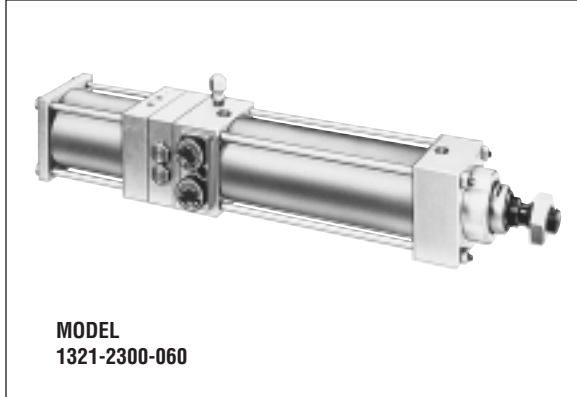




CONTROL LINE EQUIPMENT, INC.
 14750 Industrial Parkway • Cleveland, Ohio 44135
 (216) 433-7766 • FAX: (216) 433-7664

Series 13 Coaxial Air / Hydraulic Cylinder



Application Information

- Unique combination cylinder provides smooth, precise hydraulic control, but requires only a shop air supply. Oil cylinder concentric with air cylinder, results in unit about one-half the length of an in-line unit, and easier to install than side-by-side cylinder combination.
- These cylinders recommended for machine tool applications or work-piece feeding, and where precise speed control and smoothness are required.
- The compactness of the Series 13 is beneficial where long stroke length, with controlled and uniform speed throughout the stroke, is desirable.
- Dial-set, stepless, load-compensated, speed control in both directions assures smooth, uniform piston travel regardless of load fluctuations.
- Oil reservoir automatically compensates for volume changes with visual low-oil signal.
- Optional built-in skip-stop control for selection of rapid traverse or stop in either direction.

Specifications

Operating Air Pressure	30 p.s.i. minimum, 150 p.s.i. maximum.
Controlled Speed Either Direction	3 inches per minute minimum, 300 inches plus 60 inches or minus 40 inches maximum.
Effective Piston Area	4.6 square inches extending 3.14 square inches retracting.
Skip & Stop Valve Operation	A 60 p.s.i. minimum air pressure is required on coaxial cylinder operating at from 30 to 70 p.s.i. Cylinder pressures above 70 p.s.i. require a skip or stop valve pressure equal to 85% of operating pressure.
Skip Operation	Pressurizing Skip Port opens Skip Valve allowing speed control to be bypassed, either direction.
Stop Operation	Pressurizing Stop Port closes Stop Valve causing cylinder to immediately stop, in either controlled or skip feed modes.

HOW TO ORDER:

Refer to the table below and specify Series-And-Bore Number. Select suffix number indicating Cylinder Type, Control Option and Mounting Option. Add Stroke Length. This will produce a 4-digit prefix, 4-digit suffix and a dimension in inches. See typical model number beneath illustration above.

Series & Bore No.		Control Option		Rod Thread		Mounting Styles		Available Stroke Lengths	
No.	Bore	No.	Type	No.	Type	No.	Style	No.	Stroke
1321	2-1/2"	20	No Skip or Stop	0	3/4-10 UNC	0	Flush Mount	030	3"
		21	Skip Only	2	3/4-16 UNF	1	Low L	060	6"
		22	Stop Only	3	No Thread	3	Front Flange	090	9"
		23	Skip & Stop			4	Rear Flange	120	12"
								150	15"
								180	18"
								210	21"
								240	24"
								270	27"

FORM COAX 398



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