

# DAD-1000

**DAD** series

For pharmaceuticals, fine chemicals, and food ingredients purification

## **Preparative Dynamic Axial Compression Column**

Model DAD-1000 is an automatic packing column developed for high-pressure preparation. Constant pressurization of the packed bed enables self-packing of a high-durability column without creating voids. The slurry port enables operation from supplying of gel to pressurized packing with ease.

Higher sealing performance is achieved by a uniquely developed sealing structure (Japanese Patent No. 3929407). It can be used in a packing cycle for long periods. This column is entirely free from electric parts and therefore, safety use in explosion-proof area is possible. The column, manufactured in Japan, corresponds to IQ/OQ validation. We ensure a thorough support system for the maintenance and supply of consumables.

It is possible to select from various packing materials depending on the preparative object. Preparation and purification will be realized to your satisfaction together with a group of products designed exclusively by YMC.

Main Characteristics		
Product number	DAD-1000-700	
Inner diameter	1000 mm	
Packed bed length	100 - 400 mm	
Maximum pressure	7 MPa	
Compression	Constant pressurization (DAC)	
Driving direction	Downward *1	
Temperature	10 - 40 deg C, Below 50% RH	
Installation height	Inquiry	
Dimensions	Inquiry *2	
Weight	Inquiry *2	
Utility	0.5 MPa dry air	
Maximum Packing material	200 kg	

#### Recommended packing material:

Silica, Organic/inorganic hybrid silica 20 μm and larger

#### Resistance to solvent:

Ordinary solvents used in reversed-phase and normal-phase HPLC

- \*1 It is easy to unpack and collect gels from the bottom of the column by moving the cylinder down
- \*2 The hydraulic unit is a separate unit and not included in the dimensions and weight above



### **Specifications**

N	ame	Preparative Dynamic Axial Compression Column DAD-1000
Produc	t number	DAD-1000-700
Body	Size	Inner diameter = $\Phi$ 1000 mm, Length = 700 mm, Column volume = 549.5 L
	Inner finishing	Acid washing after honing process
	Roughness	Ra ≤ 0.5
Filter	Material	SUS316L (Sintered wire-mesh filter)
	Frit size	2 μm
	Material	PTFE
Seal –	Туре	Uniquely developed sealing structure
	Feature	Packing seals effectively in response to inner pressure of column.
	reature	Easy replacement
Cylinder	Feature	Stainless steel rod, Oil cylinder (Anti-rust coating on surface)
0.1	Source	Air-driven hydraulic pump
Oil pump	Air consumption	MAX 2200 L/min (ANR)*
	Switching valve	Change orientation of cylinder alignment (UP, DOWN, HOLD)
Operation	Pressure regulator	Adjust pressure of oil pump
	Pressure meter	Monitoring air operation and oil pressure
Cafatu davisa	Relief valve	Limit hydraulic pressure
Safety device	Emergency stop	Stop supplied air
Wetted	material	SUS316, SUS316L, PTFE, PCTFE
Non-wett	ed material	SUS304, Brass, Steel (Hydraulic equipment parts)
	Inlet/Outlet	1" Swagelok tube fitting
Connection	Slurry port	ISO 1.5S sanitary ferrule
	Air	Φ16 one-touch fitting

 $<sup>{}^*\</sup>textit{The specification of the hydraulic unit is subject to change depending on the installation site. Please contact us for details.}\\$ 

### **Option** (It is recommended to use a slurry container at the time of pouring slurry.)

Slurry container	Feature	Slurry can be carried easily
	Wetted material	SUS316, SUS316L, PTFE, PFA, FEP, SCS14
	Slurry hopper inner finishing	Electrolytic polishing
	Connection	Column connection: ISO 1.5S sanitary ferrule
		Air connection: Φ16 one-touch fitting
Flow path switching panel	Feature	3 three-way valves enable the flow path to be switched easily
Cylinder oil		NSF H1 approved oil is available

Before use (installation, operation, maintenance or check-up) of our products, instruction manuals should be carefully read and understood, and safety rules and precautions followed as outlined in the manuals.



YMC CO., LTD.

YMC Karasuma-Gojo Bldg., 284 Daigo-cho Karasuma Nishiiru Gojo-dori, Shimogyo-ku Kyoto, 600-8106, Japan TEL:+81-75-342-4515 FAX:+81-75-342-4550 www.ymc.co.jp sales@ymc.co.jp Distributor