

PVC universal hoses



CP

Universal non-reinforced PVC hose

Hose material: Transparent PVC

Operating temperature: -20°C to +55°C (temporarily +65°C)
(temperature-dependent working pressure, cold-bending temperature to -45°C)

A versatile, highly flexible, non-reinforced hose manufactured in the UK. Designed for the non-pressure (or very low pressure) transfer of air, water and liquids in general industrial applications, for light chemicals (e.g. dilute acids and bases), in laboratory applications, for level gauges and as a cover for pipes, hoses, cables etc. The hose material is free of phthalates, silicone and cadmium and complies with REACH, RoHS and WEEE regulations. In accordance with EU regulations, application to food products is possible after the required migration tests have been carried out using suitable model liquids simulating the food in question (the material used to manufacture the hose complies with the requirements of 10/2011/EU and FDA 21). Hose material is self-extinguishing to UL94-V2 and UL94-HB (at 3 mm thickness).

index	Internal diameter (d) [mm].	Outside diameter (D) [mm].	wall thickness (t) [mm].	bend radius [mm]	mass [kg/m]	Roll length [m]
CX-CP-03X06	3	6	1,5	12	0,026	30
CX-CP-04X06	4	6	1	18	0,019	30
CX-CP-05X08	5	8	1,5	21	0,037	30
CX-CP-05X11	5	11	3	20	0,092	30
CX-CP-06X09	6	9	1,5	27	0,043	30
CX-CP-08X11	8	11	1,5	40	0,055	30
CX-CP-08X14	8	14	3	33	0,126	30
CX-CP-09X12	9	12	1,5	48	0,06	30
CX-CP-10X13	10	13	1,5	56	0,066	30
CX-CP-10X16	10	16	3	43	0,149	30
CX-CP-12X15	12	15	1,5	75	0,078	30
CX-CP-12X18	12	18	3	54	0,172	30
CX-CP-13X19	13	19	3	60	0,184	30
CX-CP-16X19	16	19	1,5	120	0,101	30
CX-CP-16X22	16	22	3	81	0,218	30
CX-CP-19X25	19	25	3	104	0,253	30
CX-CP-22X28	22	28	3	131	0,287	30
CX-CP-25X31	25	31	3	160	0,322	30
CX-CP-32X38	32	38	3	241	0,402	30
CX-CP-38X44	38	44	3	323	0,471	30
CX-CP-45X51	45	51	3	434	0,552	30
CX-CP-45X54	45	54	4,5	324	0,854	30
CX-CP-50X59	50	59	4,5	387	0,94	30
CX-CP-50X62	50	62	6	320	1,288	30
CX-CP-60X72	60	72	6	432	1,518	30
CX-CP-76X88	76	88	6	645	1,886	30

typical PVC hose, 20°C		
d [mm]	D [mm].	Working pressure * [bar]
3	6	3,60
4	6	2,31
5	8	2,63
5	11	3,95
6	9	2,31
8	11	1,85
8	14	3,05
9	12	1,68
10	13	1,54
10	16	2,63
12	15	1,32
12	18	2,31
13	19	2,17
16	19	1,02
16	22	1,85
19	25	1,61
22	28	1,42
25	31	1,27
32	38	1,02
38	44	0,87
45	51	0,75
45	54	1,08
50	59	0,98
50	62	1,27
60	72	1,08
76	88	0,87

* - Indicative value of the recommended operating pressure at a safety factor of 5:1.

For unreinforced hoses, manufacturers usually do not specify the working pressure or burst pressure due to the less clear-cut nature of hose bursting, preceded by permanent deformation. The values given were calculated using Lamé's formula: working pressure = $(S/n) \times (D^2 - d^2) / (D^2 + d^2)$, assuming S = 3 MPa (material stress at permanent deformation) and n=5 (safety factor). These are indicative values for a typical plasticised PVC hose. The use of a hose for a specific operating pressure should be preceded by a test under operating conditions.

Temperature dependence of burst pressure and working pressure for typical PVC hoses	temperature	20°C	30°C	40°C	50°C	60°C	70°C
	pressure	100%	74%	55%	40%	30%	22%