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Rubber ball CR

Ball made of polychloroprene elastomer. Good mechanical properties and good impact and abrasion resistance. Very resistant to weathering, excellent resistance to UV radiation, low flammability. Very good adhesion to metals. Neopren® is a registered trademark of the Dupont Company.

Field of application

Pumpen und Sicherheitsventile (als Dichtungselement), pneumatische und hydraulische Anwendungen.

Corrosion resistance

Resistant in contact with sea water, in dilute acids and bases, cooling liquids, ammonia, ozone. Good resistance in contact with fresh and salt water and alkali. Sufficient resistance to mineral oils and aliphatic hydrocarbons, steam.

Unstable in contact with strong acids and bases, aromatic hydrocarbons, polar solutions, esters and ketones.

Material

Technical name	Alternative name	Abbreviation
Chloroprene rubber	Neopren®, Baypren	CR

Physical / mechanical / thermal / electrical / magnetic characteristics

Characteristic	Symbol	Unit	Type	Note	Value
Density	δ	g/cm ³	Physical	Environmental temp.	1,36
Modulus of elasticity	E	MPa	Mechanical	-	2,5
Elongation at break	A	%	Mechanical	Environmental temp.	≤ 600
Compression set	-	%	Mechanical	Environmental temp.	28
Coefficient of friction	μ	-	Mechanical	Environmental temp.	0,65
Linear coefficient of thermal expansion	α	10 ⁻⁶ /°C	Thermal	($\Delta T = 0 - 100^\circ C$)	139
Thermal conductivity	λ	W/(m*K)	Thermal	Environmental temp.	0,19
Electrical resistivity	ρ	$\Omega \cdot mm^2/m$	Electrical	-	> 10 ¹⁷
Relative magnetic permeability	μ	-	Magnetic	Diamagnetic	< -1

Technical characteristics

Characteristic	Type	Unit	Type	Unit	Value
Hardness	Mechanical	Shore A	60 - 80	-	-
Break load in traction	Mechanical	MPa	10 - 25	psi * 10 ³	0,73 - 2,90
Operating temperature	Thermal	° C	-30 - 100	° F	-22 - 212

Available with		
Diameter min/max (mm)	Diameter min/max (in)	Precision grade
2,000 - 152,400	3/32 - 6	III