

**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:           8 kN / 34 VA (appendix ...e)  
                   12 kN / 34 VA (appendix ...f)  
                   15 kN / 50 VA (appendix ...h)  
 Power supply:  230V / 50Hz  
 Alternatively:  230V / 60Hz (appendix ...e6/f6/h6)  
 Special voltages: 115V 50/60Hz, 24V 50/60Hz  
                           24V DC, 400V 3Ph. on request  
 Motor rating standard acc. to DIN EN 60034-1: S4-30%ED - 600c/h  
 Protection class acc. to DIN EN 60529: IP65

**Accessories, special types:**  
 Add. limit switches load dependent  
 Add. signal switches travel dependent  
 Potentiometer  
 Integrated positioner  
 Feedback signal 4-20mA / 0-10V  
 Actuator heater (on request)  
 Other positioning speed (on request)  
 Other 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 . . H . . , PN25: 451 5 . . H . . , PN40(25): 451 6 . . H . .  
 Accessories: . . .

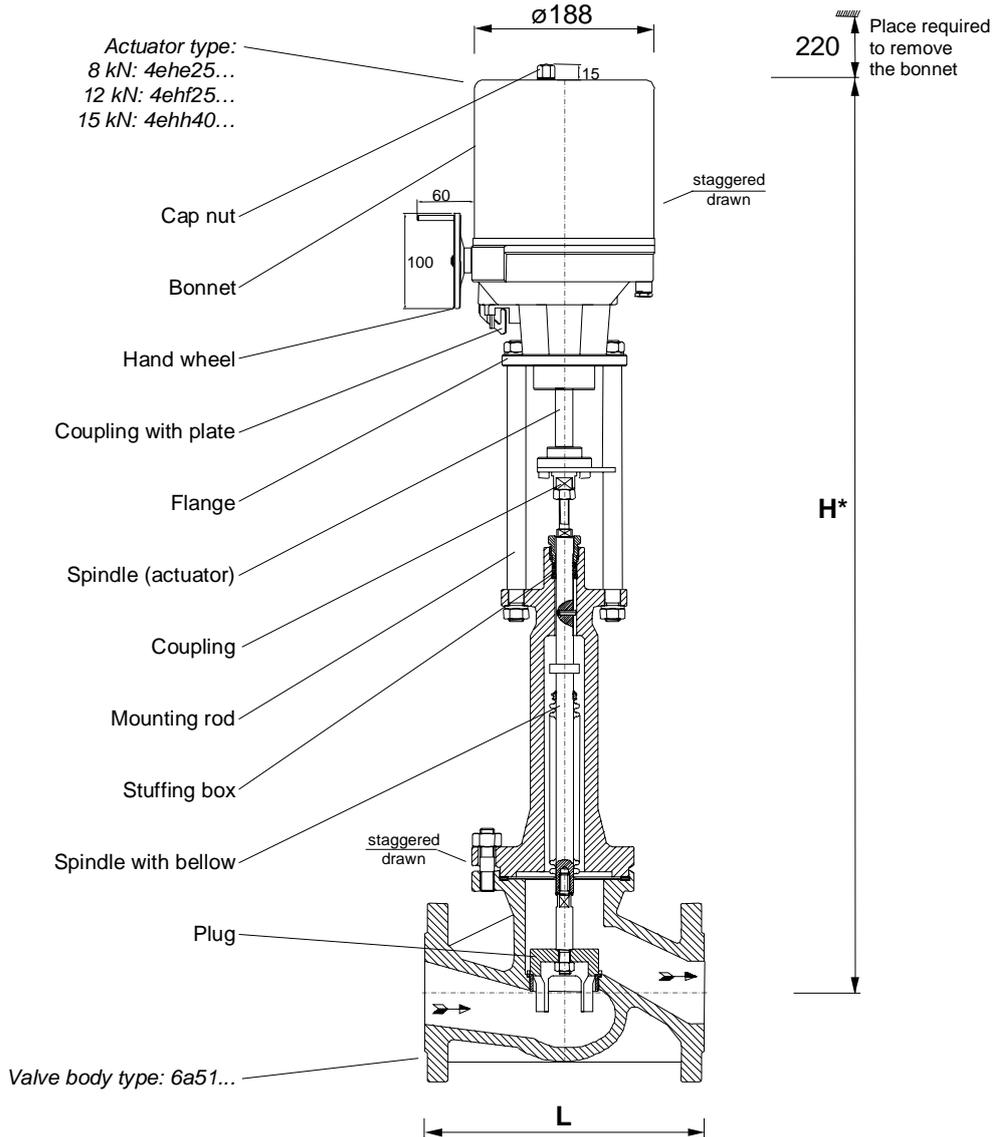
**Pressure-temperature ratings acc. to DIN EN 1092-2:**

