

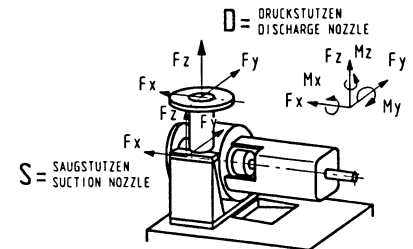
LEITUNGEN SPANNUNGSFREI ANSCHLIESSEN!
ZULÄSSIGE MASSABWEICHUNGEN FÜR:
ANSCHLÜSSE FÜR MASCHINEN
ANSCHLÜSSE FÜR PUMPEN
MASSE OHNE TOLERANZANGABE - GRAUGUSSTEILE
MASSE OHNE TOLERANZANGABE - SCHWEISSTEILE
ALLGEMEINTOLERANZEN FÜR BEARBEITETE TEILE

THE LINES MUST BE CONNECTED WITHOUT TRANSMITTING ANY STRESSES OR STRAIN!
PERMISSIBLE DEVIATIONS OF DIMENSIONS FOR:
AXIS HEIGHTS FOR MACHINES
CONNECTION DIMENSIONS FOR PUMPS
DIMENSIONS WITHOUT MENTION OF TOLERANCES - GREY CAST IRON COMPONENTS
DIMENSIONS WITHOUT MENTION OF TOLERANCES - WELDED COMPONENTS
GENERAL TOLERANCES FOR MACHINED COMPONENTS

DIN 747
DIN EN 735
DIN 1686 G1818
EN ISO 13912B
DIN ISO 2768-M

AXIS HEIGHTS FOR MACHINES
CONNECTION DIMENSIONS FOR PUMPS
DIMENSIONS WITHOUT MENTION OF TOLERANCES - GREY CAST IRON COMPONENTS
DIMENSIONS WITHOUT MENTION OF TOLERANCES - WELDED COMPONENTS
GENERAL TOLERANCES FOR MACHINED COMPONENTS

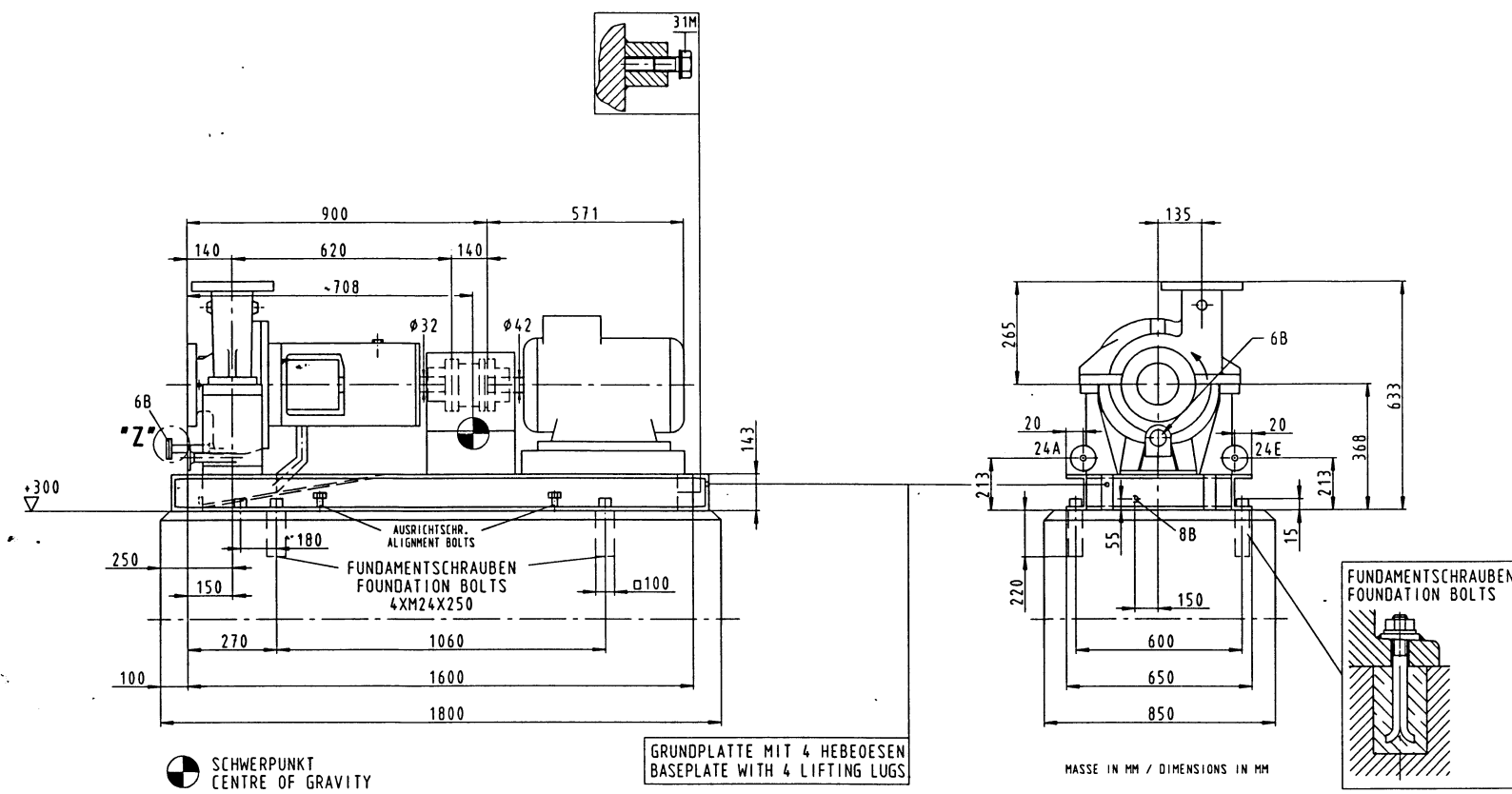
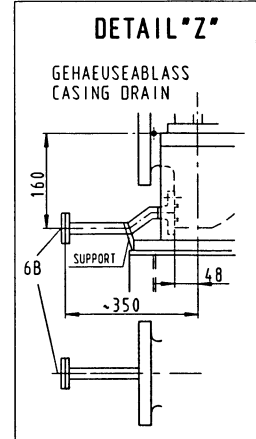
DIN 747
DIN EN 735
DIN 1686 G1818
EN ISO 13912B
DIN ISO 2768-M



