

DEUBLIN

H Series Steam and Hot Oil Unions



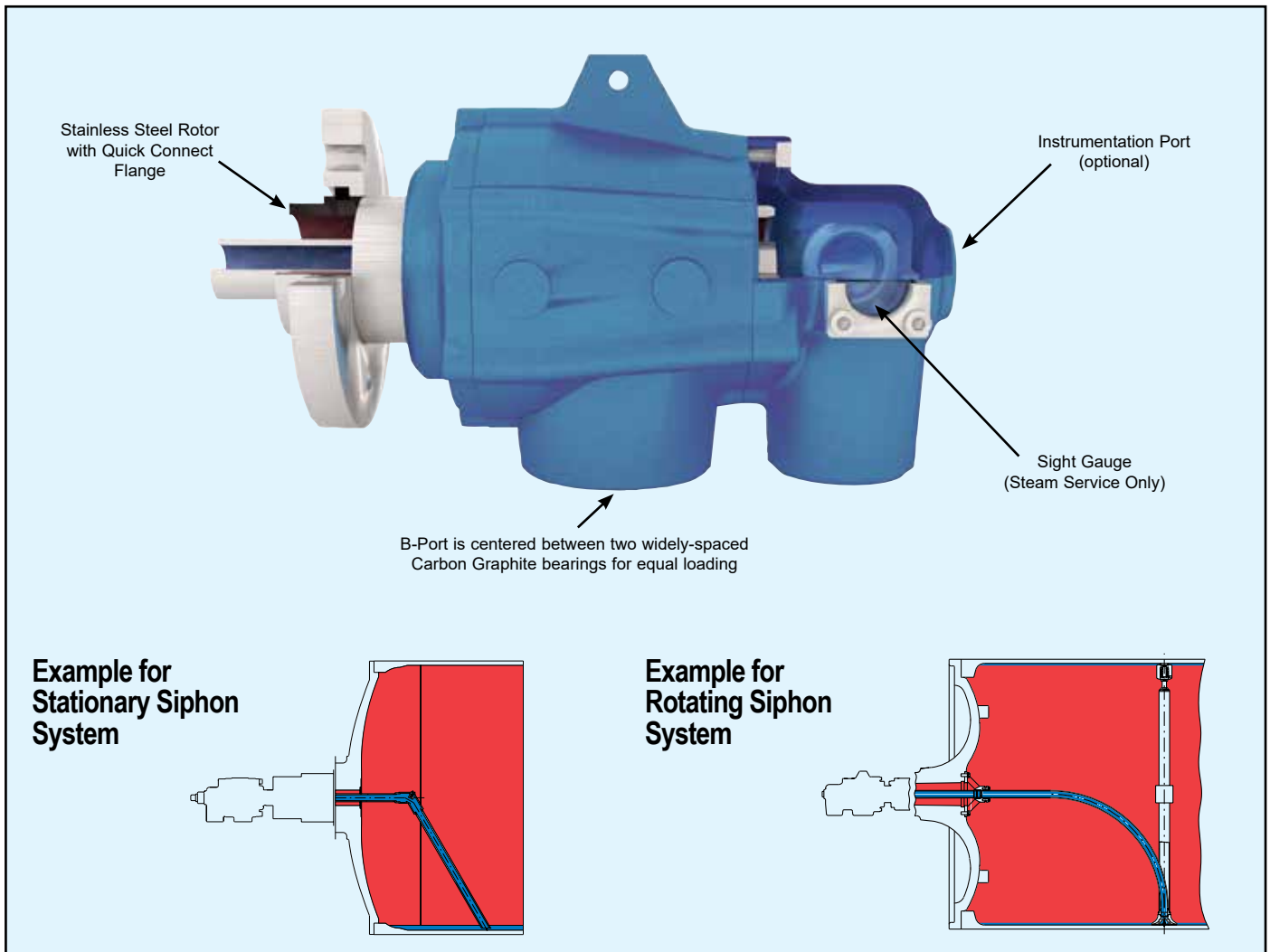
- Monoflow and duoflow design
- Self-supported rotating union
- Convex seal ring better suited to handle mechanical and thermal shock
- Two widely-spaced graphite bearings
- H57 - H127 optional with sight glasses in the end cap for visual inspection of condensate removal
- Seal wear indicator allows preventive maintenance
- Flanged or threaded rotor available
- Cast iron housing
- Stainless steel rotor
- For steam and hot oil applications in paper, plastic and textile industries and open gear paper machines

