

**Body:** two way form, for heat transfer oil  
 Pressure range: body PN16, PN25, PN40  
                   bellow PN25  
 Immersion length acc. to DIN EN 558, basic series 1  
 Flanges acc. to DIN EN 1092-1/2 type 21  
 Spindle sealing: double wall bellow  
 and safety stuffing box  
 Internal parts: stainless steel, replaceable seat rings  
 Flow characteristic: equal percentage (partially modified)  
 Positioning ratio: 30:1 (up to 50:1)  
 Leakage: < 0,01% Kvs

**Actuator:** with manual emergency operation  
 and load dependent limit switches  
 Thrust: 2000 N  
 Power input: 12 VA  
 Alternatively: 4000 N / 28 VA (appendix ...c)  
                   5500 N / 28 VA (appendix ...d)  
 Power supply: 230V/50...60Hz  
 Optionally: 115V/50...60Hz, 24V/50...60Hz, 24VDC  
 Motor rating standard acc. to DIN EN 60034-1: S1 – 100%  
 Protection class acc. to DIN EN 60529: IP65

**Accessories, special types:**  
 Add. limit switches load dependent (see page 49e)  
 Add. signal switches travel dependent (see page 49w)  
 Feedback potentiometer (see page 49f)  
 Integrated positioner (see page 49sr)  
 Integrated process controller (see page 49r)  
 Feedback signal 4-20mA / 0-10V  
 Actuator heater (on request)  
 Other positioning speed (on request)  
 Reduced Kvs- values (on request)  
 Weld-on ends (on request)  
 Flange drillings acc. to ANSI / JIS (on request)

**Order text:**  
 Motor control valve in two way form  
 Material . . . , PN . . . , DN . . . , Kvs . . .  
 Spindle sealing with bellow  
 Power supply . . . , closing pressure . . . bar  
 List-No.: PN16: 451 4 . . . , PN25: 451 5 . . . , PN40(25): 451 6 . . . , PN40(25): 451 E . . . \_p2  
 Accessories: . . .



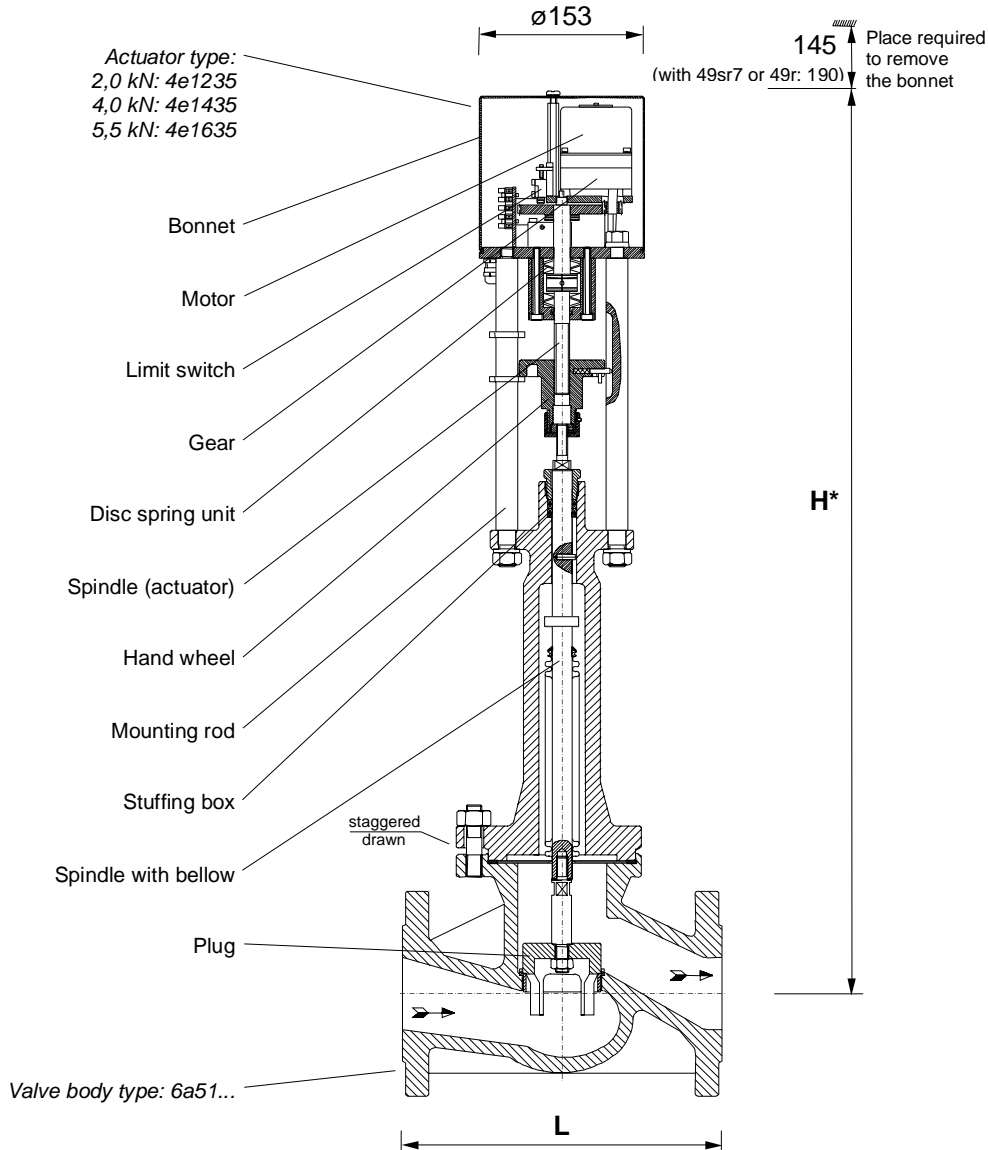
**Pressure-temperature ratings acc. to DIN EN 1092-2:**

