GIVI MISURE

MEGATRON AG
FERROXCUBE DISTRIBUTOR FOR MAGNETIC COMPONENTS

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Code	Project	Release	
ST02	***A31-B***	***B***	***TECHNICAL DATASHEET***

DIGITAL READOUT VISION VI518

GENERAL FEATURES

- Compact-design, single-axis digital readout, equipped with the new **Absolute Warning System (AWS)**.
- AWS constantly guarantees the correctness of the displayed positions and informs the operator of any malfunctioning. The user can continue machining or, based on the error message displayed, intervene to restore the proper functioning of the system.
- Suitable for several machine tools, such as those performing cutting or machining at a preset size, polishing, bending, grinding or straightening.
- Applicable on various industries, such as wood, sheet metal, marble, rubber, textile and automation.
- Absolute (SSI protocol) or incremental encoder input signals.
- Up to 8 digits displayed, including floating decimal point and negative sign.
- Device diagnostic.
- Internal rewritable memory.
- Absolute signals RS-422: Clock, $\overline{\text{Clock}}$, Data, $\overline{\text{Data}}$.
- Resolutions up to 0.5 µm.
- Correction factor, angular reading, programmable relay outputs and many other functions available.
- Serial output RS-232, for the transmission of positions.
- Panel mountable version available.

MECHANICAL AND ELECTRICAL CHARACTERISTICS

Model	VISION VI518 1 display - 1 input
Display	8 high-efficiency digits h = 13 mm
Incremental encoder input signals	2 square waves with phase displacement of 90° ± 5° and zero reference 5 Vdc or 12 Vdc (TERMINAL BOARD) 250 mA_{MAX}
Maximum input frequency	250 kHz_{MAX}
Absolute (SSI) encoder input signals	RS-422 – Clock, $\overline{\text{Clock}}$, Data, $\overline{\text{Data}}$
Power supply	230 Vac ± 10% - 50/60 Hz / 110 Vac ± 10% - 60 Hz / 24 Vac ± 10% - 50/60 Hz
Current consumption	40 mA_{MAX} (230 Vac) / 80 mA_{MAX} (110 Vac) / 350 mA_{MAX} (24 Vac)
Memory	permanent for configuration and user settings (last data operating memory)
Linear resolution	200 - 100 - 50 - 20 - 10 - 5 - 2 - 1 - 0.5 µm 0.01 - 0.005 - 0.002 - 0.001 - 0.0005 - 0.0002 - 0.0001 - 0.00005 - 0.00002 inch
Angular resolution	1 - 0.5 - 0.2 - 0.1 - 0.05 - 0.02 - 0.01 - 0.005 - 0.002 - 0.001 °
Operating temperature	0 °C ÷ 50 °C
Storage temperature	-20 °C ÷ 70 °C
Weight	450 g
Options	UR2 RELAY OUTPUTS -S SERIAL OUTPUT RS-232 SSI ABSOLUTE (SSI) ENCODER INPUT

ABSOLUTE (SSI) ENCODER PARAMETERS

Clock frequency	125 / 250 / 500 kHz
Number of position bits	8-32 bit
Output code	Binary, Gray
Optional bits	Parity bit, Error bit

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
= ISO 9001 =

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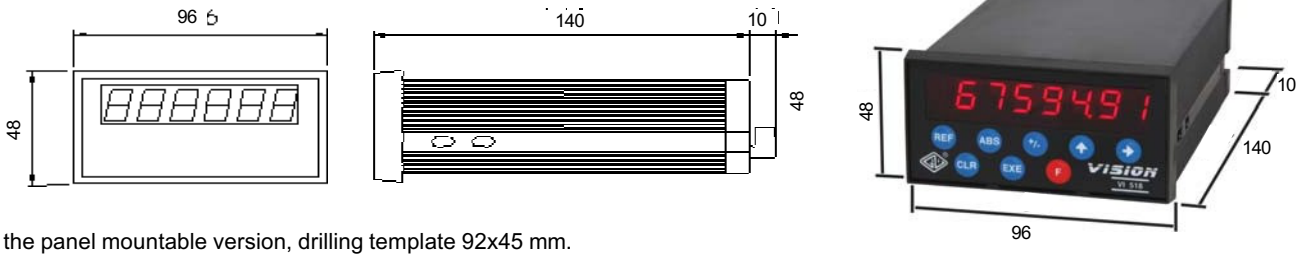
DIMENSIONS



For the panel mountable version, drilling template 92x45 mm.

CONNECTIONS

INCREMENTAL ENCODER INPUT

CONNECTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13
TERMINAL BOARD	P.S.	P.S.	C1	NA1	C2	NA2	+ V	0 V	LOAD QUOTA	/	B	A	Z

ABSOLUTE (SSI) ENCODER INPUT

CONNECTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13
TERMINAL BOARD	P.S.	P.S.	C1	NA1	C2	NA2	+ V	0 V	LOAD QUOTA	CK	$\overline{CK}$	D	$\overline{D}$

LEGEND:

P.S. = Power supply 230 Vac ± 10% 50/60 Hz (optional 110 Vac 60 Hz – 24 Vac 50/60 Hz)
C1 = Relay 1 common contact
NA1 = N.O. Relay 1 contact
C2 = Relay 2 common contact
NA2 = N.O. Relay 2 contact
+ V = Encoder power supply output 12 V / 05 V
0 V = 0 V Encoder power supply
LOAD = Load position input (connect an N.O. contact between pin 9 and pin 8)
/ = Reserved
B = Encoder channel B input (for mono-directional sensors, close at 0 V)
A = Encoder channel A input
Z = Encoder reference signal input
$\overline{CK}$ = SSI absolute encoder clock+ input
$\overline{CK}$ = SSI absolute encoder clock- input
D = SSI absolute encoder data+ input
$\overline{D}$ = SSI absolute encoder data- input

☞ Connect the cable's shield to the ground.
The maximum capacity of the relay contacts is 230 Vac 3A.

ORDERING CODE

MODEL	POWER SUPPLY	ENCODER POWER SUPPLY	RESOLUTION	OPTIONS
VI518	**230**	**05**	**1**	**UR2**
	230 = 230 Vac **110** = 110 Vac **24** = 24 Vac	**12** = 12 V **05** = 05 V	**10** = 100 µm **100** = 10 µm **1** = 1 µm ……	**No cod.** = standard **-S** = serial output RS-232 **UR2** = relay outputs **UR2-S** = serial output + relay outputs **UR2-AC** = outputs with static relays AC **UR2-DC** = outputs with static relays DC **SSI** = absolute (SSI) encoder input **SSI UR2** = absolute (SSI) encoder input + relay outputs

Example ☞ **DIGITAL READOUT VI518 230/05 1 UR2**

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement.