

PRESSURE  
CONTROL WITH  
ANALOGUE AND  
TRANSISTOR OUT-  
PUTINSTRUCTION  
SHEET

## Technical Data

Type	PC...-Gi1/4A1M-LIAPN8X-H1141	PC...-Gi1/4A1M-LUAPN8X-H1141
<b>Electrical Data</b>		
Output function	4...20 mA analogue, 20 mA transistor output, programmable pnp or npn	0...10 V analogue, 10 V
Switching current	200 mA	50 Hz
Maximum switching frequency	adjustable from 5 to 500 ms in steps of 10 ms	17...33 VDC
Output response time	switch-on and switch-off delay, adjustable from 0...50 s in steps of 1 s	80 mA
Switching delay		10 million
Operating voltage		short-circuit and reverse polarity
Current consumption		IP67 according to IEC/EN 60529
Switching cycles min.		
Electrical protection		
Protection class		
<b>Temperature ranges</b>		
Ambient temperature	-25...+80 °C	
Medium temperature	-15...+80 °C	
<b>Precision</b>		
Switch point accuracy	≤ 2 % of the upper range value	
Repeat accuracy	≤ 0.5 % of the upper range value	
Zero shift	< ± 0.1 % of the measuring range/ °C	
Sensitivity	< ± 0.03 % of the measuring range/ °C	
<b>Resistance</b>		
Vibration resistance	5 gn (25...200 Hz) and 35 gn (60...2000 Hz), conforming to IEC 68-2-6	
Shock resistance	50 gn, conforming to IEC 68-2-27	
<b>LED functions / display</b>		
Measuring value / programming	4-digit 7-segment display	
Status display	LEDs to indicate output status and selected measuring unit (bar / psi)	
Display reaction time	3 adjustable modes: slow (1 % of the measuring range) normal (0.5 % of the measuring range) fast (automatic update every 10 ms)	
<b>Material</b>		
Housing	ZNAL4	
Hydraulic connection	stainless steel 1.4305 (AISI 303)	
<b>Pressure connection</b>		
Thread	G 1/4 internal thread according to DIN 3852	
Width across flat	AF 27	
<b>Electrical connection</b>		
Connector	pin configuration: connector, system eurocon (M 12 x 1)	
(view of contacts)		

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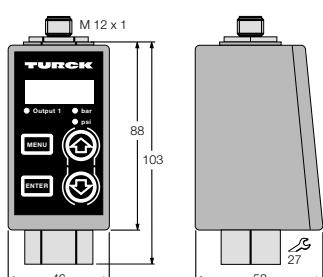
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Pressure control with analogue- and transistor output

## Characteristic Data

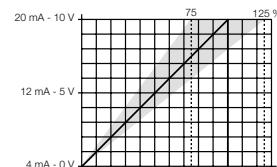
Measuring range [bar]	Pressure ranges [bar]		Admissible over-pressure [bar]	Min. burst pressure [bar]
	Switching point SP1	Release point rP1		
-1...0	-1.00 ... -0.07	-0.98 ... -0.05	0.01	3
0...1	0.08 ... 1	0.05 ... 0.97	0.01	4
0...2.5	0.17 ... 2.5	0.12 ... 2.45	0.01	10
0...10	0.7 ... 10	0.5 ... 9.8	0.1	40
0...16	1.12 ... 16	0.8 ... 15.7	0.1	64
0...25	1.7 ... 25	1.2 ... 24.5	0.1	100
0...40	2.8 ... 40	2.0 ... 39.2	0.1	160
0...70	4.9 ... 70	3.5 ... 68.6	0.1	280
0...100	7 ... 100	5 ... 98	1	400
0...160	11.2 ... 160	8 ... 156.8	1	640
0...250	17.5 ... 250	12.5 ... 245	1	1000
0...400	28 ... 400	20 ... 392	1	1200
0...600	42 ... 600	30 ... 568	1	1200

