

**LUVOCOM® 3/XCF/10-S**

LEHVOSS Group - Polyamide 6

**General Information**
**Product Description**

with carbon fibers, toughness-modified; natural color (black)

**Main Features**

- Dynamic-stress and wear-resistant parts.
- Electrically conductive, suitable for continuous discharging of statically-generated electricity.
- Strong, stiff, impact-resistant parts.

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Filler / Reinforcement	• Carbon Fiber		
Additive	• Impact Modifier		
Features	• Electrically Conductive	• High Stiffness	• Impact Modified
	• High Impact Resistance	• High Strength	• Wear Resistant
Appearance	• Black		

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density	1.15	g/cm <sup>3</sup>	ISO 1183
Water Absorption (24 hr, 73°F)	< 1.3	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.45E+6	psi	ISO 527-1/1
Tensile Stress	22500	psi	ISO 527-2
Tensile Strain (Yield)	7.0	%	ISO 527-2/50
Flexural Modulus <sup>2</sup>	1.23E+6	psi	ISO 178
Flexural Stress <sup>3</sup>	32600	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	5.7	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
--	40	ft·lb/in <sup>2</sup>	
-22°F	45	ft·lb/in <sup>2</sup>	
Thermal	Nominal Value	Unit	Test Method
Continuous Use Temperature <sup>4</sup>	194	°F	IEC 60216
Vicat Softening Temperature	428	°F	ISO 306/A
Service Temperature - during lifetime max. 200 hr	284	°F	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	< 1.0E+8	ohms	IEC 62631-3-2
Insulation Resistance <sup>5</sup>	< 1.0E+8	ohms	IEC 62631-3-3

**Processing Information**

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer, A	167	°F
Desiccant Dryer, B	221	°F
Drying Time		
Desiccant Dryer, A	10 to 16	hr
Desiccant Dryer, B	4.0 to 6.0	hr
Rear Temperature	482 to 518	°F



Middle Temperature	518 to 554 °F
Front Temperature	536 to 572 °F
Nozzle Temperature	518 to 536 °F
Processing (Melt) Temp	518 °F
Mold Temperature	158 to 230 °F

#### Injection Notes

During processing, the moisture level should not exceed 0.01%, otherwise molecular degradation may occur. As the material absorbs water very quickly, the predried material should be fed to the processing immediately. The processing notes provided merely represent a recommendation for general use. Due to the large variety of machines, geometries and volumes of parts, etc., it may be necessary to employ different settings according to the specific application. Please contact us for further information.

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.079 in/min

<sup>3</sup> 0.39 in/min

<sup>4</sup> 20,000 hr

<sup>5</sup> strip electrode R25

