

BIO-CEL® L+ 960V

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+ 960V modules.

Shipment dimensions and container transport information are detailed on page 2 and 3. BIO-CEL L+ 960V 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 4. For spare parts please refer to page 5.

Please note that the second cassette and the connection parts are packed separately.

Table 1. Standard scope of supply

Part Number	Module Name	Comments
1000032174	BIO-CEL L+ 960V	1.4301/304 (V2A), permeate port with G 2 ½ inner thread, air port with DN80 (PN10) pipe end in Polypropylene, incl. adjustable legs and connection set with all brackets, stiffeners screws and nuts
1000032176	BIO-CEL L+ 960V SS316	1.4571/316Ti (V4A), permeate port with G 2 ½ inner thread, air port with DN80 (PN10) pipe end in Polypropylene, incl. adjustable legs and connection set with all brackets, stiffeners screws and nuts

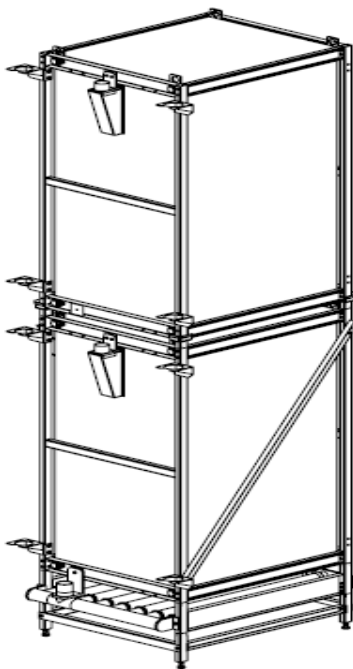


Figure 1. BIO-CEL L+ 960V scope of supply

BIO-CEL L+ 960V packaging consists of three pieces, two carboards as shown in Figure 2 and one pallet with all additional connection parts in boxes. Depending on the number of BIO-CEL L+ 960V modules ordered, all additional connection parts for more than just one module might be packed on one or more pallets project-specific.

Table 3 shows the arrangement in different container sizes for the carboards only.
Table 4 shows the required amount of containers for 10 and 20 BIO-CEL L+ 960V.

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)
BIO-CEL L+ 960V Connection Set	3,200 mm (10.4 ft)	750 mm (2.4 ft)	570 mm (1.9 ft) 1,110 mm (3.6 ft)*	104 kg (229 lb) 188 kg (414 lb)*

*If two sets of connection sets are stacked on one pallet

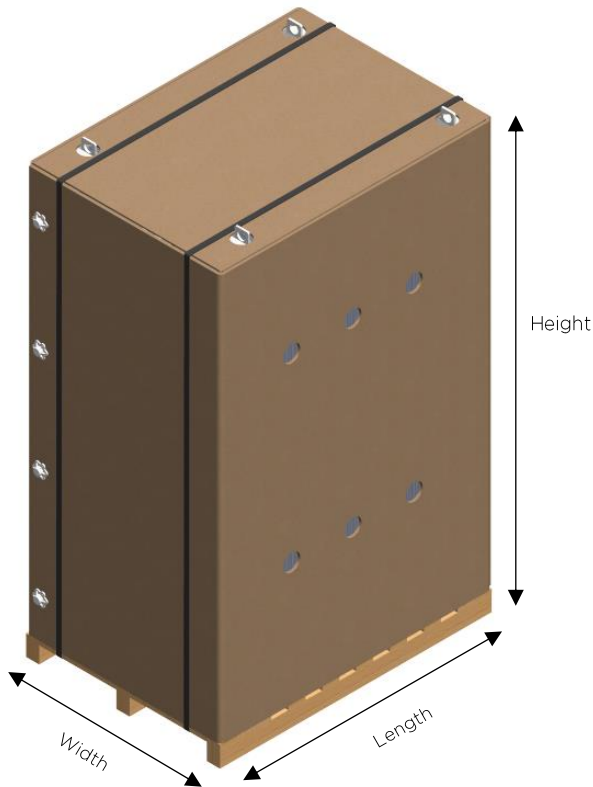


Figure 2. BIO-CEL L+ 480 in Transport packaging

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)

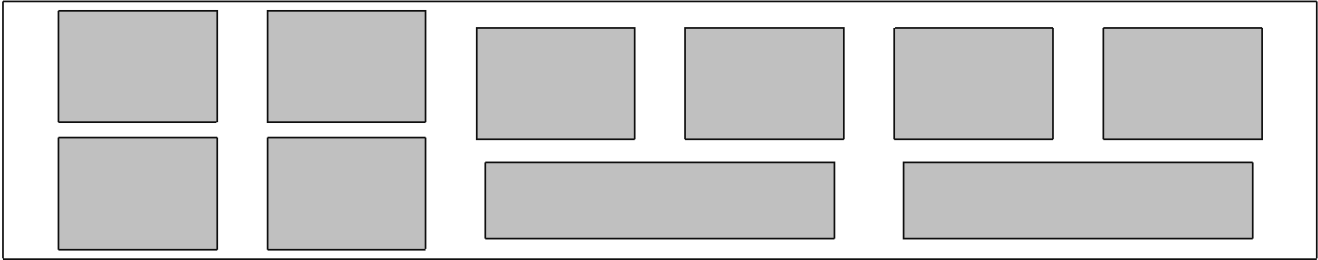


Figure 3. Exemplary arrangement of BIO-CEL L+ 960V units and pallets of connection set in 40 ft container

Table 4. Amount of High cube container needed for 10 or 20 BIO-CEL L+ 960V

Amount of BIO-CEL L+ 960V	Amount of BIO-CEL L+ 480 unites	Amount of Pallets for BIO-CEL L+ 960 V Connection Set	Amount of 40 ft HC container 20 ft HC container)
10	20 pcs	5 pcs	3 (5) pcs
20	40 pcs	10 pcs	5 (9) pcs

BIO-CEL L+ 960V

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 5. 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)

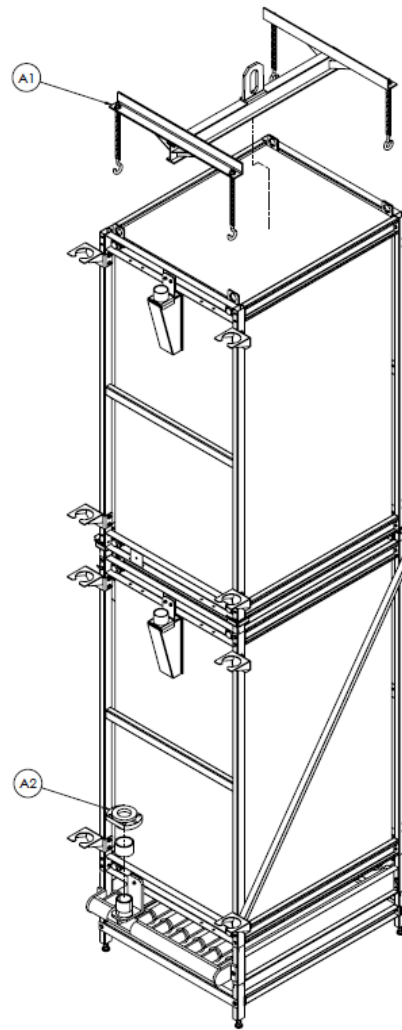


Figure 4. BIO-CEL L+ 960V accessoires

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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 6.

Table 6. 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)
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
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
S6	1000032325	BIO-CEL L+ 960 V Interconnector Set	Set of 4 interconnectors including screws and nuts, Stainless Steel 1.4301/304
	1000032326	BIO-CEL L+ 960 V Interconnector Set SS316	Set of 4 interconnectors including screws and nuts, Stainless Steel 1.4404/316Ti
S7	1000032327	BIO-CEL L+ 960 V Cross Stiffening Set	Set of 2 stiffeners including screws and nuts, Stainless Steel 1.4301/304
	1000032328	BIO-CEL L+ 960 V Cross Stiffening Set SS316	Set of 2 stiffeners including screws and nuts, Stainless Steel 1.4404/316Ti
S8	1000032329	BIO-CEL L+ 960 V Stiffening Set	Set of 4 stiffeners including screws and nuts, Stainless Steel 1.4301/304
	1000032350	BIO-CEL L+ 960 V Stiffening Set SS316	Set of 4 stiffeners including screws and nuts, Stainless Steel 1.4404/316Ti
S9	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
-	1000001439	BIO-CEL L Diffuser Tool	Pliers for assembly of ear clamps

