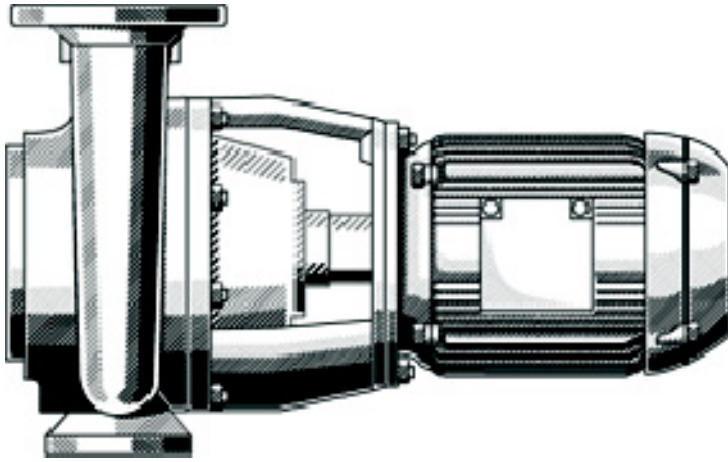


Non-clogging Impeller Centrifugal Pumps



Automation products available:

- PumpExpert
- Hyamaster
- hyatronic

Fields of Application

KWP-Bloc are used to handle contaminated, solids-laden liquids, pretreated sewage, industrial and municipal waste water as well as all kinds of pulps not liable to plait.

Other application fields are sewage and process engineering, general industry and plant engineering.

Application limits: temperature +100 °C, density ≤ 1.1 kg/dm³.

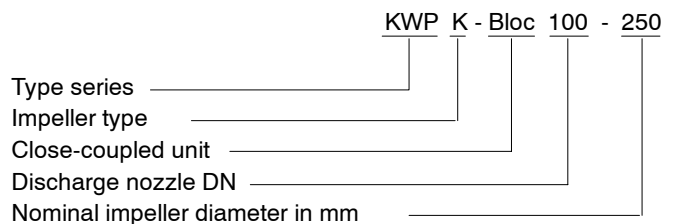
Design

Horizontal, radially split volute casing pump in close-coupled design with standardized motor, design B5, single-flow, not floodable, not self-priming, with stub shaft, with channel-type impeller and suction-side wear plate.

Certification

Certified quality management ISO 9001.

Designation



Impeller types:

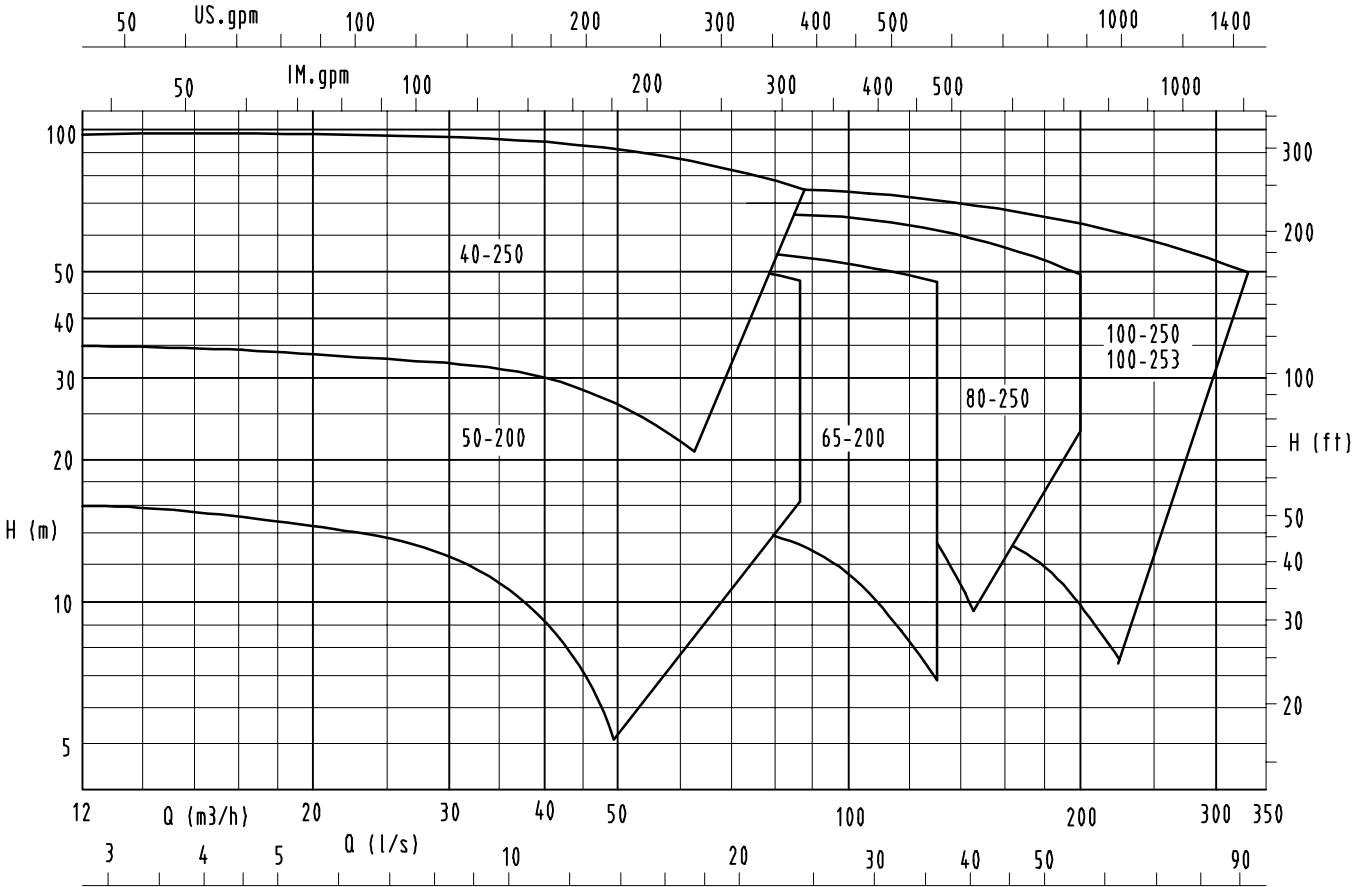
- K = channel-type impeller
- O = open multi-vane impeller
- F = free-flow impeller

Operating Data

Pump sizes	DN	from 40 to 100
Capacity	Q	up to 325 m ³ /h (90 l/s)
Head	H	up to 100 m
Motor rating	P	from 1.1 to 22 kW
Operating pressure p		up to 10 bar
Operating temp.	t	GN, GC ₂ from -10 to +100 °C
		C ₂ from -20 to +100 °C

