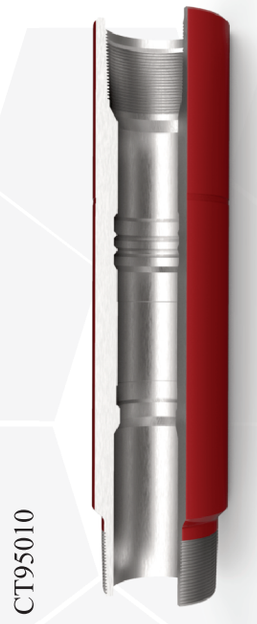
LANDING NIPPLES

- CT-LNP-X | CT95008
- CT-LNP-XN | CT95009
- CT-LNP-R | CT95010
- CT-LNP-RN | CT95011
- CT-LNP-RPT | CT95014

DESCRIPTION:

X, XN, R and RN landing nipples are run into the well on the completion tubing to provide a specific landing location for the subsurface flow control equipment. The common internal profiles of these landing nipples make them universal. X and XN landing nipples are designed for use with standard weight tubing. R and RN landing nipples are designed for use with heavy weight tubing. (The N designates no-go nipples).

RPT landing nipples are run into the well on the completion tubing to provide a specific landing location for the subsurface flow control equipment. The common internal profiles of these landing nipples make them universal. The completion can have as many selective nipples with the same ID in any sequence as desired on the tubing string. The versatility results in an unlimited number of positions for setting and locking subsurface flow controls. The flow control, which is attached to the required RPT lock mandrel, is run in the well via selective running tool on slick line. The slick line operator using the selective running tool can set the flow control in any one of the landing nipples at the desired depth. If this location is unsatisfactory or if well conditions change, the flow control may be moved up or down the tubing string to another nipple location. This operation can be done by slick line under pressure without killing the well.



FEATURES & BENEFITS:

- ✓ Large bore.
- ✓ Nipples installed in tubing string in any order- reducing work over risk.
- ✓ Provides unlimited number of positions to set.
- ✓ Same ID in all nipples reducing flowing pressure loss and minimizing turbulence.

TECHNICAL SPECIFICATIONS (CT-LNP-X / CT-LNP-XN / CT-LM-X / CT-LM-XN) :

Tubing				X Profile	XN Profile		Lock Mandrel ID (In.)
Size (In.)	Weight Lb. /ft.	ID (In.)	Drift (In.)	Seal Bore (In.)	Seal Bore (In.)	No- Go ID (In.)	
1.660	2.3	1.380	1.286	1.250	1.250	1.135	0.620
1.900	2.4	1.660	1.516	1.500	1.500	1.448	0.750
	2.75	1.610					
2.063	3.25	1.751	1.657	1.625	1.625	1.536	
2 3/8	4.6	1.995	1.901	1.875	1.875	1.791	1.000
				1.500	1.500	1.448	0.750
2 7/8	6.4	2.441	2.347	2.313	2.313	2.206	1.120
3 1/2	9.3	2.992	2.867	2.813	2.813	2.666	1.750
	10.2	2.922	2.797	2.750	2.750	2.635	
4	11	3.476	3.351	3.313	3.313	3.135	2.120
4 1/2	13.5	3.920	3.795	3.313	3.313	3.135	2.120
	12.6	3.958	3.833	3.813	3.813	3.725	2.620
5	13	4.494	4.369	4.313	4.313	3.987	
5 1/2	17	4.892	4.767	4.562	4.562	4.455	3.120

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

TECHNICAL SPECIFICATIONS (CT-LNP-R / CT-LNP-RN / CT-LM-R / CT-LM-RN) :

