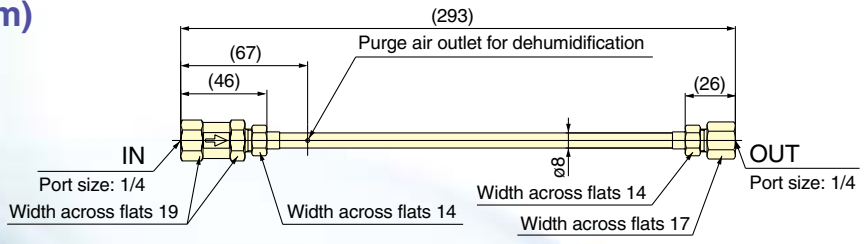
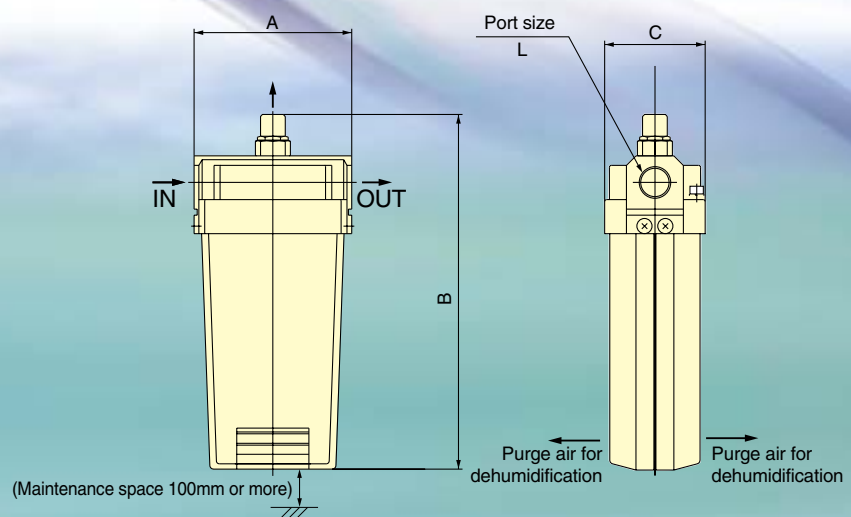


Dimensions (mm)

IDG1



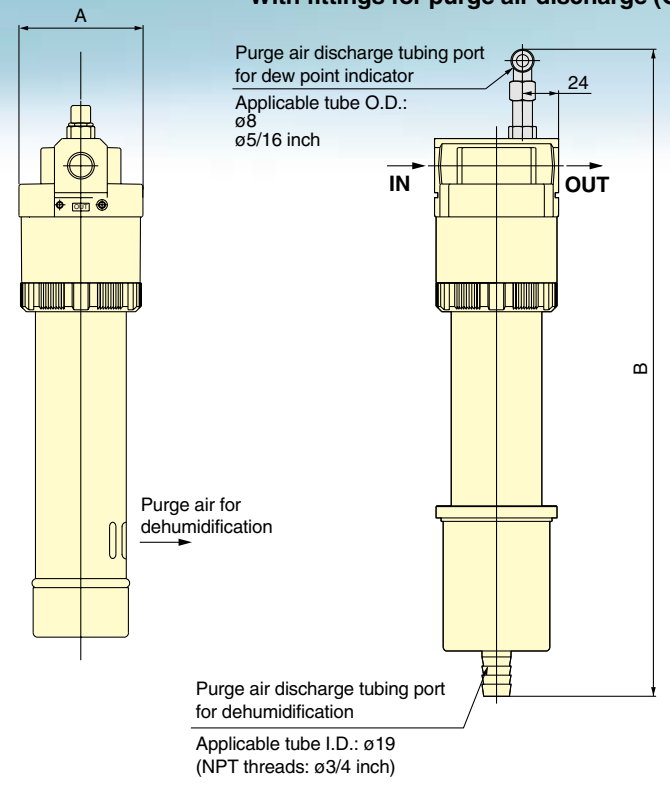
IDG3, 5, 10, 20



Model	Port size L	A	B	C
IDG3, 5	1/4	73	140	40
IDG10	3/8	83	187	53
IDG20		113	212	54

IDG 30, 50, 60, 75, 100

With fittings for purge air discharge (Option: P)



Model	Port size L	A	B
IDG30, 30L	3/8	70	361
IDG50, 50L			405
IDG60	1/2	91	428
IDG75, 100			468
IDG60L, 60S			548
IDG75L, 75S	1/2	91	618
IDG100L, 100S			618

Series IDG



Membrane Air Dryers

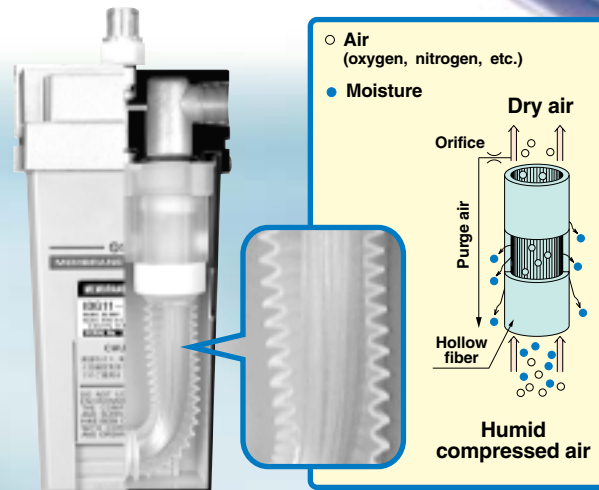
Series IDG

ROSEAIR

Membrane Air Dryer

Series IDG Membrane Air dryers are available for flow capacities up to 1000 L/min. and dew point temperatures of up to -76°F (-60°C). The dryers are also available with built in pre-filters, regulator and are ideal for point of use applications

Working Principle



The membrane air dryer uses hollow fibers composed of a macro molecular membrane through which moisture passes easily, but is difficult for air (oxygen and nitrogen) to pass through.

