

TEMPERATUR AKTIV



UDEFØLERE

**Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output**

Calibratable outside temperature measuring transducer **THERMASGARD® ATM 2** with eight switchable measuring ranges, external sensor, continuous output, housing made from impact-resistant plastic with quick-release screws, optionally **with/without display**, with **cable gland** or **M12 connector** according to DIN EN 61076-2-101.

It is used to detect outside temperatures, temperatures in wet rooms, e.g. for installation on outside walls, in cold storage buildings and greenhouses, in the industrial sector and in agriculture. Installation in outdoor areas preferably at the north side of a building or in a protected place. In case of direct solar irradiation, we recommend the use of our sun and ball-impact protection hood **WS01** or **WS04** (accessories) or the device version with the installed sun protection hood **SS02** (on request).

The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible.

TECHNICAL DATA

Power supply:	24 V AC / DC (± 10 %) for U variant 15...36 V DC for I variant, depending on working resistance, residual ripple stabilised ± 0.3 V
Working resistance:	$R_a \text{ (ohm)} = (U_b - 14 \text{ V}) / 0.02 \text{ A}$ for I variant, see load resistance diagram
Load resistance:	$R_L > 5 \text{ kOhm}$ for U variant
Power consumption:	< 1.0 VA / 24 V DC; < 2.2 VA / 24 V AC
Sensor:	Pt1000, DIN EN 60751, class B, (Perfect Sensor Protection) Sensor external
Measuring ranges:	multi-range switching with 8 switchable measuring ranges see table (other measuring ranges optional) operating range -30...+70 °C with manual zero point correction (± 10 K)
Deviation in temperature:	typically ± 0.2 K at +25 °C
Output:	0 - 10 V or 4...20 mA
Connection type:	2- or 3-wire connection
Electrical connection:	0.14 - 1.5 mm², via screw terminals
Cable connection:	cable gland, stainless steel V2A (1.4305) (M20 x 1.5; with strain relief, exchangeable, inner diameter 6 - 12 mm) or M12 connector (male, 5-pin, A-code) according to DIN EN 61076-2-101
Housing:	plastic, UV-resistant, material polyamide, 30 % glass-globe reinforced, with quick-release screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), cover for display is transparent!
Housing dimensions:	72 x 64 x 37.8 mm (Tyr 1 without display) 72 x 64 x 43.3 mm (Tyr 1 with display)
Protective tube:	made from stainless steel V4A (1.4571), Ø 6 mm, NL = 65 mm
Process connection:	by means of screws (on the housing base)
Ambient temperature:	measuring transducer -30...+70 °C
Permissible humidity:	< 95 % r.H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529) Housing tested, TÜV SÜD, Report No.713139052 (Tyr 1)
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, according to EMC Directive 2014 / 30 / EU
Optional:	display with illumination , two-line, cut-out approx. 36 x 15 mm (B x H), to display the actual temperature and internal diagnostics (measuring range exceeded, measuring range not reached, sensor breakage, sensor short circuit)
ACCESSORIES	(see table)

ATM 2
with cable gland
and SS-02



ATM 2 - Q
with M12 connector





S+S REGELTECHNIK

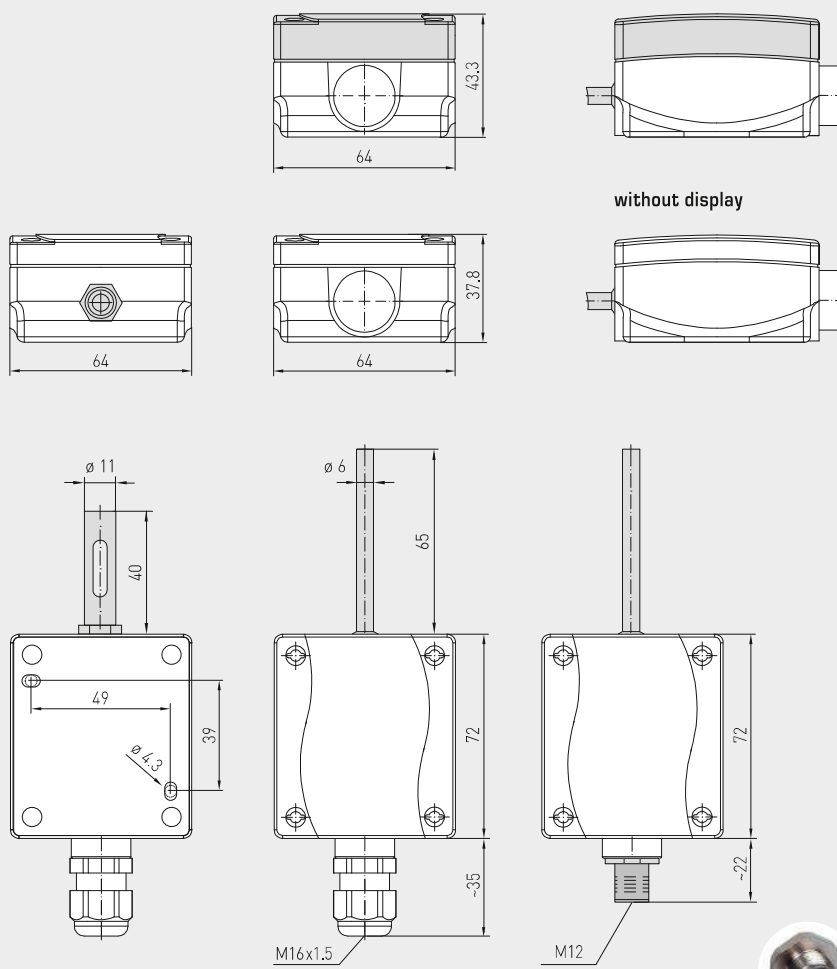
THERMASGARD® ATM 2

Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output



Dimensional drawing

ATM 2



Housing with
SS-02 (on request)

Housing with
cable gland

Housing with
M12 connector

with display

without display

ATM 2
with cable gland
and display



ATM 2-Q
with M12 connector
and display



Display and internal diagnostics

THERMASGARD®
Measuring transducer with display



Standard



Measuring range
exceeded



Measuring range
not reached



Sensor
breakage



Sensor
short circuit

High-performance encapsulation against
vibration, mechanical stress and humidity

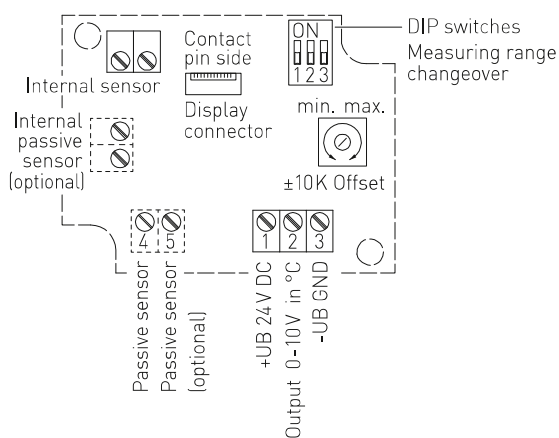


PS-PROTECTION
PERFECT SENSOR PROTECTION

Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output

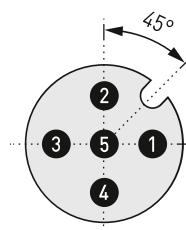
Schematic diagram

ATM 2 - U



Pin assignment (M12)

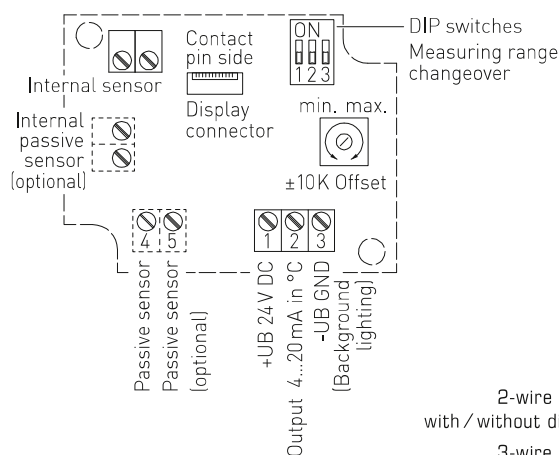
ATM 2 - U



- 1 +UB 24V AC/DC
- 2 Output temperature 0-10V [°C]
- 3 free
- 4 -UB GND
- 5 Shield

