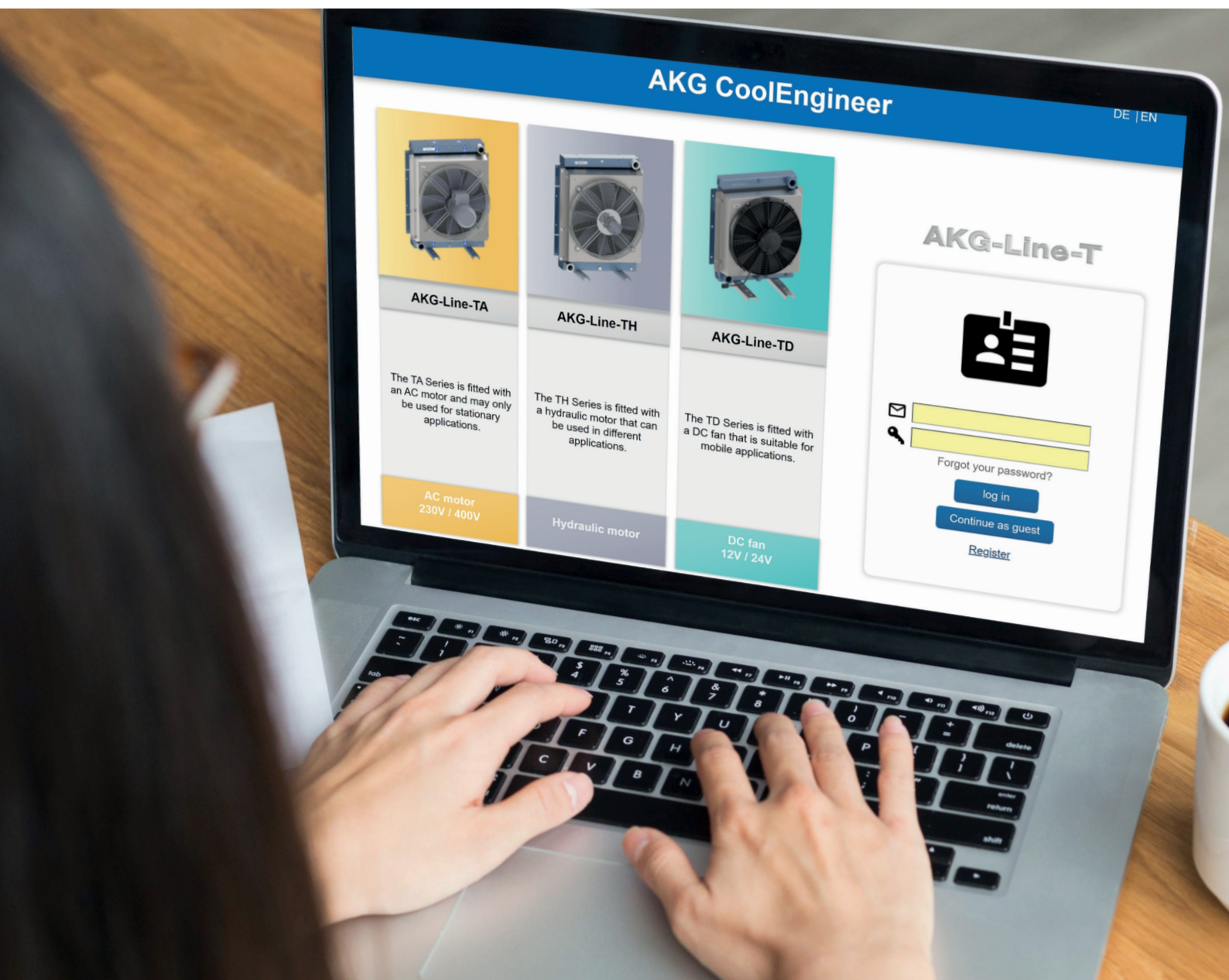


# DIGITAL TOOLS FOR COOLING SOLUTIONS

## AKG-Line-T



## OIL/AIR COOLING SYSTEMS WITH THREE-PHASE DRIVE

**AKG offers the right solution for every cooling application with low total operating costs and optimized product carbon footprint!**

Modern hydraulic and transmission systems in stationary and mobile applications require oil for power transmission, lubrication, cleaning, and cooling.

