP	14MJ-14MJ-12FP
6MJ-6MJ-4FP	16MJ-16MJ-12FP
6MJ-6MJ-6FP	16MJ-16MJ-16FP
8MJ-8MJ-4FP	20MJ-20MJ-20FP
8MJ-8MJ-6FP	24MJ-24MJ-24FP
8MJ-8MJ-8FP	32MJ-32MJ-32FP
10MJ-10MJ-4FP	

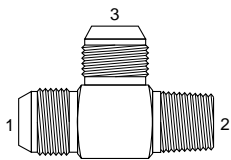
Tube Fittings — *continued*

**Tube Tee**  
**MJ-MJ-MJ Series (2603)**



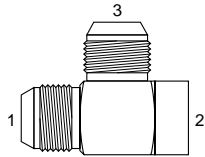
Part No.	Part No.
2MJ-2MJ-2MJ	12MJ-8MJ-12MJ
3MJ-3MJ-3MJ	12MJ-10MJ-10MJ
4MJ-4MJ-4MJ	12MJ-12MJ-6MJ
4MJ-4MJ-6MJ	12MJ-12MJ-8MJ
4MJ-6MJ-6MJ	12MJ-12MJ-10MJ
5MJ-5MJ-4MJ	12MJ-12MJ-12MJ
5MJ-5MJ-5MJ	12MJ-12MJ-16MJ
5MJ-5MJ-6MJ	12MJ-12MJ-20MJ
6MJ-6MJ-4MJ	12MJ-16MJ-16MJ
6MJ-6MJ-5MJ	14MJ-14MJ-14MJ
6MJ-6MJ-6MJ	16MJ-10MJ-10MJ
6MJ-6MJ-8MJ	16MJ-12MJ-12MJ
8MJ-6MJ-6MJ	16MJ-12MJ-16MJ
8MJ-8MJ-6MJ	16MJ-16MJ-8MJ
8MJ-8MJ-8MJ	16MJ-16MJ-12MJ
8MJ-8MJ-10MJ	16MJ-16MJ-16MJ
8MJ-8MJ-12MJ	20MJ-20MJ-10MJ
8MJ-12MJ-8MJ	20MJ-20MJ-12MJ
10MJ-8MJ-8MJ	20MJ-20MJ-16MJ
10MJ-10MJ-8MJ	20MJ-20MJ-20MJ
10MJ-10MJ-10MJ	24MJ-24MJ-24MJ
10MJ-10MJ-12MJ	32MJ-32MJ-32MJ

**Run Tee**  
**— Male**  
**MJ-MP-MJ Series (2605)**



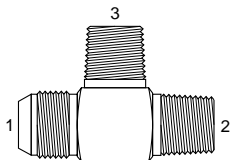
Part No.	Part No.
3MJ-2MP-3MJ	8MJ-8MP-4MJ
4MJ-2MP-4MJ	8MJ-8MP-6MJ
4MJ-4MP-4MJ	8MJ-8MP-8MJ
4MJ-4MP-6MJ	8MJ-12MP-8MJ
5MJ-2MP-5MJ	10MJ-8MP-10MJ
5MJ-4MP-5MJ	10MJ-12MP-10MJ
5MJ-6MP-5MJ	12MJ-6MP-12MJ
5MJ-6MP-6MJ	12MJ-8MP-12MJ
6MJ-2MP-6MJ	12MJ-12MP-8MJ
6MJ-4MP-6MJ	12MJ-12MP-12MJ
6MJ-6MP-5MJ	14MJ-12MP-14MJ
6MJ-6MP-6MJ	16MJ-12MP-16MJ
6MJ-8MP-6MJ	16MJ-16MP-12MJ
6MJ-8MP-10MJ	16MJ-16MP-16MJ
8MJ-4MP-8MJ	20MJ-16MP-20MJ
8MJ-6MP-4MJ	20MJ-20MP-20MJ
8MJ-6MP-6MJ	24MJ-24MP-24MJ
8MJ-6MP-8MJ	32MJ-32MP-32MJ

**Run Tee**  
**— Female**  
**MJ-FP-MJ Series (2606)**



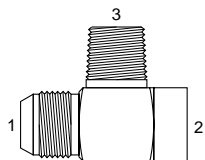
Part No.	Part No.
3MJ-2FP-3MJ	8MJ-6FP-8MJ
3MJ-2FP-4MJ	8MJ-8FP-8MJ
4MJ-2FP-4MJ	10MJ-8FP-10MJ
4MJ-4FP-4MJ	12MJ-12FP-12MJ
5MJ-2FP-5MJ	14MJ-12FP-14MJ
5MJ-4FP-5MJ	16MJ-16FP-16MJ
6MJ-4FP-6MJ	20MJ-20FP-20MJ
6MJ-6FP-4MJ	24MJ-24FP-24MJ
6MJ-6FP-6MJ	32MJ-32FP-32MJ

**Run Tee**  
**— Male**  
**MJ-MP-MP Series (2607)**



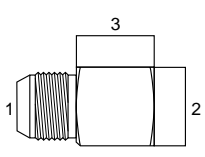
Part No.	Part No.
4MJ-2MP-2MP	10MJ-6MP-6MP
6MJ-4MP-4MP	10MJ-8MP-8MP
6MJ-6MP-4MP	12MJ-12MP-12MP
6MJ-6MP-6MP	16MJ-16MP-16MP
8MJ-6MP-6MP	20MJ-20MP-20MP
8MJ-8MP-8MP	32MJ-32MP-32MP

**Branch Tee**  
**— Male**  
**MJ-FP-MP Series (2608)**



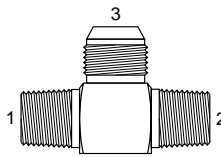
Part No.	Part No.
4MJ-2FP-2MP	6MJ-6FP-6MP
4MJ-4FP-2MP	8MJ-6FP-6MP
4MJ-4FP-4MP	10MJ-8FP-8MP
6MJ-4FP-4MP	12MJ-12FP-12MP
6MJ-4FP-6MP	16MJ-16FP-16MP

**Branch Tee**  
**— Female**  
**MJ-FP-FP Series (2609)**



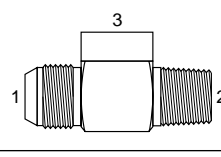
Part No.	Part No.
4MJ-2FP-2FP	10MJ-8FP-8FP
5MJ-4FP-4FP	12MJ-12FP-12FP
6MJ-4FP-4FP	16MJ-16FP-16FP
8MJ-6FP-6FP	20MJ-20FP-20FP
8MJ-8FP-8FP	24MJ-24FP-24FP

**Branch Tee**  
**— Male**  
**MP-MP-MJ Series (2610)**



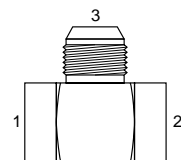
Part No.	Part No.
4MP-4MP-4MJ	8MP-8MP-10MJ
4MP-4MP-6MJ	12MP-12MP-12MJ
6MP-6MP-6MJ	12MP-12MP-16MJ
6MP-6MP-8MJ	16MP-16MP-16MJ
8MP-8MP-8MJ	

**Branch Tee**  
**— Female**  
**MJ-MP-FP Series (2611)**



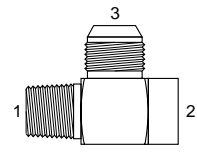
Part No.	Part No.
4MJ-2MP-2FP	8MJ-6MP-6FP
4MJ-4MP-2FP	8MJ-8MP-8FP
4MJ-4MP-4FP	10MJ-8MP-8FP
4MJ-8MP-6FP	12MJ-12MP-12FP
6MJ-4MP-4FP	16MJ-16MP-16FP
6MJ-6MP-6FP	20MJ-20MP-20FP

**Branch Tee**  
**— Male**  
**FP-FP-MJ Series (2612)**



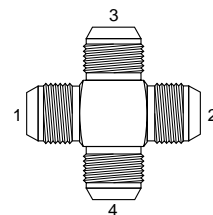
Part No.
2FP-2FP-4MJ
4FP-4FP-6MJ
6FP-6FP-8MJ
8FP-8FP-8MJ
12FP-12FP-12MJ
16FP-16FP-16MJ

**Branch Tee**  
**— Male**  
**MP-FP-MJ Series (2613)**



Part No.	Part No.
2MP-2FP-4MJ	8MP-8FP-10MJ
4MP-4FP-6MJ	12MP-12FP-12MJ
6MP-6FP-6MJ	16MP-16FP-16MJ
6MP-6FP-8MJ	20MP-20FP-20MJ

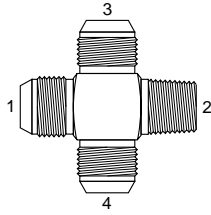
**Tube Cross**  
**MJ-MJ-MJ-MJ Series (2650)**



Part No.
2MJ-2MJ-2MJ-2MJ
4MJ-4MJ-4MJ-4MJ
5MJ-5MJ-5MJ-5MJ
6MJ-6MJ-6MJ-6MJ
8MJ-8MJ-8MJ-8MJ
10MJ-10MJ-10MJ-10MJ
12MJ-12MJ-12MJ-12MJ
14MJ-14MJ-14MJ-14MJ
16MJ-16MJ-16MJ-16MJ
20MJ-20MJ-20MJ-20MJ
24MJ-24MJ-24MJ-24MJ
32MJ-32MJ-32MJ-32MJ

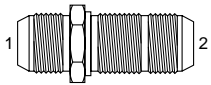
Tube Fittings — *continued*

Tube Cross  
**MJ-MP-MJ-MJ Series (2651)**



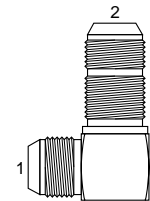
Part No.
4MJ-4MP-4MJ-4MJ
6MJ-6MP-4MJ-6MJ
6MJ-6MP-6MJ-6MJ
8MJ-8MP-8MJ-8MJ
12MJ-12MP-12MJ-12MJ
16MJ-16MP-16MJ-16MJ

Bulkhead  
 Tube Union  
**MJ-BKHD Series (2700)**



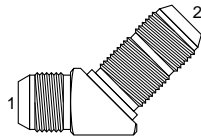
Part No.	Part No.
2MJ-2BKHD	10MJ-10BKHD
3MJ-3BKHD	12MJ-12BKHD
4MJ-4BKHD	14MJ-14BKHD
4MJ-5BKHD	16MJ-12BKHD
5MJ-5BKHD	16MJ-16BKHD
6MJ-4BKHD	20MJ-20BKHD
6MJ-6BKHD	24MJ-24BKHD
8MJ-8BKHD	32MJ-32BKHD

