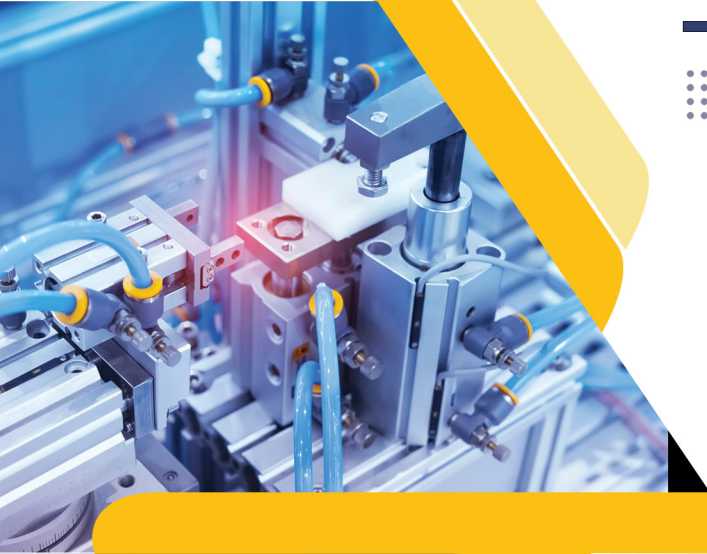


# OZ pneumatica

MADE IN ITALY



Pneumatic  
Equipment  
[ModernGulfc.com](http://ModernGulfc.com)



MODERN GULF  
SERVICES

## The Story of

Our engineering team began its activities in 2011, backed by technical knowledge and an unparalleled passion for industry and innovation.

With our expertise in hydraulic and pneumatic systems as well as electricity, we started our first activity by setting up a custom hydraulic and pneumatic systems design unit for customers, most of whom were manufacturing and industrial units in the Middle East such as Iran and Iraq, as well as China. The entire goal of the group was to provide constructive advice in accordance with the real needs of customers, develop their business, maintain safety and protect their capital.

Based on the credibility and satisfaction we had gained from these customers, after four years, with the help of our experienced team and up-to-date technology, we decided to set up a manufacturing unit to manufacture custom machinery, equipment, and hydraulic-pneumatic systems.

And this process of progress and development continued, until finally, in 2025, relying on more than 14 years of experience and with the aim of providing services directly in the GCC market, we registered Modern Golf Services (MGS) Company in Oman to expand our circle of real capital, which are our valuable customers.

## Why

Our sense of responsibility to our customers over the years, and as a result, recognizing their real needs and providing them with the best advice and services in the shortest possible time, has led customers to consider us a part of their collection and to cooperate with us without any concerns about the capital, time, or safety of their collections. We are proud and happy to be with you in the safest and fastest way possible to develop your business, improve the efficiency of your industrial unit and machinery, and reduce your costs.

**Quality and safety, along with understanding the importance of time, will be our distinguishing feature for you**



## Single and Double Solenoid Spool Valves

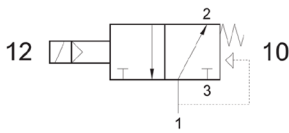


Solenoid-operated spool valves (commonly known as "book-type" solenoid valves) are among the most widely used directional control valves in pneumatic systems. They are available in two models: single-solenoid and double-solenoid.

The operating mechanism of these valves works as follows:

When the solenoid is energized (by applying an electric current), the valve's spool shifts forward. This movement opens the path for compressed air to flow toward one of the ports connected to an actuator, such as a pneumatic cylinder or motor, causing it to move.

