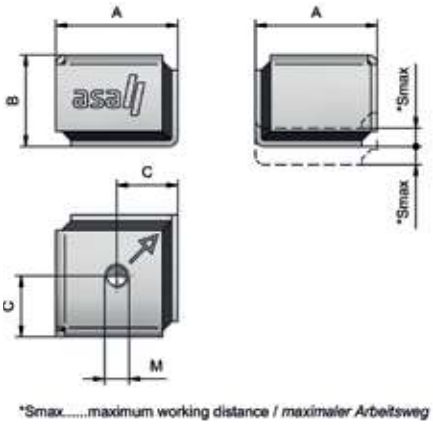
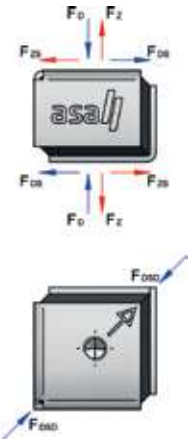
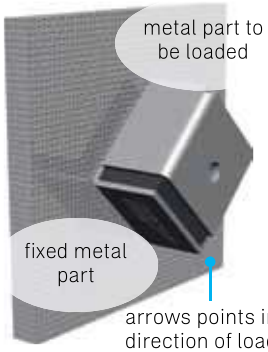
Accessories
rubber vibration absorber, foot mounting brackets

Rubber Vibration Absorber

The asa vibration absorbers are rubber metal connected parts to absorb impact loads on components to protect them and to extend the life time of the system. The patented solution is especially designed for highest shear loads. An assembly system can be checked by arrows on the metal parts, helping to optimize and raise the load capability of the vibration absorber.







- ✓ Zinc coated metal parts
- ✓ Elastomer: natural rubber
- ✓ Working temp. –30°C to +80°C

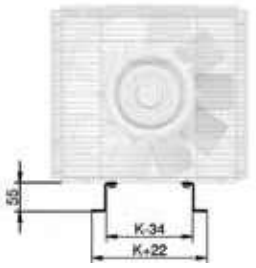
Dimensions

order number	description	A	B	C	M	Smax	weight
		[mm]	[mm]	[mm]		[mm]	[kg]
MDGQ403008IIK	40x40x30 M8	40	30	20	M8	± 3	0,127
MDGQ504510IIK	50x50x45 M10	50	45	25	M10	± 6	0,280
MDGQ755512IIK	75x75x55 M12	75	55	37,5	M12	± 8	0,659
MDGQ1007516IIK	100x100x75 M16	100	75	50	M16	± 9	1,920

Contact us for full data sheet with load capacities, maximum static loads and spring rates.

Foot Mounting

The foot mounting option is available on all rail system coolers. The optional heavy duty design is recommended for use on mobile machines and vehicles or other heavy duty applications. 1 set consists of the 2 feet brackets with mounting material



standard mounting set			heavy duty mounting set		
cooler	K_{min}	K_{max}	cooler	K_{min}	K_{max}
	[mm]	[mm]		[mm]	[mm]
TT 07	100	135	TT 07	135	135
TT 11	150	215	TT 11	135	200
TT 13	150	215	TT 13	135	200
TT 16	200	290	TT 16	135	270
TT 21	200	290	TT 21	135	270
TT 25	200	380	TT 25	135	360

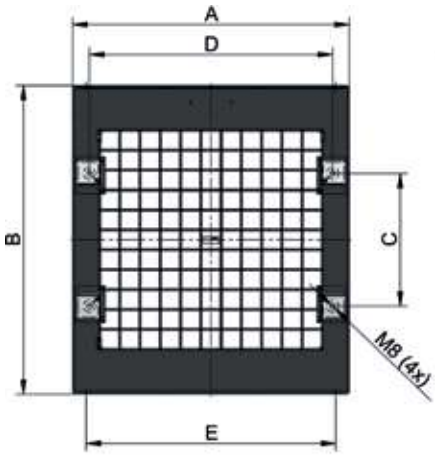
order number	description	fits on cooler type						
		TT 05	TT 07	TT 11	TT11	TT 16	TT 21	TT 25
ILLEFUSSTTK	mounting feet set TT 07 – 25	–	●	●	●	●	●	●
ILLEFUSSTTHDK	mounting feet set TT 07 – 25 (heavy duty)	–	●	●	●	●	●	●

