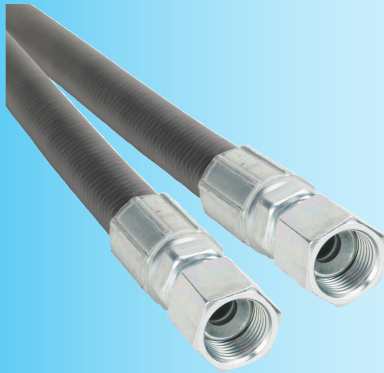




PROFLEX™ Hydraulic Hoses



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

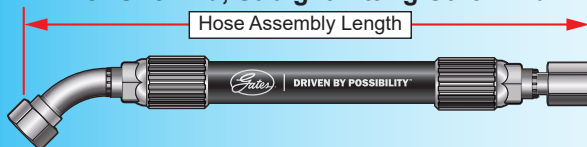
Straight Fittings Each End



90° One End, Straight Fitting Other End



45° One End, Straight Fitting Other End



Applications

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

SAE Thread Identification

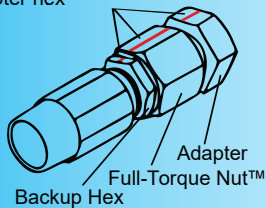
| Fitting Size | Dash Size | Thread Size |
|--------------|-----------|-------------|
| SAE 4 | -04 | 7/16-20 |
| SAE 5 | -05 | 1/2-20 |
| SAE 6 | -06 | 9/16-18 |
| SAE 8 | -08 | 3/4-16 |
| SAE 10 | -10 | 7/8-14 |
| SAE 12 | -12 | 1 1/16-12 |

Flats Method Installation

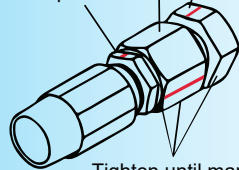
| Termination Type | Dash Size 1/16 in | Flats |
|------------------|----------------------|------------|
| JIC | -04 | 1.5 - 1.75 |
| | -06 | 1.0 - 1.5 |
| | -08 | 1.5 - 1.75 |
| | -10 | 1.0 - 1.5 |
| | -12 | |

Fitting and Adapter Installation: Flats Method

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



Full-Torque Nut
Backup Hex
Adapter



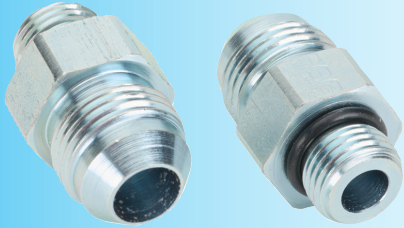
Tighten until marks are misaligned by the specified values; this example is two flats. The backup hex mark should align with the adapter mark.

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

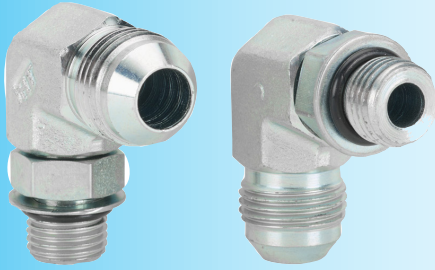
Hydraulic threaded adapters are used to connect hoses to valves, actuators or manifolds.

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.

