Ordering CONCOA Regulators

In accordance with our philosophy of flexible design, CONCOA has developed a versatile modular manufacturing system to accommodate any individual requirement. With all the options CONCOA offers, listing discrete part numbers for each regulator series would be impossible. Therefore, we have created a part number matrix which allows you to design a regulator to meet the needs of any application.

Step One

The first choice in completing the Part Number Matrix is selecting a particular regulator series. Determine which regulator series are compatible with the gases involved in the application by consulting the table which starts on page 10. For further criteria, examine page 9 entitled "Choosing a Regulator', or view the description of each regulator series in this catalog. If you are having difficulty choosing, feel free to call CONCOA for a recommendation. The regulator series number then becomes the first three digits of the part number.

Step Two

Select the desired outlet pressure range from those available in the A column. The selection of an outlet pressure range automatically specifies the outlet pressure gauge which appears in the adjacent column. For example, a regulator with a 0-250 PSIG outlet pressure range will have a 0-400 PSIG pressure gauge installed.

Step Three

Choose the inlet pressure gauge from those available in the B column. While the most common cylinder pressure is between 2200 PSIG and 2400 PSIG, several gases are stored in cylinders at other pressures. Choosing the inlet gauge with a range that most closely approximates the actual pressure range of the cylinder allows easy readability of cylinder contents. Please note that by indicating the 0-6000 PSIG inlet gauge, you are also selecting a special PCTFE Capsule® with a maximum inlet pressure of 4500 PSIG.

Step Four

Indicate the outlet assembly desired from those available in the C column. Since there are a wide variety of tubing and piping systems in use, the matrix accommodates virtually any style of connection, eliminating the need for adapters and reducing potential leak paths. CONCOA also offers a choice of valve options for gas flow control.

Step Five

Select an assembly option from those available in the D column. A bare body regulator is shipped without peripherals, with all ports open and unplugged. A standard assembly regulator comes completely assembled with all selected peripherals, ready for use; a Cleanroom regulator is completely assembled in a Class 10 environment.

Step Six

Specify an inlet connection. On all regulator series, CONCOA will provide any CGA, DIN 477, BS 341, or other standard connection provided it is recognized as safe for the materials of construction and pressure rating of the regulator. Consult your gas supplier for proper selection of the inlet connection. A "-000" at the end of the part number indicates no inlet connection (1/4" female NPT for most regulators).

Step Seven

Choose an installed option from a range of protocol stations and purges. By ordering these options as a component of the part number, CONCOA can assure the materials, maximum pressure, and connections of the option chosen are appropriate. See information on Protocol Stations and purges.

For example, using the table below to order a 422 Series regulator with an outlet pressure range of 0-50 PSIG, a 0-4000 PSIG inlet pressure gauge, a diaphragm valve with a 1/4" compression tube fitting, PSIG/kPa pressure gauges, and a CGA 580 connection for Nitrogen service, the part number would be: 422 2331-580.

422	A		B	C	D	-CON	Options
Series 422	Outlet Pressure	Outlet Gauge	Inlet Gauge	Outlet Assemblies	Assembly/ Gauges	Inlet Connections	Installed options
	1: 0-15*	30"-0-30 PSIG	**0:** None	**0:** 1/4" FPT port	**0:** Bare body	**000:** 1/4" FPT	**A:** Protocol alarm station (110V)
	2: 0-50	30"-0-100 PSIG	**3:** 0-4000 PSIG	**1:** 1/4" MPT	**1:** Cleanroom assembly (PSIG/kPa gauges)	**TF2:** 1/8" tube	**B:** Protocol alarm station (220V)
	3: 0-100	30"-0-200 PSIG	**5:** 0-1000 PSIG	**2:** 1/4" tube fitting	**2:** Cleanroom assembly (BAR/PSIG gauges)	**TF4:** 1/4" tube	**C:** Protocol switchover station
	4: 0-250	0-400 PSIG	**6:** 0-300 PSIG	**3:** Diaphragm valve 1/4" tube fitting	**6:** Mirror image (PSI/kPa gauges)	**TF6:** 3/8" tube	**D:** Deep purge*
	5: 0-500**	0-1000 PSIG	**7:** 0-400 PSIG	**4:** Diaphragm valve 1/4" MPT	**7:** Mirror image (BAR/PSI gauges)	**M06:** 6mm tube	**G:** Protocol switchover station with alarm (110V)
	7: 0-150	30"-0-200 PSIG	**8:** 0-6000 PSIG*	**5:** Needle valve 1/4" MPT		CGA DIN 477 BS 341 and others available	**H:** Protocol switchover station with alarm (220V)
	**Not available with 4500 PSIG maximum inlet pressure* ***Standard assembly does not include relief valve*		**Maximum inlet pressure 4500 PSIG (310 BAR) with PCTFE seat Capsule®*	**6:** 1/8" tube fitting			**M:** Protocol station
				7: 3/8" tube fitting			**Q:** Protocol purge station*
				8: Diaphragm valve 1/8" tube fitting			**R:** SilcoNert™ 1020
				9: Diaphragm valve 1/4" FPT			**S:** Stainless steel bonnet
				M: 6mm tube fitting			**Not available with 4500 PSIG max inlet pressure*
				S: Diaphragm valve 6mm tube fitting			