Corroflon Specifications.
Temperatures, Pressures & Flow Rates

Maximum Working Pressure (MWP) Variation with Temperature:

Hose with SS Braid as per Graph.

Hose with PB Braid, pressure as listed (Page 7) from -30 C to +80 C and 50% less from 80 C to 100 C.

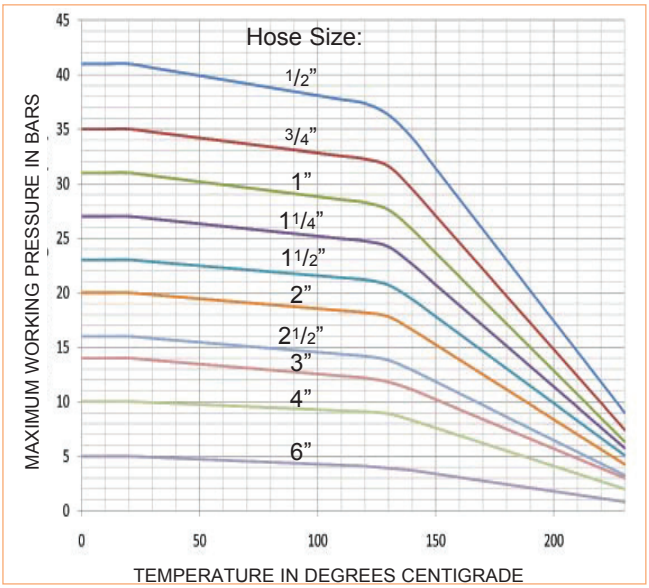
Hose with RC, FP and SI grades as per Graph, BUT only within the temperature range for the particular grade of rubber cover, as given below.

Maximum Operating Temperatures (Internal Fluid Only) for different hose grades:

SS	-73 C to +260 C
PB	-30 C to +100 C
SS,RC & SS, FP	-40 C to +140 C
SS, SI	-73 C to +224 C
KYB	-40 C to +120 C

(Subtract 20 C from the above maximum temperature limits if the temperature is external to the hose).

Temperature & MWP Graph for Corroflon GP, SS and AS, SS



Temperature vs Vacuum

All sizes of Corroflon GP,SS and AS, SS are usable at full vacuum up to 130 C up to 2". Above this, the vacuum resistance should be reduced 1% for every degree above 130 C.

Other grades the same, BUT ONLY within the temperature limits for the particular hose grade.

Flow Rates

- For maximum flow rates, it is better to use the smoothbore Bioflex hose if possible, because the convoluted bore of Corroflon creates turbulent flow, which reduces flow rates.

Corroflon Hose - Flow Rate Calculation

If it is required to determine the flow rate of a particular hose assembly, or if it is required to determine the pressure required to generate a certain flow rate, then this can sometimes be approximately calculated by the Corroflon supplier.

It should be noted that calculations can only be made for fluids with a viscosity equal to water, and for hose assemblies with PTFE lined end fittings (no bore restrictions at the ends of the hose).

The following information should be given to the supplier:

To calculate the Flow Rate in Cubic Metres per Hour:

- Pressure in Bars at the Entry into the Hose Assembly
- Pressure in Bars at the Exit from the Hose Assembly > (Subtracted to calculate Pressure Drop over the Hose Length)
- The hose configuration (roughly straight, or 33% Bends, or 66% Bends, or 100% Tightly Coiled)

OR To Calculate the Pressure Drop in bars over the length of the Hose Assembly:

- Required Flow Rate in Cubic Metres per Hour
- The hose configuration (roughly straight, or 33% Bends. or 66% Bends, or 100% Tightly Coiled)

Whistling

A 'whistling' noise may be created by turbulent flow when steam or other gasses are passed through a Corroflon hose at high flow rates. In such applications, Bioflex hose represents an alternative option which eliminates this problem.