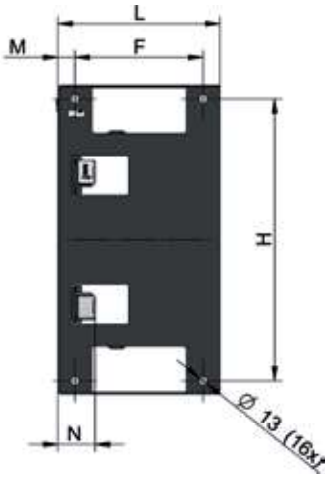
–... *not available* ●... *optional available*

Accessories
protection housing, tread plate and radiator guard

Protection Housing

The housing is a flexible, economic and easy mounting device for many assembly situations. The mechanical stress, especially at mobile applications can be reduced by the used shock absorbers between housing and cooler. The radiator side is protected by a robust grid.





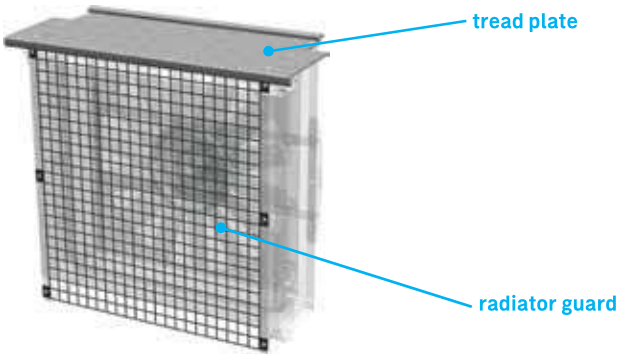
order number	description	A	B	C	D	E	F	H	L	M	N	weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
ILLEGAKTT07GT	protection housing kit TT 07 rail	334	425	172	290	300	190	385	240	20	33	5,2
ILLEGAKTT11GT	protection housing kit TT 11 rail	410	465	200	360	370	190	425	240	25	55	9,0
ILLEGAKTT16GT	protection housing kit TT 16 rail	490	590	306	436	450	210	550	260	25	55	13,4

order number	description	fits on cooler type						
		TT 05	TT 07	TT 11	TT 13	TT 16	TT 21	TT 25
ILLEGAKTT07GT	protection housing kit TT 07 rail	–	●	–	–	–	–	–
ILLEGAKTT11GT	protection housing kit TT 11 rail	–	–	●	–	–	–	–
ILLEGAKTT16GT	protection housing kit TT 16 rail	–	–	–	–	●	–	–

– … *not available* ● … *optional available*

Tread Plate / Radiator Guard

The tread plates are accessories for the asa series cooler types with side frames. The solid plates are used for applications where maintenances and servicing procedures require the cooler as a safe surface to step on. The radiator guard is a solid protection to avoid damages on the radiator air fins and oil channels.



description	description	fits on cooler type*					
		ASA 0177	ASA 0257	ASA 0367	ASA 0467	ASA 0567	ASA 0927
tread plate kit	plate, flat screws;	●	●	MW2089	○	○	○
radiator guard	grid, screws, washers;	ILLEGIT017SK	ILLEGIT025SK	ILLEGIT036SK	○	○	○

● … *optional available* ○ … *available on request* *… *DC drive versions are not compatible with these accessories*

Accessories
motor assembly kits, lifting kit (suits all standard coolers)

Motor assembly kits

With each ordered no motor cooler, a separate mounting kit can be ordered. There are three different mounting kits according to the motors size and type of drive. Check the available kits to the corresponding cooler by its motor size and motor flange on the data sheets on www.asahydraulik.com and the boss length or contact us through support@asahydraulik.com.

