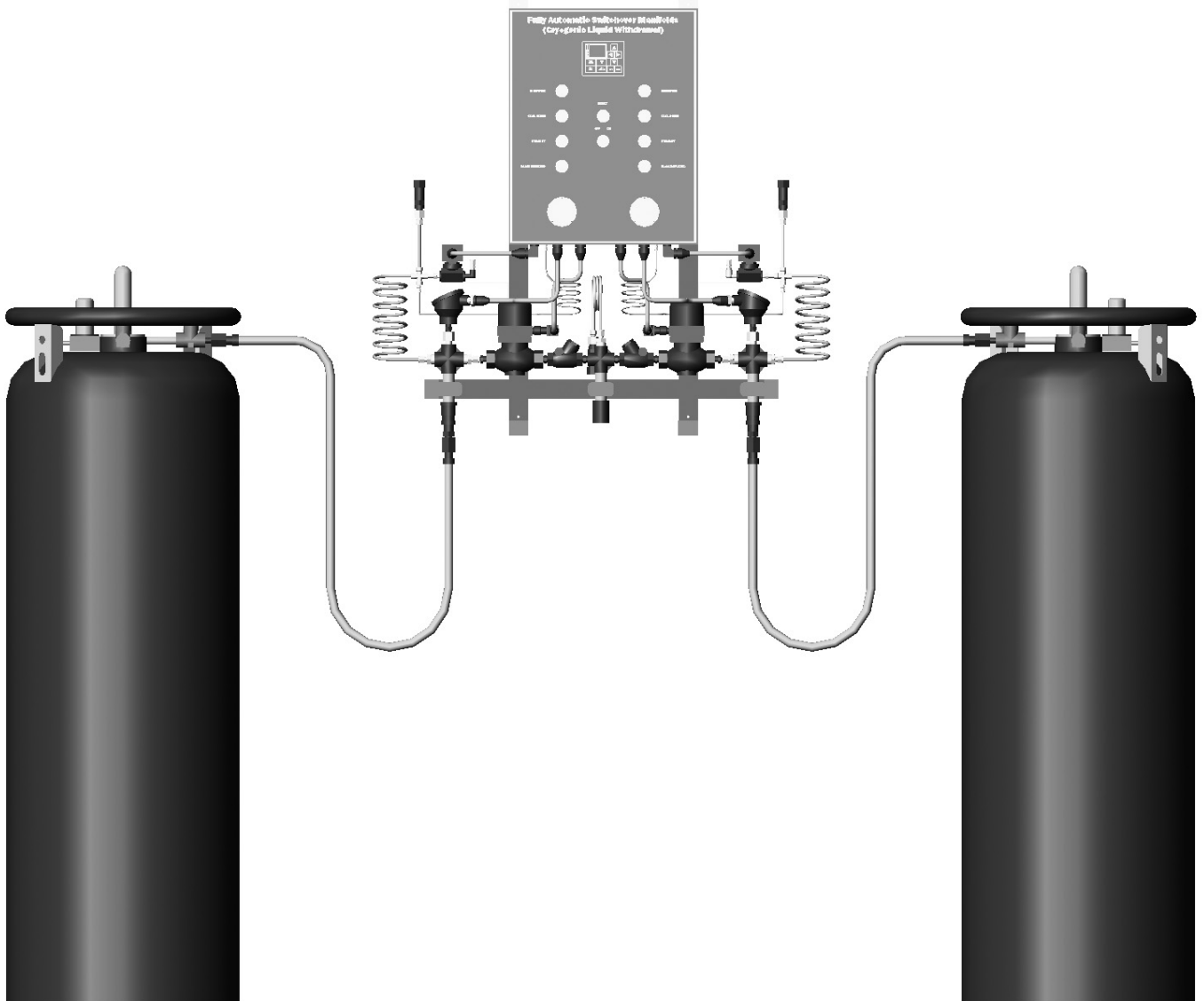


Fully Automatic Switchover Manifolds
for Liquid Cylinders
(Cryogenic Liquid Dispenser)

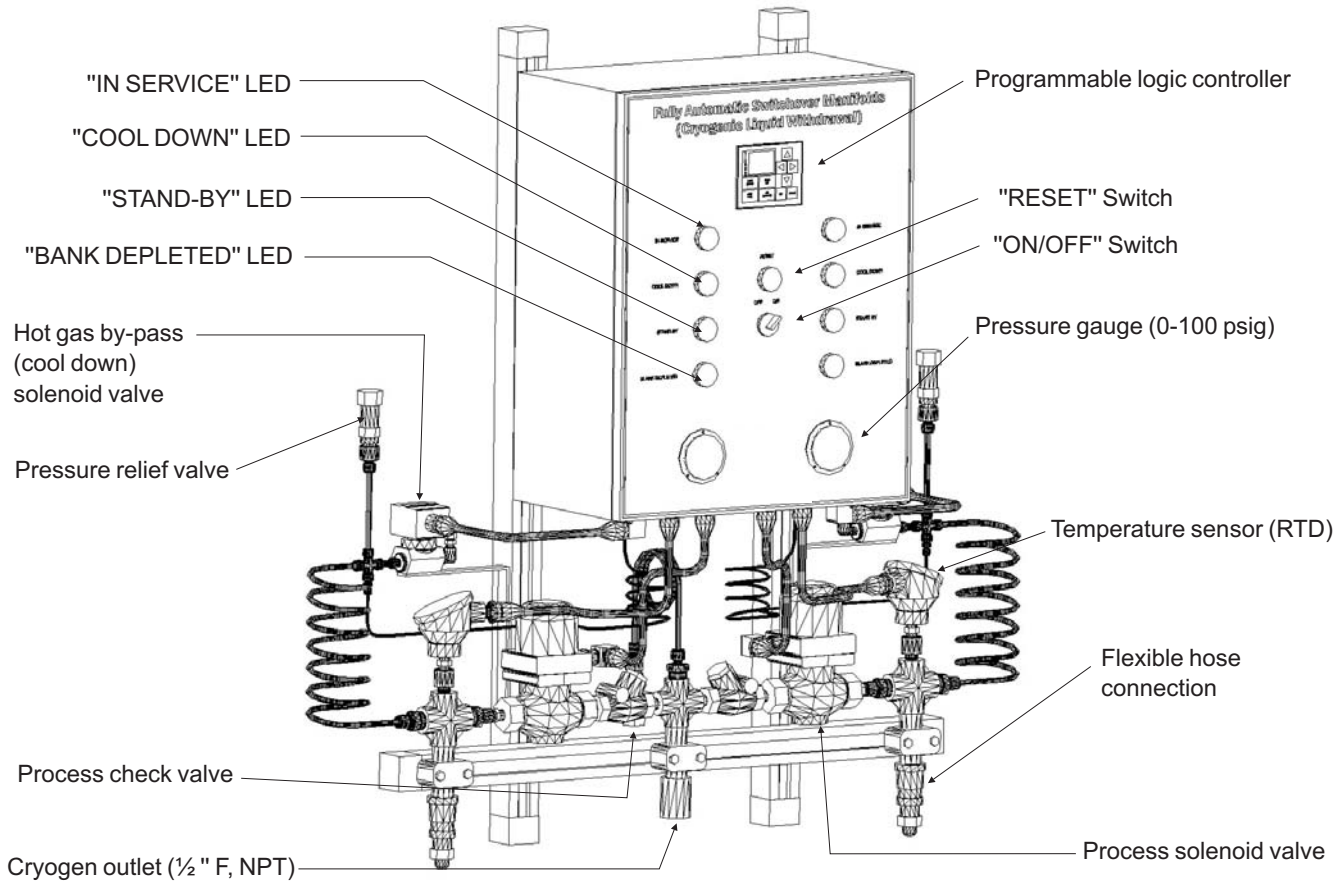


Innovative solutions for all your gas delivery needs



FULLY AUTOMATIC SWITCHOVER MANIFOLDS FOR LIQUID CYLINDERS (CRYOGENIC LIQUID DISPENSER)

CTM75
SERIES



Description

The CTM75 Cryo Transfer Manifold assures a continuous supply of cryogenic liquid. It is set to transfer from the "in use" empty bank to the "reserve" full bank based on pressure and temperature.

This PLC-based system is continuously monitoring the pressure and temperature of both banks. In "read only" mode, the PLC screen indicates actual pressure and temperature of each bank and compares them to their switchover (target) settings. In "programming" mode, the PLC allows you to change the switchover settings.

The LEDs indicate the status of each bank at all times.

