

PRESSURE CONTROL WITH RELAY OUTPUT 2.5 A

INSTRUCTION SHEET



F 4

Technical Data

Type	PC...G1/4A1M-ARX-B1151
Electrical data	relay output 2.5 A, AC-15, D200 (120 V – 3 A) Maximum switching frequency 50 Hz Output response time adjustable from 50 to 500 ms in steps of 10 ms Switching delay switch-on and switch-off delay, ranging from 0 to 50 s in steps of 1 s Operating voltage 102 to 132 VAC Current consumption 32 mA Switching cycles min. 10 million Electrical protection short-circuit and reverse polarity Protection degree IP67 according to IEC/EN 60529
Temperature ranges	Ambient temperature -25...+75 °C Medium temperature -15...+80 °C
Precision	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
Resistance	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
LED functions / display	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 options: slow (1 % of the measuring range) normal (0.5 % of the measuring range) fast (automatic update every 10 ms)
Material	Housing ZNAl4 Hydraulic connection stainless steel 1.4305 (AISI 303)
Pressure connection	Thread G 1/4 internal thread according to DIN 3852 Width across flat AF 27
Electrical connection	Connector pin configuration: connector, system <i>minicon</i> (7/8"-16 UN) Connector (view of contacts)



BN = brown
 BU = blue
 WH = white
 BK = black
 GNYE = green/yellow

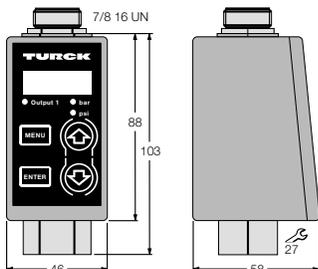


Pressure control with relay output

Characteristic data

Measuring range [bar]	Available range [bar]			Admissible over-pressure [bar]	Min. burst pressure [bar]
	Switch point SP1	Release point rP1	Increments		
-1...0	-1.00 ... -0.07	-0.98 ... -0.05	0.01	3	5
0...1	0.08 ... 1	0.05 ... 0.97	0.01	4	6
0...2.5	0.17 ... 2.5	0.12 ... 2.45	0.01	10	15
0...10	0.7 ... 10	0.5 ... 9.8	0.1	40	60
0...16	1.12 ... 16	0.8 ... 15.7	0.1	64	96
0...25	1.7 ... 25	1.2 ... 24.5	0.1	100	150
0...40	2.8 ... 40	2.0 ... 39.2	0.1	160	240
0...70	4.9 ... 70	3.5 ... 68.6	0.1	280	420
0...100	7 ... 100	5 ... 98	1	400	600
0...160	11.2 ... 160	8 ... 156.8	1	640	960
0...250	17.5 ... 250	12.5 ... 245	1	1000	1500
0...400	28 ... 400	20 ... 392	1	1200	1800
0...600	42 ... 600	30 ... 568	1	1200	1800

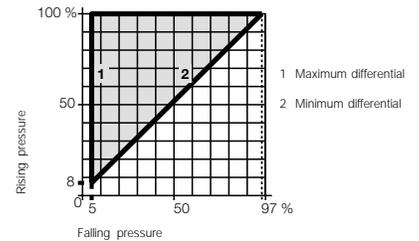
Dimensions



List of pressure ranges

bar	psi
-1	-14.5
1	14.5
2.5	36.25
10	145
16	232
25	362.5
40	580
70	1015
100	1450
160	2320
250	3625
400	5800
600	8700