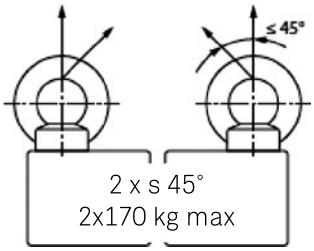
order number	description	motor size / flange / boss length
ILLESETAC10	Motor assembly kit IEC 71 - IEC 80 "AC small"	IEC 71 / B14k / 56mm
		IEC 71 / B14k / 60mm
		IEC 71 / B14k / 62mm
		IEC 80 / B14k / 55mm
		IEC 80 / B14k / 62mm
ILLESETAC20	Motor assembly kit IEC 100 - IEC 160 "AC big"	IEC 100 / B14k / 72mm
		IEC 100 / B14k / 82mm
		IEC 100 / B14k / 66,5mm
		IEC 132 / B5 / 87mm
		IEC 160 / B5 / 112mm
ILLESETH	Motor assembly kit hyrdaulic drive	1:8 cone shaft, front cover rectangular flange ø 36.47 mm (M8) / 0mm
		1:8 cone shaft, front cover rectangular flange ø 36.47 mm (M8) / 56,5mm
		1:8 cone shaft, front cover rectangular flange ø 36.47 mm (M8) / 61,5mm

Lifting Kit (suits all standard coolers)

For safe and simple handling during installation and relocation, only to be used for installation and maintenance.

using screw nut

using bolt, only

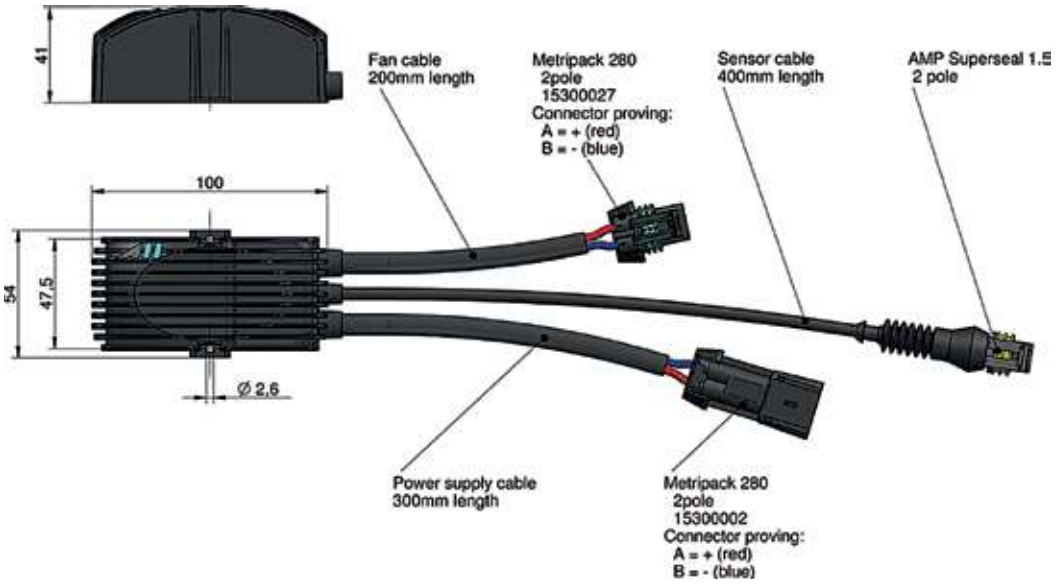


load capacity /using bolt

order number	description	delivery content
ILLZLK	Lifting kit standard coolers	one kit contains 2 ring bolts, 4 nylon washers and 2 screws

Accessories
temperature control

This system consists of a temperature sensor (ILLZTT5069K) and a control unit (12V or 24V available). The fan speed varies according to the actual oil temperature on the sensor. This reduces the noise level of the cooler system and increases the durability of the fan motor, because it is not running on the maximum speed all the time. The start up temperature of this system is 44°C and the maximum rotation of the fan is applied when the oil temperature reaches 55°C. The electro-magnetic compatibility (EMC) is tested according to CE (89/336/EC) and E (95/54/EC). Moreover the control unit (ILLZTC12-2K and ILLZTC24-2K) can also be connected with our temperature switches (IP69K switch type). This is a simple on/off mode, according to the switch temperature. The control unit benefit is the soft start curve, extending the life time of the fan motor.