Operating Data 3/4" – 2"

| | | |
|---------------------------------------|---------|---------|
| Maximum Saturated Steam Pressure | 150 PSI | 10 bar |
| Maximum Speed Saturated Steam Service | 400 RPM | 400/min |
| Maximum Saturated Steam Temperature | 365°F | 185°C |
| Maximum Hot Oil Pressure | 100 PSI | 7 bar |
| Maximum Speed Hot Oil Service | 400 RPM | 400/min |
| Maximum Hot Oil Temperature | 450°F | 232°C |

Operating Data 2 1/2" – 5"

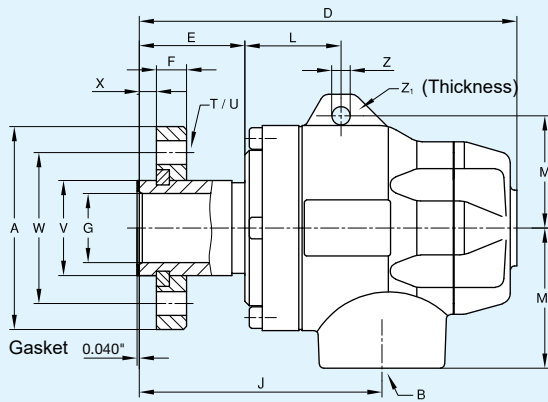
| | | |
|---------------------------------------|---------|---------|
| Maximum Saturated Steam Pressure | 150 PSI | 10 bar |
| Maximum Speed Saturated Steam Service | 180 RPM | 180/min |
| Maximum Saturated Steam Temperature | 365°F | 185°C |
| Maximum Hot Oil Pressure | 100 PSI | 7 bar |
| Maximum Speed Hot Oil Service | 350 RPM | 350/min |
| Maximum Hot Oil Temperature | 450°F | 232°C |



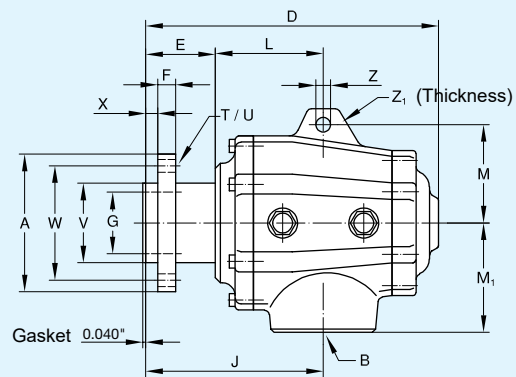
Example for Stationary Siphon System

Example for Rotating Siphon System

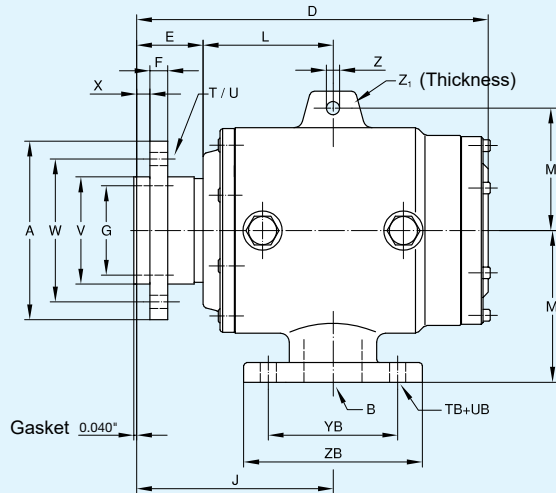
Monoflow Rotating Union Models Size H20 – H40