The heat generated by these systems needs to be cooled in order to ensure reliable and durable operation. The oil flowing through these systems collects the heat and dissipates it to the surrounding air. As the systems operate under high pressure, the oil coolers need to be robust to withstand high operating pressures. Our flexible product portfolio of AKG-Line-T includes a wide range of coolers, allowing us to provide you with the ideal solution for your specific requirements.



**With our design software AKG CoolEngineer, you can find the perfect cooler for your requirements.**

### FEATURES OF AKG-LINE-T

The new standard series AKG-Line-T for industrial high-performance cooling systems made of aluminum impresses with reliable product quality at competitive prices based on German engineering.

The fan drive is carried out through three-phase (TA/TLA series), direct current (TD/TLD series), and hydraulic motors (TH/TLH series).

All AKG solutions are developed using state-of-the-art technology, produced according to the highest quality standards, and extensively tested in the company's in-house test center.

AKG offers various designs and types of oil coolers as follows:

- **AKG plate coolers** (TA, TH and TD series)
- **AKG LightWeight coolers** (TLA, TLH and TLD series)



**The AKG-Line-T series offers optimal cooling performance, manufactured from durable long-life aluminum materials. We prioritize 100% aluminum and excellent recyclability. The cooling fins are designed to withstand extreme contamination while maintaining the cooling performance comparable to high-performance fins.**

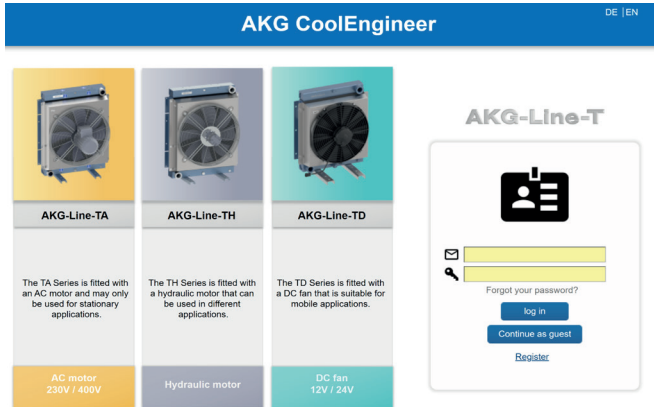
### ADVANTAGES OF THE PLATE COOLER

- Operating pressure up to 26 bar
- Highly durable construction for proven reliability in extreme operating conditions
- High pressure and temperature resistance in extreme operating conditions
- Equipped with AKG Double-Life hollow profile as standard to reduce stress in the cooler and increase lifespan by a factor of 3 to 5

### ADVANTAGES OF THE LIGHTWEIGHT COOLER

- Approximately 30% weight reduction compared to conventional plate coolers, advantageous for mobile applications
- Operating pressure up to 16 bar
- Unique patented technology for extremely demanding applications
- Efficient high-performance product with an optimal ratio of space requirement to cooling capacity

## AKG CoolEngineer



Our **AKG CoolEngineer** is your tool to find the perfect cooler for your application. With simple steps, you can configure your cooler and customize it to meet your specific requirements. Start by selecting the appropriate series and instantly receive a list of available coolers.

Refine your search with additional criteria such as fan motorization, cooling capacity, and size. Our calculation tool will then display the coolers that meet your requirements exactly.

*Save time and effort in searching for the perfect cooler and utilize the AKG CoolEngineer!*

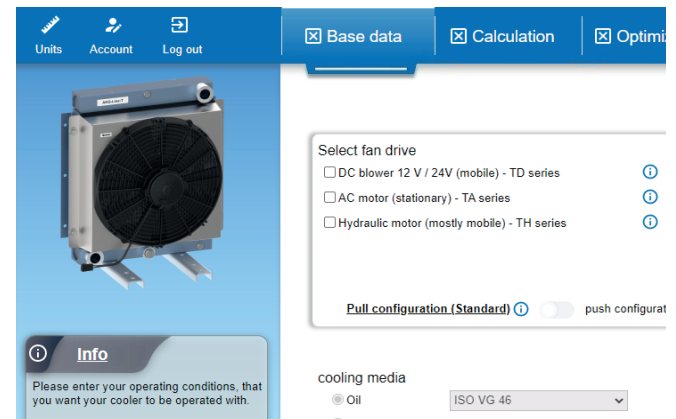
Visit our website at:

<https://www.akg-service.net/AKG-CoolEngineer/>

or simply use the QR code provided.

