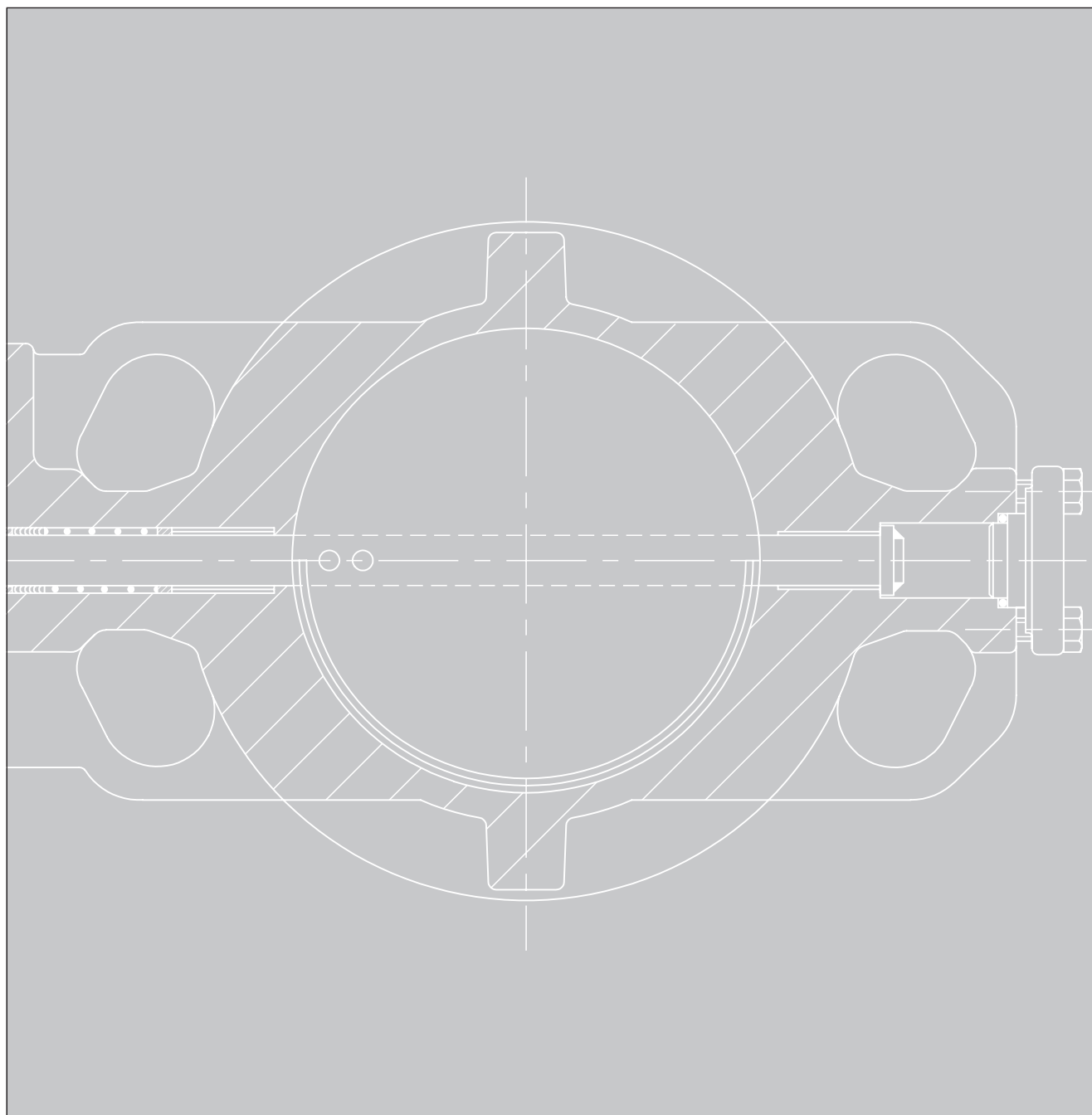


Control Valves for Industrial Processes

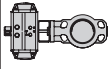
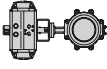
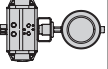
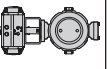
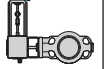

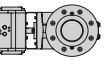
Rotary Valves



Nominal size:	DN 15 to DN 2000	½" to 80"
Nominal pressure	PN 6 to PN 400	ANSI Class 125 to 2500
Temperature:	Up to 1000 °C	Up to 1830 °F



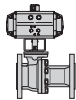
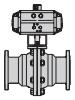
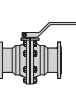
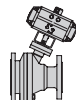
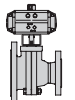
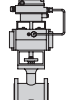
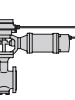
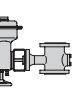
Control Valves for Industrial Processes • Rotary Valves • Summary of types

