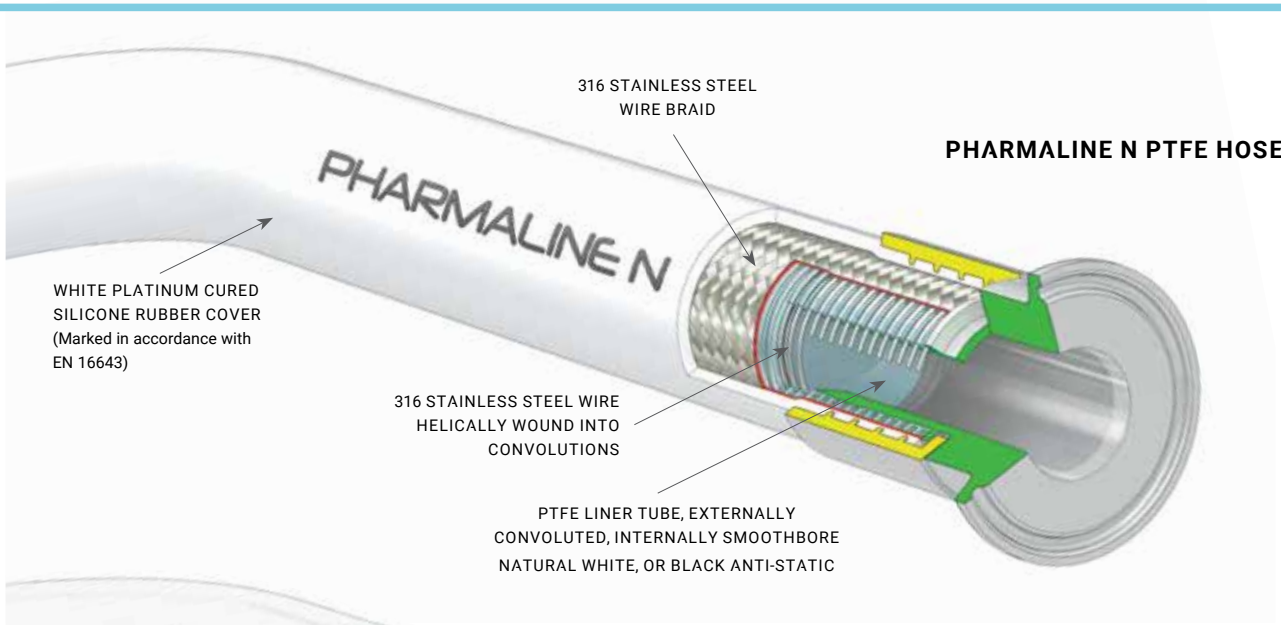
PHARMALINE® N&X

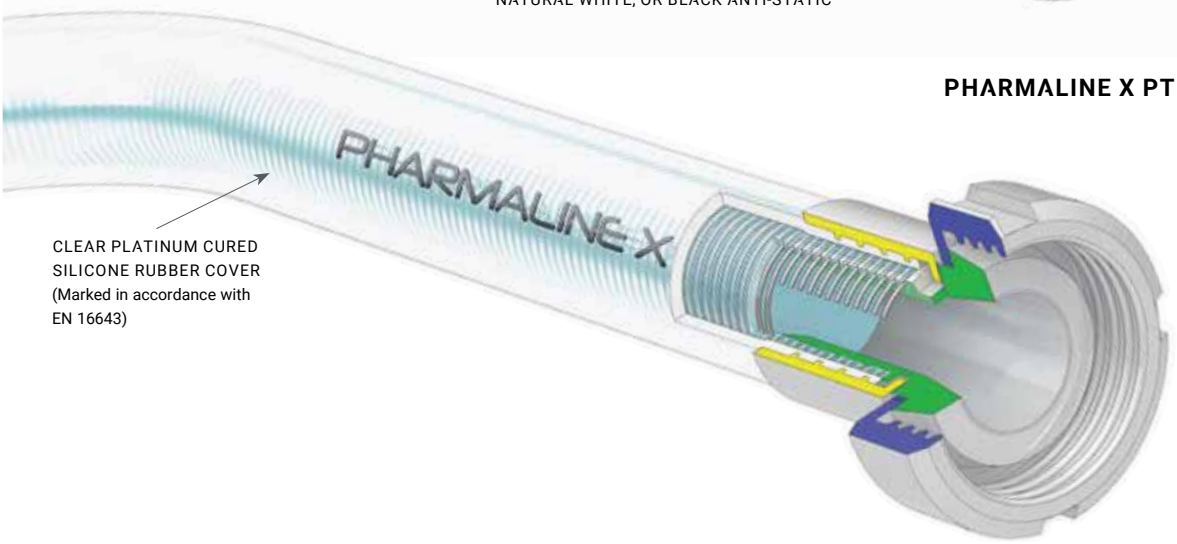
PTFE Hose for biotechnology and pharmaceutical fluid transfer

Replaces silicone rubber hose in applications where total internal chemical resistance is required



PHARMALINE N PTFE HOSE ASSEMBLY

NON-LINED SANITARY TRICLAMP END FITTING



PHARMALINE X PTFE HOSE ASSEMBLY

NON-LINED DIN 11851 FEMALE END FITTING

PHARMALINE N & X HOSE SPECIFICATIONS

HOSE BORE SIZE RANGE -

Pharmaline N - 1/4" (6.4MM) UP TO 3" (80MM)

Pharmaline X - 1/4" (6.4MM) UP TO 2" (50MM)

MAXIMUM HOSE LENGTHS -

Pharmaline N - 30 METRES (100 FEET) UP TO 1 1/2", 25 METRES (80 FEET) 2", 18 METRES (60 FEET) 2 1/2", 15 METRES (50 FEET) 3"

Pharmaline X - 20 METRES (65 FEET) UP TO 1", 6 METRES (20 FEET) UP TO 2"

TEMPERATURE LIMITS -

FROM -73°C (-100°F) UP TO +204°C (+400°F)

WORKING PRESSURE RATINGS -

Pharmaline N

80 BAR (1160 PSI) FOR 1/4" TO 15 BAR (218 PSI) FOR 3"

Pharmaline X

7.5 BAR (109 PSI) FOR 1/4" TO 2 BAR (29 PSI) FOR 2"

VACUUM LIMITATIONS -

USABLE AT VACUUM TO -0.9 BAR FOR ALL SIZES UP TO 200°C (392°F)

END FITTINGS OPTIONS *Non-Lined design for:*

SANITARY TRICLAMP FITTINGS, ANSI 150, DIN AND JIS SWIVEL FLANGE FITTINGS, CAM & GROOVE FITTINGS, DIN11851, RJT AND SMS FITTINGS, BSP, NPT AND JIC THREADED FITTINGS. LASER ETCHED FERRULE FOR ULTIMATE TRACEABILITY.

ALTERNATIVE DESIGN OPTIONS -

IF ALTERNATIVE HOSE DESIGNS LIKE A DIFFERENT COLOURED SILICONE RUBBER, OR PTFE LINED FITTINGS ARE REQUIRED, IT MAY BE POSSIBLE TO MATCH THOSE REQUIREMENTS WITH THE BIOFLEX ULTRA PRODUCT - CONSULT AFLEX HOSE FOR DETAILS.

FOR THE FULL PHARMALINE N & X HOSE BROCHURE PLEASE VISIT - **WWW.AFLEX-HOSE.COM**

SPECIFICATIONS FOR PHARMALINE N HOSE GRADES

** Maximum Working Pressures vary with temperature as in graph below*

Nominal Hose Bore Size		Actual Hose Bore Size		Helix Wire	Outside Diameter of Cover		Minimum Bend Radius		*Maximum Working Pressure		Burst Pressure		Weight per Unit Length	
in	mm	in	mm		in	mm	in	mm	Psi	Bar	Psi	Bar	lb/ft	Kg/Mtr
1/4	6.4	0.260	6.6	-	0.460	11.6	3/4	19	1160	80	4641	320	0.11	0.17
3/8	9.5	0.382	9.7	-	0.610	15.5	1	25	1015	70	4061	280	0.14	0.22
1/2	12.7	0.516	13.1	√	0.845	21.4	1 1/2	38	870	60	3480	240	0.25	0.37
5/8	16.0	0.638	16.2	√	0.990	25.2	2	50	725	50	2900	200	0.35	0.52
3/4	19.0	0.760	19.3	√	1.120	28.5	2 1/2	63	655	45	2610	180	0.42	0.65
1	25.4	1.012	25.7	√	1.455	37.0	4	100	580	40	2320	160	0.57	0.88
1 1/4	32.0	1.268	32.2	√	1.755	44.6	5 1/4	130	510	35	2030	140	0.85	1.30
1 1/2	38.0	1.516	38.5	√	2.035	51.7	6.70	170	435	30	1740	120	1.14	1.70
2	50.0	2.012	51.1	√	2.580	65.6	8.27	210	405	28	1624	112	1.58	2.36
2 1/2	65.0	2.508	63.7	√	3.169	80.5	11.81	300	290	20	1100	80	2.41	3.59
3	80.0	3.024	76.8	√	3.654	92.8	13.78	350	218	15	870	60	2.96	4.40

SPECIFICATIONS FOR PHARMALINE X HOSE GRADES

† Maximum Working Pressures do not vary with temperature

Nominal Hose Bore Size		Actual Hose Bore Size		Helix Wire	Outside Diameter of Cover		Minimum Bend Radius		† Maximum Working Pressure		Burst Pressure		Weight per Unit Length	
in	mm	in	mm		in	mm	in	mm	Psi	Bar	Psi	Bar	lb/ft	Kg/Mtr
1/4	6.4	0.260	6.6	-	0.456	11.6	1 1/4	30	109	7.5	435	30	0.06	0.09
3/8	9.5	0.382	9.7	-	0.610	15.5	1 1/2	38	87	6.0	348	24	0.09	0.14
1/2	12.7	0.516	13.1	√	0.845	21.4	2 3/8	60	84	5.8	334	23	0.21	0.32
5/8	16.0	0.638	16.2	√	0.990	25.2	2 1/2	64	72	5.0	290	20	0.19	0.29
3/4	19.0	0.760	19.3	√	1.120	28.5	3	75	72	5.0	290	20	0.37	0.55
1	25.4	1.012	25.7	√	1.455	37.0	4 3/4	120	60	4.0	240	16	0.44	0.81
1 1/4	32.0	1.268	32.2	√	1.755	44.6	5 1/2	140	43	3.0	175	12	0.50	0.75
1 1/2	38.0	1.516	38.5	√	2.035	51.7	7	180	29	2.0	116	8	0.74	1.11
2	50.0	2.012	51.1	√	2.580	65.6	12	300	29	2.0	116	8	1.28	1.91

*MAXIMUM WORKING PRESSURES (MWP)

The lesser of the MWP for the hose and the MWP of either of the end fittings.

TEMPERATURE LIMITATIONS

Usable from -73˚C (-100˚F) up to +204˚C (+400˚F)

VACUUM LIMITATIONS

Pharmaline N hose is usable at vacuum to -0.9bar up to 200˚C (392˚F).

ROLLING U TEST FOR FLEX LIFE

(View this in the 'Videos' section of our website)

More than 15x the flex life to failure compared with other types of rubber covered, smoothbore PTFE lined hose products.

FLEXIBILITY

Much less force to bend than any other equivalent smooth bore PTFE lined hose product.

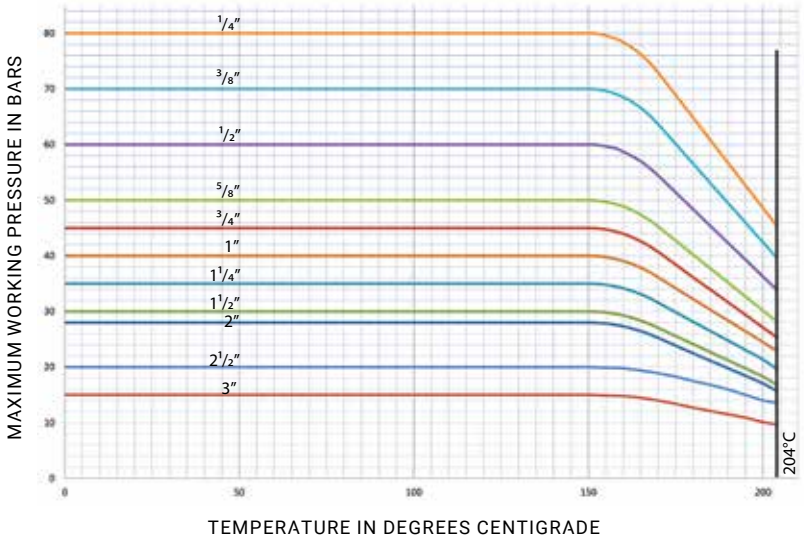
KINK RESISTANCE (See website for video)

Much more resistant to kinking than any other equivalent smooth bore PTFE lined hose product.

SOAKABLE

Pharmaline N hose assemblies are soakable.

*TEMPERATURE & MAXIMUM WORKING PRESSURE GRAPH FOR PHARMALINE N



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AFLEX HOSE
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