

BIO-CEL® L+ 480

Scope of Supply

The BIO-CEL® MBR product is ideal for biological wastewater treatment in industrial and municipal applications. This product specification sheet provides details about the standard scope of supply, available accessories and spare parts of BIO-CEL L+ 480 modules.

Shipment dimensions and container transport information are detailed on page 2. BIO-CEL L+ 480 modules are shipped in cardboard. Part numbers in the below table are the standard scope of supply. For details about available accessories please refer to page 3. For spare parts please refer to page 5.

Table 1. Standard scope of supply

Part Number	Module Name	Comments
1000032170	BIO-CEL L+ 480	1.4301/304 (V2A), permeate port with G 2 ½ inner thread, air port with DN80 (PN10) pipe end in Polypropylene, incl. 4 adjustable legs with screws and nuts
1000032171	BIO-CEL L+ 480 SS316	1.4571/316Ti (V4A), permeate port with G 2 ½ inner thread, air port with DN80 (PN10) pipe end in Polypropylene, incl. 4 adjustable legs with screws and nuts
1000032277	BIO-CEL L+ 480 VICTAULIC	1.4301/304 (V2A), permeate port with 3" Victaulic outlet to the front, air port with DN80 (PN10) pipe end in Polypropylene, incl. 4 adjustable legs with screws and nuts
1000032278	BIO-CEL L+ 480 VICTAULIC SS316	1.4571/316Ti (V4A), permeate port with 3" Victaulic outlet to the front, air port with DN80 (PN10) pipe end in Polypropylene, incl. 4 adjustable legs with screws and nuts
1000032196	BIO-CEL L+ 480 FLANGE	1.4301/304 (V2A), permeate port with DN80 (PN 6) flange outlet on the front, air port with DN80 (PN10) pipe end in Polypropylene, preferred solution for BIO-CEL L-1 replacement, incl. 4 adjustable legs with screws and nuts
1000032197	BIO-CEL L+ 480 FLANGE SS316	1.4571/316Ti (V4A), permeate port with DN80 (PN 6) flange outlet on the front, air port with DN80 (PN10) pipe end in Polypropylene, preferred solution for BIO-CEL L-1 replacement, incl. 4 adjustable legs with screws and nuts

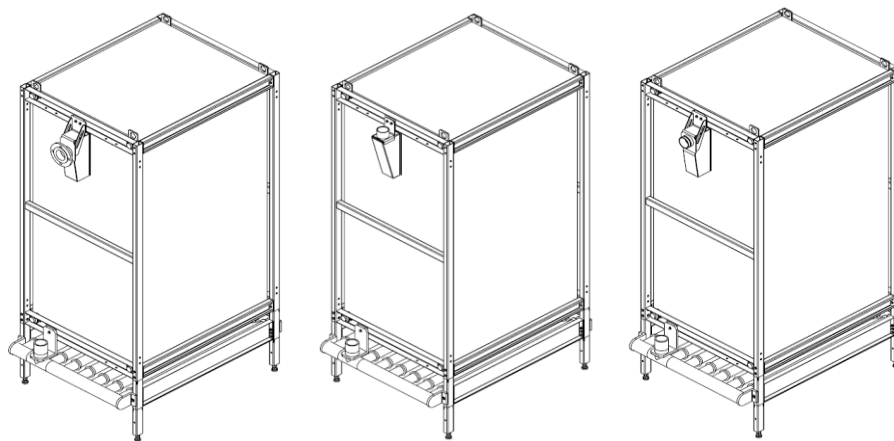


Figure 1. BIO-CEL L+ 480 scope of supply

Left BIO-CEL L+ 480 FLANGE, Center BIO-CEL L+ 480 (Standard), Right BIO-CEL L+ 480 VICTAULIC

Table 2. Cardboard shipment dimensions

	length	width	height	weight
BIO-CEL L+ 480	1,614 mm (5.3 ft)	1,136 mm (3.8 ft)	2,557 mm (8.4 ft)	433 kg (955 lb)