Models Size H57 – H87



Models Size H107 and H127



Monoflow Rotating Unions

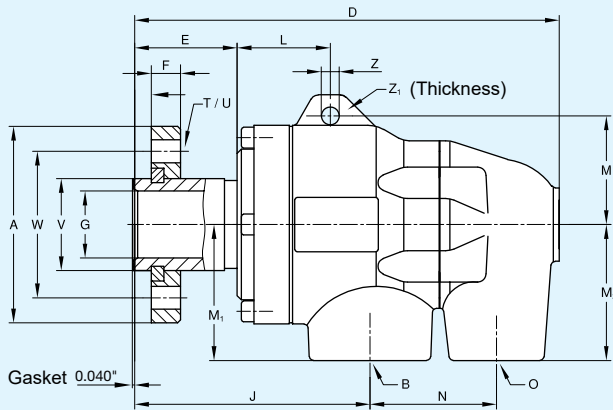
| Size | B Port | Monoflow | A | D | E | F | G | J | L | M | M ₁ |
|---------------------------------|-------------------------------------|----------|-----------------------------------|------------------------------------|-----------------------------------|----------------------------------|-----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| 3/4" | 3/4" NPT | H20 | 2 ³³ / ₃₂ " | 5 ¹ / ₂ " | 1 ¹ / ₁₆ " | 1 ⁵ / ₃₂ " | 2 ³ / ₃₂ " | 3 ³ / ₄ " | 2 ⁵ / ₁₆ " | 1 ²⁵ / ₃₂ " | 1 ³ / ₃₂ " |
| 1" | 1" NPT | H25 | 3 ¹ / ₁₆ " | 6 ¹ / ₂ " | 1 ⁷ / ₃₂ " | 1 ⁵ / ₃₂ " | 3 ¹ / ₃₂ " | 3 ³ / ₃₂ " | 1 ²³ / ₃₂ " | 1 ³ / ₃₂ " | 2 ³ / ₈ " |
| 1 ¹ / ₄ " | 1 ¹ / ₄ " NPT | H32 | 3 ¹ / ₁₆ " | 6 ³ / ₈ " | 1 ¹⁵ / ₁₆ " | 9 ¹ / ₁₆ " | 1 ¹ / ₄ " | 4 ¹ / ₁₆ " | 1 ³ / ₄ " | 2 ¹ / ₁₆ " | 2 ¹ / ₁₆ " |
| 1 ¹ / ₂ " | 1 ¹ / ₂ " NPT | H40 | 3 ²⁹ / ₃₂ " | 8 ¹ / ₂ " | 2 ³ / ₃₂ " | 9 ¹ / ₁₆ " | 1 ¹ / ₂ " | 5 ³ / ₈ " | 2" | 2 ³ / ₄ " | 2 ¹⁵ / ₁₆ " |
| 2" | 2" NPT | H57 | 4 ³ / ₁₆ " | 10 ³ / ₃₂ " | 2 ³ / ₃₂ " | 9 ¹ / ₁₆ " | 1 ²⁷ / ₃₂ " | 5 ⁵ / ₁₆ " | 3 ¹⁷ / ₃₂ " | 3 ³ / ₃₂ " | 3 ³ / ₄ " |
| 2 ¹ / ₂ " | 2 ¹ / ₂ " NPT | H67 | 5 ¹ / ₁₆ " | 11 ¹³ / ₁₆ " | 2 ³ / ₄ " | 2 ³ / ₃₂ " | 2 ¹ / ₁₆ " | 7 ¹ / ₃₂ " | 4 ⁹ / ₃₂ " | 3 ²⁹ / ₃₂ " | 4 ¹ / ₁₆ " |
| 3" | 3" NPT | H87 | 5 ²⁹ / ₃₂ " | 12 ²⁷ / ₃₂ " | 2 ² / ₃₂ " | 2 ³ / ₃₂ " | 3" | 7 ¹³ / ₃₂ " | 4 ²³ / ₃₂ " | 4 ¹⁷ / ₃₂ " | 4 ²³ / ₃₂ " |
| 4" | 4" ANSI | H107 | 7 ⁷ / ₈ " | 15 ¹ / ₂ " | 3" | 2 ⁵ / ₃₂ " | 3 ¹⁵ / ₁₆ " | 8 ¹ / ₃₂ " | 5 ² / ₃₂ " | 5 ¹ / ₃₂ " | 6 ¹ / ₁₆ " |
| 5" | 5" ANSI | H127 | 11 ¹ / ₂ " | 18 ⁵ / ₁₆ " | 3 ¹ / ₃₂ " | 1 ⁵ / ₁₆ " | 4 ¹⁵ / ₁₆ " | 10 ¹³ / ₁₆ " | 7 ¹⁵ / ₃₂ " | 6 ⁷ / ₃₂ " | 8 ² / ₃₂ " |

