



**GALPRO STYLEX**

# **GUIDE TO GAS THREADS & CONNECTIONS**

**TAPERED VS. PARALLEL**

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**BSP**

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**NPT**

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**INVERTED FLARE**

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**SAE**

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**POL**

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**OCC**

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**BAYONET**



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INDUSTRIAL EQUIPMENT  
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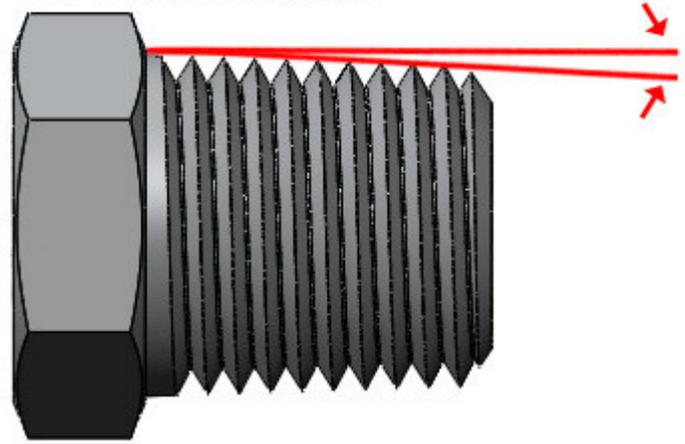
[sales@galpro.co.nz](mailto:sales@galpro.co.nz)

# TAPERED VS. PARALLEL

## TAPERED THREADS

Tapered threads decrease in diameter as you travel down the thread profile. This type of thread forms a metal-to-metal seal with the mating thread.

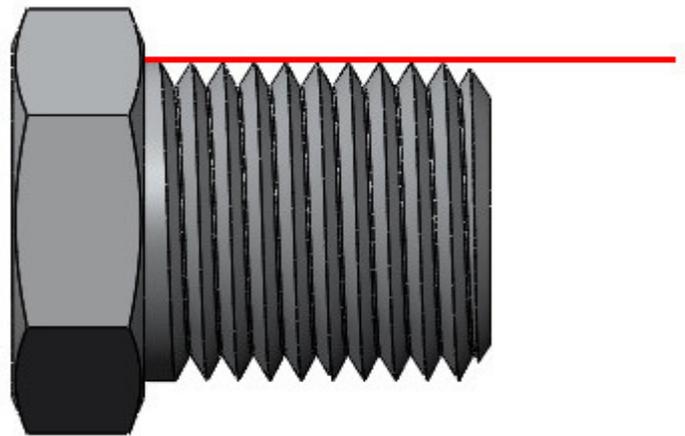
TAPERED THREADS



## PARALLEL THREADS

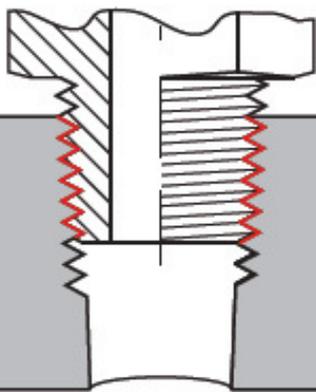
Parallel threads (straight threads) maintain a consistent diameter along the entire thread profile. A parallel-to-parallel seal is accomplished using an O-ring, seal or bonded washer.

PARALLEL THREADS



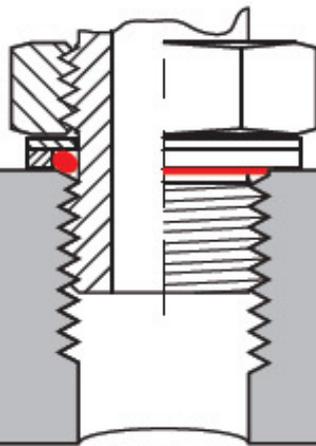
## TAPERED & PARALLEL THREAD SEALS

Tapered



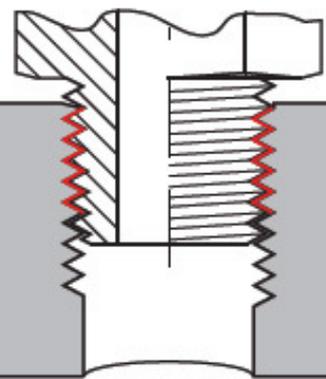
Seal is accomplished via metal-to-metal wedging

Parallel



Seal is accomplished via O-ring, seal, or bonded washer.

