

AQUACELL A/AE



Pressure boosting units

Field of application

- Drinking water supply
- Industrial water supply
- Process water supply
- Air conditioning units
- Irrigation

Design

Aquacell A, ZL

With a non-self-priming, staged centrifugal pump with constant speed, incl. dry run protection in the feed line above 1.0 bar.

Aquacell AE

With a non-self-priming, staged centrifugal pump and speed regulation (frequency converter), incl. an electrical dry run protection.

Motor

Protection classIP 55
 Class of insulation.....F
 Voltage3~ 230/400 V $\pm$ 10 %
 Speed.....2850 rpm
 Frequency50 Hz

Technical data

Flow rate..... Q up to max. 160 m³/h
 Total dynamic head H up to max. 250 m
 Fluid temperature..... t up to max. 50 °C
 Operating pressure..... p up to max. 25 bar

Pumped fluid

Clear, moderately aggressive fluids, which don't chemically and mechanically attack the pump materials.

Materials used

Pump housing..... stainless steel AISI 304
 Impellers..... stainless steel AISI 304
 O-rings..... EPDM
 Pump shaft..... stainless steel AISI 303
 Mechanical seal..... carbon/SiC/EPDM
 Fittings copper alloy
 Pipework..... stainless steel AISI 316Ti
 Base frame..... stainless steel AISI 304

Type key

Aquacell AE 4-70, VA, ZL

Aquacell..... unit type
 A..... standard
 E..... frequency controlled
 4..... pump size
 70..... number of stages x 10

Special editions

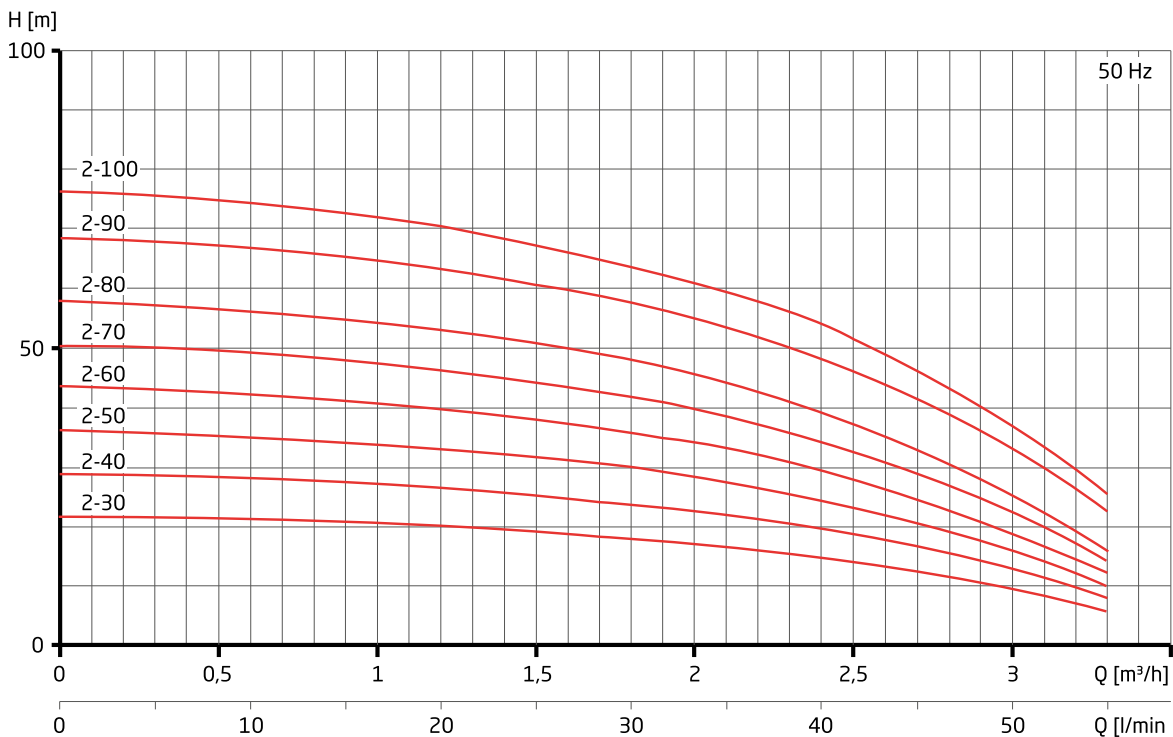
- Special voltages
- Special elastomers
- Special mechanical seals
- Higher fluid temperatures
- Larger units