Key Features

- Continuous cryogenic liquid supply
- Automatic switchover from "depleted" bank to "stand-by" bank without operator's involvement
- Built-in "hot gas by-pass" for each manifold side
Audible (optional) and visual alarms indicating when a supply side is depleted
- Two supply modes:
 - On Demand
 - Keep Full
- Use the entire amount of cryogen in the cylinders
- Eliminates downtime due to empty cylinders
- Easy field pressure and temperature settings to better meet your applications needs

How to order - part number matrix

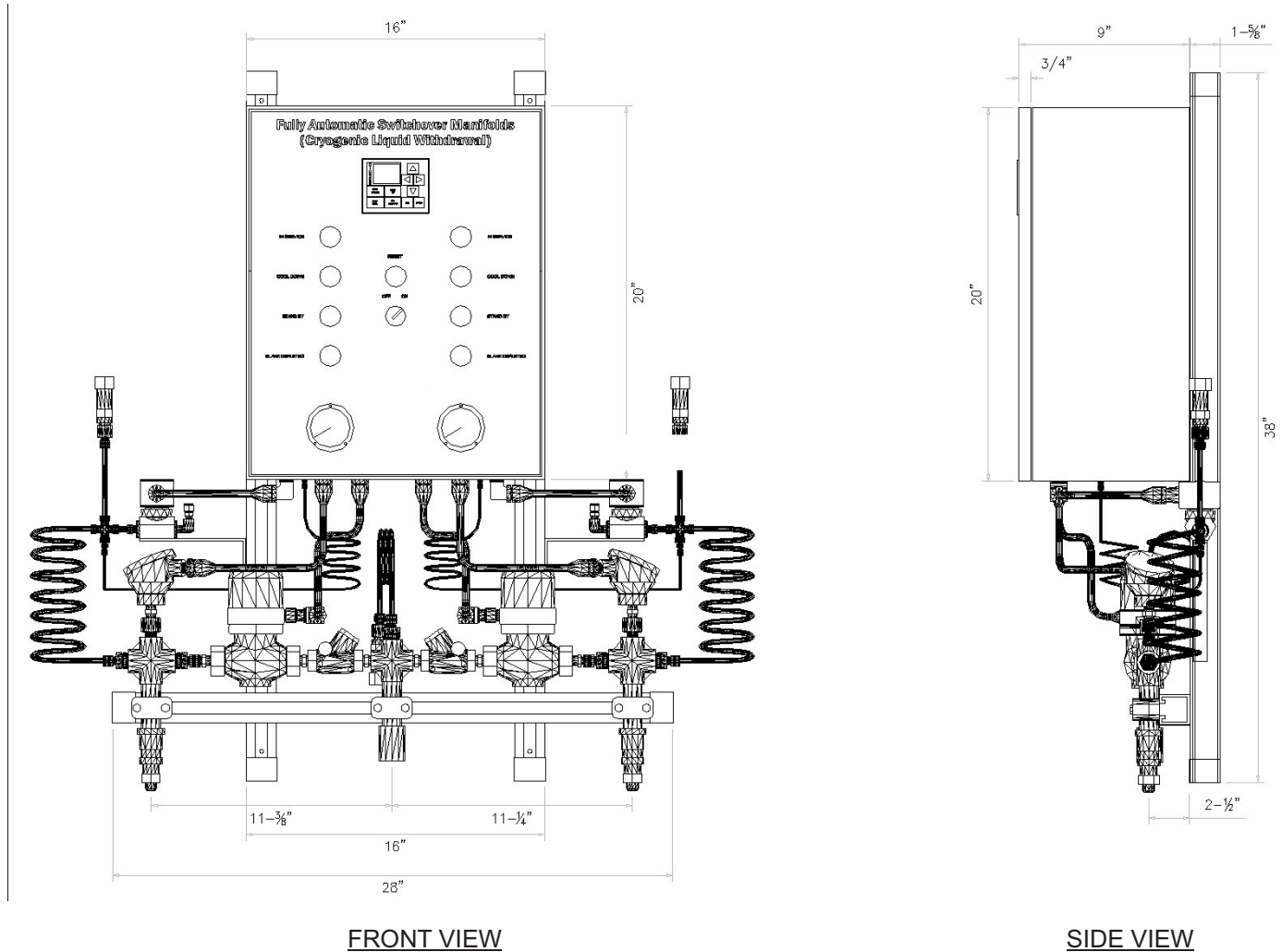
CTM75	-		-		-		-		-	
Series	Fluid	Qty. of cyl. left bank	Qty. of cyl. right bank	Application	Options					
	<ul style="list-style-type: none"> ■ Argon = 3 ■ Nitrogen = 7 ■ Oxygen = 9 	(Max. 2 cylinders)	(Max. 2 cylinders)	<ul style="list-style-type: none"> ■ Bio Medical = BM ■ Laser = L ■ Industrial = I ■ High Purity = HP 	<ul style="list-style-type: none"> ■ Floor stand = FS ■ Vacuum insulated flexible hose = VJH ■ Flashing beacon = FB ■ Audible alarm = AA 					

Contact Technical Sales 800.783.7890



FULLY AUTOMATIC SWITCHOVER MANIFOLDS FOR LIQUID CYLINDERS (CRYOGENIC LIQUID DISPENSER) CTM75 SERIES TECHNICAL SPECIFICATIONS

Dimensional drawing



Operation mode description

ON - DEMAND

The "On-Demand" supply mode vents the "hot gas" coming from the liquid cylinders through the cool down solenoid valve before opening the process solenoid valve. The process solenoid valve will open only when receiving an external signal. The same process occurs during the switchover between the depleted "in use" side to the "full reserve" side.

