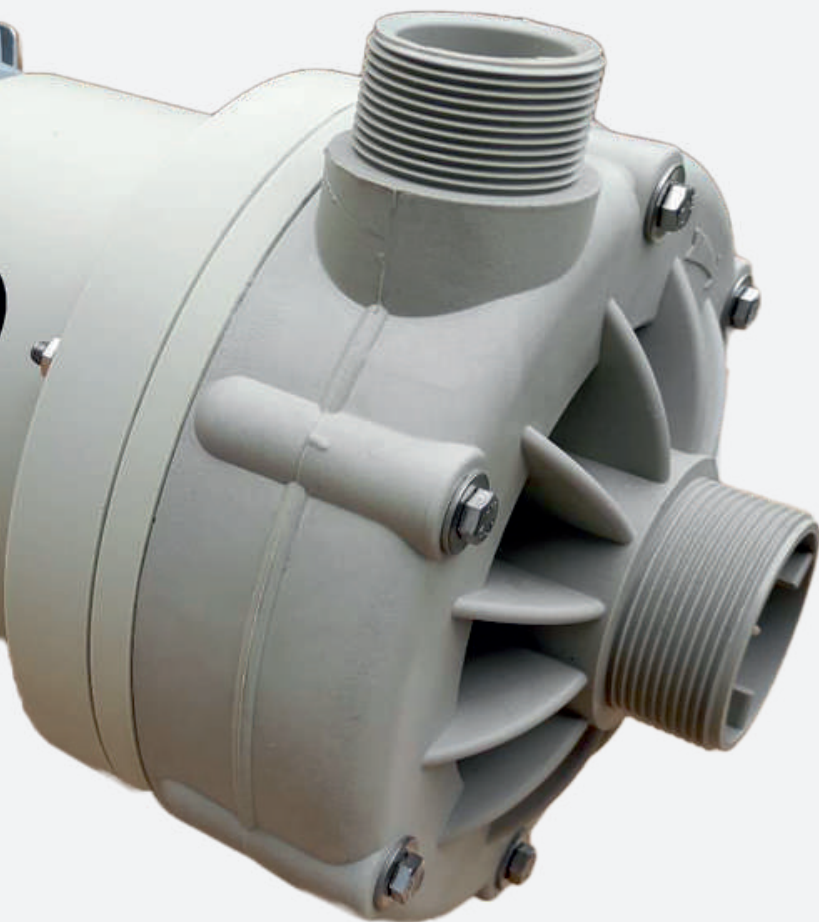




ADH Mechanical Seal Centrifugal Pumps



We Make The Difference

ADH Horizontal Centrifugal Pumps, manufactured from high-grade Polypropylene (GFR PP) and Polyvinylidene Fluoride (CFR PVDF), represent the ultimate solution for handling highly corrosive and aggressive fluids. Designed for maximum durability, these pumps completely eliminate the oxidation risks associated with metallic alternatives, ensuring total safety in chemical processes.

A core advantage of this range is the integration of a robust mechanical seal, which guarantees superior leak protection and operational reliability. Unlike magnetic drive pumps, these units excel in dirty environments, offering the distinct capability to handle liquids containing suspended solids. The internal geometry, combined with high-resistance seal faces like Silicon Carbide, prevents premature wear caused by particulates.

Whether utilizing Polypropylene for temperatures up to 60° C or PVDF for extreme oxidants up to 90° C, these pumps are ideal for galvanizing plants, wastewater treatment and scrubber systems.

With low maintenance requirements and high hydraulic efficiency, they provide a dependable investment for any industrial application requiring resistance to the most aggressive chemical media.

Main Advantages

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- **Ultimate Corrosion Resistance:** 100% immune to rust and chemical attack. These pumps outperform stainless steel and exotic alloys when handling aggressive acids, alkalis and saline solutions.
 - **High Hydraulic Efficiency:** The ultra-smooth internal surfaces of thermoplastics minimize friction loss, resulting in higher flow rates and significantly lower energy consumption.
 - **Reinforced Structural Integrity:** Built with high-performance polymers reinforced with Glass Fiber (**GFR PP**) or Carbon Fiber (**CFR PVDF**), offering the mechanical strength of metal with the chemical benefits of plastic.
 - **Excellent Thermal Insulation:** Low thermal conductivity helps maintain the temperature of the pumped fluid and provides increased safety for operators by preventing contact burns.
 - **Lower Total Cost of Ownership:** Exceptional durability in corrosive environments leads to longer service intervals, reduced spare parts costs and minimal downtime.
 - **Noise & Vibration Damping:** The natural properties of thermoplastics absorb vibrations, ensuring a much quieter operation compared to cast iron or steel pumps.
 - **Lightweight & Easy Installation:** Significantly lighter than metallic pumps, reducing the need for heavy structural supports and making maintenance handling much easier.
 - **Handling of Suspended Solids:** Unlike magnetic drive pumps, mechanical seal pumps are engineered to handle fluids containing particles, debris or crystals without the risk of internal clogging or magnet damage.
 - **Heavy-Duty Durability:** Designed for high-stress applications where the fluid may be "dirty" or abrasive, providing reliable performance in demanding industrial wastewater or chemical processes.
 - **Heavy-Duty Performance:** ADH Centrifugal pumps are specifically designed for continuous use in demanding industrial environments.

Technical Data

- Flow rates: from 6 to 75 m³/h
- Head: up to 43 m
- Viscosity: up to 500 cps
- Maximum operating temperature: PP: 60°C , PVDF: 90°C
- Three-phase Motors from 0,75 HP to 15 HP - 50 / 60 Hz
- Single phase Motors from 0,75 HP kW to 3 HP - 50 / 60 Hz
- Available with Mechanical seal and Lip seal
- Upon request the pump can be supplied with flanges PN10, ANSI 150, JIS

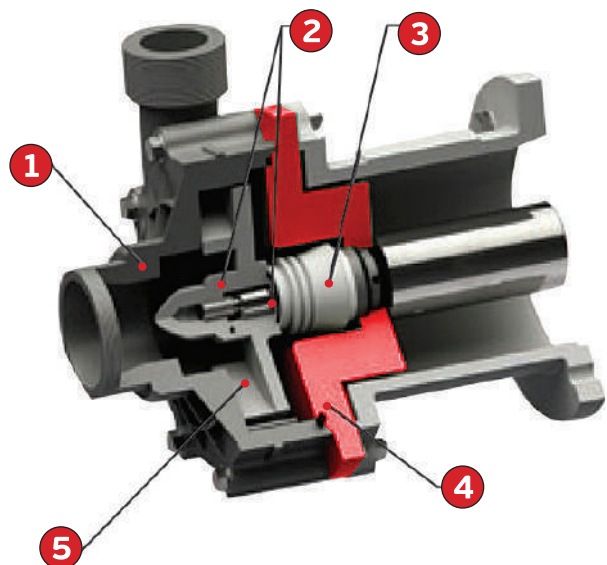


Design of Mechanical Seal Centrifugal Pumps

The motor drives the open impeller at high speeds, utilizing centrifugal force to accelerate the fluid and convert kinetic energy into discharge pressure. Its specialized open-vane geometry is engineered to handle "dirty" liquids, allowing suspended solids and crystals to pass through the casing without the risk of clogging.

The impeller is integral with the shaft and direct drive electric motor and is rotated at a preset speed with the centrifugal effect producing suction on the intake side and discharge on the delivery side.

To ensure safety, a mechanical seal creates a hermetic barrier at the shaft entry, using two precision-polished faces to prevent hazardous leaks. Manufactured from high-grade thermoplastics such as PP or PVDF, the pump is 100% immune to chemical corrosion, providing a robust and reliable solution for the most aggressive industrial environments.



POS	Description	Material
1	Pump Head	PP or PVDF
2	O-Ring	EPDM or VITON
3	Mechanical Seal	Bellow Seal PTFE SIC / CER or SIC / SIC
4	Shaft	Ceramic Al ₂ O ₃ 99.7%
5	Impeller	PP or PVDF

Application sectors

Chemical Industry, Galvanic & Electronic Industry, Water Treatment Industry, Automotive



