



Oil -Gas

OH2

Chemical process pump

Model

FS-ZL-BB4-40X12

4-P10 BT

SR. NO.FS-ZL19601004

EBARA pumps Europe S.P.A
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PART. IVA IT 01234660221
R.E.A.N. 124581 TRENTO

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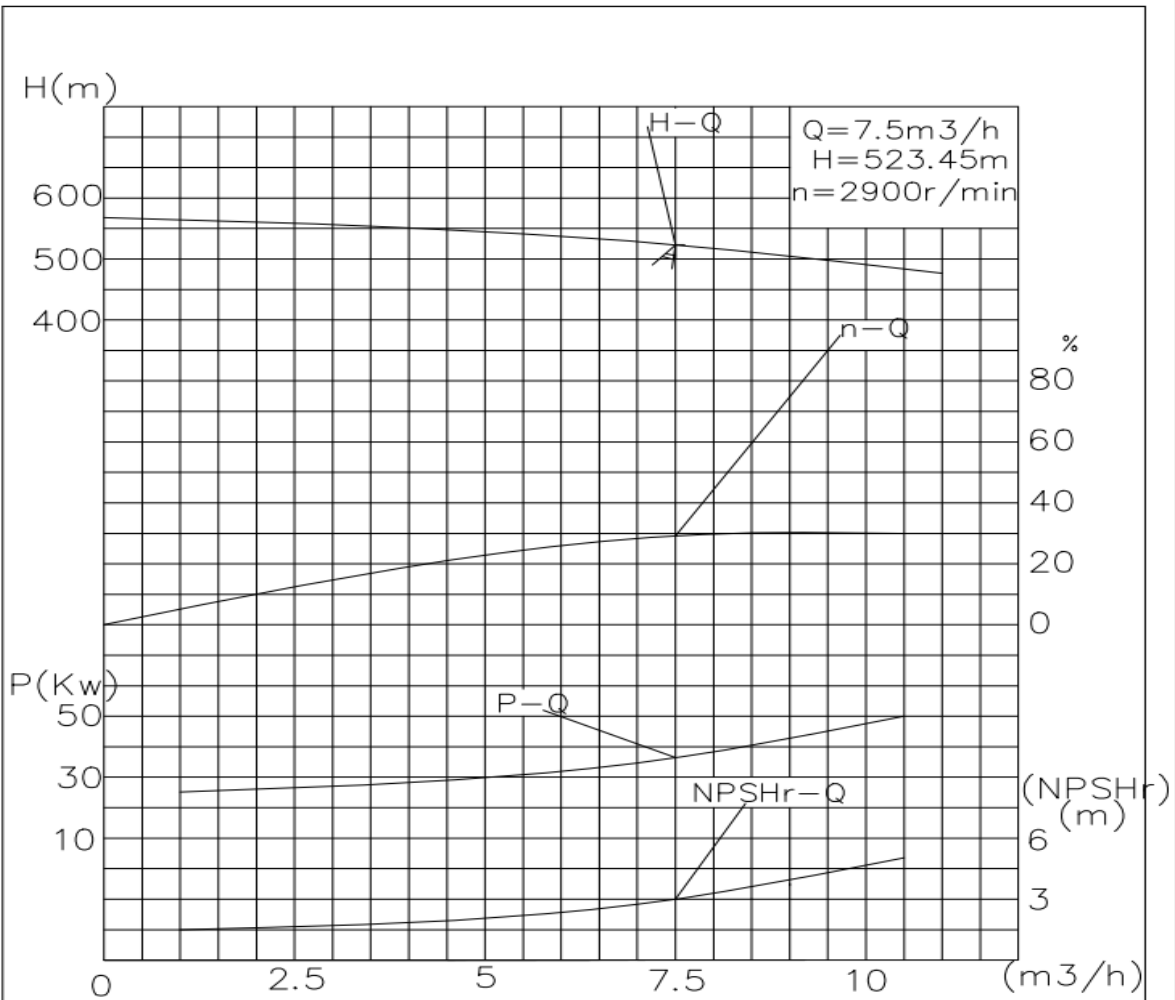
User Name :	
Device Name :	
4-P10BT	Quantity : 1
Equipment Name: Horizontal multistage pump	Pump Manufacturer : Ebara oil-Gas
Pump Model:FS-ZL/BB4-40X12	

Working Conditions		Material(s)	
Flow rate: 7.5	m ³ /h	Pump body: Cast steel	Impeller: Cast steel
Inlet gauge pressure: (rated/maximum)	MPa.G	Shaft: 2Cr13	
Outlet gauge pressure:	MPa.G	Mechanical seal flushing plan: PLAN02+53B	
Lift(H,m) 523.45 m	(NPSH)a : 4.6 m	Bearing: SKF	Brand: SKF
Usage : <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> intermittent(Number of starts/per day)		Coupling: 180	
Medium			
Name: light gas oil			
Working temperature:40°C			
Medium density:515.44kg/m ³			
Viscosity (CP): 0.11			
H ₂ S (Hydrogen Sulfide) Concentration (PPM)		Medium Characteristics: <input type="checkbox"/> Corrosive <input type="checkbox"/> Abrasive <input type="checkbox"/> Toxic	
Pump performance and structure			
Pump speed of rotation:2985rpm	Efficiency: 29 %	Shaft power: 37kW	
Impeller diameter (rated): 180mm		Impeller diameter (maximum): 200 mm	
Impeller diameter (minimum): 150 mm			

