

Certificate of Acceptance

PA05/04536

Manufacturer:
Unipart Dorman

Issue : 6
Valid From : 04/03/2015

4-Aspect Miniature Tunnel Signal with Integrated Position Light Signal

Product Description

LED 4-Aspect Miniature Tunnel Signal with an integrated Position Light Signal. These signals come in three configurations:

- Ground or wall mounted version that is for use when mounted below driver's eye level;
- Roof mounted version where the signal is above the driver's eye level;
- Elevated, base mounted version where the signal is above the driver's eye level.

Note: the image shown on the right is a ground mounted version.

Product Image



Scope of Acceptance

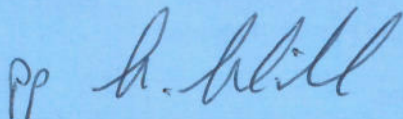
Full Acceptance:

Accepted for use in tunnel conditions only as a 4-Aspect colour light signal (400m readability) with an integrated Position Light Signal (100m readability).

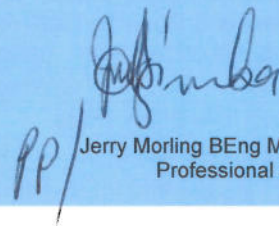
Network Rail Acceptance Panel (NRAP) hereby authorises the product above for use and trial use on railway infrastructure for which Network Rail is the Infrastructure Manager under the ROGS regulations.

Reviewed by:

Authorised by:



Steven Rennolds
Process & Change Specialist (Asset Management Services)



Jerry Morling BEng MSc CEng MIET, MIRSE
Professional Head Signalling

Certificate of Acceptance

PA05/04536

Manufacturer:
Unipart Dorman

Issue : 6
Valid From : 04/03/2015

Specific Conditions

The following Conditions are specific to the approved product/s contained within this Certificate. These conditions must be adhered to in addition to the Network Rail General Conditions contained within the "General Terms and Conditions" section. Failure to adhere to these conditions may result in the withdrawal or suspension of Acceptance of some, or all of the items contained within the accepted configuration.

Manufacturer

- 1) Manufacturer to test and record chromaticity, luminous intensity and beam alignment of all modules prior to supply.
- 2) Mk1 signals & modules must no longer be supplied.

User

- 1) For use only when specifically considered by a Signalling Sighting Committee.
- 2) Not for use within 50m of tunnel mouth.
- 3) For use only where the ambient temperature may reasonably be expected to lie within the range -6° C to +23° C.
- 4) No running signals of other construction shall be in the immediate field of view of drivers approaching this signal.
Alignment and readability to be verified from cab view as soon as practicable after installation.
The Mk2 range of housings and modules are not interchangeable with the older Mk1 versions due to the revised breather hole arrangement. In the event of a Mk1 module requiring replacement the complete signal head shall be replaced.

Product Configuration

Mk2 signals & modules

Part No.	Description	Catalogue No.
Inverted Signals for Roof Mounting		
M2P/RYGWW/1P/R	Mk 2 Miniature Tunnel Signal, 4 aspect, Red/Yellow/Green Yellow, & Position Light Aspect, 110V lamp Proved (inverted roof mounting)	086/077160
Ground / Wall Mounted Signals		
M2P/RYGWW/1P/G	Mk 2 Miniature Tunnel Signal, 4 aspect, Red/Yellow/Green Yellow & Position Light Aspect, 110V lamp Proved (Ground/Wall mounting)	086/077161
Elevated (above drivers eye), Base mounted Signals		
M2P/RYGWW/1P/E	Mk 2 Miniature Tunnel Signal, 4 aspect, Red/Yellow/Green Yellow & Position Light Aspect, 110V lamp Proved [Elevated (above drivers eye), base mounted]	086/077163
Spares & Accessories		
B20.19193	Aperture Blank Plate	086/009168
M2TM2/R/1/P/G	Mk 2 LED Miniature Tunnel Signal Module, Red/Yellow	086/009237
M2TM2/G-1/P/G	Mk 2 LED Miniature Tunnel Signal Module, Green	086/009238
M2TM2/GY/1/P/G	Mk 2 LED Miniature Tunnel Signal Module, Green/Yellow	086/009239
M2TM2/W-1/P/G	Mk 2 LED Miniature Tunnel PoSA White Module	086/077162

Certificate of Acceptance

PA05/04536

Manufacturer:
Unipart Dorman

Issue : 6
Valid From : 04/03/2015

Mk1 Signals and modules are no longer supplied due to susceptibility to water ingress in wet tunnels.

