



REBCO OIL TOOLS

EXCEEDING EXPECTATIONS ONE
TOOL AT A TIME

Equalizing Sub- Assemblies



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

PRODUCT DESCRIPTION: EQUALIZING SUB-ASSEMBLIES

EQUALIZING SUB-ASSEMBLIES provide means of equalizing pressure across Sub-Surface Controls such as Locking Mandrels and Tubing Mandrels.

Table of Contents

	PRODUCT CODE	PAGE
EQUALIZING SUB-ASSEMBLIES	20 - 24	
A - Equalizing Sub-Assemblies and Beans:		XV-1-8
'ROTB' and 'ROTH'	20	XV-1
'ROTF'	20	XV-2
'ROTC'	20	XV-3
'ROTD'	20	XV-4
'ROTT'	22	XV-5
'ROTXR' Pump-Through Bottom	21	XV-6
'BB' Circulating Plug Bottom	21	XV-7
'BT' Circulating Choke Bottom	21	XV-8
B - Accessories:		XV-9
'A' Cage	21	XV-9
'B' Cage	195	XV-9
'API' Cross Over Mandrel	195	XV-9
'K' Equalizing Shear Plug	195	XV-9
'AO' Bean	21	XV-9
'BT' Bean	195	XV-9
C - Valve & Prong Type Eq. Sub-Assemblies:		XV-10-20
'ROTR'	20	XV-10-11-12
'ROTPR'	24	XV-13-14-15-16
'ROTX'	20	XV-17-18
'ROTPX'	24	XV-19-20



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Product Code: 20

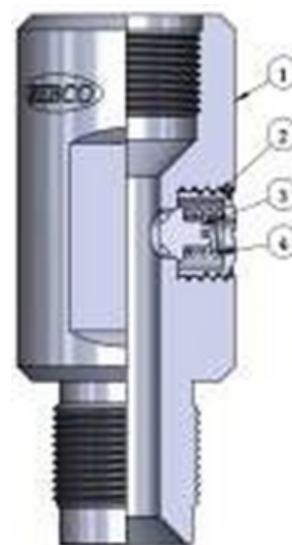
Type 'ROTB' and 'ROTH' Equalizing Sub: 2" – 3"

Rebco Type 'ROTB' and 'ROTH' Equalizing Subs are to be used with Sub-Surface Controls such as Locking Mandrels. Both Equalizing Subs are identical except the ID is larger in Type 'ROTH' Equalizing Sub.

These Sub-Assemblies are designed to allow pressure differentials to be equalized across the Lock Mandrels and Flow controls before attempting to retrieve them.

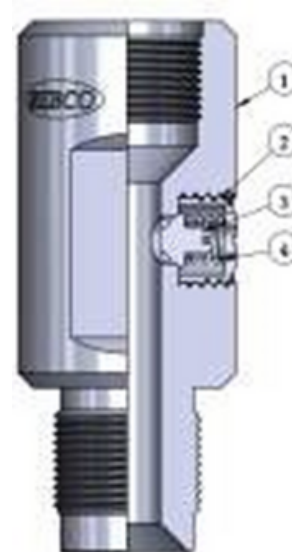
NOTE: These types of Equalizing Subs require running/pulling equalizing prongs.
Equalizing Subs are available in variety of Materials, suitable for down-hole conditions.

TECHNICAL DATA			
NOMINAL SIZE	2"	2 1/2"	3"
ASSEMBLY NUMBER	2001202000	2001202500	2001203000
ENGINEERING DATA:			
MAXIMUM OD	1.75"	2.12"	2.62"
MINIMUM ID	.53"	.72"	1.16"
EFFECTIVE AREA THRU ORIFICE PLATE	.003"	.003"	.003"
BOX THREAD CONNECTION	1 3/16" - 14	1 9/16" - 12	2" - 12
PIN THREAD CONNECTION	1 3/16" - 14	1 9/16" - 12	2" - 12
LENGTH	4.25"	4.25"	4.25"
MATERIAL	Stainless	Stainless	Stainless



Type 'ROTB'

TECHNICAL DATA			
NOMINAL SIZE	2"	2 1/2"	3"
ASSEMBLY NUMBER	2006202000	2006202500	2006203000
ENGINEERING DATA:			
MAXIMUM OD	1.75"	2.12"	2.62"
MINIMUM ID	.69"	.87"	1.50"
EFFECTIVE AREA THRU ORIFICE PLATE	.006"	.006"	.006"
BOX THREAD CONNECTION	1 3/16" - 14	1 9/16" - 12	2" - 12
PIN THREAD CONNECTION	1 3/16" - 14	1 9/16" - 12	2" - 12
LENGTH	4.25"	4.25"	4.25"
MATERIAL	Stainless	Stainless	Stainless



Type 'ROTH'



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

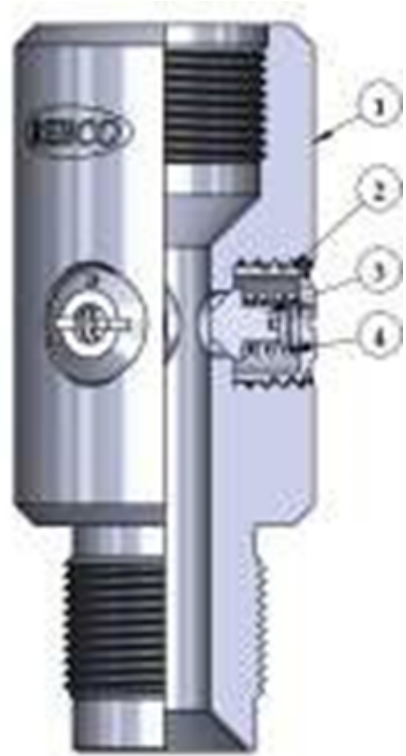
Type 'ROTF' Equalizing Sub: 2" – 3"

Rebco Type 'ROTF' Equalizing Subs are to be used with Sub-Surface Controls such as Locking Mandrels. Type 'ROTF' Equalizing Subs can be supplied with 2 or 3 Orifice Ports.

