WALSALL

ELECTRICAL EQUIPMENT PRODUCT OVERVIEW

WALSALL
A PEPPERL+FUCHS BRAND

PEPPERL+FUCHS
PROTECTING YOUR PROCESS

CONTENTS

Electrical Equipment for Hazardous and Hostile Environments

WALSALL
A PEPPERL+FUCHS BRAND

WALSALL LIMITED

Walsall Limited is a member of the Pepperl+Fuchs Group, and is incorporated in the United Kingdom. With a 115 year heritage, Walsall is a respected leader and global supplier in the field of explosion proof electrical equipment. The company is specialized in the development, certification and production of electrical products for use in hazardous areas. With its knowledge and expertise, Walsall is an ideal complement to Pepperl+Fuchs' Process Automation Division.

Walsall's main products are based around enclosures in the increased safety, intrinsic safety and flameproof protection classes with approvals for the integration of a wide range of electrical apparatus. Enclosures are available in a variety of materials, such as stainless and mild steel, glass reinforced polyester, aluminium, and cast iron. All product ranges are certified for use as a combination if more complex system solutions are required. In addition to the enclosures other product ranges include lighting, signalling equipment and emergency shutdown equipment. To compliment the core products, the ThreadEx brand offers a range of certified installation accessories which include thread conversion adaptors, stopping plugs and breather drain devices, which can all be used in hazardous areas.

END-USERS AND INSTALLERS OF WASALL EQUIPMENT

Shell, BP, Chevron, Agip, Maersk Oil & Gas, Elf, NIGC, IOEC, NIOC, Pfizer, Glaxo, Petrobras, Woodside, ADNOC, GASCO, ZADCO, Saudi Aramco, Texaco, Aker-Kvaerner, Costain, Conoco Philips, ABB, KBR, Bechtel, PFD, Snamprogetti, Cegelec, Technip, Mustang Engineering, Petronas, Marathon Oil & Gas, Transco, BNFL, London Underground, Virgin, Ikea, British Sugar, BAE Systems, Airbus, Lufthansa, British Airways, Air France, Petrofac, Wood Group, Tyco, National Grid, Diageo

CERTIFICATION

All products are certified by the British Notified Bodies, Baseefa and SIRA, with the manufacturing facility being ISO 9001:2008 approved and ATEX / IECEx notification being held. Current certifications include ATEX, GOST & IECEx with INMETRO in progress.

TERMINAL BOXES/ENCLOSURES

TERMINAL ENCLOSURES WITH RAIN CHANNEL

FXL RANGE FEATURES

- Zone 1, 2, 21, 22
- Ⓔⓧ II 2 GD, and Ⓔⓧ II 1 GD
- Certification: Ex e IIC T6/5/4/3 Gb,
  Ex tb IIIC T80/95/130/160 °C Db,
  Ex ia IIC T6/5/4/3 Ga,
  Ex tb IIIC T80/95/130/160 °C Da
- Ambient temperature range -50 °C to +120 °C
- IP66/67 to EN 60529:1992
- Electropolished 1.5 mm 316L Stainless Steel or powder coated Mild Steel box
- 0 - 4 Electropolished 3 mm 316L Stainless Steel or powder coated Mild Steel gland plates
- Sizes ranging from 229 mm x 152 mm x 130 mm to 1177 mm x 777 mm x 210/300 mm
- 4 External mounting feet
- Padlockable hasp as an option
- Return flange rain channel
- Concealed hinges

SMALL TERMINAL ENCLOSURES

SL RANGE FEATURES

- Zone 1, 2, 21, 22
- Ⓔⓧ II 2 GD and Ⓔⓧ II 1 GD
- Certification: Ex e IIC T6/5/4/3 Gb,
  Ex tb IIIC T80/95/130/160 °C Db,
  Ex ia IIC T6/5/4/3 Ga,
  Ex tb IIIC T80/95/130/160 °C Da
- Ambient temperature range -50 °C to +120 °C
- IP66 to EN 60529:1992
- Electropolished 1.5 mm 316L Stainless Steel or Powder coated (RAL 7032) 3 mm mild steel
- Sizes ranging from 110 mm x 110 mm x 65 mm to 190 mm x 190 mm x 100 mm
- 2 External mounting feet