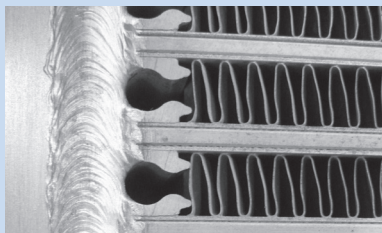


*Experience our AKG CoolEngineer with all its features!*



## AKG-Line-T

### FLEXIBLE AKG HOLLOW PROFILE



The flexible AKG hollow profile is used in AKG line coolers to reduce local stress peaks. The strength and service life of heat exchangers are significantly increased.

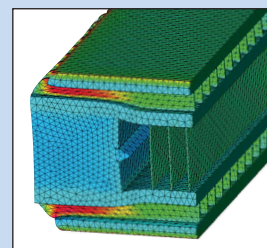
### AKG COOLING AIR FINS



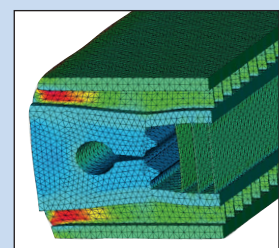
Anti-clogging cooling air fins that deliver the same level of performance as high-performance fins, ensuring optimal cooling performance throughout the entire lifecycle of the system.

### AKG HOLLOW PROFILE FEATURES

- **Reduction of material stresses:**  
Strength calculations show that maximum stresses are reduced by a factor of 2 with the hollow profile
- **Increase in life:**  
Extensive bench testing has shown that service life increases by a factor of 3 - 5



with standard profile



with hollow profile

## TECHNICAL DATA - TA/TLA SERIES

Model size	Motor voltage (V)	Power 50Hz (kW)	Nominal fan speed (rpm)	Fan diameter	Sound pressure level (dB(A), 1m)	Filling volume	Maximum operating pressure (bar)	Total weight (kg)
TA10	230/400	0,18	3000	234	77	1,8	26	17
TA13	230/400	0,25	1500	364	63	2,7	26	24
TA17	230/400	0,37	1500	364	63	4,8	26	29
TA25	230/400	0,37	1500	435	66	5,8	26	34
TA45	230/400	0,55	1500	493	73	8,8	26	47
TA75	230/400	0,75	1500	660	78	15,2	26	76
TAL90	230/400	0,75	1000	630	69	19,9	26	89
TA90	230/400	2,2	1500	630	78	19,9	26	95
TA135	230/400	2,2	1000	900	79	22,5	17	174
TA190	400/690	5,5	1500	900	90	27,5	17	150
TA225	400/690	5,5	1500	950	90	38,7	17	207
TA270	400/690	11	1500	1000	88	45,5	17	349
TLA10	230/400	0,18	3000	234	77	2	16	12,7
TLA13	230/400	0,25	1500	364	63	3,1	16	17,7
TLA25	230/400	0,37	1500	435	66	3,6	16	20,7

