CO2 FIRE PROTECTION







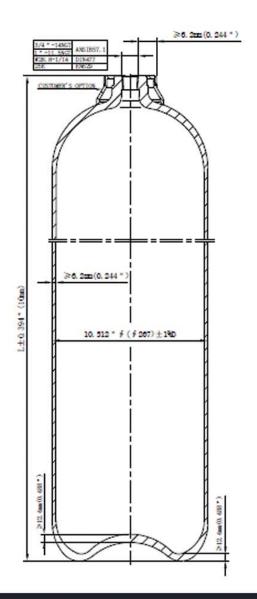
Carbon Dioxide System General Layout





Seamless Cylinder for Compressed, Liquid or Pressure-Dissolved Gases

Specification	Water vo	lume (+5%0)	Length approx.(L)	Tare weight approx. (±5%)
	V2	4150cu.in (68)	58.5 " (1485mm)	167.5 lbs.(76.0kg)





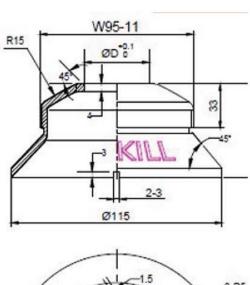


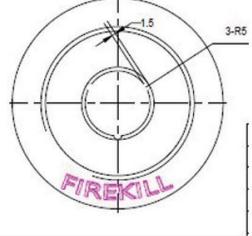
MATERIAL: 37MN

CHEMICAL ANALYSIS (%)

С	0.34- 0.4	
Si	0.1-0.3	
Mn	1.35 -1.65	
P	0.02	
S	0.02	

HYDROSTATIC TEST 250 BAR

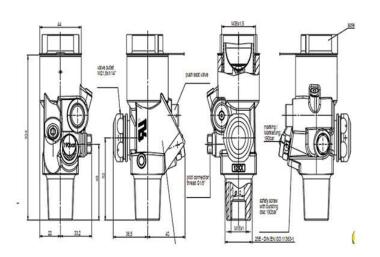








Slave Cylinder Control Head





DESCRIPTION

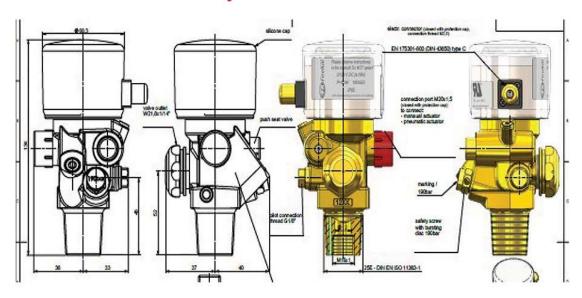
The slave cylinder's control head is quick opening with differential pressure opening valve especially designed for use with slave cylinder. The valve assembly can be used in hazardous environments in an ambient temperature range between $18^{\circ}C$ TO $54^{\circ}C$. The equivalent length for the slave cylinder valve is 25.8m for a ¾ inch schedule 40 pipe .the slave valve can be actuated by either manual or pneumatic means . The valve is equipped with a burst disc with a predetermined pressure. When this pressure is exceeded it burst open to release the pressure. For extra safety, the valve is equipped with a unique spring button that closes the valve immediately known as the push seat valve.

TEST PRESSURE	BURSTING PRESSURE
360 BAR	190 BAR





Master Cylinder Control Head

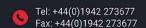


DESCRIPTION

Master cylinder control head is used especially for CO2 Systems electrical actuation. Electrical actuation is accomplished by means of electrical solenoid permanently attached to the top of the valve. The valve assembly can be used in hazardous environments in an ambient temperature range between – 18° C to 54° C .The equivalent length for the master cylinder valve is 25.8m for a $\frac{3}{4}$ inch schedule 40 pipe. Manual and pneumatic actuation means are available .The valve is equipped with a burst disc with a predetermined pressure. For extra safety, the valve is equipped with a unique spring button that closes the valve immediately known as the push seat valve.