Tubing				R Profile	RN Profile		Lock Mandrel ID (In.)
Size (In.)	Weight Lb. /ft.	ID (In.)	Drift (In.)	Seal Bore (In.)	Seal Bore (In.)	No- Go ID (In.)	
1.9	3.64	1.500	1.406	1.375	1.375	1.250	0.620
2.375	5.3	1.939	1.845	1.781	1.781	1.640	0.880
	5.95	1.867	1.773	1.710	1.710	1.560	0.750
	6.2	1.853	1.759				
	7.7	1.703	1.609	1.500	1.500	1.345	0.620
2.875	7.8	2.323	2.229	2.188	2.188	2.010	1.120
	8.6	2.259	2.165	2.125	2.125	1.937	0.880
	9.35	2.195	2.101	2.000	2.000	1.881	0.880
	10.5	2.151	2.057				
	11.55	1.995	1.901	1.875	1.875	1.716	0.880
3.5	12.95	2.750	2.625	2.562	2.562	2.329	1.380
	15.8	2.548	2.423	2.313	2.313	2.131	1.120
	16.7	2.480	2.355				
	17.05	2.440	2.315	2.188	2.188	2.010	1.120
4	11.6	3.248	3.303	3.250	3.250	3.088	1.940
	13.4	3.340	3.215	3.125	3.125	2.907	1.940
4.5	12.6	3.958	3.833	3.750	NA	NA	2.120
	12.6	3.958	3.833	3.813	3.813	3.725	2.120
	13.5	3.920	3.795	3.688	3.688	3.456	2.380
	15.5	3.826	3.701				
	16.9	3.754	3.629	3.437	3.437	3.260	1.940
	19.2	3.640	3.515				
5	15	4.408	4.283	4.125	4.125	3.912	2.750
	18	4.276	4.151	4.000	4.000	3.748	2.380
5.5	17	4.892	4.767	4.562	4.562	3.987	2.830
	20	4.778	4.653				
	23	4.670	4.545	4.313	4.313	5.018	2.620
6	15	5.524	5.399	5.250	5.250	5.018	3.500
	18	5.424	5.299				
6.625	24	5.921	5.795	5.625	5.625	5.500	3.500
	28	5.791	5.666				
7	17 ~ 35	6.538	6.004	5.963	5.963	5.770	3.750
8.625	36	7.825	7.700	7.050	7.050	6.925	3.700
				7.250	7.250	7.125	
				7.450	7.450	7.325	

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

TECHNICAL SPECIFICATIONS (CT-LNP-RPT / CT-LM-RPT) :

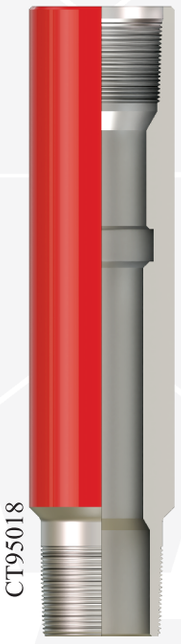
Tubing Size (In.)	Nipple Profile	Lock Mandrel	
	Sealbore ID (In.)	ID (In.)	OD (In.)
2 3/8	1.5	0.75	1.56
	1.625		1.685
	1.781		1.841
	1.875		1.935
	2		2.06
	2.125		2.185
2 7/8	2	1.12	2.06
	2.125		2.185
	2.188		2.248
	2.313		2.373
	2.482		2.542
3 1/2	2.562	1.50	2.622
	2.65		2.71
	2.75		2.81
	2.813		2.86
	2.875		2.935
4 ~ 4 1/2	3	1.75	3.06
	3.125		3.21
	3.125	1.94	3.21
	3.313		3.395
4 1/2 ~ 5	3.437	1.94	3.52
	3.562		3.65
	3.688		3.77
	3.75		3.807
	3.813		3.895
	4		4.09
5 1/2	4.188	2.75	4.27
	4.25		4.332
	4.313		4.395
	4.437		4.52
	4.5		4.55
	4.562	3.12	4.65
	4.688		4.76
	4.688		4.76
	4.75		4.825
	4.813		4.89
7	5.25	3.68	5.334
	5.5		5.584
	5.625		5.71
	5.75		5.84
	5.813		5.89
	5.875		5.94
	5.963		6.025
	6.125		6.18
	6.25		6.33

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

LANDING NIPPLE 'F' PROFILE

❑ CT-FLNP | CT95018



DESCRIPTION:

The Non-Ported Seating Nipple is a downhole tubing nipple used to locate, seal, and retain Flow Control accessories which utilize selective and/or top no-go locking devices. These accessories, which are run and re¬trieved on wire-line, will enable virtually any downhole flow control operation to be performed.It contains a top no-go shoulder and a locking groove. The shoulder and groove are used for top no-go landing; groove only is used in selective locating and landing.

