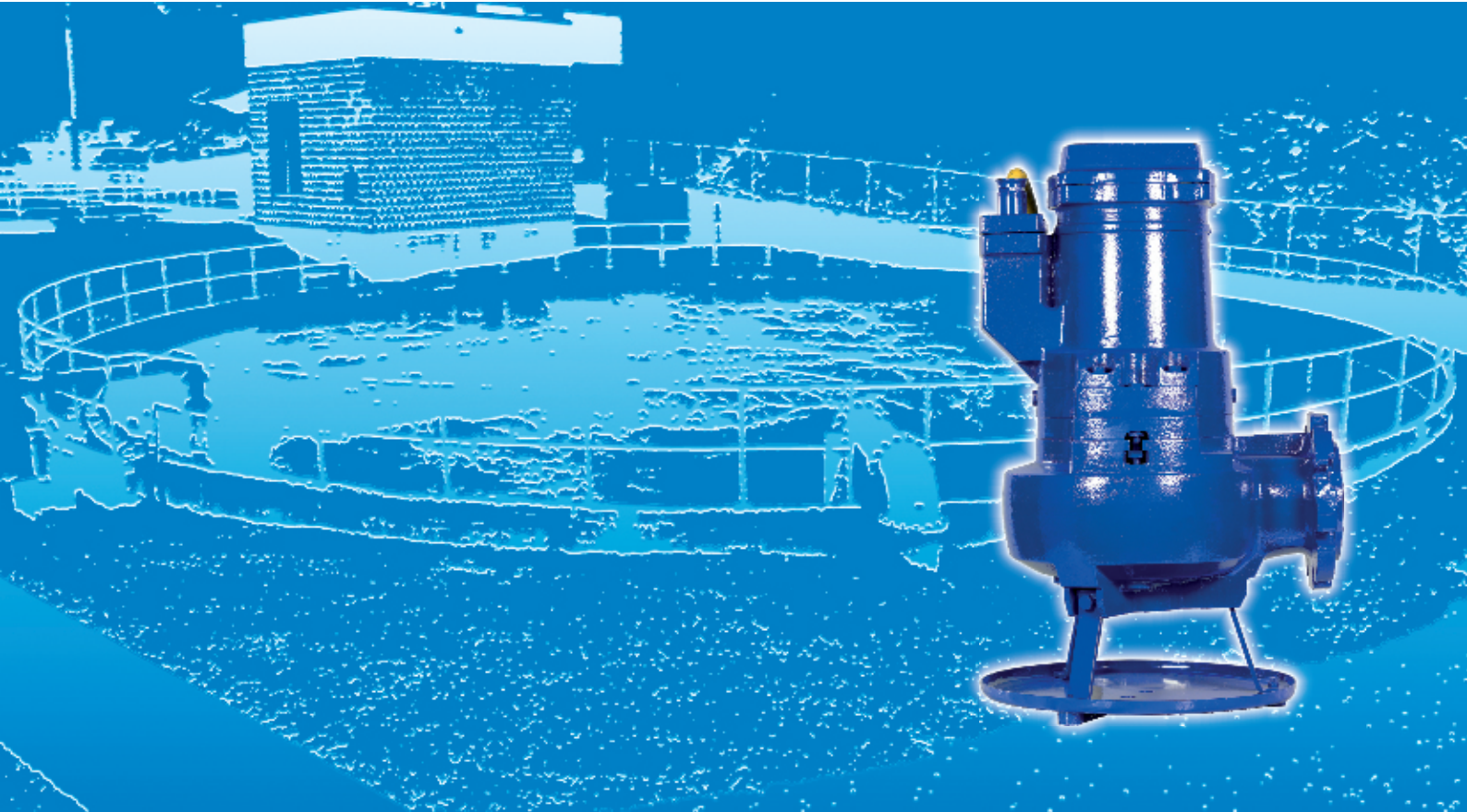


Submersible Motor Pumps for Sewage - KRTU



Applications

KRTU pumpsets are used for handling all kinds of waste water in :

Municipal sector

Pumping stations : Untreated domestic sewage
Hotels, Subways & Airports : Faeces, mixed liquor, eatables etc.
Lifting stations : Storm water
Sewage works (Treatment plants) : Grit trap pumping, raw sludge, activated sludge, digested sludge

