



aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
**hydraulics**  
pneumatics  
process control  
sealing & shielding



# IQAN-LST Input Devices

Electronic Control Systems



ENGINEERING YOUR SUCCESS.

**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.)	4.5K $\Omega$
Load capacitive (max.)	1 $\mu$ 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

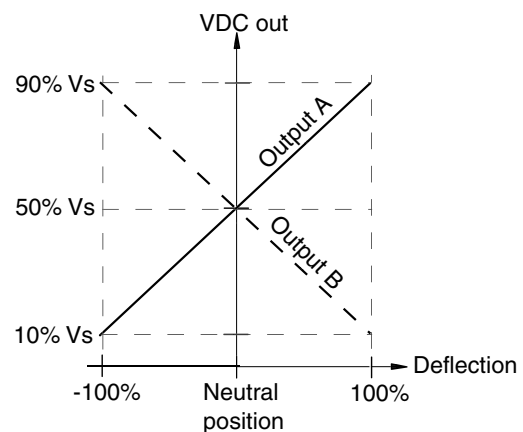
**Connectors**

S	Saab (AMP/Tyco JPT)
D	Deutsch DT04

**Ordering part numbers**

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

**Deflection vs. output diagram**



**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**

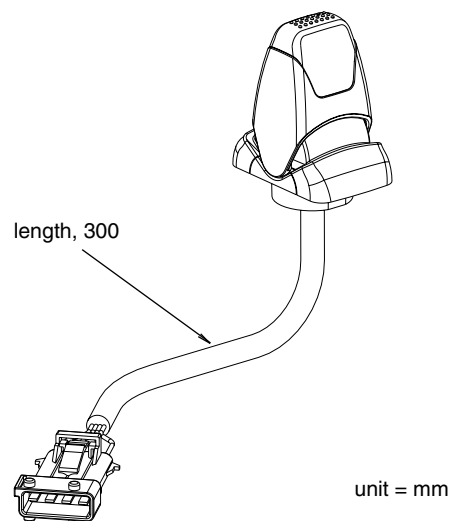
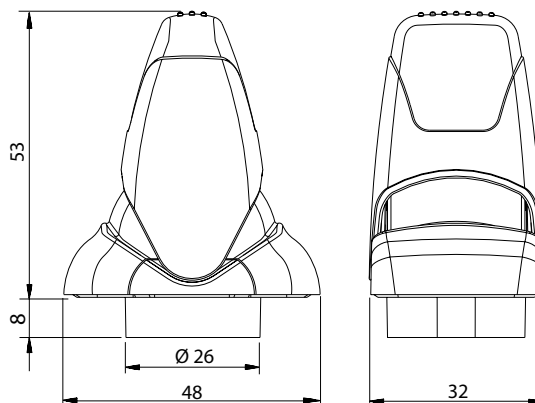
IEC 68-2-64 Fh (random)  
IEC 68-2-29 Eb (bump)

**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)



**! WARNING**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure, and review the information concerning the product or system in the current product catalogue. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

**Offer of Sale**

Please contact your Parker representation for a detailed "Offer of Sale".