AQUACELL A/AE

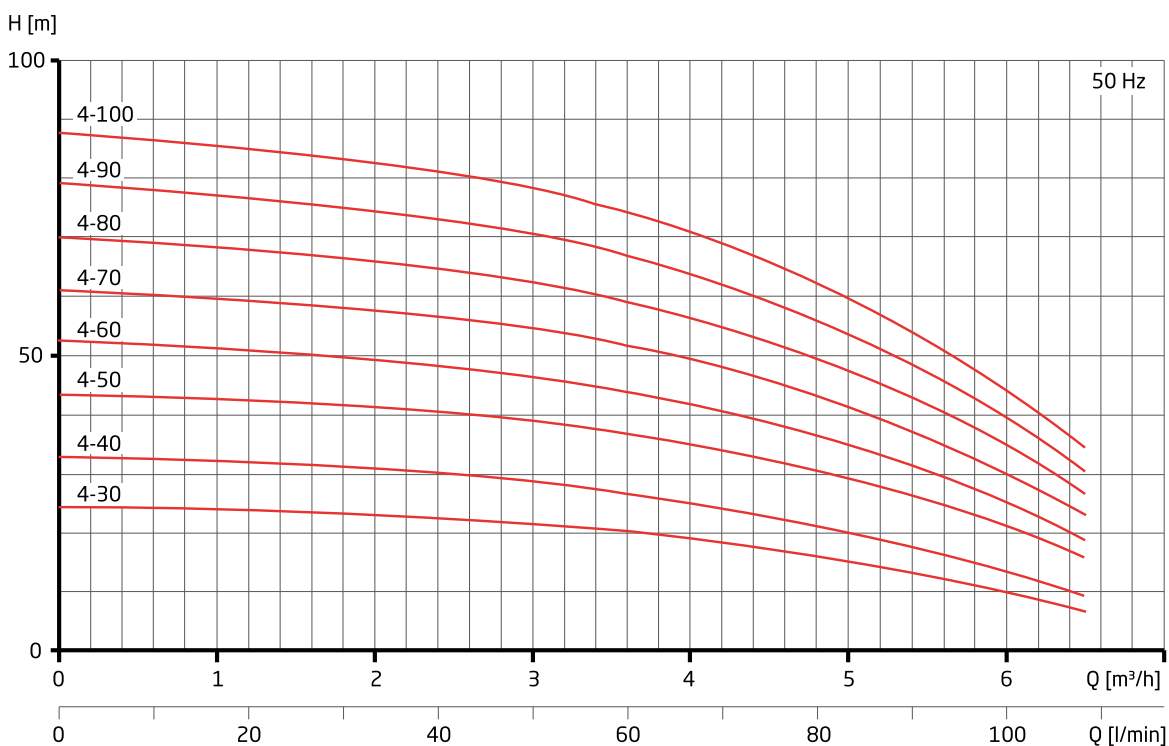


Characteristics

A/AE 2-30 to 2-100



A/AE 4-30 to 4-100

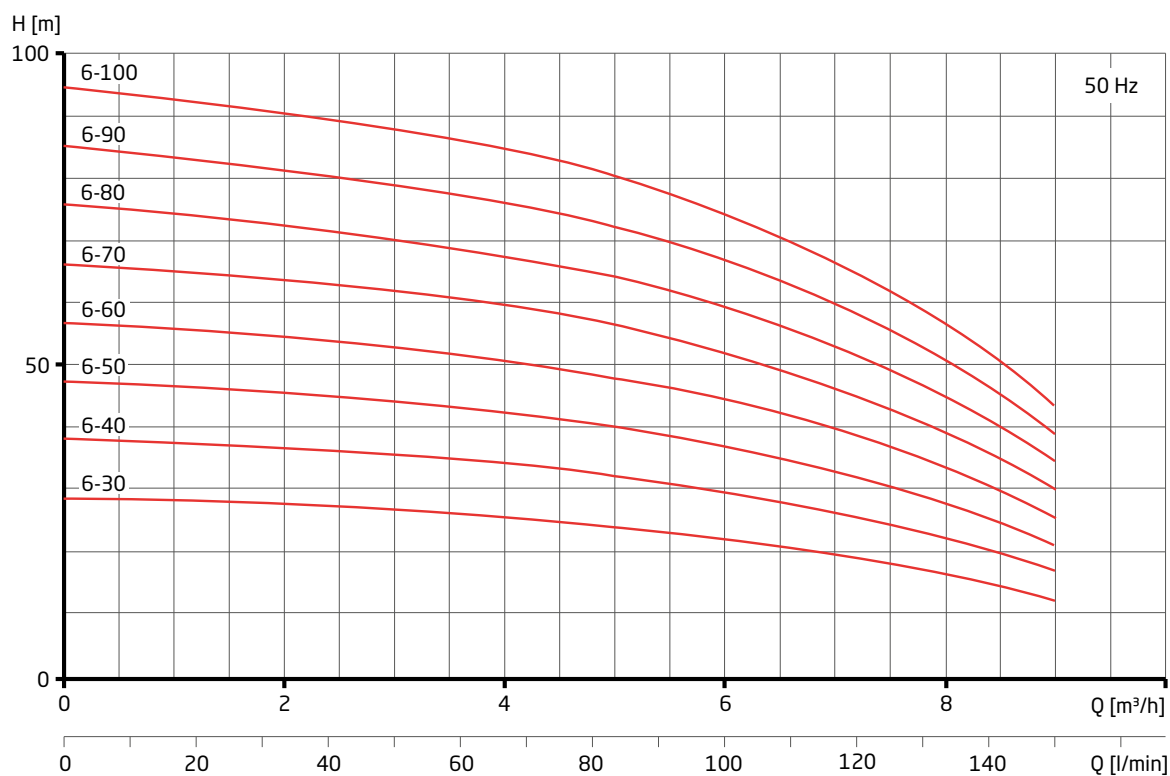


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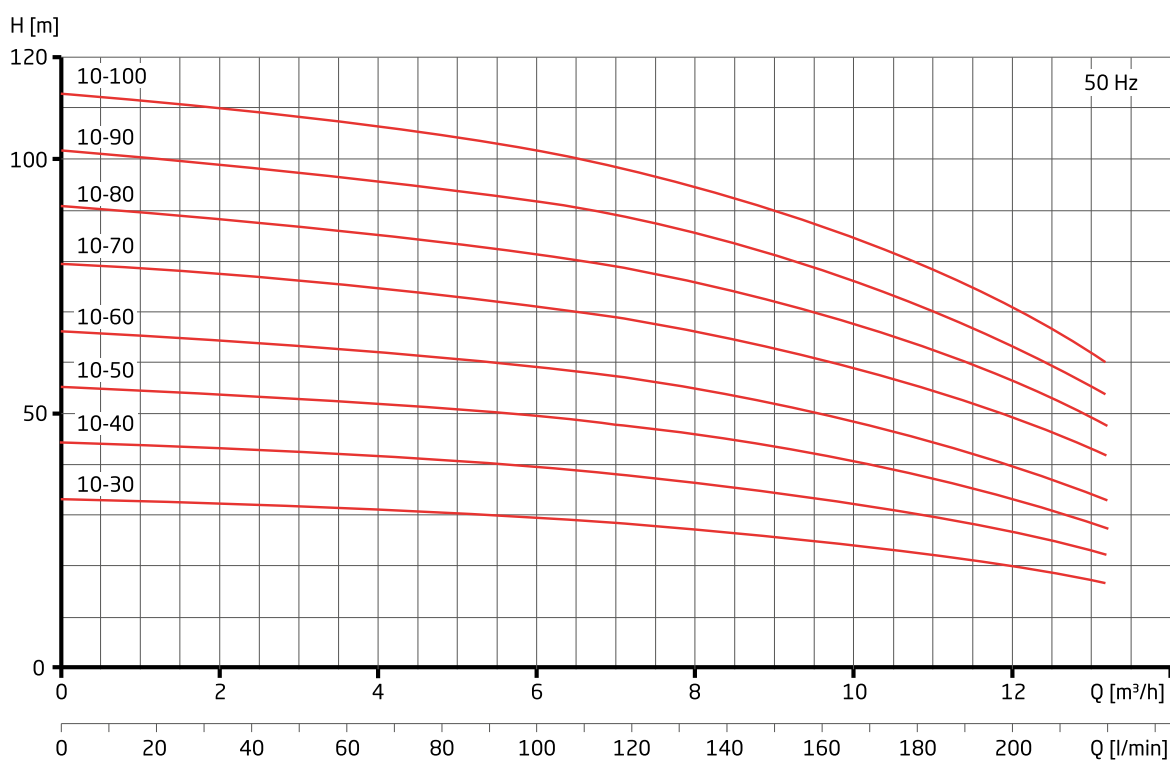


