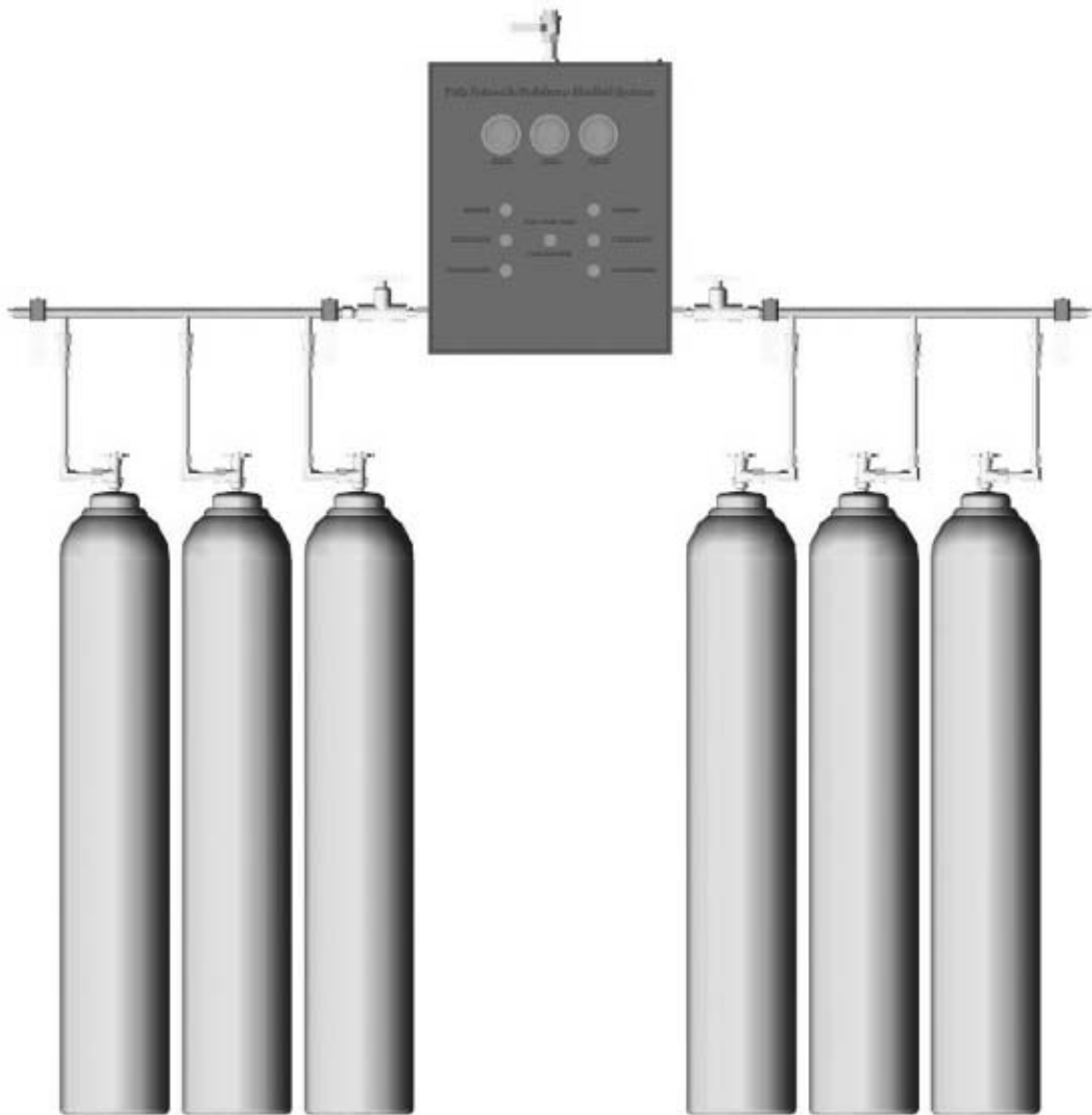


Fully Automatic Switchover Manifolds



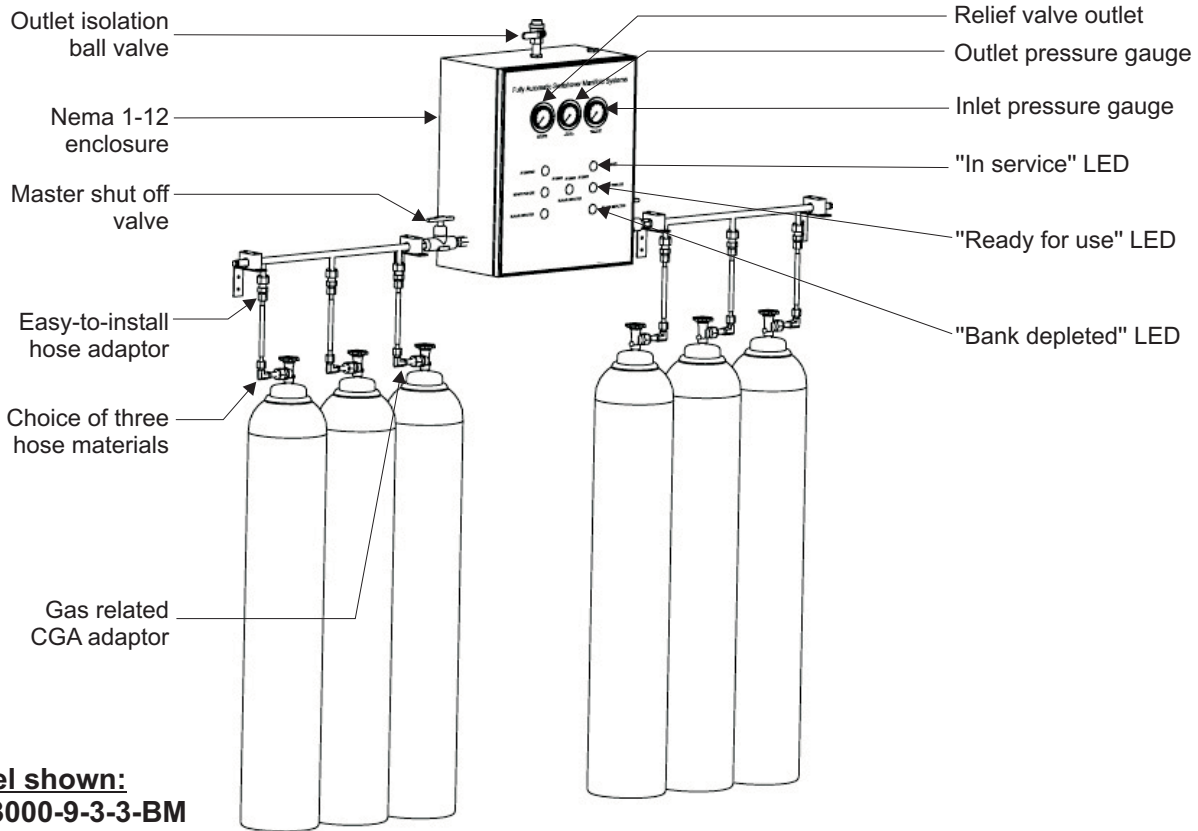
WESTERN

Innovative solutions for all your gas  delivery needs



FULLY AUTOMATIC SWITCHOVER MANIFOLDS

FAS
SERIES



Model shown:
FAS3000-9-3-3-BM

Description

The WESTERN FAS Series fully automatic switchover manifolds can accommodate multiple portable liquid cylinders or high pressure cylinders divided into two banks. The FAS Series manifold provides uninterrupted and continuous gas flow. The system consists of a control box and one cylinder bank per side. The manifold is cleaned and tested for the indicated gas service and built to meet NFPA 99, CSA B51, ASME B31.3, CSA Z351 and CGA requirements.

Key Features

- Programmable Logic Controller (PLC) monitors all functions and controls the switchover process
- 22 mm LEDs indicate the status of each bank: "IN SERVICE", "READY FOR USE" or "BANK DEPLETED"
- Fully automatic switchover assuring uninterrupted gas flow - no knobs or handle to reset
- Mechanical gauges display pressure in psig and Bar
- Optional remote audible/visual alarm and floorstand
- Optional special header configurations available