These Sub-Assemblies are designed to allow pressure differentials to be equalized across the Lock Mandrels and Flow controls before attempting to retrieve them.

NOTE: These types of Equalizing Subs require running/pulling equalizing prongs.

TECHNICAL DATA			
NOMINAL SIZE	2"	2 1/2"	3"
ASSEMBLY NUMBER	2025202000	2025202500	2025203000
ENGINEERING DATA:			
MAXIMUM OD	1.74"	2.12"	2.62"
MINIMUM ID	.53"	.72"	1.16"
EFFECTIVE AREA THRU ORIFICE PLATE	.011"	.011"	.011"
BOX THREAD CONNECTION	1 3/16" - 14	1 9/16" - 12	2" - 12
PIN THREAD CONNECTION	1 3/16" - 14	1 9/16" - 12	2" - 12
LENGTH	4.25"	4.25"	4.25"
MATERIAL	Stainless	Stainless	Stainless



Type 'ROTF'



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'ROTC' Plug Bean Sub-Assembly: 2" – 3"

Rebco Type 'ROTC' Plug Bean Sub-Assembly is to be used with Sub-Surface Controls such as Locking Mandrels and Tubing Mandrels.

The Plug holds pressure from below only and provide the means of pumping through the Plug.

Product Code: 21

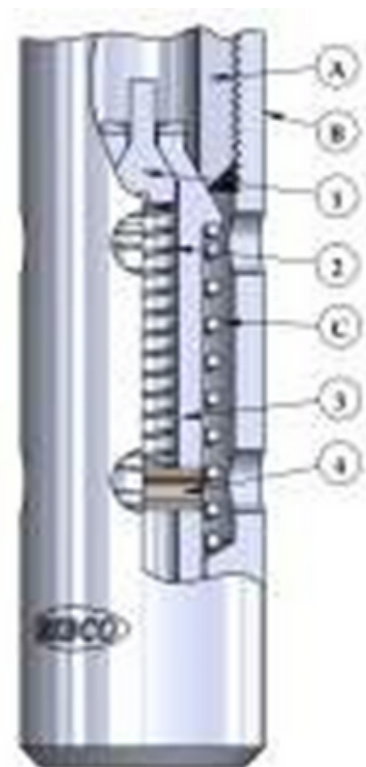
NOTE: DET A is not included in the Sub-Assembly; to be specified when ordering.

TECHNICAL DATA

NOMINAL SIZE	2"	2 1/2"	3"
SUB-ASSEMBLY NUMBER	2102202000	2102202500	2102203000

ENGINEERING DATA:

MAXIMUM OD - (DET 3) HOUSING	1.00"	1.25"	1.62"
BEAN CAGE (DET B) BOX THREAD	1 3/16" - 14	1 9/16" - 12	2" - 12
MATERIAL	Stainless	Stainless	Stainless





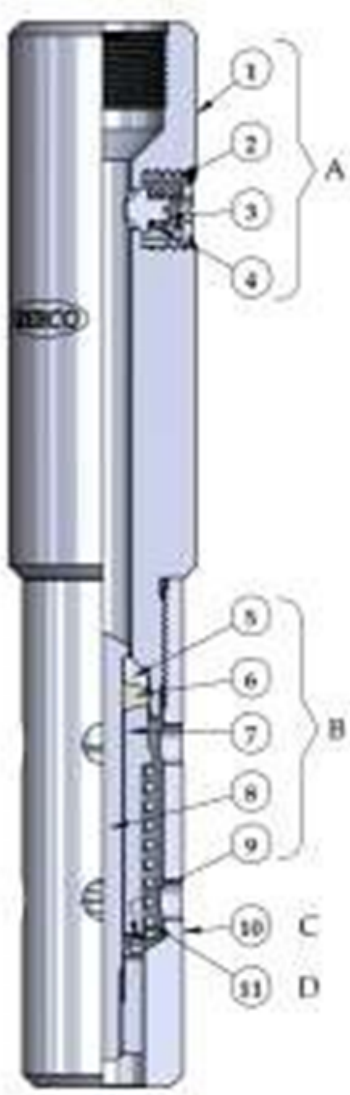
SECTION XV: EQUALIZING SUB-ASSEMBLIES
and ACCESSORIES

Type 'ROTD' Bean Plug Sub-Assembly: 2" – 3"

Rebco Type 'ROTD' Bean Plug Sub-Assembly is to be used with Sub-Surface Controls such as Locking Mandrels and Tubing Mandrels.

The Plug holds pressure from below only and provide the means of pumping through the Plug.

TECHNICAL DATA			
NOMINAL SIZE	2"	2 1/2"	3"
SUB-ASSEMBLY NUMBER (DET - A,B,C,D)	2103202000	2103202500	2103203000
ENGINEERING DATA:			
MAXIMUM OD	1.75"	2.12"	2.62"
ID	.53"	.72"	1.16"
BODY (DET A - 1) BOX THREAD	1 3/16" - 14	1 9/16" - 12	2" - 12
MATERIAL	Stainless	Stainless	Stainless





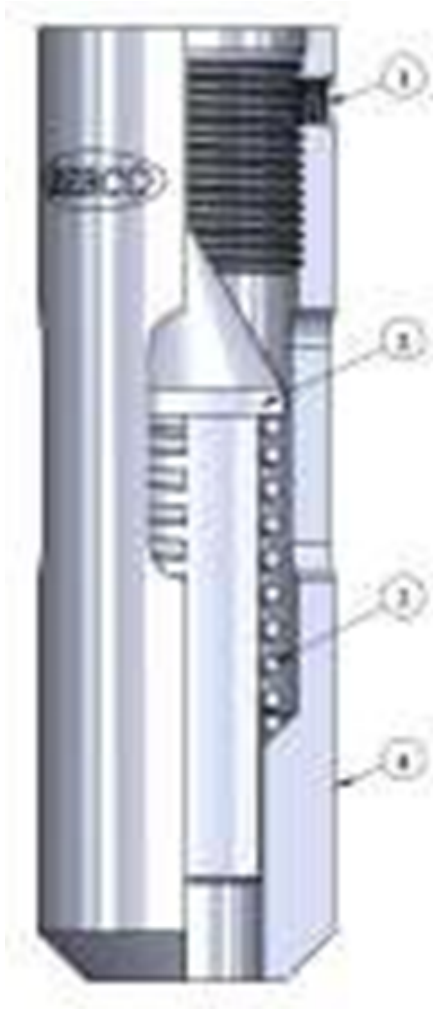
SECTION XV: EQUALIZING SUB-ASSEMBLIES
and ACCESSORIES

Type 'ROTT' Input Safety Valve Bottom Sub-Assembly: 2" – 3"

Rebco Type 'ROTT' Input Safety Valve Sub-Assembly bottom is to be used with Injection Safety Valves. Spring loaded bottom valve holds pressure from below only and provide the means of pumping through the Plug.

Product Code: 22

TECHNICAL DATA			
NOMINAL SIZE	2"	2 1/2"	3"
SUB-ASSEMBLY NUMBER	2215202030	2215202530	2215203030
ENGINEERING DATA:			
MAXIMUM OD	1.50"	1.87"	2.38"
CAGE BOX THREAD	1 3/16" - 14	1 9/16" - 12	2" - 12
MATERIAL	Stainless/Alloy	Stainless/Alloy	Stainless/Alloy





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'ROT XR' Pump-Through Bottom Sub-Assembly:

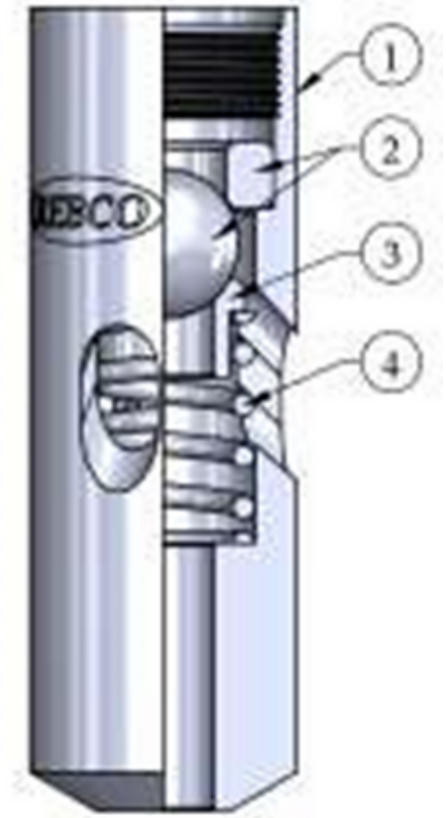
Rebco Type 'ROT XR' Pump-Through Bottom Sub-Assemblies are to be used with Lock Mandrels and Equalizing Valves (Valve type) according to the Nominal Size and Profile of the Landing Nipple.

Spring loaded Ball and Seat bottom holds pressure from below only and provide the means of pumping through the Plug. See [Section XVIII](#) - Pump-Through Plugs.

NOTE: When ordering Specify Lock Mandrel Size and Type to be used with, and Material to suit Down-hole conditions/requirement.

For Part Numbers and Engineering Data see [Section XVI](#) - PLUG CHOKES

DET	PART NAME	QTY	DET
1	CAGE	1	1
2	BALL & SEAT SUB-ASSEMBLY	1 Set	2
3	SPRING RETAINER	1	3
4	SPRING	1	4





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'BB' Circulating Bottom Sub-Assembly: 1.78" - 2.81"

Rebco Type 'BB' Circulating Bottom Sub-Assemblies for use in Type 'BF' Landing Nipple are to be used with Lock Mandrels (See [Section XIV](#)) Type 'ROTS', 'ROTW', 'ROTG', and 'ROTM' with 'API' Cross Over Mandrel or Packing Mandrel and Type 'BB' Seal Unit according to the Nominal Size.

Rebco Type 'BB' Circulating Bottom Sub-Assemblies for use in Type 'BR' Landing Nipple are to be used with Lock Mandrels (See [Section XIV](#)) Type 'ROTZ', and 'ROTK' with 'API' Cross Over Mandrel or Packing Mandrel and Type 'BB' Seal Unit according to the Nominal Size.

Circulating Bottom Sub-Assembly holds pressure from below while allowing circulation from above. It can be held open to bypass fluid while running and pulling.

Product Code: 21

NOTE: When ordering Specify Lock Mandrel Size and Type to be used with, and Material to suit Down-hole conditions/requirement.

For Part Numbers and Engineering Data see [Section XVI](#) - PLUG CHOKES

DET	PART NAME	QTY
1	SEAL UNIT	1 Set
2	API Cross Over Mandrel	1
3	CIRCULATING VALVE	1
4	VALVE STEM	1
5	SPRING	1
6	RETAINER	1
7	SPRING	1
8	Type 'A' or 'B' CAGE	1





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type '**BT**' Circulating Choke Bottom Sub-Assembly: 1.78" - 2.81"

Rebco Type '**BT**' Circulating Choke Bottom Sub-Assemblies for use in Type '**BF**' Landing Nipple are to be used with Lock Mandrels (See [Section XIV](#)) Type '**ROTW**', with '**API**' Cross Over Mandrel or Packing Mandrel and Type '**BB**' Seal Unit according to the Nominal Size.

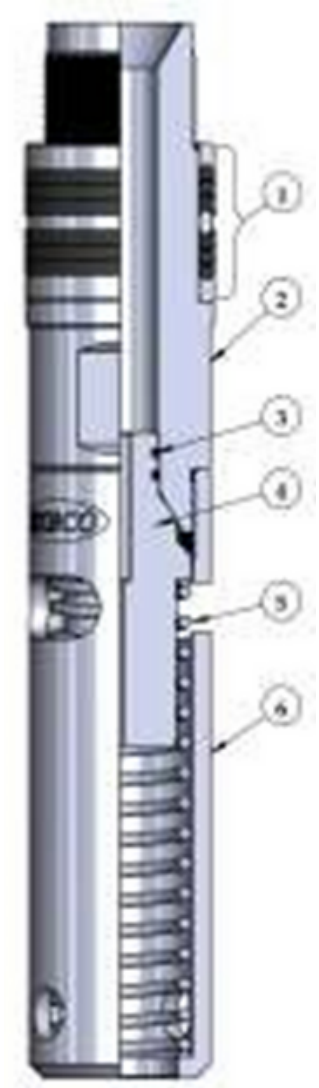
Rebco Type '**BT**' Circulating Choke Bottom Sub-Assemblies for use in Type '**BR**' Landing Nipple are to be used with Lock Mandrels (See [Section XIV](#)) Type '**ROTZ**', with '**API**' Cross Over Mandrel or Packing Mandrel and Type '**BB**' Seal Unit according to the Nominal Size.

Circulating Choke Bottom Sub-Assembly restricts fluid flow in the tubing string. It permits circulation from above. The Flow Beans can be ordered to specific ID size by increments of 1/64".

NOTE: When ordering Specify Lock Mandrel Size and Type to be used with, and Material to suit Down-hole conditions/requirement.

For Part Numbers and Engineering Data see [Section XVI](#) - PLUG CHOKES

DET	PART NAME	QTY
1	SEAL UNIT	1 Set
2	API Cross Over Mandrel	1
3	'O' RING SEAL	2
4	Type ' BT ' BEAN	1
5	SPRING	1
6	Type ' B ' CAGE	1



NOTE: There are other Types of Bottoms available: Type '**BR**', '**BP**', please inquire.



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Product Code: 21



Type 'B' Cage



Type 'A' Cage



'API' Cross-Over Mandrel



Type 'AO'



Type 'BT'



Type 'K' Equalizing Shear Plug

Beans: Available in 1/64" orifice Increments



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type '**ROTR**' Equalizing Valve Sub-Assembly: **1.500" – 3.813"**

Rebco Type '**ROTR**' Equalizing Sub-Assembly is to be used with Type 'ROTR' and Type 'ROTRN' Lock Mandrels.

These Sub-Assemblies are designed to allow pressure differentials to be equalized across the Lock Mandrels and Flow controls before attempting to retrieve them from respective Landing Nipples.

Product Code: 20

TECHNICAL DATA				
NOMINAL SIZE	1.500"	1.710"	1.781"	1.875"
ASSEMBLY NUMBER	20132015030	20132017130	20132017830	20132018730
ENGINEERING DATA:				
MAXIMUM OD – No-Go	1.495"	1.705"	1.776"	1.870"
BOX THREAD CONNECTION	1 1/8" - 16	1 1/8" - 16	1 3/8" - 14	1 3/8" - 14
PIN THREAD CONNECTION	1 1/8" - 16	1 1/8" - 16	1 3/8" - 14	1 3/8" - 14
LENGTH	8.12"	8.12"	8.12"	8.12"
MATERIAL*	Norm Alloy	Norm Alloy	Norm Alloy	Norm Alloy

To be used with Lock Mandrel	Type ' ROTR '	10132015030	10132017130	10132017830	10132018730
	Type ' ROTRN '	10131015030	10131017130	10131017830	10131018730
Sub-Assembly without Cap (DET 5)		20132015031	20132017131	20132017831	20132018731





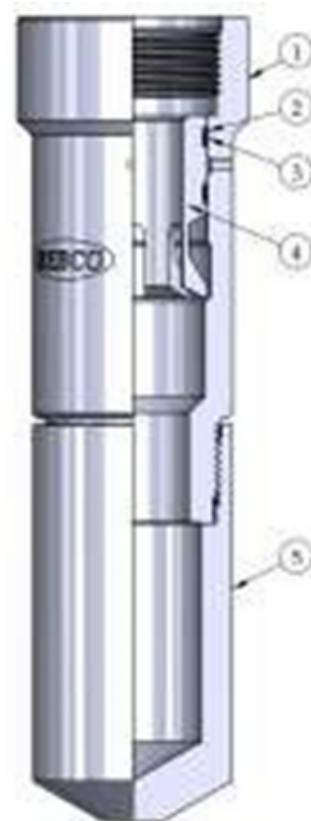
SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'ROTR' Equalizing Valve Sub-Assembly:

TECHNICAL DATA				
NOMINAL SIZE	2.000"	2.125"	2.188"	2.313"
ASSEMBLY NUMBER	20132020030	20132021230	20132021830	20132023130
ENGINEERING DATA:				
MAXIMUM OD – No-Go	1.995"	2.120"	2.183"	2.308"
BOX THREAD CONNECTION	1 3/8" - 14	1 3/8" - 14	1 3/4" - 12	1 3/4" - 12
PIN THREAD CONNECTION	1 3/8" - 14	1 3/8" - 14	1 3/4" - 12	1 3/4" - 12
LENGTH	8.12"	8.12"	8.12"	8.12"
MATERIAL*	Norm Alloy	Norm Alloy	Norm Alloy	Norm Alloy

To be used with Lock Mandrel	Type 'ROTR'	10132020030	10132021230	10132021830	10132023130
	Type 'ROTRN'	10131020030	10131021230	10131021830	10131023130
Sub-Assembly without Cap (DET 5)		20132020031	20132021231	20132021831	20132023131

*Norm Alloy (NACE MR-01-75, 1980 Rev.)



