

Test Specifications for Injection Pump and Governor

Injection Pump
PES 4 A 50 B 410 RS 50

with Governor
EP/RSV 250 – 775 A 4 A 60

DAI Sheet
1,8 d 1

dated: June 3rd 1959

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	0.3		
	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. 44	775	16	without additional springs			approx. 21	250	6	750 400 300	0 0 1.2-1.8
	815	10								
	835	6								
	820	7.2-10.2	with additional springs				100	13 -21		
	850	3 - 5					250	5.7- 6.3		
	880	1.2- 2.9					300	4 - 5		
	950	0 - 1					350	1 - 3.5		
			450	0 - 1						

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 50	750	29–30	780–790					

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