

INTE AUTO

PRODUCT CATALOGUE
Unipole & Multipole Connectors



1. INTE-AUTO Company Introduction



INTE-AUTO, registered in 2013, is a company based in Shenzhen China engaged in the design, research, and manufacture of precision push pull connectors, waterproof connectors, coaxial connectors, D-tap connectors, watertight aviation connector, custom cable assemblies and over molded cable assembly.

Our mission goes beyond supplying connectors. The ultimate goal is to consistently provide top-notch, secure, cost-effective, durable products, one-stop shop connectors and customized service for our esteemed clients worldwide.

Our high-quality connectors feature the reliable push pull self-latching connection system and are designed to endure the most extreme environments. These connectors are widely used in a large variety of applications such as for medical, testing, measurement, military, sensor, NDT, and other machines and equipment.

INTE-AUTO has over 10,000 products, all of which are manufactured under the strictest quality standards. Our connectors are fully compatible with the push pull connectors of other top brands, and commit to the Quality Management System.

Our facilities span over 5000 square meters, containing 23 production lines with 25 CNC working machines. Our mechanized work system improves efficiency, guarantees high quality, and controls production costs to comply with military and medical standards.

INTE-AUTO is RoHS, CE, ISO9001, and TUV certified. We are actively shaping the future of our company with creativity, imagination, and innovation to continually exceed the expectations of all our valued customers around the world.

Contents Table

1. INTE-AUTO Company Introduction.....	2
2. INT-B Series Push Pull Connectors.....	6
Push-Pull Self-Latching Connection System.....	7
B Series Connectors with the Following Main Features.....	8
Technical Characteristics.....	8
Part Numbering System.....	9
Part Section Showing Internal Components.....	9
Product Size.....	10
Cable Collet Size.....	16
Alignment Key and Polarized Keys.....	17
3. INT-K Series Waterproof Connectors.....	18
Push-Pull Self-Latching Connection System.....	19
K Series Connectors Provide the Following Main Features.....	20
Technical Characteristics.....	20
Part Numbering System.....	21
Part Section Showing Internal Components.....	21
Product Size.....	22
Cable Collet Size.....	24
Alignment Key and Polarized Key.....	25
INT-B and INT-K Series Multipole Layout.....	26
4. INTE-AUTO F Series Circular Connectors.....	31
Push-Pull Self-Latching Connection System.....	32
F Series Circular Connectors with the Following Main Features.....	32
Technical Characteristics.....	32
Part Section Showing Internal Components:.....	33
Part Numbering System.....	33
Product Size.....	34
Cable Collet Size.....	37
Code Options.....	39
INT-F Series Multipole Layout.....	39
5. INTE-AUTO S Series Half-Moon Type Circular Connectors:.....	42
Push-Pull Self-Latching Connection System.....	43

S Series Half-Moon Connectors with the Following Main Features.....	44
Technical Characteristics.....	44
Part Numbering System.....	45
Part Section Showing Internal Components.....	45
Product Size.....	46
Cable Collet Size.....	48
INT-S Series Multipole Layout.....	48
6. INT-S & E Series Coaxial Connector.....	50
Push-Pull Self-Latching Connection System.....	51
Coaxial Connector with the Following Main Features.....	52
Technical Characteristics.....	52
Part Numbering System.....	53
Part Section Showing Internal Components.....	53
Product Size.....	54
Cable Collet Size.....	59
Coaxial Connector Unipole Layout.....	60
7. INT-P Series Plastic Connectors.....	61
Push-Pull Self-Latching Connection System.....	62
P Series Plastic Connectors with the Following Main Features.....	63
Technical Characteristics.....	63
Part Numbering System.....	64
Part Section Showing Internal Components.....	64
Product Size.....	65
Alignment Key and Polarized Keying System.....	70
Collet Nut Code.....	71
Bend Relief Code.....	71
Bend Relief Size.....	72
Cable Collet Size.....	72
INT-P Series Multipole Layout.....	73
P Series Panel Holes Dimension.....	76
Panel Cut-out for Straight PCB Contacts.....	76
Panel Cut-out for 90° Elbow Contacts.....	77
8. INT-B & K Series Hybrid Connector.....	79
Hybrid Fluidic Connector with the Following Main Features.....	79

Part Numbering System.....	80
Product Size.....	81
Hybrid Coaxial Connector with the Following Main Features.....	82
Part Numbering System.....	83
Product Size.....	84
9. INT-HR10 Series Miniature Camera Connector.....	86
HR10 Series Connector with the Following Main Features.....	86
Part Numbering System.....	86
Technical Characteristics.....	86
Product Size.....	87
Panel Holes Dimension for Fixed Receptacle.....	88
PCB Drilling Pattern.....	88
10. INT-BP Series Fluidic Connector.....	89
Metal Fluidic Connector with the Following Main Features.....	89
Technical Specifications.....	89
Product Size.....	90
Plastic Fluidic Connector with the Following Main Features.....	91
Technical Specifications.....	91
Product Size.....	92
11. Accessories.....	93
Dust Cap for Plug.....	93
Dust Cap for Receptacle.....	93
Bend Relief.....	94
Housings, Contacts, Contact Variants.....	95
12. Panel Cut-outs.....	96
B Series.....	96
K Series.....	96
S Series.....	97
13. PCB Drilling Pattern.....	98
Fixed Receptacle with Straight Print Contact (B-K Series).....	98
Length of Straight Print Contacts (For Receptacle).....	99
Fixed Receptacle with Elbow Print Contact (B-K Series).....	100
14. Customized Cable Assembly.....	102

2. INT-B Series Push Pull Connectors

Plug:

Straight Plug



INT-TGG



INT-TGG(Z)



INT-TGG.00



INT-TEG



INT-TFG



INT-TNG



INT-TAG



INT-TVG

Right Angle Plug



INT-THG



INT-THG(Z)

Receptacle:

Fixed Panel Mount Receptacle



INT-ZGG



INT-ZCG



INT-ZEG



INT-ZHG



INT-ZNG



INT-ZCG
(Elbow Contact)



INT-ZEG
(Elbow contact)

Vacuum-tight Receptacle



INT-MEG



INT-MGG



INT-MHG

Cable Mount Receptacle



INT-DHG



INT-DHG(Z)