TECHNICAL SPECIFICATION (CT-FLNP) :

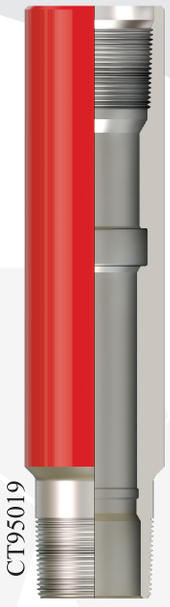
Dimension	Size (In.)									
	1.18	1.25	1.43	1.5	1.56	1.62	1.78	1.81	1.87	2.06
Seal Bore (In.)	1.187	1.25	1.437	1.5	1.562	1.625	1.781	1.812	1.875	2.062
Top No-Go (In.)	1.305	1.305	1.565	1.565	1.705	1.705	1.95	1.95	1.95	2.19

Dimension	Size (In.)									
	2.188	2.25	2.31	2.56	2.75	2.81	2.87	3.12	3.31	3.68
Seal Bore (In.)	2.188	2.25	2.312	2.562	2.75	2.812	2.875	3.125	3.313	3.688
Top No-Go (In.)	2.235	2.38	2.38	2.749	2.925	2.925	2.97	3.25	3.411	3.886

Dimension	Size (In.)									
	3.75	3.81	4	4.125	4.313	4.56	4.75	5.25	5.5	5.95
Seal Bore (In.)	3.75	3.812	4	4.125	4.313	4.562	4.75	5.25	5.5	5.953
Top No-Go (In.)	3.886	3.886	4.125	4.312	4.437	4.718	4.875	5.375	5.625	6.125

LANDING NIPPLE 'R' PROFILE

- CT-RLNP | CT95019



DESCRIPTION:

Bottom No-Go Non-Port¬ed Seating Nipple is a tubing nipple for use with bottom no-go locking devices only. It has a seal bore, bottom no-go shoulder, and a locking groove. The nipple locates, seals, and retains flow control accessories that have a bottom no-go locking device. The accessories are run and retrieved on wire-line.

TECHNICAL SPECIFICATIONS (CT-RLNP) :

Dimension	Size (In.)									
	1.180	1.430	1.500	1.560	1.780	1.810	1.870	2.060	2.120	2.250
Seal Bore (In.)	1.187	1.437	1.500	1.562	1.781	1.812	1.875	2.062	2.125	2.250
No-Go Bore (In.)	1.135	1.385	1.447	1.510	1.728	1.760	1.822	1.965	2.035	2.197

Dimension	Size (In.)								
	2.310	2.560	2.750	2.810	3.120	3.310	3.680	3.750	3.810
Seal Bore (In.)	2.312	2.562	2.750	2.812	3.125	3.313	3.688	3.750	3.812
No-Go Bore (In.)	2.257	2.442	2.697	2.759	3.072	3.242	3.625	3.700	3.759

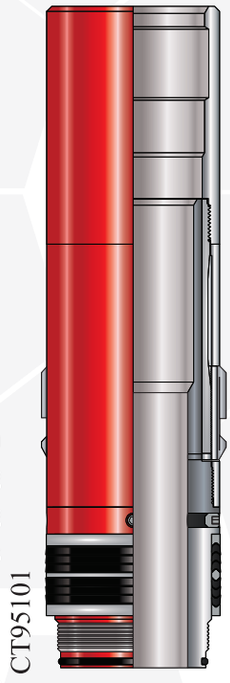
Dimension	Size (In.)								
	4.000	4.125	4.313	4.560	4.750	5.250	5.500	5.750	5.950
Seal Bore (In.)	4.000	4.125	4.313	4.562	4.750	5.250	5.500	5.750	5.953
No-Go Bore (In.)	3.910	4.035	4.223	4.472	4.660	5.150	5.400	5.625	5.828

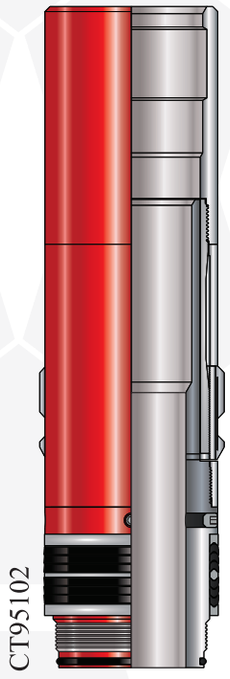
NOTES:

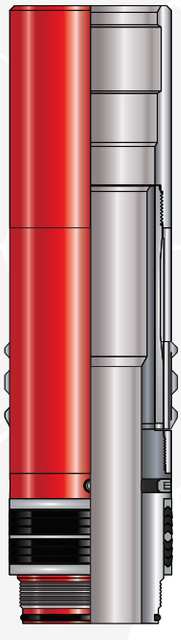
- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

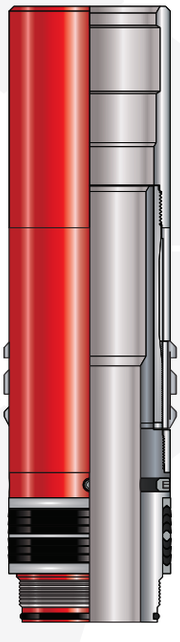
LOCK MANDREL

- CT-LM-X | CT95101
- CT-LM-XN | CT95102
- CT-LM-R | CT95103
- CT-LM-RN | CT95104


CT95101


CT95102


CT95103


CT95104

DESCRIPTION:

The 'X' landing nipples are selective by running tool and are run in the well on the completion tubing to provide a specific landing location for subsurface flow control equipment. These landing nipples feature common internal profiles. The 'X' landing nipple is designed for use in standard weight tubing.

The 'XN' no-go landing nipples are designed for use in single nipple installations or as the bottom nipple in a series of 'X' or 'R' landing nipples. These landing nipples have the same packing bore ID for a particular tubing size and weight. 'XN' landing nippes are designed for use with standard weight tubing.

'R' landing nipples are selective by running tool and are run in the well on the completion tubing to provide a specific landing location for subsurface flow control equipment. These landing nipples feature common internal profiles and are typically used with heavy weight tubing.

'RN' no-go landing nipples are designed for use in single nipple installations or as the bottom nipple in a series of 'X' or 'R' landing nipples. These landing nipples have the same packing bore ID for a particular tubing size and weight and are designed for use with standard weight tubing.

FEATURES & BENEFITS :

- ✓ Keys of locking mandrel retracted into assembly while running and retrieving.
- ✓ Locks designed to hold pressure from above or below from sudden reversals.
- ✓ High-pressure, high temperature, large bore completions
- ✓ Locking mechanism is located above the sealing elements; therefore, no O-rings are required.

LOCK MANDREL

❑ CT-LM-RPT | CT95107

DESCRIPTION:

The “RPT” no-go lock mandrels locate on top of the nipple’s polished bore; therefore, there are no secondary restrictions normally associated with bottom no-go profiles. This feature makes RPT systems well suited for high-pressure, high-volume large bore completions. “RPT” lock mandrels in any given size range are designed to use the same running and pulling tool.

FEATURES & BENEFITS :

- ✓ Simple and rugged construction.
- ✓ Keys of locking mandrel retracted into assembly while running and retrieving.
- ✓ Locks designed to hold pressure from above or below from sudden reversals.
- ✓ High-pressure, high temperature, large bore completions
- ✓ Locking mechanism is located above the sealing elements; therefore, no O-rings are required.

NOTES:

- ❒ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❒ Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

NON-ELASTMERIC SLIDING SLEEVE

- CT-CMD-NE | CT95617
- CT-CMU-NE | CT95618

DESCRIPTION:

The CT-CMD-NE & CT-CMU-NE Sliding Sleeves are high performance, equalizing sliding sleeves which allow communication between the tubing and annulus for circulation or selective-zone production. When desired, the sleeve can be shifted open or closed using standard wire line methods and a "CT- BO" type shifting tool. The tool is designed such that any lock profile and compatible seal bores can be specified to accept a wide range of Wire line Locks and accessories. The sleeve is available in "CT-CMD" downshift-to-open or "CT-CMU" upshift- to- open versions.

FEATURES & BENEFITS :

- ✓ A specially designed Diffuser Ring.
- ✓ Mill slots replace drill holes allow more flow area and reduce erosion.
- ✓ Equalizing ports in the inner sleeve allow opening under high differential pressures.
- ✓ Several sleeves can be shifted in a single slick line trip.
- ✓ Can be opened repeatedly against high differential pressures.

