

Yuasa Technisches Datenblatt



Yuasa SWL+800-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	800
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	133
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	22.9
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	22.9
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	25

Abmessungen

Länge (mm)	166 (±2)
Breite (mm)	175 (±1)
Höhe (mm)	125 (±2)
Gewicht (kg)	9.8

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M5 (F)
Drehmoment (Nm)	2.5

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	5.725

Maximaler Entladestrom

1 Sekunde (A)	500
1 Minute (A)	150

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	714
--	-----

Impedanz

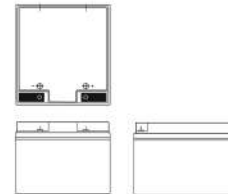
Gemessen bei 1 kHz (mΩ)	8.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+800-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	800
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	133
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	22.9
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	22.9
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	25

Dimensions

Length (mm)	166 (±2)
Width (mm)	175 (±1)
Height (mm)	125 (±2)
Mass (kg)	9.8

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	5.725

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	714
--	-----

Impedance

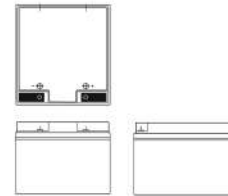
Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+800-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	800
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	133
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	22.9
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	22.9
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	25

Abmessungen

Länge (mm)	166 (±2)
Breite (mm)	175 (±1)
Höhe (mm)	125 (±2)
Gewicht (kg)	9.8

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M5 (F)
Drehmoment (Nm)	2.5

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	5.725

Maximaler Entladestrom

1 Sekunde (A)	500
1 Minute (A)	150

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	714
--	-----

Impedanz

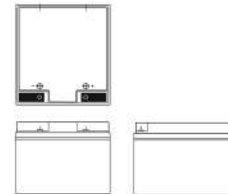
Gemessen bei 1 kHz (mΩ)	8.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+800-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	800
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	133
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	22.9
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	22.9
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	25

Dimensions

Length (mm)	166 (±2)
Width (mm)	175 (±1)
Height (mm)	125 (±2)
Mass (kg)	9.8

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	5.725

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	714
--	-----

Impedance

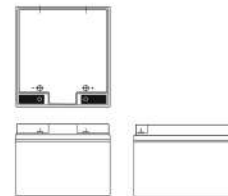
Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+850-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	850
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	142
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	27
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	27
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	28.8

Abmessungen

Länge (mm)	166 (±2)
Breite (mm)	125 (±1)
Höhe (mm)	175 (±2)
Gewicht (kg)	10.3

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M5 (F)
Drehmoment (Nm)	2.5

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	6.125

Maximaler Entladestrom

1 Sekunde (A)	500
1 Minute (A)	150

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	800
--	-----

Impedanz

Gemessen bei 1 kHz (mΩ)	8.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Yuasa Technical Data Sheet



Yuasa SWL+850-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	850
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	142
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	27
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	27
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	28.8

Dimensions

Length (mm)	166 (±2)
Width (mm)	125 (±1)
Height (mm)	175 (±2)
Mass (kg)	10.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	6.125

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	800
--	-----

Impedance

Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+850-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	850
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	142
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	27
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	27
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	28.8

Abmessungen

Länge (mm)	166 (±2)
Breite (mm)	125 (±1)
Höhe (mm)	175 (±2)
Gewicht (kg)	10.3

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M5 (F)
Drehmoment (Nm)	2.5

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	6.125

Maximaler Entladestrom

1 Sekunde (A)	500
1 Minute (A)	150

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	800
--	-----

Impedanz

Gemessen bei 1 kHz (mΩ)	8.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+850-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	850
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	142
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	27
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	27
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	28.8

Dimensions

Length (mm)	166 (±2)
Width (mm)	125 (±1)
Height (mm)	175 (±2)
Mass (kg)	10.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	6.125

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	800
--	-----

Impedance

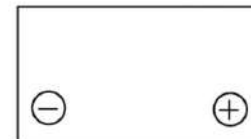
Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+1200-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	1200
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	200
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	39.6
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	39.6
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	40.6

Abmessungen

Länge (mm)	197 (±2)
Breite (mm)	165 (±1)
Höhe (mm)	170 (±2)
Gewicht (kg)	14.5

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M5 (F)
Drehmoment (Nm)	2.5

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	9.9

Maximaler Entladestrom

1 Sekunde (A)	500
1 Minute (A)	200

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1005
--	------

Impedanz

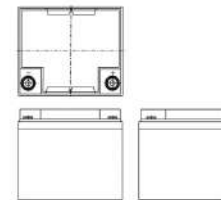
Gemessen bei 1 kHz (mΩ)	7.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+1200-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1200
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	200
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	39.6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	39.6
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	40.6

Dimensions

Length (mm)	197 (±2)
Width (mm)	165 (±1)
Height (mm)	170 (±2)
Mass (kg)	14.5

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	9.9

Maximum Discharge Current

1 second (A)	500
1 minute (A)	200

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1005
--	------

Impedance

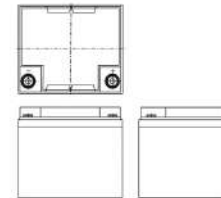
Measured at 1 kHz (mΩ)	7.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technisches Datenblatt



Yuasa SWL+1200-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	1200
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	200
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	39.6
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	39.6
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	40.6

Abmessungen

Länge (mm)	197 (±2)
Breite (mm)	165 (±1)
Höhe (mm)	170 (±2)
Gewicht (kg)	14.5

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M5 (F)
Drehmoment (Nm)	2.5

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	9.9

Maximaler Entladestrom

1 Sekunde (A)	500
1 Minute (A)	200

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1005
--	------

Impedanz

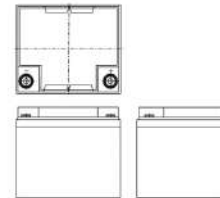
Gemessen bei 1 kHz (mΩ)	7.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+1200-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1200
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	200
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	39.6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	39.6
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	40.6

Dimensions

Length (mm)	197 (±2)
Width (mm)	165 (±1)
Height (mm)	170 (±2)
Mass (kg)	14.5

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	9.9

Maximum Discharge Current

1 second (A)	500
1 minute (A)	200

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1005
--	------

Impedance

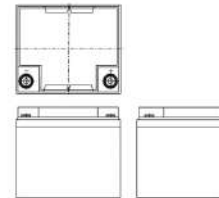
Measured at 1 kHz (mΩ)	7.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+1850-6FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	6
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	616
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	132
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	132

Abmessungen

Länge (mm)	350 (±2)
Breite (mm)	166 (±1)
Höhe (mm)	174 (±2)
Gewicht (kg)	23.8

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8



Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +50°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	6.825 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	7.25 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	33