Characteristics

A/AE 6-30 to 6-100



A/AE 10-30 to 10-100

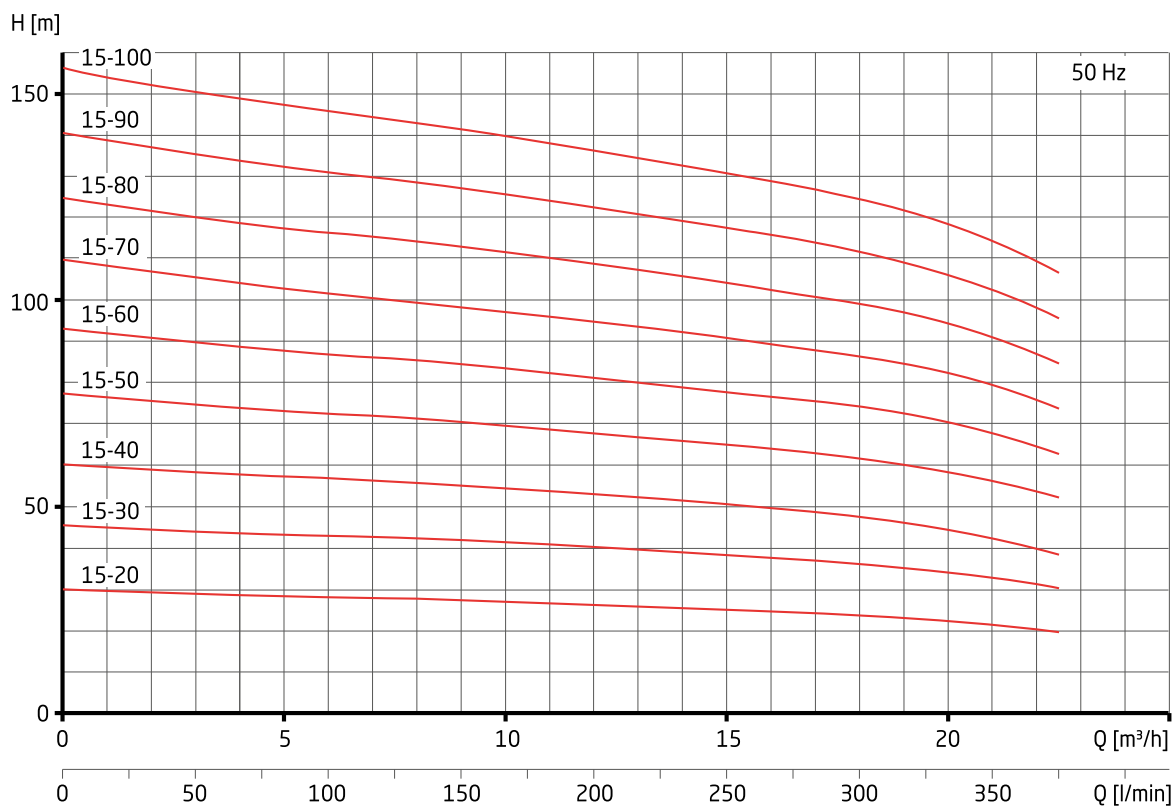


AQUACELL A/AE



Characteristics

A/AE 15-20 to 15-100



AQUACELL A/AE



Technical data

Aquacell A/AE 2-30 to A/AE 15-100

Type	Inlet/Outlet connection (Rp)	Average flow rate (m³/h)	Operating/target pressure (bar)	max. operating pressure ** (PN)	Power output P ₂ (kW)	Rated current 3~ 400 V (A)	Approx. weight (kg)
A/AE 2-30	1/1	2.50	1.40	10	0.37	0.95	30.00
A/AE 2-40	1/1	2.50	1.80	10	0.37	0.95	32.00
A/AE 2-50	1/1	2.50	2.40	10	0.37	0.95	33.00
A/AE 2-60	1/1	2.50	2.80	10	0.55	1.20	35.00
A/AE 2-70	1/1	2.50	3.40	10	0.55	1.20	35.00
A/AE 2-80	1/1	2.50	3.70	10	0.55	1.20	38.00
A/AE 2-90	1/1	2.50	4.60	10	0.75	1.80	39.00
A/AE 2-100	1/1	2.50	5.20	16	0.75	1.80	39.00
A/AE 4-30	1 ¼/1 ¼	4.00	1.90	10	0.55	1.20	33.00
A/AE 4-40	1 ¼/1 ¼	4.00	2.60	10	0.55	1.20	34.00
A/AE 4-50	1 ¼/1 ¼	4.00	3.50	10	0.75	1.80	36.00
A/AE 4-60	1 ¼/1 ¼	4.00	4.30	10	1.10	2.30	37.00
A/AE 4-70	1 ¼/1 ¼	4.00	4.90	10	1.10	2.30	37.00
A/AE 4-80	1 ¼/1 ¼	4.00	5.60	10	1.50	3.20	43.00
A/AE 4-90	1 ¼/1 ¼	4.00	6.40	16	1.50	3.20	44.00
A/AE 4-100	1 ¼/1 ¼	4.00	7.20	16	1.50	3.20	44.00