Corroflon Sizes, Grades, Bend Radius and Dimensions

Nominal Hose Bore Size		Bore Inside Convolutions		Corroflon Grade (Braid & Cover)	PTFE Liner Tube Wall Thickness		O/D of Tube, Braid or Rubber		Minimum Bend Radius		* Maximum Continuous Hose Length	
in	mm	in	mm		in	mm	in	mm	in	mm	Feet	Metres
1/2	15	0.440	11.2	TO SS PB SS,RC/FP RC,SI KYB	0.05	1.4	0.63 0.70 0.80 0.90 0.90 0.76	16.1 17.8 20.4 22.8 22.8 19.3	1 1/2 1 1/2 1 1/2 2 1/4 2 1/4 1 1/2	38 38 38 57 57 38	100 100 100 100 100 100	30 30 30 30 30 30
3/4	20	0.620	15.7	TO SS PB SS,RC/FP RC,SI KYB	0.05	1.4	0.85 0.91 1.02 1.11 1.11 0.97	21.5 23.2 25.8 28.2 28.2 24.7	2 2 2 3 3 2	51 51 51 76 76 51	100 100 100 100 100 100	30 30 30 30 30 30
1	25	0.847	21.5	TO SS PB SS,RC/FP RC,SI KYB	0.06	1.5	1.08 1.14 1.25 1.34 1.34 1.20	27.4 29.1 31.7 34.1 34.1 30.6	2 3/4 2 3/4 2 3/4 4 1/4 4 1/4 2 3/4	70 70 70 105 105 70	100 100 100 100 100 100	30 30 30 30 30 30
1 1/4	32	1.080	27.5	TO SS PB SS,RC/FP RC,SI KYB	0.06	1.5	1.45 1.53 1.72 1.72 1.72 1.57	36.8 38.8 43.6 43.8 43.8 40.0	3 1/4 3 1/4 3 1/4 4 3/4 4 3/4 3 1/4	82 82 82 123 123 82	100 100 100 100 100 100	30 30 30 30 30 30
1 1/2	40	1.250	32.0	TO SS PB SS,RC/FP RC,SI KYB	0.06	1.5	1.65 1.74 1.92 1.93 1.93 1.78	42.0 44.1 48.8 49.1 49.1 45.2	4 4 4 6 6 4	100 100 100 150 150 100	100 100 100 100 100 100	30 30 30 30 30 30
2	50	1.690	43.0	TO SS PB SS,RC/FP RC,SI KYB	0.07	1.8	2.11 2.19 2.37 2.38 2.38 2.23	53.5 55.6 60.3 60.6 60.6 56.7	5 1/2 5 1/2 5 1/2 8 1/4 8 1/4 5 1/2	140 140 140 210 210 140	100 100 100 100 100 100	30 30 30 30 30 30
2 1/2	65	2.120	54.0	TO SS PB SS,RC/FP RC,SI KYB	0.07	1.8	2.75 2.83 3.01 3.03 3.03 2.87	69.8 71.9 76.6 76.9 76.9 73.0	7 7 7 10 1/2 10 1/2 7	178 178 178 267 267 178	65 65 65 65 65 65	20 20 20 20 20 20
3	80	2.500	64.0	TO SS PB SS,RC/FP RC,SI KYB	0.07	1.8	3.27 3.37 3.53 3.57 3.57 3.39	83.0 85.7 89.8 90.7 90.7 86.2	9 9 9 13 1/2 13 1/2 9	230 230 230 345 345 230	65 65 65 65 65 65	20 20 20 20 20 20
4	100	3.860	98.0	TO SS PB SS,RC/FP RC,SI KYB	0.10	2.5	4.17 4.28 4.44 4.48 4.48 -	106.0 108.7 112.8 113.7 113.7 -	11 3/4 11 3/4 11 3/4 17 3/4 17 3/4 -	300 300 300 450 450 -	32 32 32 32 32 -	10 10 10 10 10 -
6	150	5.250	130.0	TO SS PB SS,RC/FP RC,SI KYB	0.12	3.0	5.75 5.87 - 6.06 6.06 -	146.0 149.0 - 154.0 154.0 -	23 3/4 23 3/4 - 35 1/2 35 1/2 -	600 600 - 900 900 -	28 28 - 28 28 -	8 8 - 8 8 -

