

VANDERBILT

Phoenix Flameproof

Pan & Tilt heads and Camera Housings for
potentially explosive environments



Video monitoring under extreme conditions



Vanderbilt is a world leader in the manufacture of flameproof housings and Pan & Tilt heads. These are typically used in petrochemical, industrial, aerospace, or offshore industries, on sites where there is a risk of explosion because volatile gases, vapours, mists or dusts are present.

The Phoenix™ range is recognised and chosen internationally by customers who require the best engineered solution for security in hazardous areas.



Video products for potentially explosive environments



■ 30 years of proven reliability

Phoenix™ range of explosion-proof housings and Pan & Tilt heads have been used around the world for over 30 years. First launched in 1980, the range was chosen because of its engineering performance and reliability - the latest Phoenix™ range takes this performance even higher, and is now the replacement of choice for upgrades and system expansions.

■ A wide range of applications

Since its launch in 1980, the Phoenix™ range of Pan & Tilt heads and housings have been used in:

- Oil refineries
- Oil tankers
- Oil & gas rigs
- Pharmaceutical plants
- Petrochemical plants

■ Chemical process

Flameproof housings and Pan & Tilt heads are popular in CPI (Chemical Processing Industry) applications, like petrochemical or food and beverage processing plants, that are dealing with volatile vapours, flammable dusts (such as flour, sawdust), and solvent vapours.

■ Safety and Security

Personnel safety should always be the number one priority, whether it be lone workers on oil platforms, or processing staff in a chemical plant. The Phoenix™ Flameproof range ensures that process controls and security levels can be maintained in hazardous areas whilst protecting the workforce.

■ Low running costs

Phoenix™ products are available with a range of built-in telemetry receiver options which are compatible with all Vanderbilt telemetry controllers. This eliminates the need and cost of additional ATEX - approved flameproof

enclosures. Phoenix™ housings are available with sunshields and heaters, integral telemetry receivers and wipers. Phoenix™ housings are also available with a factory pre-build option of cameras/lenses (Baseefa requirement for IIC certification).

■ International Standards

Phoenix™ equipment is certified to meet the rigorous and exacting European ATEX Directive, and is certified by the internationally-recognised body: Baseefa Ltd. All Phoenix™ products also meet the relevant European standards for electrical and mechanical safety, as well as electromagnetic compatibility. These standards generally meet or exceed the requirements of most international certification bodies.

ATEX / IEC Marking - Certification Information



Ex II 2 G D	Ex II2GD Ex db IIB T6 Ex tb IIIC T85°C Db	Ex II2GD Ex db IIC T6 Ex tb IIIC T85°C Db
ATEX Specific Marking	EEx: for use in potentially explosive environments	
Group II: non mining applications	Ex db: flameproof, pressure-resistant enclosure according to BS EN 60079-1:2007	
Equipment Category 2 – giving a level of protection to equipment intended to be used in areas in which explosive atmospheres caused by gases, vapours, mists or air / dust mixtures are likely to be present. This protection is afforded under both normal and fault conditions.	IIB: suitable for gas groups IIB & IIA eg ethylene and propane	IIC: suitable for gas groups IIC, IIB & IIA eg hydrogen, acetylene, ethylene & propane
	Suitable for use in Zones 1 and 2 (Intermittent hazards which are present for up to 1,000 hours per annum)	
G D: for use in gas/vapour/mist and dust environments	T85°C Temperature class. Based on an ambient temperature of 40°C, maximum surface temperature will not exceed 85°C	

Features and benefits

- Options for Gas Group IIB and IIC explosive environments
- Suitable for use in hazardous conductive dust conditions
- Each unit is individually pressure-tested
- Housings include thermostatically-controlled demister and sunshield
- Cost effective wiper options
- Pre-build option available for camera and lens

Phoenix™ Explosion-proof selection guide



MODEL	FP50B	FH07B-30	FH07B-40	FH07C-30	FH07C-40	FPHC-40
	Pan & Tilt	Housing	Housing	Housing	Housing	Camera Head

FEATURES						
ATEX Approvals	Ex II2GD Ex db IIB T6 Ex tb IIIC T85°C Db			Ex II2GD Ex db IIC T6 Ex tb IIIC T85°C Db		
Load rating	40 kg					40 kg
Mounting	Side mount					Side mount
Preset	Standard					Standard
Heater		Standard	Standard	Standard	Standard	
Sunshield		Standard	Standard	Standard	Standard	
Factory fitted wiper		Option	Option	Option	Option	Option
Factory fitted 10fn receiver		Option	Option	Option	Option	Option
Factory fitted 17fn receiver		Option	Option	Option	Option	Option

DIMENSIONS						
External - Length	448 mm	545 mm	675 mm	545 mm	675 mm	675 mm (Housing) 448 mm (Pan & Tilt)
External - Width	167 mm	210 mm	210 mm	210 mm	210 mm	210 mm (Housing) 167 mm (Pan & Tilt)
External - Height	286 mm	186 mm	186 mm	186 mm	186 mm	186 mm (Housing) 286 mm (Pan & Tilt)
Internal - Length		290 mm	420 mm	290 mm	420 mm	420 mm
Internal - Width		114 mm	114 mm	114 mm	114 mm	114 mm
Internal - Height		94 mm	94 mm	94 mm	94 mm	94 mm
Weight	19 kg	10 kg	11.8 kg	10 kg	11.8 kg	11.8 kg (Housing) 19 kg (Pan & Tilt)

OTHER						
Environmental EN 60079	IP67	IP67	IP67	IP67	IP67	IP67
Power Options (230 VAC, 50Hz) (24 VAC, 50/60Hz) (110 VAC, 60Hz)	FP50B FP50B/L FP50B/U	FH07B-30 FH07B-30/L FH07B-30/U	FH07B-40 FH07B-40/L FH07B-40/U	FH07C-30 FH07C-30/L FH07C-30/U	FH07C-40 FH07C-40/L FH07C-40/U	FPHC-40 FPHC-40/L FPHC-40/U
Recommended brackets	FBP100	FBP100 CDBS4540	FBP100 CDBS4540	FBP100 CDBS4540	FBP100 CDBS4540	FBP100
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years	3 Years

Factory Fit Options

FH07W Wiper kit for FH07 housings, 230 VAC, 50Hz

FH07W/L As above but 24 VAC 50/60Hz

FH07W/U As above but 110 VAC 60Hz

PHOENIX-CERT_3RD Factory Fit customer-supplied camera and lens plus ATEX equipment certification

for FH07 housings (additional charge per housing)

Telemetry receivers are available as an option. Please contact Customer Support for further details.


Accessories

FH07C-CG_Cable Gland

FBP100_100kg Heavy Duty Bracket

CDBS4540_40kg Bracket

CAHA1040_40kg Swivel Mount Adaptor (Standard 4" PCD)



The information in this document contains general descriptions of technical options available, which may not always need to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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