



Philips GentleSpace – High-quality, efficient lighting engineered for excellence in tough environments

GentleSpace gen4

GentleSpace gen4 is the ultimate lighting solution for industrial settings and indoor sports facilities. It exceeds expectations by ensuring superior light quality, improving employee safety and productivity, and complying with all the relevant safety regulations. Engineered for longevity, GentleSpace gen4 reduces the frequency, hassle, and costs of maintenance, making it ideal for high-ceiling installations. Its energy-efficient design cuts operational expenses, offering maximum application efficiency and an attractive total cost of ownership (TCO). This product range offers a wide variety of optics, beam angles (from very narrow to wide), lumen packages, and connectivity options. With GentleSpace gen4 you can easily create a tailor-made lighting solution for every high-ceiling application. Its modern, flat design makes it easier to install, clean, and maintain. The single optical window design provides superior visual performance. A variety of mounting possibilities and connectors, like the pre-mounted IP65 connector, enable quick and easy installation. The robust design allows to withstand harsh conditions in all sorts of environments. You can choose between various cover materials, including specialized variants for extreme temperatures (XT), hazardous areas (ATEX 2/22), and sports applications. Additionally, GentleSpace gen4 offers advanced connectivity options. It's ready to use in connected lighting systems like Interact. Reliable, high-efficiency lighting with smart connectivity – a bright choice for a better future. Embrace sustainability with GentleSpace gen4, the highbay lighting solution that complies with the principles of the circular economy by prioritizing durability and recyclability. The luminaire is serviceable, with all the information available at your fingertips via the Signify Service tag app. Whether you are looking

for a reliable “fit and forget” solution or one that can be adapted and controlled after installation, GentleSpace gen4 is the right choice for you.

Benefits

- Robust design, created to withstand harsh conditions in all sorts of environments
- Compact product architecture, resistant to high impact (IK08), water, and dust (IP65)
- Excellent light uniformity and low glare for optimized working conditions with improved safety and greater visual comfort
- Attractive total cost of ownership thanks to its high luminous efficacy (up to 189 lm/W), long lifetime (100,000 hours @L85), and optimized lighting plan that requires fewer luminaires per application
- Easy installation. Single-piece, lighter architecture (approximately 20% lighter than the previous generation) with multiple mounting options for flexible installation in various environments and conditions
- Interact Ready connectivity for smart lighting. Connect to the cloud and discover additional ways to save energy through optimized efficiency, motion sensing and daylight harvesting, as well as improved lighting management, productivity, and safety
- Engineered with sustainability in mind. Meets lighting for circularity criteria to help you achieve your sustainability goals

Features

- Exceptional performance with UltraEfficient (UE, 189 lm/W) and High-Efficiency (HE, 183 lm/W) versions
- Long service life of 100,000 hours at L85
- High water (IP65) and impact protection (IK08)
- Wide variety of optics (wide beam/medium beam/narrow beam/extra narrow beam/high-rack/asymmetrical)
- Special options for a broad range of applications: Extreme version (XT) up to 70°C, Safety Class I or II, swimming pool protected version (SWP), marine protection (MSP), VDE certified ball-proof (BP) option, ATEX 2/22 certified version. Tested against a broad list of chemical substances that may be present in industrial settings
- Detachable mounting system for easy installation, including various mounting options and connectors (IP65 pre-mounted connector, or fly-wire cable)
- Robust, die-cast aluminum housing with efficient thermal management and flat front and rear design for easy installation, cleaning, and maintenance
- Single LED module design for superior light quality
- Access to the Signify Service tag app with service and maintenance information

Application

- Manufacturing sites (from food and beverage to heavy industry)
- Warehouses and logistics centers
- Indoor sports facilities, swimming pools, and exhibition halls

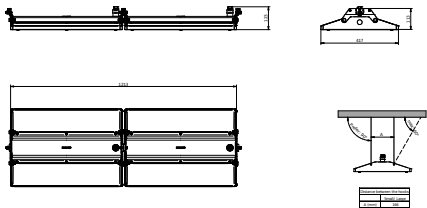
Versions



GentleSpace gen4-large, suspension

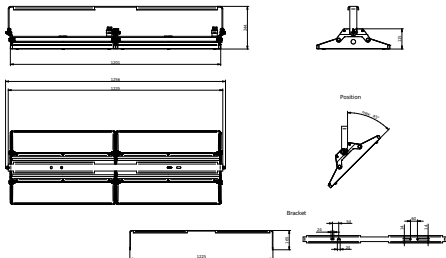
Dimensional drawing

700s suspended



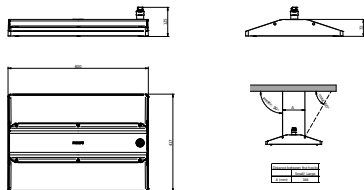
With Wieland connector on a cable or free cable finish, cable length is 0.5m or 1m or 1.5m, or 2m