Schematic diagram *

ATM 2 - I

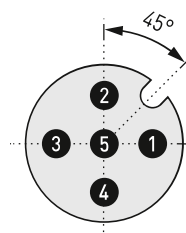


Connection*:

2-wire connection for devices
with / without display (not illuminated)
3-wire connection for devices
with illuminated display

Pin assignment (M12)

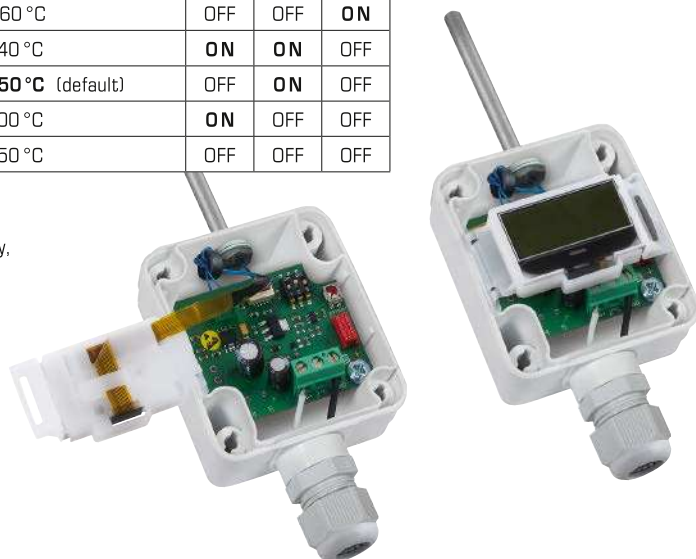
ATM 2 - I



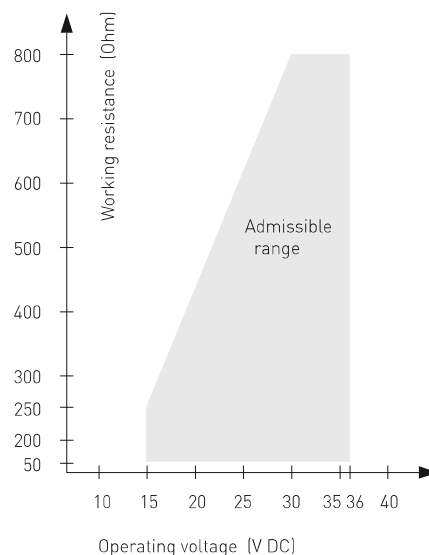
- 1 +UB 24V DC
- 2 Output temperature 4...20mA [°C]
- 3 free
- 4 -UB GND (optional for LCD backlighting)
- 5 Shield

Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
-20... +150 °C	ON	ON	ON
-50... +50 °C	OFF	ON	ON
-20... +80 °C	ON	OFF	ON
-30... +60 °C	OFF	OFF	ON
0... +40 °C	ON	ON	OFF
0... +50 °C (default)	OFF	ON	OFF
0... +100 °C	ON	OFF	OFF
0... +150 °C	OFF	OFF	OFF

ATM2-xx
with display,
hinged

Load resistance diagram
4...20mA

ATM 2 - I





S+S REGELTECHNIK

THERMASGARD® ATM 2

Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output

ATM 2-Q
with M12 connector



ATM 2
with cable gland

THERMASGARD® ATM 2		Outside temperature / wet room temperature measuring transducers (with cable gland)			
Type / WG01	Sensor	Output	Display	Item No.	Price
ATM 2					
ATM2-I	Pt1000	4...20 mA		1101-1142-0009-900	95,74 €
ATM2-I LCD	Pt1000	4...20 mA	■	1101-1142-2009-900	144,23 €
ATM2-U	Pt1000	0-10 V		1101-1141-0009-900	95,74 €
ATM2-U LCD	Pt1000	0-10 V	■	1101-1141-2009-900	144,23 €
Housing variant:		Cable connection with cable gland			
Extra charge:		other measuring ranges optional with sun protection hood SS02			24,19 € on request 9,28 €

