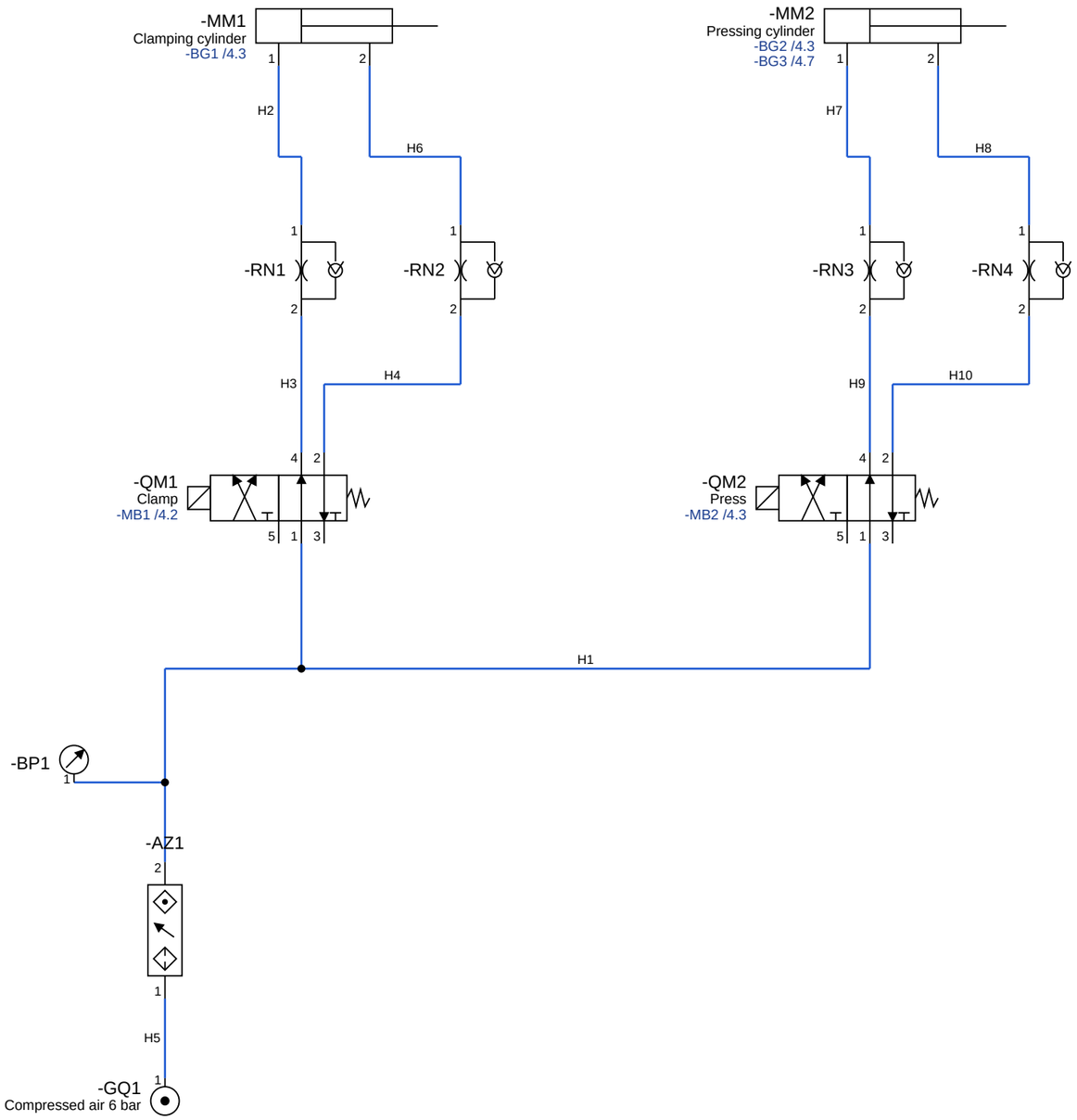
Pneumatic press

Clamping and pressing cylinder
with electrical control

Company	OpenECraft
Created by	OpenECraft
Date	2026-10-27
Revision	A
Number of pages	9