## Dimensions

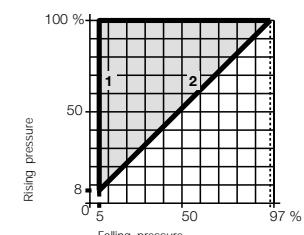


## List of pressure ranges

## Analogue output curve



## Switching and release point range



1 Maximum differential

2 Minimum differential

## Factory configurations

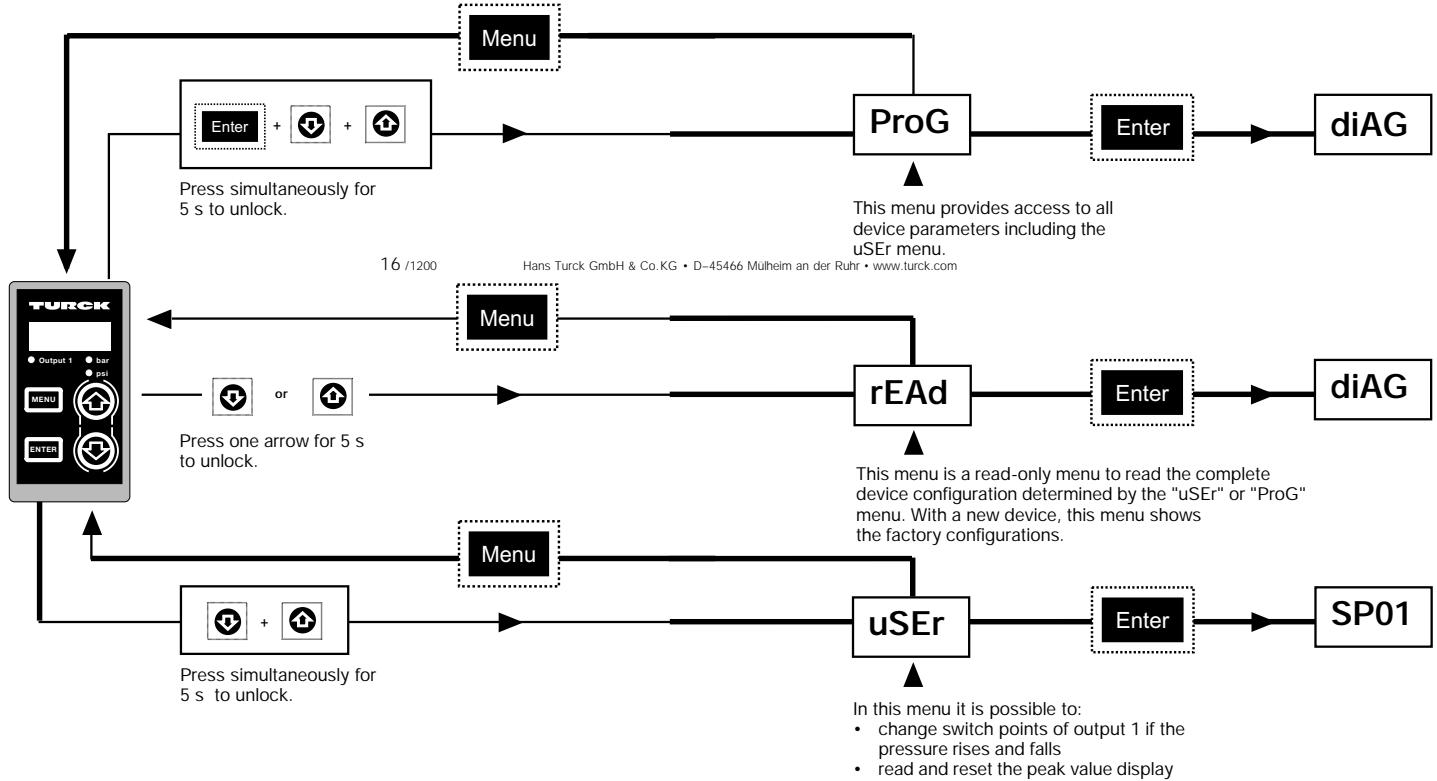
Measuring unit	unit	bar
Display reaction time	dA-d	nor
Analogue function	ArLG	
Analogue output	outA	4...20
Response time analogue output	dA-A	5 ms
Upper range value of analogue output	FS-A	100 %
Switching output	SP01	
Switching output 1	out1	PnP1
Output 1 functions	Fc1	Hn01
Switch point - rising pressure	SP1	50 %
Release point - falling pressure	rP1	25 %
Switch-ON delay output 1	dSP1	0 s
Switch-OFF delay output 1	drP1	0 s
Response time output 1	dA-1	20 ms

