



daedong



# 3C100LWS

## General Specification

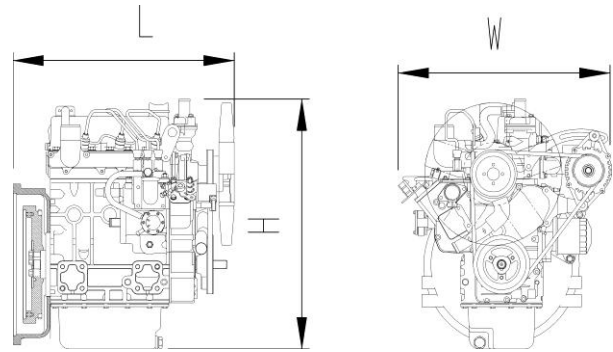
Type	3Cyl, 4Cycle, Liquid cooled Diesel
Combustion system	Indirect Injection
Rated Power	16.4kW (22HP) / 2800rpm
Max. Torque	64N.m / 1900rpm
Fuel Consumption	275 g/kWh under
Bore X Stroke	75mm X 76mm
Displacement	1.007 L (61.45in <sup>3</sup> )
Idle min/max. rpm	1050 / 3020rpm
Aspiration	Naturally Aspirated
Engine Oil capacity	3.8 L
Governor type	Mechanical
Cooling fan	315mm Puller type
Alternator	12V, 50Amp
Power Take Off	Flywheel [190(7-1/2)] Flywheelhousing (SAE #5) Fuelcamshaft spline (19.5x24x0.75)
Emission Regulation	EPA Tier 4 China step 2

