

# 5/2-Way Valve 5/3-Way Valve

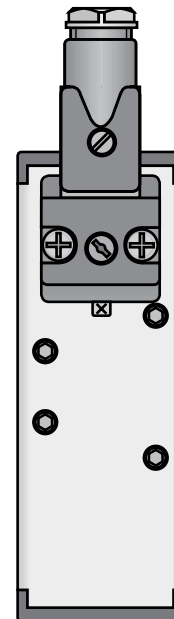
## ISO 5599 Size 1

**Actuation: Solenoid**

- Single Solenoid
- Double Solenoid
- Spring Center

**Delivery Includes:**

- valve
- mounting screws
- gasket
- solenoid coil(s)



Characteristics to VDI 3290					Pressures quoted as gauge pressure	
Characteristics	Symbol	Unit	Description			
<b>General Features</b>						
Type			Ceramic spool valve			
Mounting			On base plate, to ISO 5599			
Tube connection			Base plate			
Port size			G1/4 (base plate)			
Weight (mass)		lbs. (kg)	1.01 (0.46) signal solenoid 1.30 (0.59) double solenoid			
Installation			In any position			
Ambient temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)	Note: When using below freezing point it is necessary to consult factory.		
Medium temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)			
Medium			Filtered compressed air			
Lubrication			With or without oil mist lubrication <sup>1)</sup>			
<b>Pneumatic Characteristics</b>						
Nominal pressure	$p_n$	psi (bar)	87 (6)			
Operating pressure range	$p_{min}$	psi (bar)	29 (2)			
			-1 (Version S)			
	$p_{max}$	psi (bar)	174 (12)			
Nominal flow	$Q_N$	Cv (l/min)	5/2-way valve	5/3-way valve		
			1.7 (1680)	1.7 (1680)		
<b>Actuation</b>						
Electrical			Pilot operated Pilot operated with external pilot air			
Actuation pressure range	$p_{at min}$	psi (bar)	29 (2)			
	$p_{at max}$	psi (bar)	145 (10)			
Voltage type			AC	DC		
Nominal Voltage Standard version Low watt. version	$U_n$	V	220	24		
	$U_n$	V	220	24		
			Further voltages available on request			
Initial Power Consumption Standard version Low watt. version		VA (W)	11	4.8		
		VA (W)	7.8	2.7		
Continuous Power Consumption Standard version Low watt. version		VA (W)	8.5	4.8		
		VA (W)	4.9	2.7		
Duty cycle	ED	%	Continuous Duty			
Electrical protection			IP65 to DIN 40050 (with plug)			
Insulating material			VDE 0580			
Connection			Plug to DIN 43650 form B			

<sup>1)</sup> We recommend the use of mineral oil type VG32 to ISO 3448

Characteristics to VDI 3290					Pressures quoted as gauge pressure	
Characteristics	Symbol	Unit	Description			
<b>General Features</b>						
Type			Ceramic spool valve			
Mounting			On base plate, to ISO 5599			
Tube connection			Base plate			
Port size			G1/4 (base plate)			
Weight (mass)		lbs. (kg)	.70 (0.32)			
Installation			In any position			
Ambient temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)	Note: When using below freezing point it is necessary to consult factory.		
Medium temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)			
Medium			Filtered compressed air			
Lubrication			With or without oil mist lubrication <sup>1)</sup>			
<b>Pneumatic Characteristics</b>						
Nominal pressure	$p_n$	psi (bar)	87 (6)			
Operating pressure range	$p_{min}$ $p_{max}$	psi (bar)	-13 (-0.9) 174 (12)			
Nominal flow	$Q_N$	Cv (l/min)	5/2-way valve	5/3-way valve		
			1.7 (1680)	1.7 (1680)		
<b>Actuation</b>						
Pneumatic			Direct			
Actuation pressure range	$p_{st min}$	psi (bar)	29 (2)			
	$p_{st max}$	psi (bar)	145 (10)			

