

AUDEX

INDUSTRIAL DEWATERING



Respected manufacturers of industrial submersible and dewatering pumps

Audex pumps have been specifically developed for use in the toughest and most abrasive of applications and environments.

Trusted by operators of quarries, mines and recycling facilities, Audex pumps represent quality and reliability giving you superior performance and reduced downtime. Pumps that suit your application better because they have been designed with your industry in mind.

Audex pumps are available in a range of sizes from 2" to 8" discharge. These robust pumps feature cast-iron and high chrome wear parts and agitators to maximise wear life when pumping abrasive liquids.

Available on most of the larger submersible pumps is the seal fail detector system, which monitors moisture levels and shuts down the pump in the event of seal wear or failure. This avoids costly rewinds and allows for a quick parts replacement without a costly full pump rebuild.

Audex also manufacture a range of pontoons to mount our pumps on when installing in a lagoon, and discharge units to monitor site discharge. All this adds to up to increased pump life and less pump related downtime even in the most stringent environments.

Audex - Part of the Intrax Global Group

Intrax is a global leader in specialist pumping equipment for difficult and challenging industrial applications. We are best known for excellence in bringing innovative and cost-saving ideas to our customers as well as offering unrivalled levels of customer service and response times.

Our combined wealth of experience and technical know-how in highly sophisticated applications has allowed us to work closely with the engineering teams on large-scale projects across the globe firmly establishing us as their trusted partner.

Designed with your industry in mind...

AW pumps.





AW & AW Pro Range









Industries & Applications

Audex AW and AW Pro are submersible pumps with agitators ideal for handling dirty water and slurry. They have been designed and built for use in the abrasive applications found on quarries, recycling plants and on ready mixed concrete sites. Reliable, industry-proven and affordable, the pumps offer exceptional service life with minimal running costs and repairs.

The Audex AW Range

The Audex AW 2-040 (2") and the AW 3-075 (3") submersible dewatering pumps are predominantly used as contractor pumps for site drainage duties, for example where the water contains sand and silt in suspension. A ductile iron vortex impeller is fitted to both models, which enables solids handling and offers excellent wear resistance. A built-in shaft mounted agitator keeps the solids in suspension and minimises clogging.

The larger Audex AW pumps (2-150 to 8-2200) are heavy-duty submersible slurry pumps ideal for the harsh conditions found in industries such as quarries or recycling plants.

A top discharge allows for installation in confined spaces and all pumps are fitted with a high chrome impeller. Ductile iron or high chrome and cast iron wear plates provide for an increased lifetime while a high chrome agitator allows for smoother pumping of solids-laden fluids

The Audex AW Pro Range

The Audex AW Pro range consists of four dirty water pumps - the 2-150 TA, the 2-220 TA, 3-370 TA and the 4-370 TA. The AW Pro range includes all of the features of the standard AW range plus an intelligent control system (ICS) giving you complete protection for your pump.







AW Pro Features & Benefits

Audex AW Pro pumps will not run if they are wired up incorrectly. This prevents damage to mechanical seals and the impeller which can result from running backwards.

The pump turns off if:

- A phase goes down from the power supply
- The motor is overloaded
- The impeller gets jammed
- Incorrect voltage is sensed

This prevents the motor from burning out and prevents mechanical damage to the pump.

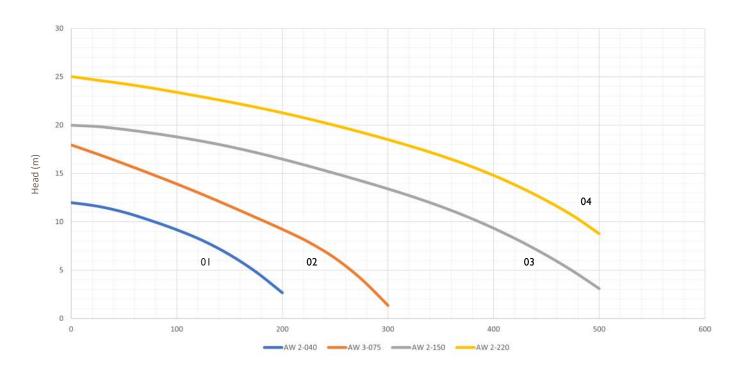
The pump will try to restart after five minutes – if the problem still persists it will wait another five minutes before trying again.