AUTOMOTIVE



CHEMICAL INDUSTRY



WATER AND SLUDGE
TREATMENT



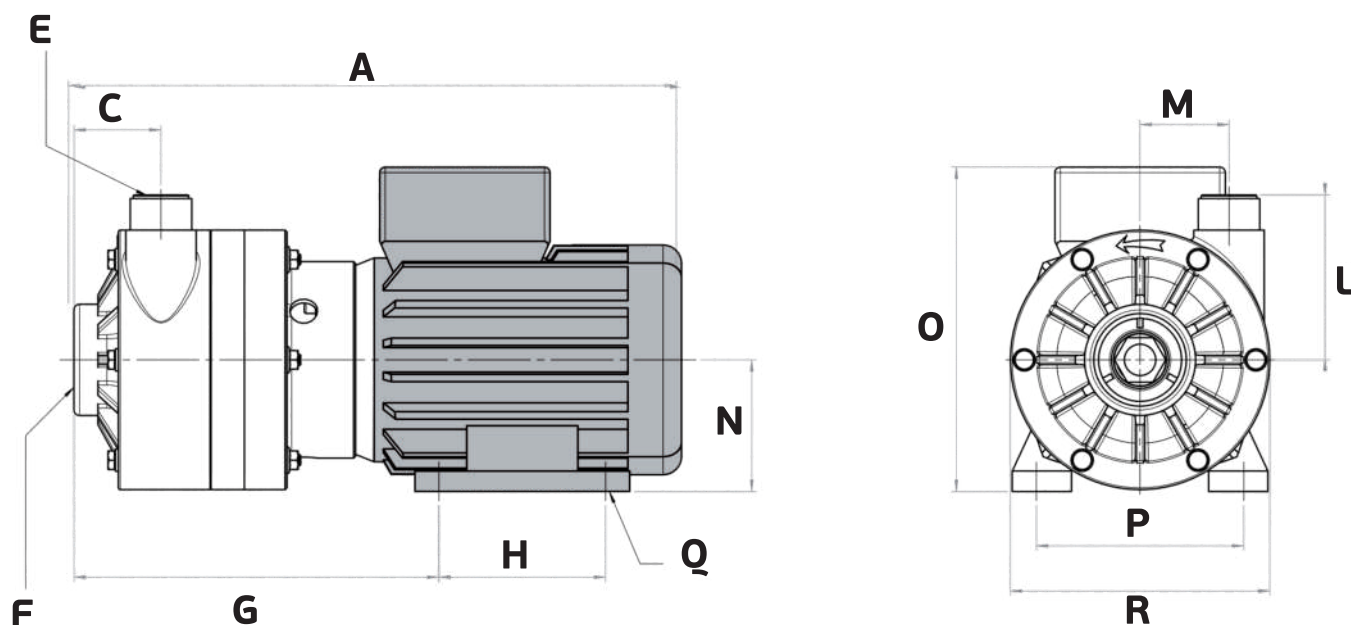
GALVANIC AND ELECTRONIC
INDUSTRY

Pump Models

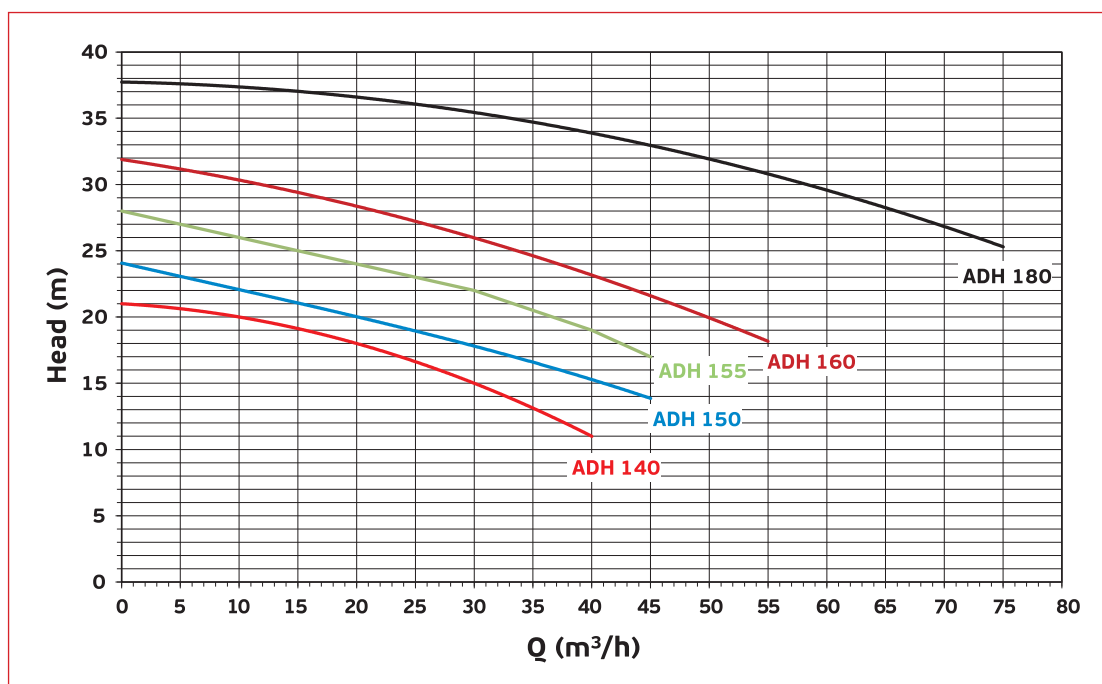
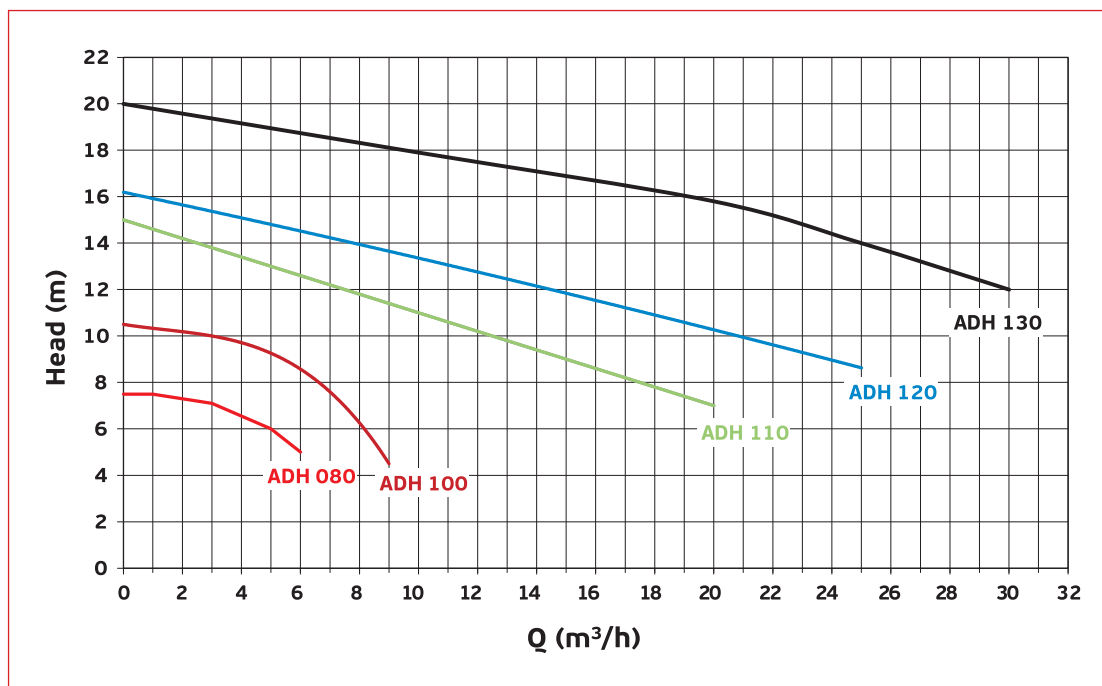


Models	Motor			Suction Connection	Discharge Connection	Weight Kg			
	HP	Rpm	Size			PP Pump	PVDF Pump	PP with Motor	PVDF with Motor
ADH 080	0.75	2900	71 / B34	1 1/2" BSM F	1" BSM M	1.7	2.7	8.5	9.5
ADH 100	0.75	2900	71 / B34	1 1/2" BSM F	1" BSM M	1.7	2.7	8.5	9.5
ADH 110	1.5	2900	80 / B35	2" BSP M	1 1/2" BSP M	3.4	4.4	16	17
ADH 120	2	2900	90 / B35	2" BSP M	1 1/2" BSP M	3.8	4.8	16	17
ADH 130	3	2900	90 / B35	2" BSP M	1 1/2" BSP M	3.8	4.8	22.5	23.5
ADH 140	4	2900	100 / B34	2" BSP F	1 1/2" BSP M	4	5	29	30
ADH 150	5.5	2900	112 / B35	2 1/2" BSP F	2" BSP M	8	11	44	47
ADH 155	7.5	2900	132 / B35	2 1/2" BSP F	2" BSP M	9.5	12.5	60	63
ADH 160	10	2900	132 / B35	2 1/2" BSP F	2" BSP M	9.5	12.5	70	73
ADH 180	15	2900	132 / B35	2 1/2" BSP F	2" BSP M	9.5	12.5	96	99

