

X82DF

External forces and moments

Crankshaft type : Forged / hollow pin

Rating R1 : 4320 kW/Cyl. @ 84 rpm / max. values of Gas/Diesel Mode

Engine Type	6X82DF	7X82DF	8X82DF	9X82DF
Speed	84 rpm	84 rpm	84 rpm	84 rpm
Power	25920 kW	30240 kW	34560 kW	38880 kW
Crank type	V25	V25	V25	V25
Massmoments / Forces				
Free Forces				
F1v	[±kN]	0	0	0
F1h	[±kN]	0	0	0
F2v	[±kN]	0	0	0
F4v	[±kN]	0	0	0
External Moments				
M1v	[±kNm]	0	369	1239
M1h	[±kNm]	0	369	1239
M2v *)	[±kNm]	5121	1487	0
M4v	[±kNm]	355	1010	410
Lateral H-Moments M_{LH}				
Ord.1	[±kNm]	0	0	0
Ord.2	[±kNm]	0	0	0
Ord.3	[±kNm]	0	0	0
Ord.4	[±kNm]	0	0	0
Ord.5	[±kNm]	0	0	0
Ord.6	[±kNm]	2000	0	0
Ord.7	[±kNm]	0	1642	0
Ord.8	[±kNm]	0	0	1351
Ord.9	[±kNm]	0	0	0
Ord.10	[±kNm]	0	0	1017
Ord.11	[±kNm]	0	0	0
Ord.12	[±kNm]	317	0	0
Lateral X-Moments M_{LX}				
Ord.1	[±kNm]	0	252	845
Ord.2	[±kNm]	1091	317	0
Ord.3	[±kNm]	1562	1709	2190
Ord.4	[±kNm]	789	2243	911
Ord.5	[±kNm]	0	188	2361
Ord.6	[±kNm]	0	24	0
Ord.7	[±kNm]	0	0	58
Ord.8	[±kNm]	168	13	0
Ord.9	[±kNm]	268	30	27
Ord.10	[±kNm]	81	229	0
Ord.11	[±kNm]	0	202	258
Ord.12	[±kNm]	0	15	58
Torque variation	[±kNm]	1981	1642	1356
				1082

* 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 0.197 [kN]

6-9 X82DF / Free external mass moments
Power Related Unbalance (PRU)
Rating R1 4320 kW/Cyl @ 84 rpm

Crankshaft type: V25

