

Unsteady State Relative Permeameter

Measurement of two phase relative permeability of a plug sample

Relative permeability is the ratio of the effective permeability of a fluid to the absolute permeability of the rock that is an indication of flowing behavior of different fluids in a porous medium.

Experiment Description

Water (or oil) is injected at a suitable pressure to the plug, which is saturated with oil (or water). By measuring the volume of the produced oil and water at the outlet, water-oil relative permeability curves can be obtained for imbibition or drainage utilizing Jones & Roszelle Method.



Specification	URP-BR02	URP-BR05	URP-BR12	URP-BR15
Pressure Accuracy	0.5% F.S.	0.5% F.S.	0.05% F.S.	0.5% F.S.
Core Length	2" to 3"	2" to 3"	2" to 3"	2" to 3"
Working Temperature	Ambient	Ambient	Ambient	Ambient
Max. Pore Pressure	6,000 Psi	6,000 Psi	6,000 Psi	6,000 Psi
Max. Confining Pressure	6,300 Psi	6,500 Psi	6,500 Psi	6,500 Psi
Core Diameter	1.5"	1.5"	1.5"	1.5"
Core Holder Orientation	Horizontal	Horizontal	Horizontal	Horizontal
Number of Accumulators	4	4	2	2
Input Power Supply	220 VAC, 50/60Hz	220 VAC, 50/60Hz	220 VAC, 50/60Hz	220 VAC, 50/60Hz
Pressure Taps: Inlet and Outlet of Core Holder	✓	✓	✓	✓
Stainless Steel Material	✓	✓	✓	✓
Downstream Pressure Controller	✓	✓	✓	✓
Hydraulic Hand Pump	✓	✓	✓	✓
Digital Upstream and Downstream pressure (Indicator)	✓	✓	✓	✓
Digital Confining and Back Pressure (Indicator)	✓	✓	✓	✓
Digital Cell Pressure (Indicator)	✓	✓	✗	✗
Special Designed Hassler Type Core Holder for Relative Permeability	✓	✓	✓	✓
High Pressure HPLC Pump is included	✗	✓	✗	✓

Contact info:

+98 71 3624 6968 / +98 71 3624 7604
info@petroazma.com
www.petroazma.com

Address:

Fars Science and Technology Park,
Aryan St., Dr.Hesabi Blvd., Shiraz, I.R.Iran
P.O Code: 7197687811