## Features



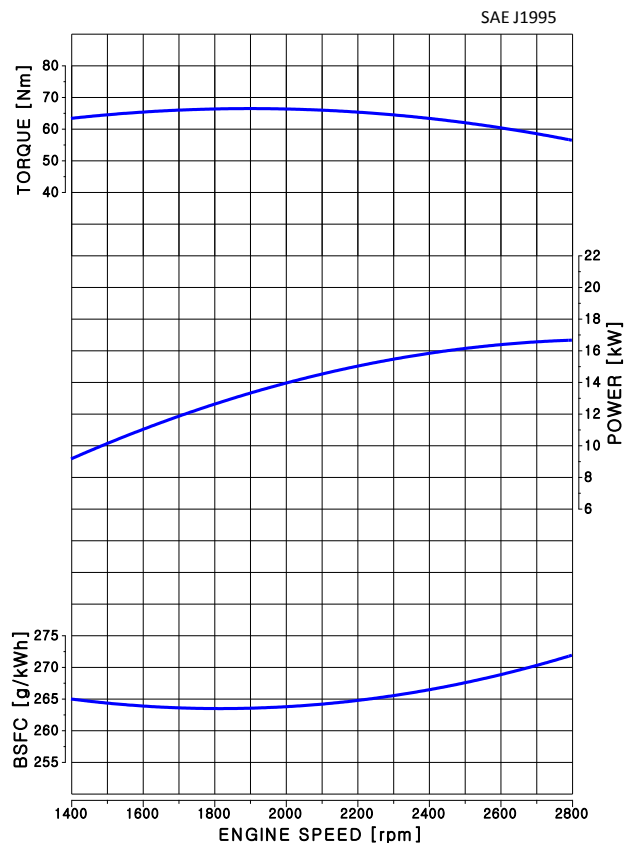
Image shown may not be actual engine

## Approximate Dimensions and Weight

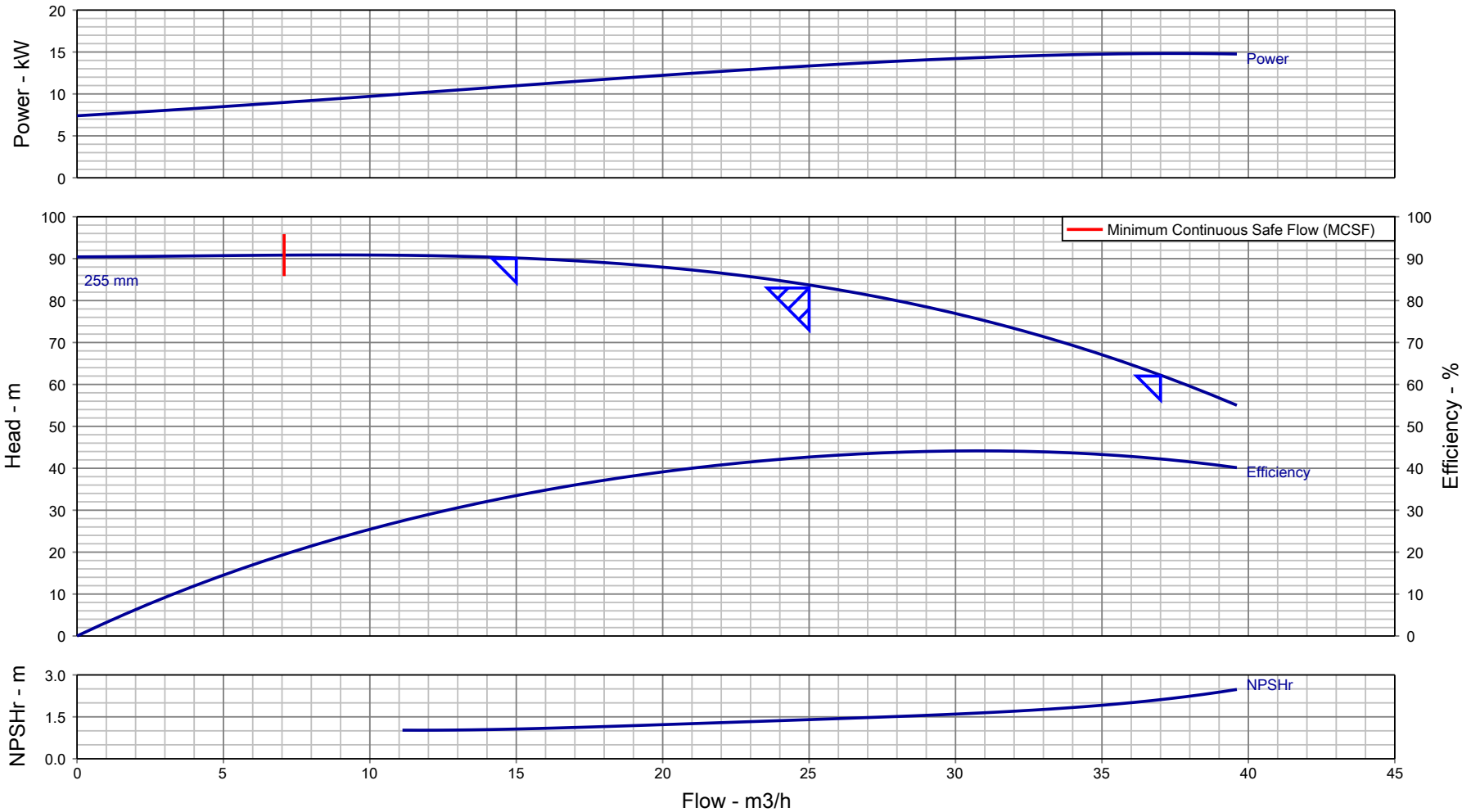


Length(L)	mm	505
	in	19.9
Width(W)	mm	482
	in	19.0
Height(H)	mm	553
	in	21.8
Dry weight	kg	101
	lb	222

## 3C100LWS FULL LOAD



## Pump Performance Curve



Customer :	Pump Size/ Stages : DB 40/26/ 1	Flow, rated : 25.00 m <sup>3</sup> /h
Customer enquiry :	Speed, rated : 2930 rpm	Differential Head : 83.00 m
Project : Default	Based on curve number : HD10208A0 Rev 0	Fluid density rated : 0.998 kg/dm <sup>3</sup>
Quote number : 312657	Viscosity : 1.00 cSt	Efficiency : 42.68 %
Item number : 001	Cq/Ch/Ce/Cn [HI2010] : 1.00 / 1.00 / 1.00 / 1.00	Power, rated : 13.34 kW
Quantity : 1	Minimum recommended driver rating : 15.00 kW / 20.12 hp	NPSH required : 1.40 m
Date last saved : 08 Dec 2020 7:44 AM	Performance testing standard : ISO 9906 / ANSI-HI 14.6 Gr 2B	Liquid Type/ Application : Water