321 ME – 322 ME – 521 ME – 522 ME – 524 ME – 5213C EE – 5223C EE



	1/8"	1/4"	1/4" 1/8"
<b>mono-stable</b>	TRA(14): 15 ms	TRA(14): 19 ms	2.5 ... 10 bar
	TRA(12): 35 ms	TRA(12): 45 ms	0.25 ... 1 MPa
<b>bi-stable</b>	TRA(14): 20 ms	TRA(14): 22 ms	1 ... 10 bar
	TRA(12): 20 ms	TRA(12): 22 ms	0.1 ... 1 MPa

## Matchbox-Type Valve (Mini Valve)

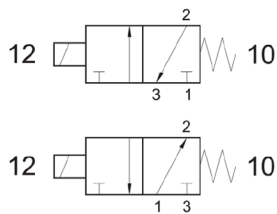


Matchbox-type solenoid valves (Mini valves) are another type of pneumatic valve, designed to be more compact in size compared to spool (book-type) valves. These valves feature two air inlets and one outlet, and are symbolized as 3/2 in pneumatic diagrams.

They are available in two configurations: normally open and normally closed.

When the solenoid is energized, compressed air is directed to the pressure port of a single-acting cylinder, causing it to move.

00.088.3 – 00.071.3 – 01.066.3 – 01.068.3



<b>Temperature range</b>	<b>max + 60 °C</b>
<b>Working pressure</b>	<b>-0.7 ... 10 bar</b> <b>-0.07 ... 1 MPa</b>
<b>Nominal orifice 1-2</b>	<b>1.1 mm</b>
<b>Nominal flow rate 1-2</b>	<b>30 NI/min</b>
<b>Fluid</b>	<b>50µ filtered , lubricated or non lubricated air</b>

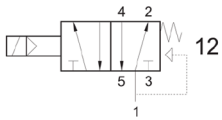
## NAMUR Valves



NAMUR valves are directional control valves designed specifically for actuators. These valves feature two ports located on the flat side of the valve body.

Unlike spool and mini (matchbox-type) valves, which use threaded ports, NAMUR valves are sealed using O-rings positioned around ports A and B.

These valves are mounted directly onto actuators using bolts inserted through pre-drilled holes in the valve body.



522 MC – 322 MC – 5223 MC – 524 MC – 324 MC – 5243 MC

<b>Nominal orifice</b>		<b>7.5 mm</b>		
<b>Ports</b>		<b>G1/4"</b>		
<b>Temperature range</b>		<b>max + 60 °C</b>		
<b>Working pressure</b>	electr . monost	electr . bi-stable	pneum . monost	pneum . bist
	2.5 ... 10 bar 0.25 ... 1 MPa	1 ... 10 bar 0.1 ... 1 MPa	0 ... 10 bar 0 ... 1 MPa	0 ... 10 bar 0 ... 1 MPa
<b>Actuating pressure</b>			pneum . monost	pneum . bist
			2.5 ... 10 bar 0.25 ... 1 MPa	1 ... 10 bar 0.1 ... 1 MPa
<b>Fluid</b>		<b>50µ filtered , lubricated or non lubricated air</b>		

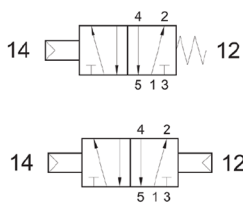
## Signal Valve



Pneumatic signal valves are used in various industries to control the flow of air or other gases.

Since these valves do not rely on electrical solenoids, they are ideal for use in high-risk environments where flammable or explosive conditions may be present.

Signal valves operate by receiving pneumatic signals, which trigger the redirection of air or gas to different parts of the system.



582 ME

<b>Nominal orifice</b>		<b>13 mm</b>	
<b>Nominal flow rate at 6 bar , Δp 1 bar</b>		<b>4600 NI/min</b>	
<b>Temperature range</b>		<b>max + 60 °C</b>	
<b>working pressure</b>	mono - stable	bi-stable	
	2.5 ... 10 bar 0.25 ... 1 MPa	-0.9 ... 10 bar -0.09 ... 1 MPa	
<b>Actuating Pressure</b>	mono - stable	bi-stable	
	2.5 ... 10 bar 0.25 ... 1 MPa	1 ... 10 bar 0.1 ... 1 MPa	
<b>Fluid</b>		<b>50µ filtered , lubricated or non lubricated air</b>	

## Manual Lever Valve



Manual pneumatic valves, like solenoid valves, come in a variety of types and configurations. In these valves, instead of an electrical solenoid, a lever is used to manually actuate the valve.



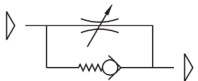
321ML90 – 322ML90 – 324ML90 – 522LL90 – 524LL90 – 521ML90 – 5213C ML90 – 52MC ML90 – 5243C ML90

<b>Nominal orifice</b>		<b>1/8" : 5mm</b> <b>1/4" : 7.5 mm</b>			
<b>Temperature range</b>		<b>max + 60 °C</b>			
<b>Working pressure</b>		direct actuation -0.09 ... 1 MPa		servo-piloted actuation 0.25 ... 1 MPa	
<b>Actuating force</b>	1/8" monost .	1/4" monost .	1/8" bi-stable	1/4" bi-stable	
	15 N	20 N	10 N	15 N	
<b>Fluid</b>		<b>50µ filtered , lubricated or non lubricated</b>			

## Flow Control Valve



Flow control valves regulate the flow rate of air in pneumatic systems, allowing for precise control of the speed of cylinders or air motors.



RFU 1/8.2 – RFU 1/4 – RFU 1/2

<b>Model</b>		RFU M5	RFU 1/8.1	RFM 1/8	RFU 1/8.2 RFU 1/8.3	RFUM 1/4	RFU 1/4 RFU 3/8	RFU 1/2	RFU 1/8.2	
<b>Parts</b>		M5	G1/8"	G1/8"	G1/8"	G1/4"	G3/4"	G1/2"	G1/8"	
<b>Nominal orifice</b>	<b>1-2</b>	1.2 mm	1.2 mm	2 mm	3.2 mm	3.5 mm	7 mm	7 mm	2mm	
	<b>2-1</b>	2.2 mm	4.2 mm	4.2 mm	4.2 mm	6.5 mm	10 mm	11 mm	4.2mm	
<b>Nominal flow rate</b>	<b>1-2</b>	60 NI/min	60 NI/min	120 NI/min	210 NI/min	300 NI/min	600 NI/min	600 NI/min	120 NI/min	
	<b>2-1</b>	130 NI/min	450 NI/min	450 NI/min	450 NI/min	600 NI/min	1100 NI/min	1400 NI/min	450 NI/min	
<b>Temperature range</b>		<b>max + 60 °C</b>								
<b>Working pressure</b>		<b>2 ... 10 bar</b> <b>0.2 ... 1 MPa</b>							0.5 ... 10 bar 0.05 ... 1MPa	
<b>Fluid</b>		<b>50µ filtered , lubricated or non lubricated air</b>								

## Pressure Switch



A pressure switch is a type of pressure sensor used in pneumatic systems. It serves as a safety device in industrial applications by monitoring the fluid pressure.

When the pressure reaches a preset threshold, the pressure switch opens or closes an electrical contact to turn devices such as solenoid valves or compressors on or off.

17.090.0 – 17.005.0 – 17.004.0

<b>Temperature range</b>	<b>max + 60 °C</b>
<b>setting range</b>	<b>1 ... 10 bar 0.1 ... 1 MPa</b>
<b>tolerance at 20 °C</b>	<b>0.5 bar 0.05 MPa</b>
<b>Max . tension</b>	<b>250V AC</b>
<b>Standard hysteresis</b>	<b>20%</b>
<b>Fluid</b>	<b>50µ filtered , lubricated or non lubricated air</b>

## Check Valve (VNR)



Check valves are used as flow rectifiers in pneumatic circuits, allowing fluid to flow in only one direction — from port 1 to port 2.

They prevent reverse flow and ensure unidirectional movement of air or gas within the system.