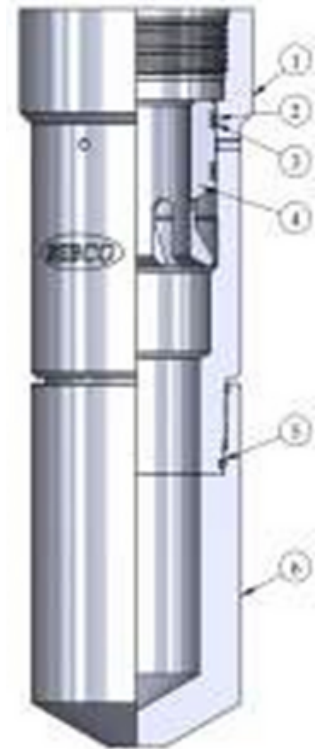


SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'ROTR' Equalizing Valve Sub-Assembly:

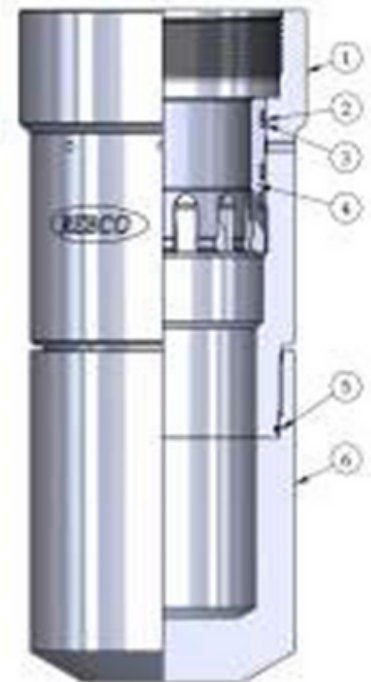
TECHNICAL DATA				
NOMINAL SIZE	2.562"	2.750"	2.813"	2.875"
ASSEMBLY NUMBER	20132025630	20132027530	20132028130	20132028730
ENGINEERING DATA:				
MAXIMUM OD – No-Go	2.557"	2.745"	2.808"	2.869"
BOX THREAD CONNECTION	2" - 12 SLB	2 1/4" - 12 SLB	2 1/4" - 12 SLB	2 1/4" - 12 SLB
PIN THREAD CONNECTION	2" - 12 SLB	2 1/4" - 12 SLB	2 1/4" - 12 SLB	2 1/4" - 12 SLB
LENGTH	8.12"	9.12"	9.12"	9.12"
MATERIAL*	Norm Alloy	Norm Alloy	Norm Alloy	Norm Alloy

To be used with Lock Mandrel	Type 'ROTR'	10132025630	10132027530	10132028130	10132028730
	Type 'ROTRN'	10131025630	10131027530	10131028130	10131028730
Sub-Assembly without Cap (DET 6)		20132025631	20132027531	20132028131	20132028731



TECHNICAL DATA			
NOMINAL SIZE	3.437"	3.688"	3.813"
ASSEMBLY NUMBER	20132034330	20132036830	20132038130
ENGINEERING DATA:			
MAXIMUM OD – No-Go	3.431"	3.682"	3.807"
BOX THREAD CONNECTION	2 3/4" - 12 SLB	3 1/16" - 12 SLB	3 1/16" - 12 SLB
PIN THREAD CONNECTION	2 3/4" - 12 SLB	3 1/16" - 12 SLB	2 3/4" - 12 SLB
LENGTH	8.63"	8.63"	8.63"
MATERIAL*	Norm Alloy	Norm Alloy	Norm Alloy

To be used with Lock Mandrel	Type 'ROTR'	18132034330	18132036830	18132038130
	Type 'ROTRN'	18131034330	18131036830	18131038130
Sub-Assembly without Cap (DET 6)		20132034331	20132036831	20132038131



*Norm Alloy (NACE MR-01-75, 1980 Rev.)

NOTE: Equalizing Sub-Assemblies are available in variety of Materials, suitable for down-hole conditions.



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'ROTPR' Equalizing Prong and Valve Sub-Assembly: 1.781" – 4.813"

Rebco Type 'ROTPR' Equalizing Prong and Valve Sub-Assembly, when attached to Type 'ROTR' and/or 'ROTRN' Lock Mandrel Assembly, converts the Lock Mandrel to a Plug Choke, with equalizing device, capable of holding pressure differentials from above or below.