THERMASGARD® ATM 2-Q		Outside temperature / wet room temperature measuring transducers (with M12 connector)			
Type / WG01	Sensor	Output	Display ● = Q	Item No.	Price
ATM 2-Q					
ATM2-I Q	Pt1000	4...20 mA	●	2001-6111-2100-001	135,66 €
ATM2-I Q LCD	Pt1000	4...20 mA	● ■	2001-6112-2100-001	184,16 €
ATM2-U Q	Pt1000	0-10 V	●	2001-6111-1100-001	135,66 €
ATM2-U Q LCD	Pt1000	0-10 V	● ■	2001-6112-1100-001	184,16 €
Housing variant "Q":		Cable connection with M12 connector (male, 5-pin, A-code)			
Extra charge:		see table above!			

ACCESSORIES				
WS-01	protection contre le soleil et pare-balle, 184 x 180 x 80 mm, en acier inox V2A (1.4301)	7100-0040-2000-000	30,26 €	
WS-04	protection contre le soleil et les intempéries, 130 x 180 x 135 mm, en acier inox V2A (1.4301)	7100-0040-7000-000	35,70 €	
Special accessories for M12 connector see chapter Accessories!				

**Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output**

Calibratable outside temperature measuring transducer **THERMASGARD® ATM 2 - VA**

with eight switchable measuring ranges, external sensor, continuous output, rugged housing made from **stainless steel V4A**, with **cable gland** or **M12 connector** according to DIN EN 61076-2-101.

It is used to detect outside temperatures, temperatures in wet rooms, e.g. for installation on outside walls, in cold storage buildings and greenhouses, in the industrial sector and in agriculture. Installation in outdoor areas preferably at the north side of a building or in a protected place. In case of direct solar irradiation, we recommend using our sun and ball-impact protection hood **WS01** or **WS03** (accessories).

The sensor is factory-calibrated; an environmental precision adjustment by an expert is possible.

TECHNICAL DATA

Power supply:	24 V AC / DC ($\pm 10\%$) for U variant 15...36 V DC for I variant, depending on working resistance, residual ripple stabilised ± 0.3 V
Working resistance:	$R_a \text{ (ohm)} = (U_b - 14 \text{ V}) / 0.02 \text{ A}$ for I variant, see load resistance diagram
Load resistance:	$R_L > 5 \text{ kOhm}$ for U variant
Power consumption:	$< 1.0 \text{ VA} / 24 \text{ V DC}$; $< 2.2 \text{ VA} / 24 \text{ V AC}$
Sensor:	Pt1000, DIN EN 60751, class B, (Perfect Sensor Protection) Sensor external
Measuring ranges:	multi-range switching with 8 switchable measuring ranges see table (other measuring ranges optional) operating range $-30...+70^\circ\text{C}$ with manual zero point correction ($\pm 10 \text{ K}$)
Deviation in temperature:	typically $\pm 0.2 \text{ K}$ at $+25^\circ\text{C}$
Output:	0 - 10 V or 4...20 mA
Connection type:	2-wire connection
Electrical connection:	0.14 - 1.5 mm ² , via screw terminals
Cable connection:	cable gland, stainless steel V2A (1.4305) (M20 x 1.5; with strain relief, exchangeable, inner diameter 6 - 12 mm) or M12 connector (male, 5-pin, A-code) according to DIN EN 61076-2-101
Housing:	stainless steel V4A (1.4571), with non-distortion cover bolting, impact resistant, high EMI shielding, corrosion, temperature, weather- and UV-resistant
Housing dimensions:	143 x 97 x 61 mm (Tyr 2E)
Protective tube:	made from stainless steel V4A (1.4571), $\varnothing 6 \text{ mm}$, NL = 65 mm
Process connection:	by screws
Ambient temperature:	measuring transducer $-30...+70^\circ\text{C}$
Permissible humidity:	$< 95\%$ r.H., non-precipitating air
Protection class:	III (according to EN 60730)
Protection type:	IP 65 (according to EN 60529) Housing tested, TÜV SÜD, Report No. 713160960B (Skadi2)
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, according to EMC Directive 2014/30/EU
ACCESSORIES	(see table)



