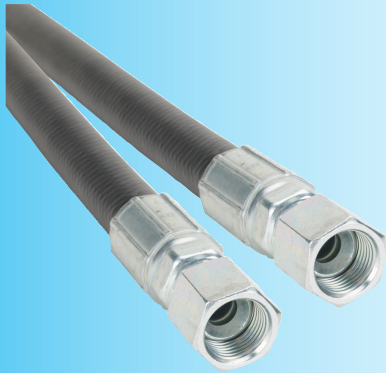




# PROFLEX™ Hydraulic Hoses



## Overview

Gates ProFlex hydraulic hose assemblies are lighter and more flexible than many hoses in the industry. Thousands of industrial facilities, global operations and OE manufacturers choose Gates ProFlex hose.

## Features

- Synthetic black rubber
- Reinforced braided steel wire
- Qualified for 200,000 cycles impulse life with MEGACRIMP, PCK, GB (-8, -12 & -16) couplings

Part No. 1/2PFX-24IN-FJXEE

### ProFlex Hydraulic Hoses Selection

Part No.	I.D. in (mm)	O.D. in (mm)	Fitting	Assembly Length (ft)	Weight (lbs)	Price
<u>1/4PFX-24IN-FJXEE</u>	1/4 (6.3)	0.52 (13.2)	(2) -4 female straight JIC 37° fittings	2	0.60	\$29.00
<u>1/4PFX-48IN-FJXEE</u>				4	0.96	\$33.00
<u>1/4PFX-72IN-FJXEE</u>				6	1.31	\$37.00
<u>1/4PFX-96IN-FJXEE</u>				8	1.67	\$42.00
<u>1/4PFX-120IN-FJXEE</u>				10	2.02	\$46.00
<u>3/8PFX-24IN-FJXEE</u>	3/8 (9.5)	0.65 (16.5)	(2) -6 female straight JIC 37° fittings	2	0.86	\$33.00
<u>3/8PFX-48IN-FJXEE</u>				4	1.34	\$39.00
<u>3/8PFX-72IN-FJXEE</u>				6	1.82	\$44.00
<u>3/8PFX-96IN-FJXEE</u>				8	2.30	\$50.00
<u>3/8PFX-120IN-FJXEE</u>				10	2.79	\$55.00
<u>1/2PFX-24IN-FJXEE</u>	1/2 (12.7)	0.81 (20.5)	(2) -8 female straight JIC 37° fittings	2	1.26	\$42.00
<u>1/2PFX-48IN-FJXEE</u>				4	1.91	\$49.00
<u>1/2PFX-72IN-FJXEE</u>				6	2.62	\$55.00
<u>1/2PFX-96IN-FJXEE</u>				8	3.16	\$61.00
<u>1/2PFX-120IN-FJXEE</u>				10	3.87	\$68.00
<u>3/4PFX-24IN-FJXEE</u>	3/4 (19.0)	1.08 (27.4)	(2) -12 female straight JIC 37° fittings	2	2.18	\$81.00
<u>3/4PFX-48IN-FJXEE</u>				4	3.24	\$91.00
<u>3/4PFX-72IN-FJXEE</u>				6	4.20	\$102.00
<u>3/4PFX-96IN-FJXEE</u>				8	5.32	\$113.00
<u>3/4PFX-120IN-FJXEE</u>				10	7.74	\$124.00

### ProFlex Hydraulic Hose Specifications

Hose Size	DIN (Ref)	Working Pressure PSI (MPa)	Burst Pressure PSI (MPa)	Min. Bend Radius in (mm)
-4	6	5,800 (39.9)	23,000 (160.0)	1.9 (48.2)
-6	10	4,800 (33.1)	19,200 (132.4)	2.5 (64.0)
-8	12	4,000 (27.6)	16,000 (110.3)	3.5 (88.9)
-12	19	3,125 (21.5)	12,500 (86.2)	4.7 (119.3)