Audex AW Pro pumps feature an automatic level control. This prevents damage to the pump from running dry, takes away the need for a control panel and saves power as the pump only runs when it needs to. There is a 60 second time lag from when the level sensor is activated. This is to prevent a false start and reduce the amount of times the motor starts/stops

The pump also stores malfunction history. This allows for correct diagnostics if the pump fails and helps with future preventative action.

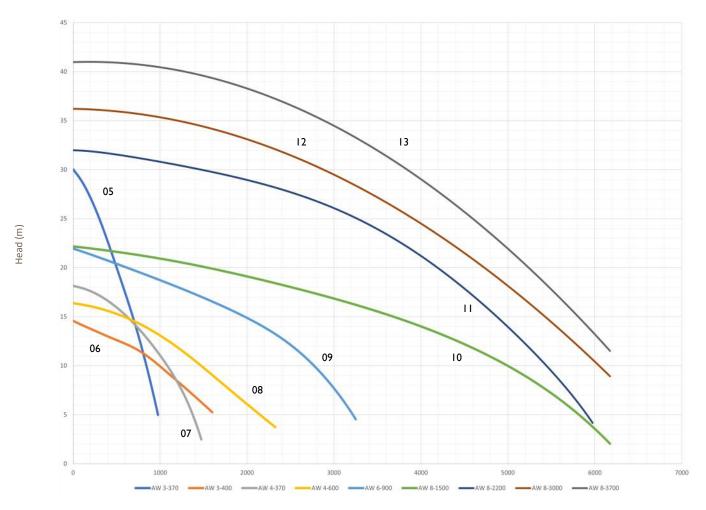
Audex AW and AW Pro Technical Specification

Part	Audex	Мс	tor	Rated Current	Strainer Size	Max Head	Max Flow	Max Dimensions	Net Weight	Curve
Code	Model	kW	V	Amps	mm	m	L/min	mm	kg	No.
P10038	AW 2-040 SA with Float	0.4	110	5	6	12	210	405 x 255 x 255	13.5	01
P10037	AW 2-040 SM	0.4	110	5	6	12	210	405 x 255 x 255	13.5	01
P10040	AW 2-040 VA with Float	0.4	230	3	6	12	210	405 x 255 x 255	13.5	01
P10039	AW 2-040 VM	0.4	230	3	6	12	210	405 x 255 x 255	13.5	01
P10041	AW 2-040 TM	0.4	415	1.1	6	12	210	405 x 255 x 255	13.5	01
P10043	AW 3-075 SA with Float	0.75	110	10	6	17	300	445 x 295 x 255	18	02
P10042	AW 3-075 SM	0.75	110	10	6	17	300	445 x 295 x 255	18	02
P10045	AW 3-075 VA with Float	0.75	230	5.4	6	17	300	445 x 295 x 255	18	02
P10044	AW 3-075 VM	0.75	230	5.4	6	17	300	445 x 295 x 255	18	02
P10046	AW 3-075 TM	0.75	415	1.7	6	17	300	445 x 295 x 255	18	02
P12864	AW 2-150 VC	1.5	230	3.5	10	20	500	610 x 265 x 265	37	03
P11707	AW 2-150 TC	1.5	415	3.5	10	20	500	610 x 265 x 265	37	03
P11708	AW 2-220 TC	2.2	415	5	10	25	500	620 x 265 x 275	40	04
P13232	AW 3-400 TC	4	415	10.2	30	14.8	1650	885 x 385 x 395	108.5	06
P13233	AW 4-600 TC	6	415	13.8	30	16.9	2400	470 x 410 x 985	141	08
P13234	AW 6-900 TC	9	415	19.5	30	21.5	3200	470 x 470 x 1045	171	09
P13235	AW 8-1500 TC	15	415	30.1	30	22	6200	540 x 500 x 1220	260	10
P13236	AW 8-2200 TC	22	415	42	30	32	6000	740 x 570 x 1460	408	11
P18369	AW 8-3000 TC	30	415	57.6	30	34	6500	1565 x 700 x 775	510	12
P18370	AW 8-3700 TC	37	415	69.8	30	39	6500	1565 x 700 x 775	535	13
P13367	AW Pro 2-150 TA	1.5	415	3.5	10	20	500	680 x 265 x 265	43	14
P13465	AW Pro 2-220 TA	2.2	415	5	10	25	500	680 x 265 x 265	46	15
P13466	AW Pro 3-370 TA	3.7	415	7.7	10	30	1000	770 x 320 x 295	72	05
P13467	AW Pro 4-370 TA	3.7	415	7.7	10	18	1500	770 x 320 x 295	73	07

