

Company Address	<i>Flexitallic, www.flexitallic.com Tele:+44 1274 851273 Email: sales@flexitallic.com</i>
Gasket Type	<i>Sigma 500 - PTFE with Glass Microspheres</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}	11	<10	<10	<10	<10		<10		<10
10^{-3}	16	15	<10	<10	<10		<10		<10
10^{-4}	42			40	29		29		24
10^{-5}	141								135
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]		0,42	0,34
Stress level 2 [60 MPa]		0,72	0,58
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	180

Sekant unloading modulus of the gasket E_G [MPa]			
Gasket stress [MPa]	ambient temperature	temperature 1 [175°C]	temperature 2 [225°C]
20	801	424	371
30	853	615	521
40	1107	778	616
50	1404	770	789
60	1294	1434	841
80	2042	1128	1036
100	2258	1284	1255
120	1757	1438	1341
140	1803	1529	1309
160	1519	1308	1678
180	1599	1822	2170
200	1489	2266	
220	1599	1676	
225			

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

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