

URANUS BMUR120

Constructional Properties

Conductor	Electrolytic Solid Copper Wire (IEC 60228/ DIN EN 60228 / EN 60228 Class I(RE)) & 2 (RM) Electrolytic Copper
Insulation	EN 50363-1 EI2 Silicone Compound
Core Identification	HD 308 52 (for details please see color code table below)
Lay up	Cores stranded in layers
Wrapping	Pes Tape
Overall Screen	Tinned Copper Drain Wire(0.5 mm2) + AL-Pes Tape
Sheath	Halogen free flame retardant compound (EN 50290-2-27 HFFR Compound)
Sheath Color	Red (RAL 3000) or White (RAL 9003)

Technical Properties

Operating Voltage	300/500V
Test Voltage	2 kV
Insulation Resistance	min. 100 MO x km
Temperature Range	-30°C ~ + 70°C (Temp. for stationary condition) -5°C ~ +50°C (Temp. for moving condition) + 90°C (Max. Permissible Operating Temp at Conductor)
Min. Bending Radius	Operation: 6 x Cable Diameter
Flame Retardant Test	IEC 60332-1-2, VOE 0482-332-1-2, EN 60332-1-2
Flame Propagation Test (Cat C)	IEC 60332-3-24, VOE 0482-332-3-24, EN 60332-3-24
Smoke Density Test	IEC 61034-2, VOE 0482-1034-2, EN 61034-2
Halogen Free Test	IEC 60754-1, VOE 0482-267-2-1, EN 50267-2-1
Corrosive Gas Test	IEC 60754-2, VOE 0482-267-2-3, EN 50267-2-3
Circuit Integrity with Shock and Water Test (C,W,Z)	BS 6387:2013
Circuit Integrity Test (FE180)	IEC 60331-21
Circuit Integrity with Shock Test (PH120)	EN 50200; VOE 0482-200; BS EN 50200
Cable Markings	URANUS BMUR120 ELECTRIC CABLE x mm2 ENS0200 PH120 BS 6387-CWZ 300/500V LPCB1469b-(cl-) YYYY @ue/@OK CE ROHS CCCCC mt I CCCCC mt

No of Cores

HD308 S2 Color Code

2 Core	Blue		Brown	
3 Core	Brown	Black		Grey
4 Core	Blue	Brown	Black	Grey

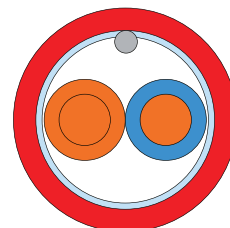
Cross Section (mm ²)	Approx. Overall Diameter (mm) (± %10)	Conductor Resistance (Ω/km)	Approx. Weight (kg/km)
2xl *	6.00	18.1	60
2 X 1.5 *	7.00	12.1	79
2 x 1.5 **	7.40	12.1	82
3 x 1.5 *	7.60	12.1	105
3x 1.5 **	8.00	12.1	109
4 x 1.5 *	8.30	12.1	128
4 x 1.5 **	9.00	12.1	140
2 x 2.5 *	8.40	7.41	113
2 x 2.5 **	8.80	7.41	116
3 x 2.5 *	9.10	7.41	153
3 x 2.5 **	9.50	7.41	156
4 x 2.5 *	10.10	7.41	195
4 x 2.5 **	10.60	7.41	201

* Class 1 Solid conductor

** Class 2 Stranded conductor

Standard of Compliance:

Standard	Description	Compliance
BS 6387:2013 (Category CWZ)	C - At 950°C Fire with stand up to 180min W- At 650°C with fire 30min & after 15 min – Water Spray 15 min Z- At 950°C first 15 Min Fire + Mechanical Shock(Impact)	Comply
EN 50200:2015 (Class PH120)-120min	At 830°C Fire and Mechanical Shock(Impact)	Comply
EN 50363-1 EI2 Extruded Silicon rubber Compound	Insulation	Comply
Halogen free flame-retardant compound HFFR/LSHF/FRNC - EN 50290-2-27). Tinned Copper Drain Wire -0.5mm ² with AL-PES (Aluminium with Polyester Cable Shield)	Sheath	Comply
HD 308 S2 Standard	Core Identification	Comply
2- Core: Brown, Blue 3-Core: Brown, Black, Grey 4-Core: Blue, Brown, Black, Grey	Insulation Color	Comply
IEC/ EN 60228 Class 1 (Solid Copper Conductor)& Class 2 (Stranded Copper Conductor)	Annealed Solid / Stranded Copper Conductor	Comply
6 x Cable Diameter	Minimum Bending Radius	Comply
-30° C to + 70° C (temp. for stationary condition)	Operating Temperature	Comply
-5° C to + 50° C (Temp. for moving condition)		
+90° C (Max Permissible Operating Temp at Conductor)		
Max 95%	Relative Humidity	Comply
300/500V	Operating Voltage	Comply
2 kV	Test Voltage	Comply
min 100 MΩ x km	Insulation Resistance	Comply
Cores stranded in layers	Lay up	Comply
EN 50290-2-27	Halogen Free Flame Retardant Compound	Comply
BS 7655 EI2	Fire Resistance Silicon Rubber Insulation	Comply
BS 7671	Core Colors HD 308-S2	Comply
BS 5266-1	Emergency lighting and standard application circuits	Comply
EN 60754-1:2014	Acid Gas Emission Test	Comply
BS 6425-2 / EN 60754-2:2014 / EN 50267	Acid Gas Emission Test	Comply
IEC 60331-21:1999	Flame Resistance Test (Circuit Integrity Test FE180)	Comply
EN 60332-3-22:20-2009	Specifies method of test for the assessment of vertical flame spread of vertically-mounted bunched wires or cables	Comply
EN 61034-2:2005+A1:2013	Smoke Density Test	Comply
BS 5839-1:2013 (Clause26.2d STD)	Fire detection & fire alarm systems for buildings- Code of practice for design, installation, commissioning and maintenance of system in non-domestic premises.	Comply
BS 7629-1:2015	Cable resistance to fire, mechanical shock and water. This Standard specifies that the cable must have a minimum duration of survival of 30 minutes (PH30). They must resist fire and impact alone for 15 minutes, followed by 15 minutes of fire, impact and water.	Comply
BS 5839-8	Voice Alarm Systems	Comply
BS 5039-9	Emergency Voice Communication Systems	Comply
BS EN/IEC 60331-1-2	Flame Propagation Test	Comply
BS EN/IEC 60332-3-24	Flame Propagation Test	Comply
BS5266-1	Emergency lighting and standard application circuits	Comply
BS 8519:2010	Selection and installation of fire resistant power and control cable systems for life safety and fire fighting application	Comply



URANUS BMUR120E30

Constructional Properties

Conductor	Electrolytic Solid Copper Wire (IEC 60228/ DIN EN 60228 / EN 60228 Class I) & Class 2 - Stranded Electrolytic Copper
Insulation	EN 50363-1 E12 Silicone Compound
Core Identification	HD 308 52 (for details please see color code table below)
Lay up	Cores stranded in layers
Overall Screen	Tinned Copper Drain Wire +Aluminium Foil (AL-PE)
Sheath	Halogen free flame retardant compound (HFFR Compound, BS 7655-6.1 LT53)
Sheath Color	Red (RAL 3000) or White (RAL 9003)
Reference Standard	BS 7629-1: 2015

Technical Properties

Operating Voltage	300/500V
Test Voltage	2 kV
Insulation Resistance	min. 100 MO x km
Temperature Range	Operation: -40°C ~ + 70°C
Min. Bending Radius	Operation: 6 x Cable Diameter
Flame Resistant Test	IEC 60332-1-2, VDE 0482-332-1-2, EN 60332-1-2
Flame Propagation Test (Cat A)	IEC 60332-3-22, VDE 0482-332-3-22, EN 60332-3-22
Smoke Density Test	IEC 61034-2, VDE 0482-1034-2, EN 61034-2
Halogen Free Test	IEC 60754-1, VDE 0482-267-2-1, EN 50267-2-1
Corrosive Gas Test	IEC 60754-2, VDE 0482-267-2-3, EN 50267-2-3
Circuit Integrity with Shock and Water Test (C,W,Z)	BS 6387:2013
Circuit Integrity Test (FE180)	IEC 60331-21
Circuit Integrity with Shock Test (PH120)	EN 50200; VDE 0482-200; BS EN 50200
Circuit Integrity with Shock Test (With Water Option 30min)	EN 50200 +ANNEXE; VDE 0482-200 +ANNEXE; BS EN 50200 +ANNEXE
Cable Markings	URANUS BMUR120E30 ELECTRIC CABLEX.....mm ² 300/500V BS 7629-1:2015 STANDARD 30&60 BS6387-CWZ LPCB Ref. No. 1469a-(cl-2)01 YYYY @ UE/@OK C€ RoHS CCCCC mt CCCCC mt

