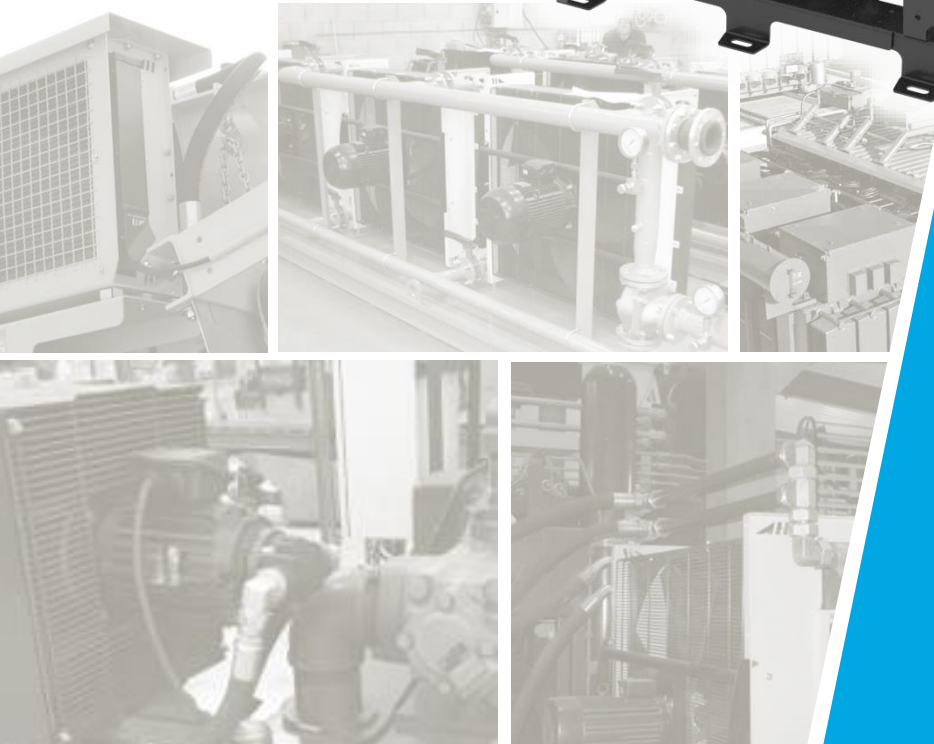




# Thermal Systems

## Fluid Controls

### Modular Cooler Unit – MCU



**be different.  
make a difference.**

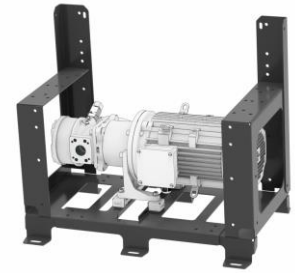
# Fluid Controls

## Air Cooled Range / Water Cooled Range



### Design

The modular cooling unit (MCU) has been developed to offer a compact offline cooling solution that combines high performance pumps and heat exchangers with an adjustable steel frame. This highly flexible system can be used to create the best solution for most offline circuits, e.g. for lubrication, cooling or filtration. The MCU comes with our gerotor generation 2 pump technology and offers 5 different displacements in combinations with the best suitable AC motors. You can choose between an air blast oil cooler or two different heat exchangers such as Shell & Tube and brazed plate heat exchangers. Please contact us to discover the huge potential of this system and select the optimal configuration for your application.



### Advantages

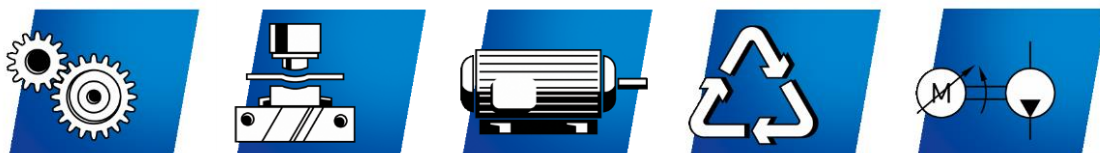
- Complete system for quick installation
- Compact design to save space.
- Robust design for durable use in heavy duty industrial fields.
- Best cooling designed with comprehensive research & development.
- Short-term availability through modular standard parts.
- The asa rail system is an additional option to the conventional SAE 1 ¼" connection on the pump outlet. The system requires a connector kit which can be turned in 4 different directions and offers an additional BSP ½" port for any monitoring or other purpose.
- Our standard range of plate heat exchangers covers a wide performance spectrum to ensure competitive pricing, high quality and short lead times.
- The other water cooled option is with shell and tube heat exchangers, which can also be used with process water to reduce clogging situations.
- High reliability