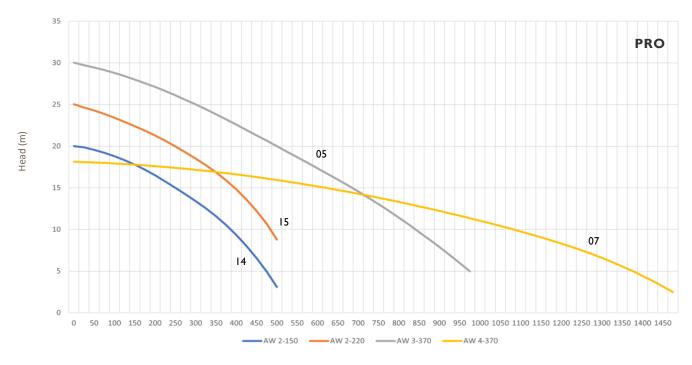


Flow (L/min)

Audex AW and AW Pro Technical Specification



Flow (L/min)

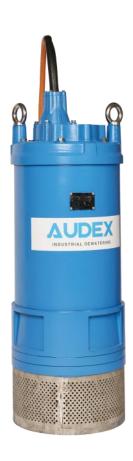


Flow (L/min)



AS Range





Industries and Applications

The Audex AS range of submersible pumps are predominantly used in quarrying for general duties such as handling dirty water or wash-plant feed. AS pumps are additionally used in mining, civil engineering and construction.

Audex AS models with a power rating ranging from 22kW to 75kW are also suitable for pre-dewatering of deep wells and high head dewatering.

Pump Performance

Audex AS pumps provide you with a highly reliable and efficient solution with minimal running costs and repairs. Along with a rugged build utilising wear-resistant materials, they offer an impressive performance, achieving a discharge of up to 16,000 litres/minute with a head of up to 130m.

Build and Design

Reliable, industry-proven and affordable, Audex AS pumps are available in a range of sizes from 3" to 8" discharge. This durable range of pumps have cast-iron bodies and motors, while their mechanical seals are resistant to high pressures, allowing the pumps to be deeply submerged.

A semi-open impeller made from high chrome improves durability along with the wear plates which are made from ductile iron. The pump motors are hermetically sealed.

All AS pumps have a top outlet allowing the user to submerge the pump in a confined area if needs be, while the pumps are fitted with lifting eyes for quick and easy deployment and suspension.





