

AEH 1201 ... 6108 magnetic coupling

TECHNICAL DATA

output:	max. 35 m ³ /h
delivery head:	max. 354 m (at 1450 rpm)
speed:	max. 1800 rpm
temperature:	max. 180°C high temperature on request
casing pressure:	PN 40 / PN 25
shaft sealing:	glandless due to magnetic coupling
flange connection:	DIN 2501 PN 40
sense of rotation:	clockwise when seen on the pump from the drive

APPLICATION

AEH pumps are side channel pumps, are applied in order to handle problem-free and without any leakage and economically clear or turbid, aggressive, valuable toxic or ill-smelling liquids which do not contain any solid particles or abrasive components.

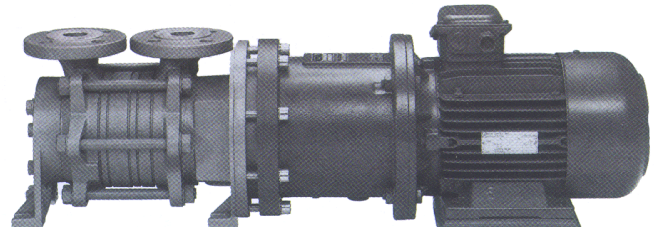
AEH pumps are applied in the chemical and petrochemical industry, in the pharmaceutical industry, in the plastic and rubber industry, in the surface finishing and hardening, in the food, beverage and tobacco industry.

BAUART

Horizontal, selfpriming side channel pumps, handling entrained gas, of segmental type construction with open vane wheel impellers. The sealing to atmosphere is effected glandless by isolation shroud; the drive power is transmitted contactless by a magnetic coupling. The use of stable permanent magnetic material ensures the transmission of the nominal torque and given protection against overload..

On the basis of the compact close coupled design has been created a pumping unit that is easily to be installed. All IEC standard motors of the construction type IM B 35 are applicable. This design permits the operation of the pump without any additional coupling. Thus the alignment, a source of trouble, can be omitted.

The simple construction of the pump allows the assembly or disassembly without special tools.



CONSTRUCTION

Casing pressure:

Sizes 1200, 3100, 3600, 4100, 5101 to 5104:	PN 40;
Sizes 5105 to 5108, 6100:	PN 25

Please observe:

Casing pressure = zero head + inlet pressure
Test pressure 52 bar resp. 33 bar

Position of the branches:

Suction and discharge branches pointing radially upwards.

Flanges:

The flanges comply with DIN 2535 / PN 40
Flanges according to DIN 2512 with groove and bored to ANSI 150 or 300 as well as BS Table F is possible.

Hydraulic:

First hydraulics, designation of this construction type: A•

Bearing:

The pump shaft runs in two sleeve bearings of pure silicon carbide (SiC), lubricated by the pumping medium.
The remaining axial forces are absorbed by axial sleeve bearings. Optionally available a friction reducing coating of the bushings to avoid critical operation.
The outer magnet is directly fixed on the motor shaft consequently the external bearing becomes unnecessary.
Designation of this construction type: •F

Shaft sealing:

Without shaft seals by an isolation shroud. Transmission of the driving moment by a magnetic coupling.

Designation of this construction type: see last page.

Material design:

Item	COMPONENTS	MATERIAL DESIGN *				
		1A	1B	1F ***	4B	4F ***
10.60 10.70 10.80, 10.90 11.40, 11.41	suction casing discharge casing intermediate piece	GGG 40.3 (0.7043)			G-X 6 Cr Ni Mo 18 10 (1.4408)	
21.00	shaft	up to 4-stufig: 1.4462; from 5-stufig: 1.4021			X 2 Cr Ni Mo N 22 5 (1.4462)	
23.50	vane wheel impeller	Cu Zn 40 Al 2 (2.0550)	G-X 20 Cr 14 (1.4027 05)	PAEK	G-X 3 Cr Ni Mo Cu 26 6 (1.4517)	PAEK
0242	bearing bush	from 5-stufig: special carbon			special carbon	
31.40 52.90, 52.91 54.00, 54.01	thrust bearing radial bearing radial bearing	silicon carbide (SiC) **				
34.60	stool	GG 25 (0.6025) or St 52-3 (1.0570)				
81.70	sealing shroud	Hastelloy C4 (2.4610)				
81.71	flange for can	St 52-3 (1.0570)				
84.71	internal magnet	Sm Co-magnets on St 52-3 (1.0570), jacketed with X 6 Cr Ni Mo Ti 17 12 2 (1.4571)				
84.72	external magnet	Sm Co-magnets on St 52-3 (1.0570)				
84.80	driving flange	St 52-3 (1.0570)				

* Special materials upon request, e.g..
Hastelloy B/C
titanium
Monel
1.4500

** Optionally - coating to diminish the friction energy.

*** Only for the construction sizes 1200, 3100, 3600, 4100. Larger vane wheel impellers of PAEK are not available at present.

Casing sealing:

The casing sealing is made by soft Teflon and O-ring PTFE. Designation of this construction type: 4

Drive:

By commercial three-phase A.C. motors, construction type IM B35. The selection is depending on the power consumption of the hydraulics, taking into consideration the density and viscosity of the pumping medium. For the motor rating the eddy current losses are to be added to the pump performance.

Motors controlled by frequency converters are admissible. The motors and magnetic couplings indicated in the delivery programme are selected for a mains frequency of max. 50 Hz and are applicable for watery liquids. In case of differing speeds other magnetic dipole moments are necessary for the couplings. It is recommendable to check the selection with Sterling SIHI.

Position:

Usually the pump units are installed horizontally. The operation with vertically installed pump units is possible, but should be made only in consultation with Sterling SIHI because of the special instructions for starting-up, the support and thermal load of the drive motor.