TEST PRESSURE	BURSTING PRESSURE
360 BAR	190 BAR

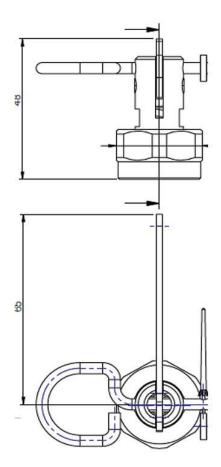


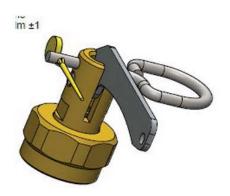






Manual Release Actuator for Master Cylinder





DESCRIPTION

The Manual Release Actuator provides a manual means of slave cylinder actuation by direct lever pushing with a force equals to 25N.

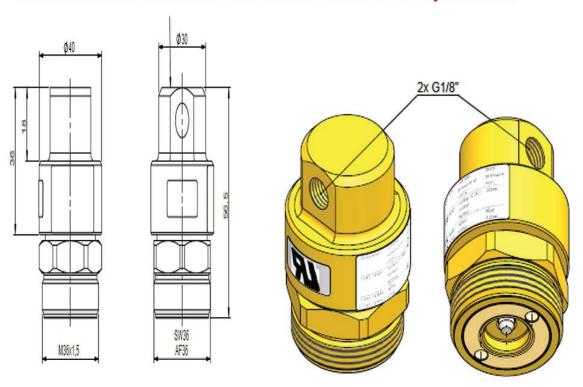
The manual release is directly attached to the top of slave valve for ease of actuation. The lever is designed with mechanical mechanism to lock lever in open position once actuated. The manual release Actuator is equipped with safety pins to avoid false activation.

BODY MATERIAL	PULLING LEVER	LOCK PIN	ACTUATION FORCE
Brass	Stainless steel	Stainless steel	25 N





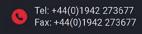
Pneumatic Release Actuator for Slave Cylinders

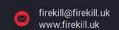


DESCRIPTION

The Pneumatic Release Actuator provides pneumatically means of actuation for slave cylinders. The pneumatic release Actuator is directly attached to the top of the slave cylinder control Head .Actuation is accomplished after the master cylinders Activation with a minimum pilot pressure of 20 bar and maximum working pressure of 360 Bar.

BODY MATERIAL	ACTUATING PIN	PILOT PRESSURE
Brass	Stainless steel	20 Bar









Pilot Discharge Hose 1/4 inch

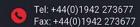


DESCRIPTION

Pilot Hose with DN4 Size connects between each two consecutive cylinders to provide actuation means pilot hose is used to drive release systems in batteries or discharge of modular cylinders.

MAX OPERATING PRESSURE AT 21°C	LENGTH
225 BAR	40 CM











Flexible Discharge Hose 3/4 inch



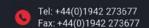
DESCRIPTION

Discharge Hose line with DN12 Size connects CO2 cylinder Discharge outlet to Discharge pipe Network or Discharge Manifold.

Discharge Hose will allow for ease of alignment of multiple cylinders to the manifold or discharge pipe network. The Hose is equipped with swivels nuts for ease of connection.

MAX OPERATING PRESSURE AT 21°C	LENGTH
275 BAR	50 CM





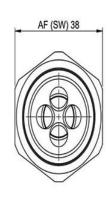


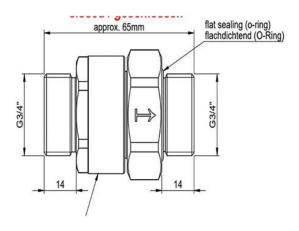




Check Valve 3/4 inch





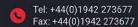


DESCRIPTION

Check Valve is especially designed for CO2 system allowing it to flow in a single direction through the manifold. It does not allow gas to leave to the opposite direction. At discharge, it controls the flow for the complete system making sure the CO2 flow is directed to the discharge piping network. The check valve is installed to allow maintenance for a certain cylinder without putting the rest of the cylinders out of service .the check valve material is resistant to corrosion and can withstand extremely high temperatures.

