

Pressure Reduction Factors

Pressure reduction factors (in percent) have to be considered when intending to use the components at operating temperatures exceeding +120 °C / +248 °F.

Calculation Example

Component Straight Fitting FI-G-10S-W3-MS made of Steel
with a nominal pressure (PN) rating of 800 bar / 11600 PSI

Temperature +175 °C / +347 °F

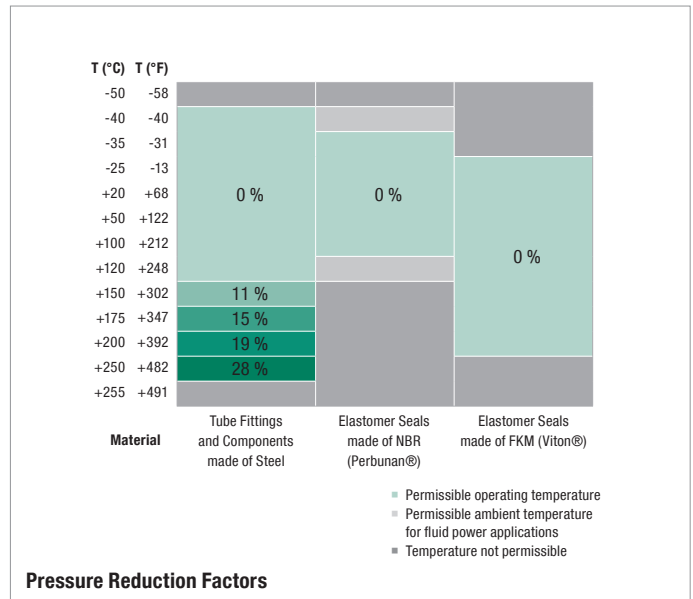
Reduction Factor 15 %

Reduced Nominal Pressure $PN = \frac{800 \text{ bar}}{100 \%} \times (100 \% - 15 \%) = 680 \text{ bar}$

$PN = \frac{11600 \text{ PSI}}{100 \%} \times (100 \% - 15 \%) = 9860 \text{ PSI}$

Please note:

When selecting tubes and other components for your system, any additional potential pressure reduction factors stated by the manufacturers / suppliers have to be considered.



Selection Criteria for Tube

STAUFF recommends to use seamless, cold-drawn and normalized precision steel tubes as specified in DIN EN 10305-4, material E235+N (material number 1.0308+N, formerly St37.4) or material E355 (material number 1.0580, formerly St52.4).

In order to avoid misdeliveries, the tubes have to be ordered from the supplier by specifying the exact outer and inner diameter.

Tube materials and tolerances differing from these recommendations may lead to system faults or leakages and may even result in total breakdowns.

Unless otherwise stated, the pressure / temperature ratings as well as all other operating conditions indicated in this product catalogue do not refer to the actual tube. Specifications made by the respective tube manufacturers / suppliers have to be considered.