

# Test Specifications for Injection Pump and Governor

<b>Injection Pump</b> PES 4 A 50 B 410 RS 50 RS 68, RS 68 z x PES 4 A 50 C 410 RS 1010 x RS 1010 z, y, x	<b>with Governor</b> EP/RSV 250 – 950 A 4/15 A 4 A 60 A 4 B 60	<b>DAI Sheet</b> <b>1.8 i</b> x dated: Dec. 10th 1962
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## A. Adjustment Data of the Injection Pump

Feed Begin at a Pre-stroke of  $1.7 \pm 0.1$  mm (from BDC)

1	2	3	4	5	6
Speed r. p. m.	Control Rod Travel r. p. m.	Feed Quantity cm <sup>3</sup> /100 strokes	Feed Quantity Differential cm <sup>3</sup> /100 strokes	Feed Quantity Drop (between 1000 and 200 r. p. m.) cm <sup>3</sup> /100 strokes	Pre-tension of Spring (Adaptation Valve) mm
1000	9	0.9–1.5			
	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
Upper Rated Speed			Medium Rated Speed (not applicable)			Lower Rated Speed			Adaptation	
Adjusting Lever Range		Control Rod Travel				Adjusting Lever Range		Control Rod Travel		Control Rod Travel
degrees	r. p. m.	mm	r. p. m.			degrees	r. p. m.	mm	r. p. m.	mm
approx. 70	950	16	without additional springs			approx. 24	250	6	930 420 300	0 0 1.2-1.8
	1000	10								
	1050	2								
	1000	8 -11	with additional springs				100	19 -21		
	1040	2.6-6					250	5.7- 6.3		
	1080	0 -2.5					340	1.8- 3.8		
	1150	0 -1					380	0 - 2.6		
				450	0					

## C. Adjustment of Injection Pump with Mounted Governor

0	1	2	3	4	5	6	7	8
Injection Pump	Adjustment of Full- Load Quantity at Control Rod Stop		Limit of RPM at the Governor Adjusting Lever	Testing of Feed Quantity Characteristics		Testing of Starting Quantity		Idle run Adjustment by means of the Stop screw
	r. p. m.	cm <sup>3</sup> /100 strokes	r. p. m.	r. p. m.	cm <sup>3</sup> /100 strokes	r. p. m.	cm <sup>3</sup> /100 strokes	
RS 50	930	29–30	960–980	–	–	–	–	–
RS 1010								
RS 68 z	930	28–29	960–970	–	–			
RS 1010 z								
RS 68	930	24.5–25.5	960–980	–	–			
RS 1010 y								
RS 1010 x	930	23.5–24.5	960–980	–	–			

The values in col. 2 and 5 are obtained by dividing the total quantity through the number of pump elements