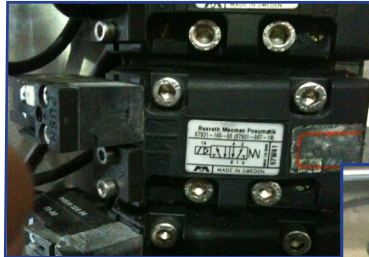


MAC Drop-in Solution for SIG Combibloc[®] Machines

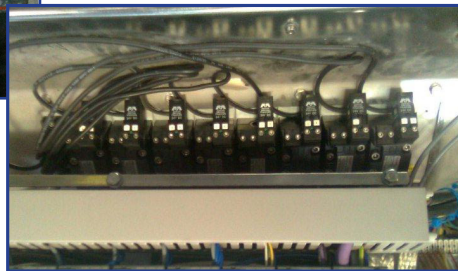


Application Description

- Drop-in solution to replace the OEM supplied valves on SIG Combibloc[®] machines.



Previous solution



Challenges

- The valve body and O-ring are easily damaged.
- OEM supplied valve design flaw creates easy contamination, which causes the valve to shut down.
- OEM supplied valve response time is inaccurate which causes production downtime.
- Need to disassemble the components for maintenance each month.
- OEM supplied valve is not easy to assemble and disassemble.

MAC Solutions

- **Bar :** ISO 1
- **Valves:** MV-B1A-AAAA-DM-DDAJ-1KA Mod. EK58

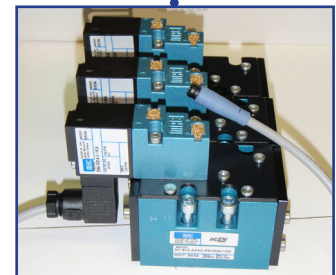


Customer Benefits

- Resistance to contamination eliminates blockage in the valve.
- Fewer parts equal easy maintenance and part replacement.
- Low friction and wiping function.

Cost Savings

- All-in-one design makes it easy to replace, which reduces replacement cost (a KA type connector is designed by MAC.)
- Reduces production downtime caused by valve failure, so the daily production rate is increased and defect rate is decreased.



Technical Data

Fluid:	Compressed air, vacuum, inert gases
Pressure range:	Vacuum to 8 bar
Pilot pressure:	Single operator: 1,3 to 8 bar
Lubrication:	Not required, if used select a medium aniline point lubricant (between 80°C and 100°C)
Filtration:	40µ
Temperature:	-18°C to 50°C
Flow (at 6 bar, Δ P=1bar):	1800 NI/min
Coil:	Epoxy encapsulated - class A wires - Continuous duty
Voltage range:	-15% to +10% of nominal voltage
Response times:	Energize: 11,3 ms De-energize: 7,8 ms

Response Times Comparison

	Pressure	Energization time (ms)	De-energization time (ms)	Total variation (ms) @E + @DE"
MAC ISO 1	2 bar	8,4	6,6	0,2
	4 bar	8,4	6,8	
	6 bar	8,4	6,8	
OEM supplied ISO 1 valve	2 bar	20,8	22,8	4,4
	4 bar	18,4	22,8	
	6 bar	16,8	23,2	

Dimensions

