RT-flex50-E

External forces and moments

Crankshaft type : Forged / full crank pin

Rating R1 : 1745 kW/Cyl. @ 124 rpm / Standard Tuning

Engine Type		**5RT-flex50-E**	**6RT-flex50-E**	**7RT-flex50-E**	**8RT-flex50-E**
Speed		124 rpm	124 rpm	124 rpm	124 rpm
Power		8725 kW	10470 kW	12215 kW	13960 kW
Crank type		Forged	Forged	Forged	Forged
Massmoments / Forces					
Free Forces					
F1v	[±kN]	0	0	0	0
F1h	[±kN]	0	0	0	0
F2v	[±kN]	0	0	0	0
F4v	[±kN]	0	0	0	0
External Moments					
M1v	[±kNm]	114	0	241	226
M1h	[±kNm]	113	0	105	228
M2v *)	[±kNm]	1348	938	272	0
M4v	[±kNm]	8	65	185	75
Lateral H-Moments M_{LH}					
Ord.1	[±kNm]	0	0	0	0
Ord.2	[±kNm]	0	0	0	0
Ord.3	[±kNm]	0	0	0	0
Ord.4	[±kNm]	0	0	0	0
Ord.5	[±kNm]	884	0	0	0
Ord.6	[±kNm]	0	659	0	0
Ord.7	[±kNm]	0	0	533	0
Ord.8	[±kNm]	0	0	0	387
Ord.9	[±kNm]	0	0	0	0
Ord.10	[±kNm]	98	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	0	32	0	0
Lateral X-Moments M_{LX}					
Ord.1	[±kNm]	94	0	56	188
Ord.2	[±kNm]	61	43	12	0
Ord.3	[±kNm]	91	164	179	230
Ord.4	[±kNm]	32	251	712	289
Ord.5	[±kNm]	0	0	55	689
Ord.6	[±kNm]	13	0	8	0
Ord.7	[±kNm]	109	0	0	20
Ord.8	[±kNm]	66	46	4	0
Ord.9	[±kNm]	3	68	8	7
Ord.10	[±kNm]	0	20	58	0
Ord.11	[±kNm]	1	0	27	34
Ord.12	[±kNm]	6	0	1	5
Torque variation	[±kNm]	913	672	543	395

* No engine fitted 2nd order balancer available. If reduction of M2v is needed, an external compensator has to be applied.

The values for other engine ratings are available on request
The resulting lateral guide force at the crosshead can be estimated as follows: FL=MLH x 0.324 [kN]

RT-flex50-E

External forces and moments

Crankshaft type : Forged / full crank pin

Rating R1 : 1745 kW/Cyl. @ 124 rpm / Delta-Tuning

Engine Type		**5RT-flex50-E**	**6RT-flex50-E**	**7RT-flex50-E**	**8RT-flex50-E**
Speed		124 rpm	124 rpm	124 rpm	124 rpm
Power		8725 kW	10470 kW	12215 kW	13960 kW
Crank type		Forged	Forged	Forged	Forged
Massmoments / Forces					
Free Forces					
F1v	[±kN]	0	0	0	0
F1h	[±kN]	0	0	0	0
F2v	[±kN]	0	0	0	0
F4v	[±kN]	0	0	0	0
External Moments					
M1v	[±kNm]	114	0	241	226
M1h	[±kNm]	113	0	105	228
M2v *)	[±kNm]	1348	938	272	0
M4v	[±kNm]	8	65	185	75
Lateral H-Moments M_{LH}					
Ord.1	[±kNm]	0	0	0	0
Ord.2	[±kNm]	0	0	0	0
Ord.3	[±kNm]	0	0	0	0
Ord.4	[±kNm]	0	0	0	0
Ord.5	[±kNm]	848	0	0	0
Ord.6	[±kNm]	0	625	0	0
Ord.7	[±kNm]	0	0	506	0
Ord.8	[±kNm]	0	0	0	365
Ord.9	[±kNm]	0	0	0	0
Ord.10	[±kNm]	91	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	0	27	0	0
Lateral X-Moments M_{LX}					
Ord.1	[±kNm]	93	0	55	185
Ord.2	[±kNm]	77	54	16	0
Ord.3	[±kNm]	90	164	179	229
Ord.4	[±kNm]	31	242	688	280
Ord.5	[±kNm]	0	0	53	662
Ord.6	[±kNm]	12	0	7	0
Ord.7	[±kNm]	103	0	0	19
Ord.8	[±kNm]	62	43	3	0
Ord.9	[±kNm]	3	62	7	6
Ord.10	[±kNm]	0	19	54	0
Ord.11	[±kNm]	1	0	24	31
Ord.12	[±kNm]	5	0	1	4
Torque variation	[±kNm]	875	636	515	372

* No engine fitted 2nd order balancer available. If reduction of M2v is needed, an external compensator has to be applied.

