

Coupling Identification

This section lists the origin and coupling style found in each country. Brief descriptions and dimensional data follows each coupling style.

There are five coupling systems generally used for hydraulic connections today.

They are identified geographically or by country as:

- North American**
- British**
- French**
- German**
- Japanese**

NORTH AMERICAN THREAD TYPES

Iron Pipe Thread Abbreviations

- N** National
- S** Straight Thread
- F** Fuels
- P** Pipe
- T** Tapered Thread
- M** Mechanical Joint

NPTF

National Pipe Tapered thread for Fuel is a dryseal thread. It is used for both male and female ends.

The NPTF male will mate with the NPTF, NPSF, or NPSM female.

The NPTF male has tapered threads and a 30° inverted seat. The NPTF female has tapered threads and no seat. The seal takes place by deformation of the threads. The NPSM female has straight threads and a 30° inverted seat. The seal takes place on the 30° seat.

The NPTF connector is similar to, but not interchangeable with, the BSPT connector. The thread pitch is different in most sizes. Also, the thread angle is 60° instead of the 55° angle found on BSPT threads.

NPSF

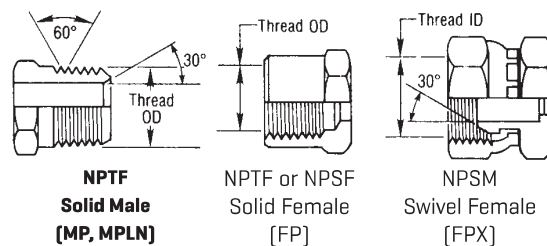
National Pipe Straight thread for Fuels is sometimes used for female ends and properly mates with the NPTF male end. However, SAE recommends the NPTF thread in preference to the NPSF for female ends.

NPSM

National Pipe Straight thread for Mechanical Joint is used on the female swivel nut of iron pipe swivel adapters. The leak-resistant joint is not made by the sealing fit of threads, but by a tapered seat in the coupling end.

Dash Size	Nominal Size [In.]	No. Threads per Inch	Female Thread	Male Thread	Max. Torque Recommendation for Dry NPTF* [Ft. Lbs.]
			I.D. [In.]	O.D. [In.]	
-2	1/8	27	23/64	13/32	20
-4	1/4	18	15/32	35/64	25
-6	3/8	18	19/32	43/64	35
-8	1/2	14	3/4	27/32	45
-12	3/4	14	61/64	1-1/16	55
-16	1	11-1/2	1-13/64	1-5/16	65
-20	1-1/4	11-1/2	1-17/32	1-43/64	80
-24	1-1/2	11-1/2	1-25/32	1-29/32	95
-32	2	11-1/2	2-1/4	2-3/8	120

NPT Pipe Thread



*NOTES:

- Torque values can vary considerably depending on thread condition. Use only enough torque to achieve adequate sealing.
- With female straight or parallel pipe threads [NPSM], maximum values are 50 percent of those listed in the table.
- If thread sealant is used, maximum values shown should be decreased by 25 percent.

HOSE
HOSE/CPLG. SELECTION
G8K COUPLINGS
GLOBAL SPIRAL COUPLINGS
PCM / PCS FERRULES
MEGACRIMP COUPLINGS
STAINLESS STEEL
POWER CRIMP COUPLINGS
LOC, GL AND GLP COUPLINGS
POLARSEAL COUPLINGS
POLARSEAL II COUPLINGS
C14 COUPLINGS
PCTS THERMOPLASTIC COUPLINGS
FIELD ATTACHABLE G1 & G2 COUPLINGS
FIELD ATTACHABLE C5 & C5E COUPLINGS
SURELOK AIR BRAKE COUPLINGS
ADAPTERS
QUICK DISCONNECT COUPLERS
LIVE SWIVEL
BALL VALVES
ACCESSORIES
EQUIPMENT AND PARTS