### Characteristics

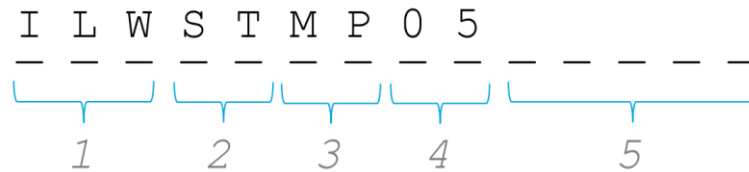
- Circulation unit with low pulsation and included cooling function
- Optional filter integration
- High performance cooling systems with ambient air or water
- Fan and pump are driven with three-phase motors
- Universally applicable to hydraulic oil, gear oil, coolant and lubrication oil circuits
- Maximum pump outlet pressure up to 10bar (relative)

### Applications

The asa modular cooling unit (MCU) is designed for low pressure offline cooling, filtration and lubrication circuits with hydraulic oil, gear oil, engine oil and lubrication oil in industrial applications.



### Order Code



#### 1 Product Category

ILL	oil/air cooling
ILW	oil/water cooling

#### 2 Product Series

TT	TT rail series
PL	plate heat exchanger series
ST	shell & tube series

#### 3 Product Series

MP	motor pump
----	------------

#### 4 Cooler Size

25	ILLTT
36	
45	
53	ILWPL
65	
70	
03	ILWST
05	

#### 5 Customized

-----	drawing no.
-------	-------------

#### Pump option:

- 20 cm<sup>3</sup>
- 32 cm<sup>3</sup>
- 40 cm<sup>3</sup>
- 60 cm<sup>3</sup>
- 80 cm<sup>3</sup>

#### Motor option:

- 1,10 kW
- 1,50 kW
- 2,20 kW
- 3,00 kW
- 4,00 kW

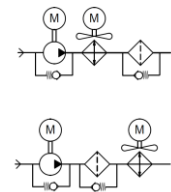
#### Standard components of adjustable frame

#### Cooler option:

- ASATT25RA...
- ASATT36RA...
  
- ILWPL45...EP
- ILWPL53...EP
- ILWPL65...EP
- ILWPL70...EP
  
- ILWST...0324...
- ILWST...0518...
- ILWST...0524...

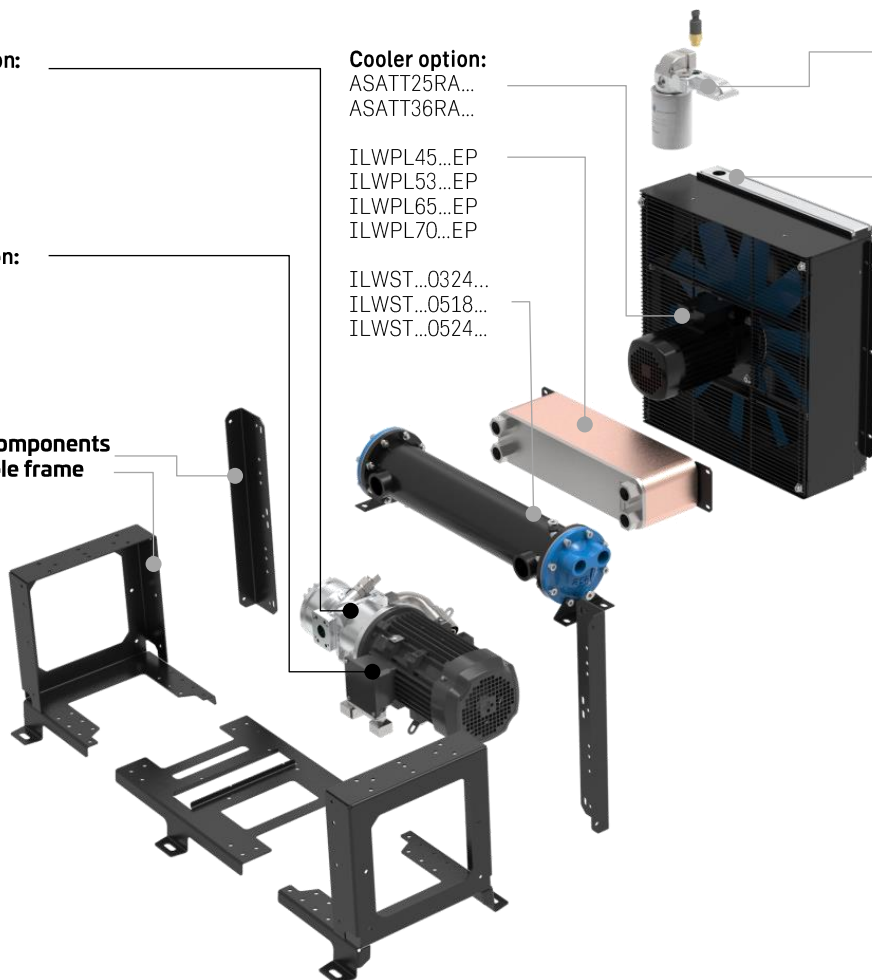
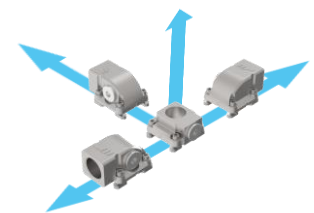
#### Other option:

Filter installation options:  
Oil/Air Cooler/Pump Unit



#### Connection options:

ILLZATT53G25  
ILLZATT53G32



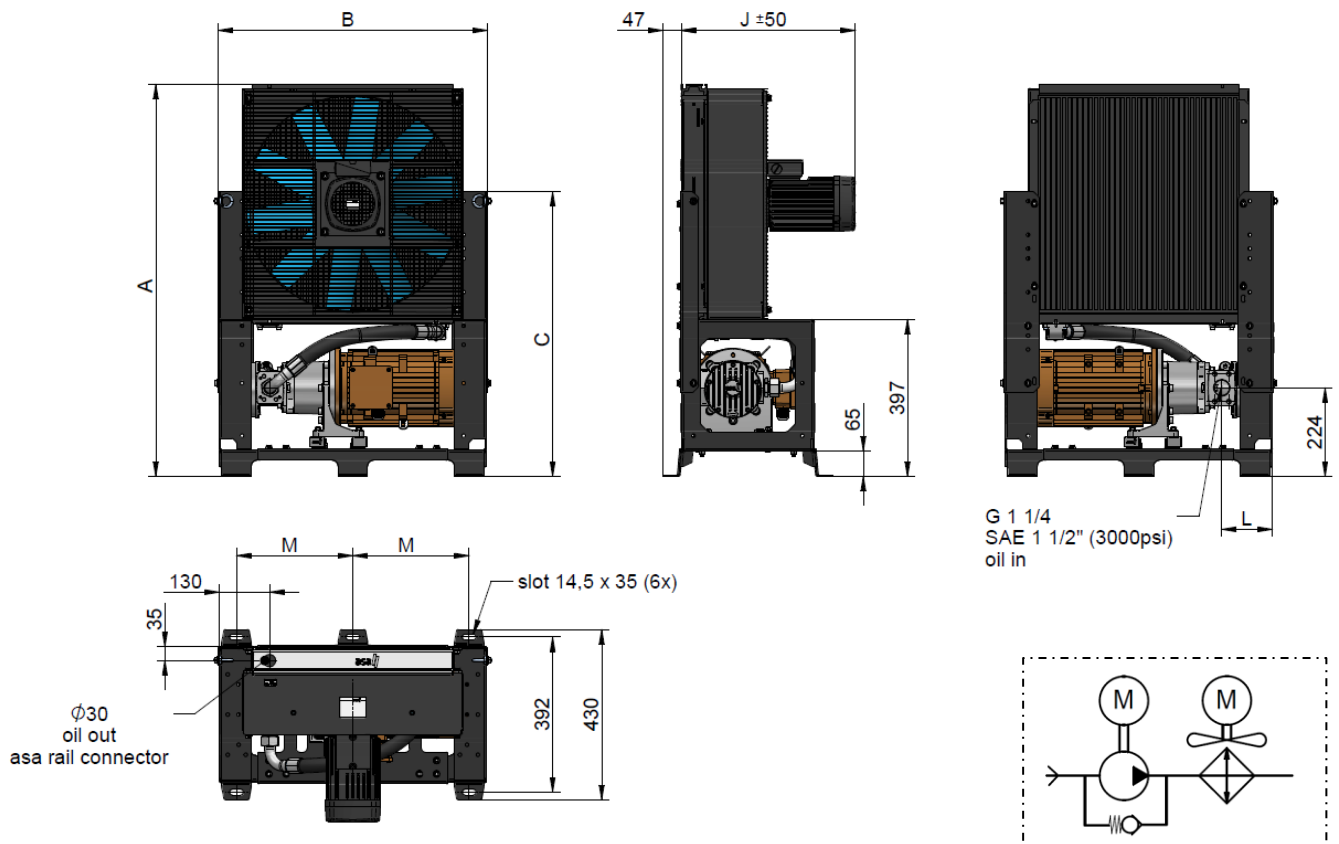
# Fluid Controls

## Air Cooled Range

### Oil/Air Cooler / Pump Unit



High reliability, short lead times and best availability for wear parts are the arguments in favor of a combination of standard oil coolers with standard motor pump units. Contact us to select the optimal configuration for your application.