Rotary valve		Design	Butterfly valves					Segmented ball valve
		Type	3331	BR 14b	3335/ BR 10e	BR 10a	3237	LTR 43
Closure member/shaft design	Centric	•		•		•		•
	Double eccentric		•		•			
	Triple eccentric						•	
Closure member	Metal sealing	•	•			•	•	•
	Soft sealing		•	•	•		•	•
Leakage class acc. to DIN EN 1349, %/K _{V5} 90 or DIN EN 12 266-1 ¹⁾		≤ 0.5...1 %	V	A ¹⁾	VI	0.05... ≤ 0.5 %	A ¹⁾	IV/VI
Criteria for selection			+++ Excellent ++ Good + Satisfactory - Not suitable					
On/off service		-	+++	+++	++	-	+++	+++
Throttling service		++	+	-	+	+	++	++
Leakage rate		-	+++	+++	+++	-	+++	+++
Δp when valve is closed		+	++	+	+	+	+++	++
Temperatures	> 220 °C (428 °F)	++	+	-	-	++	+++	++
	< -10 °C (14 °F)	+	+++	-	-	+	+++	+
Fire-safe		-	+ ²⁾	-	-	-	+++	-
TA-Luft (German clean air act)		-	+++	-	+++	+	++	-
Cavitation		-	-	-	-	-	+	-
Noise performance		+	-	-	-	-	++	-
Suitable for	fibrous media	+	+	+	-	+	+	++
	media contain. suspended particles	-	++	+	+	-	++	-
Standard version	DIN	•	•	•	•	•	•	(•)
	ANSI	•	•	•	•	•	•	•
Nominal sizes	DN	100...400	80...400	50...300	100...800	500...1000	80...2000	(25...300)
	in	4" ... 16"	3" ... 16"	2" ... 12"		20" ... 40"	3" ... 80"	1" ... 10"
Nominal pressure	PN	10...40	10...40	10/16	10	6...16	10...400	(10...40)
	Class	150/300	150/300			150	150...2500	150/300
Permissible temperatures and differential pressures		See associated data sheet						
Body material	Cast iron, EN-JL1040			•				
	Sph. graphite iron, EN-JS1049			•	•			
	Cast steel, WN 1.0619	•				•	•	
	Stainless cast steel, WN 1.4581	•				•		
	X6CrNiMoTi17-12-2, WN 1.4571							
	Others		1.4408				1.4408	
	ASTM A 216 WCC, carbon steel	•					•	•
	A 351 CF8M, st. carbon steel	•	•				•	•
Special material, e.g. Ni, Ti	•					•		
Option	Insulating section	•	•			•	•	•
	Recommended actuator Type	BR 31a/AT	•	•	•			•
		3278	•					•
Others		BR 30			3271/3277	•		
Connection	Flange						•	•
	Wafer	•	•	•	•	•	•	
	Lug-type		•		•		•	
								
Data Sheet T ... EN		8227	9924	8220	9925	8225	9923	8222

1) Leakage rate A acc. to EN 12266-1, test P12

2) Design, not approved

Control Valves for Industrial Processes • Rotary Valves • Summary of types

Rotary valve		Design Type	Ball valves			Tank bottom valves		Rotary plug valves		
			BR 26 (horiz./vert.)	BR 20a	BR 20b	BR 22a	BR 21a	72.x AT	72.x R	73.x R 73.x M
Closure member/shaft design	Centric		•	•	•	•	•			
	Double eccentric						•	•	•	
	Triple eccentric									
Closure member	Metal sealing		•			•		•	•	
	Soft sealing		•	•	•	•	•	•	•	
Leakage class acc. to DIN EN 1349, %/KvS 90 or DIN EN 12 266-1 ¹⁾			A 1)	A 1)	A 1)	A 1)	A 1)	IV-L1/VI-G1		
Criteria for selection			+++ Excellent			++ Good		+ Satisfactory		- Not suitable
On/off service			+++	+++	+++	+++	+++	+	+	+
Throttling service			-	-	-	-	-	+++	+++	+++
Leakage rate			+++	+++	+++	+++	+++	++	++	++
Δp when valve is closed			++	+	+	++	++	++	++	+++
Temperatures	> 220 °C (428 °F)		-	-	-	-	-	+	+	+
	< -10 °C (14 °F)		-	-	-	-	-	-	+	+
Fire-safe			+++	-	-	-	-	+ 2)	+ 2)	+ 2)
TA-Luft (German clean air act)			+++	+++	+++	+++	+++	+++	+++	+++
Cavitation			-	-	-	-	-	++	++	++
Noise performance			-	-	-	-	-	++	++	++
Suitable for	fibrous media		+	-	-	+	-	+	+++	+++
	media cont. suspended particles		+	-	+	+	-	+	+++	+++
Standard version	DIN		•	•	•	•	•	•	•	•
	ANSI		•	•	•	•	•	•	•	•
Nominal sizes	DN		15...150	25...150	25...100	25...150	50...100	25...200	25...400	25...400
	in					1"....6"	2"....4"	1"....8"	1"....16"	1"....16"
Nominal pressure	PN		16...40	10/16	16	16...40	16	10...40	10...40	63...160
	Class					150/300	150	150/300	150/300	600/900
Perm. temperatures and differential pressures			See associated data sheet							
Body material	Cast iron, EN-JL1040									
	Sph. graphite iron, EN-JS1049			•	•			•		
	Cast steel, WN 1.0619							•	•	•
	Stainless cast steel, 1.4581							•	•	•
	X6CrNiMoTi17-12-2, 1.4571		•					•		
	Others		1.4408				1.4408			
	A 216 WCC, carbon steel									
	A 351 CF8M, st. carbon steel									
	Special material (Ni, Ti)		•				•		•	•
Option	Insulating section									
	Recommended actuator Type	BR 31a/AT 3278	•	•	•	•	•	•		•
	Others								R, S	R, M, S
Connection	Flange		•			•	•	•	•	•
	Wafer			•	•			•	•	•
	Lug type					•	•			
										
Data Sheet T ... EN			9926	9927	9928	9932	9931	9921	9918	9919/20

1) Leakage rate A acc. to EN 12266-1, test P12

2) Design, not approved

Specifications subject to change without notice.



SAMSON AG · MESS- UND REGELTECHNIK
Weismüllerstraße 3 · 60314 Frankfurt am Main · Germany
Phone +49 69 4009-0 · Fax +49 69 4009-1507
Internet: <http://www.samson.de>

T 8200 EN