

2-1 Membrane Type

Following five types of the membrane are available now:

Membrane type	High pressure side of hollow fiber	Application for	Limit	
			Differential pressure bar (psi)	Temperature (°C)
A	outside	H ₂ , He, CO ₂	35(500)	150(300)
B-L	outside	H ₂ , He, CO ₂	35(500)	150(300)
B-H	outside	H ₂ , He, CO ₂	100(1400)	100(210)
C	inside	dehumidification	10(140)	100(210)
D	outside or inside	dehydration	10(140)	150(300)

2-2 Characteristic of Membrane

UBE's membranes characterize properties in various ways, heat resistance, chemicals tolerance, high selective permeability in gas separation, etc. Permeation rates for various gas components of each membrane type are shown in the example permeability data.

2-3 Module Model

Tabulated membrane modules with polyimide hollow fiber are available.

Module type	Application	Material		Allowable pressure barg (psig)
		Membrane type	Vessel	
UBE GAS SEPARATOR				
100mmD x 2000mmL (4inD x 80inL)	H ₂ , He, CO ₂	A, B-L, B-H	Steel	40 (570) or 150 (2200)
100mmD x 4000mmL (4inD x 160inL)	H ₂ , He, CO ₂	A, B-L, B-H	Steel	40 (570) or 150 (2200)
200mmD x 2000mmL (8inD x 80inL)	H ₂ , He, CO ₂	A, B-L, B-H	Steel	40 (570) or 150 (2200)
200mmD x 4000mmL (8inD x 160inL)	H ₂ , He, CO ₂	A, B-L, B-H	Steel	40 (570) or 150 (2200)
130mmD x 1500mmL (5inD x 60inL)	Dehydration	D	Steel	3 (42)
200mmD x 1500mmL (8inD x 60inL)	Dehydration	D	Steel	3 (42)
UM				
A1	Dehumidification	C	Polycarbonate	10 (140)
A2	Dehumidification	C	Polycarbonate	10 (140)
A5	Dehumidification	C	Polycarbonate	10 (140)
B1	Dehumidification	C	Polycarbonate	10 (140)
B2	Dehumidification	C	Polycarbonate	10 (140)
B5	Dehumidification	C	Polycarbonate	10 (140)
B10	Dehumidification	C	Polycarbonate	10 (140)