Maximaler Entladestrom

1 Sekunde (A)	500
1 Minute (A)	260

Kurzschlussstrom & Innenwiderstand

Innenwiderstand gemäß EN IEC 60896-21 (mΩ)	2.96
Kurzschlussstrom gemäß EN IEC 60896-21 (A)	2408

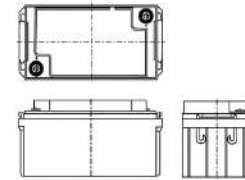
Impedanz

Gemessen bei 1 kHz (mΩ)	1.8
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years

Layout



Zertifikate von unabhängigen Institutionen
 ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+1850-6FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	616
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	132
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	132

Dimensions

Length (mm)	350 (±2)
Width (mm)	166 (±1)
Height (mm)	174 (±2)
Mass (kg)	23.8

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.25 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	33

Maximum Discharge Current

1 second (A)	500
1 minute (A)	260

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	2.96
Short-Circuit current - according to EN IEC 60896-21 (A)	2408

Impedance

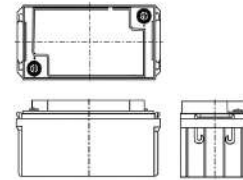
Measured at 1 kHz (mΩ)	1.8
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+1950-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	1950
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	325
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	66
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	66
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	74

Abmessungen

Länge (mm)	350 (±2)
Breite (mm)	166 (±1)
Höhe (mm)	174 (±2)
Gewicht (kg)	23.3

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	16.5

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1529
--	------

Impedanz

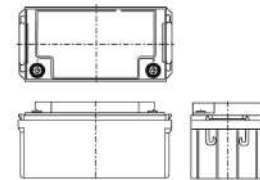
Gemessen bei 1 kHz (mΩ)	4.4
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+1950-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1950
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	325
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	66
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	66
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	74

Dimensions

Length (mm)	350 (±2)
Width (mm)	166 (±1)
Height (mm)	174 (±2)
Mass (kg)	23.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	16.5

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1529
--	------

Impedance

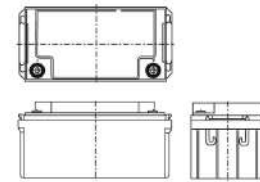
Measured at 1 kHz (mΩ)	4.4
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+1950-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	1950
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	325
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	66
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	66
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	74

Abmessungen

Länge (mm)	350 (±2)
Breite (mm)	166 (±1)
Höhe (mm)	174 (±2)
Gewicht (kg)	23.3

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +50°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	16.5

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1529
--	------

Impedanz

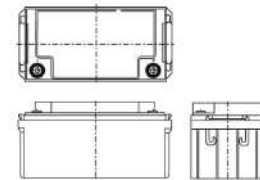
Gemessen bei 1 kHz (mΩ)	4.4
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+1950-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1950
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	325
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	66
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	66
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	74

Dimensions

Length (mm)	350 (±2)
Width (mm)	166 (±1)
Height (mm)	174 (±2)
Mass (kg)	23.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	16.5

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1529
--	------

Impedance

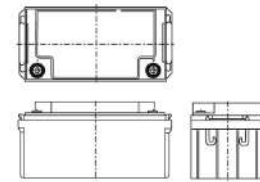
Measured at 1 kHz (mΩ)	4.4
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+2000-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2000
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	333
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	55
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	55
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	57.6

Abmessungen

Länge (mm)	216 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	223 (±1)
Gewicht (kg)	23.2

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	13.75

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1437
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	6
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+2000-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2000
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	333
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	55
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	55
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	57.6

Dimensions

Length (mm)	216 (±3)
Width (mm)	168 (±2)
Height (mm)	223 (±1)
Mass (kg)	23.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	13.75

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1437
--	------

Impedance

Measured at 1 kHz (mΩ)	6
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa Technisches Datenblatt



Yuasa SWL+2000-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2000
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	333
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	55
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	55
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	57.6

Abmessungen

Länge (mm)	216 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	223 (±1)
Gewicht (kg)	23.2

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	13.75

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1437
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	6
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+2000-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2000
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	333
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	55
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	55
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	57.6

Dimensions

Length (mm)	216 (±3)
Width (mm)	168 (±2)
Height (mm)	223 (±1)
Mass (kg)	23.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	13.75

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1437
--	------

Impedance

Measured at 1 kHz (mΩ)	6
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa SWL+2250-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2250
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	375
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	76
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	76
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	86.0

Abmessungen

Länge (mm)	380 (±2)
Breite (mm)	166 (±1)
Höhe (mm)	177.5 (±2)
Gewicht (kg)	28

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +50°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	19

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1442
--	------

Impedanz

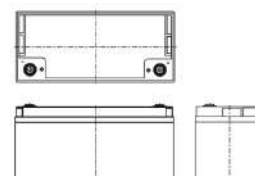
Gemessen bei 1 kHz (mΩ)	3.6
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+2250-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2250
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	375
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	76
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	76
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	86.0

Dimensions

Length (mm)	380 (±2)
Width (mm)	166 (±1)
Height (mm)	177.5 (±2)
Mass (kg)	28

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	19

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1442
--	------

Impedance

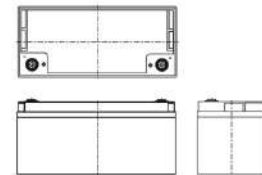
Measured at 1 kHz (mΩ)	3.6
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+2250-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2250
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	375
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	76
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	76
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	86.0

Abmessungen

Länge (mm)	380 (±2)
Breite (mm)	166 (±1)
Höhe (mm)	177.5 (±2)
Gewicht (kg)	28

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +50°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	19

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1442
--	------

Impedanz

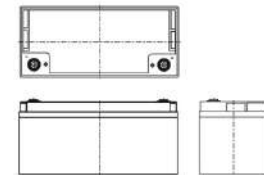
Gemessen bei 1 kHz (mΩ)	3.6
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+2250-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2250
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	375
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	76
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	76
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	86.0

Dimensions

Length (mm)	380 (±2)
Width (mm)	166 (±1)
Height (mm)	177.5 (±2)
Mass (kg)	28

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	19

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1442
--	------

Impedance

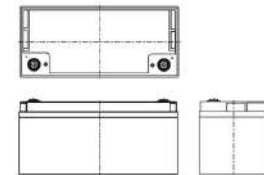
Measured at 1 kHz (mΩ)	3.6
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technisches Datenblatt



Yuasa SWL+2450-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2450
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	408
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	78
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	78
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	80.0

Abmessungen

Länge (mm)	261 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	224,5 (±1)
Gewicht (kg)	28.3

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +50°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	19.5

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	400

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1857
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	5
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+2450-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2450
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	408
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	78
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	78
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	80.0