MAX WORKING PRESSURE	FLOW DIAMETER
300 Bar	3/4 inch











180 and 360 High Pressure Discharge Nozzles



NOZZLES SPECIFICATIONS

Maximum coverage area is 57 m2 Spacing

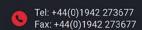
between Nozzles = 9m

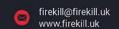
DESCRIPTION

Discharge Nozzle comes in multiple thread sizes and 2 degrees of discharge, 180 and 360 patterns. It is used to effectively distribute the agent into the hazard area and cover the required surface area.

MATERIAL	MAX WORKING PRESSURE	DISTRIBUTION PAATTERN	SIZES
Brass	300 Bar	180-360	3/8-2











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 Manchester, M12 6JH United Kingdom

UL CERTIFICATE FOR

Container Valve Assemblies with Actuators - Component



Container Valve Assemblies with Actuators - Component

COMPANY

FireKill Ltd

Universal Square Downshire street M12 6JH Manchester Manchester, M12 6JH United Kingdom

EX29211

Marking: Company name model designation, and the Recognized Component Mark Note: For additional marking information, refer to the <u>Guide Information Page</u>.

View model for additional information

Container valve assembly with actuator, Investigated to ANSI/CAN/UL/ULC 2127, Model(s): <u>FK-IG150</u>, <u>FK-IG200-1</u>, <u>FK-IG200-2</u>, <u>FK-IG200-3</u>, <u>FK-IG200-4</u>, <u>FK-IG200-5</u>, <u>FK-IG300-1</u>, <u>FK-IG300-2</u>, <u>FK-IG300-2</u>, <u>FK-IG300-3</u>, <u>FK-IG300-5</u>, <u>FK-IG300-6</u>, <u>FX-IG300-6</u>, <u>FX-IG300-6</u>,

Container valve assembly with actuator, Investigated to ANSI/CAN/UL/ULC 2166, Model(s): <u>FK-HFC-N1</u>, <u>FK-HFC-N2</u>, <u>FK-HFC-N3</u>, <u>FK-HFC-N4</u>, <u>FK-HFC-N5</u>, <u>FK-HFC-N6</u>, <u>FK-HFC-N7</u>

Container valve assembly with actuator, Investigated to NFPA 12, Model(s): FK-CO2-1, FK-CO2-2, FK-CO2-3

Last Updated on 2024-01-17

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Model FK-CO2-1

File Number: EX29211

COMPANY

FireKill Ltd

Universal Square Downshire street M12 6JH Manchester Manchester, M12 6JH United Kingdom

MODEL INFO

FK-CO2-1

Container valve assembly with actuator, Investigated to NFPA 12

Nom Size	Equivalent Length	Operating Pressure at Indicated Temp	Operating Temp Range	Agent(s)
DN12	84.8 ft/ 25.8 m of 3/4 in. Schedule 40 pipe	50 Bar @ 21°C	-20°C to 50°C	CO2

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Model FK-CO2-2

File Number: EX29211

COMPANY

FireKill Ltd

Universal Square Downshire street M12 6JH Manchester Manchester, M12 6JH United Kingdom

MODEL INFO

FK-CO2-2

Container valve assembly with actuator, Investigated to NFPA 12

Nom Size	Equivalent Length	Operating Pressure at Indicated Temp	Operating Temp Range	Agent(s)
DN12	84.8 ft/ 25.8 m of 3/4 in. Schedule 40 pipe	50 Bar @ 21°C	-20°C to 50°C	CO2

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Model FK-CO2-3

File Number: EX29211

COMPANY

FireKill Ltd

Universal Square Downshire street M12 6JH Manchester Manchester, M12 6JH United Kingdom

MODEL INFO

FK-CO2-3

Container valve assembly with actuator, Investigated to NFPA 12

Nom Size	Equivalent Length	Operating Pressure at Indicated Temp	Operating Temp Range	Agent(s)
DN12	84.8 ft/ 25.8 m of 3/4 in. Schedule 40 pipe	50 Bar @ 21°C	-20°C to 50°C	CO2

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