

1.04 | Design Considerations When Selecting TEFLON® HOSE

DATABASE FOR PRESSURES

All stated burst pressures are static and are measured on samples at ambient temperature from which averages are recorded to create relevant specifications. Proof or test pressures are usually twice working pressure and all burst pressures are conservatively rated to provide a high margin of safety.

CHEMICAL RESISTANCE

The PTFE hose liner resists all chemicals and solvents except molten alkali metals, Chlorine Trifluoride, and Fluorine Gas.

HOSE QUALITY - PRESSURE TESTING OF RANDOM LENGTH HOSE

The responsibility rests completely on the purchaser to ensure satisfactory and appropriate testing before supplying hose assemblies for final use. All hose is checked extensively throughout all stages of manufacture, PACIFIC HOSEFLEX products is proof pressure tested in sample random pieces and not in bulk lengths. Bulk testing can be offered on all products but does incur a premium. Please contact our Sales Department.

REDUCED STATIC PTFE HOSE

A damaging electrostatic charge can build up inside the hose when electrically resistive fluids are being transmitted at very high flow rates (particularly if the PTFE hose assemblies are lengthy). To prevent this a special carbon is mixed with the PTFE to reduce its resistivity. The need for earth conductor braids or wires in the bore of the hose is therefore eliminated. Please contact our Sales Department for advice on when to specify anti-static hose. BS2050:1978 (items 4, 5, 6 and 7 as appropriate) calls for a maximum resistance of 106 ohms/metre hose length on the critical inside surface of the PTFE hose tubing as well as on the outside.

Supply Policy

Our policy is one of continuous development and the information in this publication should be taken only as a guide for the use of PACIFIC HOSEFLEX PTFE hose. It does not constitute a warranty of any kind, expressed or implied, of our products or their suitability for any particular use. We reserve the right to alter published specifications without prior notice. PACIFIC HOSEFLEX introduces 'AFX' the easy way to order PTFE hose. We here at PACIFIC HOSEFLEX appreciate the problems that can occur when ordering products in both metric and imperial dimensions, that is why we have introduced the AFX part number system.

Not only do we quote both metric and imperial measurements in all of our specifications but we now assign a part number to each and every product we manufacture.

Just state the AFX number and the quantity you require and we will do the rest, it couldn't be simpler.

TEMPERATURE AND PRESSURE

Whilst PTFE has a working temperature range between -60°C and +260°C (dependent upon the grade selected) as with all other types of - hose, increased working temperatures require a reduction in maximum rated working or burst pressure. Whenever excessive flexing, vibration, thermal fluctuations or rapid pressure impulsing is in evidence, further caution should be exercised in reducing the maximum working pressure.

ELONGATION AND CONTRACTION

At working pressure this falls within the range +2% to -4% (1/8" & 3/16" +0% to -6%)

MINIMUM/MAXIMUM CONTINUOUS LENGTHS

All PTFE hose is supplied in random lengths, but if special lengths are required please contact your approved distributor or PACIFIC HOSEFLEX Sales Department.

Working Pressure p.s.i.	DO NOT	DO NOT	% catalogue working pressure that may be safely used	
	USE	ABOVE	Degrees C	
4000	USE	ABOVE	-60 to +100	100
3000			+100 to +150	93
2000			+150 to +200	85
1000			+200 to +250	77
			+250 to +260	70
			Degrees C	