Duoflow Rotating Unions

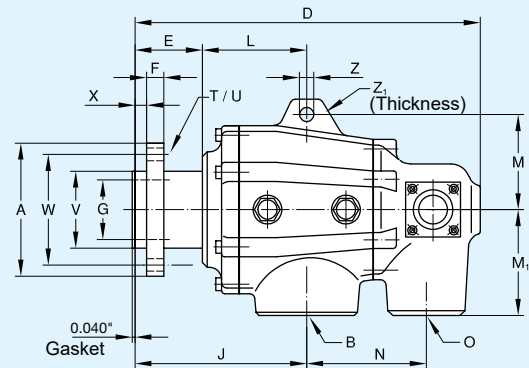
| Size | B Port | O Port | Duoflow E-R-S | A | D | E | F | G | J | L | M | M ₁ | M ₂ | N |
|---------------------------------|--------------------------------------|--------------------------------------|---------------|-----------------------------------|------------------------------------|-----------------------------------|----------------------------------|-----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| 3/4" | 3/4" NPT | 1/2" NPT | H20 | 2 ²³ / ₃₂ " | 7 ¹ / ₁₆ " | 1 ¹ / ₁₆ " | 1 ⁵ / ₃₂ " | 2 ³ / ₃₂ " | 3 ³ / ₄ " | 2 ⁵ / ₁₆ " | 1 ²⁵ / ₃₂ " | 1 ³ / ₃₂ " | 1 ³ / ₁₆ " | 3 ³ / ₈ " |
| 1" | 1" NPT | 1/2" NPT | H25 | 3 ¹ / ₁₆ " | 8 ² / ₃₂ " | 1 ²⁷ / ₃₂ " | 1 ⁵ / ₃₂ " | 3 ¹ / ₃₂ " | 3 ³ / ₃₂ " | 1 ²³ / ₃₂ " | 1 ³ / ₃₂ " | 2 ³ / ₈ " | 1 ³ / ₁₆ " | 4 ³ / ₃₂ " |
| 1 ¹ / ₄ " | 1" NPT | 3/4" NPT | H32 | 3 ¹ / ₁₆ " | 8" | 1 ¹⁵ / ₁₆ " | 9 ¹ / ₁₆ " | 1 ¹ / ₄ " | 4 ¹ / ₁₆ " | 1 ³ / ₄ " | 2 ¹ / ₁₆ " | 2 ¹ / ₁₆ " | 2 ¹ / ₁₆ " | 2 ³ / ₈ " |
| 1 ¹ / ₂ " | 1 ¹ / ₂ " NPT | 1" NPT | H40 | 3 ²⁹ / ₃₂ " | 9 ² / ₃₂ " | 2 ¹³ / ₃₂ " | 9 ¹ / ₁₆ " | 1 ¹ / ₂ " | 5 ³ / ₈ " | 2" | 2 ¹ / ₄ " | 2 ¹⁵ / ₁₆ " | 2 ¹⁵ / ₁₆ " | 2 ¹³ / ₁₆ " |
| 2" | 1 ¹ / ₂ " NPT | 1 ¹ / ₂ " NPT | H57 | 4 ³ / ₁₆ " | 11 ¹⁵ / ₁₆ " | 2 ¹³ / ₃₂ " | 9 ¹ / ₁₆ " | 1 ²⁷ / ₃₂ " | 5 ⁵ / ₁₆ " | 3 ¹⁷ / ₃₂ " | 3 ³ / ₃₂ " | 3 ³ / ₄ " | 3 ³ / ₄ " | 3 ¹³ / ₁₆ " |
| 2 ¹ / ₂ " | 2" NPT | 1 ¹ / ₂ " NPT | H67 | 5 ¹ / ₁₆ " | 14 ¹ / ₈ " | 2 ³ / ₄ " | 2 ³ / ₃₂ " | 2 ¹ / ₁₆ " | 7 ¹ / ₃₂ " | 4 ⁹ / ₃₂ " | 3 ²⁹ / ₃₂ " | 4 ¹ / ₁₆ " | 4 ¹ / ₁₆ " | 4 ²⁹ / ₃₂ " |
| 3" | 2 ¹ / ₂ " NPT | 2" NPT | H87 | 5 ²⁹ / ₃₂ " | 15 ¹⁹ / ₃₂ " | 2 ² / ₃₂ " | 2 ³ / ₃₂ " | 3" | 7 ¹³ / ₃₂ " | 4 ²³ / ₃₂ " | 4 ¹⁷ / ₃₂ " | 4 ²³ / ₃₂ " | 4 ²³ / ₃₂ " | 5 ³ / ₄ " |
| 4" | 3" ANSI | 2 ¹ / ₂ " ANSI | H107 | 7 ⁷ / ₈ " | 22 ⁵ / ₃₂ " | 3" | 2 ⁵ / ₃₂ " | 3 ¹⁵ / ₁₆ " | 8 ² / ₃₂ " | 5 ² / ₃₂ " | 5 ¹³ / ₃₂ " | 6 ¹ / ₁₆ " | 6 ¹ / ₁₆ " | 9 ⁷ / ₈ " |
| | 2 ¹ / ₂ " ANSI | 2 ¹ / ₂ " ANSI | H107* | 7 ⁷ / ₈ " | 22 ⁵ / ₃₂ " | 3" | 2 ⁵ / ₃₂ " | 3 ¹⁵ / ₁₆ " | 8 ² / ₃₂ " | 5 ² / ₃₂ " | 5 ¹³ / ₃₂ " | 6 ¹ / ₁₆ " | 6 ¹ / ₁₆ " | 9 ⁷ / ₈ " |
| 5" | 4" ANSI | 2 ¹ / ₂ " ANSI | H127 | 11 ¹ / ₂ " | 24 ⁵ / ₁₆ " | 3 ¹ / ₃₂ " | 1 ⁵ / ₁₆ " | 4 ¹⁵ / ₁₆ " | 10 ¹³ / ₁₆ " | 7 ¹⁵ / ₃₂ " | 6 ⁷ / ₃₂ " | 8 ² / ₃₂ " | 8 ² / ₃₂ " | 9 ²⁷ / ₃₂ " |
| | 3" ANSI | 3" ANSI | H127* | 11 ¹ / ₂ " | 24 ¹⁹ / ₃₂ " | 3 ¹ / ₃₂ " | 1 ⁵ / ₁₆ " | 4 ¹⁵ / ₁₆ " | 10 ¹³ / ₁₆ " | 7 ¹⁵ / ₃₂ " | 6 ⁷ / ₃₂ " | 8 ² / ₃₂ " | 8 ² / ₃₂ " | 9 ²⁷ / ₃₂ " |

*Hot Oil Design

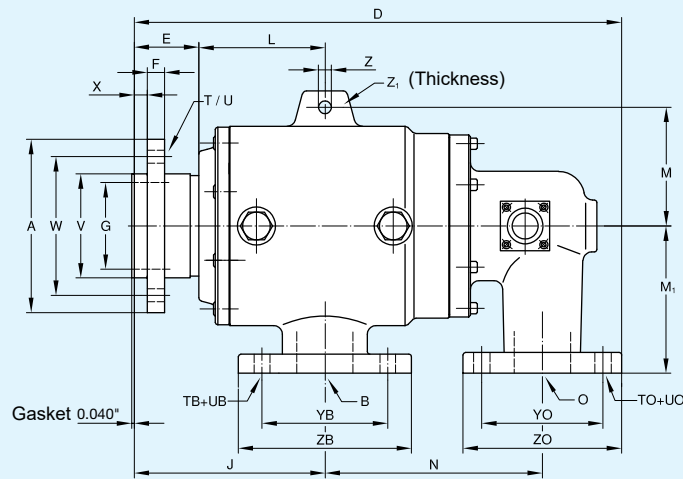
Duoflow Rotating Union Models Size H20 – H40



Models Size H57 – H87



Models Size H107 and H127



| T | U | TB | UB | V* | W | X | YB | ZB | Z | Z ₁ | Size |
|---------|--------|---------|------|-------|----------|---------|--------|---------|---------|----------------|--------|
| 4 x 90° | 3/8" | - | - | 1.181 | 1 3/32" | 1/4" | - | - | 9/32" | 5/16" | 3/4" |
| 4 x 90° | 3/8" | - | - | 1.417 | 2 3/8" | 9/32" | - | - | 9/32" | 7/16" | 1" |
| 4 x 90° | 7/16" | - | - | 1.732 | 2 3/4" | 5/16" | - | - | 1 1/32" | 5/16" | 1 1/4" |
| 4 x 90° | 7/16" | - | - | 2.047 | 3 1/16" | 13/32" | - | - | 7/16" | 13/32" | 1 1/2" |
| 4 x 90° | 7/16" | - | - | 2.559 | 3 3/4" | 1 3/32" | - | - | 1/2" | 19/32" | 2" |
| 4 x 90° | 1/2" | - | - | 3.149 | 4 17/32" | 15/32" | - | - | 19/32" | 25/32" | 2 1/2" |
| 4 x 90° | 1/2" | - | - | 3.740 | 4 15/16" | 15/32" | - | - | 19/32" | 1" | 3" |
| 6 x 60° | 19/32" | 8 x 45° | 3/4" | 4.724 | 6 5/16" | 19/32" | 7 1/2" | 8 1/32" | 19/32" | 1" | 4" |
| 6 x 60° | 23/32" | 8 x 45° | 7/8" | 6.299 | 8 27/32" | 19/32" | 8 1/2" | 9 7/32" | 19/32" | 1" | 5" |

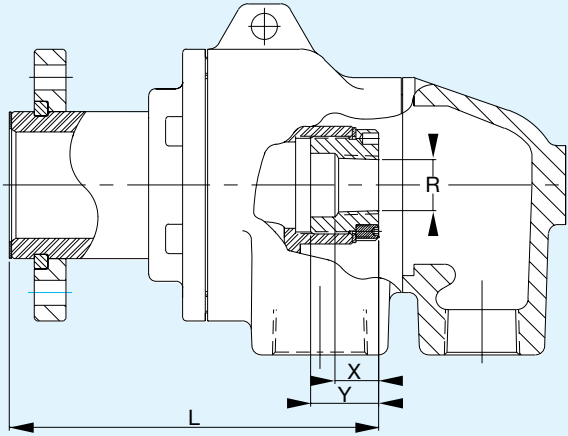
| T | U | TB | UB | TO | UO | V* | W | X | YB | ZB | YO | ZO | Z | Z ₁ | Size |
|---------|--------|---------|------|---------|------|-------|----------|---------|--------|----------|--------|---------|---------|----------------|--------|
| 4 x 90° | 3/8" | - | - | - | - | 1.181 | 1 3/32" | 1/4" | - | - | - | - | 9/32" | 5/16" | 3/4" |
| 4 x 90° | 3/8" | - | - | - | - | 1.417 | 2 3/8" | 9/32" | - | - | - | - | 9/32" | 7/16" | 1" |
| 4 x 90° | 7/16" | - | - | - | - | 1.732 | 2 3/4" | 5/16" | - | - | - | - | 1 1/32" | 5/16" | 1 1/4" |
| 4 x 90° | 7/16" | - | - | - | - | 2.047 | 3 1/16" | 13/32" | - | - | - | - | 7/16" | 13/32" | 1 1/2" |
| 4 x 90° | 7/16" | - | - | - | - | 2.559 | 3 3/4" | 1 3/32" | - | - | - | - | 1/2" | 19/32" | 2" |
| 4 x 90° | 1/2" | - | - | - | - | 3.149 | 4 17/32" | 15/32" | - | - | - | - | 19/32" | 25/32" | 2 1/2" |
| 4 x 90° | 1/2" | - | - | - | - | 3.740 | 4 15/16" | 15/32" | - | - | - | - | 19/32" | 1" | 3" |
| 6 x 60° | 19/32" | 4 x 90° | 3/4" | 4 x 90° | 3/4" | 4.724 | 6 5/16" | 19/32" | 6" | 7 7/8" | 5 1/2" | 7 7/32" | 19/32" | 1" | 4" |
| 6 x 60° | 19/32" | 4 x 90° | 3/4" | 4 x 90° | 3/4" | 4.724 | 6 5/16" | 19/32" | 5 1/2" | 7 9/32" | 5 1/2" | 7 7/32" | 19/32" | 1" | 4" |
| 6 x 60° | 23/32" | 8 x 45° | 3/4" | 4 x 90° | 3/4" | 6.299 | 8 27/32" | 19/32" | 7 1/2" | 8 21/32" | 5 1/2" | 7 7/32" | 19/32" | 1" | 5" |
| 6 x 60° | 23/32" | 4 x 90° | 3/4" | 4 x 90° | 3/4" | 6.299 | 8 27/32" | 19/32" | 6" | 7 7/8" | 6" | 7 7/8" | 19/32" | 1" | 5" |

*Tolerance +.000 to -.003 depending on size.