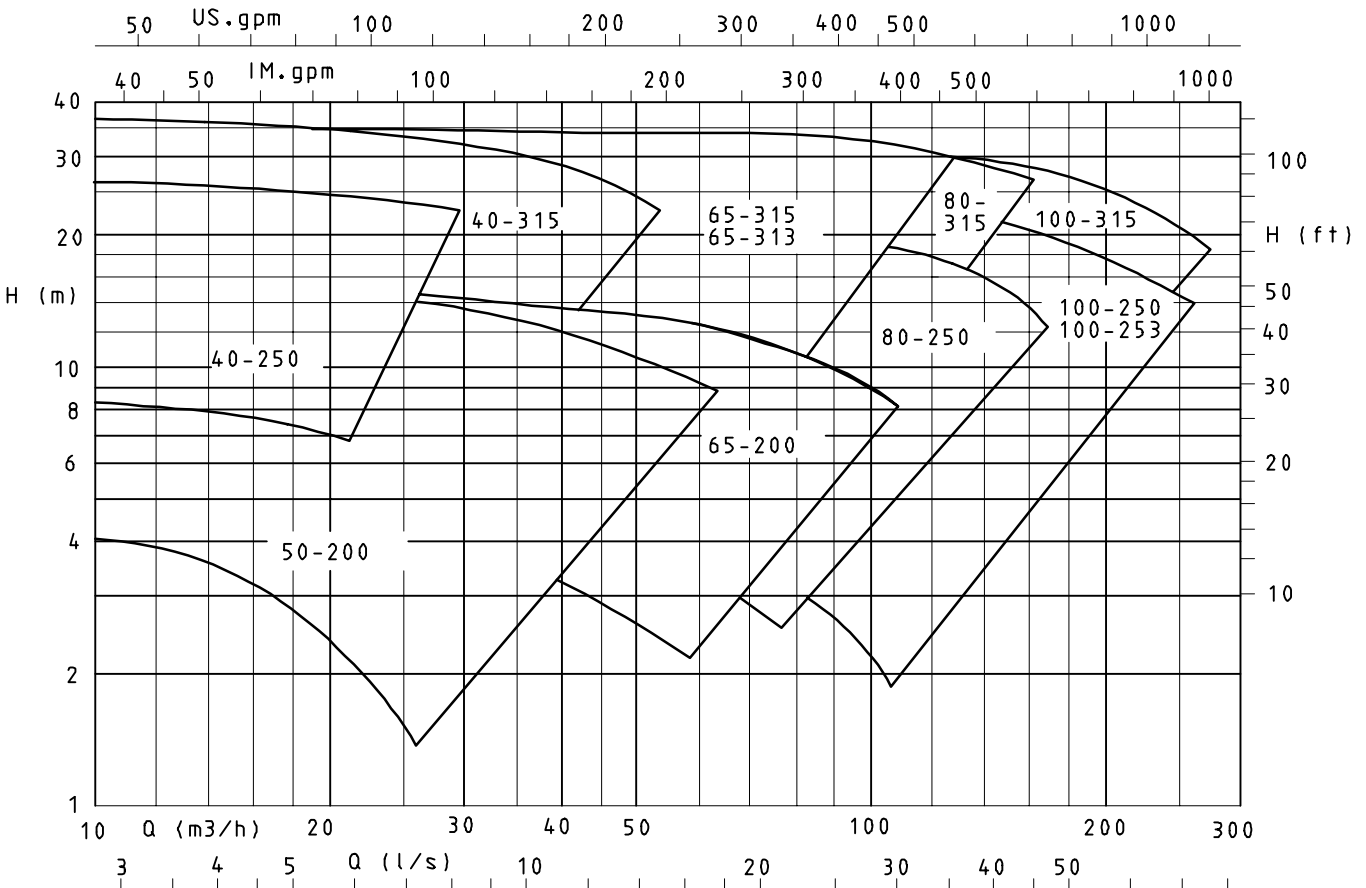
Selection Charts KWPK

n = 2900 1/min



000484

n = 1450 1/min



000485

Pressure and Temperature Limits

Operating pressure	p_{\max} :	10 bar	
Operating temp.	t_{\max} :	for GN, GC ₂ :	from -10 to +100°C
		for C ₂ :	from -20 to +100°C

Materials

Possible Variants

KWP-Bloc is available in the following materials:

Material variant	Casing material	Internals
C ₂	Noridur 1.4593	with impeller and wear plate made of Noridur 1.4593
GN	JL 1040 ¹⁾	with impeller and wear plate made of ERN
GC ₂	JL 1040 ¹⁾	with impeller made of Noridur 1.4593 and wear plate made of ERN

Table of Materials

Part No.	Description	Material variant		
		GN	C ₂	GC ₂
101	Pump casing	JL 1040 ¹⁾	Noridur 1.4593	JL 1040 ¹⁾
135.01	Wear plate, suction side	ERN	Noridur 1.4593	ERN
146	Intermediate lantern	JL 1040 ¹⁾	JL 1040 ¹⁾	JL 1040 ¹⁾
163	Discharge cover	JL 1040 ¹⁾	Noridur 1.4593	JL 1040 ¹⁾
210	Shaft	1.4021+QT700	1.4462	1.4021+QT700
230	Impeller	ERN	Noridur 1.4593	Noridur 1.4593
509	Intermediate ring	--	JL 1040 ¹⁾	--
524.01	Shaft protecting sleeve	1.4539	1.4539	1.4539
906	Impeller screw	C22+N	1.4539	C22+N

