

# X62DF-S2.0

## External forces and moments

Crankshaft type : FCV2 (v3\_1)

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

Engine Type		5X62DF-S2.0	6X62DF-S2.0	7X62DF-S2.0	8X62DF-S2.0
Speed		108 rpm	108 rpm	108 rpm	108 rpm
Power		10550 kW	12660 kW	14770 kW	16880 kW
Crank type		FCV2	FCV2	FCV2	FCV1
<b>Massmoments / Forces</b>					
<b>Free Forces</b>					
F1v	[±kN]	0	0	0	0
F1h	[±kN]	0	0	0	0
F2v	[±kN]	0	0	0	0
F4v	[±kN]	0	0	0	0
<b>External Moments</b>					
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
<b>Lateral H-Moments M<sub>LH</sub></b>					
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]	1367	0	0	0
Ord.6	[±kNm]	0	997	0	0
Ord.7	[±kNm]	0	0	746	0
Ord.8	[±kNm]	0	0	0	648
Ord.9	[±kNm]	0	0	0	0
Ord.10	[±kNm]	200	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	0	165	0	0
<b>Lateral X-Moments M<sub>LX</sub></b>					
Ord.1	[±kNm]	159	0	95	318
Ord.2	[±kNm]	309	215	62	0
Ord.3	[±kNm]	156	281	308	395
Ord.4	[±kNm]	49	378	1073	436
Ord.5	[±kNm]	0	0	90	1124
Ord.6	[±kNm]	20	0	12	0
Ord.7	[±kNm]	150	0	0	27
Ord.8	[±kNm]	123	85	7	0
Ord.9	[±kNm]	8	150	17	15
Ord.10	[±kNm]	0	38	107	0
Ord.11	[±kNm]	5	0	100	128
Ord.12	[±kNm]	42	0	9	34
<b>Torque variation</b>	[±kNm]	1386.5	1005.9	762.6	656.9

\*) 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]

# X62DF-S2.0 VCR

## External forces and moments

Crankshaft type : FCV2 (v3\_1)

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

Engine Type		5X62DF-S2.0 VCR	6X62DF-S2.0 VCR	7X62DF-S2.0 VCR	8X62DF-S2.0 VCR
Speed		108 rpm	108 rpm	108 rpm	108 rpm
Power		10550 kW	12660 kW	14770 kW	16880 kW
Crank type		FCV2	FCV2	FCV2	FCV1
<b>Massmoments / Forces</b>					
<b>Free Forces</b>					
F1v	[±kN]	0	0	0	0
F1h	[±kN]	0	0	0	0
F2v	[±kN]	0	0	0	0
F4v	[±kN]	0	0	0	0
<b>External Moments</b>					
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
<b>Lateral H-Moments M<sub>LH</sub></b>					
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]	1371	0	0	0
Ord.6	[±kNm]	0	1118	0	0
Ord.7	[±kNm]	0	0	934	0
Ord.8	[±kNm]	0	0	0	746
Ord.9	[±kNm]	0	0	0	0
Ord.10	[±kNm]	231	0	0	0
Ord.11	[±kNm]	0	0	0	0
Ord.12	[±kNm]	0	152	0	0
<b>Lateral X-Moments M<sub>LX</sub></b>					
Ord.1	[±kNm]	135	0	81	270
Ord.2	[±kNm]	236	164	48	0
Ord.3	[±kNm]	115	208	227	291
Ord.4	[±kNm]	50	385	1095	445
Ord.5	[±kNm]	0	0	87	1091
Ord.6	[±kNm]	23	0	14	0
Ord.7	[±kNm]	198	0	0	36
Ord.8	[±kNm]	133	92	7	0
Ord.9	[±kNm]	8	169	19	17
Ord.10	[±kNm]	0	48	136	0
Ord.11	[±kNm]	5	0	101	129
Ord.12	[±kNm]	37	0	7	30
<b>Torque variation</b>	[±kNm]	1425.8	1145.7	945.9	751.7