General remarks:

The following pump series with magnetic couplings are available:

Side channel pump with NPSH inducer stage:

Series **CEHB** with axial inlet and low NPSH

Volute casing pumps:

Sterling SIHI-MAT-system e.g.:

Series **CBMD** volute casing pump **as per DIN EN 22858 bearing bracket design**

Series **CBED** volute casing pump **as per DIN EN 22858 close coupled construction**

Series **ZLKD** volute casing pump close coupled construction - branches **as per DIN 24255 / EN 733**

Series **ZLID** inline pump

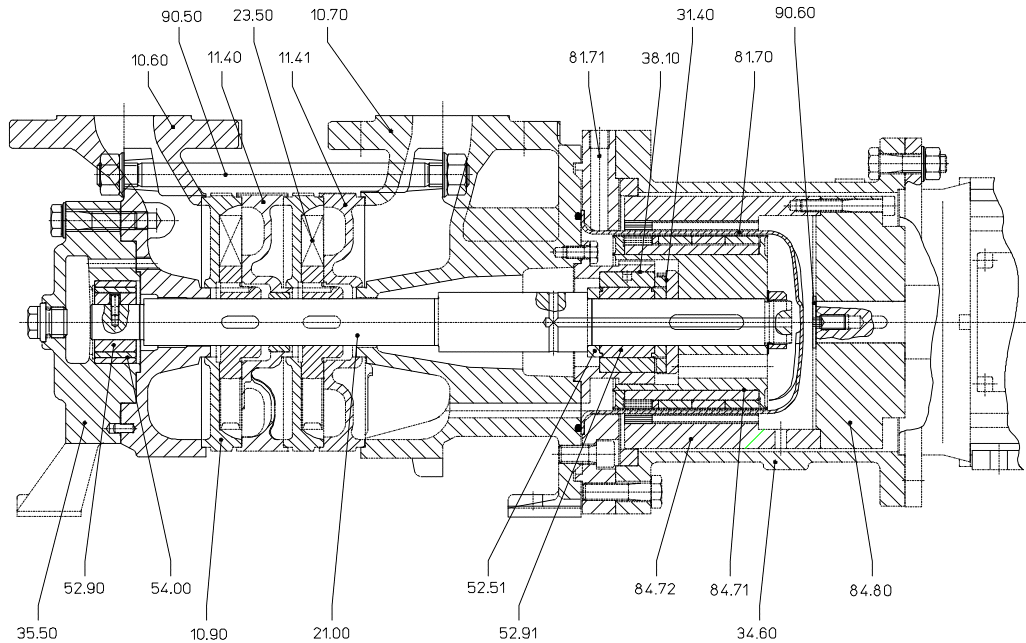
Series **ZTKA** volute casing pump for medium temperatures up to 400°C

For lower delivery heads:

Series **AKLA /AKVA** single-stage inline side channel pump

Technical documentation on these programmes is available on request.

Sectional drawing and nomenclature



10.60	suction casing	23.50	vane wheel impeller	54.00	bearing bush
10.70	discharge casing	31.40	thrust bearing	81.70	isolation shroud
10.80	intermediate piece	34.60	stool	81.71	flange of can
10.90, 10.91	suction piece	35.50	bearing bracket casing	84.71	interior magnet
11.40, 11.41	discharge piece	38.10	bearing carrier	84.72	exterior magnet
21.00	shaft	52.51	spacer ring	84.80	driving flange
23.10	impeller	52.90, 52.91	sleeve	90.60	shaft screw

FUNCTION

Partial flow:

For the cooling of the isolation shroud, heated up by eddy currents, a partial flow is derived which at the same time serves as lubricant for the ceramic sleeve bearings. The partial flow flows through two longitudinal bores in the discharge casing into the isolation shroud and is led back through the hollow bored shaft and the balance bores of the rear vane wheel impeller to its suction side. By the pumping capability of the inner magnet, inside the isolation shroud a circulation flow is created which flows through the longitudinal bores of the inner magnet towards the bottom of the isolation shroud and in the gap between inner magnet and isolation shroud back to the front side of the inner magnet. This circulation flow is nearly independent of the operating point of the pump. Consequently the cooling of the isolation shroud is guaranteed over the entire characteristic.

By the pumping capability of the lubricating grooves in the thrust bearing disk a further flow is created through the bearing gap of the radial bearing over the thrust bearing towards the longitudinal bores of the inner magnet. Thus, also independent of the operating point of the pump, the lubrication of the bearings is guaranteed.

Bearing:

The SiC bushings are clamped axially on the shaft. The material combination secures that the clamping power is maintained also in

case of high temperatures. The sleeve at suction side is secured on the shaft by a shoulder stud. The stationary bearing inserts are screwed to the discharge casing or pressed into the bearing bracket casing. Alternatively bearings coated with adamantine carbon are available. Hereby are considerably reduced the coefficients of friction during dry operation and danger to the pump can be prevented. This coating is applicable up to 250°C.

Safety:

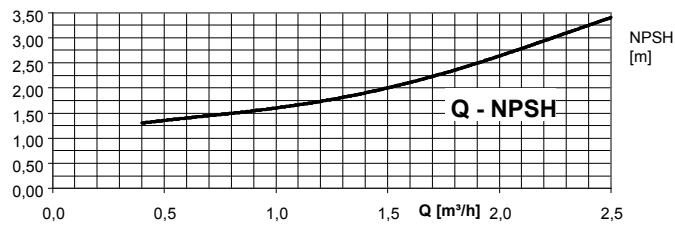
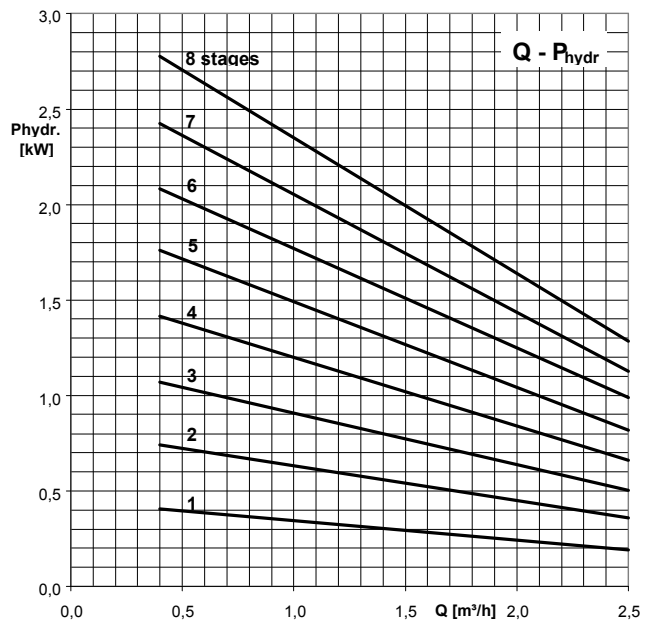
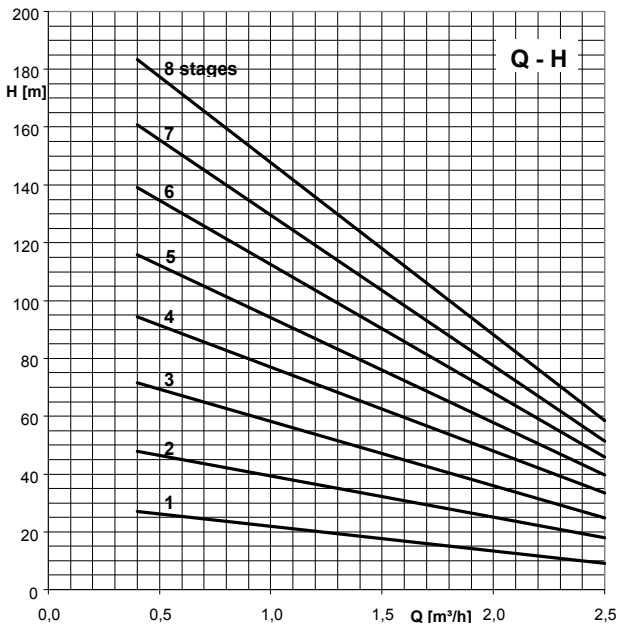
The magnetic bell is directly fixed on the motor shaft. The load on the bearings resulting from this is relatively slight and therefore a damage to the bearings very improbable. In order to protect the isolation shroud against internal or external damages by rotating parts, a stationary seat is installed in the stool and at the bearing insert. The distance from the rotors is smaller than that of the rotors from the isolation shroud. In order to obtain double leakproofness the application of fanless motors which withstand flooding, is possible. Then the sealed stool chamber serves to control the function of the isolation shroud.