Dimensions

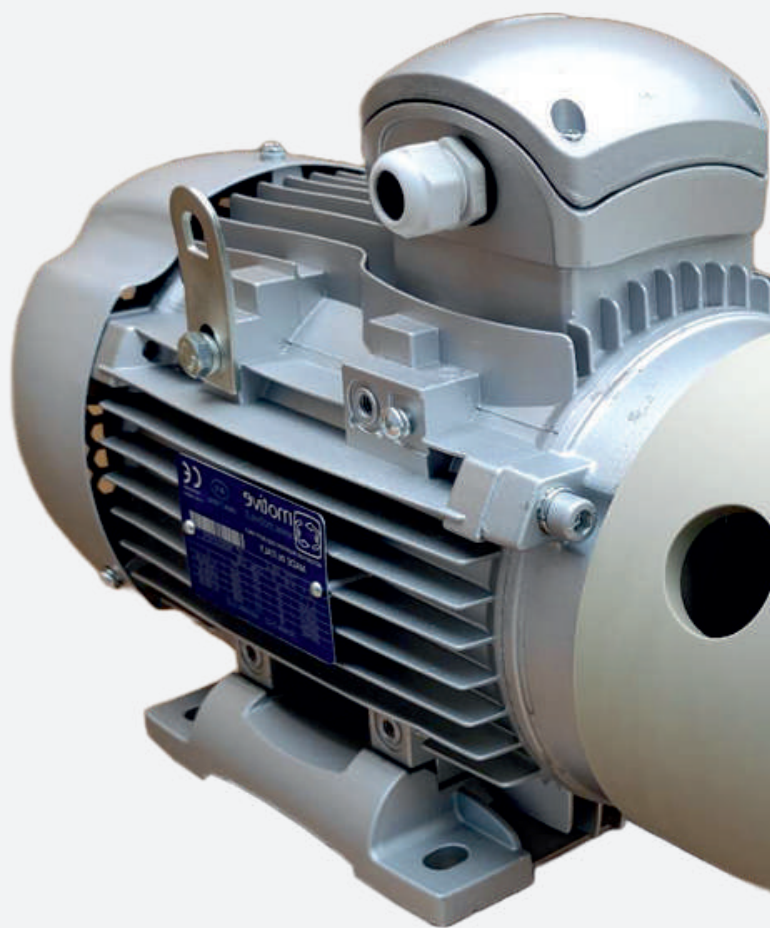


Models	Dimensions (mm)												
	A	C	G	H	L	M	N	O	P	R	Q	F	E
ADH 080	328	47	197	90	89	48	71	175	112	140	4 x Ø8	1 1/2" BSM F	1" BSM M
ADH 100	328	47	197	90	89	48	71	175	112	140	4 x Ø8	1 1/2" BSM F	1" BSM M
ADH 110	406	75	247	100	130	40	80	191	125	203	4 x Ø10	2" BSM F	1 1/2" BSM M
ADH 120	426	75	257	100	130	40	90	90	210	203	4 x Ø10	2" BSM F	1 1/2" BSM M
ADH 130	448	75	257	125	130	40	90	210	140	203	4 x Ø10	2" BSM F	1 1/2" BSM M
ADH 140	505	68	296	140	130	40	100	227	160	203	4 x Ø12	2" BSM F	1 1/2" BSM M
ADH 150	527	68	300	140	158	96	112	249	190	300	4 x Ø12	2 1/2" BSM F	2" BSM M
ADH 155	619	68	329	140	158	96	132	312	216	300	4 x Ø12	2 1/2" BSM F	2" BSM M
ADH 160	645	68	335	140	158	96	132	312	216	300	4 x Ø12	2 1/2" BSM F	2" BSM M
ADH 180	695	68	335	158	158	96	312	312	216	300	4 x Ø12	2 1/2" BSM F	2" BSM M





We Make The Difference



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