Product Description



NGL Series digital level switches are the perfect solution designed for use in harsh industrial conditions.

It has long-term stability and overload resistance.It provides high linearity, adjustable hysteresis and flexible use over the entire measuring range.

- Level measurement with 5mm resolution
- Adjustable hysteresis and window function outputs
- Flexible configurable switching output (PNP, NPN) and Relay Outputı
- Optional Analog 4...20 mA output
- Instant temperature reading with LED screen
- • 270° rotatable led display

Areas of Application

- Machine tools
- Hydraulics and Pneumatics
- Pumps and compressors
- Machine building

Technicial Specifications

Connection Type	G1 - G1/2" - 1/2" BSPT - 1/2" NPT
Accuracy @ 25°C for 5 min	5mm
Operating temperature	-20°C...+80°C
Body Material	316L Stainless Body
Output Signal	Relay Output (NO/NC), Switching(PNP, NPN), Analog(4...20 mA)

Measuring Range Specifications	
Vacuum Resistance	Yes
Pressure Resistance	Max. 25 bar
Digital Display	
Indication range	14 segment
Measurement units	cm, mm, mA
Display Color	Green (LED)
Character size	13 mm [0.51 in]
Digits	4-digits
Display	The display can be rotated manually through 270°

Order Codes

Table 1

NGL	-	-	-		-	-
Model	**Mechanical Connection**	**Electrical Connection Type**	**Measuring Range**		**Output Signal**	**Analog Output (Optional)**
			Code	**Level**		
NGL	**A1** G1 **A5** G1/2” **S5** 1/2” BSPT **N5** 1/2” NPT	**T3** M12 x 1 (4 pin)	50	50 mm	**K1** Relay Output (NO/NC) **K2** Switch Output (PNP,NPN)	**Z1** Analog Output (4...20 mA) If Z1 is not selected, analog output will not be added.
			150	150 mm		
			200	200 mm		
			250	250 mm		
			300	300 mm		
			400	400 mm		
			500	500 mm		
			1000	1000 mm		
			1500	1500 mm		

Electrical connection

Connection Type	Circular Connector M12 x 1 (4-pin)
Pin Assignment	Pin assignments vary according to the output signals. Please see “Table 2” for detailed explanation.
Reverse Polarity Protection	U+ vs. U
Insulation Voltage	DC 500 V

Table 2



M12 x 1 (4 PİN)

K1	
U+	1
U-	3
NC	4
NO/S+ (1)	2

K2	
U+	1
U-	3
SP1	4
SP2/S+(1)	2

Pin Assignment:

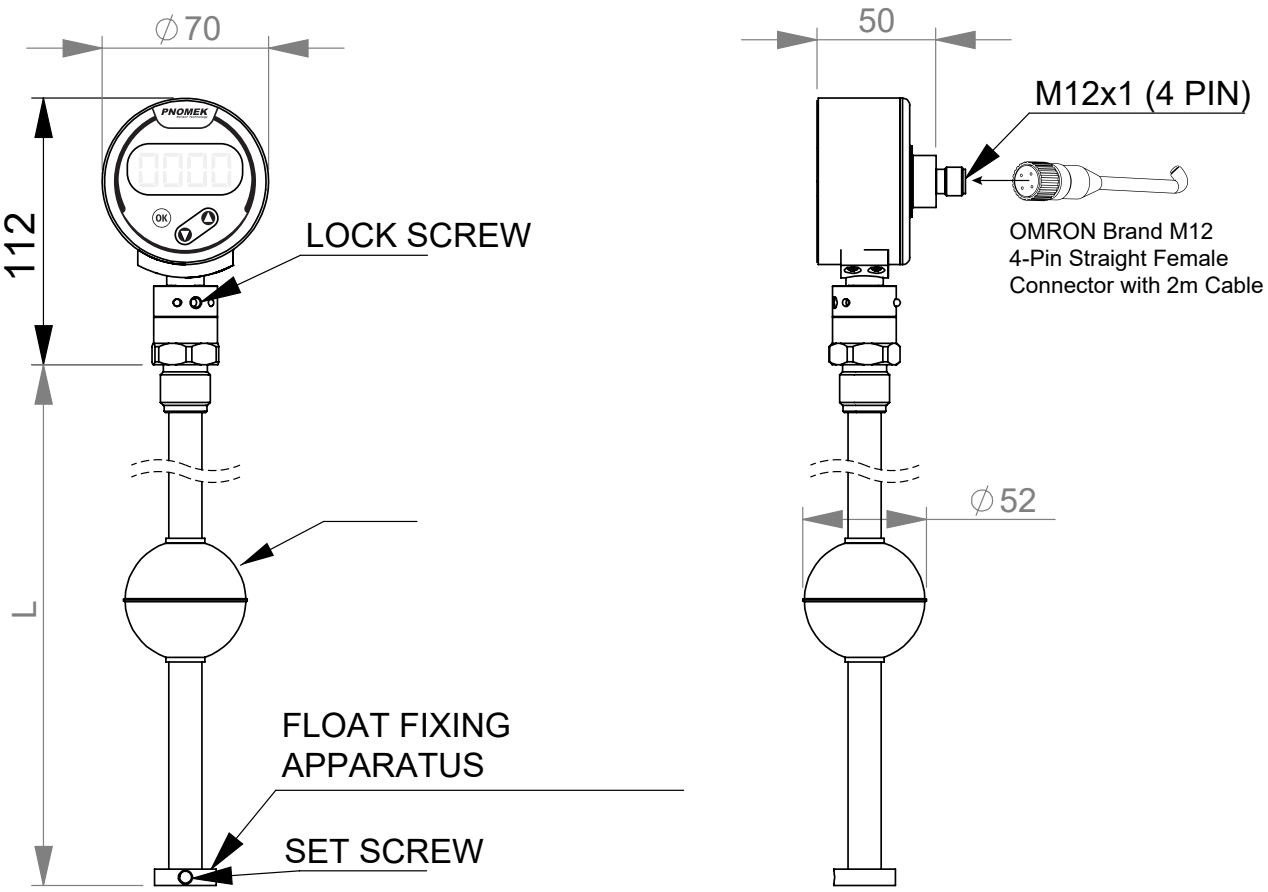
U+ Positive power supply terminal
U- Negative power supply terminal
SP1 1.Switching point
SP2 2. Switching point
S+ 4...20 mA

(1) If analog output is requested, pin “2” will be used as analog pin.

Properties of Output Signal		
Anahtarlama Çıkışı 1	PNP(1)	
	NPN (1)	
	Factory Setting:PNP	
Anahtarlama Çıkışı 2	PNP (1)	
	NPN (1)	
	Factory Setting:PNP	
Röle Çıkışı	NO	
	NC	
Analog Output	4...20 mA	
Switching Function	•Window (2) • Hysteresis (2)	
	Factory setting: Hysteresis Contact function	
Setting range of the switch points	• Factory settings • Customer-specific Switching point	
	Switching point 1 and switching point 2 can be set independently → See operating instructions	
Switch hysteresis	Minimum 0.25 % of FS (3)	
Load		
Analog Output (4 ... 20 mA)	≤ 500 Ω	
NO	Max. 5A - 24DCV	
NC	Max. 5A - 24DCV	
PNP	Max. 300 mAh	
NPN	Max. 300 mAh	
Switching delay time	Configurable from 0 to 65 sr	
Reset Delay Time	Configurable from 0 to 65 s	
Supply Voltage		
Product Operating Voltage Range	5 - 24 VDC	
Switching voltage	Supply voltage	
Current Consumption	Models without 4 ... 20 mA output signal	Max. 70 mA
	Models with 4 ... 20 mA output signal	Max. 95 mA
Overvoltage protection	DC 40 V	
Dynamic behaviour		
Settling time per IEC 61298-2	Analog signal	≤ 2 ms
	Switching output	≤ 2 ms
Switch-on time	2 s	

(1) For detailed explanation, refer to the page “8” of the user manual. Please review the “Table 2” on that page.
(2) For detailed explanation, see the page “12 and 13” of the user manual. Please review “Table 3” and “Table 4” on those pages.
(3) Full Scale

Technical Dimensions



270° ROTATABLE SCREEN

