



شركة المصنع السعودي لأجهزة الإطفاء
SAUDI FACTORY FOR FIRE EQUIPMENT Co.

Empowering
a **Safer Future** for
the Kingdom



THERMO ACT 
AUTOMATIC FIRE DETECTION
& SUPPRESSION SYSTEM 

Technical
Datasheets

Quality Approvals for Various Products and Services

VER: 00-04/26



The Global Standard in Fire Safety

Since 1983, SFFECO has been the trusted name and a recognized global leader in manufacturing top-tier fire-fighting equipment. We don't just offer products; we provide total fire safety solutions like fire doors, fire cabinets, fire pumps, fire extinguishing systems, etc. Our commitment to excellence is certified by multiple international standards, including ISO 9001 (Quality), ISO 14001 (Environmental), and ISO 45001 (Health & Safety). With state-of-the-art facilities in Riyadh and Dubai, we ensure every product meets rigorous international quality standards.

One-Stop-Shop for Fire Protection

SFFECO is your single source for everything in fire protection and fire-fighting. Represented in over 100 countries through a vast network of dealers, our innovative approach and comprehensive, end-to-end product range deliver the full spectrum of solutions you need. We're dedicated to keeping you safe and updated, constantly integrating the latest fire-fighting technology into our knowledge and services. Choose SFFECO and get certified quality, global reach, and pioneering innovation—all in one place.



Quality Services

SFFECO is deeply committed to ensuring superior performance and accuracy in every product it delivers. This dedication is maintained through continuous, close collaboration with a wide array of stakeholders, including key certification bodies, government regulatory agencies, industry partners, and leading technology associations. This concerted effort focuses on the development and delivery of truly innovative and high-quality fire-fighting solutions. The commitment to excellence is rigorously upheld through extensive product testing and evaluation, alongside a strict, ongoing process for continued product quality compliance, guaranteeing that SFFECO's equipment operates with assured reliability when it matters most.

SFFECO is dedicated to providing fire safety products of the highest quality and performance. We achieve this by working closely with certification bodies, government regulatory agencies, industry partners, and technology associations. This collaboration ensures our innovative products are backed by extensive product testing and evaluation, and maintained through continuous quality compliance.

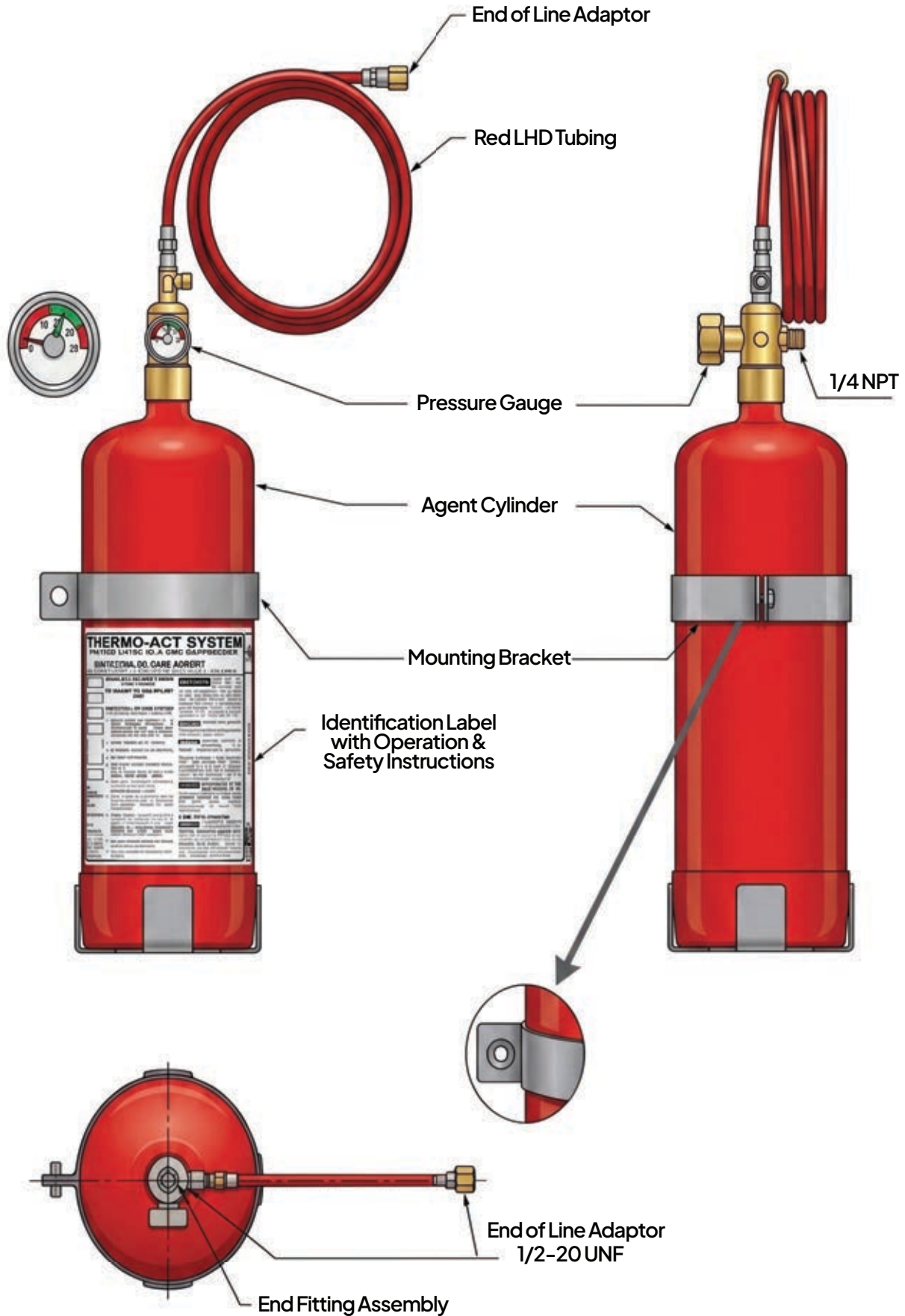
As global leaders since 1983, SFFECO believes in manufacturing quality products and offering exceptional service standards worldwide. Our primary goal is to reward our customers by keeping their investments safe and secure. Our manufacturing plant has steadily grown and is now equipped with modern hi-tech equipment and staffed by highly skilled professionals. With optimal ISO-certified operations, we consistently roll out products that match global standards to serve the needs of the growing fire safety market.



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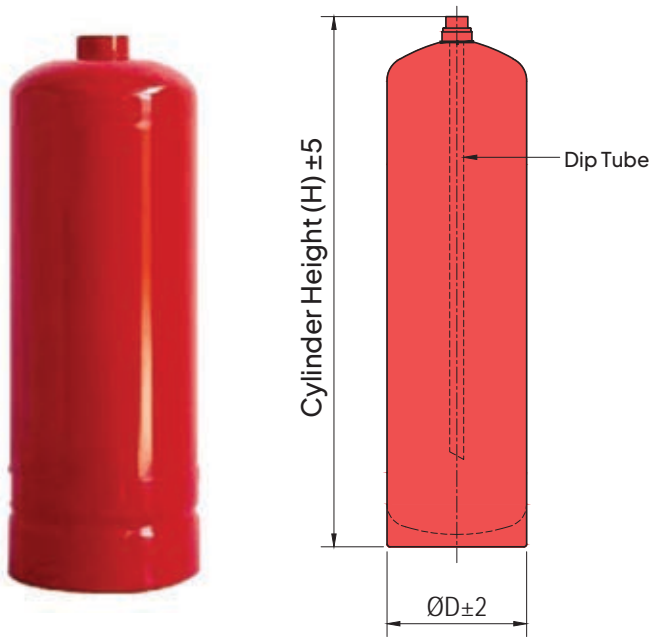
Thermo-Act System Components



Thermo-Act System Components



Extinguishing Agent Cylinder



Description

The cylinder in a Thermo-act system serves as a storage container for the extinguishing agent, designed to safely hold the medium under pressure until activation.

Manufactured from high-quality steel, it ensures durability, leak-proof performance, and long service life.

Colour: Red / White

Agent & Type of System	Models	Max. Fill (LBS)	Agent Weight (KG)	CYLINDER HEIGHT (WITHOUT VALVE)	CYLINDER HEIGHT (WITH VALVE)	CYLINDER DIAMETER
Clean Agent Direct System	THD-CA-3	3	1	335 mm	435 mm	78 mm
	THD-CA-7	7	3	425 mm	525 mm	105 mm
	THD-CA-12	12	5	425 mm	525 mm	125 mm
	THD-CA-15	15	6	465 mm	565 mm	150 mm
	THD-CA-18	18	8	565 mm	665 mm	200 mm
Clean Agent Indirect System	THS-CA-3	3	1	335 mm	435 mm	78 mm
	THS-CA-7	7	3	425 mm	525 mm	105 mm
	THS-CA-12	12	5	425 mm	525 mm	125 mm
	THS-CA-15	15	6	465 mm	565 mm	150 mm
	THS-CA-18	18	8	565 mm	665 mm	200 mm

Cylinder can be provided in other capacities or agents upon request. Please contact our technical people for further information

Thermo-Act System Components



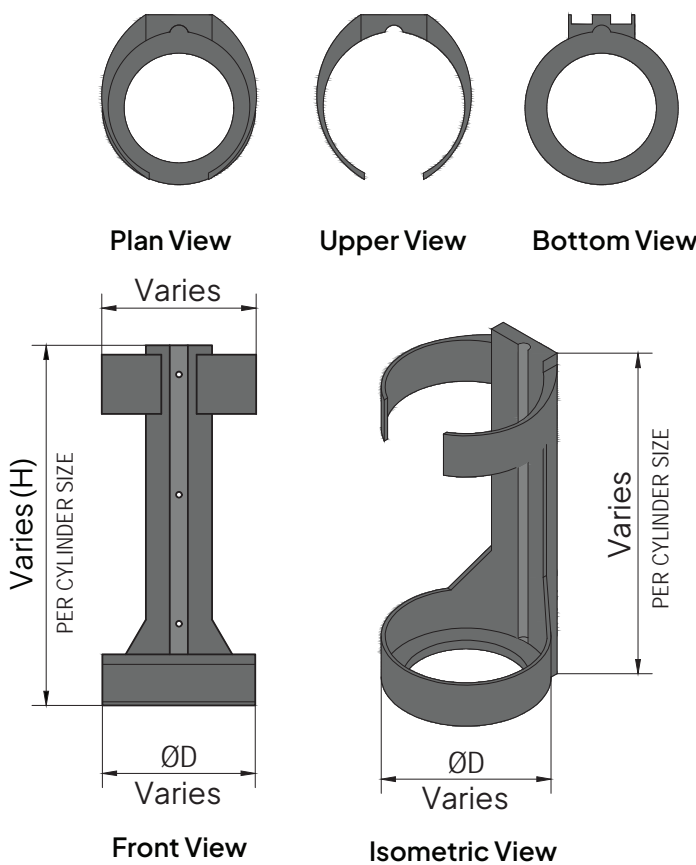
Cylinder Bracket



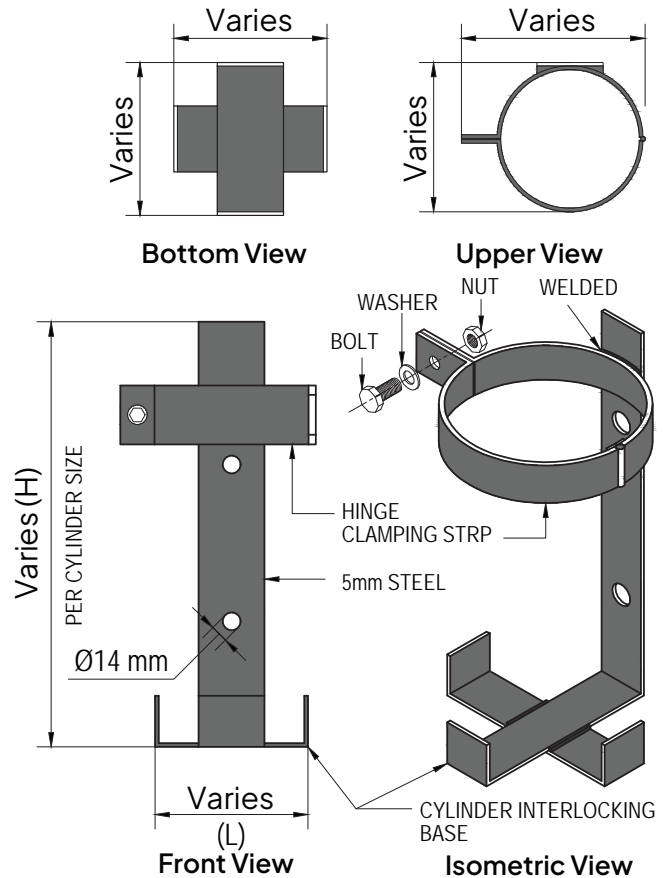
Description

The Cylinder Bracket is a robust support component designed to securely hold the thermo-act cylinders in place, ensuring stability and safety during both standby and discharge conditions.

Manufactured from high-quality materials such as plastic, mild steel, stainless steel, etc. the bracket is engineered to withstand vibration, impact, and environmental factors. It is designed for easy installation and maintenance, providing proper alignment and secure fastening of cylinders.



Plastic Type



MS or SS

Thermo-Act System Components



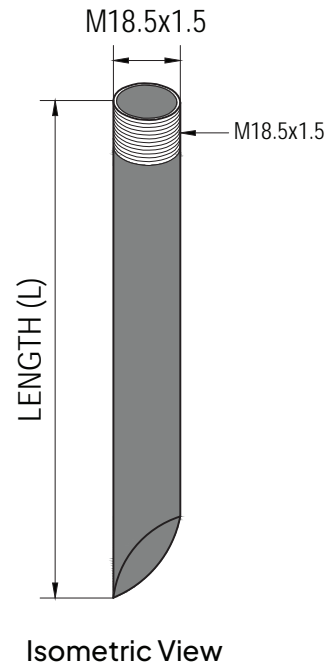
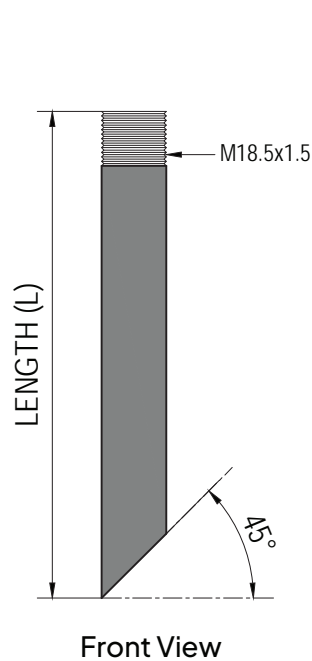
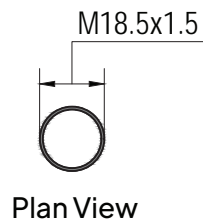
Dip Tube



Description

The dip tube is an internal component designed to direct the extinguishing agent from the bottom of the cylinder to the discharge valve during operation. Typically made from corrosion-resistant materials such as plastic or metal.

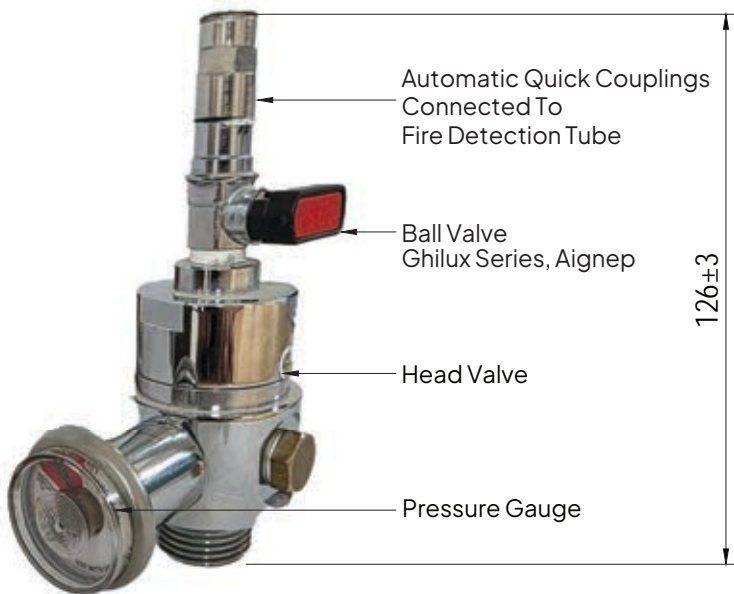
The dip tube ensures efficient and complete discharge of the extinguishing medium in the thermo-act system cylinder. It is precisely sized and positioned to maximize agent flow while minimizing residue, contributing to the overall reliability and performance of the extinguisher.



Thermo-Act System Components



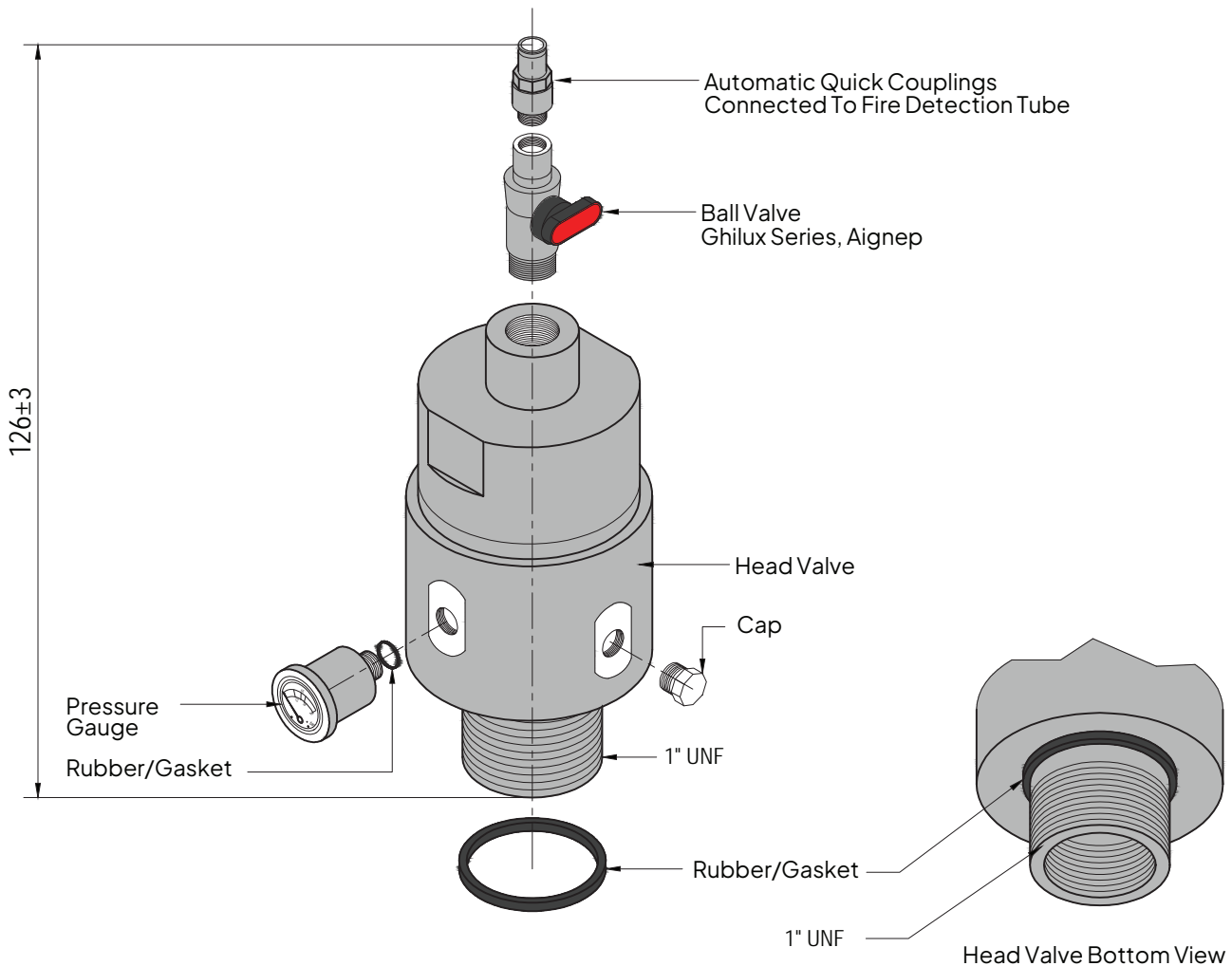
Direct System Valve



Description

The valve is a critical control component mounted on the cylinder, responsible for regulating the release of the extinguishing agent during operation.