COST EFFECTIVE TERMINAL ENCLOSURES

RX RANGE FEATURES

- Zone 1, 2, 21, 22
- Ⓔⓧ II 2 GD and Ⓔⓧ II 1 GD
- Certification: Ex e IIC T3/4/5/6 Gb,
  Ex tb IIIC T80/95/130/160 °C Db,
  Ex ia IIC T3/4/5/6 Ga,
  Ex tb IIIC T80/95/130/160 °C Da
- Ambient temperature range -50 °C to +120 °C
- IP66 to EN 60529:1992
- Electropolished 1.5 mm 316L Stainless Steel
- Sizes ranging from 100 mm x 150 mm x 60 mm to 600 mm x 600 mm x 200 mm
- 2 or 4 External mounting feet

EXTRA LARGE TERMINAL ENCLOSURES

XLX RANGE FEATURES

- Zone 1, 2
- ⟨Ex⟩ II 2 G
- Certification: Ex e IIC T3/4/5/6 Gb,
  Ex tb IIIC T80/95/130/160 °C Db,
  Ex ia IIC T3/4/5/6 Ga,
  Ex tb IIIC T80/95/130/160 °C Da
- Ambient temperature range -50 °C to +120 °C
- IP55 to EN 60529:1992
- Electropolished 1.5 mm 316L Stainless Steel or powder coated Mild Steel box
- 0 - 4 Electropolished 3 mm 316L Stainless Steel or powder coated Mild Steel gland plates
- 4 - 6 External mounting feet
- Padlockable hasp

BESPOKE TERMINAL ENCLOSURES

FXL RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex e IIC T6/5/4/3 Gb,
  Ex tb IIIC T80/95/130/160 °C Db,
  Ex ia IIC T6/5/4/3 Ga,
  Ex tb IIIC T80/95/130/160 °C Da
- Ambient temperature range -50 °C to +120 °C
- IP66 to EN 60529:1992
- Electropolished 1.5 mm 316L Stainless Steel or powder coated Mild Steel box
- 0 - 4 Electropolished 3 mm 316L Stainless Steel or powder coated Mild Steel gland plates
- Any sizes on request up to 2000 mm x 1250 mm x 600 mm
- 4 or 6 External mounting feet
- Padlockable hasp as an option
- Return flange rain channel
- Concealed hinges

GRP TERMINAL ENCLOSURES

GL RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD and ⟨Ex⟩ II 1 GD
- Certification: Ex e IIC T4/5/6 Gb,
  Ex tb IIIC T80/95/130°C Db,
  Ex ia IIC T4/5/6 Ga,
  Ex tb IIIC T80/95/130/ °C Da
- Ambient temperature range -40 °C to +60 °C
- IP66 to EN 60529:1992
- Black moulded finish as standard, other colours are available on request including red, yellow and blue
- Sizes ranging from 75 mm x 80 mm x 55 mm to 405 mm x 400 mm x 200 mm
- Concealed mounting holes

HEAVY DUTY GRP JUNCTION BOXES

GVU JUNCTION BOX FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex e IIC T6 Gb
  Ex tb IIIC T85°C Db
- Ambient temperature range -40 °C to +50 °C
- IP66 to EN 60529:1992
- Black moulded finish
- 110 mm x 110 mm x 65 mm
- 2 x external mounting lugs
- Pillar terminal option
- MK terminal option

FLAMEPROOF TERMINAL ENCLOSURES

ASMT RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex d IIB T6 Gb
  Ex tb IIIC T76°C Db
- Ambient temperature range -20 °C to +50 °C
- IP66 to EN 60529:1992
- Available in Cast Iron, Cast Aluminium or
  Cast Stainless Steel
- Available in 3 sizes:
  ASM130: 210 mm x 185 mm x 152 mm
  ASM150: 335 mm x 310 mm x 200 mm,
  ASM170:560 mm x 560 mm x 245 mm
- External mounting straps supplied as standard