- **energy saving**
- **reduced noise level**
- **EMC compatibility**
- **IP 69K protection to sensor/switch**

Technical Data

order number	description	max. power fan motor	max. current fan	protection	weight	supply
		[W]	[A]		[kg]	DC
ILLZTC12-2K	temperature control 12V DC	310	21 (14,7V DC)	IP 67	0,25	12V (9V – 15V)
ILLZTC24-2K	temperature control 24V DC	340	12 (24V DC)	IP 67	0,25	24V (18V – 32V)

Characteristics

material:	polyamide
mounting instructions	any mounting position

Measurement input

temperature sensor	ILLZTT5069K (control range 44-55°C) page 38
temperature switch	ILLZTH5069K (set point 50°C, soft start) page 39
	ILLZTH6069K (set point 60°C, soft start) page 39
	ILLZTH9069K (set point 90°C, soft start) page 39

Ambient Conditions

ambient temperature range	–20°C to +85°C
storage temperature range	–60°C to +110°C

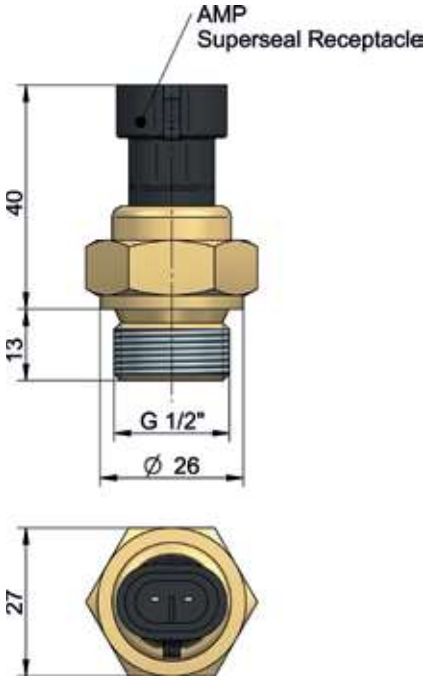
Combinations

12V and 24V DC coolers	LL 03L, LL 04, LL 06, LL08 / TT 05 – 25 rail / ASA 0177 – 0367

Please note:
The maximum start current is approximately 10% higher than the nominal current of the motor. Observe the maximum allowable supply of the fan motor. The allowed voltage range of the fan might differ from the allowed voltage range of the temperature control. In case of inverse polarity of the supply, the control unit is deactivated. After changing the polarity, the control is ready for use again. If the supply voltage exceeds 16,5V (ILLZTC12-2K) and 32V (ILLZTC24-2K) respectively, the control is switched off to protect the fan. After supply voltage is reducing below 12V or 24V, respectively, the control is activated again, automatically. The closed current is 5mA (ILLZTC12-2K) and 4mA (ILLZTC24-2K), respectively. The recommended fuse is fast acting 25A (ILLZTC12-2K) and 16A (ILLZTC24-2K), respectively. Due to the high currents (21A at the ILLZTC12-2K), the dimension of the electrical wires must be appropriate and in case of a luster terminal it has to be tightened properly.

Accessories
temperature sensor

The temperature sensor requires a control unit for the control system which is available in 12V (ILLZTC12-2K) and 24V (ILLZTC24-2K). The fan speed varies according to the actual oil temperature on the sensor. This reduces the noise level of the cooler system and increases the durability of the fan motor, because it is not running at maximum speed all the time. The start up temperature of this system is 44°C and the maximum rotation of the fan is applied when the oil temperature reaches 55°C.



Temperature Control

- NTC sensing
- IP 69K protection
- compact design

Technical Data

order number	description	connection	protection	weight
				[kg]
ILLZTT5069K	temperature sensor BSP ½“	AMP superseal 1.5	IP 69K	0,09

Characteristics

screw part material	brass
mounting instructions	any mounting position
maximum tightening torque	50Nm

Measurement Output

connection	AMP superseal 1.5

Ambient Conditions

oil temperature range	–20°C to +100°C
ambient temperature range	–20°C to +85°C
storage temperature range	–60°C to 110°C

Required Accessories

temperature control unit 12V DC	ILLZTC12-2K (page 43)
temperature control unit 24V DC	ILLZTC24-2K (page 43)

Combinations

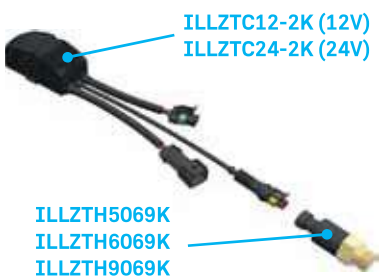
12V and 24V DC coolers	LL 03L, LL 04, LL 06, LL08 / TT 05 – 25 rail / ASA 0177 – 0367

Accessories
temperature switches

According to the cooler type and size, our temperature switches fit on all coolers and connectors with BSP ½“ threads. Please contact us for the compatibility of the products. IP69K switch types (ILLZTH5069K, ILLZTH6069K and ILLZTH9069K) work in combination with our temperature control units ILLZTC12-2K (12V) and also with ILLZTC24-2K (24V). This is a simple on/off mode, according to the switch temperature. The control unit benefit is the soft start curve, extending the life time of the fan motor.

On request we offer various other bi-metal temperature switches with different temperature settings, protection classes and connection makes.

Temperature Control



Protection IP69k

Protection IP65

Technical Data

order number	description	connection	protection	switch temperature	differential	weight
				[°C]	[°C]	[kg]
ILLZTH5069K	temperature switch 50°C	AMP superseal 1,5	IP 69K	50 ± 5	10 ± 5	0,10
ILLZTH6069K	temperature switch 60°C	AMP superseal 1,5	IP 69K	60 ± 5	10 ± 5	0,10
ILLZTH9069K	temperature switch 90°C	AMP superseal 1,5	IP 69K	90 ± 5	10 ± 5	0,10
ILLZTH4765K	temperature switch 50°C	ISO 4400	IP 65	50 ± 5	10 ± 5	0,09
ILLZTH6065K	temperature switch 60°C	ISO 4400	IP 65	60 ± 5	10 ± 5	0,09

Characteristics

screw part material	brass
mounting	any position
max. tightening torque	40Nm
number of cycles	100.000
counter connector	included

Ambient Conditions

oil temperature range	–20°C to +100°C
ambient temperature range	–20°C to +80°C
storage temperature range	–60°C to 110°C

Combinations

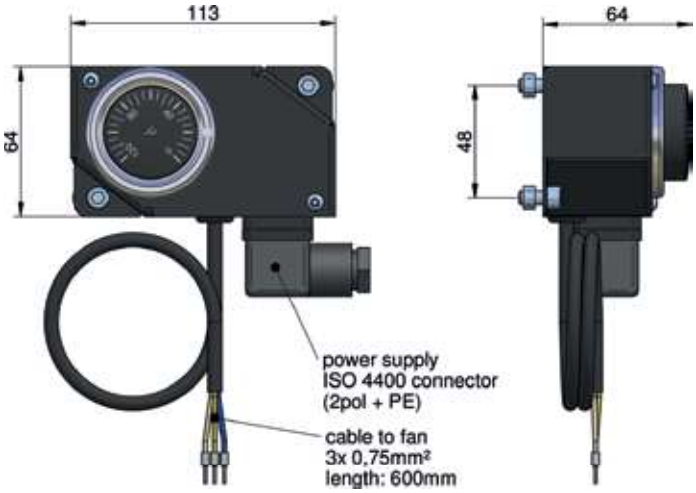
all coolers and connectors with BSP ½“ threads

Measurement Output

contact	N.O. (normal open)
minimum current	200mA
maximum current	12V AC: 10A
	24V AC: 10A
	120V AC: 12A
	230V AC: 10A
Use power relay for switching!	

Accessories
temperature control AC

The AC temperature control is a system with a thermostat, which is non oil touch connected to the rail surface on the cooler. The setting of the switch temperature can be changed by rotating the button on the top of the device. The wiring to the fan must be individually completed by the end customer.



Technical Data

order number	description	switch control range	protection	weight
		[°C]		[kg]
ILLZTCACK	temperature control 115V/230V AC	–30 / +120	IP 40	0,56

Characteristics

material housing	steel sheet metal, powder coated
mounting instructions	any mounting position

Operation

switch control range	–30/+120°C
contacts rating	C.1–10(2,5)A/250V~
	C.2–6(2,5)A/250V~

Ambient Conditions

max. head temperature	+85°C
max. bulb temperature	+150°C
storage temperature range	–15°C to +55°C

Please note:

- The reference room temperature for the setting is 20°C.
- superficial current: PTI 250
- type of action (ref. EN60730-1): 2B

