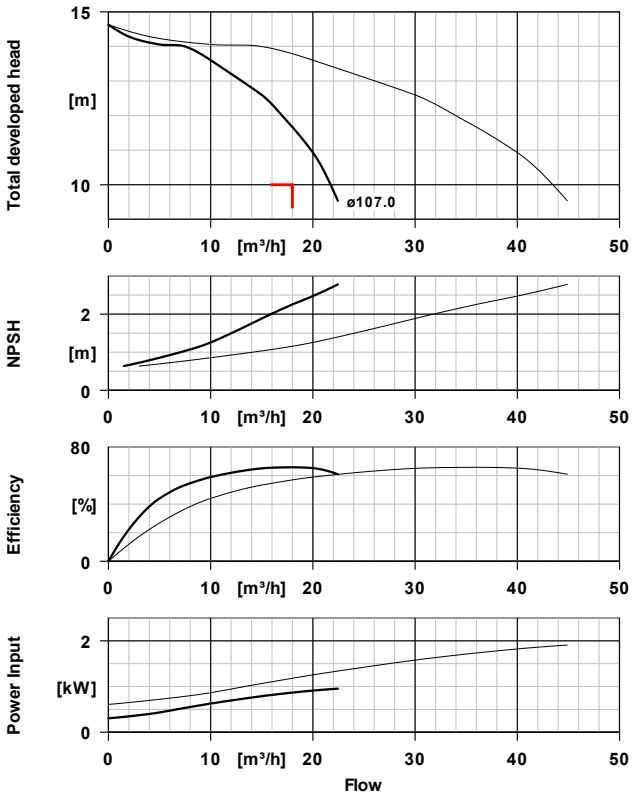
Compact data sheet

KDP SVP2-015/010M5S314/100

KSB Delta Primo



Data specified

Pumped medium	Water Not containing chemical and mechanical substances which affect the materials
Fluid temperature	20.0 °C
NPSH required	2.38
Minimum inlet pressure	1.00 bar.g
Maximum inlet pressure	1.00 bar.g

System data

Design	Multiple system (parallel operation)
Manufacturer	KSB
Type	KDP SVP2-015/010M5S314/100
Materialno.	02021145
pump(s)	Movitec V015C/01 C
No. of pumps	2
Component size	15C
No.of stages	1
Operation mode	Variable speed
Max. fluid temperature	60.0 °C
Connection type	Direct
Stand-by pump	Yes
Max. disch. press.	16.00 bar
Max. inlet pressure	4.00 bar

Operating data

Actual flow rate	19.13 m³/h
Actual developed head	11.29 m
Start up pressure pE	1.98 bar.g
Nominal value	1.98 bar.g
Shutoff pressure	2.43 bar.g

Design

System type series	KSB Delta Primo
Suction nominal dia.	DN 65
Discharge nominal dia.	DN 65
Appendage Suction size [DN]	DN 50
Appendage discharge size [DN]	DN 50
Number of pressure vessel connection	1
Pressure vessel gross content	8 L
Suction header type	Cap X Flange
Suction connection position	Right
Discharge header type	Cap X Flange
Discharge connection position	Right
Pressure Class	PN 16
Control variant	SVP
Type of Controller	KSB Booster Command Pro
VFD type	PumpDrive 2 ECO
Control cabinet material	Metal
Fuse limit	25.00 A
Cabinet protection class	IP54
Control cabinet size	400x400x155mm
Total connection power	2.78 kVA

Motor data

Model (make)	KSB SuPremE®
Efficiency class	IE5 acc. IEC/TS 60034-30-2 (2016)
Rated power	1.10 kW
Effective motor speed	2900 rpm
Operating voltage	400 V
Motor enclosure	IP55
Rated current per motor	3.0 A

Quantity: 1

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Total rated current	8.4 A
Frequency	100 Hz

Installation plan

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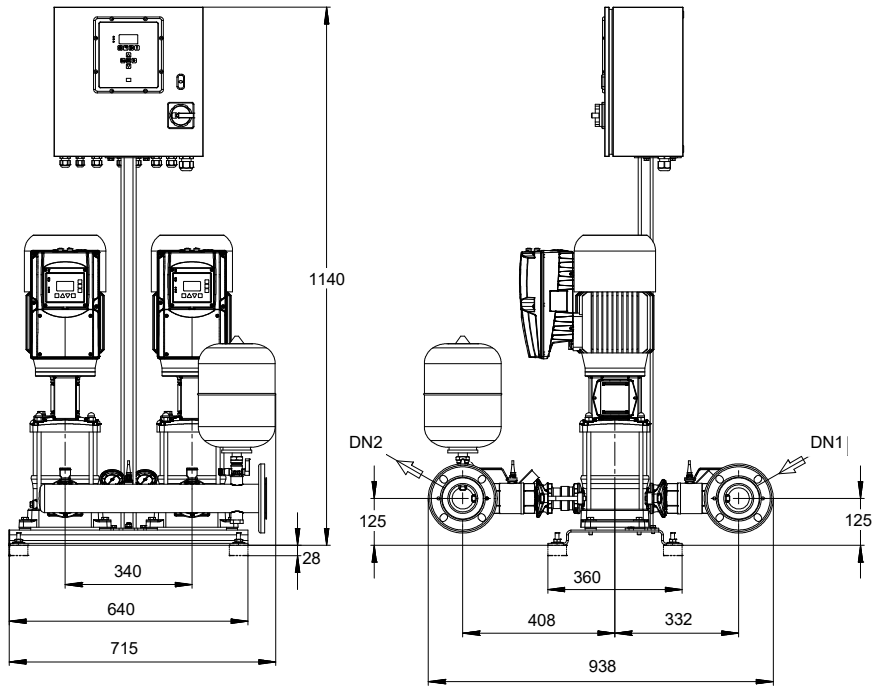

Drawing is not to scale *Dimensions in mm*

Connections

Suction flange according to(DN1)	EN1092-1 / 21/B1 / DN 65 / PN 16
Discharge flange according to(DN2)	EN1092-1 / 21/B1 / DN 65 / PN 16

Weight net

System	127 kg
Total	127 kg

Connect pipes without stress or strain!