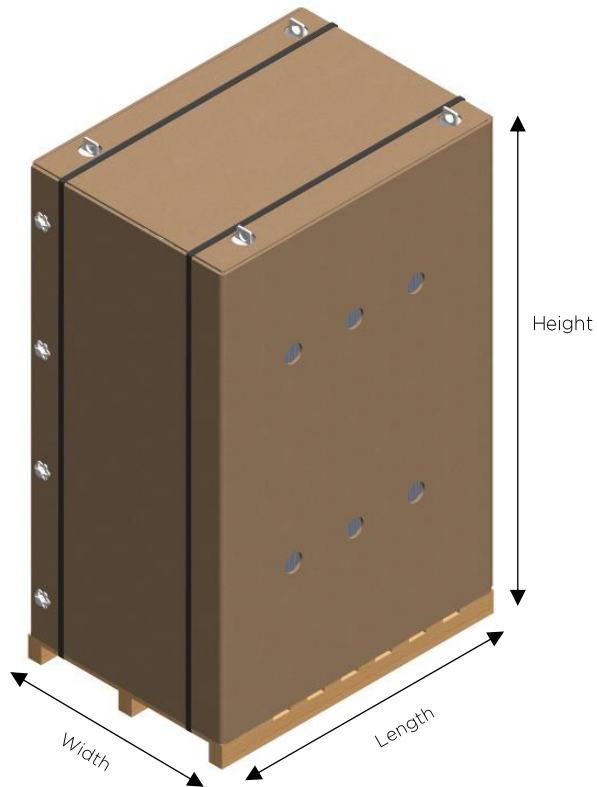


Figure 2. BIO-CEL L+ 480 in Transport packaging

Table 3. High cube container inner dimensions

	length	width	height
20 ft container	5,898 mm (19.4 ft)	2,350 mm (7.7 ft)	2,690 mm (8.8 ft)
40 ft container	12,032 mm (39.5 ft)	2,350 mm (7.7 ft)	2,700 mm (8.8 ft)
Door opening	-	2,350 mm (7.7 ft)	2,597 mm (8.5 ft)

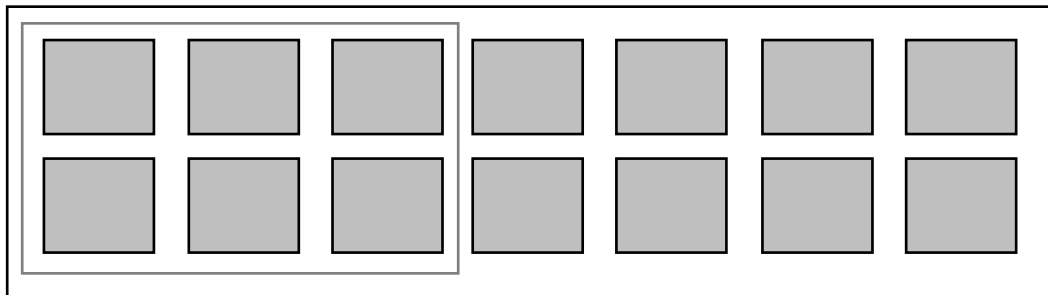


Figure 3. BIO-CEL L+ 480 arrangement in 20/40 ft HC container (6 / 14 pcs capacity)

BIO-CEL L+ 480

Accessories

To ensure proper installation and operation of BIO-CEL MBR modules, certain accessories may be necessary. Drawings of wall fixations, lifting & guiding system and hanging concepts can be sent on request.

Table 4. Accessories

Position	Part Number	Accessory	Material / Comment
A1	1000001433	BIO-CEL L Lifting Tool	Stainless Steel 1.4301/304
A2	1000000679	BIO-CEL L Air Port Flange Adapter	Polypropylene adapter to DN80 flange including DN80 Grip Clamp (Stainless Steel 1.4404/316L and EPDM sealing)
A3	1000003064	BIO-CEL L Air Pipe Extension Kit GP	Polypropylene pipe with DN80 flange including pipe support and DN80 Grip Clamp (Stainless Steel 1.4404/316L and EPDM sealing)
A4	1000002852	BIO-CEL L Permeate Pipe Extension Kit	DN80 (PN6) flange, Stainless Steel 1.4404/316Ti
A5	1000021089	BIO-CEL L Ground Fixation Set SS316	Set of 4 brackets including screws and nuts, Stainless Steel 1.4404/316Ti
A6	1000025074	BIO-CEL L Guide Brackets Set	Set of 4 brackets including screws and nuts, Stainless Steel 1.4301/304
	1000024949	BIO-CEL L Guide Brackets Set SS316	Set of 4 brackets including screws and nuts, Stainless Steel 1.4404/316Ti

