HARDO.

TechLine

LED lighting fixtures

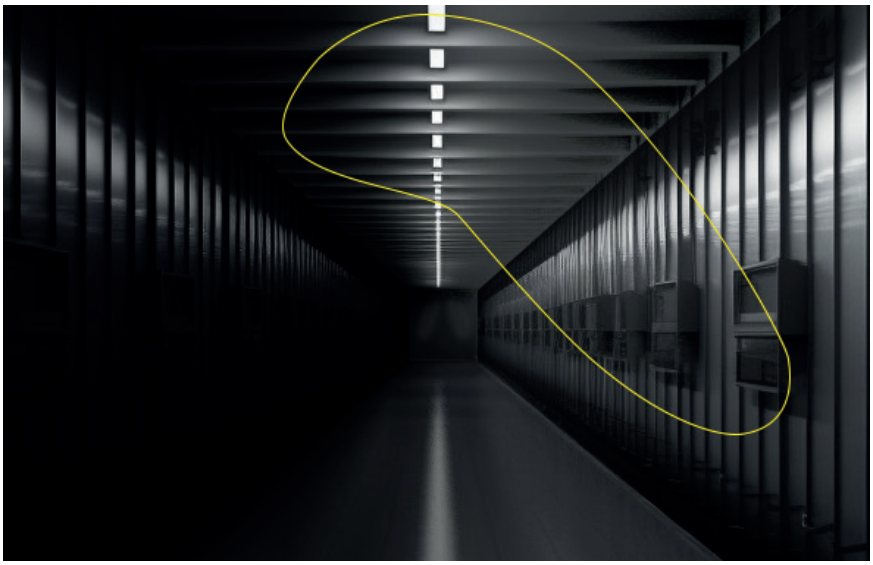
Linear industrial lighting fixtures

CE IP66/67 WERSJA DALI QAN QAR

Application

Dust, waterjet and UV resistant (HT version for high temperature applications) industrial linear LED lighting fixture.This fixture is designed for use in production halls, warehouses and other facilities where reliable illumination is critical for work safety and efficiency.

- This lighting fixture is designed to replace 18W/36W/56W fluorescent luminaires reducing energy consumption at the same time.
- This fixture offers high energy efficiency and work compfort by allowing the following control options: DALI control, motion detectors, daylight harvesting, intelligent PoE controls
- Available in external mounting version
- It's design offering cable entries from both ends and the top eliminates the need for additional junction boxes.
- The insides of the fixture are designed with the installers' efficiency in mind: quick opening, no loose parts, easy access to connection terminals
- No need to replace the entire fixture when different light distribution is required. There is a selection of 22 lenses to choose from. Illustration below:



TechLine fixture - numbers

- 3 types of application (general lighting, emergency with self-contained inverter, emergency for central battery systems)
- 3 lengths,
- 2 types of diffuser
- 2 body types
- up to 5 years of warranty,
- installation in 2 minutes
- + 22 additional directional lenses

HARDO. Possible TechLine configurations

TechLine	AA	–	BB	XX	YY	K	K	CCC	WW

Code

TechLine

Length

60 - 615 mm	
12 - 1174 mm	
15 - 1454 mm	

Power

20 - 20 W	61 - 61 W
24 - 24 W	62 - 62 W
37 - 37 W	70 - 70 W
44 - 44 W	74 - 74 W
51 - 51 W	77 - 77 W
59 - 59 W	

Wiring

30 - 1 x terminal block, 3-pole
33 - 2 x terminal block, 3-pole
50 - 1 x terminal block, 5-pole
55 - 2 x terminal block, 5-pole

Wattage by Length

615 mm: 20 W, 24 W
1174 mm: 24 W, 37 W, 51 W*, 59 W*, 61 W, 74 W
1454 mm: 44 W, 51 W, 62 W*, 70 W*, 77 W
* - HT - high temperature version is available

Cable glands (quantity)

10 - 1 cable gland at one end of the fixture
11 - 1 cable gland at each end of the fixture

Body type

G - glassfibre reinforced polyester (GRP)
P - polycarbonate (PC)

Diffuser type

P - polycarbonate (PC)
M - polymethyl mathacrylate (PMMA)

Emergency version

--- - basic version compatible with non monitored Central Battery Systems
A3- - self-contained version 3h rated
CBX - version featuring a V-CG-S addressing module dedicated for the use with Central Battery System
CBY - version featuring a V-CG-S addressing/switching module dedicated for the use with Central Battery System

Accessories

-- - basic fixture without accessories
D- - DALI LED driver
M- - motion detector
DM - DALI LED driver and motion detector

HARDO. General lighting fixtures

TechLine fixtures 615 mm lenght

Technical data

	TechLine 60-20******-----	TechLine 60-24******-----
Lighting data		
Rated luminous flux [lm]	**2600**	**3400**
Light source type	**20W LED Module**	**24W LED Module**
Color temperature [K]	4000	
CRI	>80	
Efficacy of the complete luminaire [lm / W]	**130**	**141**
Lifetime [h]	L70B10 (Ta=35°C): 70 000 L80B10 (Ta=35°C): 48 000	L70B50 (Ta=35°C): 72 000 L80B10 (Ta=35°C): 72 000 L80B10 (Ta=45°C): 72 000

All data was measured at 25°C, color temperature of 4000K, CRI>60. Tolerance +/-5%

Electrical data		
Protection class	I	
Rated power [W]*	**20**	**24**
Power factor	**0,94**	**0,96**
Rated Voltage [V]	AC 220-240, 50/60Hz DC 220-240, 0Hz	
Rated current [A]	**0,10**	**0,12**
Cable terminals	min. 1,5mm² max. 2,5mm²	

Mechanical data	
Degree of protection	IP66/67
Impact resistance	Cover up to IK10; Body up to IK10
Body	Polycarbonate (PC)
Cover	UV stabilized PC or PMMA. Opalized version
Working temperature	-20°C ≤ Ta ≤ +45°C
Gasket	Silicone or non-aging polyurethane „endless" type injected gasket

* - Power tolerance +/-5%

HARDO. General lighting fixtures

TechLine fixtures 1174 mm lenght

Technical data

	TechLine 12-24******-----	TechLine 12-37******-----	TechLine 12-61******-----
Lighting data			
Rated luminous flux [lm]	**3500**	**5200**	**8300**
Light source type	**24W LED Module**	**37W LED Module**	**61W LED Module**
Color temperature [K]	4000		
CRI	>80		
Efficacy of the complete luminaire [lm / W]	**145**	**140**	**136**
Lifetime [h]	L70B50 (Ta=35°C): 72 000 L80B10 (Ta=35°C): 72 000 L80B10 (Ta=45°C): 72 000	L70B50 (Ta=35°C): 72 000 L80B10 (Ta=35°C): 72 000 L80B10 (Ta=45°C): 72 000	L70B50 (Ta=35°C): 72 000 L80B10 (Ta=35°C): 72 000

All data was measured at 25°C, color temperature of 4000K, CRI>60. Tolerance +/-5%

Electrical data			
Protection class	I		
Rated power [W]*	**24**	**37**	**61**
Power factor	**0,97**	**0,96**	**0,97**
Rated Voltage [V]	AC 220-240, 50/60Hz DC 220-240, 0Hz		
Rated current [A]	**0,12**	**0,17**	**0,27**
Cable terminals	min. 1,5mm² maks. 2,5mm²		
Mechanical data			
Degree of protection	IP66/67		
Impact resistance	Cover up to IK10; Body up to IK10		
Body	Glassfibre reinforced polyester (GRP) or Polycarbonate (PC)		
Cover	UV stabilized PC or PMMA. Opalized version		
Working temperature	**-20°C ≤ Ta ≤ +45°C**	**-20°C ≤ Ta ≤ +45°C**	**-20°C ≤ Ta ≤ +35°C**
Gasket	Silicone or non-aging polyurethane „endless" type injected gasket		

* -Power tolerance +/-5%

HARDO. General lighting fixtures

TechLine fixtures 1174 mm lenght

Technical data

	TechLine 12-74******-----	TechLine 12-51******-----HT	TechLine 12-59******-----HT
Lighting data			
Rated luminous flux [lm]	**11300**	**7400**	**8700**
Light source type	**74W LED Module**	**51W LED Module**	**59W LED Module**
Color temperature [K]	4000		
CRI	>80		
Efficacy of the complete luminaire [lm / W]	**152**	**145**	**147**
Lifetime [h]	L70B50 (Ta=35°C): 100 000 L80B10 (Ta=35°C): 64 000	L80B10 (Ta=50°C): 64 000 L90B10 (Ta=50°C): 50 000	L80B10 (Ta=50°C): 64 000 L90B10 (Ta=50°C): 50 000

All data was measured at 25°C, color temperature of 4000K, CRI>60. Tolerance +/-5%

Electrical data			
Protection class	I		
Rated power [W]*	**74**	**51**	**59**
Power factor	**0,97**	**0,93**	**0,97**
Rated Voltage [V]	AC 220-240, 50/60Hz DC 220-240, 0Hz		
Rated current [A]	**0,33**	**0,23**	**0,26**
Cable terminals	min. 1,5mm² max. 2,5mm²		
Mechanical data			
Degree of protection	IP66/67		
Impact resistance	Cover up to IK10; Body up to IK10		
Body	Glassfibre reinforced polyester (GRP) or Polycarbonate (PC)		
Cover	**UV stabilized PC or PMMA. Opalized version**	**UV stabilized PC. Opalized version**	**UV stabilized PC. Opalized version**
Working temperature	**-20°C ≤ Ta ≤ +35°C**	**-30°C ≤ Ta ≤ +60°C**	**-30°C ≤ Ta ≤ +50°C**
Gasket	Silicone or non-aging polyurethane „endless" type injected gasket		

* - Power tolerance +/-5%

TechLine fixtures 1454 mm lenght

Technical data

	TechLine 15-44******-----	TechLine 15-51******-----	TechLine 15-77******-----
Lighting data			
Light source type	**7000**	**7000**	**10400**
Light source type	**44W LED Module**	**51W LED Module**	**77W LED Module**
Color temperature [K]	4000		
CRI	>80		
Efficacy of the complete luminaire [lm / W]	**160**	**137**	**135**
Lifetime [h]	L70B50 (Ta=35°C): 102 000 L80B10 (Ta=35°C): 102 000 L80B10 (Ta=45°C): 102 000	L70B50 (Ta=35°C): 72 000 L80B10 (Ta=35°C): 72 000 L80B10 (Ta=45°C): 72 000	L70B50 (Ta=35°C): 72 000 L80B10 (Ta=35°C): 72 000

All data was measured at 25°C, color temperature of 4000K, CRI>60. Tolerance +/-5%

Electrical data			
Protection class	I		
Rated power [W]*	**44**	**51**	**77**
Power factor	**0,93**	**0,97**	**0,97**
Rated Voltage [V]	AC 220-240, 50/60Hz DC 220-240, 0Hz		
Rated current [A]	**0,19**	**0,22**	**0,34**
Cable terminals	min. 1,5mm² max. 2,5mm²		
Mechanical data			
Degree of protection	IP66/67		
Impact resistance	Cover up to IK10; Body up to IK10		
Body	Glassfibre reinforced polyester (GRP) or Polycarbonate (PC)		
Cover	UV stabilized PC or PMMA. Opalized version		
Working temperature	**-20°C ≤ Ta ≤ +45°C**	**-20°C ≤ Ta ≤ +45°C**	**-20°C ≤ Ta ≤ +35°C**
Gasket	Silicone or non-aging polyurethane „endless" type injected gasket		

* - Power tolerance +/-5%

HARDO. General lighting fixtures

TechLine fixtures 1454 mm lenght

Technical data

	TechLine 15-62******-----HT	TechLine 15-70******-----HT
Lighting data		
Rated luminous flux [lm]	**9500**	**10400**
Light source type	**62W LED Module**	**70W LED Module**
Color temperature [K]	4000	
CRI	>80	
Efficacy of the complete luminaire [lm / W]	**153**	**148**
Lifetime [h]	L80B10 (Ta=50°C): 64 000 L90B10 (Ta=50°C): 64 000	L80B10 (Ta=50°C): 64 000 L90B10 (Ta=50°C): 50 000

All data was measured at 25°C, color temperature of 4000K, CRI>60. Tolerance +/-5%

Electrical data		
Protection class	I	
Rated power [W]*	**62**	**70**
Power factor	**0,96**	**0,97**
Rated Voltage [V]	AC 220-240, 50/60Hz DC 220-240, 0Hz	
Rated current [A]	**0,27**	**0,31**
Cable terminals	min. 1,5mm² max. 2,5mm²	

Mechanical data		
Degree of protection	IP66/67	
Impact resistance	Cover up to IK10; Body up to IK10	
Body	Glassfibre reinforced polyester (GRP) or Polycarbonate (PC)	
Cover	UV stabilized PC. Opalized version	
Working temperature	**-30°C ≤ Ta ≤ +60°C**	**-30°C ≤ Ta ≤ +50°C**
Gasket	Silicone or non-aging polyurethane „endless" type injected gasket	