Longer lengths may be available to special order if needed

Corroflon Sizes, Grades, Pressure Ratings & Weights

Nominal Hose Bore Size		Bore Inside Convolutions		Corroflon Grade (Braid & Cover)	Maximum Working Pressure of Hose		Burst Pressure		Weight per Unit Length	
in	mm	in	mm		Bar	psi	Bar	psi	Kg/Mtr	lb/ft
1/2	15	0.440	11.2	TO	6	87	24	350	0.21	0.14
				SS	41	595	450	6525	0.33	0.22
				PB	31	450	150	2175	0.26	0.17
				SS,RC/FP	41	595	450	6525	0.49	0.33
				RC,SI	41	595	450	6525	0.49	0.33
				KYB	15	215	61.5	890	0.23	0.15
3/4	20	0.620	15.7	TO	5	70	20	290	0.29	0.19
				SS	35	505	240	3480	0.45	0.30
				PB	26	375	105	1520	0.36	0.24
				SS,RC/FP	35	505	240	3480	0.56	0.38
				RC,SI	35	505	240	3480	0.56	0.38
				KYB	13	190	52.5	760	0.31	0.21
1	25	0.847	21.5	TO	4.5	65	18	260	0.45	0.30
				SS	31	450	200	2900	0.70	0.47
				PB	23	334	93	1350	0.56	0.38
				SS,RC/FP	31	450	200	2900	0.98	0.66
				RC,SI	31	450	200	2900	0.98	0.66
				KYB	11	160	46.5	675	0.49	0.33
1 1/4	32	1.080	27.5	TO	4	58	16	230	0.53	0.36
				SS	27	390	180	2610	0.82	0.55
				PB	20	290	81	1175	0.66	0.44
				SS,RC/FP	27	390	180	2610	1.12	0.75
				RC,SI	27	390	180	2610	1.12	0.75
				KYB	10	145	40.5	585	0.57	0.38
1 1/2	40	1.250	32.0	TO	3.5	50	14	205	0.97	0.65
				SS	23	335	120	1740	1.50	1.01
				PB	17	245	69	1000	1.20	0.80
				SS,RC/FP	23	335	120	1740	1.90	1.27
				RC,SI	23	335	120	1740	1.90	1.27
				KYB	9	130	34.5	500	1.05	0.70
2	50	1.690	43.0	TO	3	44	12	175	1.36	0.91
				SS	20	290	100	1450	2.10	1.41
				PB	15	215	60	870	1.68	1.13
				SS,RC/FP	20	290	100	1450	2.72	1.82
				RC,SI	20	290	100	1450	2.72	1.82
				KYB	8	115	30	435	1.47	0.99
2 1/2	65	2.120	54.0	TO	2.5	36	10	145	1.68	1.13
				SS	16	230	70	1015	2.58	1.73
				PB	12	175	48	695	2.06	1.38
				SS,RC/FP	16	230	70	1015	3.10	2.08
				RC,SI	16	230	70	1015	3.10	2.08
				KYB	6	87	24	350	1.81	1.21
3	80	2.500	64.0	TO	2	29	8	115	2.14	1.43
				SS	14	205	60	870	3.29	2.20
				PB	10	145	42	610	2.63	1.76
				SS,RC/FP	14	205	60	870	3.95	2.65
				RC,SI	14	205	60	870	3.95	2.65
				KYB	5	73	21	305	2.30	1.54
4	100	3.860	98.0	TO	1.5	22	6	87	3.18	2.13
				SS	10	145	40	580	5.05	3.38
				PB	8	115	30	435	3.98	2.67
				SS,RC/FP	10	145	40	580	6.12	4.10
				RC,SI	10	145	40	580	6.14	4.11
				KYB	-	-	-	-	-	-
6	150	5.250	130.0	TO	0.75	11	3	44	6.50	4.36
				SS	5	73	20	290	10.00	6.70
				PB	-	-	-	-	-	-
				SS,RC/FP	5	73	20	290	12.00	8.04
				RC,SI	5	73	20	290	12.00	8.04
				KYB	-	-	-	-	-	-