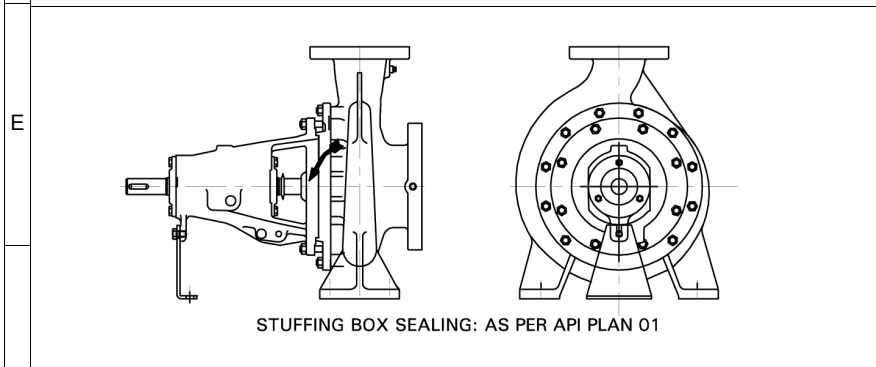
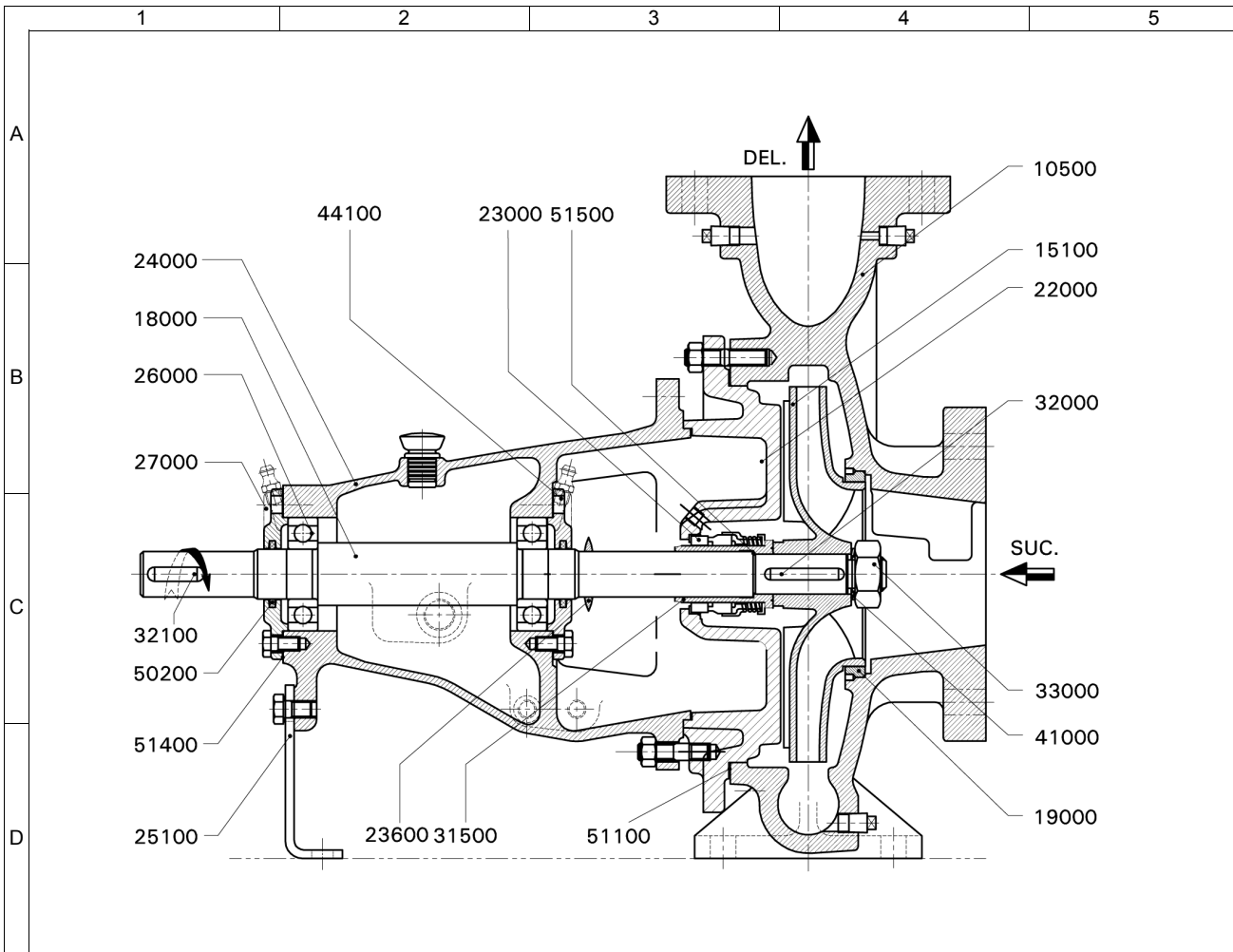
Notes: 1. Performance at shut off condition is approximate. 2. Rated impeller diameter is approximate. 3. Only duty point is guaranteed as per testing standard.



