

Technical Data Sheet

Silicone Pressure Hoses

Silicone rubber hoses stand out due to their excellent resistance against ageing, weathering, ozone as well as UV and gamma radiation. They show moderate resistance against aliphatic engine and gearbox oils and more or less poor resistance against fuels, chlorinated hydrocarbons, esters, ethers, ketones and strong acids and alkalis. Silicone rubber possesses a high permeability rate. It can be chosen – for all dimensions and reinforcement materials – between standard cure (peroxide) or premium addition cure (platinum) (see table below). The standard hardness is 70 Shore A, but other hardnesses can be produced on request. The silicone hoses can be manufactured in any different colours.

nominal ID*		Outer ID* [mm]	wall thickness* [mm]	Bending radius* [mm]	bersting pressure @ 20° C [bar]**		vacuum [mbar absolute]
[mm]	[Inch]				1layer	2layer	
3	1/8	8	2,5	30	60	> 100	150
6	1/4	12	3	50	40	> 100	150
8	5/16	14,4	3,2	60	40	> 80	150
10	3/8	17	3,5	70	35	> 80	150
12,5	1/2	20,5	4	80	30	> 80	150
16	5/8	25,6	4,8	100	30	> 80	200
19	3/4	31	6	150	25	> 80	200
25	1	37	6	185	15	> 70	250
32	1¼	46	7	220	10	--	300
38	1½	52	7	260	10	--	400
50	2	64	7	350	6	--	600

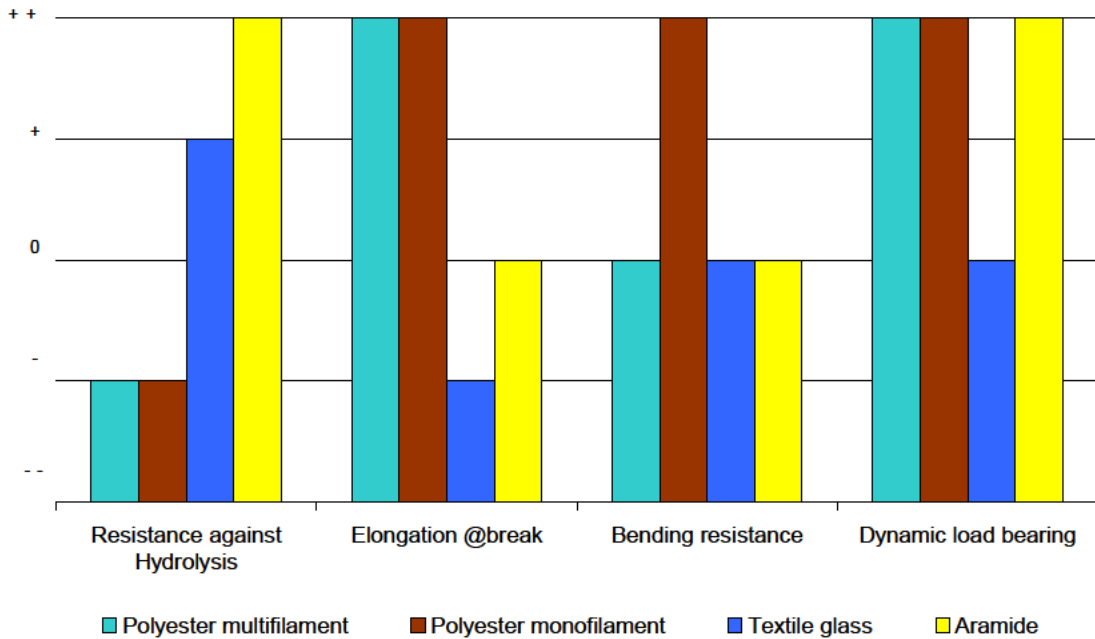
Reinforcement	Temperature resistance	ID possible up to [mm]
Polyester (multifilament)	-40 bis 160	19mm (¾")
Polyester monofilament		25mm (1")
Textile glass	-40 bis 180 -40 bis 240 (special grade)	50mm (2")
Aramide		

* Other sizes on request

** The pressure resistance depends on the connectors used and the operating conditions

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Properties of Reinforcement materials



Properties of silicone rubber compounds

Peroxide cure	Peroxide-cured silicone rubber can be used for many applications where a good cost-performance ratio is desired. It is available with a broad variety of properties and colours and suitable for direct contact with food (Recommendation XV BfR, CFR21 FDA177.2600) It is of limited suitability for medical and pharmaceutical applications.
platinum cure	Addition-cured silicone rubber is well known for its purity. Thus, it is recommended for hoses used in contact with food (Recommendation XV BfR, CFR21 FDA177.2600), drinking water (KTR, WRAS, W270) and in medical as well as pharmaceutical applications (EP3.1.9, USP Class VI).