



INTEGRATED[®]

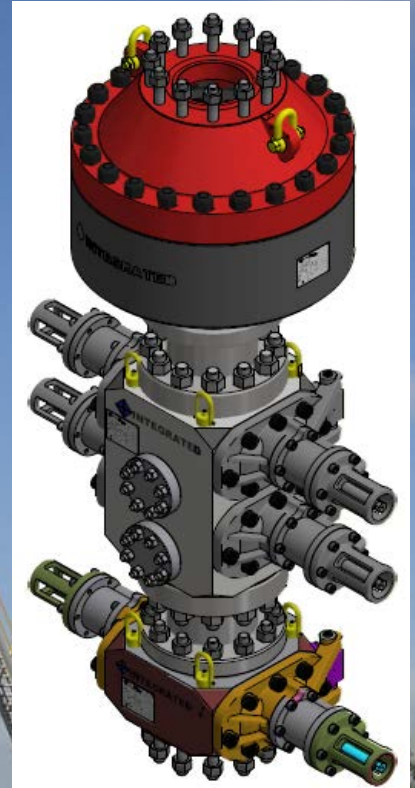
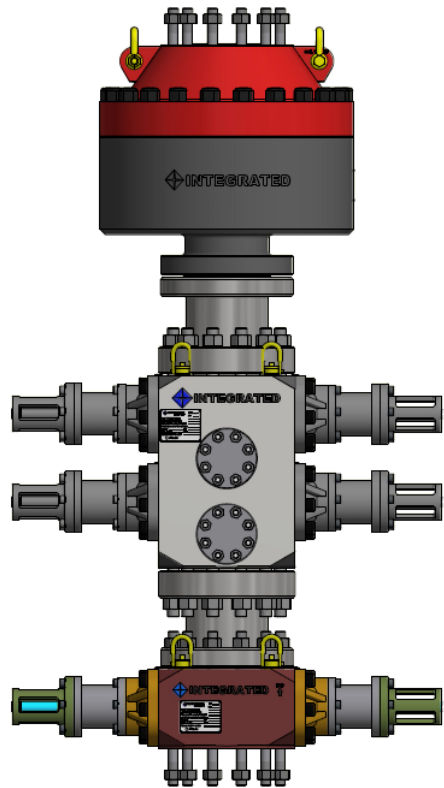
OEM RAM IWP™ BOP CATALOG

INTEGRATED[®]

is an established OEM manufacturer of API Monogrammed Pressure Control Equipment and Spare Parts that meets or exceed industry requirements. All products are designed, engineered, manufactured and validated as per API 6A, 16A, 20E & ASME Standards & Specifications.



The INTEGRATED IWP™ Ram BOP is a lightweight blowout preventer designed for easy maintenance and long life. It is ideal for smaller bore and lower working pressure application. The field proven ram preventer has been one of the most popular BOPs in small bore drilling and workover service for many decades. Easy to replace ram with a wide range of pipe ram sizes.



INTEGRATED[®] is an API licensed Original Equipment Manufacturer (OEM) of Pressure and Flow Control Equipment for the Global Workover, Snubbing, Drilling, Rental and Production sectors of the Oil and Gas Industry

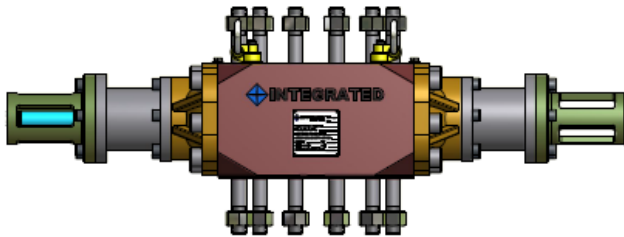
INTEGRATED OEM API 16A MONOGRAMMED TYPE IWPT™ RAM BLOWOUT PREVENTER

The Integrated Model **IWPT™** Ram Type Blowout Preventer (BOP) is used to contain wellbore pressure for onshore and inland water drilling and workover service. The **IWPT™** Ram BOP provides a rugged, reliable operations that is proven to be easy to maintain with a long history of field proven reliability. Integrated BOPs are manufactured in accordance with API 16A and 6A specifications.

