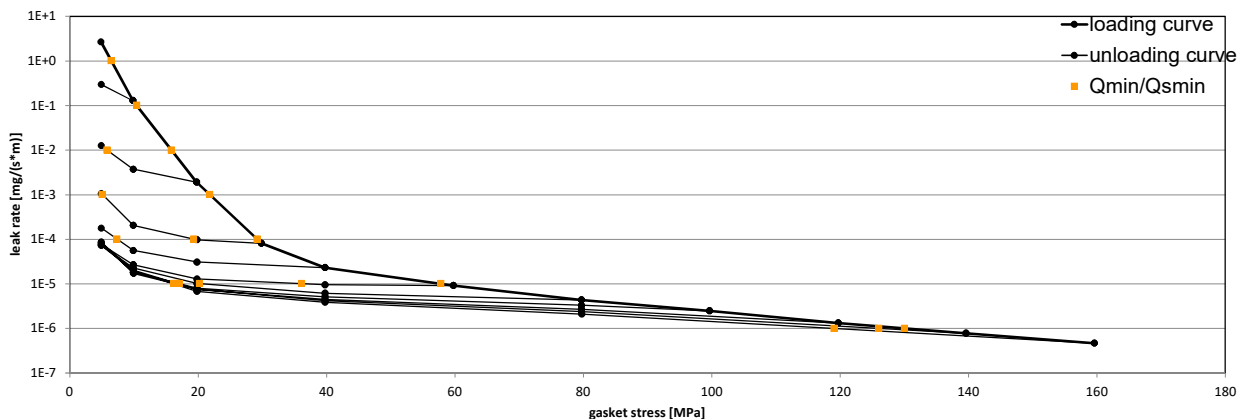


Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to EN 13555 2021-04
Gasket Type	GYLON® Style 3501E	
Sealing element dimensions [mm]	92 x 49 x 3.2	

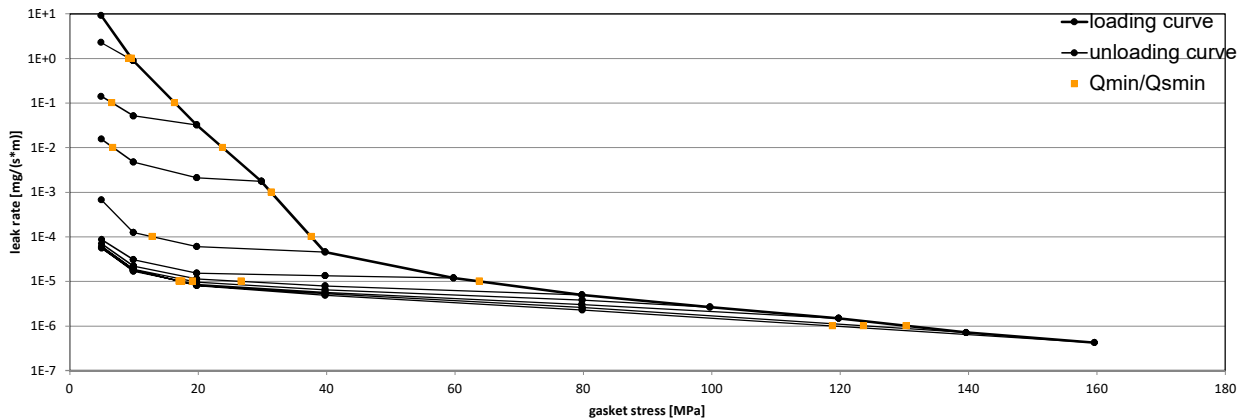
L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 10 bar									
		Q _{Smin/L} [MPa]									
		Q _A = 10 MPa	Q _A = 20 MPa	Q _A = 30 MPa	Q _A = 40 MPa	Q _A = 60 MPa	Q _A = 80 MPa	Q _A = 100 MPa	Q _A = 120 MPa	Q _A = 140 MPa	Q _A = 160 MPa
10 ⁰	6	5	5	5	5	5	5	5	5	5	5
10 ⁻¹	10		5	5	5	5	5	5	5	5	5
10 ⁻²	16		6	5	5	5	5	5	5	5	5
10 ⁻³	22			5	5	5	5	5	5	5	5
10 ⁻⁴	29			19	7	5	5	5	5	5	5
10 ⁻⁵	58					36	20	17	17	16	16
10 ⁻⁶	130									126	119
10 ⁻⁷											
10 ⁻⁸											