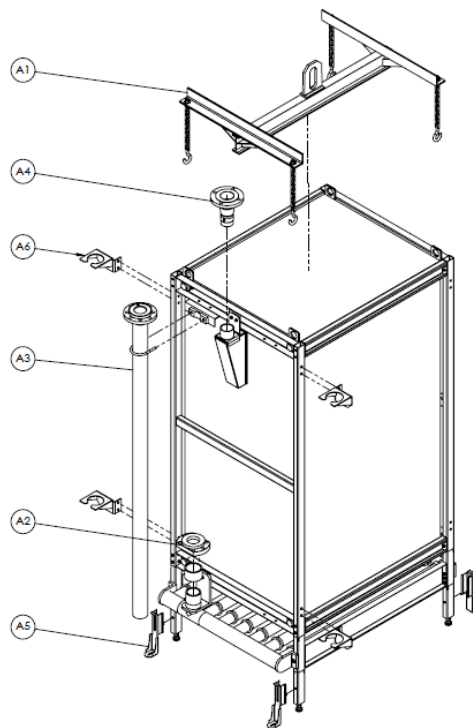


Figure 4. BIO-CEL L+ 480 accessories

BIO-CEL L+ 480

Spare Parts

No spare parts are typically required within the first 5 years of operation. If spare parts are needed, they may be ordered as per the table 5.

Table 5. Spare parts

Position	Part Number	Spare Part	Remarks
S1	1000032166	BIO-CEL L+ 480 Cassette	Stainless Steel 1.4301/304 (V2A)
	1000032168	BIO-CEL L+ 480 Cassette SS316	Stainless Steel 1.4571/316Ti (V4A)
(S1)	1000032279	BIO-CEL L+ 480 Victaulic Cassette	Stainless Steel 1.4301/304 (V2A)
	1000032290	BIO-CEL L+ 480 Victaulic Cassette SS316	Stainless Steel 1.4571/316Ti (V4A)
(S1)	1000023404	BIO-CEL L+ 480 Flange Cassette	Stainless Steel 1.4301/304 (V2A)
	1000023405	BIO-CEL L+ 480 Flange Cassette SS316	Stainless Steel 1.4571/316Ti (V4A)
S2	1000001436	BIO-CEL L Permeate Block Standard	1.4301/304 (V2A), permeate port with G 2 ½ inner thread
	1000022956	BIO-CEL L Permeate Block Standard SS316	1.4571/316Ti (V4A), permeate port with G 2 ½ inner thread
(S2)	1000022957	BIO-CEL L Permeate Block Flange	1.4301/304 (V2A), permeate port with DN80 (PN 6) flange
	1000022958	BIO-CEL L Permeate Block Flange SS316	1.4571/316Ti (V4A), permeate port with DN80 (PN 6) flange
(S2)	1000023000	BIO-CEL L Permeate Block 3" Victaulic	1.4301/304 (V2A), permeate port with 3" Victaulic outlet
	1000023001	BIO-CEL L Permeate Block 3" Victaulic SS316	1.4571/316Ti (V4A), permeate port with 3" Victaulic outlet
S3	1000001438	BIO-CEL L Diffuser grid Incl. Diffuser Hoses	Polypropylene (Grid) Silicone (Hoses)
S4	1000001470	BIO-CEL L Diffuser Hose Set SIL	Set of 8 silicone hoses, ear clamps, glue strips (changing diffuser hoses requires BIO-CEL L-2 Diffuser Tool)
S5	1000001432	BIO-CEL L Adjustable Legs	Set of 4 legs including screws and nuts, Stainless Steel 1.4301/304
	1000001457	BIO-CEL L Adjustable Legs SS316	Set of 4 legs including screws and nuts, Stainless Steel 1.4404/316Ti
-	1000001439	BIO-CEL L Diffuser Tool	Pliers for assembly of ear clamps