9" - SINGLE (SR) RAM IWPT™ BOP

PN (3K): 70-311-000

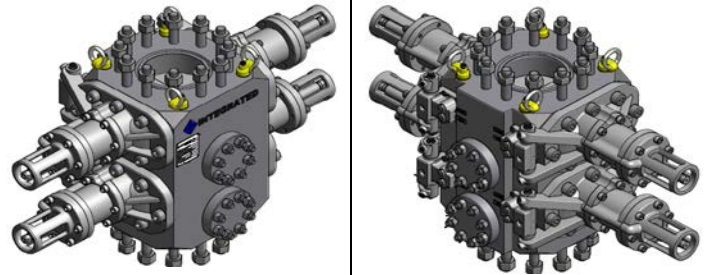
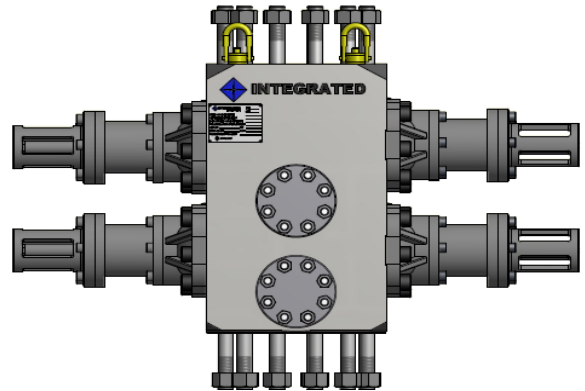
PN (5K): 70-511-000



9" – DOUBLE (DR) RAM IWPT™ BOP

PN (3K): 70-312-000

PN (5K): 70-512-000

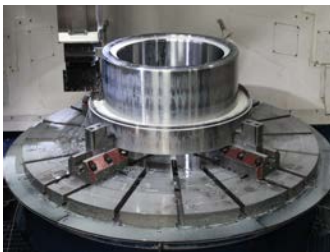
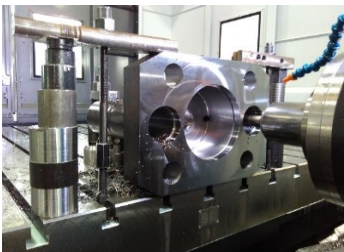


