

MAXIMUS

Completion Systems

SERVICE PACKERS



Magnus MSU Retrievable Bridge Plug & Accessories

MSU-RBP-01



MAGNUS RETRIEVABLE BRIDGE PLUG

The Magnus Retrievable Bridge Plug is high pressure packer style bridge plug used for multiple selective zone treating and testing operations. The Magnus Retrievable Bridge Plug is a superior field proven design. The Magnus Retrievable Bridge Plug is designed to set in tension or compression, which makes it ideal for shallow applications to test wellhead for deep, high pressure applications.

The plug is designed with large internal bypass to prevent swabbing when running and retrieving. The by-pass closes during the setting of the plug and opens prior to releasing the upper slips to equalize pressure when un setting.

Features

- Field proven superior design
- Left hand rotation release setting tool from plug
- Standard packing element system rated at 275° F

Benefits

- 1/4 right hand turn to set and 1/4 turn to release
- Large internal by-pass
- Pressure equalizes prior to release of upper slips
- Can be set shallow or deep
- Utilizes a spring loaded over shot retrieving tool

Applications

- Temporary zonal isolation
- Shallow set to test wellhead
- Deep high pressure testing
- Squeeze cementating
- Fracturing operations
- Multi selective zone treating and testing operations





SETTING PROCEDURE

Run the tool to setting depth while latched to its spring loaded retrieving tool. Pick up and slack off to establish true pick-up and slack off weights. Pick up on the tubing, rotate 1/4 turn to the right at the plug, and lower the tubing to set lower slips and pack off elements.

Pull tension on the tubing to pack-off the elements and set upper slips. Pulling tension and setting weight on the plug may be repeated to insure set and pack-off. After setting the plug, set down on plug with 500 to 1,500 Lbs., hold left hand torque on tubing and pick up to release from plug.

RELEASING PROCEDURE

Lower the tubing until the retrieving tool automatically latches to the Retrievable Bridge Plug. Sand may be washed from the upper slips by circulating through the upper portion of the plug. Set down weight on the bridge plug (500 to 1,000 Lbs.), hold right hand torque, and pick up on the tubing to open the bypass valve.

Wait until the differential pressure has equalized. Continue to pick up to release the upper slips, relaxing the packing elements and re-latch the plug will not release conventionally, slack off weight to re-set the plug, then pick straight up to shear the j-pins and release the plug.

Caution :

Once the J-pins are sheared the tool can not be moved down the hole, but can be moved upward.

Product Specifications

MAGNUS RETRIEVABLE BRIDGE PLUG

CASING				BRIDGE PLUG
O.D. (in./mm)	Weight (lb/ft, kg/m)	I.D. (in./mm)		Maximum O.D. (in./mm)
		Minimum	Maximum	
4-1/2 114.3	9.50 to 13.5	3.920 99.57	4.090 103.89	3.750 95.25
5 127.0	11.50 to 15.0	4.408 111.96	4.560 115.82	4.280 108.71
	18.0 to 20.8	4.156 105.56	4.276 108.61	4.000 101.60
5-1/2 139.7	20.0 to 23.0	4.670 118.62	4.778 121.36	4.500 114.30
	14.0 to 20.0	4.778 121.36	5.004 127.10	4.625 117.48
6-5/8 168.3	24.0 to 32.0	5.675 144.15	5.921 150.39	5.500 139.70
7.00 177.8	26.0 to 32.0	6.094 154.79	6.276 159.41	5.875 149.23
	20.0 to 26.0	6.276 159.41	6.456 163.98	5.969 151.61
7-5/8 193.7	24.0 to 29.7	6.875 174.63	7.025 178.44	6.672 169.47
	33.7 to 39.0	6.625 168.28	6.765 171.83	6.453 163.91
8-5/8 219.1	28.0 to 40.0	7.725 196.22	8.017 203.63	7.531 191.29
9-5/8 244.5	40.0 to 53.5	8.535 216.79	8.835 224.41	8.250 209.55
10-3/4 273.05	40.5 to 45.5	9.95 252.73	10.05 255.27	9.30 236.22



SETTING FORCE GUIDE

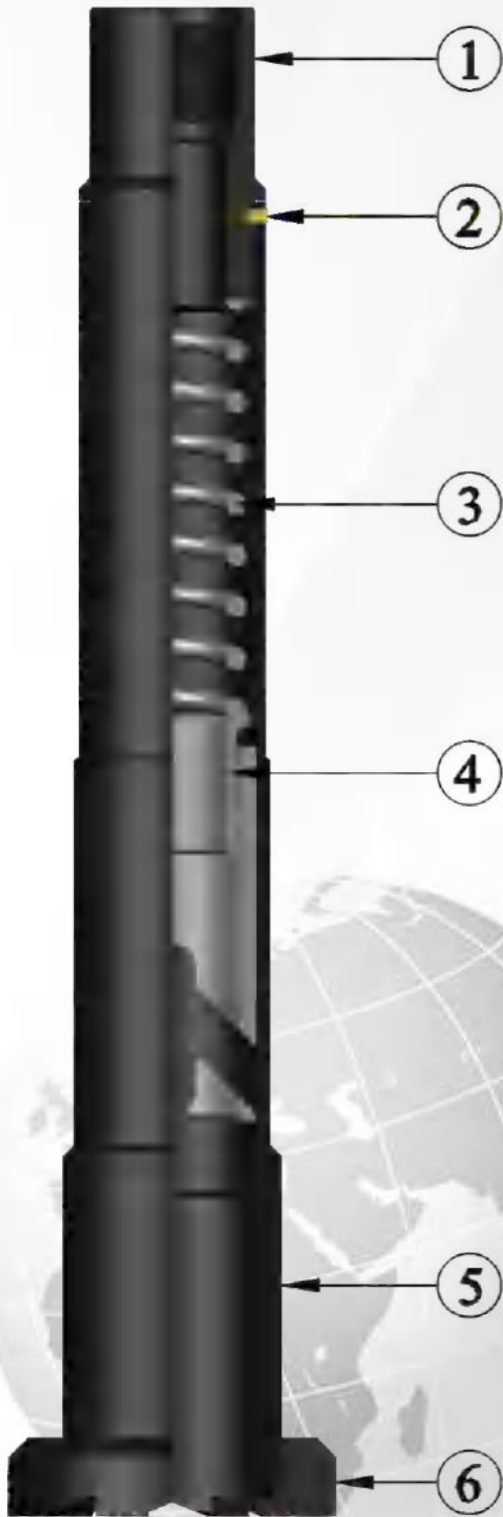
SIZE (in./mm)	MINIMUM FORCE REQUIRED AT PLUG (Lb/kg)
4-1/2 114.3	10,000 4536.00
5 127.0	10,000 4536.00
5-1/2 139.7	12,000 5443.00
6-5/8 168.3	14,000 6350.00
7.00 177.8	15,000 6804.00
7-5/8 193.7	18,000 8165.00
8-5/8 219.1	25,000 11340.00
9-5/8 244.5	25,000 11340.00

NOTE : Most of the components are manufactured from heat treated alloy steel. Therefore, extended exposure to corrosives can be detrimental to the metallurgy. Care in cleaning the tool soon after removal from the well can help extend the life of component parts. Close inspection of the part is necessary, after removal, to identify any parts, which require replacement.

CAUTION : When running this tool with a packer, make sure the J-slots in the plug, running / retrieving tool, and the packer are all compatible.



SPRING LOADED RETRIEVING TOOL



ITEM NO.	DESCRIPTION
1.	TOP SUB
2.	SET SCREW [3/8 " X 16 X 3/8 "]
3.	FOLLOWER SPRING
4.	PLUNGER
5.	BODY
6.	SHOE