CT95617 / CT95618

BO SHIFTING TOOL

❑ CT-BO | CT95006

CT95006

DESCRIPTION:

"BO" tool is used to move the inner sleeve to its open or closed position in circulating devices. "BO" standard positioning tools engage the recess in the upper (or lower) end of the inner sleeve to permit the sleeve to be shifted by a jarring action. It is designed to release itself only after the sleeve reaches its fully open or closed position. This automatic-releasing feature incorporates a releasing profile on the key itself that acts to compress the key spring and release the positioning tool. A shear pin is an added feature designed to release the tool in the event well conditions make it impossible to shift the sleeve. A set of positive keys is available for this tool to permit upward movement of the inner sleeve of one among several Sliding Sleeve circulating devices in one wellbore. These keys do not have a releasing profile. The positioning tool pin must be sheared to release.

TECHNICAL SPECIFICATIONS (CT-BO) :

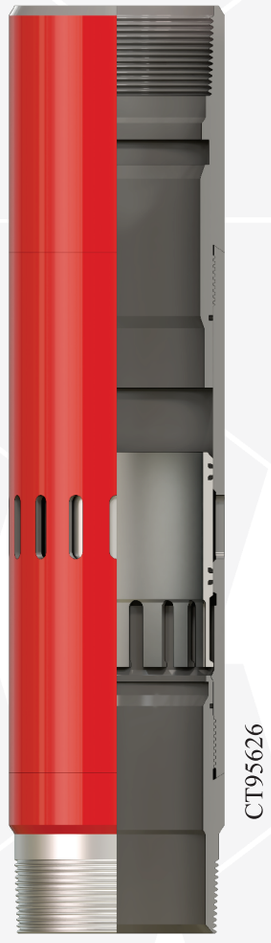
Sliding Sleeve ID (In.)	Fish Neck Size (In.)	OD	OD	Thread	Total Length (In.)
		Keys Extracted (In.)	Keys Retracted (In.)		
1.5	1.187	1.690	1.490	15/16-10 UN	12.44
1.625	1.187	1.890	1.620	15/16-10 UN	12.75
1.781	1.375	2.070	1.750	15/16-10 UN	12.5
1.875	1.375	2.110	1.840	15/16-10 UN	13.3
2.125	1.375	2.370	1.950	15/16-10 UN	13.3
2.250/ 2.313	1.750	2.592	2.160	15/16-10 UN	13.94
2.562	1.750	3.000	2.530	15/16-10 UN	13.94
2.75/ 2.813	2.313	3.300	2.625	1 1/16-10 UN	14.415
3.688	3.120	4.130	3.660	1 1/16-10 UN	15.75
3.813	3.120	4.269	3.750	1 1/16-10 UN	15.2

NOTES:

- ❒ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❒ Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

L TYPE SLIDING SLEEVE

❑ CT-L | CT95626



DESCRIPTION:

L Type Sliding Sleeves are high performance, equalizing sliding sleeves which allow communication between the tubing and annulus for circulation or selective-zone production. When desired, the sleeve can be shifted open or closed using standard wireline methods with the shifting tool. It has seal bores above and below the ports, and a Top No-Go Shoulder and Locking Groove. The shoulder and groove are utilized in Top No-Go landing and the groove only in Selective locating and landing. The L Sliding Sleeve locates, seals and retains Flow Control Accessories that have either Top No-Go or Selective Locks. The model 'L' Sliding Sleeve can also be made available in Otis style nipple profiles on request.

FEATURES & BENEFITS :

- ✓ Upper seals are designed to accommodate elastomer swell, to Prevent pressure trapping, and to require only a moderate and consistent shifting force.
- ✓ Lower seals have all the above features, and in addition are integrally mold-bonded to the Closing Sleeve.
- ✓ Features a nipple profile above and a packing seal bore above and below the communication ports.
- ✓ Seal Bores Contoured and polished to pass Chevron Packing without damage.
- ✓ Variety of nipple profiles may be configured to accept other intervention tools.