The pump has to be run with a motor load detector. It protects the machine against dry operation and operation beyond the range of the characteristic curves.

VARIANTS

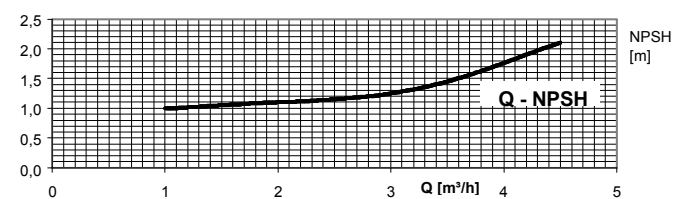
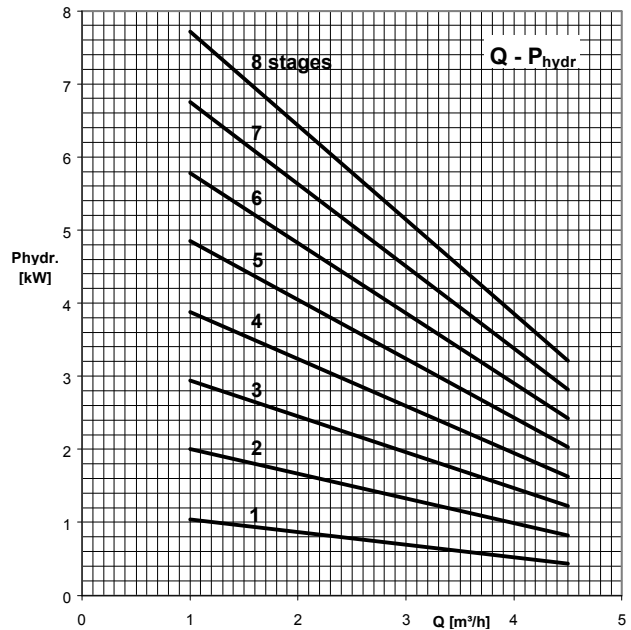
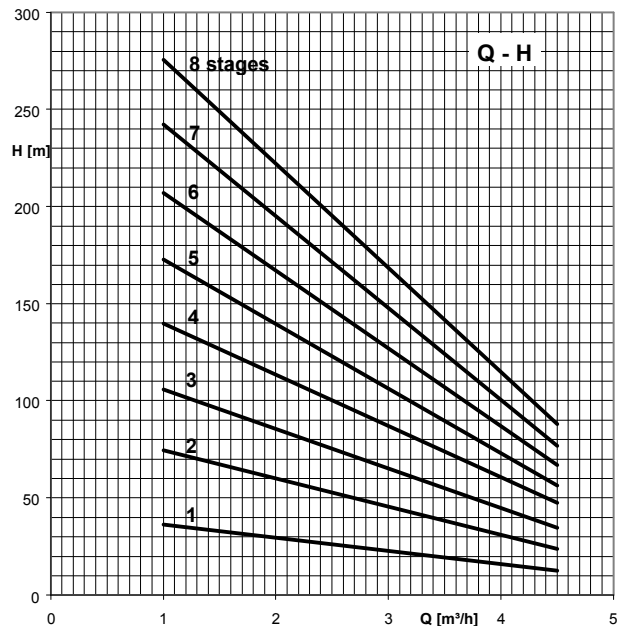
Pumps with heating or cooling chambers for the handling of smeltings or boiling media also are available. For such cases special heating stages, instead of normal stages, are installed in the pump and thus offering the heating or cooling by means of liquid or vapour.

Characteristic curves



AEH 1200 with magnetic coupling

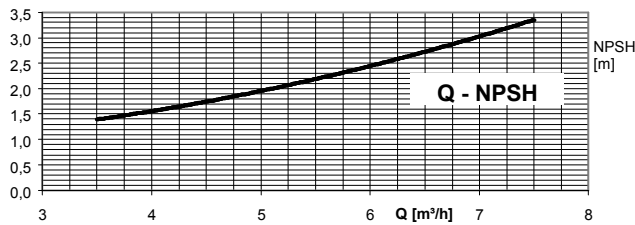
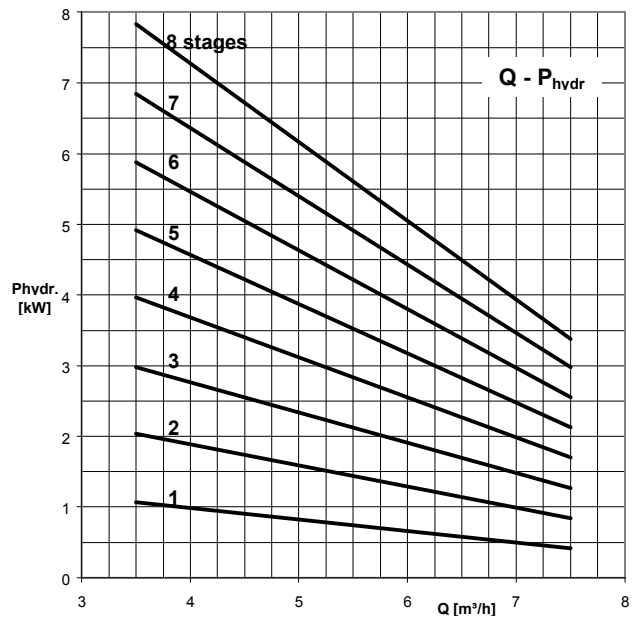
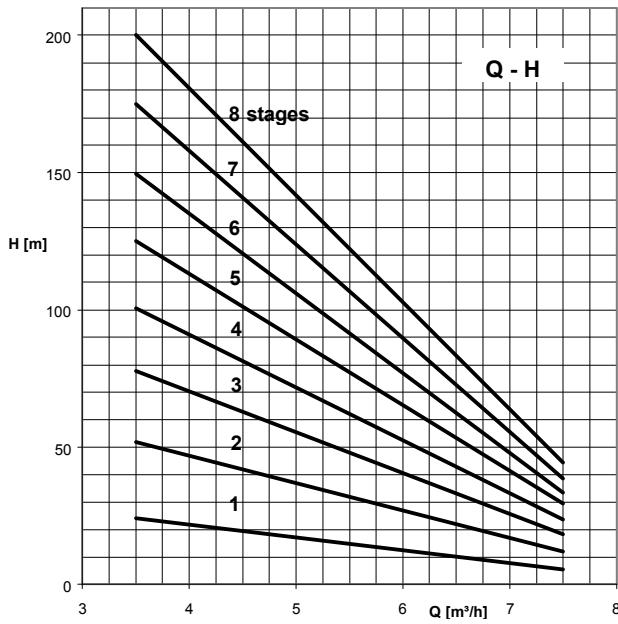
speed 1450 rpm, Visc.= 1 mm²/s, spec. grav. = 1 kg/dm³



