PHILIPS Lighting



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 tailormade 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 it 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 prioritising 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

- \cdot 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 optimised 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 optimised 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
- \cdot 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)
- \cdot Warehouses and logistics centres
- Indoor sports facilities, swimming pools, and exhibition halls

Versions





GentleSpace gen4-large, suspension

GentleSpace gen4-large, wall-bracket

Dimensional drawing







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

BY581P, BY583P Wallmounted bracket

BY580X suspended



BY581P, BY583P suspended









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



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

BY581X suspended

General Information	
Driver included	Yes
Number of gear units	Unit
Light Technical	
Correlated Colour Temperature (Nom)	4000 K
Colour rendering index (CRI)	>80
Operating and Electrical	
Protection class IEC	Safety class I
Input Voltage	220 to 240 V
Line Frequency	50 to 60 Hz
Mechanical and Housing	
Housing Colour	Silver
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	t)
Luminous flux tolerance	+/-10%

Light Technical

		Luminous		
		efficacy (rated)	Luminous	
Order Co	de Full Product Name	(nom.)	Flux	Optic type
5895200	0 BY581P 700S/840 DIA	177 lm/W	70,000 lm	Symmetrical
	HE WB GC SI BR			
5939300	0 BY580X 170S/840 SIA	167 lm/W	17,000 lm	Symmetrical
	WB GC SI H4			
5939540	0 BY581X 350S/840 SIA	167 lm/W	35,000 lm	Symmetrical
	WB GC SI H4			
59396100	0 BY580X 130S/840 SIA	178 lm/W	13,000 lm	Symmetrical
	HE WB GC SI H4			
5939850	0 BY581X 250S/840 SIA	184 lm/W	25,000 lm	Symmetrical
	HE WB GC SI H4			
5940740	0 BY581X 250S/840 SIA	184 lm/W	25,000 lm	Symmetrical
	HE WB GC SI ELW3 H4			

Luminous efficacy (rated) Luminous Order Code Full Product Name (nom.) Flux Optic type 58907000 BY581P 250S/840 DIA 176 lm/W 25,000 lm Assymetric HE ASYM GC SI MBW beam angle 59411100 BY581P 250S/840 PSU 184 lm/W 25,000 lm Symmetrical HE WB GC SI 59417300 BY581P 350S/840 DIA 167 lm/W 35,000 lm Symmetrical WB GC SI 59431900 BY581P 250S/840 DIA 174 lm/W 25,000 lm Symmetrical WB GC SI ELD3 58915500 BY581P 250S/840 DIA 25,000 lm 181 lm/W Symmetrical HE XNB GC SI 58931500 BY581P 350S/840 DIA 177 lm/W 35,000 lm Symmetrical HE WB GC SI XT 1m

Operating and Electrical

General Information

Order Code	Full Product Name	Service Tag
58952000	BY581P 700S/840 DIA HE WB GC SI BR	Yes
59393000	BY580X 170S/840 SIA WB GC SI H4	Yes
59395400	BY581X 350S/840 SIA WB GC SI H4	Yes
59396100	BY580X 130S/840 SIA HE WB GC SI H4	Yes
59398500	BY581X 250S/840 SIA HE WB GC SI H4	Yes
59407400	BY581X 250S/840 SIA HE WB GC SI ELW3 H4	Yes
58907000	BY581P 250S/840 DIA HE ASYM GC SI MBW	-
59411100	BY581P 250S/840 PSU HE WB GC SI	Yes
59417300	BY581P 350S/840 DIA WB GC SI	Yes
59431900	BY581P 250S/840 DIA WB GC SI ELD3	Yes
58915500	BY581P 250S/840 DIA HE XNB GC SI	-
58931500	BY581P 350S/840 DIA HE WB GC SI XT 1m	-

		Power	Suitable for random
Order Code	Full Product Name	Consumption	switching
58952000	BY581P 700S/840 DIA HE WB	397 W	No
	GC SI BR		
59393000	BY580X 170S/840 SIA WB GC	102 W	Yes (relates to
	SI H4		presence/movement
			detection and daylight
			harvesting)
59395400	BY581X 350S/840 SIA WB GC	210 W	Yes (relates to
	SI H4		presence/movement
			detection and daylight
			harvesting)
59396100	BY580X 130S/840 SIA HE WB	73 W	Yes (relates to
	GC SI H4		presence/movement
			detection and daylight
			harvesting)
59398500	BY581X 250S/840 SIA HE WB	136 W	Yes (relates to
	GC SI H4		presence/movement