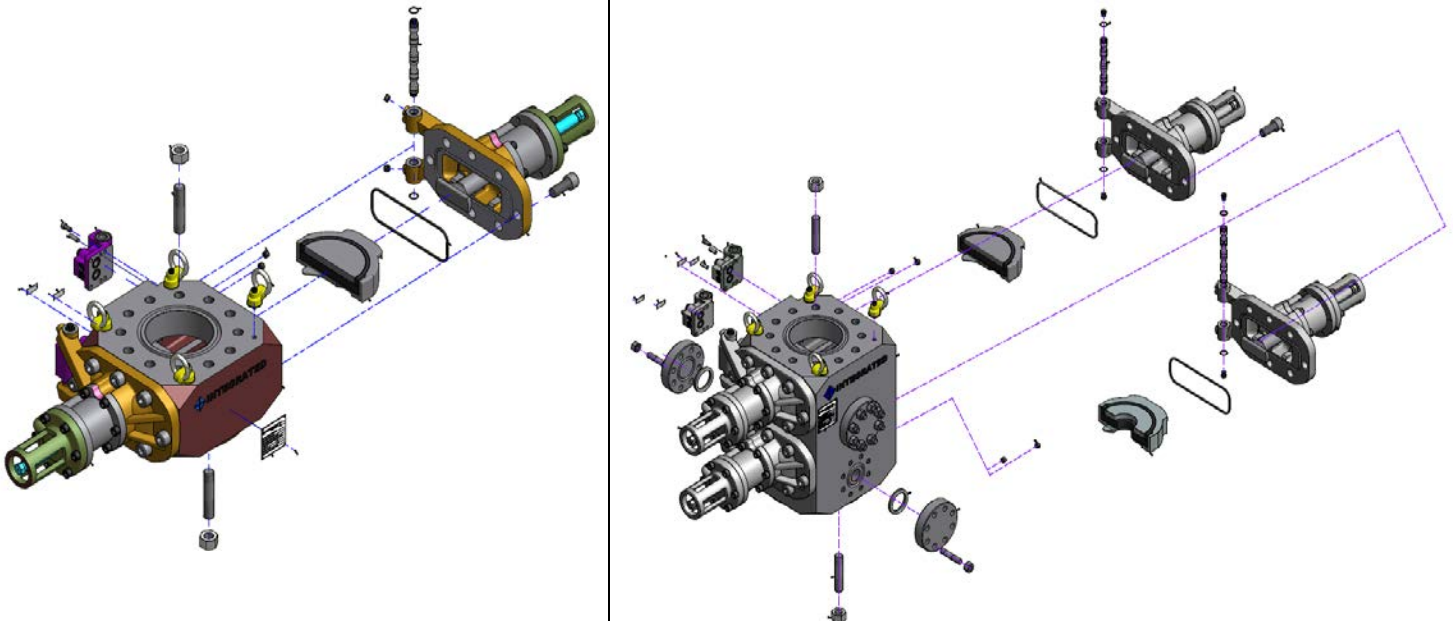
PRODUCT SPECIFICATIONS

- Designed and manufactured to ISO 13533 (API 16A) for Drill-through equipment
- API 16A Monogrammed
- Designed as standard to ISO 15156-1 (NACE MR-0175) for use in hydrogen sulfide environments (H2S)
- Material: A-487D, 75k
- Temperature Class (Edition 3): T-20 | Temperature Class (Edition 4): T-20/250
- Quality Level (Edition 4): PR1
- Non-Metallic Seal Temperature Rating: BGB
- Xylan coated internals for operational performance and corrosion control
- Manual Ram locking device
- The hydraulic fluid wetted dynamic sealing surfaces are either hard chrome plated or hard faced assuring maximum performance
- Ring Grooves are standard carbon steel. Other options are 625 Inconel Inlay.
- Top and Bottom Connections: Standard is Studded Top x Studded Bottom
 - Special Order Options: Studded x Flanged | Flanged x Studded | Flanged x Flanged
- Outlets: The 9" SR Ram **IWPT™** BOP has no outlets. The 9" DR Ram **IWPT™** BOP comes standard with two (2) x Studded 2-1/16" – 5k (blind flanges included).

**INTEGRATED OEM API 16A MONOGRAMMED
TYPE IWP™ RAM BLOWOUT PREVENTER**

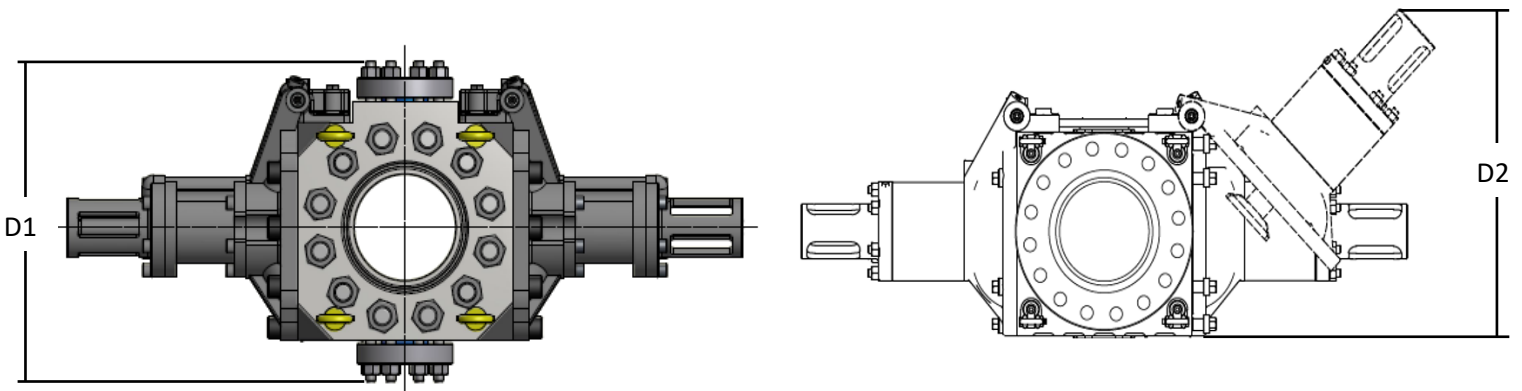
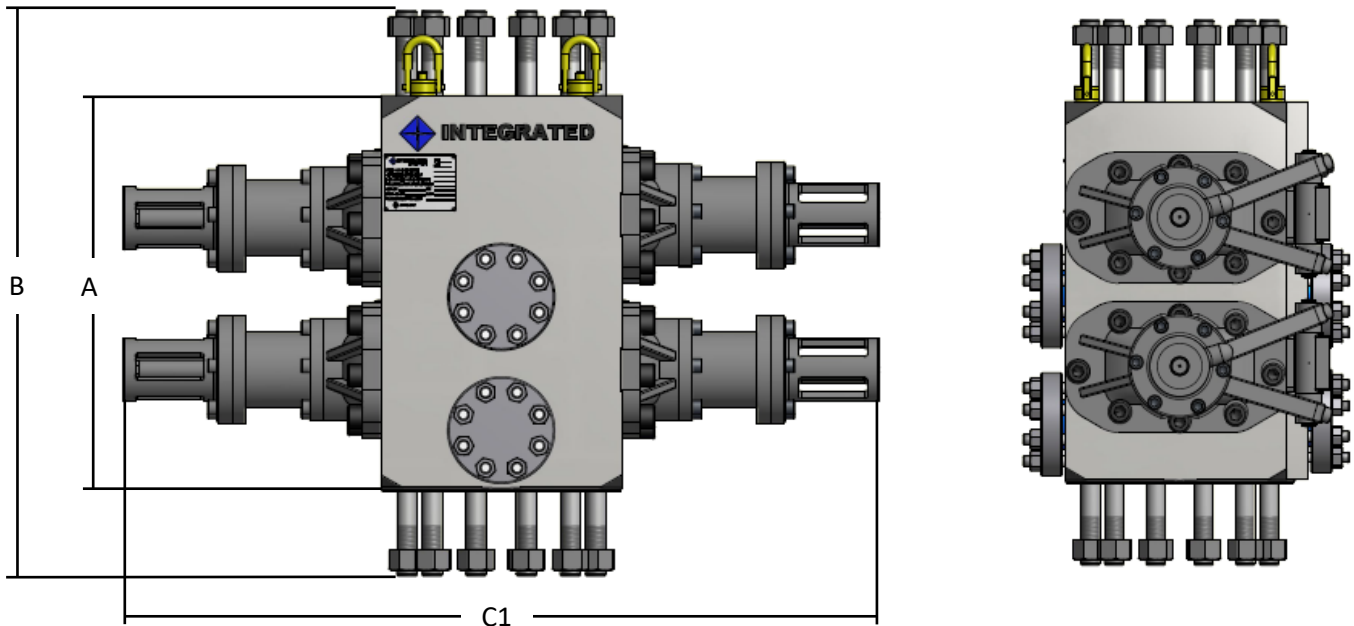
Integrated's API Certified – Licensed OEM plants provide state-of-the-art manufacturing of our Engineered-Designed Pressure Control Equipment and Elastomeric Products. Integrated - JD Edwards ERP system integrates our global manufacturing and distribution facilities.