A/AE 6-30	1 ¼/1 ¼	6.00	2.20	10	0.75	1.80	36.00
A/AE 6-40	1 ¼/1 ¼	6.00	2.90	10	1.10	2.30	36.00
A/AE 6-50	1 ¼/1 ¼	6.00	3.70	10	1.10	2.30	37.00
A/AE 6-60	1 ¼/1 ¼	6.00	4.40	10	1.50	3.20	43.00
A/AE 6-70	1 ¼/1 ¼	6.00	5.30	10	1.50	3.20	43.00
A/AE 6-80	1 ¼/1 ¼	6.00	5.90	16	2.20	4.60	45.00
A/AE 6-90	1 ¼/1 ¼	6.00	6.60	16	2.20	4.60	45.00
A/AE 6-100	1 ¼/1 ¼	6.00	7.40	16	2.20	4.60	46.00
A/AE 10-30	2/1 ½	8.00	2.70	10	1.10	2.30	51.00
A/AE 10-40	2/1 ½	8.00	3.70	10	1.50	3.20	54.00
A/AE 10-50	2/1 ½	8.00	4.60	10	2.20	4.60	58.00
A/AE 10-60	2/1 ½	8.00	5.50	10	2.20	4.60	60.00
A/AE 10-70	2/1 ½	8.00	6.60	10	3.00	5.80	66.00
A/AE 10-80	2/1 ½	8.00	7.60	16	3.00	5.80	68.00
A/AE 10-90	2/1 ½	8.00	8.50	16	4.00	7.40	75.00
A/AE 10-100	2/1 ½	8.00	9.50	16	4.00	7.40	76.00
A/AE 15-20	2/2	15.00	2.50	10	2.20	4.60	68.00
A/AE 15-30	2/2	15.00	3.80	10	3.00	5.80	77.00
A/AE 15-40	2/2	15.00	5.10	10	4.00	7.40	88.00
A/AE 15-50	2/2	15.00	6.50	10	5.50	10.00	114.00
A/AE 15-60	2/2	15.00	7.80	16	7.50	13.30	127.00
A/AE 15-70	2/2	15.00	9.10	16	7.50	13.30	129.00
A/AE 15-80*	2/2	15.00	10.40	16	11.00	19.30	199.00
A/AE 15-90*	2/2	15.00	11.70	16	11.00	19.30	202.00
A/AE 15-100*	2/2	15.00	13.00	16	11.00	19.30	208.00