90° Bulkhead  
 Tube Elbow  
**MJ-BKHD90 Series (2701)**



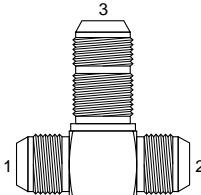
Part No.	Part No.
2MJ-2BKHD90	12MJ-16BKHD90
3MJ-3BKHD90	14MJ-14BKHD90
4MJ-4BKHD90	16MJ-12BKHD90
5MJ-5BKHD90	16MJ-16BKHD90
6MJ-6BKHD90	20MJ-20BKHD90
8MJ-8BKHD90	24MJ-24BKHD90
10MJ-10BKHD90	32MJ-32BKHD90
12MJ-12BKHD90	

45° Bulkhead  
 Tube Elbow  
**MJ-BKHD45 Series (2702)**



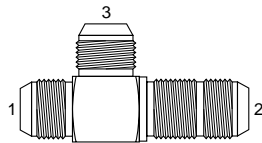
Part No.	Part No.
3MJ-3BKHD45	12MJ-12BKHD45
4MJ-4BKHD45	14MJ-14BKHD45
5MJ-5BKHD45	16MJ-16BKHD45
6MJ-6BKHD45	20MJ-20BKHD45
8MJ-8BKHD45	24MJ-24BKHD45
10MJ-10BKHD45	32MJ-32BKHD45

Bulkhead Branch Tee  
**MJ-MJ-BKHD Series (2703)**



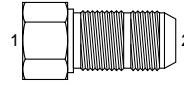
Part No.
3MJ-3MJ-3BKHD
4MJ-4MJ-4BKHD
4MJ-4MJ-6BKHD
5MJ-5MJ-5BKHD
6MJ-6MJ-6BKHD
8MJ-8MJ-8BKHD
10MJ-10MJ-10BKHD
12MJ-12MJ-12BKHD
12MJ-12MJ-16BKHD
14MJ-14MJ-14BKHD
16MJ-16MJ-16BKHD
20MJ-20MJ-20BKHD
24MJ-24MJ-24BKHD

Bulkhead Run Tee  
**MJ-BKHD-MJ Series (2704)**



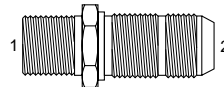
Part No.
2MJ-2BKHD-2MJ
3MJ-3BKHD-3MJ
4MJ-4BKHD-4MJ
5MJ-5BKHD-5MJ
6MJ-6BKHD-6MJ
8MJ-8BKHD-8MJ
10MJ-10BKHD-10MJ
12MJ-12BKHD-12MJ
16MJ-12BKHD-12MJ
16MJ-16BKHD-16MJ
20MJ-20BKHD-20MJ
24MJ-24BKHD-24MJ

Bulkhead  
 — **Female NPT**  
**FP-BKHD Series (2705)**



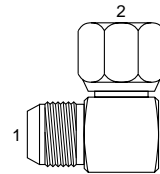
Part No.	Part No.
2FP-4BKHD	12FP-6BKHD
4FP-4BKHD	12FP-12BKHD
4FP-6BKHD	12FP-14BKHD
6FP-6BKHD	16FP-16BKHD
6FP-8BKHD	20FP-20BKHD
8FP-8BKHD	24FP-24BKHD
8FP-10BKHD	32FP-32BKHD

Bulkhead  
 — **Male NPT**  
**MP-BKHD Series (2706)**



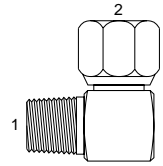
Part No.	Part No.
2MP-4BKHD	8MP-12BKHD
4MP-4BKHD	12MP-12BKHD
4MP-6BKHD	16MP-16BKHD
6MP-6BKHD	20MP-20BKHD
6MP-8BKHD	24MP-24BKHD
8MP-8BKHD	32MP-32BKHD
8MP-10BKHD	

90° Swivel Elbow  
**MJ-FJX90 Series (6500)**



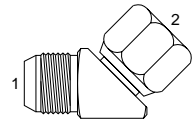
Part No.	Part No.
3MJ-3FJX90	10MJ-8FJX90
4MJ-4FJX90	10MJ-10FJX90
4MJ-6FJX90	10MJ-12FJX90
5MJ-5FJX90	12MJ-8FJX90
5MJ-6FJX90	12MJ-10FJX90
6MJ-4FJX90	12MJ-12FJX90
6MJ-6FJX90	12MJ-16FJX90
6MJ-8FJX90	14MJ-14FJX90
8MJ-6FJX90	16MJ-16FJX90
8MJ-8FJX90	20MJ-20FJX90
8MJ-10FJX90	24MJ-24FJX90
8MJ-12FJX90	32MJ-32FJX90

90° Swivel Elbow  
**MP-FJX90 Series (6501)**



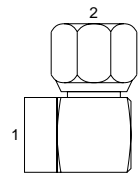
Part No.	Part No.
2MP-4FJX90	8MP-8FJX90
2MP-5FJX90	8MP-10FJX90
4MP-4FJX90	12MP-8FJX90
4MP-5FJX90	12MP-12FJX90
4MP-6FJX90	12MP-14FJX90
5MP-4FJX90	16MP-16FJX90
6MP-6FJX90	20MP-20FJX90
6MP-8FJX90	24MP-24FJX90
8MP-6FJX90	32MP-32FJX90

45° Swivel Elbow  
**MJ-FJX45 Series (6502)**



Part No.	Part No.
4MJ-4FJX45	12MJ-12FJX45
5MJ-5FJX45	14MJ-14FJX45
6MJ-4FJX45	16MJ-16FJX45
6MJ-6FJX45	20MJ-20FJX45
8MJ-8FJX45	24MJ-24FJX45
10MJ-8FJX45	32MJ-32FJX45
10MJ-10FJX45	

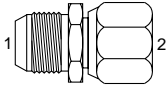
Swivel Adapter  
 — **Female**  
**FP-FJX90 Series (6503)**



Part No.	Part No.
4FP-4FJX90	8FP-8FJX90
4FP-6FJX90	8FP-10FJX90
6FP-6FJX90	10FP-8FJX90
6FP-8FJX90	12FP-12FJX90

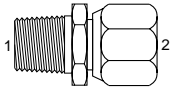
Tube Fittings — *continued*

**Swivel Adapter  
 — Male  
 MJ-FJX Series (6504)**



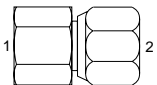
Part No.	Part No.
4MJ-4FJX	8MJ-10FJX
5MJ-5FJX	8MJ-12FJX
6MJ-6FJX	10MJ-10FJX
6MJ-8FJX	12MJ-12FJX
6MJ-10FJX	16MJ-16FJX
8MJ-8FJX	20MJ-20FJX

**Swivel Adapter  
 — Male  
 MP-FJX Series (6505)**



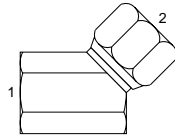
Part No.	Part No.
2MP-4FJX	12MP-10FJX
4MP-4FJX	12MP-12FJX
4MP-5FJX	12MP-16FJX
4MP-6FJX	16MP-16FJX
6MP-6FJX	20MP-20FJX
6MP-8FJX	24MP-16FJX
6MP-10FJX	24MP-24FJX
8MP-8FJX	32MP-32FJX
8MP-10FJX	40MP-40FJX
8MP-12FJX	

**Swivel Adapter  
 — Female  
 FP-FJX Series (6506)**



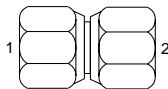
Part No.	Part No.
2FP-4FJX	8FP-10FJX
4FP-4FJX	8FP-12FJX
4FP-5FJX	12FP-10FJX
4FP-6FJX	12FP-12FJX
6FP-6FJX	12FP-14FJX
6FP-8FJX	16FP-16FJX
6FP-10FJX	20FP-20FJX
8FP-6FJX	24FP-24FJX
8FP-8FJX	32FP-32FJX

**45° Swivel Elbow  
 FP-FJX45 Series (6507)**



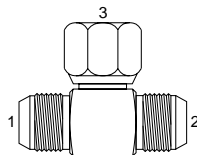
Part No.	Part No.
6FP-8FJX45	8FP-10FJX45
8FP-6FJX45	

**Straight  
 FJX-FJX Series (6565)**



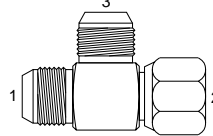
Part No.	Part No.
4FJX-4FJX	10FJX-10FJX
5FJX-5FJX	12FJX-12FJX
6FJX-6FJX	16FJX-16FJX
8FJX-6FJX	20FJX-20FJX
8FJX-8FJX	24FJX-24FJX
10FJX-8FJX	

**Swivel Tee — Outlet  
 MJ-MJ-FJX Series (6600)**



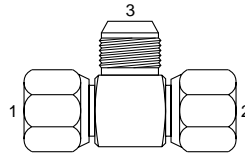
Part No.	Part No.
4MJ-4MJ-4FJX	12MJ-12MJ-12FJX
4MJ-4MJ-4FJX	14MJ-14MJ-14FJX
6MJ-6MJ-6FJX	16MJ-16MJ-16FJX
6MJ-6MJ-8FJX	20MJ-20MJ-20FJX
8MJ-8MJ-8FJX	24MJ-24MJ-24FJX
10MJ-10MJ-10FJX	32MJ-32MJ-32FJX
12MJ-12MJ-10FJX	

**Swivel Tee  
 — Run  
 MJ-FJX-MJ Series (6602)**



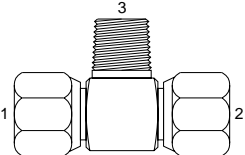
Part No.	Part No.
4MJ-4FJX-4MJ	12MJ-12FJX-12MJ
5MJ-5FJX-4MJ	14MJ-14FJX-14MJ
5MJ-5FJX-5MJ	16MJ-16FJX-10MJ
6MJ-6FJX-6MJ	16MJ-16FJX-12MJ
8MJ-8FJX-4MJ	16MJ-16FJX-16MJ
8MJ-8FJX-8MJ	20MJ-20FJX-20MJ
8MJ-8FJX-12MJ	24MJ-24FJX-24MJ
10MJ-10FJX-10MJ	32MJ-32FJX-32MJ
10MJ-10FJX-12MJ	

