

X82DF-1.0

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-1.0	7X82DF-1.0	8X82DF-1.0	9X82DF-1.0
Speed	84 rpm	84 rpm	84 rpm	84 rpm
Power	25920 kW	30240 kW	34560 kW	38880 kW
Crank type	FCV2	FCV2	FCV2	FCV2
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]	2028	0	0
Ord.7	[±kNm]	0	1697	0
Ord.8	[±kNm]	0	0	1401
Ord.9	[±kNm]	0	0	0
Ord.10	[±kNm]	0	0	1058
Ord.11	[±kNm]	0	0	0
Ord.12	[±kNm]	0	0	0
Lateral X-Moments M_{LX}				
Ord.1	[±kNm]	0	247	830
Ord.2	[±kNm]	1063	309	0
Ord.3	[±kNm]	1422	1556	1994
Ord.4	[±kNm]	790	2244	912
Ord.5	[±kNm]	0	187	2348
Ord.6	[±kNm]	0	24	0
Ord.7	[±kNm]	0	0	60
Ord.8	[±kNm]	174	13	0
Ord.9	[±kNm]	276	31	28
Ord.10	[±kNm]	86	244	0
Ord.11	[±kNm]	0	210	269
Ord.12	[±kNm]	0	15	58
Torque variation	[±kNm]	1980	1701	1408
				1119

* 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-1.0 / Free external mass moments
Power Related Unbalance (PRU)
Rating R1 4320 kW/Cyl @ 84 rpm

Crankshaft type: FCV2