Product Code: 24

TECHNICAL DATA

NIPPLE SEAL BORE	1.781"	1.875"	2.000"	2.125"
SUB-ASSEMBLY NUMBER	24111317830	24111318730	24111320030	24111321230

ENGINEERING DATA:

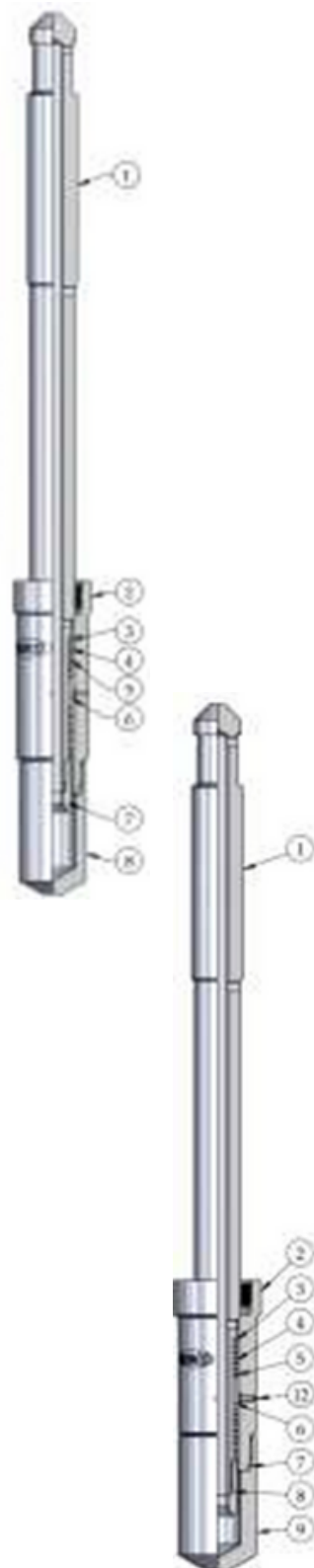
MAXIMUM OD (NO-GO)	1.776"	1.870"	1.995"	2.120"
BOX THREAD CONNECTION	1 3/8" - 14	1 3/8" - 14	1 3/8" - 14	1 3/8" - 14
PRONG FISHING NECK SIZE	1.187"	1.187"	1.187"	1.187"
PRONG LENGTH	22.4"	22.4"	22.4"	22.4"
LENGTH	24.71"	24.71"	24.71"	24.71"
'V' PACKING OD	.818"	.818"	.818"	.818"
PRONG RUNNING / PULLING TOOL	4014011500	4014011500	4014011500	4014011500
MATERIAL *	Norm Alloy	Norm Alloy	Norm Alloy	Norm Alloy

TECHNICAL DATA

NIPPLE SEAL BORE	2.188"	2.313"	2.562"	2.750"
SUB-ASSEMBLY NUMBER	24111321830	24111323130	24111325630	24111327530

ENGINEERING DATA:

MAXIMUM OD (NO-GO)	2.183"	2.308"	2.557"	2.745"
BOX THREAD CONNECTION	1 3/4" - 12	1 3/4" - 12	2" - 12 SLB	2 1/4" - 12 SLB
PRONG FISHING NECK SIZE	1.375"	1.375"	1.375"	1.375"
PRONG LENGTH	24.75"	24.75"	23.46"	25.0"
LENGTH	27.34"	27.34"	25.74"	28.0"
'V' PACKING OD	.937"	.937"	1.250"	1.250"
PRONG RUNNING / PULLING TOOL	4014012000	4014012000	4014012000	4014012000
MATERIAL *	Norm Alloy	Norm Alloy	Norm Alloy	Norm Alloy



* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type '**ROTPR**' Equalizing Prong and Valve Sub-Assembly:

TECHNICAL DATA

NIPPLE SEAL BORE	2.813"	2.875"	3.437"
SUB-ASSEMBLY NUMBER	24111328130	24111328730	24111334330

ENGINEERING DATA:

MAXIMUM OD (NO-GO)	2.808"	2.870"	3.431"
BOX THREAD CONNECTION	2 1/4" - 12 SLB	2 1/4" - 12 SLB	2 3/4" - 12 SLB
PRONG FISHING NECK SIZE	1.375"	1.375"	1.750"
PRONG LENGTH	25.0"	25.0"	36.0"
LENGTH	28.0"	28.0"	38.5"
'V' PACKING OD	1.250"	1.250"	1.500"
PRONG RUNNING / PULLING TOOL	4014012000	4014012000	4014012500
MATERIAL *	Norm Alloy *	Norm Alloy *	Norm Alloy *

* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)



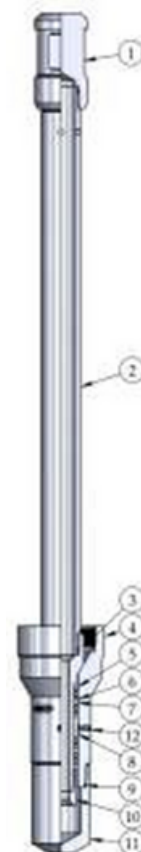
TECHNICAL DATA

NIPPLE SEAL BORE	3.688"	3.813"	4.125"	4.313"
SUB-ASSEMBLY NUMBER	24111336830	24111338130	24111341230	24111343130

ENGINEERING DATA:

MAXIMUM OD (NO-GO)	3.682"	3.807"	4.119"	4.307"
BOX THREAD CONNECTION	3 1/16" - 12 SLB	3 1/16" - 12 SLB	3 1/4" - 12 SLB	3 1/4" - 12 SLB
PRONG FISHING NECK SIZE	2.313"	2.313"	2.313"	2.313"
PRONG LENGTH	34.84"	34.84"	34.84"	34.84"
LENGTH	37.15"	37.38"	38.1"	38.83"
'V' PACKING OD	1.500"	1.500"	2.313"	2.313"
PRONG RUNNING / PULLING TOOL	4014013000	4014013000	4014013000	4014013000
MATERIAL *	Norm Alloy *	Norm Alloy *	Norm Alloy *	Norm Alloy *

* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type '**ROTPR**' Equalizing Prong and Valve Sub-Assembly:

TECHNICAL DATA

NIPPLE SEAL BORE	4.562"	4.813"
SUB-ASSEMBLY NUMBER	24111345630	24111348130

ENGINEERING DATA:

MAXIMUM OD (NO-GO)	4.556"	4.808"
BOX THREAD CONNECTION	3 3/4" – 12 SLB	4" – 12 SLB
PRONG FISHING NECK SIZE	3.125"	3.125"
PRONG LENGTH	38.98"	38.98"
LENGTH	42.52"	42.52"
'V' PACKING OD	2.313"	2.313"
PRONG RUNNING / PULLING TOOL	4014014000	4014014000
MATERIAL *	Norm Alloy *	Norm Alloy *



TECHNICAL DATA

NIPPLE SEAL BORE	5.875"
SUB-ASSEMBLY NUMBER	24111358730

ENGINEERING DATA:

MAXIMUM OD (NO-GO)	5.870"
BOX THREAD CONNECTION	5 1/16" – 8 SLB
PRONG FISHING NECK SIZE	3.125"
PRONG LENGTH	52.62"
LENGTH	32.84"
'V' PACKING OD	1.500"
PRONG RUNNING / PULLING TOOL	4014014000
MATERIAL *	Norm Alloy *



* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)



SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type '**ROTPR**' Equalizing Prong and Valve Sub-Assembly:

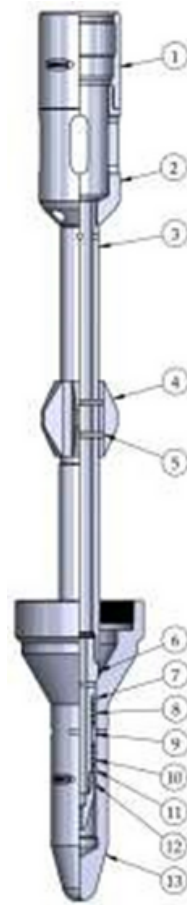
TECHNICAL DATA

NIPPLE SEAL BORE	5.963"
SUB-ASSEMBLY NUMBER	24111359630

ENGINEERING DATA:

MAXIMUM OD (NO-GO)	5.958"
BOX THREAD CONNECTION	5 1/16" – 8 SLB
PRONG FISHING NECK SIZE	3.12"
PRONG LENGTH	38.98"
LENGTH	42.52"
'V' PACKING OD	2.313"
PRONG RUNNING / PULLING TOOL	40051436804
MATERIAL *	Norm Alloy *

* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'ROTX' Equalizing Valve Sub-Assembly: 1.500" – 4.562"

Rebco Type 'ROTX' Equalizing Sub-Assembly is to be used with Type 'ROTX' and Type 'ROTXN' Lock Mandrels.

These Sub-Assemblies are designed to allow pressure differentials to be equalized across the Lock Mandrels and Flow controls before attempting to retrieve them from respective Landing Nipples.

TECHNICAL DATA

NOMINAL SIZE	1.500"	1.625"	1.875"	2.313"
ASSEMBLY NUMBER	20182015030	20182016230	20182018730	20182023130

ENGINEERING DATA:

MAXIMUM OD – No-Go	1.495"	1.620"	1.870"	2.307"
BOX THREAD CONNECTION	1 1/8" - 16	1 1/8" - 16	1 3/8" - 14	1 3/4" - 12
PIN THREAD CONNECTION	1 1/8" - 16	1 1/8" - 16	1 3/8" - 14	1 3/4" - 12
LENGTH	8.12"	8.12"	8.12"	8.25"
MATERIAL*	Norm Alloy*	Norm Alloy*	Norm Alloy*	Norm Alloy*

To be used with Lock Mandrel	Type 'ROTX'	10182015030	10182016230	10182018730	10182023130
	Type 'ROTXN'	10181015030	10181016230	10181018730	101810230
Sub-Assembly without End Cap (DET 4)		20182015031	20182016231	20182018731	20182023131

*Norm Alloy (NACE MR-01-75,1980 Rev.)



TECHNICAL DATA

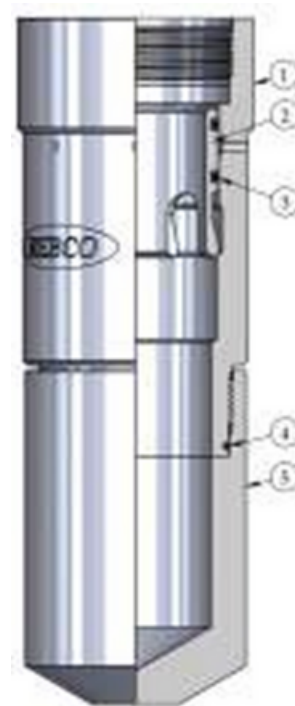
NOMINAL SIZE	2.750"	2.813"	2.875"	3.313"
ASSEMBLY NUMBER	20182027530	20182028130	20182028730	20182033130

ENGINEERING DATA:

MAXIMUM OD – No-Go	2.745"	2.808"	2.870"	3.307"
BOX THREAD CONNECTION	2 1/4" - 12 SLB	2 1/4" - 12 SLB	2 1/4" - 12 SLB	2 3/4" - 12 SLB
PIN THREAD CONNECTION	2 1/4" - 12 SLB	2 1/4" - 12 SLB	2 1/4" - 12 SLB	2 3/4" - 12 SLB
LENGTH	8.02"	8.02"	8.02"	8.02"
MATERIAL*	Norm Alloy*	Norm Alloy*	Norm Alloy*	Norm Alloy*

To be used with Lock Mandrel	Type 'ROTX'	10182027530	10182028130	10182028730	1818203310
	Type 'ROTXN'	10181027530	10181028130	10181028730	1818103310
Sub-Assembly without End Cap (DET 4)		20182027531	20182028131	20182028731	20182033131

*Norm Alloy (NACE MR-01-75,1980 Rev.)





