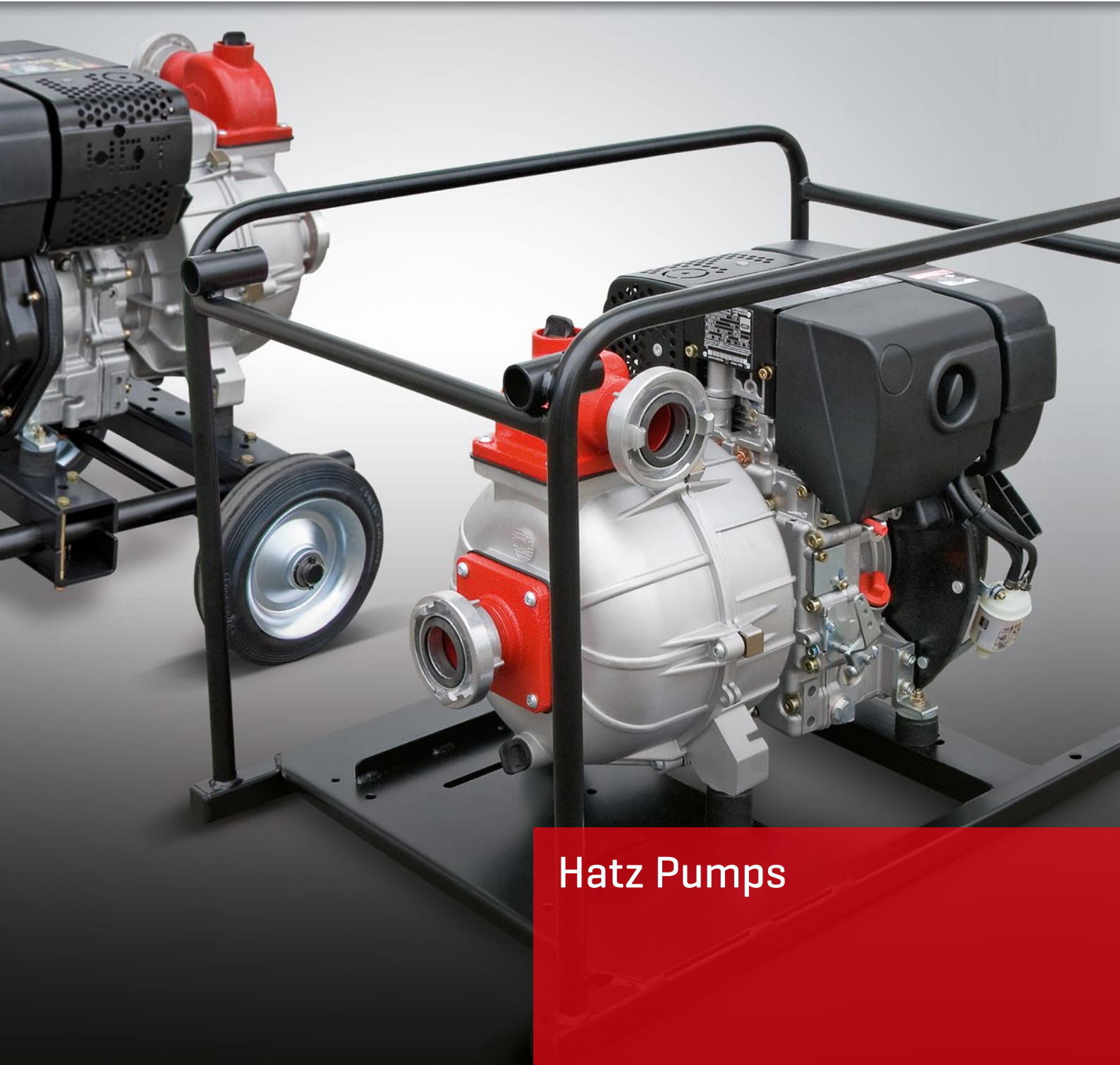


CREATING POWER SOLUTIONS.



Hatz Pumps

Hatz Systems – Made in Germany



Hatz Systems develops and produces special systems based on industrial engines.