* Frequency converter not integrated in the motor (AE version)

** Higher operating pressures on request

AQUACELL A/AE



Order information

Aquacell AE 2-30 to AE 15-100

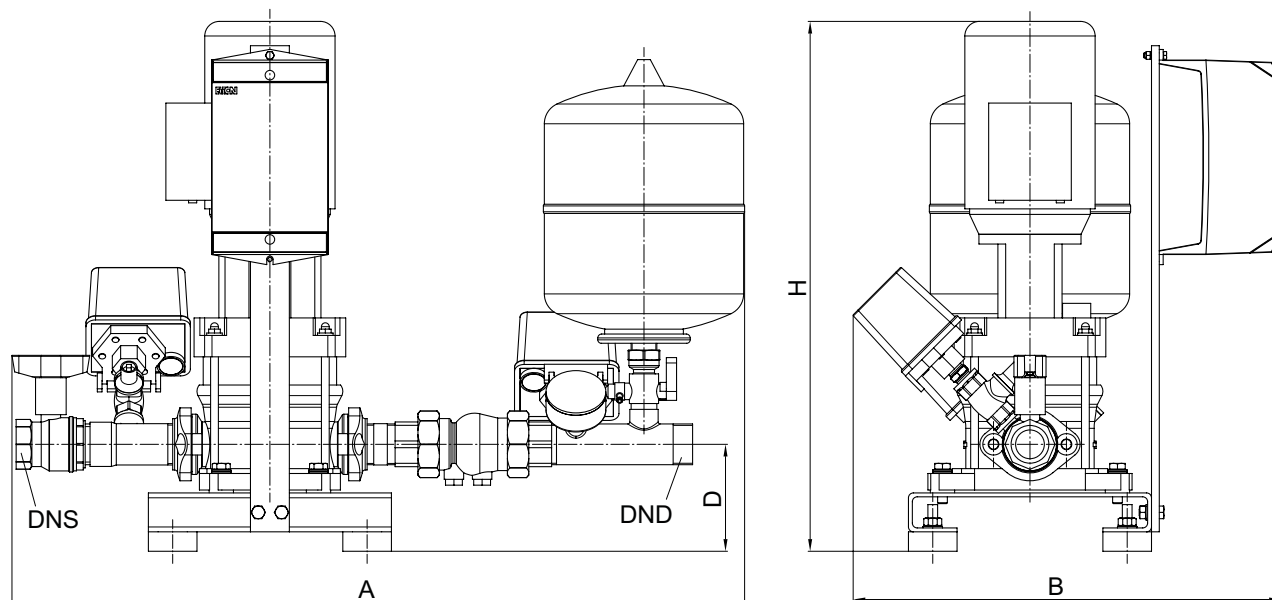
Type	Article no.	Type	Article no.
A 2-30	562.1000.000	AE 2-30	562.1001.000
A 2-40	562.2000.000	AE 2-40	562.2001.000
A 2-50	562.3000.000	AE 2-50	562.3001.000
A 2-60	562.4000.000	AE 2-60	562.4001.000
A 2-70	562.5000.000	AE 2-70	562.5001.000
A 2-80	562.6000.000	AE 2-80	562.6001.000
A 2-90	562.7000.000	AE 2-90	562.7001.000
A 2-100	562.8000.000	AE 2-100	562.8001.000
A 4-30	560.1000.000	AE 4-30	560.1001.000
A 4-40	560.2000.000	AE 4-40	560.2001.000
A 4-50	560.3000.000	AE 4-50	560.3001.000
A 4-60	560.4000.000	AE 4-60	560.4001.000
A 4-70	560.5000.000	AE 4-70	560.5001.000
A 4-80	560.6000.000	AE 4-80	560.6001.000
A 4-90	561.0409.000	AE 4-90	561.0409.500
A 4-100	560.7000.000	AE 4-100	560.7001.000
A 6-30	561.1000.000	AE 6-30	561.1001.000
A 6-40	561.2000.000	AE 6-40	561.2001.000
A 6-50	561.3000.000	AE 6-50	561.3001.000
A 6-60	561.4000.000	AE 6-60	561.4001.000
A 6-70	561.5000.000	AE 6-70	561.5001.000
A 6-80	561.6000.000	AE 6-80	561.6001.000
A 6-90	561.7000.000	AE 6-90	561.7001.000
A 6-100	561.8000.000	AE 6-100	561.8001.000
A 10-30	564.1000.000	AE 10-30	564.1001.000
A 10-40	564.2000.000	AE 10-40	564.2001.000
A 10-50	564.3000.000	AE 10-50	564.3001.000
A 10-60	564.4000.000	AE 10-60	564.4001.000
A 10-70	564.5000.000	AE 10-70	564.5001.000
A 10-80	564.6000.000	AE 10-80	564.6001.000
A 10-90	564.7000.000	AE 10-90	561.1009.500
A 10-100	561.1010.000	AE 10-100	561.1010.500
A 15-20	565.0000.000	AE 15-20	565.0001.000
A 15-30	565.1000.000	AE 15-30	565.1001.000
A 15-40	565.2000.000	AE 15-40	565.2001.000
A 15-50	565.3000.000	AE 15-50	565.3001.000
A 15-60	565.4000.000	AE 15-60	565.4001.000
A 15-70	565.5000.000	AE 15-70	565.5001.000
A 15-80	565.6000.000	AE 15-80*	565.6001.000
A 15-90	561.1509.000	AE 15-90*	561.1509.500
A 15-100	565.7000.000	AE 15-100*	565.7001.000
Commissioning (Net)	INBK02		

* Frequency converter not integrated in the motor (AE version)

