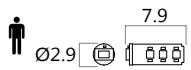
Series Information

UNIT:±0.2mm

	B164Axx	B164Bxx	B209xx	B311xx	B363xx	B441xx	B441Bxx	B104xx
Image sensor	1/11" CMOS Color	1/11" CMOS Color	1/9" CMOS Color	1/6" CMOS Color	1/5" CMOS Color	1/4" CMOS Color	1/4.1" CMOS Color	2/3" CMOS Color
Pixel size(μm)	1.116 x 1.116	1.12 x 1.12	1.4 x 1.4	1.4 x 1.4	1.12 x 1.12	3 x 3	3 x 3	4.75 x 4.75
Image area	1.44634 x 0.91066	1.43 x 0.81	1.819 x 1.033	2.7288 x 1.5498	2.9 x 2.18	3.84 x 2.16	3.84 x 2.16	9.12 x 5.13
Resolution	1 MP	1 MP	1 MP	2 MP	5 MP	1 MP	1 MP	2 MP
Shutter	Rolling	Rolling	Rolling	Rolling	Rolling	Rolling	Global	Rolling
Seneitivity	4500 e-/(Lux-sec)	TBD	585 mV/(Lux-sec)	553 mV/(Lux-sec)	3.6V/lux-sec	4300 mV/lux-sec	TBD	9900 mV/lux-sec
SNR	36.8 dB	TBD	36.4 dB	38.3 dB	37 dB	37 dB	38 dB	40.2 dB
Dynamic range	72.2dB @16x gain	TBD	68.4dB @16x gain	73.3 dB @ 15.5x gain	64.7 dB	72 dB	71.4 dB	74.8 dB

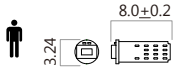
B164Axx series

B164A03

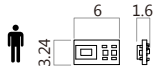


B164Bxx series

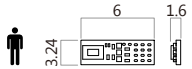
B164B03



BL164B03

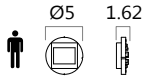


BL164B03S

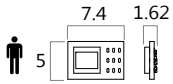


B363xx series

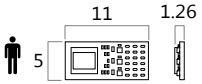
B36305



BL36305

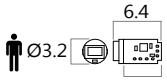


BL36305S

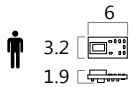


B209xx series

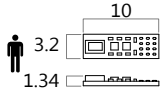
B20903



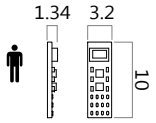
BL20903



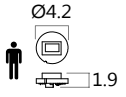
BL20903S



B20903U

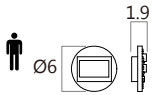


B20904R



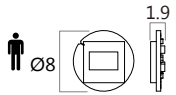
B441xx series

B44106R

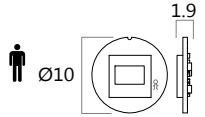


B441Bxx series

B441B08R

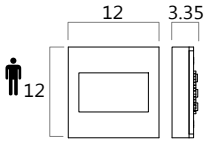


B441B10R



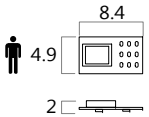
B104xx series

B10412

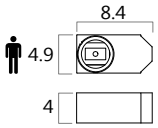


B311xx series

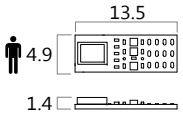
B31105



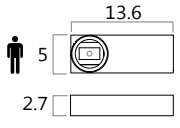
SL31105



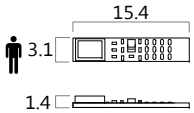
BL31105S



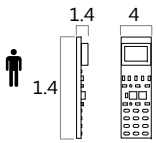
SL31105S



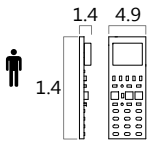
SL31103



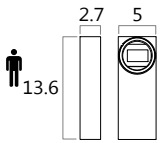
B31104U



B31105U



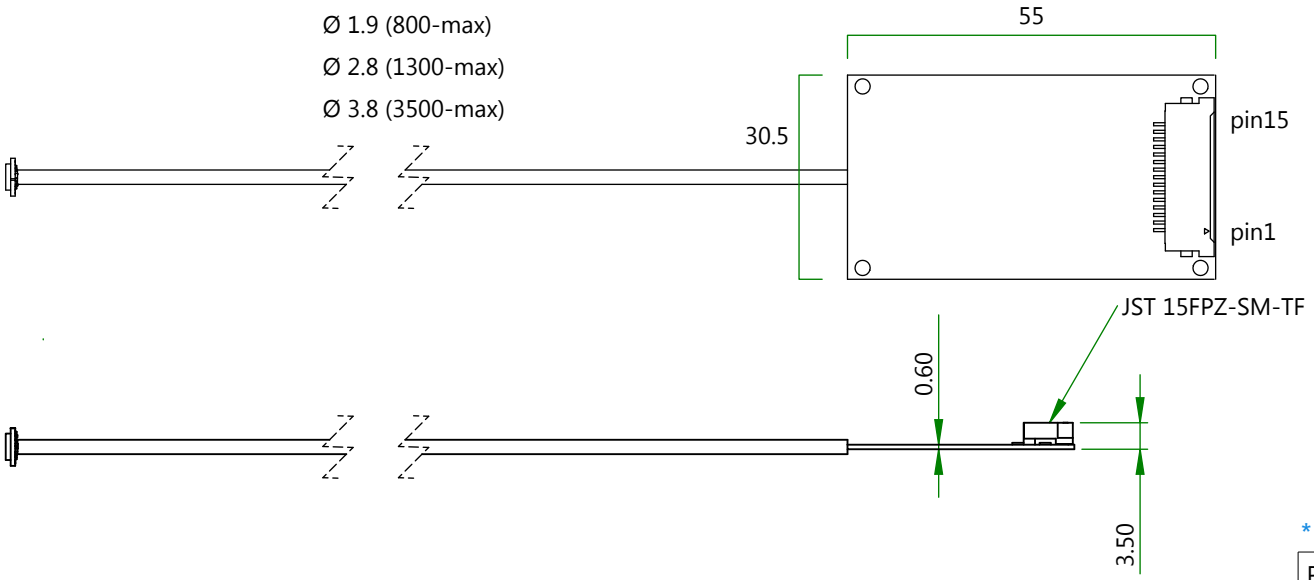
S31105U



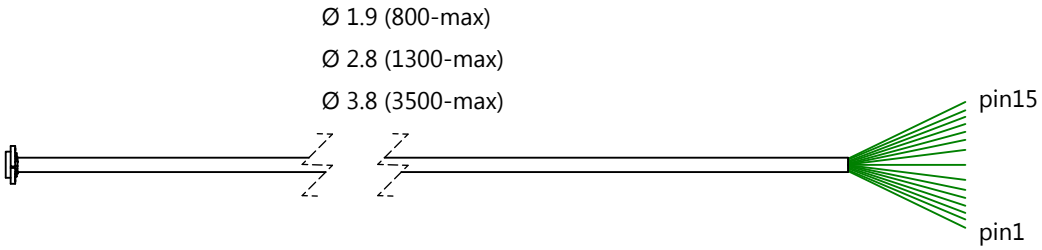
B31105

B31106R

Type 1



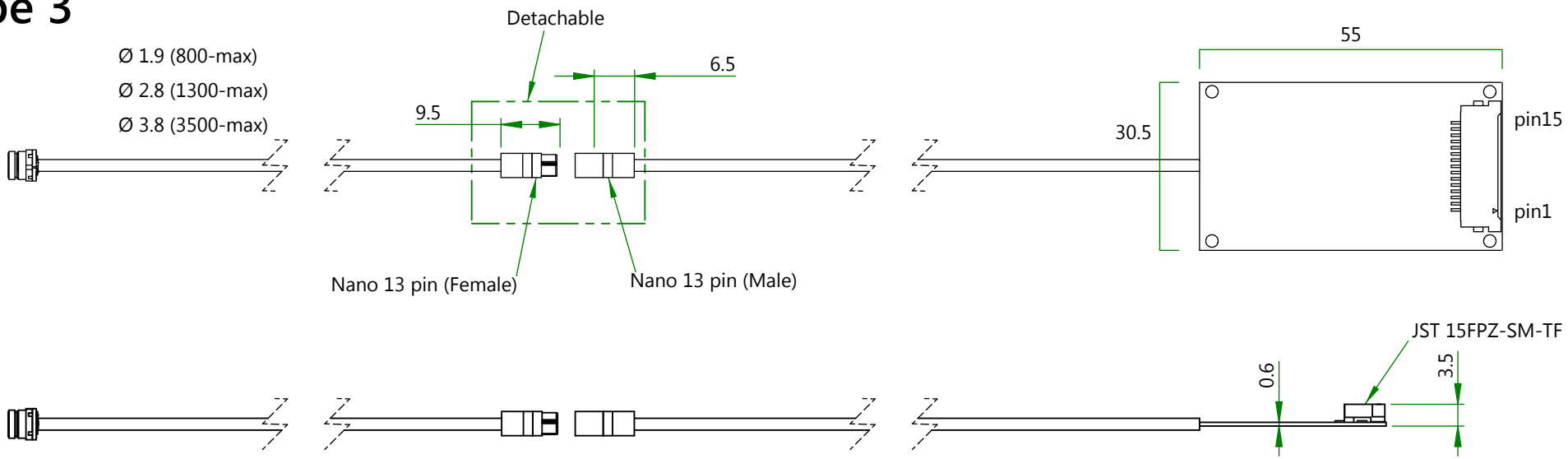
Type 2



*** B164Axx / B164Bxx / B209xx / B441xx without pin 5 and pin 6**

PIN	Name	Description
1	GND	Ground
2	MDN0	MIPI data negative output
3	MDP0	MIPI data positive output
4	GND	Ground
5	MDN1	MIPI data negative output
6	MDP1	MIPI data positive output
7	GND	Ground
8	MCN	MIPI clock negative output
9	MCP	MIPI clock positive output
10	GND	Ground
11	RST	Reset and power down (active low)
12	MCLK	System clock input
13	SCL	Serial interface clock
14	SDA	Serial interface data
15	+3.3V	Power supply +3.3V

