

Rotational Alignment Sub (RAS) (V-Packing Seal)

UMS Flowell Rotational Alignment Sub (RAS) is a quick and easy way to orientate your completion. The RAS is used to assist with the orientation of well completion assemblies within a well completion string. A typical example would be the orientation between upper and lower y-tools in dual ESP completions.

The RAS is lockable to left and right hand rotation in 6 degree increments. The RAS has 30 self-meshing clutch teeth that orientate the tubing hanger to the body. The orientation mechanism requires no power tongs to torque the mechanism into the locked position. The RAS uses a bidirectional V-stack seals for redundancy, to provide a leak proof connection between the production tubing and production casing.

The RAS can be supplied in different tubing sizes, materials, and different elastomeric or non-elastomeric seal materials to meet the customer's requirements. Where height adjustment is also required, the UMS Flowell Tubing Adjustable Union (TAU) should be used.

FEATURES & BENEFITS

- Available in sizes from 2-3/8" up to 5-1/2"
- Other sizes available on request
- Compact design
- Clutch design allows quick and easy orientation in 6° increments
- Locked to right and left-hand rotation

SPECIFICATIONS

- Low alloy or 13Cr metallurgy
- Viton, Aflas, or HNBR elastomers
- 6500psi MWP limited by elastomers
- Non-elastomeric stacks available for high temperature applications
- Matched tubing tensile and compression ratings



Technical Specifications - Rotational Alignment Sub

Part Number	Box Thread	Pin Thread	OD (in)	ID (in)	Length (in)
RU13-0010	4-1/2" 12.6# VAM TOP	4-1/2" 12.6# VAM TOP	5.86	3.919	50
RU13-0050-010	3-1/2" 9.2# VAM TOP	3-1/2" 9.2# VAM TOP	5.00	2.99	50
RU13-0050-020	3-1/2" 9.3# EUE	3-1/2" 9.3# EUE	5.00	2.99	50
RU-2375-01	2-3/8" 4.6# JFE BEAR	2-3/8" 4.6# JFE BEAR	3.531	1.995	43
RU-5500-01	5-1/2" 20# VAM TOP	5-1/2" 20# VAM TOP	7.00	4.778	57