<sup>1)</sup> We recommend the use of mineral oil type VG32 to ISO 3448

# 5/2-Way Valve 5/3-Way Valve

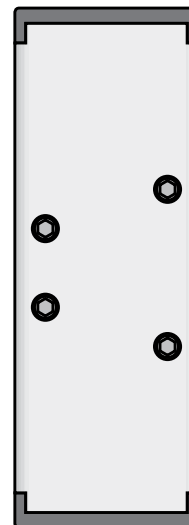
## ISO 5599 Size 1

**Actuation: Air Pilot**

- Single Air Pilot
- Double Air Pilot
- Spring Center

**Delivery Includes:**

- valve
- mounting screws
- gasket



# 5/2-Way Valve 5/3-Way Valve

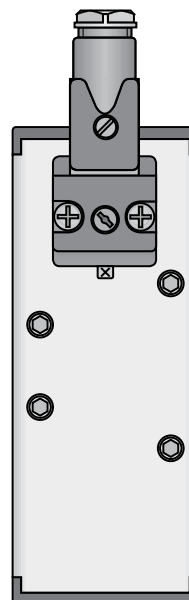
## ISO 5599 Size 2

**Actuation: Solenoid**

- Single Solenoid
- Double Solenoid
- Spring Center

**Delivery Includes:**

- valve
- mounting screws
- gasket
- solenoid coil(s)



Characteristics to VDI 3290					Pressures quoted as gauge pressure	
Characteristics	Symbol	Unit	Description			
<b>General Features</b>						
Type			Ceramic spool valve			
Mounting			On base plate, to ISO 5599			
Tube connection			Base plate			
Port size			G3/8 (base plate)			
Weight (mass)		lbs. (kg)	1.54 (0.70) single solenoid 1.83 (0.83) double solenoid			
Installation			In any position			
Ambient temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)	Note: When using below freezing point it is necessary to consult factory.		
Medium temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)			
Medium			Filtered compressed air			
Lubrication			With or without oil mist lubrication <sup>1)</sup>			
<b>Pneumatic Characteristics</b>						
Nominal pressure	$p_n$	psi (bar)	87 (6)			
Operating pressure range	$p_{min}$	psi (bar)	29 (2)			
			-1 (Version S)			
	$p_{max}$	psi (bar)	174 (12)			
Nominal flow	$Q_N$	Cv (l/min)	5/2-way valve	5/3-way valve		
			4.3 (4320)	4.3 (4320)		
<b>Actuation</b>						
Electrical			Pilot operated Pilot operated with external pilot air			
Actuation pressure range	$p_{st min}$	bar	2			
	$p_{st max}$	bar	12			
Voltage type			AC	DC		
Nominal Voltage Standard version Low watt. version	$U_n$ $U_n$	V V	220	24		
			220	24		
			Further voltages available on request			
Initial Power Consumption Standard version Low watt. version		VA (W) VA (W)	11	4.8		
			7.8	2.7		
Continuous Power Consumption Standard version Low watt. version		VA (W) VA (W)	8.5	4.8		
			4.9	2.7		
Duty cycle	ED	%	Continuous Duty			
Electrical protection			IP65 to DIN 40050 (with plug)			
Insulating material			VDE 0580			
Connection			Plug to DIN 43650 form B			

<sup>1)</sup> We recommend the use of mineral oil type VG32 to ISO 3448

Characteristics to VDI 3290					Pressures quoted as gauge pressure	
Characteristics	Symbol	Unit	Description			
<b>General Features</b>						
Type			Ceramic spool valve			
Mounting			On base plate, to ISO 5599			
Tube connection			Base plate			
Port size			G3/8 (base plate)			
Weight (mass)		lbs. (kg)	1.23 (0.56)			
Installation			In any position			
Ambient temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)	Note: When using below freezing point it is necessary to consult factory.		
Medium temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)			
Medium			Filtered compressed air			
Lubrication			With or without oil mist lubrication <sup>1)</sup>			
<b>Pneumatic Characteristics</b>						
Nominal pressure	$p_n$	psi (bar)	87 (6)			
Operating pressure range	$p_{min}$ $p_{max}$	psi (bar)	-13 (-0.9) 174 (12)			
Nominal flow	$Q_N$	Cv (l/min)	5/2-way valve	5/3-way valve		
			4.3 (4320)	4.3 (4320)		
<b>Actuation</b>						
Pneumatic			Direct			
Actuation pressure range	$p_{st min}$	psi (bar)	29 (2)			
	$p_{st max}$	psi (bar)	174 (12)			

<sup>1)</sup> We recommend the use of mineral oil type VG32 to ISO 3448

# 5/2-Way Valve 5/3-Way Valve

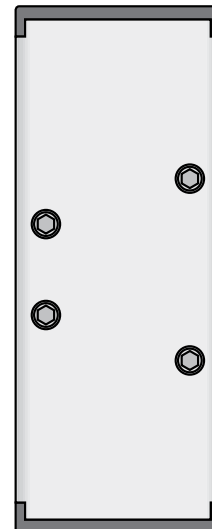
## ISO 5599 Size 2

**Actuation: Air Pilot**

- Single Air Pilot
- Double Air Pilot
- Spring Center

**Delivery Includes:**

- valve
- mounting screws
- gasket



# 5/2-Way Valve 5/3-Way Valve

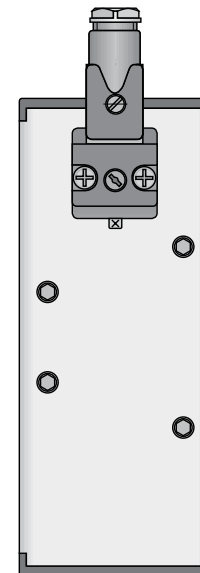
## ISO 5599 Size 3

**Actuation: Solenoid**

- Single Solenoid
- Double Solenoid
- Spring Center

**Delivery Includes:**

- valve
- mounting screws
- gasket
- solenoid coil(s)



Characteristics to VDI 3290					Pressures quoted as gauge pressure	
Characteristics	Symbol	Unit	Description			
<b>General Features</b>						
Type			Ceramic spool valve			
Mounting			On base plate, to ISO 5599			
Tube connection			Base plate			
Port size			G1/2 (base plate)			
Weight (mass)		lbs. (kg)	2.71 (1.23) single solenoid 3.01 (1.37) double solenoid			
Installation			In any position			
Ambient temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)	Note: When using below freezing point it is necessary to consult factory.		
Medium temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)			
Medium			Filtered compressed air			
Lubrication			With or without oil mist lubrication <sup>1)</sup>			
<b>Pneumatic Characteristics</b>						
Nominal pressure	$p_n$	psi (bar)	87 (6)			
Operating pressure range	$p_{min}$	psi (bar)	29 (2)			
	$p_{max}$	psi (bar)	-1 (Version S)			
Nominal flow	$Q_N$	Cv (l/min)	5/2-way valve	5/3-way valve		
			6.5 (6540)	6.5 (6540)		
<b>Actuation</b>						
Electrical			Pilot operated Pilot operated with external pilot air			
Actuation pressure range	$p_{st min}$	psi (bar)	29 (2)			
	$p_{st max}$	psi (bar)	145 (10)			
Voltage type			AC	DC		
Nominal Voltage Standard version Low watt. version	$U_n$	V	220	24		
	$U_n$	V	220	24		
			Further voltages available on request			
Initial Power Consumption Standard version Low watt. version		VA (W)	11	4.8		
		VA (W)	7.8	2.7		
Continuous Power Consumption Standard version Low watt. version		VA (W)	8.5	4.8		
		VA (W)	4.9	2.7		
Duty cycle	ED	%	Continuous Duty			
Electrical protection			IP65 to DIN 40050 (with plug)			
Insulating material			VDE 0580			
Connection			Plug to DIN 43650 form B			