TECHNICAL SPECIFICATIONS (CT-L) :

L Type Sliding Sleeve			Shifting Tool	
Size (In.)	Max. OD (In.)	Closed Sleeve ID (In.)	D2 Shifting Tool (In.)	Collet OD (In.)
2.250	3 27/64	2.375	2.250	2.281
2.310			2.310	2.343
2.750	4 1/2	2.875	2.750	2.781
2.810			2.810	2.843
3.680	5 1/2	3.910	3.680	3.743
3.810			3.810	3.867
4.310	6 1/16	4.697	4.310	4.406
4.560	6 1/16	4.697	4.560	4.656
5.500	7 5/13	5.875	5.500	5.575

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

D2 SHIFTING TOOL

❑ CT-D2 | CT95030

DESCRIPTION:

D2 Shifting Tool is used to provide a safe, selective and controlled method of opening and closing 'L' Type sliding sleeves. Collets on the D2 shifting tool come in different OD measurements for each sleeve ID. The use of the collet is to locate the sleeve desired to be shifted. The tool can then be extended allowing the spring loaded dogs to move outside latching the inner sleeve for shifting. The tool needs a specific distance from the square face of the shifting dog to the collet locating profile. This measurement is done with the tool in the retracted position and allows for the shifting tool to disengage the sleeve when the shifting sequence is complete. Shear pins are incorporated at the base of the shifting dogs allowing for a safety release feature.

CT95030

FEATURES & BENEFITS :

- ✓ Automatic Locating Collet indicates the operator when a sleeve is reached or the tool has passed through a sleeve or nipple.
- ✓ As soon as a shift (either open or closed) is completed, an attempt to repeat the operation (in the same sleeve) will give a positive indication that the shift was performed. Can be run in tandem if required to both open and close Sleeves on the same run in well. (Collet up to open sleeve and down to close sleeve).
- ✓ After seating in the sleeve the tool can still be retrieved without shifting the sleeve.

NOTES:

- ❒ Additional size/weight, end connection, pressure rating, etc. are also available on request.
- ❒ Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

'X' / 'R' LINE RUNNING TOOL

- CT-RTX | CT95002
- CT-RTR | CT95003

DESCRIPTION:

The 'X'/'R' Line' Selective Running Tool is designed to install subsurface control equipment using a type CT-LM-X/R Locking Mandrel. The selective features of the CT-CTX/ CT-RTR Line Running Tool allow the operator to install the down-hole device in a pre-determined CT-LNP-X/R Landing Nipple by adjusting the tool into the selective position. If the subsurface control is to be installed in the upper most landing nipple, the locking mandrel may be run with the keys in the control or location position.

In addition to setting the CT-LM-X/R Locking Mandrel, the Running Tool may be used to locate CT-LNP-X /R Landing Nipples.

FEATURES & BENEFITS :

- ✓ Provides positive indication that a nipple profile is reached.
- ✓ Can be run in selective or non-selective modes, in selective modes gives the ability to set a selective locking device in desired nipple from a series of nipples at the desired depth.
- ✓ Successful tool release indication to operator.

CT95002

'S' PULLING TOOL

❑ CT-PTS | CT95001

DESCRIPTION:

The 'S' Pulling Tool is a wire line service tool designed to remove retrievable subsurface devices with external fishing necks from a well. This tool utilizes a set of three dogs to engage the fishing neck.

This Pulling Tool is available in a wide range of sizes, with three reaches in each size. All tools can be supplied for standard or H2S service. The "S" Pulling Tool is designed to be released from the down-hole device by downward jarring. Therefore the "S" Pulling Tool is particularly suited for use as a pulling tool when extensive jarring is required.

Because of the downward shear release of the "S" Pulling Tool, it is particularly useful as a running tool for collar stops, pack-off anchor stops, and other subsurface devices landed against a positive no-go

TECHNICAL SPECIFICATIONS (CT-PTS):

Size (In.)	Type	To Engage Fishing Neck OD (In.)	Reach (In.)	Max. OD (In.)	Top Thread Connecon
1 1/2	SB	1.187"	1.297"	1.437"	15/16-10
1 1/2	SS	1.187"	1.781"	1.437"	15/16-10
2	SB	1.375"	1.219"	1.770"	15/16-10
2	SS	1.375"	2.031"	1.770"	15/16-10
2 1/2	SB	1.750"	1.281"	2.180"	15/16-10
2 1/2	SS	1.750"	2.000"	2.180"	15/16-10
3	SB	2.312"	1.500"	2.740"	1 1/16"-10
3	SS	2.312"	2.219"	2.740"	1 1/16"-10
4	SB	3.125"	1.800"	3.718"	1 1/16"-10

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

'GS' & 'GR' PULLING TOOL

- CT-PTGS | CT95007
- CT-PTGR | CT95115

DESCRIPTION:

The Model 'GS' Pulling Tool is a wire line service tool designed to retrieve flow control devices from well bore. Pulling Tool is designed to engage an internal type fishing neck. The tool is available in a wide range of sizes for standard, H_2S or CO_2 service well conditions.

