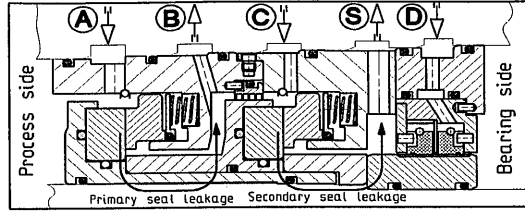


PROJECT: BAOJI Methanol..... **EagleBurgmann.** REV

MAX. SHAFT DIAMETER AT MAIN SEAL: **120 mm** PRELIMINARY DRAWING No: **PDGS10/140-ZT30-U-Ax**
 SEAL SIZE: **140** **0,00**

GAS SEAL TYPE: PDGS ARRANGEMENT: Tandem with int. labyrinth
 DIRECTION OF ROTATION: bi-directional TEST PROCEDURE: SIEMENS 82143515 (API-S)
 BARRIER TO PROCESS: not in scope of supply

SEPARATION SEAL TYPE: not in scope of supply



GAS SEAL PERFORMANCE:

CASE		1	2	3	4	5	6	Static	Test dyn.	Test stat.
	Speed	rpm	11943					0	11943	0
(A)	Primary seal gas		Process Gas					Process Gas	He_Air	He_Air
	Pressure	barg	52,18					79	52,18	79
	Gas temperature	°C	40					40	100	100
(B)	Flare pressure	barg	1,5					1,5	0	0
(C)	Buffer gas		Nitrogen					Nitrogen	Air	
	Pressure	barg	1,5					1,5	0,2	
	Gas temperature	°C	20					20	100	
	Velocity across int. Laby.	m/s	5					5		
(B)	Primary seal leakage	NI/min	51/76					50/75	43/64	38/57
	Flow across int. labyrinth	NI/min	126/147					126/147		
(S)	Secondary seal leakage	NI/min	1/2					1/2	1/2	0/0

GAS SEAL DESIGN CONDITIONS:

DESIGN PRESSURE (DYNAMIC) PRIM. SEAL 100 barg
 DESIGN PRESSURE (STATIC) PRIM. SEAL 100 barg
 DESIGN PRESSURE (DYNAMIC) SEC. SEAL 100 barg
 DESIGN PRESSURE (STATIC) SEC. SEAL 100 barg
 MAXIMUM DEPRESSURIZATION RATE: unlimited bar / min
 BALANCING: ISO1940-Q2.5/10(SIEMENS)
 GAS INLET TEMPERATURE (min.): -50 °C
 GAS INLET TEMPERATURE (max.): 160 °C
 MATERIAL DESIGN TEMPERATURE (min.): -50 °C
 MATERIAL DESIGN TEMPERATURE (max.): 230 °C
 AXIAL MOVEMENT: ± 3 mm

GAS SEAL MATERIALS:

SEAT (ROTATING): SILICON CARBIDE REACTION BONDED
 SEAL FACE (STATIONARY): SILICON CARBIDE WITH DLC-COATED
 DYNAMIC SEAL ELEMENT: FKM FLUOROCARBON
 SEAL ELEMENT BEHIND THE SEAT: FILLED PTFE, SPRING ENERGIZED
 SECONDARY SEAL ELEMENTS: FILLED PTFE, SPRING ENERGIZED
 - PRIMARY SEAL FILLED PTFE, SPRING ENERGIZED
 - SECONDARY SEAL FKM FLUOROCARBON
 METAL PARTS: 1.4006 (ASTM 410)
 SPRINGS: 2.4669 (ASTM Alloy N07750)
 LABYRINTHS: AlMg4,5Mn (Aluminium alloy AA5083)
 SCREWS: A4-70 (ASTM A193 Gr. B8M)

REMARKS: Dew line in case of an Order

GAS SEAL DATA SHEET

Revision	0	1	2	3
Date	02.09.11			
Name	KneiBl			

Handwritten signatures and numbers: 13, 169, and a signature.