Enriching Lives

## Pump Performance Datasheet

General						
Customer	:		Quote number	: 312657		
Customer Enquiry No.	:		Pump model	: DB 40/26		
Project	:	Default	Stages	: 1		
End user	:	-	Based on curve number	: HD10208A0 Rev 0		
Tag number	:	001	Date last updated	: 08 Dec 2020 7:44 AM		
Service	:	-	Quantity of pumps	: 1		
Operating Conditions		Liquid				
Flow, rated	:	25.00 m3/h	Liquid handled	: Water		
Suction pressure, rated / max	:	0.00 bar.g / 0.00 bar.g	Additional liquid description	: Fresh Water		
Discharge pressure, rated	:	8.20 bar.g	Temperature, max	: 20.00 deg C		
Head, rated (requested)	:	83.00 m	Solids diameter, max	: 0.00 mm		
NPSH available, rated	:	Value not specified	Solids in suspension by volume	: 0.00 %		
Frequency	:	50 Hz	Specific gravity, rated / max	: 0.998 / 0.998 kg/dm3		
Performance		Viscosity, Rated / Max.		: 1.00 cSt / -		
		Driver & Power Data				
		Pump speed, rated	:	2930 rpm	Driver sizing specification	: Maximum Power
		Impeller Dia, Rated (Approx.)	:	255 mm	Margin over specification	: 0.00 %
		Impeller diameter, maximum	:	264 mm	Power, rated	: 13.34 kW
		Impeller diameter, minimum	:	205 mm	-	: -
		Efficiency at duty point	:	42.68 %	-	: -
		NPSH required / margin required	:	1.40 m / 0.50 m	Driver Rating	: 18.5KW
		Pressure Data				
		MCSF	:	7.07 m3/h	Maximum working pressure	: 8.90 bar.g
		Cq/Ch/Ce: [-]	:	1.00 / 1.00 / 1.00	Maximum allowable working pressure	: 16.00 bar.g
		Water eq. duties (Qw/Hw/Ew)	:	25.00 m3/h / 83.00 m / 42.68 %	Maximum allowable suction pressure	: 1.96 bar.g
		Suction / Delivery nozzle size	:	65.00 mm / 40.00 mm	Hydrostatic test pressure	: 18.34 bar.g
		Construction				
		Noise level	:	90 dB	Basic construction	: End Suction Pump-OH1
		Vibration level (RMS)	:	5.1 mm/s	Impeller type	: Enclosed
		Test standard	:	ISO 9906 / ANSI-HI 14.6 Gr 2B	Selection status	: Acceptable
		Starting condition	:	Closed Delivery Valve	Rec. Pipe Size (Suc / Del)	: 80.00 mm / 65.00 mm
Material						
MOC Code	:	16MOC				
Material (Casing / Impeller / Shaft)	:	CI IS210:FG260 (012) / CI IS210:FG260 (012) / ST ST ASTM A276-410 ANLD (253)				
-	:	-				