FLAMEPROOF JUNCTION BOXES

E RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification:
  E115: Ex d IIC T4/5/6 Gb,
        Ex tb IIIC T130/95/80 °C Db
  E210: EEx d IIB T6
  E220: EEx d IIB T6
- Ambient temperature range:
  E115: -40 °C to +50 °C,
  E210: -20 °C to +40 °C
  E220: -20 °C to +40 °C
- IP66 to EN 60529:1992/IP6X for E210 & E220
- Powder coated cast iron
- Available in 3 sizes:
  E115: 117 mm x 117 mm x 70 mm
  E210: 145 mm x 106 mm x 65 mm
  E220: 104 mm diameter x 57.5 mm
- 2 External mounting feet

HIGH VOLTAGE TERMINAL ENCLOSURE

HVB FEATURES

- 6.6kV max operating voltage
- 650 Amps max operating current
- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification:
  Ex e IIC T6 Gb
  Ex tb IIIC T85 °C Db
  Ex e IIC T4 Gb (with anticondensation heater fitted)
  Ex tb IIIC T135 °C Db
- Ambient temperature range -50 °C to +55 °C
- IP66 to EN 60529:1992
- Electropolished 1.5 mm 316L Stainless Steel
- 0 – 4 Electropolished 3 mm 316L Stainless Steel
  or powder coated Mild Steel gland plates
- 4 External mounting feet
- Padlockable hasp as standard

LOCAL CONTROL IN GRP

SINGLE FUNCTION LOCAL CONTROL

LCP100 RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex edm IIC T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +55 °C.
  -40°C when used with a plug and gland rated to -40 °C
- IP64 for rotary components
- IP66 for all other functions
- Carbon loaded anti-static glass reinforced polyester
- Enclosure – 110 mm x 110 mm x 99 mm
- 2 x External mounting lugs

2 FUNCTION LOCAL CONTROL

LCP200 RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex edm IIC T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +55 °C.
  -40 °C when used with a plug and gland rated to -40 °C
- IP64 for rotary components
- IP66 for all other functions
- Carbon loaded anti-static glass reinforced polyester
- Enclosure – 110 mm x 220 mm x 99 mm
- 2 x External mounting lugs

3 FUNCTION LOCAL CONTROL

LCP300 RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex edm IIC T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +55 °C.
  -40 °C when used with a plug and gland rated to -40 °C
- IP64 for rotary components
- IP66 for all other functions
- Carbon loaded anti-static glass reinforced polyester
- Enclosure – 110 mm x 220 mm x 99 mm
- 2 x External mounting lugs

SINGLE FUNCTION LOCAL CONTROL

LCS100 RANGE FEATURES

- Zone 1, 2, 21, 22
- Ⓔ II 2 GD
- Certification: Ex edm IIC T5 Gb
  Ex tb IIIC T95 °C Db
- Ambient temperature range -20 °C to +50 °C.
  -40 °C when used with a plug and gland rated to -40 °C
- IP64 for rotary components. IP66 for all other functions
- LCS - Electropolished 1.5 mm 316L Stainless Steel
- Enclosure – 116 mm x 116 mm x 120 mm
- 4 x External mounting feet

2 FUNCTION LOCAL CONTROL

LCS200 RANGE FEATURES

- Zone 1, 2, 21, 22
- Ⓔ II 2 GD
- Certification: Ex edm IIC T5 Gb
  Ex tb IIIC T95 °C Db
- Ambient temperature range -20 °C to +50 °C.
  -40 °C when used with a plug and gland rated to -40 °C
- IP64 for rotary components. IP66 for all other functions
- LCS - Electropolished 1.5 mm 316L Stainless Steel
- Enclosure – 116 mm x 171 mm x 120 mm
- 4 x External mounting feet

3 FUNCTION LOCAL CONTROL

LCS300 RANGE FEATURES

- Zone 1, 2, 21, 22
- Ⓔ II 2 GD
- Certification: Ex edm IIC T5 Gb
  Ex tb IIIC T95 °C Db
- Ambient temperature range -20 °C to +50 °C.
  -40 °C when used with a plug and gland rated to -40 °C
- IP64 for rotary components. IP66 for all other functions
- LCS - Electropolished 1.5 mm 316L Stainless Steel
- Enclosure – 116 mm x 236 mm x 120 mm
- 4 x External mounting feet

CONTROL PANELS

GRP CONTROL PANELS

GLCP RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex edm IIC T6/5 Gb
              Ex tb IIIC T80/95°C Db
- Ambient temperature range -50 °C to +50 °C
- IP66 to EN 60529:1992
- Black moulded GRP enclosures
- Available sizes:
  GLCP11 – 250 mm x 255 mm x 120 mm
  GLCP12 – 250 mm x 400 mm x 120 mm
  GLCP13 – 405 mm x 400 mm x 120 mm
  GLCP14 – 405 mm x 400 mm x 165 mm
- 4 concealed mounting holes

SHEET STEEL CONTROL PANELS

XLCP RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex edm IIC T6/5 Gb
              Ex tb IIIC T130/160 °C Db
- Ambient temperature range -50 °C to +50 °C
- IP66 to EN 60529:1992
- Electropolished 1.5 mm (FXLCP3) or 2 mm (FXLCP5, 6 & 9) 316L Stainless Steel or powder coated Mild Steel box
- 0 - 4 Electropolished 3 mm 316L Stainless Steel or powder coated Mild Steel gland plates
- Available sizes : XLCP3 – 306 mm x 306 mm x 150/200 mm
                   XLCP5 – 458 mm x 382 mm x 150/200 mm
                   XLCP6 – 480 mm x 480 mm x 150/200 mm
                   XLCP9 – 762 mm x 580 mm x 150/200 mm
- 4 External mounting feet
- Padlockable hasp

FLAMEPROOF CONTROL PANELS

ASMCP RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex d IIB T6 Gb
              Ex tb IIIC T76°C Db
- Ambient temperature range -20 °C to +50 °C
- IP66 to EN 60529:1992
- Available in cast iron, cast aluminium and cast stainless steel
- Available sizes:
  ASMCP150/CI/AL/SS – 335 mm x 310 mm x 200 mm
  ASMCP170/CI/AL/SS – 560 mm x 560 mm x 245 mm
- 4 external mounting holes

POWER SWITCHING

SWITCH DISCONNECTORS

SD RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex d IIB T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +50 °C
- IP64 to EN 60529:1992
- Black powder coated cast iron
- Supplied with 2 steel mounting straps
- 4 & 6 pole switch disconnectors in 20 to 315 Amps
- 2 position switch Labeled 0-1 or On - Off
- Switch padlockable in the off position

FUSED SWITCH DISCONNECTORS

SF RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex d IIB T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +50 °C
- IP66 to EN 60529:1992
- Black powder coated cast iron
- Supplied with 2 steel mounting straps
- 4 pole fused switch disconnectors in 20 to 125 Amps
- 2 position switch Labeled 0-1 or On - Off
- Switch padlockable in the off position

DIRECT-ON-LINE STARTERS

DOL RANGE FEATURES

- Zone 1, 2, 21, 22
- Ex II 2 GD
- Certification: Ex d IIB T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +50 °C
- IP65/66 to EN 60529:1992
- Black powder coated cast iron
- Supplied with 2 steel mounting straps
- Direct online starters from 5.5 kW to 30 kW
- Adjustable overload relay
- 240 or 415 V control circuit

STAR-DELTA STARTERS

SDS RANGE FEATURES

- Zone 1, 2, 21, 22
- Ex II 2 GD
- Certification: Ex d IIB T6 Gb
  Ex tb IIIC T76 °C Db
- Ambient temperature range -20 °C to +50 °C
- IP66 to EN 60529:1992
- Black powder coated cast iron
- Supplied with 2 steel mounting straps
- Star Delta Starter/Isolator from 11 kW to 30 kW
- 240 or 415 V control circuit

DISTRIBUTION BOARDS

DBD150 RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex d IIB T6 Gb
                 Ex tb IIIC T76 °C Db
- Ambient temperature range -20 °C to +50 °C
- IP66 to EN 60529:1992
- Available in Cast Iron, Cast Aluminium or Cast Stainless Steel
- External mounting straps supplied as standard
- Up to 2 rows of twenty single pole MCBs rated between 3 & 63 A, up to 500 V.
- 62W maximum dissipation