## Dimensions

order number	description	A	B	C	J	L	M	weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
ILLTTMP25.....	MCU TT25 rail G2 80cm <sup>3</sup> AC	992	682	720	442	131	295	88
ILLTTMP36.....	MCU TT36 rail G2 80cm <sup>3</sup> AC	996	858	720	466	220	383	97

## Technical Data

order number	description	cooler				motor / pump unit					spec. cooling power
		motor power	motor current	rotation	air flow	motor power	motor current	rotation	oil flow	displacement	P (spec.)
		[kW]	[A]	[rpm]	[kg/s]	[kW]	[A]	[rpm]	[l/min]	[cm <sup>3</sup> /rotation]	[kW/°C]
ILLTTMP25.....	MCU TT25 rail G2 80cm <sup>3</sup> AC	0,75	1,7	1445	2,00	2,2	4,52	1435	102	80	0,67
ILLTTMP36.....	MCU TT36 rail G2 80cm <sup>3</sup> AC			1450							0,77

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# Fluid Controls

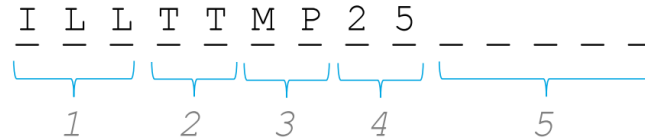
## Air Cooled Range

### Oil/Air Cooler / Pump Unit



Cooling oil with ambient air is a very cost efficient way to maintain hydraulic fluids within its best working range. Our products, systems and solutions help to ensure best life-time performance, supply add on values to the end user and reduce the energy consumption. We offer short lead times and the densest program of pressure resistant coolers with all relevant features

## Order Code



### 1 Product Category

ILL oil/air cooling

### 2 Product Series

TT TT rail series

### 3 Product Series

MP motor pump

### 4 Cooler Size

25

36 ILLTT

### 5 Customized

----- drawing no.

## General Data

asa rail connector	ILLZATT53G25 (BSP 1") or ILLZATT53G32 (BSP 1 ¼")
AC – motor voltage	230/400V, 50 Hz
frame	powder coated steel
working temperature range	-20°C to +80°C (oil temperature)
working pressure:	10 bar
compatible media	any mineral oil acc. to DIN 51524



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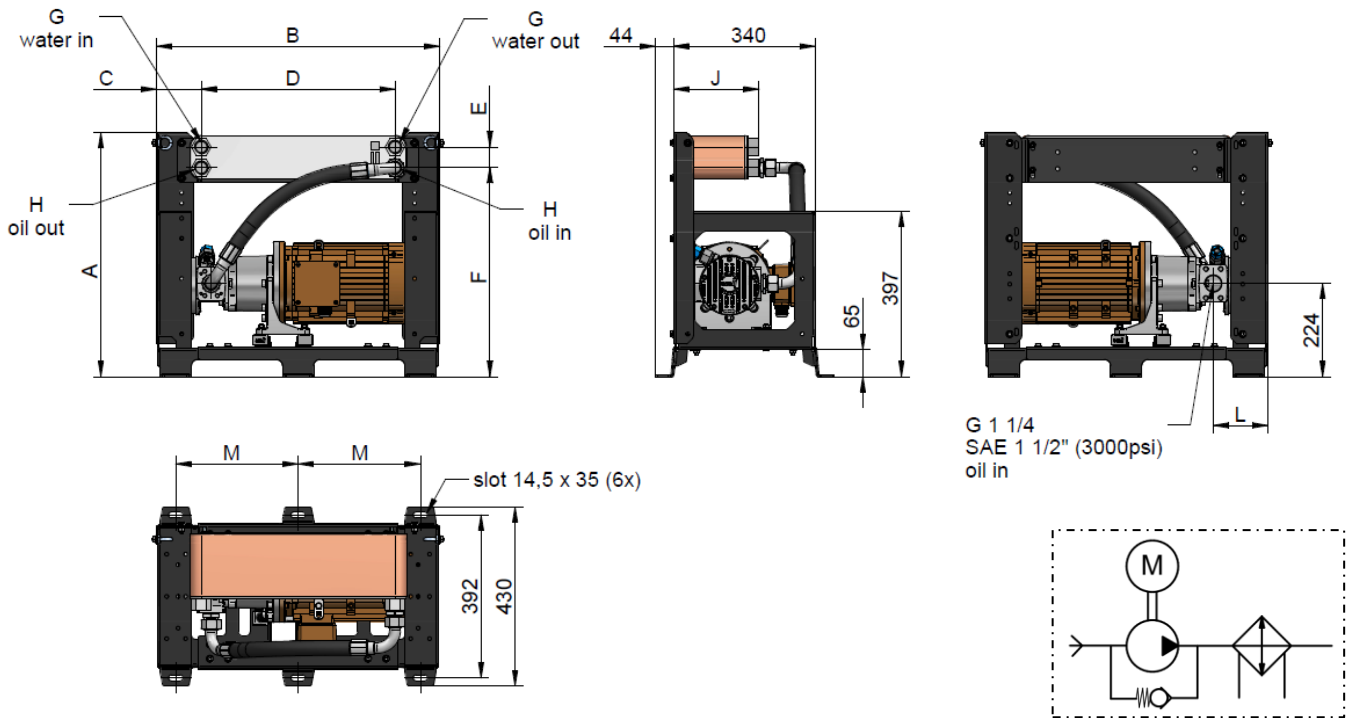
# Fluid Controls