TA10/TLA10-TLA25 / T90: B14 kleiner Flansch / TA135-TA270 B5

## TECHNICAL DATA - TH/TLH SERIES

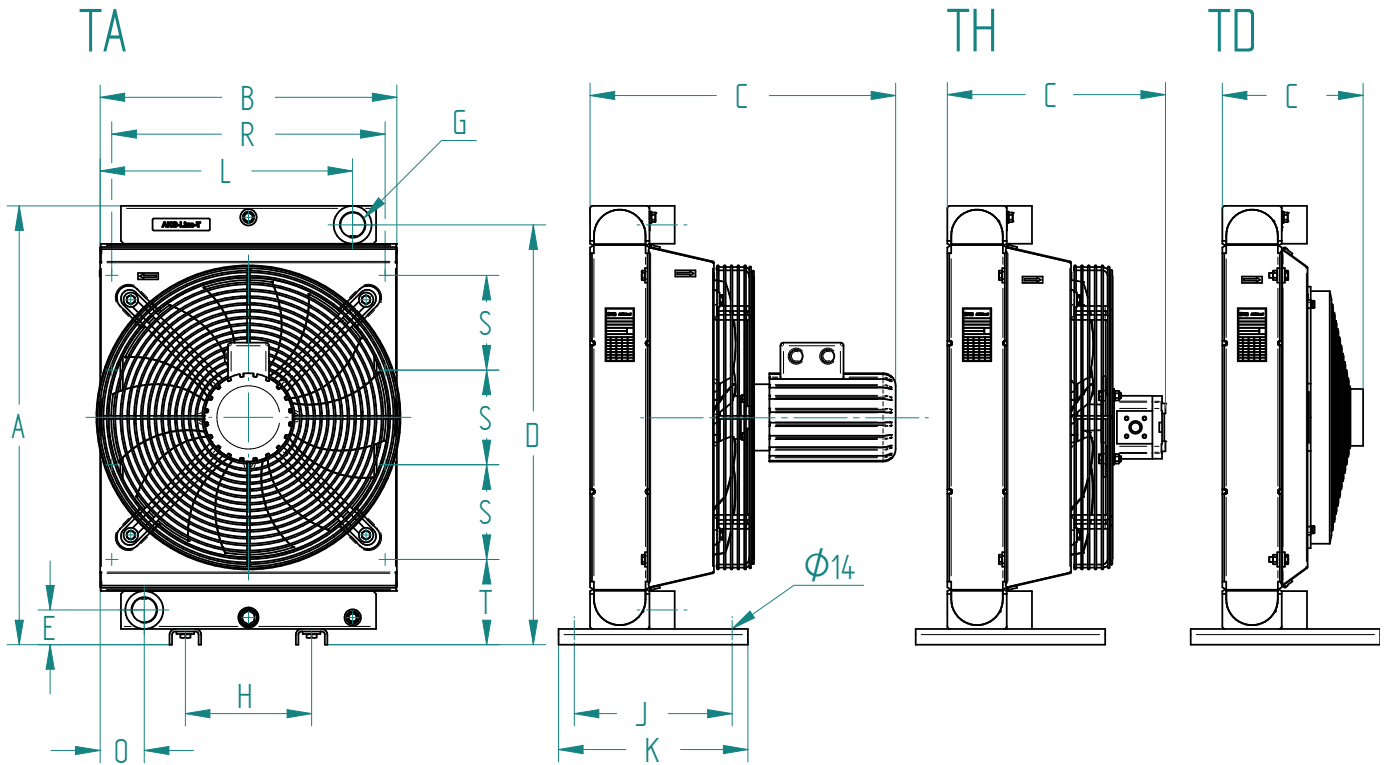
Model size	Motor volume (cm <sup>3</sup> )	max. permissible motor pressure (bar)	Nominal fan speed (rpm)	Fan diameter	Sound pressure level (dB(A), 1m)	Filling volume	Maximum operating pressure (bar)	Total weight (kg)
TH10	11	250	3000	234	77	1,8	26	15
TH13	11	250	1500	364	63	2,7	26	20
TH17	11	250	1500	364	63	4,8	26	25
TH25	11	250	1500	435	66	5,8	26	30
TH45	11	250	1500	493	73	8,8	26	42
TH75	11	250	1500	660	78	15,2	26	65
TH90	11	250	1000	630	78	19,9	26	78
TH135	21	200	1500	900	88	19,9	26	140
TH190	21	200	1500	900	90	22,5	17	146
TH225	21	200	1500	950	90	27,5	17	203
TH270	21	200	1500	1000	88	38,7	17	241
TLH10	11	250	3000	234	77	2	16	10
TLH13	11	250	1500	364	63	3,1	16	14,1
TLH25	11	250	1500	435	63	3,6	16	16,8