DISTRIBUTION BOARDS

DBD170 RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex d IIB T6 Gb
                 Ex tb IIIC T76 °C Db
- Ambient temperature range -20 °C to +50 °C
- IP66 to EN 60529:1992
- Available in Cast Iron, Cast Aluminium or Cast Stainless Steel
- External mounting straps supplied as standard
- Up to 3 rows of twenty single pole MCBs rated between 3 & 63 A, up to 500 V.
- 200W maximum dissipation

ZONE 1 & 2 FLUORESCENT FITTINGS

EX D CALSTAR 500/550/600/650
RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: 500/550 – Ex d IIB T6 Gb, Ex tb IIIC T85 °C Db
  600/650 – Ex d IIC T6 Gb, Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +60 °C
- IP67 to EN 60529:1992
- Single lamp 8 Watt version. Also available as an Fire Exit fitting
- Single and double lamp 18, 36, 58 Watt versions
- Borosilicate glass or polycarbonate overtube
- Powder coated die cast aluminium housing
- 230 V AC
- High frequency electronic ballast
- Power factor 0.98
- Maintained or non-maintained operation
- 3 hours operation time in emergency mode
- Ballast lumen factor - 8 W - 27%, 18 W - 12%, 36 W - 10%, 58W - 7%

BULKHEAD FITTINGS

CALSTAR 300/350 RANGE FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: 300 – Ex de IIC T6 Gb, Ex tb IIIC T85 °C Db
  350 – Ex d IIC T6 Gb, Ex tb IIIC T85 °C Db
- Ambient temperature range -20 °C to +60 °C
- IP67 to EN 60529:1992
- Single 13 Watt compact fluorescent and 60 Watt GLS Versions
- Borosilicate glass or polycarbonate overtube
- Powder coated die cast aluminium housing
- Powder coated 0.9 mm galvanised steel reflector

SINGLE STATUS/INDICATOR LAMP

E501 FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex d IIB T5/4 Gb
  Ex tb IIIC T100 °C/135 °C Db
- Ambient temperature range -40 °C to +50 °C (T5) or +85 °C (T4)
- IP66 to EN 60529:1992
- Black powder coated cast iron
- 2 external mounting feet
- 15 Watt incandescent lamp

WELLGLASS FITTINGS

ORBEX FEATURES

- Zone 1, 2, 21, 22
- II 2 GD
- Certification: Ex de IIC T4
  Ex tD A21 IP66 T135 °C
- Ambient temperature range -20 °C to +55 °C
- IP66 to EN 60529:1992
- 230 V AC
- 125, 150 and 250 Watt mercury, metal halide and high pressure sodium versions
- Powder coated cast aluminium housing
- Magnetic choke with associated electronic igniter
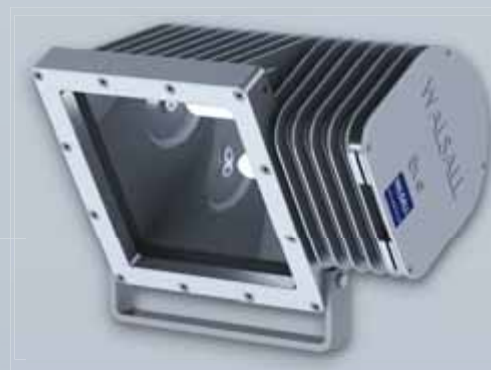- Optional wire guard

FLOODLIGHT FITTINGS

FLN FEATURES

- Zones 2 and 22
- II 3 GD
- Temperature range -40 °C to +53 °C
- Ex nR II
- IP65 to EN 60529:1992
- Magnetic choke with associated electronic igniter
- 230 V AC
- 250 W & 400 W metal halide and high pressure sodium lamps
- Body and cover - Aluminium 3.0 mm
- Glass – Toughened glass
- Reflector – Smooth polished or hammer finish Aluminium

FLOODLIGHT FITTINGS

HORIZON FEATURES

- Zone 1, 2, 21, 22
- Certification: Ex de IIC T* Gb
  Ex tb IIIC T**°C Db
- T classes to be confirmed
- Corrosion resistant marine grade Aluminium alloy
- 230 V AC
- 250 W & 400 W tubular sodium and metal halide lamps
- Re-lamping via threaded IIC access hole with separate cover to protect flamepath
- Ex e magnetic ballast with power factor correction and digital ignitor