Dimensions

Length (mm)	261 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	28.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	19.5

Maximum Discharge Current

1 second (A)	800
1 minute (A)	400

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1857
--	------

Impedance

Measured at 1 kHz (mΩ)	5
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technisches Datenblatt



Yuasa SWL+2450-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2450
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	408
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	78
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	78
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	80.0

Abmessungen

Länge (mm)	261 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	224,5 (±1)
Gewicht (kg)	28.3

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +50°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	19.5

Maximaler Entladestrom

1 Sekunde (A)	800
1 Minute (A)	400

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1857
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	5
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+2450-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2450
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	408
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	78
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	78
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	80.0

Dimensions

Length (mm)	261 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	28.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	19.5

Maximum Discharge Current

1 second (A)	800
1 minute (A)	400

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	1857
--	------

Impedance

Measured at 1 kHz (mΩ)	5
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa SWL+2800-6 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	6
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2800
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	933
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	180
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	180

Abmessungen

Länge (mm)	297 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	231,5 (±1)
Gewicht (kg)	32,5

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	45

Maximaler Entladestrom

1 Sekunde (A)	1500
1 Minute (A)	800

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	>4000
--	-------

Impedanz

Gemessen bei 1 kHz (mΩ)	1.7
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Yuasa Technical Data Sheet



Yuasa SWL+2800-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2800
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	933
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	180
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	180

Dimensions

Length (mm)	297 (±3)
Width (mm)	168 (±2)
Height (mm)	231.5 (±1)
Mass (kg)	32.5

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	45

Maximum Discharge Current

1 second (A)	1500
1 minute (A)	800

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	>4000
--	-------

Impedance

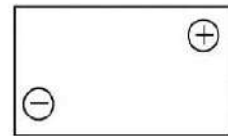
Measured at 1 kHz (mΩ)	1.7
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa SWL+2800-6FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	6
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2800
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	933
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	180
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	180

Abmessungen

Länge (mm)	297 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	231,5 (±1)
Gewicht (kg)	32,5

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	45

Maximaler Entladestrom

1 Sekunde (A)	1500
1 Minute (A)	800

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	>4000
--	-------

Impedanz

Gemessen bei 1 kHz (mΩ)	1.7
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Yuasa Technical Data Sheet



Yuasa SWL+2800-6FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2800
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	933
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	180
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	180

Dimensions

Length (mm)	297 (±3)
Width (mm)	168 (±2)
Height (mm)	231.5 (±1)
Mass (kg)	32.5

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	45

Maximum Discharge Current

1 second (A)	1500
1 minute (A)	800

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	>4000
--	-------

Impedance

Measured at 1 kHz (mΩ)	1.7
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa Technisches Datenblatt



Yuasa SWL+2900-12FT Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2940
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	490
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	90
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	90
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	92.2

Abmessungen

Länge (mm)	395
Breite (mm)	105
Höhe (mm)	255
Gewicht (kg)	32

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	3.9-5.4

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-15°C to +45°C
Ladung	-15°C to +45°C
Entladung	-15°C to +45°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	9.68
Ladestrombegrenzung bei Starkladung (A)	9.68

Maximaler Entladestrom

1 Sekunde (A)	540
1 Minute (A)	279

Impedanz

Gemessen bei 1 kHz (mΩ)	3.4
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+2900-12FT Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2940
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	490
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	90
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	90
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	92.2

Dimensions

Length (mm)	395
Width (mm)	105
Height (mm)	255
Mass (kg)	32

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	3.9-5.4

Operating Temperature Range

Storage (in fully charged condition)	-15°C to +45°C
Charge	-15°C to +45°C
Discharge	-15°C to +45°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	9.68
Cyclic (or Boost) charge current limit (A)	9.68

Maximum Discharge Current

1 second (A)	540
1 minute (A)	279

Impedance

Measured at 1 kHz (mΩ)	3.4
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa SWL+3000-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	3000
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	500
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	91.4
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	91.4
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	93.6

Abmessungen

Länge (mm)	305 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	224,5 (±1)
Gewicht (kg)	33

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	22.5

Maximaler Entladestrom

1 Sekunde (A)	1000
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	2258
--	------

Impedanz

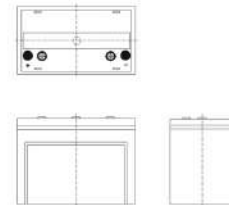
Gemessen bei 1 kHz (mΩ)	4
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+3000-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	3000
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	500
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	91.4
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	91.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	93.6

Dimensions

Length (mm)	305 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	33

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	22.5

Maximum Discharge Current

1 second (A)	1000
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	2258
--	------

Impedance

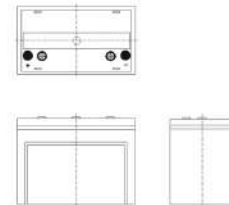
Measured at 1 kHz (mΩ)	4
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa SWL+3000-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	3000
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	500
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	91.4
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	91.4
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	93.6

Abmessungen

Länge (mm)	305 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	224,5 (±1)
Gewicht (kg)	33

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	22.5

Maximaler Entladestrom

1 Sekunde (A)	1000
1 Minute (A)	500

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	2258
--	------

Impedanz

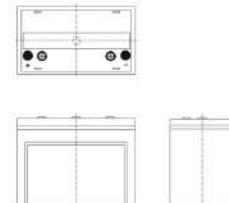
Gemessen bei 1 kHz (mΩ)	4
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+3000-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	3000
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	500
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	91.4
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	91.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	93.6

Dimensions

Length (mm)	305 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	33

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	22.5

Maximum Discharge Current

1 second (A)	1000
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	2258
--	------

Impedance

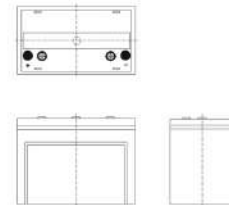
Measured at 1 kHz (mΩ)	4
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL+3500-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	3500
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	583
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	102
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	102
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	110.2

Abmessungen

Länge (mm)	350 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	225 (±1)
Gewicht (kg)	37.7

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	25.625

Maximaler Entladestrom

1 Sekunde (A)	1100
1 Minute (A)	550

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	2547
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	3.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL+3500-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	3500
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	583
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	102
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	102
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	110.2

Dimensions

Length (mm)	350 (±3)
Width (mm)	168 (±2)
Height (mm)	225 (±1)
Mass (kg)	37.7

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	25.625

Maximum Discharge Current

1 second (A)	1100
1 minute (A)	550

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	2547
--	------

Impedance

Measured at 1 kHz (mΩ)	3.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technisches Datenblatt



Yuasa SWL+3500-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	3500
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	583
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	102
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	102
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	110.2