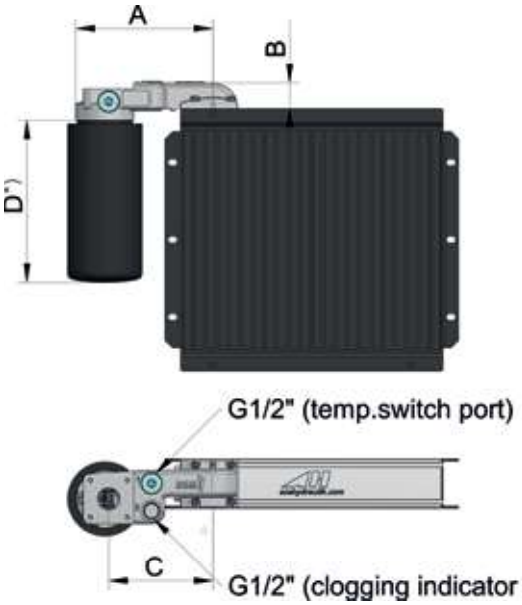
Overview / Combinations

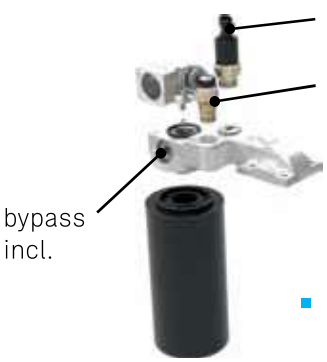
asa electronics	LL01	LL02	LLO3L	LLO3	LL04	LL06	LL08	TT05	TT07-25	ASA0177	ASA0257	ASA0367	ASA0467–0927
temperature control ILLZTT5069K + ILLZTC12-2K or 24-2K	–	–	•	•	•	•	•	•	•	•	•	•	–
temperature switch ILLZTH5069K temperature switch ILLZTH6069K temperature switch ILLZTH9069K	–	•	•	•	•	•	•	•	•	•	•	•	•
temperature switch ILLZTH4765K temperature switch ILLZTH6056K	•	•	•	•	•	•	•	•	•	•	•	•	•
temperature control AC ILLZTCACK	–	–	–	–	–	–	–	–	•	–	–	–	–

• … *optional available* – … *combination not available*

Accessories
System for Rail Series

The H-Set is an optional system to integrate another hydraulic set to the asa rail system. The H-Set currently offers 2 sizes of kits to mount a spin on filter to the cooler application. This is a very compact and cost efficient integration. This system can also be combined with various other filters or the shown configurations. Contact us for further options and assistance to select the optimal product for you.





- **compact filter integration**
- **standard spin on filter**
- **compatible to whole rail series**

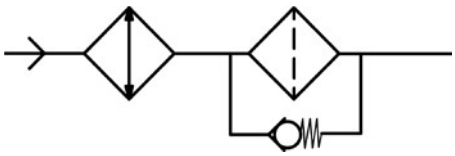
*) depending on the make of the filter element

Dimension

order number	description	filter rating	working pressure	bypass incl.	spin on port	A	B	C	D
		[µm]	[bar]	[bar]	[BSP]	[mm]	[mm]	[mm]	[mm]
ILLZRF11G2010	Spin on filter kit rail 10µm, 60lpm	10	10	2	3/4˝	177,5	33	135	146
ILLZRF11G2025	Spin on filter kit rail 25µm, 60lpm	25	10	2	3/4˝	177,5	33	135	146
ILLZRF12G2010	Spin on filter kit rail 10µm, 100lpm	10	10	2	3/4”	177,5	33	135	191
ILLZRF12G2025	Spin on filter kit rail 25µm, 100lpm	25	10	2	3/4”	177,5	33	135	191

Rail-filter Block

material:	aluminium
working temperature range:	–20°C to +100°C (oil temperature)*
Sealing to rail flange:	o-ring NBR
bypass:	incl.2 bar standard setting



Hydraulic Connection

compatible to	any rail system cooler

Application

main application	offline circuits, lubrication, cooling and filration circuits
oil flow	from cooler to filter

Options

temperature switches	ILLZTH5069K, ILLZTH4765K, ILLZTH6065K
clogging indicator / indication pressure 1,5 bar	electric: HFZVEG15 N.O. & N.C. contact optical: HFZVOG15

** ...the indicated temperature is the maximum inlet temperature for the cooler radiator. Depending on the sealings in use, the application needs appropriate checking.*