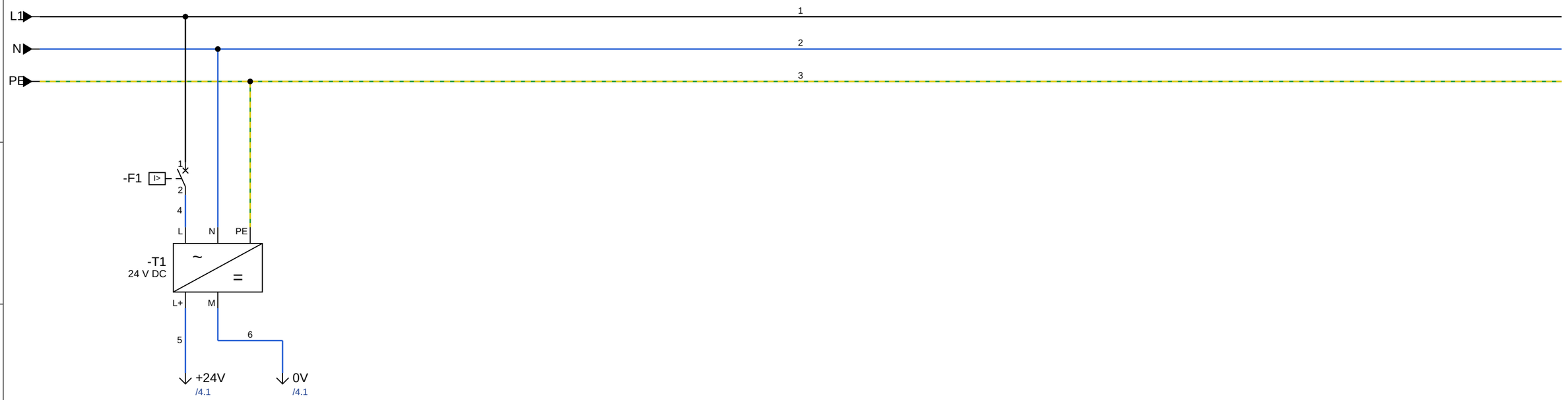


Fluid power

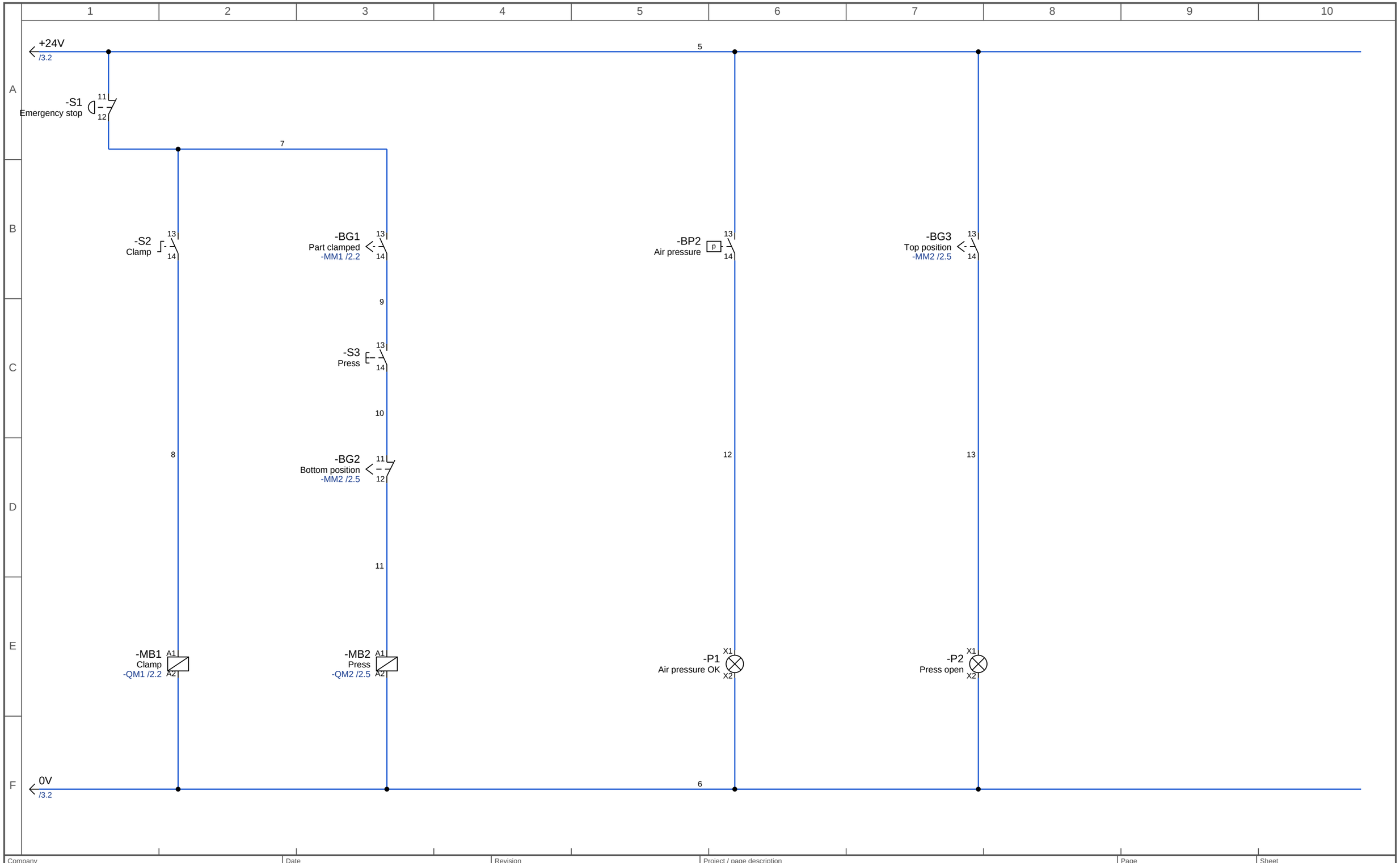
Lines between fluid ports are hoses (H1, H2, ...) in nets of their own.

