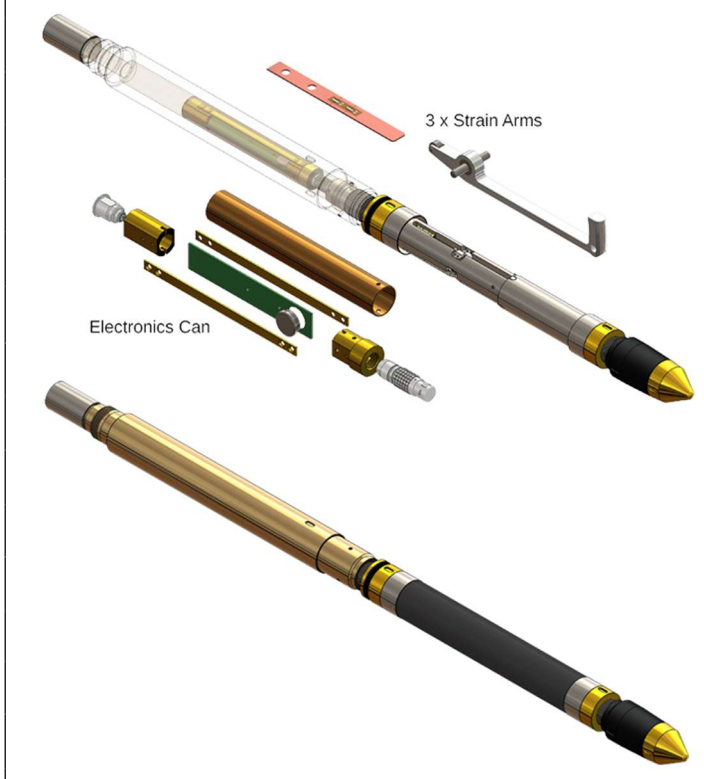
Reaming Pressuremeter (RPM)

Specification and technical data sheet.

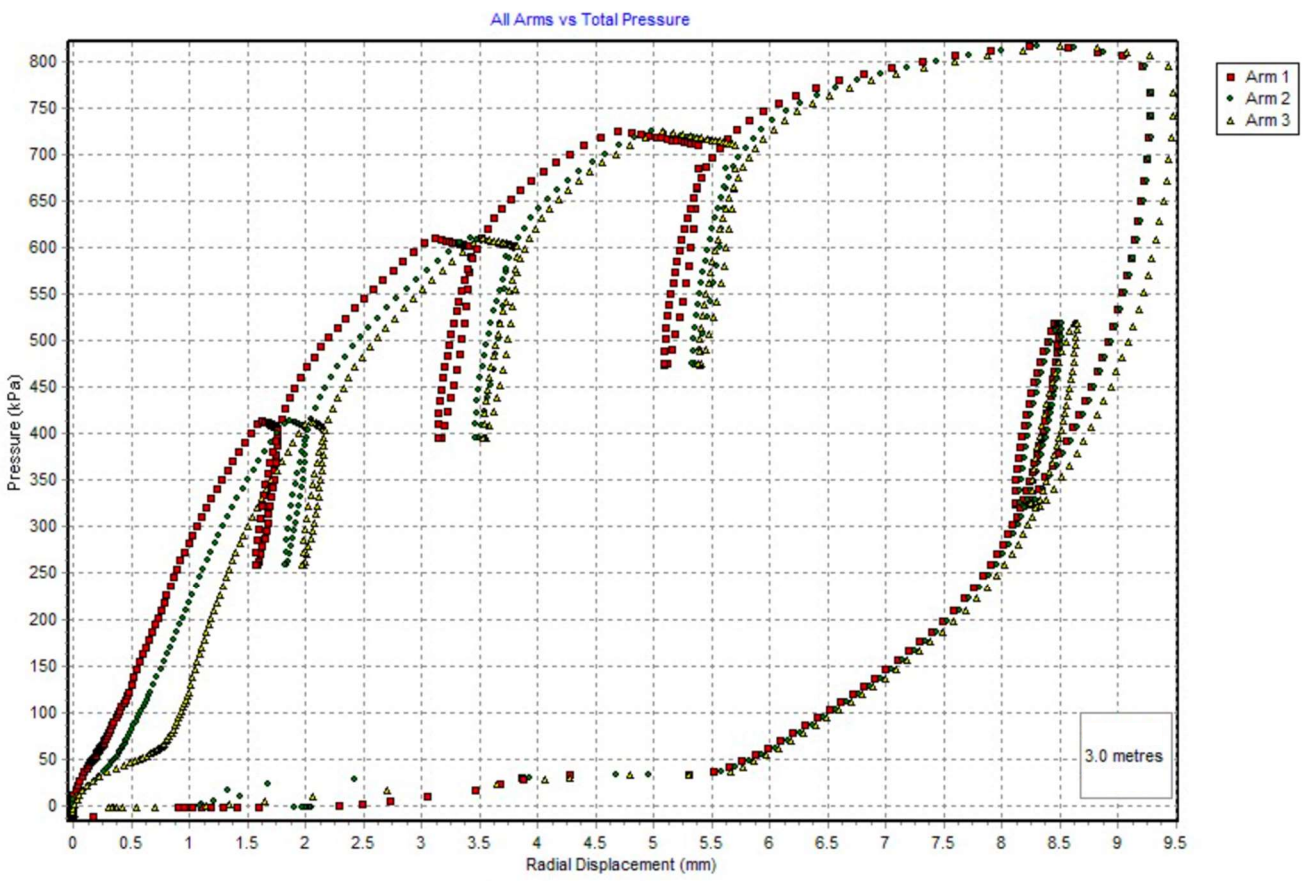
The Reaming Pressuremeter (RPM) is a versatile small diameter pressuremeter, used in materials ranging from weak rock such as weathered chalk, to very weak clays.

Insertion techniques for the RPM can be either by pushing with hydraulic rams, or pre-boring with an SPT split spoon, 50mm drag bit or a rotary core barrel. This instrument can be configured to take a 15cm² live cone (CPT), thus changing the instrument from a Reaming Pressuremeter to a Cone Pressuremeter. The CPT operates entirely separately to the pressuremeter.

Reaming Pressuremeter (RPM)	
Probe Diameter (Field Ready):	47mm
Max Working Pressure	10MPa
Max Arm Radial Displacement:	10mm
Maximum Strain:	42.5%
No. of Direct Strain Arms:	3
Arm Spacing at Circumference:	120°
No. of Total Pressure Cells:	1
No. of Pore Pressure Cells:	0
Length of expanding section:	285mm
Assembled Length (No Subs):	945mm
Umbilical Diameter:	12mm
Actuation:	Pneumatic
Power Requirements:	12V
Pre-bored:	Yes
Self-bored	No
Pushed:	Yes
Thread Type From Probe:	BW



Example Data



Common Parameters

Insitu Horizontal Stress	σ_{ho}
Yield Stress	P_f
Limit Pressure	P_{lm}
Undrained Shear Strength	C_u
Frictional Strength Properties	ϕ_{cv} , ϕ_{pk} , C'
Initial Shear Modulus	G_i
Shear Modulus	G_{ur}
Young's Modulus	E

Details may be subject to change – please request latest revision to ensure accuracy.