

Technical sheet

Product Name	Battery 9,6V 1,7Ah for ECG Cardimax FX7202 FUKUDA - DENSHI
Reference	FX7202
Manufacturer of the device	FUKUDA - DENSHI
Model	Exalium Premium
Accumulators	Soft
Technology	Ni-mh
Voltage	9.60 V
Capacitance	1.70 A/h
Length	100 mm
Width	28 mm
Height	28 mm
Weight	0.208 kg



Technical sheet

Product Name	Battery 12V 2,8Ah for defibrillator Fred Easy SCHILLER
Reference	FRED-EASY
Manufacturer	SCHILLER
Model	Original
Technology	Lithium
Voltage	12.00 V
Capacitance	2.80 A/h
Weight	0.174 kg
Suitable for	Durée de vie: 5 ans SKITY SCB3530126



Technical sheet

Product Name	Battery 7.2V 2.25Ah for Mac400 GE
Reference	MAC400-O
Manufacturer	GE HEALTHCARE
Model	Original
Technology	Li-ion
Voltage	7.20 V
Capacitance	2.25 A/h
Weight	0.110 kg
Suitable for	2030912-001 - MAC600 2047357-001 2024423-001 2111132-001




Technical sheet

Product Name	Battery 7.4V 1.8Ah for Ophthalmoscope KEELER KEELER
Reference	1919-P-1013
Manufacturer	KEELER
Model	Original
Technology	Li-ion
Voltage	7.40 V
Capacitance	1.80 A/h
Weight	0.155 kg
Suitable for	KEELER OPHTALMOSCOPE KEELER



Technical sheet

Product Name	Battery 12V 18Ah % 28lot of 2% 29 for pump CS300 IABP MAQUET
Reference	CS300
Manufacturer of the device	MAQUET
Model	Exalium
Accumulators	EXALIUM
Technology	Plomb
Voltage	12.00 V
Capacitance	18.00 A/h
Weight	12.400 kg
	

14. Ordering information

Overview

Introduction This chapter lists accessories used for the analyzer.

Contents This chapter contains the following topics.

Analyzer accessories	14-2
Quality control	14-5
Sampling devices	14-7

Analyzer accessories

Introduction The following accessories are available on order for the ABL800 FLEX analyzer depending on analyzer configuration.

Electrodes

Item	Code No.	Type
Reference Electrode	945-603	E1001
pH Electrode	945-614	E777
pO ₂ Electrode	945-613	E799
pCO ₂ Electrode	945-612	E788
K Electrode	945-615	E722
Na Electrode	945-618	E755
Cl Electrode	945-617	E744
Ca Electrode	945-616	E733
Glucose Electrode	945-620	E7066
Lactate Electrode	945-619	E7077
Crea A electrode	945-662	E8088
Crea B electrode	945-663	E8089
Dummy Electrode	945-626	-

Membrane boxes

Item	Code No.	Type
Reference Membrane Box (4 units)	942-058	D711
pO ₂ Membrane Box (4 units)	942-064	D799
pCO ₂ Membrane Box (4 units)	942-063	D788
K Membrane Box (4 units)	942-059	D722
Na Membrane Box (4 units)	942-062	D755
Cl Membrane Box (4 units)	942-061	D744
Ca Membrane Box (4 units)	942-060	D733
Glucose Membrane Box (4 units)	942-065	D7066
Lactate Membrane Box (4 units)	942-066	D7077
Membrane Box for Crea A and Crea B electrodes (2 × 2 units)	942-073	D8088 and D8089

Continued on next page

Analyzer accessories, *Continued*

Solutions

ABL835/830/825/820/815/810/810 BG only/805:

Item	Code No.	Type
Waste Container 600 mL	905-802	D513
ctHb Calibration Solution (4 ampoules)	944-021	S7770
Cleaning Solution 175 mL	944-126	S8375
Calibration Solution 1 200 mL	944-127	S1820
Calibration Solution 2 200 mL	944-129	S1830
Rinse Solution 600 mL	944-130	S4980

ABL837/27/17:

Item	Code No.	Type
Waste Container 600 mL	905-802	D513
ctHb Calibration Solution (4 ampoules)	944-021	S7770
Cleaning Met II Solution, 100 mL × 6	944-136	S8377
Calibration Solution 1, 175 mL × 6	944-135	S1827
Calibration Solution 2, 150 mL × 6	944-134	S1837
Rinse Solution, 600 mL	944-155	S4987

Gas accessories

Item	Code No.	Type
Gas Cal 1 (10 bar) Onboard gas bottle	962-169	-
Gas Cal 2 (10 bar) Onboard gas bottle	962-170	-
Gas Cal 1 (34 bar) Onboard gas bottle for non-EU countries	962-183	-
Gas Cal 2 (34 bar) Onboard gas bottle for non-EU countries	962-184	-
Gas Cal 1 (34 bar), Onboard gas bottle for the USA and Canada	962-174	-
Gas Cal 2 (10 bar), Onboard gas bottle for the USA and Canada	962-175	-
Gas Cal 1 (26 bar), Onboard gas bottle for Japan	962-176	-
Gas Cal 2 (10 bar), Onboard gas bottle for Japan	962-177	-
Valve Key	922-509	-

Continued on next page

Analyzer accessories, *Continued*

Power cords

Item	Code No.	Type
Line Cord 120 V, USA and Japan	615-403	-
Line Cord 230 V, UK	615-312	-
Line Cord 230 V, ITA	615-313	-
Line Cord 230 V, DK	615-314	-
Line Cord 230 V, ISR	615-315	-
Line Cord 230 V, CHE	615-316	-
Line Cord 230 V, other 230 V countries	615-303	-
Line Cord 230 V, AUS and NZA	615-317	-
Line Cord 230 V, ZAF and IND	615-318	-

Other accessories

Item	Code No.	Type
Thermal Paper (8 rolls)	984-070	-
Hypochlorite Solution	943-906	S5362
Inlet Gasket	902-668	-
Inlet Probe	902-797	-
Inlet Probe Tube	841-780	-
Inlet Syringe Handle	902-669	-
Inlet Capillary Handle	902-670	-
Pump Tube for electrode modules	842-328	-
Waste Pump Tube, yellow (2 pcs.)	842-326	-
Pump Tube for solutions	842-327	-
Fan Filter	924-073	-
Clot Catcher for the ABL800 FLEX analyzer, 250 units	906-020	-

Documentation

Item	Code No.	Type
Communication Protocol Specifications, English	989-329	-
ABL800 FLEX Operator's manual, US	994-909	-
ABL800 FLEX Reference manual, English	989-963	-

MEDICAL BATTERY

BATTERIE MÉDICALE

MAIN INFORMATION / INFORMATIONS GÉNÉRALES

BRAND NAME / MARQUE	CS
TYPE OF BATTERY / TYPE DE BATTERIE	Defibrillator battery / Batterie pour défibrillateur
TECHNOLOGY / TECHNOLOGIE	Nickel-métal hydrure
VOLTAGE / TENSION	12V
CAPACITY / CAPACITÉ	2.8Ah
DIMENSIONS / DIMENSIONS	
• LENGHT / LONGUEUR	112 mm
• WIDTH / LARGEUR	45 mm
• HEIGHT / HAUTEUR	45 mm
WEIGHT / POIDS	560 g
GUARANTEE / GARANTIE	6 months / mois
PART NUMBER / PART NUMBER	ECG-1350



MANUFACTURER-MODEL / MARQUE-MODÈLE

Nihon Kohden	Défibrillateur TEC
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MEDICAL BATTERY

BATTERIE MÉDICALE

MAIN INFORMATION / INFORMATIONS GÉNÉRALES

BRAND NAME / MARQUE	Nihon Kohden
TYPE OF BATTERY / TYPE DE BATTERIE	Medical battery / Batterie pour appareil médical
TECHNOLOGY / TECHNOLOGIE	Nickel-métal hydrure
VOLTAGE / TENSION	9.6V
CAPACITY / CAPACITÉ	2.9Ah
DIMENSIONS / DIMENSIONS	
• LENGTH / LONGUEUR	96mm
• WIDTH / LARGEUR	76mm
• HEIGHT / HAUTEUR	35mm
WEIGHT / POIDS	550gr
PART NUMBER / PART NUMBER	SB-671P



MANUFACTURER-MODEL / MARQUE-MODÈLE

NIHON KOHDEN	X075
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AGM LEAD ACID BATTERY

S 12V-3.2Ah FR

AGM
STANDARD

MAIN INFORMATION / INFORMATIONS GÉNÉRALES

BRAND / MARQUE	NX
TECHNOLOGY / TECHNOLOGIE	AGM Lead acid
NOMINAL VOLTAGE / TENSION NOMINALE	12V
NOMINAL CAPACITY / CAPACITÉ NOMINALE	3.2Ah (20hr)
DIMENSIONS (± 2 mm) / DIMENSIONS (± 2 mm)	
• Length / Longueur	134 ± 2mm (5.28 inches)
• Width / Largeur	67 ± 1mm (2.64 inches)
• Height / Hauteur	60.5 ± 1mm (2.38 inches)
• Total height with terminals / Hauteur totale (avec cosSES)	66.5 ± 1mm (2.62 inches)
WEIGHT (± 2 %) / POIDS (± 2 %)	Approx.1.35kg (2.98lbs)
TERMINAL / TYPE DE COSSES	T1
CASING / TYPE DE BAC	UL94 V-0 (Flame retardant)
COLOR / COULEUR DE BAC	Black top and black case

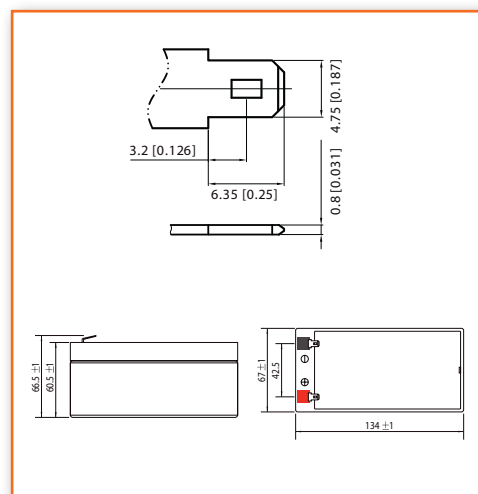


TECHNICAL INFORMATION / INFORMATIONS TECHNIQUES

CAPACITY / CAPACITÉ	3.20 Ah / 0.160A (20hr,1.80V/cell,25°C/77°F) 2.98 Ah / 0.298A (10hr,1.80V/cell,25°C/77°F) 2.69 Ah / 0.538A (5hr,1.75V/cell,25°C/77°F) 2.35 Ah / 0.783A (3hr,1.75V/cell,25°C/77°F) 1.94 Ah / 1.94A (1hr,1.60V/cell,25°C/77°F)
DISCHARGE CURRENT / COURANT DE DÉCHARGE	48A (5s)
INTERNAL RESISTANCE / RÉSISTANCE INTERNE	Approx 45mΩ
OPERATING TEMPERATURE RANGE / PLAGES DE TEMPÉRATURE	
• Discharging / Décharge	-15°~50°C (5 ~122°F)
• Charging / Charge	0°~40°C (32 ~104°F)
• Storage / Stockage	-15°~40°C (5 ~104°F)
NOMINAL OPERATING TEMPERATURE / TEMPÉRATURE D'UTILISATION	25 ± 3°C (77 ± 5°F)
CAPACITY VS TEMPERATURE / CAPACITÉ SELON LA TEMPÉRATURE	40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%

T1 / Terminal

Unité : mm / Unit: inches



APPLICATIONS

- All purpose / Tout usage
- UPS / Onduleur
- Emergency light / Éclairage de secours
- Railway signal / Signalisation ferroviaire
- Alarm and security system / Alarme et sécurité
- Aircraft signal / Signal d'avion
- Electronic devices and equipment / Appareils et équipements électroniques
- Emergency backup / Alimentation de secours
- Power supply / Réserve d'énergie



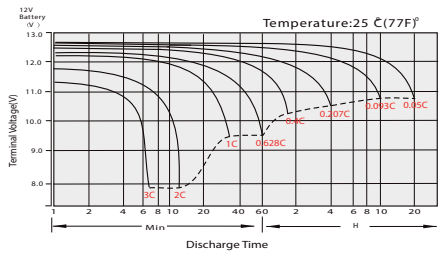
CONSTANT CURRENT DISCHARGE (AMPERES) AT 25°C
TABLE DE DÉCHARGE À COURANT ET PUISSANCE CONSTANTS (A) À 25°C

F.V/Temps	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	6.14	4.28	3.53	3.06	2.46	1.89	1.55	0.944	0.719	0.591	0.502	0.435	0.345	0.287	0.158
1.80V/cell	7.55	5.11	4.10	3.47	2.72	2.06	1.66	1.00	0.756	0.622	0.524	0.454	0.358	0.298	0.160
1.75V/cell	8.95	5.78	4.52	3.77	2.91	2.19	1.75	1.05	0.783	0.641	0.538	0.465	0.368	0.303	0.162
1.70V/cell	10.2	6.37	4.89	4.05	3.05	2.27	1.82	1.09	0.809	0.657	0.551	0.476	0.374	0.308	0.164
1.65V/cell	11.2	6.85	5.17	4.25	3.18	2.36	1.90	1.12	0.829	0.670	0.563	0.485	0.380	0.313	0.167
1.60V/cell	11.8	7.14	5.39	4.39	3.27	2.41	1.94	1.16	0.849	0.687	0.575	0.495	0.388	0.318	0.168

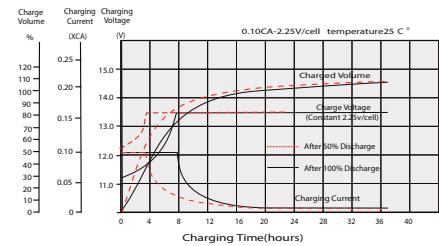
CONSTANT POWER DISCHARGE (WATTS) AT 25°C
DÉCHARGE À PUISSANCE CONSTANTE (WATTS) À 25°C

F.V/Temps	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	11.6	8.16	6.79	5.93	4.79	3.71	3.04	1.87	1.43	1.18	1.00	0.872	0.695	0.579	0.320
1.80V/cell	14.1	9.64	7.81	6.66	5.27	4.01	3.26	1.98	1.49	1.23	1.04	0.905	0.716	0.596	0.322
1.75V/cell	16.5	10.8	8.53	7.20	5.59	4.24	3.41	2.05	1.54	1.26	1.06	0.921	0.731	0.604	0.322
1.70V/cell	18.5	11.8	9.15	7.67	5.83	4.38	3.53	2.12	1.58	1.29	1.08	0.938	0.738	0.610	0.326
1.65V/cell	20.1	12.5	9.56	7.97	6.03	4.52	3.66	2.17	1.61	1.31	1.10	0.952	0.746	0.616	0.329
1.60V/cell	20.8	12.9	9.86	8.13	6.13	4.58	3.71	2.22	1.64	1.33	1.12	0.966	0.758	0.623	0.330

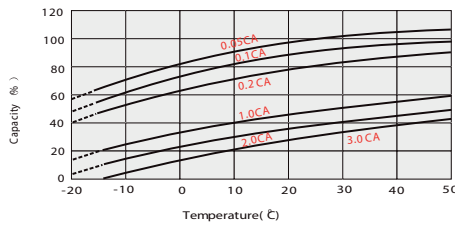
DISCHARGE CHARACTERISTICS
CARACTÉRISTIQUES DE DÉCHARGE



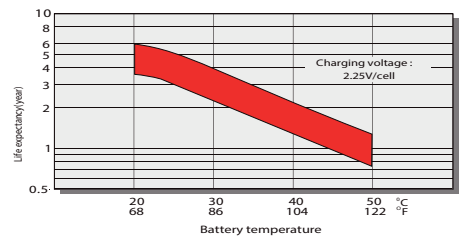
FLOAT CHARGING CHARACTERISTICS
CARACTÉRISTIQUES DE CHARGE EN FLOATING



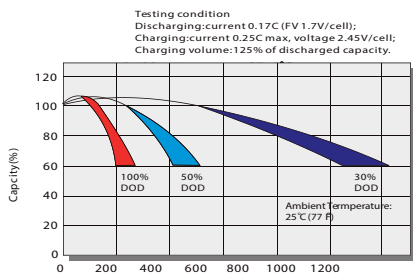
TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY
EFFET DE LA TEMPÉRATURE SUR LA BATTERIE



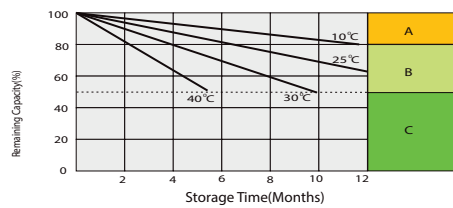
EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE
EFFET DE LA TEMPÉRATURE SUR LA DURÉE DE VIE EN FLOATING



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE
CYCLE DE VIE EN FONCTION DE LA PROFONDEUR DE LA DÉCHARGE



SELF DISCHARGE CHARACTERISTICS
RELATION ENTRE LA CAPACITÉ ET LE TEMPS DE STOCKAGE





AGM LEAD ACID BATTERY

S 12V-18Ah FR

AGM
STANDARD

MAIN INFORMATION / INFORMATIONS GÉNÉRALES

BRAND / MARQUE	NX
TECHNOLOGY / TECHNOLOGIE	AGM Lead acid
NOMINAL VOLTAGE / TENSION NOMINALE	12V
NOMINAL CAPACITY / CAPACITÉ NOMINALE	18Ah (20hr)
DIMENSIONS (± 2 mm) / DIMENSIONS (± 2 mm)	
• Length / Longueur	181.5 ± 2mm (2.76 inches)
• Width / Largeur	77 ± 2mm (1.89 inches)
• Height / Hauteur	167.5 ± 2mm 5 (3.86 inches)
• Total height with terminals / Hauteur totale (avec cosses)	167.5 ± 2mm 4.09 inches
WEIGHT (± 2 %) / POIDS (± 2 %)	Approx 5.4kg (11.9lbs)
TERMINAL / TYPE DE COSSES	T3
CASING / TYPE DE BAC	UL94 V-0 (Flame retardant)
COLOR / COULEUR DE BAC	Black top and black case

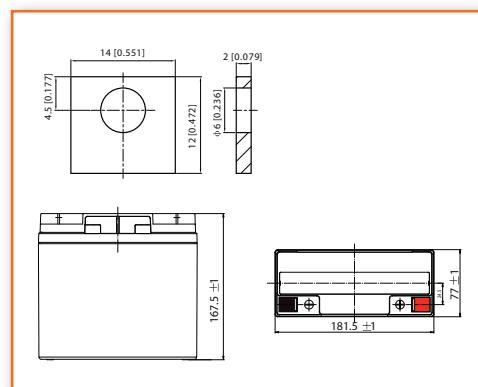


TECHNICAL INFORMATION / INFORMATIONS TECHNIQUES

CAPACITY / CAPACITÉ	18.0Ah/0.90A (20hr,1.80V/cell,25°C/77°F) 16.7Ah/1.67A (10hr,1.80V/cell,25°C/77°F) 15.1Ah/3.03A (5hr,1.75V/cell,25°C/77°F) 13.5Ah/4.49A (3hr,1.75V/cell,25°C/77°F) 11.1Ah/11.1A (1hr,1.60V/cell,25°C/77°F)
DISCHARGE CURRENT / COURANT DE DÉCHARGE	270A (5s)
INTERNAL RESISTANCE / RÉSISTANCE INTERNE	Approx 16mΩ
OPERATING TEMPERATURE RANGE / PLAGES DE TEMPÉRATURE	
• Discharging / Décharge	-15°~50°C (5 ~122°F)
• Charging / Charge	0°~40°C (32 ~104°F)
• Storage / Stockage	-15°~40°C (5 ~104°F)
NOMINAL OPERATING TEMPERATURE / TEMPÉRATURE D'UTILISATION	25 ± 3°C (77 ± 5°F)
CAPACITY VS TEMPERATURE / CAPACITÉ SELON LA TEMPÉRATURE	40°C (104°F) 103% 25°C (77°F) 100% 0°C (32°F) 86%

T3 / Terminal

Unité : mm / Unit: inches



APPLICATIONS

- All purpose / Tout usage
- UPS / Onduleur
- Emergency light / Éclairage de secours
- Railway signal / Signalisation ferroviaire
- Alarm and security system / Alarme et sécurité
- Aircraft signal / Signal d'avion
- Electronic devices and equipment / Appareils et équipements électroniques
- Emergency backup / Alimentation de secours
- Power supply / Réserve d'énergie



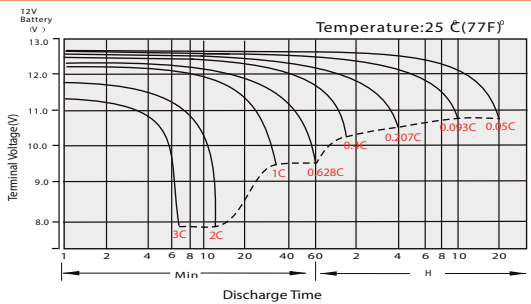
CONSTANT CURRENT DISCHARGE (AMPERES) AT 25°C
TABLE DE DÉCHARGE À COURANT ET PUISSANCE CONSTANTS (A) À 25°C

F.V/Temps	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.9	25.6	22.7	19.9	15.3	11.4	9.11	5.51	4.13	3.35	2.84	2.47	1.96	1.63	0.884
1.80V/cell	40.8	30.2	25.9	22.1	16.7	12.2	9.79	5.85	4.34	3.51	2.94	2.55	2.02	1.67	0.900
1.75V/cell	45.8	33.0	27.8	23.4	17.4	12.8	10.2	6.07	4.49	3.60	3.03	2.62	2.06	1.70	0.918
1.70V/cell	49.9	35.4	29.7	24.7	18.1	13.2	10.6	6.27	4.63	3.69	3.09	2.67	2.09	1.72	0.929
1.65V/cell	53.8	37.7	31.1	25.8	18.9	13.8	10.9	6.44	4.73	3.77	3.14	2.71	2.12	1.74	0.938
1.60V/cell	57.9	39.6	31.9	26.4	19.3	14.0	11.1	6.59	4.82	3.84	3.20	2.74	2.15	1.76	0.945

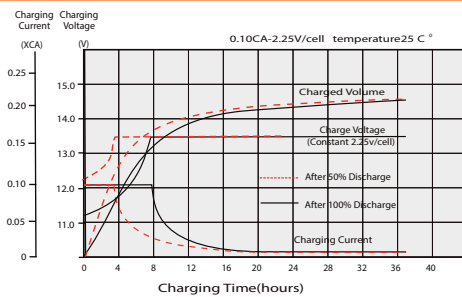
CONSTANT POWER DISCHARGE (WATTS) AT 25°C
DÉCHARGE À PUISSANCE CONSTANTE (WATTS) À 25°C

F.V/Temps	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	64.0	48.8	43.6	38.5	29.8	22.3	17.9	10.9	8.21	6.68	5.68	4.95	3.95	3.29	1.79
1.80V/cell	76.3	57.2	49.5	42.7	32.4	23.9	19.2	11.5	8.59	6.98	5.86	5.09	4.04	3.36	1.81
1.75V/cell	84.8	62.0	52.8	44.8	33.6	24.9	20.0	11.9	8.87	7.14	6.02	5.21	4.11	3.39	1.82
1.70V/cell	91.1	65.6	55.7	46.8	34.7	25.6	20.6	12.2	9.06	7.25	6.08	5.27	4.15	3.42	1.83
1.65V/cell	96.6	68.8	57.5	48.4	35.8	26.3	21.0	12.5	9.19	7.35	6.15	5.32	4.18	3.43	1.84
1.60V/cell	101.5	70.8	58.0	48.7	36.0	26.5	21.3	12.7	9.31	7.45	6.22	5.33	4.21	3.45	1.85

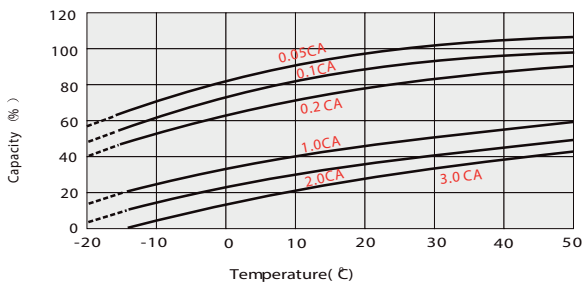
DISCHARGE CHARACTERISTICS
CARACTÉRISTIQUES DE DÉCHARGE



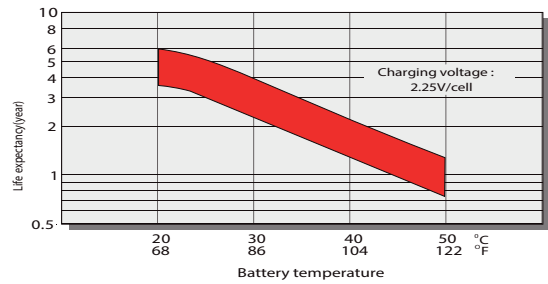
FLOAT CHARGING CHARACTERISTICS
CARACTÉRISTIQUES DE CHARGE EN FLOATING



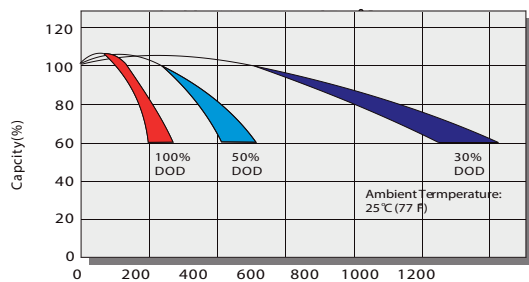
TEMPERATURE EFFECTS IN RELATION TO BATTERY CAPACITY
EFFET DE LA TEMPÉRATURE SUR LA BATTERIE



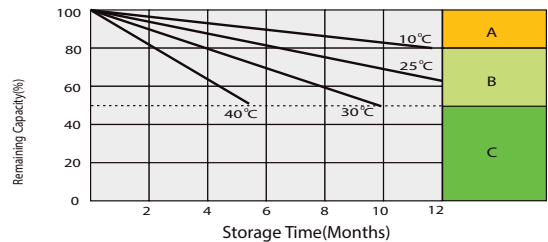
EFFECT OF TEMPERATURE ON LONG TERM FLOAT LIFE
EFFET DE LA TEMPÉRATURE SUR LA DURÉE DE VIE EN FLOATING



CYCLE LIFE IN RELATION TO DEPTH OF DISCHARGE
CYCLE DE VIE EN FONCTION DE LA PROFONDEUR DE LA DÉCHARGE



SELF DISCHARGE CHARACTERISTICS
RELATION ENTRE LA CAPACITÉ ET LE TEMPS DE STOCKAGE



UFO-130-2 Oxygen Sensor



Ultra-Fast Oxygen Sensor (UFO)

2x2 inch PC Board

Teledyne Analytical Instruments has a long history of developing unique solutions for challenging applications.

The 2-year Ultra Fast Oxygen sensor (UFO-130-2) is a prime example of this capability. Specifically developed as a reliable and economical alternative to expensive paramagnetic and optical sensors, the Teledyne UFO utilizes fuel cell technology which is inherently rugged and forgiving.

Unlike other sensors, the UFO is insensitive to shock, vibration, and position, and will withstand repeated exposure to water without damage. With an average response time of 100 milliseconds, the UFO is one of the fastest sensors ever developed for this application.

Ideally suited for use in Metabolic and Critical Care Monitors, the UFO is also a welcome addition to Clinical Exercise and Sports Medicine as well as other applications where Breath by Breath analysis is critical.

Available with a 2 x 2 inch PC board and weighing only 4.0 ounces, the UFO can be mounted in almost any location.

Since the UFO already meets ISO 7767 (1997), ASTM F1462-93, and CE Medical Devices Directives, very little additional work is needed to integrate the sensor into new or existing products.

For additional information on this or other Teledyne oxygen sensors, please contact us using the information noted on this data sheet.

UFO-130-2 Specifications

Output:	3.4 - $\pm 0.4V$ at 100% oxygen, 1 ATM	Sensor life expectancy: 24 months in air @ 25°C 50% RH
Range:	1 - 100% oxygen	Sensor storage temp.: 0 - 40°C
Accuracy:	Less than $\pm 1.0\%$ oxygen at constant temperature and pressure, when calibration in air and 100% oxygen	Gas inlet connection: 1/16" OD tube
Resolution:	0.1%	Gas outlet connection: Luer connector
Response time:	10 - 90% OS step change in <130 MS (@200 ± 100 cc / min gas flow rate) Response time will degrade at slower flow rate.	Standard: Meets ISO7767 (May, 1997) ASTM F1462/93
Cross interference:	Referenced to ISO7767 (May, 1997) ASTM-F1462/93	
Operating humidity:	0 - 99% RH (non-condensing)	
Operating ambient pressure:	550 - 800 mm Hg	
Operating relative pressure:	Continuous: -100 to +100 mm Hg to ambient pressure Intermittent: Up to -200 mm Hg for less than 5 seconds	
Operating temp.:	Continuous: 15 - 40°C Intermittent: Up to 50°C for less than 2 hours per day	
Power supply:	+11.8 VDC to +16.0 VDC -11.8 VDC to -16.0 VDC	
Power consumption:	Less than 200 mW	
Weight:	Sensor: <2.5 oz Electronics board: <1.5 oz	
Dimensions:	Sensor: 2 5/8" L x 1 3/16" W Electronics Board: 2" x 2"	

 **TELEDYNE**
ANALYTICAL INSTRUMENTS

A Teledyne Technologies Company
16830 Chestnut Street
City of Industry, California 91748, USA

TEL: 626-934-1500 or 888-789-8168
FAX: 626-934-1651 EMAIL: ask_tai@teledyne.com

www.teledyne-ai.com

Warranty

Instrument is warranted for 1 year from date of shipment against defects in material or workmanship.

NOTE: Specifications and features will vary with application. The above are established and validated during design, but are not to be construed as test criteria for every product. All specifications and features are subject to change without notice.



PE150AF CERMAX® XENON SHORT-ARC LAMPS



Cermax® Xenon short-arc lamps from Excelitas Technologies are ideal for applications that require a high degree of illumination control.

The Cermax® Xenon short-arc lamp from Excelitas Technologies is an innovative lamp design in the specialty lighting industry. Cermax® Xenon lamps were first introduced in the early 1980s and are now used in diagnostic and surgical endoscopes in most major hospitals worldwide, in high-brightness projection display systems, and for a wide variety of other high-performance applications.

The Cermax® Xenon lamp, Model PE150AF, has an integrated parabolic reflector, enabling high-intensity, focused light output. Due to the Xenon lamp's broad color spectrum, the lamp is filtered to emit ultraviolet, visible, or infrared light, depending upon application and usage. With their internal reflector and rugged ceramic body construction, Cermax® Xenon lamps are the safest and most compact alternative to conventional quartz xenon lamps. Cermax® lamps are ideal for applications that require a high degree of illumination control.

Current-regulated or power-regulated power supplies with output ripples of less than 5% are recommended. Single-shot ignition pulses are advised because radio frequency starters may damage the lamp's internal reflector.

In addition to lamps, Excelitas Technologies manufactures Cermax® Xenon short-arc lamp power supplies, lamp holders, OEM lighting systems, and fiber optic light sources.

www.excelitas.com

PE150AF 03/2012 page 1 of 4

CERMAX

Key Features

- High-intensity illumination—1350 Lumens
- Compact size
- Power range of 100-150 Watts
- 1000 hours lamp lifetime
- Broad spectral range with 5900° Kelvin color temperature

Applications

- Medical fiber optic illuminators
- Industrial fiber optic illuminators
- Machine vision
- Infrared and visible spotlights/beacons
- Spectroscopy
- Microscopy
- UV Curing
- Video projection

EXCELITAS
TECHNOLOGIES

PE150AF

CERMAX® XENON SHORT-ARC LAMP

PE150AF

Operational Specifications		
Description	Nominal	Range
Power	150 Watts	100-150 Watts
Current	11 amps (DC)	10-14 amps (DC)
Operating Voltage	11.7 Volts (DC)	10-13.6 Volts (DC)
Ignition Voltage	23 kilovolts (recommended minimum)	
Temperature	120° C (Maximum)	
Lifetime*	1000 hours typical	

* End of life is defined as 50% of initial output

Initial Output at Nominal Power	
F= UV Filtered Output	
Description	PE150AF
Radiant Output*	16 Watts
UV Output*	0.9 Watts
IR Output*	8 Watts
Visible Output*	1350 Lumens
Color Temperature	5900° Kelvin
Peak Instabilities	4%

* These values indicate total output in all directions. Wavelengths = UV<390 nm, IR>770 nm, Visible: 390 nm-770 nm

Physical Specifications	
Description	Specification
Arc Gap	0.038 inch (0.96 mm)
Weight	100 grams
Window Diameter	0.77 inch (19.6 mm)

PE150AF

CERMAX[®] XENON SHORT-ARC LAMP

PE150AF

Focused Output with a F/1.0 Lens

Description	Visible Output	Total Output*
3 mm aperture	700 Lumens	5.5 Watts
6 mm aperture	900 Lumens	8.0 Watts

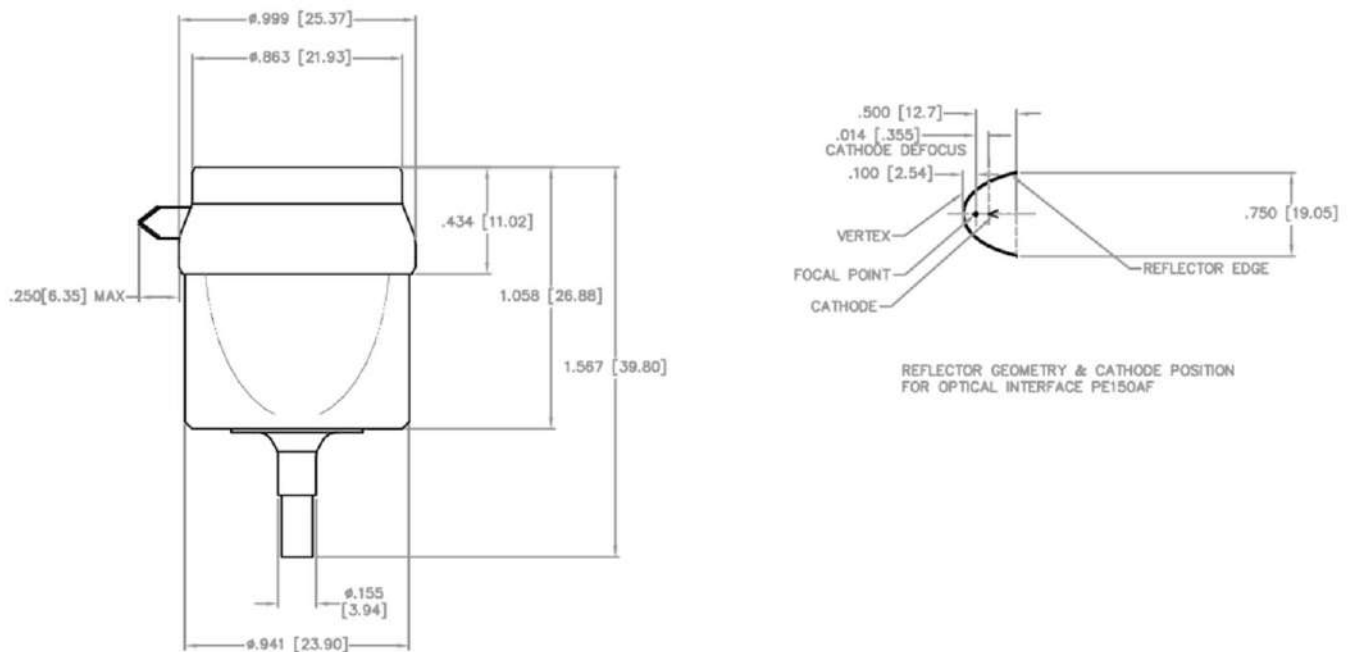
* Nominal values at 150 watts after 2 hour burn-in.

NOTES:

1. Lamp must not be operated with window facing upwards within 45° of vertical.
2. Seal temperature must not exceed 120° C.
3. Current/power regulated power supplies and Excelitas lamp housing units are recommended.
4. Lamp must be operated within recommended current and power range. Over powering may lead to arc instability, hard starting and premature aging.
6. Cermax[®] Xenon lamps are much safer lamps to use than their quartz xenon arc lamp equivalents. However, caution must be practiced when operating the lamps because they are under high pressure, require high voltage, reach temperatures up to 200° C, and their IR and UV radiation can cause skin burns and eye damage. Please read hazard sheet included with each lamp shipment.

Mechanical Dimensions

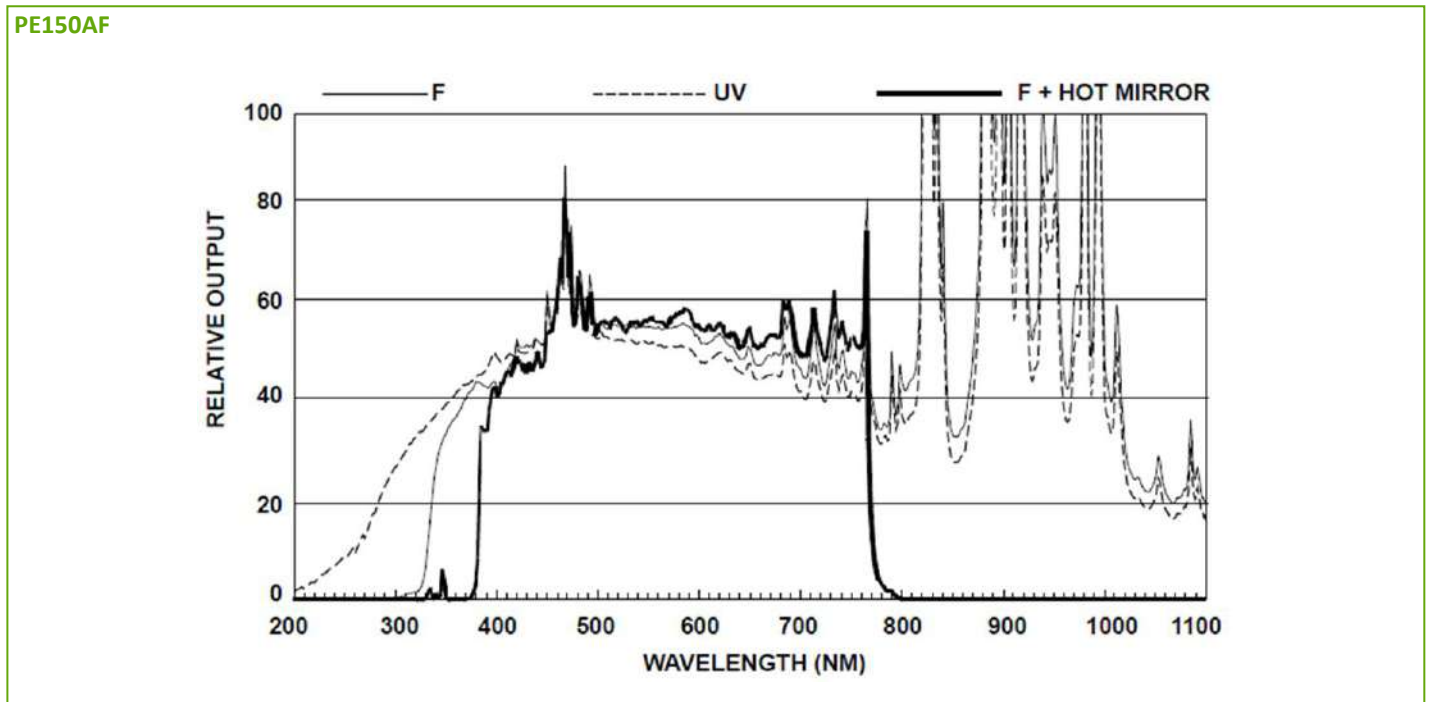
PE150AF



PE150AF

CERMAX® XENON SHORT-ARC LAMP

Spectral Output



About Excelitas Technologies

Excelitas Technologies is a global technology leader focused on delivering innovative, customized solutions to meet the lighting, detection and other high-performance technology needs of OEM customers.

From medical lighting to analytical instrumentation, clinical diagnostics, industrial, safety and security and aerospace and defense applications, Excelitas Technologies is committed to enabling our customers' success in their specialty end-markets. Excelitas Technologies has approximately 3,000 employees in North America, Europe and Asia, serving customers across the world.

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EXCELITAS
TECHNOLOGIES



**U.S. FOOD & DRUG
ADMINISTRATION**

CENTER FOR DEVICES AND RADIOLOGICAL HEALTH

U.S. Food & Drug Administration
10903 New Hampshire Avenue
Silver Spring, MD 20993
www.fda.gov

Certificate No. 8914-4-2018

Certificate to Foreign Government - Name of Product(s) Attachment Page 1 of 2

Name of Manufacturer/Distributor

MEDICA CORP.
5 OAK PARK DRIVE
BEDFORD, MA USA 01730

Name of Product(s)

Catalog #

2004	EasyLyte Na/K Analyzer
2014	EasyLyte Plus Na/K/Cl Analyzer
2015	EasyLyte Lithium Na/K/Li Analyzer
2016	EasyLyte Calcium Na/K/Ca/pH Analyzer
2021	EasyLyte Na/K/Cl/Li Analyzer
2070	EasyLyte EasySampler
2030	EasyLyte EXPAND Na/K/Cl/Ca/Li Analyzer
C2004	EasyLyte Na/K Analyzer
C2014	EasyLyte Plus Na/K/Cl Analyzer
C2015	EasyLyte Lithium Na/K/Li Analyzer
C2016	EasyLyte Calcium Na/K/Ca/pH Analyzer
L2014	EasyLyte Plus Na/K/Cl Analyzer
L2015	EasyLyte Lithium Na/K/Li Analyzer
L2016	EasyLyte Calcium Na/K/Ca/pH Analyzer
L2021	EasyLyte Na/K/Cl/Li Analyzer
2028	EasyLyte Na/K/Cl/Li Solutions Pack, 400mL
2026	EasyLyte Na/K/Cl/Li Solutions Pack, 800mL
2109	EasyLyte Na/K Solutions Pack, 400mL
2120	EasyLyte Na/K Solutions Pack, 800mL
2112	EasyLyte Na/K/Cl Solutions Pack, 400mL
2121	EasyLyte Na/K/Cl Solutions Pack, 800mL
2115	EasyLyte Na/K/Li Solutions Pack, 400mL
2122	EasyLyte Na/K/Li Solutions Pack, 800mL
2114	EasyLyte Na/K/Ca/pH Solutions Pack, 400mL
2123	EasyLyte Na/K/Ca/pH Solutions Pack, 800mL
2124	EasyLyte Na/K/Cl/Ca/Li Solutions Pack, 800mL
L2028	EasyLyte Na/K/Cl/Li Solutions Pack, 400mL
L2026	EasyLyte Na/K/Cl/Li Solutions Pack, 800mL
L2112	EasyLyte Na/K/Cl Solutions Pack, 400mL
L2121	EasyLyte Na/K/Cl Solutions Pack, 800mL
L2115	EasyLyte Na/K/Li Solutions Pack, 400mL
L2122	EasyLyte Na/K/Li Solutions Pack, 800mL
L2114	EasyLyte Na/K/Ca/pH Solutions Pack, 400mL
L2123	EasyLyte Na/K/Ca/pH Solutions Pack, 800mL
2074	Sample Cup Retainer Ring
2076	Sample Tray
2095	EasyLyte Maintenance Kit
2100	EasyLyte Calcium Tubing Kit
2101	EasyLyte K+ Electrode
2102	EasyLyte Na+ Electrode
2103	EasyLyte Reference Electrode
2104	EasyLyte Tubing Kit
2105	EasyLyte Quarterly Operating Kit
2106	EasyLyte Li+ Electrode
2107	EasyLyte Sample Probe
2108	EasyLyte Solutions Valve
2111	Urine Diluent (500mL)
2113	EasyLyte Cl- Electrode
2118	Daily Cleaning Solution Kit
2150	EasyLyte Ca++ Electrode
2151	EasyLyte pH Electrode





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Certificate to Foreign Government - Name of Product(s) Attachment Page 2 of 2

- 2152 EasyLyte Disposable Reference Electrode
- 2257 EasyLyte Sample Detector
- 2258 EasyLyte Membrane Assembly
- 2292 EasyLyte Capillary Adapter Cleaning Kit
- 2293 Capillary Tubes
- 2309 Wash Solution (50mL)
- 2323 EasyLyte Probe Wipers (6 ct.)
- 2492 EasyLyte Internal Filling Solution (125mL)
- 2541 EasyLyte Printer Paper (3 rolls)
- 2544 EasyLyte C Series Printer Paper (5 rolls)
- 2571 Calcium Troubleshooting Kit
- 2572 Troubleshooting Kit
- 2577 Standard Urine Solution (50mL)
- 2578 Red Test Dye Solution (50mL)
- 2590 EasyLyte Capillary Adapter Kit
- 2595 500µL Sample Cups (500 ct.)
- 2596 2mL Sample Cups (500 ct.)
- 10745 Anti-Evaporation Caps (500 ct.)
- 2598 EasyLyte Daily Cleaner Cup
- 2814 Bi-Level Quality Control Kit
- 2815 Tri-Level Quality Control Kit
- 2843 Quality Control Sample Cups (60 ct.)
- 7118 Daily Rinse/Cleaning Solution Kit

-----END OF PRODUCT LIST-----





Operation board for CLG series



Lid gasket



Exhaust Bottle for CLG series



E



E-17/M

- Connector: 3-pin Molex
- Measuring range: 0-100% O₂
- Output signal: 12.5-16.5 mV
- Response time: < 12 seconds
- Warranty: 16 months
- Storage: up to 6 months



OxyTrace

MX01049

O2 sensor Oxytrace VE, for Savina® ventilator, (For Savina® & Savina® 300)



E-15/2

- Connector: 3 contact rings
- Measuring range: 0-100% O₂
- Output signal: 14.-20 mV
- Response time: < 12 seconds
- Warranty: 15 months
- Storage: up to 6 months

E



E-17/A2

- Connector: 3-pin Molex
- Measuring range: 0-100% O₂
- Output signal: 8-12.5 mV
- Response time: < 15 seconds
- Warranty: 16 months
- Storage: up to 6 months



Keeler 1012-P-5110/1012-P-7003



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JUMO dTRANS p30

Pressure Transmitter

General application

Pressure transmitters are used to measure the relative (gauge) and absolute pressures in liquids or gases. The measuring device for the transmitter is a piezo-resistive element or a thin-film strain gauge. The pressure is converted into an electrical signal.

Technical data

Reference conditions

as per DIN 16086 and IEC 770/5.3

Ranges

see order details

Overload limit

ranges 0 to 25 bar

3 x full scale

ranges "0 to 40 bar" up to "0 to 250 bar"

2 x full scale

ranges "0 to 400 bar" up to "0 to 600 bar"

1.5 full scale

Bursting pressure

ranges 0 to 40 bar

≤ 4 x full scale

ranges "0 to 60 bar" up to "0 to 100 bar"

8 x full scale

ranges "0 to 160 bar" up to "0 to 400 bar"

5 x full scale

ranges 0 to 600 bar

3 x full scale

Parts in contact with medium

normally:

Stainless steel 316 Ti/316 L

for range ≥ 60 bar:

Stainless steel 316 Ti/630

Output

0 to 20 mA, three-wire,
 burden ≤ (U_B-12 V) ÷ 0.02 A

4 to 20 mA, two-wire,
 burden ≤ (U_B-10 V) ÷ 0.02 A

4 to 20 mA, three-wire,
 burden ≤ (U_B-12 V) ÷ 0.02 A

0.5 to 4.5 V, burden ≥ 50 kΩ

1 to 6 V, burden ≥ 10 kΩ

0 to 10 V, burden ≥ 10 kΩ

Burden error

0.5 % max.

Zero offset

≤ 0.3% MSP (measuring span)

Thermal hysteresis

≤ ± 0.5 % max. MSP

(within compensated temperature range)

≤ ± 1 % max. for ranges

0 to 250 mbar

0 to 400 mbar

0 to 600 mbar

Ambient temperature error

within range 0 to 100 °C

(compensated temperature range)

for ranges 250 and 400 mbar

zero: ≤ 0.03 %/°C typical,

≤ 0.05 %/°C max.

measuring span: ≤ 0.02 %/°C typical,

≤ 0.04 %/°C max.

for ranges above 600 mbar

zero: ≤ 0.02 %/°C typical,

≤ 0.04 %/°C max.

span: ≤ 0.02 %/°C typical,

≤ 0.04 %/°C max.

with basic type extension 024:

zero: ≤ 0.01 %/°C

Deviation from characteristic

≤ 0.5 % MSP (limit point adjustment)

with basic type extension 023:

≤ 0.2 % MSP (limit point setting)

Hysteresis

≤ 0.1 % MSP

Repeatability

≤ 0.05 % MSP

Response time

with current output

(output 402, 405 or 406):

≤ 3 msec max.

with voltage output

(output 412, 415, 418 or 420):

≤ 10 msec max.

Stability per year

≤ 0.5 % MSP



Type 404366 with terminal box

Voltage supply

DC 10 to 30 V (output 4 to 20 mA and 1 to 6 V)

DC 5 V (output 0.5 to 4.5 V)

DC 11.5 to 30 V (output 0 to 10 V)

DC 11.5 to 30 V (output 0(4) to 20 mA)

Ripple: the voltage spikes must not go above or below the values specified for the voltage supply

Requirements: The device must be equipped with an electrical circuit that meets the requirements of EN 61010-1 with regard to "Limited-energy circuits".

max. current drawn: approx. 25 mA

Supply voltage error

≤ 0.02 % per V

(nominal supply voltage DC 24 V)

in proportion for voltage supply DC 5 V

(±0.5 V)

Permissible ambient temperature

-20 to +100 °C

Storage temperature

-40 to +125 °C

Permissible temperature of medium

-30 to +120 °C

Electromagnetic compatibility

EN 61326

interference emission: Class B

noise immunity: industrial requirements

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 Internet: www.jumousa.com



Mechanical shock

(to IEC 68-2-27)
 100 g/1 msec

Mechanical vibration

(to IEC 68-2-6)
 20 g max. at 15 to 2000 Hz

Protection

with terminal box
 IP65 to EN 60529
 (connecting cable diameter 5 mm min.,
 7 mm max.)
 with connecting cable
 IP67 to EN 60529
 with circular connector M12 x 1
 IP67 to EN 60529

Housing

Stainless steel 304
 Polycarbonate GF

Pressure connection

see order details;
 other connections on request

Electrical connection

see order details
 terminal box to DIN 43650, Form A,
 conductor cross-section up to 1.5 mm²; or
 attached 4-core PVC cable, length 2 m
 other lengths on request

Nominal position

unrestricted

Weight

200 g

Electrical connection

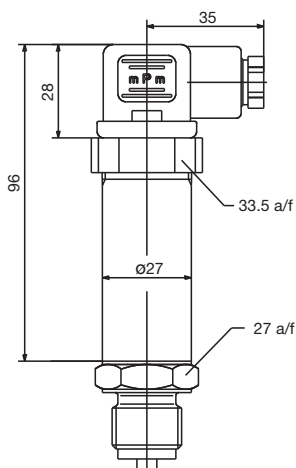
Connection		Terminals		
		Plug	Cable	M12 x 1
Voltage supply DC 10 to 30 V DC 11.5 to 30 V DC 5 V		1 L+ 2 L-	white grey	1+ 3-
Output 1 to 6 V 0 to 10 V 0.5 to 4.5 V		2 - 3 +	grey yellow	3- 4+
Output 4 to 20 mA, two-wire		1 + 2 -	white grey	1+ 3-
Output 0(4) to 20 mA, three-wire		2 - 3 +	grey yellow	3- 4+
Protective conductor				
Screen			black	2
Caution: Earth device (pressure connection and/or or screen				

Pin assignment M12 x 1

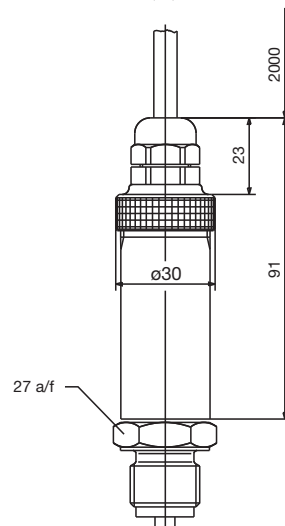


Dimensions

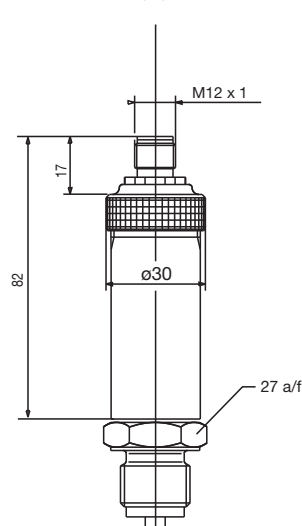
Electrical connection
 with terminal box
 (61)



Electrical connection
 with attached cable
 (12)



Electrical connection
 with circular connector M12 x 1
 (36)



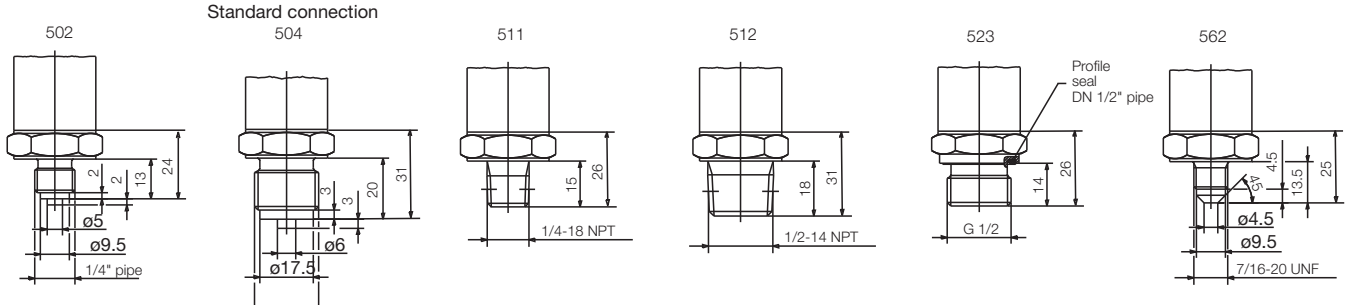
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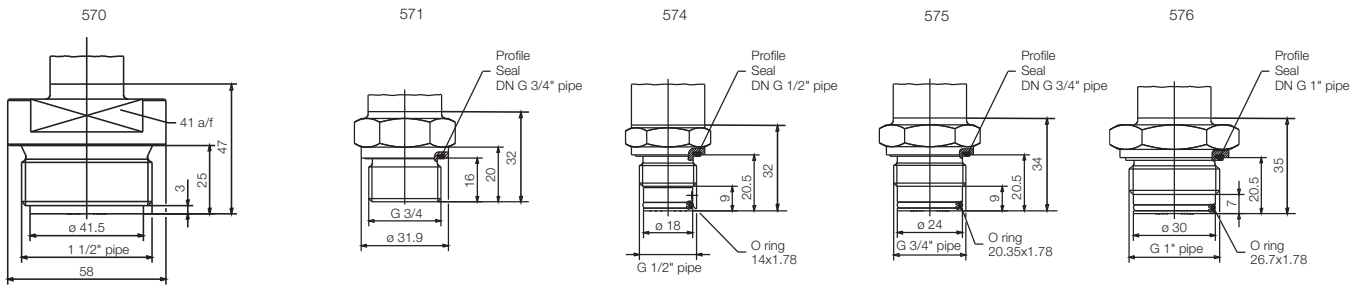
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Not front-flush connections

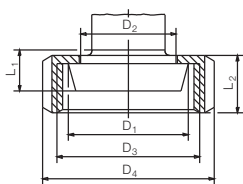


Front-flush connections



603-607

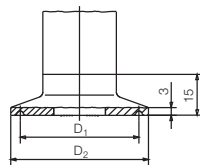
Cone nipple with slotted union nut to DIN 11851



	DN	ϕD_1	ϕD_2	ϕD_3	ϕD_4	L ₁	L ₂
603	20	36.5	30	RD 44x1/6	54	13	
604	25	44	35	RD 52x1/6	63		21
605	32	50	41	RD 58x1/6	70	15	
606	40	56	48	RD 65x1/6	78		
607	50	68.5	61	RD 78x1/6	92	16	22

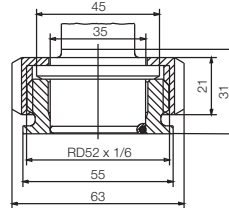
612-616

Clamp connection to DIN 32676



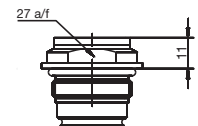
	DN DIN 32676	DN (Zoll)	Nominal Size ISO 2852	ϕD_1	ϕD_2
612	20 15		12 12.7 17.2 21.3	27.5	34
613	25 32 40	1" 1.5"	25 33.7 38	43.5	50.5
616	50	2"	40 51	56.5	64

652



997

Suitable for the JUMO PEKA adapter system, see data sheet 409711



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**Order details**

	(1) Basic type
404366	JUMO dTRANS p30 – Pressure Transmitter
	(2) Basic type extension
000	None
023	reduced deviation of characteristic line ^a
024	reduced influence of ambient temperature ^b
999	Special version
	(3) Input
451	0 to 250 mbar relative pressure
452	0 to 400 mbar relative pressure
453	0 to 600 mbar relative pressure
454	0 to 1 bar relative pressure
455	0 to 1.6 bar relative pressure
456	0 to 2.5 bar relative pressure
457	0 to 4 bar relative pressure
458	0 to 6 bar relative pressure
459	0 to 10 bar relative pressure
460	0 to 16 bar relative pressure
461	0 to 25 bar relative pressure
462	0 to 40 bar relative pressure
463	0 to 60 bar relative pressure
464	0 to 100 bar relative pressure
465	0 to 160 bar relative pressure
466	0 to 250 bar relative pressure
467	0 to 400 bar relative pressure
468	0 to 600 bar relative pressure
478	-1 to 0 bar relative pressure
479	-1 to +0.6 bar relative pressure
480	-1 to +1.5 bar relative pressure
481	-1 to +3 bar relative pressure
482	-1 to +5 bar relative pressure
483	-1 to +9 bar relative pressure
484	-1 to +15 bar relative pressure
485	-1 to +24 bar relative pressure
487	0 to 600 mbar absolute pressure
488	0 to 1 bar absolute pressure
489	0 to 1,6 bar absolute pressure
490	0 to 2,5 bar absolute pressure
491	0 to 4 bar absolute pressure
492	0 to 6 bar absolute pressure
493	0 to 10 bar absolute pressure
494	0 to 16 bar absolute pressure
495	0 to 25 bar absolute pressure
998	Special range absolute pressure
999	Special range relative pressure
	(4) Output
402	0 to 20 mA, three-wire
405	4 to 20 mA, two-wire
406	4 to 20 mA, three-wire
412	0,5 to 4,5 V, three-wire

JUMO GmbH & Co. KG

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JUMO Instrument Co. Ltd.

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JUMO Process Control, Inc.

6733 Myers Road
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Internet: www.jumousa.com



415	0 to 10 V, three-wire
418	1 to 5 V, three-wire
420	1 to 6 V, three-wire
(5) Process connection	
502	G 1/4 DIN EN 837
504	G 1/2 DIN EN 837
511	1/4-18 NPT DIN EN 837
512	1/2-14 NPT DIN EN 837
523	G 1/2 DIN 3852-11
562	7/16-20 UNF
570	G 1 1/2 front-flush DIN EN ISO 228-1 ^c
571	G 3/4 front-flush DIN EN ISO 228-1 ^c
574	G 1/2 front-flush, with double gasket ^d
575	G 3/4 front-flush, with double gasket ^c
576	G 1 front-flush, with double gasket ^c
603	Taper socket with union nut DN 20 DIN 11851 (dairy pipe fitting) ^c
604	Taper socket with union nut DN 25 DIN 11851 (dairy pipe fitting) ^c
605	Taper socket with union nut DN 32 DIN 11851 (dairy pipe fitting) ^c
606	Taper socket with union nut DN 40 DIN 11851 (dairy pipe fitting) ^c
607	Taper socket with union nut DN 50 DIN 11851 (dairy pipe fitting) ^c
612	Clamping socket DN 10/15/20 DIN 32676 ^c
613	Clamping socket DN 25/40 DIN 32676 ^c
616	Clamping socket DN 50 (2") DIN 32676 ^c
652	Tank connection with union nut DN 25
997	JUMO-PEKA with EHEDG certificate ^e
998	Connection for pressure separator
(6) Material of process connection	
20	CrNi (stainless steel)
(7) Electrical connection	
12	Fixed connecting cable shielded 2 m (further length on request)
36	Round plug M12 × 1
61	Cable socket DIN EN 175301-803, Form A
(8) Extra code	
000	None
452	Parts in contact with the medium electro-polished, surface roughness Ra ≤ 0.8 μm
591	Throttle in pressure duct
631	Higher humidity and vibration protection

- a. Measuring devices with reduced deviation from characteristic line are not available with process connection 574, they are only available with output 405 and only for measuring spans between 0.6 to 40 bar.
- b. Measuring devices with ambient temperature influence are not available with process connection 574, they are only available with outputs 402, 405, 406, 415 and only for measuring spans between 4 to 25 bar.
- c. Process connections 570, 571, 575, 576, 603, 604, 605, 606, 607, 612, 613, 616 are only available for measuring spans up to 25 bar.
- d. Process connection 574 is only available for measuring spans between 1 to 400 bar.
- e. Suitable process connection adapters can be found on data sheet or price sheet 409711.

Order code (1) (2) (3) (4) (5) (6) (7) (8)

Order example 404366 / 000 - 461 - 405 - 504 - 20 - 61 / 000

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Stock versions

Article	Input relative pressure	Output	Process connection	Part no.
404366/000-451-405-504-20-61/000	0 to 250 mbar	4 to 20 mA, two-wire	G 1/2	43006500
404366/000-451-405-571-20-61/000	0 to 250 mbar	4 to 20 mA, two-wire	G 3/4 front-flush	43007916
404366/000-452-405-504-20-61/000	0 to 400 mbar	4 to 20 mA, two-wire	G 1/2	43006493
404366/000-453-405-504-20-61/000	0 to 600 mbar	4 to 20 mA, two-wire	G 1/2	43008131
404366/000-454-405-504-20-61/000	0 to 1 bar	4 to 20 mA, two-wire	G 1/2	00392193
404366/000-454-405-571-20-61/000	0 to 1 bar	4 to 20 mA, two-wire	G 3/4 front-flush	43007917
404366/000-455-405-504-20-61/000	0 to 1.6 bar	4 to 20 mA, two-wire	G 1/2	43008069
404366/000-456-405-504-20-61/000	0 to 2.5 bar	4 to 20 mA, two-wire	G 1/2	00394352
404366/000-457-405-504-20-61/000	0 to 4 bar	4 to 20 mA, two-wire	G 1/2	43006501
404366/000-458-405-504-20-61/000	0 to 6 bar	4 to 20 mA, two-wire	G 1/2	43007816
404366/000-459-405-504-20-61/000	0 to 10 bar	4 to 20 mA, two-wire	G 1/2	00391647
404366/000-459-405-604-20-61/000	0 to 10 bar	4 to 20 mA, two-wire	Taper socket with union nut DN 25	43008066
404366/000-459-405-571-20-61/000	0 to 10 bar	4 to 20 mA, two-wire	G 3/4 front-flush	43008095
404366/000-459-405-574-20-61/000	0 to 10 bar	4 to 20 mA, two-wire	G 1/2 front-flush with double gasket	43008164
404366/000-459-405-613-20-61/000	0 to 10 bar	4 to 20 mA, two-wire	Clamping socket DN 25/40	43008621
404366/000-459-415-504-20-61/000	0 to 10 bar	0 to 10 V, three-wire	G 1/2	43006543
404366/000-460-405-504-20-61/000	0 to 16 bar	4 to 20 mA, two-wire	G 1/2	00391650
404366/000-461-405-504-20-61/000	0 to 25 bar	4 to 20 mA, two-wire	G 1/2	43006495
404366/000-464-405-504-20-61/000	0 to 100 bar	4 to 20 mA, two-wire	G 1/2	43006496
404366/000-466-405-504-20-61/000	0 to 250 bar	4 to 20 mA, two-wire	G 1/2	43006498
404366/000-467-405-504-20-61/000	0 to 400 bar	4 to 20 mA, two-wire	G 1/2	43006511
404366/000-478-405-504-20-61/000	-1 to 0 bar	4 to 20 mA, two-wire	G 1/2	43006494
404366/000-481-405-504-20-61/000	-1 to +3 bar	4 to 20 mA, two-wire	G 1/2	43006531

Article	Input absolute pressure	Output	Process connection	Part no.
404366/000-488-405-504-20-61/000	0 to 1 bar	4 to 20 mA, two-wire	G 1/2	43008096
404366/000-488-406-504-20-61/000	0 to 1 bar	4 to 20 mA, three-wire	G 1/2	43007910
404366/000-488-415-504-20-61/000	0 to 1 bar	0 to 10 V, three-wire	G 1/2	43007892
404366/000-489-405-504-20-61/000	0 to 1,6 bar	4 to 20 mA, two-wire	G 1/2	43008058
404366/024-491-405-504-20-61/000	0 to 4 bar	4 to 20 mA, two-wire	G 1/2	43008375
404366/024-491-402-504-20-61/000	0 to 4 bar	0 to 20 mA, three-wire	G 1/2	43006756

Accessories

Article	Part no.
Cable box (straight) with control cable, shielded, 4-pole, 5 m PVC cable, pressure compensation	00512341

XBO R 180 W/45 C OFR

XBO | Xenon short-arc lamps with reflector 75...300 W



Product family benefits

- Very high luminance (point light source)
- Continual color quality, irrespective of lamp type and lamp wattage
- Constant light color throughout the life of the lamp
- Long lamp life

Product family features

- Color temperature: approx. 6,000 K (Daylight)
- High color rendering index: $R_a >$
- High arc stability
- Hot restart capability
- Dimmable
- Instant light on starting
- Continuous spectrum in the visible range



Product datasheet

Technical data

Electrical data

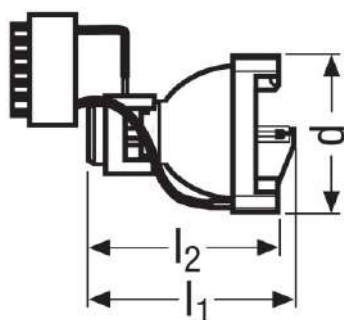
Lamp wattage	150 W
Lamp voltage	12.8...14.8 V ¹⁾
Lamp current	11.75...12.25 A
Type of current	DC
Rated wattage	180.00 W

¹⁾ Initial voltage range

Light technical data

Focal length	45.0 mm
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Dimensions & weight



Mounting length	81.5 mm
Cable length	9999.9 mm
Diameter	64.0 mm

Lifespan

Lifespan	500 h
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Capabilities

Cooling	Forced
Burning position	p20
Application	Other

Country specific information

Product code	METEL code	SEG-No.	STK-Number	UK Org
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Product datasheet

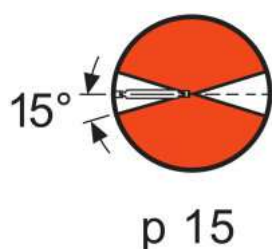
4050300432199	OSRXBOR18045COFR	-	-	-
4050300432199	OSRXBOR18045COFR	-	-	-

Product datasheet

Safety advice

Because of their high luminance, UV radiation and high internal pressure in both the hot and cold state, XBO lamps must only be operated in appropriate enclosed casings. Always use the protective jackets supplied when handling these lamps. They may only be used as open lamps if appropriate safety measures are taken. More information is available on request or can be found in the leaflet included with the lamp or the operating instructions.

The xenon lamp element is always under very high pressure. It may explode if subject to impact or damage. Therefore, spent XBO reflector lamps should be stored in an inaccessible place in the supplied casing or under the protection cap until they are sent for disposal.



Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4050300432199	XBO R 180 W/45 C OFR	Folding carton box 1	87 mm x 87 mm x 110 mm	0.83 dm ³	160.00 g
4050300432205	XBO R 180 W/45 C OFR	Shipping carton box 2	186 mm x 126 mm x 98 mm	2.30 dm ³	373.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

Further technical information on XBO lamps and information for manufacturers of operating equipment can be requested directly from OSRAM.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.