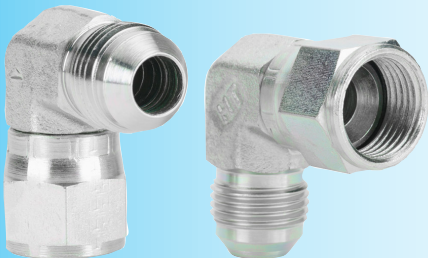
Features

- 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 |
|-----------------------------|----------------------------|------------------------------------|------------------|------------------|-----------|-----------------|---------|
| 4MJ-4MB90 | -4 | -4 | 212°F (100°C) | 5,000 psi | 2 | 0.14 | \$8.25 |
| 4MJ-6MB90 | | -6 | | | 2 | 0.24 | \$9.25 |
| 4MJ-8MB90 | | -8 | | | 2 | 0.45 | \$14.50 |
| 6MJ-4MB90 | -6 | -4 | | | 2 | 0.23 | \$10.00 |
| 6MJ-6MB90 | | -6 | | | 2 | 0.23 | \$8.00 |
| 6MJ-8MB90 | | -8 | | | 2 | 0.45 | \$12.50 |
| 6MJ-10MB90 | | -10 | | | 2 | 0.68 | \$18.00 |
| 8MJ-6MB90 | -8 | -6 | | 4,500 psi | 2 | 0.41 | \$11.50 |
| 8MJ-8MB90 | | -8 | | | 2 | 0.48 | \$13.00 |
| 8MJ-10MB90 | | -10 | | | 2 | 0.72 | \$16.00 |
| 8MJ-12MB90 | | -12 | | | 2 | 1.16 | \$24.50 |
| 10MJ-8MB90 | -10 | -8 | | 3,500 psi | 2 | 0.66 | \$17.00 |
| 10MJ-10MB90 | | -10 | | | 2 | 0.75 | \$17.00 |
| 10MJ-12MB90 | | -12 | | | 2 | 1.19 | \$28.00 |
| 12MJ-8MB90 | -12 | -8 | | | 2 | 1.02 | \$32.50 |
| 12MJ-10MB90 | | -10 | | | 2 | 1.07 | \$24.50 |
| 12MJ-12MB90 | | -12 | | | 2 | 1.21 | \$22.50 |

HY-TECH Hydraulic Threaded Adapters



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

Overview

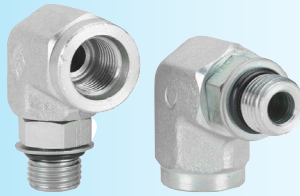
Hydraulic threaded adapters are used to connect hoses to valves, actuators or manifolds.

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 |
| 4MJ-4FJX90 | -4 | -4 | 250°F (121.1°C) | 5,000 psi | 2 | 0.14 | \$9.50 |
| 6MJ-6FJX90 | -6 | -6 | | | 2 | 0.23 | \$11.00 |
| 8MJ-8FJX90 | -8 | -8 | | 4,500 psi | 2 | 0.44 | \$13.00 |
| 10MJ-10FJX90 | -10 | -10 | | 3,500 psi | 2 | 0.64 | \$17.50 |
| 12MJ-12FJX90 | -12 | -12 | | | 2 | 1.05 | \$26.50 |

HY-TECH Hydraulic Threaded Adapters

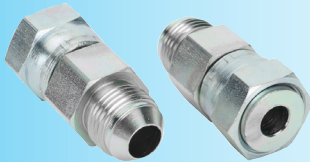
Part No. 8MB-6FBPart No. 6MB-6FB90

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 |
| <u>8MB-4FB</u> | -8 male o-ring boss | -4 female o-ring boss | 212°F (100°C) | 6,000 psi | 2 | 0.28 | \$15.50 |
| <u>8MB-6FB</u> | | -6 female o-ring boss | | | 2 | 0.26 | \$7.50 |
| <u>10MB-8FB</u> | -10 male o-ring boss | -8 female o-ring boss | | 5,000 psi | <u>2</u> | 0.41 | \$9.00 |
| <u>12MB-8FB</u> | -12 male o-ring boss | | | | 2 | 0.42 | \$14.50 |
| <u>12MB-10FB</u> | | -10 female o-ring boss | | | 2 | 0.63 | \$15.00 |
| HY-TECH Hydraulic O-ring Boss Elbow Adapters Selection | | | | | | | |
| <u>4MB-4FB90</u> | -4 male o-ring boss | -4 female o-ring boss | 212°F (100°C) | 6,000 psi | 2 | 0.30 | \$17.50 |
| <u>6MB-6FB90</u> | -6 male o-ring boss | -6 female o-ring boss | | | 2 | 0.56 | \$24.50 |
| HY-TECH Hydraulic JIC to Flat Face Adapters Selection | | | | | | | |
| <u>6MJ-6FFORX</u> | -6 male JIC 37 deg | -6 female flat face o-ring | 212°F (100°C) | 6,000 psi | 2 | 0.28 | \$13.50 |
| <u>8MJ-8FFORX</u> | -8 male JIC 37 deg | -8 female flat face o-ring | | | 2 | 0.48 | \$18.00 |