Abmessungen

Länge (mm)	350 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	225 (±1)
Gewicht (kg)	37.7

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	25.625

Maximaler Entladestrom

1 Sekunde (A)	1100
1 Minute (A)	550

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	2547
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	3.5
-------------------------	-----

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+3500-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	3500
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	583
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	102
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	102
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	110.2

Dimensions

Length (mm)	350 (±3)
Width (mm)	168 (±2)
Height (mm)	225 (±1)
Mass (kg)	37.7

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	25.625

Maximum Discharge Current

1 second (A)	1100
1 minute (A)	550

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	2547
--	------

Impedance

Measured at 1 kHz (mΩ)	3.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technisches Datenblatt



Yuasa SWL+4000-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	4000
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	667
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	124
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	124
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	135

Abmessungen

Länge (mm)	350 (±3)
Breite (mm)	173 (±2)
Höhe (mm)	272 (±2)
Gewicht (kg)	49.2

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	31

Maximaler Entladestrom

1 Sekunde (A)	1200
1 Minute (A)	600

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	3000
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	3
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+4000-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4000
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	667
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	124
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	124
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	135

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	3000
--	------

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technisches Datenblatt



Yuasa SWL+4000-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	4000
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	667
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	124
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	124
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	135

Abmessungen

Länge (mm)	350 (±3)
Breite (mm)	173 (±2)
Höhe (mm)	272 (±2)
Gewicht (kg)	49.2

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	31

Maximaler Entladestrom

1 Sekunde (A)	1200
1 Minute (A)	600

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	3000
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	3
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+4000-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4000
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	667
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	124
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	124
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	135

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	3000
--	------

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technisches Datenblatt



Yuasa SWL+4300-12 Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	4300
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	717
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	130
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	130
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	140

Abmessungen

Länge (mm)	350 (±3)
Breite (mm)	173 (±2)
Höhe (mm)	272 (±2)
Gewicht (kg)	49.2

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	31

Maximaler Entladestrom

1 Sekunde (A)	1200
1 Minute (A)	600

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	3000
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	3
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+4300-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4300
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	717
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	130
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	130
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	140

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	3000
--	------

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 03/09/2025 – E&OE



Yuasa Technisches Datenblatt



Yuasa SWL+4300-12FR Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	4300
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	717
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	130
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	130
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	140

Abmessungen

Länge (mm)	350 (±3)
Breite (mm)	173 (±2)
Höhe (mm)	272 (±2)
Gewicht (kg)	49.2

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M8 (F)
Drehmoment (Nm)	6

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-20°C to +60°C
Ladung	-15°C to +50°C
Entladung	-20°C to +60°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	31

Maximaler Entladestrom

1 Sekunde (A)	1200
1 Minute (A)	600

Kurzschlussstrom & Innenwiderstand

Kurzschlussstrom gemäß EN IEC 60896-21 (A)	3000
--	------

Impedanz

Gemessen bei 1 kHz (mΩ)	3
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Very Long Life	12+ years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 15 years



Layout



Zertifikate von unabhängigen Institutionen

ISO 9001 - Quality Management System
ISO14001 - Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.

Datenblatt erstellt am 03/09/2025 - E&EO



Yuasa Technical Data Sheet



Yuasa SWL+4300-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4300
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	717
10-hr rate Capacity to 1.75v per cell at 20°C (Ah)	130
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	130
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	140

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	3000
--	------

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL750 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	767
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	128
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	22.9
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	25.0

Dimensions

Length (mm)	166 (±2)
Width (mm)	175 (±1)
Height (mm)	125 (±2)
Mass (kg)	9.8

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	5.725

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	20.47
Short-Circuit current - according to EN IEC 60896-21 (A)	714

Impedance

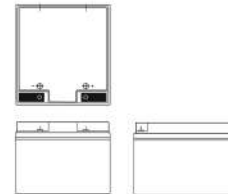
Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL750FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	767
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	128
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	22.9
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	25.0

Dimensions

Length (mm)	166 (±2)
Width (mm)	175 (±1)
Height (mm)	125 (±2)
Mass (kg)	9.8

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	5.725

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	20.47
Short-Circuit current - according to EN IEC 60896-21 (A)	714

Impedance

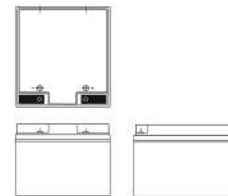
Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL780FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	815
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	136
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	27
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	28.8

Dimensions

Length (mm)	166 (±2)
Width (mm)	125 (±1)
Height (mm)	175 (±2)
Mass (kg)	10.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	6.125

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	18
Short-Circuit current - according to EN IEC 60896-21 (A)	800

Impedance

Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL780V Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	815
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	136
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	27
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	28.8

Dimensions

Length (mm)	166 (±2)
Width (mm)	125 (±1)
Height (mm)	175 (±2)
Mass (kg)	10.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	6.125

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	18
Short-Circuit current - according to EN IEC 60896-21 (A)	800

Impedance

Measured at 1 kHz (mΩ)	8.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL1100 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1202
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	200
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	39.6
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	40.6

Dimensions

Length (mm)	197 (±2)
Width (mm)	165 (±1)
Height (mm)	170 (±2)
Mass (kg)	14.5

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	9.9

Maximum Discharge Current

1 second (A)	500
1 minute (A)	200

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	14.4
Short-Circuit current - according to EN IEC 60896-21 (A)	1005

Impedance

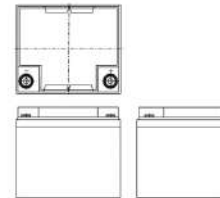
Measured at 1 kHz (mΩ)	7.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL1100FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1202
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	200
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	39.6
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	40.6

Dimensions

Length (mm)	197 (±2)
Width (mm)	165 (±1)
Height (mm)	170 (±2)
Mass (kg)	14.5

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.5

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	9.9

Maximum Discharge Current

1 second (A)	500
1 minute (A)	200

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	14.4
Short-Circuit current - according to EN IEC 60896-21 (A)	1005

Impedance

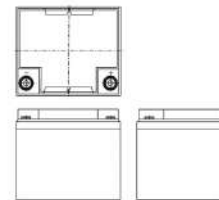
Measured at 1 kHz (mΩ)	7.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL1800FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1974
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	322
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	55
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	57.6

Dimensions

Length (mm)	216 (±3)
Width (mm)	168 (±2)
Height (mm)	223 (±1)
Mass (kg)	23.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	13.75

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	10.09
Short-Circuit current - according to EN IEC 60896-21 (A)	1437

Impedance

Measured at 1 kHz (mΩ)	6
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL1850 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1916
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	319
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	66
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	74

Dimensions

Length (mm)	350 (±2)
Width (mm)	166 (±1)
Height (mm)	174 (±2)
Mass (kg)	23.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	16.5