When humid, compressed air is supplied to the inside of the hollow fibers, only moisture permeates the membrane and moves to the outside due to the pressure difference between the moisture inside and outside of the fibers. The compressed air becomes dry air and continues out of the dryer. Part of the dry air from the outlet side is passed through a very small orifice to reduce the pressure and purge the outside of the hollow fibers. The moisture which permeated to the outside of the hollow fibers is discharged to the atmosphere by this purge air. In this way, the partial pressure outside of the hollow fibers remains low and dehumidification is continuously performed.

Feature

- No power supply required
- No refrigerants and desiccants used
- No moving parts
- Compact and light weight
- Fitted with dew point indicator

Benefit

- Saves electrical wiring and associated labor costs
- Environmentally friendly
- No vibration or heat generation
- Saves installation space
- Confirms air drying at a glance



Purge air discharge fitting for dew point indicator

Purge air discharge fitting for dehumidification

Applications

- Machine tools (air bearings, lasers, etc.)
- Precision measuring equipment (3-D measuring machines)
- Semiconductor manufacturing equipment
- Semiconductor inspection equipment
- Dental equipment
- Chemical analysis equipment
- Ozonizers, Hydrogen gas generating equipment
- Packaging machines, Paper making machines, Food processing machines
- Printed circuit board IC mounting machines
- Fine particle drying, Transfer equipment
- Electrostatic and high grade coating
- Drying and cleaning of precision parts
- Condensation prevention in control panels
- General pneumatic equipment and pneumatic tools

Specifications

Single Type -4°F (-20°C) Dew point

Model	Flow						Port NPT	Weight		Bracket
	Inlet		Outlet		Purge			lbs	kg	
	L/min	CFM	L/min	CFM	L/min	CFM				
IDG1-N02-P	12.5	0.44	10	0.35	2.5	0.09	1/4"	0.24	0.11	-
IDG3-N02-PS	31	1.09	25	0.88	6	0.21	1/4"	0.55	0.25	BM59
IDG5-N02-PS	62	2.19	50	1.77	12	0.42	1/4"	0.55	0.25	BM59
IDG10-N03-P	125	4.41	100	3.53	25	0.88	3/8"	0.95	0.43	BM61
IDG20-N03-P	250	8.83	200	7.06	50	1.77	3/8"	1.46	0.66	BM63
IDG30-N03-P	375	13.24	300	10.59	75	2.65	3/8"	1.63	0.74	BM64
IDG50-N03-P	625	22.07	500	17.66	125	4.41	3/8"	1.7	0.77	BM64
IDG60-N04-P	725	25.6	600	21.19	125	4.41	1/2"	3.31	1.5	BM65
IDG75-N04-P	900	31.78	750	26.49	150	5.29	1/2"	3.31	1.5	BM65
IDG100-N04-P	1190	42.02	1000	35.31	190	6.71	1/2"	3.42	1.55	BM65

Single Type -40°F (-40°C) Dew point

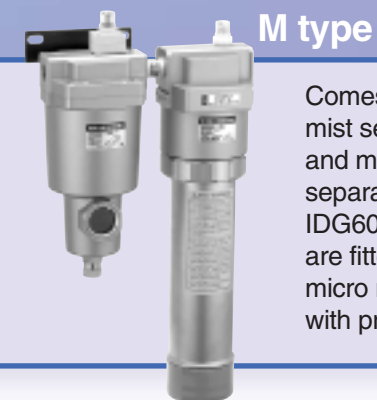
Model	Flow						Port NPT	Weight		Bracket
	Inlet		Outlet		Purge			lbs	kg	
	L/min	CFM	L/min	CFM	L/min	CFM				
IDG30L-N03-P	100	3.53	75	2.65	25	0.88	3/8"	1.63	0.74	BM64
IDG50L-N03-P	150	5.29	110	3.88	40	1.41	3/8"	1.7	0.77	BM64
IDG60L-N04-P	227	8.02	170	6	57	2.02	1/2"	3.31	1.5	BM65
IDG75L-N04-P	320	11.3	240	8.48	80	2.82	1/2"	3.64	1.65	BM65
IDG100L-N04-P	400	14.12	300	10.59	100	3.53	1/2"	3.97	1.8	BM65

Single Type -76°F (-60°C) Dew point

Model	Flow						Port NPT	Weight		Bracket
	Inlet		Outlet		Purge			lbs	kg	
	L/min	CFM	L/min	CFM	L/min	CFM				
IDG60S-N04-P	77	2.72	50	1.77	27	0.95	1/2"	3.31	1.5	BM65
IDG75S-N04-P	154	5.44	100	3.53	54	1.91	1/2"	3.64	1.65	BM65
IDG100S-N04-P	235	8.29	150	5.29	85	3	1/2"	3.97	1.8	BM65

1. Flow rates indicated are at ambient temperature of 68°F (25°C) are at atmospheric pressure.
2. All dryers come with dew point indicator (except IDG1) and fitting for purge air discharge.
3. P/A recommends the use of mist separator (Series AFM) and micro separator (Series AFD) at the inlet of IDG membrane dryer.

Membrane Air Dryer Unit



M type

Comes with pre-filter mist separator AFM, and micro mist separator AFD. IDG60M, IDG100M are fitted with AMH micro mist separator with pre-filter.

V type



Comes with pre-filter as detailed left + regulator AR.

Series IDG

Series IDG