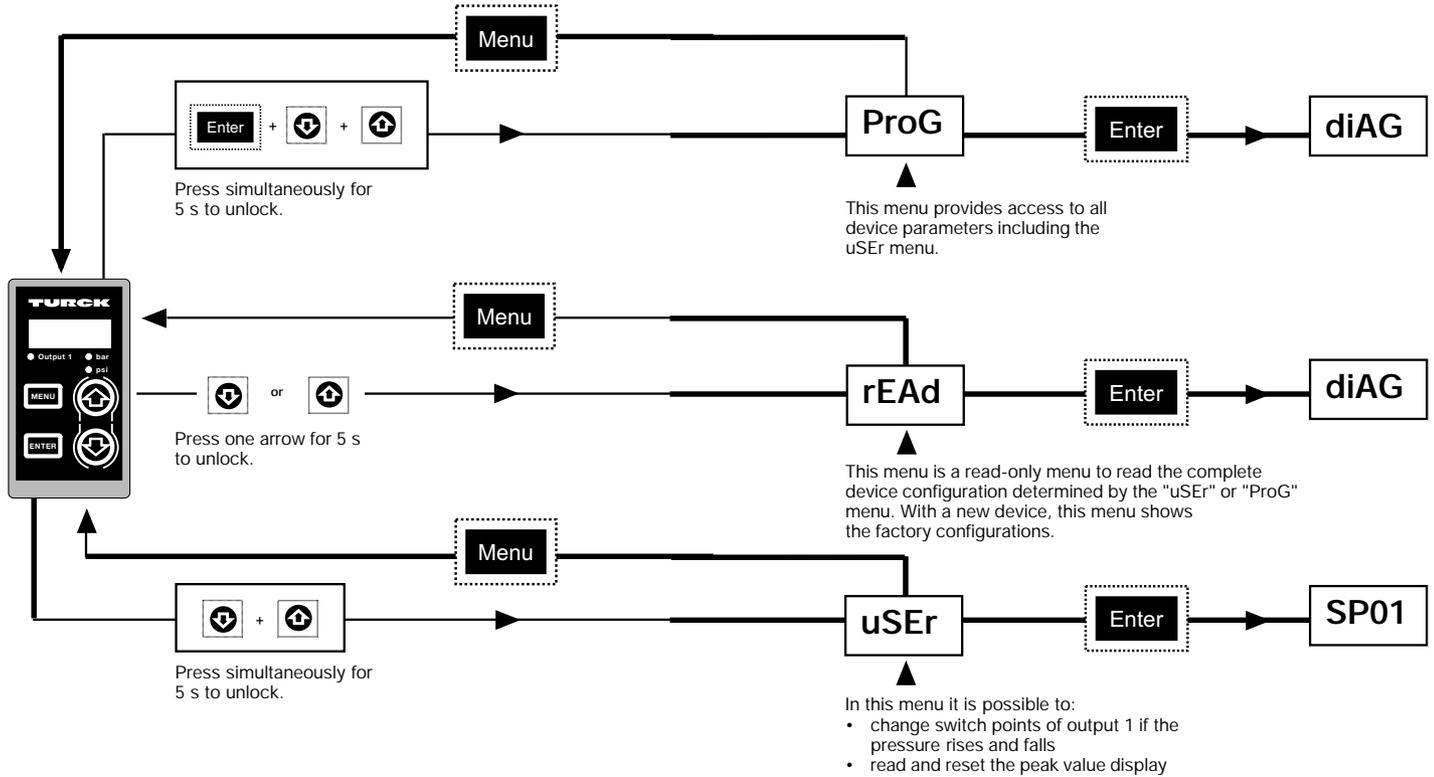
Switching and release point range



Factory configurations

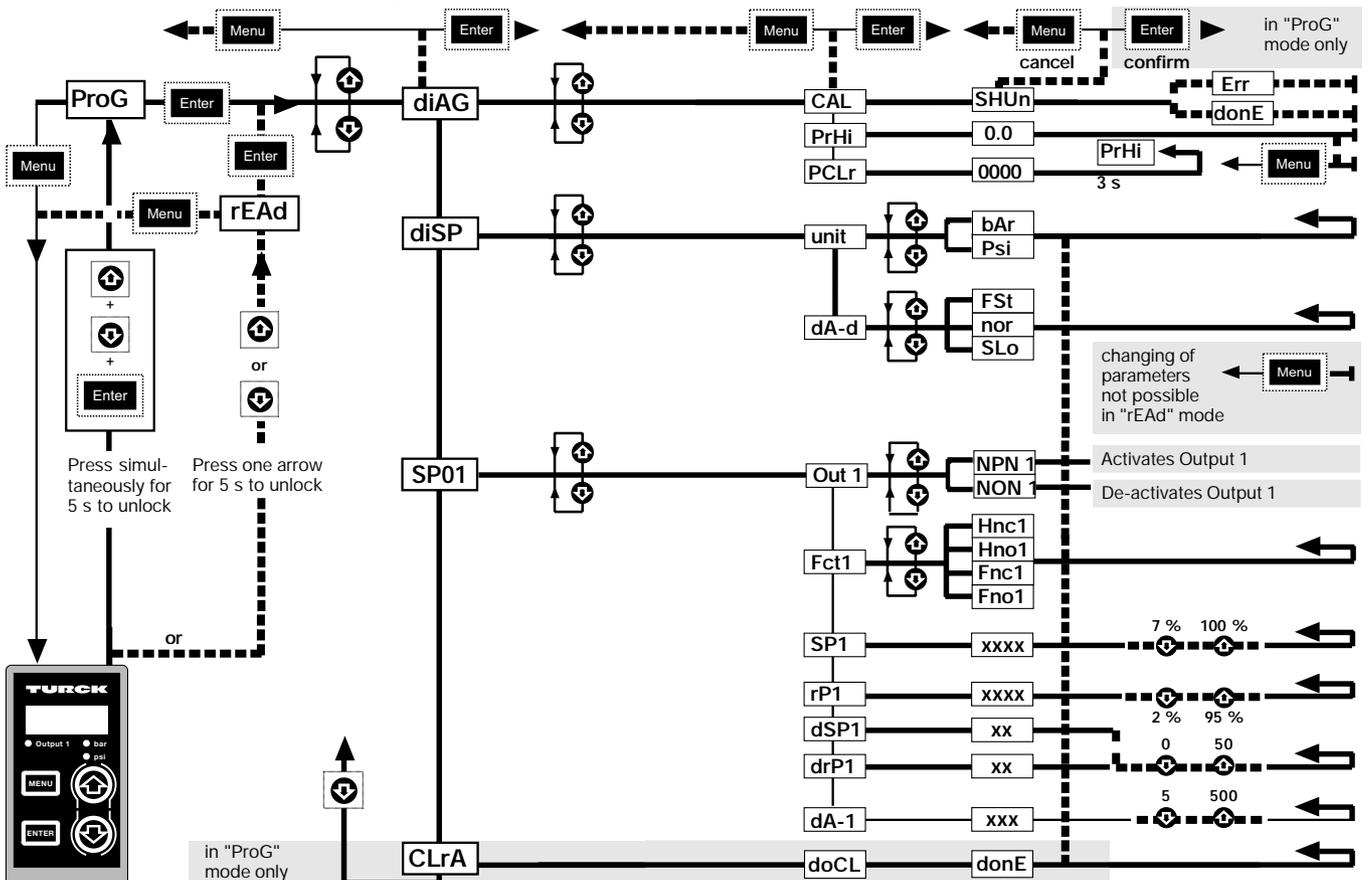
Measuring unit	unit	bar
Display reaction time	dA-d	nor
Relay output		
Function of output 1	Fct1	Hno1
Switch point - rising pressure	SP1	50 %
Release point - falling pressure	rP1	25 %
Switch-ON delay output 1	dSP1	0 s
Switch-OFF delay output 1	drP1	0 s
Response time output 1	dA-1	20 ms