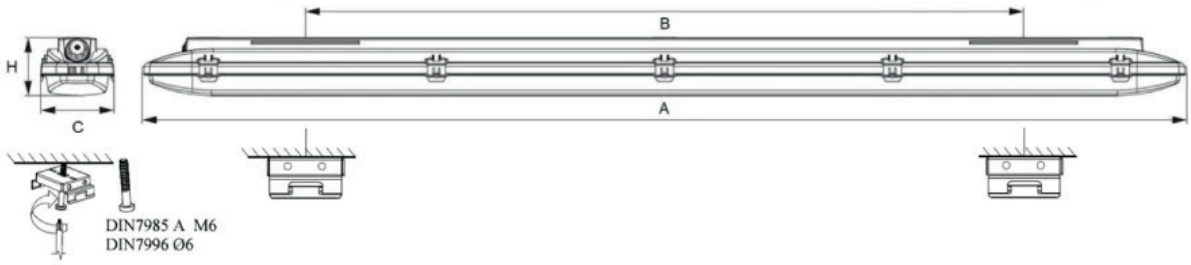
* - Power tolerance +/-5%

HARDO. Dimensions and mounting options; Polar curves

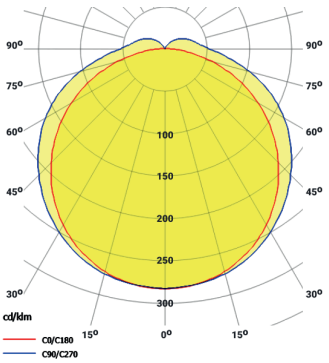
Dimensions and mounting options

Fixture type	A	B	C	H
TechLine 60-********-----	615	300 ±25	102	80
TechLine 12-********-----	1174	700 ±76	102	80
TechLine 15-********-----	1454	1000 ±76	102	80

► TechLine lighting fixtures can be suspension, ceiling or wall mounted. To do this two stainless steel mounting clips should be first connected with suspension lines or mounting brackets and then attached by pushing them in to the body of the fixture. Special runners along the top surface of the fixture's body provide 15 cm of spacing adjustment for two longer versions and 5 cm of spacing adjustment for the shortest version. if needed, mounting clips can be locked in a desired location.



Polar curves



Emergency pictograms - codification

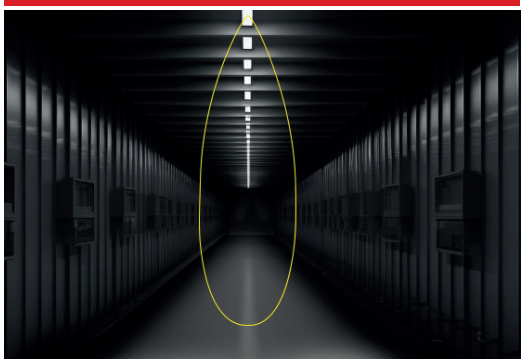
Directional lenses

Possibility to adjust light distribution of already installed luminaire by using of accessory directional lenses. 4 basic lenses:

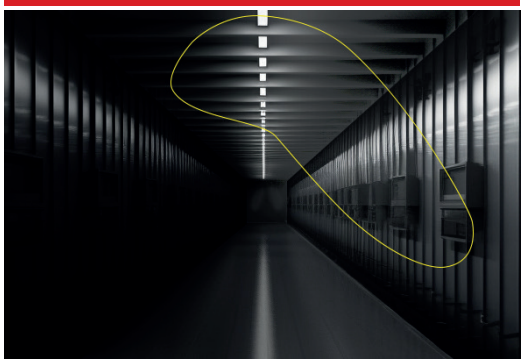
- ► 40° wide beam - WS
- ► asymmetric beam - AS
- ► S-35°-70°
- ► asymmetric beam for uplighting AS-WS

Other directional lens configurations are available as needed - 22 types in all.

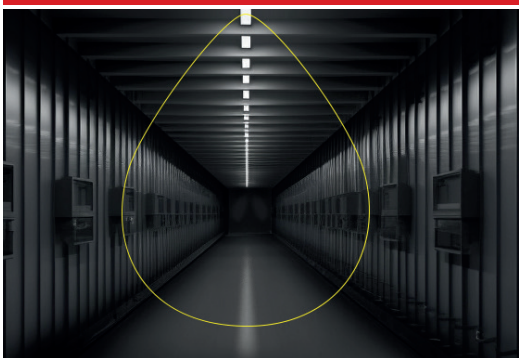
40° wide beam - WS



Asymmetric beam - AS



S - 35° - 70°



Asymmetric beam for uplighting AS-WS