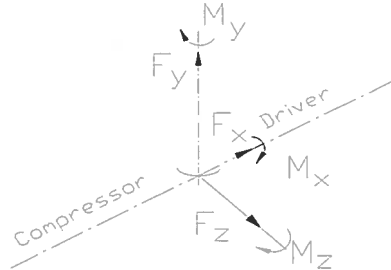


Skizze
Sketch



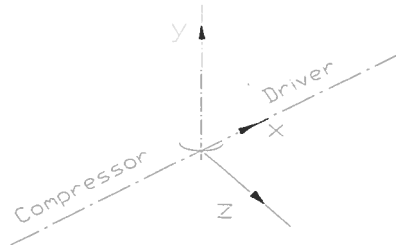
Nozzle Loads
Stutzenlasten

NPS		kN			kNm		
DN		F_x	F_y	F_z	M_x	M_y	M_z
Suction	500 20"	5,32	13,22	10,58	8,10	4,05	4,05
Side stream 1	300 12"	4,15	10,30	8,24	6,31	3,15	3,15
Side stream 2	300 12"	4,15	10,30	8,24	6,31	3,15	3,15
Discharge	300 12"	4,15	10,30	8,24	6,31	3,15	3,15

1	Issue for approval	08.05.12	Wolfsdorf	08.05.12 Enger
0	Draft / Entwurf	03.11.11	Wolfsdorf	
Issue	Description	Date / prepared	Date / checked	Date / approved
Ausgabe	Beschreibung	Datum / erstellt	Datum / geprüft	Datum / genehmigt

Skizze

Sketch



Nozzle Displacements

Stutzenverschiebung

Tie in point	x - Variation of length		y - Variation of length		z - Variation of length	
	Nozzle (mm)		Nozzle (mm)		Nozzle (mm)	
	Min	Max	Min	Max	Min	Max
SS 1st Stage	-0,806	1,040	-0,620	0,800	-0,434	0,560
DS 3rd Stage	-0,273	0,352	-1,085	1,400	-0,155	0,200
Temperature range:						
Ambient:		min.	+ 2	°C	max.	+48°C °C
Suction Side:		min.	-35,6	°C	max.	-35,6 °C
Design temp.		min.	-42°C	°C	max.	+100°C °C
Basis temperature			+20 °C			
coefficient of thermal expansion			10x10 ⁻⁶ 1/K			

Nozzle Vibrations

Stutzenschwingungen

Tie in point	x - Direction	y - Direction	z - Direction
	Nozzle (mm/s)	Nozzle (mm/s)	Nozzle (mm/s)
Suction	3,000	5,000	5,000
Side stream 1	3,000	5,000	5,000
Side stream 2	3,000	5,000	5,000
Discharge	5,000	3,000	5,000

1	Issue for approval	08.05.12	Wolfsdorf	08.05.12	Enger	08.05.12	Gerth
0	Draft / Entwurf	03.11.11	Wolfsdorf	03.11.2011	Enger	03.11.2011	Kilgert
Issue Rev.	Description	Date / prepared		Date / checked		Date / approved	
	Beschreibung	Datum / erstellt		Datum / geprüft		Datum / genehmigt	