Leakage - ambient temperature / inner pressure = 10 bar



L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 20 bar									
		Q _{Smin/L} [MPa]									
		Q _A = 10 MPa	Q _A = 20 MPa	Q _A = 30 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	9	5	5	5	5	5	5	5	5	5
10 ⁻¹	16		7	5	5	5	5	5	5	5	5
10 ⁻²	24			7	5	5	5	5	5	5	5
10 ⁻³	31				5	5	5	5	5	5	5
10 ⁻⁴	38				13	5	5	5	5	5	5
10 ⁻⁵	64						27	19	17	17	17
10 ⁻⁶	130									124	119
10 ⁻⁷											
10 ⁻⁸											

Leakage - ambient temperature / inner pressure = 20 bar



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

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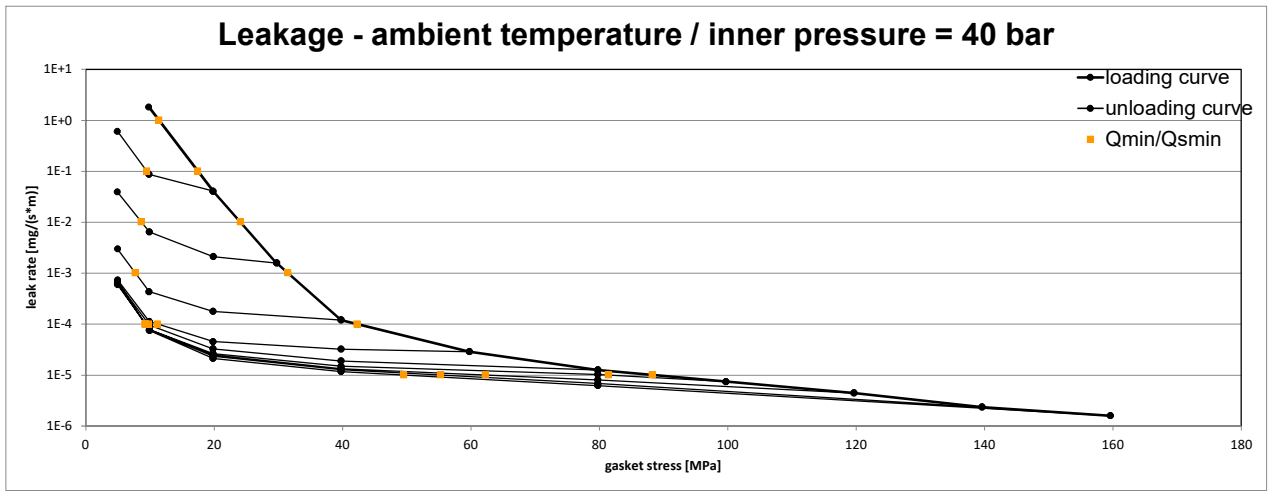
Creation date of this sheet:

2021-03-24

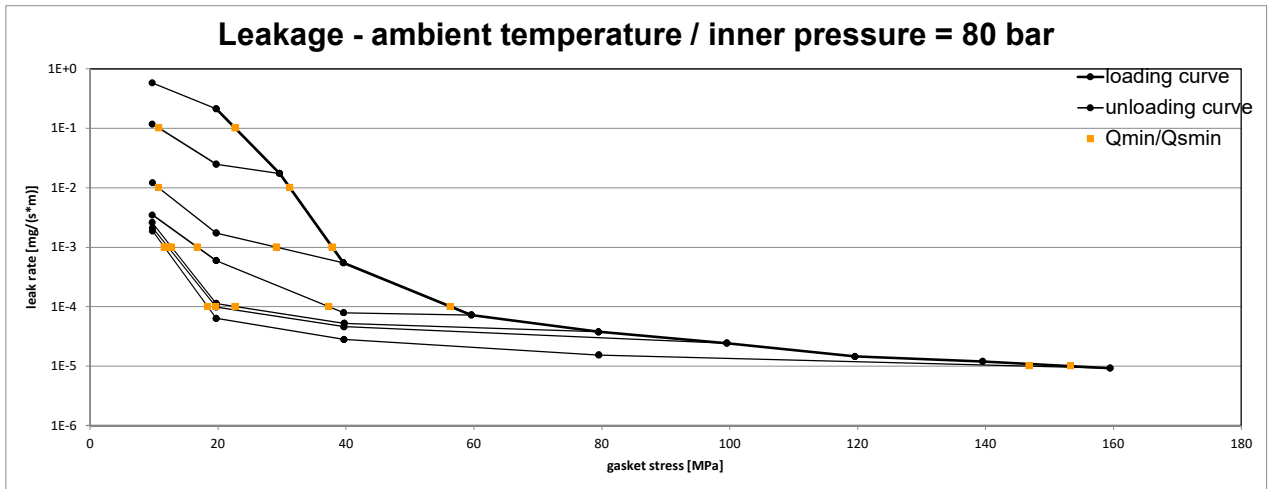


Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to EN 13555 2021-04
Gasket Type	GYLON® Style 3501E	
Sealing element dimensions [mm]	92 x 49 x 3.2	