The Pulling Tool is designed to be released from the down-hole device by downward jarring.

The GR pulling tool is assembled by incorporating an "GS" pulling tool with an shear-up adapter.

TECHNICAL SPECIFICATIONS (CT-PTGS):

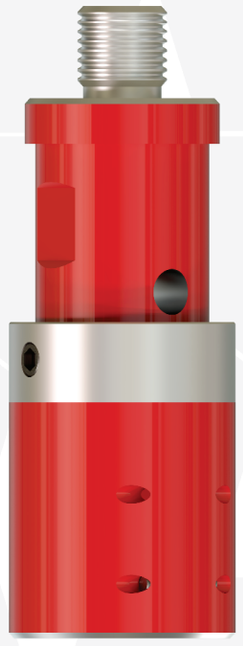
Size (In.)	Will Engage Fishing Neck ID (In.)	Top Thread Connection	Fishing Neck OD On Tool (In.)	Bottom Thread Connection	Max. OD (In.)
1 1/2	1.062	15/16"-10	1.187	1/2"-13	1.370
2	1.375	15/16"-10	1.375	1/2"-13	1.870
2 1/2	1.815	15/16"-10	1.750	5/8"-11	2.250
3	2.313	1 1/16"-10	2.313	5/8"-11	2.840
4	3.125	1 1/16"-10	3.125	2 1/8"-12	3.630

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

'C1' RUNNING TOOL

- CT-C1 | CT95005



DESCRIPTION:

The COT model 'CT-C1' running tool runs flow Control devices into the well those have external fishing neck locks. A thread protector, which has the same OD as the tool body, makes selective setting possible. A seal bore locating ring provides Top No go setting.

TECHNICAL SPECIFICATION (CT-C1):

Tubing Size (In.)	Nipple Seal Bore Size (In.)	Accessory Size (In.)	Running Tool Size (In.)	Locating Ring Size OD (In.)	Top Thread Connection Size	Fish Neck Size OD (In.)	Shear Pin Diameter OD (In.)
2 1/16	1.562	1.56	2 1/16	1.593	15/16-10	1.188	1/8
	1.625	1.62		1.656			
2 3/8	1.781	1.78	2 3/8	1.807	15/16-10	1.375	3/16
	1.812	1.81		1.843			
	1.875	1.87		1.906			
2 7/8	2.062	2.06		2.093			
	2.25	2.25	2 7/8	2.281	15/16-10	1.75	3/16
	2.312	2.31		2.343			
3 1/2	2.562	2.56		2.593			
	2.75	2.75	3 1/2	2.781	1 1/16-10	2.312	3/16
	2.812	2.81		2.843			
4 1/2	3.688	3.68	4 1/2	3.718	1 1/16-10	3.125	3/16
	3.75	3.75		3.802			
	3.812	3.81		3.835			

T95005

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

SELECTIVE & NON- SELECTIVE TEST TOOL

- CT-TET-S | CT95125
- CT-TET-N | CT95114

DESCRIPTION:

Selective & Non-selective test tools are designed to test the tubing string, set hydraulic packers, and protect lower zones when circulating through a sliding Sleeve circulating device or producing a zone above the lowermost zone. Designed to hold pressure from above only using of a drop valve equalizing assembly, the non selective test tools land in no-go landing nipples with compatible packing bores. When landed in the landing nipple, pressure from above is sealed by the drop, seal ring, and V-packing. To retrieve by wireline, the drop is moved off-seat with a pulling tool. This equalizes the pressure across the test tool, thus allowing retrieval.

