

# SAMPLE PRODUCT SPECIFICATION

<b>Product name</b>	5kWe single cylinder R&D gas expander
<b>Product number</b>	FPE048FS
<b>Specification version</b>	v1, February 2017



A free piston gas expander flux designed for high expansion ratio thermodynamic cycle research applications. The flux switching electrical machine is integrated with a passive inlet valve mechanism and a pneumatic preload system to accommodate a wide range of test conditions and objectives.

Can be supplied as a bare electrical machine or with servo-drive and motion controller.

<b>Application</b>	Conventional, transcritical, supercritical ORC systems
<b>Working fluid</b>	Ethanol, refrigerants, steam
<b>Mover diameter</b>	48mm
<b>Maximum stroke</b>	400mm
<b>Inlet pressure</b>	Up to 30 bar
<b>Inlet temperature</b>	Up to 250 °C
<b>Expansion ratio</b>	Up to 50:1
<b>Specific force</b>	>0.2 kN/kg