**INTEGRATED OEM API 16A MONOGRAMMED
TYPE IWP™ RAM BLOWOUT PREVENTER**
IWS™ BOP EXPLODED VIEW

IWS™ BOP GENERAL DIMENSIONS AND WEIGHTS
**SINGLE AND DOUBLE RAM IWP™ BLOWOUT PREVENTER
DIMENSIONS & WEIGHTS**

The information below applies to Integrated Model **IWP™** Ram Type Blowout Preventers
Dimensions shown in the following chart are in inches and are approximate

A	- Height Studded Top x Studded Bottom Connections – Body only
B	- Height Studded Top x Studded Bottom Connections – Stud to Stud Bottom
C1	- Length – Doors Close
C2	- Length – Doors Open
D1	- Width with Doors Closed
D2	- Width with Doors Open
	- Weight - Lbs
	- Weight - Kgs

**INTEGRATED OEM API 16A MONOGRAMMED
TYPE IWP™ RAM BLOWOUT PREVENTER**

9" RAM IWP™ BOP DIMENSIONS AND WEIGHTS

Size (in.)	Cavity	Pressure Rating (psi)	A (in.)	B (in.)	C1 (in.)	C2 (in.)	D1 (in.)	D1 (in.)	Weight (lbs)	
			Body Height	Stud Height	Doors Closed	Doors Open	Doors Closed	Doors Open	Lbs	kgs
9"	Single (SR)	3000	11.19	21.94	60.00	67.00	27.30	48.30	1406	637
9"	Double (DR)	3000	26.94	37.75	60.00	67.00	27.30	48.30	3247	1472
9"	Single (SR)	5000	13.08	26.15	60.00	67.00	27.30	48.30	1516	687
9"	Double (DR)	5000	31.50	45.00	60.00	67.00	27.30	48.30	3502	1588

**INTEGRATED OEM API 16A MONOGRAMMED
TYPE IWP™ RAM BLOWOUT PREVENTER**
IWP™ BOP CONFIGURATION OPTIONS
9" – 3k SINGLE RAM IWP™ BOP

IWP™ BOP Part Number	Top Connection	Bottom Connection	Outlet Connection	No. of Outlets	Outlet Size
70-311-000	Studded	Studded	None	None	None
Available upon Request	Studded	Flanged	None	None	None
Available upon Request	Flanged	Studded	None	None	None
Available upon Request	Flanged	Flanged	None	None	None

9" – 3k DOUBLE RAM IWP™ BOP

IWP™ BOP Part Number	Top Connection	Bottom Connection	Outlet Connection	No. of Outlets	Outlet Size
70-312-000	Studded	Studded	None	None	None
Available upon Request	Studded	Flanged	None	None	None
Available upon Request	Flanged	Studded	None	None	None
Available upon Request	Flanged	Flanged	None	None	None
Available upon Request	Studded	Studded	Flanged	Flanged	2-1/16"
Available upon Request	Studded	Flanged	Flanged	Flanged	2-1/16"
Available upon Request	Flanged	Studded	Flanged	Flanged	2-1/16"
Available upon Request	Flanged	Flanged	Flanged	Flanged	2-1/16"

9" – 5k SINGLE RAM IWP™ BOP

IWP™ BOP Part Number	Top Connection	Bottom Connection	Outlet Connection	No. of Outlets	Outlet Size
70-511-000	Studded	Studded	None	None	None
Available upon Request	Studded	Flanged	None	None	None
Available upon Request	Flanged	Studded	None	None	None
Available upon Request	Flanged	Flanged	None	None	None