FEATURES & BENEFITS:

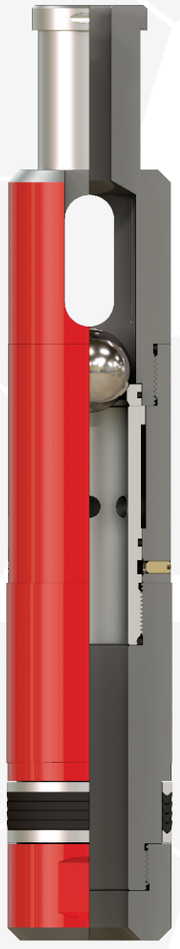
- ✓ Ease of running, setting, and retrieving.
- ✓ No-go OD on bottom of tool for positive location in landing nipple.
- ✓ Can be pumped into the well.
- ✓ Designed for high-pressure rating.

CT95114

CT95125

EQUALIZING CHECK VALVE

- CT-FB-2 | CT95021
- CT-RB-2 | CT95020



DESCRIPTION:

The Equalizing Check Valves are complete equipment units, without any Locking Device. They are utilized in the respective tubing mounted equipment. Both models are run into a landing nipple or sliding sleeves profile through wireline operated tools to hold pressure from above only. check valve lands on the top No-go landing nipple profile A 'C1' Running Tool is used to run the valve assemblies. The COT model can be equalized prior to retrieval, by shifting open the Equalizing Mandrel Ports. Standard Pulling Tool is utilized for retrieval of these valves. Equalizing Check Valves are manufactured for Standard, H2S and CO2 service conditions.

TECHNICAL SPECIFICATION (CT-FB-2):

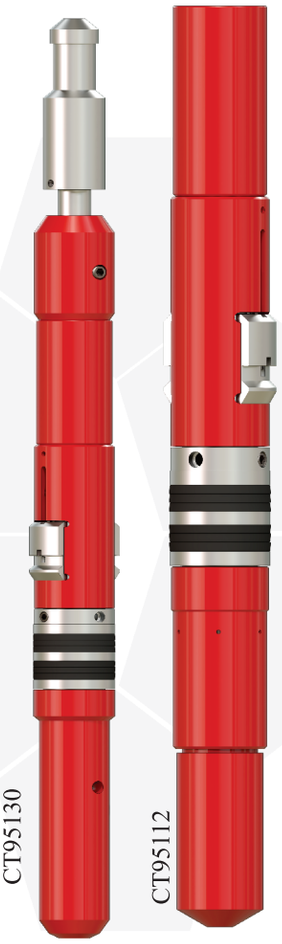
Size (In.)	Nipple Seal Bore Size (In.)	Check Valve Size (In.)	To Pull	Max OD (In.)
			Pulling Tool (In.)	
2 1/16	1.562	1.560	1 1/2	1.615
	1.625	1.620		1.672
2 3/8	1.781	1.780	2	1.865
	1.812	1.810		1.865
	1.875	1.870		1.905
2 7/8	2.188	2.188	2	2.225
	2.250	2.250	2 1/2	2.302
	2.312	2.310		2.364
3 1/2	2.750	2.750	3	2.802
	2.812	2.810		2.865
4 1/2	3.313	3.310		3.365
	3.688	3.680	4	3.740
	3.750	3.750		3.802
	3.812	3.810		3.875

NOTES:

- Additional size/weight, end connection, pressure rating, etc. are also available on request.
- Technical data presented above are based upon experimental data & theortical engineering calculations. These values will change within accepted engineering tolerances due to variations in material properties, dimensional tolerances and actual operating conditions.

BLANKING PLUGS SYSTEM

- CT-BPL-ST | CT95112
- CT-BPL-TT | CT95130



DESCRIPTION:

One-trip plug assemblies consist of a lock mandrel, equalizing subassembly, and plug cap. These plugs are run and pulled on slickline to plug the tubing during various operations. One-trip plugs are available for all key-type locks. One-trip plug assemblies are designed to hold differential pressure from above or below during normal plugging operations. The equalizing sub provides an equalization path across the plug. Only one slickline trip is required to run or pull the plug.

Blanking plug with Two Trip assemblies consist of a lock mandrel, housing and prong. These plugs are run and pulled on slickline to plug the tubing during various operations. These plug is double trip system.

These assemblies are designed to hold differential pressure from above or below during normal plugging operations. Prong provides an equalization path across the plug.

Available with below profile:

X ; XN

R ; RN

RPT

FEATURES & BENEFITS:

- ✓ Balanced equalizing system
- ✓ Fluid bypass during running or retrieving operations
- ✓ Requires only one slickline trip to run or pull