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	9.35
Short-Circuit current - according to EN IEC 60896-21 (A)	1529

Impedance

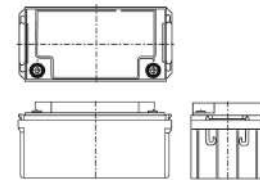
Measured at 1 kHz (mΩ)	4.4
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL1850-6FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	384 (20min Rate)
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	132

Dimensions

Length (mm)	350 (±2)
Width (mm)	166 (±1)
Height (mm)	174 (±2)
Mass (kg)	23.8

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.25 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	33

Maximum Discharge Current

1 second (A)	500
1 minute (A)	260

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	2.96
Short-Circuit current - according to EN IEC 60896-21 (A)	2408

Impedance

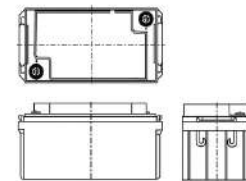
Measured at 1 kHz (mΩ)	1.8
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL1850FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	1916
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	319
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	66
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	74

Dimensions

Length (mm)	350 (±2)
Width (mm)	166 (±1)
Height (mm)	174 (±2)
Mass (kg)	23.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	16.5

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	9.35
Short-Circuit current - according to EN IEC 60896-21 (A)	1529

Impedance

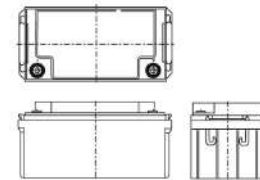
Measured at 1 kHz (mΩ)	4.4
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL2250FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2250
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	375
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	76
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	86.0

Dimensions

Length (mm)	380 (±2)
Width (mm)	166 (±1)
Height (mm)	177.5 (±2)
Mass (kg)	28

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	19

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	10.49
Short-Circuit current - according to EN IEC 60896-21 (A)	1442

Impedance

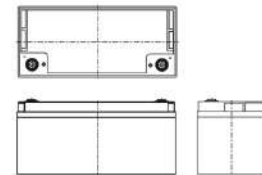
Measured at 1 kHz (mΩ)	3.6
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa SWL2300E Industrial VRLA Battery

Spezifikationen

Nennspannung (V)	12
10-minütige Konstantleistungs-Entladerate bis 9,6V/Zelle bei 20°C (Watt pro Block)	2400
10-minütige Konstantleistungs-Entladerate bis 1,6V/Zelle bei 20°C (Watt pro Zelle)	400
10-stündige Kapazität bis 1,8 V/Zelle bei 20 °C (Ah)	78
20-stündige Kapazität bis 1,75 V/Zelle bei 20 °C (Ah)	80.0

Abmessungen

Länge (mm)	261 (±3)
Breite (mm)	168 (±2)
Höhe (mm)	224,5 (±1)
Gewicht (kg)	28.3

Anschlusspol Typ

Innengewinde oder Bolzenanschluss	M6 (F)
Drehmoment (Nm)	4.8

Betriebstemperaturbereich

Lagerung (in voll geladenem Zustand)	-15°C to +40°C
Ladung	-15°C to +50°C
Entladung	-15°C to +50°C

Lagerung

Selbstentladung pro Monat bei 20°C in % (ca.)	3
---	---

Gehäusematerial

Standard	ABS (UL94:HB)
FR-Version erhältlich	UL94:V0

Ladespannung

Schwebeladespannung bei 20°C (V)/Block	13.65 (±1%)
Schwebeladespannung bei 20°C (V)/Zelle	2.275 (±1%)
Ladespannungskompensationsfaktor bei Schwebeladung bei Abweichungen von der Standardtemperatur 20°C(mV)	-3
Zyklische oder Starkladespannung bei 20°C (V)/Block	14.5 (±3%)
Zyklische oder Starkladespannung bei 20°C (V)/Zelle	2.42 (±3%)
Ladespannungskompensationsfaktor bei Starkladung bei Abweichungen von der Standardtemperatur 20°C (mV)	-4

Ladestrom

Ladestrombegrenzung bei Schwebeladung (A)	No limit
Ladestrombegrenzung bei Starkladung (A)	19.5

Maximaler Entladestrom

1 Sekunde (A)	520
1 Minute (A)	240

Kurzschlussstrom & Innenwiderstand

Innenwiderstand gemäß EN IEC 60896-21 (mΩ)	7.71
Kurzschlussstrom gemäß EN IEC 60896-21 (A)	1857

Impedanz

Gemessen bei 1 kHz (mΩ)	5
-------------------------	---

Gebrauchsdauer und Zulassungen

EUROBAT-Klasse: Long life	10 to 12 years
YUASA-Gebrauchsdauer bei 20°C (Jahre)	up to 10 years



Layout



Zertifikate von unabhängigen Institutionen
 ISO 9001 - Quality Management System
 ISO14001 - Environmental Management System
 ISO45001 OHSAS Management Systems
 UNDERWRITERS LABORATORIES Inc.



Sicherheit

Einbau

Kann in Ausrichtungen bis zu 90 ° aus der aufrechten Position installiert und betrieben werden.

Tragegriffe

Batterien nicht dauerhaft an den Tragegriffen hängend (sofern vorhanden) installieren.

Ventile

Um den Gasdruck auszugleichen, ist jede Zelle mit einem Niederdruck-Ablassventil ausgestattet, das nach dem Öffnen wieder schließt.

Gasung

VRLA Batterien setzen Wasserstoffgas frei

Recycling

Yuasa VRLA Batterien müssen am Ende ihrer Gebrauchsdauer gemäß den lokalen und nationalen Gesetzen und Richtlinien dem Recycling zugeführt werden.



Yuasa Technical Data Sheet



Yuasa SWL2300E Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2400
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	400
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	78
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	80.0

Dimensions

Length (mm)	261 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	28.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-15°C to +40°C
Charge	-15°C to +50°C
Discharge	-15°C to +50°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	19.5

Maximum Discharge Current

1 second (A)	520
1 minute (A)	240

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	7.71
Short-Circuit current - according to EN IEC 60896-21 (A)	1857

Impedance

Measured at 1 kHz (mΩ)	5
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL2300EFR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2400
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	400
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	78
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	80.0

Dimensions

Length (mm)	261 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	28.3

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	19.5

Maximum Discharge Current

1 second (A)	800
1 minute (A)	400

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	7.71
Short-Circuit current - according to EN IEC 60896-21 (A)	1857

Impedance

Measured at 1 kHz (mΩ)	5
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 04/03/2025 – E&OE



Yuasa Technical Data Sheet



Yuasa SWL2500-6FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	922
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	180

Dimensions

Length (mm)	297 (±3)
Width (mm)	168 (±2)
Height (mm)	231.5 (±1)
Mass (kg)	32.5

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.25 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	45

