



## BOTTOM PACK-OFF CROSS OVER SEAL

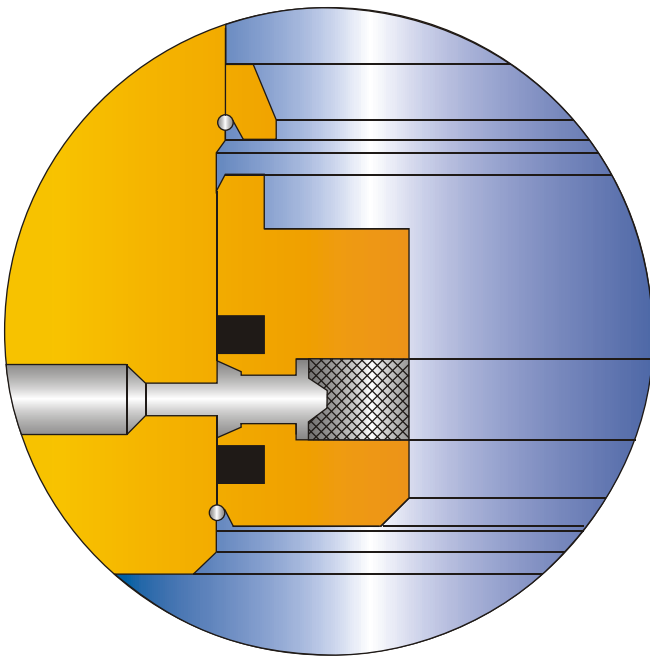
The standard **bottom pack - off** is type '**PBP1**'

The bottom pack - off is installed in the lower flange of the casing head spool and tubing head spool to prevent the lower flange from being exposed to high pressure.

The bottom pack-off type 'PBP1' seals the annulus pressure by injecting packing. The bottom pack - off PBP - 2 is designed to give a positive annular seal with pressure energized oversize O - Rings.

For services at working pressures above 5,000 psi, the 'PP' seal is used.

When the bottom pack - off is used, the casing should be cut 90 mm from the top flange surface of the connecting spool.



**Bottom Pack-OFF (PBP-1)**

Nominal Flange Size	Casing Pipe										
	4 1/2	5	5 1/2	6 5/8	7	7 5/8	8 5/8	9 5/8	10 3/4	11 3/4	13 3/8
9	O	O	O								
11	O	O	O	O	O	*					
13 5/8			O	O	O	O	O	O			
16 3/4								O	O	O	
20 3/4 & 21 1/4								O	O	O	

O Type 'PBP-1', \* Type 'PBP-2'

NOTE:

All sizes are in inches