How to order - part number matrix

Series	Fluids	Qty. of cyl. (left bank)	Qty. of cyl. (right bank)	Application	Options
FAS3000					
■ FAS350 = Liquid cylinders (gas use) to both sides	■ Air = 2			■ Bio Medical = BM	■ Floor Stand = FS
■ FAS3000 = 3000 psig cylinders to both sides	■ Argon = 3			■ Laser = L	■ Flashing Beacon = FB
■ FAS5000 = 5000 psig cylinders to both sides	■ Carbon dioxide = 4			■ Industrial = I	■ Audible alarm = AA
■ FAS3350 = Liquid cylinders as main bank + 3000 psig cylinders as back up	■ Helium = 5			■ High Purity = HP	
■ FAS5350 = Liquid cylinders as main bank + 5000 psig cylinders as back up	■ Nitrogen = 7				
	■ Oxygen = 9				
	Other, please specify				

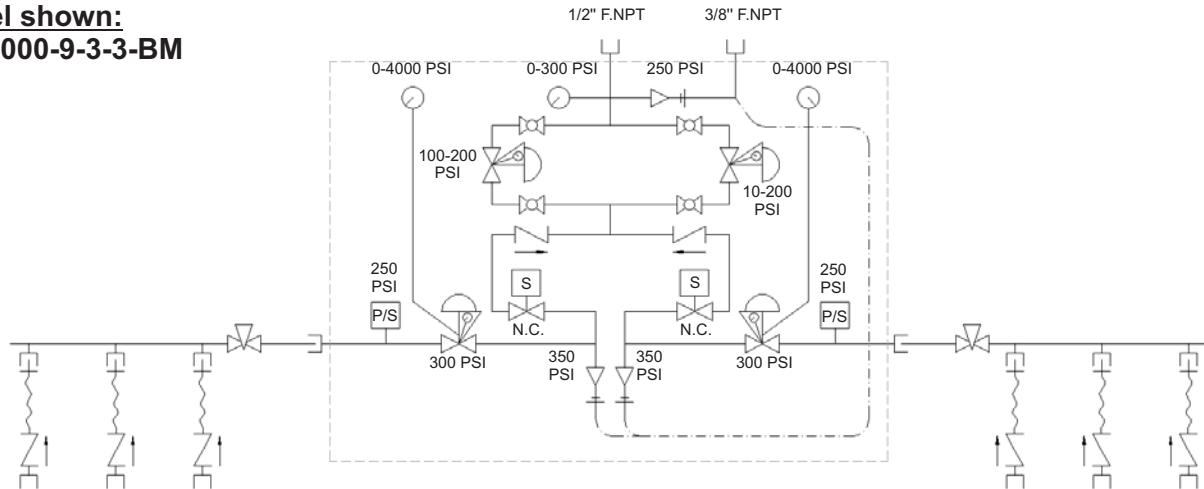
Contact Technical Sales 800.783.7890



FULLY AUTOMATIC SWITCHOVER MANIFOLDS FOR GASEOUS WITHDRAWAL FAS SERIES TECHNICAL SPECIFICATIONS

Flow diagram

**Model shown:
FAS3000-9-3-3-BM**



Standard materials of construction

Part

Enclosure	Aluminum
Headers	Stainless steel TP304/F304 - brass CDA 36000
Tubing	Stainless steel TP304 - copper ASTM B280/B819
Fittings	Brass ASTM B16/B453 - stainless steel 316
Flexible hoses	
Nylon hose (Thermoplastic):	Innercore: SAE J517 100 R8 - Nylon - fittings: steel
Teflon hose:	Innercore: virgin PTFE smooth bore tubing - overbraid: stainless steel - fittings: brass
All stainless steel hose:	Innercore: 321 stainless steel - overbraid: 304 stainless steel - fittings: 316C stainless steel
Relief valves	Body, seat retainer: brass ASTM B16 - adjusting screw, springs: stainless steel 316 - Disc: PTFE
Inlet regulators	Body: forged brass - diaphragm: stainless steel - housing cap: forged brass - inlet filter: bronze
Pressure switches	Piston: stainless steel - "O"-ring: Buna-N - connection: brass
Outlet pressure regulators	Body: forged brass - bonnet: nickel plated aluminium - diaphragm: nitrile with PTFE liner - springs: stainless steel - "O"-rings: viton (EPDM seat disc & "O"-rings for nitrous oxide and carbon dioxide)
Solenoid valves	Body: brass - Seals & Discs: Buna "N" or Teflon - Disc Holder: Nylon - Core tube: 305 S.S. - Core & plugnut: 403F S.S. - shading coil: copper
Master valves	Body, bonnet, stem, seat retainer, stem seal retaining rings and washer: brass - stem "O"-ring: Viton - handweel washer: PTFE