MCSF:4m ³ /h NPSH: 3m							
Maximum head at rated diameter: 550m							
From rated head to shutoff head: 93%				Head ratio (rated/maximum): 97%			
Flow rate (Best Efficiency Point, BEP): 9m ³ /h				Flow ratio (rated/BEP): 85 %			
Installation form: <input type="checkbox"/> Vertical <input checked="" type="checkbox"/> Horizontal							
Impeller form: <input checked="" type="checkbox"/> Closed <input type="checkbox"/> Open <input type="checkbox"/> Semi-open							
Pump Casing Split: Axial <input checked="" type="checkbox"/> Radial							
Pump casing type: <input checked="" type="checkbox"/> Single volute <input type="checkbox"/> Double volute <input type="checkbox"/> Guide casing (guide vane)							
Flange standard: GB9111.1-2000	caliber mm	Flange pressure rating	Sealing Face Type	Orientation position	steam turbine		
					Model: <input checked="" type="checkbox"/>	N0.055-0.3	
Suction port	80	5MPa	PF	Horizontal	steam turbine		
Discharge port	40	7.5MPa	PF	Vertical	Rated power: 55kW	Maximum power:	
Drain port	/	/	/	/			
Pump casing design pressure: 7.5 MPa		Pump Casing Hydrostatic Test: 10 MPa					
Maximum working pressure: 5MPa		Maximum permissible suction pressure:2MPa Maximum permissible working pressure: 7.5MPa					
Bearing type: <input type="checkbox"/> Sliding bearing <input checked="" type="checkbox"/> Radial rolling							
Bearing Lubrication: <input checked="" type="checkbox"/> Oil Bath/Grease <input checked="" type="checkbox"/> Oil Slinger							



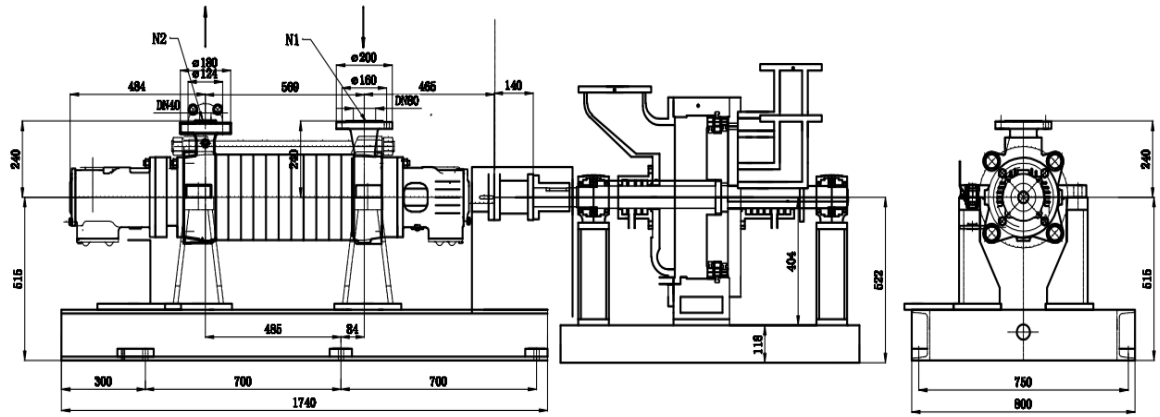
Oil -Gas



Line Item	name	model	flow: Q (m3/h)	Lift(H, m)	Quantity	Remark
100-P12 A	Horizontal multistage pump	FS-ZL/BB4-40X12	7.5	523.45	1	API610 standard production, Mechanical seals comply with API682 standards, materials: cast steel, containerized mechanical seals, bearing box seals: isolators, all contact rotating parts are made of brass, mechanical seal flushing solution PLAN 02+53B SKF bearings, scope of supply: pump head+base+diaphragm coupling.
	Steam Turbine	N0.055-0.3	3000rpm	Inlet pressure 0.3MPa	1	Steam turbine body: N0.055-0.3 Steam turbine base, bolts, etc. are provided by the equipment factory Condenser: 50m ³ Control system: Siemens PLC Coupling: Shenyang Schenk Spare parts: provided by the equipment factory



Oil -Gas



Line Item	name	model	flow: Q (m ³ /h)	Lift (H, m)	Quantity	Remark
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Oil -Gas

Requested flow rate	7.5 m ³ /h
Requested developed head	523.45 m
Pumped medium	LPG
Temperature	40.0 °C
Fluid density	515.44 kg/m ³
Fluid viscosity (cP)	0.11
Vapors pressure	11.03 kg/cm ² a
Suction pressure max.	10.0 kg/cm ² g
Efficiency	0.00%
Power Absorbed	0
Pump speed of rotation	2900rpm
Discharge press.	33.83 bar.g
Stuffing box press.	VTA
Shutoff head	602m
Shutoff pressure	40kg/cm ²
Differential pressure	23.83 bar.g
NPSH available	4.6 m
Ratio Q/Qbep	97.00%
Max. power on curve	54KW
low for continuous stab	VTA
Suction Flange Size & Rating	VTA
Discharge Flange Size & Rating	VTA
Shaft seal	As Per API 682
Shaft seal manufacture	EBARA
Sealing plan	API plan 02+53B (VTC)
Bearing bracket size	No. 3 bearing box
Coupling Manufacturer	EBARA
Coupling type	Diaphragm coupling
Spacer length	140mm
Driver type	Steam Turbine
Drive standard mech.	VTA
Motor const. type	VTA
Motor speed	VTA
Frequency	50 Hz
Rated voltage	Note 8

Rated power P2	Note 8
Volute casing (102)	Cast Steel
Casing cover (161)	Cast Steel
Shaft (210)	2Cr13
Impeller (230)	Cast Steel