		Power	Suitable for random
Order Code	Full Product Name	Consumption	switching
			detection and daylight
			harvesting)
59407400	BY581X 250S/840 SIA HE WB	136 W	Yes (relates to
	GC SI ELW3 H4		presence/movement
			detection and daylight
			harvesting)
58907000	BY581P 250S/840 DIA HE	142 W	No
	ASYM GC SI MBW		
59411100	BY581P 250S/840 PSU HE WB	136 W	No
	GC SI		
59417300	BY581P 350S/840 DIA WB GC	210 W	No
	SI		
59431900	BY581P 250S/840 DIA WB GC	144 W	No
	SI ELD3		
58915500	BY581P 250S/840 DIA HE	138 W	No
	XNB GC SI		
58931500	BY581P 350S/840 DIA HE WB	198 W	No
	GC SI XT 1m		

Controls and Dimming

		Embedded	Maximum
Full Product Name	Dimmable	control	dim level
BY581P 700S/840 DIA HE WB	Yes	-	10%
GC SI BR			
BY580X 170S/840 SIA WB GC	Yes	Sensor SNH (R)	-
SI H4		210	
BY581X 350S/840 SIA WB GC	Yes	Sensor SNH (R)	-
SI H4		210	
BY580X 130S/840 SIA HE WB	Yes	Sensor SNH (R)	-
GC SI H4		210	
BY581X 250S/840 SIA HE WB	Yes	Sensor SNH (R)	-
GC SI H4		210	
BY581X 250S/840 SIA HE WB	Yes	Sensor SNH (R)	-
GC SI ELW3 H4		210	
	BY581P 700S/840 DIA HE WB GC SI BR BY580X 170S/840 SIA WB GC SI H4 BY581X 350S/840 SIA WB GC SI H4 BY580X 130S/840 SIA HE WB GC SI H4 BY581X 250S/840 SIA HE WB GC SI H4	BY581P 700S/840 DIA HE WB Yes GC SI BR Yes BY580X 170S/840 SIA WB GC Yes SI H4 Yes BY581X 350S/840 SIA WB GC Yes SI H4 Yes BY580X 130S/840 SIA WB GC Yes GC SI H4 Yes BY581X 250S/840 SIA HE WB Yes GC SI H4 Yes BY581X 250S/840 SIA HE WB Yes GC SI H4 Yes BY581X 250S/840 SIA HE WB Yes	Full Product Name Dimmable control BY581P 700S/840 DIA HE WB Yes - GC SI BR - - BY580X 170S/840 SIA WB GC Yes Sensor SNH (R) SI H4 210 - BY580X 130S/840 SIA WB GC Yes Sensor SNH (R) SI H4 210 - BY580X 130S/840 SIA WB GC Yes Sensor SNH (R) GC SI H4 10 - BY581X 250S/840 SIA HE WB Yes Sensor SNH (R) GC SI H4 10 - BY581X 250S/840 SIA HE WB Yes Sensor SNH (R) GC SI H4 10 - BY581X 250S/840 SIA HE WB Yes Sensor SNH (R) GC SI H4 10 - - BY581X 250S/840 SIA HE WB Yes Sensor SNH (R) BY581X 250S/840 SIA HE WB Yes Sensor SNH (R)

			Embedded	Maximum
Order Code	Full Product Name	Dimmable	control	dim level
58907000	BY581P 250S/840 DIA HE	Yes	-	10%
	ASYM GC SI MBW			
59411100	BY581P 250S/840 PSU HE	No	-	-
	WB GC SI			
59417300	BY581P 350S/840 DIA WB GC	Yes	-	10%
	SI			
59431900	BY581P 250S/840 DIA WB GC	Yes	-	10%
	SI ELD3			
58915500	BY581P 250S/840 DIA HE	Yes	-	10%
	XNB GC SI			
58931500	BY581P 350S/840 DIA HE WB	Yes	-	10%
	GC SI XT 1m			

Mechanical and Housing

		Mech. impact protection
Order Code	Full Product Name	code
58952000	BY581P 700S/840 DIA HE WB GC SI BR	IK07
59393000	BY580X 170S/840 SIA WB GC SI H4	IK03
59395400	BY581X 350S/840 SIA WB GC SI H4	IK03
59396100	BY580X 130S/840 SIA HE WB GC SI H4	IK03
59398500	BY581X 250S/840 SIA HE WB GC SI H4	ІКОЗ
59407400	BY581X 250S/840 SIA HE WB GC SI ELW3 H4	IK03

		Mech. impact protection
Order Code	Full Product Name	code
58907000	BY581P 250S/840 DIA HE ASYM GC SI MBW	IK07
59411100	BY581P 250S/840 PSU HE WB GC SI	IK07
59417300	BY581P 350S/840 DIA WB GC SI	IK07
59431900	BY581P 250S/840 DIA WB GC SI ELD3	IK07
58915500	BY581P 250S/840 DIA HE XNB GC SI	IK07
58931500	BY581P 350S/840 DIA HE WB GC SI XT 1m	IK07