**Swivel Tee  
 — Male Branch  
 FJX-FJX-MJ Series (6603)**



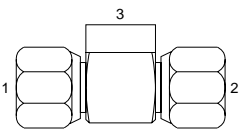
Part No.	Part No.
4FJX-4FJX-4MJ	
8FJX-8FJX-8MJ	
10FJX-10FJX-10MJ	
12FJX-12FJX-12MJ	
16FJX-16FJX-16MJ	

**Swivel Tee  
 — Male Branch  
 FJX-FJX-MP Series (6604)**



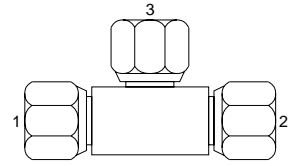
Part No.	Part No.
4FJX-4FJX-4MP	
12FJX-12FJX-12MP	

**Swivel Tee  
 — Female Branch  
 FJX-FJX-FP Series (6605)**



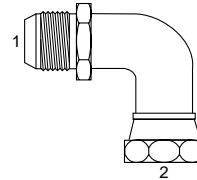
Part No.	Part No.
4FJX-4FJX-4FP	

**Swivel Tee  
 FJX-FJX-FJX Series (6606)**



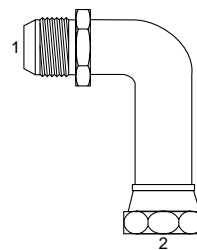
Part No.	Part No.
4FJX-4FJX-4FJX	
6FJX-6FJX-6FJX	
8FJX-8FJX-8FJX	
10FJX-10FJX-10FJX	
12FJX-12FJX-12FJX	
16FJX-16FJX-16FJX	

**90° Sweep  
 MJ-FJX90 Series (6701)**



Part No.	Part No.
4MJ-4FJX90	12MJ-12FJX90
6MJ-6FJX90	16MJ-16FJX90
8MJ-8FJX90	20MJ-20FJX90
10MJ-10FJX90	

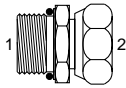
**90° Sweep Long  
 MJ-FJX90 Series (6701-L)**



Part No.	Part No.
4MJ-4FJX90-L	10MJ-10FJX90-L
6MJ-6FJX90-L	12MJ-12FJX90-L
8MJ-8FJX90-L	16MJ-16FJX90-L

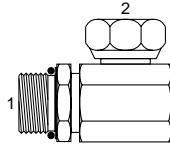
## Adapter Unions

### O.R.B. Adapter MB-FPX Series (6900)



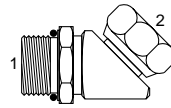
Part No.	Part No.
4MB-2FPX	12MB-6FPX
4MB-4FPX	12MB-8FPX
4MB-6FPX	12MB-12FPX
4MB-8FPX	12MB-16FPX
5MB-4FPX	14MB-12FPX
5MB-8FPX	14MB-16FPX
6MB-4FPX	16MB-8FPX
6MB-6FPX	16MB-12FPX
6MB-8FPX	16MB-16FPX
8MB-4FPX	16MB-20FPX
8MB-6FPX	20MB-12FPX
8MB-8FPX	20MB-16FPX
8MB-12FPX	20MB-20FPX
10MB-6FPX	24MB-20FPX
10MB-8FPX	24MB-24FPX
10MB-12FPX	32MB-32FPX

### 90° O.R.B. Adjustable Adapter MB-FPX90 Series (6901-NWO)



Part No.	Part No.
4MB-2FPX90	10MB-12FPX90
4MB-4FPX90	12MB-6FPX90
4MB-4FPX90	12MB-8FPX90
4MB-6FPX90	12MB-12FPX90
4MB-8FPX90	12MB-16FPX90
5MB-4FPX90	14MB-12FPX90
6MB-4FPX90	14MB-16FPX90
6MB-6FPX90	16MB-12FPX90
6MB-6FPX90	16MB-16FPX90
6MB-8FPX90	16MB-16FPX90
6MB-12FPX90	16MB-20FPX90
8MB-4FPX90	20MB-12FPX90
8MB-4FPX90	20MB-16FPX90
8MB-6FPX90	20MB-16FPX90
8MB-8FPX90	20MB-20FPX90
8MB-12FPX90	24MB-20FPX90
10MB-4FPX90	24MB-24FPX90
10MB-6FPX90	32MB-32FPX90
10MB-8FPX90	

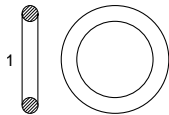
### 45° O.R.B. Adjustable Adapter MB-FPX45 Series (6902-NWO)



Part No.	Part No.
2MB-2FPX45	10MB-12FPX45
3MB-4FPX45	12MB-6FPX45
4MB-4FPX45	12MB-8FPX45
4MB-6FPX45	12MB-12FPX45
6MB-4FPX45	12MB-16FPX45
6MB-6FPX45	14MB-12FPX45
6MB-8FPX45	16MB-12FPX45
8MB-4FPX45	16MB-16FPX45
8MB-6FPX45	16MB-20FPX45
8MB-8FPX45	20MB-16FPX45
8MB-12FPX45	20MB-20FPX45
10MB-6FPX45	24MB-24FPX45
10MB-8FPX45	

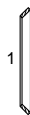
## Adjustable & O-Ring Fittings

### O-Ring OR Series (4000)



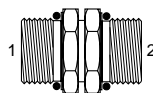
Part No.	Part No.
2OR	12OR
3OR	14OR
4OR	16OR
5OR	20OR
6OR	24OR
8OR	32OR
10OR	

### Washer BW Series (6000)



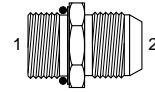
Part No.	Part No.
2BW	12BW
3BW	14BW
4BW	16BW
5BW	20BW
6BW	24BW
8BW	32BW
10BW	

### O.R.B. Connector MB-MB Series (3474-NWO)



Part No.	Part No.
4MB-4MB	16MB-16MB
6MB-6MB	20MB-20MB
8MB-8MB	24MB-16MB
10MB-10MB	24MB-24MB
12MB-12MB	32MB-32MB
16MB-12MB	

### Straight Connector MB-MJ Series (6400)



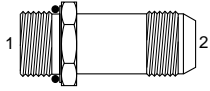
Part No.	Part No.
2MB-2MJ	8MB-8MJ
2MB-3MJ	8MB-10MJ
2MB-4MJ	8MB-12MJ
3MB-3MJ	8MB-14MJ
3MB-4MJ	8MB-16MJ
4MB-3MJ	10MB-4MJ
4MB-4MJ	10MB-5MJ
4MB-5MJ	10MB-6MJ
4MB-6MJ	10MB-8MJ
4MB-8MJ	10MB-10MJ
4MB-10MJ	10MB-12MJ
5MB-4MJ	10MB-14MJ
5MB-5MJ	10MB-16MJ
5MB-6MJ	10MB-20MJ
5MB-8MJ	12MB-4MJ
6MB-2MJ	12MB-6MJ
6MB-4MJ	12MB-8MJ
6MB-5MJ	12MB-10MJ
6MB-6MJ	12MB-12MJ
6MB-8MJ	12MB-14MJ
6MB-10MJ	12MB-16MJ
6MB-12MJ	12MB-20MJ
6MB-16MJ	14MB-8MJ
8MB-4MJ	14MB-10MJ
8MB-5MJ	14MB-12MJ
8MB-6MJ	14MB-14MJ

### Straight Connector — (continued) MB-MJ Series (6400)

Part No.	Part No.
14MB-16MJ	20MB-12MJ
16MB-6MJ	20MB-16MJ
16MB-8MJ	20MB-20MJ
16MB-10MJ	20MB-24MJ
16MB-12MJ	20MB-32MJ
16MB-14MJ	24MB-16MJ
16MB-16MJ	24MB-20MJ
16MB-20MJ	24MB-24MJ
16MB-24MJ	24MB-32MJ
20MB-8MJ	32MB-24MJ
20MB-10MJ	32MB-32MJ

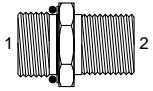
**Adjustable & O-Ring Fittings — continued**

**Straight Connector**  
**— Extended**  
**MB-MJ-L Series (6400-L)**



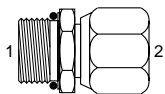
Part No.	Part No.
4MB-4MJ-L	10MB-12MJ-L
4MB-6MJ-L	12MB-12MJ-L
5MB-5MJ-L	14MB-14MJ-L
6MB-6MJ-L	16MB-8MJ-L
8MB-6MJ-L	16MB-10MJ-L
8MB-8MJ-L	16MB-12MJ-L
8MB-12MJ-L	16MB-16MJ-L
10MB-8MJ-L	20MB-20MJ-L
10MB-10MJ-L	24MB-24MJ-L

**O.R.B. Adapter**  
**— Male**  
**MB-MP Series (6401)**



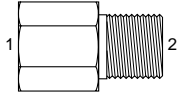
Part No.	Part No.
3MB-2MP	12MB-8MP
4MB-2MP	12MB-12MP
4MB-4MP	12MB-16MP
5MB-2MP	14MB-12MP
5MB-4MP	14MB-16MP
6MB-2MP	16MB-6MP
6MB-4MP	16MB-12MP
6MB-6MP	16MB-16MP
6MB-8MP	16MB-20MP
8MB-4MP	20MB-12MP
8MB-6MP	20MB-16MP
8MB-8MP	20MB-20MP
8MB-12MP	24MB-12MP
10MB-4MP	24MB-16MP
10MB-6MP	24MB-20MP
10MB-8MP	24MB-24MP
10MB-12MP	32MB-32MP
12MB-6MP	

**O.R.B. Swivel Adapter**  
**MB-FJX Series (6402)**



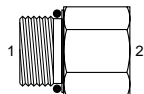
Part No.	Part No.
4MB-4FJX	10MB-10FJX
4MB-6FJX	12MB-10FJX
6MB-4FJX	12MB-12FJX
6MB-6FJX	16MB-16FJX
6MB-8FJX	20MB-20FJX
8MB-8FJX	24MB-24FJX
8MB-10FJX	32MB-32FJX

**O.R.B. Adapter**  
**— Female**  
**FB-MP Series (6404)**



Part No.	Part No.
2FB-2MP	10FB-6MP
3FB-6MP	10FB-8MP
4FB-2MP	10FB-12MP
4FB-4MP	12FB-8MP
4FB-6MP	12FB-12MP
5FB-2MP	12FB-16MP
5FB-4MP	14FB-12MP
5FB-6MP	16FB-12MP
6FB-4MP	16FB-16MP
6FB-6MP	16FB-20MP
6FB-8MP	20FB-16MP
8FB-6MP	20FB-20MP
8FB-8MP	24FB-24MP
8FB-12MP	32FB-32MP

**O.R.B. Adapter**  
**MB-FP Series (6405)**



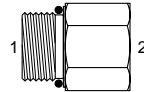
Part No.	Part No.
2MB-2FP	12MB-12FP
2MB-4FP	12MB-16FP
2MB-6FP	14MB-8FP
3MB-4FP	14MB-12FP
4MB-2FP	14MB-16FP
4MB-4FP	16MB-4FP
4MB-6FP	16MB-6FP
5MB-2FP	16MB-8FP
5MB-4FP	16MB-12FP
5MB-6FP	16MB-16FP
6MB-2FP	16MB-20FP
6MB-4FP	16MB-24FP
6MB-6FP	20MB-8FP
6MB-8FP	20MB-12FP
8MB-2FP	20MB-16FP
8MB-4FP	20MB-20FP
8MB-6FP	20MB-24FP
8MB-8FP	20MB-32FP
8MB-12FP	24MB-12FP
10MB-4FP	24MB-16FP
10MB-6FP	24MB-20FP
10MB-8FP	24MB-24FP
10MB-12FP	32MB-16FP
12MB-2FP	32MB-20FP
12MB-4FP	32MB-24FP
12MB-6FP	32MB-32FP
12MB-8FP	

**O.R.B. Plug**  
**MB-PLUG Series (6408)**



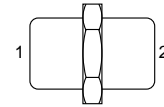
Part No.	Part No.
2MB-PLUG	12MB-PLUG
3MB-PLUG	14MB-PLUG
4MB-PLUG	16MB-PLUG
5MB-PLUG	20MB-PLUG
6MB-PLUG	24MB-PLUG
8MB-PLUG	32MB-PLUG
10MB-PLUG	

**O.R.B. Port Bushing**  
**MB-FB Series (6410)**



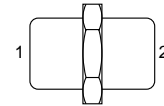
Part No.	Part No.
4MB-2FB	12MB-16FB
4MB-4FB	12MB-20FB
4MB-4FB	14MB-8FB
4MB-5FB	14MB-10FB
4MB-6FB	14MB-12FB
5MB-4FB	14MB-16FB
5MB-6FB	16MB-4FB
6MB-4FB	16MB-6FB
6MB-6FB	16MB-8FB
6MB-8FB	16MB-10FB
6MB-12FB	16MB-12FB
8MB-3FB	16MB-14FB
8MB-4FB	16MB-16FB
8MB-6FB	16MB-20FB
8MB-8FB	16MB-24FB
8MB-10FB	20MB-6FB
8MB-12FB	20MB-10FB
10MB-4FB	20MB-12FB
10MB-5FB	20MB-16FB
10MB-6FB	20MB-24FB
10MB-8FB	24MB-12FB
10MB-12FB	24MB-16FB
10MB-16FB	24MB-20FB
12MB-4FB	32MB-12FB
12MB-6FB	32MB-16FB
12MB-8FB	32MB-20FB
12MB-10FB	32MB-24FB
12MB-12FB	40MB-24FB
12MB-14FB	

**Straight**  
**FB-FP Series (6420)**



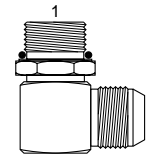
Part No.	Part No.
6FB-6FP	10FB-8FP
8FB-8FP	

**Straight**  
**FB-FB Series (6425)**



Part No.	Part No.
8FB-8FB	10FB-10FB

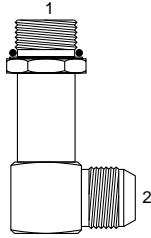
**90° Adjustable Elbow**  
**MB-MJ90 Series (6801-NWO)**



Part No.	Part No.
2MB-2MJ90	10MB-20MJ90
3MB-3MJ90	12MB-6MJ90
4MB-4MJ90	12MB-8MJ90
4MB-5MJ90	12MB-10MJ90
4MB-6MJ90	12MB-12MJ90
4MB-8MJ90	12MB-14MJ90
5MB-4MJ90	12MB-16MJ90
5MB-5MJ90	12MB-20MJ90
5MB-6MJ90	14MB-12MJ90
5MB-8MJ90	14MB-14MJ90
6MB-4MJ90	14MB-16MJ90
6MB-6MJ90	16MB-8MJ90
6MB-8MJ90	16MB-10MJ90
6MB-8MJ0	16MB-12MJ90
6MB-10MJ90	16MB-14MJ90
6MB-12MJ90	16MB-16MJ90
8MB-4MJ90	16MB-20MJ90
8MB-5MJ90	16MB-24MJ90
8MB-6MJ90	20MB-10MJ90
8MB-8MJ90	20MB-12MJ90
8MB-10MJ90	20MB-16MJ90
8MB-12MJ90	20MB-20MJ90
8MB-16MJ90	20MB-24MJ90
10MB-5MJ90	24MB-16MJ90
10MB-6MJ90	24MB-20MJ90
10MB-8MJ90	24MB-24MJ90
10MB-10MJ90	24MB-32MJ90
10MB-12MJ90	32MB-24MJ90
10MB-16MJ90	

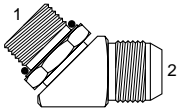
**Adjustable & O-Ring Fittings — continued**

**90° Adjustable Elbow — Extended**  
**MB-MJ90-L Series (6801-L-NWO)**



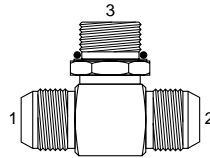
Part No.	Part No.
4MB-4MJ90-L	10MB-10MJ90-L
4MB-6MJ90-L	10MB-12MJ90-L
6MB-6MJ90-L	12MB-10MJ90-L
6MB-8MJ90-L	12MB-12MJ90-L
8MB-6MJ90-L	16MB-12MJ90-L
8MB-8MJ90-L	16MB-16MJ90-L
10MB-8MJ90-L	20MB-20MJ90-L

**45° Adjustable Elbow**  
**MB-MJ45 Series (6802-NWO)**



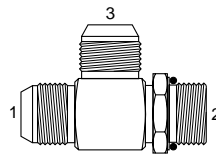
Part No.	Part No.
3MB-3MJ45	10MB-12MJ45
4MB-4MJ45	12MB-6MJ45
4MB-5MJ45	12MB-8MJ45
4MB-6MJ45	12MB-10MJ45
4MB-8MJ45	12MB-12MJ45
5MB-4MJ45	12MB-14MJ45
5MB-5MJ45	12MB-16MJ45
5MB-6MJ45	14MB-12MJ45
6MB-4MJ45	14MB-14MJ45
6MB-5MJ45	14MB-16MJ45
6MB-6MJ45	16MB-8MJ45
6MB-8MJ45	16MB-12MJ45
6MB-12MJ45	16MB-16MJ45
8MB-4MJ45	16MB-20MJ45
8MB-6MJ45	20MB-16MJ45
8MB-8MJ45	20MB-20MJ45
8MB-10MJ45	20MB-24MJ45
8MB-12MJ45	24MB-20MJ45
10MB-6MJ45	24MB-24MJ45
10MB-8MJ45	32MB-32MJ45
10MB-10MJ45	

**Branch Tee — Adjustable**  
**MJ-MJ-MB Series (6803-NWO)**



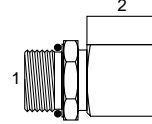
Part No.	Part No.
4MJ-4MJ-4MB	10MJ-10MJ-10MB
4MJ-4MJ-6MB	10MJ-10MJ-12MB
5MJ-5MJ-5MB	10MJ-10MJ-16MB
6MJ-6MJ-4MB	12MJ-12MJ-6MB
6MJ-6MJ-5MB	12MJ-12MJ-8MB
6MJ-6MJ-6MB	12MJ-12MJ-10MB
6MJ-6MJ-8MB	12MJ-12MJ-12MB
6MJ-6MJ-12MB	12MJ-12MJ-16MB
8MJ-6MJ-4MB	14MJ-14MJ-14MB
8MJ-6MJ-6MB	16MJ-4MJ-16MB
8MJ-8MJ-6MB	16MJ-16MJ-12MB
8MJ-8MJ-8MB	16MJ-16MJ-16MB
8MJ-8MJ-10MB	20MJ-20MJ-20MB
8MJ-8MJ-12MB	24MJ-24MJ-24MB
10MJ-10MJ-8MB	32MJ-32MJ-32MB

**Run Tee — Adjustable**  
**MJ-MB-MJ Series (6804-NWO)**



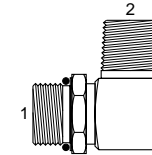
Part No.	Part No.
4MJ-4MB-4MJ	10MJ-12MB-10MJ
4MJ-6MB-4MJ	10MJ-16MB-8MJ
5MJ-4MB-5MJ	12MJ-8MB-12MJ
5MJ-5MB-5MJ	12MJ-10MB-12MJ
6MJ-4MB-6MJ	12MJ-12MB-6MJ
6MJ-5MB-6MJ	12MJ-12MB-8MJ
6MJ-6MB-4MJ	12MJ-12MB-10MJ
6MJ-6MB-6MJ	12MJ-12MB-12MJ
6MJ-8MB-6MJ	12MJ-12MB-16MJ
6MJ-12MB-8MJ	14MJ-14MB-14MJ
6MJ-12MB-12MJ	16MJ-12MB-16MJ
8MJ-6MB-4MJ	16MJ-14MB-16MJ
8MJ-6MB-8MJ	16MJ-16MB-16MJ
8MJ-8MB-8MJ	16MJ-16MB-20MJ
8MJ-10MB-8MJ	20MJ-16MB-20MJ
8MJ-12MB-6MJ	20MJ-20MB-20MJ
8MJ-12MB-8MJ	24MJ-20MB-24MJ
10MJ-8MB-10MJ	24MJ-24MB-24MJ
10MJ-10MB-10MJ	32MJ-32MB-32MJ

**90° Adjustable Elbow — Female**  
**MB-FP90 Series (6805-NWO)**



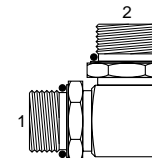
Part No.	Part No.
4MB-2FP90	12MB-8FP90
4MB-4FP90	12MB-12FP90
5MB-2FP90	14MB-12FP90
6MB-4FP90	16MB-12FP90
6MB-6FP90	16MB-16FP90
8MB-6FP90	20MB-20FP90
8MB-8FP90	24MB-24FP90
10MB-6FP90	32MB-32FP90
10MB-8FP90	

