

## Test Specifications for Injection Pump and Governor

<b>Injection Pump</b> PES 4 A 50 B 410 RS 50 z or RS 68	<b>with Governor</b> EP/M 60 A 55 d or A 71 d	<b>DAI Sheet</b> <b>1.7 i</b>  dated: Sep. 1st 1953
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### A. Adjustment Data of the Injection Pump

Feed Begin at a Pre-stroke of 1.7+0.1 mm (from BDC)

1	2	3	4	5	6
Speed <small>r. p. m.</small>	Control Rod Travel <small>mm</small>	Feed Quantity <small>cm<sup>3</sup>/100 strokes</small>	Feed Quantity Differential <small>cm<sup>3</sup>/100 strokes</small>	Feed Quantity Drop <small>(between 1000 and 200 r. p. m.) cm<sup>3</sup>/100 strokes</small>	Pre-tension of Spring <small>(Adaptation Valve) mm</small>
1000	9	0.9-1.5		0.8	
	12	2.3-2.8	0.3		
	18	4.6-5.3			
200	9	0.7-1.2			

Adjust delivery of equal quantities within outlined  limits

### B. Adjustment Data of the Governor

1	2	3	4	5	6	7	8	9	10	11
Travel of Adaptation <small>mm</small>	Leak-Proof Test Vacuum Drop <small>mm Water Col.</small>		Point of Adjustment Contr. Rod Travel Limit Control Rod Travel <small>mm</small>		Control Rod Travel Test with Governor Design <small>mm Water Col.</small>			Control Rod Travel <small>r. p. m.</small>	Adaptation Vacuum <small>mm Water Col.</small>	
1.0±0.1	500-480		300		.. A 55 d			12.3	50	
					.. A 71 d			8.6-12.3	100	
								0.7-3.2	150	
								12.3	50	
								7.8-12.3	100	
								0-2.7	150	

For Testing Control Rod Travel (Column 4-11) n = 500 r. p. m.

### C. Adjustment of Injection Pump with Mounted Governor

0	1	2	3	4	5	6	7	8	9
Injection Pump	Adjustment of Full-Load Stop Screw			Testing of Feed Quantity Characteristics			Adjustment of Idling Stop		
	<small>r. p. m.</small>	Vacuum <small>mm Water Col.</small>	<small>cm<sup>3</sup>/100 strokes</small>	<small>r. p. m.</small>	Vacuum <small>mm Water Col.</small>	<small>cm<sup>3</sup>/100 strokes</small>	<small>r. p. m.</small>	Vacuum <small>mm Water Col.</small>	Control Rod Travel from Full-Load to Idling <small>mm</small>
RS 50 z RS 68	1000	300	24.5-25.5	500 750	50 125	26.5-29.5 24.5-27.5			

The values in col. 3 and 6 are obtained by dividing the total quantity through the number of pump elements