

Armstrong combines its Trap Valve Stations (TVS) concept with MSD manifolds into a package called the MCC-160 Condensate Collection Assembly. This prepackaged assembly offers many great benefits – cost savings in assembly, design flexibility and reduced purchasing and design time. The MCC-160 with TVS-5111 and 2000 Series Inverted Bucket Traps is **guaranteed for 3 years**.

Cost Savings

This preassembled concept offers tremendous savings by reducing multiple component purchases that cause additional purchase order monitoring and shipping costs. Other savings include far less labor time required for field assembly.

This modular forged steel body design provides quick assembly/delivery, reducing overall project costs.

- Eliminates multiple component purchases
- Reduced design specification costs
- Prefabrication vs. field assembly for easy installation
- Reduced shipping and field handling costs
- Lower long-term maintenance and operating costs
- 3-years guarantee

TVS-5111 Concept

Armstrong Traps Valve Stations (TVS) concept gives compact alternative to traditional trap installations including 4 valves and a strainer. The universal connector allows easy installation and replacement of traps using any of the existing operating principles. Armstrong TVS-5111 includes:

- Upstream isolating piston valve
- Blowdown valve
- Test valve

System Design Flexibility

Armstrong can meet virtually any design parameter with your choice of socketweld or threaded connections. Inverted bucket, bimetallic, thermostatic bellow, thermostatic wafer or disc steam traps can be provided. If you require a specific piping arrangement, Armstrong can offer the flexibility to meet your specifications.

- All existing steam trap types could be used
- Dimensional consistency
- Space savings
- Insulation jacket available

Table STE-192-1. MCC-160 List of Materials	
Name	Material
Manifold Body	ASTM A105 Forged Steel
Handwheel	Ductile Iron
Bonnet	ASTM A105 Forged Steel
Spring Washer	Stainless Steel
Bolts and Nuts	Bolts: ASTM A193 grade B7
	Nuts: ASTM A194 grade 2H
Piston & Stem	17% Chrome Stainless Steel
Valve Sealing Rings	Expanded Graphite & Stainless Steel
Bushing, Valve	Stainless Steel

Removable Insulation Jackets

A removable insulation jackets are available for all steam and condensate manifolds.

- Inexpensive
- Quick to install
- Removable for maintenance
- Reusable after maintenance
- Weatherproof
- Formed to cover all manifold elements
- Strong, durable cover
- Available to fit all manifold sizes

MCC-160 Manifold Condensate Collection with TVS-5111

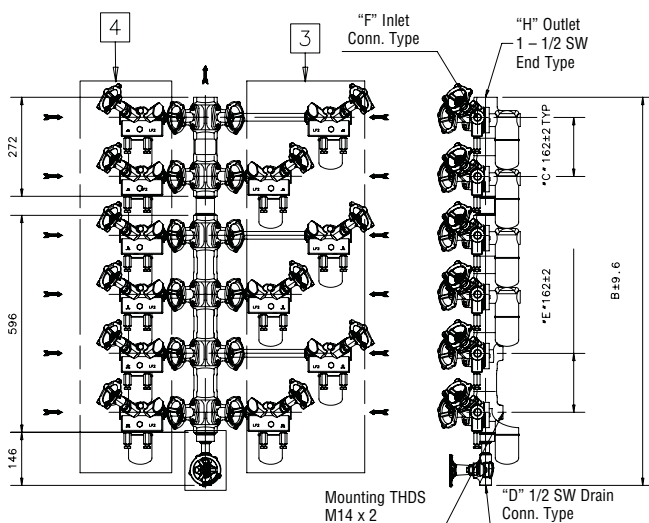


Table STE-193-1. MCC-160 with TVS-5111 (dimensions in mm)			
Model	MCC-160-04	MCC-160-08	MCC-160-12
Number of tracers	4	8	12
"A" Valve, Open Position	195	195	195
"B" Height	418	742	1 065
"C" \varnothing Inlet to Outlet	162	162	162
"D" Connection, Blowdown	1/2" SW		
"E" \varnothing to \varnothing	2	4	6
"F" Connection Size	1/2" and 3/4" – SW and Screwed NPT		
"H" Outlet Connection	1 1/2" SW		
"I" Face to Face [3] (with 2011 steam trap configuration)	800 - 470		
"J" Face to Face [4]	470	470	470
Weight in Kg (without traps)	24	46	68
Maximum Operating Pressure	28 bar @ 399 °C		

All MCC-160 models are CE Marked according to the PED (97/23/EC).
For traps, please check the specific page.

Options

Top Outlet:

- Socketweld
- Flanged DIN or ANSI
- Gate valve 1 1/2" SW or Flanged

Drain:

- 1/2" or 3/4" SW reducer
- TCMS piston valve

Insulation:

- Armstrong Insulation Jacket
- Modular or 1 piece versions
- Insulation jackets could be installed without removing the handwheels