

X62DF-S1.0

External forces and moments

Crankshaft type : FCV2 (v3_1)

Rating R1 : 2110 kW/Cyl. @ 108 rpm / max. values of Gas/Diesel-Mode

Engine Type		5X62DF-S1.0	6X62DF-S1.0	7X62DF-S1.0	8X62DF-S1.0
Speed		108 rpm	108 rpm	108 rpm	108 rpm
Power		10550 kW	12660 kW	14770 kW	16880 kW
Crank type		FCV2 (v3_1)	FCV2 (v3_1)	FCV2 (v3_1)	FCV2 (v3_1)
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]	181	0	108	362
M1h	[±kNm]	181	0	108	362
M2v	[±kNm]	2152	1497	435	0
M2v *)	[±kNm]	1083	752	-	-
M4v	[±kNm]	13	104	295	120
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]	1070	0	0	0
Ord.6	[±kNm]	0	804	0	0
Ord.7	[±kNm]	0	0	627	0
Ord.8	[±kNm]	0	0	0	538
Ord.9	[±kNm]	0	0	0	0
Ord.10	[±kNm]	163	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	0	129	0	0
Lateral X-Moments M_{LX}					
Ord.1	[±kNm]	146	0	87	292
Ord.2	[±kNm]	266	185	54	0
Ord.3	[±kNm]	186	336	368	471
Ord.4	[±kNm]	39	298	847	344
Ord.5	[±kNm]	0	0	71	887
Ord.6	[±kNm]	16	0	10	0
Ord.7	[±kNm]	126	0	0	23
Ord.8	[±kNm]	102	71	6	0
Ord.9	[±kNm]	6	117	13	12
Ord.10	[±kNm]	0	31	87	0
Ord.11	[±kNm]	4	0	86	110
Ord.12	[±kNm]	32	0	7	26
Torque variation	[±kNm]	1067	785.3	631.6	538.1

*) 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 0.296 [kN]

5-8 X62DF-S1.0 / Free external mass moments
Power Related Unbalance (PRU)
 Rating R1 2110 kW/Cyl @ 108 rpm

Crankshaft type: FCV2 (v3_1)