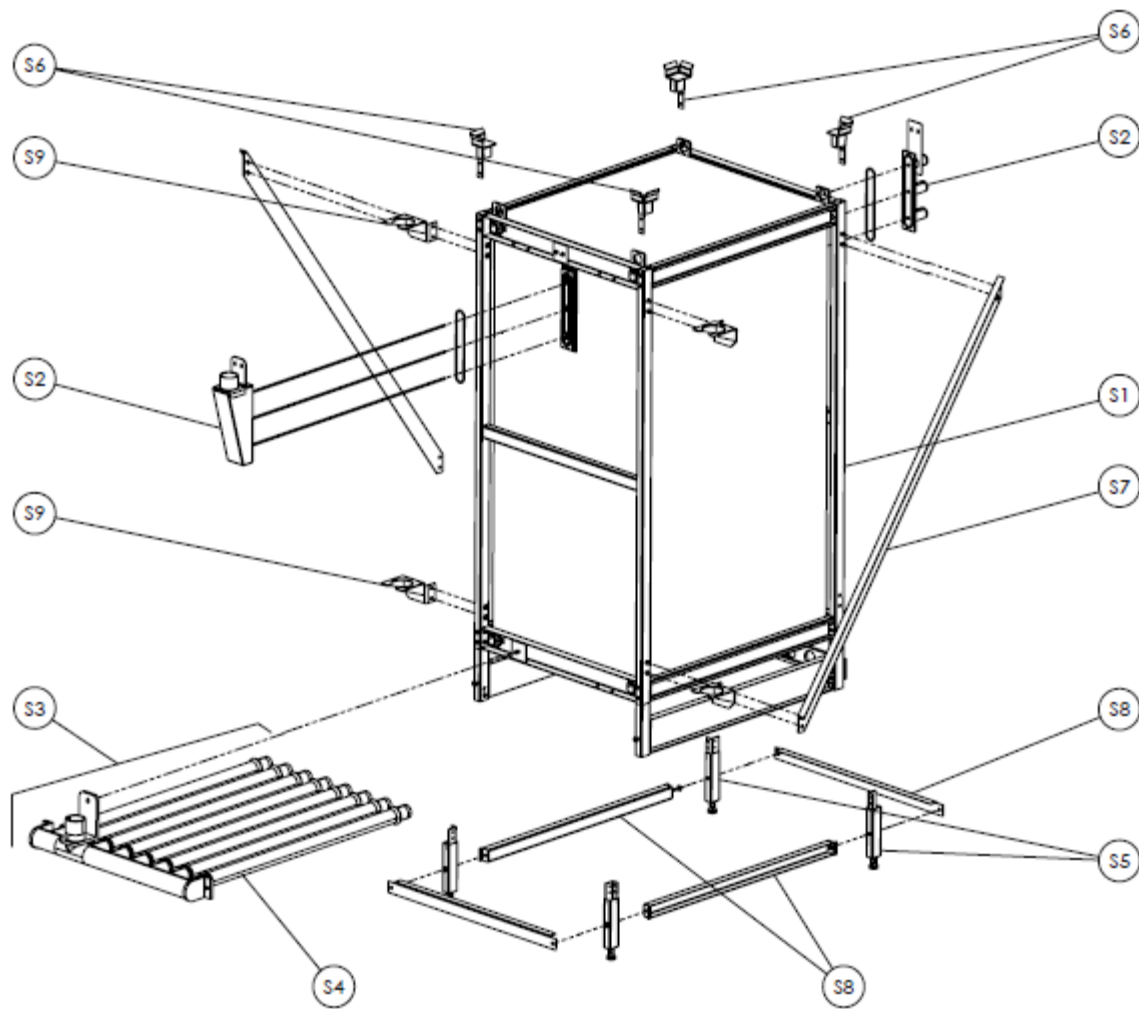


Figure 5. BIO-CEL L+ 960V spare parts

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