KEEP FULL

The "Keep Full" supply mode assures instant liquid withdrawal whether or not dispensing. The system monitors both pressure and temperature and keeps optimal conditions by opening and closing the cool down solenoid valves. By doing so, quality liquified gas is maintained up to the process solenoid valves. Thus, the CTM75 will dispense cryogenic liquid within seconds. Because both sides are "Kept Full" at all times, the "reserve bank" will immediately supply cryogenic liquid as soon as the "in use" side is depleted. The end user must be aware that the "Keep Full" supply mode will vent product to atmosphere if the demand is low.

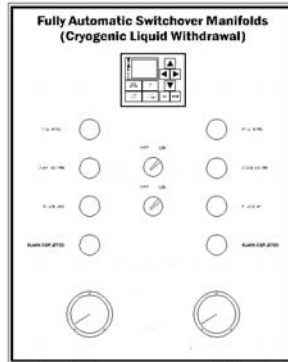


FULLY AUTOMATIC SWITCHOVER MANIFOLDS FOR LIQUID CYLINDERS (CRYOGENIC LIQUID DISPENSER) CTM75 SERIES TECHNICAL SPECIFICATIONS

Flow diagram & electrical data

POWER REQUIREMENTS

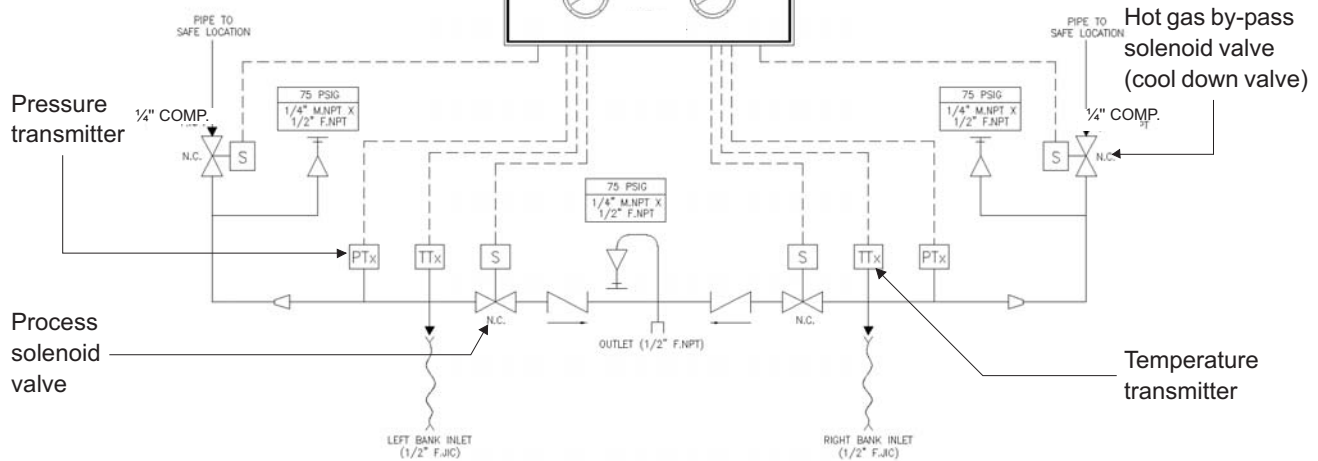
110 VAC, 5 Amp



EXTERNAL SIGNAL ALLOWED

Dry contact: 24 VDC circuit energized by the CTM75

Electrical signal: 110 VAC circuit energized by the end user



Standard materials of construction

Part Description

Process solenoid valve	Body: cast brass - Plunger: 430 St. Stl. - Seal: Teflon
Temperature sensor	Well: 316 St. Stl.
Pressure transmitter	Body & diaphragm: 316 St, Stl.
Cool down solenoid valve	Body: brass
Fittings	304 St. Stl. - Brass: CDA 360
Relief valves	Body: brass - Spring: St. Stl. - Disc: fluorosilicone
Flexible hoses	Fittings: 316 St. Stl. - Innercore: 304 St. Stl. - Braiding: St. Stl.

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