

Test Specifications for Injection Pump and Governor

Injection Pump

PES 4 A 50 B 410 S 17
or RS 17
or S 17 z

with Governor
EP/M 60 A 30

DAI Sheet

1,7 c

dated: Sept. 25th 1956
and/or Aug. 1st 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	Control Rod Travel	Feed Quantity	Feed Quantity Differential	Feed Quantity Drop	Pre-tension of Spring
r.p.m.	mm	cm ³ /100 strokes	cm ³ /100 strokes	(between 1000 and 200 r.p.m.) cm ³ /100 strokes	(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
Travel of Adaptation	Leak-proof Test		Point of Adjustment Control Rod Travel Limit		Control Rod Travel Test			Adaptation		
mm	Vacuum Drop	Time Min.	Vacuum	Control Rod Travel	with Governor Design	Vacuum	Control Rod Travel	Vacuum	Control Rod Travel	
mm	mm Water Col.	sec.	mm Water Col.	mm		mm Water Col.	mm	mm Water Col.	mm	
—	500–480	10	—	—	— —	100 200 400 600 800	20 –21 19 –20.5 10.5–13.5 1 – 3.5 0 – 2	—	—	

For Testing Control Rod Travel (column 4–11) n = 500 r.p.m.

C. Adjustment of Injection Pump with Mounted Governor

0	1	2	3	4	5	6	7	8	9
Injection Pump	Adjustment of Full-Load Stop Screw			Testing of Feed Quantity Characteristics			Adjustment of Idling Stop		
	r.p.m.	Vacuum		r.p.m.	Vacuum		r.p.m.	Vacuum	Control Rod Travel from Full-Load to Idling
		mm Water Col.	cm ³ /1000 strokes		mm Water Col.	cm ³ /1000 strokes		mm Water Col.	mm
S 17 or RS 17	1000		27.5–28.5						
S 17 z	1000		24.5–25.5						

The values in col. 3 and 6 are obtained by dividing the total quantity through the number of pump elements