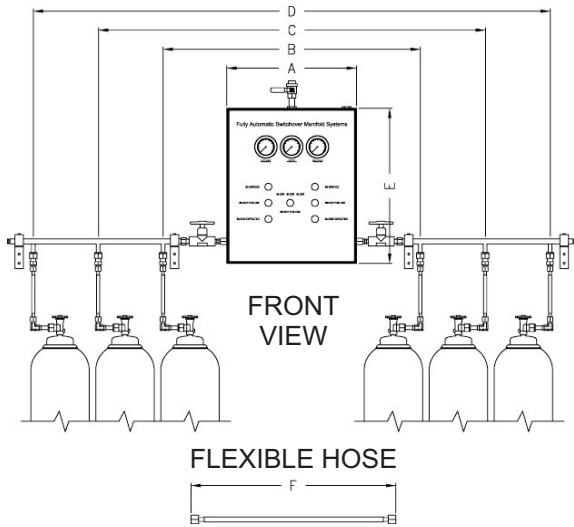
Technical specifications

	FAS350	FAS3000	FAS5000
Max. inlet pressure	350 psig	3000 psig	5000 psig
Outlet pressure range	5-110 psig	10-200 psig	10-200 psig
Low alarm setpoint & switchover setpoint	135 psig	250 psig	300 psig
Inlet gauges	0-400 psig	0-4000 psig	0-6000 psig
Outlet gauge	0-200 psig	0-300 psig	0-300 psig
Operating temperature		5°C to 50°C	
Power requirement		110 VAC 50-60 Hz	
Enclosure rating		Nema 1-12	
Gauge size		2-1/2" dial	
Pilot lights		22 mm, LED, 110 VAC	



FULLY AUTOMATIC SWITCHOVER MANIFOLDS FOR GASEOUS WITHDRAWAL FAS SERIES TECHNICAL SPECIFICATIONS

Dimensional drawing

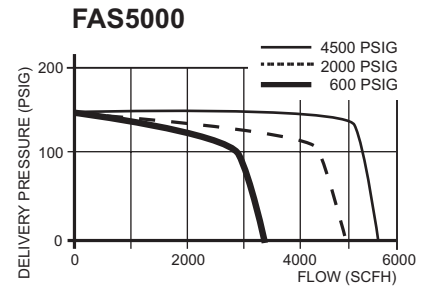
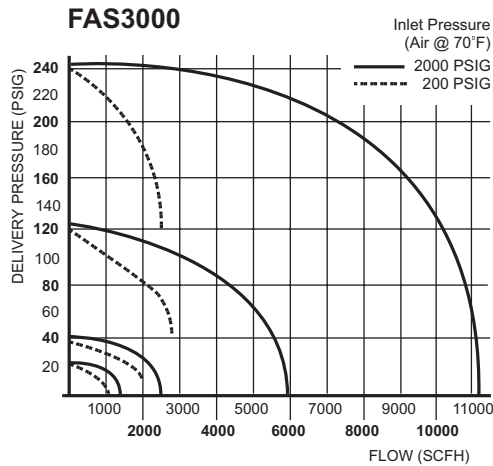
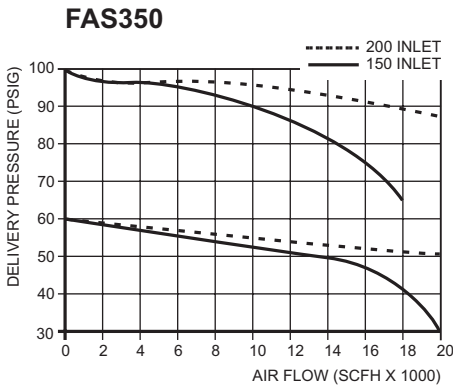


	FAS350	FAS3000	FAS5000
A	20"	20"	20"
B	38"	38"	38"
C	78"	58"	58"
D	118"	78"	78"
E	24"	24"	24"
F*	60"	30"	30"

*HOSES FOR BULKPACKS (CYLINDER CLUSTERS) ARE 72" LONG.

CONTROL BOX DEPTH: 11"

Flow charts



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