## Water Cooled Range

### Plate Heat Exchanger / Pump Unit



Compact water-cooled plate heat exchangers in combination with a pump unit can save space and weight. Please contact us to discuss the possible options and perfect fit for the actual application.



## Dimensions

order number	description	A	B	C	D	E	F	G	H	J	L	M	weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[BSPPP]	[BSPPP]	[mm]	[mm]	[mm]	[kg]
ILWPLMP45.....	MCU PL45 G2 80cm <sup>3</sup> AC	587	682	108	466	50	496	G 1"	G 1"	206	131	294	60
ILWPLMP53.....	MCU PL53 G2 80cm <sup>3</sup> AC	587	682	119	444	64	489	G 1"	G 1"	156	131	294	63
ILWPLMP65.....	MCU PL65 G2 80cm <sup>3</sup> AC	595	771	126	519	92	456	G 1½"	G 1½"	135	176	339	76
ILWPLMP70.....	MCU PL70 G2 80cm <sup>3</sup> AC	720	682	113	456	174	493	G 1½"	G 1½"	110	131	294	83

## Technical Data

order number	description	motor / pump unit					spec. cooling power
		motor power	motor current	rotation	oil flow	displacement	P (spec.)
		[kW]	[A]	[rpm]	[l/min]	[cm <sup>3</sup> /rotation]	[kW/°C]
ILWPLMP45.....	MCU PL45 G2 80cm <sup>3</sup> AC	2,2	4,52	1435	102	80	1,43
ILWPLMP53.....	MCU PL53 G2 80cm <sup>3</sup> AC						1,14
ILWPLMP65.....	MCU PL65 G2 80cm <sup>3</sup> AC						1,42
ILWPLMP70.....	MCU PL70 G2 80cm <sup>3</sup> AC						1,21

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# Fluid Controls

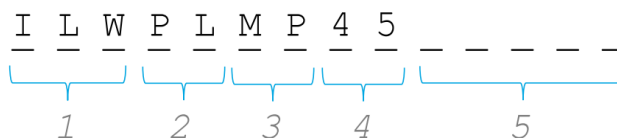
## Water Cooled Range

### Plate Heat Exchanger / Pump Unit



The asa E plate heat exchanger is designed for maximum heat transfer using profiled plates of acid proof stainless steel. The plates form channels through which oil and water pass (alternating every other channel). At the front and back side of the plate package there are cover plates. The cooler plates are brazed together at all outer and inner points of contact. The cooler can be installed in charge-pump circuits as well as in return lines with high pressure variations. This product is also suitable for water, air and gas.

## Order Code



### 1 Product Category

ILW oil/water cooling

### 2 Product Series

PL plate heat exchanger series

### 3 Product Series

MP motor pump

### 4 Cooler Size

45  
53  
65  
70

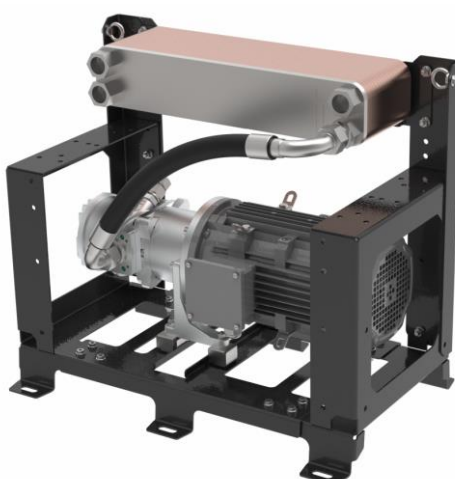
ILLWPL

### 5 Customized

----- drawing no.