Hatz Systems

Key areas of focus include solutions relating to power and energy supply, scalable electricity stations, pumping units and special applications for the marine and military sector. As a manufacturer of diesel engines with over 100 years' experience, our name is known and in demand all over the world. For more than 30 years, we have been developing and producing customer-specific systems based on industrial engines in our Hatz Systems business unit.

The range of Hatz systems stretches from 2 kW to several 100 kW of power. All of our

systems can also be fully customised. The Special Applications division particularly focuses on individual concepts and customer requirements in relation to systems that have industrial engines as their source of power.

Hatz Systems product areas:

- Power systems
- Pumps
- Marine applications
- Special applications

Choosing the right pump

The selection of type and size of a pump is very important to have a proper working and reliable application. When selecting a pump, the following basic information is needed:

Suction height

The height between the water surface and the pump inlet.

Pressure height

The height between the pump inlet and the highest point of the delivery pipe.

Discharge hose length

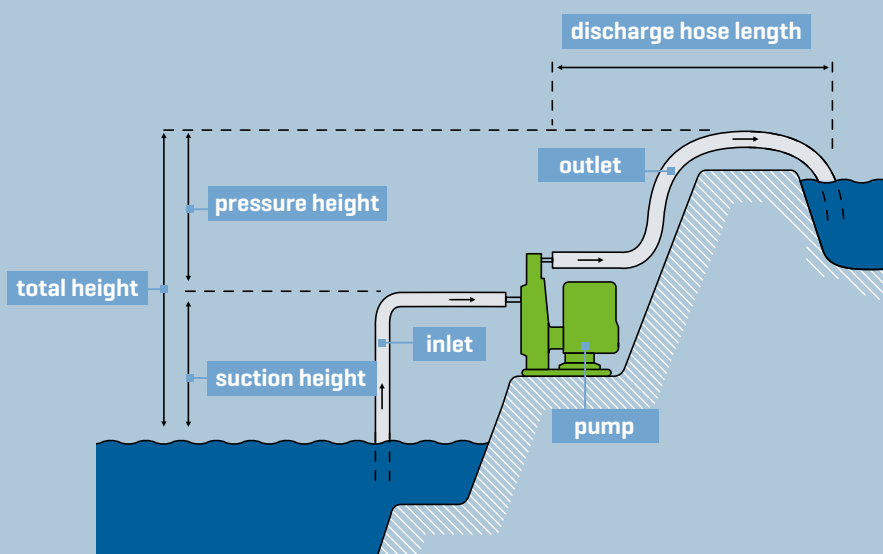
The total length of the outlet hose.

Delivery rate/quantity

The amount of fluid that needs to be processed in a certain time.

Fluid quality

When the basic requirement is defined, also the type of fluids, the content and the size of solids within is an important information.



Long-lasting and powerful: Hatz diesel-powered pumps

Hatz supplies robust, resilient, diesel-powered pumps for operation in tough conditions in the construction trade, industry, and agriculture as well as for local authorities and deployments of national and international aid organisations.

Optimum pump technology for professionals

From small, easy-to-transport pumps to large, powerful dirt and heat transfer pumps – Hatz offers a broad spectrum of engine-powered pumps for a variety of applications. Ideal for anyone who wants to work quickly, reliably and efficiently when there's no power supply.

Hatz pumps are equipped with industrial diesel engines and deliver dependability and a long service life.

They operate in accordance with the circulating pump principle and, depending on the design, pump between 20 and 800 m³/h of liquid per hour in the standard configuration. Whether it be clean water for irrigating gardens or crops, trash water or mud on construction sites, drainage in the case of floods or chemicals, diesel and cleaning agents in

industry – Hatz has the perfect pump for the job, whatever it is.

As well as the rapidly-available standard range, Hatz Systems also develops customised solutions such as mounted pumps on trailers with road approval or Bronze pumps for critical media.

Hatz Systems product range:

- Clean water pumps
- Trash water pumps
- Sludge pumps
- Sea water pumps
- Diesel fuel pumps
- Chemical liquid pumps
- Thermal oil / heat transfer pumps

Application	Pump Model						
Construction (Page 4–5)	C3-G20M	S2-K36P	C2-G46	C3-G68	C4-M90	C6-M225	
max. suction height [m]	5	5	6	6	6	6	
max. pressure height [m]	7,5	36	32	27	22	26	
max. delivery [m³/h l/min]	20 333	31 517	45,4 756	68,1 1.135	90 1.500	225 3.750	
Special application (Page 6–7)	C3-G20M	S2-K36P	S2-R32	S2.5-A140	S2.5-S125	S4-K220	S3-A225
max. suction height [m]	5	5	5	6	4,5	4	5
max. pressure height [m]	7,5	36	160	36	80	31	83
max. delivery [m³/h l/min]	20 333	31 517	32 533	140 2.334	125 2.083	220 3.667	225 3.750
Agriculture pressure (Page 8–9)	AP1.5-R24	AP2-R48	AP2.5-R70	AP2.5-R90	AP2.5-R93	AP4-R200	AP4-R225
max. suction height [m]	4	4,5	4	4,5	4,5	4,5	4,5
max. pressure height [m]	47	53	53	117	62	46	54
max. delivery [m³/h l/min]	24 400	48 800	70 1.167	90 1.500	93 1.550	230 3.834	240 4.000
Agriculture volume (Page 10)	AQ5-R300	AQ8-R540	AQ10-R830				
max. suction height [m]	5	4	4				
max. pressure height [m]	20	15	16				
max. delivery [m³/h l/min]	300 5.000	540 9.000	830 13.833				

Robust and reliable: Hatz trash water pumps

Hatz trash water pumps for construction sites are known for their reliability and robustness. They cover both the professional as well as the private customer side.



Trash water pumps with 2, 3, 4 or 6 inch diameter

Hatz Systems standard range includes self priming trash water pumps with closed tubular frame or frame with trolley, covering pumping capacities of 7 up to 225 m³/h.

Construction pumps

Specially designed for extreme conditions, the C-product-line offers pumps which can even process sand, leaves and other solids with a size of up to 40 mm. Reinforced sealings and a robust housing and components protect the engine and allow for a high running time even under adverse conditions. With a flow rate from 20 up to 225 m³/h the Hatz pumps are available for all kinds of application.

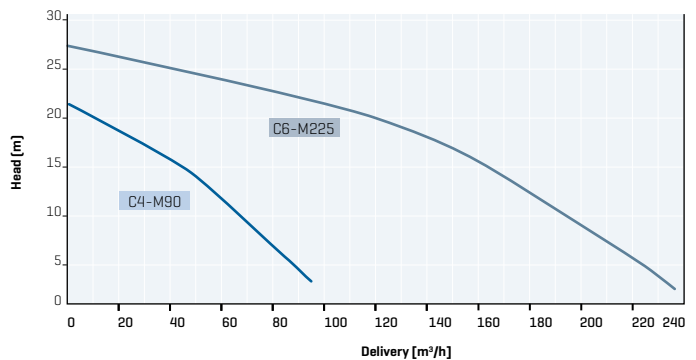
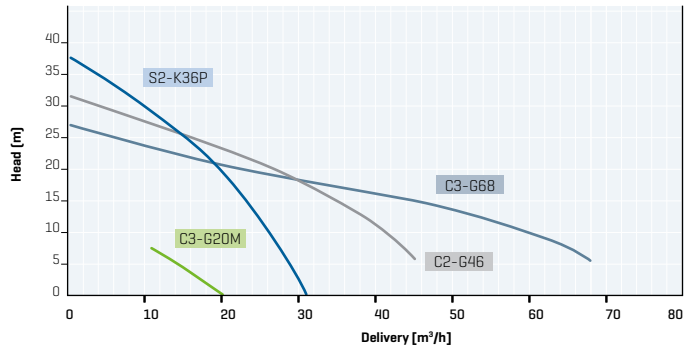
The pump housing is made of aluminium casting. For increased reliability and robustness, the pump impeller and the pump body are manufactured using a very rigid grey cast iron.

