45 Series Steam Trap

The proprietary 45 series steam trap is designed to efficiently discharge condensate from corrugating rolls, preheater rolls, preconditioner rolls, and hot plates. The 45 series steam trap handles large and variable loads at any back-pressure and the thermostatic capsules provide automatic air-venting to ensure rapid warm-up of the rolls and other components.

The Kadant Johnson 45 series steam trap was purposely developed for use in corrugated packaging plants. The patented design allows single facers, double backers, and other steam-heated equipment to operate with high efficiency and high heat output. All internals are stainless steel construction to resist corrosion while the housing components are made of ductile iron and forged steel. The duplex control device features a rolling-ball shut-off mechanism and a thermostatic capsules for automatic air venting and is easily accessible after removing the trap cover for in-line replacement.

**Overview**

**Features**
- Proprietary internal by-pass device
- Proven rolling ball shut-off mechanism
- Optimized venting of control unit
- In-line repair, cleaning, and inspection

**Benefits**
- Immediate condensate discharge under all conditions
- Maximum efficiency and heat output
- Reliable and durable for extended operating life
- Faster start-up time

**Diagram**
- Cover
- Ball float
- Rolling ball valve
- Orifice
- End connections (flanged or threaded)
- Sleeve
- Body
- Flat thermostatic capsule with proprietary internal by-pass
- Control unit
Adapter Kits
Adapter kits are available when upgrading to a 45 series steam trap from a 26E or 26H Donahue steam trap. The adapter kit includes the steam trap and all fittings required to convert from the 26 series steam trap shown in the solid lines.

<table>
<thead>
<tr>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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Steam Trap Assembly
When replacing an entire trap assembly, the recommended approach is from union-to-union. This ensures genuine components are supplied with the Kadant Johnson trap.

45 Series Trap Assembly
26 Series Trap Assembly

<table>
<thead>
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<th>Size</th>
<th>Maximum ΔP</th>
<th>Part ID</th>
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<tbody>
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<td>1 1/2&quot;</td>
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</table>

1 For use with a high-pressure return system using a high-pressure receiver.
2 For use with a low-pressure return system using a vented receiver or DA tank.

Adapter Kits
Adapter kits are available when upgrading to a 45 series steam trap from a 26E or 26H Donahue steam trap. The adapter kit includes the steam trap and all fittings required to convert from the 26 series steam trap shown in the solid lines.

3/4" 45 Series Adapter Kit
1 1/2" 45 Series Adapter Kit

<table>
<thead>
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<th>Size</th>
<th>Maximum ΔP</th>
<th>Part ID</th>
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</tbody>
</table>

1 For use with a high-pressure return system using a high-pressure receiver.
2 For use with a low-pressure return system using a vented receiver or DA tank.

Note: The differential pressure is the difference between the inlet and outlet pressure and depends on, among other things, the run of the condensate line. If the condensate downstream of the trap is lifted, the back pressure is increased by approximately 5 psi for every 3 feet of lift.

Dimensions are for reference only and subject to change.