

PNEUMVENT BOM

Item No.	Description	Manufacturer	Manufacturer Part Number	Designator	Quantity
1	15A 60PSI Compressor	McMaster	4251K71	M2	1
2	2/2 Air solenoid valve	Festo	MHP1-M4H-2/2G-M3-TC	M11, M12	2
3	2/2 Air solenoid valve	Festo	MHP1-M4H-3/2GM3-TC	M23, M24	2
4	2/2 Electrovalves Plate	Festo	MHP1-AS-2-M3	M5, M6	2
5	2/2 Electrovalves Plate	Festo	MHP1-AS-3-M3	M17, M18	2
6	22mm Compact, extendable breathing system with luer elbow, 1.5m	Intersurgical	2150000	M34	1
7	3.9μH Shielded Wirewound Inductor 4.2A 26.4mOhm Max Nonstandard	Murata	1255AY-3R9N=P3	L1	1
8	4mm Plastic Tubing	Festo	PUN-H-4X0,75-BL	M30	1
9	ARM® Cortex®-M4 STM32F4 Microcontroller IC 32-Bit 84MHz 256KB (256K x 8) FLASH 100-LQFP (14x14)	STMicroelectronics	STM32F401VCT6	IC1	1
10	Battery 12V 75Ah	Powersonic	PS-12750S	M33	1
11	BI-DIRECTIONAL ESD PROTECTION DI	Toshiba Semiconductor and Storage	DF2B26M4SL,L3F	D2	1
12	BUZZER, 16.5 MM, 6.7 MM DEEP, P,	CUI	CPT-1667-85T	B1	1
13	CAP 6.8 UF 20% 50 V	Wurth Electronics	865080642005	C29, C31, C35, C37, C41	5
14	CAP ALUM 47UF 20% 50V SMD	Panasonic	EEE-1HA470XAP	C2	1
15	CAP CER 0.1UF 50V X7R 0603	KEMET	C0603C104M5RACTU	C1, C6, C7, C8, C9, C10, C12, C13, C14, C15, C16, C18, C19, C20, C21, C24, C25, C39, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60	36
16	CAP CER 0.33UF 50V X5R 0603	TDK	C1608X5R1H334K080AB	C17	1
17	CAP CER 10UF 25V X7R 1206	Samsung	CL31A106MBHNNNE	C3	1
18	CAP CER 1nF 50V X7R 0603	KEMET	C0603C104M5RACTU	C30, C33, C36, C38, C42	5
19	CAP CER 1UF 16V X7R 0603	KEMET	C0603C104M5RACTU	C26	1
20	CAP CER 2.2nF 50V X7R 0603	KEMET	C0603C104M5RACTU	C27, C28, C32, C34, C40	5
21	CAP CER 2.2UF 16V X5R 0603	KEMET	C0603C225K4PACTU	C11, C23	2
22	CAP CER 22UF 10V X5R 0805	Taiyo Yuden	LMK212BBJ226MG-T	C4, C5	2
23	CAP CER 4.7UF 10V X5R 0603	Taiyo Yuden	LMK107BJ475KA-T	C22	1
24	Clamp Ipp Tvs Diode Surface Mount SOT-323-5	STMicroelectronics	ESDALC6V1W5	IC2	1

Item No.	Description	Manufacturer	Manufacturer Part Number	Designator	Quantity
25	CONN RCPT 20POS 0.05 GOLD PCB	Amphenol ICC (FCI)	20021311-00020T4LF	M31	1
26	CORD 18AWG 5-15P - 320-C13 9.84'	Assmann WSW Components	A-PC2302-030021-1	M32	1
27	DC DC CONVERTER 5V 1W	Recom	RFB-0505S	PS2, PS3, PS4, PS5, PS6	5
28	DIODE SCHOTTKY 200V 5A SMC	SMC	SK520TR	D1, D4, D5, D6	4
29	Enclosed AC DC Converters 1 Output 12V 17A 90 ~ 132 VAC, 180 ~ 264 VAC, 240 ~ 370 VDC Input	Mean Well	LRS-200-12	M1	1
30	FERRITE BEAD 300 OHM 0603 1LN	Vishay Dale	ILBB0603ER301V	L2	1
31	Header, 13-Pin	Sullins	PREC013SAAN-RC	P1	1
32	Header, 6-Pin	Sullins	PRPC006SACN-RC	J3	1
33	HOOK-UP DUAL STRND 20AWG WHT 5'	81044/12-20-9	20 AWG WIRE	M4	1
34	IC INST AMP 1 CIRCUIT 8VSSOP	Texas Instruments	INA826AIDGKR	IC9, IC10	2
35	IC PWR DRVR N-CHAN 1:1 SOT23-3	ON Semiconductor	NUD3124LT1G	U1	1
36	IC REG BUCK 3.3V 2A TSOT26	Diodes	AP63203WU-7	PS1	1
37	Inductor Unshielded Wirewound 190mA 4.81Ohm Max 0805 (2012 Metric)	Taiyo Yuden	CBC2012T220M	L3, L4, L5, L6, L7	5
38	LCD MOD GRAPH 122X32 WH TRANSM	Newhaven Display	NHD-12232KZ-NSW-BBW-P	IC11	1
39	LED GREEN CLEAR 0603 SMD	Wurth Electronics	150060RS75000	LED3	1
40	LED GREEN CLEAR 0603 SMD	Wurth Electronics	150060VS75000	LED1, LED2	2
41	Linear Voltage Regulator IC 1 Output 100mA 8-SOIC	Texas Instruments	UA78L12ACD	IC4	1
42	MEMS OSC XO 2.0000KHZ CMOS SMD	Microchip	DSC6083HI2A-002K000T	Y1	1
43	MOSFET N-CH 60V 300MA SOT-23	Rohm	RYE002N05TCL	Q1, Q2	2
44	OPTOISOLTR 5KV 4CH TRANS 16-SMD	Vishay Lite-On	LTV-847S	IC3	1
45	Plug socket with cable for Valves	Festo	KMH-0,5	M25, M26, M27, M28	4
46	Power Entry Connector Receptacle, Male Blades IEC 320-C14 Panel Mount, Flange	Schaffner	FN9222B-1-06	M3	1
47	PRESSURE SENSOR DUAL PORT 8SOP	NXP USA Inc.	MPXV7002DPT1	IC5, IC6	2
48	Push-in fitting	Festo	QSM-M3-4-I	M13, M14, M15, M16, M19, M20, M21, M22	8
49	Push-in fitting 1/4mm to 4mm	Festo	QS-1/4-4	M7, M8, M9, M10	4
50	Push-in Y-connector	Festo	QSY-8-4	M29	1
51	Red 620nm LED Indication - Discrete 2.4V 1113 (2835 Metric)	QT-Brightek	QBHP686-RH	LED4	1

Item No.	Description	Manufacturer	Manufacturer Part Number	Designator	Quantity
52	RELAY AUTOMOTIVE SPST 15A 12V	Panasonic	JSM1A-12V-5	RE2	1
53	RELAY GEN PURPOSE SPDT 20A 12V	TE Connectivity P&B	T9GV5L14-12	RE1	1
54	RES 20 OHM 1% 1/2W 1206	Stackpole Electronics	RNCP1206FTD20R0	R14, R15, R16	3
55	RES SMD 0 OHM JUMPER 1/10W 0603	Panasonic	ERJ-3GEY0R00V	R2, R4, R5, R7, R27	5
56	RES SMD 1.2K OHM 1% 1/4W 1206	Yageo	RC1206FR-071K2L	R17	1
57	RES SMD 100K OHM 0.5% 1/16W 0603	Susumu	RR0816P-104-D	R28, R30	2
58	RES SMD 10K OHM 1% 1/4W 1206	Yageo	RC1206FR-07200RL	R1, R11, R12, R13, R18, R19, R20, R21, R22, R23, R24, R25, R44, R45, R46, R47, R48, R49, R50	19
59	RES SMD 10K OHM 5% 1/10W 0603	Yageo	RC0603JR-0710KL	R3, R8, R9, R10, R26	5
60	RES SMD 200K OHM 0.5% 1/16W 0603	Susumu	RR0816P-204-D	R29, R31	2
61	RES SMD 6K04 OHM 0.5% 1/16W 0603	Stackpole Electronics	RMCF0603FT6K04	R33, R39	2
62	RES SMD100K OHM 0.5% 1/16W 0603	Susumu	RR0816P-104-D	R32, R34, R35, R36, R37, R38, R40, R41, R42, R43	10
63	RESISTOR 47 Ohms $\pm 5\%$ 0.1W, 1/10W Chip Resistor 0603	TE Connectivity	CRGCQ0603J47R	R6	1
64	Screws for WH/WQ Series Enclosures	PolyCase	SCREWS-007-50	M37	1
65	SENS PRESSURE 7.25 PSI MAX MPAK	NXP Freescale	MPXM2053GST1	IC7	1
66	SENSOR GAUGE PRESS 14.5PSI MAX	NXP Freescale	MPXV2102GP	IC8	1
67	SWITCH TACT SPST-NO 0.025A 50V	E-Switch	320E11BLK	SW2, SW3, SW4, SW5, SW6, SW7	6
68	Tactile Switch SPST-NO Top Actuated Surface Mount	ITT C&K	PTS526SM15SMTR2LFS	SW1	1
69	TERM BLK 2POS SIDE ENTRY 5MM PCB	Phoenix Contact	1935161	J1, J2, J4, J9, J10, J11, J12	7
70	Test Point	N/A	N/A	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11	11
71	TVS Diode (Uni-directional)	STMicroelectronics	ESDALC6V1-1U2	D3	1
72	Vixen Air Inflation Schrader Valve with Push to Connect (PTC) for 1/4" OD Air Line	Vixen Air Inflation	VXA1014-2	M35	1
73	WQ-64 NEMA Hinged Enclosure 0.43 x 0.31 x 0.31 in	PolyCase	WQ-64	M36	1