Combined with the air cooled Hatz diesel engines of the B-, L- and M-series, the pump system offers the best combination to achieve a long lifetime at low running cost.

Application areas

On construction sites or for disaster relief organisations to drain excavations, cable channels or cellars, as well as for gardening and landscape construction the Hatz C-Series pumps deliver a reliable service.

Pump performance



Technical data	C3-G20M	S2-K36P	C2-G46	C3-G68	C4-M90	C6-M225
engine	1B20	1B20	1B20	1B30	1B40	2M41/2L41C
quantity of cylinder	1	1	1	1	1	2
power (kW/HP) ICFN	3,1/4,2	3,1/4,2	3,1/4,2	4,5/6,1	6,5/8,8	23,0/31,3
max. speed (rpm)	3.600	3.600	3.600	3.600	3.600	3.000
starter	recoil / electric					electr. / crank handle
fuel consumption (l/h)	0,81	0,81	0,81	1,2	1,7	5,5
tank capacity (l)	3	3	3	5	5	21 oder 100
inlet Ø (inch)	3	2	2	3	4	6
outlet Ø (inch)	3	2	2	3	4	6
max. suction height (m)	5	5	6	6	6	6
max. delivery height (m)	7,5	36	32	27	22	26
max. solid Ø (mm)	40	8	25	32	25	40
max. delivery (m³/h l/min)	20/333	31/517	45,4/756	68,1/1.135	90/1.500	225/3.750
material	aluminium	fiber-reinforced polypropylene	aluminium / grey cast iron			grey cast iron
type	diaphragm	self-priming	self-priming	self-priming	self-priming	self-priming
type of chassis	trolley	closed tubular frame / trolley				rigid base frame
dimensions L x W x H (mm)	1.090 x 710 x 640	600 x 400 x 530	670 x 480 x 520 [recoil start] 780 x 520 x 560 [electric start]		780 x 520 x 621	1.550 x 850 x 1.360
weight (kg)	78	45	73	79	98	840

Standard or customized: Hatz special pumps

Whenever there are special requirements to be met whether it be chemicals or thermal oil Hatz offers special pumps which can even be configured based on customer demand.



Fiber-reinforced polypropylene pump

The Hatz S2-K36P is a corrosion-free pump made of a glass fiber reinforced polypropylene body for use in the chemical industry or for pumping of sea-water or diesel fuel.



Thermal oil pumps

The large standard version of the thermal oil / heat transfer pumps from Hatz Systems is powered by a 4-cylinder 4M41 diesel engine. The maximum pumping capacity is 225 m³/h up to a pressure head of 80 metres.

Special pumps

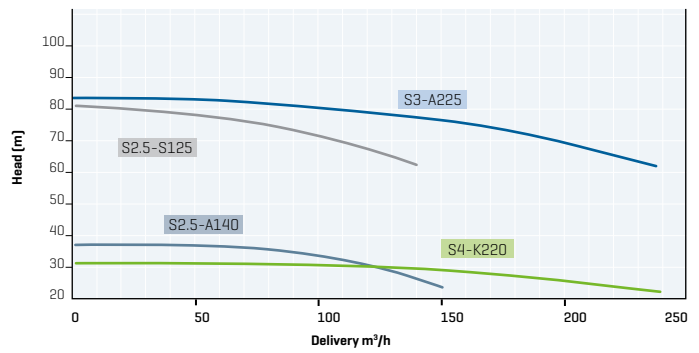
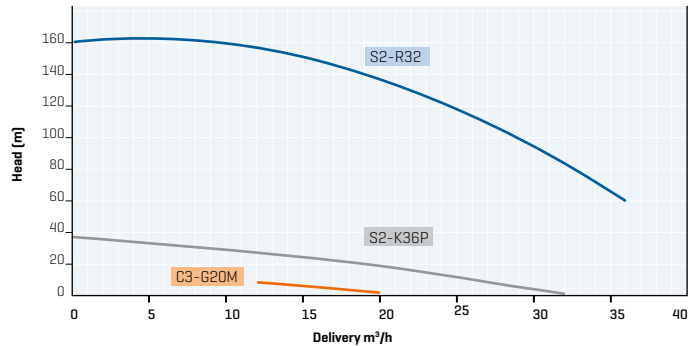
Hatz special pumps are used in applications where a normal pump is not robust enough or where some special requirements are needed. This, for example is the case for thermal oil pumps. With temperatures of up to 380° C these pumps have a totally different requirement compared to trash or clean-water pumps. For this application very often oils with low viscosity and reduced lubricating properties are used which have bad influence for the pump. S-Series pumps are also able to deliver a high pressure at a low flow rate. With a housing made of fiber-reinforced polypropylene even chemicals, diesel fuel and sea water can be processed.

