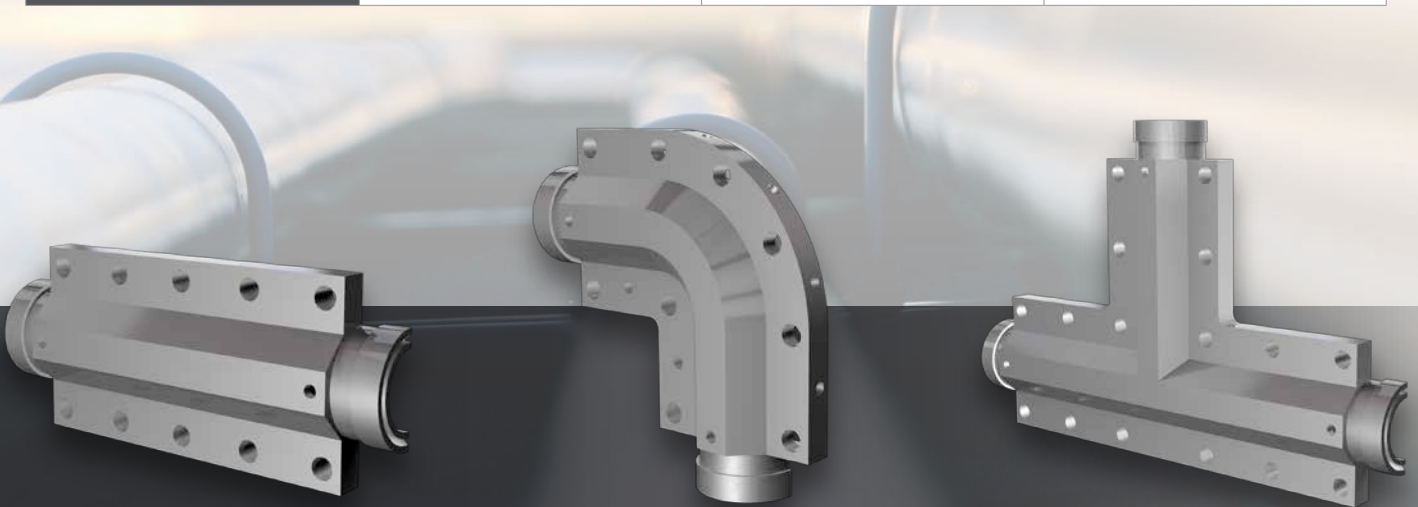




## Quickseal Range specifications

	Straight	Elbow	Tee
Available Sizes	1 Inch 2 Inch 3 Inch 4 Inch	1 Inch 2 Inch 3 Inch 4 Inch	1 Inch 2 Inch 3 Inch 4 Inch
Design Temp	400 deg C	400 deg C	400 deg C
Design Pressure	50 bar (g)	50 bar (g)	50 bar (g)
Min Design Temp (Deg C)	- 40	- 40	- 40
Material	SA-516 GR 70N	SA-516 GR 70N	SA-516 GR 70N
Construction	Solid Plate	Solid Plate	Solid Plate
Clamp Lifetime	5 Years	5 Years	5 Years
Strongback System	Bolt on	Bolt on	Bolt on
Interlink Piece	Yes, Bolt on	Yes, Bolt on	Yes, Bolt on



STRAIGHT

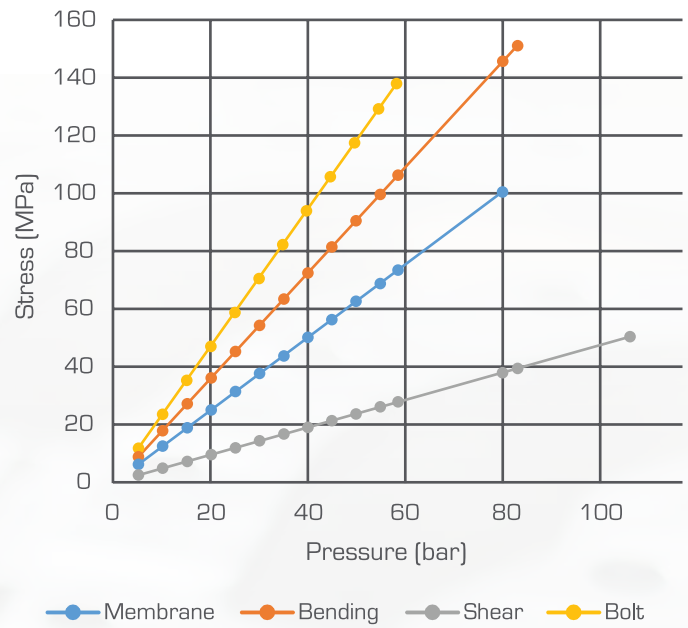
ELBOW

TEE

# Quickseal Analysis

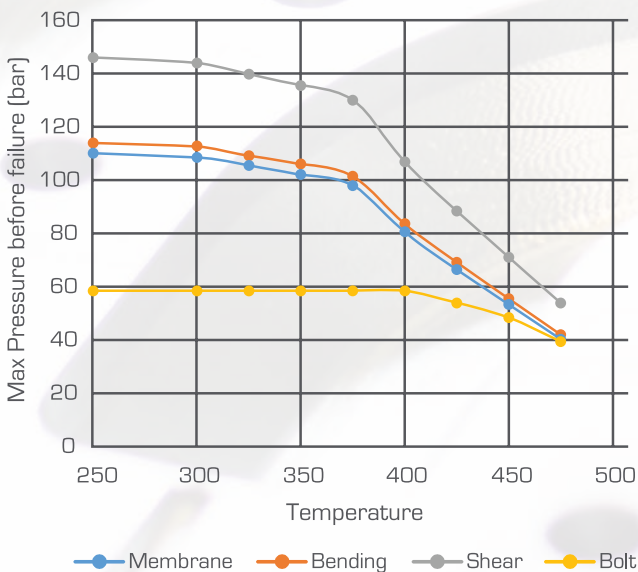
Pressure (bar)	Membrane Stress (Mpa)	Bending Stress (Mpa)	Shear Stress (Mpa)	Bolt Stress (Mpa) 10 x M18
107			50.5	
83.5		151.148	39.409	
80.5	100.696	145.718	37.993	
58.5	73.427	106.256	27.704	137.917
55	68.798	99.559	25.958	129.223
50	62.544	90.508	23.598	117.476
45	56.29	81.457	21.238	105.728
40	50.035	72.406	18.878	93.981
35	43.781	63.356	16.519	82.233
30	37.526	54.305	14.159	70.485
25	31.272	45.254	11.799	58.738
20	25.018	36.203	9.439	46.99
15	18.763	27.152	7.079	35.243
10	12.509	18.102	4.72	23.495
5	6.254	9.051	2.36	11.748

### Stress vs Pressure



Temperature (°C)	Allowable Plate Stress (Mpa)	Allowable Bolt Stress (Mpa)	Membrane Failure Pressure (Bar)	Bending Failure Pressure (Bar)	Shear Failure Pressure (Bar)	Bolt Failure Pressure (Bar) 10 x M18
475	51	93.6	40.5	42	54	39.5
450	67.1	115	53.5	55.5	71	48.5
425	83.8	128	66.5	69	88.5	54
400	101	138	80.5	83.5	107	58.5
375	123	138	98	101.5	130	58.5
350	128	138	102	106	135.5	58.5
325	132	138	105.5	109	139.5	58.5
300	136	138	108.5	112.5	144	58.5
250	138	138	110	114	146	58.5

### Pressure vs Temperature



### Allowable Stress vs Temperature