## General Data

AC – motor voltage	230/400V, 50 Hz
frame	powder coated steel
working temperature range	-20°C to +80°C (oil temperature)
working pressure:	max. 10 bar
pump: compatible media (oil side)	any mineral oil acc to DIN 51524
plate heat exchanger: compatible media (water side)	water, water-glycol



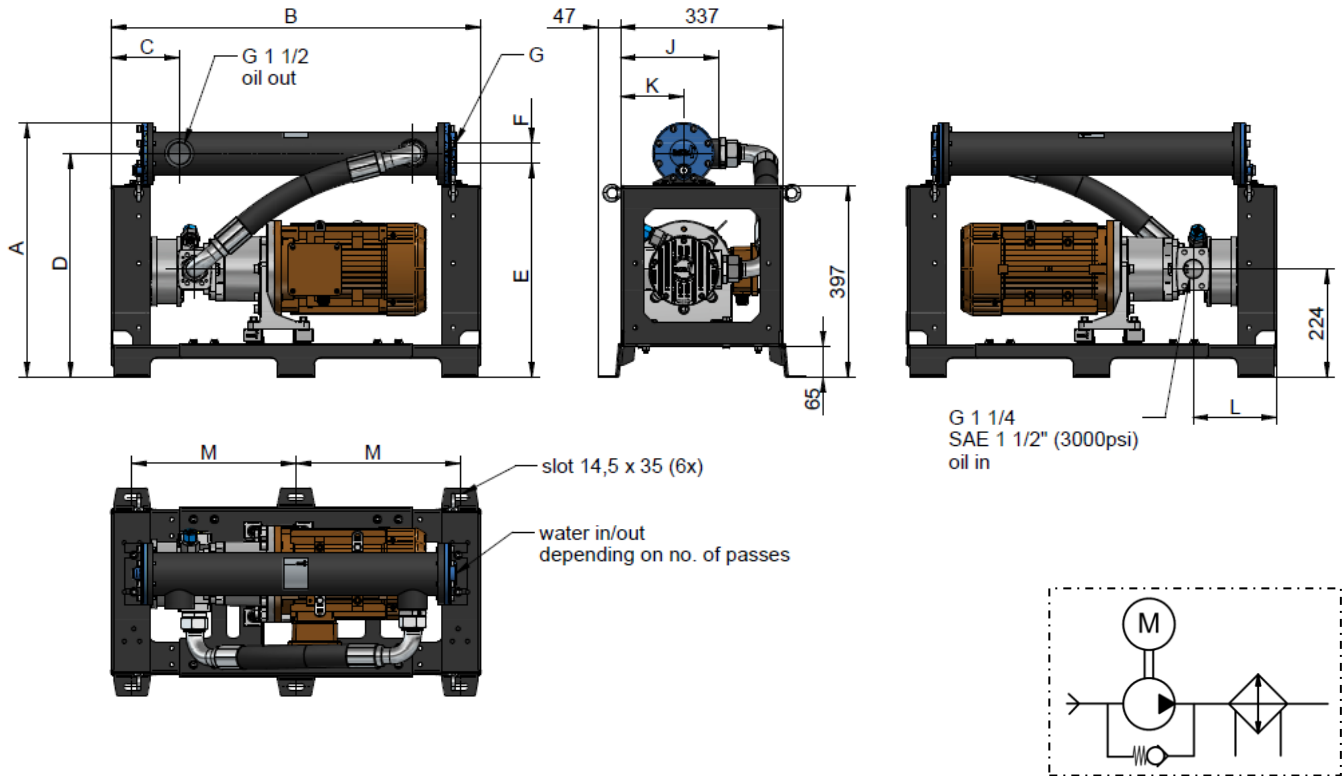
# Fluid Controls

## Water Cooled Range

### Shell & Tube Heat Exchanger / Pump Unit



Water-cooled shell & tube heat exchangers can be combined with our oil pump units with integrated filter function. Contact us to select the best options from our portfolio.



## Dimensions

order number	description	A	B	C	D	E	F	G	J	K	L	M	weight
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[BSPP]	[mm]	[mm]	[mm]	[mm]	[kg]
ILWSTMP03.....	MCU ST03 G2 80cm <sup>3</sup> AC	527	765	141	463	442	41	¼"	204	130	173	339	65
ILWSTMP05.....	MCU ST05 G2 80cm <sup>3</sup> AC	581	765	152	499	468	61	1"	205	118	173	339	70

## Technical Data

order number	description	motor / pump unit					spec. cooling power
		motor power	motor current	rotation	oil flow	displacement	P (spec.)
		[kW]	[A]	[rpm]	[l/min]	[cm <sup>3</sup> /rotation]	[kW/°C]
ILWSTMP03.....	MCU ST03 G2 80cm <sup>3</sup> AC	2,2	4,52	1435	102	80	1,02....1,45*
ILWSTMP05.....	MCU ST05 G2 80cm <sup>3</sup> AC						

\* Value for 2-pass and 4-pass versions, tube diameter 5mm.  
Selection see data sheet Shell & Tube Heat Exchanger.