700S Bracket



With Wieland connector on a cable or free cable finish, cable length is 0.5m or 1m or 1.5m, or 2m

BY581P, BY583P suspended



With Wieland connector on a cable or free cable finish, cable length is 0.5m or 1m or 1.5m, or 2m

General Information	
Driver included	Yes
Number of gear units	1 unit
Service tag	Yes
Light Technical	
Optic type	Symmetrical
Operating and Electrical	
Protection class IEC	Safety class I
Input Voltage	220 to 240 V
Line Frequency	50 to 60 Hz
Suitable for random switching	No
Mechanical and Housing	
Housing Color	Silver
Mech. impact protection code	IK07
Ingress protection code	IP65
Emergency Operation	
Central Emergency	No
Approval and Application	
CE mark	Yes
ENEC mark	ENEC mark
Flammability mark	For mounting on easily flammable surfaces
Initial Performance (IEC Compliant)	
Luminous flux tolerance	+/-10%
Product Data	
Product family code	BY581P

Light Technical

Order Code	Full Product Name	Correlated Color	Color	Luminous Efficacy (rated) (Nom)	Luminous Flux
		Temperature (Nom)	rendering index (CRI)		
58950600	BY581P 700S/840 DIA HE WB GC SI	4000 K	>80	177 lm/W	70,000 lm
58951300	BY581P 700S/840 DIA WB GC SI BR	4000 K	>80	167 lm/W	70,000 lm
59409800	BY581P 250S/840 PSU WB GC SI	4000 K	>80	174 lm/W	25,000 lm
59416600	BY581P 250S/840 DIA WB GC SI	4000 K	>80	174 lm/W	25,000 lm
59431900	BY581P 250S/840 DIA WB GC SI ELD3	4000 K	>80	174 lm/W	25,000 lm
58921600	BY581P 250S/865 DIA WB GC SI	6500 K	>80	171 lm/W	25,000 lm
58929200	BY581P 250S/940 DIA WB GC SI	4000 K	>90	165 lm/W	25,000 lm

Operating and Electrical

Order Code	Full Product Name	Power Consumption
58950600	BY581P 700S/840 DIA HE WB GC SI	397 W
58951300	BY581P 700S/840 DIA WB GC SI BR	420 W
59409800	BY581P 250S/840 PSU WB GC SI	144 W
59416600	BY581P 250S/840 DIA WB GC SI	144 W

Order Code	Full Product Name	Power Consumption
59431900	BY581P 250S/840 DIA WB GC SI ELD3	144 W
58921600	BY581P 250S/865 DIA WB GC SI	146 W
58929200	BY581P 250S/940 DIA WB GC SI	152 W

Controls and Dimming

Order Code	Full Product Name	Dimmable	Maximum dim level
58950600	BY581P 700S/840 DIA HE WB GC SI	Yes	10%
58951300	BY581P 700S/840 DIA WB GC SI BR	Yes	10%
59409800	BY581P 250S/840 PSU WB GC SI	No	-
59416600	BY581P 250S/840 DIA WB GC SI	Yes	10%

Order Code	Full Product Name	Dimmable	Maximum dim level
59431900	BY581P 250S/840 DIA WB GC SI ELD3	Yes	10%
58921600	BY581P 250S/865 DIA WB GC SI	Yes	10%
58929200	BY581P 250S/940 DIA WB GC SI	Yes	10%

Emergency Operation (1/2)

Order Code	Full Product Name	Emergency lighting	Emergency flux	Type of emergency lighting	Power consumption during Central DC emergency mode
				battery	
58950600	BY581P 700S/840 DIA HE WB GC SI	-	-	-	-
58951300	BY581P 700S/840 DIA WB GC SI BR	-	-	-	-
59409800	BY581P 250S/840 PSU WB GC SI	-	-	-	-
59416600	BY581P 250S/840 DIA WB GC SI	-	-	-	-
59431900	BY581P 250S/840 DIA	Emergency lighting 3	850 lm	Lithium	5 W

Emergency Operation (2/2)

Order Code	Full Product Name	Rated duration of the emergency lighting (when fully charged)
58950600	BY581P 700S/840 DIA HE WB GC SI	-
58951300	BY581P 700S/840 DIA WB GC SI BR	-
59409800	BY581P 250S/840 PSU WB GC SI	-
59416600	BY581P 250S/840 DIA WB GC SI	-