TEMP. = 79 °C
ZULÄSSIGE KRAEFTE UND MOMENTE ENTSPRECHEN MIN. 2X API 610/8.
DIE ANGABEN GELTEN FÜR STATISCHE ROHRLASTEN.
BEI ÜBERSCHREITUNG IST NACHPRÜFUNG ERFORDERLICH.
ADMISSIBLE FORCES AND MOMENTS CORRESPOND TO MIN. 2X API 610/8.
DATA GIVEN BELOW ARE ONLY VALID FOR STATIC PIPING LOADS.
IF VALUES ARE EXCEEDED CHECK IS NECESSARY.

KRAEFTE, MOMENTE / FORCES, MOMENTS

KRAEFTE FORCES (N)	SAUGSTUTZEN SUCTION NOZZLE				DRUCKSTUTZEN DISCHARGE NOZZLE			
	Fx	Fz	Fy	Fres	Fx	Fz	Fy	Fres
1780	1160	1430	2560	1430	1780	1160	2560	
MOMENTE MOMENTS (Nm)	SAUGSTUTZEN SUCTION NOZZLE				DRUCKSTUTZEN DISCHARGE NOZZLE			
	Mx	Mz	My	Mres	Mx	Mz	My	Mres
920	710	460	1250	920	710	460	1250	

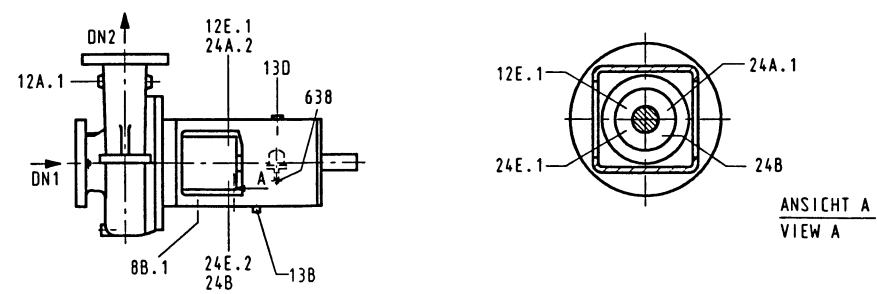


24E/24A	NPS1/2"	QUENCHFLÜSSIGKEIT EIN/AUS - QUENCH LIQUID INLET/OUTLET	-	-	X	S	-0.5	-
31M	M10	ERDUNGSANSCHLUSS - EARTHING CONNECTION	-	X	-	-	-	-
24B	NPT 1/2	QUENCHFLÜSSIGKEIT ABLASS - QUENCH LIQUID DRAIN	X	-	-	-	-	-
24E.2/24A.2	NPT 1/2	QUENCHFLÜSSIGKEIT EIN/AUS - QUENCH LIQUID INLET/OUTLET	X	-	-	-	-	-
12E.1/12A.1	NPT 1/2	ZIRKULATIONSFL. EIN/AUS - CIRCULATION LIQUID INLET/OUTLET	-	-	X	-	-	-
8B.1	NPT 1	LECKABLAß - LEAKAGE DRAIN	-	-	X	-	-	-
8B	NPT 1	LECKABLAß GRUNDPLATTE - LEAKAGE DRAIN BASEPLATE	-	X	-	-	-	-
6B	NPS1"	GEHAUSEABLAß - CASING DRAIN	BLIND FLANGE	-	-	-	-	-
13B	NPT 1/2	ÖLABLAß - OIL DRAIN	X	-	-	-	-	-
13D	NPT 1/2	ENTLUEFTUNGSTOPFEN - VENT PLUG	X	-	-	-	-	-
63B	NPT 1/4	ÖLSTANDSREGLER - CONSTANT LEVEL OILER	WIRD LOSE MITGELIEFERT - LOOSE ITEM	-	-	-	-	-
ANSCHLUSS CONNECTION	GROSSE SIZE	BEZEICHNUNG DESIGNATION	MIT STOPFEN VERSCHLOSSEN/ CLOSED WITH SCREW PLUG	KUNDE/ CUSTOMER	KSB	ERF. MENGE/ QUANTITY REQ.	ACTUAL PRESSURE	DESIGN PRESSURE
		GEWINDE NACH DIN ISO 228, TEIL 1 UND ISO 7/1 (ENTSPRICHT DIN 2999 TEIL 1) / THREAD ACC. TO DIN ISO 228, PART 1 AND ISO 7/1 (CONFORMING TO DIN 2999, PART 1)		SCHLIESST AN/ CONNECTED BY		L/MIN	BAR G	BAR G
ANSCHLUESSE / CONNECTIONS DIE AUSFÜHRUNG DES AUFTRAGES IST DURCH X GEKENNZEICHNET / THE EXECUTION OF THE ORDER IS MARKED BY X								

24A	ASME B16.5 CL.300RF NPS1/2"	QUENCH OUT FLANGE API PLAN 62
24E	ASME B16.5 CL.300RF NPS1/2"	QUENCH IN FLANGE API PLAN 62
6B	ASME B16.5 CL.300RF NPS1"	PUMP DRAIN FLANGE
DN2	ASME B16.5 CL.300RF NPS1-1/2"	PUMP DISCHARGE FLANGE
DN1	ASME B16.5 CL.300RF NPS2"	PUMP SUCTION FLANGE
ANSCHLUSS CONNECTION	AUSFÜHRUNG DESIGN	REMARKS
FLANSCH / FLANGES		

GRUNDPLATTENGROSSE BASEPLATE SIZE	ZN24259-BS
MOTOREGROSSE MOTOR SIZE	SCHORCH KA7-160M-AB016-V 2930RPM 13kW
KUPPLUNGSGROSSE COUPLING SIZE	FLENDER N-EUPEX H 95-140
GROSSEN / SIZES	

PUMPE	PUMP	158
GRUNDPLATTE	BASEPLATE	267
KUPPLUNG	COUPLING	9
ANTRIEB	DRIVE	96
-	-	-
-	-	-
GESAMT	TOTAL	530
GEWICHTE / WEIGHTS		KG



Check for process conformity only
A: No comments / work may proceed
P: Comments must be noted and resolved / Work may proceed subject to implementation of Comments indicated
F: Comments noted, action and solution verified per PAB / Work may proceed
X: Recheck and resolved / work may proceed
N: Recheck not subject to verification / off-species material
Note: Recheck and resolved must be accompanied by a report of change status, cause, effect, solution, and evidence for non-recurrence. Recheck and resolved must also be accompanied by a report of change status, cause, effect, solution, and evidence for non-recurrence.

Project Engineering and Construction Group
Date: 12.12.01
Signature: [Signature]
Date: 12.12.01
Signature: [Signature]

OK/12.12.01 [Signature]

1	2001-10-16	AS BUILT	DRESSEL	KOSMAK	SCHIRM	WALTERUS
0	2001-08-01	1ST EDITION	DRESSEL	KOSMAK	SCHIRM	WALTERUS

STATUS	ISSUE	DATE	DESCRIPTION	PRE. BY	CHK. BY	APP. BY	PROJ. ENGR.

DRAWING TITLE: GENERAL ARRANGEMENT DRAWING FOR HOT CAUSTIC CIRCULATION PUMP ITEM NO.: 10-P-2271 A/B

OWNER ENG. NO.: 10-VD-A1-RE-011-028-L	P.O. NO.: 2PB434
UNICE ENG. NO.: M-ZA 50037	OWNER JOB CODE / PROJ. NO.: NPSOL / 70700A NPSOE / 70700A
UNICE JOB CODE / PROJ. NO.: MARUN / 370 104A	

OWNER: NATIONAL PETROCHEMICAL COMPANY MARUN PETROCHEMICAL COMPANY

PROJECT: C2+ RECOVERY AND GAS CRACKING PLANTS

CONTRACTOR: Linde Energy Industries Engineering and Design NARGAN COMPANY

ZEICHNUNG-NUMMERING NO.: 2001-10-16	KOSMAK	SEPR.	REVISOR-NR./PURCHASER NO.: 1
CAD: 2001-10-16	DRESSEL	1	ITEM-NO.: 10-P-2271 A/B
2001-08-01	DRESSEL	0	REVISOR-NR./CUSTOMER NO.: 0
DATE/DATE	NAME	REVISION/REVISION	ITEM NUMBER-NR./ITEM NUMBER NO.: 9970089248
BAUZEICHEN-GRÖSSE/TYP-GRÖSSE			ITEM NUMBER-NR./ITEM NUMBER NO.: 6-N27-503907/1-2
RPH 40-231			
AUFSTELLUNGSPLAN			
INSTALLATION PLAN			
F 103570			

BLATT 1 VON 4 SHEET 1 OF 4