The valves -QM1 / -QM2 sit on valve terminal -KH1; their solenoid coils -MB1 / -MB2 and the position switches -BG1 to -BG3 are on page 4.

Company: OpenECraft	Date: 2026-10-27	Revision: A	Project / page description: Pneumatic press	Page: 2	Sheet: 2 / 9
	Creator: OpenECraft	Software: OpenECraft	Pneumatic circuit	Type: Schematic	Project: Pneumatic press



Company: OpenECraft	Date: 2026-10-27	Revision: A	Project / page description: Pneumatic press	Page: 3	Sheet: 3 / 9
	Creator: OpenECraft	Software: OpenECraft	Power supply 24 V	Type: Schematic	Project: Pneumatic press



Company	Date	Revision	Project / page description	Page	Sheet
OpenECraft	2026-10-27	A	Pneumatic press	4	4 / 9
	Creator	Software	Control press	Type	Project
	OpenECraft	OpenECraft		Schematic	Pneumatic press

Electro-fluid cross reference

Fluid device	Function	Location	Electrical device	Function	Location	Status
-MM1	Cylinder, double-acting	/2.2	-BG1	Position switch NO	/4.3	Linked
-MM2	Cylinder, double-acting	/2.5	-BG2	Position switch NC	/4.3	Linked
			-BG3	Position switch NO	/4.7	Linked
-QM1	5/2 directional valve	/2.2	-MB1	Solenoid valve coil	/4.2	Linked
-QM2	5/2 directional valve	/2.5	-MB2	Solenoid valve coil	/4.3	Linked

Fluid netlist

Net	Hose no.	Line	Medium	Nominal size	Ports	Branches
F1	H5	Pressure line	Compressed air	6 mm	-AZ1:1 (in-line), -GQ1:1 (supply)	
F2	H1	Pressure line	Compressed air	6 mm	-BP1:1 (measuring), -AZ1:2 (in-line), -QM1:1 (pressure), -QM2:1 (pressure)	2
F3	H3	Working line	Compressed air	6 mm	-RN1:2 (in-line), -QM1:4 (working)	
F4	H4	Working line	Compressed air	6 mm	-QM1:2 (working), -RN2:2 (in-line)	
F7	H2	Working line	Compressed air	6 mm	-MM1:1 (working), -RN1:1 (in-line)	
F8	H6	Working line	Compressed air	6 mm	-MM1:2 (working), -RN2:1 (in-line)	
F9	H9	Working line	Compressed air	6 mm	-RN3:2 (in-line), -QM2:4 (working)	
F10	H10	Working line	Compressed air	6 mm	-QM2:2 (working), -RN4:2 (in-line)	
F13	H7	Working line	Compressed air	6 mm	-MM2:1 (working), -RN3:1 (in-line)	
F14	H8	Working line	Compressed air	6 mm	-MM2:2 (working), -RN4:1 (in-line)	