# Fluid Controls

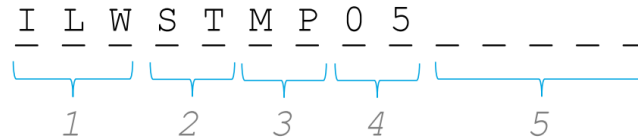
## Water Cooled Range

### Shell & Tube Heat Exchanger/ Pump Unit



Our ST series is a modular range of shell and tube design heat exchangers. The main benefits of this design are the versatility of applications more independent of the used fluid quality and good maintenance ability compared to other heat exchanger types. Our modular setup allows the best suitable connection and flow principle for lowest pressure drop at highest cooling performance. We supply single or more pass configurations as well as different material combinations. For raising efficiency we offer all these configurations with hybrid finned tube technology.

## Order Code



### 1 Product Category

ILW oil/water cooling

### 2 Product Series

ST shell & tube series

### 3 Product Series

MP motor pump

### 4 Cooler Size / Product Series

03 ILLWST

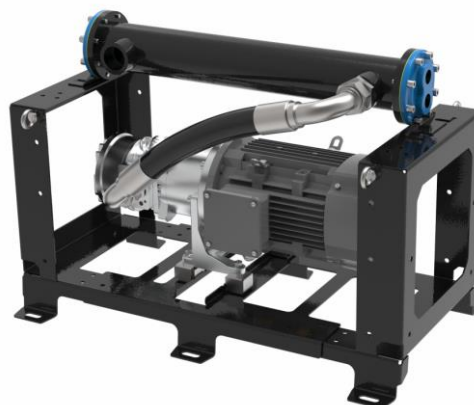
05 ILLWST

### 5 Customized

----- drawing no.

## General Data

AC – motor voltage	230/400V, 50 Hz
frame	powder coated steel
working pressure	max. 10 bar
working temperature range	-20°C to +80°C (oil temperature)
pump: compatible media (oil side)	any mineral oil acc to DIN 51524
shell & tube heat exchanger: compatible media (water side)	water, water glycol, sea water



# COMPANY

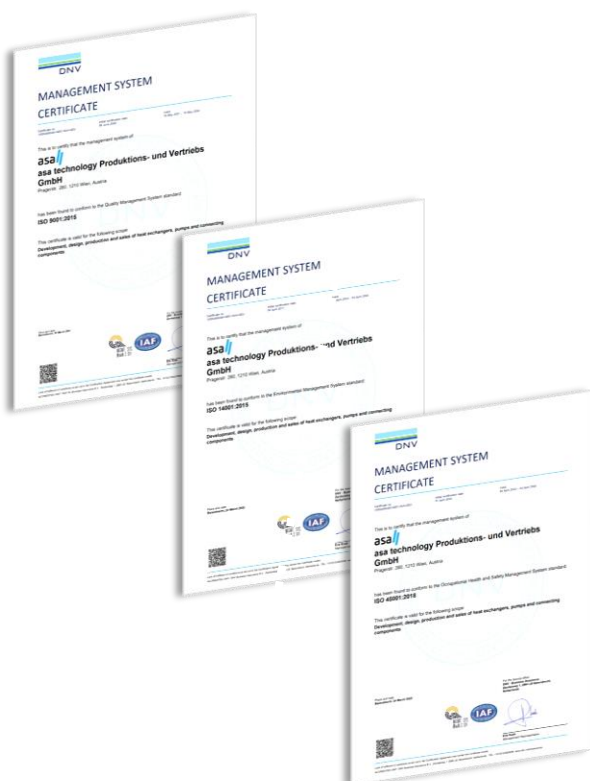
asa stands for developments, advances and innovations already at work through our customers' various mobile and stationary applications. More than 40 years experience in thermal systems, connection technology and Fluid control has made us a global leader in advanced technologies. Our experience creates progress to ensure you competitive pricing, consistent product performance and reliability.



## Be different. Make a difference.

Over the years, asa continually developed into a globally active systems supplier. Despite this evolution, we consciously maintained the medium sized structure of a family owned company. As a result, we are able to respond quickly and flexibly to our customer's demands and promote our innovations. Our increasing product portfolio and quality targets developed asa as a brand to the next level. Thus made us create a new logo and appearance to strengthen our key values and highlight it in all our present and future markets. We are proud on looking back on more than 40 years of innovative products, but our major attitude is the view into the future. Please check out our newest products and technologies in this catalogue and contact us if more detailed information is required.

