



**ASTRA Suspended 90 LD/LI
FROST**

VIEW PRODUCT

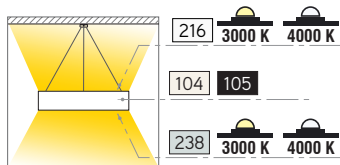
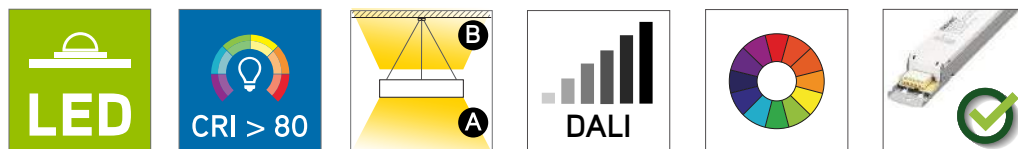
Select one option

**ASTRA Suspended 90 LD/LI
PRISMATIC (UGR<19)**

VIEW PRODUCT

**descrição** description ·

- Luminária de aplicação suspensa com design minimalista e moderno;
 - Desenvolvido com base na tecnologia LED com opção de cor Warm White (3000 K) ou Neutral White (4000 K);
 - Corpo construído em alumínio com difusor em policarbonato frost, que combina um elevado coeficiente de transmissão de luz e uma elevada difusão de luz;
 - Disponível em três tamanhos de modo a poder a ser aplicada numa grande diversidade de espaços, desde zonas amplas de grande dimensão até zonas mais pequenas (ex: hall entrada);
 - Em dois acabamentos padrão (branco e preto mate) ou personalizado na cor adequada a cada espaço (sob consulta);
 - 3 tipos de suspensão disponíveis, permitindo a selecção da opção mais adequada a cada projecto – componente a encomendar à parte;
- *Trendy and minimalist design suspended mounted luminaire;*
 - *Engineered around LED technology, available in light colours 3000 K (Warm White) and 4000 K (Neutral White);*
 - *Aluminium housing with frost polycarbonate diffuser combining high light transmission coefficient and a high light diffusion;*
 - *Three sizes are available to suit a multitude of environments, from large areas to smaller areas (example: entrance hall);*
 - *Two standard finishes (matt white and matt black) or customized colour to suit each environment (on request);*
 - *3 suspension types available allowing selection of the most suitable option for each project – component to be ordered separately;*

**pormenores** details ·

- Seleccionar o tipo de suspensão pretendido (luminária fornecida pronta a instalar) . *Select suspension type (luminaire supplied ready to install)*
- Disponível em versões LED dimáveis com fonte de alimentação DALI . *Dimmable LED versions with DALI power supply*
- **MULTICOLOR** - Outras cores sob consulta . *Other colours on request*
- Fonte de alimentação integrada na luminária . *Luminaire with integrated power supply*

acabamento finishing ·

- 104 Branco mate RAL 9003 . *RAL 9003 matt White*
- 105 Preto mate RAL 9005 . *RAL 9005 matt Black*

simbologia symbols ·

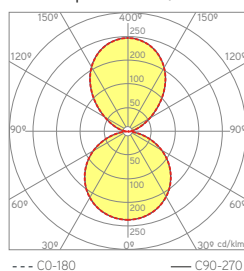


características do difusor
diffuser features ·

- 238** Policarbonato frost . *Polycarbonate frost*
- 216** Acrílico frost clear 000 . *Frost clear 000 acrylic*

diagr. polar diagr. polar ·

Astra Suspended 90 LD/LI LED



	Dlor	Ulor
43W 63W	65%	35%
77W 116W	72%	28%
128W 196W	78%	22%

características do LED
LED features ·

- 3000 K** 3000 K - Branco Quente . *Warm White - 172-183 lm/W tp=45°C* - Eficiência do LED . *LED efficiency*
- 4000 K** 4000 K - Branco Neutro . *Neutral White - 181-191 lm/W tp=45°C* - Eficiência do LED . *LED efficiency*

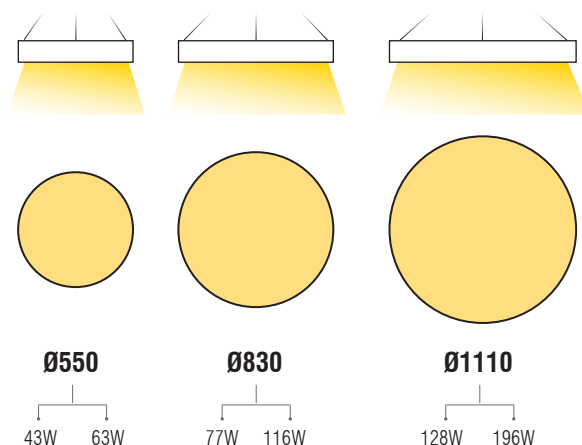
- **CRI > 80** - LED de elevada eficiência energética com índice de restituição cromática . *High efficacy LED colour rendering index*
- **MacAdams 3** - Estreita tolerância na variação de cor do LED . *Close tolerance on the LED colour variation*
- **50 000 horas** - Tempo vida útil . *Long lifetime*
- **L90** - Manutenção do fluxo luminoso do LED . *LED luminous flux maintenance*
- **F10** - Degradação ou mortalidade do LED . *LED degradation or mortality*
- **120°** - Ângulo de distribuição de luz do LED . *LED light distribution angle*

opções options ·

- ON/OFF** - Fonte de alimentação electrónica . *Electronic control gear*
- DALI** - Fonte de alimentação compatível com DALI . *DALI dimmable control gear*

tamanhos sizes ·

A ASTRA Suspended 90 LD/LI LED



exemplo . exemple Os componentes A e B são necessários para formar uma luminária completa. (luminária fornecida pronta para instalação).
A and B components are required to assemble one complete luminaire. (luminaire supplied ready to install).

B Tipos de Suspensão . Suspension Types

S1



- Suspensão 3 pontos com florão encastrar branco mate
- Matt white 3-point suspension with recessed ceiling cup

S2



- Suspensão 3 pontos com florão saliente branco mate
- Matt white 3-point suspension with surface ceiling cup

S3



- Suspensão 1 ponto com florão saliente branco mate
- Matt white single point suspension with surface ceiling cup



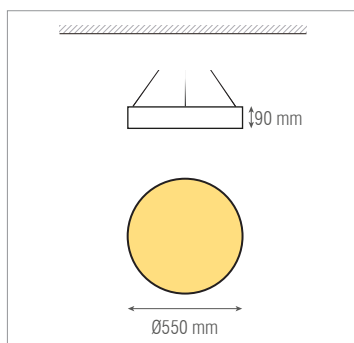
A ASTRA suspended 90 LD/LI LED



Encomenda . Order

A x1 **B** x1

Ø550mm



Warm White (3000 K)

A Astra Suspended LD/LI - [104] Branco mate RAL 9003 . RAL 9003 matt white

Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000782	33.06.40.000800
Ø550	63W	LED	6,50	31,0	33.06.40.000783	33.06.40.000801

3000 K

A Astra Suspended LD/LI - [105] Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000794	33.06.40.000812
Ø550	63W	LED	6,50	31,0	33.06.40.000795	33.06.40.000813

Neutral White (4000 K)

A Astra Suspended LD/LI - [104] Branco mate RAL 9003 . RAL 9003 matt white

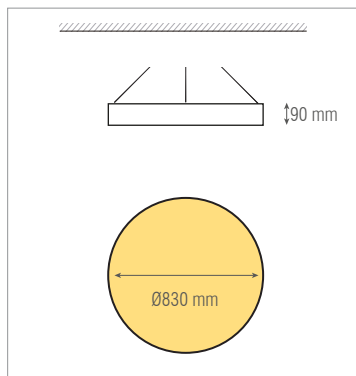
Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000818	33.06.40.000848
Ø550	63W	LED	6,50	31,0	33.06.40.000819	33.06.40.000837

4000 K

A Astra Suspended LD/LI - [105] Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000830	33.06.40.000848
Ø550	63W	LED	6,50	31,0	33.06.40.000831	33.06.40.000849

Ø830mm



Warm White (3000 K)

A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000784	33.06.40.000802
Ø830	116W	LED	13,0	77,0	33.06.40.000785	33.06.40.000803



A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000796	33.06.40.000814
Ø830	116W	LED	13,0	77,0	33.06.40.000797	33.06.40.000815

Neutral White (4000 K)

A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . RAL 9003 matt white

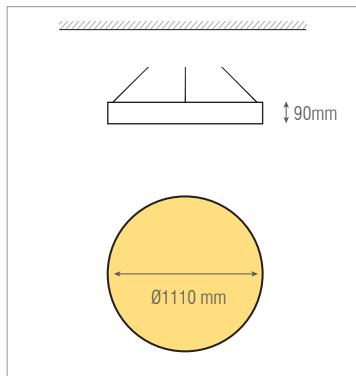
Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000820	33.06.40.000838
Ø830	116W	LED	13,0	77,0	33.06.40.000821	33.06.40.000839



A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000832	33.06.40.000850
Ø830	116W	LED	13,0	77,0	33.06.40.000833	33.06.40.000851

Ø1110mm



Warm White (3000 K)

A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	W				ON/OFF	DALI
Ø1110	128W	LED	17,7	114,5	33.06.40.000786	33.06.40.000804
Ø1110	196W	LED	17,7	114,5	33.06.40.000787	33.06.40.000805



A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø1110	128W	LED	17,7	114,5	33.06.40.000798	33.06.40.000816
Ø1110	196W	LED	17,7	114,5	33.06.40.000799	33.06.40.000817

Neutral White (4000 K)

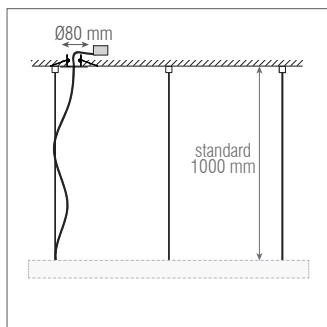
A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	W				ON/OFF	DALI
Ø1110	128W	LED	17,7	114,5	33.06.40.000822	33.06.40.000840
Ø1110	196W	LED	17,7	114,5	33.06.40.000823	33.06.40.000841



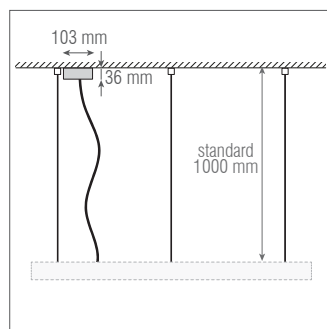
A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø1110	128W	LED	17,7	114,5	33.06.40.000834	33.06.40.000852
Ø1110	196W	LED	17,7	114,5	33.06.40.000835	33.06.40.000853

tipos de suspensão
suspension types ·**B** S1 - 104 Branco mate RAL 9003 . RAL 9003 matt white

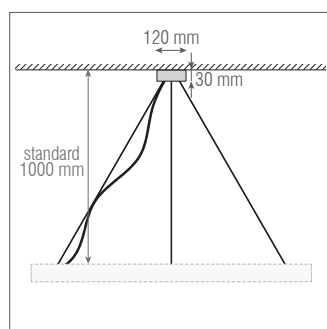
Ref.	Cod.
S1 - Suspension 3 point (1m)	35.06.40.001634

- 3 cabos de aço 1,25 mm² com acessórios de fixação . Three 1,25 mm² steel cables whit mounting accessory set
- Florão de encastrar . Recessed ceiling cup

**B** S2 - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	Cod.
S2 - Suspension 3 point (1m) + ceiling cup	35.06.40.001635

- 3 cabos de aço 1,25 mm² com acessórios de fixação . Three 1,25 mm² steel cables whit mounting accessory set
- Florão saliente . Surface ceiling cup

**B** S3 - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	Cod.
S3 - Suspension 1 point (1m) + ceiling cup	35.06.40.001636

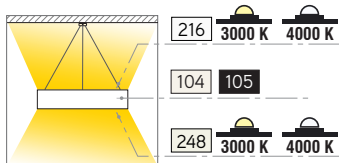
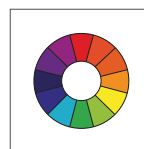
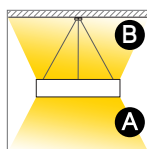
- 3 cabos de aço 1,25 mm² com acessórios de fixação . Three 1,25 mm² steel cables whit mounting accessory set
- Florão saliente . Surface ceiling cup



**descrição** description ·

- Luminária de aplicação suspensa com design minimalista e moderno;
- Desenvolvido com base na tecnologia LED com opção de cor Warm White (3000 K) ou Neutral White (4000 K);
- Corpo construído em alumínio com difusor em PMMA Microprismático (UGR<19);
- Disponível em três tamanhos de modo a poder a ser aplicada numa grande diversidade de espaços, desde zonas amplas de grande dimensão até zonas mais pequenas (ex: hall entrada);
- Em dois acabamentos padrão (branco e preto mate) ou personalizado na cor adequada a cada espaço (sob consulta);
- 3 tipos de suspensão disponíveis, permitindo a selecção da opção mais adequada a cada projecto – componente a encomendar à parte;

- *Trendy and minimalist design suspended mounted luminaire;*
- *Engineered around LED technology, available in light colours 3000 K (Warm White) and 4000 K (Neutral White);*
- *Aluminium housing with PMMA Microprismatic (UGR < 19);*
- *Three sizes are available to suit a multitude of environments, from large areas to smaller areas (example: entrance hall);*
- *Two standard finishes (matt white and matt black) or customized colour to suit each environment (on request);*
- *3 suspension types available allowing selection of the most suitable option for each project – component to be ordered separately;*

**pormenores** details ·

- Seleccionar o tipo de suspensão pretendido (luminária fornecida pronta a instalar) . *Select suspension type (luminaire supplied ready to install)*
- Disponível em versões LED dimáveis com fonte de alimentação DALI . *Dimmable LED versions with DALI power supply*
- **MULTICOLOR** - Outras cores sob consulta . *Other colours on request*
- Fonte de alimentação integrada na luminária . *Luminaire with integrated power supply*
- Limitação do encandeamento directo de acordo com UGR<19 na Astra de 43W . *Direct glare limitation in accordance with UGR < 19 on 43W Astra*

acabamento finishing ·

- 104 Branco mate RAL 9003 . *RAL 9003 matt White*
- 105 Preto mate RAL 9005 . *RAL 9005 matt Black*

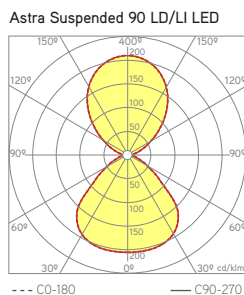
simbologia symbols ·



características do difusor
diffuser features ·

- 248** Difusor em PMMA Microprismático . *PMMA Microprismatic diffuser*
- 216** Acrílico frost clear 000 . *Frost clear 000 acrylic*

diagr. polar diagr. polar ·



	Dlor	Ulor
43W	66%	34%
63W		
77W	73%	27%
116W		
128W	79%	21%
196W		

características do LED
LED features ·

- 3000 K** 3000 K - Branco Quente . *Warm White - 172-183 lm/W tp=45°C* - Eficiência do LED . *LED efficiency*
- 4000 K** 4000 K - Branco Neutro . *Neutral White - 181-191 lm/W tp=45°C* - Eficiência do LED . *LED efficiency*

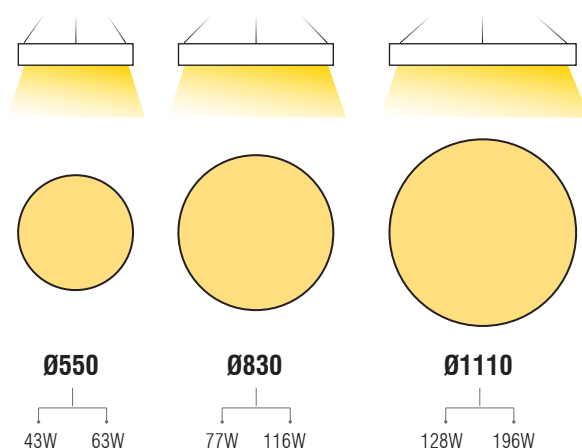
- **CRI > 80** - LED de elevada eficiência energética com índice de restituição cromática . *High efficacy LED colour rendering index*
- **MacAdams 3** - Estreita tolerância na variação de cor do LED . *Close tolerance on the LED colour variation*
- **50 000 horas** - Tempo vida útil . *Long lifetime*
- **L90** - Manutenção do fluxo luminoso do LED . *LED luminous flux maintenance*
- **F10** - Degradação ou mortalidade do LED . *LED degradation or mortality*
- **120°** - Ângulo de distribuição de luz do LED . *LED light distribution angle*

opções options ·

- ON/OFF** - Fonte de alimentação electrónica . *Electronic control gear*
- DALI** - Fonte de alimentação compatível com DALI . *DALI dimmable control gear*

tamanhos sizes ·

A ASTRA Suspended 90 LD/LI LED



exemplo . exemple Os componentes A e B são necessários para formar uma luminária completa. (luminária fornecida pronta para instalação).
A and B components are required to assemble one complete luminaire. (luminaire supplied ready to install).

B Tipos de Suspensão . Suspension Types

S1



- Suspensão 3 pontos com florão encastrar branco mate
- Matt white 3-point suspension with recessed ceiling cup

S2



- Suspensão 3 pontos com florão saliente branco mate
- Matt white 3-point suspension with surface ceiling cup

S3



- Suspensão 1 ponto com florão saliente branco mate
- Matt white single point suspension with surface ceiling cup



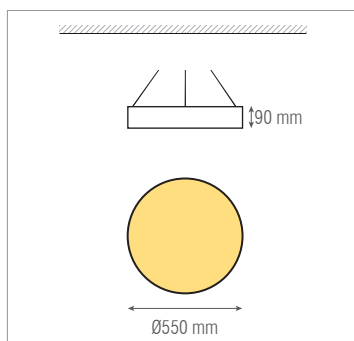
A ASTRA suspended 90 LD/LI LED



Encomenda . Order

A x1 **B** x1

Ø550mm



Warm White (3000 K)

A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000854	33.06.40.000872
Ø550	63W	LED	6,50	31,0	33.06.40.000855	33.06.40.000873



A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000866	33.06.40.000884
Ø550	63W	LED	6,50	31,0	33.06.40.000867	33.06.40.000885

Neutral White (4000 K)

A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . RAL 9003 matt white

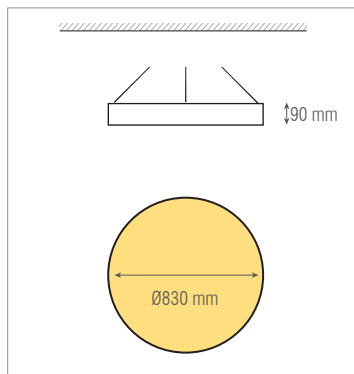
Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000890	33.06.40.000908
Ø550	63W	LED	6,50	31,0	33.06.40.000891	33.06.40.000909



A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . RAL 9005 matt Black

Ref.	W				ON/OFF	DALI
Ø550	43W	LED	6,50	31,0	33.06.40.000902	33.06.40.000920
Ø550	63W	LED	6,50	31,0	33.06.40.000903	33.06.40.000921

Ø830mm


A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000856	33.06.40.000874
Ø830	116W	LED	13,0	77,0	33.06.40.000857	33.06.40.000875


A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000868	33.06.40.000886
Ø830	116W	LED	13,0	77,0	33.06.40.000869	33.06.40.000887

Neutral White (4000 K)

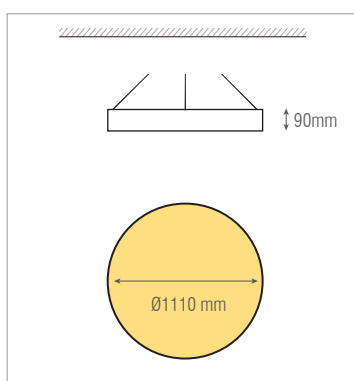
A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000892	33.06.40.000910
Ø830	116W	LED	13,0	77,0	33.06.40.000893	33.06.40.000911


A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø830	77W	LED	13,0	77,0	33.06.40.000904	33.06.40.000922
Ø830	116W	LED	13,0	77,0	33.06.40.000905	33.06.40.000923

Ø1110mm



Warm White (3000 K)

A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø1110	128W	LED	17,7	114,5	33.06.40.000858	33.06.40.000876
Ø1110	196W	LED	17,7	114,5	33.06.40.000859	33.06.40.000877


A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø1110	139W	LED	17,7	114,5	33.06.40.000870	33.06.40.000888
Ø1110	185W	LED	17,7	114,5	33.06.40.000871	33.06.40.000889

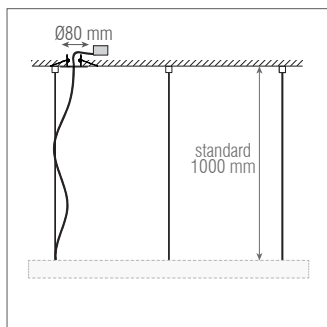
Neutral White (4000 K)

A Astra Suspended LD/LI - 104 Branco mate RAL 9003 . *RAL 9003 matt white*

Ref.	W				ON/OFF	DALI
Ø1110	128W	LED	17,7	114,5	33.06.40.000894	33.06.40.000912
Ø1110	196W	LED	17,7	114,5	33.06.40.000895	33.06.40.000913

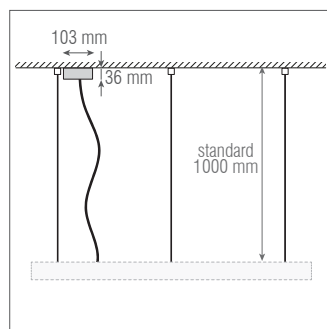

A Astra Suspended LD/LI - 105 Preto mate RAL 9005 . *RAL 9005 matt Black*

Ref.	W				ON/OFF	DALI
Ø1110	128W	LED	17,7	114,5	33.06.40.000906	33.06.40.000924
Ø1110	196W	LED	17,7	114,5	33.06.40.000907	33.06.40.000925

tipos de suspensão
suspension types ·**B** S1 - 104 Branco mate RAL 9003 . RAL 9003 matt white

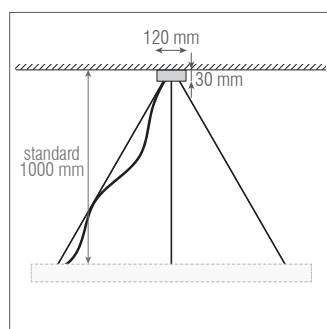
Ref.	Cod.
S1 - Suspension 3 point (1m)	35.06.40.001634

- 3 cabos de aço 1,25 mm² com acessórios de fixação . Three 1,25 mm² steel cables whit mounting accessory set
- Florão de encastrar . Recessed ceiling cup

**B** S2 - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	Cod.
S2 - Suspension 3 point (1m) + ceiling cup	35.06.40.001635













- 3 cabos de aço 1,25 mm² com acessórios de fixação . Three 1,25 mm² steel cables whit mounting accessory set
- Florão saliente . Surface ceiling cup

**B** S3 - 104 Branco mate RAL 9003 . RAL 9003 matt white

Ref.	Cod.
S3 - Suspension 1 point (1m) + ceiling cup	35.06.40.001636

- 3 cabos de aço 1,25 mm² com acessórios de fixação . Three 1,25 mm² steel cables whit mounting accessory set
- Florão saliente . Surface ceiling cup



	Saliente tecto <i>Ceiling surface</i>		Aplique parede <i>Wall surface</i>		Saliente chão <i>Floor surface</i>		De canto <i>Corner mounted</i>
	Encastrado tecto <i>Ceiling recessed</i>		Encastrado parede <i>Wall recessed</i>		Encastrado chão <i>Floor recessed</i>		De pé <i>Floor standing</i>
	Trimless tecto <i>Ceiling trimless</i>		Trimless parede <i>Wall trimless</i>		Suspenso tecto <i>Ceiling suspended</i>		De mesa <i>Table standing</i>



Lâmpada não incluída. *Lamp not included.*



Lâmpada incluída. *Lamp included.*



Marca de conformidade com as Normas Europeias do Comité Europeu de Normalização Electrotécnica (CENELEC), aplicável a todo o material eléctrico certificado pela CERTIF no âmbito do acordo CCA do CENELEC. *Reference symbol of compliance with the European Norms of the European Electrotechnical Standardization Committee (CENELEC) applied to every electrical material certified by CERTIF in accordance with the CCA of the CENELEC.*



ENEC - Marca comum europeia concedida no âmbito do Acordo ENEC, aplicável a todo o tipo de luminárias em conformidade com as normas da série EN 60 598. Marca reconhecida em todos os países subscritores do referido acordo. 04 - Numeração atribuída a Portugal. *ENEC - European common reference symbol granted in accordance with the ENEC Agreement, applicable to every type of luminaire within the Standards of the EN 60 598 series. Reference symbol recognized in all the countries that subscribed the referred agreement. 04 -Number assigned to Portugal.*



Produto projectado e fabricado em conformidade com a directiva comunitária 2004 / 108 / CE relativa à Compatibilidade Electromagnética e com a directiva comunitária 2006 / 95 / CE para equipamentos de Baixa Tensão. *Product designed and manufactured in accordance with the Council Directive 2004 / 108 / CE concerning the Electromagnetic Compatibility and the Council Directive 2006 / 95 / CE for Low-Tension equipment.*



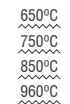
Esta luminária não pode ser coberta com material isolante ou análogo. *Luminaire not suitable for covering with thermally insulating material.*



Fonte luminosa LED. *LED light source.*



Classe I - Isolamento principal e protecção por ligação à terra prevista nas partes metálicas acessíveis. *Class I - All the exposed metal parts are connected to one another and to the protective earth conductor.*



O ensaio é efectuado utilizando um fio de Ni-Cr incandescente aquecido a 650°C, 750°C, 850°C ou 960°C. *The test is made using nickel-chromium flow-wire heated to 650°C, 750°C, 850°C or 960°C.*



Classe II - Com isolamento principal e isolamento suplementar, mas sem meio de protecção por ligação à terra. *Class II - The luminaire is insulated in such a way that there are no exposed metal parts that can carry current. There is no protective earth conductor.*



Luminária protegida contra o arremesso de bolas, de acordo com especificado na norma DIN VDE 0710 part 13/05.81. *Luminaire safe to ball throwing in accordance with DIN VDE 0710 part 13/05.81 standard.*



Classe III - Previsto para alimentação em muita baixa tensão de segurança ($\leq 50V$). *Class III - Appliance designed to be supplied from a safety extra-low voltage power source.*



Dimensão do corte no tecto para encastrar luminária (tolerância em mm). *Cut-out dimension for recessed luminaires (tolerance in mm).*



Casquilho / Suporte de lâmpada. *Lamp holder.*



Adaptável aos módulos standard dos tectos falsos. *Adaptable to the standard modules of the false ceilings.*



Peso unitário aproximado sem embalagem (em Kg). *Unit approximate weight without package (specified in Kg).*



O prefixo IP seguido de dois algarismos, indica a "resistência" oferecida pelo aparelho à penetração de corpos sólidos e líquidos, sendo que o primeiro algarismo identifica a protecção à entrada de elementos sólidos e o segundo aos líquidos. *The IP prefix followed by two figures indicates the "resistance" offered by the device to solid bodies and liquids penetration, the first figure being representative of the protection to solid bodies penetration and the second to liquids.*



Volume unitário com embalagem (em dm³). *Unit approximate volume with package. Specified in dm³.*



Dimensões em mm. *Dimensions in mm.*



Índice Resistência Mecânica - Grau de resistência dos invólucros das luminárias a impactos mecânicos externos, definidos pela norma EN 62262. *Mechanical Resistance Classes - Resistance degree of the luminaires envelope against external mechanical impacts, defined by EN 62262 standards.*



Distância mínima dos objectos iluminados (em metros). *Minimum distance between the lit object and the luminaire (in metres).*