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

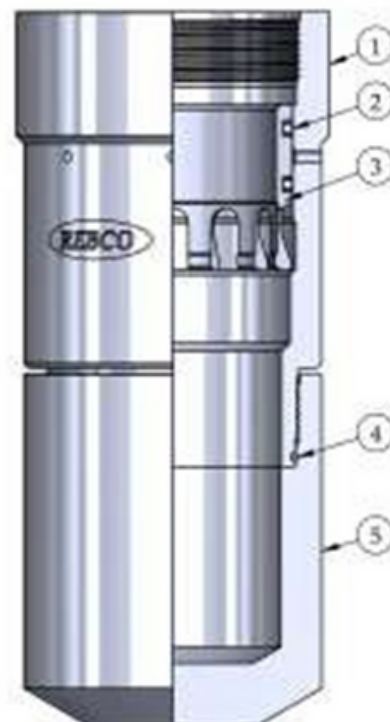
Type '**ROTX**' Equalizing Valve Sub-Assembly: 1.500" – 4.562"

TECHNICAL DATA			
NOMINAL SIZE		3.813"	4.562"
ASSEMBLY NUMBER		20182038130	20182045630
ENGINEERING DATA:			
MAXIMUM OD – No-Go		3.807"	4.556"
BOX THREAD CONNECTION		3 1/16" - 12 SLB	4" - 12 SLB
PIN THREAD CONNECTION		3 1/16" - 12 SLB	4" - 12 SLB
LENGTH		8.63"	10.42"
MATERIAL*		Norm Alloy*	Norm Alloy*
To be used with Lock Mandrel	Type 'ROTX'	18182038130	18182045630
	Type 'ROTXN'	18181038130	18181045630
Sub-Assembly without End Cap (DET 5)		20182038131	20182045631

*Norm Alloy (NACE MR-01-75,1980 Rev.)

Note: Type '**ROTX**' Equalizing Sub-Assemblies are available in variety of Materials.

Lock Mandrels - see [PRODUCT CODE 10, 17 and 18](#)





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type 'ROTPX' Equalizing Prong and Valve Sub-Assembly: 1.500" – 4.562"

Rebco Type 'ROTPX' Equalizing Prong and Valve Sub-Assembly, when attached to Type 'ROTX' and/or 'ROTXN' Lock Mandrel Assembly, converts the Lock Mandrel to a Plug Choke, with equalizing device, capable of holding pressure differentials from above or below.

Product Code: 24

TECHNICAL DATA				
NIPPLE SEAL BORE	1.500"	1.625"	1.875"	2.313"
SUB-ASSEMBLY NUMBER	24111815031	24111816231	24111818731	24111823131
ENGINEERING DATA:				
MAXIMUM OD (NO-GO)	1.495"	1.620"	1.870"	2.307"
BOX THREAD CONNECTION	1 1/8" - 16	1 1/8" - 16	1 3/8" - 14	1 3/4" - 12
PRONG FISHING NECK SIZE	1.000"	1.000"	1.375"	1.375"
PRONG LENGTH	26.0"	26.0"	23.38"	23.46"
LENGTH	29.87"	29.87"	26.46"	26.56"
'V' PACKING OD	.630"	.630"	.938"	1.250"
PRONG RUNNING / PULLING TOOL	400703021375	400703021375	4014012000	4014012000
MATERIAL *	Norm Alloy	Norm Alloy	Norm Alloy	Norm Alloy

* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)

TECHNICAL DATA				
NIPPLE SEAL BORE	2.750"	2.813"	2.875"	3.313"
SUB-ASSEMBLY NUMBER	24111827530	24111828130	24111828730	24111833130
ENGINEERING DATA:				
MAXIMUM OD (NO-GO)	2.745"	2.808"	2.870"	3.307"
BOX THREAD CONNECTION	2 1/4" – 12 SLB	2 1/4" – 12 SLB	2 1/4" – 12 SLB	2 3/4" – 12 SLB
PRONG FISHING NECK SIZE	1.375"	1.375"	1.375"	1.375"
PRONG LENGTH	25.18"	25.18"	25.18"	25.18"
LENGTH	28.13"	28.13"	28.13"	28.13"
'V' PACKING OD	1.500"	1.500"	1.500"	1.500"
PRONG RUNNING / PULLING TOOL	4014012000	4014012000	4014012000	4014012000
MATERIAL *	Norm Alloy *	Norm Alloy *	Norm Alloy *	Norm Alloy *

* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)





SECTION XV: EQUALIZING SUB-ASSEMBLIES and ACCESSORIES

Type '**ROTPX**' Equalizing Prong and Valve Sub-Assembly:

TECHNICAL DATA				
NIPPLE SEAL BORE	3.688"	3.813"	4.313"	4.562"
SUB-ASSEMBLY NUMBER	24111836830	24111838130	24111843130	24111845630
ENGINEERING DATA:				
MAXIMUM OD (NO-GO)	3.682"	3.807"	4.307"	4.556"
BOX THREAD CONNECTION	3 1/16" – 12 SLB	3 1/16" – 12 SLB	3 1/4" – 12 SLB	3 3/4" – 12 SLB
PRONG FISHING NECK SIZE	2.313"	2.313"	3.125"	3.125"
PRONG LENGTH	34.84"	34.84"	39.04"	39.04"
LENGTH	37.15"	36.95"	41.2"	41.23"
'V' PACKING OD	1.500"	1.500"	2.313"	2.313"
PRONG RUNNING / PULLING TOOL	4014013000	4014013000	4014014000	4014014000
MATERIAL *	Norm Alloy *	Norm Alloy *	Norm Alloy *	Norm Alloy *

* Norm Alloy is suitable for H2S Service (NACE MR-01-75, Latest Revision)

Equalizing Sub-Assemblies are available in variety of Materials to suit Well Conditions.