PORTABLE LIGHTING

LED HANDLAMP

600 FEATURES

- Zone 0, 20, 1, 21, 2, 22
- ⟨Ex⟩ II 1 GD
- Ex ia IIC T4 & iaD T180°C
- 8 watt white high intensity LED light source
- Versatile output with optional beam form
- Compact & lightweight
- Up to 25m cable

Applications
- Aeronautical inspection and maintenance
- Petrochemical
- Offshore Oil & Gas
- Chemical

PORTABLE LUMINAIRIES

300 FEATURES

- Zone 1, 21, 2, 22
- ⟨Ex⟩ II 2 GD
- Ex d IIB T5 ExtD T100 ° A21
- IP66/67
- Polycarbonate over tube
- Moulded suspension hooks secured
- Compact fluorescent lamps
- Compact fluorescent lamps
- The 300F can be festooned by interconnecting suitable cables between light fittings using the 20 mm threaded entries. Alternatively each light fitting can be fitted with a suitable cable and flameproof inline plug and coupler to ease deployment.

FLAMEPROOF MANUAL CALL POINT

BREAKGLASS
E0301 FEATURES

- Zone 1, 2, 21, 22
- Ⓔ II 2 GD
- Certification: Ex d IIC T6 Gb
  Ex tb IIIC T80 °C Db
- Ambient temperature range -40 °C to +50 °C
- IP66 to EN 60529:1992
- Red powder coated cast iron
- 2 external mounting feet
- Operating voltage of 415 V max

GRP MANUAL CALL POINT

BREAKGLASS
E0301 FEATURES

- Zone 1, 2, 21, 22
- Ⓔ II 2 GD
- Certification: Ex ed IIC T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -40 °C to +55 °C
- IP66 to EN 60529:1992
- End of line or series resistors can be fitted
- Moulded red GRP (other colours available)
- 2 external mounting lugs
- Operating voltages - 24 V max with resistors fitted, 415 without

MANUAL CALL POINT

E0303/E0304 FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex ed IIC T6 Gb
  Ex tb IIIC T85 °C Db
- Ambient temperature range -40 °C to +55 °C
- IP66 to EN 60529:1992
- E0303 – GRP key switch call point
- E0304 – GRP push button call point
- Moulded red GRP (other colours available)
- 2 external mounting lugs

VANTAGE BEACON

FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Certification: Ex de IIC Gb T*
  Ex tb IIIC Db T** °C (T class TBA)
- Xenon flash tube
- Volt free & telephone initiation
- 24/48 V DC or 110/230 V AC operation
- 5, 10, 15 & 21J flash powers
- Fixed 1Hz frequency
- GRP Housing
- Ex e terminal chamber

SOCKET OUTLETS

DXN RANGE FEATURES

- Zone 1, 2, 21, 22
- Ⓔⓧ II 2 GD
- Ex de IIC T4/5/6
  Ex tD A21 T70/78/87/90/98/107
- Ambient temperature range -40 °C to +60 °C
- IP 66/67
- 20, 32 and 63 Amp versions

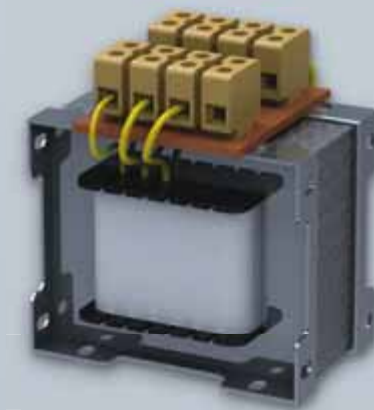## SP SPIDER BOX

SPFXL AND SPGL FEATURES

- Zone 1, 2, 21, 22
- Ⓔⓧ II 2 GD
- Ex ed IIC T6 T85 °C
- IP66/67
- SPXL - Electro polished 316L Stainless Steel
- SPGL - Enclosure black moulded GRP
- Transformer specification as TF range below

EX E TRANSFORMERS

TF FEATURES

- Zone 1, 2, 21, 22
- Ⓔⓧ II 2 GD
- Ex e IIC Gb
- 100 to 550 VA
- Voltages available:
- Primary 0-230-400 V Secondary 0-24-48 V
  Primary 0-230-400 V Secondary 2 x 0-110 V
  Primary 0-240-415 V Secondary 0-24-48 V
- Terminals capacity 0.5 - 6 mm²