## TECHNICAL DATA - TD/TLD SERIES

Model size	Motor voltage (V)	Power consumption (A)	Nominal fan speed (rpm)	Fan diameter	Sound pressure level (dB(A), 1m)	Filling volume	Maximum operating pressure (bar)	Total weight (kg)
TD10	12/24	9,4/5,3	---	255	76	1,8	26	17
TD13	12/24	16,5/7,9	---	350	83	2,7	26	24
TD17	12/24	16,5/7,9	---	350	83	4,8	26	28,4
TD25	12/24	18,7/8,7	---	385	81	5,8	26	33,3
TD45	12/24	2x(16,1/8,5)	---	2x305	84	8,8	26	46,8
TLD2	12/24	4,2/2,8	---	130	71	0,8	16	2,7
TLD4	12/24	5,3/2,4	---	167	74	1,1	16	3,9
TLD10	12/24	9,4/5,3	---	255	76	2	16	6,4
TLD13	12/24	16,5/7,9	---	350	83	3,1	16	10,6
TLD25	12/24	18,7/8,7	---	385	83	3,6	16	11,7

All data related to the nominal fan speed

COOLER DIMENSION T10 - T270



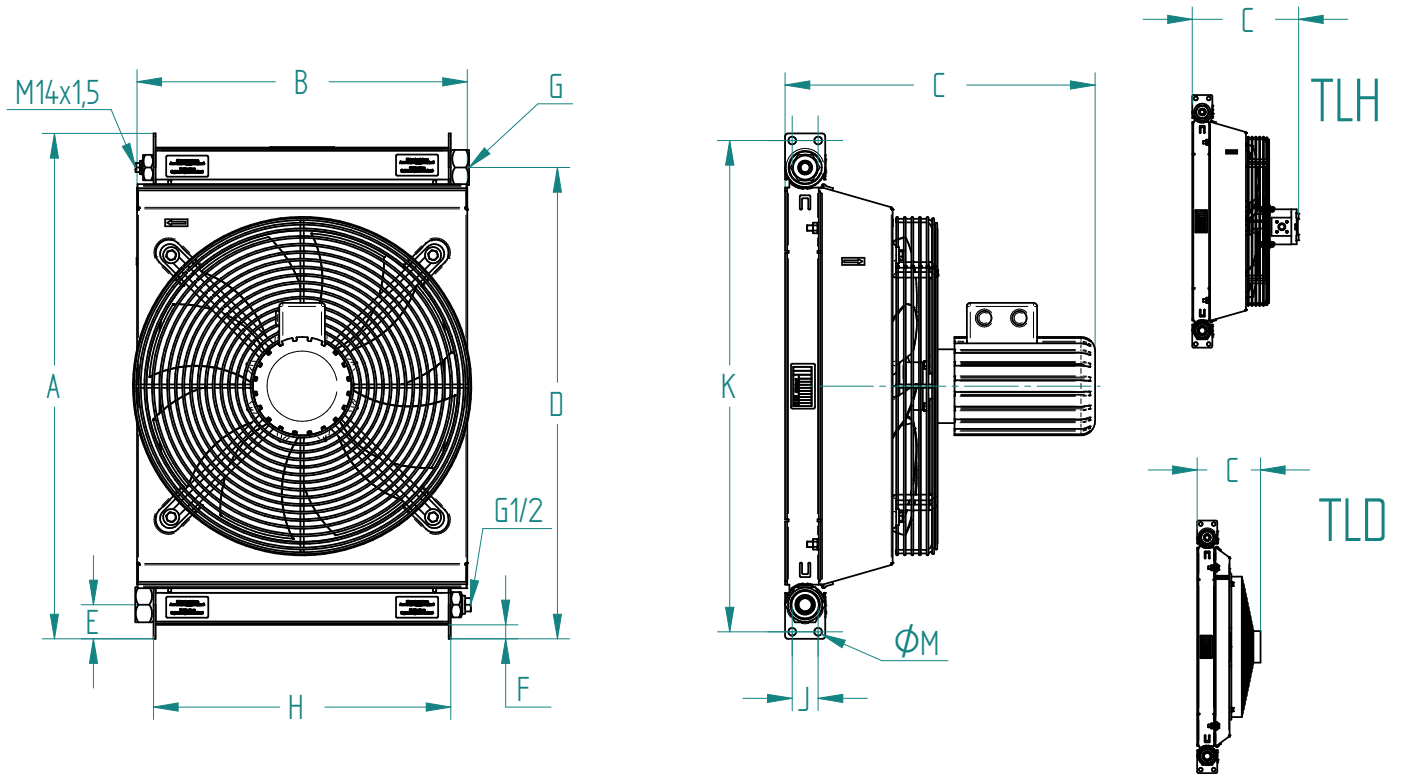
T135-T270 with motor bracket

Bezeichnung / Type	Kühlleistung / Heat Rejection (kW)	A	B	C			D	E	G	H	J	K	L	O	R	S	T
				TA	TH	TD											
T10	3-11	425	343	395	288	160	400	50	G1	150	200 / 250	300	283	60	318	200	125
T13	8-15	525	454	441	314	224	500	50	G1	200	200 / 250	300	387	67	429	150	125
T17	10-20	545	454	472	345	258	515	55	G1 1/4	200	200 / 250	300	384	70	429	150	135
T25	15-27	695	470	484	346	223	665	55	G1 1/4	200	200 / 250	300	397	67	433	150	135
T45	20-47	795	612	482	340	239	765	55	G1 1/4	310	200 / 250	300	541	71	587	200	110
T75	30-80	965	707	577	428	-	930	60	G1 1/2	310	250 / 350	400	589	119	663	225	158
T90	40-110	965	732	640	441	-	930	60	G1 1/2	400	250 / 350	400	646	86	698	175	145
T135	60-140	1302	983	704	482	-	1248	63	SAE3	440	596	637	126	857	951	175	218
T190	90-200	1301	983	733	501	-	1246	64	SAE3	440	596	637	126	857	951	175	218
T225	100-230	1358	1133	803	570	-	1303	68	SAE3	525	775	825	155	977	1107	255	175
T270	120-280	1458	1256	864	533	-	1403	68	SAE3	525	765	810	115	1141	1231	200	235

TA: 230V/400V (400V/690V)  
 TH: Hydromotor / Hydraulic Motor  
 TD: 12V/24V

(Alle Maße in mm / all dimensions in mm)

COOLER DIMENSION TL2 - TL25



Bezeichnung / Type	Kühlleistung / Heat Rejection (kW)	A	B	C			D	E	F	G	H	I	J	K
				TLA	TLH	TLD								
TL2	1-3	319	202	-	-	145	270,5	48,5	20	G1	162	50	37	299