9" – 5k DOUBLE RAM IWP™ BOP

IWP™ BOP Part Number	Top Connection	Bottom Connection	Outlet Connection	No. of Outlets	Outlet Size
70-512-000	Studded	Studded	None	None	None
Available upon Request	Studded	Flanged	None	None	None
Available upon Request	Flanged	Studded	None	None	None
Available upon Request	Flanged	Flanged	None	None	None
Available upon Request	Studded	Studded	Flanged	Flanged	2-1/16"
Available upon Request	Studded	Flanged	Flanged	Flanged	2-1/16"
Available upon Request	Flanged	Studded	Flanged	Flanged	2-1/16"
Available upon Request	Flanged	Flanged	Flanged	Flanged	2-1/16"

IWP™ PRODUCT OPERATING DATA AND FLUID REQUIREMENT

All Integrated Model IWP™ ram type blowout preventers are supplied with labeled "OPEN" and "CLOSED" ports located on the body of the blowout preventers. The connections to the hydraulic operating system of the blowout preventer are 1" NPT.

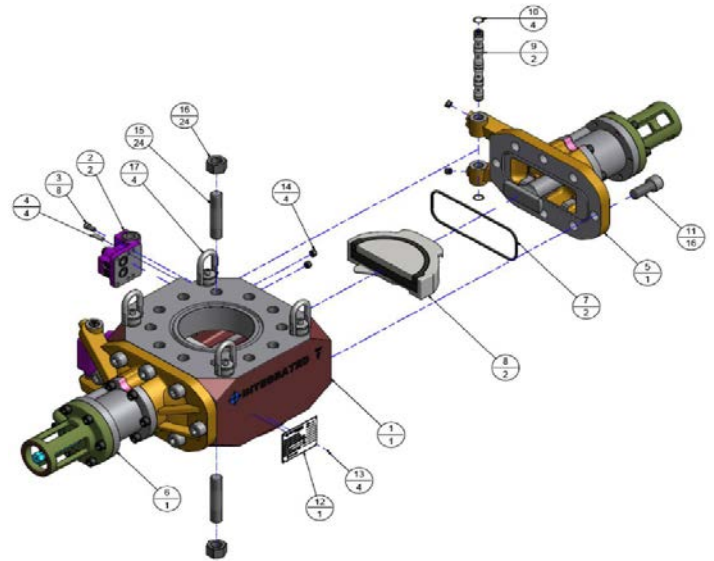
Bore Size	Working Pressure (psi)	Piston Size (in.)	Opening Ratio	Closing Ratio	Gallons to Open	Gallons to Close
9"	3,000				.68	.77
9"	5,000				.68	.77

**INTEGRATED OEM API 16A MONOGRAMMED
TYPE IWPT™ RAM BLOWOUT PREVENTER**
IWPT™ BOM (Bill of Materials): 9" – 3k SR Ram IWPT™ BOP