**NOTES:**

- " \* " INDICATES RECOMMENDED SPARES.
- FASTENERS IN LIQUID CONTACT ARE IN CS

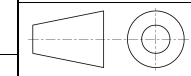
**IMPORTANT: THIS DRAWING IS THE PROPERTY OF Kirloskar Brothers Limited. AND MUST NOT BE USED OR COPIED WITHOUT THEIR PRIOR AUTHORITY IN WRITING.**



Enriching Lives

PART NO.	PART DESCRIPTION	MAT. CODE	MOC DESCRIPTION
10500	PUMP CASING	012	CI IS210:FG260
15100*	IMPELLER	012	CI IS210:FG260
18000*	PUMP SHAFT	253	ST ST ASTM A276-410 ANLD
19000*	WEAR RING - SUCTION SIDE	012	CI IS210:FG260
22000	CASING COVER	012	CI IS210:FG260
23000*	MECHANICAL SEAL	998	DIN SEAL
23600*	LIQUID DEFELCTOR	370	NATURAL RUB ASTM D2000AA-70SHORE/7MPa
24000	BEARING HOUSING	012	CI IS210:FG260
25100	SUPPORT FOOT	042	MS IS:5986-Fe410WA (OLD-IS:1079)
26000*	DEEP GROOVE BALL BEARING	000	STEEL
27000	BEARING COVER DE & NDE	012	CI IS 210-FG 260
31500*	SHAFT SLEEVE - MECHANICALSEAL	565	ST ST ASTMA276-410(210/250BHN)-ANLD
32000*	KEY FOR IMPELLER	253	ST ST ASTM A276-410 ANLD
32100	KEY FOR COUPLING	053	CS IS1570:40C8 HOT RLD
33000*	IMPELLER NUT	664	AUS ST ASTMA194/194M-8M-UNS S31600 (NUT)
41000*	LOCK WASHER-IMPELLER NUT	054	SPRING ST IS:4072-80C6
44100	GREASE NIPPLE	444	CS IS:1367 Part3 CL4.6 CDP
50200*	FELT RING	375	FELT
51100*	GASKET-CASING COVER	702	NON ASBESTOS FERROLITE NAM37 OR EQ
51400*	GASKET-BEARING COVER	702	NON ASBESTOS FERROLITE NAM37 OR EQ
51500*	GASKET-SHAFT SLEEVE	702	NON ASBESTOS FERROLITE NAM37 OR EQ

