



## **4" Aluminum Internal Air Emergency Valve (3" Air Cylinder) - Tee**

Betts internal air emergency valve meets HM183 requirements for an internal self-closing stop valve. Body is constructed of aluminum and incorporates a shear section that satisfies 49CFR178.345-8 tested per TTMA RP 84. The 1/8" NPT air inlet is designed to shear and close the valve in the event of an under-ride accident. A fusible plug is installed to dump air pressure if temperatures exceed 212°F.<sup>tt</sup> Valve uses Teflon<sup>®</sup> encapsulated seals for compatibility with a wide range of products. Other seal options are also available. Internal air cylinder saves space on exterior of valve providing maximum clearance for piping. Valve is equipped with stainless steel jackscrew that allows for manual operation in the event of an air system failure.

The Maximum Operating Pressure is defined as the maximum tank pressure that valve can open against w/ given air line pressure. Maximum Operating Pressure is 18 psi with 80 psi line pressure and 25 psi with 100 psi line pressure. The Valve MAWP is 35 psi [2.4 bar] and the Minimum Bursting Pressure is 140 psi [9.7 bar].

Assembly Number	Outlet	Inlet Flange (4" Sump)	Outlet Flange	Dimensions	Wt. lb. [kg]	F b-Max Per TTMA RP 86
EV46991AL**	Grooved	B.C: 7.25" [184 mm] 8 Holes: .563" Dia [14.3 mm]	4" GROOVED O.D. 4.5" [114.3 mm]	A: 4.38" [111.3mm] B: 6.63 [168.4mm]	10.5 [4.8]	32,000 lbs. [14,515 kg]
EV46992AL**	Flanged	B.C: 7.25" [184 mm] 8 Holes: .563" Dia [14.3 mm]	B.C: 5.88" [149 mm] 8 Holes: .438" Dia [11.1 mm]	A: 4.38" [111.3 mm] B: 5.13" [130.3 mm]	10.8 lb. [4.9 kg]	32,000 lbs. [14,515 kg]

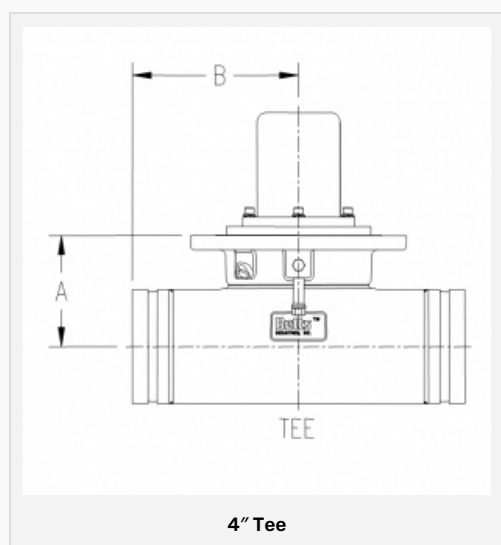
Part #	Description	Valve Temp Range
TS	Teflon product contact seals, nitrile interior seals, and polyurethane air piston seal.	-40°F to +220°F [-40°C to 104°C]
TS030	Teflon product contact seals, FKM "A" interior seals.	5°F to +400°F [-15°C to 204°C]
TS038	Teflon product contact seals, fluorosilicone interior seals, and polyurethane air piston seal.	-50°F to +220°F [-45°C to 104°C]
VB	FKM "BLT" product contact seals w/ polyurethane air piston seal.	-20°F to +220°F [-29°C to 104°C]
VF	FKM "GFLT-s" product contact seals w/ polyurethane air piston seal	-20°F to +220°F [-29°C to 104°C]

\* Valves shown are test valves. Actual valves may vary due to service conditions

\*\*Last two letters of part number designate seal material. See material table for seal options.

††Fusible plug melts at 212°F [100°C]. If valve is subject to higher temperatures, the fusible plug must be relocated to isolate fusible from heat.

**CAUTION:** Valve must be properly installed and maintained. Never bottom load through the emergency valve without the first opening valve. Failure to do so may result in damage to the tank and/or valve.



**Manuals:**

See assembly video

**EB-01-12:** Water Flow Rates of Betts Emergency Valves

**EB3-00:** MAWP and Bursting Pressure Ratings for Betts Valves

**EB2-14:** Jack Screw Usage Instructions for Internal Air Emergency Valves

**EB4-12:** Modification of Internal Air Emergency Valve Breather Port

**EB1-11:** Important Design Modification Alert for Betts Internal Air Valves

**EB1-03:** Air Emergency Valve System

**MV-EV001 Internal Air Emergency Valve Rebuild**