AEH 3100 with magnetic coupling

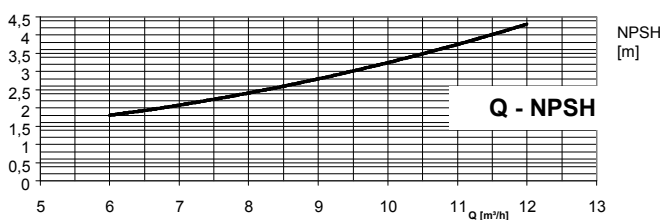
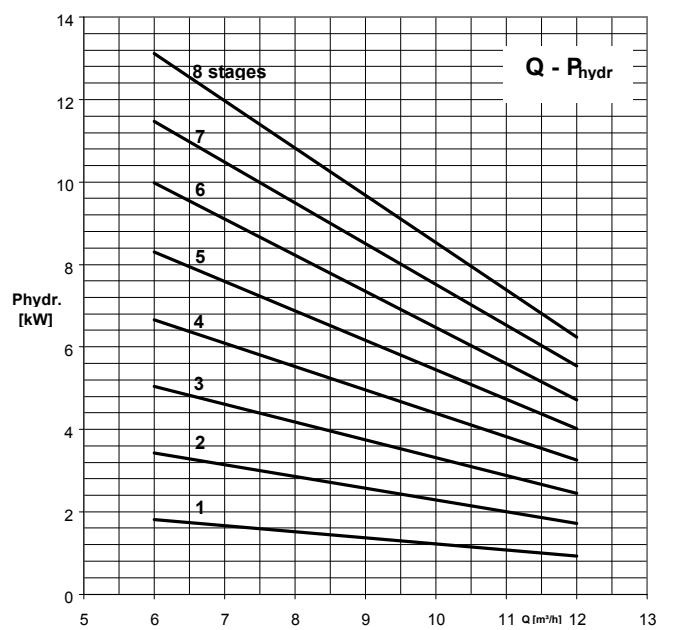
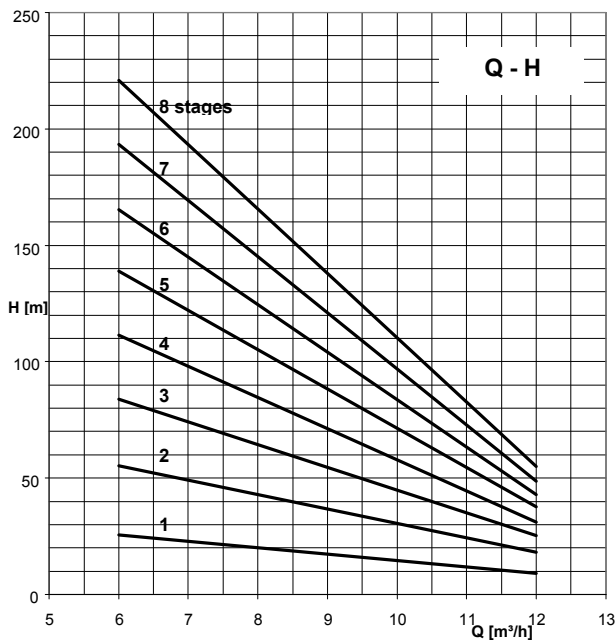
speed 1450 rpm, Visc. 1 mm²/s, spec.grav. 1 kg/dm³