Elbow Receptacle



INT-ZGP

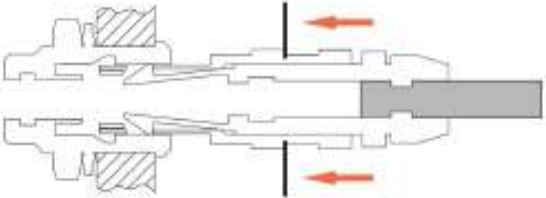
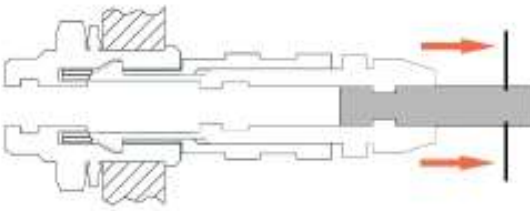
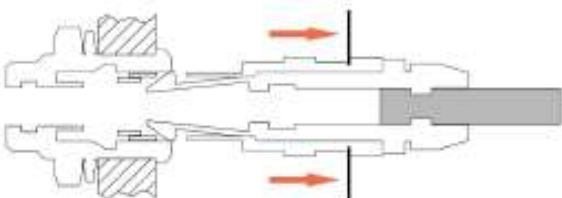


INT-ZXG

2. INT-B Series Push Pull Connectors

Push-Pull Self-Latching Connection System



Drawing	Specification
	<p>Engaging</p> <p>The self-latching system allows the connector to be mated by simply pushing the plug into the receptacle.</p>
	<p>Latched</p> <p>Once firmly latched, the connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.</p>
	<p>Disengaging</p> <p>When required, the connector is disengaged by a single axial pull on the outer release sleeve. This first disengages the latches and then withdraws the plug from the socket.</p>

2. INT-B Series Push Pull Connectors

B Series Connectors with the Following Main Features

1. Secure push-pull self-latching system design
2. Multiple key options for aligned and blind mating
3. Keying system available (alpha=0/30/45/60/80/145/155)
4. 360° screening for full EMC shielding
5. Multipole types 2 to 32 contacts
6. Supply size 00B, 0B, 1B, 2B, 3B, 4B series
7. Solder contact, PCB contacts (straight or elbow)
8. Crimp contact can be customized
9. High-density configurations for blind mating even in tight spaces
10. Available customized cable assembly solution

Technical Characteristics

Mechanical and Climatrical

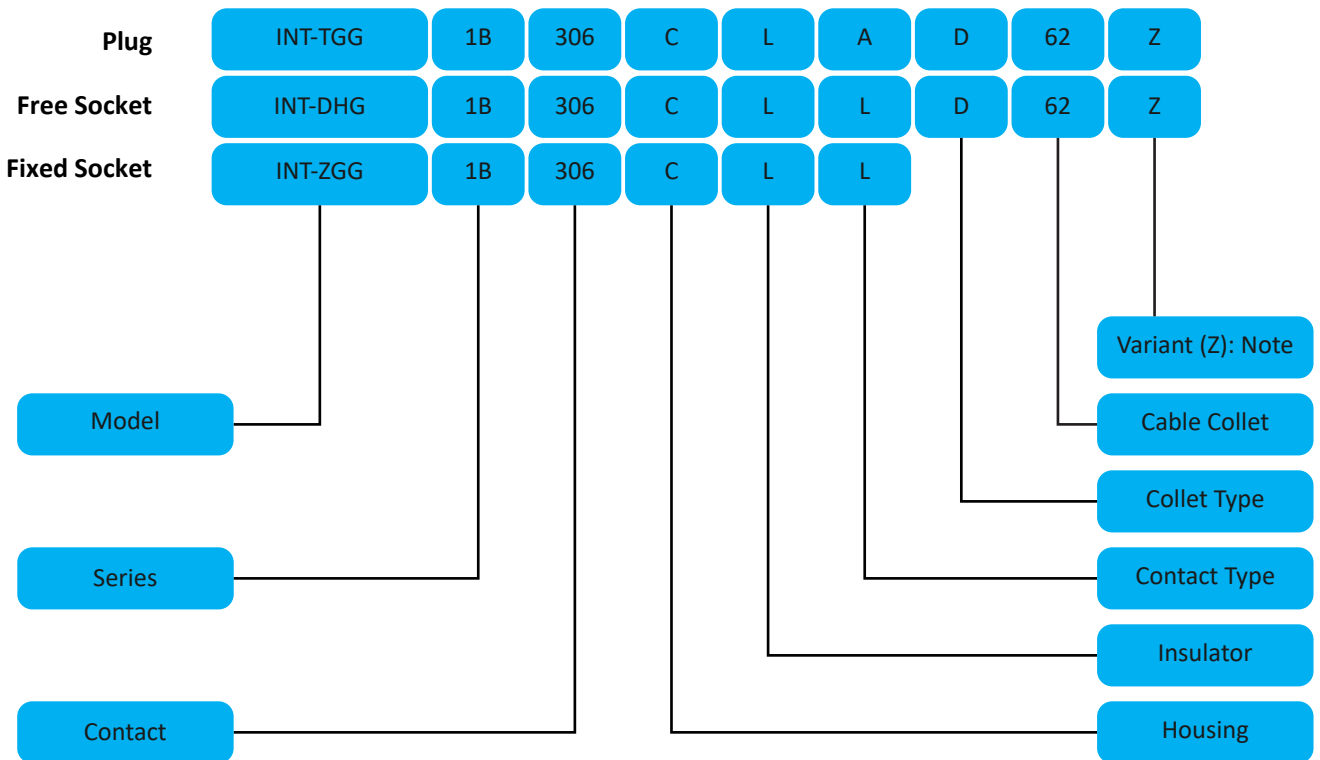
Characteristics	Value	Standard
Endurance	>6000 cycles	IEC 60512-5 test 9a
Humidity	Up to 95% at 60°C	
Temperature Range	-40°C, +250°C	
Resistance to Vibration	10-2000Hz, 15g	IEC 60512-4 test 6d
Shock Resistance	100g, 6ms	IEC 60512-4 test 6c
Salt Spray Corrosion Test	>144h	IEC 60512-6 test 11f
Protection Index (mated)	IP 50	IEC 60529

Electrical

Characteristics		Value	Standard
Shielding Efficiency	at 10 MHz	>75 dB	IEC 60619-1-3
	at 1 GHz	>40 dB	IEC 60619-1-3

2. INT-B Series Push Pull Connectors

Part Numbering System



INT13-TGG.1B.306.CLAD62 = 1B 6 pins straight plug, G key (alpha=0), pearl chrome plated brass housing, PPS insulator, male soldering contact type, 6.0 mm cable collet, nut for fitting bend relief

INT13-DHG.1B.306.CLLD62Z = 1B 6 pins free receptacle, G key (alpha=0), pearl chrome plated brass housing, PPS insulator, female soldering contact type, 6.0 mm cable collet, nut for fitting bend relief

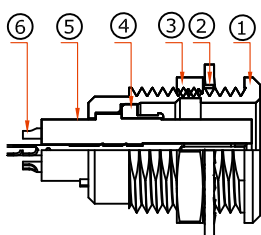
INT13-ZGG.1B.306.CLL = 1B 6 pins panel mounted socket, G key (alpha=0), pearl chrome plated brass housing, PPS insulator, female soldering contact type, nut fixed.

