

X82DF-2.0

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-2.0	7X82DF-2.0	8X82DF-2.0	9X82DF-2.0
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	0
F1h	[±kN]	0	0	0	0
F2v	[±kN]	0	0	0	0
F4v	[±kN]	0	0	0	0
External Moments					
M1v	[±kNm]	0	369	1239	1273
M1h	[±kNm]	0	369	1239	1273
M2v *)	[±kNm]	5121	1487	0	1671
M4v	[±kNm]	355	1010	410	511
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]	0	0	0	0
Ord.6	[±kNm]	2615	0	0	0
Ord.7	[±kNm]	0	2058	0	0
Ord.8	[±kNm]	0	0	1714	0
Ord.9	[±kNm]	0	0	0	1300
Ord.10	[±kNm]	0	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	391	0	0	0
Lateral X-Moments M_{LX}					
Ord.1	[±kNm]	0	250	839	862
Ord.2	[±kNm]	900	261	0	294
Ord.3	[±kNm]	1126	1231	1578	1949
Ord.4	[±kNm]	899	2556	1039	1295
Ord.5	[±kNm]	0	218	2731	1080
Ord.6	[±kNm]	0	30	0	1751
Ord.7	[±kNm]	0	0	73	92
Ord.8	[±kNm]	215	17	0	57
Ord.9	[±kNm]	352	39	35	0
Ord.10	[±kNm]	99	280	0	26
Ord.11	[±kNm]	0	244	312	28
Ord.12	[±kNm]	0	19	74	289
Torque variation	[±kNm]	2715	2112	1742	1334

* 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-2.0 / Free external mass moments
Power Related Unbalance (PRU)
Rating R1 4320 kW/Cyl @ 84 rpm

Crankshaft type: FCV2

