20” [508mm] Non-ASME Full Opening Shallow Head Manhole, Model 8310, 6 Hold Down, 43.5 psig MAWP

With decades of service and commitment to quality, the Betts’ Full Opening Manhole product line is the proven leader of the chemical transportation and stationary tank markets. This industrial grade 20” [508 mm] manhole includes a low-profile shallow head and conforms to the requirements of 49CFR§178.345-5 and §178.347-3 for use as an access port on DOT cargo tanks.

The 8310-manhole assembly incorporates six (6) threaded 304SS wing-nut hold-downs and heavy-duty 5/8-inch 304SS welded swing-bolts. The hinge is configured to provide 180-degree opening but optional hinge-stops are also available. Manholes are available in multiple material configurations with a range of gasket material options to accommodate specific service applications. Manholes manufactured from 316 stainless steel are fully passivated in accordance with ASTM A380 and are suitable for a wide range of chemical and food-grade applications.

This manhole is NOT rated for ASME service, but Betts does offer an extensive line of ASME manholes.

Internal MAWP: 43.5 psig (3.0 bar)
External MAWP (Vacuum): FV (-14.7 psig)
Test Pressure **: 75 psig (5.2 bar)

Part Number *	Weld Collar Mat'l	Dome Cover Mat'l	Weight	Collar Height *
8310ASX-8	Alum. (5454 H32)	Steel (SA414 Gr. C)	48 lb. (21.8 kg)	8" (203 mm)
8310ALX-8	Alum. (5454 H32)	316L Stainless Steel	48 lb. (21.8 kg)	8" (203 mm)
8310SCX-8	Steel (SA414 Gr. C)	Steel (SA414 Gr. C)	80 lb. (36.3 kg)	8" (203 mm)
8310LCX-8	316L Stainless Steel	316L Stainless Steel	80 lb. (36.3 kg)	8" (203 mm)
8310PLX-8	2205 Duplex	316L Stainless Steel	80 lb. (36.3 kg)	8" (203 mm)

*** Alternate collar heights are available by designating 4, 6, 8, or 10 as last digits of part number.**

**** Test pressure established using elastomer gasket. Manhole sealing performance is dependent on gasket selection, condition of sealing surfaces and wing-nut torque.**

Gasket Code	Material	Temp. Range
X	No Gasket (Sold Separately)	n/a
B	Buna-N (Black)	-40°F to +240°F [-40°C to +116°C]
V	FKM Type-A (Brown FDA)	-20°F to +400°F [-29°C to +204°C]
C	FKM Type-B (Green)	-20°F to +400°F [-29°C to +204°C]
W	Hypalon (White)	-40°F to +275°F [-40°C to +135°C]
P	EPDM (Black)	-40°F to +250°F [-40°C to +121°C]
T	PTFE Encapsulated Silicone Note: Tef-Sil gasket is difficult to seal. See Bulletin EB-03-99	-40°F to +400°F [-40°C to +204°C]
D	EPDM (White FDA)	-40°F to +250°F [-40°C to +121°C]
E	Syntex Fiber (Woven) Note: Braided packing is not leak tight and will seep.	-40°F to +500°F [-40°C to +260°C]
F	Buna-N (White FDA)	-40°F to +240°F [-40°C to +116°C]
G	Viton™ GF	-35°F to +400°F [-37°C to +204°C]
Q	Fluorosilicone	-40°F to +350°F [-40°C to +177°C]
H	Viton™ A (White FDA/NSF)	-20°F to +400°F [-29°C to +204°C]

- Not all materials are available in every model.

- Actual performance and temperature values may vary due to service conditions.

Engineering Bulletins

EB3-99: Installation and Care Instructions for Teflon Encapsulated Square Gaskets for Tiona-Betts Full Opening Manholes

EB-07-03: Maintenance and Use of Betts Full Opening Pressure Manhole

Installation and Maintenance Manual

MM-MH001: Full Opening Manhole Installation and Maintenance Manual

Instructional Videos

No video available at this time.

Non-ASME Replacement Swing-bolt / Wing-nut Assemblies

For full a full list of replacement components – seeParts List Page

⚠ **WARNING**: This product can expose you to chemicals including Chromium (hexavalent compounds) which is known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov. For additional information on Betts products and Proposition 65 list please see: http://www.bettsind.com/prop-65/