*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position.

Part Section Showing Internal Components

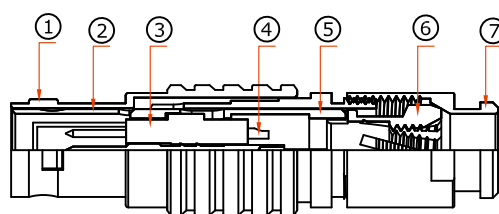
Fixed Receptacle

- ① Outer Shell
- ② Retaining Ring
- ③ Hexagonal Nut
- ④ Locking Washer
- ⑤ Insulator
- ⑥ Female Contact



Straight Plug

- ① Outer Shell
- ② Latch Sleeve
- ③ Insulator
- ④ Male Contact
- ⑤ Split Insert Carrier
- ⑥ Collet
- ⑦ Collet Nut

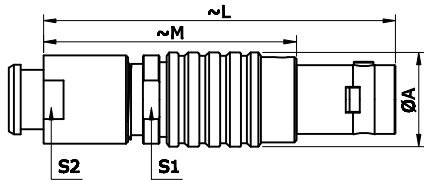


2. INT-B Series Push Pull Connectors

Product Size

INT-TGG(Z)

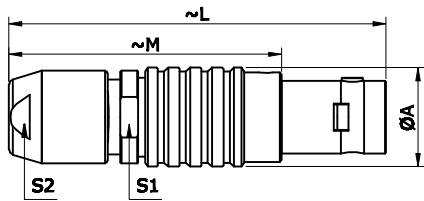
Cable mount straight plug, key (G) or keys (A...M), cable collet and nut for fitting a bend relief



Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
INT-TGG(Z)	00	6.4	28.5	20	5.5	6.0
INT-TGG(Z)	0B	9.5	35.0	25.0	8.0	8.0
INT-TGG(Z)	1B	12.0	42.0	31.0	10.0	9.0
INT-TGG(Z)	2B	15.0	49.0	37.0	13.0	12.0
INT-TGG(Z)	3B	18.0	58.5	43.5	15.0	15.0

INT-TGG

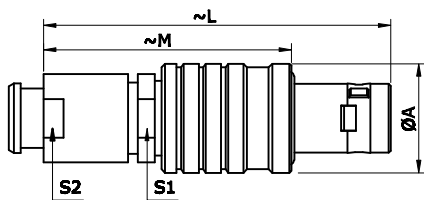
Cable mount straight plug, key (G) or keys (A...M), cable collet



Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
INT-TGG	00	6.4	28.5	20.5	5.5	5.0
INT-TGG	0B	9.5	36.0	26.0	8.0	7.0
INT-TGG	1B	12.0	43.0	32.0	10.0	9.0
INT-TGG	2B	15.0	50.0	38.0	13.0	12.0
INT-TGG	3B	18.0	58.0	43.0	15.0	14.0

INT-TEG

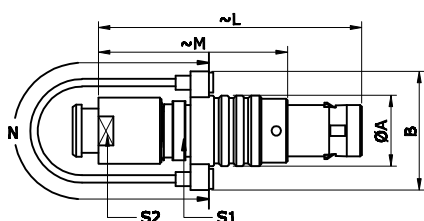
Cable mount straight plug, front sealed, key (G) or keys (A...M), cable collet and nut for fitting a bend relief



Reference		Dimensions (mm)				
Model	Series	A	L	M	S1	S2
INT-TEG	0B	11.0	35.0	20.0	8.0	8.0
INT-TEG	1B	13.5	42.0	33.0	10.0	9.0
INT-TEG	2B	16.5	48.0	36.0	13.0	12.0
INT-TEG	3B	19.0	56.0	41.5	15.0	15.0

INT-TNG

Cable mount straight plug, key (G) or keys (A...M), cable collet and lanyard release

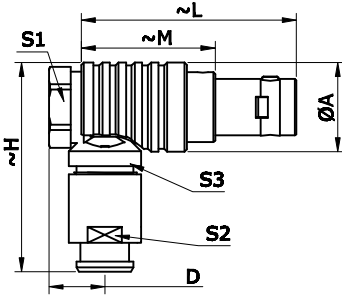


Reference		Dimensions (mm)						
Model	Series	A	B	L	M	N	S1	S2
INT-TNG	0B	9.5	15.95	34.62	24.3	140	8.0	8.0
INT-TNG	1B	12.0	18.0	43.0	32.0	140	10.0	9.0
INT-TNG	2B	15.0	21.0	49.0	37.0	160	13.0	12.0
INT-TNG	3B	18.0	25.0	58.0	43.0	190	15.0	14.0

2. INT-B Series Push Pull Connectors

INT-THG

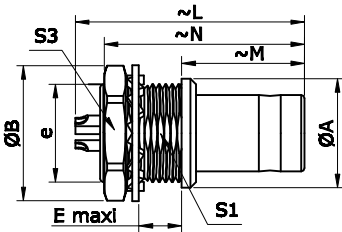
Cable mounted elbow plug, 90°, key (G) or keys (A...M), cable collet



Reference		Dimensions (mm)							
Model	Series	A	D	H	L	M	S1	S2	S3
INT-THG	0B	11.0	6.5	23.5	26.5	16.5	10.0	7.0	8.0
INT-THG	1B	13.5	8.0	30.5	36.0	25.0	11.0	9.0	10.0
INT-THG	2B	16.5	9.0	40.0	37.7	25.6	14.0	12.0	13.0
INT-THG	3B	19.0	10.0	37.0	50.0	35.0	17.0	14.0	14.0

INT-TAG

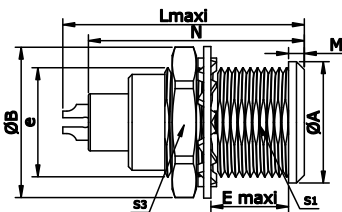
Panel mount fixed plug, non-latching, nut fixing, key (G) or keys (A...M)



Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
INT-TAG	0B	10.0	12.4	M9*0.6	4.2	20.8	11.5	18.9	8.2	11.0
INT-TAG	1B	14.0	15.8	M12*1.0	5.4	25.2	12.5	21.6	10.5	14.0
INT-TAG	2B	18.0	19.2	M15*1.0	6.0	28.7	13.8	23.9	13.5	17.0
INT-TAG	3B	22.0	25.0	M18*1.0	5.8	32.1	17.0	30.2	16.5	22.0

INT-ZGG

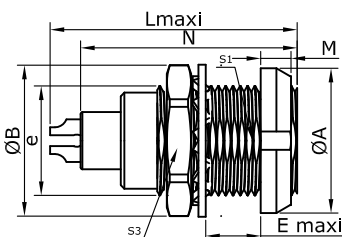
Panel mount fixed receptacle, nut fixing, key (G) or keys (A...M)



Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
INT-ZGG	00B	8.0	10.2	M7*0.5	6.0	15.5	1.0	13.7	6.3	9.0
INT-ZGG	0B	10.0	12.4	M9*0.6	7.0	20.7	1.2	19.1	8.2	11.0
INT-ZGG	1B	14.0	15.8	M12*1.0	7.5	23.0	1.5	21.1	10.5	14.0
INT-ZGG	2B	18.0	19.2	M15*1.0	8.5	26.7	1.8	24.6	13.5	17.0
INT-ZGG	3B	21.8	25.0	M18*1.0	11.5	37.1	2.0	24.6	16.5	22.0

INT-ZCG

Panel mount receptacle with two screw nuts, key (G) or keys (A...M), back panel mounting

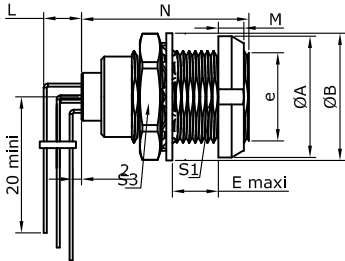


Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
INT-ZCG	00B	10.0	10.2	M7*0.5	4.3	13.7	2.5	13.7	6.3	9.0
INT-ZCG	0B	12.0	12.4	M9*0.6	5.5	20.7	2.5	16.4	8.2	11.0
INT-ZCG	1B	16.0	15.8	M12*1.0	6.0	23.0	3.5	19.8	10.5	14.0
INT-ZCG	2B	20.0	19.2	M15*1.0	6.5	26.7	3.5	20.2	13.5	17.0
INT-ZCG	3B	24.0	25.0	M18*1.0	9.0	37.7	4.5	25.8	16.5	22.0

2. INT-B Series Push Pull Connectors

INT-ZCG.CLV

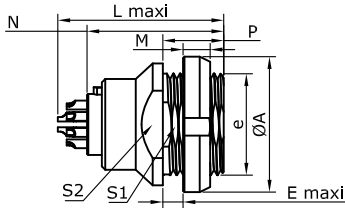
Panel mount fixed receptacle with two screw nuts, key (G) or keys (A...M), elbow 90° contact for printed circuit



Reference		Dimensions (mm)								
Model	Series	A	B	e	E	M	N	S1	S3	
INT-ZCG.CLV	0B	12.0	12.4	M9*0.6	5.5	2.5	18.3	8.2	11.0	
INT-ZCG.CLV	1B	16.0	15.8	M12*1.0	6.0	3.5	20.3	10.5	14.0	
INT-ZCG.CLV	2B	20.0	19.2	M15*1.0	6.5	3.5	22.3	13.5	17.0	
INT-ZCG.CLV	3B	24.0	25.0	M18*1.0	9.0	4.5	25.8	16.5	22.0	

INT-ZEG

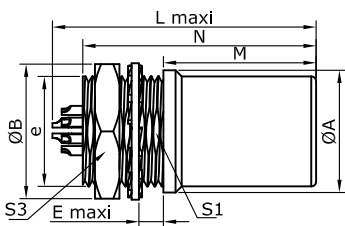
Panel mount fixed receptacle, nut fixing, key (G) or keys (A...M), back panel mounting



Reference		Dimensions (mm)									
Model	Series	A	B	e	E	L	M	N	P	S1	S3
INT-ZEG	00B	10.0	9.5	M7*0.5	2.3	15.5	2.5	13.7	6.0	6.3	7.5
INT-ZEG	0B	12.0	12.5	M9*0.6	2.4	20.7	2.5	19.1	6.3	8.2	9.0
INT-ZEG	1B	16.0	16.0	M12*1.0	6.5	23.0	3.5	21.1	11.0	10.5	13.0
INT-ZEG	2B	20.0	20.0	M15*1.0	3.0	26.7	3.5	24.6	9.0	13.5	15.0

INT-ZHG

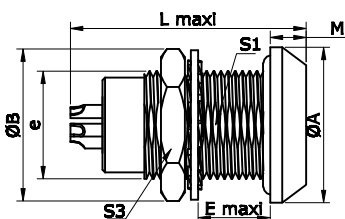
Panel mount fixed receptacle, nut fixing, key (G) or keys (A...M) and protruding shell



Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
INT-ZHG	0B	10.0	12.4	M9*0.6	2.0	19.5	12.5	19.1	8.2	11.0
INT-ZHG	1B	14.0	15.8	M12*1.0	4.0	21.7	12.0	21.1	10.5	14.0
INT-ZHG	2B	18.0	19.2	M15*1.0	5.1	22.7	12.5	24.6	13.5	17.0

INT-MGG

Panel mount sealed fixed receptacle, nut fixing, key (G) or keys (A...M)

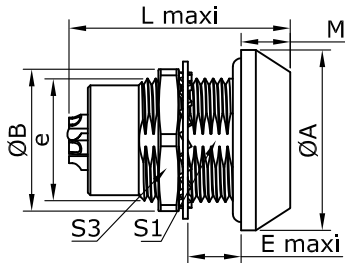


Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	S1	S3	
INT-MGG	0B	13.0	12.4	M9*0.6	7.0	21.5	3.0	8.2	11.0	
INT-MGG	1B	18.0	15.8	M12*1.0	7.0	26.6	4.5	10.5	14.0	
INT-MGG	2B	20.0	19.2	M15*1.0	8.0	31.6	4.0	13.5	17.0	

2. INT-B Series Push Pull Connectors

INT-MHG

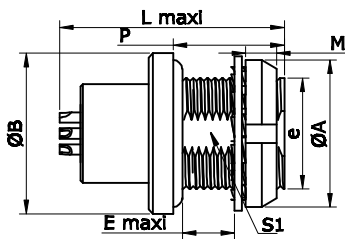
Panel mounted sealed fixed receptacle, nut fixing, key (G) or keys (A...M)



Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
INT-MHG	0B	13.0	12.4	M9*0.6	7.0	23.2	4.8	8.2	11.0
INT-MHG	1B	18.0	15.8	M12*1.0	7.0	30.3	5.2	10.5	14.0
INT-MHG	2B	20.0	19.2	M15*1.0	8.0	35.6	6.0	13.5	17.0

INT-MEG

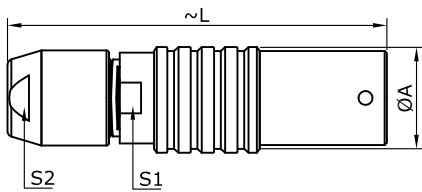
Panel mounted sealed fixed receptacle, nut fixing, key (G) or keys (A...M), back panel mounting



Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	P	S1	S3
INT-MEG	0B	12.0	13.0	M9*0.6	2.5	20.2	2.5	9.0	8.2	-
INT-MEG	1B	16.0	18.0	M12*1.0	5.5	26.6	3.5	11.0	10.5	-
INT-MEG	2B	20.0	20.0	M15*1.0	6.5	31.6	3.5	9.6	13.5	15.0

INT-DHG

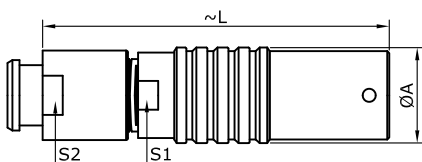
Cable mount receptacle, key (G) or keys (A...M), cable collet



Reference		Dimensions (mm)			
Model	Series	A	L	S1	S2
INT-DHG	0B	9.5	35.5	8.0	7.0
INT-DHG	1B	12.5	40.5	10.0	9.0
INT-DHG	2B	16.5	47.0	13.0	12.0
INT-DHG	3B	19.0	56.0	15.0	14.0

INT-DHG(Z)

Cable mount receptacle, key (G) or keys (A...M), cable collet and nut for fitting a bend relief

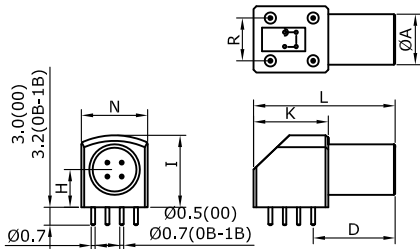


Reference		Dimensions (mm)			
Model	Series	A	L	S1	S2
INT-DHG(Z)	0B	9.5	35.5	8.0	8.0
INT-DHG(Z)	1B	12.5	40.5	10.0	9.0
INT-DHG(Z)	2B	16.5	47.0	13.0	12.0
INT-DHG(Z)	3B	19.0	56.0	15.0	14.0

2. INT-B Series Push Pull Connectors

INT-ZPG

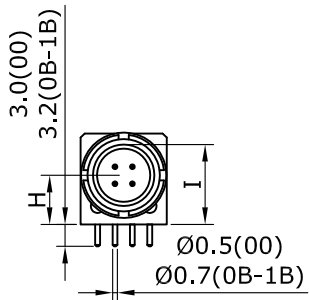
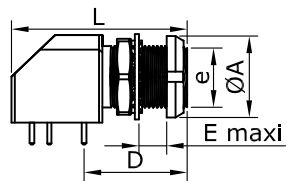
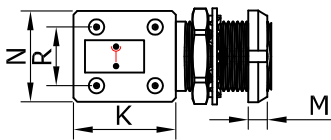
Elbow (90°) receptacle for printed circuit, key (G) or keys (A..F) (solder or screw fixing)



Reference	Dimensions (mm)							
Model	A	D	H	I	K	L	N	R
INT-ZPG.0B.302.HLN	9.0	14.6	6.7	12.6	13.3	25.0	11.7	7.62
INT-ZPG.0B.303.HLN								
INT-ZPG.0B.304.HLN								
INT-ZPG.0B.305.HLN								
INT-ZPG.0B.306.HLN								
INT-ZPG.0B.307.HLN								
INT-ZPG.1B.302.HLN								
INT-ZPG.1B.303.HLN	11.0	16.6	7.5	14.0	13.3	27.0	12.6	7.62
INT-ZPG.1B.304.HLN								
INT-ZPG.1B.305.HLN								
INT-ZPG.1B.306.HLN								
INT-ZPG.1B.307.HLN								
INT-ZPG.1B.308.HLN								
INT-ZPG.1B.310.HLN								

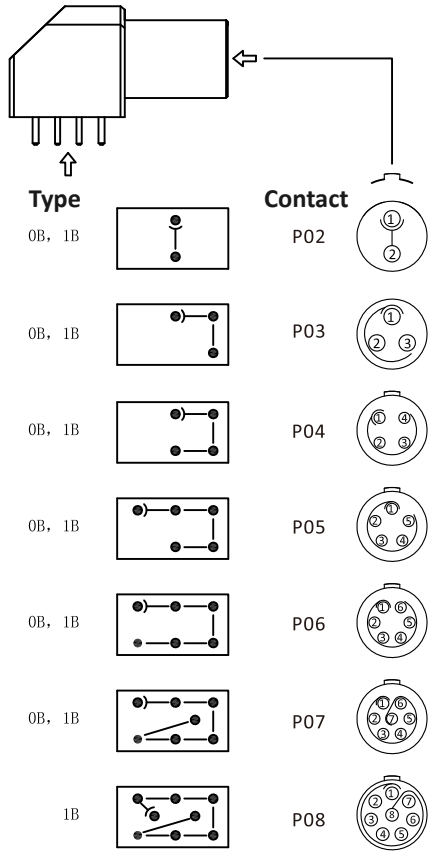
INT-ZXG

Elbow (90°) receptacle for printed circuit, key (G) or keys (A..F) (solder or screw fixing) back panel mounting



Reference	Dimensions (mm)												
Model	A	B	D	e	E	H	I	K	L	M	N	R	S3
INT-ZXG.0B.302.HLN	12.0	12.4	14.6	M9*0.6	6	6.7	12.6	13.3	25	2.5	11.7	7.62	11
INT-ZXG.0B.303.HLN													
INT-ZXG.0B.304.HLN													
INT-ZXG.0B.305.HLN													
INT-ZXG.0B.306.HLN													
INT-ZXG.0B.307.HLN													
INT-ZXG.1B.302.HLN													
INT-ZXG.1B.303.HLN													
INT-ZXG.1B.304.HLN													
INT-ZXG.1B.305.HLN													
INT-ZXG.1B.306.HLN													
INT-ZXG.1B.307.HLN													
INT-ZXG.1B.308.HLN													
INT-ZXG.1B.310.HLN													

2. INT-B Series Push Pull Connectors

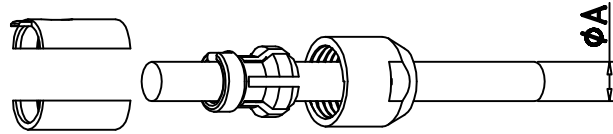


Electrical

Model	Shell Size	Contact No.	Test voltage (contact-contact) K/V rms	Test voltage (contact-shell) K/V rms	Rated Current (A)
INT-ZPG-ZXG	0B	302	1.45	1.20	4.5
INT-ZPG-ZXG	0B	303	1.70	1.60	4.5
INT-ZPG-ZXG	0B	304	1.30	1.10	4.5
INT-ZPG-ZXG	0B	305	1.25	1.20	4.5
INT-ZPG-ZXG	0B	306	1.25	1.20	2.5
INT-ZPG-ZXG	0B	307	1.00	1.20	2.0
INT-ZPG-ZXG	1B	302	1.70	1.45	4.5
INT-ZPG-ZXG	1B	303	1.60	1.85	4.5
INT-ZPG-ZXG	1B	304	1.70	1.80	4.5
INT-ZPG-ZXG	1B	305	1.30	1.55	4.5
INT-ZPG-ZXG	1B	306	1.35	1.45	4.5
INT-ZPG-ZXG	1B	307	1.45	1.45	2.0
INT-ZPG-ZXG	1B	308	1.30	1.30	2.0
INT-ZPG-ZXG	1B	310	1.00	1.00	1.50