1 2

VNR 1/8 FF – VNR 1/4 FF – VNR 1/2 FF

Model	VNR 1/8 FF VNR 1/8 MF	VNR 1/4 FF VNR 1/4 MF	VNR M5 FF	VNR 1/8 MFR	VNR 3/8 FF	VNR 1/2 FF
<b>Parts</b>	G1/8"	G1/4"	M5	G1/8"	G3/8"	G1/2"
<b>Nominal orifice</b>	5.2 mm	7mm	2.2 mm	4 mm	8.5 mm	10 mm
<b>Nominal flow rate at 6 bar</b>	500 NI/min	900 NI/min	100 NI/min	350 NI/min	2000 NI/min	3500 NI/min
<b>Temperature range</b>	<b>max + 60 °C VITON : max + 110 °C</b>					
<b>Working pressure</b>	<b>2 ... 10 bar 0.2 ... 1 MPa</b>					
<b>Fluid</b>	<b>50µ filtered , lubricated or non lubricated air</b>					



## Air Preparation Unit (FRL Unit)

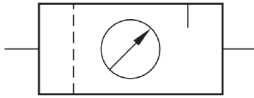


The pneumatic air preparation unit is a vital component in pneumatic systems, consisting of three main parts:

Filter – removes solid particles and moisture from the compressed air,

Regulator – adjusts and maintains the desired air pressure,

Lubricator – adds a fine mist of oil to the airflow to lubricate pneumatic components.



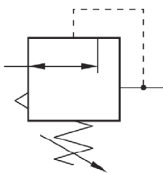
ORDER CODE		FR + L 4-08-30-S	FR + L 2-08-25-S
parts		G1/2"	G1/4"
Temperature range		max + 50 °C	max + 50 °C
Weight		1.5 kg	0.32 kg
Inlet pressure range	$p_1$ min $p_1$ max	0 bar ; 0 MPa 16 bar ; 1.6 MPa	0 bar ; 0 MPa 10 bar ; 1 MPa
Outlet pressure range ( $\Delta p$ )	$p_2$ min $p_2$ max	0.5 bar ; 0.05 MPa 8 bar ; 0.8 MPa	0.5 bar ; 0.05 MPa 8 bar ; 0.8 MPa
Minimum pressure difference	$P_1 - P_2$	0.2 bar ; 0.02 MPa	0.2 bar ; 0.02 MPa
Hysteresis	$p_1 = 10 \text{ bar} / p_2 = 0 \text{ bar}$ $p_1 = 10 \text{ bar} / p_2 = 8 \text{ bar}$	0.9 0.7	1.6 0.6
Recommended flow rate	$p_2 = 6.3 \text{ bar a } 25 \text{ m/s}$ $p_2 = 6.3 \text{ bar at } 25 \text{ m/s}$	$Q_n$	1900 NI/min 550 NI/min (max 580 NI/min)
filter element		30 $\mu\text{m}$	25 $\mu\text{m}$

## Regulator



A regulator is a component in pneumatic systems that controls and stabilizes air pressure.

It allows you to adjust the air pressure to the desired level required for the proper operation of pneumatic tools and equipment.



ORDER CODE		REG 2-08	REG 4-08
parts		G1/4"	G1/2"
Temperature range		max + 50 °C	max + 60 °C
Weight		0.11 kg	0.55 kg
Inlet pressure range	$p_1$ min $p_1$ max	0 bar ; 0 MPa 10 bar ; 1 MPa	0 bar ; 0 MPa 10 bar ; 1.6 MPa
Outlet pressure range ( $\Delta p$ )	$p_2$ min $p_2$ max	0.5 bar ; 0.05 MPa 8 bar ; 0.8 MPa	0.5 bar ; 0.05 MPa 8 bar ; 0.8 MPa
Minimum pressure difference	$P_1 - P_2$	0.2 bar ; 0.02 MPa	0.2 bar ; 0.02 MPa
Hysteresis	$p_1 = 10 \text{ bar} / p_2 = 0 \text{ bar}$ $p_1 = 10 \text{ bar} / p_2 = 8 \text{ bar}$	1.6 0.6	0.9 0.7
Recommended flow rate	$p_2 = 6 \text{ bar a } 25 \text{ m/s}$ $p_2 = 6 \text{ bar at } 25 \text{ m/s}$	$Q_n$	550 NI/min 1900 NI/min
maximum flow rate	$p_1 = 10 \text{ bar} ; p_2 = 6.3 \text{ bar} ; \Delta P = 1 \text{ bar}$	$Q_{max}$	5700 NI/min



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