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KSB Delta Primo

Pompe 4

1

KDP SVP2-015/010M5S314/100

Ready-to-connect package pressure booster system with magnet-less IE5 KSB SuPremE® reluctance motor (to IEC/TS 60034-30-2 (2016)), KSB frequency inverter for continuously variable speed control of each pump and Booster Control Advanced control system. To DIN 1988-500.

Function:
Pressure booster system for adjustable, constant supply pressure for drinking water applications. Every pump is speed-controlled with operating hours evenly distributed among the pumps. The system is started and stopped as a function of pressure. The control system is parameterised at the factory for the specific customer requirements.

Features:
- Vertical Movitec high-pressure centrifugal pumps with wetted components made of stainless steel
- KSB SuPremE® IE5 motor on each pump (to IEC/TS 60034-30-2 (2016))
- KSB's PumpDrive Eco frequency inverter mounted on the motor of each pump
- Booster Control Advanced control unit with password protection to prevent unauthorised access
- One check valve per pump and one lockable shut-off valve on the suction side and discharge side of each pump
- 8-litre membrane-type accumulator equipped with Flowjet flow through valve; accumulator fitted on the discharge side, with shut-off valve and drain valve
- Pressure sensor with Flowjet shut-off valve, for controlling the supply pressure
- Pressure sensor for dry running protection of the system, with Flowjet shut-off valve
- Pressure gauge for pressure indication
- Lockable master switch at the control cabinet
- Suction-side and discharge-side manifolds with threaded or round flange connection on one side
- All components mounted on one baseplate
- Pumps mounted on the baseplate with anti-vibration mounts
- Foot set for height compensation for installation on uneven surfaces

Pumped medium : Water, Clean water
Temperature limit for selected material max. : 60.0 °C
Requested flow rate : 18.00 m³/h
Requested developed head : 10.00 m
Maximal system discharge pressure : 16.00 bar
Start up pressure pE : 1.98 bar.g
Minimum inlet pressure : 1.00 bar.g
Nominal Pressure of the system : PN 16
Number of pumps : 2
Stand-by pump : Yes
Stage number : 1
Connecting type : Direct
Flange design, discharge : EN1092-1 / 21/B1 / DN 65 / PN 16
Flange design, suction : EN1092-1 / 21/B1 / DN 65 / PN 16
Frequency : 50 Hz
Operating voltage : 400 V
Rated power P2 : 1.10 kW
Speed : 2900 rpm

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Motor enclosure : IP55
Dimensions : 715 x 938 x 1140
Motor efficiency class : IE5 acc. IEC/TS 60034-30-2 (2016)
Article No. : 48245747
Monitoring / open-loop control / closed-loop control :
- Functional monitoring of the pressure sensor
- Manual or automatic fault acknowledgement
- Integrated motor protection
- Pipe rupture detection: system stops when the set pressure cannot be reached.
- Functional check run with adjustable parameters
- Adjustable base load/peak load operation
- Operation with/without stand-by pump can be selected

Operation/display:
- Backlit colour display with sensitive navigation button for symbol indication of operation / fault / fault message
- Menu navigation with symbol display, display of operating parameters and setting of setpoint and operating mode of pumps
- Standard Bluetooth connection for using app
- Display of pump status and actual pressure value
- Operating hours counter for each pump
- Operating hours counter for overall system
- Start-stop cycles counter per pump

Communication/interfaces:
- 1 digital input for external dry running protection
- 2 volt-free digital outputs for a general fault message (alert or warning)
- 1 volt-free digital output per pump for Pump in operation
- 1 volt-free digital output per pump for Pump fault
- Emergency operation-0-automatic switch per pump
- Display indicating:
  - o System pressure
  - o Status of dry running protection
  - o Inlet pressure
  - o Alerts and warnings (incl. history)
  - o Colour LEDs at the control system for trouble-free operation (green), warnings (yellow) and alerts (red)

Bus systems (standard):
- Modbus RTU

Bus systems (optional):
- BACnet MS/TP
- Profibus DP

Materials:
- Pump: Wetted components made of stainless steel
- Piping: Stainless steel
- Valves: Brass or stainless steel, suitable for drinking water
- Baseplate: Steel, powder-coated

Certification:
The system is suitable for drinking water and certified to ACS (France) and WRAS (United Kingdom). All components and materials are approved by DVGW.
Pressure booster systems are subjected to hydraulic testing with sterile water at the factory; they are closed after testing. During the test KSB continuously monitors the test water quality. Test certificate available on request.

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Dimensions and connections:
- Suction side and discharge side
- Dimensions L x W x H:

Purchase order information:
- Make: KSB
- Type series: KSB Delta Primo SVP
- Material price group: LB

Material number:

Note:
Prior to commissioning in drinking water applications the system has to be flushed at the site in accordance with the requirements of the German TrinkwV drinking water ordinance and of DIN EN 806 (to prevent microbial contamination). This also applies if the system has been at standstill for a prolonged period of time.

Typical tender for KSB Delta Primo SVP
1983.556/04-EN
Subject to technical modification without prior notice
14 October 2021