

## **Product Overview**

The AX-RSV-MxR range of Brass Rotary shoe valves are designed for use in heating systems for mixing or diverting applications where a certain amount of leakage is desirable. The valves come complete with female BSP threaded connections upto 50mm.

Note: these valves are not tight shut-off

### **Features**

- Brass
- Mixing or Diverting applications

- Good Control Characteristics
- PN10

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<b>Product Specifica</b>	tions	
Flow Type:		Mixing or Diverting
Fluid Temperature:		2 to 110 degC
Max Pressure Drop:		100kPa
Nominal Pressure:		PN10
<b>Operating Pressure:</b>		10 Bar
Letby:	3 Port	1%
	4 port	1.5%
Rangeability:		100:1
Materials:	Body/Lid	Brass
	Gate/Spindle	Brass
	Lever	ABS
	O-Rings	EPDM
Country of Origin:		Switzerland

### **Brass Valves**

AX-RSVM3R15F200	3 Port 15mm BSP Screwed Rotary Shoe Valve Kvs 2.5	
AX-RSVM3R20F200	3 Port 20mm BSP Screwed Rotary Shoe Valve Kvs 6.0	
AX-RSVM3R25F200	3 Port 25mm BSP Screwed Rotary Shoe Valve Kvs 12.0	
AX-RSVM3R32F200	3 Port 32mm BSP Screwed Rotary Shoe Valve Kvs 18.0	
AX-RSVM3R40F200	3 Port 40mm BSP Screwed Rotary Shoe Valve Kvs 26.0	
AX-RSVM3R50F200	3 Port 50mm BSP Screwed Rotary Shoe Valve Kvs 40.0	
AX-RSVM4R20F200	4 Port 20mm BSP Screwed Rotary Shoe Valve Kvs 6.0	
AX-RSVM4R25F200	4 Port 25mm BSP Screwed Rotary Shoe Valve Kvs 12.0	
AX-RSVM4R32F200	4 Port 32mm BSP Screwed Rotary Shoe Valve Kvs 18.0	
AX-RSVM4R40F200	4 Port 40mm BSP Screwed Rotary Shoe Valve Kvs 26.0	
AX-RSVM4R50F200	4 Port 50mm BSP Screwed Rotary Shoe Valve Kvs 40.0	
Actuators- see relevant datasheet		

# AX-DASM105SF132 AX-DASM115SF132 AX-DASM115SF132 AX-DASM124SF132 Tonm Proportional Damper actuator 24Vac c/w linkage kit Tonm Proportional Damper actuator 24Vac c/w linkage kit

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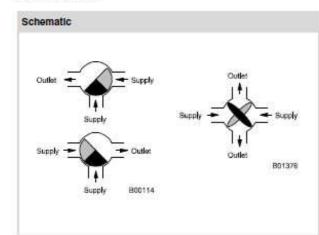
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#### Operation

The hot-water inlet is continuously opened by turning the spindle, while the cold-water inlet (heating return) is closed proportionately. This cause the temperature of the mixed water to rise (heating flow) while the flow remains practically constant.

On closing the hot-water inlet on the four-way valve, a by-pass to the boiler return is opened, which allows thermal circulation.

For automatic operation, a reversible drive with 90° angle of rotation is suitable. When the coupling is disengaged, the slider can be adjusted by hand.

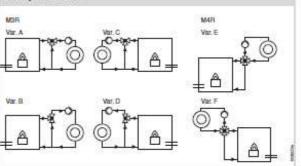


#### Additional technical data

Body of brass, not injection-moulded. Tapped holes for fitting the bracket and the motor drive. Lever for manual adjustment, of ABS Scale, printed on both sides, for the following types of fitting: Boiler flow from left or right.

The ABS lever is supplied with the valve.

#### Examples of use



#### Engineering and fitting notes

All control valves should be used only in closed circuits. If used in open circuits, an excessive oxygen mixture may damage the valves. To prevent this from happening, use an oxygen binding agent, but consult the manufacturer of the binding agent with regard to compatibility and corrosion. Consult the material list, see MD 54.026. The composition of the water should be in accordance with VDI 2035.

#### Using with water

When using water, mixed with glycol or an inhibitor, consult the manufacturer with regard to the compatibility of the materials and seals used in the control valves. Please refer to the materials list below. If glycol is used, we recommend a concentration of between 20% and 50%.

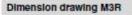
#### Permissible fitting positions

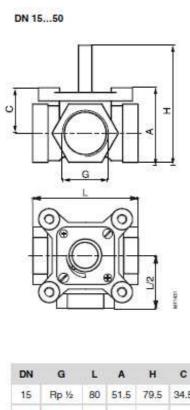
The control unit can be fitted in any position; however, we do not recommend fitting it in the upside-down position. The ingress of condensate, drops of water etc. into the drive should be prevented.

Every effort has been taken in the production of this data sheet to ensure it's accuracy. Axio can not, however, accept responsibility for any damage, expense, injury, loss or consequential loss resulting from any errors or omissions. Axio has a policy of continuous improvement and reserves the right to change this specification without notice.

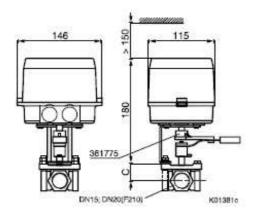
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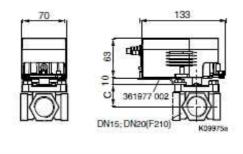
M3R three-way valve with AR30 actuator

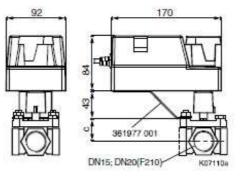


M3R three-way valve with ASM124 actuator



Three-way valve with ASM105/115 actuator



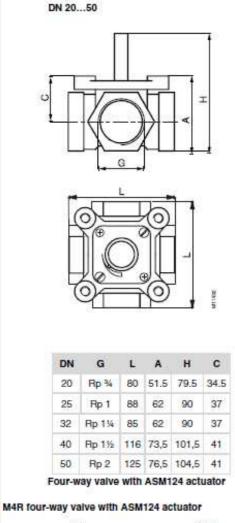


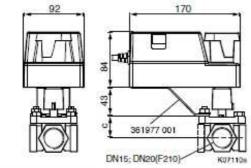
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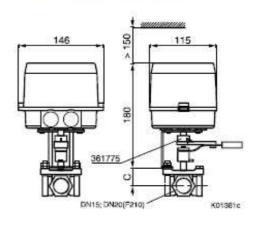
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### Dimension drawing M4R

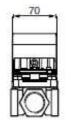


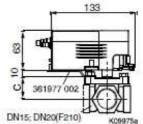


#### M4R four-way valve with AR30 actuator



M4R four-way valve with ASM105/115 actuator





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