Characteristic curves



AEH 3600 with magnetic coupling

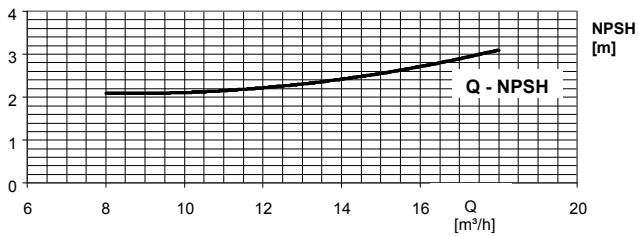
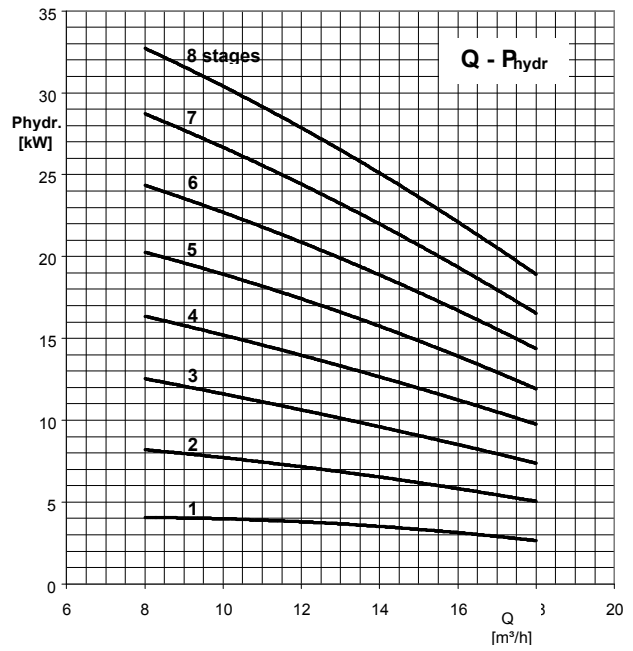
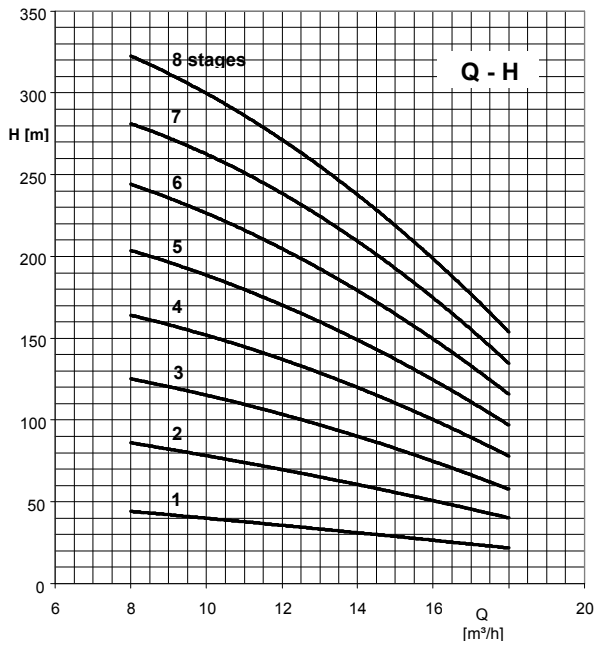
speed 1450 rpm, Visc. 1 mm²/s, spec.grav. 1 kg/dm³



AEH 4100 with magnetic coupling

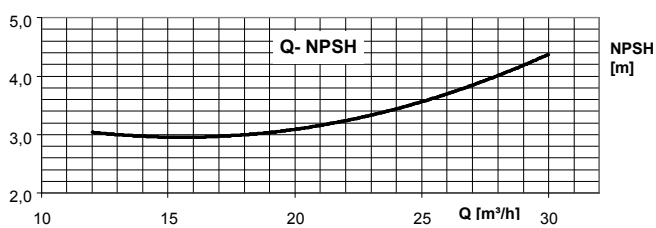
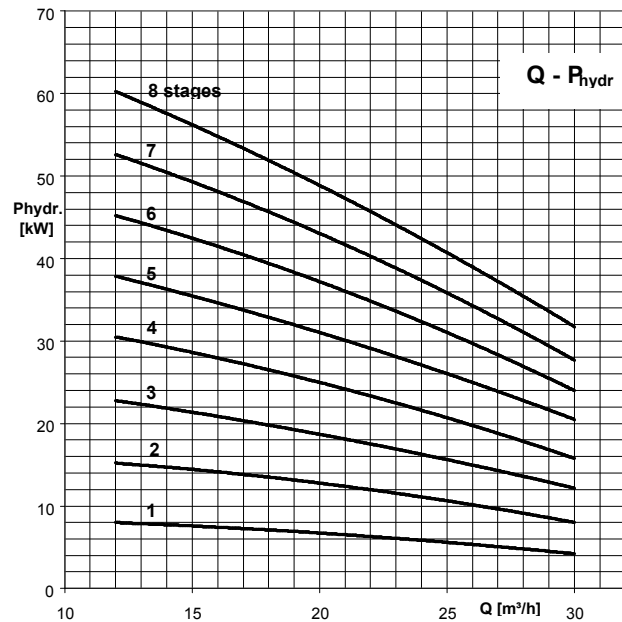
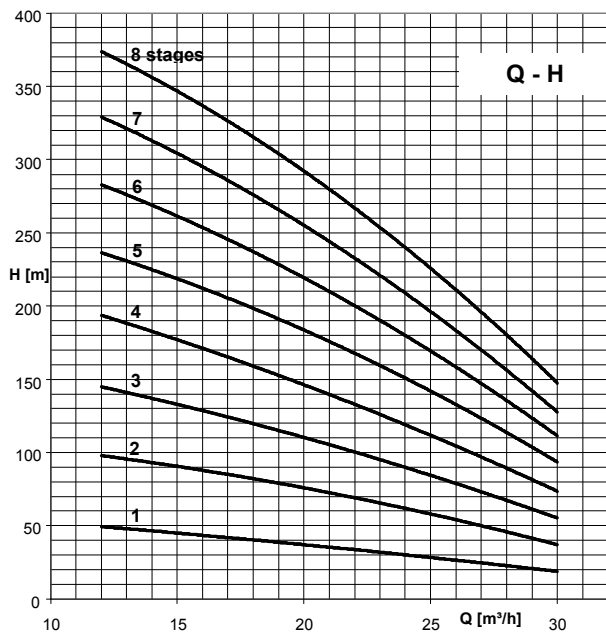
speed 1450 rpm, Visc. 1 mm²/s, spec.grav. 1 kg/dm³

Characteristic curves



AEH 5100 with magnetic coupling

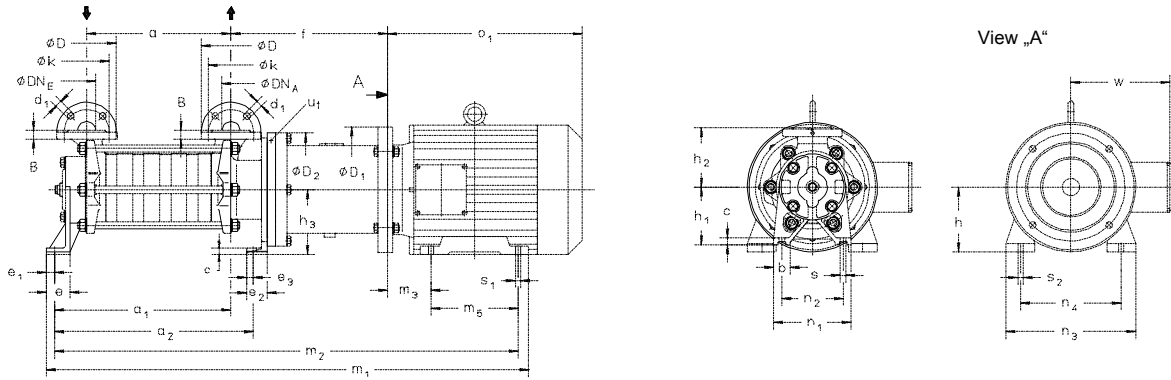
speed 1450 rpm, Visc. 1 mm²/s, spec.grav. 1 kg/dm³



