

MMRG-2V-B

Barrier Series dual-pocket side pocket mandrel

APPLICATIONS

- High-pressure, deepwater installations
- Subsea installations
- Safety-critical applications with stringent pressure integrity requirements
- Standard installations

BENEFITS

- Reduces downtime by eliminating the need for annulus fluid unloading following typical slickline operations
- Lowers costs and downtime through improved pressure integrity of entire well-bore environment

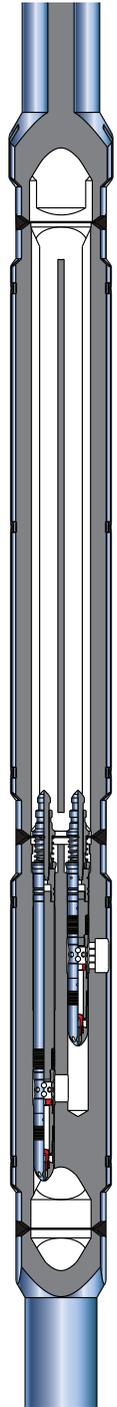
FEATURES

- Field-proven, dual-pocket, side pocket configuration, with a dual-inline, redundant, leak-tight seal
- Compatibility with existing field-proven Camco* gas lift and subsurface safety systems' orienting-type slickline installation and pulling tools
- Integral tubing-to-casing barrier valve (TCBV) that prevents tubing-to-casing communication when operating valve is removed
- Same barrier-qualified check valve design found in barrier gas lift valves
- Qualification to API Specification 19G2 V1, ISO 17078-2 V1, and barrier standards

The MMRG-2V-B Barrier Series dual-pocket side pocket mandrel enhances the capability of existing gas lift systems. The MMRG-2V-B mandrel uses a field-proven, dual-pocket side pocket configuration with a dual-inline, redundant, leak-tight seal. This configuration of dual bores and communication portals allows for the use of two separate and distinct retrievable flow control check valve devices that work independently to simultaneously serve both the flow control and pressure barrier requirements of the gas lift system.

The barrier mandrel is a round-body, fully machined mandrel with a one-piece, twin 1½-in bore pocket design with a dual-tool discriminator containing a TCBV. The TCBV prevents communication between the tubing and casing when the normal operating gas lift valve is removed from the primary pocket. The primary pocket accepts all standard and barrier version 1½-in OD gas lift type valves. Both TCBV and active gas lift valves are slickline retrievable.

The MMRG-2V-B SPM design incorporates dual, flush-mount, full-length OD grooves to facilitate cable and control-line bypass. This reduces overall running OD while offering maximum line protection.



MMRG-2V-B series side pocket mandrels.

MMRG-2V-B

MMRG-2V-B Barrier Series Mandrel Specifications

Tubing Size, [†] in [mm]	Type	Material Type	Major OD, in [mm]	Internal Drift, in [mm]	Test Pressure (Internal), psi [kPa]	Test Pressure (External), psi [kPa]	Latch Type	Kickover Tool
4.500 [114.3]	MMRG-2V-B	410-13Cr	7.580 [192.5]	3.833 [97.4]	8,500 [58,605]	8,000 [55,158]	RK, RK-1, RKP	OM-2V-B
5.500 [139.7]	MMRG-2V-B	4130	8.285 [210.4]	4.653 [118.2]	8,000 [55,158]	7,000 [48,263]	RK, RK-1, RKP	OM-2V-B
5.500 [139.7]		410-13Cr	8.285 [210.4]	4.653 [118.2]	8,000 [55,158]	7,000 [48,263]		
5.500 [139.7]		INCOLOY® 925	8.285 [210.4]	4.653 [118.2]	11,000 [75,842]	9,630 [66,396]		

[†]Additional design options for other tubing sizes and materials are available on request.

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