

# Test Specifications for Injection Pump and Governor

**Injection Pump**  
PES 4 A 50 B 410 RS 50

**with Governor**  
EP/RSV 250 – 1275 A 5 A 60

**DAI Sheet**  
**1.8 r 1**

dated: May 15th 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 <small>r. p. m.</small>	Control Rod Travel <small>mm</small>	Feed Quantity <small>cm<sup>3</sup>/100 strokes</small>	Feed Quantity Differential <small>cm<sup>3</sup>/100 strokes</small>	Feed Quantity Drop <small>(between 1000 and 200 r. p. m.) cm<sup>3</sup>/100 strokes</small>	Pre-tension of Spring <small>(Adaptation Valve) mm</small>
1000	9	0.9-1.5			
	12	2.3-2.8	0.2		
	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>	Control Rod Travel <small>r. p. m.</small>	Control Rod Travel <small>mm</small>	<small>r. p. m.</small>			Adjusting Lever Range <small>degrees</small>	Control Rod Travel <small>r. p. m.</small>	Control Rod Travel <small>mm</small>	<small>r. p. m.</small>	<small>mm</small>
approx. 54	1275	16	} without additional springs			approx. 18	250	6	1250 500 340	0 0 1.2-1.8
	1320	11.6					100	19-21		
	1380	5	250	5.7-6.3						
	1330	9-12	350	3-4.5						
	1360	5-9	450	0-2.2						
	1400	2.5-5	550	0-1						
	1450	0.5-2.8								
1500	0	} with additional springs								

## 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>	Limit of RPM at the Governor Adjusting Lever <small>cm<sup>3</sup>/1000 strokes</small>	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 Feed Quantity Characteristics <small>cm<sup>3</sup>/1000 strokes</small>	Testing of Starting Quantity <small>r. p. m.</small>	Testing of Starting Quantity <small>cm<sup>3</sup>/1000 strokes</small>	Idle run Adjustment by means of the STOP screw
RS 50	1250	29-30	1280-1290	-	-			

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