

Selection

The flow rate of the compressor is the basis of model selection but with the decrease of pressure or the increase of temperature, saturated water content entering the dryer will be increased. Therefore, it is necessary to adjust the model selection according to the actual conditions to ensure that the system configuration is reasonable and the operation is stable and reliable.

Inlet Temperature Correction -CX

Inlet	℃	20	25	30	35	40	45	50
Temperature	CX	1.20	1.00	1.00	1.00	0.80	0.70	0.50

Pressure Correction PX

Pressure	MPa	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2
	PX	0.60	0.75	0.85	1.00	1.02	1.05	1.10	1.15	1.20

Pressure Dew point Correction -CF

Pressure	℃	-20	-40	-50	-60	-70
Dew point	CF	1.10	1.00	0.70	0.60	0.50

Corrected dryer flow rate = Compressor flow rate / (CX * PX * CF)

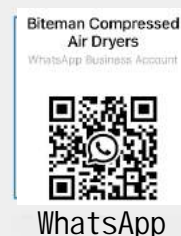
For example Compressor flow rate is 20m³/min, then Inlet temperature is 40°C, operating Pressure is 0.6Mpa, and the required Pressure Dewpoint is -40°C, so the corrected dryer flow rate = 20m³/min / (0.8 * 0.85 * 1) = 29.41m³/min. As the above dryer sizing table, the correct dryer for this application should better be selected a model with a nearer flow rate of 29.41m³/min, that is a BTGMXD295-A

Note: equipment selection should fully meet the requirements of the worst working conditions, to ensure safety and reliability, consider the standby machine, when necessary, to avoid the impact of maintenance, failure and other equipment on production gas and shutdown loss.



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ALL FOR BETTER PRODUCTION

Biteman Desiccant Cartridge Dryer

World's leading compressed air drying and purification equipment

Features:

- ▲ Constant Pressure Dewpoint -40 °C ~ -70
- ▲ Easy maintenance, Convenient replacement of absorbent (independent Desiccant Cartridge)
- ▲ LCD touch panel displays operation parameters in real-time, Consumables replacement reminder
- ▲ Automatically adjustment of purge air (DRAC function)



PARTS DISPLAY OF
DESICCANT CARTRIDGE DRYER



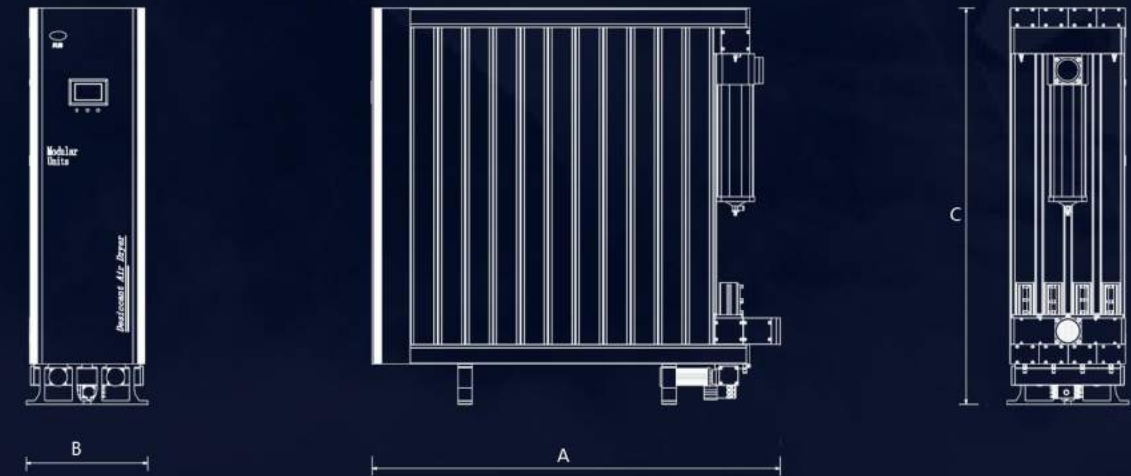
Note: Due to the different sizes of the models, it is divided into 2P machines and 4P machines
illustrate: ① -Display panel、② -power switch button、③ -Control System、④ -base、⑤ -outlet manifold、⑥ -one-way valve seat、



⑦ -one-way valve 、⑧ -Air outlet、⑨ -Adsorption core、
⑩ -outlet filter、⑪ - junction box、⑫ -Biaxial cylinder、
⑬ -intake valve seat、⑭ -Water separator、⑮ -Air inlet、
⑯ -Exhaust valve seat、⑰ -Silencer、⑱ -Central drain valve

Specification of Biteman Desiccant Cartridge Dryer (Heat)