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

\* = acc. to KFM norm

DN	List-No.			Kvs m³/h	Stroke mm	Pos. time sec	Closing pressure** (bar)		
	PN16	PN25	PN40(25)				8kN	12kN	15kN
<b>50</b>	451 405He	451 505He	451 605He	40	20	48	25,0		
<b>65</b>	451 406H. 451 456H.	451 506H. 451 556H.	451 606H. 451 656H.	63 40	30 20	72 48	20,4 25,0	25,0	
<b>80</b>	451 408H. 451 458H. 451 478H.	451 508H. 451 558H. 451 578H.	451 608H. 451 658H. 451 678H.	100 63 40	30 20 20	72 48 48	13,4 20,4 25,0	21,0 25,0	25,0
<b>100</b>	451 410H. 451 460H. 451 480H.	451 510H. 451 560H. 451 580H.	451 610H. 451 660H. 451 680H.	160 100 63	30 30 22	72 72 53	8,4 20,4 20,4	13,3 25,0 25,0	17,0
<b>125</b>	451 412H. 451 412H._140a 451 412H._100a	451 512H. 451 512H._140a 451 512H._100a		230 140 100	40 30 30	96 72 72	5,2 8,4 13,4	8,4 13,3 21,0	10,8 17,0 25,0
<b>150</b>	451 415H. 451 415H._250a 451 415H._150a			330 250 160	40 40 30	96 96 72	3,5 5,2 8,4	5,7 8,4 13,3	7,4 10,8 17,0

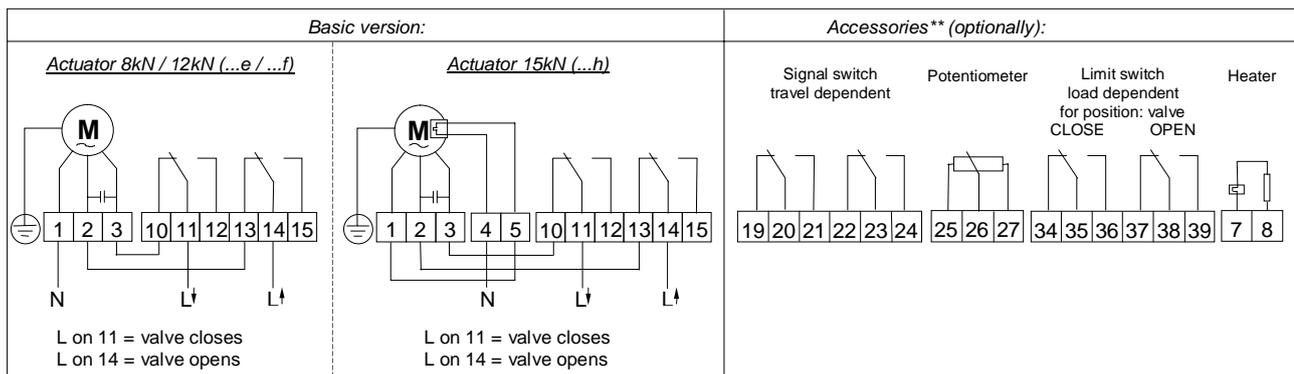
\*\* = higher closing pressures on request, DN200: see page 451420Hf/h/i/k, DN>200 on request



DN	50	65	80	100	125	150
Height H*	793	923	924	931	1033	1048
Length L	230	290	310	350	400	480
Weight kg	22	39	46	56	103	123

\* = additional 20mm for 15kN actuator and 25mm for version with positioner

**Electrical wiring 230 / 115 / 24 V 50/60 Hz:\*\***



\*\* = for other voltages / accessories see wiring diagrams in operating instruction 4eh80\_b.