Hose list

Hose no.	From	To	Medium	Nominal size	Colour	Length (m)	Page
H5	-AZ1:1	-GQ1:1	Compressed air	6 mm	BU	–	/2.2
H1	-BP1:1	-AZ1:2	Compressed air	6 mm	BU	–	/2.1
H1	-AZ1:2	-QM1:1	Compressed air	6 mm	BU	–	/2.2
H1	-QM1:1	-QM2:1	Compressed air	6 mm	BU	–	/2.2
H3	-RN1:2	-QM1:4	Compressed air	6 mm	BU	–	/2.2
H4	-QM1:2	-RN2:2	Compressed air	6 mm	BU	–	/2.2
H2	-MM1:1	-RN1:1	Compressed air	6 mm	BU	–	/2.2
H6	-MM1:2	-RN2:1	Compressed air	6 mm	BU	–	/2.2
H9	-RN3:2	-QM2:4	Compressed air	6 mm	BU	–	/2.5
H10	-QM2:2	-RN4:2	Compressed air	6 mm	BU	–	/2.5
H7	-MM2:1	-RN3:1	Compressed air	6 mm	BU	–	/2.5
H8	-MM2:2	-RN4:1	Compressed air	6 mm	BU	–	/2.5

Fluid device groups

Group	Kind	Place	Device	Function	Actuated by	Location	Part
-KH1	Valve terminal			Valve terminal press			
		1	-QM1	Clamp	-MB1	/2.2	GEN.VLV-52-24DC
		2	-QM2	Press	-MB2	/2.5	GEN.VLV-52-24DC

Bill of materials

Pos	Qty	Unit	Part number	Type number	Manufacturer	Description	Devices	Unit price	Total
1	2	pcs	GEN.CYL-32-100	CYL-32-100	Generic	Pneumatic cylinder double-acting, bore 32 mm, stroke 100 mm	-MM1, -MM2	82.00 EUR	164.00
2	1	pcs	GEN.ESTOP-1NC	ESTOP-1NC	Generic	Emergency stop mushroom 40 mm, twist release, 1 NC	-S1	24.60 EUR	24.60
3	1	pcs	GEN.FR-G14	FR-G14	Generic	Filter regulator G1/4, 5 µm, 0.5 - 10 bar	-AZ1	54.00 EUR	54.00
4	1	pcs	GEN.LIMIT-1NC	LIMIT-1NC	Generic	Position switch plunger, 1 NC, positive opening	-BG2	26.00 EUR	26.00
5	2	pcs	GEN.LIMIT-1NO1NC	LIMIT-1NO1NC	Generic	Position switch roller plunger, 1 NO + 1 NC	-BG1, -BG3	32.00 EUR	64.00
6	2	pcs	GEN.LMP-GN-24	LMP-GN-24	Generic	Indicator lamp green, LED 24 V	-P1, -P2	9.10 EUR	18.20
7	24	pcs	GEN.MARK-DEV	MARK-DEV	Generic	Device marker 15 x 5 mm, white, printable	marking	0.08 EUR	1.92
8	32	pcs	GEN.MARK-WIRE	MARK-WIRE	Generic	Wire marker sleeve for 0.5 – 2.5 mm², white, printable	marking	0.03 EUR	0.96
9	1	pcs	GEN.MCB-1P-C6	MCB-1P-C6	Generic	Miniature circuit breaker 1P C6	-F1	8.70 EUR	8.70
10	1	pcs	GEN.PB-GN-1NO	PB-GN-1NO	Generic	Pushbutton green, 1 NO	-S3	11.20 EUR	11.20
11	1	pcs	GEN.PRESS-SW-10BAR	PRESS-SW-10BAR	Generic	Pressure switch 1 - 10 bar, G1/4, 1 NO	-BP2	48.00 EUR	48.00
12	1	pcs	GEN.PS-24DC-5A	PS-24DC-5A	Generic	Power supply 230 V AC / 24 V DC 5 A	-T1	89.00 EUR	89.00
13	1	pcs	GEN.SEL-2POS-1NO	SEL-2POS-1NO	Generic	Selector switch 2 positions, 1 NO	-S2	15.90 EUR	15.90
14	4	pcs	GEN.THROTTLE-G18	THROTTLE-G18	Generic	One-way flow control valve G1/8	-RN1, -RN2, -RN3, -RN4	12.00 EUR	48.00
15	2	pcs	GEN.VLV-52-24DC	VLV-52-24DC	Generic	5/2-way solenoid valve G1/8, spring return, coil 24 V DC	-QM1, -QM2	68.00 EUR	136.00
						Sum			710.48