product specification

High immunity extension cables

Application : high-immunity extension cables have been developped for the transmission of low level impulsional signals delivered by source range neutron detectors under environmental conditions which do not allow the use of organic insulated cables. Such extension cables are equipped with watertight HN connectors and offer a high level resistance to radiations and electromagnetic parasitic signals.

Unless otherwise stated, all characteristics are given at 20°C

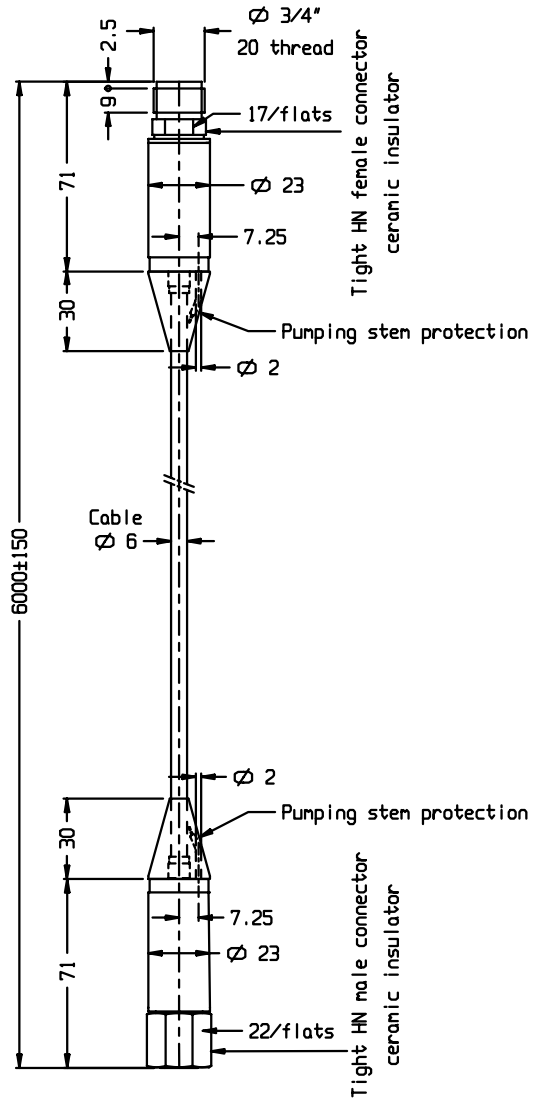
Mechanical and physical characteristics

Cable :			
type			1 Zs FCAc 60
external diameter		6	mm
mineral isulator			MgO
curvature radius	min	60	mm
electrical insulation by "Scotch 27" (optional)			50% overlapping
Connectors :			
type			male or female, watertight HN
screwing		6 flat screw	
external watertightness ring			organic, nuclear quality
screwing torque :			
recommanded		0.9	m.daN
maximum		1.1	m.daN
Operating temperature :			
for short times		170	°C
for long times		130	°C
Overall length :			
maximum (request when ordering)		15	m

Electrical characteristics

Cable :			
characteristic impedance		50	Ω
capacitance		170	pF/m
line resistance		0.4	Ω/m
attenuation		0.34	dB/m
Extension :			
transfer impedance (20kHz-100MHz pass band)		$< 10^5$	Ω/m
insulating resistance at 900 V :	min	10^{12}	Ω
breakdown resistance	min	1000	Veff

EXT-HN/MF-6-6



all dimensions in mm unless otherwise indicated

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