



Compact System in Level Control

ELK 4/ ELK 4F



Main Features :

Ayvaz Compact System GALAXY ELK 4 / ELK 4F work according conductivity measurement principle. ELK 4/ELK 4F capable of displaying 4 levels in conductor liquids ;

4 levels, each with one contact point :

- High level alarm
- Low level alarm
- Pump start,
- Pump stop.

ELK 4/ELK 4F ensure the control of all functions inside the panel. No external control device is required.

Function :

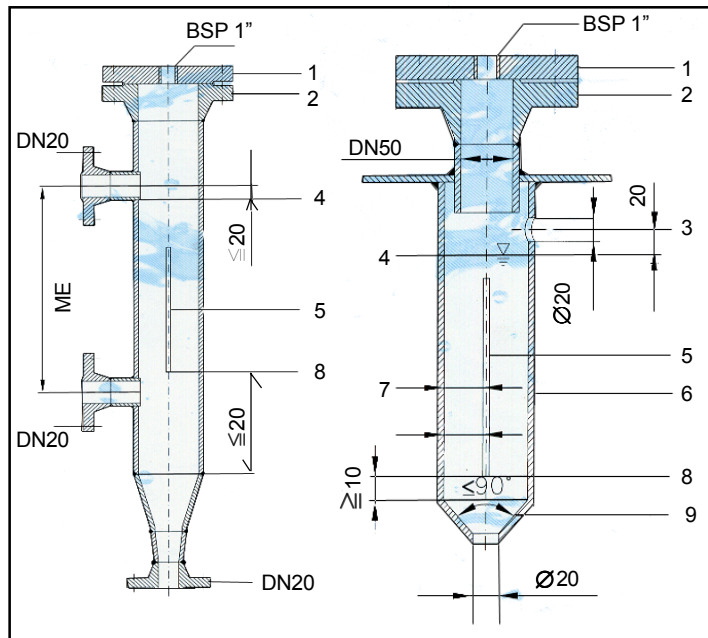
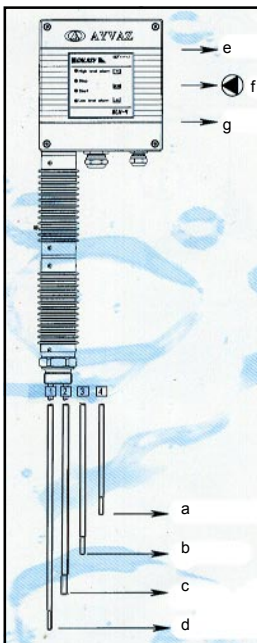
Conductivity of liquid is utilized for displaying the level of liquid. some liquids are conductor, that is, such liquids allow electric current to go through themselves. Minimum conductivity of liquid must be measured in order to ensure safe functioning of device. Two situations can be detected tank to such characteristic of liquids :

- Electrode rod dipped/exposed,
- Switch point accessed / not accessed.

Before the assembly, sizes of electrode rods must be adapted according to contact levels. (For example; maximum/minimum alarm, vale of pump control.)

- Applications
- Steam boilers
 - Supply tanks
 - Chemical applications

- a - Max.Seviye Alarm
- b - Pompa stop
- c - Pompa start
- d - Min.Seviye Alarm
- e - Max.Seviye Alarm
- f - Pompa start-stop
- g - Min.Seviye Alarm



ORDER SPECIMEN :

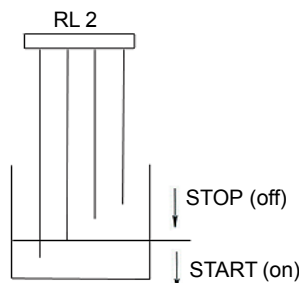
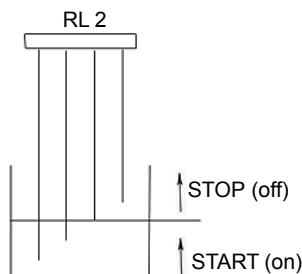
L1. Length measures :
ELK 4 : 500/1000/1500

L2. Length measures :
ELK 4F : 436/936/1436

1. FLANGE :
DIN 50, PN 40, DIN 2527
DIN 100, PN 40, DIN 2527
2. Rules n the approval of boiler stand pipe with connection flange must be taken into consideration
3. Ventilation hole
4. High water level (HW)
5. Electrode rod, d = 14 mm
6. Protection pipe \geq DN 100
7. Electrode distance \geq 14
8. Low water level (LW)
9. Reduction :
114.3 x 3.6 - 48.3 x 2.9 W
DIN 2616

Important Note

For cable connection use multiconduit flexible cable with minimum conductor size of 1.5 mm²



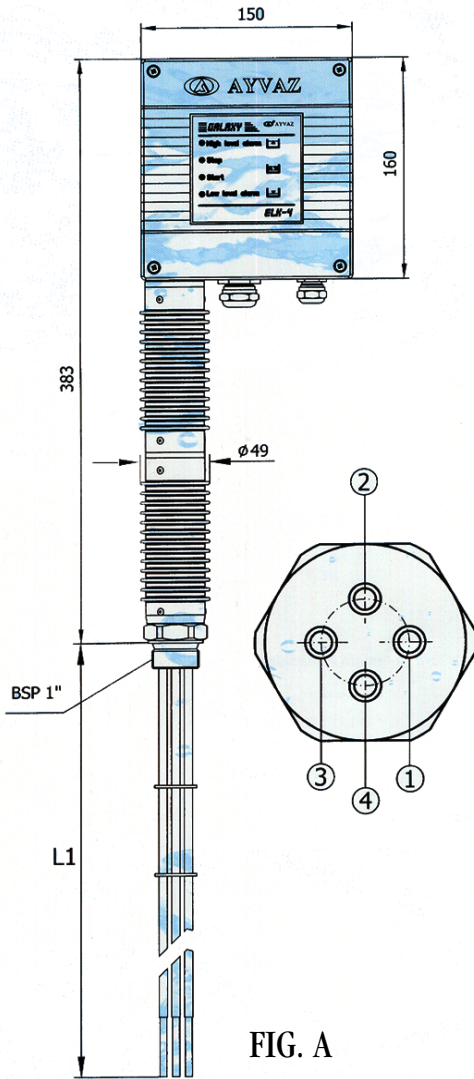


FIG. A

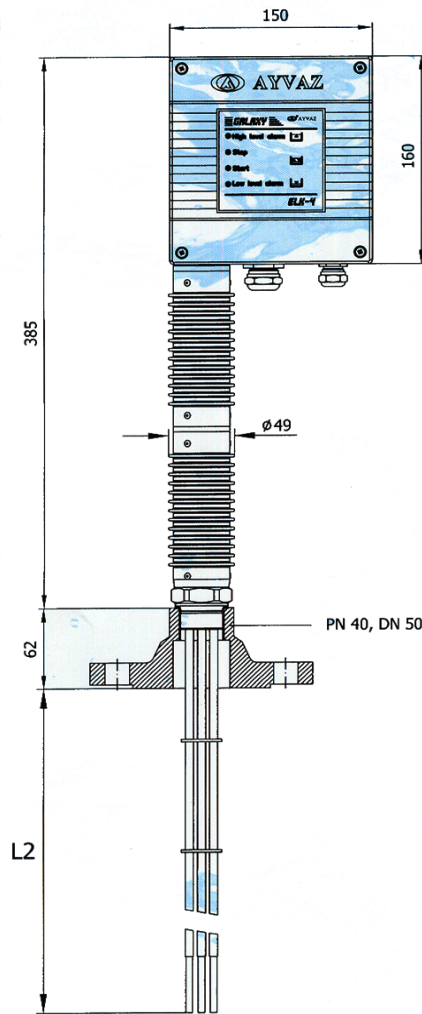
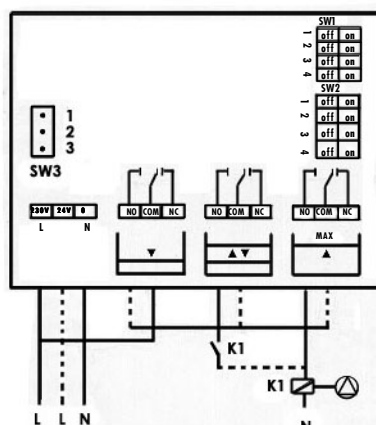
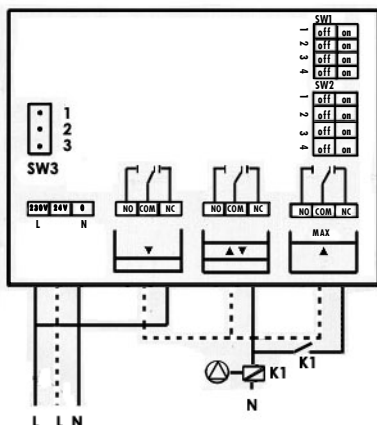


FIG. B

OPERATING CONDITIONS	
Max.Operating Temperature TMD. (°C)	238
Max.Operating Pressure PMO (bar)	32
Max.Allowable Ambient Temperature TMD. (°C)	70
Approx Weight (kg)	2.3

CONNECTIONS	
ELK 4	Screwed 1" BSP (DIN ISO 228) (fig. A)
ELK 4F	Flanged DN 50, PN 40, DIN 2635 For marine applications (fig. B)

Typical connention types



Intermediate Disc : PTFE
Standard Sizes :

ELK-4 (L mm)	ELK-4F (L mm)
L1	L2
500	436
1000	936
1500	1436

Main Supply :

230 V ±% 10, 50 - 60 Hz
 115 V ±% 10, 50 - 60 Hz(Opsiyonel)
 24 V ±% 10, 50 - 60 Hz(Opsiyonel)

Power Consumption : 5 VA

Fuse : Thermal Fuse Tmax = 115 °C

Precision :

Degree 1 : 10 µS/cm
 Degree 2 : 0.5 µS/cm

Electrode Voltage : 10 Vss

Output :

3 Volt-free relay contact (dry contact)
 12 A at 125 V AC - 50/60 Hz
 7 A at 250 V AC - 50/60 Hz
 7 A at 30 V DC

Current Supply / Current Cut-Out Delay :

0 to 7 sec.
 Dip switch adjusted (default adjustment 3 sec)

Indicators and Adjusters :

4 leds to indicate
 "electrode dipped"
 "current supplied to out output / output relay"
 1 quadripole DIP switch for change in precision subject to conductivity.
 1 Dip switch for change in contact delay.

Cable Inlet :

1 x PG 9
 1 x PG 13.5
 Integral cable, clamp cable.

Protection :

IP 65, DIN 40050

Material Structure :

Case : Aluminium Injection 3.2161 (G AISI8Cu3)

Body :

Stainless steel 1.4571 (CrNiMoTi 17122)

Flange :

Forged Steel 1.0460 (C22.8)

Measuring Electrodes :

Stainless Steel 1.4571

Electrode Insulation : PTFE