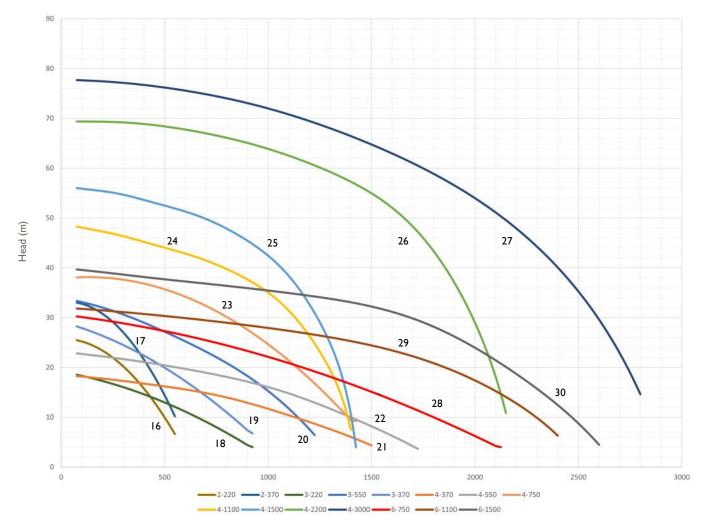
Audex Seal Protection Device

Available on most of the larger AS pumps is the Audex Seal Protection Device, which monitors moisture levels and shuts down the pump in the event of seal wear or failure. This avoids costly rewinds and allows for a quick parts replacement without a costly full pump rebuild.

The Audex Seal Protection Device can be installed in any control panel and turns the pump off as soon as it senses any moisture behind the first seal. The red light indicates a seal failure and the pump is automatically turned off. This removes the risk of the second seal failing and the motor burning out which would clearly result in a costly pump rebuild. This means you only have to replace a low cost seal rather than expend thousands on a new pump or refurbishment. The pump is only likely to be out of action for a matter of hours over against the possibilities of a long and costly repair project or long lead time on a new pump.



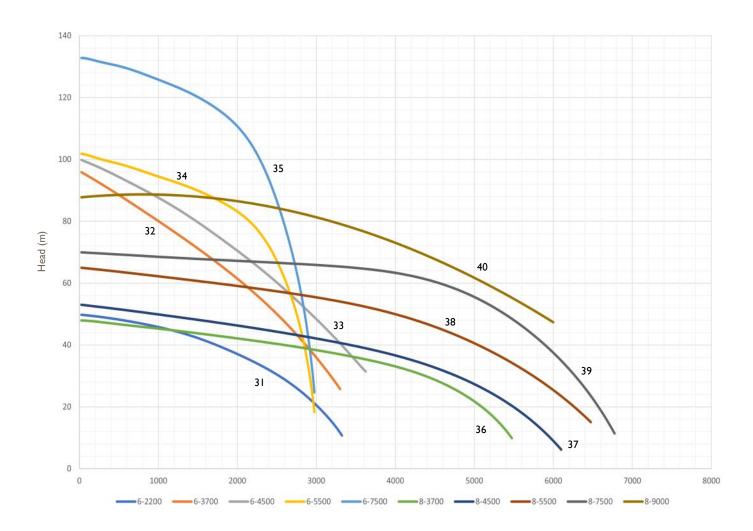
Audex AS Range Technical Specification



Flow (L/min)

Part	Audex	Мо	tor	Rated Current	Strainer Size	Max Head	Max Flow	Max Dimensions	Net Weight	Curve
Code	Model	kW	٧	Amps	mm	m	L/min	mm	kg	No
P13627	AS 2-220 TC	2.2	415	5	8.5	26	550	610 x 265 x 265	39	16
P17649	AS 2-370 TC	3.7	415	7.7	8.5	34	550	710 x 320 x 295	63	17
P17507	AS 3-220 TC	2.2	415	5	8.5	19	920	620 x 265 x 275	39	18
P17650	AS 3-370 TC	3.7	415	7.7	8.5	29	920	710 x 320 x 295	63	19
P14190	AS 3-550 TC	5.5	415	11.4	8.5	34	1250	750 x 350 x 360	77	20
P14197	AS 4-370 TC	3.7	415	7.7	8.5	18.5	1500	710 x 320 x 295	63	21
P14192	AS 4-550 TC	5.5	415	11.4	8.5	23	1750	750 x 350 x 360	77	22
P15703	AS 4-750 TC	7.5	415	15	11.5	40	1400	835 x 365 x 385	106	23
P14191	AS 4-1100 TC	11	415	22	11.5	48.5	1400	885 x 415 x 435	136	24
P14198	AS 4-1500 TC	15	415	29.5	11.5	56	1400	935 x 415 x 435	158	25
P13198	AS 4-2200 TC	22	415	41.5	6	68	2166	1490 x 490 x 720	370	26
P13199	AS 4-3000 TC	30	415	54	6	78	2833	1490 x 490 x 720	375	27
P15704	AS 6-750 TC	7.5	415	15	19.5	31	2080	865 x 365 x 385	108	28