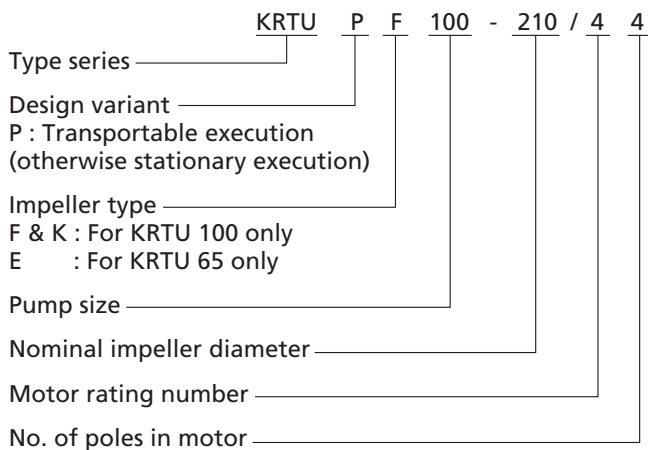
Industrial sector

Iron & Steel : Raw water, sinter water, cooling water with solids, scrubber liquor
Cellulose, Paper Manufacturer of insulation materials : Process water with glass wool, Asbestos fibre
Mechanical engineering : Cutting oil
Chemical : All kinds of effluents
Sugar : Sugarcane tails, wash water etc.
Food processing : Transportation of tomatoes etc.
Sea water, Industrial water : Sandy water, Waste water
Refinery : Hydrocarbons (Oil, Gasoline, Butane, Methane etc.)

Design

KRTU pumps are single stage, submersible centrifugal pumps of closed coupled (monobloc) construction. They are available with three types of impellers - E (single vane) K (non-clog two channel) and F (free flow) for two types of installations, namely transportable and stationary.

Designation



Operating data

Pump sizes : DN 65 and DN 100
Capacity : up to 200 m³/hr
Head : up to 24 m
Motor rating : up to 9.5 kW
Temperature : up to 70°C

Drive

Three phase induction motor for operating voltage of 380 V and 415 V, insulation class F with built-in temperature protection.

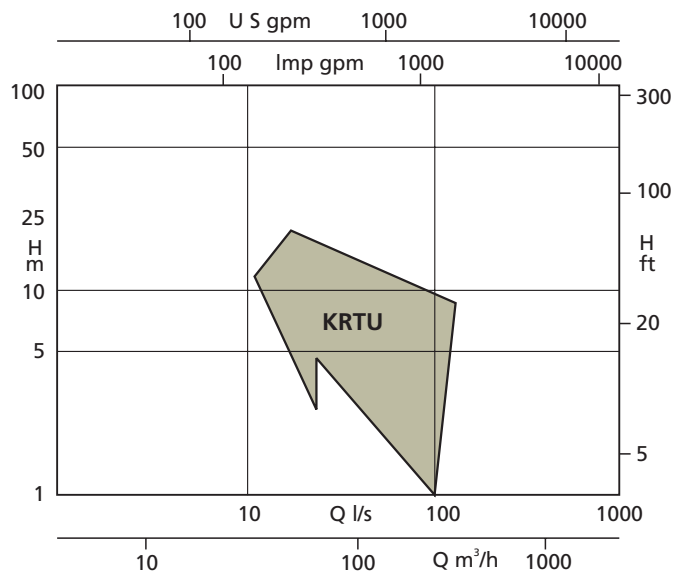
Shaft sealing

KRTU 65 : Pump side : Mechanical seal
Motor side : Oil seals
KRTU 100 : Pump side : Mechanical seal
Motor side : Mechanical seal

Bearings

Antifriction ball bearings as per DIN 625, packed with grease for life.

Family curve



Materials

Materials for standard C.I. execution are as under :

Part Name	KRTU 65	KRTU 100
Pump casing	C.I.	C.I.
Impeller	C.I.	C.I.
Shaft	Carbon steel	Carbon steel
Motor casing	C.I.	C.I.
Shaft protection sleeve	—	Stainless steel
Guide rope	Stainless steel	Stainless steel

Lateral cable entry

Your benefit :
Transport and installation damage is avoided.