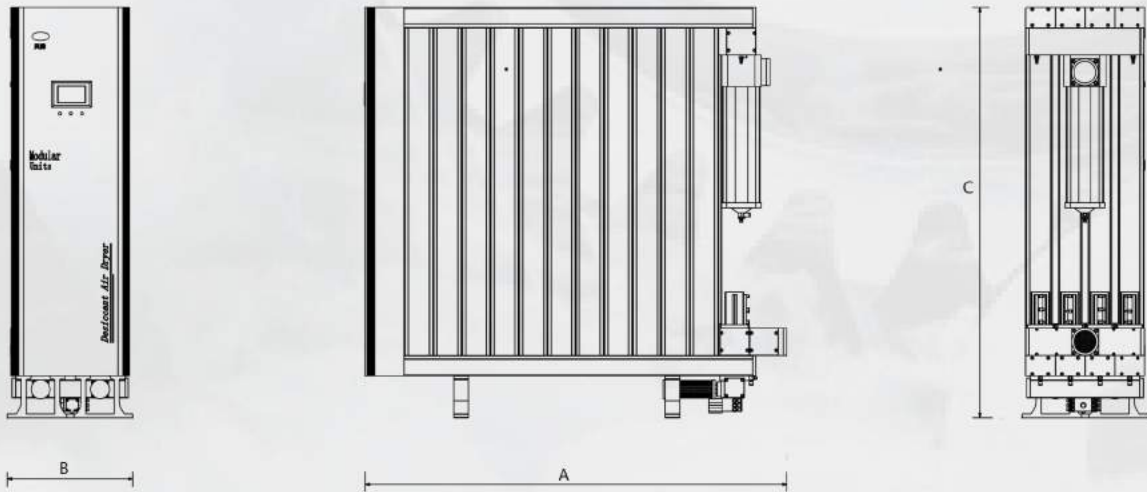
Model		Pipe size	Volume flow (m³/min) @ 0.7~0.8MPa	Normal size (mm)			Normal item wgt (kg)	BTHG size (mm)			BTHG wgt (kg)	power (kW)
Normal item	BTGMXD065-A/B	DN50	6.5	819	275	1688	170	808	275	1688	183	0.85
BTHG series	BTHGMXD065-A/B											
Normal item	BTGMXD085-A/B	DN50	8.5	927	275	1688	203	924	275	1688	219	1.05
BTHG series	BTHGMXD085-A/B											
Normal item	BTGMXD106-A/B	DN50	10.6	1035	275	1688	239	1040	275	1688	259	1.05
BTHG series	BTHGMXD106-A/B											
Normal item	BTGMXD146-A/B	DN50	14.6	1252	275	1688	305	1272	275	1688	332	1.45
BTHG series	BTHGMXD146-A/B											
Normal item	BTGMXD165-A/B	DN50	16.5	1360	275	1688	340	1388	275	1688	375	1.65
BTHG series	BTHGMXD165-A/B											
Normal item	BTGMXD206-A/B	DN80	20.6	1589	275	1688	390	1633	275	1688	435	2.05
BTHG series	BTHGMXD206-A/B											
Normal item	BTGMXD248-A/B	DN80	24.8	1806	275	1688	526	1865	275	1688	574	2.45
BTHG series	BTHGMXD248-A/B											
Normal item	BTGMXD295-A/B	DN80	29.5	1264	516	1688	595	1285	516	1688	646	2.85
BTHG series	BTHGMXD295-A/B											
Normal item	BTGMXD336-A/B	DN80	33.6	1372	516	1688	643	1401	516	1688	678	3.25
BTHG series	BTHGMXD336-A/B											
Normal item	BTGMXD385-A/B	DN80	38.5	1480	516	1688	720	1517	516	1688	790	3.65
BTHG series	BTHGMXD385-A/B											
Normal item	BTGMXD425-A/B	DN80	42.5	1588	516	1688	790	1633	516	1688	870	4.05
BTHG series	BTHGMXD425-A/B											
Normal item	BTGMXD465-A/B	DN100	46.5	1680	516	1688	850	1732	516	1688	940	4.45
BTHG series	BTHGMXD465-A/B											
Normal item	BTGMXD516-A/B	DN100	51.6	1789	516	1688	922	1848	516	1688	1018	4.85
BTHG series	BTHGMXD516-A/B											
Normal item	BTGMXD568-A/B	DN100	56.8	1897	516	1688	996	1964	516	1688	1106	5.25
BTHG series	BTHGMXD568-A/B											



Standard working condition: Working pressure $0.7\text{ MPa} \leq P < 0.8\text{ MPa}$, Inlet temperature $T \leq 35\text{ }^{\circ}\text{C}$;
Applied working condition: Working pressure $0.4\text{ MPa} \leq P < 1.0\text{ MPa}$, Inlet temperature $2\text{ }^{\circ}\text{C} \leq T \leq 35\text{ }^{\circ}\text{C}$
Technical performance: $\text{PDP} \leq -40\text{ }^{\circ}\text{C}$, Purge air 2%, Pressure loss $\leq 0.02\text{ MPa}$, Noise $\leq 75\text{ dB}$
Standard configuration: Biteman control system
Standard power supply: 220V 50Hz
Optional configuration: Pressure Dew Point display, DCS remote control function, Biteman flow meter, smart electricity meter
High pressure model of Working pressure $1\text{ MPa} \leq P < 2\text{ MPa}$, and model of Flow range $59 \sim 120\text{ m}^3/\text{min}$ can be customized