# Hydraulic Hoses - Overview



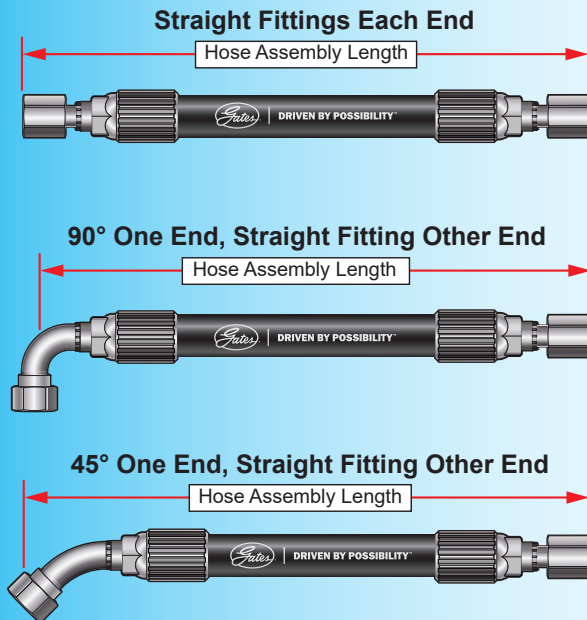
Gates hoses and fittings are some of the best in the industry. Royal Brass and Hose is a leading manufacturer of Gates hose assemblies in the USA. AutomationDirect.com offers both the ProFlex™ and MXT™ lines of hoses, both with Gates Megacrimp fittings. Adapters are nickel-plated steel and come in straight or 90° elbows. JIC, o-ring boss and o-ring face connection styles are available.

## Features

- Hose diameters from 1/4 inch (-4 size) to 3/4 inch (-12 size)
- Assembly lengths from 2 feet to 10 feet
- Straight female JIC swivel fittings on both ends
- Meets or exceeds SAE 100R2/EN 857 2SC/EN 853 2SN, SAE 100R16, SAE 100R17
- ProFlex tested to 200,000 cycles
- MXT tested to **600,000** cycles
- All Requirements as per SAE J514 & 6149-3

## Applications

- Manufacturing
- Machine tools
- Machinery
- Construction
- Mining
- Agriculture



### SAE Thread Identification

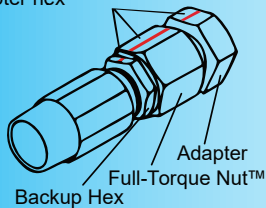
Fitting Size	Dash Size	Thread Size
SAE 4	-04	7/16-20
SAE 5	-05	1/2-20
SAE 6	-06	9/16-18
SAE 8	-08	3/4-16
SAE 10	-10	7/8-14
SAE 12	-12	1 1/16-12

### Flats Method Installation

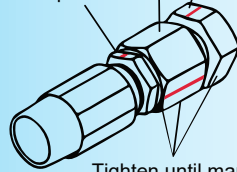
Termination Type	Dash Size 1/16 in	Flats
JIC	-04	1.5 - 1.75
	-06	1.0 - 1.5
	-08	1.5 - 1.75
	-10	1.0 - 1.5
	-12	

## Fitting and Adapter Installation: Flats Method

Once hand-tight, mark a straight line between the backup hex, nut and adapter hex



Adapter  
Full-Torque Nut  
Backup Hex



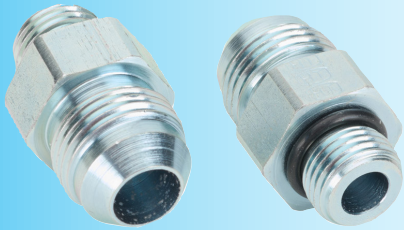
Tighten until marks are misaligned by the specified values; this example is two flats. The backup hex mark should align with the adapter mark.

### NOTE:

1. Seal faces must be in contact and the fitting fully hand-tightened before marking flats
2. Flats method is the most accurate for the first assembly cycle; for multiple disassembly/assembly cycles, torque values are more reliable
3. Tightening two flats or more is equivalent to severe over-torque and may damage seal faces

Dash Size	JIC 37° (Steel)		Flat Face O-Ring Seal (Steel)		SAE O-Ring Boss (Steel) & Gates Adapterless ≤ 4000PSI	
1/16 in	LB-FT		LB-FT		LB-FT	
	Min	Max	Min	Max	Min	Max
-04	11	14	18	23	13	17
-06	18	22	29	37	22	28
-08	36	45	41	51	37	46
-10	57	71	44	55	44	55
-12	79	99	66	83	70	88

# HY-TECH Hydraulic Threaded Adapters



Part No. 8MJ-6MB

## Overview

Hydraulic threaded adapters are used to connect hoses to valves, actuators or manifolds.

