



PTFE hose with vacuum helix and para-aramid braiding

Our PTFE hose type NFN-AV is a corrugated, conductive PTFE hose with a vacuum helix and high-strength, non-metallic braiding.

The grey/black PTFE hose is UV and weather resistant. The para-aramid braiding with carbon fibre makes the hose universally deployable, very flexible and light. And there is no risk of injury from protruding metal strands, which makes the hose very convenient to work with.

PTFE hose type NFN-AV

Our PTFE hose with vacuum helix offers high compressive strength and high chemical resistance against all media (pH 0-14), except molten or dissolved alkali metals and elemental fluorine. Convoluted hoses with a vacuum helix are used in particular where a high vacuum coincides with high temperatures. The support helix reduces kinking of the hose under extreme conditions.

On top of this, the support helix is located on the outside; there is therefore no contact with the product.

The PTFE hose type NFN-AV is suitable for use in areas in which a potentially explosive atmosphere consisting of a mixture of air with flammable substances in the form of gas, vapour or mist exists continuously or over long periods (EX zone 0). Accordingly, our PTFE hose with vacuum helix is frequently used as a suction or pressure hose in chemical, pharmaceutical or food plants.

The liner of the hose consists of extruded PTFE with universal chemical resistance in an electrically conductive design.

We can offer a variety of fittings and materials for all our PTFE hoses and are pleased to respond flexibly to customer requests. In addition, smooth ends and flared or lined fittings are also possible with our PTFE hoses. Complete traceability of our hoses is ensured by the serial number on the crimp collar.



Technical specifications

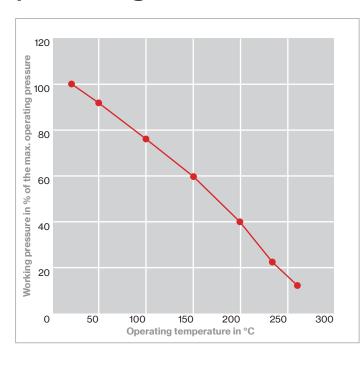
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DN mm / inch		Inside Ø approx. [mm]	Outside Ø approx. [mm]	Operating pressure* max. [bar]	Weight [kg/m]	Bending radius [mm]
12	1/2	11.6 – 13.6	23.4	50	0.13	50
20	3/4	19.5 – 20.5	29.9	60	0.34	55
25	1	24.5 – 25.5	40.7	40	0.46	85
32	11/4	31.5 – 32.5	48.6	40	0.57	100
40	1½	36.5 – 37.5	52.4	40	0.71	120
50	2	49.5 – 50.5	69.2	25	1.15	165
65	2½	62.5 – 63.5	91.6	16	2.14	230
80	3	73.5 – 74.5	102.2	14	3.31	260

DN 10 and DN 100 on request.

*All values are stated for a temperature of 20 °C.

p-T diagram



Structure

Liner	Electrically conductive PTFE		
Cover	N/A		
Braiding	Para-aramids with conductive fibers		
Fittings	Crimped or flared		
Inserts	N/A		
Temperature	-70 °C / +260 °C		
Vacuum	With vacuum helix down to 66.25 mbar absolute at 20 °C		
Max. length	10 m, longer lengths on request		
Standard/ approval	FDA 21 CFR 177.1550, FDA 21 CFR 178.3297, USP XXXVI Class VI, EC 1935/2004, free of TSE & BSE		

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