Specification of Biteman Desiccant Cartridge Dryer (Heatless)

Model		Pipe size	Volume flow (m³/min) @ 0.7~0.8 MPa	Normal size (mm)			Normal wgt (kg)	BTHG size (mm)			BTHG wgt (kg)	Power (kW)
Normal item	BTGMXW015-A/B	DN25	1.5	572	275	732	85	692	275	732	93	0.05
BTHG series	BTHGMXW015-A/B											
Normal item	BTGMXW026-A/B	DN25	2.6	572	275	952	87	692	275	952	95	0.05
BTHG series	BTHGMXW026-A/B											
Normal item	BTGMXW038-A/B	DN25	3.8	688	275	952	107	808	275	952	115	0.05
BTHG series	BTHGMXW038-A/B											
Normal item	BTGMXW065-A/B	DN50	6.5	819	275	1688	167	808	275	1688	180	0.05
BTHG series	BTHGMXW065-A/B											
Normal item	BTGMXW085-A/B	DN50	8.5	927	275	1688	200	924	275	1688	216	0.05
BTHG series	BTHGMXW085-A/B											
Normal item	BTGMXW106-A/B	DN50	10.6	1035	275	1688	235	1040	275	1688	255	0.05
BTHG series	BTHGMXW106-A/B											
Normal item	BTGMXW146-A/B	DN50	14.6	1252	275	1688	300	1272	275	1688	328	0.05
BTHG series	BTHGMXW146-A/B											
Normal item	BTGMXW165-A/B	DN50	16.5	1360	275	1688	335	1388	275	1688	370	0.05
BTHG series	BTHGMXW165-A/B											
Normal item	BTGMXW206-A/B	DN80	20.6	1589	275	1688	390	1633	275	1688	430	0.05
BTHG series	BTHGMXW206-A/B											
Normal item	BTGMXW248-A/B	DN80	24.8	1806	275	1688	520	1865	275	1688	568	0.05
BTHG series	BTHGMXW248-A/B											
Normal item	BTGMXW295-A/B	DN80	29.5	1264	516	1688	585	1285	516	1688	640	0.05
BTHG series	BTHGMXW295-A/B											
Normal item	BTGMXW336-A/B	DN80	33.6	1372	516	1688	635	1401	516	1688	670	0.05
BTHG series	BTHGMXW336-A/B											
Normal item	BTGMXW385-A/B	DN80	38.5	1480	516	1688	710	1517	516	1688	782	0.05
BTHG series	BTHGMXW385-A/B											
Normal item	BTGMXW425-A/B	DN80	42.5	1588	516	1688	780	1633	516	1688	860	0.05
BTHG series	BTHGMXW425-A/B											
Normal item	BTGMXW465-A/B	DN100	46.5	1680	516	1688	840	1732	516	1688	928	0.05
BTHG series	BTHGMXW465-A/B											
Normal item	BTGMXW516-A/B	DN100	51.6	1789	516	1688	910	1848	516	1688	1006	0.05
BTHG series	BTHGMXW516-A/B											
Normal item	BTGMXW568-A/B	DN100	56.8	1897	516	1688	984	1964	516	1688	1088	0.05
BTHG series	BTHGMXW568-A/B											



Standard working condition: Working pressure $0.7\text{ MPa} \leq P < 0.8\text{ MPa}$, Inlet temperature $T \leq 35\text{ }^{\circ}\text{C}$;
Applied working condition: Working pressure $0.4\text{ MPa} \leq P < 1.0\text{ MPa}$, Inlet temperature $2\text{ }^{\circ}\text{C} \leq T \leq 35\text{ }^{\circ}\text{C}$
(If T exceed $35\text{ }^{\circ}\text{C}$, please consult with Biteman technology);
Technical performance: $\text{PDP} \leq -40\text{ }^{\circ}\text{C}$, Purge air 3%, Pressure loss $\leq 0.02\text{ MPa}$, Noise $\leq 75\text{ dB}$
Standard configuration: Biteman control system
Standard power supply: 220V 50Hz
Optional configuration: Pressure Dew Point display, DCS remote control function, Biteman flow meter, smart electricity meter.
High pressure model of Working pressure $1\text{ MPa} \leq P < 2\text{ MPa}$, and model of Flow range $59 \sim 120\text{ m}^3/\text{min}$ can be customized.