<sup>1)</sup> We recommend the use of mineral oil type VG32 to ISO 3448

Characteristics to VDI 3290					Pressures quoted as gauge pressure	
Characteristics	Symbol	Unit	Description			
<b>General Features</b>						
Type			Ceramic spool valve			
Mounting			On base plate, to ISO 5599			
Tube connection			Base plate			
Port size			G1/2 (base plate)			
Weight (mass)		lbs. (kg)	2.42 (1.1)			
Installation			In any position			
Ambient temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)	Note: When using below freezing point it is necessary to consult factory.		
Medium temperature range	$\vartheta_{min}$ $\vartheta_{max}$	°F (°C)	14 (-10) 140 (+60)			
Medium			Filtered compressed air			
Lubrication			With or without oil mist lubrication <sup>1)</sup>			
<b>Pneumatic Characteristics</b>						
Nominal pressure	$p_n$	psi (bar)	87 (6)			
Operating pressure range	$p_{min}$ $p_{max}$	psi (bar)	-13 (-0.9) 174 (12)			
Nominal flow	$Q_N$	1/min	5/2-way valve	5/3-way valve		
			6.5 (6540)	6.5 (6540)		
<b>Actuation</b>						
Pneumatic			Direct			
Actuation pressure range	$p_{st min}$	psi (bar)	29 (2)			
	$p_{st max}$	psi (bar)	174 (12)			

<sup>1)</sup> We recommend the use of mineral oil type VG32 to ISO 3448

# 5/2-Way Valve 5/3-Way Valve

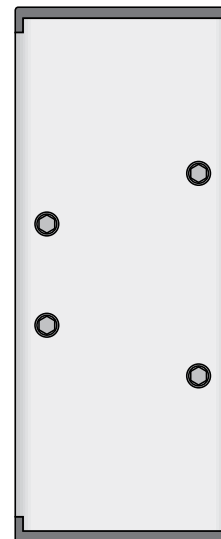
## ISO 5599 Size 3

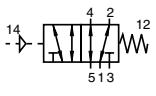
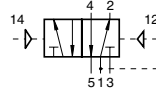
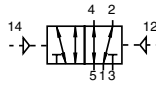
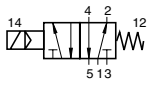
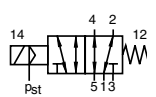
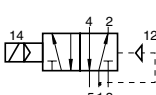
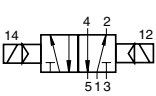
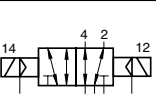
**Actuation: Air Pilot**

- Single Air Pilot
- Double Air Pilot
- Spring Center

**Delivery Includes:**

- valve
- mounting screws
- gasket



ORDER INSTRUCTIONS: 5/2-Way Valves				
Actuation	Symbol	Type Number	Order Number	Size
5/2 Single Air Pilot Spring Return		S20561RF-01	PA 12891	VDMA 01
		S20561RF-1	PA 12869	Size 1
		S20561RF-2	PA 16425	Size 2
		S20561RF-3	PA 16426	Size 3
5/2 Single Air Pilot Air Spring Return		S20561R-01	PA 12892	VDMA 01
		S20561R-1	PA 12870	Size 1
		S20561R-2	PA 16428	Size 2
		S20561R-3	PA 16429	Size 3
5/2 Double Air Pilot		S20561-01	PA 12893	VDMA 01
		S20561-1	PA 12868	Size 1
		S20561-2	PA 16422	Size 2
		S20561-3	PA 16423	Size 3
5/2 Single Solenoid Spring Return		S20581RF-01-..	PA 12886-..33	VDMA 01
		S20581RF-1-..	PA 12875-..33	Size 1
		S20581RF-2-..	PA 16441-..33	Size 2
		S20581RF-3-..	PA 16442-..33	Size 3
5/2 Single Solenoid Spring Return with external pilot air		S20581S-RF-01-..	PA 12896-..33	VDMA 01
		S20581S-RF-1-..	PA 12882-..33	Size 1
		S20581S-RF-2-..	PA 16456-..33	Size 2
		S20581S-RF-3-..	PA 16462-..33	Size 3
5/2 Single Solenoid Air Spring Return		S20581R-01-..	PA 12887-..33	VDMA 01
		S20581R-1-..	PA 12876-..33	Size 1
		S20581R-2-..	PA 16444-..33	Size 2
		S20581R-3-..	PA 16445-..33	Size 3
5/2 Double Solenoid		S20581-01-..	PA 12888-..33	VDMA 01
		S20581-1-..	PA 12874-..33	Size 1
		S20581-2-..	PA 16438-..33	Size 2
		S20581-3-..	PA 16439-..33	Size 3
5/2 Double Solenoid with external pilot air		S20581S-01-..	PA 12898-..33	VDMA 01
		S20581S-1-..	PA 12880-..33	Size 1
		S20581S-2-..	PA 16454-..33	Size 2
		S20581S-3-..	PA 16460-..33	Size 3