Maximum Discharge Current

1 second (A)	1500
1 minute (A)	800

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	3.0
Short-Circuit current - according to EN IEC 60896-21 (A)	>4000

Impedance

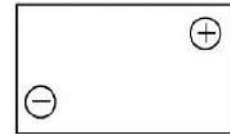
Measured at 1 kHz (mΩ)	1.7
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL2500E Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2940
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	490
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	91.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	93.6

Dimensions

Length (mm)	305 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	33

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	22.5

Maximum Discharge Current

1 second (A)	1000
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	6.5
Short-Circuit current - according to EN IEC 60896-21 (A)	2258

Impedance

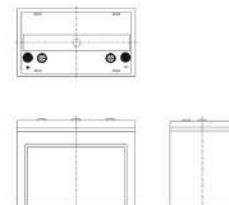
Measured at 1 kHz (mΩ)	4
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL2500EFR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2940
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	490
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	91.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	93.6

Dimensions

Length (mm)	305 (±3)
Width (mm)	168 (±2)
Height (mm)	224.5 (±1)
Mass (kg)	33

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	22.5

Maximum Discharge Current

1 second (A)	1000
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	6.5
Short-Circuit current - according to EN IEC 60896-21 (A)	2258

Impedance

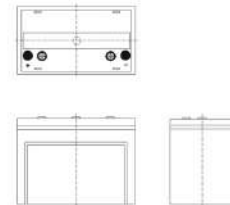
Measured at 1 kHz (mΩ)	4
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL2500TFR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	2940
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	490
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	91.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	93.6

Dimensions

Length (mm)	305 (±3)
Width (mm)	173 (±3)
Height (mm)	220 (±3)
Height over terminals (mm)	225 (±3)
Mass (kg)	32

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.8

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	22.5

Maximum Discharge Current

1 second (A)	1000
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	6.5
Short-Circuit current - according to EN IEC 60896-21 (A)	2258

Impedance

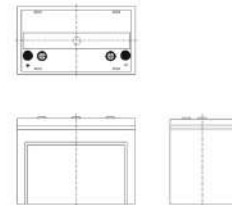
Measured at 1 kHz (mΩ)	4
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 04/03/2025 – E&OE



Yuasa Technical Data Sheet



Yuasa SWL3300 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	3300
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	550
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	102
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	110.2

Dimensions

Length (mm)	350 (±3)
Width (mm)	168 (±2)
Height (mm)	225 (±1)
Mass (kg)	37.7

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	25.625

Maximum Discharge Current

1 second (A)	1100
1 minute (A)	550

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	5.64
Short-Circuit current - according to EN IEC 60896-21 (A)	2547

Impedance

Measured at 1 kHz (mΩ)	3.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 04/03/2025 – E&OE



Yuasa Technical Data Sheet



Yuasa SWL3300FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	3300
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	550
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	102
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	110.2

Dimensions

Length (mm)	350 (±3)
Width (mm)	168 (±2)
Height (mm)	225 (±1)
Mass (kg)	37.7

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	25.625

Maximum Discharge Current

1 second (A)	1100
1 minute (A)	550

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	5.64
Short-Circuit current - according to EN IEC 60896-21 (A)	2547

Impedance

Measured at 1 kHz (mΩ)	3.5
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL3800 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4206
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	701
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	124
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	135.0

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	4.8
Short-Circuit current - according to EN IEC 60896-21 (A)	3000

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL3800FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4206
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	701
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	124
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	135.0

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	4.8
Short-Circuit current - according to EN IEC 60896-21 (A)	3000

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL4250FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4266
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	711
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	140
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	150.0

Dimensions

Length (mm)	341 (±3)
Width (mm)	173 (±3)
Height (mm)	281 (±3)
Mass (kg)	49

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	11.9

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	35

Maximum Discharge Current

1 second (A)	840
1 minute (A)	420

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 4 (mΩ)	
Short-Circuit current - according to EN IEC 60896-21 (A)	3436

Impedance

Measured at 1 kHz (mΩ)	2.7
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 04/03/2025 – E&OE



Yuasa Technical Data Sheet



Yuasa SWL4300 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4300
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	716.8
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	130
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	140

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	4.8
Short-Circuit current - according to EN IEC 60896-21 (A)	3000

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa SWL4300FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4300
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	716.8
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	130
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	140

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	4.8
Short-Circuit current - according to EN IEC 60896-21 (A)	3000

Impedance

Measured at 1 kHz (mΩ)	3
------------------------	---

Design Life & Approvals

EUROBAT Classification: Long life	10 to 12 years
Yuasa design life at 20°C (yrs)	up to 10 years



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP0.8-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	0.74
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	0.8

Dimensions

Length (mm)	96 (±1)
Width (mm)	25 (±1)
Height (mm)	61.5 (±2)
Mass (kg)	0.35

Terminal Type

FASTON - Quickfit / release (JST where stated)	PLUG-JST No VHR2N
--	----------------------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.2

Maximum Discharge Current

1 second (A)	24
1 minute (A)	5

Impedance

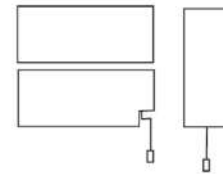
Measured at 1 kHz (mΩ)	180
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP1.2-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	1.1

Dimensions

Length (mm)	97 (±1)
Width (mm)	25 (±1)
Height over terminals (mm)	54.5 (±2)
Mass (kg)	0.31

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.3

Maximum Discharge Current

1 second (A)	36
1 minute (A)	12

Impedance

Measured at 1 kHz (mΩ)	60
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP1.2-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	1.1
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	1.2

Dimensions

Length (mm)	97 (±1)
Width (mm)	48 (±1)
Height over terminals (mm)	54.5 (±2)
Mass (kg)	0.58

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.3

Maximum Discharge Current

1 second (A)	36
1 minute (A)	12

Impedance

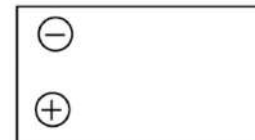
Measured at 1 kHz (mΩ)	110
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP1.2-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	1.1
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	1.2

Dimensions

Length (mm)	97 (±1)
Width (mm)	48 (±1)
Height over terminals (mm)	54.5 (±2)
Mass (kg)	0.58

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.3

Maximum Discharge Current

1 second (A)	36
1 minute (A)	12

Impedance

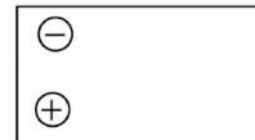
Measured at 1 kHz (mΩ)	110
------------------------	-----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP1-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	0.93

