



NEFIT *N* Fittings

***N* : a “sign of confidence”**

SEALING MATERIALS

1. Sealing of screwthreads (ISO 7-1)

The sealing of screw threads on fittings must primarily result from the contact between the metal of the screw threads of the connecting parts.

The sealing material should only fill out the deviations from the theoretical thread profile.

Nefit Industrial does not provide any sealing material for the fittings.

The sealing material should be specified by the designer of the installation in cooperation with the manufacturer/supplier depending on the application and the medium. Apply the material according to the specifications of the supplier. Do not use too much material on the threads, which can lead to rolling up and leaking connections (see our Fitting Brochure).

Table 1 below gives an overview for the use of sealing materials for sealing thread for different media (from literature).

	Hemp + paste	Acrylicfiber + paste	PTFE tape	PTFE cord	Anaerobic paste	Fiberband
Drinking water *			X	X	X	X
Hot water	X		X	X	X	X
Steam			X	X	X	X
Natural gas		X	X	X	X	X
Fuels			X	X	X	X
Compressed air	X	X	X	X	X	X
Oxygen			X	X	X	X
Solvents			X	X	X	
Acids			X	X	X	

Table 1: possible sealing materials depending on the application

* sealing material for drinking water must be authority approved.



NB: the combination of screw threads according to ISO 7-1 and ISO 228-1 is not suitable as sealing thread!

2. Sealing of flat faced couplings

Nefit Industrial does not supply gaskets in or with the flat faced couplings.

The material and the dimensions of the gaskets must be specified by the designer in collaboration with the manufacturer/supplier depending on the application and the medium. Depending on the coupling dimension gasket thicknesses between 2 and 3 mm can be used. For recommendations for the diameters of the gaskets: see table 2 (EN 10242 table 27 and ISO 49 chapter 36).

Coupling dimension (inch)	Union nut thread (inch)	Inside-diameter d (mm)	Outside-diameter D (mm)
1/8	G 1/2	-----	-----
1/4	G 5/8	13	20
1/4	G 3/4	17	24
3/8	G 3/4	17	24
3/8	G 7/8	19	27
1/2	G 1	21	30
1/2	G 1 1/8	24	34
3/4	G 1 1/4	27	38
1	G 1 1/2	32	44
1 1/4	G 2	42	55
1 1/2	G 2 1/4	46	62
2	G 2 3/4	60	78
2 1/2	G 3 1/2	75	97
3	G 4	88	110
4	G 5	-----	-----
4	G 5 1/2	-----	-----

Table 2: recommended diameters of gaskets for flat faced couplings

3. Sealing of conical couplings

The sealing of conical couplings is made by the contact between the metal of the coupling parts.



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The couplings have been designed in a manner that no sealing material is necessary.

Though, the assembly instructions have to be followed precisely for a good function and tightness of the coupling.

When correctly assembled , the coupling is suitable for fluids and gases.
(see also table 1 for media)

Extra attention for a good sealing is necessary after unscrewing and re-assembly of the coupling in connection with potential displacement of the conical surfaces in relation to each other.

Nefit Industrial advises to apply flat couplings with a suitable packing at higher pressures and frequent disassembly of the couplings.

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