

Test Specifications for Injection Pump and Governor

Injection Pump
PES 4 A 50 B 410 RS 68

with Governor
EP/RSV 250 – 1200 A 5 A 333

DAI Sheet
1.8 r 2

dated: May 1st 1961

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			
	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			Lower Rated Speed			Adaptation	
Adjusting Lever Range		Control Rod Travel	(not applicable)			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. 51	1200	16	without additional springs			ap. 18	250	6	1180 500 310	0 0 1.2-1.8
	1250	11								
	1300	5.6								
	1250	10 -12	with additional springs				100	19 -21		
	1300	3.8- 7.5					250	5.7- 6.3		
	1350	1.8- 3.6					350	3 - 4.4		
	1450	0 - 1					450	0 - 2.2		
			550	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 /1000 strokes	r. p. m.	r. p. m.	cm ³ /1000 strokes	r. p. m.	cm ³ /1000 strokes	r. p. m.
RS 68	1180	24.5–25.5	1210–1230	–	–	–	–	n 250 RW 6

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