Tapered Male into Parallel Female



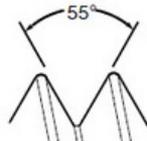
Seal is accomplished via metal-to-metal wedging

# BSP THREADS

(BRITISH STANDARD PIPE)

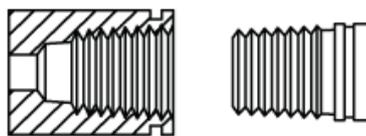
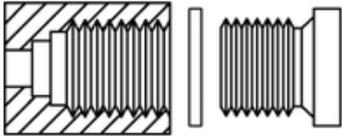
The BSP thread has been adopted internationally as an interconnecting and sealing thread for pipe fittings in Gasfitting and Plumbing.

The thread has a pitch angle of 55°, with rounded peaks and valleys.



**BSPP**  
(PARALLEL)

**BSPT**  
(TAPERED)



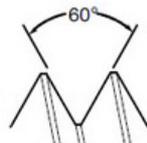
| Size (inches) | Threads p/inch |
|---------------|----------------|
| 1/8"          | 28             |
| 1/4"          | 19             |
| 3/8"          | 19             |
| 1/2"          | 14             |
| 3/4"          | 14             |
| 1"            | 11             |
| 1 - 1/4"      | 11             |
| 1 - 1/2"      | 11             |
| 2"            | 11             |

# NPT THREADS

(NATIONAL PIPE THREAD TAPERED)

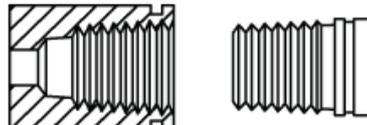
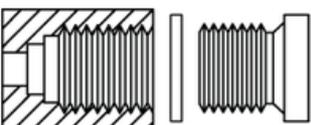
The NPT thread is an American standard tapered thread. This thread is commonly tapered, but referred to as NPS if parallel (straight).

The thread has a pitch angle of 60°, with flat peaks and valleys.



**NPS**  
(PARALLEL/  
STRAIGHT)

**NPT**  
(TAPERED)



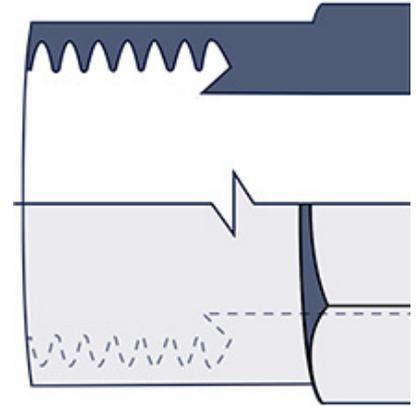
| Size (inches) | Threads p/inch |
|---------------|----------------|
| 1/8"          | 27             |
| 1/4"          | 18             |
| 3/8"          | 18             |
| 1/2"          | 14             |
| 3/4"          | 14             |
| 1"            | 11-1/2         |
| 1 - 1/4"      | 11-1/2         |
| 1 - 1/2"      | 11-1/2         |
| 2"            | 11-1/2         |

# INVERTED FLARE

An inverted flare fitting includes a flared outward facing seat within a Female fitting which creates a seal with an incredible resistance to vibration.

The internal flare seat creates a strong and reliable seal. The standard thread size is 7/16 - 24tpi

Note: No PTFE or liquid Teflon joining compound required.

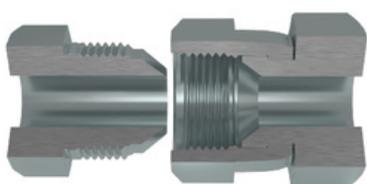
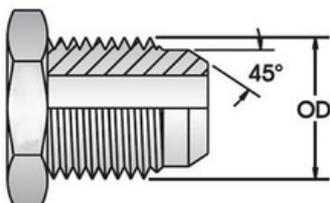


# SAE THREADS (SOCIETY OF AUTOMOTIVE ENGINEERS)

The SAE flare thread is a straight thread. It is commonly used in automotive, refrigeration and gasfitting applications.

The male flare thread has a 45° flare, which seals against a 45° seat in the female thread.

Note: No PTFE or liquid Teflon joining compound required.



| Tube Size (inches) | Flare Thread OD (inches) | Threads p/inch |
|--------------------|--------------------------|----------------|
| 1/8"               | 5/16"                    | 24             |
| 3/16"              | 3/8"                     | 24             |
| 1/4"               | 7/16"                    | 20             |
| 5/16"              | 1/2"                     | 20             |
| 3/8"               | 5/8"                     | 18             |
| 1/2"               | 3/4"                     | 16             |
| 5/8"               | 7/8"                     | 14             |
| 3/4"               | 1- 1/16"                 | 14             |

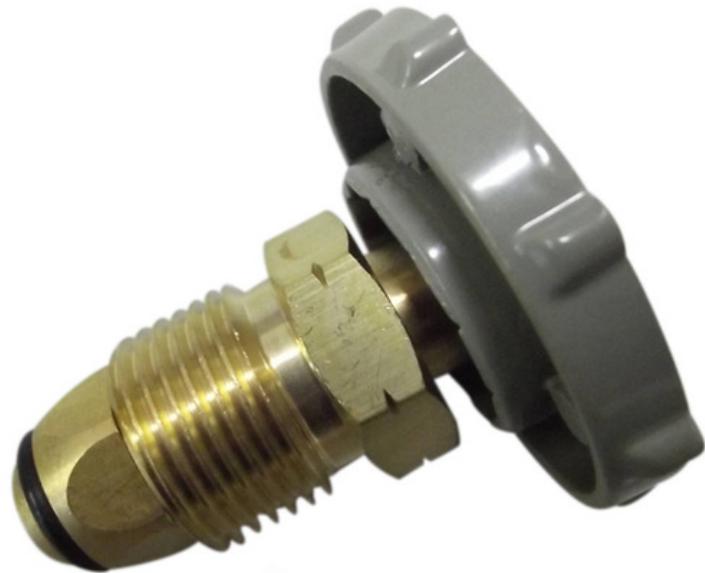
# POL FITTINGS

The POL fitting is most commonly used on larger LPG cylinders (18kg and higher) as a Female POL connection within the valve. The Male connections can vary from hoses, regulators, individual fittings/adaptors etc.

These fittings are a left hand thread only. The Female fitting can come with or without a handwheel for application.



**MALE POL FITTING**



**MALE POL FITTING WITH A HANDWHEEL**



**POL CYLINDER VALVE (FEMALE FITTING)**

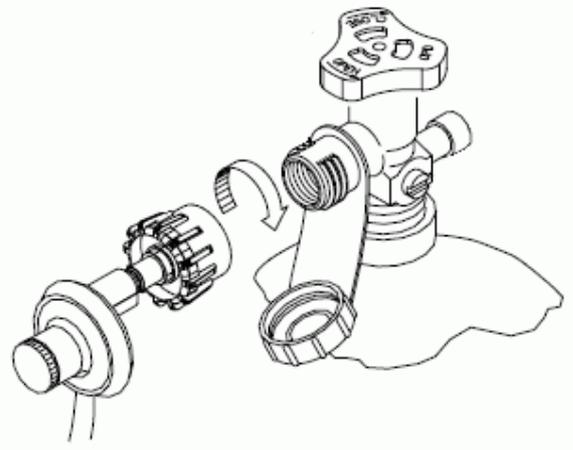


**MALE POL FITTING ON A REGULATOR**

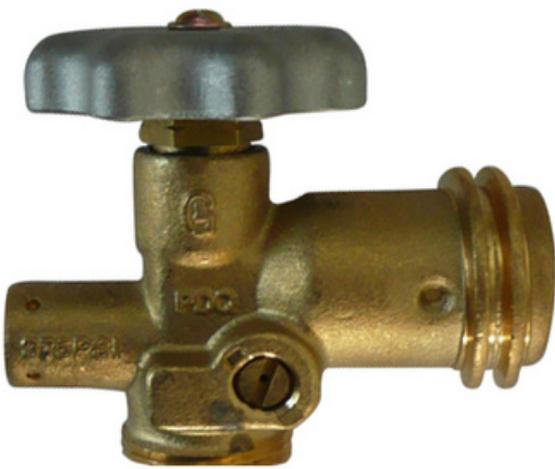
# QCC FITTINGS

The QCC fitting is an end fitting used for domestic gas appliances to the gas cylinder valve (most commonly used on smaller cylinders e.g. 4kg and 9kg). The Male connections can vary from hoses, regulators, individual fittings/adaptors etc.

It is easily identifiable through the large plastic (usually black) "handle" on the Male connection, and the large right hand ACME thread on the valve.



**MALE QCC FITTING ON A REGULATOR**



**QCC CYLINDER VALVE (FEMALE FITTING)**



**MALE QCC HOSE**

# BAYONET FITTINGS

The Bayonet fitting allows a safe quick connection for interior gas appliances.

The Female fitting is mounted within or on a wall or flooring whereas the Male fitting is attached to the hose of an appliance e.g. gas heater.

The connection is made by aligning locking "notches" on the Male fitting with the engagement slots on the Female fitting and twisting clockwise to lock the connection.

