

### **Rotational Alignment Sub (RAS-M)**

**Metal To Metal Variant** 

UMS Flowell Tubing Rotation Alignment Sub with Metal to Metal seal (RAS-M) 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, or orientation below a tubing hanger.

The RAS-M can be orientated at any angular position. The wedge type metal to metal seal is energised by torqueing a locking ring which also locks the angular position to prevent back off.







# **Rotational Alignment Sub (RAS-M)**



#### **Features & Benefits**

- Available in sizes from 1.900" up to 5-1/2"
- Other sizes available on request
- Compact design
- Wedge type Metal to Metal Seal
- Locked to right and left-hand rotation by torque

### **Specifications**

- Low alloy or 13Cr metallurgy
- Tubing matched pressure rating and strength



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| Part Number     | Upper Connection             | Lower Connection             | OD (in) | ID (in) |
|-----------------|------------------------------|------------------------------|---------|---------|
| RU-4500X4500-01 | 4-1/2" 12.6lb/ft VAM TOP BOX | 4-1/2" 12.6lb/ft VAM TOP PIN | 5.90    | 3.913   |
| RU-5500-01      | 5-1/2" 20lb/ft VAM TOP BOX   | 5-1/2" 20lb/ft VAM TOP PIN   | 7.00    | 4.778   |
| RU-4500X4500-05 | 4-1/2" 12.6# JFE Bear Box    | 4-1/2" 12.6# JFE Bear Pin    | 5.90    | 3.936   |