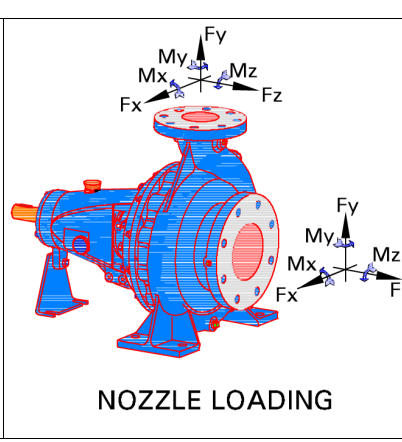
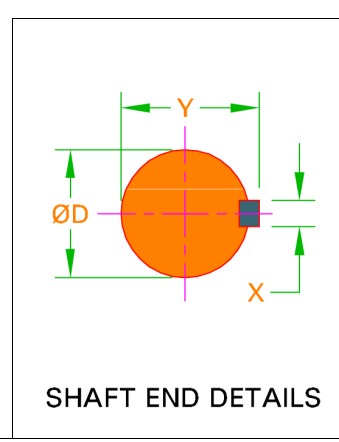
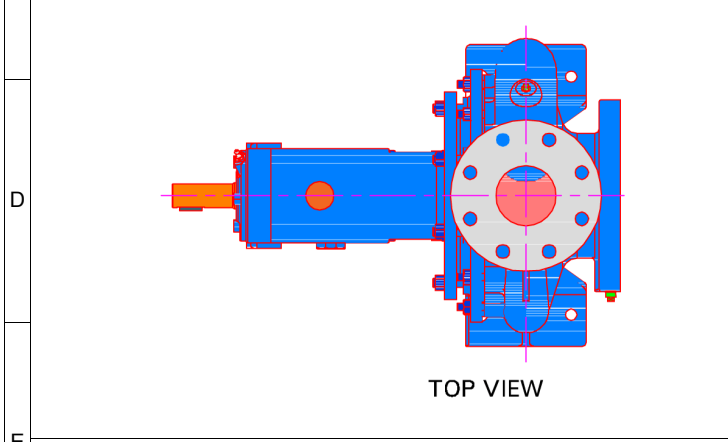
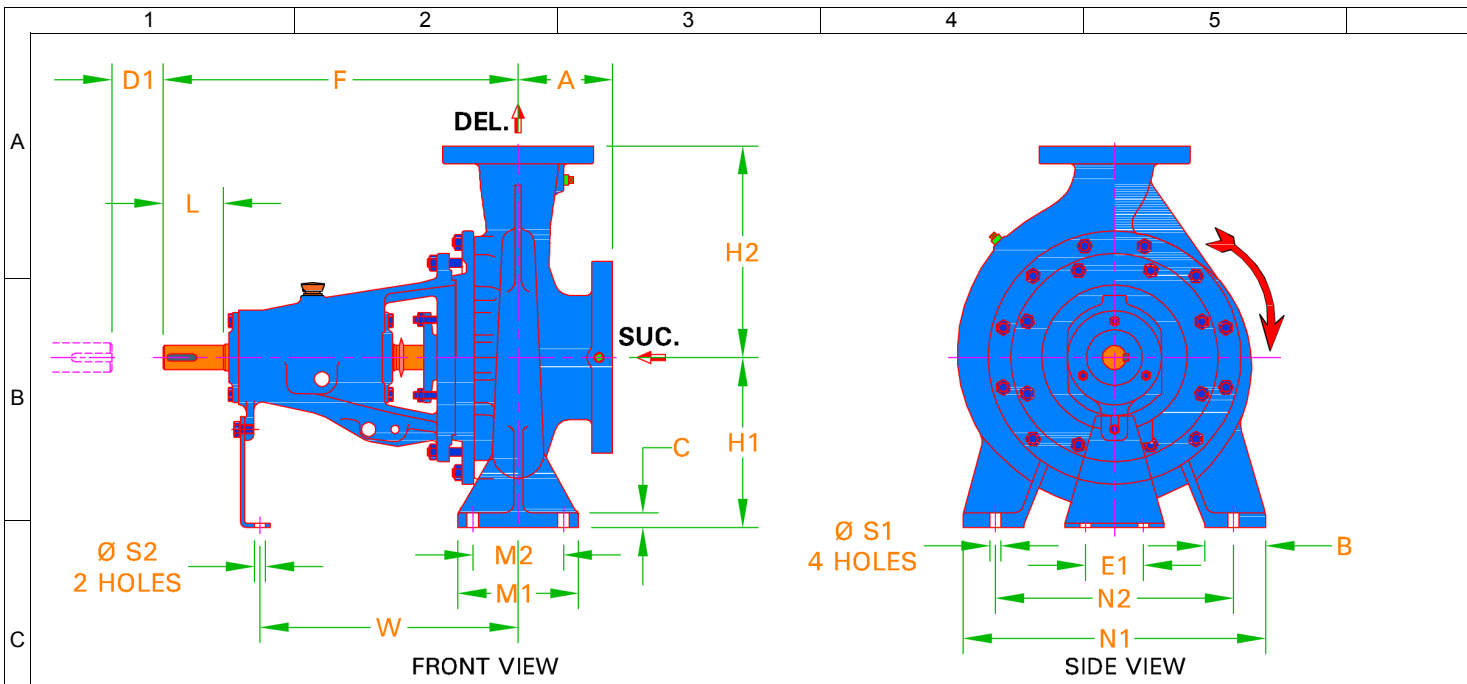
PUMP	DB 40/26	MOC	16
ENQUIRY NO./DATE	/	QUANTITY	1
PO. NO./DATE	-	TAG NO.	001
QUOTATION NO.	0	DATE.	-
O/A. NO.	-	MISI.	-
CUSTOMER	-		
END USER	-		
PROJECT	Default		
CONSULTANT	-		
SERVICE	-		