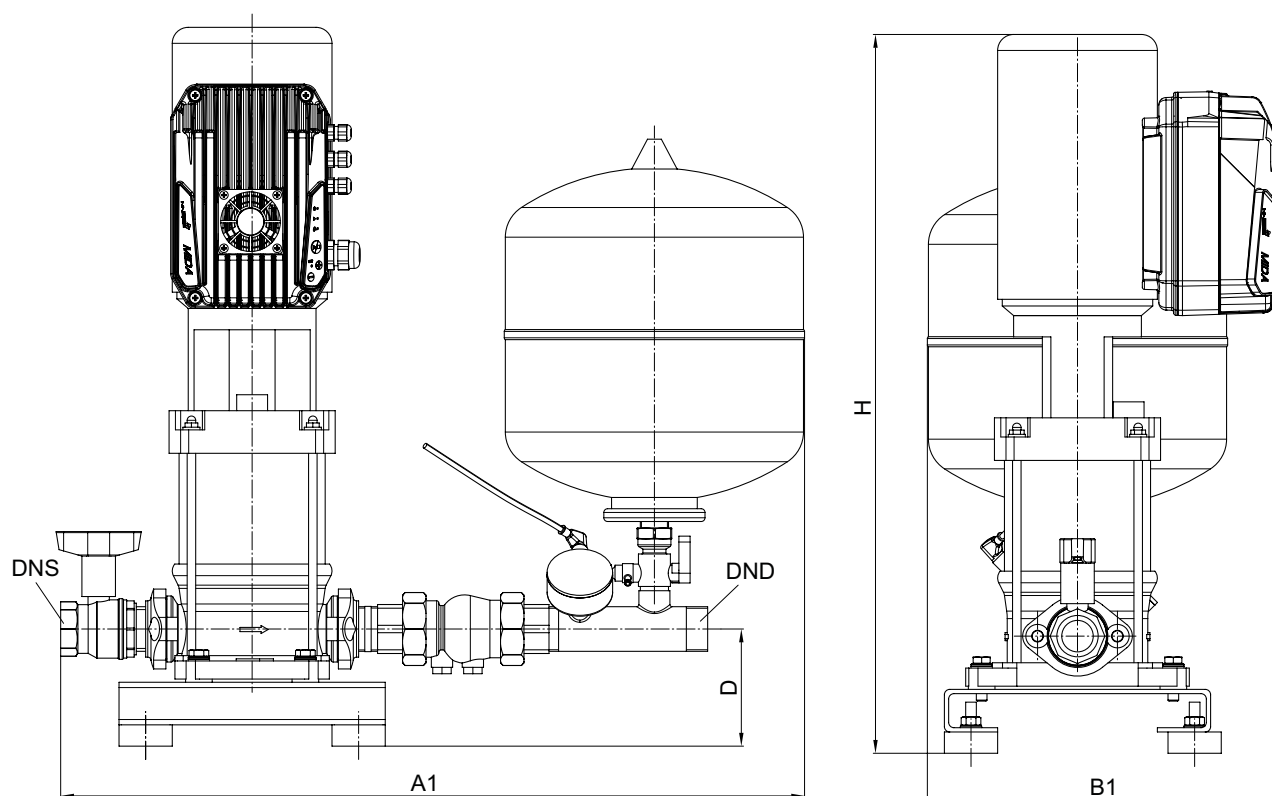
AQUACELL A/AE



Dimensions AQUACELL A



Dimensions AQUACELL AE



AQUACELL A/AE



Dimensions

Type	A	A1	B	B1	D	H
A/AE 2-30	754	684	440	326	110	560
A/AE 2-40	754	684	440	326	110	585
A/AE 2-50	754	684	440	324	110	605
A/AE 2-60	754	684	440	324	110	650
A/AE 2-70	754	684	440	323	110	670
A/AE 2-80	754	684	440	323	110	700
A/AE 2-90	754	684	440	333	110	715
A/AE 2-100	754	684	440	333	110	735
A/AE 4-30	754	684	440	392	110	585
A/AE 4-40	754	684	440	392	110	605
A/AE 4-50	754	684	440	340	110	630
A/AE 4-60	754	684	440	340	110	680
A/AE 4-70	754	684	440	340	110	700
A/AE 4-80	754	684	440	359	110	750
A/AE 4-90	754	684	440	359	110	770
A/AE 4-100	754	684	440	359	110	795
A/AE 6-30	754	699	440	341	110	595
A/AE 6-40	754	699	440	341	110	650
A/AE 6-50	754	699	440	332	110	675
A/AE 6-60	754	699	440	332	110	730
A/AE 6-70	754	699	440	360	110	755
A/AE 6-80	754	699	440	360	110	805
A/AE 6-90	754	699	440	360	110	830
A/AE 6-100	754	699	440	360	110	855
A/AE 10-30	878	790	496	385	140	700
A/AE 10-40	878	790	496	405	140	750
A/AE 10-50	878	790	496	405	140	805
A/AE 10-60	878	790	496	405	140	830
A/AE 10-70	878	790	496	413	140	875
A/AE 10-80	878	790	496	413	140	905
A/AE 10-90	878	790	496	436	140	960
A/AE 10-100	878	790	496	436	140	985
A/AE 15-20	1016	962	496	474	150	724
A/AE 15-30	1016	962	496	489	150	811
A/AE 15-40	1016	962	496	510	150	891
A/AE 15-50	1016	962	496	531	150	1090
A/AE 15-60	1016	962	496	531	150	1130
A/AE 15-70	1016	962	496	531	150	1170
A/AE 15-80	1016	962	496	555	150	1330
A/AE 15-90	1016	962	496	555	150	1385
A/AE 15-100	1016	962	496	555	150	1420

ACCESSORIES



Aquacell/Multicell

Dry run protection

Type	Article no.	Weight (kg)
Float switch with 10 m cable (red)	500.8400.003	5.00
Pressure switch in feed line with pre-pressure over 1 bar	561.9901.000	0.50
Pressure switch in pressure line with pre-pressure below 1 bar	561.9902.000	0.50
Weight for float switch	500.8499.998	0.70

Diaphragm pressure vessel, PN 10, for drinking water

with replaceable diaphragm resistant to food stuffs, preloaded with 4 bar, pressure gauge, filling valve and manufacturer's certificate. Container has additional inner coating. All containers are equipped with dual connections.

