

# 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 discreet 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 the facing page. For further criteria, consider page 8 entitled Choosing a Regulator and finally the description of each regulator series in this catalog. If you are having problems deciding, feel free to call CONCOA for a recommendation. The regulator series number then becomes the first three digits of the part number and is followed by a dash.
- 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<sup>®</sup> 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. Finally, each regulator must pass a battery of rigorous operational tests and a Helium Leak Integrity check.
- 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 (¼” female NPT).
- 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 appropriate materials, pressure maximum, and connections of the option chosen. See pages 26 through 29 for more information on Protocol Stations, and pages 115 and 116 for more information about 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 ¼” 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	-Inlet	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: ¼” FPT Port	0: Bare Body	000: ¼” FPT	A: Protocol Alarm Station (110V)
	2: 0-50	30”-0-100 PSIG	3: 0-4000 PSIG	1: ¼” MPT	1: Standard Assembly (PSIG/kPa Gauges)	TF2: ⅛” Tube	B: Protocol Alarm Station (220V)
	3: 0-100	30”-0-200 PSIG	5: 0-1000 PSIG	2: ¼” Tube Fitting	2: Standard Assembly (BAR/PSIG Gauges)	TF4: ¼” Tube	C: Protocol Switchover Station
	4: 0-250	0-400 PSIG	6: 0-300 PSIG	3: Diaphragm Valve ¼” Tube Fitting	4: Cleanroom Assembly (PSIG/kPa Gauges)	TF6: ⅜” Tube	D: Deep Purge
	5: 0-500	0-1000 PSIG	7: 0-400 PSIG	4: Diaphragm Valve ¼” MPT	5: Cleanroom Assembly (BAR/PSIG 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 ¼” MPT		CGA	H: Protocol Switchover Station with Alarm (220V)
				6: ⅛” Tube Fitting		DIN 477	M: Protocol Station
				7: ⅜” Tube Fitting		BS 341	S: SS Bonnet
				8: Diaphragm Valve ⅛” Tube Fitting		and others available	
				9: Diaphragm Valve ¼” FPT			
				A: ⅜” BSP Right Hand Fitting			
				M: 6mm Tube Fitting			
				S: Diaphragm Valve 6mm Tube Fitting			