by:	-10...50	100	150	200	250	300	350	400	450	°C*
PN16 451 4 EN-GJS-400-18-LT	16	16	15,5	14,7	13,9	12,8	11,2	-	-	bar
PN25 451 5 EN-GJS-400-18-LT	25	25	24,3	23	21,8	20	17,5	-	-	bar
PN40(25)* 451 6 GP240GH+N	25	25	25	25	25	25	24	21	13,1	bar
PN40(25) 451 E GX5CrNiMo19-11-2	25	25	22,7	21	19,8	18,5	17,4	17,1	-	bar

\* = acc. to KFM norm

DN	List-No.				Kvs m³/h	Stroke mm	Pos. time sec	Closing pressure** (bar)		
	PN 16	PN 25	PN40(25)	PN40(25)				2000N	4000N	5500N
15	451 400	451 500	451 600	451 E00_p2	4	20	66	25,0		
20	451 401	451 501	451 601	451 E01_p2	6,3	20	66	25,0		
25	451 402	451 502	451 602	451 E02_p2	10	20	66	25,0		
32	451 403.	451 503.	451 603.	451 E03._p2	16	20	66	17,3	25,0	
40	451 404.	451 504.	451 604.	451 E04._p2	25	20	66	10,8	25,0	
50	451 405.	451 505.	451 605.	451 E05._p2	40	20	66	6,6	16,0	23,0
65	451 406.	451 506.	451 606.	451 E06._p2	63	30	99	3,4	9,1	13,3
80	451 408.	451 508.	451 608.	451 E08._p2	100	30	99	2,0	5,8	8,6
100	451 410.	451 510.	451 610.	451 E10._p2	160	30	99	1,1	3,5	5,4
125	451 412.	451 512.			230	40	132		2,1	3,3
150	451 415.				330	40	132		1,3	2,1

\*\* = higher closing pressures see page 451He/f/h, DN200: see page 451420Hf/h/i/k, DN>200 on request



DN	15	20	25	32	40	50	65	80	100	125	150
Height H*	661	675	669	676	681	683	813	814	821	924	940
Length L	130	150	160	180	200	230	290	310	350	400	480
Weight kg	17	18	19	20	22	24	43	47	57	104	124

\* = add. 45mm for actuators with positioner 49sr7 or controller 49r

### Electrical wiring:

