

Technical Data Sheet: HSU 7-1/16" X 5,000 psi

All HEC HU Blowout Preventers are manufactured and tested according to HEC Quality Management Standards

Part Number: 75MHSU

Performance Requirement Level: PR1

Through Bore: 7-1/16"

Rated Working Pressure: 5,000 psi Rated Hydraulic Pressure: 1,500 psi

Note: Hydraulic Pressure can be applied up to 3,000 psi. in emergency situations

Pipe Diameter Ranges: 2-1/16" to 5-1/2"

Temperature Ranges:

Metallic: -20 to 250°F Elastomers: 20 to 200°F

Assembly Weights and Dimensions:

7-1/16" x 5M	Flange x Flange	Stud x Stud	Stud x Flange	Flange x Stud
Weight (lbs.) w/o Shear Bonnets	3,200	2,830	3,020	3,005
Height (in.)	27.5	13.75	21	20.25
Width, Bonnets Closed (in.) w/locking screws Unlocked	85			
Width, Bonnets Closed (in.) w/locking screws locked	77			
Width, Bonnets Open (in.) w/locking screws unlocked	114			

⁻⁹³ lbs. for Snubbing Style

Operating Capacities:

SIZE AND WORKING	GALLONS TO	GALLONS TO	LOCKING SCREW	CLOSING	OPENING RATIO
PRESSURE	OPEN RAMS	CLOSE RAMS	TURNS (EACH END)	RATIO	
7-1/16" 5M	1.3	1.4	19.5	6.9:1	2.9:1

Minimum Operating Pressure For a low Pressure Seal (MOPFLPS):

	Operator Type			
Ram Type	Standard	Tandem Booster	SD Booster	
Blind	200	N/A	N/A	
Pipe	250	N/A	N/A	
VBR	750	N/A	N/A	



Operating Pressure to effect a wellbore seal at rated working pressure:

	Operator Type			
Ram Type	Standard	Tandem Booster	SD Booster	
Blind	950	N/A	N/A	
Pipe	1,000	N/A	N/A	
VBR	1,500	N/A	N/A	

Elastomers:

Acrylonitrile Butadiene Rubber (NBR) Nominal Operating Range: 20 to 200°F

Test Results:

- Ram Access: 200 cycles with 10 pressure cycles
- > Fatigue Test: 546 open/close cycles, 78 pressure test
 - o Ram Locking completed during fatigue testing
- ➤ Low Temperature Test: 3 pressure cycles at 20°F
- ➤ Hot Temperature Test: 10 pressure cycles and 1 hour hold time at 200°F
- Shear: Maximum shear pressure: 3000 psi.
 - o Shear Doors with Tandem Boosters must be installed to shear pipe
- ➤ Hang Off
 - o 7-1/16" HU Pipe Rams
 - Rated up to 450,000 lbs.
 - 3-1/2" test mandrel with 18° taper
 - o Note: Do not recommend hanging off on the smallest size pipe for VBR rams
- Stripping
 - o 7-1/16" HU
 - 3-1/2" test mandrel
 - 50,000 ft. of pipe stripped at 3,000 psi wellbore
 - Not Recommended on VBR's or flex packers