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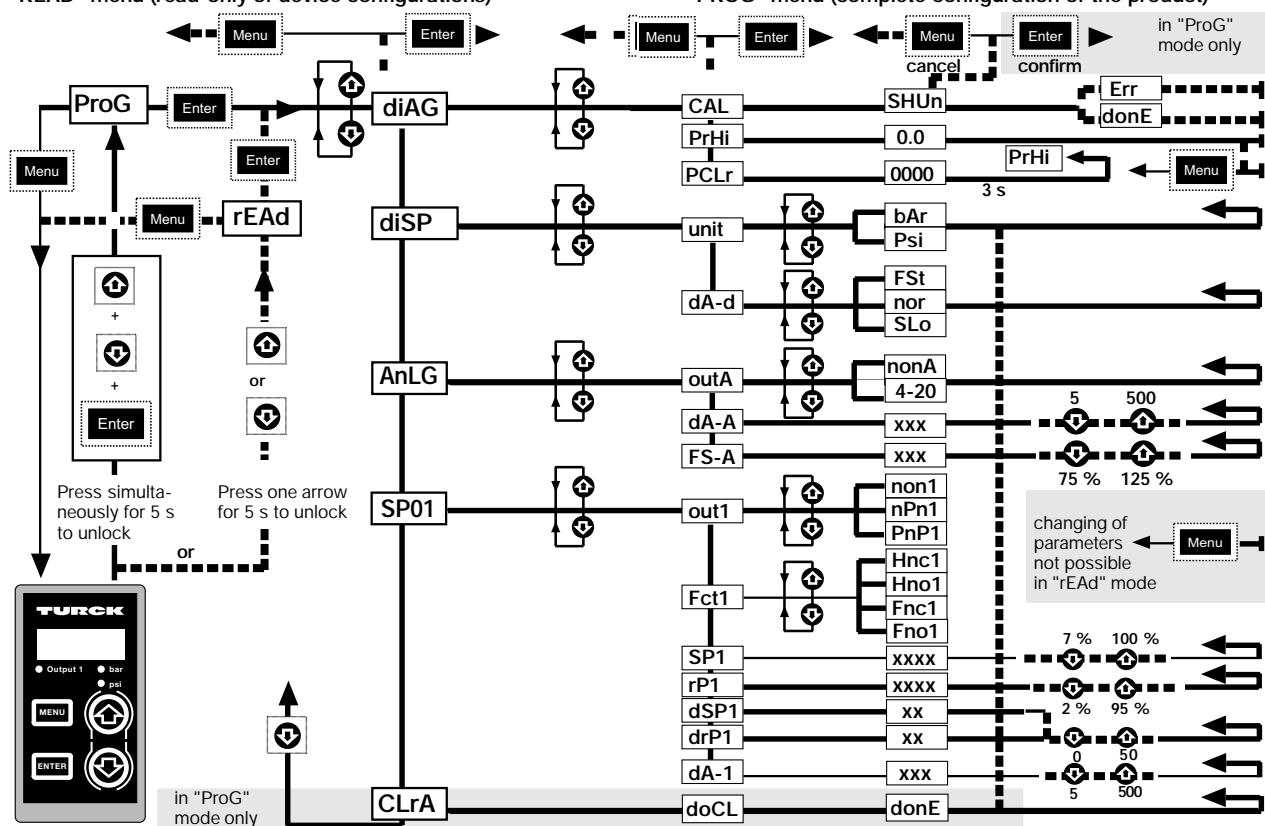
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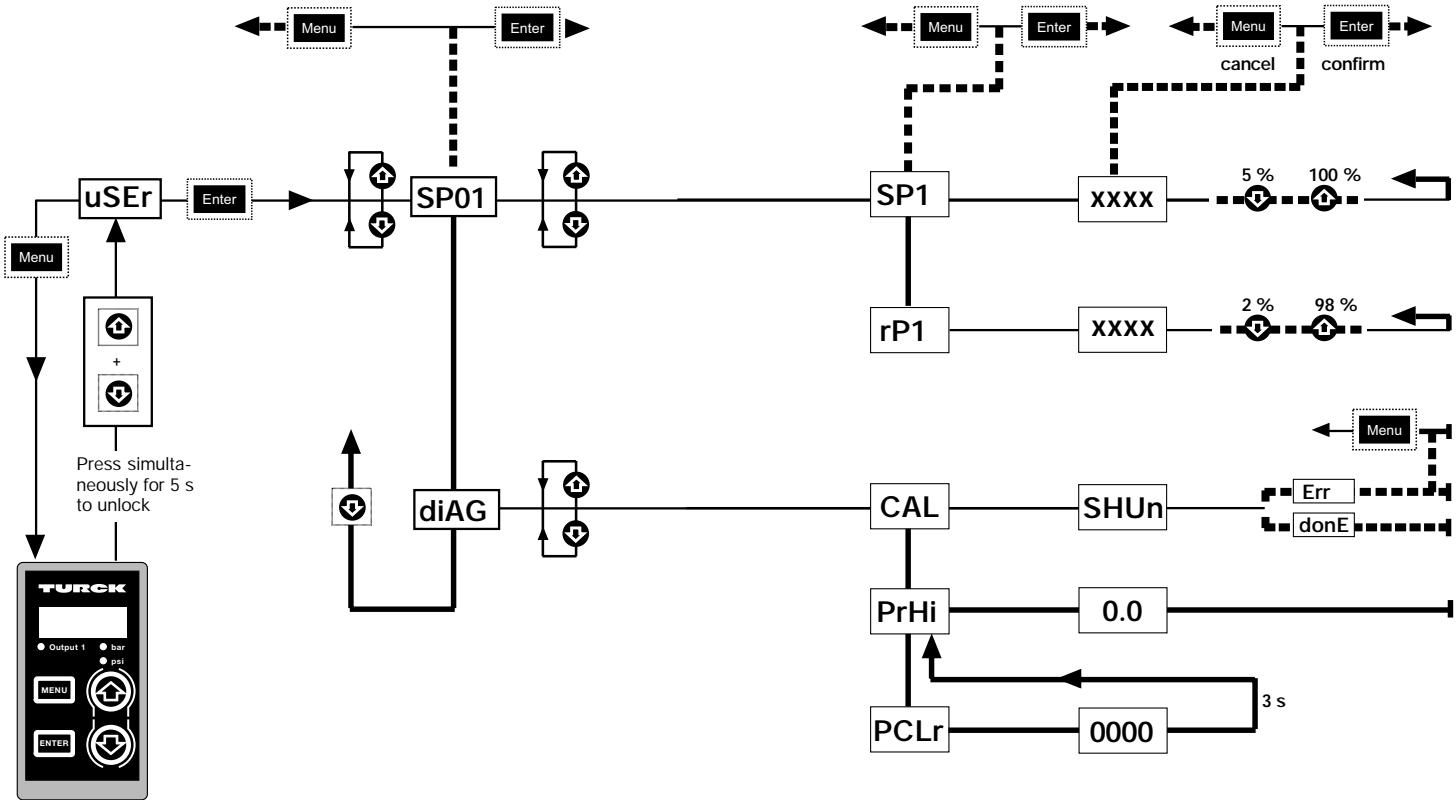
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## Main menu



