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Pos.no	Description	Item no.
	<b>Submersible dirty water motor pumps</b>	
	Amarex D-max 80-170/073F2YSG	39110693
	<b>Amarex KSB submersible motor pump for waste water applications, in grey cast iron and special materials</b>	

Vertical submersible motor pump set for wet installation, single-stage, with three-phase motor to IEC standards. Temperature sensor for protection against overheating, optional leakage sensor in the motor space, power cable with resin-sealed, absolutely water-tight cable entry and service-friendly plug-type connection in the motor space.

**Pump set:**

Make : KSB  
 Impeller : Amarex D / 80-170  
 type : D-max open two-vane impeller

D-max is an open two-vane impeller of the latest generation. The D-max impeller ensures a non-clogging flow and an excellent hydraulic efficiency.

The D-flector technology is specially designed to drastically reduce the risk of clogging by items such as wet wipes contained in the waste water.

Impeller diameter : 170 mm  
 Free passage : 37,7 mm

**Operating data:**

Fluid handled : Water  
 Flow rate :  
 Head :  
 Power input : 400 V 3~  
 Operating temperature : 40 °C max.

**Drive:**

Nominal voltage : 3~400 V  
 Nominal frequency : 50 Hz  
 Starting method : DOL / star-delta starting is also

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Pos.no	Description	Item no.	Qty.	UP / EUR	TP / EUR
	possible Enclosure	: IP68 to EN 60529 / IEC 529, thermal class H			
	Explosion protection	: ATEX II 2G Ex db h IIB T4 Gb			
	Max. fluid temperature	: 40 °C			
	Thermal motor protection	: Temperature sensor			
	Leakage sensor in the motor space	: no			
	Efficiency class	:			
	Duty type	: S1 submerged / with motor section partly outside the fluid			
	Motor rating P2	: 7,3 kW			
	Motor rating P1	: 8,72 kW			
	Motor efficiency	: 83,7%			
	Nominal current	: 14,70 A			
	Speed	: 2.812 1/min			
	Cable length	: 10 m			
	Cable entry	: Screwed cable entry / cable entry with individually stripped, resin-embedded cores and service-friendly plug-type connection inside the motor			
	<b>Materials:</b>				
	Pump casing Class 35B)	: Grey cast iron EN-GJL-250 (A 48			
	Handle	: 1.4306			
	Impeller Class 35B)	: Grey cast iron EN-GJL-250 (A 48			
	Discharge cover 276 Type 420)	: Stainless steel EN-1.4021+QT800 (A			
	Suction cover	: D-flector			
	Shaft Class 35B)	: Grey cast iron EN-GJL-250 (A 48			
	Cable sheath	: Chloroprene rubber			
	Elastomer seals	: Nitrile-butadiene-rubber NBR			
	Coating	: Two-component epoxy resin High Solid			
	Colour	: RAL 5002			

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	<b>Shaft seal:</b>				
	2 independent mechanical seals arranged in the oil reservoir				
	Pump end	:	Bellows-type mechanical seal		
	Motor end	:	Bellows-type mechanical seal,		
	Carbon-Al2O3				
	Oil fill	:	Environmentally friendly, non-toxic oil		
	<b>Dimensions and connections:</b>				
	Nominal size, discharge side	:	PN 16		
	Nominal size, suction side	:	DN 80		
	Pump weight	:	115 kg		
	<b>Purchase order information:</b>				
	Make	:	KSB		
	Type series / size	:	Amarex D 80-170		
	Material price group	:	18		
	Weight	:	115 kg		
	<b>Item number</b>	<b>:</b>	<b>39110693</b>		
	Motor: 732YSG				1
	MOTOR				
	The motor shall be three-phase, dry squirrel-cage induction type in design conforming to IEC / VDE / EN standards. The motor shall be adequately sized and rated for continuous operation to maximum a fluid temperature of 40 °C (104 °F).				
	The motor housing shall be both air filled and watertight. Motor protection shall be at minimum IP 68. Allowable maximum submergence shall be not less than 25 m.				
	The motor shall be rated for supply voltage of 400 V and frequency of 50 Hz and accept voltage fluctuations as per range A of DIN EN 60 034-1 (Supply voltage +/10 supply frequency -5%/+3%). The motor shall be explosionproof to ATEX II 2G T4, EEX d II B.				
	The motor shall be designed for a maximum of 30 number of starts per hour. Starting of the motor shall be direct.				
	The motor stator shall be wound to have an overall motor rating of 155°C, Class H. The rotor bars and short circuit rings shall be made of cast aluminum.				
	The motor and pump set complete shall be designed and manufactured by the same company.				
	MOTOR THERMAL PROTECTION				