**90° Adjustable Elbow — Male**  
**MB-MP90 Series (6806-NWO)**



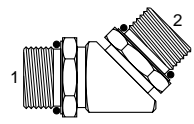
Part No.	Part No.
4MB-2MP90	12MB-12MP90
4MB-4MP90	12MB-16MP90
5MB-2MP90	14MB-12MP90
6MB-4MP90	16MB-12MP90
6MB-6MP90	16MB-16MP90
8MB-6MP90	20MB-20MP90
8MB-8MP90	24MB-24MP90
10MB-8MP90	32MB-32MP90

**90° O.R.B. Boss Connector**  
**MB-MB90 Series (6807-NWO)**



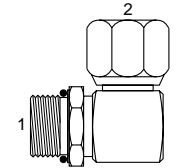
Part No.	Part No.
4MB-4MB90	12MB-12MB90
6MB-6MB90	16MB-14MB90
8MB-8MB90	16MB-16MB90
10MB-8MB90	20MB-20MB90
10MB-10MB90	24MB-24MB90

**45° O.R.B. Boss Connector**  
**MB-MB45 Series (6808-NWO)**



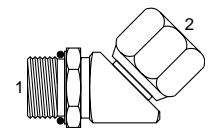
Part No.	Part No.
4MB-4MB45	16MB-16MB45

**90° O.R.B. Adjustable Elbow**  
**MB-FJX90 Series (6809-NWO)**



Part No.	Part No.
4MB-4FJX90	10MB-10FJX90
6MB-4FJX90	12MB-10FJX90
6MB-6FJX90	12MB-12FJX90
8MB-6FJX90	16MB-16FJX90
8MB-8FJX90	20MB-20FJX90
8MB-12FJX90	

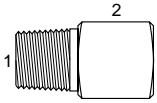
**45° O.R.B. Adjustable Elbow**  
**MB-FJX45 Series (6810-NWO)**



Part No.	Part No.
4MB-4FJX45	8MB-8FJX45
6MB-4FJX45	12MB-12FJX45
6MB-6FJX45	

## Pipe Fittings

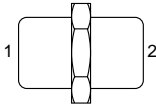
### 90° Dot Street Elbow MP-FP90 DOT Series (3051)



**Part No.**

- 2MP-2FP90 DOT
- 4MP-4FP90 DOT
- 6MP-6FP90 DOT
- 8MP-8FP90 DOT
- 12MP-12FP90 DOT

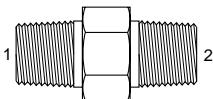
### Pipe Coupling — Female FP-FP Series (5000)



**Part No.**

- |          |           |
|----------|-----------|
| 2FP-2FP  | 12FP-8FP  |
| 4FP-2FP  | 12FP-12FP |
| 4FP-4FP  | 16FP-8FP  |
| 6FP-2FP  | 16FP-12FP |
| 6FP-4FP  | 16FP-16FP |
| 6FP-6FP  | 20FP-16FP |
| 8FP-2FP  | 20FP-20FP |
| 8FP-4FP  | 24FP-20FP |
| 8FP-6FP  | 24FP-24FP |
| 8FP-8FP  | 32FP-32FP |
| 12FP-6FP |           |

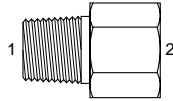
### Pipe Coupling — Male MP-MP Series (5404)



**Part No.**

- |           |           |
|-----------|-----------|
| 2MP-2MP   | 16MP-8MP  |
| 4MP-1MP   | 16MP-12MP |
| 4MP-2MP   | 16MP-16MP |
| 4MP-4MP   | 20MP-12MP |
| 6MP-2MP   | 20MP-16MP |
| 6MP-4MP   | 20MP-20MP |
| 6MP-6MP   | 24MP-12MP |
| 8MP-4MP   | 24MP-16MP |
| 8MP-6MP   | 24MP-20MP |
| 8MP-8MP   | 24MP-24MP |
| 12MP-4MP  | 32MP-12MP |
| 12MP-6MP  | 32MP-16MP |
| 12MP-8MP  | 32MP-20MP |
| 12MP-12MP | 32MP-24MP |
| 16MP-4MP  | 32MP-32MP |
| 16MP-6MP  | 40MP-40MP |

### Pipe Reducer Coupling MP-FP Series (5405)



**Part No.**

- |          |           |
|----------|-----------|
| 2MP-2FP  | 12MP-6FP  |
| 2MP-4FP  | 12MP-8FP  |
| 2MP-6FP  | 12MP-12FP |
| 2MP-8FP  | 12MP-16FP |
| 4MP-2FP  | 12MP-20FP |
| 4MP-4FP  | 16MP-6FP  |
| 4MP-6FP  | 16MP-8FP  |
| 4MP-8FP  | 16MP-12FP |
| 4MP-12FP | 16MP-16FP |
| 6MP-2FP  | 16MP-20FP |
| 6MP-4FP  | 16MP-24FP |
| 6MP-6FP  | 16MP-32FP |
| 6MP-8FP  | 20MP-16FP |
| 6MP-12FP | 20MP-20FP |
| 8MP-4FP  | 20MP-24FP |
| 8MP-6FP  | 20MP-32FP |
| 8MP-8FP  | 24MP-20FP |
| 8MP-12FP | 24MP-24FP |
| 8MP-16FP | 24MP-32FP |
| 12MP-4FP | 32MP-32FP |

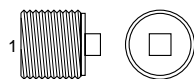
### Plug Cap FP-CAP Series (5406-C)



**Part No.**

- |         |          |
|---------|----------|
| 2FP-CAP | 12FP-CAP |
| 4FP-CAP | 16FP-CAP |
| 6FP-CAP | 20FP-CAP |
| 8FP-CAP |          |

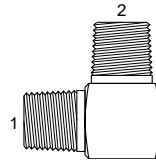
### Square Head Pipe Plug MP-PLUG Series (5406-SHP)



**Part No.**

- |           |           |
|-----------|-----------|
| 2MP-PLUG  | 16MP-PLUG |
| 4MP-PLUG  | 20MP-PLUG |
| 6MP-PLUG  | 24MP-PLUG |
| 8MP-PLUG  | 32MP-PLUG |
| 12MP-PLUG |           |

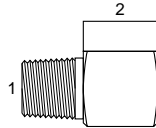
### 90° Pipe Elbow — Male MP-MP90 Series (5500)



**Part No.**

- |           |             |
|-----------|-------------|
| 2MP-2MP90 | 12MP-6MP90  |
| 4MP-2MP90 | 12MP-8MP90  |
| 4MP-4MP90 | 12MP-12MP90 |
| 6MP-2MP90 | 16MP-8MP90  |
| 6MP-4MP90 | 16MP-12MP90 |
| 6MP-6MP90 | 16MP-16MP90 |
| 8MP-4MP90 | 20MP-20MP90 |
| 8MP-6MP90 | 24MP-24MP90 |
| 8MP-8MP90 | 32MP-32MP90 |

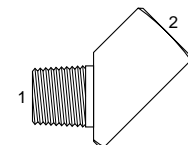
### 90° Street Elbow MP-FP90 Series (5502)



**Part No.**

- |            |             |
|------------|-------------|
| 2MP-2FP90  | 12MP-6FP90  |
| 2MP-4FP90  | 12MP-8FP90  |
| 2MP-6FP90  | 12MP-12FP90 |
| 4MP-2FP90  | 12MP-16FP90 |
| 4MP-4FP90  | 16MP-8FP90  |
| 4MP-6FP90  | 16MP-12FP90 |
| 6MP-4FP90  | 16MP-16FP90 |
| 6MP-6FP90  | 16MP-20FP90 |
| 6MP-8FP90  | 20MP-16FP90 |
| 8MP-4FP90  | 20MP-20FP90 |
| 8MP-6FP90  | 20MP-24FP90 |
| 8MP-8FP90  | 24MP-24FP90 |
| 8MP-12FP90 | 32MP-32FP90 |

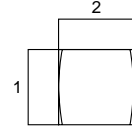
### 45° Street Elbow MP-FP45 Series (5503)



**Part No.**

- |           |             |
|-----------|-------------|
| 2MP-2FP45 | 12MP-12FP45 |
| 2MP-4FP45 | 16MP-16FP45 |
| 4MP-4FP45 | 20MP-20FP45 |
| 6MP-6FP45 | 24MP-24FP45 |
| 8MP-8FP45 | 32MP-32FP45 |

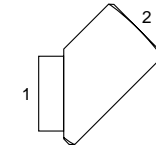
### 90° Pipe Elbow — Female FP-FP90 Series (5504)



**Part No.**

- |            |             |
|------------|-------------|
| 2FP-2FP90  | 12FP-12FP90 |
| 4FP-2FP90  | 16FP-8FP90  |
| 4FP-4FP90  | 16FP-12FP90 |
| 6FP-4FP90  | 16FP-16FP90 |
| 6FP-6FP90  | 20FP-12FP90 |
| 8FP-4FP90  | 20FP-16FP90 |
| 8FP-6FP90  | 20FP-20FP90 |
| 8FP-8FP90  | 24FP-20FP90 |
| 12FP-6FP90 | 24FP-24FP90 |
| 12FP-8FP90 | 32FP-32FP90 |

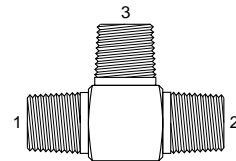
### 45° Pipe Elbow — Female MP-FP45 Series (5505)



**Part No.**

- |           |             |
|-----------|-------------|
| 2FP-2FP45 | 12FP-12FP45 |
| 4FP-4FP45 | 16FP-16FP45 |
| 6FP-6FP45 | 20FP-20FP45 |
| 8FP-8FP45 |             |

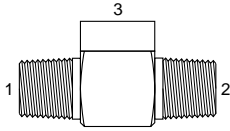
### Pipe Tee — Male MP-MP-MP Series (5600)



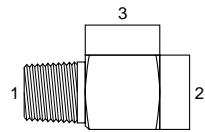
**Part No.**

- 2MP-2MP-2MP
- 4MP-4MP-4MP
- 6MP-6MP-6MP
- 8MP-8MP-8MP
- 12MP-12MP-12MP
- 16MP-16MP-16MP
- 20MP-20MP-20MP
- 32MP-32MP-32MP

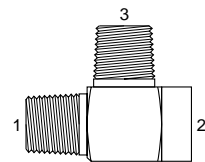
Pipe Fittings — *continued*

 Pipe Tee  
 — **Female Branch**  
 MP-MP-FP Series (5601)