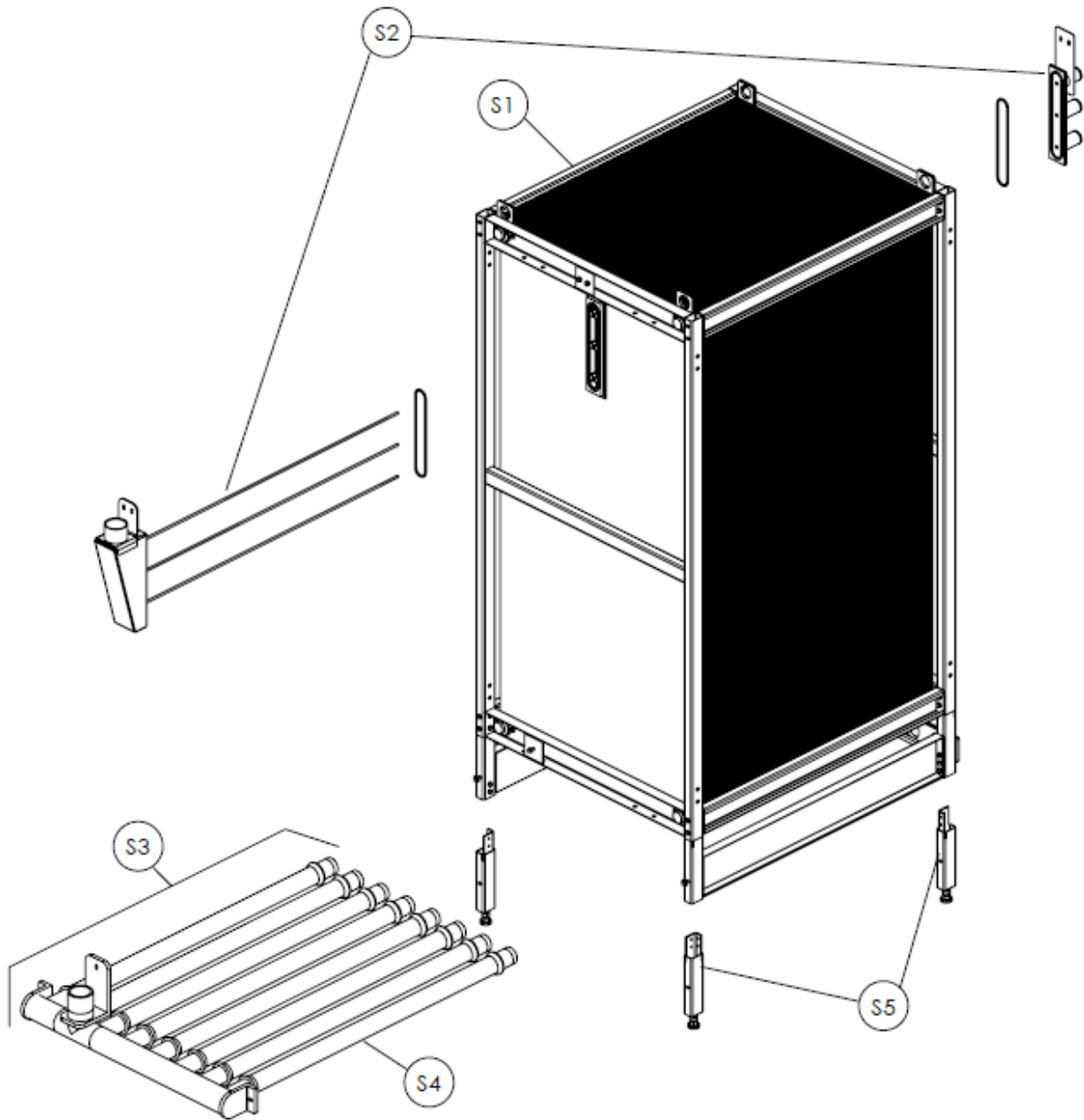


Figure 5. BIO-CEL L+ 480 spare parts

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