Hatz special pumps can cope with strong requirements and are very well suited for all application areas. Hatz pumps can also be developed and produced based on customer demand.

Application areas

Hatz S-Series pumps can be found in application areas such as district heating, the chemical industry or in the maritime sector.

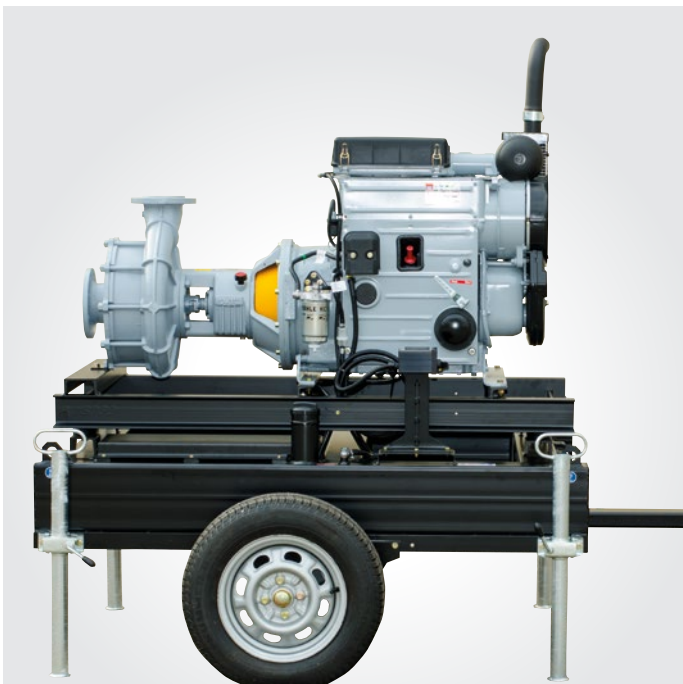
Pump performance



Technical data		C3-G20M	S2-K36P	S2-R32	S2.5-A140	S2.5-S125	S4-K220	S3-A225
Engine	engine	1820	1820	2640	2640	3M41/3L41C	2M41/2L41C	4M42/4L42C
	quantity of cylinder	1	1	2	2	3	2	4
	power [kW/HP] ICFN	3,1/4,2	3,1/4,2	12,6/17,1	13,5/18,3	35,0/47,6	18,2/24,7	50,2/68,2
	max. speed [rpm]	3.600	3.600	2.600	2.900	2.900	1.650	2.900
	starter	recoil / electric		electric	electric	electric / crank handle		
Pump	fuel consumption [l/h]	0,81	0,81	2,6	2,9	7,7	3,5	11,6
	tank capacity [l]	3	3	7	7	60	60	60
	inlet Ø [inch]	3	2	2,5	3	3	5	4
	outlet Ø [inch]	3	2	2	2,5	2,5	4	3
	max. suction height [m]	5	5	5	6	4,5	4	5
	max. delivery height [m]	7,5	36	160	36	80	31	83
	max. solid Ø [mm]	40	8	0	thermal oil	thermal oil	thermal oil	thermal oil
	max. delivery [m³/h l/min]	20 333	31 517	32 533	140 2.334	125 2.083	220 3.667	225 3.750
	material	aluminium	fiber-reinforced polypropylene	grey cast iron	grey cast iron	grey cast iron	grey cast iron	grey cast iron
	type	diaphragm	self-priming	normal priming	normal priming	normal priming	normal priming	normal priming
Frame	type of chassis	trolley	closed tubular frame	rigid base frame	rigid base frame	rigid base frame	rigid base frame	rigid base frame
	dimensions L x W x H [mm]	1.090 x 710 x 640	600 x 400 x 530	1.440 x 700 x 734	1.300 x 540 x 700	1.920 x 800 x 1.095	1.650 x 800 x 870	2.050 x 800 x 1.054
	weight [kg]	78	45	310	265	510	475	610