2. INT-B Series Push Pull Connectors

Cable Collet Size



Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
00B-022	22	2.2	2.2	>1.4
00B-027	27	2.7	2.7	>2.2
00B-030	30	3.0	3.0	>2.5

Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
0B-021	21	2.1	2.2	>1.4
0B-032	32	3.2	3.2	>2.2
0B-042	42	4.2	4.2	>3.2
0B-052	52	5.2	5.2	>4.2
0B-056	56	5.6	5.6	>4.6

Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
1B-042	42	4.2	4.2	>3.2
1B-052	52	5.2	5.2	>4.2
1B-062	62	6.2	6.2	>5.2
1B-072	72	7.2	7.2	>6.2
1B-076	76	7.6	7.6	>6.5

Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
2B-042	42	4.2	4.2	>3.2
2B-052	52	5.2	5.2	>4.2
2B-062	62	6.2	6.2	>5.2
2B-072	72	7.2	7.2	>6.2
2B-082	82	8.2	8.2	>7.2
2B-092	92	9.2	9.2	>8.2
2B-099	99	9.9	9.9	>8.9

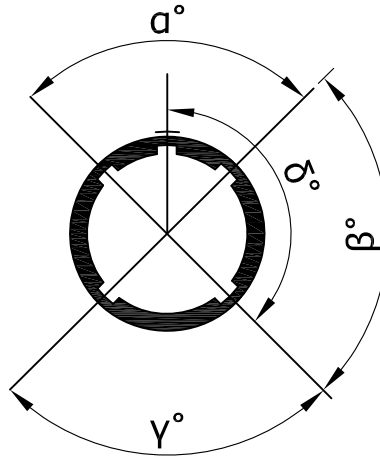
Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
3B-062	62	6.2	6.2	>4.9
3B-072	72	7.2	7.2	>6.2
3B-082	82	8.2	8.2	>7.1
3B-092	92	9.2	9.2	>7.7
3B-100	10	10.2	10.2	>9.2
3B-110	11	11.2	11.0	>10.2
3B-120	12	12.0	12	>11.1

2. INT-B Series Push Pull Connectors

Alignment Key and Polarized Key

INT-B series connector model types are composed of six letters.
The last letter indicated the key position and contact type (male or female).

Front View of Receptacle



Code	Keys No.	Angles	Series			Code	Keys No.	Angles	Series		Contact Type	
			00	0B	1B				2B	3B	Plug	Receptacle
G	1		0°	0°	0°	G	1		0°	0°	Male	Female
A	2	α	30°	30°	30°	A	2	α	30°	30°	Male	Female
B	2		60°	60°	60°	B	2		45°	45°	Male	Female
C	2		-	90°	90°	C	2		60°	60°	Male	Female
D	2	β	-	135°	135°	D	2	γ	95°	95°	Male	Female
E	2		-	145°	145°	E	2	β	120°	120°	Male	Female
F	2		-	155°	155°	F	2		145°	145°	Male	Female
J	2	γ	45°	45°	45°	J	2	α	37.5°	37.5°	Female	Male
K	2		-	70°	70°	K	2		52.5°	52.5°	Female	Male
L	2		-	80°	80°	L	2	γ	70°	70°	Female	Male
M	2	δ	-	110°	-	M	2	δ	-	-	Female	Male

3. INT-K Series Waterproof Connectors

Plug:



INT-TGG



INT-TGG(Z)

Receptacle:



INT-ZGG



INT-ZEG



INT-ZEG (elbow)



INT-DHG

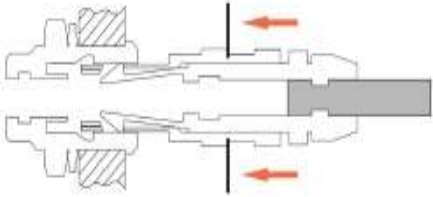
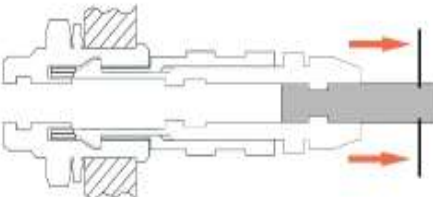
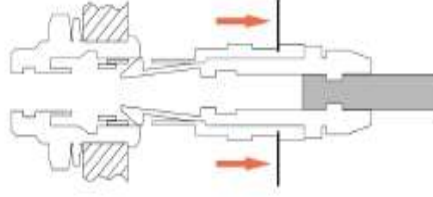


INT-DHG (Z)

3. INT-K Series Waterproof Connectors

Push-Pull Self-Latching Connection System



Drawing	Specification
	<p>Engaging</p> <p>The self-latching system allows the connector to be mated by simply pushing the plug into the receptacle.</p>
	<p>Latched</p> <p>Once firmly latched, the connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.</p>
	<p>Disengaging</p> <p>When required, the connector is disengaged by a single axial pull on the outer release sleeve. This first disengages the latches and then withdraws the plug from the socket.</p>

3. INT-K Series Waterproof Connectors

K Series Connectors with the Following Main Features

1. Security of the push-pull latching system
2. Watertight connection (IP 66~IP 68)
3. Multipole types 2 to 30 contacts
4. Solder, crimp or print (straight or elbow) contacts
5. Keying system («G» key standard) for connector alignment
6. Multiple key options to avoid cross mating of similar connectors
7. 360° screening for full EMC shielding
8. High packing density for space savings
9. Rugged housing for extreme working conditions
10. Available customized cable assembly solution

