

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 r.p.m.	Control Rod Travel mm	Feed Quantity cm ³ /100 strokes	Feed Quantity Differential cm ³ /100 strokes	Feed Quantity Drop (between 1000 and 200 r.p.m.) cm ³ /100 strokes	Pre-tension of Spring (Adaptation Valve) mm
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 (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				degrees	r.p.m.	mm	r.p.m.	mm	
approx. 52	950	16	without additional springs			approx. 16	250	6	900	0	
	970	9					100	19 – 21	500	0	
	1020	3					250	5.7– 6.3	430	0.2–0.8	
	975	7 – 11	with additional springs				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		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 ³ /100 strokes	r.p.m.	r.p.m.	cm ³ /1000 strokes	r.p.m.	cm ³ /1000 strokes	
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