

Test Specifications for Injection Pump and Governor

Injection Pump

PES 4 A 50 B 410 RS 50
or RS 68

with Governor

RSV 250 – 950 A 1
or A 9

DAI Sheet

1,8 f

dated: March 10th 1958

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>cm³/100 strokes</small>	Feed Quantity Differential <small>cm³/100 strokes</small>	Feed Quantity Drop <small>(between 1000 and 200 r.p.m.) cm³/100 strokes</small>	Pre-tension of Spring <small>(Adaptation Valve) mm</small>
1000	9	0.9–1.5	0.2		
	12	2.3–2.8			
	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 <small>(not applicable)</small>			Lower Rated Speed			Adaptation	
Adjusting Lever Range <small>degrees</small>	r.p.m.	Control Rod Travel <small>mm</small>				Adjusting Lever Range <small>degrees</small>	r.p.m.	Control Rod Travel <small>mm</small>	r.p.m.	Control Rod Travel <small>mm</small>
approx. 52	950	16	} without additional springs			approx. 16	250	6	900	0
	970	9					100	19 –21	500	0
	1020	3	} with additional springs				250	5.7– 6.3	430	0.2–0.8
	975	7 –11				350	1.6– 3.6	225	2.2–2.8	
	1000	3 – 7				400	0 – 2.4			
	1025	0 – 3.8				500	0			
	1100	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 <small>r.p.m.</small>	cm ³ /100 strokes	Limit of RPM at the Governor Adjusting Lever <small>r.p.m.</small>	Testing of Feed Quantity Characteristics <small>r.p.m.</small>		Testing of Starting Quantity <small>r.p.m.</small>		Idle run Adjustment by means of the STOP screw
RS 68	900	24.5–25.5	960–980					
RS 50	900	29–30	960–980					

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