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	<p>Temperature monitors shall be embedded in the motor windings for use in conjunction with and supplemental to external motor overload protection. These temperature sensitive switches shall allow for direct integration with the motor control circuit to shut down the pump if high temperatures are detected. The switches shall be normally closed rated for 250 V AC and a current of not less than 2 A. Additional temperature sensitive switches shall be embedded in the motor winding to limit temperatures of the motor as per explosion-proof certification. The pump's control shall shut down the pump should any of the monitors detect high temperature. Automatic reset shall not be allowed.</p> <p><b>MOTOR HOUSING MOISTURE PROTECTION</b> A moisture detector shall be mounted in the motor's stator cavity allowing a control panel mounted relay to de-energize the motor when a leakage occurs.</p>				

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**Data sheet: technical data**

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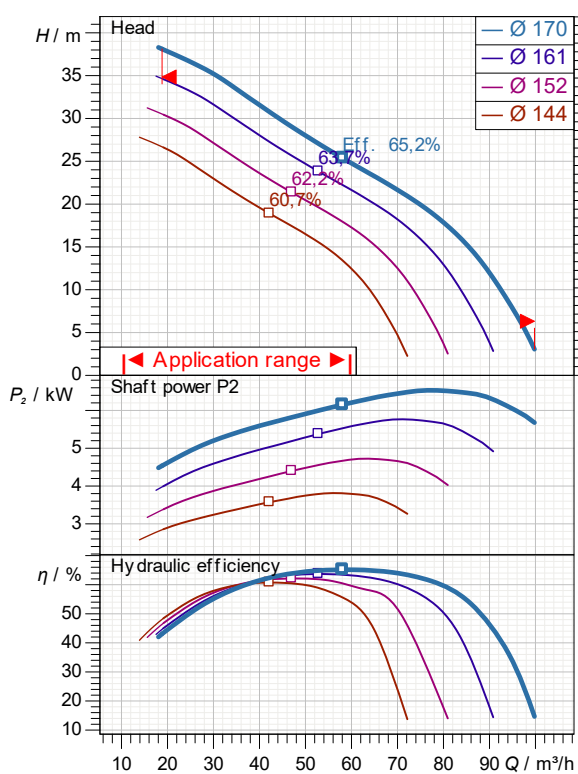
**Item-No.**  
**Design**                      **Submersible dirty water motor pumps**  
**Type / Coding**              **Amarex D-max 80-170/073F2YSG**

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**demand data**

Flow  
Total head  
Geodetic head  
Media                              Water  
Liquid temperature            20 °C

**Pump data**

Make                                      KSB  
Type                                      Amarex D-max 80-170/073F2YSG  
Design                                  Submersible dirty water motor p  
Specific design                      Single head pump  
No. of pumps                          1  
Standby pump                         No  
Max. fluid temperature

**Hydraulic data (Duty point)**

Flow  
Head

**Material / sealing element**

Casing                                    Grey cast iron EN-GJL-250 (A 48 Class 35B)  
Cover                                      Grey cast iron EN-GJL-250 (A 48 Class 35B)  
Suction cover                          D-flector  
Suction cover material              Ductile cast iron EN-GJS-600-3  
Discharge cover                      Grey cast iron EN-GJL-250 (A 48 Class 35B)  
Shaft                                        Stainless steel EN-1.4021+QT800 (A 276 Type 420)  
O-Rings                                  Nitrile-butadiene-rubber NBR  
Impeller                                  Ductile cast iron EN-GJS-600-3

**Dimensions**

Discharge flange standard        DN 80

**Rated motor data**

Power input (P1)                      8,72 kW  
Rated power (Pn)                      7,3 kW  
Speed                                      2.812 1/min  
Rated voltage                          400 V  
Rated current (In)                      14,7 A

**Product information**

Ident. No./ type key                  39110693  
Weight loaded                          115 kg  
Gross price                              17.001,98 EUR  
PL 2025-01-20  
Price group

