AIR LIQUIDE
SPECIALTY GASES

SCOTT™ 8100 Series Single or Dual-Cylinder Manifolds

A safe, convenient and cost-effective way to connect and changeout cylinders

Benefits and Features

- Reduces maintenance costs and improves safety by eliminating the need to repeatedly handle the regulator during cylinder changeouts.
- Helium-tested to ensure system integrity and eliminate costly gas leaks.
- Integral check valve prevents backflow of gas.
- Provides a convenient, inexpensive means of connecting a gas cylinder to distribution tubing.
- Dual-cylinder configuration available for added flexibility.

SCOTT™ 8100 Series Manifolds

Applications

SCOTT 8100 Series manifolds, complete with mounting brackets, are ideal for applications where gas consumption warrants one or two cylinders. They provide a safe, cost-effective means of connecting and changing out cylinders by eliminating the need to repeatedly handle the regulator. Available in brass or stainless steel with options to suit any application, SCOTT 8100 manifolds are compatible with all SCOTT brand regulators but can be purchased without depending on your needs. They ensure years of safe, economical, contaminant-free gas delivery. Each manifold comes complete with a 2-foot flexible stainless steel pigtail. Dual-cylinder models include two pigtails and built-in isolation valves.

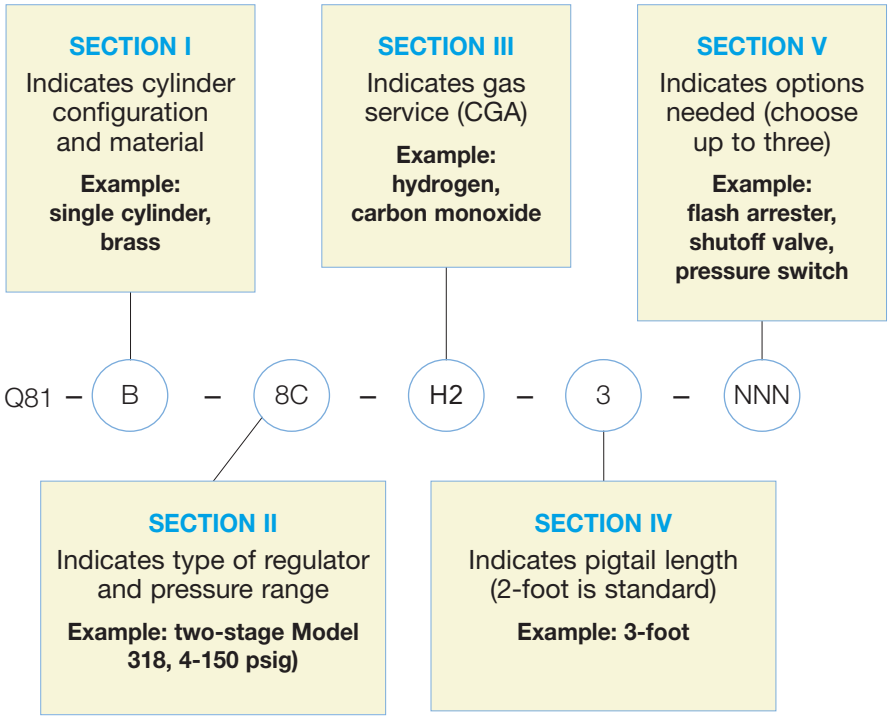
Dual-cylinder configuration allows connection of two gas cylinders to your distribution system.

Selection Guide

How to Order

Using the selection guide below, you can determine the correct part number for ordering an 8100 manifold appropriate for your specific application.

First, make one selection from each of Sections I through IV. Then add one or more optional selections from Section V as needed.



Specifications

Inlet Pressure Rating:
3000 psig (207 bar)

Operating Temperature Range:

Without Regulator:
-60ºF to 200ºF (-51ºC to 93ºC)

With Regulator:
-40ºF to 140ºF (-40ºC to 60ºC)

Connection: 1/4" NPT

Weight: 4 lbs. (1.8 kg) without regulator

Bracket Dimensions:
1.25" x 5" x 9"
(3.2 cm x 12.7 cm x 22.9 cm)

Materials of Construction

Bracket: Rigid flat stock with 316L Stainless Steel 1/4" NPT Male coupling

Pigtail: 2-foot stainless steel flexible pigtail with brass or 316L Stainless Steel CGA connection as appropriate

Check Valve:

Brass: Brass/Viton®

Stainless steel:
316 Stainless Steel, Viton®

Isolation Valve(s)*:

Brass: Brass/PCTFE, diaphragm packless, Teflon® tape

Stainless steel: 316 Stainless Steel, PCTFE, diaphragm packless, Teflon® tape

**Included in double-cylinder configuration.*

Selection Guide Continued

		SECTION I Cylinder Type and Material			
		BRASS		STAINLESS STEEL	
		Single Cylinder Q81-B	Dual-Cylinder Q81-C	Single Cylinder Q81-S	Dual-Cylinder Q81-T
SECTION II Regulator & Pressure Range					
psig	**bar**	**Single-Stage Model 3300**		**Single-Stage Model 213**	
1–30	0.1–2	3A	3A	1A	1A
2–75	0.1–5	3B	3B	1B	1B
4–150	0.3–10	3C	3C	1C	1C
7–300	0.5–21	3D	3D	1D	1D
10–500	0.7–35	3E	3E	1E	1E
psig	**bar**	**Two-Stage Model 318**		**Two-Stage Model 215**	
1–30	0.1–2	8A	8A	5A	5A
2–75	0.1–5	8B	8B	5B	5B
4–150	0.3–10	8C	8C	5C	5C
7–300	0.5–21	8D	8D	5D	5D
10–500	0.7–35	8E	8E	5E	5E
SECTION III Gas Service/CGA					
Air	590	A5	A5		
Argon	580	N2	N2		
Carbon dioxide	320	CD	CD		
Helium	580	N2	N2		
Hydrogen/carbon monoxide	350	H2	H2		
Nitrogen	580	N2	N2		
Nitrous oxide	326	N3	N3		
Oxygen	540	O2	O2		
Hydrogen chloride	330			HC	HC
Hydrocarbons	510	HY	HY		
Corrosives	660			C6	C6
SECTION IV Pigtail Length					
Two Feet (standard with purchase)		2	2	2	2
Three Feet		3	3	3	3
Four Feet		4	4	4	4
Five Feet		5	5	5	5
Six Feet		6	6	6	6
SECTION V Option(s)†					
Flash arrester		G	G	G	G
Flow limit safety shutoff valve		H	P	H	P
Pressure relief valve		J	J	S	S
Four cylinder floor rack		K	K	K	K
Purge assembly (stainless steel tee)		L	Q	L	Q
Isolation valve		M	Included	T	Included
Indicating pressure switch*		N	N	N	N
Cross purge assembly		—	—	v	—

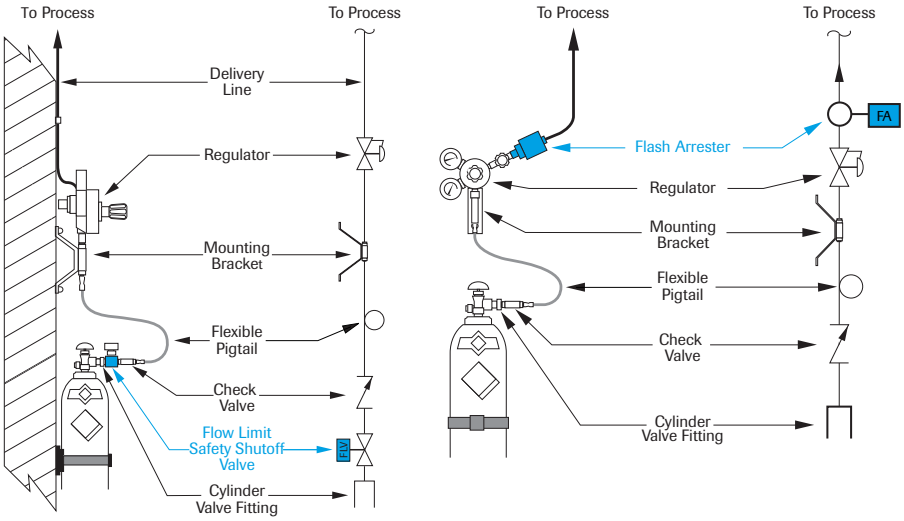
* *Not for use with flammable or oxygen service.*

† *When selecting more than three options, contact your Air Liquide representative for complete model number.*

SCOTT™ 8100 Series
Optional Equipment

Flow Limit Safety Shutoff Valve for Single-Cylinder Hook-Up

A flow limit safety shutoff valve stops potentially dangerous and expensive leaks by automatically shutting off all flow from the cylinder when flow exceeds a preset level. The flow limit valve should be installed between the cylinder outlet and the pressure regulator inlet. It senses flow as a pressure drop and closes the valve with a snap action for a leak-tight seal when the preset differential pressure limit is reached. To allow normal gas usage as the cylinder pressure decreases, the flow limit setting should be set to provide shutoff at six to ten times the anticipated actual process flowrate.



Flash Arrester on Single Cylinder

In order to prevent a flame from reaching the cylinder, a flash arrester should be installed on the down-stream side of the regulator.

The flash arrester is designed to:

1) check reverse flow.
2) extinguish flashbacks to prevent explosions in the regulator, pipeline or cylinder.
3) stop gas flow to eliminate feeding gas to any residual sparks or fire.

Flash arresters are recommended for oxygen, hydrocarbon and fuel gas service.

Other Optional Equipment

- Annunciator
- Cross purge assembly
- Flash arrester
- Flow limit shutoff valve
- Gas safety cabinet
- Indicating pressure switch
- 2' to 6' stainless steel flexible armored pigtail(s) with integral check valves
- Longer 3' to 6' stainless steel flexible pigtail(s) with integral check valves
- Pressure relief valve
- Tee purge assembly

8100 manifolds may be purchased online with same-day shipping on most.

MOLECULES that matter™

AIR LIQUIDE™

Founded in 1902, Air Liquide is a world leader in industrial and medical specialty gases and related services, providing innovative solutions for the manufacture of everyday products and for the protection of life.

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