

# Series 9000 compatibility table

Series 9000 actuators with 2 way, 3 way, 4 way and 6 way valves



■ Recommended

■ Alternative

2PND - 2 point control non-defined

2P - 2 point control

3P - 3 point control

MOD - Modulating signal

		S9000													
		2PND	2PND	2PND (DIV)	2P		3P				3P MIX	MOD X (Modulating signal 0-10V)			
Valve type	Valve variants	8s/60°	12s/90°	12s/90°	20s/90°	40s/90°	20s/90°	40s/90°	80s/90°	110s/90°	110s/90°	20s/90°	40s/90°	110s/90°	
<b>2w zone ball valves</b> DN15-DN32      	 <b>FBV 220</b> internal threads		<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>					
	 <b>FBV 221</b> internal thread, union fitting		<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>					
	 <b>FBV 222</b> union fittings		<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>					
	 <b>FBV 223</b> external threads		<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>					
	 <b>FBV 224</b> compression fittings		<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>					
<b>2w control ball valves</b> DN15-DN32      	With characterized insert  <b>FBV 220-M</b> internal threads						<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	
	 <b>FBV 221-M</b> internal threads, union fittings						<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	
	 <b>FBV 222-M</b> union fittings							<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>
	 <b>FBV 223-M</b> external threads							<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>
	 <b>FBV 224-M</b> compression fittings							<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>
<b>3w vertical mixing/diverting ball valves</b> DN20-DN32     	 <b>FBV 234</b> internal threads				<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	
	 <b>FBV 237</b> union fittings				<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	
	 <b>FBV 238</b> external threads				<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	
	 <b>FBV 244</b> compression fittings				<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>		<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	
<b>4-way valves</b> DN20  	<b>FBV 400</b> external/internal threads												<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	
<b>6-way valves</b> DN20  	<b>FBV 600</b> internal threads					<span style="color: blue;">■</span>				<span style="color: gray;">■</span>			<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	

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Valve type	Valve variants	8s/60°	12s/90°	12s/90°	20s/90°	40s/90°	20s/90°	40s/90°	80s/90°	110s/90°	110s/90°	20s/90°	40s/90°	110s/90°
3w horizontal ball valves (DN15-DN20)	 FBV 331C internal threads				<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: gray;">■</span>
	 FBV 332C external threads				<span style="color: blue;">■</span>	<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>	<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: blue;">■</span>	<span style="color: gray;">■</span>
Vertical rotary diverting valves	 FDV 532C external threads	<span style="color: blue;">■</span>												
	 FMV 533C compression fittings	<span style="color: blue;">■</span>												
3w horizontal rotary mixing valves: (DN15-DN32)	 FMV 131C internal threads										<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: blue;">■</span>
	 FMV 132C external threads										<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: blue;">■</span>
	 FMV 133C compression fittings										<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: blue;">■</span>
3w horizontal rotary diverting valves: (DN15-DN32)	 FDV 231C internal threads			<span style="color: blue;">■</span>										
	 FDV 232C external threads			<span style="color: blue;">■</span>										
	 FDV 233C compression fittings			<span style="color: blue;">■</span>										
3w mixing valves H-151C with by-pass and pump connection	 FMV H-151C with clip system and by-pass										<span style="color: blue;">■</span>		<span style="color: gray;">■</span>	<span style="color: blue;">■</span>
4w horizontal rotary mixing valves: (DN15-DN32)	 FMV 140C with clip system										<span style="color: blue;">■</span>			<span style="color: blue;">■</span>