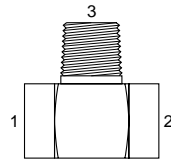
Part No.	Part No.
2MP-2MP-2FP	12MP-12MP-12FP
4MP-4MP-4FP	16MP-16MP-16FP
6MP-6MP-6FP	20MP-20MP-20FP
8MP-8MP-8FP	32MP-32MP-32FP

 Service Tee  
 — **Female Branch**  
 MP-FP-FP Series (5602)


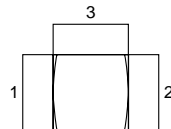
Part No.	Part No.
2MP-2FP-2FP	12MP-12FP-12FP
2MP-4FP-4FP	16MP-16FP-16FP
4MP-4FP-4FP	20MP-20FP-20FP
6MP-6FP-6FP	24MP-24FP-24FP
8MP-8FP-8FP	32MP-32FP-32FP

 Pipe Tee  
 — **Male Branch**  
 MP-FP-MP Series (5603)


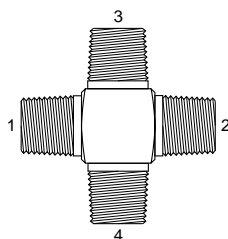
Part No.	Part No.
2MP-2FP-2MP	12MP-12FP-12MP
4MP-4FP-4MP	16MP-16FP-16MP
6MP-6FP-6MP	20MP-20FP-20MP
8MP-8FP-8MP	24MP-24FP-24MP
12MP-12FP-8MP	32MP-32FP-32MP

 Pipe Tee  
 — **Male Branch**  
 FP-FP-MP Series (5604)


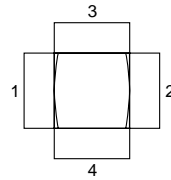
Part No.	Part No.
2FP-2FP-2MP	12FP-12FP-12MP
4FP-4FP-4MP	16FP-16FP-16MP
6FP-6FP-6MP	20FP-20FP-20MP
6FP-6FP-8MP	24FP-24FP-24MP
8FP-8FP-8MP	32FP-32FP-32MP
12FP-12FP-8MP	

 Pipe Tee  
 — **Female**  
 FP-FP-FP Series (5605)


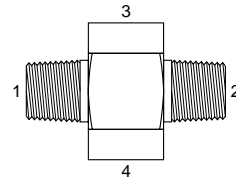
Part No.	Part No.
2FP-2FP-2FP	12FP-12FP-12FP
4FP-4FP-2FP	16FP-16FP-16FP
4FP-4FP-4FP	20FP-20FP-16FP
4FP-4FP-6FP	20FP-20FP-20FP
6FP-6FP-6FP	24FP-24FP-24FP
6FP-6FP-8FP	32FP-32FP-32FP
8FP-8FP-8FP	

 Pipe Cross  
 — **Male**  
 MP-MP-MP-MP Series (5650)


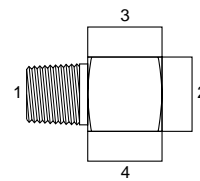
Part No.
4MP-4MP-4MP-4MP

 Pipe Cross  
 — **Female**  
 FP-FP-FP-FP Series (5652)


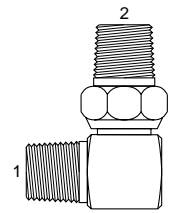
Part No.
2FP-2FP-2FP-2FP
4FP-4FP-4FP-4FP
6FP-6FP-6FP-6FP
8FP-8FP-8FP-8FP
12FP-12FP-12FP-12FP
16FP-16FP-16FP-16FP
20FP-20FP-20FP-20FP
24FP-24FP-24FP-24FP
32FP-32FP-32FP-32FP

 Pipe Cross  
 — **Female Branch**  
 MP-MP-FP-FP Series (5653)


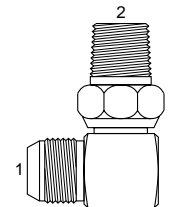
Part No.
4MP-4MP-4FP-4FP

 Pipe Cross  
 — **Female Branch**  
 MP-FP-FP-FP Series (5655)


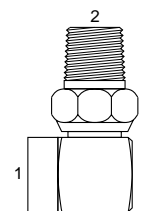
Part No.
4MP-4FP-4FP-4FP
6MP-6FP-6FP-6FP
8MP-8FP-8FP-8FP
12MP-12FP-12FP-12FP

 90° Swivel  
 Pipe Elbow  
 MP-MPX Series (5700)


Part No.	Part No.
4MP-4MPX90	8MP-8MPX90
6MP-6MPX 90	12MP-12MPX90

 90° Swivel Elbow  
 MJ-MPX Series (5701)


Part No.	Part No.
4MJ-4MPX90	8MJ-8MPX90
6MJ-4MPX90	10MJ-8MPX90
6MJ-6MPX90	12MJ-12MPX90
8MJ-6MPX90	

 90° Swivel  
 Pipe Elbow  
 FP-MPX Series (5702)


Part No.	Part No.
4FP-4MPX90	8FP-8MPX90
6FP-6MPX90	12FP-12MPX90

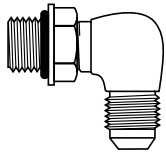
## BSP (British Standard Pipe) Thread Adapters

Male BSPP  
with O-Ring to Male JIC



BSPP Thread (In.)	JIC Thread (In.)	Part No.
1/8-28	7/16-20	2MBSPPOR-4MJ
1/4-19	7/16-20	4MBSPPOR-4MJ
1/4-19	9/16-18	4MBSPPOR-6MJ
3/8-19	7/16-20	6MBSPPOR-4MJ
3/8-19	9/16-18	6MBSPPOR-6MJ
3/8-19	3/4-16	6MBSPPOR-8MJ
1/2-14	9/16-18	8MBSPPOR-6MJ
1/2-14	3/4-16	8MBSPPOR-8MJ
1/2-14	1 1/8-12	8MBSPPOR-12MJ
3/4-14	1 1/8-12	12MBSPPOR-12MJ
1-11	1 5/8-12	16MBSPPOR-16MJ
1 1/4-11	1 5/8-12	20MBSPPOR-20MJ

Male BSPP with  
O-Ring to Male JIC — 90°



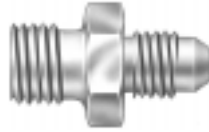
BSPP Thread (In.)	JIC Thread (In.)	Part No.
3/8-19	9/16-18	6MBSPP-6MJ90
1/2-14	3/4-16	8MBSPP-8MJ90
3/4-14	1 1/8-12	12MBSPP-12MJ90

Male BSPP to NPTF Solid  
Male (Straight)



BSPP Thread (In.)	JIC Thread (In.)	Part No.
1/4-19	1/4-18	4MBSPP-4MP
3/8-19	3/8-18	6MBSPP-6MP
1/2-14	1/2-14	8MBSPP-8MP
3/4-14	3/4-14	12MBSPP-12MP
1-11	1-11 1/2	16MBSPP-16MP

Male BSPP to  
Male JIC (37° Flare)



BSPP Thread (In.)	JIC Thread (In.)	Part No.
1/4-19	7/16-20	4MBSPP-4MJ
3/8-19	9/16-18	6MBSPP-6MJ
1/2-14	3/4-16	8MBSPP-8MJ
5/8-14	7/8-14	10MBSPP-10MJ
3/4-14	1 1/8-12	12MBSPP-12MJ
1-11	1 5/8-12	16MBSPP-16MJ

Male BSPP to Swivel  
Female JIC (37° Flare)



BSPP Thread (In.)	JIC Thread (In.)	Part No.
1/4-19	7/16-20	4MBSPP-4FJX
3/8-19	9/16-18	6MBSPP-6FJX
1/2-14	3/4-16	8MBSPP-8FJX
5/8-14	7/8-14	10MBSPP-10FJX
3/4-14	1 1/8-12	12MBSPP-12FJX
1-11	1 5/8-12	16MBSPP-16FJX

Male BSPP to  
Female BSPP Swivel



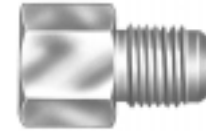
MBSPP Thread (In.)	FBSPPX Thread (In.)	Part No.
1/4-19	1/4-19	4MBSPP-4FBSPPX
3/8-19	3/8-19	6MBSPP-6FBSPPX
1/2-14	1/2-14	8MBSPP-8FBSPPX
5/8-14	5/8-14	10MBSPP-10FBSPPX
3/4-14	3/4-14	12MBSPP-12FBSPPX
1-11	1-11	16MBSPP-16FBSPPX

Male BSPT (Tapered)  
to Male JIC (37° Flare)



MBSPT Thread (In.)	JIC Thread (In.)	Part No.
1/8-28	7/16-20	2MBSPT-4MJ
1/4-19	7/16-20	4MBSPT-4MJ
3/8-19	9/16-18	6MBSPT-6MJ
1/2-14	3/4-16	8MBSPT-8MJ
1/2-14	7/8-14	8MBSPT-10MJ
3/4-14	1 1/8-12	12MBSPT-12MJ
1-11	1 5/8-12	16MBSPT-16MJ

Female BSPP to  
Male JIC (37° Flare)



FBSPP Thread (In.)	JIC Thread (In.)	Part No.
1/8-28	7/16-20	2FBSPP-4MJ
1/4-19	7/16-20	4FBSPP-4MJ
1/4-19	9/16-18	4FBSPP-6MJ
3/8-19	9/16-18	6FBSPP-6MJ
1/2-14	3/4-16	8FBSPP-8MJ
3/4-14	1 1/8-12	12FBSPP-12MJ
1-11	1 5/8-12	16FBSPP-16MJ
1 1/4-11	1 5/8-12	20FBSPP-20MJ

Female BSPP Swivel to  
Male JIC (37° Flare)



BSPP Thread (In.)	JIC Thread (In.)	Part No.
1/4-19	7/16-20	4FBSPPX-4MJ
3/8-19	9/16-18	6FBSPPX-6MJ
1/2-14	3/4-16	8FBSPPX-8MJ
5/8-14	7/8-14	10FBSPPX-10MJ
3/4-14	1 1/8-12	12FBSPPX-12MJ
1-11	1 5/8-12	16FBSPPX-16MJ