## Features

- Plated steel body
- All Requirements as per SAE J514 & 6149-3

### HY-TECH Hydraulic JIC to O-ring Boss Straight Adapters Selection

Part No.	Connection 1 (Male JIC)	Connection 2 (Male O-ring boss)	Max. Temp.	Max. Pressure	Qty./pack	Weight (lbs)	Price
<u>4MJ-4MB</u>	-4	-4	212°F (100°C)	5,000 psi	2	0.10	\$3.75
<u>4MJ-6MB</u>		-6			2	0.14	\$4.75
<u>4MJ-8MB</u>		-8			2	0.23	\$6.50
<u>6MJ-4MB</u>	-6	-4			2	0.12	\$4.50
<u>6MJ-6MB</u>		-6			2	0.14	\$4.25
<u>6MJ-8MB</u>		-8			2	0.24	\$6.25
<u>6MJ-10MB</u>		-10			2	0.36	\$8.50
<u>8MJ-6MB</u>	-8	-6		4,500 psi	2	0.22	\$6.00
<u>8MJ-8MB</u>		-8			2	0.27	\$6.50
<u>8MJ-10MB</u>		-10			2	0.36	\$8.75
<u>8MJ-12MB</u>		-12			2	0.60	\$11.00
<u>10MJ-8MB</u>	-10	-8		3,500 psi	2	0.38	\$8.50
<u>10MJ-10MB</u>		-10			2	0.40	\$9.00
<u>12MJ-8MB</u>	-12	-8			2	0.60	\$12.00
<u>12MJ-10MB</u>		-10			2	0.56	\$12.00
<u>12MJ-12MB</u>		-12			2	0.67	\$12.00
<u>12MJ-16MB</u>		-16			2	0.93	\$19.00

# HY-TECH Hydraulic Threaded Adapters



Part No. [8MJ-6MB90](#)

## Overview

Hydraulic threaded adapters are used to connect hoses to valves, actuators or manifolds.

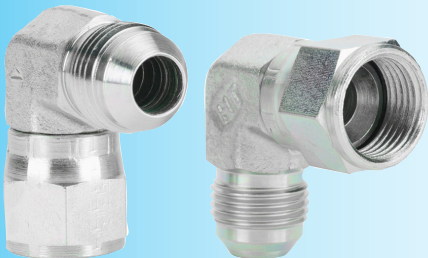
## Features

- Plated steel body
- All Requirements as per SAE J514 & 6149-3

### HY-TECH Hydraulic JIC to O-ring Boss Elbow Adapters Selection

Part No.	Connection 1 (Male JIC)	Connection 2 (Male O-ring boss)	Max. Temp.	Max. Pressure	Qty./pack	Weight (lbs)	Price
<a href="#">4MJ-4MB90</a>	-4	-4	212°F (100°C)	5,000 psi	2	0.14	\$8.25
<a href="#">4MJ-6MB90</a>		-6			2	0.24	\$9.25
<a href="#">4MJ-8MB90</a>		-8			2	0.45	\$14.50
<a href="#">6MJ-4MB90</a>	-6	-4			2	0.23	\$10.00
<a href="#">6MJ-6MB90</a>		-6			2	0.23	\$8.00
<a href="#">6MJ-8MB90</a>		-8			2	0.45	\$12.50
<a href="#">6MJ-10MB90</a>		-10			2	0.68	\$18.00
<a href="#">8MJ-6MB90</a>	-8	-6		4,500 psi	2	0.41	\$11.50
<a href="#">8MJ-8MB90</a>		-8			2	0.48	\$13.00
<a href="#">8MJ-10MB90</a>		-10			2	0.72	\$16.00
<a href="#">8MJ-12MB90</a>		-12			2	1.16	\$24.50
<a href="#">10MJ-8MB90</a>	-10	-8		3,500 psi	2	0.66	\$17.00
<a href="#">10MJ-10MB90</a>		-10			2	0.75	\$17.00
<a href="#">10MJ-12MB90</a>		-12			2	1.19	\$28.00
<a href="#">12MJ-8MB90</a>	-12	-8			2	1.02	\$32.50
<a href="#">12MJ-10MB90</a>		-10			2	1.07	\$24.50
<a href="#">12MJ-12MB90</a>		-12			2	1.21	\$22.50

