

Grok Mini Sub: Bill of materials

Concept assembly guide derived from the staged build plan. Not a certified engineering drawing. Prices are estimates (Oct 2026); nothing here is a purchase.

ID	Stage	Part	Qty	Price	Buy link
M1	Stage 1	cheeyoo 12 V brushed underwater thruster	3	\$92.34	Amazon B0D5JN1Z5R
M2	Stage 1	USB endoscope camera, 15 m waterproof cable, LEDs	1	~\$30	Amazon search
M3	Stage 1	BTS7960 H-bridge motor driver	3	~\$27	Amazon search
M4	Stage 1	50 ft 18 AWG 8-conductor cable	1	~\$35	Amazon search
M5	Stage 1	Braided pull line 1/8 in	1	~\$8	Amazon search
M6	Stage 1	12 V 6 Ah LiFePO4 battery + 10 A fuse	1	~\$36	Amazon search
M7	Stage 1	12 V to 5 V 5 A buck for Pi	1	~\$10	Amazon search
M8	Stage 1	PVC pipe, fittings, pool noodle, dive weights	1	~\$25	Amazon search
M9	Stage 1	Marine heat shrink, liquid tape, silicone	1	~\$12	Amazon search
M10	Stage 2	Blue Robotics 3-inch watertight enclosure, aluminum cap	1	~\$110	Blue Robotics search
M11	Stage 2	WetLink penetrators	5	~\$75	Blue Robotics search
M12	Stage 2	Bar02 depth sensor	1	\$80	Blue Robotics search
M13	Stage 2	ESP32-S3 board	1	~\$15	Amazon search
M14	Stage 2	BNO085 IMU	1	~\$25	Amazon search
M15	Stage 2	RS-485 transceivers	2	~\$8	Amazon search
M16	Stage 2	4th thruster (second vertical)	1	\$30.78	Amazon B0D5JN1Z5R
M17	Stage 2	Self-contained dive lights	2	~\$40	Amazon search
M18	Stage 2	Vacuum plug + hand pump	1	~\$45	Blue Robotics search
M19	Stage 2	DIY leak probe	1	~\$5	Amazon search

Links marked 'Amazon search' open a search for that exact part spec (no specific listing chosen yet, no affiliate tag). Vendor links come from the existing build brochures.