

MODEL : M2F | 2-Way Control Valve



Connection : CI, PN 16

APPLICATIONS - Control valves type M2F are designed for regulating hot water, steam and lubricating oil systems. The double-seated valves are used in installations where the system pressure necessitates a closing force greater than available in the actuator programme for a single-seated valve. The valves are used in conjunction with our temperature or pressure differential regulators for controlling industrial processes, district or central heating plants or marine installations.

DESIGN - The valve components - spindle, seats and cone - are made of stainless steel. The valve body is made of cast iron EN-GJS-400-15 with flanges drilled according to EN 1092-2. The thread for the actuator connection is G1B ISO 228. The valves are double-seated. The leakage rate is less than 0.5% of the full flow (according to VDI/VDE 2174).

FUNCTION - Without the actuator being connected, the valve is held in open position by means of a spring. With pressure on the spindle the valve will close. In connection with our thermostats or electronic actuators, the valves will close at rising temperatures. For cooling circuits the valve can be used in conjunction with a reverse acting electric actuator. Alternatively a reverse acting valve can be used with our self-acting thermostats. The quadratic characteristic (DN20-80mm) will not cease and linear characteristic (DN100-150mm) will not cease, until the flow has dropped below 4% of the full flow.

MOUNTING - The valve can be installed with vertical as well as horizontal spindles. For valve temperatures of max. 170°C, the thermostat/ actuator can be fitted below or above the valve. For valve mounted with thermostats in media temperatures above 170°C, a cooling unit has to be applied with connection downwards (please refer to data sheet for thermostat accessories). For electric actuators a high temperature adaptor must be used (please refer to datasheets for the electric actuators).

FEATURES

- Simple design secures reliable controls.
- Location of the pack box in the actuator makes the valve service friendly
- Reliable and secure due to internal parts of stainless steel

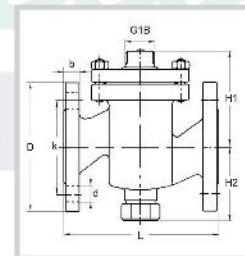


DN20 - 80 mm

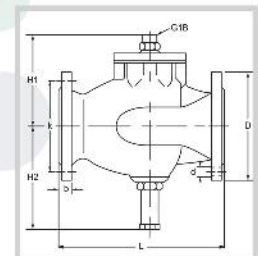


DN100 - 150 mm

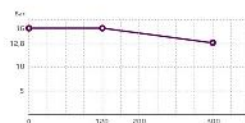
Parts Name / Size	MATERIAL	
	DN20 - DN80	DN100 - DN150
Body	Cast Iron (EN-GJS-400-15)	
Spring	1.4568	-
Cone	1.4408, 1.4305	-
Components	Stainless Steel	
Gasket	Stainless Steel Foil and Graphite	
Upper seat	AISI 303	
Lower Seat	1.430, 1.4305, 1.4307	
Bolts, Nuts	24 CrMo 4/A4	
Nominal pressure	PN 16	
Seating	Double - Seated	
Flow characteristic	Quadratic	Almost Quadratic
Leakage rate	<0.5% of Kvs	
Regulating Capability	Kvs / Kvr > 25	
Flanges drilled according to	EN 1092 - 2 PN 16	
Counter flanges Adjustable seat interspace	DIN 2633 / BS 4504	



DN20 - 80 mm



DN100 - 150 mm



Pressure Temperature Diagram

Type	Flange connection	Opening	k-value	Lifting height	L	H1	H2	b	D (dia.)	k (dia.)	d mm dia.	Weight
	DN in mm	mm	m ³ /h	mm	mm	mm	mm	mm	mm	mm	(number)	kg
20 M2F	20	20	5	6.5	150	85	70	16	105	75	14x(4)	5
25 M2F	25	25	7.5	7	160	95	77	16	115	85	14x(4)	6.5
32 M2F	32	32	12.5	8	180	105	82	18	140	100	19x(4)	9
40 M2F	40	40	20	9	200	110	92	19	150	110	19x(4)	11
50 M2F	50	50	30	10	230	125	102	19	165	125	19x(4)	16
65 M2F	65	65	50	11	290	135	120	19	185	145	19x(4)	21
80 M2F	80	80	80	13	310	145	130	19	200	160	19x(8)	38
100 M2F	100	100	125	20	350	185	209	24	220	180	18x(8)	32
125 M2F	125	125	215	20	400	205	224	26	250	210	18x(8)	50
150 M2F	150	150	310	20	400	240	244	26	285	240	22x(8)	70