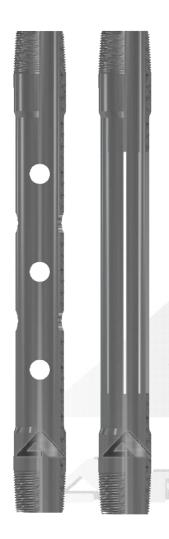


ARMORTOOLS INTL. Perforated – Slotted Pup Joints



Description

Perforated - Slotted Pup Joints are various lengths of tubing with predetermined machined holes or slots situated at either 45° or 90° apart along the length of the tubing. Perforated - Slotted Pup Joints are usually installed near or at the bottom of the completion tubing string. When installed between two profile nipples, downhole recording devices such as temperature and pressure gauges can be installed in the lower profile nipple to acquire flowing pressure and temperature measurements.

In other well completion proposes the Perforated / Slotted Pup Joints provide unrestricted flow of fluid & gas when Frac balls are not recovered.

Features& Benefits

- ✓ Available in multiple tubing lengths
- ✓ Available in multiple tubing sizes
- ✓ Available in multiple tubing grades
- ✓ Available in API or other premium thread connections



ARMORTOOLS INTL. Perforated – Slotted Pup Joints

2-3/8 Slotted PJ										
Tubi	ing Flow 3.3 sq in		2x Tubing Flow= 6.6 sq in		3x Tubing Flow= 9.9 sq in					
Length (ft)	Slotted Columns	Degrees	# of Slots	Length of Slot (in)	Slot Width (in)	Flow Achieved				
2'	8	45	8	12	0.114	10.94 sq. in.				
4'	4	90	6	16	0.114	10.94 sq. in.				
6'	4	90	10	12	0.114	13.68 sq. in.				
8'	4	90	10	12	0.114	13.68 sq. in.				
10'	4	90	10	12	0.114	13.68 sq. in.				
		2-3/8	Perfo	rated PJ						
Tubi	Tubing Flow 3.3 sq in			2x Tubing Flow= 6.6 sq in		3x Tubing Flow= 9.9 sq in				
Length (ft)	Hole Columns	Degrees	# of Holes	Size (in)	Flow /Hole	Flow achieved				
2'	4	90	10	1"	0.7854	7.85 sq. in.				
4'	4	90	18	3/4"	0.4418	7.95 sq. in.				
6'	4	90	22	5/8"	0.3068	6.75 sq. in.				
8'	4	90	26	5/8"	0.3068	7.98 sq. in.				
10'	4	90	34	5/8"	0.3068	10.43 sq. in.				

2-7/8 Slotted PJ										
Tub	ing Flow 4.71 sq in		2x Tubing	g Flow= 9.42 sq in	3x Tubing Flow= 14.13 sq in					
Length (ft)	Slotted Columns	Degrees	# of Slots	Length of Slot (in)	Slot Width (in)	Flow Achieved				
2'	8	45	8	15	0.114	13.68 sq. in.				
4'	88	45	12	12	0.114	16.42 sq. in.				
6'	4	90	10	14	0.114	15.96 sq. in.				
8'	4	90	10	14	0.114	15.96 sq. in.				
10'	4	90	10	14	0.114	15.96 sq. in.				
		2-7/	8 Perf	orated PJ						
Tubing Flow 4.71 sq in			2x Tubing Flow= 9.42 sq in		3x Tubing Flow= 14.13 sq in					
Length (ft)	Hole Columns	Degrees	# of Holes	Size (in)	Flow /Hole	Flow achieved				
2'	4	90	10	1"	0.7854	7.85 sq. in.				
4'	4	90	18	3/4"	0.4418	7.95 sq. in.				
6'	4	90	22	3/4"	0.4418	9.72 sq. in.				
8'	4	90	26	3/4"	0.4418	11.49 sg. in.				

^{***}Custom Slotted and Perforated Pup Joints Upon Request***

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3/4"