Audex AS Range Technical Specification



Flow (L/min)

Code Model kW V Amps mm m L/min mm P14193 AS 6-1100 TC 11 415 22 19.5 32 2450 885 x 415 x 435	kg 139	No.
P14193 AS 6-1100 TC 11 415 22 19.5 32 2450 885 x 415 x 435	139	29
		23
P14194 AS 6-1500 TC 15 415 29.5 19.5 40 2600 935 x 415 x 435	146	30
P13676 AS 6-2200 TC 22 415 41.5 15 50 3333 1560 x 490 x 720	385	31
P13200 AS 6-3700 TC 37 415 66 6 88 3300 1550 x 600 x 870	570	32
P13201 AS 6-4500 TC 45 415 80 6 100 3666 1550 x 600 x 870	575	33
P13832 AS 6-5500 TC 55 415 98 8 105 3200 1760 x 620 x 940	830	34
P14196 AS 6-7500 TC 75 415 132 8 130 3300 1760 x 620 x 940	830	35
P13202 AS 8-3700 TC 37 415 66 20 48 5500 1600 x 600 x 870	575	36
P13203 AS 8-4500 TC 45 415 80 20 53 6200 1550 x 600 x 870	580	37
P13468 AS 8-5500 TC 55 415 98 20 65 5500 1810 x 620 x 940	880	38
P13469 AS 8-7500 TC 75 415 132 20 70 6500 1810 x 620 x 940	880	39
P17648 AS 8-9000 TC 90 415 162 20 90 6000 1825 x 665 x 965	1120	40



Pontoons

Audex are able to offer a range of pontoons to suit various types of centrifugal and slurry pumps.

The pontoons are made to order to suit the customers exact requirements and specification. They consist of a heavy duty mild steel structure which is supported by patented blow moulded plastic buoyancy sections.

The buoyancy sections offer impressive payloads and are extremely hard wearing and robust whilst the flexible design allows the option of mounting pumps in various ways to suit all pumping applications.

Huge savings with Audex pumps and pontoons

Audex manufacturers Atlantic Pumps, produced two pontoons for a quarry in southern Scotland with each holding an 8" Audex submersible pump.

Following installation, the delighted Quarry Manager contacted Atlantic regarding the outstanding saving he had made.

'I've done some rough initial calculations, the pump that runs to top up the plant pond will save us a minimum of £8000 a year on diesel. Well happy with that.'

The Atlantic team were also delighted with the saving and at the project as a whole. From placing the order to point of delivery only took 2-3 weeks and that includes the building of the two pontoons' said Sales Advisor, Mark McCreadie. 'I, along with the rest of the team thoroughly enjoyed working on this job and we're really keen to help other quarries make such savings'.



Cross Plant Hire incorporate Audex pumps in new wheel wash system

Wheel washers are an essential piece of equipment for quarries and construction sites. Removing material from a vehicles' tyres prior to it leaving a site ensure that public roads are not polluted and dangerous. The cleaning also ensures that a vehicle can continue to be operated at optimal standard. Removal of mud and debris from a vehicles wheels involves a purpose-designed arrangement of nozzles spraying the dirt off.

The process utilises a powerful pump to achieve the required pressure and flow, with the required water recycled from other operations or from the wheel wash itself.

A solution is also required for the resulting sludge collected; usually a settlement tank is used to remove the heavier debris before reusing this water.

Cross Plant Hire are an established, recognised supplier of plant and machinery solutions to the construction and plant hire industries throughout the UK & Europe. The company have recently launched the Compact+ Wheelwash which is currently being dispatched to sites across the country. Each system incorporates an Audex pump, chiefly the AW 4-600.

The Audex AW 4-600 is ideal for handling abrasive applications and is more than suitable for use with systems such as Cross Plant Hire's Compact+ Wheelwash. The pump is a reliable and affordable heavy-duty submersible slurry pump which is often used on quarries and in recycling plants. It is fitted with a high chrome impeller and wear plates for increased lifetime and an inbuilt agitator which reduces silt settlement in the pump location, plus prevents clogging in the pump when handling solids-laden fluids.