AEH 6100 with magnetic coupling

speed 1450 rpm, Visc. 1 mm²/s, spec.grav. 1 kg/dm³

Dimension table



u_t : connection for temperatur probe G $\frac{1}{4}$

flanges acc. to DIN 2501 PN 40					
DN _{A/E}	20	32	40	50	65
D	115	140	154	165	190
k	75	100	110	125	145
d ₁ x number	14 X 4	18 x 4	18 x 4	18 x 4	18 x 8

flanges acc. to ANSI 300 RF					
DN _{A/E}	20	32	40	50	65
D	115	140	154	165	190
k	82,5	98,4	114,3	127	149,2
d ₁ x number	19 x 4	19 x 4	22,2 x 4	19 x 8	22,2 x 8

Dimensions of the motor

size	nominal power		D ₁	h	m ₃	m ₅	n ₃ *	n ₄	o ₁ *	s ₁ *	s ₂ *	w*	weight abt. kg
	IP54 resp. EExde	EExe											
80A	0,55	0,55	200	80	50	100	151	125	229	8,5	15	121	8,3
80B	0,75	0,75	200	80	50	100	151	125	229	8,5	15	121	10
90 S	1,1	1,0	200	90	56	100	180	140	250	10,5	-	167	14
90 L	1,5	1,35	200	90	56	125	180	140	275	10,5	-	167	18
100 L 1	2,2	2,0	250	100	63	140	205	160	323	12	-	175	23
100 L 2	3,0	2,5	250	100	63	140	205	160	323	12	-	175	25
112 M	4,0	3,6	250	112	70	140	230	190	329	12	18	191	38
132 S	5,5	5,0	300	132	89	140	266	216	361	12	18	213	59
132 M	7,5	6,8	300	132	89	178	266	216	399	12	18	213	69
160 M	11,0	10,0	350	160	108	210	310	254	470	15	22	245	108
160 L	15,0	13,5	350	160	108	254	310	254	514	15	22	245	130
180 M	18,5	15,0	350	180	121	241	345	279	536	15	25	280	162
180 L	22,0	17,5	350	180	121	279	345	279	574	15	25	280	176
200 L	30,0	24,0	400	200	133	305	400	318	656	20	26	302	254
225 S	37,0	30,0	450	225	149	286	450	356	678	20	26	353	305
225 M	45,0	36,0	450	225	149	311	450	356	703	20	26	353	335
250 M	55,0	44,0	550	250	168	349	505	406	790	25	36	406	425

* dimension dependent on motor make

Dimensions of the pump

size	IP 54	EExe II T3	torque of the magnetic coupling	DN _A	DN _E	a	a ₁	a ₂	b	c	D ₂	e	e ₁	e ₂	e ₃	f	h ₁	h ₂	h ₃	m ₁ *	m ₂ *	n ₁	n ₂	s	weight of the pump					
	kW	kW																							abt. kg					
1201	0,55	0,55	K	20	20	120	178	228			182	44	17	34	17	237	100	100	100	585	555	140	105	13	46					
1202	0,75	0,75																							51					
1203	1,1	1																							154	212	262	237	593	561
	1,5	1,35																											618	586
	0,75	0,75																											619	589
1204	1,1	1																							188	246	296	237	627	595
	1,5	1,35																											652	620
	2,2	2																											684	652
	3	2,5																											661	629
1205	1,5	1,35																							222	280	330	237	686	654
	-	2																											718	686
	2,2	-																											720	688
	3	2,5																											752	720
	-	3,6																											762	727
1206	-	1,35																							256	314	364	227	754	722
	-	2																											786	754
	2,2	-																											796	761
	3	2,5																											820	788
1207	3	2,5																							290	348	398	237	830	795
	4	3,6																											854	822
	2,2	2	864	829																										
1208	3	2,5	324	382	432	257	908	868																						
	4	3,6																												
	-	5																												

size	IP 54	EExe II T3	torque of the magnetic coupling	DN _A	DN _E	a	a ₁	a ₂	b	c	D ₂	e	e ₁	e ₂	e ₃	f	h ₁	h ₂	h ₃	m ₁ *	m ₂ *	n ₁	n ₂	s	weight of the pump					
	kW	kW																							abt. kg					
3101	1,1	1	T	32	32	146	213	270			260	42	17	50	17	295	112	132	132	696	664	170	135	13	122					
3601	1,5	1,35																							721	689				
3102	2,2	2																							186	253	310	305	753	721
	1,5	1,35																											721	689
	2,2	2																											753	721
3103	3	2,5																							226	293	350	305	763	728
	4	3,6																											793	761
	2,2	2																											803	768
	3	2,5																											847	807
3104	4	3,6																							266	333	390	305	833	801
	-	5																											843	808
	4	-																											887	847
	5,5	-																											887	847
	-	6,8																											925	885
3105	3	-																							306	373	430	305	873	841
	-	3,6																											883	848
	-	5																											927	887
	4	-																											927	887
	5,5	-																											965	925
	-	6,8																											923	888
3106	-	3,6	346	413	470	325	967	927																						
	4	-					1005	965																						
	5,5	-					1086	1046																						
	-	10					963	928																						
	4	-					1007	967																						
3107	-	5	386	453	510	355	1045	1005																						
	5,5	-					1126	1086																						
	-	6,8					1047	1007																						
	7,5	-					1085	1045																						
3108	11	10	386	453	510	355	1166	1126																						
	5,5	5					1210	1170																						
	7,5	6,8																												