Type	Article no.	Volume (l)	Max. volume flow (m³/h)	ØD (mm)	H (mm)	Connection (DN)	Weight (kg)
Refix DT 80	505.4100.080	80	15	480	750	50	23.70
Refix DT 100	505.4100.100	100	15	480	834	50	26.80
Refix DT 200	505.4100.200	200	15	634	973	50	53.00
Refix DT 300	505.4100.300	300	15	634	1273	50	59.00
Refix DT 400	505.4100.400	400	15	740	1245	50	80.00
Refix DT 500	505.4100.500	500	15	740	1475	50	88.00

Type	Article no.	Volume (l)	Max. volume flow (m³/h)	ØD (mm)	H (mm)	Connection (DN)	Weight (kg)
Refix DT 80	505.4100.082	80	27	480	750	65	24.70
Refix DT 100	505.4100.102	100	27	480	834	65	27.80
Refix DT 200	505.4100.202	200	27	634	973	65	54.00
Refix DT 300	505.4100.302	300	27	634	1273	65	60.00
Refix DT 400	505.4100.402	400	27	740	1245	65	81.00
Refix DT 500	505.4100.501	500	27	740	1475	65	89.00

PN 16 on request

Diaphragm pressure vessel, PN 10, for process and fire extinguishing water

with replaceable diaphragm, preloaded with 4 bar, pressure gauge, filling valve and manufacturer's certificate. Container has additional inner coating. No medium flow, no shut-off, no drainage.

Type	Article no.	Volume (l)	ØD (mm)	H (mm)	Connection (G)	Weight (kg)
Refix DE 80	505.4300.080	80	480	737	1	14,00
Refix DE 100	505.4300.100	100	480	852	1	16,00
Refix DE 200	505.4300.200	200	634	967	1 ¼	36,50
Refix DE 300	505.4300.300	300	634	1267	1 ¼	41,60
Refix DE 400	505.4300.400	400	740	1245	1 ¼	74,00
Refix DE 500	505.4300.500	500	740	1475	1 ¼	106,00

PN 16 on request

ACCESSORIES



Aquacell/Multicell

Additional cost for pressure boosting unit with flange.

Size (Rp up to DN)	Article no.	Weight (kg)
1 ½ up to 40	560.6000.001	0.80
2 up to 50	560.6000.002	1.00
2 ½ up to 65	560.6000.003	1.20

Stainless steel compensator, PN 16, for drinking water, including tie rods.

Size (DN)	Article no.	Construction length (mm)	Weight (kg)
32	503.5400.032	135	5.00
40	503.5400.040	135	5.50
50	503.5400.050	155	7.10
65	503.5400.065	165	8.60
80	503.5400.080	175	10.2
100	503.5400.100	180	11.5
125	503.5400.125	200	16.3
150	503.5400.150	230	19.3

Rubber buffer PN 16 for drinking water, including length limiters.

Size (DN)	Article no.	Construction length (mm)	Weight (kg)
40	503.5200.040	100	3.60
50	503.5200.050	100	4.40
65	503.5200.065	100	5.30
80	503.5200.080	100	6.50
100	503.5200.100	100	7.30
125	503.5200.125	100	8.90
150	503.5200.150	100	12.3

Pressure reducer

with balanced single-seated valve, built-in dirt trap and transparent strainer cup (design A) or brass strainer cup (design B), housing and screws made from brass. static pressure max. 25 bar, back pressure 1,5 - 6 bar = design A, back pressure 1,5 - 12 bar = design B

Size (R)	Article no.	Design	Max. Q (m³/h)	Weight (kg)
1	504.4100.025	A	4.00	1.30
1	504.4200.025	B	4.00	1.30
1 ¼	504.4100.032	A	6.00	1.60
1 ¼	504.4200.032	B	6.00	1.60
1 ½	504.4100.038	A	9.00	3.20
1 ½	504.4200.038	B	9.00	3.20
2	504.4100.050	A	12.00	4.40
2	504.4200.050	B	12.00	4.40
Pressure gauge	507.6121.010	R ¼, connection at rear, 0 - 10 bar, Ø 63 mm		

Foot valve made from brass, PN 10, seal in form of an o-ring, strainer made from plastic, temperature max. 60 °C.

Any installation position. Required for each pump when the unit is operated in intake mode.

Size (Rp)	Article no.	Weight (kg)
1 ¼	507.2210.032	0.40
1 ½	507.2210.038	0.50
2	507.2210.050	0.70

Feed tank, closed, pressureless and made from polyethylene. incl. floating inlet valve, dry run protection and float switch.

Size (l)	Article no.	Inlet pres- sure (bar)	Floating inlet valve (Rp)	Booster unit connection (Rp)	Weight (kg)
1100	569.9200.000	1.2 - 6.0	2	2	90.00
2000	569.9210.000	1.2 - 6.0	2	2	150.00