BSP (British Standard Pipe) Thread Adapters — *continued*

 Female BSPP Swivel to  
 Female JIC (37° Flare)  
 Swivel


BSPP Thread (In.)	JIC Thread (In.)	Part No.
1/4-19	7/16-20	4FBSPPX-4FJX
3/8-19	9/16-18	6FBSPPX-6FJX
1/2-14	3/4-16	8FBSPPX-8FJX
5/8-14	7/8-14	10FBSPPX-10FJX
3/4-14	1 1/16-12	12FBSPPX-12FJX
1-11	1 5/16-12	16FBSPPX-16FJX

## Metric Thread Adapters

 Male Metric with O-Ring  
 to Male JIC (37° Flare)


Male Metric Thread	JIC (MJ) Thread (In.)	Part No.
M10 x 1.0	7/16-20	10MM-4MJ
M12 x 1.5	7/16-20	12MM-4MJ
M14 x 1.5	9/16-18	14MM-6MJ
M16 x 1.5	9/16-18	16MM-6MJ
M16 x 1.5	3/4-16	16MM-8MJ
M18 x 1.5	3/4-16	18MM-8MJ
M18 x 1.5	7/8-14	18MM-10MJ
M20 x 1.5	7/8-14	20MM-10MJ
M22 x 1.5	7/8-14	22MM-10MJ
M22 x 1.5	1 1/16-12	22MM-12MJ
M27 x 2.0	1 1/16-12	27MM-12MJ
M33 x 2.0	1 5/16-12	33MM-16MJ
M42 x 2.0	1 5/16-12	42MM-20MJ

 Male DIN to Male JIC  
 (37° Flare) (Light Series)


DIN Male Metric Thread	DIN Tube* O.D. (mm)	JIC Male Thread (In.)	Part No.
M14 x 1.5	8	7/16-20	8MDL-4MJ
M16 x 1.5	10	9/16-18	10MDL-6MJ
M18 x 1.5	12	9/16-18	12MDL-6MJ
M22 x 1.5	15	3/4-16	15MDL-8MJ
M26 x 1.5	18	7/8-14	18MDL-10MJ
M30 x 2.0	22	1 1/16-12	22MDL-12MJ
M36 x 2.0	28	1 5/16-12	28MDL-16MJ

\*DIN light and heavy series couplings can be distinguished from each other by the tube O.D. Heavy series have a smaller O.D. tube than the light.

 Male DIN to Male JIC  
 (37° Flare) (Heavy Series)


DIN Male Metric Thread	DIN Tube* O.D. (mm)	JIC Male Thread (In.)	Part No.
M18 x 1.5	10	7/16-20	10MDH-4MJ
M22 x 1.5	14	9/16-18	14MDH-6MJ
M24 x 1.5	16	3/4-16	16MDH-8MJ
M30 x 2.0	20	7/8-14	20MDH-10MJ
M36 x 2.0	25	1 1/16-12	25MDH-12MJ
M42 x 2.0	30	1 5/16-12	30MDH-16MJ

\*DIN light and heavy series couplings can be distinguished from each other by the tube O.D. Heavy series have a smaller O.D. tube than the light.

Metric Thread Adapters — *continued*

Female DIN Swivel to Male JIC (37° Flare) (Light Series)



DIN Female Metric Thread	DIN Tube* O.D. (mm)	JIC (MJ) Thread (In.)	Part No.
M14 x 1.5	8	7/16-20	8FDLX-4MJ
M16 x 1.5	10	9/16-18	10FDLX-6MJ
M18 x 1.5	12	9/16-18	12FDLX-6MJ
M22 x 1.5	15	3/4-16	15FDLX-8MJ
M30 x 2.0	22	1 1/8-12	22FDLX-12MJ
M36 x 2.0	28	1 3/8-12	28FDLX-16MJ

\*DIN light and heavy series couplings can be distinguished from each other by the tube O.D. Heavy series have a smaller O.D. tube than the light.

Female DIN Swivel to Male JIC (37° Flare) (Heavy Series)



DIN Female Metric Thread	DIN Tube* O.D. (mm)	JIC (MJ) Thread (In.)	Part No.
M18 x 1.5	10	7/16-20	10FDHX-4MJ
M16 x 1.5	12	1/2-20	12FDHX-5MJ
M22 x 1.5	14	9/16-18	14FDHX-6MJ
M24 x 1.5	16	3/4-16	16FDHX-8MJ
M30 x 2.0	20	7/8-14	20FDHX-10MJ
M36 x 2.0	25	1 1/8-12	25FDHX-12MJ
M42 x 2.0	30	1 5/8-12	30FDHX-16MJ
M52 x 2.0	38	1 5/8-12	38FDHX-20MJ

\*DIN light and heavy series couplings can be distinguished from each other by the tube O.D. Heavy series have a smaller O.D. tube than the light.

Flat-Face O-Ring Plugs, Caps and Adapters

Pressure Rated at 6000 psi Maximum (-4 through -16) — O-Rings Included

Flat-Face O-Ring Cap



Thread Size (In.)	Part No.
9/16-18	4FFOR-CAP
1 1/8-16	6FFOR-CAP
1 3/8-16	8FFOR-CAP
1-14	10FFOR-CAP
1 3/8-12	12FFOR-CAP
1 7/8-12	16FFOR-CAP
1 1/2-12	20FFOR-CAP
2-12	24FFOR-CAP

Flat-Face O-Ring Plug



Thread Size (In.)	Part No.
9/16-18	4MFFOR-PLUG
1 1/8-16	6MFFOR-PLUG
1 3/8-16	8MFFOR-PLUG
1-14	10MFFOR-PLUG
1 3/8-12	12MFFOR-PLUG
1 7/8-12	16MFFOR-PLUG
1 1/2-12	20MFFOR-PLUG
2-12	24MFFOR-PLUG

Male Flat-Face O-Ring to NPTF Solid Male



"A" Thread Size (In.)	"B" Thread Size (In.)	Part No.
9/16-18	7/8-27	4MFFOR-2MP
9/16-18	1/4-18	4MFFOR-4MP
9/16-18	3/8-18	4MFFOR-6MP
1 1/8-16	1/4-18	6MFFOR-4MP
1 1/8-16	3/8-18	6MFFOR-6MP
1 1/8-16	1/2-14	6MFFOR-8MP
1 3/8-16	3/8-18	8MFFOR-6MP
1 3/8-16	1/2-14	8MFFOR-8MP
1-14	1/2-14	10MFFOR-8MP
1 3/8-12	3/4-14	12MFFOR-12MP
1 7/8-12	1-11 1/2	16MFFOR-16MP
1 1/2-12	1 1/4-11 1/2	20MFFOR-20MP*

\*Pressure rated at 4000 psi maximum.

Male Flat-Face O-Ring to Male O-Ring Boss Solid



"A" Thread Size (In.)	"B" Thread Size (In.)	Part No.
9/16-18	7/16-20	4MFFOR-4MB
9/16-18	9/16-18	4MFFOR-6MB
9/16-18	3/4-16	4MFFOR-8MB
1 1/8-16	9/16-18	6MFFOR-6MB
1 1/8-16	3/4-16	6MFFOR-8MB
1 1/8-16	7/8-14	6MFFOR-10MB
1 3/8-16	9/16-18	8MFFOR-6MB
1 3/8-16	3/4-16	8MFFOR-8MB
1 3/8-16	7/8-14	8MFFOR-10MB
1 3/8-16	1 1/8-12	8MFFOR-12MB
1-14	7/8-14	10MFFOR-10MB
1 3/8-12	3/4-16	12MFFOR-8MB
1 3/8-12	1 1/8-12	12MFFOR-12MB
1 3/8-12	1 5/8-12	12MFFOR-16MB
1 7/8-12	1 1/8-12	16MFFOR-12MB
1 7/8-12	1 5/8-12	16MFFOR-16MB
1 7/8-12	1 5/8-12	16MFFOR-16MBL
1 1/2-12	1 5/8-12	20MFFOR-16MB*
1 1/2-12	1 5/8-12	20MFFOR-20MB*
1 1/2-12	1 5/8-12	20MFFOR-20MBL*

\*Pressure rated at 4000 psi maximum.

Flat-Face O-Rings Adapters — *continued*

Pressure Rated at 6000 psi Maximum (-4 through -16) — O-Rings Included

Male Flat-Face O-Ring to Male O-Ring Boss — 45°



“A” Thread Size (In.)	“B” Thread Size (In.)	Part No.
9/16-18	9/16-18	4MFFOR-6MB45
1 1/16-16	9/16-18	6MFFOR-6MB45
1 3/16-16	7/8-14	8MFFOR-10MB45

Male Flat-Face O-Ring on Run Male O-Ring Boss (Tee)



“A” Thread Size (In.)	“B” Thread Size (In.)	Part No.
1 1/16-16	9/16-18	6MFFOR-6MFFOR-6MB
1 3/16-12	1 1/16-12	12MFFOR-12MFFOR-12MB
1 7/16-12	1 5/16-12	16MFFOR-16MFFOR-16MB

Female Flat-Face O-Ring to Male JIC (37° Flare)



“A” Thread Size (In.)	“B” Thread Size (In.)	Part No.
9/16-18	7/16-20	4FFORX-4MJ
1 1/16-16	9/16-18	6FFORX-6MJ
1 3/16-16	3/4-16	8FFORX-8MJ
1-14	7/8-14	10FFORX-10MJ
1 3/16-12	1 1/16-12	12FFORX-12MJ
1 7/16-12	1 5/16-12	16FFORX-16MJ

Male Flat-Face O-Ring to Male O-Ring Boss Solid — 90°



“A” Thread Size (In.)	“B” Thread Size (In.)	Part No.
9/16-18	7/16-20	4MFFOR-4MB90
1 1/16-16	7/16-20	6MFFOR-4MB90
1 1/16-16	9/16-18	6MFFOR-6MB90
1 1/16-16	7/8-14	6MFFOR-10MB90
1 3/16-16	3/4-16	8MFFOR-8MB90
1 3/16-16	7/8-14	8MFFOR-10MB90
1 3/16-16	1 1/16-12	8MFFOR-12MB90
1-14	3/4-16	10MFFOR-8MB90
1-14	7/8-14	10MFFOR-10MB90
1 3/16-12	1 1/16-12	12MFFOR-12MB90
1 7/16-12	1 1/16-12	16MFFOR-12MB90
1 7/16-12	1 5/16-12	16MFFOR-16MB90
1 1 1/16-12	1 5/16-12	20MFFOR-20MB90*

Male Flat-Face O-Ring to Male O-Ring Boss on Run — Male Flat-Face O-Ring Branch (Tee)



“A” Thread Size (In.)	“B” Thread Size (In.)	Part No.
1 1/16-16	9/16-18	6MFFOR-6MB-6MFFOR
1-14	7/8-14	10MFFOR-10MB-10MFFOR

Male Flat-Face O-Ring to Female Flat-Face O-Ring Swivel — 90°



“A” Thread Size (In.)	“B” Thread Size (In.)	Part No.
1 1/16-16	1 1/16-16	6MFFOR-6FFORX90

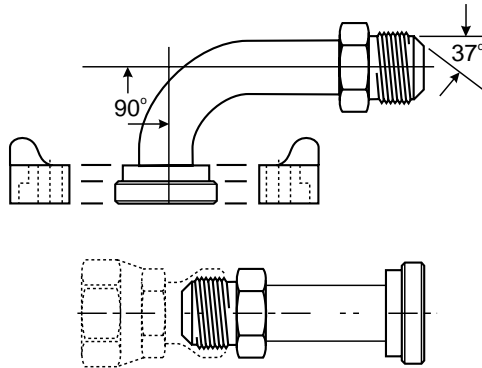
Male Flat-Face O-Ring to Male Flat-Face O-Ring on Run — Female Flat-Face O-Ring Branch (Tee)



Thread Size (In.)	Part No.
9/16-18	4MFFOR-4MFFOR-4FFORX
1 1/16-16	6MFFOR-6MFFOR-6FFORX
1 3/16-16	8MFFOR-8MFFOR-8FFORX

\*Pressure rated at 4000 psi maximum.