Duoflow Central Pipe Specifications

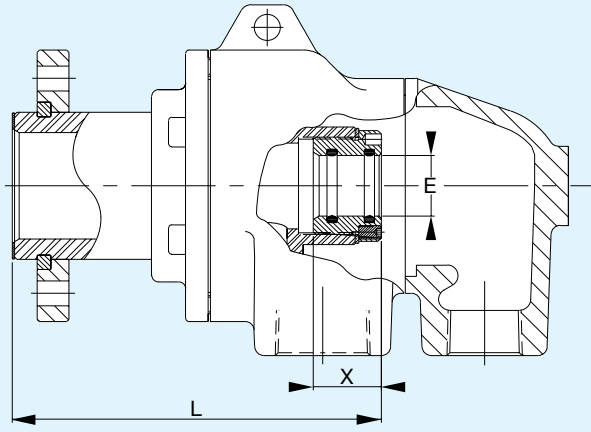
Rotating Central Pipe

R For rotating siphon (steam inlet pipe); the inner pipe is connected by means of a threaded bushing that screws into the rotor.



Rotating Central Pipe Axial Movement

E For a rotating siphon capable of axial movement; a sliding connection is made between the bushing and the central pipe to allow for the thermal expansion of the central pipe.

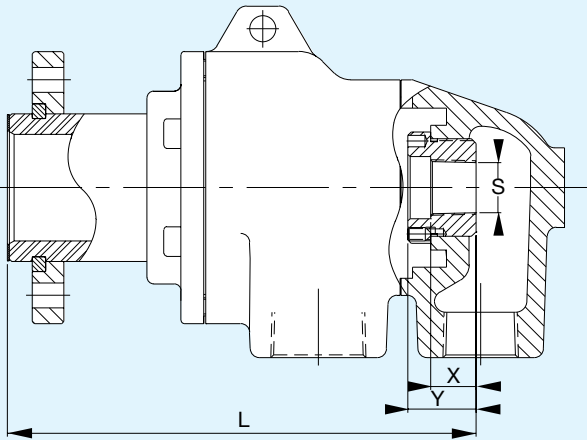


| Model | L | X | Y | Optional Pipe Sizes "R" |
|-------|------------------------------------|-----------------------------------|----------------------------------|--|
| H20 | 4 ¹³ / ₃₂ " | 1 ⁹ / ₃₂ " | 2 ⁵ / ₃₂ " | 1/8" - 1/4" NPT |
| H25 | 5 ¹ / ₄ " | 1 ⁹ / ₃₂ " | 2 ⁵ / ₃₂ " | 1/4" - 3/8" NPT |
| H32 | 5 ²⁵ / ₃₂ " | 2 ⁵ / ₃₂ " | 1" | 3/8" - 1/2" NPT |
| H40 | 6 ⁷ / ₈ " | 1" | 1 ³ / ₁₆ " | 1/2" - 1" NPT |
| H57 | 9 ³ / ₁₆ " | 1" | 1 ³ / ₈ " | 1/2" - 1 ¹ / ₄ " NPT |
| H67 | 10 ³ / ₄ " | 1" | 1 ³ / ₈ " | 1/2" - 1 ¹ / ₂ " NPT |
| H87 | 11 ¹³ / ₁₆ " | 1" | 1 ¹ / ₈ " | 1" - 2" NPT |
| H107 | 14 ³ / ₄ " | 1 ²⁵ / ₃₂ " | 2 ³ / ₈ " | 1" - 3" NPT |
| H127 | 18 ¹ / ₈ " | 1 ²⁵ / ₃₂ " | 2 ³ / ₈ " | 1 ¹ / ₄ " - 4" NPT |

| Model | L | X | Optional Pipe Sizes "E" |
|-------|------------------------------------|----------------------------------|--|
| H20 | 4 ¹³ / ₃₂ " | 2 ⁵ / ₃₂ " | 1/8" - 1/4" |
| H25 | 5 ¹ / ₄ " | 2 ⁵ / ₃₂ " | 1/4" - 3/8" |
| H32 | 5 ²⁵ / ₃₂ " | 1" | 3/8" - 1/2" |
| H40 | 6 ⁷ / ₈ " | 1 ³ / ₁₆ " | 1/2" - 1" |
| H57 | 9 ³ / ₁₆ " | 1 ³ / ₈ " | 1/2" - 1 ¹ / ₄ " |
| H67 | 10 ³ / ₄ " | 1 ³ / ₈ " | 1/2" - 1 ¹ / ₂ " |
| H87 | 11 ¹³ / ₁₆ " | 1 ¹ / ₈ " | 1" - 2" |
| H107 | 14 ³ / ₄ " | 2 ³ / ₈ " | 1" - 3" |
| H127 | 18 ¹ / ₈ " | 2 ³ / ₈ " | 1 ¹ / ₄ " - 4" |

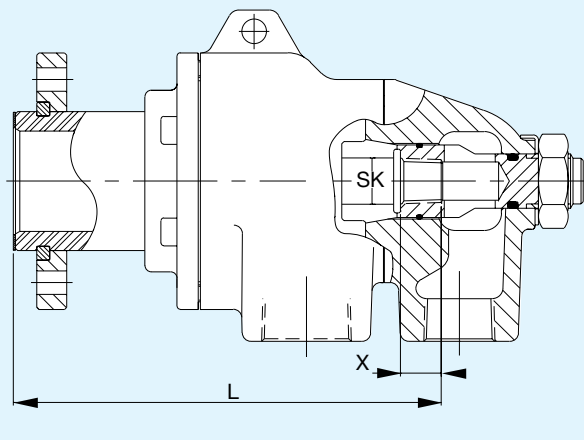
Stationary Central Pipe

S For fixed siphons; the pipe is connected by means of a threaded bushing that screws into the end cap.



Stationary Central Pipe

SK For stationary fixed siphons; the central pipe is supported in the end cap and connected by means of an external bolt to the end cap.



| Model | L | X | Y | Optional Pipe Sizes "S" |
|-------|------------------------------------|----------------------------------|----------------------------------|--|
| H20 | 5 ¹³ / ₃₂ " | 7/16" | 5/8" | 1/8" - 1/4" NPT |
| H25 | 6 ³ / ₁₆ " | 7/16" | 2 ⁵ / ₃₂ " | 1/4" - 3/8" NPT |
| H32 | 6 ²⁵ / ₃₂ " | 1 ⁹ / ₃₂ " | 1" | 3/8" - 1/2" NPT |
| H40 | 8 ¹ / ₈ " | 2 ⁵ / ₃₂ " | 1 ⁵ / ₁₆ " | 1/2" - 1" NPT |
| H57 | 9 ³ / ₈ " | 1" | 1 ⁹ / ₁₆ " | 1/2" - 1 ¹ / ₄ " NPT |
| H67 | 11 ¹⁵ / ₁₆ " | 1 ³ / ₈ " | 1 ⁹ / ₁₆ " | 1/2" - 1 ¹ / ₂ " NPT |
| H87 | 13" | 1 ³ / ₈ " | 1 ³ / ₂ " | 1" - 2" NPT |
| H107 | - | - | - | - |
| H127 | - | - | - | - |

| Model | L | X | Optional Pipe Sizes "SK" |
|-------|------------------------------------|----------------------------------|---|
| H57 | 8 ³ / ₃₂ " | 1 ¹ / ₁₆ " | 1/2" - 3/4" |
| H67 | 10 ³ / ₈ " | 1 ¹ / ₁₆ " | 3/4" - 1" |
| H87 | 11 ¹⁵ / ₃₂ " | 1 ¹ / ₁₆ " | 1" - 1 ¹ / ₄ " |
| H107 | 14 ³ / ₄ " | 2 ³ / ₈ " | 1" - 1 ¹ / ₄ " |
| H127 | 18 ¹ / ₈ " | 2 ³ / ₈ " | 1 ¹ / ₄ " - 1 ¹ / ₂ " |

Adjustable Siphons Available
Consult DEUBLIN