Dimensions

Length (mm)	51 (±1)
Width (mm)	42.5 (±1)
Height over terminals (mm)	54.5 (±2)
Mass (kg)	0.25

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.25

Maximum Discharge Current

1 second (A)	30
1 minute (A)	10

Impedance

Measured at 1 kHz (mΩ)	75
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP2.1-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	1.9
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	2.1

Dimensions

Length (mm)	178 (±1)
Width (mm)	34 (±1)
Height over terminals (mm)	64 (±2)
Mass (kg)	0.82

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.525

Maximum Discharge Current

1 second (A)	63
1 minute (A)	21

Impedance

Measured at 1 kHz (mΩ)	65
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP2.3-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	2.1
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	2.3

Dimensions

Length (mm)	178 (±1)
Width (mm)	34 (±1)
Height over terminals (mm)	64 (±2)
Mass (kg)	0.95

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.575

Maximum Discharge Current

1 second (A)	69
1 minute (A)	23

Impedance

Measured at 1 kHz (mΩ)	65
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP2.8-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	2.5

Dimensions

Length (mm)	134 (±1)
Width (mm)	34 (±1)
Height over terminals (mm)	64 (±2)
Mass (kg)	0.57

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.7

Maximum Discharge Current

1 second (A)	84
1 minute (A)	28

Impedance

Measured at 1 kHz (mΩ)	30
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP2.8-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	2.5
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	2.8

Dimensions

Length (mm)	134 (±1)
Width (mm)	67 (±1)
Height over terminals (mm)	64 (±2)
Mass (kg)	1.32

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.7

Maximum Discharge Current

1 second (A)	84
1 minute (A)	28

Impedance

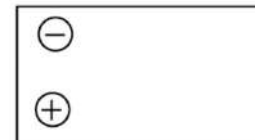
Measured at 1 kHz (mΩ)	60
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP3.2-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	2.9
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	3.2

Dimensions

Length (mm)	134 (±1)
Width (mm)	67 (±1)
Height over terminals (mm)	64 (±2)
Mass (kg)	1.1

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.8

Maximum Discharge Current

1 second (A)	96
1 minute (A)	32

Impedance

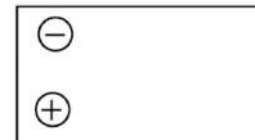
Measured at 1 kHz (mΩ)	50
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP3.2-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	2.9
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	3.2

Dimensions

Length (mm)	134 (±1)
Width (mm)	67 (±1)
Height over terminals (mm)	64 (±2)
Mass (kg)	1.1

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	0.8

Maximum Discharge Current

1 second (A)	96
1 minute (A)	32

Impedance

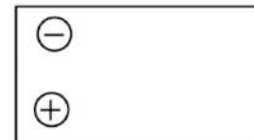
Measured at 1 kHz (mΩ)	50
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP3-6 Industrial VRLA Battery

Specifications

Nominal voltage (V) 6

Dimensions

Length (mm) 134 (±1)
Width (mm) 34 (±1)
Height over terminals (mm) 64 (±2)
Mass (kg) 0.66

Terminal Type

FASTON - Quickfit / release (JST where stated) 4.7/6.35

Operating Temperature Range

Storage (in fully charged condition) -20°C to +60°C
Charge -15°C to +50°C
Discharge -20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.) 3

Case Material

Standard ABS (UL94:HB)
FR version available UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block 6.825 (±1%)
Float charge voltage at 20°C (V)/Cell 2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV) -3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block 7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell 2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV) -4

Charge Current

Float charge current limit (A) No limit

Design Life & Approvals

EUROBAT Classification: Standard Commercial 3 to 5 years
Yuasa design life at 20°C (yrs) up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP4-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	3.7

Dimensions

Length (mm)	70 (±1)
Width (mm)	47 (±1)
Height over terminals (mm)	105.5 (±2)
Mass (kg)	0.87

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	1

Maximum Discharge Current

1 second (A)	120
1 minute (A)	40

Impedance

Measured at 1 kHz (mΩ)	20
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP4-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	3.7
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	4

Dimensions

Length (mm)	90 (±1)
Width (mm)	70 (±1)
Height over terminals (mm)	106 (±2)
Mass (kg)	1.75

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	1

Maximum Discharge Current

1 second (A)	120
1 minute (A)	40

Impedance

Measured at 1 kHz (mΩ)	40
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP7-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	6.5

Dimensions

Length (mm)	151 (±1)
Width (mm)	34 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	1.32

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	1.75

Maximum Discharge Current

1 second (A)	210
1 minute (A)	48

Impedance

Measured at 1 kHz (mΩ)	12
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP7-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	6.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	7

Dimensions

Length (mm)	151 (±1)
Width (mm)	65 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.2

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	1.75

Maximum Discharge Current

1 second (A)	210
1 minute (A)	48

Impedance

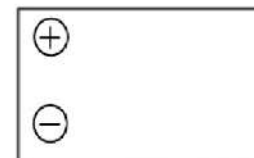
Measured at 1 kHz (mΩ)	23
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP7-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	6.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	7

Dimensions

Length (mm)	151 (±1)
Width (mm)	65 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.2

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	1.75

Maximum Discharge Current

1 second (A)	210
1 minute (A)	48

Impedance

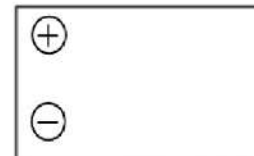
Measured at 1 kHz (mΩ)	23
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP7-12L Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	6.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	7

Dimensions

Length (mm)	151 (±1)
Width (mm)	65 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.2

Terminal Type

FASTON - Quickfit / release (JST where stated)	6.35
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	1.75

Maximum Discharge Current

1 second (A)	210
1 minute (A)	70

Impedance

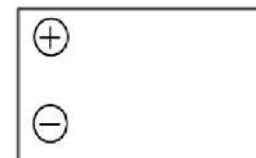
Measured at 1 kHz (mΩ)	23
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 04/03/2025 – E&OE



Yuasa Technical Data Sheet



Yuasa NP7-12LFR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	6.4
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	7

Dimensions

Length (mm)	151 (±1)
Width (mm)	65 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.2

Terminal Type

FASTON - Quickfit / release (JST where stated)	6.35
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	1.75

Maximum Discharge Current

1 second (A)	210
1 minute (A)	70

Impedance

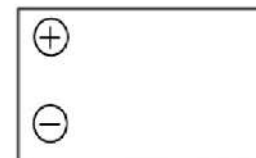
Measured at 1 kHz (mΩ)	23
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP10-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	9.2

Dimensions

Length (mm)	151 (±1)
Width (mm)	50 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	1.93

Terminal Type

FASTON - Quickfit / release (JST where stated)	4.75
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	2.5