Voltage Range		Coil Number	Order Code
Nominal	Secondary		
12 vDC	--	KZ 3518	01
24 vDC	60 50/60Hz	KZ 3519	02
110 50/60Hz	48 vDC	KZ 3521	57
220 50/60Hz	110 vDC	KZ 3522	61



• Other voltages available. Contact factory.

ORDER INSTRUCTIONS: 5/3-Way Valves					
Actuation	Symbol	Type Number	Order Number	Size	
5/3 Double Air Pilot Closed Center		S20561RFG-01	PA 12894	VDMA 01	
		S20561RFG-1	PA 12871	Size 1	
		S20561RFG-2	PA 16431	Size 2	
		S20561RFG-3	PA 16432	Size 3	
	Dual Center		S20561RFB-1	PA 12873	Size 1
			S20561RFB-2	PA 16437	Size 2
	Open Center		S20561RFE-01	PA 12895	VDMA 01
			S20561RFE-1	PA 12872	Size 1
			S20561RFE-2	PA 16434	Size 2
S20561RFE-3			PA 16435	Size 3	
5/3 Double Solenoid Closed Center		S20581RFG-01	PA 12889-..33	VDMA 01	
		S20581RFG-1-..	PA 12877-..33	Size 1	
		S20581RFG-2-..	PA 16447-..33	Size 2	
		S20581RFG-3-..	PA 16448-..33	Size 3	
	Dual Center		S20581RFB-1-..	PA 12879-..33	Size 1
			S20581RFB-2-..	PA 16453-..33	Size 2
	Open Center		S20581RFE-01	PA 12890-..33	VDMA 01
			S20581RFE-1-..	PA 12878-..33	Size 1
			S20581RFE-2-..	PA 16450-..33	Size 2
S20581RFE-3-..			PA 16451-..33	Size 3	
5/3 Double Solenoid with external air pilot Closed Center		S20581S-RFG-01-..	PA 12900-..33	VDMA 01	
		S20581S-RFG-1-..	PA 12883-..33	Size 1	
		S20581S-RFG-2-..	PA 16457-..33	Size 2	
		S20581S-RFG-3-..	PA 16463-..33	Size 3	
	Dual Center		S20581S-RFB-1-..	PA 12885-..33	Size 1
			S20581S-RFB-2-..	PA 16459-..33	Size 2
	Open Center		S20581S-RFE-01-..	PA 12899-..33	VDMA 01
			S20581S-RFE-1-..	PA 12884-..33	Size 1
			S20581S-RFE-2-..	PA 16458-..33	Size 2
S20581S-RFE-3-..			PA 16464-..33	Size 3	

Voltage Range		Coil Number	Order Code
Nominal	Secondary		
12 vDC	--	KZ 3518	01
24 vDC	60 50/60Hz	KZ 3519	02
110 50/60Hz	48 vDC	KZ 3521	57
220 50/60Hz	110 vDC	KZ 3522	61



• Other voltages available. Contact factory.