L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 40 bar									
		Q _{Smin/L} [MPa]									
		Q _A = 20 MPa	Q _A = 30 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 ⁻⁹	11	5	5	5	5	5	5	5	5	5	
10 ⁻¹	17	10	5	5	5	5	5	5	5	5	
10 ⁻²	24		9	5	5	5	5	5	5	5	
10 ⁻³	32			8	5	5	5	5	5	5	
10 ⁻⁴	42				11	10	9	9	9	9	
10 ⁻⁵	88						81	62	55	50	
10 ⁻⁶											
10 ⁻⁷											
10 ⁻⁸											



L [mg/(s*m)]	Q _{min/L} [MPa]	Minimum stress to seal Q _{min/L} (at assembly), Q _{Smin/L} (after off-loading) for p = 80 bar									
		Q _{Smin/L} [MPa]									
		Q _A = 20 MPa	Q _A = 30 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 ⁻⁹	20	10	10	10	10	10	10			10	
10 ⁻¹	23		11	10	10	10	10			10	
10 ⁻²	31			11	10	10	10			10	
10 ⁻³	38			29	17	13	12			12	
10 ⁻⁴	56				37	23	20			18	
10 ⁻⁵	153									147	
10 ⁻⁶											
10 ⁻⁷											
10 ⁻⁸											



Note: the content of darkened cells was not determined respectively is unnecessary Rev - No: 4 Creation date of this sheet: 2021-03-24

Company Address	Garlock GmbH, Falkenweg 1, 41468 Neuss, Germany	According to EN 13555 2021-04
Gasket Type	GYLON® Style 3501E	
Sealing element dimensions [mm]	92 x 49 x 3.2	

Gasket stress	Relaxation ratio P_{QR} for stiffness $C = 500$ kN/mm									
	ambient temperature		temperature 1 [150 °C]		temperature 2 [200 °C]		temperature 3 [250 °C]		P_{QR}	Δe_{GC} [mm]
	P_{QR}	Δe_{GC} [mm]	P_{QR}	Δe_{GC} [mm]	P_{QR}	Δe_{GC} [mm]	P_{QR}	Δe_{GC} [mm]		
Stress level 1 [10 MPa]	0,86	0,012	0,67	0,028	0,64	0,030	0,47	0,044		
Stress level 2 [30 MPa]	0,90	0,025	0,48	0,132	0,35	0,165	0,25	0,189		
Stress level 3 [40 MPa]							0,24	0,257		
Stress level 4 [50 MPa]			0,38	0,260	0,34	0,279				
Stress level 5 [60 MPa]	0,78	0,111								
P_{QR} and Δe_{GC} at maximal applicable gasket stress Q_{Smax}										
P_{QR} at Q_{Smax}	0,88	0,181	0,51	0,582	0,47	0,445	0,25	0,507		
Q_{Smax}	180 MPa		140 MPa		100 MPa		80 MPa			

Gasket stress [MPa]	Sekant unloading modulus of the gasket E_G [MPa] and gasket thickness e_G [mm]									
	ambient temperature		temperature 1 [150 °C]		temperature 2 [200 °C]		temperature 3 [250 °C]		E_G [MPa]	e_G [mm]
	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]	E_G [MPa]	e_G [mm]		
0		3,005		3,125		3,085		3,075		
1		2,982		3,098		3,054		3,068		
5	2404	2,963	815	3,061	804	3,021	460	3,007		
10	1367	2,941	801	2,975	712	2,847	498	2,734		
15	1874	2,922	827	2,821	840	2,553	614	2,414		
20	1984	2,899	1065	2,639	1032	2,303	631	2,189		
25	1879	2,864	1197	2,459	1259	2,095	717	2,009		
30	2109	2,824	1646	2,304	1348	1,936	948	1,874		
40	2797	2,733	1642	2,035	1759	1,709	1183	1,675		
50	2886	2,613	1918	1,849	2095	1,552	1417	1,538		
60	3278	2,490	2383	1,704	2438	1,432	1896	1,427		
80	4527	2,293	2467	1,495	3340	1,251	2005	1,247		
100	5852	2,128	2655	1,333	3914	1,104				
120	4950	1,985	5437	1,141						
140	5758	1,881	3620	0,898						
160	6988	1,789								
180	5608	1,708								