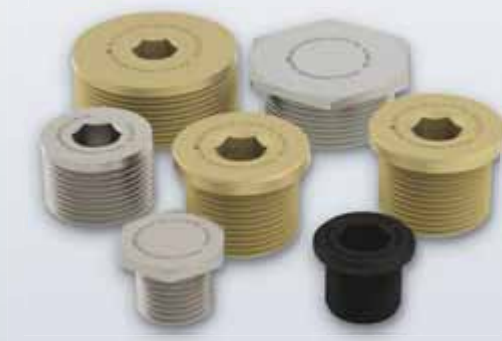## CUSTOMISED SYSTEMS

FEATURES

Walsall Ltd are able to offer Ex protected systems engineered from combinations of the product range. A typical example would be an ASM type Ex d enclosure being used to house industrial equipment such as PLC's, contactors and MCB's close coupled to an FXL type Ex e enclosure via a line bush. The Ex e enclosure is used to house control functions and terminals thus allowing for easier installation.

Component approved line bushes are used to join the enclosures to one another, and if required the whole assembly may be mounted on a steel framework. Since both design and manufacture of the system take place in-house at Walsall, the customer has only one point of contact and can be assured of good communication throughout the process.

In conjunction with the wide range of local control stations, alarm and signalling that Walsall offer, entire automation systems may be placed within the hazardous area if required.

STOPPING PLUGS FEATURES

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Ex d, Ex e and Ex e/Ex d dual certified models
- IP66
- -60 °C to +160 °C (metal plugs)
- -20 °C to +70 °C (nylon plugs)

BREATHER DRAINS

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Ex e II Ex tD A21
- IP66
- -20 °C to +70 °C (nitrile O ring)
- -60 °C to +160 °C (silicone O ring)
- 10 mm thread as standard 20 mm thread option
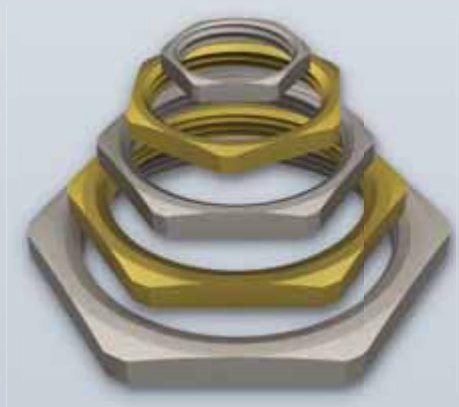
ADAPTORS & REDUCERS

- Zone 1, 2, 21, 22
- ⟨Ex⟩ II 2 GD
- Dual certified
- Ex d IIC Ex e II Ex tD A21
- IP66
- -60 °C to +160 °C
- Available in brass, brass nickel plated, stainless steel or mild steel
- ThreadEx adaptors are certified to step up 1 or 2 sizes e.g. M32 to M40 or M20 to M32

EARTH TAGS

- Brass or Stainless Steel
- Metric M16 to M100
- NPT 1/2" to 4"

LOCK NUTS

- Brass or Stainless Steel
- Metric M16 to M100
- NPT 1/2" to 4"

WASHERS

- White Nylon
  M16 – M100
  NPT 1/2" to 4"
- Red Fibre
  M16 – M100
  NPT 1/2" to 4"
- Serrated
  Stainless Steel or Mild Steel/Zinc Plated
  M16 – M100
  NPT 1/2" to 4"

PROCESS AUTOMATION –
PROTECTING YOUR PROCESS

For over a half century, Pepperl+Fuchs has been continually providing new concepts for the world of process automation. Our company sets standards in quality and innovative technology. We develop, produce and distribute electronic interface modules, Human-Machine Interfaces and hazardous location protection equipment on a global scale, meeting the most demanding needs of industry. Resulting from our world-wide presence and our high flexibility in production and customer service, we are able to individually offer complete solutions – wherever and whenever you need us. We are the recognized experts in our technologies – Pepperl+Fuchs has earned a strong reputation by supplying the world's largest process industry companies with the broadest line of proven components for a diverse range of applications.

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