Series variation

Total air control systems (Total Air system)

Detector

F.R.L.
F.R.
F (Filtr)
R (Reg)

L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve
SlowStart
Anti-bac/Bacremove Filt
Film
Resist FR
Oil-ProhR

Press FR No Cu/ PTFE FRL Outdrs FRL Adapter Joiner Press Gauge CompFRL LgFRL PrecsR VacF/R Clean FR ElecPneuR AirBoost Speed Ctrl Silncr CheckV/ other Fit/Tube Nozzle Air Unit PrecsCompn Electro Press SW ContactSW AirSens PresSW Air Flo Sens/Ctrl WaterRtSens TotAirSys (Total Air) TotAirSys (Gamma)

	Product appearance	Valve	Connection	Operation																
Model				Pin plunger	Roller lever	One way roller lever	Roller plunger	Straight plunger	Toggle switch	Pushbutton valve	Mushroom valve	Select valve	Select valve (2 stations)	Roller arm	Adjusting roller lever	Rod lever	Wire lever	Spring lever	Effective cross- sectional area (mm²)	Page
Compact mechanical valve (MS)		Normally closed	Rc1/8	•	•	•	•	•	•	•	•	•	•						2.5	- 1612
			ø4 push-in fitting	•	•	•	•	•	•	•	•	•	•						1.6	
		Normally open	Rc1/8	•	-	-	-	-	-	-	-	1	-						2.5	
			ø4 push-in fitting	•	-	-	-	-	-	-	-	1	-						1.6	
Medium mechanical valve (MM)	B	Normally closed	Rc1/8	•	•									•	•	•	•	•	2.5	- 1626
			ø4 push-in fitting	•	•									•	•	•	•	•	1.6	
		Normally open	Rc1/8	•	-									,				,	2.5	
			ø4 push-in fitting	•	-										ı	1	1	,	1.6	
Large mechanical valve (MAVL)		Both normally closed and normally open are available by piping method.	Rc1/4	•	•									•	•	•	•	•	31	1638

indicates not available.

Ending

generator RefrDry DesicDry HiPolymDry MainFiltr Dischrg

⁻ indicates available, but not specified in the catalog.

Total air system (Total Air system)

Series variation

Circuit device

Model	Product appearance	Port size	Applications		
● Air timer RTD-3A		ø4 push-in fitting	Delaying pneumatic signals for max. 30 seconds.	1644	
Pressure switch PE-1		ø4 push-in fitting	Switching electric contact by 0.2 to 0.7 MPa of air signals.	1645	
● Air lamp AL-R -B -Y		ø4 push-in fitting	Confirming residual pressure and displaying operational status. (3 display colors are available; red, blue, and yellow)	1645	
● Compact air lamp SAL-R -B	33	ø4	Confirming residual pressure and displaying operational status. (Two display colors are available: red and blue) Just insert a ø4 push-in fitting.	1646	

F (Filtr) R (Reg) L (Lub) Drain Separ Mech Press SW Res press exh valve SlowStart Anti-bac/Bacremove Filt Resist FR Oil-ProhR Med Press FR No Cu/ PTFE FRL Outdrs FRL Adapter Joiner Press Gauge CompFRL LgFRL PrecsR VacF/R Clean FR ElecPneuR AirBoost Speed Ctrl Silncr CheckV/ other

F.R.L.

Fit/Tube

PrecsCompn
Electro
Press SW
ContactSW

AirSens
PresSW
Cool
Air Flo
Sens/Ctrl

WaterRtSens
TotAirSvs

TotAirSys (Total Air) TotAirSys (Gamma) Gas generator RefrDry DesicDry

HiPolymDry

MainFiltr

Dischrg

Ending

Total air systems

Detector types

F.R.L. F.R.

F (Filtr)

R (Reg)

L (Lub)
Drain
Separ
Mech
Press SW
Res press
exh valve

SlowStart
Anti-bac/Bac-remove Filt
Film
Resist FR

Oil-ProhR Med Press FR No Cu/ PTFE FRL Outdrs FRL Adapter

Joiner
Press
Gauge
CompFRL
LgFRL

PrecsR VacF/R

Clean FR

ElecPneuR AirBoost

Speed Ctrl
Silncr

CheckV/ other Fit/Tube

Nozzle

Air Unit
PrecsCompn
Electro

Press SW

AirSens
PresSW
Cool
Air Flo
Sens/Ctrl

WaterRtSens
TotAirSys
(Total Air)
TotAirSys
(Gamma)
Gas
generator
RefrDry

DesicDry
HiPolymDry
MainFiltr
Dischrg

Ending

etc

Detector

A detector is used to confirm the cylinder position and the presence of material during control. A variety of TAS detectors are available to detect objects of different shapes and states. Optimum detection is ensured by selecting these devices.

Detector types



	MS Series mechanical valve (compact)
Mechanical detection — Mechanical valve	— MM Series mechanical valve (medium)
	MAVL Series mechanical valve (large)
Non-contact detection by air flow —	Interface valve (output: air signal)

Series	Features	Applications	Page
MS Series mechanical valve	Equivalent to electrical micro switch Compact and most commonly used.	Confirmation of cylinder, machine position and manual operation	1612
MM Series mechanical valve	Equivalent to compact/vertical electrical limit switch, great mechanical actuator strength. Actuators, such as rod lever and spring rod lever, etc., not available in the MS Series are now available. (Flow rate is the same as MS)	Confirmation of cylinder, machine, and material position	1626
MAVL Series mechanical valve	Equivalent to vertical electrical limit switch. The flow rate is large, so an Ø80 cylinder can be moved directly.	Confirmation of cylinder, machine, and material position	1638