 ➤ **Model & Exploded View 9" – 3k, SR Ram IWPT™ BOP (without outlets)**

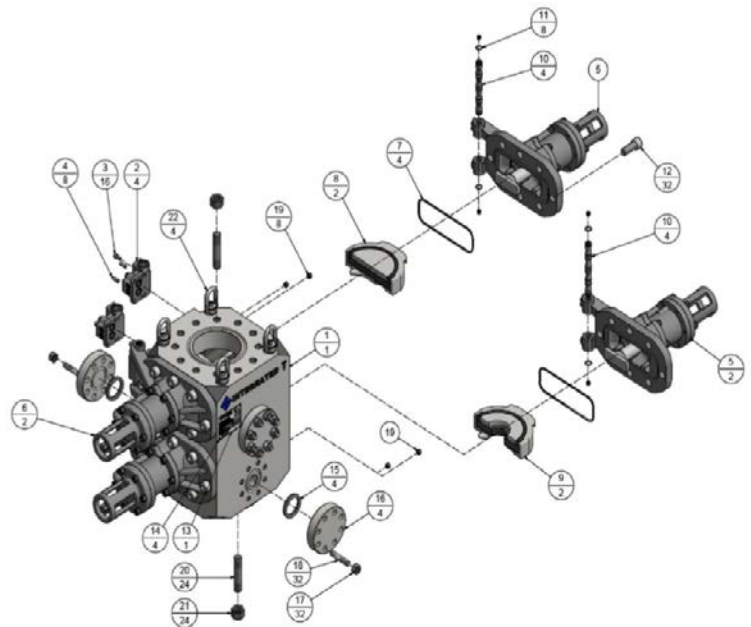
- Part Number: 70-311-000

Drawing No.	Quantity	Part Number	Part Description
1	1	70-300-009	BOP Body
2	2	70-311-003	Assembly Hinge Bracket
3	8	26-010-601	SHCS
4	4	21-020-001	Dowel Pin
5	1	70-311-011	Door Assembly RH (Right Hand)
6	1	70-311-012	Door Assembly LH (Left Hand)
7	2	70-102-030	O-Ring
8	2	Ram Block	Ram Block Assembly
9	2	70-311-013	Assembly Hinge Pin
10	4	70-102-367	Retainer Ring Hinge Pin
11	16	26-010-430	Cap Screw
12	1	95-05-304	Name Plate
13	4	26-051-002	Nail, Easy drive
14	4	15-010-130	Pipe Plug
15	24	30-000080	Pad Stud
16	24	25-100-141	Heavy Hex Nut
17	4	30-000033	Swivel Hoist Rings


 ➤ **Model & Exploded View 9" – 3k, DR Ram IWPT™ BOP (outlets)**

- Part Number: 70-312-000

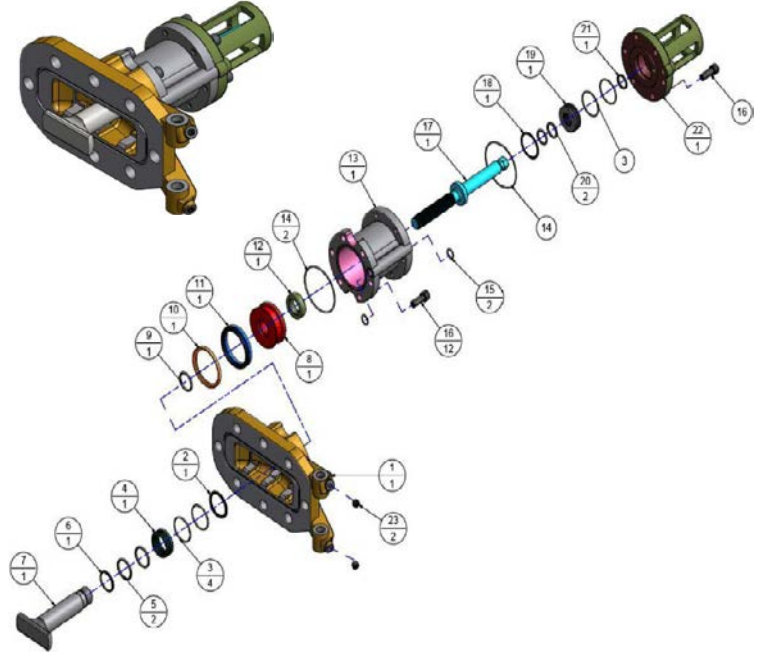
Drawing No.	Quantity	Part Number	Part Description
1	1	70-300-009	BOP Body
2	4	70-311-003	Assembly Hinge Bracket
3	16	26-010-601	SHCS
4	8	21-020-001	Dowel Pin
5	2	70-311-011	Door Assembly RH (Right Hand)
6	2	70-311-012	Door Assembly LH (Left Hand)
7	4	70-102-030	O-Ring
8	2	Ram Block	Ram Block Assembly
9	2	Ram Block	Ram Block Assembly
10	4	70-311-013	Assembly Hinge Pin
11	8	70-102-367	Retainer Ring Hinge Pin
12	32	26-010-430	Cap Screw
13	1	95-05-304	Name Plate
14	4	26-051-002	Nail, Easy drive
15	4	API-R02413	Ring Gasket
16	4	08-620-003	Blind Flange
17	32	25-100-002	Heavy Hex Nut
18	32	30-000079	Pad Stud
19	8	15-010-130	Pipe Plug
20	24	30-000080	Pad Stud
21	24	25-100-141	Heavy Hex Nut
22	4	30-000033	Swivel Hoist Rings



INTEGRATED OEM API 16A MONOGRAMMED TYPE IWP™ RAM BLOWOUT PREVENTER

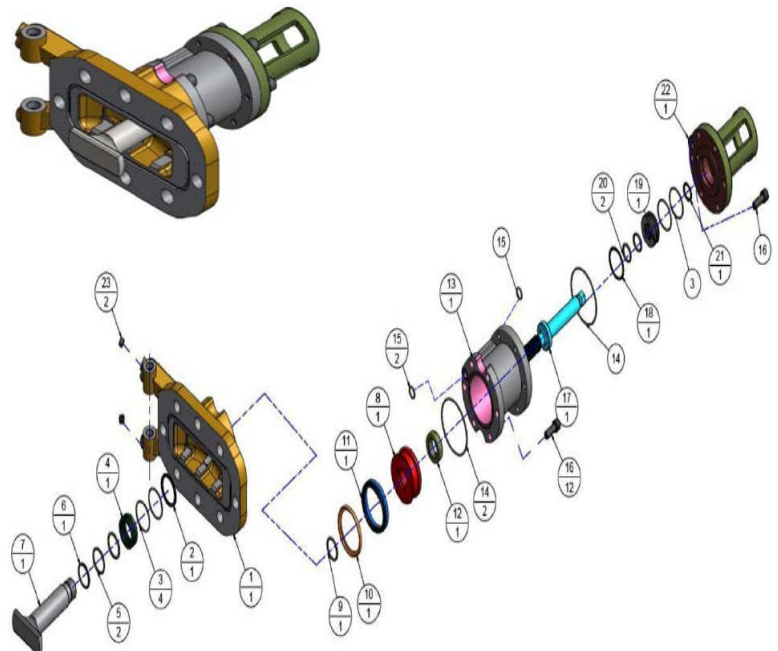
➤ **Model & Exploded View – LH (Left Hand) Door Assembly: 9” – 3k, SR Ram IWP™ BOP**
- Part Number 70-311-012

Drawing No.	Quantity	Part Number	Part Description
1	1	70-300-001	Door LH
2	1	70-102-951	Packing Adaptor Retainer Ring
3	4	70-102-011	O-Ring
4	1	70-300-013	Packing Adapter
5	2	70-102-069	O-Ring
6	1	70-102-186	Wiper Ring Ram Shaft
7	1	70-300-015	Ram Shaft
8	1	70-300-008	Piston
9	1	70-102-023	O-Ring
10	1	70-102-21H	Piston OD Wiper
11	1	70-102-21J	Piston OD Seal Assembly
12	1	70-300-017	Lock Nut
13	1	70-300-004	Cylinder LH
14	2	70-102-134	O-Ring
15	2	70-102-058	O-Ring
16	12	26-010-606	Socket Head Cap Screw
17	1	70-300-014	Locking Shaft
18	1	70-102-146	Thrust Bushing Retainer Ring
19	1	70-300-007	Thrust Bushing
20	2	70-102-065	O-Ring
21	1	70-102-222	Wiper Ring Locking Shaft
22	1	70-300-006	Cylinder Head LH
23	2	15-010-130	Pipe Plug



➤ **Model & Exploded View – RH (Right Hand) Door Assembly: 9” – 3k, SR Ram IWP™ BOP**
- Part Number 70-311-011

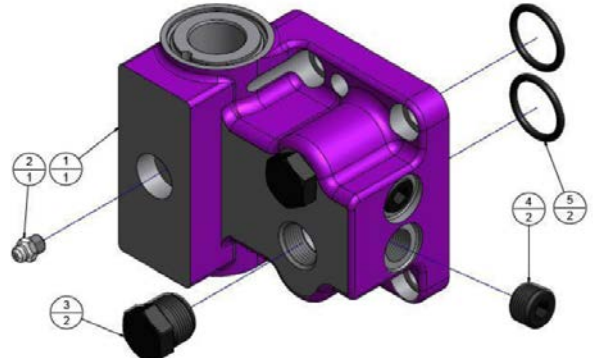
Drawing No.	Quantity	Part Number	Part Description
1	1	70-300-000	Door RH
2	1	70-102-951	Packing Adaptor Retainer Ring
3	4	70-102-011	O-Ring
4	1	70-300-013	Packing Adapter
5	2	70-102-069	O-Ring
6	1	70-102-186	Wiper Ring Ram Shaft
7	1	70-300-015	Ram Shaft
8	1	70-300-008	Piston
9	1	70-102-023	O-Ring
10	1	70-102-21H	Piston OD Wiper
11	1	70-102-21J	Piston OD Seal Assembly
12	1	70-300-017	Lock Nut
13	1	70-300-003	Cylinder RH
14	2	70-102-134	O-Ring
15	2	70-102-058	O-Ring
16	12	26-010-606	Socket Head Cap Screw
17	1	70-300-014	Locking Shaft
18	1	70-102-146	Thrust Bushing Retainer Ring
19	1	70-300-007	Thrust Bushing
20	2	70-102-065	O-Ring
21	1	70-102-222	Wiper Ring Locking Shaft
22	1	70-300-006	Cylinder Head LH
23	2	15-010-130	Pipe Plug



INTEGRATED OEM API 16A MONOGRAMMED TYPE IWPT™ RAM BLOWOUT PREVENTER

- **Exploded View Hinge Bracket Assembly: 9" – 3k, Ram IWPT™ BOP**
 - Part Number: 70-311-003

Drawing No.	Quantity	Part Number	Part Description
1	1	70-300-011	Hinge Bracket
2	1	15-011-100	Grease Fitting
3	2	15-010-140	Hex Screw
4	2	15-010-130	Pipe Plug
5	2	70-102-060	O-Ring