Emergency Operation (1/2)

					Power						Power
					consumption						consumption
				Type of	during Central					Type of	during Central
				emergency	DC					emergency	DC
	Full Product	Emergency	Emergency	lighting	emergency		Full Product	Emergency	Emergency	lighting	emergency
Order Code	Name	lighting	flux	battery	mode	Order Code	Name	lighting	flux	battery	mode
58952000	BY581P	-	-	-	-			Wireless			
	700S/840 DIA							Interface			
	HE WB GC SI					58907000	BY581P	-	-	-	-
	BR						250S/840 DIA				
59393000	BY580X	-	-	-	-		HE ASYM GC SI				
	170S/840 SIA						MBW				
	WB GC SI H4					59411100	BY581P	-	-	-	-
59395400	BY581X	-	-	-	-		250S/840 PSU				
	350S/840 SIA						HE WB GC SI				
	WB GC SI H4					59417300	BY581P	-	-	-	-
59396100	BY580X	-	-	-	-		350S/840 DIA				
	130S/840 SIA						WB GC SI				
	HE WB GC SI					59431900	BY581P	Emergency	850 lm	Lithium	5 W
	H4						250S/840 DIA	lighting 3-			
59398500	BY581X	-	-	-	-		WB GC SI ELD3	hour			
	250S/840 SIA							duration with			
	HE WB GC SI							DALI			
	H4							interface			
59407400	BY581X	Emergency	850 lm	Lithium	5 W	58915500	BY581P	-	-	-	-
	250S/840 SIA	lighting 3					250S/840 DIA				
	HE WB GC SI	hours					HE XNB GC SI				
	ELW3 H4	duration with				58931500	BY581P	-	-	-	-
							350S/840 DIA				
							HE WB GC SI				
							XT 1m				

Emergency Operation (2/2)

	Rated duration of the
	emergency lighting (when
Full Product Name	fully charged)
BY581P 700S/840 DIA HE WB GC SI BR	-
BY580X 170S/840 SIA WB GC SI H4	-
BY581X 350S/840 SIA WB GC SI H4	-
BY580X 130S/840 SIA HE WB GC SI H4	-
BY581X 250S/840 SIA HE WB GC SI H4	-
BY581X 250S/840 SIA HE WB GC SI ELW3 H4	3 h
	BY580X 170S/840 SIA WB GC SI H4 BY581X 350S/840 SIA WB GC SI H4 BY580X 130S/840 SIA HE WB GC SI H4 BY581X 250S/840 SIA HE WB GC SI H4

Order Code	Full Product Name	Rated duration of the emergency lighting (when fully charged)
58907000	BY581P 250S/840 DIA HE ASYM GC SI MBW	-
59411100	BY581P 250S/840 PSU HE WB GC SI	-
59417300	BY581P 350S/840 DIA WB GC SI	-
59431900	BY581P 250S/840 DIA WB GC SI ELD3	3 h
58915500	BY581P 250S/840 DIA HE XNB GC SI	-
58931500	BY581P 350S/840 DIA HE WB GC SI XT 1m	-

Approval and Application

		Ambient		Flickering	
Order	Full Product	temperature		value	Stroboscopic
Code	Name	range	Glow-wire test	(PstLM)	effect
58952000	BY581P	-30 to +55 °C	Temperature	0.22	0.01
	700S/840		650 °C, duration		
			30 s		

		Ambient		Flickering		
Order	Full Product	temperature		value	Stroboscopic	
Code	Name	range	Glow-wire test	(PstLM)	effect	
	DIA HE WB					
	GC SI BR					

		Ambient		Flickering				Ambient		Flickering	
Order	Full Product	temperature		value	Stroboscopic	Order	Full Product	temperature		value	Stroboscop
Code	Name	range	Glow-wire test	(PstLM)	effect	Code	Name	range	Glow-wire test	(PstLM)	effect
59393000	BY580X	-30 to +55 °C	Temperature	1	0.4	59411100	BY581P	-30 to +55 °C	Temperature	0.04	0.07
	170S/840		650 °C, duration				250S/840		650 °C, duration		
	SIA WB GC SI		30 s				PSU HE WB		30 s		
	H4						GC SI				
59395400	BY581X	-30 to +55 ℃	Temperature	1	0.4	59417300	BY581P	-30 to +55 °C	Temperature	0.22	0.01
	350S/840		650 °C, duration				350S/840		650 °C, duration		
	SIA WB GC SI		30 s				DIA WB GC		30 s		
	H4						SI				
59396100	BY580X	-30 to +55 °C	Temperature	1	0.4	59431900	BY581P	0°C to 25°C	Temperature	0.12	0.07
	130S/840		650 °C, duration				250S/840		850 °C, duration		
	SIA HE WB		30 s				DIA WB GC		30 s		
	GC SI H4						SI ELD3				
59398500	BY581X	-30 to +55 °C	Temperature	1	0.4	58915500	BY581P	-30 to +55 °C	Temperature	0.12	0.07
	250S/840		650 °C, duration				250S/840		650 °C, duration		
	SIA HE WB		30 s				DIA HE XNB		30 s		
	GC SI H4						GC SI				
59407400	BY581X	0°C to 25°C	Temperature	1	0.4	58931500	BY581P	-30°C to 55°C	Temperature	0.22	0.01
	250S/840		850 °C, duration				350S/840		650 °C, duration		
	SIA HE WB		30 s				DIA HE WB		30 s		
	GC SI ELW3						GC SI XT 1m				
	H4										
58907000	BY581P	-30 to +55 °C	Temperature	0.12	0.07						
	250S/840		650 °C, duration								
	DIA HE		30 s								
	ASYM GC SI										
	MBW										

Initial Performance (IEC Compliant)

Order Code	Full Product Name	Initial chromaticity
58952000	BY581P 700S/840 DIA HE WB GC SI BR	(0.383, 0.377) SDCM 3
59393000	BY580X 170S/840 SIA WB GC SI H4	(0.380, 0.375) SDCM 3
59395400	BY581X 350S/840 SIA WB GC SI H4	(0.380, 0.375) SDCM 3
59396100	BY580X 130S/840 SIA HE WB GC SI H4	(0.383, 0.377) SDCM 3
59398500	BY581X 250S/840 SIA HE WB GC SI H4	(0.383, 0.377) SDCM 3
59407400	BY581X 250S/840 SIA HE WB GC SI ELW3 H4	(0.383, 0.377) SDCM 3

Order Code	Full Product Name	Initial chromaticity
58907000	BY581P 250S/840 DIA HE ASYM GC SI MBW	(0.383, 0.377) SDCM 3
59411100	BY581P 250S/840 PSU HE WB GC SI	(0.383, 0.377) SDCM 3
59417300	BY581P 350S/840 DIA WB GC SI	(0.380, 0.375) SDCM 3
59431900	BY581P 250S/840 DIA WB GC SI ELD3	(0.380, 0.375) SDCM 3
58915500	BY581P 250S/840 DIA HE XNB GC SI	(0.383, 0.377) SDCM 3
58931500	BY581P 350S/840 DIA HE WB GC SI XT 1m	(0.383, 0.377) SDCM 3

Product Data

Order Code	Full Product Name	Product family code
58952000	BY581P 700S/840 DIA HE WB GC SI BR	BY581P
59393000	BY580X 170S/840 SIA WB GC SI H4	BY580X
59395400	BY581X 350S/840 SIA WB GC SI H4	BY581X
59396100	BY580X 130S/840 SIA HE WB GC SI H4	BY580X
59398500	BY581X 250S/840 SIA HE WB GC SI H4	BY581X
59407400	BY581X 250S/840 SIA HE WB GC SI ELW3 H4	BY581X

Order Code	Full Product Name	Product family code
58907000	BY581P 250S/840 DIA HE ASYM GC SI MBW	BY581P
59411100	BY581P 250S/840 PSU HE WB GC SI	BY581P
59417300	BY581P 350S/840 DIA WB GC SI	BY581P
59431900	BY581P 250S/840 DIA WB GC SI ELD3	BY581P
58915500	BY581P 250S/840 DIA HE XNB GC SI	BY581P
58931500	BY581P 350S/840 DIA HE WB GC SI XT 1m	BY581P

Polar Wide Diagrams



0-180

Polar Normal (separate) - BY580PI -

910505102881

Polar Normal (separate) - BY580PI -910505102895



910505102875



Polar Normal (separate) - BY580PI -910505102921



Polar Normal (separate) - BY580PI -910505102871



Polar Normal (separate) - BY580PI -910505102859



Polar Normal (separate) - BY580PI -910505102857



Polar Normal (separate) - BY580PI -910505102862



Polar Normal (separate) - BY580PI -910505102860





Polar Wide Diagrams







Polar Normal (separate) - BY580PI -910505102937 Polar Normal (separate) - BY580PI -910505102913 Polar Normal (separate) - null - 910505102956



© 2024 Signify Holding All rights reserved. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify. All trademarks are owned by Signify Holding or their respective owners.