

Subject: PEFS Loctite Guide

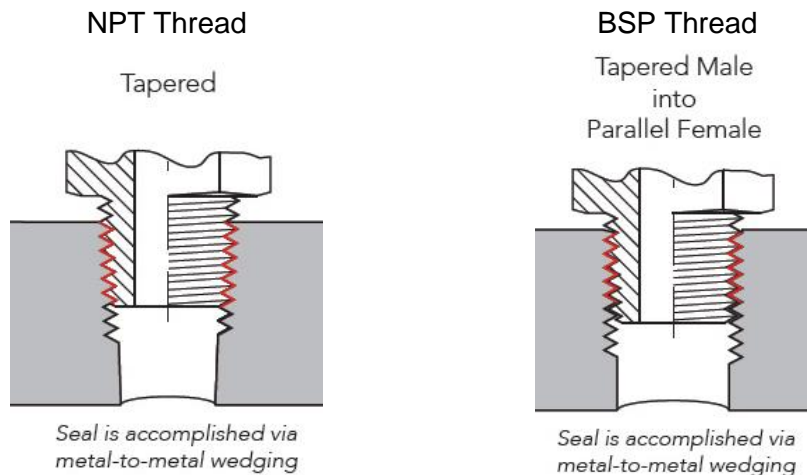
Product: PEFS F3/F3N/C6 systems

Parts: Pipe and Flare Fittings

This bulletin is to provide guidance to the correct selection and use of Loctite's for PEFS fittings, both pipe and flare.

PIPE FITTINGS

The main pipe fitting we use in our PEFS systems and components uses the NTP thread (National Taper Pipe) and is an American standard thread. The other common thread used in our PEFS systems is the BSP thread (British Standard Pipe) and is the standard thread used throughout the Commonwealth. The BSP thread comes in both parallel and taper profiles, the male form is normally tapered and the female is normally parallel.



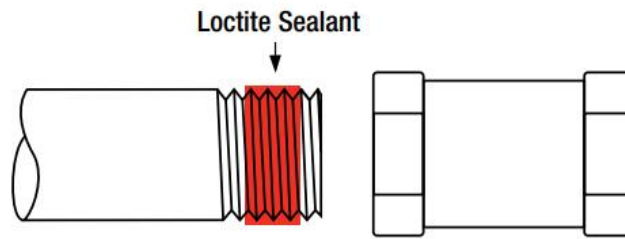
Loctite 577 is the preferred thread sealant. This Loctite has the highest strength breakaway torque of all the Loctite sealants and has the quickest curing time.

Loctite 569 is an acceptable alternative but has a much lower breakaway torque strength compared to 577 and has longer cure times.

Both Loctite's should be allowed to cure for at least 30 minutes before being subjected to pressure.

	Loctite 577	Loctite 569
Breakaway Torque Strength	Medium	Low
50% Cure Time	30 minutes	> 1 hour
90% Cure Time	Brass 1 hour Steel 3 hours	No data
100% Cure Time	24hours	24hours

Application of Loctite on pipe threads



1. Clean parts of contamination. For faster cure times, if required, spray Loctite 7649 Primer or Loctite 7471 Primer onto threaded parts (male and female). Allow to dry.
2. Apply a band of Loctite Thread Sealant to male threads starting one to two threads from end of thread. For 1/8" threads the length of the band only needs to span 90°. For larger thread sizes increase the span length. A 3/4" thread will only need a span length of 180°.



1/8" NPT



1/4" NPT

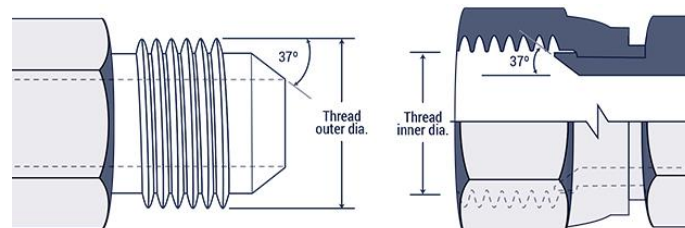


3/4" BSP

3. Assemble parts
4. Wait 30 minutes before pressurising.

FLARE FITTINGS

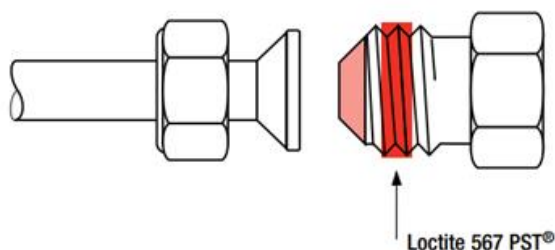
Our PEFS systems utilise the JIC flared fitting (Joint Industry Council – defined by SAE and US military) in the Discharge and Actuation hose and pipework connectors. These fittings are typically used for high pressure hydraulic hose connectors and seal with a metal-to-metal interface on a 37° flare sealing surface.



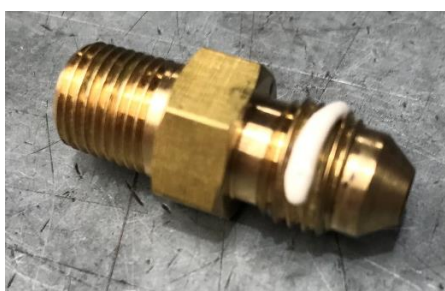
Loctite 567 is the recommended thread sealant by Loctite for these kinds of fittings. This Loctite maybe used on the JIC fittings used in the PEFS actuation system. This Loctite should be allowed to cure for at least 30 minutes before being subjected to pressure.

	Loctite 567
Breakaway Torque Strength	Low
50% Cure Time	> 6 hours
90% Cure Time	> 24 hours
Maximum pressure resistance	24 hours
100% Cure Time	168 hours

Application of Loctite on JIC threads



1. Clean parts of contamination. For faster cure times, if required, spray Loctite 7649 Primer or Loctite 7471 Primer onto threaded parts (male and female). Allow to dry.
2. Apply a band of Loctite Thread Sealant to male threads starting one to two threads from end of thread. For the 7/16" JIC threads the length of the band only needs to span 90°.



3. Assemble parts to correct torque.
4. Wait 30 minutes before pressurising.

Effective Date: Immediately

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