IWPT™ RAM BOP SEAL KIT BREAKDOWN

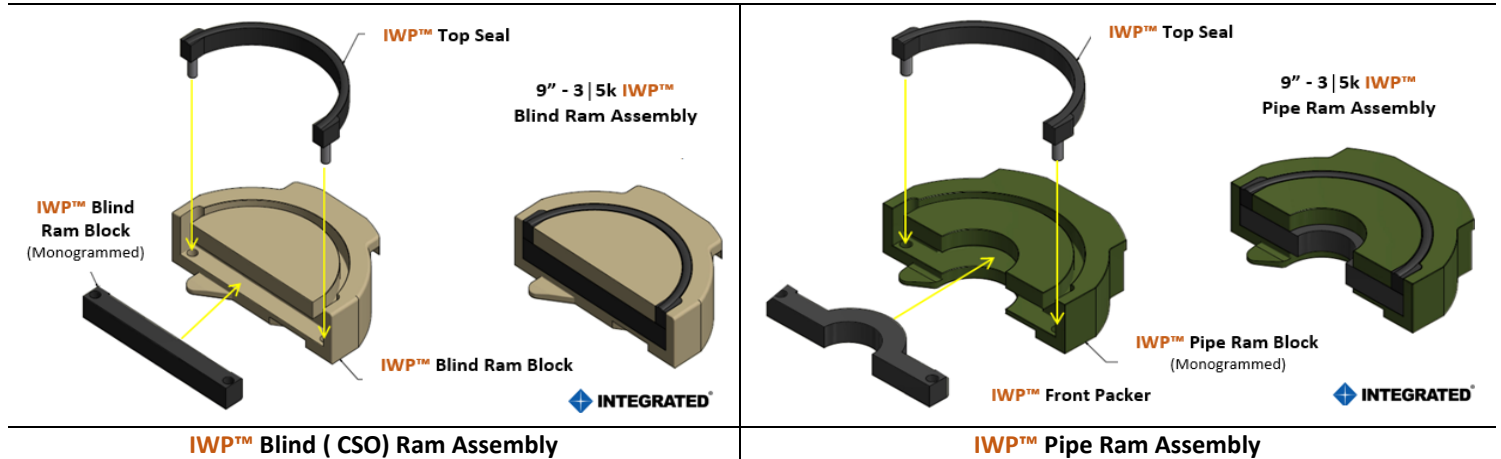
9" RAM FORGED IWPT™ BOP – STANDARD BONNET SEAL KIT BREAKDOWN

Complete Kit Part Number: 70-102-040 | Re-builds One Cavity (two Standard Bonnet Operators)

Item Number	Part Number	Quantity	Part Description
1	70-102-058	4	Cylinder Manifold Port O-Ring
2	70-102-030	2	Door Seal
3	70-102-367	4	Retainer Ring Hinge Pin
4	70-102-134	4	Cylinder Head O-Ring
5	70-102-056	16	Hinge Pin O-Ring
6	70-102-060	4	Hinge O-Ring
7	70-102-21H	2	Piston OD Wiper
8	70-102-21J	2	Piston Seal Rubber
9	70-102-023	2	Piston Seal Rubber
10	70-102-186	2	Wiper Ring
11	70-102-951	2	Retainer Ring
12	70-102-222	2	Wiper Ring Holder
13	70-102-069	6	O-Ring, Pkg Adapter Int.
14	70-102-011	8	Packing End Ring Seal
15	70-102-066	4	O-Ring
16	70-102-146	2	Retainer Ring



INTEGRATED RAM BOP CARDED SEAL KIT

**INTEGRATED OEM API 16A MONOGRAMMED
TYPE IWP™ RAM BLOWOUT PREVENTER**
IWP™ RAM ASSEMBLIES: 9" – 3|5K

IWP™ CSO AND PIPE RAMS

IWP™ Ram Block Size	IWP™ Assembly Part Number	IWP™ Assembly Sub-Component Part Number		
		Block	Front Packer	Top Seal
CSO	70-301-019-2	70-300-019-3	70-102-002-2	70-102-000
2-3/8"	70-301-019-3	70-300-019-4	70-102-002-3	70-102-000
2-7/8"	70-301-019-4	70-300-019-5	70-102-002-5	70-102-000
3-1/2"	70-301-019-5	70-300-019-6	70-102-002-6	70-102-000
4"	70-301-019-6	70-300-019-7	70-102-002-7	70-102-000
4-1/2"	70-301-019-7	70-300-019-9	70-102-002-9	70-102-000
5"	70-301-019-8	70-300-019-10	70-102-002-19	70-102-000
5-1/2"	70-301-019-2	70-300-019-3	70-102-002-15	70-102-000

Note: No Flex, Multi Ram or VBR's are available in the 9" – 3/5k IWP™ Style



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Well Control Solutions (WCS)

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Contact: +61-7-3375-4388 | Email: sales@well-control.com.au



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Red Deer Well Control (RDWC)

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