Resin filled, triple protection cable assembly

Your benefit :
No leakage in the motor even in the event of damage to cable or core.

Sealed bearing on both sides, lubricated for life.

Your benefit :
No maintenance.

Dry, fully submersible perfectly sealed motor with temperature class F & S1 duty.

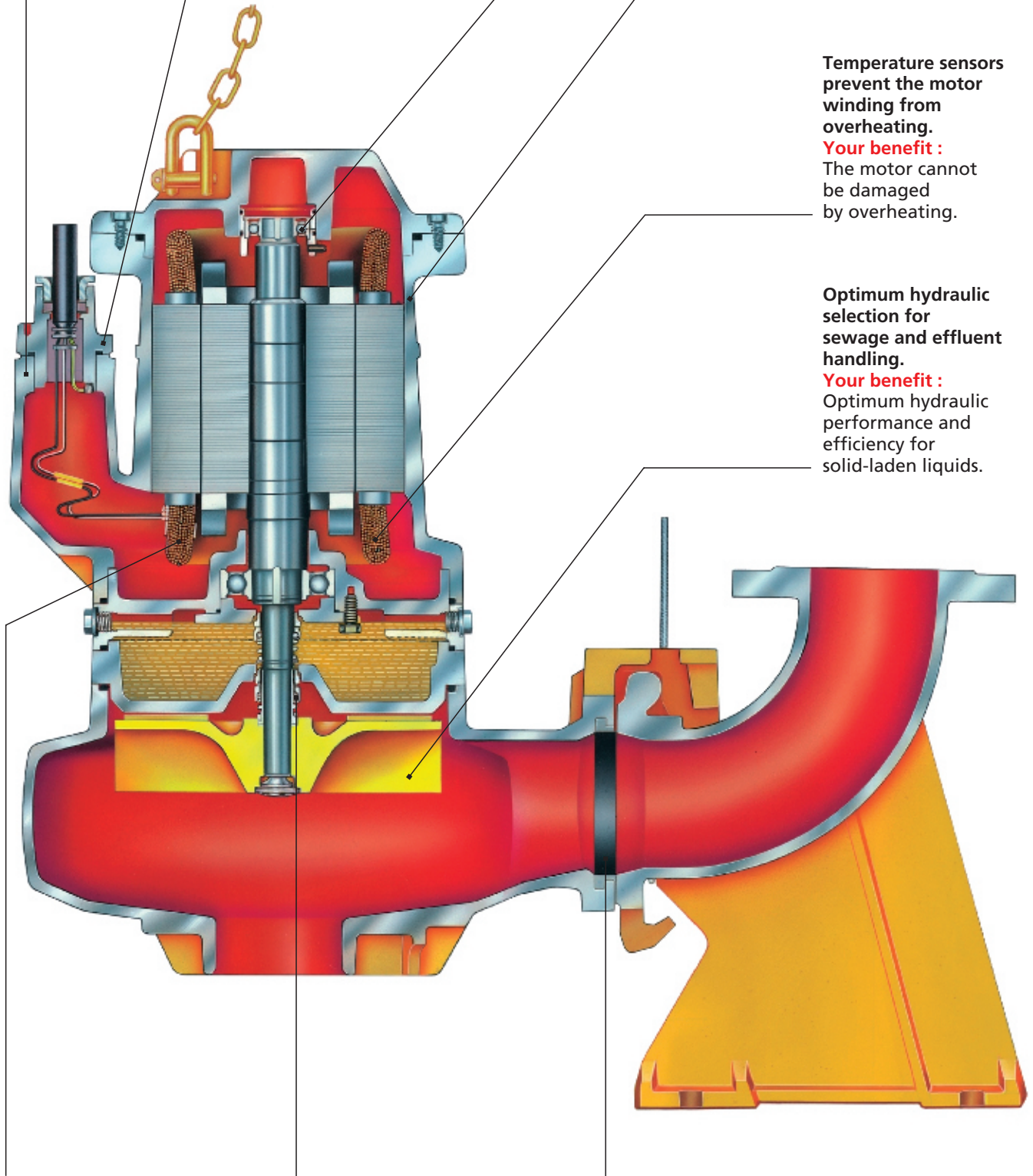
Your benefit :
High permissible switching frequency allowing you to reduce the sump size.