Maximum Discharge Current

1 second (A)	300
1 minute (A)	48

Impedance

Measured at 1 kHz (mΩ)	8
------------------------	---

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP12-6 Industrial VRLA Battery

Specifications

Nominal voltage (V)	6
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	11.1

Dimensions

Length (mm)	151 (±1)
Width (mm)	50 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.05

Terminal Type

FASTON - Quickfit / release (JST where stated)	6.35
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	6.825 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	7.26 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	3

Maximum Discharge Current

1 second (A)	360
1 minute (A)	75

Impedance

Measured at 1 kHz (mΩ)	7
------------------------	---

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP12-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	11.1
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	12

Dimensions

Length (mm)	151 (±1)
Width (mm)	98 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	4.05

Terminal Type

FASTON - Quickfit / release (JST where stated)	6.35
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	3

Maximum Discharge Current

1 second (A)	360
1 minute (A)	75

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	44.39
Short-Circuit current - according to EN IEC 60896-21 (A)	320

Impedance

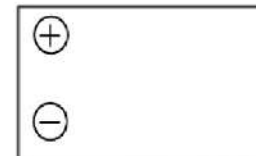
Measured at 1 kHz (mΩ)	16
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP12-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	11.1
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	12

Dimensions

Length (mm)	151 (±1)
Width (mm)	98 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	4.05

Terminal Type

FASTON - Quickfit / release (JST where stated)	6.35
--	------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	3

Maximum Discharge Current

1 second (A)	360
1 minute (A)	75

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	44.39
Short-Circuit current - according to EN IEC 60896-21 (A)	320

Impedance

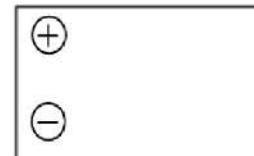
Measured at 1 kHz (mΩ)	16
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP17-12I Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	15.7
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	17

Dimensions

Length (mm)	181 (±1)
Width (mm)	76 (±1)
Height (mm)	167 (±2)
Mass (kg)	6.1

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.45

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	4.25

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	34.47
Short-Circuit current - according to EN IEC 60896-21 (A)	421

Impedance

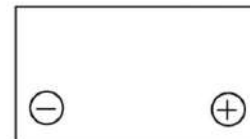
Measured at 1 kHz (mΩ)	15
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP17-12IFR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	15.7
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	17

Dimensions

Length (mm)	181 (±1)
Width (mm)	76 (±1)
Height (mm)	167 (±2)
Mass (kg)	6.1

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.45

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	4.25

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	34.47
Short-Circuit current - according to EN IEC 60896-21 (A)	421

Impedance

Measured at 1 kHz (mΩ)	15
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP18-12B Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	16
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	17.2

Dimensions

Length (mm)	180 (±1)
Width (mm)	76 (±1)
Height (mm)	167 (±2)
Mass (kg)	6.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 Lug
--	--------

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	4.5

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Impedance

Measured at 1 kHz (mΩ)	15
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP24-12I Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	22.3
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	24

Dimensions

Length (mm)	166 (±1)
Width (mm)	175 (±1)
Height (mm)	125 (±2)
Mass (kg)	9

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.45

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	6

Maximum Discharge Current

1 second (A)	500
1 minute (A)	150

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	22.19
Short-Circuit current - according to EN IEC 60896-21 (A)	656

Impedance

Measured at 1 kHz (mΩ)	11
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP38-12I Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	35.3
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	38

Dimensions

Length (mm)	197 (±1)
Width (mm)	165 (±1)
Height (mm)	170 (±2)
Mass (kg)	14.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M5 (F)
Torque (Nm)	2.45

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	9.5

Maximum Discharge Current

1 second (A)	500
1 minute (A)	200

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	18.22
Short-Circuit current - according to EN IEC 60896-21 (A)	804

Impedance

Measured at 1 kHz (mΩ)	9
------------------------	---

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5
VdS (Germany)	VdS No: G 182024



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NP65-12I Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	60.5
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	65

Dimensions

Length (mm)	350 (±1)
Width (mm)	166 (±1)
Height (mm)	174 (±2)
Mass (kg)	23

Terminal Type

Threaded terminal - (M=Male or F=Female)	M6 (F)
Torque (Nm)	4.76

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	16.25

Maximum Discharge Current

1 second (A)	800
1 minute (A)	500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	10.51
Short-Circuit current - according to EN IEC 60896-21 (A)	1375

Impedance

Measured at 1 kHz (mΩ)	7
------------------------	---

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5
VdS (Germany)	VdS No: G 183008



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.



Yuasa Technical Data Sheet



Yuasa NPW45-12 Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	256
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	42.8
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	6.6
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	7.5

Dimensions

Length (mm)	151 (±1)
Width (mm)	65 (±1)
Height (mm)	94 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.7

Terminal Type

FASTON - Quickfit / release (JST where stated)	6.35
--	------

Operating Temperature Range

Storage (in fully charged condition)	-15°C to +40°C
Charge	-0°C to +40°C
Discharge	-15°C to +50°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	1.9
Cyclic (or Boost) charge current limit (A)	1.9

Maximum Discharge Current

1 second (A)	105
1 minute (A)	42

Impedance

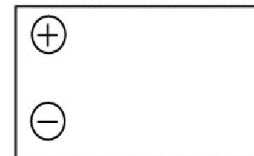
Measured at 1 kHz (mΩ)	24
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

Data Sheet generated on 04/03/2025 – E&OE



Yuasa Technical Data Sheet



Yuasa NPW45-12FR Industrial VRLA Battery

Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	256
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	42.8
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	6.6
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	7.5

Dimensions

Length (mm)	151 (±1)
Width (mm)	65 (±1)
Height (mm)	94 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.7

Terminal Type

FASTON - Quickfit / release (JST where stated)	6.35
--	------

Operating Temperature Range

Storage (in fully charged condition)	-15°C to +40°C
Charge	-0°C to +40°C
Discharge	-15°C to +50°C

Storage

Capacity loss per month at 20°C (% approx.)	3
---	---

Case Material

Standard	ABS (UL94:V0)
----------	---------------

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	14.5 (±3%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.42 (±3%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

Charge Current

Float charge current limit (A)	1.9
Cyclic (or Boost) charge current limit (A)	1.9

Maximum Discharge Current

1 second (A)	105
1 minute (A)	42

Impedance

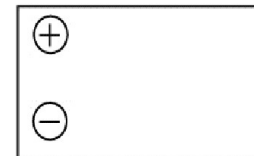
Measured at 1 kHz (mΩ)	24
------------------------	----

Design Life & Approvals

EUROBAT Classification: Standard Commercial	3 to 5 years
Yuasa design life at 20°C (yrs)	up to 5



Layout



3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

Handles

Batteries must not be suspended by their handles (where fitted).

Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