1) GJL-250 to EN 1561

Benefits at a Glance

Hydraulics of our well-proven type series KWP supplied over 10,000 times. Use of available modular design components reduces required spare parts stock and speeds up delivery of spare parts

Due to back pull-out design, the casing may remain in the pipeline when the pump is dismantled

Jacking screws facilitate dismantling

Gasket (V-ring) serves as splash guard for ball bearing (reliable sealing against oil, if variant with oil chamber is used)

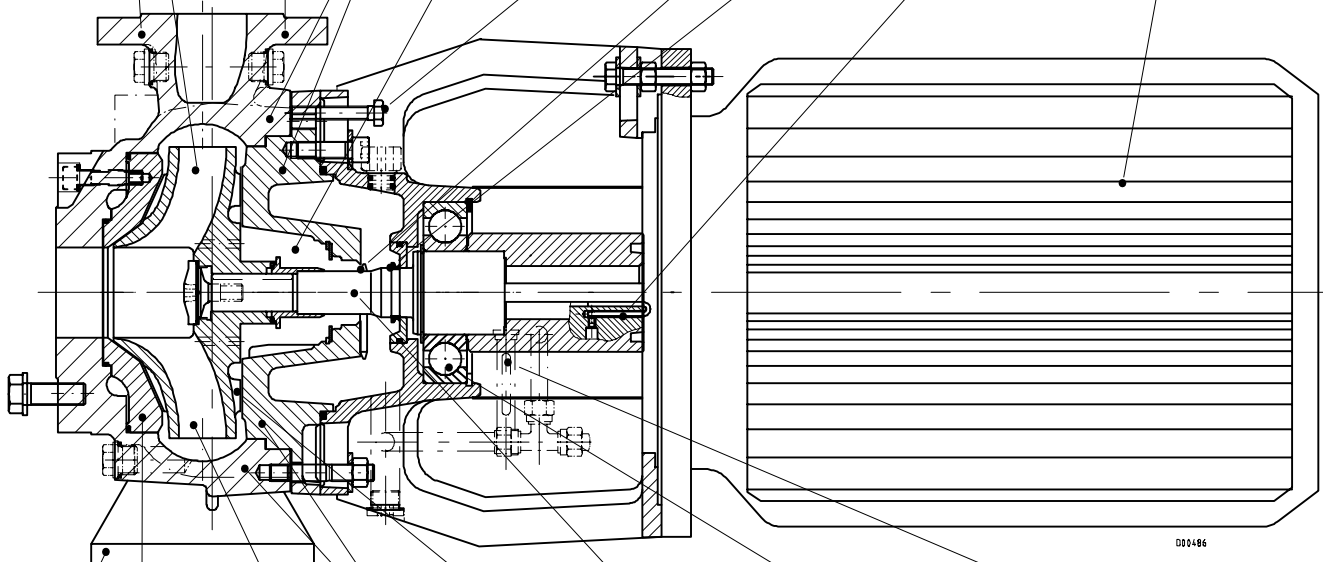
Commercial standardized motor, design B5; therefore all types of protection and speeds possible

Flange design to EN 1092 up to PN 16, other flange designs possible

All mechanical seals integrated in the casing cover with conical seal chamber (A-type cover), therefore improved internal circulation, automatic venting and dead-end operation possible

Oil thrower ensures low oil level

Shaft prestressed in direction of rotation, therefore no deflection of key due to frequent switching cycles; even over 1 million switchings will not damage it



Pump casing with suction-side wear plate, wear-resistant diagonal gap design

Safe design of all pressure-retaining components due to quality casting with corrosion/wear allowance

Shaft not in contact with the pumped product (dry shaft), therefore no special materials required

Stationary bearing prevents axial loads on the motor bearing. Bearings grease-lubricated for life, therefore maintenance-free

Constant-level-oiler for monitoring oil level with overflow

No foundation required

High efficiencies with channel-type impeller: impeller with front vanes and diagonal gap

Back vanes for reduced axial thrust and shaft seal balancing

Subject to technical modification without prior notice.

15.10.2006

2362.1/8-10