## O-Ring Flange to JIC (37° Flare) Adapters SAE 100R2 Pressure Maximum



When hose replacement is required, disconnect between adapter and hose coupling. In this way, adapter O-ring seal will not be broken. Attach Female JIC (37° Flare) Swivel Hose Couplings. This permits complete lineup of offset bends resulting in fast and positive replacement in the field without special tools. It also eliminates need for large inventory of costly ready-made hose assemblies.

### O-Ring Flange to Male JIC (37° Flare) — Straight (Code 61—SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
1/2	3/4-16	.265	8FL-8MJ
3/4	1 1/8-12	.265	12FL-12MJ
1	1 1/4-12	.315	16FL-16MJ
1 1/4	1 5/8-12	.315	20FL-20MJ
1 1/2	1 7/8-12	.315	24FL-24MJ
2	2 1/2-12	.375	32FL-32MJ

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

### O-Ring Flange to Male JIC (37° Flare) — 45° (Code 61—SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
1/2	3/4-16	.265	8FL-8MJ45
3/4	1 1/8-12	.265	12FL-12MJ45
1	1 1/4-12	.315	16FL-16MJ45
1 1/4	1 5/8-12	.315	20FL-20MJ45
1 1/2	1 7/8-12	.315	24FL-24MJ45
2	2 1/2-12	.375	32FL-32MJ45

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

### O-Ring Flange to Male JIC (37° Flare) — 90° (Code 61—SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
1/2	3/4-16	.265	8FL-8MJ90
3/4	1 1/8-12	.265	12FL-12MJ90
1	1 1/4-12	.315	16FL-16MJ90
1 1/4	1 5/8-12	.315	20FL-20MJ90
1 1/2	1 7/8-12	.315	24FL-24MJ90
2	2 1/2-12	.375	32FL-32MJ90

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

## High Pressure Adapter 5000 psi Maximum

*No Braze Joints, Solid One-piece Construction for increased Reliability*

O-Ring Flange to Male  
 JIC (37° Flare) — Straight  
 (Code 61–SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
3/4	1 1/8-12	.265	12FL5K-12MJ
1	1 1/8-12	.315	16FL5K-12MJ
1	1 5/8-12	.315	16FL5K-16MJ
1	1 5/8-12	.315	16FL5K-20MJ
1 1/4	1 5/8-12	.315	20FL4K-16MJ*
1 1/4	1 5/8-12	.315	20FL4K-20MJ*

\*Rated at 4000 psi maximum.

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

O-Ring Flange to Male  
 JIC (37° Flare) — 45° Bent  
 Tube (Code 61–SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
3/4	1 1/8-12	.265	12FL5K-12MJ45
1	1 5/8-12	.315	16FL5K-16MJ45

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

O-Ring Flange to Male  
 JIC (37° Flare) — 90° Bent  
 Tube (Code 61–SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
3/4	1 1/8-12	.265	12FL5K-12MJ90*
1	1 1/8-12	.315	16FL5K-12MJ90
1	1 5/8-12	.315	16FL5K-16MJ90
1 1/4	1 5/8-12	.315	20FL4K-16MJ90*

\*Rated at 4000 psi maximum.

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

## High Pressure Adapter 6000 psi Maximum

*No Braze Joints, Solid One-piece Construction for increased Reliability*

O-Ring Flange to Male  
 JIC (37° Flare) — Straight  
 (Code 62–SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
3/4	1 1/8-12	.345	12FLH6K-12MJ
1	1 1/8-12	.375	16FLH6K-12MJ
1	1 5/8-12	.375	16FLH6K-16MJ
1	1 5/8-12	.375	16FLH6K-20MJ
1 1/4	1 5/8-12	.405	20FLH6K-16MJ
1 1/4	1 5/8-12	.405	20FLH6K-20MJ
1 1/2	1 5/8-12	.495	24FLH6K-24MJ

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

O-Ring Flange to Male  
 JIC (37° Flare) — 45° Bent  
 Tube (Code 62–SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
3/4	1 1/8-12	.345	12FLH6K-12MJ45
1	1 5/8-12	.375	16FLH6K-16MJ45
1 1/4	1 5/8-12	.405	20FLH6K-20MJ45

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

O-Ring Flange to Male  
 JIC (37° Flare) — 90° Bent  
 Tube (Code 62–SAE J518)



Nom. Fig. Size (In.)	JIC Male Thread (In.)	Fig. Head Thickness (In.)	Part No.
3/4	1 1/8-12	.345	12FLH6K-12MJ90
3/4	1 1/8-12	.345	12FLH6K-16MJ90
1	1 1/8-12	.375	16FLH6K-12MJ90
1	1 5/8-12	.375	16FLH6K-16MJ90
1	1 5/8-12	.375	16FLH6K-20MJ90
1 1/4	1 5/8-12	.405	20FLH6K-16MJ90
1 1/4	1 5/8-12	.405	20FLH6K-20MJ90

Flange halves and O-ring if required are to be ordered by part number in addition to adapter. See Flange Half Sets.

## Banjo Fittings with Barbed Connections for Hose or Polyamide Tube

### Banjo Fittings



Hose/ Tube I.D. (In.)	Bolt Size Metric	For Rubber Hose Part No.	For Polyamide Tube Part No.
¼	M10 x 1.0	7610-04R-2	7610-04P-2
¼	M12 x 1.5	7612-04R-2	7612-04P-2
¼	M14 x 1.5	7614-04R-2	7614-04P-2
¼	M16 x 1.5	7616-04R-2	7616-04P-2
¼	M18 x 1.5	—	7618-04P-2
⅝	M12 x 1.5	7612-05R-2	7612-05P-2
⅝	M14 x 1.5	7614-05R-2	7614-05P-2
⅝	M16 x 1.5	7616-05R-2	7616-05P-2
⅝	M18 x 1.5	7618-05R-2	7618-05P-2
¾	M22 x 1.5	—	7622-05P-2
¾	M14 x 1.5	—	7614-06P-2
¾	M16 x 1.5	7616-06R-2	7616-06P-2
¾	M18 x 1.5	7618-06R-2	—
1	M18 x 1.5	7618-08R-2	—
1	M22 x 1.5	7622-08R-2	7622-08P-2

### Double Banjo Fittings



Hose/ Tube I.D. (In.)	Bolt Size Metric	For Rubber Hose Part No.	For Polyamide Tube Part No.
⅝	M8 x 1.0	8008-02R-2	8008-02P-2*
¼	M10 x 1.0	8010-04R-2	8010-04P-2*
¼	M12 x 1.5	8012-04R-2	8012-04P-2*
⅝	M14 x 1.5	8014-05R-2	8014-05P-2*
¾	M16 x 1.5	8016-06R-2	8016-06P-2*

\*Not stocked, special order only.

### Seals\*



Bonded  
Seal



Copper  
Washer

Bolt Size (mm)	Bonded Seal Part No.	Copper Washer Part No.
M10	400-008-4490	082109
M12	400-021-4490	082149
M14	400-010-4490	082189
M16	400-011-4490	082229
M18	400-024-4490	082309
M22	400-026-4490	082429

\*Two seals required for Single Banjo. Three seals for Double Banjo.

### Optional Metric/NPT Adapter



Male NPTF (In.)	Female Metric Thread	Part No.
¾	M10 x 1.0	MP 1006
½	M12 x 1.5	MP 1208
½	M14 x 1.5	MP 1408
¾	M16 x 1.5	MP 1612
¾	M18 x 1.5	MP 1812
1	M22 x 1.5	MP 2216

### Banjo Bolt/Tube Assembly



Male Metric Thread	Tube O.D. x Wall (In.)	Part No.
M10 x 1.0	¼ x .030	SBT 10-L
M12 x 1.5	⅝ x .032	SBT 12-L
M14 x 1.5	¾ x .035	SBT 14-L
M16 x 1.5	1 x .032	SBT 16-L
M18 x 1.5	1 ⅝ x .035	SBT 18-L
M22 x 1.5	2 x .035	SBT 22-L

### Banjo Bolt



Male Metric Thread	Length (mm)	Hex (mm)	Part No.
M8 x 1.0	17	12	BJS-08x1.0
M10 x 1.0	19	14	BJS-10x1.0
M12 x 1.5	24	17	BJS-12x1.5
M14 x 1.5	26	19	BJS-14x1.5
M16 x 1.5	28	22	BJS-16x1.5
M18 x 1.5	32	24	BJS-18x1.5
M22 x 1.5	39	27	BJS-22x1.5

### Double Banjo Bolt



Male Metric Thread	Length (mm)	Hex (mm)	Part No.
M10 x 1.0	30	14	DBJS-10x1.0
M12 x 1.5	38	17	DBJS-12x1.5
M14 x 1.5	42	19	DBJS-14x1.5
M16 x 1.5	46	22	DBJS-16x1.5
M18 x 1.5	54	24	DBJS-18x1.5
M22 x 1.5	66	27	DBJS-22x1.5

### Double Banjo Bolt Assemblies\*



\*Assemblies are available on special order from the Summers Rubber Co.