PVC food-grade hoses

PVC STAR PS

Food-grade PVC hose reinforced with a rigid PVC spiral

Material: transparent PVC
Reinforcement: rigid PVC spiral
Working temperature: from -15°C to +60°C (working pressure depends on temperature)

Lightweight, flexible suction and delivery hose for conveying water, juices, beverages, beer, wine, alcohols up to 50%, and also milk and dairy products, at temperatures up to +60°C. Not recommended for oils and fatty foodstuffs. Reinforced with an impact-resistant rigid PVC spiral, providing good resistance to vacuum and kinking. The transparent wall allows easy visual flow inspection. The smooth inner surface reduces flow losses and ensures easy cleaning. The hose's outer surface is also smooth, which facilitates fitting of ends with tapes or clamps, reduces external damage from abrasion and keeps the hose easy to clean.

With no direct contact with food (in industry, construction, agriculture) it may be used:
- for mild chemicals, water, sludge and effluent, other liquids (excluding fats, oils and hydrocarbons),
- for air, vacuum conveying of dusts, powders, granulates and other **mildly** abrasive bulk materials (non-greasy). Abrasion and the possible issue of static electricity must then be taken into account.

As a hose reinforced only with a rigid PVC spiral, without braid, it exhibits some elongation under pressure, which must be taken into account in the application, particularly at temperatures above 40°C.

Standards and requirements:
Food industry - temporary contact with food: hose compliant with European requirements 1935/2004/EC and 10/2011/EU (simulants A, B, C, D1), 2023/2006/EC (GMP), under the conditions, time and temperature per the manufacturer's declaration of conformity (available at Tubes International).
Marking: SO-PVCSTAR-PS-20 Reg.EU 10/2011 A, B, C, D1 www.tubes-international.com Made in France [batch no.]

index	diameter inner [mm]	diameter outer [mm]	wall wall [mm]	pressure working 20°C [bar]	pressure burst 20°C [bar]	vacuum 20°C [bar]	bending radius [mm]	weight [kg/m]	length length [m]
SO-PVCSTAR-PS-20	20	25,2	2,6	7	21	0,9	60	0,242	25
SO-PVCSTAR-PS-25	25	30,4	2,7	7	21	0,9	75	0,300	25
SO-PVCSTAR-PS-32	32	37,6	2,8	6	18	0,9	95	0,387	25
SO-PVCSTAR-PS-38	38	44	3	6	18	0,9	115	0,504	25
SO-PVCSTAR-PS-40	40	46	3	6	18	0,9	120	0,523	25
SO-PVCSTAR-PS-50	50	56,6	3,3	5	15	0,9	150	0,736	25

Note: indexes highlighted in colour – most commonly used

Relationship between burst pressure and working pressure as a function of temperature for typical PVC hoses	temperature	20°C	30°C	40°C	50°C	60°C	70°C
	pressure	100%	74%	55%	40%	30%	22%

The PVC STAR PS hose with DIN or SMS hygienic ends, crimped with stainless steel ferrules, provides a reliable, safe and economical solution for standard flexible connections in food-product installations. Owing to the rigid PVC spiral, it is better to use ends and ferrules with a smooth surface pressing on the hose (deeply grooved ends and ferrules are not recommended).