Temperature sensors prevent the motor winding from overheating.

Your benefit :
The motor cannot be damaged by overheating.

Optimum hydraulic selection for sewage and effluent handling.

Your benefit :
Optimum hydraulic performance and efficiency for solid-laden liquids.



Special moisture sensor

Your benefit :
Motor winding is protected in the event of accidental water entry.

Two bi-directional mechanical seals in tandem, with silicon carbide faces.

Your benefit :
Long service life.

Automatic, bolt-free connection, leakage prevented by means of elastic seal.

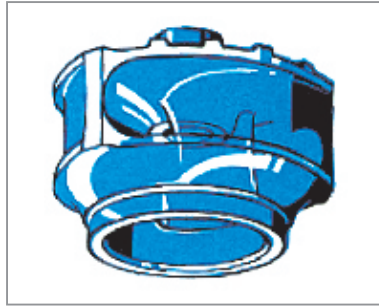
Your benefit :
Simple and operator-friendly allowing easy installation and removal of the pumpset.

The right impeller for the job



Free-flow impeller (F-impeller)

For liquids containing coarse solids and fibrous admixtures such as untreated sewage; also for sludges and liquids with a high gas or air content. Very large free passage up to the nominal diameter of the pump connection; non-clogging and resistant to deposits due to friction, excellent for handling entrained gas.



Closed two or three vane non-clogging impeller (K-impeller)

For pumping solid-laden contaminated liquid not containing any fibrous admixtures liable to bunch or plait.

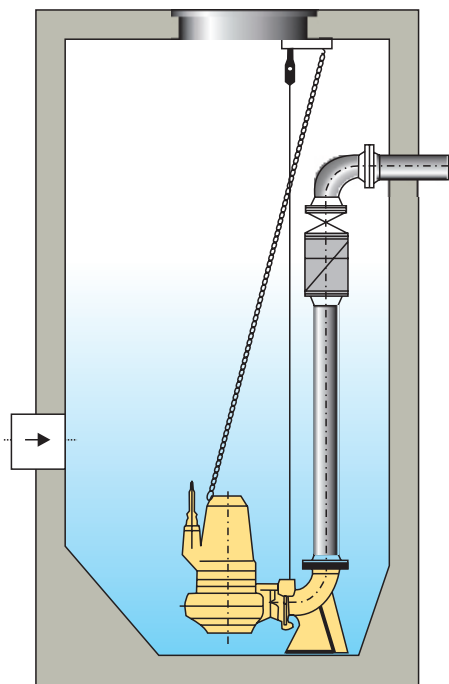
For dirty water, prescreened sewage, activated sludge, treated sewage; for handling fragile products suspended in water.



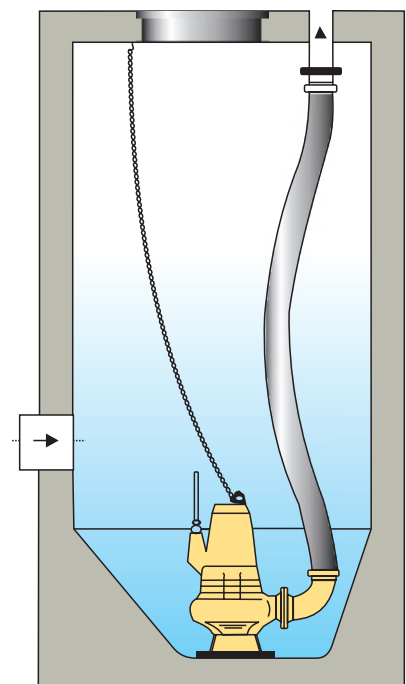
Single-vane impeller (E-impeller)

For liquids containing coarse solids and admixtures, for untreated sewage and all types of sludge. Very large free passage; non-clogging and resistant to plaiting when handling textile waste and fibrous constituents; for handling fragile products suspended in water.

Installation Options :



◀ A permanent wet-well installation with KSB's own guide wire device (available for all KRTU Sizes)



▶ A transportable wet-well installation with baseplate (available for all KRTU Sizes)



KSB PUMPS LIMITED

Mumbai-Pune Road, Pimpri, Pune - 411 018. India.

Tel.: 020 2710 1000 Fax : 020 2742 6000 www.ksbindia.co.in