Part No.	Description	Catalogue No.
MLP/RYGWW/1P/R	4-Aspect Miniature Tunnel Signal & Position Light Aspect (Inverted mounting)	086/077145
MLP/RYGWW/1P/G	4-Aspect Miniature Tunnel Signal & Position Light Aspect (ground/wall mounting)	086/077151
MTM2/R/1P/G	Miniature Tunnel Signal Module, Red Yellow, 110V, Lamp Proved, Ground/Wall Mounting	086/009240
MTM2/G-1P/G	Miniature Tunnel Signal Module, Green, 110V, Lamp Proved, Ground/Wall Mounting	086/009241
MTM2/GY/1P/G	Miniature Tunnel Signal Module, Green Yellow, 110V, Lamp Proved, Ground/Wall Mounting	086/009242

Assessed Documentation

Reference	Title	Date and Applies to Cert. issue No.	
PA05/02316	Acceptance file for the miniature tunnel signal	N/A	1
MLP/RYGWW/1P/G	Miniature 4-aspect signal & POSA drawing	04/06/10	1
C64.65003	Wiring diagram	09/06/10	1
OC-0220-03	Report of Readability Tests on LED Tunnel Signal & POSA	13/10/10	1
-	Email Steve French to John Walker	24/01/2011	2
MLP/RYGWW/1P/R	Drawing of signal showing changes for inverted mounting	-	3
086/077145 Issue 1	Miniature Tunnel 4 Asp/PoSA Signal (Inverted Modules)	04/12/12	4
MLP/RYGWW/1P/G Issue 1	Drawing of Miniature Tunnel A-aspect/POSA Signal	04/12/12	4
12152 Issue 1	Atkins Technical Investigation Report: Clayton Tunnel – Signal Number T392 Three Instances of Water Ingress, 18 December 2011 to 27 January 2012	19/11/12	4
12073 Issue 1	Atkins Technical Investigation Report: St Pancras Low Level – WH1012 Signal Black Aspect, 19 March 2012	27/07/12	4
-	Email Clive Porter to John Walker re addition of a new configuration.	03/12/13	5
PRE M2P/RYGWW/1P/E Issue 0	Drawing, Miniature Tunnel 4 Aspect RYG/PoSA Signal (Elevated)	04/12/13	5
GK/RT0057 Issue 1	Lineside Signal and Indicator Product Design and Assessment Requirements	Dec 2014	6

Certificate of Acceptance

PA05/04536

Manufacturer:
Unipart Dorman

Issue : 6
Valid From : 04/03/2015

Certificate History

Issue	Date	Issue History
1	09/11/2010	First accepted for use.
2	24/03/2011	Scope of acceptance amended to allow use of the position light aspect as a subsidiary signal
3	15/07/11	Third acceptance certificate to allow a new signal to be top mounted.
4	18/03/13	Fourth acceptance to incorporate a design change to prevent water ingress. This design change resulted in the introduction of the Mk2 module.
5	11/12/13	Fifth acceptance to include an elevated version where the signal is base mounted above the driver's eye level.
6	04/03/15	Sixth acceptance to remove the reference to Category 2, 250m and Category 3, 100m readability. GK/RT0057 no longer stipulates readability categories which gives the opportunity for the assessed readability of 400m to be declared and utilised for the colour light signal.

Contact Details

Manufacturer

Clive Porter
Unipart Dorman
Wennington Road,
Southport
PR9 7TN
csp@dorman.co.uk

Sponsor

Orry King
Project Engineering manager
Network Rail
Orry.king@networkrail.co.uk

Certificate of Acceptance

PA05/04536

Manufacturer:
Unipart Dorman

Issue : 6
Valid From : 04/03/2015

General Terms & Conditions

1) General

- 1) This certificate can only be amended by Network Rail Technology Introduction Group. Any alterations made by a different person will invalidate the entire certificate.
- 2) Failure to abide by the requirements in this Certificate of Acceptance may invalidate the certificate, thereby restricting the right to operate the product and / or limiting the future supply and deployment of the product on the infrastructure.
- 3) Upon the review date this certificate and the product it relates to is invalid and not accepted for use. Manufacturers are to make an application for a review prior to the review date.