Approval and Application

Order Code	Full Product Name	Ambient temperature range	Glow-wire test	Flickering value (PstLM) - value as per EN 61000-3-3	Stroboscopic effect visibility measure (SVM)
58950600	BY581P 700S/840 DIA HE WB GC SI	-30 to +55 °C	Temperature 650 °C, duration 30 s	0.22	0.01
58951300	BY581P 700S/840 DIA WB GC SI BR	-30 to +55 °C	Temperature 650 °C, duration 30 s	0.22	0.01
59409800	BY581P 250S/840 PSU WB GC SI	-30 to +55 °C	Temperature 650 °C, duration 30 s	0.04	0.07
59416600	BY581P 250S/840 DIA WB GC SI	-30 to +55 °C	Temperature 650 °C, duration 30 s	0.12	0.07

Order Code	Full Product Name	Emergency lighting	Emergency flux	Type of emergency lighting	Power consumption during Central DC emergency mode
				battery	
	WB GC SI ELD3	hours duration with DALI interface			
58921600	BY581P 250S/865 DIA WB GC SI	-	-	-	-
58929200	BY581P 250S/940 DIA WB GC SI	-	-	-	-

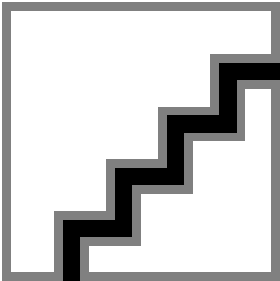
Order Code	Full Product Name	Rated duration of the emergency lighting (when fully charged)
59431900	BY581P 250S/840 DIA WB GC SI ELD3	3 hour(s)
58921600	BY581P 250S/865 DIA WB GC SI	-
58929200	BY581P 250S/940 DIA WB GC SI	-

Order Code	Full Product Name	Ambient temperature range	Glow-wire test	Flickering value (PstLM) - value as per EN 61000-3-3	Stroboscopic effect visibility measure (SVM)
59431900	BY581P 250S/840 DIA WB GC SI ELD3	0 °C to 25 °C	Temperature 850 °C, duration 30 s	0.12	0.07
58921600	BY581P 250S/865 DIA WB GC SI	-30 to +55 °C	Temperature 650 °C, duration 30 s	0.12	0.07
58929200	BY581P 250S/940 DIA WB GC SI	-30 to +55 °C	Temperature 650 °C, duration 30 s	0.12	0.07

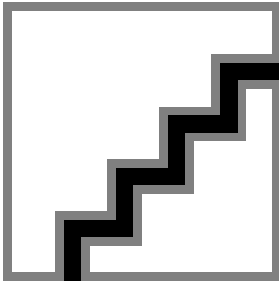
Initial Performance (IEC Compliant)

Order Code	Full Product Name	Initial chromaticity	Order Code	Full Product Name	Initial chromaticity
58950600	BY581P 700S/840 DIA HE WB GC SI	(0.383, 0.377) SDCM 3	59431900	BY581P 250S/840 DIA WB GC SI ELD3	(0.380, 0.375) SDCM 3
58951300	BY581P 700S/840 DIA WB GC SI BR	(0.380, 0.375) SDCM 3	58921600	BY581P 250S/865 DIA WB GC SI	(0.312, 0.327) SDCM 3
59409800	BY581P 250S/840 PSU WB GC SI	(0.380, 0.375) SDCM 3	58929200	BY581P 250S/940 DIA WB GC SI	(0.380, 0.375) SDCM 3
59416600	BY581P 250S/840 DIA WB GC SI	(0.380, 0.375) SDCM 3			

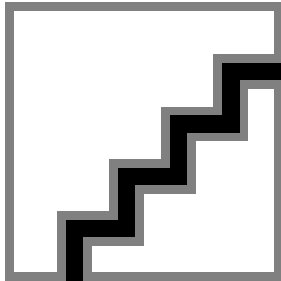
Polar Wide Diagrams



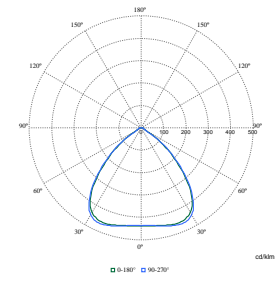
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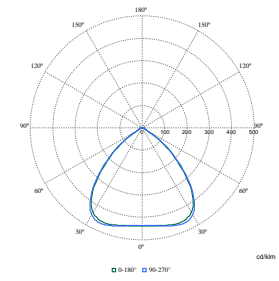
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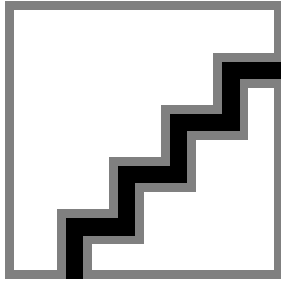
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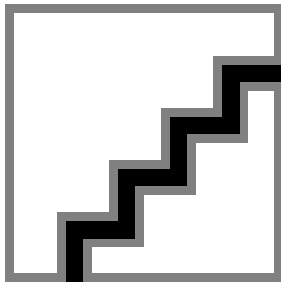
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