Dimensions of the pump

size	IP 54	EExe II T3	torque of the magnetic coupling	DN _A	DN _E	a	a ₁	a ₂	b	c	D ₂	e	e ₁	e ₂	e ₃	f	h ₁	h ₂	h ₃	m ₁ *	m ₂ *	n ₁	n ₂	s	weight of the pump																																																																																																								
	kW	kW																								mm																				abt. kg																																																																																			
4101	2,2	2	T	40	40	159	214	275	36	15	260	43	17	49	17	311	132	140	132	760	728	195	155	13	113																																																																																																								
	3	2,5																		770	735																																																																																																												
	-	3,6																		815	783																																																																																																												
4	-	W	40			40	214	269								330				36	15				260	43	17	49	17	311	132	140	132	825	790	195	155	13	140																																																																																										
2,2	2																																	869	829																																																																																														
3	2,5																																	870	838																																																																																														
4	3,6	W					40	40								269														324				385	36				15	260	43	17	49	17	331	132	140	132	880	845	195	155	13	156																																																																											
5,5	5																																												924				884																																																																																
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3	-	T														40														40				269											324				385	36				15	260	43	17	49	17	311	132	140	132	1043	1003	195	155	13	204																																																												
-	3,6																																																											1098				1058																																																																	
4	-																																																											1127				1087																																																																	
5,5	5	Z																																40											40				324											379				440	36				15	260	43	17	49	17	331	132	140	132	979	939	195	155	13	211																																													
-	-																																																																										1034				994																																																		
7,5	6,8																																																																										1072				1032																																																		
-	10	A																																															40											40				324											379				440	36				15	260	43	17	49	17	361	132	140	132	1017	977	195	155	13	218																														
-	-																																																																																									1153				1113																																			
11	-																																																																																									1197				1157																																			
-	5	Z																																																														40											40				379											434				495	36				15	260	43	17	49	17	331	132	140	132	1127	1087	195	155	13	225															
5,5	-																																																																																																								1208				1168																				
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-	-	on request																																																																													40											40				434											489				550	36				15	260	43	17	49	17	361	132	140	132	1229	1212	195	155	13	235
11	-																																																																																																																							1263				1223					
15	13,5																																																																																																																							1307				1267					
-	15	on request		40	40				489	544	605	36	15	260	43		17	49	17			331	132	140																																																																						132											1314				1267											195				155	13				235
7,5	6,8																					1337																																																																																			1297																								
-	10																					1371																																																																																			1331																								
18,5	15	on request	40			40			544	599	660									36	15	260			43	17	49	17	361		132	140	132			1407	1360	195																																																																			155				13																				235
-	-																												1441							1401																																																																																													
7,5	-																												1475							1435																																																																																													
-	10	on request					40	40	544	599	660																		36						15	260	43		17	49	17	361	132	140		132	1509	1469			195	155	13																																																																												235
11	-																																									1543					1503																																																																																		
15	13,5																																									1577					1537																																																																																		
18,5	15	on request							40	40	544					599														660												36					15	260		43				17	49	17	361	132	140		132	1611	1571			195	155	13																																																													235
-	-																																																								1645					1605																																																																			
-	17,5																																																								1679					1639																																																																			

Dimensions of the pump

size	IP 54	EExe II T3	torque of the magnetic coupling	DN _A	DN _E	a	a ₁	a ₂	b	c	D ₂	e	e ₁	e ₂	e ₃	f	h ₁	h ₂	h ₃	m ₁ *	m ₂ *	n ₁	n ₂	s	weight of the pump				
	kW	kW		mm																				abt. kg					
5101	3	-	T	50	50	175	253	315	45	17	260	65	18	57	19	318	160	165	160	215	170	15	808	774	200				
	4	3,6	W																				818	781					
	5,5	5	Z																				862	820					
	7,5	6,8	A																				900	858					
5102	-	5	Z			250	328	390								338							937	895					
	5,5	-	A																							235			
	7,5	6,8	-																								975	933	
	11	10	C																								1056	1114	
5103	-	13,5	D			325	403	465															368	1100			1058		
	-	15	-																							254			
	-	6,8	A																									1107	1058
	7,5	-	C																									1050	1008
5104	-	10	D			400	478	540															368	1131			1089		
	11	-	-																							315			
	15	13,5	E																									1175	1133
	18,5	15	-																									1182	1133
5105	-	10	D			475	553	615															434	1206			1164		
	11	-	-																							366			
	15	13,5	-																									1250	1208
	18,5	15	-																									1257	1208
5106	-	17,5	-			550	628	690															434	1295			1246		
	22	-	-																							378			
	-	24	-																									1333	1284
	30	-	-																									1347	1305
5107	15	-	-			625	703	765															464	1391			1349		
	18,5	15	-																							389			
	-	17,5	-																									1397	1349
	22	-	-																									1435	1387
5108	-	24	-			700	778	840															434	1474			1425		
	30	-	-																							401			
	-	30	-																									1466	1424
	37	-	-																									1472	1424
5108	-	30	-			700	778	840															464	1510			1462		
	37	-	-																							389			
	-	36	-																									1549	1500
	45	-	-																									1588	1527
5108	-	44	-			700	778	840															464	1585			1537		
	22	-	-																							401			
	-	24	-																									1541	1499
	30	-	-																									1547	1499
5108	-	36	-	700	778	840	464	1624	1575																				
	37	-	-							389																			
	-	36	-								1663	1602																	
	45	-	-								1660	1610																	
5108	-	44	-	700	778	840	464	1696	1650																				
	22	-	-							401																			
	-	24	-								1738	1677																	
	30	-	-								1763	1702																	
5108	-	36	-	700	778	840	464	1813	1759																				
	37	-	-							389																			
	-	36	-								1813	1759																	
	45	-	-								1813	1759																	

Dimensions of the pump

size	IP 54	EEExe II T3	torque of the magnetic coupling	DN _A	DN _E	a	a ₁	a ₂	b	c	D ₂	e	e ₁	e ₂	e ₃	f	h ₁	h ₂	h ₃	m ₁ *	m ₂ *	n ₁	n ₂	s	weight of the pump																																																																																																																																																
	kW	kW																							mm																				abt. kg																																																																																																																												
6101	5,5	5	A	65	65	196	286	353	50	20	315	63	19	65	20	413	180	180	180	245	195	15	969	928	298																																																																																																																																																
	7,5	6,8																					1007	966																																																																																																																																																	
	-	10																					1089	1047																																																																																																																																																	
6102	11	-	B			65	65	286								376							443	50		20	315	63	19	65	20	443	180	180	180	245	195	15	1133	1091	320																																																																																																																																
	-	13,5																																					1098	1056																																																																																																																																	
	7,5	-																																					1179	1137																																																																																																																																	
6103	-	10	A					65								65							376									466							533	50		20	315	63	19	65	20	413	180	180	180	245	195	15	1223	1181	335																																																																																																																
	-	10																																																					1229	1181																																																																																																																	
	11	-																																																					1267	1219																																																																																																																	
6104	-	13,5	E																				65									65							466									556							623	50		20	315	63	19	65	20	443	180	180	180	245	195	15	1313	1271	349																																																																																																
	18,5	15																																																																					1319	1271																																																																																																	
	-	17,5																																																																					1357	1309																																																																																																	
6105	22	-	F																																				65									65							556									646							713	50		20	315	63	19	65	20	443	180	180	180	245	195	15	1403	1361	368																																																																																
	-	24																																																																																					1409	1361																																																																																	
	30	-																																																																																					1447	1399																																																																																	
6106	-	30	H																																																				65									65							646									736							803	50		20	315	63	19	65	20	473	180	180	180	245	195	15	1486	1437	382																																																																
	37	-																																																																																																					1525	1464																																																																	
	-	36																																																																																																					1550	1489																																																																	
6107	-	17,5	E																																																																				65									65							556									646							713	50		20	315	63	19	65	20	443	180	180	180	245	195	15	1537	1489	397																																																
	22	-																																																																																																																					1576	1527																																																	
	-	24																																																																																																																					1615	1554																																																	
6108	30	-	F																																																																																				65									65							646									736							803	50		20	315	63	19	65	20	473	180	180	180	245	195	15	1640	1579	415																																
	-	30																																																																																																																																					1690	1636																																	
	37	-																																																																																																																																					1628	1579																																	
6109	-	36	E																																																																																																				65									65							736									826							893	50		20	315	63	19	65	20	443	180	180	180	245	195	15	1666	1617	382																
	45	-																																																																																																																																																					1705	1644																	
	-	44																																																																																																																																																					1730	1669																	
6110	-	44	H																																																																																																																				65									65							826									916							983	50		20	315	63	19	65	20	473	180	180	180	245	195	15	1780	1726	397
	55	-																																																																																																																																																																					1756	1707	
	-	24																																																																																																																																																																					1795	1734	
6111	-	30	F	65	65				826	916	983	50	20	315	63		19	65	20	443	180	180			180																																																																																																														245									195							15									1820							1759	415	
	37	-																																																																																																																																																														1870							1816		
	-	30																																																																																																																																																														1846							1797		
6112	-	36	E			65	65		826	916	983									50				20		315	63	19	65	20	473		180	180	180	245	195	15			1885																																																																																																																							1824							382		
	45	-																																							1910																																																																																																																							1849									
	-	44																																							1960																																																																																																																							1906									