**Kirloskar Brothers Limited**  
KIRLOS KARVADI - 416308, DIST.- SANGLI (INDIA)

CROSS SECTIONAL DRAWING

DRAWING NO. **TC02-1**



PUMP DUTIES			
CAPACITY	25.00 m <sup>3</sup> /h	EFFICIENCY	42.68 %
TOTAL HEAD	83.00 m	PUMP INPUT	13.34 kW
DENSITY	0.998 kg/dm <sup>3</sup>	NPSHR	1.40 m

FLANGE DRILLING STANDARD AND DETAILS					
SUCTION	BS EN1092 PN16 FF	DELIVERY	BS EN1092 PN16		
	NOM. SIZE	RF DIA.	P.C.D.	NO OF HOLES	HOLE DIA.
SUCTION	65.00 mm	N.A.	145 mm	4	18.0
DELIVERY	40.00 mm	N.A.	110 mm	4	18.0

ALLOWABLE NOZZLE LOADING						
	FORCES			MOMENTS		
	Fx	Fy	Fz	Mx	My	Mz
SUCTION	57.00 kgf	142.0 kgf	114.0 kgf	843 N.m	422 N.m	422 N.m
DELIVERY	34.00 kgf	85.00 kgf	68.00 kgf	510 N.m	255 N.m	255 N.m

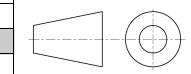
TAPPING DETAILS	
DESCRIPTION	SIZE / TYPE
Suction Gauge	1/4"BSP
Delivery Gauge	1/4"BSP
Casing Drain	3/8"BSP
Casing Vent	NA
Bearing Cooling in / out	NA
Pad Cooling in / out	NA
Priming in	NA
Base Drain	NA

DIRECTION OF ROTATION FROM DE		CLOCKWISE	
PUMP	DB 40/26	PUMP WT.	61.00
REC. DRIVER RATING	18.5KW	GD*2	0.02 kg
ENQ. NO./DATE	/	RATED SPEED	2930R
PO. NO./DATE	-	QUANTITY	1
QUOTATION NO.	0	TAG NO.	001
O/A NO.	-	DATE	-
CUSTOMER	-	MISI	-
END USER	-		
PROJECT	Default		
CONSULTANT	-		
SERVICE	-		

**NOTES:**  
 • ALL DIMENSIONS ARE IN mm  
 • DIM 'D1' INDICATES THE DISTANCE REQUIRED TO REMOVE BACK PULL OUT ASSEMBLY.

**IMPORTANT: THIS DRAWING IS THE PROPERTY OF Kirloskar Brothers Limited AND MUST NOT BE USED OR COPIED WITHOUT THEIR AUTHORITY IN WRITING.**

A	F	H1	H2	B	C	M1	M2	N1	N2	S1	E1	S2	W	-	D
100	360	180	225	65.00	14.00	125	95.00	320	250	14.00	110	14.00	267	-	24.00
X	Y	L	D1	-	-	-	-	-	-	-	-	-	-	-	-
8.00	27.00	50.00	100	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Kirloskar Brothers Limited**  
 KIRLOS KARVADI - 416308, DIST. - SANGLI (INDIA)

PUMP OUTLINE DRAWING