



PURPOSE

A R Lock is a selective lock which can be installed in a R-type landing nipple. It is typically used in heavy weight tubing in wells with high pressures. This type of lock uses keys to employ a unified packing mandrel and profile in landing nipples which allow it to hold the pressure distinctions from either below or above depending on the equalizing assembly chosen.

ASSEMBLY PARTS

1. Fishneck
2. Expander Sleeve
3. Key Retainer
4. Key Spring
5. Keys
6. Packing Mandrel
7. Female Backup Ring
8. V-Packing
9. Male Backup Ring

DESCRIPTION

The R Lock mandrels with flow control components are designed for the R seating nipples installed in heavy weight tubing.

These lock mandrels, similar in design, are selective. This is made possible by their running tools.

The lock mandrels may be installed in any one of multiple seating nipples installed in the tubing string of comparable size.

Once the desired nipple has been located in the tubing string these mandrels are mechanically locked. This is done by driving the expander sleeve behind the keys, holding the mandrel in a locked position.

OPERATION

The R Lock mandrels can be ran selective, or can be ran in the non-selective Position, when setting in the upper R profile in the tubing completion string.

Both the running positions are built into the running tool. The tool has a set of locating dogs to selectively run and set the lock mandrels in the lower nipples in the string.

The running tool is changed to a non-selective position once the desired selective nipple has been located. This is done by lowering the running tool and the lock mandrel through the nipple profile and then pulling back up through. The R running tool procedures are explained in the X running tool operation in the running tools section.

(Sizes on next page)

Nominal Size		1.710"	1.781"	1.875"	2.00"
Assembly Number		0802R171A0	0802R178A0	0802R187A0	0802R200A0
Item	Part Name				
1	Fishneck	0802R17101	0802R17801	0802R18701	0802R20001
2	Expander Sleeve	0802R17102	0802R17802	0802R18702	0802R20002
3	Key Retainer	0802R17103	0802R17803	0802R18703	0802R20003
4	Key Spring	0802X15005	0802X15005	0802X20005	0802X20005
5	Key "R"	0802R17104	0802R17804	0802R18704	0802R20004
6	Packing Mandrel	0802R17106	0802R17806	0802R18706	0802R20006
7	Female Backup Ring	0802BUR17101	0802BUR17801	0802BUR18701	0802BUR20001
8	V-Packing	0802VP17101	0802VP17801	0802VP18701	0802VP20001
9	Male Backup Ring	0802BUR17102	0802BUR17802	0802BUR18702	0802BUR20002
Bottom Thread Connection		1.125" - 16	1.375" - 14	1.375" - 14	1.375" - 14
Fishneck size		1.062"	1.375"	1.375"	1.375"

Nominal Size		2.125"	2.188"	2.313"	2.56"
Assembly Number		0802R212A0	0802R218A0	0802R231A0	0802R256A0
Item	Part Name				
1	Fish Neck	0802R21201	0802R21801	0802R21801	0802R25601
2	Expander Sleeve	0802R21202	0802R21802	0802R21802	0802R25602
3	Key Retainer	0802R21203	0802R21803	0802R23103	0802R25603
4	Key Spring	0802X20005	0802X20005	0802X20005	0802X20005
5	Key "R"	0802R21204	0802R21804	0802R23104	0802R25604
6	Packing Mandrel	0802R21206	0802R21806	0802R23106	0802R25606
7	Female Backup Ring	0802BUR21201	0802BUR21801	0802BUR23101	0802BUR25601
8	V-Packing	0802VP21201	0802VP21801	0802VP23101	0802VP25601
9	Male Backup Ring	0802BUR21202	0802BUR21802	0802BUR23102	0802BUR25602
Bottom Thread Connection		1.375" - 14	1.75" - 12	1.75" - 12	2.00" - 12 SLB
Fishneck size		1.375"	1.812"	1.812"	1.812"

* Other larger sizes are available upon request. *