No of Cores

HD308 S2 Color Code

2 Core	Blue		Brown	
3 Core	Brown	Black		Grey
4 Core	Blue	Brown	Black	Grey

Cross Section (mm ²)	Approx. Overall Diameter (mm) (± %10)	Insulation Resistance (MΩ/km)	Conductor Resistance (Ω/km)	Conductor Loop Resistance (Ω/km)	Drain Wire Resistance (Ω/km)	Current Load (A)
2x 1 mm ² *	6.90	100	18.1	36.2	1 mm ² = 18.2	16
2x 1.5 mm ² *	7.90	100	12.10	24.20	1.5 mm ² = 12.2	20
3x 1.5 mm ² *	8.20	100	12.10	24.20	1.5 mm ² = 12.2	20
4x 1.5 mm ² *	9.20	100	12.10	24.20	1.5 mm ² = 12.2	20
2x 2.5 mm ² *	9.30	100	12.10	24.20	1.5 mm ² = 12.2	20
3x 2.5 mm ² *	11.00	100	7.4	15.1	2.5 mm ² = 7.56	25
4x 2.5 mm ² *	10.80	100	7.4	15.1	2.5 mm ² = 7.56	25
2x 4 mm ² **	10.30	100	4.61	9.20	4 mm ² = 4.7	24
3x 4 mm ² **	10.40	100	4.61	9.20	4 mm ² = 4.7	24
4x 4 mm ² **	12.10	100	4.61	9.20	4 mm ² = 4.7	24

* Solid Only

** Solid & Stranded

Standard of Compliance:

Standard	Description	Compliance
BS 6387:2013 (Category CWZ)	C - At 950°C Fire with stand up to 180min W- At 650°C with fire 30min & after 15 min – Water Spray 15 min Z- At 950°C first 15 Min Fire + Mechanical Shock(Impact)”	Comply
EN 50200:2015 (Class PH120)-120min	At 830°C Fire and Mechanical Shock(Impact)	Comply
EN 50200:2015 ANNEX E (30min)	BS EN 50200:2015 + Annex E 830°C – 30 min. (15 min. fire and mechanical shocks + 15 min. fire mechanical shocks and water spray	Comply
IEC/ EN 60228 Class 1 (Solid Copper Conductor)& Class 2 for 4mm ² (Stranded Copper Conductor)	Annealed Solid / Stranded Copper Conductor	Comply
6 x Cable Diameter	Minimum Bending Radius	Comply
-40° C to + 70° C	Operating Temperature	Comply
Max 95%	Relative Humidity	Comply
0.50mm Solid tinned Copper Wire	Drain Wire	Comply
EN 50363-1 E12 Silicon Compound	Insulation	Comply
EN 50290-2-27	Halogen Free Flame Retardant Compound	Comply
BS 7655 EI2	Fire Resistance Silicon Rubber Insulation	Comply
BS 7671	Core Colors HD 308-S2	Comply
BS 5266-1	Emergency lighting and standard application circuits	Comply
EN 60754-1:2014	Acid Gas Emission Test	Comply
BS 6425-2 / EN 60754-2:2014 / EN 50267	Acid Gas Emission Test	Comply
IEC 60331-21:1999	Flame Resistance Test (Circuit Integrity Test FE180)	Comply
EN 60332-3-22:20-2009	Specifies method of test for the assessment of vertical flame spread of vertically-mounted bunched wires or cables	Comply
EN 61034-2:2005+A1:2013	Smoke Density Test	Comply
BS 5839-1:2013 (Clause26.2d STD)	Fire detection & fire alarm systems for buildings- Code of practice for design, installation, commissioning and maintenance of system in non-domestic premises.	Comply
BS 7629-1:2015	Cable resistance to fire, mechanical shock and water. This Standard specifies that the cable must have a minimum duration of survival of 30 minutes (PH30). They must resist fire and impact alone for 15 minutes, followed by 15 minutes of fire, impact and water.	Comply
BS 5839-8	Voice Alarm Systems	Comply
BS 5039-9	Emergency Voice Communication Systems	Comply
BS EN/IEC 60331-1-2	Flame Propagation Test	Comply
BS EN/IEC 60332-3-24	Flame Propagation Test	Comply
BS5266-1	Emergency lighting and standard application circuits	Comply
BS 8519:2010	Selection and installation of fire resistant power and control cable systems for life safety and fire fighting application	Comply