# Parker Worldwide

## Europe, Middle East, Africa

**AE – United Arab Emirates,**  
Dubai

Tel: +971 4 8127100  
parker.me@parker.com

**AT – Austria,** Wiener Neustadt  
Tel: +43 (0)2622 23501-0  
parker.austria@parker.com

**AT – Eastern Europe,** Wiener  
Neustadt  
Tel: +43 (0)2622 23501 900  
parker.easteurope@parker.com

**AZ – Azerbaijan,** Baku  
Tel: +994 50 2233 458  
parker.azerbaijan@parker.com

**BE/LU – Belgium,** Nivelles  
Tel: +32 (0)67 280 900  
parker.belgium@parker.com

**BY – Belarus,** Minsk  
Tel: +375 17 209 9399  
parker.belarus@parker.com

**CH – Switzerland,** Etoy  
Tel: +41 (0)21 821 87 00  
parker.switzerland@parker.com

**CZ – Czech Republic,** Klecany  
Tel: +420 284 083 111  
parker.czechrepublic@parker.com

**DE – Germany,** Kaarst  
Tel: +49 (0)2131 4016 0  
parker.germany@parker.com

**DK – Denmark,** Ballerup  
Tel: +45 43 56 04 00  
parker.denmark@parker.com

**ES – Spain,** Madrid  
Tel: +34 902 330 001  
parker.spain@parker.com

**FI – Finland,** Vantaa  
Tel: +358 (0)20 753 2500  
parker.finland@parker.com

**FR – France,** Contamine s/Arve  
Tel: +33 (0)4 50 25 80 25  
parker.france@parker.com

**GR – Greece,** Athens  
Tel: +30 210 933 6450  
parker.greece@parker.com

**HU – Hungary,** Budapest  
Tel: +36 1 220 4155  
parker.hungary@parker.com

**IE – Ireland,** Dublin  
Tel: +353 (0)1 466 6370  
parker.ireland@parker.com

**IT – Italy,** Corsico (MI)  
Tel: +39 02 45 19 21  
parker.italy@parker.com

**KZ – Kazakhstan,** Almaty  
Tel: +7 7272 505 800  
parker.easteurope@parker.com

**NL – The Netherlands,** Oldenzaal  
Tel: +31 (0)541 585 000  
parker.nl@parker.com

**NO – Norway,** Asker  
Tel: +47 66 75 34 00  
parker.norway@parker.com

**PL – Poland,** Warsaw  
Tel: +48 (0)22 573 24 00  
parker.poland@parker.com

**PT – Portugal,** Leca da Palmeira  
Tel: +351 22 999 7360  
parker.portugal@parker.com

**RO – Romania,** Bucharest  
Tel: +40 21 252 1382  
parker.romania@parker.com

**RU – Russia,** Moscow  
Tel: +7 495 645-2156  
parker.russia@parker.com

**SE – Sweden,** Spånga  
Tel: +46 (0)8 59 79 50 00  
parker.sweden@parker.com

**SK – Slovakia,** Banská Bystrica  
Tel: +421 484 162 252  
parker.slovakia@parker.com

**SL – Slovenia,** Novo Mesto  
Tel: +386 7 337 6650  
parker.slovenia@parker.com

**TR – Turkey,** Istanbul  
Tel: +90 216 4997081  
parker.turkey@parker.com

**UA – Ukraine,** Kiev  
Tel +380 44 494 2731  
parker.ukraine@parker.com

**UK – United Kingdom,** Warwick  
Tel: +44 (0)1926 317 878  
parker.uk@parker.com

**ZA – South Africa,** Kempton Park  
Tel: +27 (0)11 961 0700  
parker.southafrica@parker.com

## North America

**CA – Canada,** Milton, Ontario  
Tel: +1 905 693 3000

**US – USA,** Cleveland  
(industrial)  
Tel: +1 216 896 3000

**US – USA,** Elk Grove Village  
(mobile)  
Tel: +1 847 258 6200

## Asia Pacific

**AU – Australia,** Castle Hill  
Tel: +61 (0)2-9634 7777

**CN – China,** Shanghai  
Tel: +86 21 2899 5000

**HK – Hong Kong**  
Tel: +852 2428 8008

**IN – India,** Mumbai  
Tel: +91 22 6513 7081-85

**JP – Japan,** Fujisawa  
Tel: +81 (0)4 6635 3050

**KR – South Korea,** Seoul  
Tel: +82 2 559 0400

**MY – Malaysia,** Shah Alam  
Tel: +60 3 7849 0800

**NZ – New Zealand,** Mt Wellington  
Tel: +64 9 574 1744

**SG – Singapore**  
Tel: +65 6887 6300

**TH – Thailand,** Bangkok  
Tel: +662 717 8140

**TW – Taiwan,** Taipei  
Tel: +886 2 2298 8987

## South America

**AR – Argentina,** Buenos Aires  
Tel: +54 3327 44 4129

**BR – Brazil,** Sao Jose dos  
Campos  
Tel: +55 12 4009 3500

**CL – Chile,** Santiago  
Tel: +56 2 623 1216

**MX – Mexico,** Apodaca  
Tel: +52 81 8156 6000

**VE – Venezuela,** Caracas  
Tel: +58 212 238 5422



### EMEA Product Information Centre

Free phone: 00 800 27 27 5374

(from AT, BE, CH, CZ, DE, DK, EE, ES, FI, FR, IE, IL,  
IS, IT, LU, MT, NL, NO, PL, PT, RU, SE, SK, UK, ZA)

### US Product Information Centre

Toll-free number: 1-800-27 27 537

www.parker.com

Your local authorized Parker distributor