Main menu

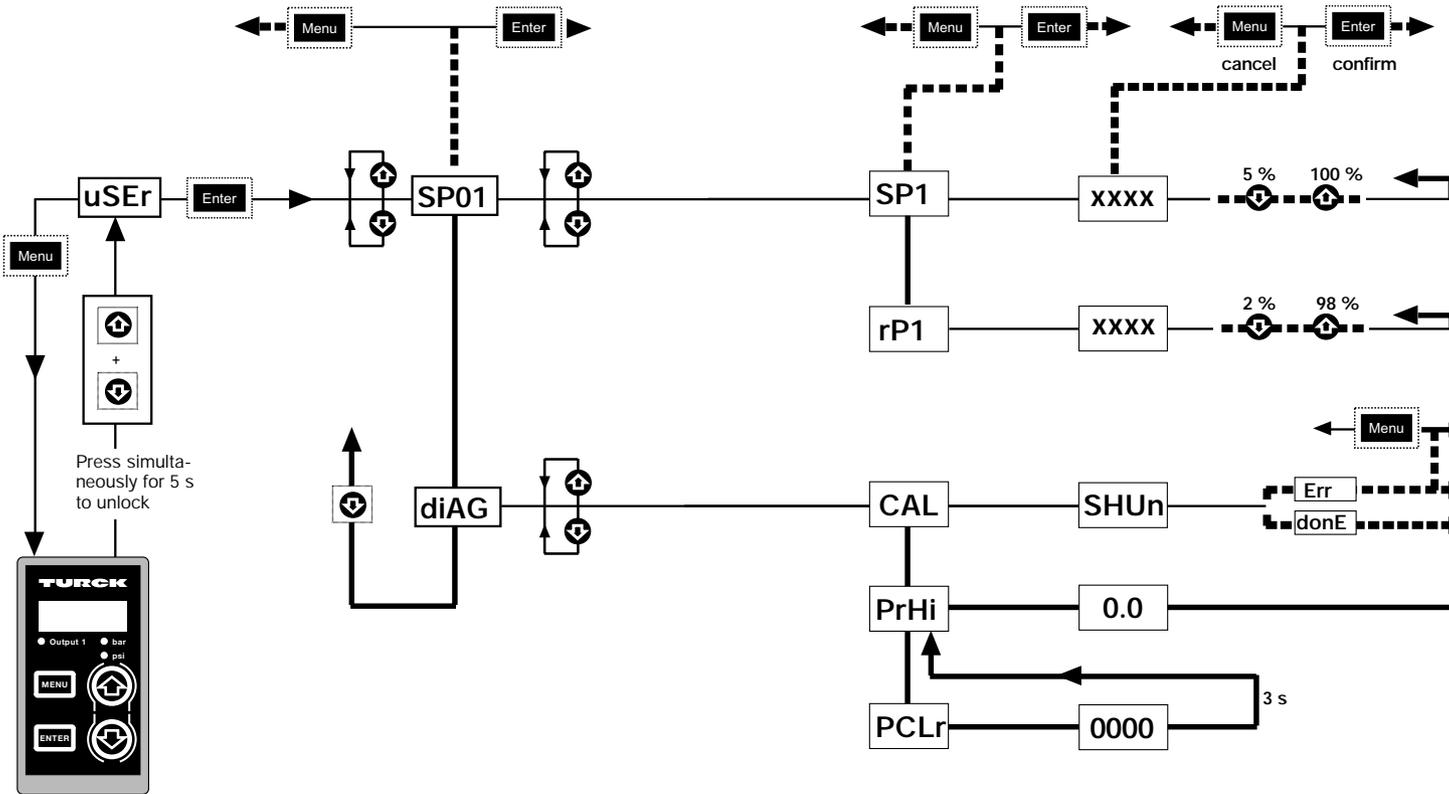


"READ" menu (read-only of device configurations)

"PROG" menu (complete configuration of the product)



USER menu, diagnostics



Display symbol list (alphanumeric list)

4-20	Analogue output active
AnLG	Analogue 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 reaction 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, NC output 2
Fno1	Window mode, NO output 1
Fno2	Window mode, NO output 2
FS-A	Analogue 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	Analogue 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	Analogue 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 st stage)
rP2	Reset point: decreasing pressure (2 nd 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 st stage)
SP2	Switching point increasing pressure (2 nd stage)
unit	Measurement unit
uSEr	User menu