Long-lasting and powerful: Hatz clean water pumps

Hatz Systems offers robust and resilient diesel engines for agriculture use. Whether it be a pressure or quantity pump Hatz has the right product for operation under tough conditions.



More pressure in the pipe network

Hatz booster pumps stabilise the water pressure in the supply networks of residential homes and industrial buildings. If the pressure falls due to high demand, booster pumps kick in to restore the normal level.

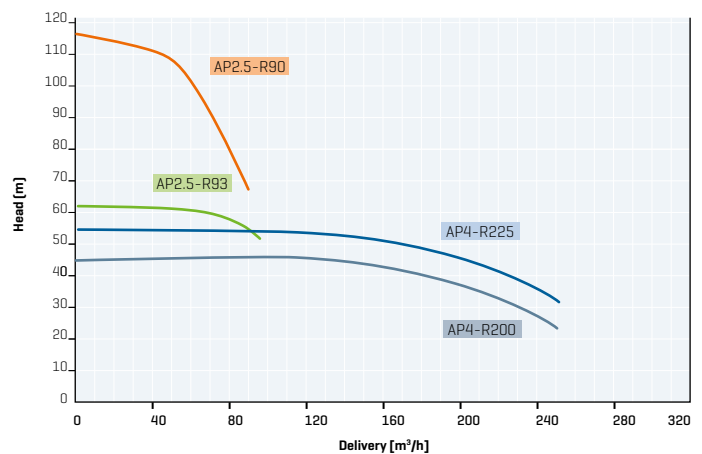
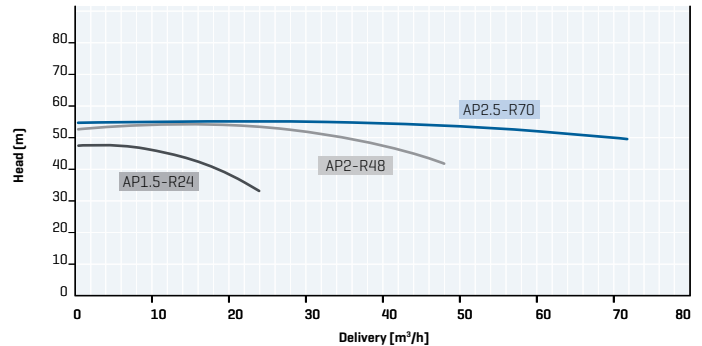
Agricultural pressure pumps

The Hatz self-priming clean water pumps are known for their quality and user friendliness. The pressure pumps are specifically used for irrigation systems and as booster pumps. With a capacity of up to 4000 litres/min. the pumps are designed for handling large amounts of water. Smaller pumps are also available with a capacity of 400 litres/min. and are suitable for a variety of professional applications. All materials used for the pump match the quality levels which are expected from Hatz products. The pump impeller for example is made of very rigid hardened grey cast iron. Gaskets are made of ceramics to further enhance lifetime. Depending on the design a Hatz diesel engine with one, two, three or four cylinders is used to always offer the best possible performance combined with the optimal consumption. Even under extreme conditions the engines operate reliably and efficiently.

Application areas

Hatz pressure pumps are used predominantly in the agriculture field in irrigation systems but also as a booster pump where water needs to be transported over long distances or great heights.