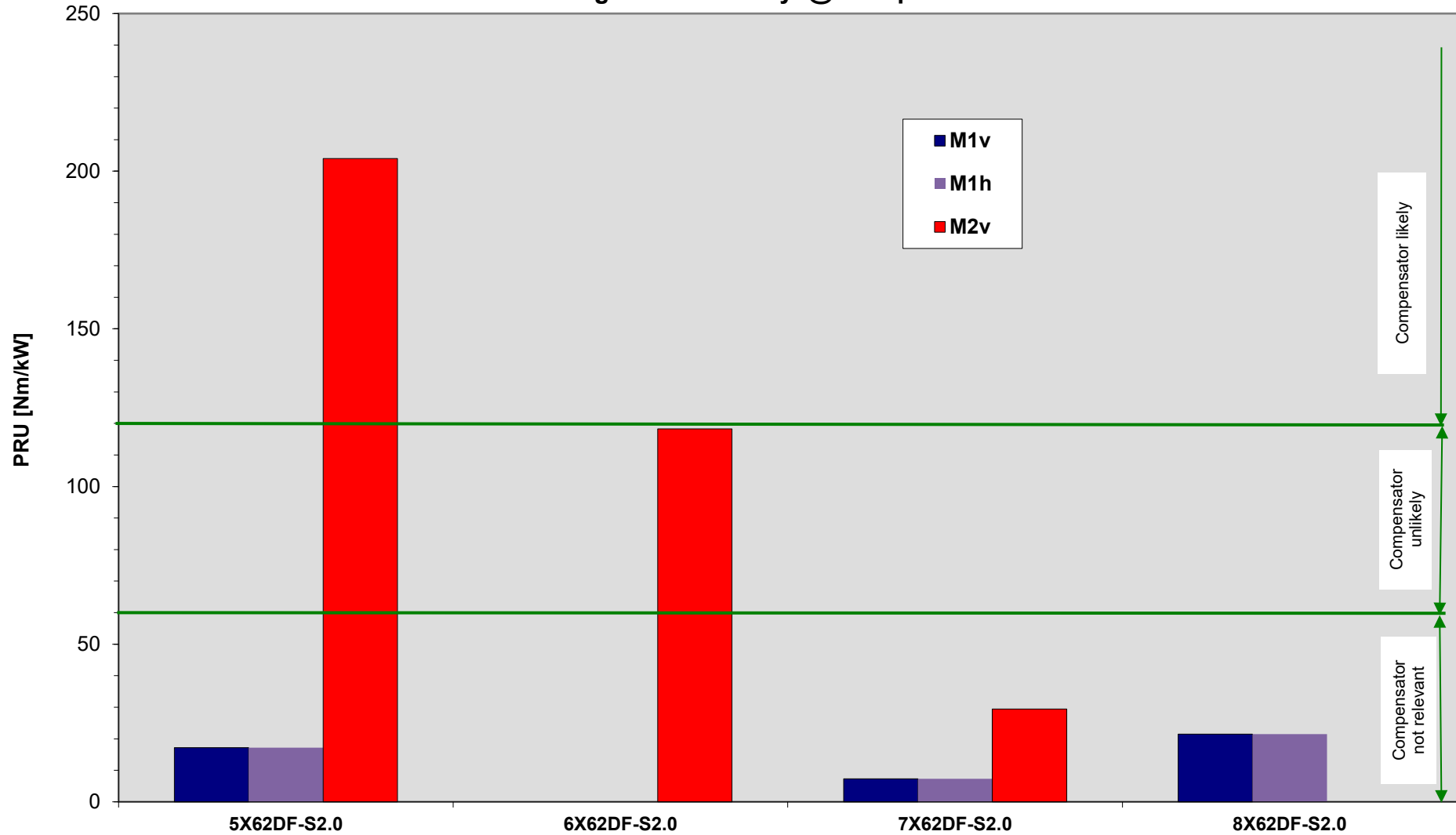
\*) with iELBA applied at FE + DE

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-S2.0 / Free external mass moments**  
**Power Related Unbalance (PRU)**  
 Rating R1 2110 kW/Cyl @ 108 rpm

Crankshaft type: FFCV2 (v3\_1)



**5-8 X62DF-S2.0 VCR / Free external mass moments**  
**Power Related Unbalance (PRU)**  
 Rating R1 2110 kW/Cyl @ 108 rpm

Crankshaft type: FFCV2 (v3\_1)