S+S REGELTECHNIK

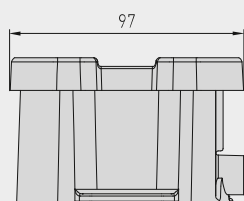
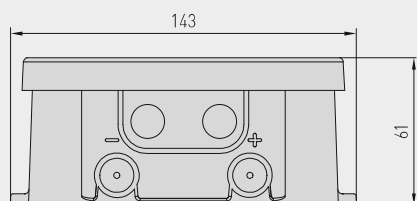
THERMASGARD® ATM 2 - VA

Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output

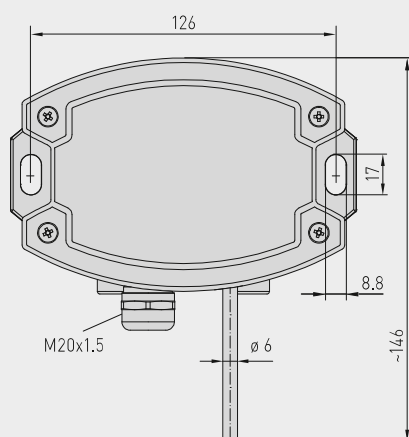


Dimensional drawing

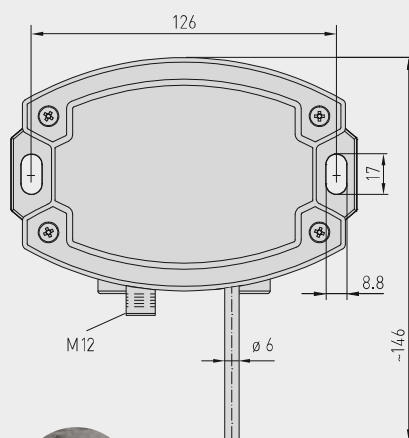
ATM 2 - VA



Housing with
cable gland



Housing with
M12 connector



M12 connector
(male)

High-performance encapsulation against
vibration, mechanical stress and humidity



PS-PROTECTION

PERFECT SENSOR PROTECTION

ATM 2 - VA
with cable gland



ATM 2 - VAQ
with M12 connector

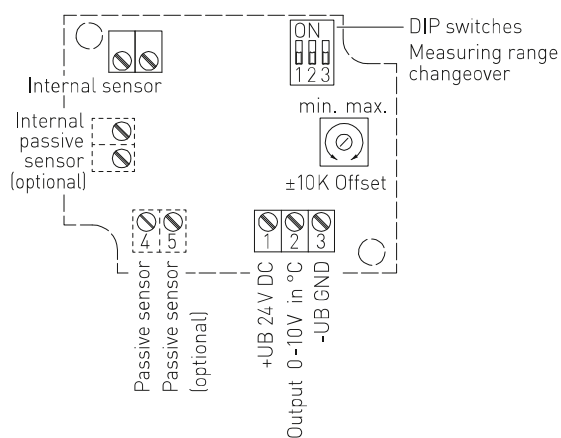


Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output

S+S REGELTECHNIK

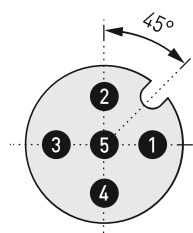
Schematic diagram

ATM 2 - U



Pin assignment (M12)

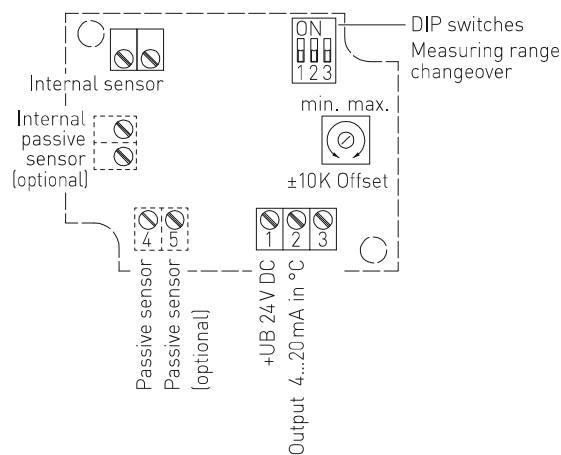
ATM 2 - U



- 1 +UB 24V AC/DC
- 2 Output temperature 0-10V [°C]
- 3 free
- 4 -UB GND
- 5 Shield

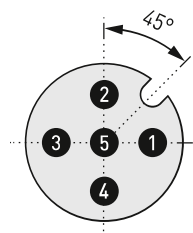
Schematic diagram

ATM 2 - I



Pin assignment (M12)

ATM 2 - I

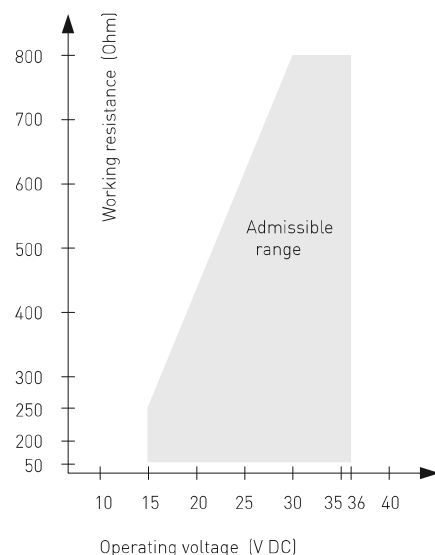


- 1 +UB 24V DC
- 2 Output temperature 4...20mA [°C]
- 3 free
- 4 -UB GND (optional)
- 5 Shield

Measuring ranges (adjustable)	DIP 1	DIP 2	DIP 3
-20... +150 °C	ON	ON	ON
-50... +50 °C	OFF	ON	ON
-20... +80 °C	ON	OFF	ON
-30... +60 °C	OFF	OFF	ON
0... +40 °C	ON	ON	OFF
0... +50 °C (default)	OFF	ON	OFF
0... +100 °C	ON	OFF	OFF
0... +150 °C	OFF	OFF	OFF

Load resistance diagram
4...20mA

ATM 2 - I





S+S REGELTECHNIK

THERMASGARD® ATM 2 - VA

Outside temperature / wet room temperature measuring transducers,
calibratable, with multi-range switching and
active output

ATM 2 - VAQ

with M12 connector



ATM 2 - VA

with cable gland



THERMASGARD® ATM 2 - VA		Outside temperature / wet room temperature measuring transducers, <i>ID</i> (Stainless steel housing with cable gland)		
Type / WG02I	Sensor	Output	Item No.	Price
ATM 2 - VA				
ATM2-I VA	Pt1000	4...20 mA	2001-6171-2200-001	359,38 €
ATM2-U VA	Pt1000	0-10 V	2001-6171-1200-001	359,38 €
Housing variant:		Cable connection with cable gland		
Extra charge:		other measuring ranges optional		
				24,19 €

THERMASGARD® ATM 2 - VAQ		Outside temperature / wet room temperature measuring transducers, <i>ID</i> (Stainless steel housing with M12 connector)		
Type / WG02I	Sensor	Output	● = Q Item No.	Price
ATM 2 - VAQ				
ATM2-I VAQ	Pt1000	4...20 mA	● 2001-6171-2100-001	396,08 €
ATM2-U VAQ	Pt1000	0-10 V	● 2001-6171-1100-001	396,08 €
Housing variant "Q":		Cable connection with M12 connector (male, 5-pin, A-code)		
Extra charge:		see table above!		

ACCESSORIES	
Special accessories for M12 connector see chapter Accessories!	



**HVAC & BYGNINGS-
AUTOMATIK**

VORES PRODUKTSORTIMENT INKLUDERER:



TEMP. PASSIV - UDEFØLERE



TRÅDLØS - UDEFØLERE



POWER IO



TILBEHØR



TEMPERATUR AKTIV



TEMPERATUR PASSIV

VI FØRER PRODUKTER INDENFOR KATEGORIERNE:



AUTOMATIK



ELVARME



KØLEPROFILER

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