The values for other engine ratings are available on request
The resulting lateral guide force at the crosshead can be estimated as follows: FL=MLH x 0.324 [kN]

RT-flex50-E

External forces and moments

Crankshaft type : Forged / full crank pin

Rating R1 : 1745 kW/Cyl. @ 124 rpm / LowLoad Tuning

Engine Type		**5RT-flex50-E**	**6RT-flex50-E**	**7RT-flex50-E**	**8RT-flex50-E**
Speed		124 rpm	124 rpm	124 rpm	124 rpm
Power		8725 kW	10470 kW	12215 kW	13960 kW
Crank type		Forged	Forged	Forged	Forged
Massmoments / Forces					
Free Forces					
F1v	[±kN]	0	0	0	0
F1h	[±kN]	0	0	0	0
F2v	[±kN]	0	0	0	0
F4v	[±kN]	0	0	0	0
External Moments					
M1v	[±kNm]	114	0	241	226
M1h	[±kNm]	113	0	105	228
M2v *)	[±kNm]	1348	938	272	0
M4v	[±kNm]	8	65	185	75
Lateral H-Moments M_{LH}					
Ord.1	[±kNm]	0	0	0	0
Ord.2	[±kNm]	0	0	0	0
Ord.3	[±kNm]	0	0	0	0
Ord.4	[±kNm]	0	0	0	0
Ord.5	[±kNm]	833	0	0	0
Ord.6	[±kNm]	0	611	0	0
Ord.7	[±kNm]	0	0	493	0
Ord.8	[±kNm]	0	0	0	355
Ord.9	[±kNm]	0	0	0	0
Ord.10	[±kNm]	88	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	0	25	0	0
Lateral X-Moments M_{LX}					
Ord.1	[±kNm]	92	0	55	184
Ord.2	[±kNm]	85	59	17	0
Ord.3	[±kNm]	91	164	179	230
Ord.4	[±kNm]	31	239	678	276
Ord.5	[±kNm]	0	0	52	652
Ord.6	[±kNm]	12	0	7	0
Ord.7	[±kNm]	101	0	0	18
Ord.8	[±kNm]	61	42	3	0
Ord.9	[±kNm]	3	60	7	6
Ord.10	[±kNm]	0	18	52	0
Ord.11	[±kNm]	1	0	23	30
Ord.12	[±kNm]	5	0	1	4
Torque variation	[±kNm]	860	622	503	362

* No engine fitted 2nd order balancer available. If reduction of M2v is needed, an external compensator has to be applied.

The values for other engine ratings are available on request
The resulting lateral guide force at the crosshead can be estimated as follows: FL=MLH x 0.324 [kN]

RT-flex50-E

External forces and moments

Crankshaft type : Forged / full crank pin

Rating R1 : 1745 kW/Cyl. @ 124 rpm / DeltaBypass Tuning

Engine Type		**5RT-flex50-E**	**6RT-flex50-E**	**7RT-flex50-E**	**8RT-flex50-E**
Speed		124 rpm	124 rpm	124 rpm	124 rpm
Power		8725 kW	10470 kW	12215 kW	13960 kW
Crank type		Forged	Forged	Forged	Forged
Massmoments / Forces					
Free Forces					
F1v	[±kN]	0	0	0	0
F1h	[±kN]	0	0	0	0
F2v	[±kN]	0	0	0	0
F4v	[±kN]	0	0	0	0
External Moments					
M1v	[±kNm]	114	0	241	226
M1h	[±kNm]	113	0	105	228
M2v *)	[±kNm]	1348	938	272	0
M4v	[±kNm]	8	65	185	75
Lateral H-Moments M_{LH}					
Ord.1	[±kNm]	0	0	0	0
Ord.2	[±kNm]	0	0	0	0
Ord.3	[±kNm]	0	0	0	0
Ord.4	[±kNm]	0	0	0	0
Ord.5	[±kNm]	860	0	0	0
Ord.6	[±kNm]	0	636	0	0
Ord.7	[±kNm]	0	0	515	0
Ord.8	[±kNm]	0	0	0	372
Ord.9	[±kNm]	0	0	0	0
Ord.10	[±kNm]	94	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	0	28	0	0
Lateral X-Moments M_{LX}					
Ord.1	[±kNm]	93	0	56	187
Ord.2	[±kNm]	72	50	14	0
Ord.3	[±kNm]	91	165	180	231
Ord.4	[±kNm]	32	245	696	283
Ord.5	[±kNm]	0	0	53	670
Ord.6	[±kNm]	13	0	8	0
Ord.7	[±kNm]	105	0	0	19
Ord.8	[±kNm]	63	44	3	0
Ord.9	[±kNm]	3	64	7	6
Ord.10	[±kNm]	0	20	55	0
Ord.11	[±kNm]	1	0	25	32
Ord.12	[±kNm]	5	0	1	4
Torque variation	[±kNm]	887	647	524	379

* No engine fitted 2nd order balancer available. If reduction of M2v is needed, an external compensator has to be applied.

The values for other engine ratings are available on request
The resulting lateral guide force at the crosshead can be estimated as follows: FL=MLH x 0.324 [kN]

5-8 RT-flex50-E / Free external mass moments
Power Related Unbalance (PRU)
Rating R1 1745 kW/Cyl @ 124 rpm

Crankshaft type: Full crank pin