

X72DF-2.2

External forces and moments

Crankshaft type : Full crank pin

Rating R1 : 2600 kW/Cyl. @ 79 rpm / max. values of Gas/Diesel Mode

Engine Type		5X72DF-2.2	6X72DF-2.2
Speed		79 rpm	79 rpm
Power		13000 kW	15600 kW
Crank type		FCV2	FCV2
Massmoments / Forces			
Free Forces			
F1v	[±kN]	0	0
F1h	[±kN]	0	0
F2v	[±kN]	0	0
F4v	[±kN]	0	0
External Moments			
M1v	[±kNm]	272	0
M1h	[±kNm]	308	0
M2v	[±kNm]	3440	2393
M2v *)	[±kNm]	1257	1142
M4v	[±kNm]	22	166
Lateral H-Moments M_{LH}			
Ord.1	[±kNm]	0	0
Ord.2	[±kNm]	0	0
Ord.3	[±kNm]	0	0
Ord.4	[±kNm]	0	0
Ord.5	[±kNm]	2093	0
Ord.6	[±kNm]	0	1643
Ord.7	[±kNm]	0	0
Ord.8	[±kNm]	0	0
Ord.9	[±kNm]	0	0
Ord.10	[±kNm]	361	0
Ord.11	[±kNm]	0	0
Ord.12	[±kNm]	0	259
Lateral X-Moments M_{LX}			
Ord.1	[±kNm]	223	0
Ord.2	[±kNm]	336	234
Ord.3	[±kNm]	199	360
Ord.4	[±kNm]	70	543
Ord.5	[±kNm]	0	0
Ord.6	[±kNm]	31	0
Ord.7	[±kNm]	261	0
Ord.8	[±kNm]	198	138
Ord.9	[±kNm]	11	223
Ord.10	[±kNm]	0	68
Ord.11	[±kNm]	8	0
Ord.12	[±kNm]	58	0
Torque variation	[±kNm]	2179.5	1678.1

*) with iELBA applied at FE + DE

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 0.215 [kN]

5-6 X72DF-2.2 / Free external mass moments Power Related Unbalance (PRU) Rating R1 2600 kW/Cyl @ 79 rpm

Crankshaft type: Full crank pin

