

PVDF - Polyvinylidene fluoride



PVDF is a high-performance polymer compared to standard resins. It offers exceptional chemical and weather resistance, along with robust mechanical strength. PVDF also excels in UV stability and long-term durability.

Continuous Use Temperature

150°C/302°F

Flame Retardant Grade

UL94 V-0

Torsional fracture torque unit: Nm

Head Type	M2	M3	M4	M5	M6	M8	M10	M12
Hexagon Head		0.15	0.3	0.65	0.9	2.32	5	10
Socket Hex Head		0.15	0.25	0.55	0.98	2.18	-	-
Slotted Countersunk Head		0.15	0.25	0.6	1.03	1.55	2.5	-
Cross Countersunk Head		0.15	0.3	0.55	1	2.4	4.25	-

Tensile Fracture Load : N

Head Type	M2	M3	M4	M5	M6	M8	M10	M12
Hexagon Head			213	672	919	1529	2867	3938

- ➔ **The flash (end stump) of the bolt length (L) is less than or equal to 5%**
If bolts are used with nuts, we recommend using bolts and nuts of the same material.
- ➔ **Table contains reference values. These are not guaranteed**
Please use a torque wrench for tightening. The recommended tightening torque is 50% of the breaking torque.



Polyvinylidene Fluoride (PVDF) Properties

Property	Nominal Value	Unit	Test Method
Density	1780	kg/m ³	ISO 1183
Water Absorption	0.03	%	ISO 62
Tensile Modulus	2300	MPa	ISO 527-1/-2
Yield Stress	54	MPa	ISO 527-1/-2
Yield Strain	9	%	ISO 527-1/-2
Nominal Strain at Break	>50	%	ISO 527-1/-2
Charpy Impact Strength (+23°C)	192	kJ/m ²	ISO 179/1eU
Charpy Impact Strength (-30°C)	208	kJ/m ²	ISO 179/1eU
Melting Temperature	168	°C	ISO 11357-1/-3
Glass Transition Temperature	-40	°C	ISO 11357-1/-2
Deflection Temperature (1.80 MPa)	110	°C	ISO 75-1/-2
Deflection Temperature (0.45 MPa)	130	°C	ISO 75-1/-2
Vicat Softening Temperature	140	°C	ISO 306
Coefficient of Linear Thermal Expansion	150	E-6/K	ISO 11359-1/-2
Flame Retardant Rating (1.5mm thickness)	V-0		IEC 60695-11-10
Oxygen Index	43	%	ISO 4589-1/-2