2) Manufacturer

The Manufacturer shall:

- 1) Ensure that all products supplied comply with the standards defined in the Acceptance Requirements or otherwise documented as part of the assessment, including meeting the reliability requirements included in the Acceptance Requirements and in any deed of warranty for the relevant certificate number.
- 2) Notify Network Rail Technology Introduction Group:
 - a. Within 48 hours, of any deficiencies affecting the quality, functionality or safety integrity of the product (including corrective action undertaken or proposed).
 - b. Of any intended change to the accepted product; changes include:
 - i. a change to the product configuration (to the actual product or its application);
 - ii. a variation to or addition of manufacturing locations or processes;
 - iii. a change in the name or ownership of the manufacturing company;
 - iv. any changes to the ability or intention to support with technical services, spares or repairs.
- 3) The Manufacturer shall provide Network Rail Technology Introduction Group at least 12 (twelve) months notice of its intention to discontinue supply or to provide such notice as is reasonable if such discontinuance is outside its control and will offer the opportunity of a Last Time Buy to Network Rail together with date for last order placement and supply of the parts affected. The introduction of proposed alternative products shall be communicated to the Network Rail Technology Introduction Group.
- 4) Provide further copies of operating and maintenance manuals to purchasers / users of the product as necessary (including certificates of conformance, calibration etc).
- 5) Provide further copies of training manuals and an appropriate level of training to purchasers or users of the product as necessary.
- 6) Where applicable, specialist technical support, repairs and servicing of the product shall be carried out by the Original Equipment Manufacturer (OEM) or authorised agent only.
- 7) Network Rail may request information from the manufacturer to prove product compliance with clauses 1 and 2 above and reserve the right to suspend and/or withdraw any application where information is not forthcoming within a reasonable timeframe.
- 8) In accordance with Network Rail's Quality Assurance Policy Statement 2011, where the specification and/or Product Acceptance Certificates specify quality assurance classifications (QA1 to QA5) for the products, the manufacturer shall comply with the specified level of quality assurance for each product and allow Network Rail access to carry out its quality assurance checks.
- 9) The manufacturer shall give Network Rail's representatives access at all reasonable times to its premises and allow them to inspect its quality systems and production methods and, if requested, to inspect, examine and test the products both during and after their manufacture and the materials being used in their manufacture.

3) Conditions of Use

Specifiers, installers, operators, maintainers, etc. using the product shall:

- 1) Comply with the certificate conditions. If a condition is not understood guidance must be sought from Network Rail Technology Introduction Group.
- 2) Check that the application of use complies with the relevant certificate's scope of acceptance.
- 3) Report any defect if it is a design or manufacturing fault likely to affect performance and/or the safe operation of the railway in writing to Network Rail Technology Introduction Group.
- 4) Inform Network Rail Technology Introduction Group in writing of a change to the product configuration (or to the actual product or its application).
- 5) Operate, maintain and service the product in accordance with Network Rail standards and Operation and Maintenance manuals as appropriate.
- 6) Be appropriately trained and authorised for the installation, maintenance and use of the product.
- 7) Only send products for repair or reconditioning to the Original Equipment Manufacturer (OEM) or authorised agent.
- 8) Users are to be aware that Product Acceptance is not a substitute for design approval.

Certificate of Acceptance

PA05/04536

Manufacturer:
Unipart Dorman

Issue : 6
Valid From : 04/03/2015

4) Compliance

Railways and Other Guided Systems (ROGS) Regulations

1) Where the product is to be used in areas where Network Rail is not the Infrastructure Manager (e.g. leased stations), the sponsor shall additionally obtain formal consent from the Infrastructure Manager for the locality where the equipment is to be installed. This may include a requirement for additional safety verification. The decision of that Infrastructure Manager is binding, and cannot be overridden by Network Rail except by the escalation processes established in the ROGS regulations

2) As required in Railway Group Standard GE/RT8270, at each use of this product the project or group responsible for installation and commissioning shall be required to demonstrate compatibility with:

- a. All rail vehicle types that have access rights over the area affected by the change
- b. Infrastructure managed by others
- c. Neighbours.

Railway Interoperability Regulations

3) For interoperable constituents of systems the project or group responsible for installation and commissioning shall be required to demonstrate compliance with the relevant Technical Specifications for Interoperability (TSI) where appropriate.

4) An authorisation from the national safety authority (i.e. the Railway Safety Directorate of the Office of Rail Regulation) is required before the equipment is to be used in revenue earning service.

5) Supply Chain Arrangements

1) Certificates of acceptance do not imply any particular quantity of supply nor any exclusivity of supply.

2) Products may be purchased by Network Rail or its agents, suppliers or contractors.

3) Manufacturers should note that it is not necessary to enter into any exclusive supply arrangements with resellers or other suppliers