TL4	2-5	369	242	-	-	153	320,5	48,5	20	G1	205,5	50	37	349
TL10	3-11	469	342	384	276	148	420,5	48,5	20	G1	307	50	37	449
TL13	8-15	569	457	411	284	212	520,5	48,5	20	G1	423	50	37	549
TL25	15-27	719	470	441	303	180	670,5	48,5	20	G1 1/4	423	50	37	699

TLA: 230V/400V (400V/690V)  
 TLH: Hydromotor / Hydraulic Motor  
 TLD: 12V/24V

(Alle Maße in mm / all dimensions in mm)

## AKG Thermotechnik International GmbH & Co. KG

Am Hohlen Weg 31

D-34369 Hofgeismar • Germany

Phone + 49 5671 - 8 83 - 0

[info@akg-group.com](mailto:info@akg-group.com)

[www.akg-group.com](http://www.akg-group.com)



## Sustainable Cooling Solutions

We at AKG are aware that as a company, we play an important role in supporting decarbonization and promoting clean energy for a sustainable future.

Our wide range of products includes sustainable cooling solutions for a variety of industries. Each cooler is manufactured to the highest standards and consists of modern components to ensure its contribution to a sustainable environment.



## AKG GROUP – A STRONG GLOBAL COMPANY

*AKG is a leading global supplier of high-performance coolers and heat exchangers, providing custom system solutions with the highest quality standards.*

*The AKG Verwaltungsgesellschaft (holding company) in Hofgeismar directs the operation of the AKG Group, whose 3,150 employees produce over 2,5 million heat exchangers in various designs each year. To achieve this, 11 business units in Germany, France, Latvia, Turkey, India, USA, Brazil and China as well as 14 sales companies are in operation twenty-four hours per day.*

*Development and production of high-performance heat exchangers and complete cooling modules for application in construction equipment, compressed air equipment, industrial coolers, agricultural and forestry equipment, vehicle construction, railroad vehicles, aviation, household appliances and special applications.*

*For over 100 years, AKG's heat exchangers have stood for innovative solutions as well as the highest standard of engineering and manufacturing expertise.*