

Characterised control valves

Characterised control valves with small actuators

				Emergency control function					
				KR	TR / TRF / TRC				
3-point	AC/DC 24 V	Ⓜ : 90 s / Ⓢ : <25 s	3-point						
		75 s	3-point	80°C	120°C ⁴⁾				
		100 s	3-point						
	AC 230 V	75 s	3-point	KR24	TRF24-2(-O)				
		105 s	3-point		TR24				
					TR230-3 ³⁾				
Modulating	AC/DC 24 V	15 s	DC (0) 2...10 V		TRC24A-SR				
		75 s	DC (0) 2...10 V	KR24-SR					
		90 s	DC (0) 2...10 V		TR24-SR				
		Ⓜ : 90 s / Ⓢ : 25 s	DC (0) 2...10 V		TRF24-SR(-O)				
Flange (EN 10921) 2-way		3-way		PN 6 T _{max} = 100°C		Range of use⁴⁾ Closed / open circuits (pH > 7)			
				DN [mm]	k_{VS}¹⁾ [m ³ /h]	Δp_s [kPa]	Δp_{max} [kPa]	Δp_s [kPa]	Δp_{max} [kPa]
R6015RP63-B1...R6015R4-B1		R7015RP63-B1...R7015R4-B1		15	0.63 / 1 / 1.6 / 2.5 / 4 ²⁾	600	100	600	100
R6020R6P3-B1		R7020R6P3-B1		20	6.3	600	100	600	100

1) $k_{VS} = A - AB$, $k_{VS} (B - AB) = 70\% \times k_{VS}$

2) 2-way valves only

3) Parallel control not possible

4) If medium temperature $\geq 100^\circ\text{C}$, then pipe and valve must be insulated

Characterised control valves



Characterised control valves with standard actuators

				Emergency control function	LR/LRC/LRQ/ LRF/NRFD	NR/NRQ/ NRF	SR/ SRF
					120°C	120°C	120°C
3-point	AC/DC 24 V	90 s	3-point		LR24A(-S)	NR24A(-S)	SR24A(-S)
	AC 230 V	90 s	3-point		LR230A(-S)	NR230A(-S)	SR230A(-S)
		Ⓜ : 35 s / Ⓞ : <20 s	3-point	Ⓞ	NRFD230A-3(-S2)(-O)		
		Ⓜ : 90 s / Ⓞ : <20 s	3-point	Ⓞ		NRF230A-3(-S2)(-O)	
Modulating AC/DC 24 V	9 s		DC (0) 2...10 V		LRQ24A-SR	NRQ24A-SR	
			DC (0) 0.5...10 V		LRQ24A-SZ	NRQ24A-SZ	
	35 s		DC (0) 2...10 V		LRC24A-SR		
			DC (0) 2...10 V		LR24A-SR	NR24A-SR	SR24A-SR
	90 s		DC (0) 0.5...10 V	Ⓞ		NRF24A-SZ(-S2)(-O)	SRF24A-SZ(-S2)(-O)
	Ⓜ : 150 s / Ⓞ : <20 s	DC (0) 2...10 V	Ⓞ	LRF24-SR			

Flange (EN 1092/1) 2-way	PN 6 T _{max} = 100°C		Range of use Closed / open circuits (pH > 7)					
	DN [mm]	k _{vs} ¹⁾ [m ³ /h]	Δp _s [kPa]	Δp _{max} [kPa]	Δp _s [kPa]	Δp _{max} [kPa]	Δp _s [kPa]	Δp _{max} [kPa]
R6025R10-B2	25	10	600	100	600	100	600	100
R6032R16-B3	32	16						
R6040R25-B3	40	25						
R6050R40-B3 ⁴⁾	50	40			600	100	600	100

Flange (EN 1092/1) 3-way	PN 6 T _{max} = 100°C		Range of use ³⁾ closed circuits (pH > 7)					
	DN [mm]	k _{vs} ¹⁾ [m ³ /h]	Δp _s [kPa]	Δp _{max} [kPa]	Δp _s [kPa]	Δp _{max} [kPa]	Δp _s [kPa]	Δp _{max} [kPa]
R7025R10-B2	25	10	600	100	600	100	600	100
R7032R16-B3	32	16						
R7040R16-B3	40	16						
R7050R25-B3 ¹⁾	50	25			600	100	600	100

1) k_{vs} = A - AB, k_{vs} (B - AB) = 70% x k_{vs}
 2) If medium temperature ≥ 100°C, then pipe and valve must be insulated
 3) R3..., R7...: not suitable for open circuits
 4) Valve can not be motorised with NRQ.. actuators