

## **Submittal Data**

# **LOGSTOR PexFlex**

#### General:

PexFlex pipe are flexible, pre insulated pipe systems with a complete range of fittings and joints in all available pipe dimensions. The semi-flexible polyurethane foam with its closed cells has a high insulation value, is Freon free and environmentally friendly. The foam is moulded directly around the carrier pipe, followed by extrusion of the jacket; no spacers are required, therefore thermal bridges are eliminated.

A proprietary Polymer membrane is incorporated between the PUR foam and PE outer jacket to avoid the migration of cell gases through the jacket over the long term. This foil material is made up of a special polymer with PEL adhesive on both sides, bonding the foam to the casing.

The smooth polyethylene (LDPE) jacket is strong and is able to resist any impacts or blows incurred during transport or installation. The jacket pipe is resistant to both high and low temperatures and is UV treated. In the solid-foamed flexible system, the carrier pipe, polyurethane foam and LDPE jacket pipe are bonded together, eliminating the risk of water penetration along the carrier pipe. In operation, the system is held in place by the soil friction. The plastic properties of the Pex carrier pipe is utilized to absorb thermal expansion, consequently these Pex pipes are self-compensating and expansion need not be considered.

PexFlex has a PEX carrier pipe intended for maximum temperatures of 203<sup>0</sup>F (95<sup>0</sup>C) and a pressure of 87 psi (6 bar), a detailed specification is available at <u>www.pexflex.net</u>. The PEX carrier pipe also features an EVOH external oxygen diffusion barrier, which prevents oxygen from diffusing into the water.



### **Material Properties**

 $\label{eq:conductivity} \begin{array}{l} \mbox{Thermal Conductivity of PEX Pipe @ 0.38 W/(m{\sc w}K) \\ (0.219 \mbox{BTU/h}{\sc ft}^{\sc F}) \\ \mbox{Thermal Conductivity of PUR Insulation 0.022} \\ \mbox{W/(m{\sc w}K) (0.012 \mbox{BTU/h}{\sc ft}^{\sc F}) \\ \end{array}$ 

#### Dimensions and Coil Lengths: PexFlex, Single

Perfiex, Single						
Nominal	Carrier	Carrier	Jacket	Minimum/Maximum	Weight	
pipe	pipe	pipe wall	pipe	coil length	kg/m	
size in	0.D.	thickness	0.D.	m <i>(ft)</i>	(lb/ft)	
	mm	mm <i>(in)</i>	mm			
	(in)		(in)			
3⁄4	25	2.5	77	50/300 <i>(164/800)</i>	1.0	
	(0.98)	(0.098)	(3.0)		(0.7)	
1	32	2.9	77	50/300 <i>(164/800)</i>	1.0	
	(1.26)	(0.114)	(3.0)		(0.7)	
1 1⁄4	40	3.7	90	50/300 <i>(164/800)</i>	1.3	
	(1.57)	(0.145)	(3.5)		(0.9)	
1 1/2	50	4.6	110	50/200 <i>(164/800)</i>	1.9	
	(1.97)	(0.181)	(4.3)		(1.3)	
2	63	5.8	125	50/200 <i>(164/656)</i>	2.4	
	(2.48)	(0.228)	(5.0)		(1.6)	
2 1/2	75	6.9	140	50/100 <i>(164/328)</i>	3.3	
	(2.95)	(0.272)	(5.5)		(2.2)	
3	90	8.2	160	50/100 <i>(164/328)</i>	4.2	
	(3.54)	(0.323)	(6.3)		(2.8)	
4	110	10.0	160	50/100 <i>(164/328)</i>	5.5	
	(4.33)	(0.393)	(6.3)		(3.7)	
BoxElox Dual						

PexFlex, Dual Carrier Jacket Minimum/ Weight Nominal Carrier pipe pipe O.D. pipe wall pipe Maximum kg/m thickness 0.D. coil length mm (in) (lb/ft) size in mm (in) mm (in) m (ft) 1.7 (1.1)  $2 \times \frac{1}{2}$ 2 x 20 2.0 90 (3.5) 50/300 <u>(2 x</u> 0.79) (0.07<u>9</u>) (164/800) 2 x 3/4 2 x 25 2.5 110 50/200 2.1 (1.4) (2 x 0.98) (0.098) (164/800) (4.3)2 x 1 2 x 32 2.9 110 50/200 2.2 (1.5) (2 x 1.57) (0.114) (4.3) (164/800) 2 x 1¼ 2 x 40 125 50/200 2.7 (1.8) 3.7 (2 x 1.26) (0.145) (5.0) (164/656) 2 x 1 ½ 2 x 50 4.6 160 50/100 4.1 (2.8) (2 x 1.97) (0.181) (6.3)(164/328)

All sizes are metric, neither IPS nor CTS sizes; imperial adapters are supplied as required.

#### **Minimum Bending Radius:**

Wherever a change of direction is required PexFlex can be curved on site to reach a minimum radius depending on the dimension.

Jacket Pipe O.D. mm (in.)	Minimum radius of curvature m (ft.)
77 (3.0)	0.8 (2.6)
90 (3.5)	0.9 (3.0)
110 (4.3)	1.1 (3.5)
125 (4.9)	1.2 (4.0)
140 (5.5)	1.4 (4.5)
160 (6.3)	1.6 (5.2)

#### **Temperature and Pressure:**

PexFlex is intended for a maximum temperature of  $203^{0}F$  (95<sup>o</sup>C) and a pressure of 87 (6 bar). Continuous operating temperature of 85°C (*185°F*) will ensure an extended service life of more than 30 years. More details pertaining to temperature and pressure are available in the PexFlex Specification.

### **PexFlex Pipe Connections:**

Logstor offers top quality brass compression or PRESSFIT fittings in a wide variety, such as: T-couplings, reducers, PEX to PEX couplings and

PEX to thread-end couplings.

When connecting to NPT thread, metric to NPT thread adapters are also offered.

## CANADA

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Local Representative

#### **Joints and Fittings Insulation:**

Preformed polyurethane insulation foam covers are available to accommodate the Compression or PRESSFIT couplers and T-fittings. A waterproof seal is accomplished by field applying the supplied heat shrink material.

#### **Quality:**

Logstor was the worlds' first producer of preinsulted PEX and has been producing PexFlex since 1974. LOGSTOR continues to be Europe's leading manufacturer of insulated piping systems. (copper or steel carrier pipes also available). Both Logstor and Urecon's quality management system is certified in accordance with ISO-9001: 2000. The product is sold in more than 30 countries, with manufacturing facilities in Denmark and Poland.

Urecon is Logstor's agent for Canada, the Americas, the Bahamas and the Caribbean.

The company staff of engineers and technicians is ready to assist in all aspects on project planning, selection of materials and systems, as well as system layout.

For further information and technical assistance on Urecon or Logstor's pre-insulated piping systems, please contact any of the following offices, or your local Agent/Distributor.

## UNITED STATES

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