Valve systems → Standardized valve systems

5/3-way valve, Series 581, size 3

► Qn = 4100 l/min ► plate connection ► Pilot valve width: 22 mm ► compressed air connection output: Base plate ISO 5599-1 ► Electr. connection: Plug, Form B, industry ► Manual override: with detent ► closed center

00132224

Standards	ISO 5599-1
Version	Spool valve
Sealing principle	soft sealing
Blocking principle	Single base plate principle
Working pressure min./max.	See table below
Ambient temperature min./max.	-15°C / +50°C
Medium temperature min./max.	-15°C / +50°C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 mg/m³ - 5 mg/m³
Pneumatic ports	Base plate ISO 5599-1
Protection classwith electrical connector/ plug	IP 65
Duty cycle	100 %
Switch-on time	25 ms
Switch-off time	40 ms
Mounting screw	with hexagon socket
mounting screw tightening torque	10 Nm
Materials:	
Housing	Aluminum
Seals	Acrylonitrile Butadiene Rubber

Technical Remarks

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

Operating voltage			Voltage tolerance			Power consumption	Switch-on power		Holding power	
DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
						W	VA	VA	VA	VA
12 V	-	-	-10% / +10%	-	-	5	-	-	-	-
-	24 V	-	-	-10% / +10%	-	-	10	-	8	-
24 V	-	-	-10% / +10%	-	-	5	-	-	-	-
48 V	-	-	-10% / +10%	-	-	5	-	-	-	-
-	-	110 V	-	-	-10% / +10%	-	-	10	-	8
-	230 V	-	-	-10% / +10%	-	-	10	-	8	-

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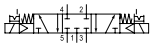
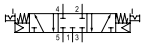
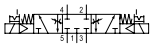
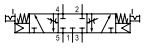
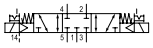
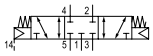
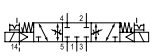
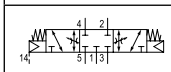
	MO	Operating voltage			Flow conductance	Qn	Working pressure min./ max.	Control pressure min./ max.	Weight	Note	Part No.
		DC	AC 50 Hz	AC 60 Hz	C						
					[l/(s*bar)]	[l/min]	[bar]	[bar]	[kg]		
		12 V	-	-	14.1	4100	3 / 10	3 / 10	1.01	1)	5813420500
		-	24 V	-							5813420200
		24 V	-	-							**5813420100**
		48 V	-	-							5813420600
		-	-	110 V							**5813420300**
		-	230 V	-							**5813420400**
		-	-	-	14.1	4100	3 / 10	3 / 10	1.01	1); 3)	**5813420000**
		12 V	-	-	14.1	4100	3 / 10	3 / 10	1.01	1); 4)	5813421500
		-	24 V	-							5813421200
		24 V	-	-							**5813421100**
		48 V	-	-							5813421600
		-	-	110 V							5813421300
		-	230 V	-							5813421400
		-	-	-	14.1	4100	3 / 10	3 / 10	1.01	1); 3); 4)	**5813421000**
		12 V	-	-	14.1	4100	-0.95 / 10	3 / 10	1.01	2)	5813422500
		-	24 V	-							5813422200
		24 V	-	-							5813422100
		48 V	-	-							5813422600
		-	-	110 V							5813422300
		-	230 V	-							5813422400
		-	-	-	14.1	4100	-0.95 / 10	3 / 10	1.01	2); 3)	5813422000
		12 V	-	-	14.1	4100	-0.95 / 10	3 / 10	1.01	2); 4)	5813423500
		-	24 V	-							5813423200
		24 V	-	-							5813423100
		48 V	-	-							5813423600
		-	-	110 V							5813423300
		-	230 V	-							5813423400
		-	-	-	14.1	4100	-0.95 / 10	3 / 10	1.01	2); 3); 4)	5813423000

MO = Manual override
1) Pilot: internal
2) Pilot: external
3) Basic valve without coil
4) with throttle
Nominal flow Qn at 6 bar and Δp = 1 bar

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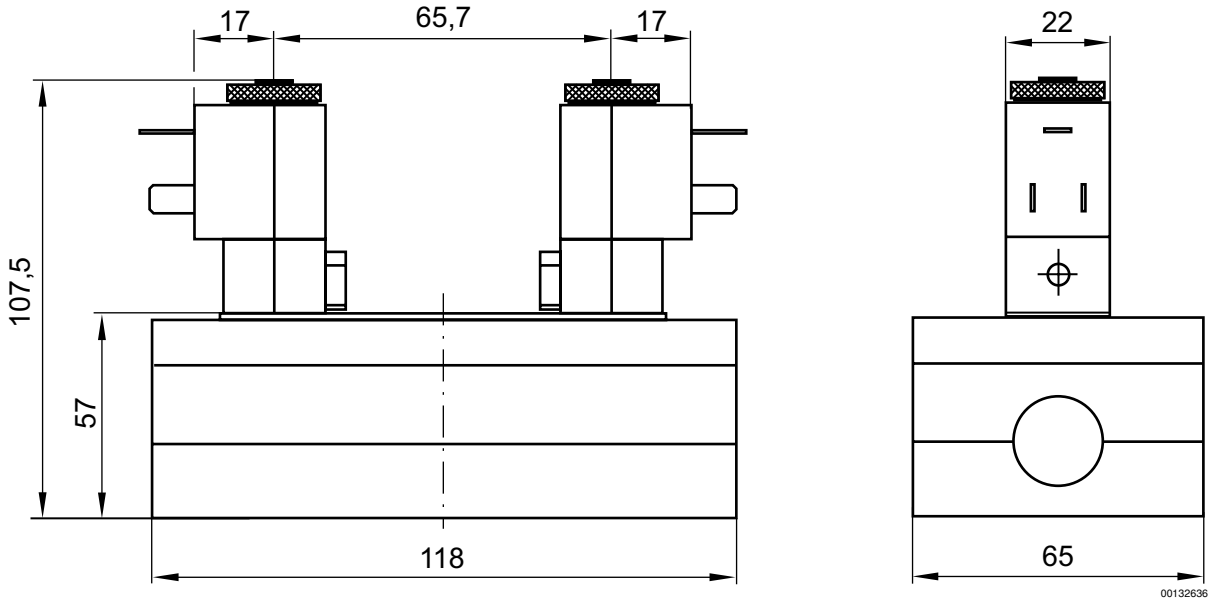
Dimensions



The pilot valves can be loosened and turned through 180°.