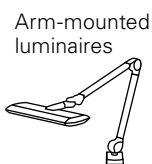
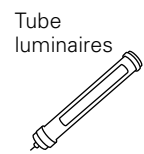
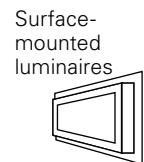
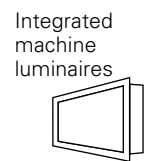


FLEXIBLE-TUBE LUMINAIRES

Flexible-tube luminaires offer the highest lighting flexibility. The lighting can be quickly and easily adjusted to a wide range of activities at an industrial workplace or at a machine.



ABL		IP67 or IP20	88 - 89	
SPOT LED	-30% energy		IP65 or IP40	90 - 91
HSW 20		IP65	92 - 93	
HI 20		IP20	94 - 95	
SOL		IP20	96 - 97	
MINELA	NEW		IP20	98 - 99
STE 111		IP20	100 - 101	



ABL

THE FLEXIBLE HEAD FOR TOUGH TASKS.



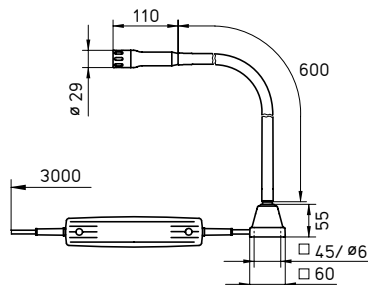
With its minimalist design, the ABL is as small and handy as a mini flashlight that can be fixed in any position. The fact that it is extremely tough in spite of its delicate appearance makes it a highly versatile luminaire.

- Fast and precise positioning
- High luminous power with low energy consumption
- Variants with narrow and wide angles of illumination

- Insensitive to vibrations, resistant to metal chippings
- Maintenance-free: LED life of up to 50,000 hours and more



efficient *light*

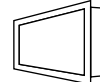


Tip: Drawing shows luminaire with separate transformer

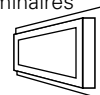
Features at a glance

- 1 x HIGH POWER LED
- Color temperature daylight white 6,000 K
- 6° or 25° angle of illumination
- Black aluminum anodized housing, 2 mm thick safety glass
- Metal flexible tube for at least 20,000 movements
- Without switch
- System of protection IP67 (without transformer) or IP20 (with transformer, luminaire head IP67); class of protection III (without transformer) or II (with transformer)
- Supplied with 3 m mains lead with free stranded wires or integrated power pack with plug type CEE 7/16 (Euro plug)
- Various fastenings and drivers as accessories

Integrated machine luminaires



Surface-mounted luminaires



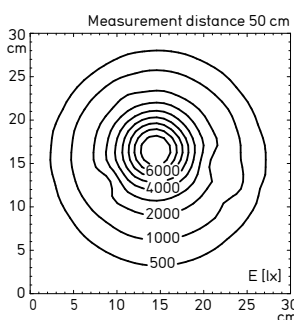
Tube luminaires



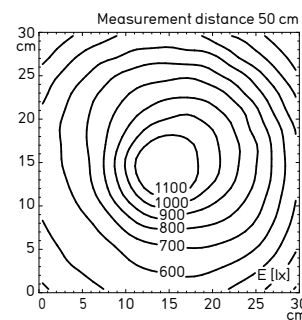
Arm-mounted luminaires



Flexible-tube luminaires



Illuminance with 6° lens



Illuminance with 25° lens

CONNECTION TO A CONSTANT POWER SOURCE WITH 350 OR 700 MA

CONSUMPTION	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E_m/E_{max}^*	MODEL	ORDER NO.
3 W	-	Dependent on the driver	6° lens	1219/8966 lx ¹	ABLTL 1	112 423 000 - 000 715 50
3 W	-	Dependent on the driver	25° lens	691/1260 lx ¹	ABLTL 1	112 423 001 - 000 715 49

CONNECTION TO A CONSTANT POWER SOURCE WITH 350 OR 700 MA

CONSUMPTION	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E_m/E_{max}^*	MODEL	ORDER NO.
3 W	Transformer in separate housing	95 – 240 V, 50/60 Hz	6° lens	1219/8966 lx ¹	ABLTL 1	112 426 000 - 000 740 02
3 W	Transformer in separate housing	95 – 240 V, 50/60 Hz	25° lens	691/1260 lx ¹	ABLTL 1	112 426 001 - 000 741 55

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ Measuring range 30 cm x 30 cm/Measuring distance 50 cm
 Also available as a pivoting-head luminaire

SPOT LED

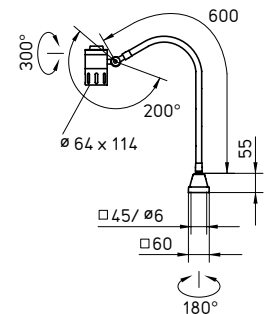


HARD CORE, FLEXIBLE ADJUSTMENT.



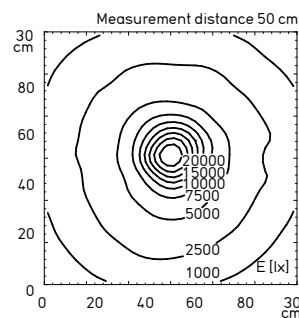
A luminaire that is used close to the workplace should be both compact, powerful and robust. This is why the SPOT LED combines 3 LEDs in its extremely small, insensitive housing. They produce flicker-free light that can be precisely positioned even in small spaces thanks to the flexible tube.

- Very bright and energy-efficient
- Variants with narrow and wide angles of illumination
- Wide range
- Comfort and safety thanks to absolutely even and flicker-free light
- Without heat development in the beam direction
- Convenient switching on and off from your working position
- Maintenance-free: LED life of up to 50,000 hours and more

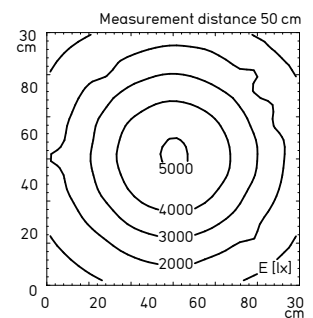


Features at a glance

- 3 x HIGH POWER LED
- Color temperature daylight white 5,700 K
- 10° or 40° angle of illumination
- Black aluminum anodized housing, 3 mm thick safety glass
- Metal flexible tube for at least 20,000 movements
- With switch in the luminaire head
- System of protection IP65 (without mains plug) or IP40 (with mains plug, luminaire head IP65); class of protection III (without mains plug) or II (with mains plug)
- Supplied with 3 m mains lead with free stranded wires or with mains plug type CEE 7/16 (Euro plug), BS 1363 and NEMA 1-15P
- Various fastenings as accessories



Illuminance with 10° lens



Illuminance with 40° lens



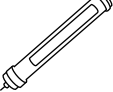
Integrated machine luminaires



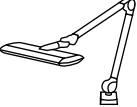
Surface-mounted luminaires



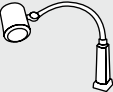
Tube luminaires



Arm-mounted luminaires



Flexible-tube luminaires



CONSUMPTION	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E_m/E_{max}^*	MODEL	ORDER NO.
7 W	Mains plug	100 – 240 V, 50/60 Hz	10° lens	3358/22350 lx ¹	MCTFL 3 N	112 462 007 - 000 919 26
7 W	Mains plug	100 – 240 V, 50/60 Hz	40° lens	2539/5095 lx ¹	MCTFL 3 N	112 462 009 - 000 919 70
6 W	–	16 – 30 VAC/16 – 40 VDC	10° lens	3358/22350 lx ¹	MCTFL 3 S	112 462 001 - 000 918 51
6 W	–	16 – 30 VAC/16 – 40 VDC	40° lens	2539/5095 lx ¹	MCTFL 3 S	112 462 003 - 000 919 60

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ Measuring range 30 cm x 30 cm/Measuring distance 50 cm

Also available as an arm-mounted luminaire, pivoting-head luminaire, integrated machine luminaire and surface-mounted luminaire

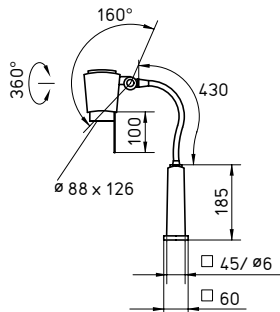
HSW 20

SIMPLY BRILLIANT.

Occupational safety conditions dictate that light at the workplace must be glare-free. In spite of its very strong halogen light, the HSW 20 reliably fulfills these requirements. Thanks to the maneuverability offered by its flexible tube, it provides excellent focused light in a direct, pleasant and fast manner.

- Brilliant halogen light
- Variants with narrow and wide angles of illumination
- Glare-free
- Easy changing of illuminant
- Easy to reach switch that can be operated with one hand
- Twin glass screen
- No burning in of cooling agents thanks to reduced temperatures on the surface of the luminaire
- High system of protection

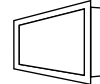




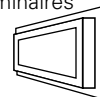
Features at a glance

- Halogen lamp
- Color temperature warm white 2,800 K (23 W) or 3,100 K (20 W)
- Glare-free thanks to metal louver, angle of illumination 10° or 36°
- Luminaire head of special black plastic, twin glass screen
- Metal flexible tube for at least 20,000 movements
- With switch in the luminaire head
- System of protection IP65; class of protection I (without transformer) or II (with transformer)
- Supplied with 1.5 m mains lead with free stranded wires or plug type CEE 7/17 (shaped plug) for mains variant
- Various fastenings and magnifier (5 diopters) as accessories

Integrated machine luminaires



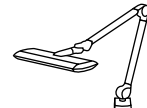
Surface-mounted luminaires



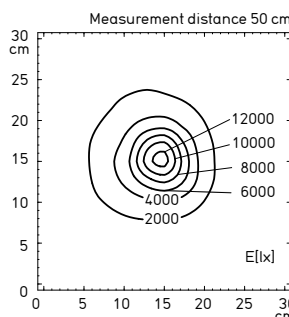
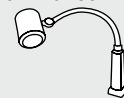
Tube luminaires



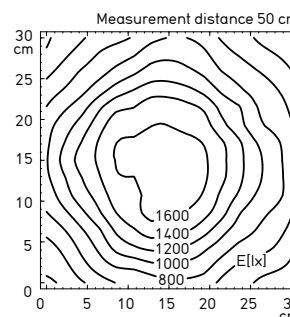
Arm-mounted luminaires



Flexible-tube luminaires



Illuminance with 10° angle of illumination (112 048 000 - 000 788 81)



Illuminance with 36° angle of illumination (112 048 038 - 000 788 82)

FITTED WITH	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E _m /E _{max} *	MODEL	ORDER NO.
1 x 20 W	Integrated transformer	230 V, 50/60 Hz	10° angle of illumination	1295/12740 lx ¹	HSWT 20	112 048 000 - 000 788 81
1 x 20 W	Integrated transformer	230 V, 50/60 Hz	36° angle of illumination	959/1698 lx ¹	HSWT 20	112 048 038 - 000 788 82
1 x 23 W	–	24 VAC/DC	10° angle of illumination	1295/12740 lx ¹	HSWT 20	112 049 010 - 000 788 85
1 x 20 W	–	12 VAC/DC	10° angle of illumination	1295/12740 lx ¹	HSWT 20	112 049 000 - 000 788 83
1 x 20 W	–	12 VAC/DC	36° angle of illumination	959/1698 lx ¹	HSWT 20	112 049 012 - 000 788 84

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ Measuring range 30 cm x 30 cm/Measuring distance 50 cm
 Also available as an arm-mounted and pivoting-head luminaire

HI 20

THE VARIABLE LIGHTING SOLUTION.



When it comes to the HI 20, diversity not only means that it is available with various angles of illumination. In conjunction with the flexible tube, it can easily be brought into the right position in tight spaces. Its extra strong halogen lamp can thus light up every angle.

- Versatile halogen luminaire
- Brilliant halogen light
- Variants with narrow and wide angles of illumination
- Easy and fast positioning
- Bright
- Heat protection jacket
- Easy, tool-free changing of lamp
- Convenient switching on and off from your working position
- High life cycle of the lamp

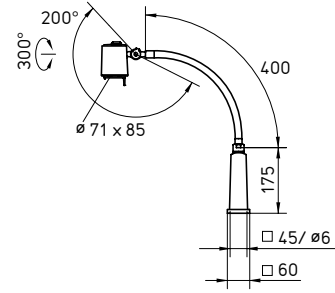


Features at a glance

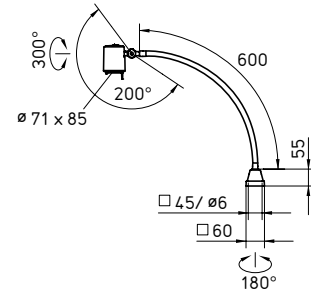
- Halogen lamp
- Color temperature warm white 2,800 K (23 W) or 3,000 K (20 W)
- 10°, 24°, 36° or 60° angle of illumination
- Black luminaire head of aluminum and plastic, glass screen
- Metal flexible tube for at least 20,000 movements
- With switch in the luminaire head
- System of protection IP20; class of protection III (without transformer) or II (with transformer)
- Supplied with 1.5 m mains lead with free stranded wires or plug type CEE 7/16 (Euro plug) for mains variant
- Various fastenings and magnifier (4 diopters) as accessories



HI 20 with integrated transformer



HI 20 without transformer



Integrated machine luminaires



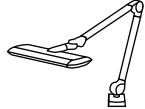
Surface-mounted luminaires



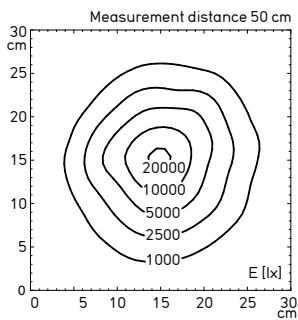
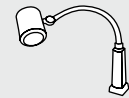
Tube luminaires



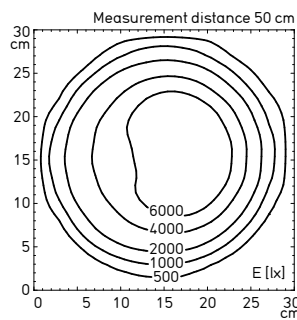
Arm-mounted luminaires



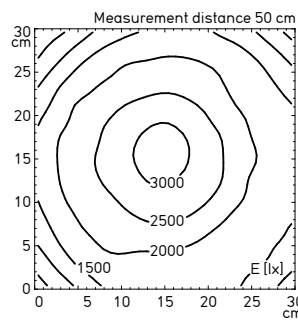
Flexible-tube luminaires



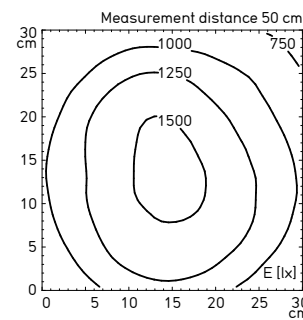
Illuminance with 10° angle of illumination (112 378 000 - 000 608 54)



Illuminance with 24° angle of illumination (112 378 001 - 000 683 32)



Illuminance with 36° angle of illumination (112 378 002 - 000 683 34)



Illuminance with 60° angle of illumination (112 378 003 - 000 683 39)

FITTED WITH	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E _m /E _{max} *	MODEL	ORDER NO.
1 x 20 W	Integrated transformer	230 V, 50/60 Hz	10° angle of illumination	2268/23200 lx ¹	HITH 20 N	112 378 000 - 000 608 54
1 x 20 W	Integrated transformer	230 V, 50/60 Hz	24° angle of illumination	2504/7375 lx ¹	HITH 20 N	112 378 001 - 000 683 32
1 x 20 W	Integrated transformer	230 V, 50/60 Hz	36° angle of illumination	1970/3126 lx ¹	HITH 20 N	112 378 002 - 000 683 34
1 x 20 W	Integrated transformer	230 V, 50/60 Hz	60° angle of illumination	1182/1598 lx ¹	HITH 20 N	112 378 003 - 000 683 39
1 x 20 W	–	12 VAC/DC	24° angle of illumination	2504/7375 lx ¹	HITF 20 S	112 379 025 - 000 684 01
1 x 23 W	–	24 VAC/DC	10° angle of illumination	1619/14398 lx ¹	HITF 20 S	112 379 028 - 000 609 06
1 x 23 W	–	24 VAC/DC	24° angle of illumination	1683/7082 lx ¹	HITF 20 S	112 379 029 - 000 903 37
1 x 23 W	–	24 VAC/DC	36° angle of illumination	1553/3055 lx ¹	HITF 20 S	112 379 030 - 000 903 39

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ Measuring range 30 cm x 30 cm/Measuring distance 50 cm

Also available as an arm-mounted and pivoting-head luminaire

SOL

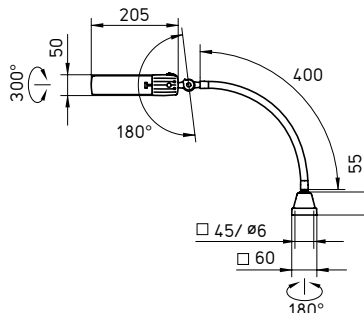
IMPRESSIVE MINIMALISM.

Sometimes, a universal solution is simply the best solution. Particularly when it combines the properties of the SOL. It evenly illuminates the work space with neutral white light and is also very energy-efficient.

And thanks to the flexible tube it can be individually positioned.

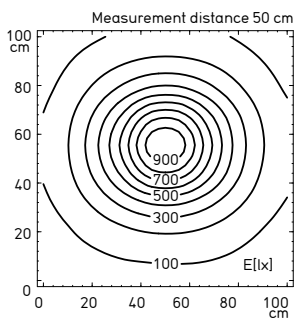
- Light and easy to adjust to your individual position
- Compact and bright
- Switch integrated in the luminaire head





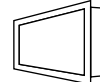
Features at a glance

- TC-S compact fluorescent lamp
- Color temperature neutral white 4,000 K
- Glare-free thanks to in-built reflector
- Black plastic housing
- Metal flexible tube for at least 20,000 movements
- With switch in the luminaire head
- System of protection IP20; class of protection II
- Supplied with 2 m mains lead with plug type CEE 7/16 (Euro plug)
- Various fastenings as accessories

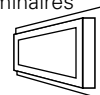


Illuminance 1 x 9 W

Integrated machine luminaires



Surface-mounted luminaires



Tube luminaires



Arm-mounted luminaires



Flexible-tube luminaires



FITTED WITH	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E_m / E_{max}^*	MODEL	ORDER NO.
1 x 9 W TC-S	Conventional plug-in ballast	230 V, 50 Hz	–	233/953 lx ¹	SOL 109	112 390 000 - 000 715 41

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ Measuring range 100 cm x 100 cm / Measuring distance 50 cm

MINELA

NEW

FLEXIBLE AND EFFICIENT LIGHTING.



This luminaire thinks for itself, switching off automatically after 14 hours and therefore preventing unnecessary power consumption. The LED luminaire also features cleverly designed thermal management, which ensures high energy efficiency,

longer service life and less heating up of the luminaire head.

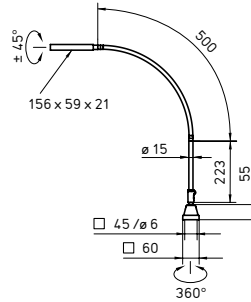
- Light and easy to adjust to your individual position
- Switch-off and dimming with a light touch of the touch-LED

- Intelligent Auto-Off function reduces power consumption

- Maintenance-free LED technology with a service life of up to 50,000 hours and more

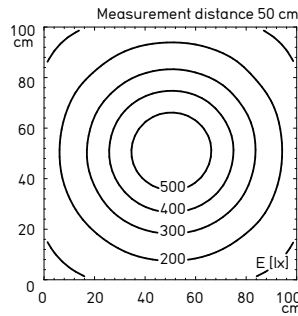


efficient *light*



Features at a glance

- 1 x HIGH POWER LED
- Color temperature neutral white 4,000 K
- Light control via reflector
- Colorless anodized aluminum housing, acrylic screen
- Metal flexible tube for at least 20,000 movements
- Illuminated touch-LED integrated in the luminaire head for On/Off and dimming
- System of protection IP20; class of protection II
- Supplied with 2.5 m mains lead and with mains plug type CEE 7/16 (Euro plug), BS 1363 and NEMA 1-15P
- Various fastenings as accessories



Illuminance 1 x 7 W

Integrated machine luminaires



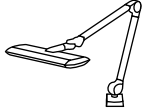
Surface-mounted luminaires



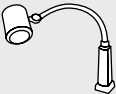
Tube luminaires



Arm-mounted luminaires



Flexible-tube luminaires



CONSUMPTION	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E_m/E_{max}^*	MODEL	ORDER NUMBER
7 W	Mains plug	100 – 240 V, 50/60 Hz	Dimmable	268/575 lx ¹	SOL 1	112 929 000 - 005 953 21

* E_m = Medium illuminance; E_{max} = Maximum illuminance; ¹ Measuring range 100 cm x 100 cm/Measuring distance 50 cm

STE 111

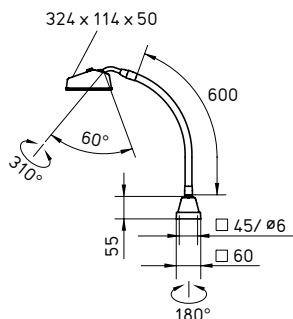
GOOD LIGHT IS A MATTER OF ADJUSTMENT.

When a luminaire is in use almost all day and all night in industrial assembly or inspection, it is important for it to provide comfortable lighting. But it also needs to consume as little energy as possible. Thanks to state-of-the-art fluorescent lamp technology, the STE 111 can do both.

This makes it a universal flexible tube luminaire, which thanks to its features is also highly suitable for illuminating small parts.

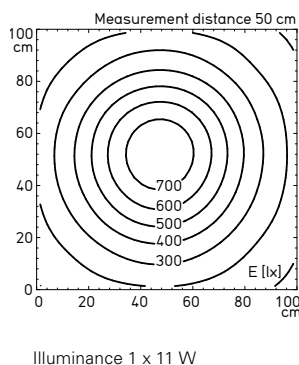
- Even area lighting
- Energy-efficient and very bright
- Glare-free
- Light and easy to adjust to your individual position
- Switch integrated in the luminaire head



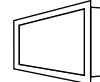


Features at a glance

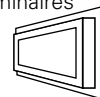
- TC-SEL compact fluorescent lamp
- Color temperature neutral white 4,000 K
- Glare-free thanks to white opal screen
- Light gray plastic housing, acrylic screen
- Metal flexible tube for at least 20,000 movements
- With switch in the luminaire head
- System of protection IP 20, class of protection I
- Supplied with 3 m mains lead with plug type CEE 7/7 (shock-proof plug)
- Various fastenings and magnifier (4 diopters) as accessories



Integrated machine luminaires



Surface-mounted luminaires



Tube luminaires



Arm-mounted luminaires



Flexible-tube luminaires



FITTED WITH	OPERATING DEVICE	CONNECTED LOAD	SPECIAL FEATURE	E_m / E_{max}^*	MODEL	ORDER NO.
1 x 11 WTC-SEL	Integr. electronic ballast	220 – 240 V, 50 Hz	–	355/782 lx ¹	STE 111	112 399 000 - 000 729 37

* E_m = medium illuminance; E_{max} = maximum illuminance; ¹ Measuring range 100 cm x 100 cm/Measuring distance 50 cm
 Also available as an arm-mounted luminaire