Pump performance



Technical data	AP1.5-R24	AP2-R48	AP2.5-R70	AP2.5-R90	AP2.5-R93	AP4-R200	AP4-R225
engine	1B30	1081	2640	3M41/3L41C	2M41/2L41C	3M41/3L41C	3M41/3L41C
quantity of cylinder	1	1	2	3	2	3	3
power [kW/HP] ICFN	4,2/5,7	9,2/12,5	12,6/17,1	33,7/45,8	22,3/30,3	33,7/45,8	34,3/46,6
max. speed (rpm)	3.000	2.900	2.600	2.200	2.300	2.200	2.300
starter	recoil / electric	electr./crank han.	electric	electric / crank handle			
fuel consumption [l/h]	1,1	2,3	2,6	7,4	5,0	7,4	7,6
tank capacity [l]	5	10	21	60	21/35/60/100 on request		
inlet Ø [inch]	2	2,5	3	3	3	5	5
outlet Ø [inch]	1,5	2	2,5	2,5	2,5	4	4
max. suction height [m]	4	4,5	4	4,5	4,5	4,5	4,5
max. delivery height [m]	47	53	53	117	62	46	54
max. solid Ø [mm]	40	40	40	40	40	40	40
max. delivery [m³/h l/min]	24 400	48 800	70 1.167	90 1.500	93 1.550	230 3.834	240 4.000
material	grey cast iron	grey cast iron	grey cast iron	grey cast iron	grey cast iron	grey cast iron	grey cast iron
type	normal priming	normal priming	normal priming	normal priming	normal priming	normal priming	normal priming
type of chassis	trolley	rigid base frame	rigid base frame	rigid base frame	rigid base frame	rigid base frame	rigid base frame
dimensions L x W x H [mm]	906 x 505 x 565	1.000 x 630 x 785	1.100 x 580 x 734	1.800 x 820 x 1.279	1.240 x 820 x 1.225	1.380 x 820 x 1.225	1.380 x 820 x 1.225
weight [kg]	86	196	235	554	422	455	455

Hatz agricultural volume pumps

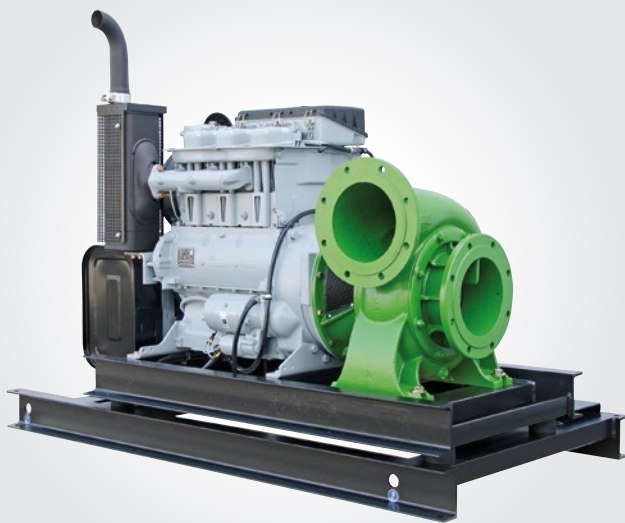
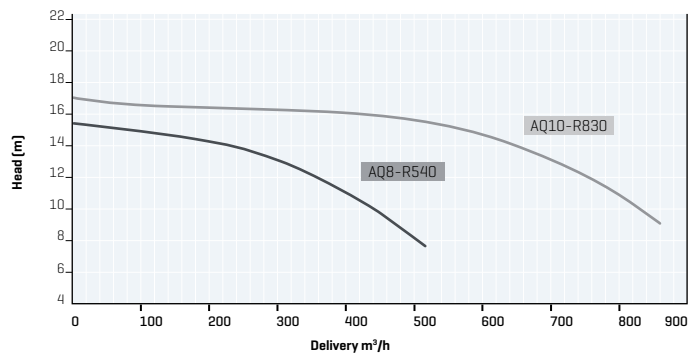
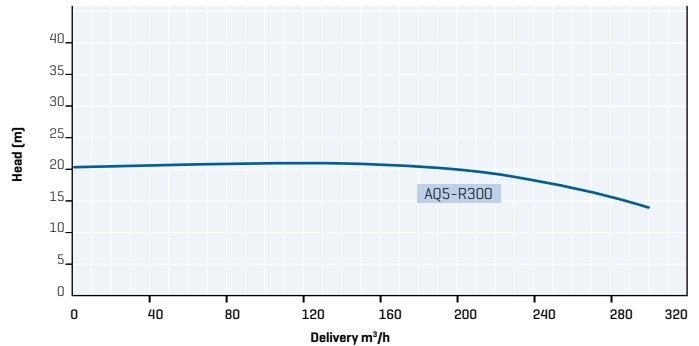
If higher amounts of clean water need to be raised, Hatz has a number of solutions available. When there is a low sand content and no solids in the water, Hatz pumps can process higher amounts of water rapidly. The pump flow rate ranges from 5000 up to almost 14,000 l/min. The maximum sand content allowed is 40 g/m³.

The pumps use the larger air-cooled Hatz engines of the L- and M-Series range with two, three or four cylinders. All engines are equipped with an automatic engine protection device, which for example could shut off the engine automatically in case of low oil pressure, overheating or a failure of the cooling fan.

Application areas

The agricultural volume pump is used mainly for field irrigation systems or when higher amounts of water need to be transported over closer distances. They can also be used by disaster relief organisations in case of floods.

Pump performance



Technical data		AQ5-R300	AQ8-R540	AQ10-R830
Engine	engine	2M41/2L41C	3M41/3L41C	4M41/4L41C
	quantity of cylinder	2	3	4
	power [kW/HP] ICFN	17,8/24,4	22,2/30,2	29,9/40,7
	max. speed [rpm]	1.800	1.500	1.500
	starter	electric / crank handle		
	fuel consumption [l/h]	3,6	4,3	5,7
	tank capacity [l]	21/35/60/100 on request		
Pump	inlet Ø [inch]	6	8	10
	outlet Ø [inch]	5	8	10
	max. suction height [m]	5	4	4
	max. delivery height [m]	20	15	16
	max. solid Ø [mm]	40	40	40
	max. delivery [m³/h l/min]	300 5.000	540 9.000	830 13.833
Frame	material	grey cast	grey cast	grey cast
	type	normal priming	normal priming	normal priming
	type of chassis	rigid base frame	rigid base frame	rigid base frame
	dimensions L x W x H [mm]	1.150 x 980 x 935	1.350 x 1.000 x 997	1.750 x 1.170 x 982
	weight [kg]	430	530	720

Volume pumps for irrigation projects

Hatz has particular expertise in the construction of special pumps for the irrigation of dryer regions. These pumps demand a reliable construction and the lowest possible risk of failure.

The perfect add-ons: Hatz pump parts and accessories

With a worldwide service network with more than 500 service centres Hatz can ensure a quick and reliable parts supply for all Hatz diesel engines and pumps. In addition we stock a variety of accessories for our pumps including suction strainer, suction hoses, couplings and discharge hoses. All parts and accessories are selected and built according to our high quality standards.



Accessory kit

The accessory kit contains all parts which are needed to operate the 2, 3 and 4 inch pumps:

- Flexible discharge hose
- Reinforced suction hose
- Storz couplings and
- Suction strainer



Suction strainer

The suction strainer is made of robust and durable materials. It includes a non return valve and is available for 2, 3 or 4 inch pumps.



Storz couplings

Robust Storz coupling for pump side assembly. Both internal screw thread and external screw thread are available.



Reinforced suction hose

A high quality PVC hose designed for a wide variety of suction applications. It is made of a flexible clear PVC with smooth bore and an external helix that increases stability and enables easy dragging.

- Complete assembly with Storz couplings
- Available for 2, 3 and 4 inch pumps



Flexible discharge hose

The general purpose lay-flat discharge hose is made of PVC covered with a polyester mesh for increased robustness.

- Complete assembly with Storz couplings
- 5, 10 or 20 metres available
- For 2, 3 or 4 inch pumps



Maintenance kits

It only remains an original with an original. Therefore Hatz offers maintenance kits that work trouble-free and contain all required parts for the regular service of Hatz products.

Maintenance kits offer a price advantage compared to purchasing the parts individually.

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