Data regarding pump size - order hints

series + size	hydraulics + bearings	shaft sealing + magnetic coupling	material design	casing seal
	A• first hydraulics •F two liquid surrounded sleeve bearing	1 •• coupling system 1 2 •• coupling system 2 3 •• coupling system 3 4 •• coupling system 4 isolation shroud of: • A • Hastelloy C (2.4610) torque of desynchronization [Nm] for system 12 / 3 4 ••A 78 69 ••B 83 ••C 100 ••D 112 ••E 158 133 ••F 179 178 ••H 212 ••J 255 ••K 14 293 ••L 330 ••M 380 ••P 23 ••T 33 ••V 38 ••W 41 ••Z 54	1A main parts of spheroidal cast iron, vane wheel impeller of brass 1B main parts of spheroidal cast iron, vane wheel impeller of chrome steel 1F main parts of spheroidal cast iron, vane wheel impeller of PAEK 4B stainless steel 4F stainless steel vane wheel impeller PAEK	4 soft PTFE and PTFE O-ring at isolation shroud
AEH	AF	1201 1AK 1202 1AK 1203 1AK, 1AP 1204 1AK, 1AP, 1AV 1205 1AP, 1AV 1206 1AP, 1AV 1207 1AP, 1AV 1208 1AV 3101 and 3601 2AT 3102 and 3602 2AT 3103 and 3603 2AT, 2AW 3104 and 3604 2AT, 2AW, 2AZ 3105 and 3605 2AT, 2AW, 2AZ, 2AA 3106 and 3606 2AT, 2AW, 2AZ, 2AA 3107 and 3607 2AW, 2AZ, 2AA 3108 and 3608 2AZ, 2AA, 2AC 4101 3AT, 3AW 4102 3AT, 3AW, 3AZ 4103 3AT, 3AW, 3AZ, 3AA 4104 3AZ, 3AA, 3AC 4105 3AZ, 3AA, 3AC, 3AD 4106 3AA, 3AC, 3AD, 3AE 4107 3AC, 3AD, 3AE 4108 3AC, 3AD, 3AE 5101 3AT, 3AW, 3AZ, 3AA 5102 3AZ, 3AA, 3AC, 3AD 5103 3AA, 3AC, 3AD, 3AE 5104 3AD, 3AE, 3AF 5105 4AA, 4AB, 4AE, 4AF, 4AH 5106 4AE, 4AF, 4AH 5107 4AE, 4AF, 4AH, 4AJ 5108 4AE, 4AF, 4AH, 4AJ, 4AK; 4AL 6101 4AA, 4AB, 4AE 6102 4AA, 4AB, 4AE 6103 4AE, 4AF, 4AH 6104 4AE, 4AF, 4AH, 4AJ 6105 4AE, 4AF, 4AH, 4AJ, 4AK; 4AL 6106 4AF, 4AH, 4AJ, 4AK; 4AL, 4AM 6107 4AF, 4AH, 4AJ, 4AK; 4AL, 4AM 6108 4AH, 4AJ, 4AK; 4AL, 4AM	alternatively 1A 1B 1F 4B 4F	4

Possible pump-magnetic coupling-motor combinations please take from the dimensions table on the page 7 - 11.

Order hints

selection table - 3-phase AC motors, speed: = 1450 rpm				
size	IP 54 EEx e II T3 (Ex e G3)		IP 54 and IP 54 EEx d II T3 (TEF)	
	nominal power [kW]	SIHI designation	nominal power [kW]	SIHI designation
80A	0,55	FK	0,55	FB
80B	0,75	GK	0,75	GB
90 S	1,0	HK	1,1	HB
90 L	1,35	JK	1,5	JB
100 L 1	2,0	KK	2,2	KB
100 L 2	2,5	LK	3,0	LB
112 M	3,6	MK	4,0	MB
132 S	5,0	NK	5,5	NB
132 M	6,8	PK	7,5	PB
160 M	10,0	SK	11,0	SB
160 L	13,5	UK	15,0	UB
180 M	15,0	VK	18,5	VB
180 L	17,5	WK	22,0	WB
200 L	24,0	XK	30,0	XB
225 S	30,0	ZK	37,0	ZB
225 M	36,0	AK	45,0	AB
250 M	44,0	BK	55,0	BB

Example of order

A two stage pump of size 3100 in material design 4B, equipped with a T-magnet and a 1,35 kW motor, protection type EEx e II T3 has the complete order number:

AEH- 3102 AF 2AT 4B 4 JK

On delivery, the point (•) in the fourth place of the type designation is replaced by a letter in the factory.

Any changes in the interest of the technical development reserved.

Sterling SIHI GmbH

Lindenstraße 170, D-25524 Itzehoe, Germany, Telephone +49 (0)48 21 / 7 71 - 01, Fax +49 (0)48 21 / 7 71 - 274