# HY-TECH Hydraulic Threaded Adapters



Part No. [8MJ-8FJX90](#)

## Overview

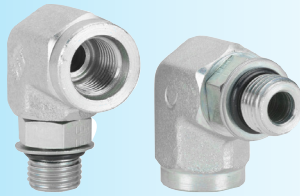
Hydraulic threaded adapters are used to connect hoses to valves, actuators or manifolds.

## Features

- Plated steel body
- All Requirements as per SAE J514 & 6149-3

HY-TECH Hydraulic Elbow JIC to JIC Adapters Selection							
Part No.	Connection 1 (Male JIC)	Connection 2 (Female JIC)	Max. Temp.	Max. Pressure	Qty./pack	Weight (lbs)	Price
<a href="#">4MJ-4FJX90</a>	-4	-4	250°F (121.1°C)	5,000 psi	2	0.14	\$9.50
<a href="#">6MJ-6FJX90</a>	-6	-6			2	0.23	\$11.00
<a href="#">8MJ-8FJX90</a>	-8	-8		4,500 psi	<a href="#">2</a>	0.44	\$13.00
<a href="#">10MJ-10FJX90</a>	-10	-10		3,500 psi	2	0.64	\$17.50
<a href="#">12MJ-12FJX90</a>	-12	-12			2	1.05	\$26.50

# HY-TECH Hydraulic Threaded Adapters

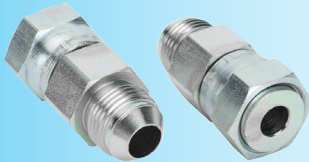
Part No. 8MB-6FBPart No. 6MB-6FB90

## Overview

Hydraulic threaded adapters are used to connect hoses to valves, actuators or manifolds.

## Features

- Plated steel body
- All Requirements as per SAE J514 & 6149-3

Part No. 8MJ-8FFORX

HY-TECH Hydraulic O-ring Boss Straight Reducer Adapters Selection							
Part No.	Connection 1	Connection 2	Max. Temp.	Max. Pressure	Qty./pack	Weight (lbs)	Price
<a href="#"><u>8MB-4FB</u></a>	-8 male o-ring boss	-4 female o-ring boss	212°F (100°C)	6,000 psi	2	0.28	\$15.50
<a href="#"><u>8MB-6FB</u></a>		-6 female o-ring boss			2	0.26	\$7.50
<a href="#"><u>10MB-8FB</u></a>	-10 male o-ring boss	-8 female o-ring boss		5,000 psi	<u>2</u>	0.41	\$9.00
<a href="#"><u>12MB-8FB</u></a>	-12 male o-ring boss				2	0.42	\$14.50
<a href="#"><u>12MB-10FB</u></a>		-10 female o-ring boss			2	0.63	\$15.00
HY-TECH Hydraulic O-ring Boss Elbow Adapters Selection							
<a href="#"><u>4MB-4FB90</u></a>	-4 male o-ring boss	-4 female o-ring boss	212°F (100°C)	6,000 psi	2	0.30	\$17.50
<a href="#"><u>6MB-6FB90</u></a>	-6 male o-ring boss	-6 female o-ring boss			2	0.56	\$24.50
HY-TECH Hydraulic JIC to Flat Face Adapters Selection							
<a href="#"><u>6MJ-6FFORX</u></a>	-6 male JIC 37 deg	-6 female flat face o-ring	212°F (100°C)	6,000 psi	2	0.28	\$13.50
<a href="#"><u>8MJ-8FFORX</u></a>	-8 male JIC 37 deg	-8 female flat face o-ring			2	0.48	\$18.00