FLOW CONTROL TOOLS











XO/XD CIRCULATING SLEEVE

The "XO/XD" Circulating Sleeve provides a convenient way to establish or shut off communication between the tubing and the annulus. Any number of these sleeves may be run in a tubing string, and any or all of them may be opened or closed in one run by standard wireline methods.

Design Features:

- Features a nipple profile above and a packing bore, above and below, the communication ports
- Ports can be closed without leaving any obstructions in the tubing once the shifting operation is completed
- The Model "B" Shifting Tool is used to open (jarring down) or close (jarring up) the "XO/XD" Circulating sleeve

XO CIRCULATING SLEEVE									
Part Number	Size	OD	Seal Bore	Pressure	Port Area	Thread			
	in.	in.	in.	psi.	in²				
D90-7187-201	2.375	3.063	1.875	7,000	1.804	2 3/8" EUE			
D90-7231-201	2.875	3.668	2.313	7,000	2.405	2 7/8" EUE			
D90-7275-201	3.500	4.275	2.750	7,000	4.454	3 1/2" EUE			
D90-7281-201		4.290	2.813	7,000	4.454				

XD CIRCULATING SLEEVE									
Part Number	Size	OD	Seal Bore	Pressure	Port Area	- Thread			
	in.	in.	in.	psi.	in²				
D90-7187-301	2.375	3.063	1.875	7,000	2.761	2 3/8" EUE			
D90-7231-301	2.875	3.668	2.313	7,000	4.201	2 7/8" EUE			
D90-7275-301	3.500	4.275	2.750	7,000	5.939	3 1/2" EUE			
D90-7281-301		4.290	2.813	7,000	6.210				