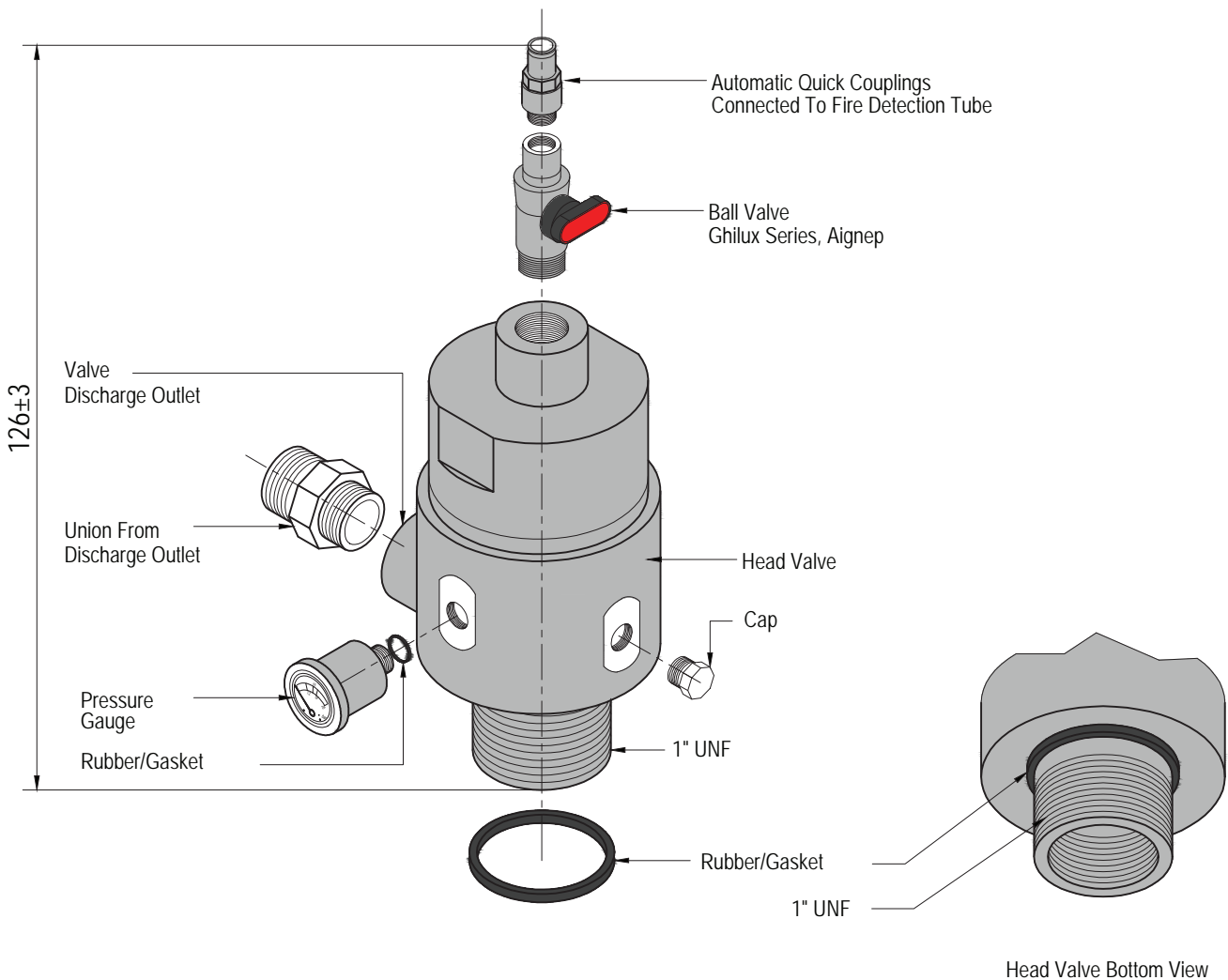
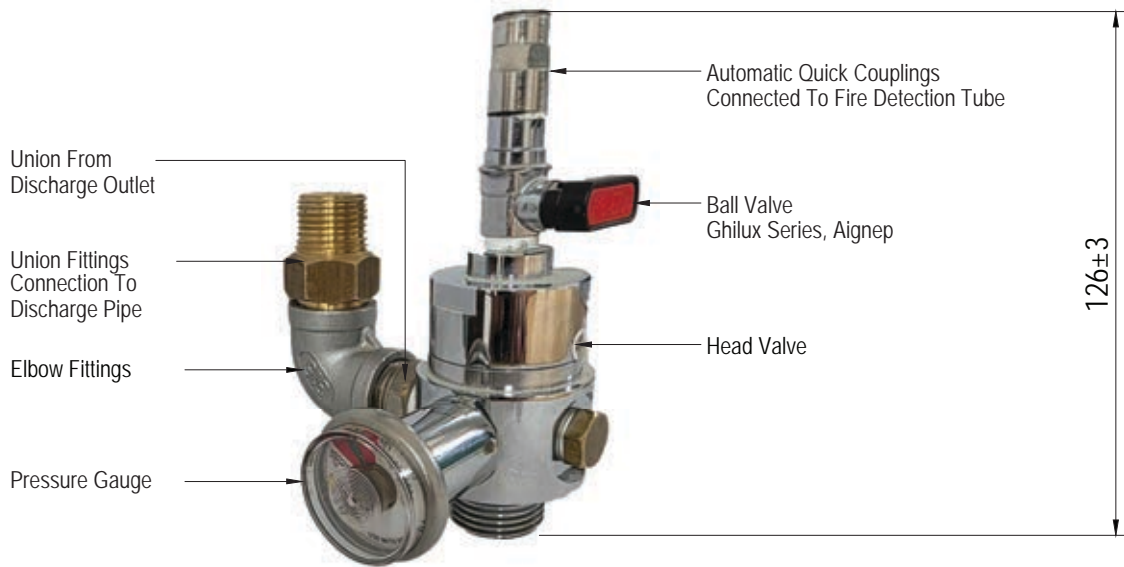
It is designed to ensure safe storage under pressure and rapid, controlled discharge when activated, either manually or automatically. Manufactured from high-strength, corrosion-resistant materials, the valve incorporates safety features such as pressure relief mechanisms and secure sealing to prevent leakage.



Thermo-Act System Components



Indirect System Valve



Thermo-Act System Components



Fire Detection Flexible tube



Part Number	Int. Dia.	Ext. Dia.
SF 99011-A-1	4 MM	6 MM
SF 99011-B-1	6 MM	8 MM

Specifications

- ❖ Continuous linear pneumatic heat detection tube made of UV-coated thermoplastic
- ❖ Available in multiple sizes and lengths (extendable up to 100 m and beyond)
- ❖ Durable, flexible, and unaffected by humidity or vibration
- ❖ Detects and suppresses fire directly at the source with rapid response
- ❖ Ruptures accurately at 100°C (212°F) at the hottest spot
- ❖ Acts as both detection and discharge (direct release systems)
- ❖ Operates without control panels
- ❖ High reliability with simple design and minimal components
- ❖ Easy maintenance and quick replacement after activation
- ❖ Cost-effective and environmentally friendly solution

Description

The principle is a simple self-activating system that offers the widest versatility and is absolutely safe against malfunction, which results in the best cost-performance ratio. It does not rely on any complex electronics or any moving parts.

SFFECO employs a flexible detection and delivery system called Fire Detection Tube. The tube is manufactured from specially processed polymer materials to achieve the desired heat detection and delivery characteristics.

The Fire Detection Tube, which is pressurized, is placed within an enclosed area above potential fire hazards and secured in place with brackets provided. Extinguishing mediums can be matched to the particular application. Various canister sizes are available and are supplied attached to the Fire Detection Tube.

The Direct Action Release System discharges the extinguishant directly from the burst hole in the tube, this will be the closest point to the fire, and will allow the fastest extinguishing time and minimum spread of the fire. The Secondary Action Release system discharges the extinguishant into the protected area via plumbed diffusers that are initiated by the tube bursting

Features

- ❖ Acts as a multi-sensor
- ❖ Made of a high-tech polymer
- ❖ When bursting at the hottest spot, it ruptures as a nozzle shape opening
- ❖ Long-time resistance
- ❖ Flexibility
- ❖ Temperature sensitivity
- ❖ Different temperature rating



Since 1983, SFFECO has been a trusted name in fire protection, known for innovation and quality worldwide.

With state-of-the-art facilities in Riyadh and Dubai, we deliver a complete range of firefighting solutions that meet international standards.

Our innovative approach and comprehensive product portfolio make SFFECO the one-stop destination for reliable fire protection products and services.

شركة المصنع السعودي لأجهزة الإطفاء SAUDI FACTORY FOR FIRE EQUIPMENT Co.

FACTORY & HEAD OFFICE - RIYADH

2nd Industrial Area, Al-Kharj Road, Riyadh, KSA, P.O. Box: 58469, Riyadh 11515
Tel : +966 11 2650070, E-mail: riyadh@sffeco.com.sa

JEDDAH BRANCH

P.O. Box: 16769, Jeddah - 21474, KSA
Tel : +966 12 670 6009,
E-mail: jeddah@sffeco.com.sa

DAMMAM BRANCH

P.O. Box: 7162, Dammam - 31462, KSA
Tel : +966 13 8351961,
E-mail: dammam@sffeco.com.sa

MADINAH BRANCH

Tel : 0148660959, 0148283256,
E-mail: madinah@sffeco.com.sa

