

X82DF

External forces and moments

Crankshaft type : FCV1 / FCV2

Rating R1 : 4320 kW/Cyl. / 84 rpm , Max. values 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
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	350	1171	642
M1h	[±kNm]	0	344	1157	636
M2v *)	[±kNm]	4766	1384	0	2340
M4v	[±kNm]	325	923	375	519
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]	1983	0	0	0
Ord.7	[±kNm]	0	1654	0	0
Ord.8	[±kNm]	0	0	1325	0
Ord.9	[±kNm]	0	0	0	1000
Ord.10	[±kNm]	0	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	307	0	0	0
Lateral X-Moments M_{LX}					
Ord.1	[±kNm]	0	248	832	457
Ord.2	[±kNm]	869	252	0	426
Ord.3	[±kNm]	1204	1316	1687	2302
Ord.4	[±kNm]	816	2318	942	1304
Ord.5	[±kNm]	0	187	2344	1028
Ord.6	[±kNm]	0	24	0	1566
Ord.7	[±kNm]	0	0	62	118
Ord.8	[±kNm]	170	13	0	24
Ord.9	[±kNm]	271	30	27	0
Ord.10	[±kNm]	89	253	0	13
Ord.11	[±kNm]	0	204	262	35
Ord.12	[±kNm]	0	14	57	245
Torque variation	[±kNm]	1967	1653	1333	1064

* 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 can be calculated as follows: FL=MLH x 0.196 [kN]

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

Crankshaft type: FCV1/FCV2