## "READ" menu (read-only of device configurations)



**USER menu, diagnostics****Display symbol list (alphanumeric list)**

4-20	Analog output active
AnLG	Analog function
bAr	bar
CAL	Manual shunt calibration
CLRa	Return to factory configuration
dA-1	Response time output 1
dA-2	Response time output 2
dA-A	Response time analogue output
dA-d	Display reactor time
diAG	Diagnostic
disP	Display
doCL	Safety request: Return to factory configuration?
donE	Return to factory configuration
drP1	Reset time delay output 1
drP2	Reset time delay output 2
dsP1	Switching time delay output 1
dsP2	Switching time delay output 2
Fct1	Output 1 functions
Fct2	Output 2 function
Fnc1	Window mode, NC output 1
Fnc2	Window mode, NO output 2
Fno1	Window mode, NO output 1
Fno2	Window mode, NO output 2
FS-A	Analog output range limit values
Fst	Direct display of value without time filter
Hnc1	Hysteresis mode, NC output signal 1
Hnc2	Hysteresis mode, NC output signal 2
Hno1	Hysteresis mode, NO output signal 1
Hno2	Hysteresis mode, NO output signal 2
inFO	System info
non1	Output 1 non active
non2	Output 2 non active
nonA	Analog output non active
nor	Direct display of value with filtering at 0.5 %
nPn1	Output 1 active on NPN
nPn2	Output 2 active on NPN
out1	Digital output 1
out2	Digital output 2
outA	Analog output

PCLr	Clear maximum peaks
PnP1	Output 1 active on PNP
PnP2	Output 2 active on PNP
PrHi	Peaks reading
ProG	Programming menu
Psi	psi
rEAd	Read the existing configuration
	In rEAd mode, when trying to change the parameters by pressing an arrow, the display shows "rEAd" without giving access to the parameter itself.
rP1	Reset point: decreasing pressure (1 <sup>st</sup> stage)
rP2	Reset point: decreasing pressure (2 <sup>nd</sup> stage)
SHUn	Shunt calibration activated
SLo	Direct display of value with filtering at 1 %
SP01	Setting digital output 1
SP02	Setting digital output 2
SP1	Switching point increasing pressure (1 <sup>st</sup> stage)
SP2	Switching point increasing pressure (2 <sup>nd</sup> stage)
unit	Measurement unit
uSER	User menu