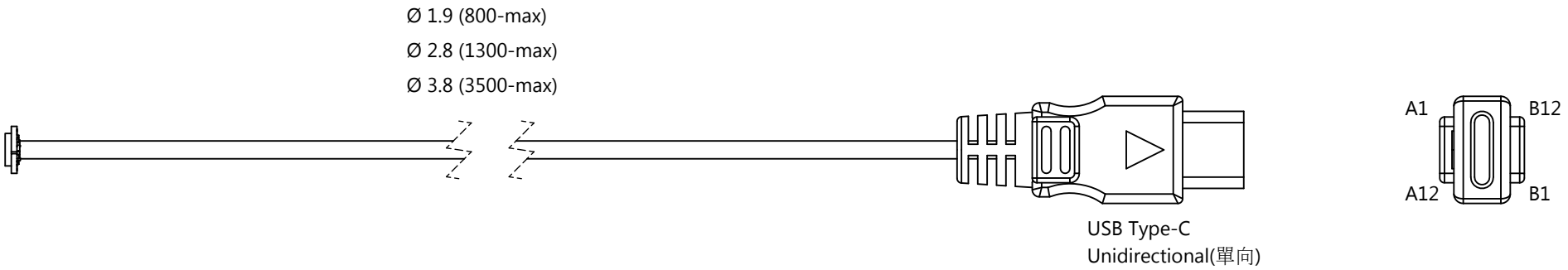
Type 3



* B164Axx / B164Bxx / B209xx / B441xx **without pin 5 and pin 6**

PIN	Name	Description
1	GND	Ground
2	MDN0	MIPI data negative output
3	MDP0	MIPI data positive output
4	GND	Ground
5	MDN1	MIPI data negative output
6	MDP1	MIPI data positive output
7	GND	Ground
8	MCN	MIPI clock negative output
9	MCP	MIPI clock positive output
10	GND	Ground
11	RST	Reset and power down (active low)
12	MCLK	System clock input
13	SCL	Serial interface clock
14	SDA	Serial interface data
15	+3.3V	Power supply +3.3V

Type 4

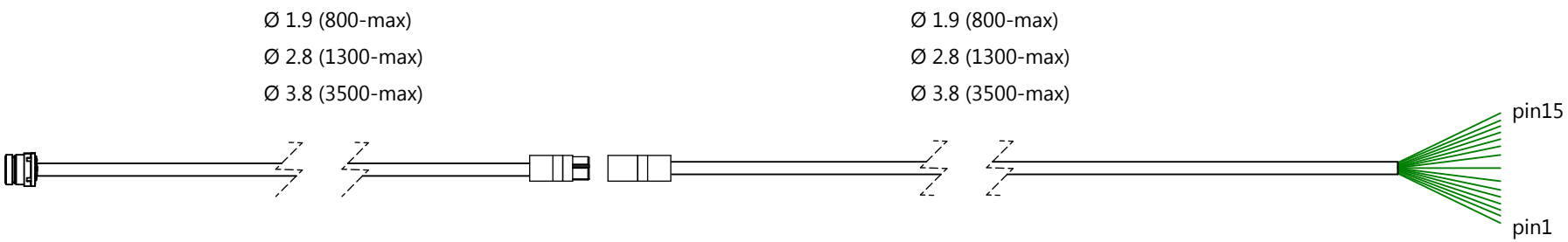


* B164Axx / B164Bxx / B209xx / B441xx **without pin 6 (A6) and pin 7 (A7)**

PIN	Name	Description
A1	GND	Ground
A2	MDN0	MIPI data negative output
A3	MDP0	MIPI data positive output
A4	+3.3V	Power supply +3.3V
A5		
A6	MCN	MIPI clock negative output
A7	MCP	MIPI clock positive output
A8		
A9	+3.3V	Power supply +3.3V
A10	MCLK	System clock input
A11	RST	Reset and power down (active low)
A12	GND	Ground

PIN	Name	Description
B12	GND	Ground
B11	MDN0	MIPI data negative output
B10	MDP0	MIPI data positive output
B9	+3.3V	Power supply +3.3V
B8		
B7	SCL	Serial interface clock
B6	SDA	Serial interface data
B5		
B4	+3.3V	Power supply +3.3V
B3	LED	Power supply +3.3V
B2		
B1	GND	Ground

Type 5



*** B164Axx / B164Bxx / B209xx / B441xx without pin 5 and pin 6**

PIN	Name	Description
1	GND	Ground
2	MDN0	MIPI data negative output
3	MDP0	MIPI data positive output
4	GND	Ground
5	MDN1	MIPI data negative output
6	MDP1	MIPI data positive output
7	GND	Ground
8	MCN	MIPI clock negative output
9	MCP	MIPI clock positive output
10	GND	Ground
11	RST	Reset and power down (active low)
12	MCLK	System clock input
13	SCL	Serial interface clock
14	SDA	Serial interface data
15	+3.3V	Power supply +3.3V