



# WORKSWELL EX-PROOF HOUSING FOR THERMAL CAMERAS

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Datasheet

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Revision number: 1.0

# Workswell EX-PROOF Housing for Thermal Cameras

## Introduction

Workswell **EX-PROOF protective fixed housing** for thermal camera (“EX-WHTC”) is specially designed for using in various industrial, fire-safety and surveillance applications where EX regulations must be met. The housing is suitable for different thermal cameras that can be equipped with smaller or bigger lenses. Workswell EX-PROOF housing offers effective **protection IP67** against dust, rain, snow and freezing conditions due to integrated heater system.



The main part of the housing is very well optimized for maximum heat dissipation from camera electronics. For this reason is thermal measurement stable even at high operational temperature fluctuations. The open system allows an easy access for installation of different kind of infrared cameras including [Workswell WIC](#) and [Workswell SMARTIS](#).



# Workswell EX-PROOF Housing Technical Specification

General information	
AISI 316L stainless steel construction	
Passivated and electro-polished external surfaces	
Silicone O-ring seals	
Compatible cameras	Workswell: WIC (all lenses), SMARTIS (all lenses) FLIR: A3xx / A325sc (15°, 25°, 45°), A615 / A655sc (25°, 45°) <i>Minimum distance between camera and housing window: 10 mm</i>
Mechanical information	
Cable entry	2x 3/4" NPT holes for cable entry
Sunshield	Yes
Internal usable area (W x H x L)	80 x 82 x 245 mm
Weight	16.5 kg
Germanium window information	
Material	Germanium
Window protection	Window with protection grid
Spectral range	7.5 – 14 $\mu$ m
Dimensions	Diameter 56mm
Thickness	10mm
External treatment	Scratch resistant (Hard Carbon Coating), Antireflection
Internal treatment	Antireflection
Power supply, Serial interface and heating	
Camera power supply	24 V AC, 2.2 A, 50/60 Hz
Serial interface	1x RS-485 line, half-duplex
Camera power consumption	13 W max
Heater	On Temperature 15°C $\pm$ 3°C Off Temperature 22°C $\pm$ 3°C
Operating environment	
Indoor / Outdoor	Yes
IP protection	EN60529: 1991/A1 2001, IP66/IP67 with cable glands
Operating temperature with heating	-40°C...+60°C, Relative humidity 10-95% (non-condensation)



## EX-PROOF housing certification

### **ATEX (EN 60079-0: 2012, EN 60079-1: 2007, EN 60079-31: 2009):**

Ex II 2 G Ex d IIC T6 Gb Ta -40°C to +60°C

Ex II 2 D Ex tb IIIC T85°C Db Ta -40°C to +60°C

### **IECEX (IEC 60079-0: 2011 Ed.6, IEC 60079-1: 2007-04 Ed.6, IEC 60079-31: 2008 Ed.1):**

Ex d IIC T6 Gb Ta -40°C to +60°C

Ex tb IIIC T85°C Db Ta -40°C to +60°C

IP66/IP67 (EN60529:1991/A1 2001)

### **INMETRO (ABNT NBR IEC 60079-0:2008 + Errata 1:2011, ABNT NBR IEC 60079-1:2009 + Errata 1:2011, ABNT NBR IEC60079-31:2011):**

Ex d IIC T6 Gb -40°C à/to +60°C

Ex tb IIIC T85°C Db -40oC à/to +60°C

IP66/IP67

### **EAC EX:**

Ex II 2G Ex d IIC T6 Gb,Ta -40°C/+60°C

Ex II 2D Ex tb IIIC T85°C Db Ta -40°C/+60°C

IP66/IP67

### **KCs 16- KABO-0172X - 16- KABO-0171X**

Ex d IIC T6

Ex tb IIIC T85°C



## Accessories – cable gland selection guide

3/4" NPT CABLE GLAND SELECTION GUIDE							
Zone, Gas	Cable gland type	Certification	Operating temperature	Cable	Part Number	Diameter of external cable (mm)	Under armor cable diameter
IIC, Zone 1 or Zone 2 IIB or IIA, Zone 1	Barrier	IECEX/ATEX/ EAC Ex	-60°C...+80°C	Not armored	C-EX-001	13 - 20.2	-
				Armored	C-EX-002	16.9 – 26	-
IIB or IIA, Zone 2	With gasket	IECEX/ATEX/ EAC Ex	-60°C...+100°C	Not armored	C-EX-003	13 - 20.2	-
				Armored	C-EX-004	16.9 – 26	11.1 – 19.7
		ATEX	-20°C...+80°C	Not armored	C-EX-005	14 – 17	-
				Armored	C-EX-006	18 – 23	14 – 17

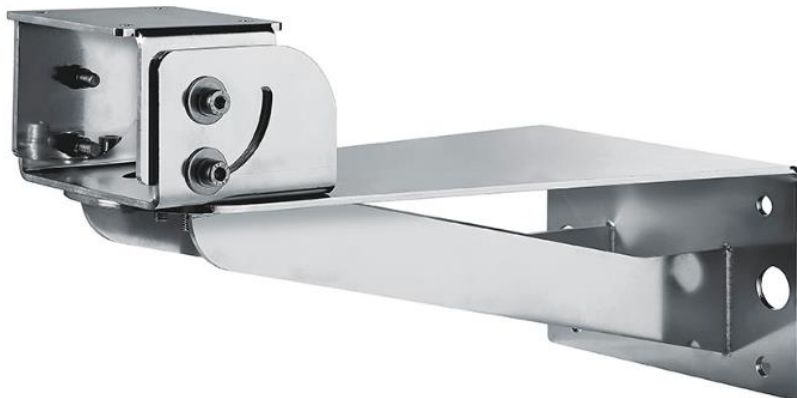
## Accessories – brackets and adaptors

Brackets and adaptors	
Part number	Description
MHXWBS	AISI 316L stainless steel wall bracket
MHXFWCA	AISI 316L stainless steel ball joint
MPXCOL	AISI 316L stainless steel pole adapter module
MPXCW	AISI 316L stainless steel corner adapter module



## Pictures of brackets and adaptors

**Wall bracket**



**Ball joint**



**Pole adapter module**



**Corner adapter module**





