aqualux LIGHTING

Neon Flex

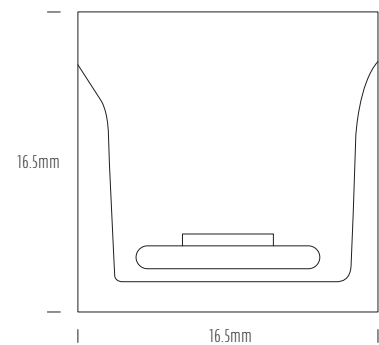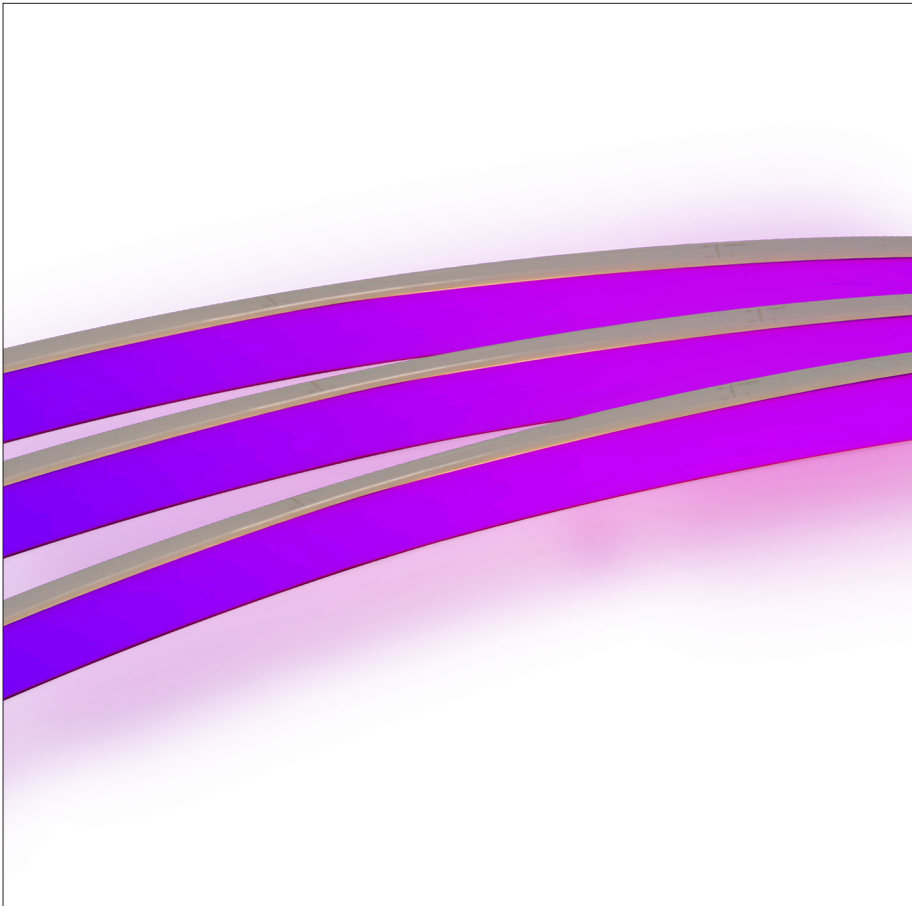|								
IP68 INGRESS PROTECTION	3y YEARS WARRANTY	SALTWATER RESISTANT	SOLVENT RESISTANT	ULTRA VIOLET PROTECTION	3s STEP MACADAM	YES VERTICAL BENDING	LM80 LUMEN MAINTENANCE	24V DC OBSERVE POLARITY

16.5mm

16.5mm

Product	AQS-510-DMX
Voltage	24V DC
Watts (per Meter)	18W
IP Rating	IP68
Lumen Output (per Meter)	TBA
CCT & Colour Options	2700K / R / G / B
Working Mode	DMX (RS485)
Max Length (Single Power Feed)	8m
Max Length (Double Power Feed)	16m
Cut Interval	100mm
Bend Direction	Vertically
Minimum Bend Diameter	120mm
LED Type	SMD5050
LED Qty / M	70pcs
Lumen Maintenance	70,000 Hours L70@ 25°C, 50,000 Hours L70@ 50°C
Materials	Eco PVC
Emission Angle	120°
Operating Temperature	-20° to +40°C
Installation Temperature	5° to +35°C
Warranty	3 Year Aqualux Warranty

Production Tolerances

The AQS-500 series Neon Flex product is manufactured in a continuous extrusion process and then manually terminated with IP68 overmolded cable entry points. Production tolerances need to be accounted for during site preparation.

< 1M ±5mm

< 5M Length ±10mm

< 10M Length ±15mm

< 20M ± 20mm

Refer to installation guide when planning your project.

For wiring diagrams please refer to the aqualux website: www.aqualux.com.au / Support / Downloads / Wiring Diagrams

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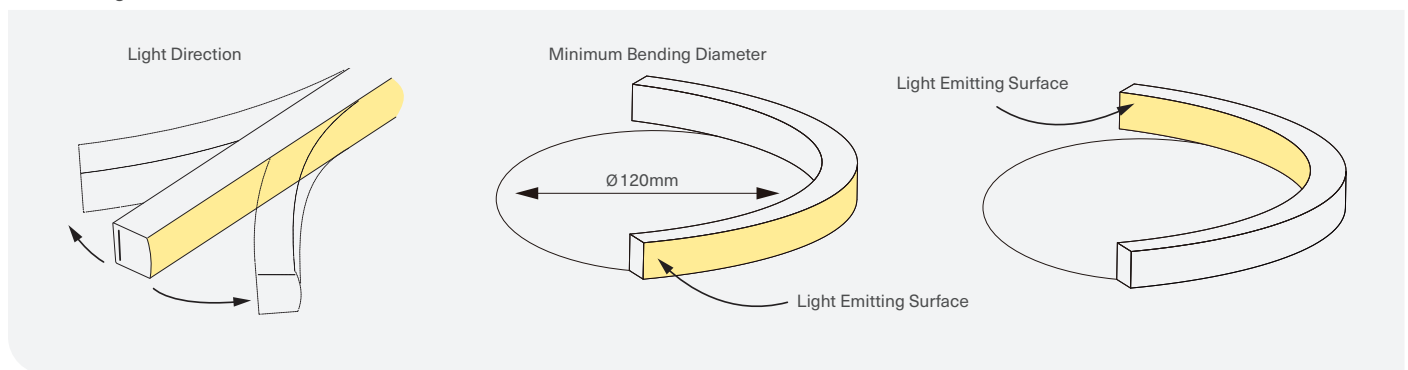## sales@aqualux.com.au

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Neon Flex

Variations

Product Code	CCT Kelvin			Voltage Direct Current	Watts Meter	Lumens Meter	Min Run Single End	Max Run Double End
AQS-510-Z6A18		RGB	2700k	24V DC	18W	TBC	10m	20m

Bending Directions

Light Direction

Minimum Bending Diameter

Ø120mm

Light Emitting Surface

Light Emitting Surface

Light Emitting Surface

DMX Cable Length Limits

Without AMP = Total Length = 50m

With Single AMP = Total Length = 100m

With Twin AMP = Total Length = 200m
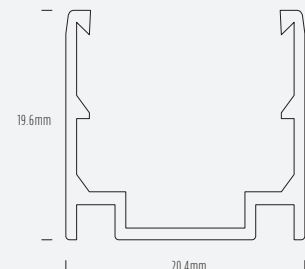
Extrusions and Clips

AQS-510-ACC-AL-01 / 1m AL Extrusion

AQS-510-ACC-AL-02 / 2m AL Extrusion

AQS-510-ACC-AL-03 / 1m PC Extrusion

AQS-510-ACC-SS-01 / 1m stainless steel flexible mounting channel

AQS-510-ACC-02 / 5cm Mounting Clip for Anti Drop for Upside down

19.6mm

20.4mm

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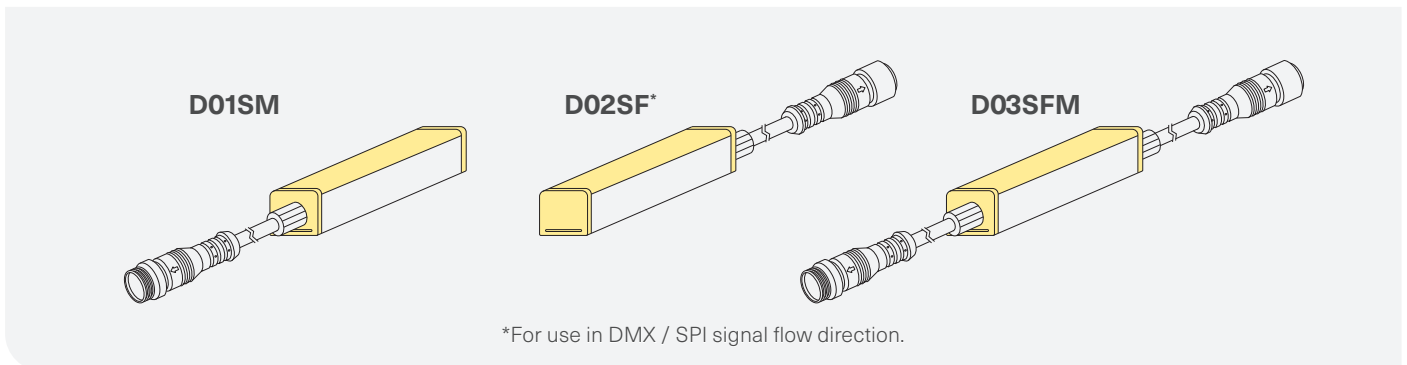sales@aqualux.com.au

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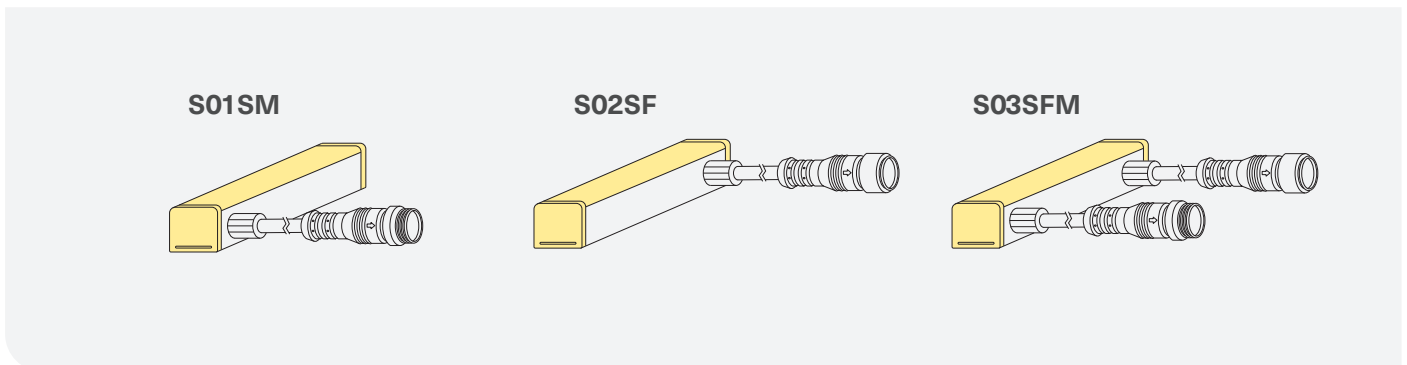
Quick Connect Cable Entry Options

- Integrated non-removeable anti-siphon device

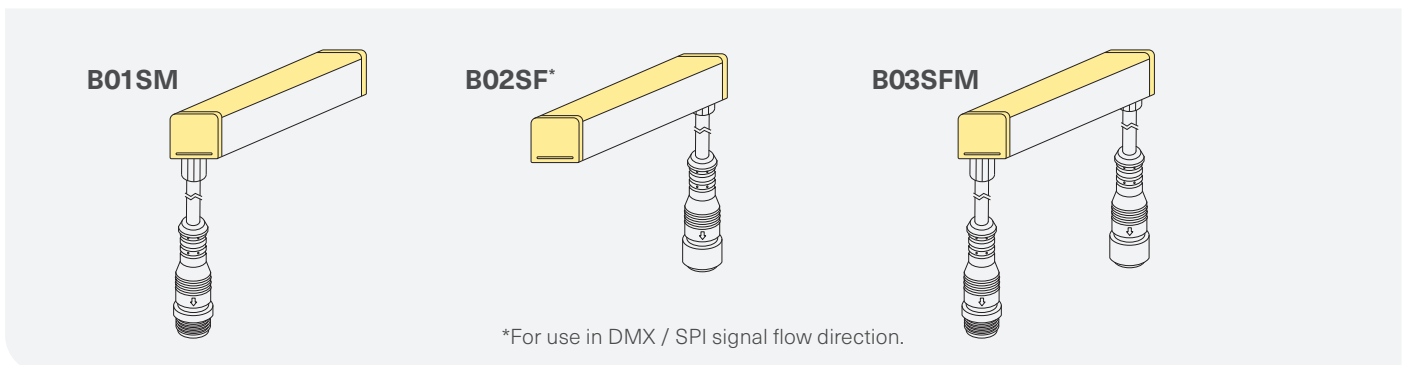- IP68 factory assembly only

- Injection Moulded Connectors

Direct Cable Entry

D01SM

D02SF*

D03SFM

*For use in DMX / SPI signal flow direction.

Side Cable Entry

S01SM

S02SF

S03SFM

Bottom Cable Entry

B01SM

B02SF*

B03SFM

*For use in DMX / SPI signal flow direction.

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Quick Connector Dimensions

Direct Cable Entry

Ø 9.8mm

18mm

47.8mm

3mm

(a) / Ø 6mm   9.0mm

(a) = Minimum length of 6 - 8mm

Side Cable Entry

18mm

3mm   Ø 9.8mm

20mm   9mm   (a) / Ø 6mm

(a) = Minimum length of 6 - 8mm

Bottom Cable Entry

16.5mm

18mm

9mm

(a) / Ø 6mm

3mm
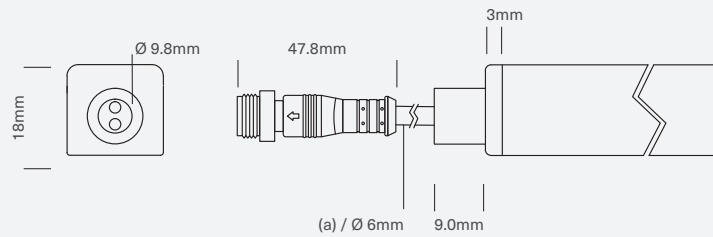
Ø 9.8mm
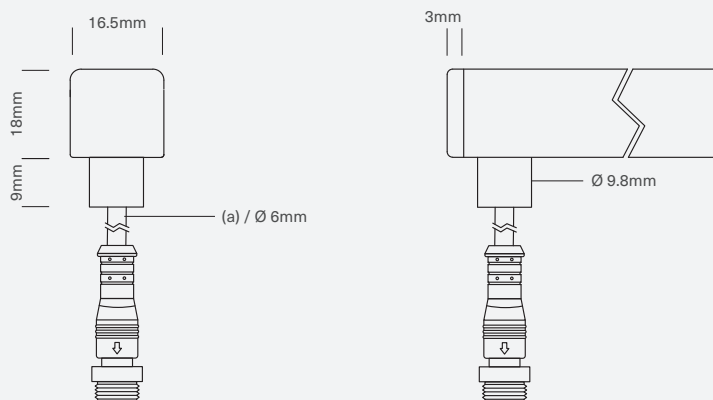
(a) = Minimum length of 6 - 8mm

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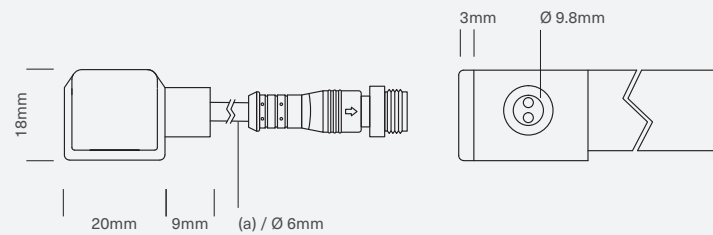All specifications subject to change. Copyright © 2020.   18/12/20   **4**

Neon Flex

Extrusion and End Cap allowances

Assembly Notes

Quick Connector Output

Quick Connectors

— Ø6mm

Standard Cable
length 100mm —

Crimp —

Overmolded
cable entry

AQS-510

AQS-510

Extrusion

Extrusion

50mm

Allow gap in extrusion
to fit cable output ends

Quick Connector Output

Quick Connectors

— Ø6mm

Standard Cable
length 100mm —

Crimp —

Overmolded
cable entry

AQS-510

Extrusion

25mm

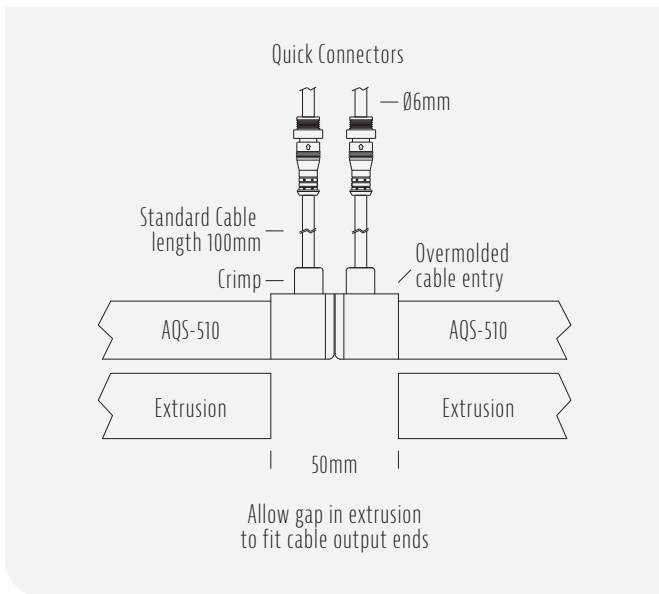Allow for extrusion to fit
with cable output ends

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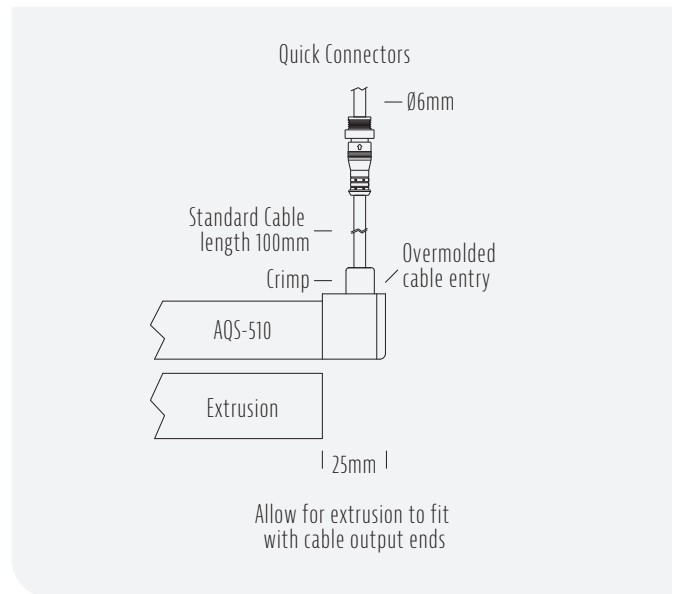All specifications subject to change. Copyright © 2020.   18/12/20   **5**

Neon Flex

AQS Family Reference Table

Product	Type	IP Rating	LED Options	Size mm	Power/m	Application
AQS-170	Cob Strip	IP20	Mono	10mm	10W DC	Internal / Profile required
AQS-260	Classic	IP65	Mono	10mm	12W AC / 15W DC	External / Profile required
AQS-400	Neon Flex	IP65	Mono	10 x 9	5W DC / 10W DC	External / No profile required
AQS-401	Neon Flex	IP65	Mono	10 x 10	10W DC	External / No profile required
AQS-410	Neon Flex	IP65	RGB	13 x 12	10W DC	External / No profile required
AQS-420	Neon Flex	IP65	Mono / RGBW	12 x 20	10W / 15W	External / No profile required
AQS-500	Neon Flex	IP68	Mono / RGB / RGBW / DMX	11.5 x 21	5W / 8W / 12W /18W	External / Submerged / No profile
AQS-505	Neon Flex	IP68	Mono	13.5 x 13.5	10W	External / Submerged / No profile
AQS-510	Neon Flex	IP68	Mono / RGB / RGBW / DMX	16.5 x 16.5	10W / 13W / 17W / 18W	External / Submerged / No profile

Extension Wire Recommendations

Maximum extension wire length according to light power

Watts	22AWG 0.34mm²	20AWG 0.53mm²	18AWG 0.82mm²	17AWG 1.04mm²	16AWG 1.38mm²	14AWG 2.07mm²	12AWG 3.29mm²	10AWG 5.62mm²
10W	36m	60m	100m	120m	140m	240m	400m	600m
20W	18m	30m	50m	60m	70m	120m	200m	300m
30W	12m	20m	30m	38m	45m	80m	130m	200m
40W	8m	15m	22m	28m	35m	60m	95m	140m
50W	6m	12m	18m	22m	28m	48m	75m	105m
60W	5m	10m	15m	18m	22m	36m	60m	88m
70W	-	8m	12m	14m	18m	30m	50m	72m
80W	-	6m	10m	11m	14m	24m	40m	58m
90W	-	4m	7m	8m	10m	18m	30m	45m
100W	-	-	5m	6m	7m	12m	22m	32m
110W	-	-	3m	4m	5m	8m	15m	22m
120W	-	-	2m	2.5m	3m	0m	8m	12m

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