

**Technical Information****IQAN-LST Input Devices****Environmental Protection****EMI**

ISO 11452-2 (immunity vs EM field)
ISO 14982 (radiated emission)
ISO 11452-4 (immunity vs injected RF)
ISO 7637-2 (immunity vs supply transients)
EN61000-4-8 (immunity vs magnetic field)

ESD

EN 61000-4-2 (external)
ISO TR 10605 (external)

Mechanical environment

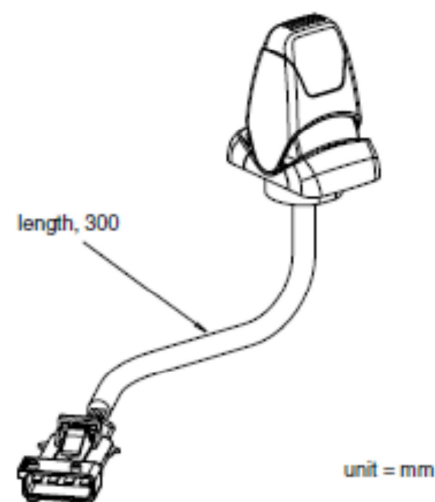
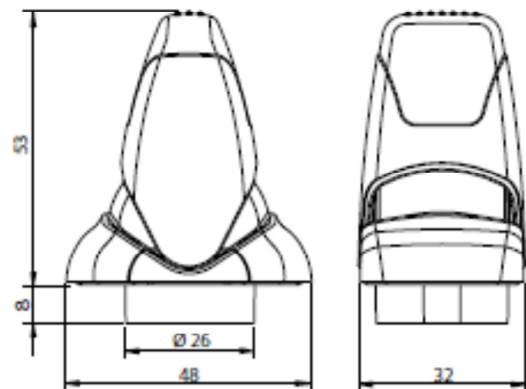
IEC 68-2-64 Fh (random)
IEC 68-2-29 Eb (bump)

Climate environment

IEC 68-2-18 Rb3 (water)
IEC 68-2-30 Db (var1, damp, cyclic)
IEC 68-2-3 Ca (damp, heat steady state)
IEC 68-2-2 Bb (heat)
IEC 68-2-1 Ab (cold)
IEC 68-2-14 Nb (change of temperature)

Chemical environment

IEC 68-2-52 Kb (salt mist, cyclic)



Technical Information

IQAN-LST Input Devices

Application

The IQAN-LST is a paddle style mini-lever in the IQAN product group. This lever focuses on compact design, weather resistance and safety.

The LST is a small single-axis joystick 0.5 - 4.5 Vdc, intended for the proportional control of one double-acting hydraulic function. The combination of a mini-lever and armrest can provide substantial ergonomic benefits. The LST can be mounted in the armrest or on the dashboard in mobile vehicles. It is easily actuated with a fingertip for good ergonomics.

Design and function

The IQAN-LST is lightweight with small installation dimensions. The LST also has low, well-adapted forces designed in for ease of operation in close quarters. The lever is covered with friction rubber on either side, to prevent the fingers from slipping and to provide a comfortable feel. Mounting screws are installed from underneath for a clean appearance of the dashboard, panel or armrest.

The IQAN-LST is designed for the outdoor environment. The electronics are potted and the cable has a choice of either a Saab sealed AMP junior-power timer connector or a Deutsch DT series transportation connector. . These features combine to give the LST an IP66 rating.

The IQAN-LST is a spring centered, dual sensor device. The dual sensors provide 0.5 - 4.5 Vdc and 4.5 - 0.5 Vdc outputs which allows error checking to meet high safety requirements. All inputs and outputs are protected against short circuit to ground. It is well suited as a control unit for a variety of valve drivers. The LST fits to the IQAN platform and is designed to meet typical environmental stresses in mobile hydraulic applications.

General

Weight	0.04 Kg
Rated power supply (V_s)	5 VDC
Load resistive (min.)	1K Ω
Load capacitive (max.)	1 μ F
Current consumption	16 mA

Mechanical

Angle of movement	$\pm 30^\circ$
Expected life (operations)	5 million

Environment

Operating temperature	-40° to 70 °C
Sealing	IP66

Analog outputs

Active range (VDC out)	10%-90% V_s
Resolution	<2mV

Connectors

S	Saab (AMP/Tyco JPT)
D	Deutsch DT04

Ordering part numbers

IQAN-LST-S	20011381
IQAN-LST-D	20014070

Deflection vs. output diagram

