

Company Address	<i>Flexitallic, www.flexitallic.com Tele:+44 1274 851273 Email: sales@flexitallic.com</i>
Gasket Type	<i>Sigma 588 - pure PTFE with conformable surface layers</i>
Thickness e_{G0} [mm]	<i>1.6mm</i>

Minimum stress to seal $Q_{min/L}$ (at assembly), $Q_{Smin/L}$ (after off-loading) for $p = 40$ bar									
L [mg/(s*m)]	$Q_{min/L}$ [MPa]	$Q_{Smin/L}$ [MPa]							
		$Q_A = 20$ [MPa]	$Q_A = 40$ [MPa]	$Q_A = 60$ [MPa]	$Q_A = 80$ [MPa]	$Q_A = 100$ [MPa]	$Q_A = 120$ [MPa]	$Q_A = 140$ [MPa]	$Q_A = 160$ [MPa]
10^{-0}	<10	<10	<10	<10	<10		<10		<10
10^{-1}	<10	<10	<10	<10	<10		<10		<10
10^{-2}	13	<10	<10	<10	<10		<10		<10
10^{-3}	16	<10	<10	<10	<10		<10		<10
10^{-4}	19	<10	<10	<10	<10		<10		<10
10^{-5}	39			10	10		10		10
10^{-6}									
10^{-7}									
10^{-8}									

Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm			
Gasket stress [MPa]	ambient temperature	temperature 1 [175°C]	temperature 2 [225°C]
Stress level 1 [30 MPa]		0,28	0,24
Stress level 2 [60 MPa]		0,51	0,33
Q_{Smax} [220 MPa]			

Maximal applicable gasket stress Q_{Smax}		
Q_{Smax} [MPa] – ambient temperature	Q_{Smax} [MPa] – temperature 1 [175°C]	Q_{Smax} [MPa] – temperature 2 [225°C]
>220	>220	>220

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [175°C]	temperature 2 [225°C]
20	697	1780	280
30	1227	3546	350
40	1688	7555	453
50	1792	4832	434
60	2215	3858	758
80	3925	5418	313
100	2537	14456	159
120	2527	10927	131
140	1853	12067	113
160	2305		99
180	1752		38
200	1872		13
220	1601		
225			

Note: the content of darkened cells was not determined respectively is unnecessary

Creation date of this sheet: 04.12.2007