Talking about the inclusion of the Audex AW 4-600 in Cross Plant Hire's new Compact+ Wheelwash system, Deryck Harmer of Atlantic Pumps said "This particular pump is ideal for Cross Plant's requirements as it is an extremely tough and durable unit, ideal for handling the abrasive particles of mud and aggregate which will be removed from the vehicles on the wheel wash. This leads to longer wear life, reduced maintenance costs and less downtime, which fitted Cross Plants' requirements very well."

Lorne Entwistle is Executive Chairman at Cross Plant Hire.

"We have very high standards, principles and design criteria to meet for exacting clients' needs. Using the Audex meets these requirements and then some, and this is why we chose the Audex as our pump of choice!"



Long-lasting AW pump radically helps conveyor pit cleaning

Cleaning out the materials that have spilt into the conveyor pit is an issue faced by ready-mix sites globally. It is an essential but often awkward task that involves downtime, out-of-hours working and lost production plus potential health and safety issues. One Tarmac site addressed this problem with Audex manufacturers, Atlantic Pumps in a very successful way.

Rather than shoveling out the bottom of the pit, the site introduced a high pressure hose and an Audex AW 3-400 submersible pump. A single operator added water to the collected sand spillages and the AW pump disposed of the sand-laden water with ease. The introduction of this method removed the need for any shoveling and cut the time to complete the task by half, resulting in a clean and tidy conveyor pit and a more productive plant.

At the time of writing, despite being used several times a week, the pump has been operational and maintenance free for over two years.

Wash plant pit transformed thanks to the introduction of an AW 4-600

An Oxfordshire quarry had been experiencing problems for over two years with the vertical pump that they had installed under their wash plant, with staff having to regularly enter and clear the pit and replace parts.

A visit by Atlantic Pumps found that the fluid was not being agitated in the sump and due to the design, was difficult to install a stirrer. Atlantic recommended installation of an Audex AW 4-600.

The pump has inbuilt agitators which helps break up solids and are also much easier to install. Featuring a 4-pole motor for an increased lifetime, the impeller wear plate and agitator are made from high-chrome for ultimate wear-life.

Replacing the vertical pump with the Audex AW 4-600 radically transformed the wash plant pit. Staff also no longer had to enter the pit, thus reducing site downtime and providing a cleaner and safer working environment.



Audex triumphs as Tarmac quarry establishes emergency flood system

Many hard rock quarries drain naturally however the quarry that this case study focuses on doesn't, therefore the quarry was recycling a lot of water from around the site. The site was made aware by the Environment Agency that were they to experience a Superstorm – an event that takes place on average every five years, the quarry would be unable to stop large quantities of water from entering a nearby brook, thus polluting the environment. Discharging dirty water into the dike could potentially result in a fine that could run into hundreds of thousands of pounds. The quarry therefore needed to put a system in place for an emergency flooding situation.

In recent years the site had experienced increased costs relating to pumps and product quality issues. They trialed Audex pumps in early 2015 and were very impressed with the quality and have since gone on to purchase further Audex pumps from Atlantic. With this in mind Atlantic Pumps were invited to present a solution.

Atlantic specified three 6" Audex submersibles to handle the task while another company specified one large submersible. Site management preferred the Audex option as it was more flexible; the other pumps could be used as spares elsewhere on site. When they're needed, the pumps could simply be dropped onto the storm relief project. The rival plan would see a £40k pump possibly remaining unused on-site for years at a time.

Tarmac's final decision was to purchase Audex pumps as they're built for the quarrying and mining market and, from their experience, the pumps lasted longer and were able to cope with dirty water. Choosing Audex pumps also meant a more cost effective solution, less hassle and less downtime. Atlantic Pumps fitted each of the pumps with an Audex Seal Protection Device (see page 9).

At the time of writing, the client remains satisfied with the solution put in place and the performance of their Audex submersible pumps.



DESIGNED WITH YOUR INDUSTRY IN MIND



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