## Quality References



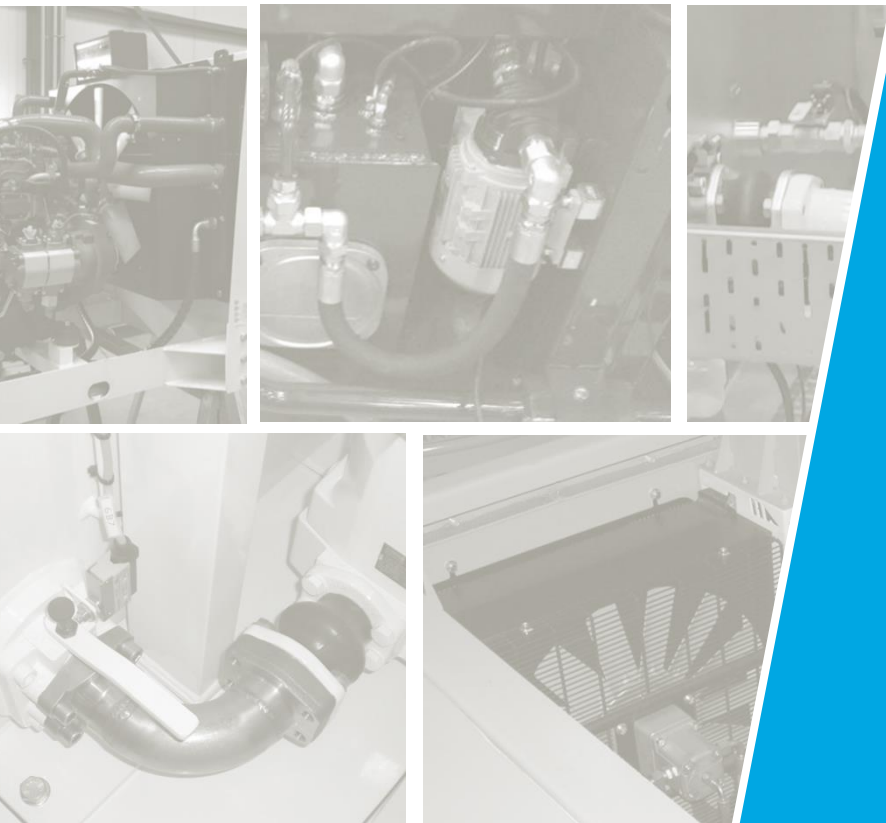
## History

- **1980**  
**Foundation in Vienna, Austria**  
Production of expansion joint and butterfly valves
- 1984  
Manufacturing Shell & Tube type heat exchanger „Silver T80“
- 1988  
Worldwide first modular cooler system in plate & bar „OKO“
- 1993  
Foundation of asa hydraulik of America Inc., Branchburg / New Jersey
- 2000  
“1<sup>st</sup> flexible connectors”  
More than 100.000 produced cooling systems of the patented asa universal connectors
- 2007  
Foundation of asa hydraulik of Kunshan / China, manufacturing modular cooler range “TT-Rail” / 3 brazing lines
- 2014  
Foundation of asa Products Pty Ltda in Epping/Australia
- 2016  
New manufacturing sites in asa Hydraulik Technology Suzhou/China, 5 brazing lines
- 2019  
New R&D center in Vienna / Austria  
Foundation of asa heatexchanger Pvt Ltd in Ahmedabad / India  
start of new brazing line
- 2022  
Foundation of asa hydraulik do Brasil Pvt Ltd a. in Sao Paulo / Brazil  
Manufacturing site of patented asa “FW” heat transfer system

discover reliable  
technology!



**be different.  
make a difference.**



#### **AUSTRIA**

asa technology Produktions-  
und Vertriebs GmbH  
Prager Strasse 280  
A-1210, Vienna  
Tel.: +43 1 292 40 20  
support@asahydraulik.com

#### **AUSTRALIA**

asa Products Pty Ltd  
Quinlan Road 23  
3076 Epping, Victoria  
Tel.: +61 3 9397 6129  
melbourne@asahydraulik.com

#### **BRASIL**

asa hydraulik do Brasil Ltda  
Rua Maria Fett 96  
03263-000 Vil Mercedes, Sao Paulo  
Tel.: +55 11 9 8862-0022  
sales\_brazil@asahydraulik.com

#### **CHINA**

asa Hydraulik Technology (Suzhou) Co.Ltd  
江苏省苏州市工业园区方洲路128号6区B幢  
Area 6, Building B,  
Fangzhou Road No 128,  
Suzhou industrial park,  
Suzhou City, Jiangsu Province  
Tel.: +86 512 62381988  
suzhou@asahydraulik.com

#### **INDIA**

asa heatexchanger Pvt Ltd  
Plot no.1226, Phase-3, GIDC, Vatva  
Ahmedabad - 382445  
Tel.: +91 70 43907273  
salesindia@asahydraulik.com

#### **USA**

asa hydraulik of America  
160 Meister Avenue 20 A  
Branchburg, New Jersey 08876  
Tel.: +1 800 473 94 00  
Tel.: +1 908 541 15 00  
sales\_us@asahydraulik.com