Technical Characteristics

Mechanical and Climatical

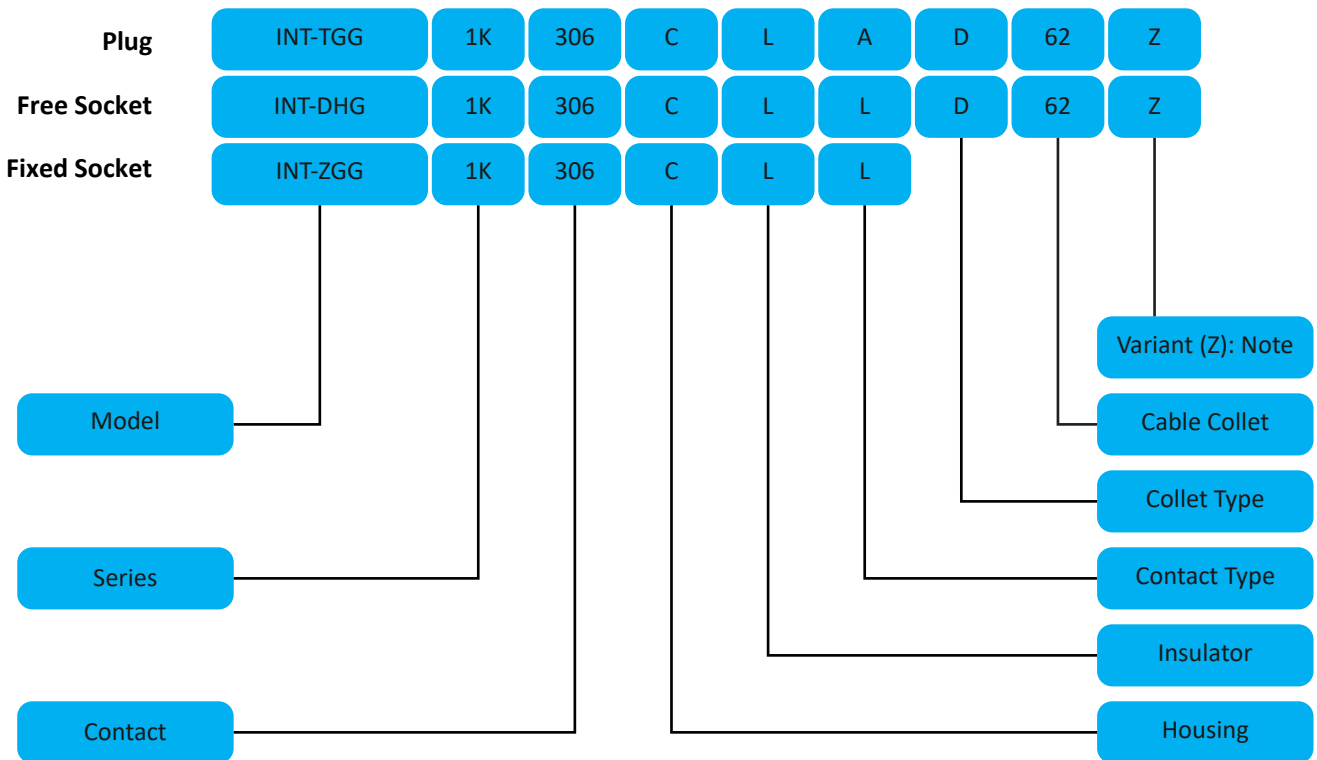
Characteristics	Value	Standard
Endurance	>6000 cycles	IEC 60512-5 test 9a
Humidity	Up to 95% at 60°C	
Temperature Range	-40°C, +250°C	
Resistance to Vibration	10-2000Hz, 15g	IEC 60512-4 test 6d
Shock Resistance	100g, 6ms	IEC 60512-4 test 6c
Salt Spray Corrosion Test	>144h	IEC 60512-6 test 11f
Protection Index (mated)	IP 68	IEC 60529
Climatical category	55/175/21	IEC 60068-1

Electrical

Characteristics		Value	Standard
Shielding Efficiency	at 10 MHz	>95 dB	IEC 60619-1-3
	at 1 GHz	>80 dB	IEC 60619-1-3

3. INT-K Series Waterproof Connectors

Part Numbering System



INT13-TGG.1K.306.CLAD62 = 1K 6 pins straight plug, G key (alpha=0), pearl chrome plated brass housing, PPS insulator, male soldering contact type, 6.2 mm cable collet

INT13-DHG.1K.306.CLLD62Z = 1K 6 pins free receptacle, G key (alpha=0), pearl chrome plated brass housing, PPS insulator, female soldering contact type, 6.2 mm cable collet, nut for fitting bend relief

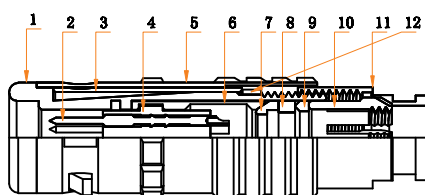
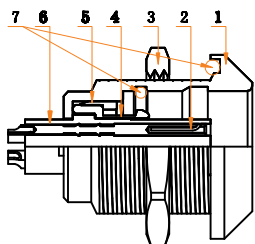
INT13-ZGG.1K.306.CLL = 1K 6 pins panel mounted socket, G key (alpha=0), pearl chrome plated brass housing, PPS insulator, female soldering contact type, nut fixed.

*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position.

Part Section Showing Internal Components

Fixed Receptacle

- ① Outer Shell
- ② Insulator
- ③ Hexagonal Nut
- ④ Retaining Ring
- ⑤ Earthing Crown
- ⑥ Female Contact
- ⑦ O-ring



Straight Plug

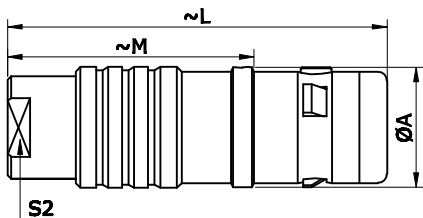
- ① Outer Shell
- ② Male Contact
- ③ Latch Sleeve
- ④ Insulator
- ⑤ Inner Shell
- ⑥ Split Insert Carrier
- ⑦ Earthing Cone
- ⑧ Gasket
- ⑨ Washer
- ⑩ Collet
- ⑪ Collet Nut
- ⑫ Retaining Ring

3. INT-K Series Waterproof Connectors

Product Size

INT-TGG

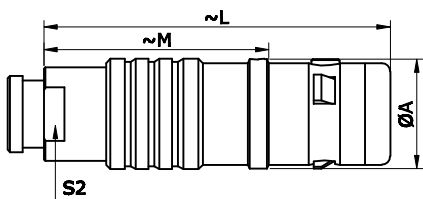
Waterproof cable mount straight plug, key (G) or keys (A... L), cable collet



Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
INT-TGG	0K	11.0	34.0	23.0	7.0
INT-TGG	1K	13.0	42.0	28.0	9.0
INT-TGG	2K	16.0	52.0	36.0	12.0
INT-TGG	3K	19.0	60.0	40.0	15.0

INT-TGG(Z)

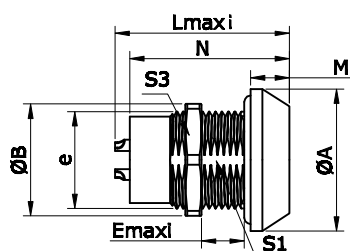
Waterproof cable mount straight plug, key (G) or keys (A... L), cable collet and nut for fitting a bend relief



Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
INT-TGG(Z)	0K	11.0	34.0	23.0	7.0
INT-TGG(Z)	1K	13.0	42.0	28.0	9.0
INT-TGG(Z)	2K	16.0	52.0	36.0	12.0
INT-TGG(Z)	3K	19.0	60.0	40.0	15.0

INT-ZGG

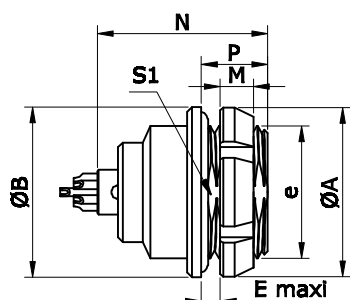
Panel mount fixed receptacle, nut fixing, key (G) or keys (A... L), solder or PCB printed type



Reference		Dimensions (mm)								
Model	Series	A	B	e	E	L	M	N	S1	S3
INT-ZGG	0K	18.0	19.2	M14 *1.0	6	21.7	4.0	20.0	12.5	17
INT-ZGG	1K	20.0	21.5	M16 *1.0	9	27.0	4.5	25.1	14.5	19
INT-ZGG	2K	25.0	27.0	M20 *1.0	9	30.7	5.0	28.6	18.5	24
INT-ZGG	3K	31.0	34.0	M24 *1.0	11	36.2	6.0	33.6	22.5	30

INT-ZEG

Panel mount fixed receptacle, nut fixing, key (G) or keys (A... L), solder or PCB printed type (back panel mounting)

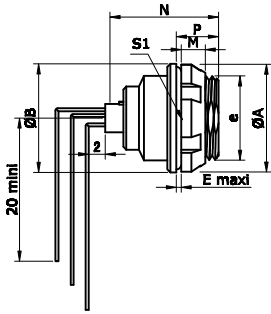


Reference		Dimensions (mm)								
Model	Series	A	B	e	E	M	N	P	S1	
INT-ZEG	0K	18.0	18.0	M14 *1.0	3.4	3.5	20.1	7.0	12.5	
INT-ZEG	1K	20.0	20.0	M16 *1.0	6.2	3.5	25.1	10.0	14.5	
INT-ZEG	2K	25.0	25.0	M20 *1.0	5.0	3.5	28.6	10.0	18.5	
INT-ZEG	3K	30.0	31.0	M24 *1.0	7.5	4.5	33.6	12.0	22.5	

3. INT-K Series Waterproof Connectors

INT-ZEG (ELBOW)

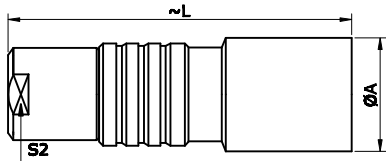
Panel mount fixed receptacle, nut fixing, key (G) or keys (A... L), elbow 90° contact for printed circuit (back panel mounting)



Reference		Dimensions (mm)								
Model	Series	A	B	e	E	M	N	P	S1	
INT-ZEG(elbow)	0K	18.0	18.0	M14 *1.0	3.4	3.5	20.1	7.0	12.5	
INT-ZEG(elbow)	1K	20.0	20.0	M16 *1.0	6.2	3.5	25.1	10.0	14.5	
INT-ZEG(elbow)	2K	25.0	25.0	M20 *1.0	5.0	3.5	28.6	10.0	18.5	
INT-ZEG(elbow)	3K	30.0	31.0	M24 *1.0	7.5	4.5	33.6	12.0	22.5	

INT-DHG

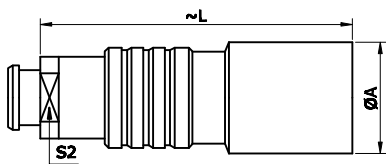
Free cable mounted receptacles, key (G) or keys (A... L), cable collet



Reference		Dimensions (mm)		
Model	Series	A	L	S2
INT-DHG	0K	13.0	34.0	7.0
INT-DHG	1K	15.0	45.0	9.0
INT-DHG	2K	19.0	54.0	12.0
INT-DHG	3K	23.0	64.0	15.0

INT-DHG(Z)

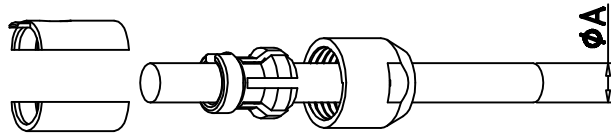
Free cable mounted receptacles, key (G) or keys (A... L), cable collet and nut for fitting a bend relief



Reference		Dimensions (mm)		
Model	Series	A	L	S2
INT-DHG(Z)	0K	13.0	34.0	7.0
INT-DHG(Z)	1K	15.0	45.0	9.0
INT-DHG(Z)	2K	19.0	54.0	12.0
INT-DHG(Z)	3K	23.0	65.0	15.0

3. INT-K Series Waterproof Connectors

Cable Collet Size



Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	ϕA	Max	Min
0K-022	22	2.2	2.2	>1.4
0K-032	32	3.2	3.2	>2.2
0K-042	42	4.2	4.2	>3.2
0K-052	52	5.2	5.2	>4.2

Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	ϕA	Max	Min
1K-042	42	4.2	4.2	>3.2
1K-052	52	5.2	5.2	>4.2
1K-062	62	6.2	6.2	>5.2
1K-072	72	7.2	7.2	>6.2
1K-076	76	7.6	7.5	>6.6

Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	ϕA	Max	Min
2K-042	42	4.2	4.2	>3.2
2K-052	52	5.2	5.2	>4.2
2K-062	62	6.2	6.2	>5.2
2K-072	72	7.2	7.2	>6.2
2K-082	82	8.2	8.2	>7.2
2K-092	92	9.2	9.2	>8.2
2K-099	99	9.9	9.9	>9.0

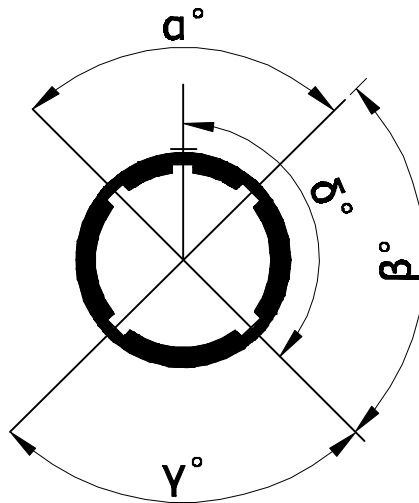
Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	ϕA	Max	Min
3K-062	62	6.2	6.2	>5.2
3K-072	72	7.2	7.2	>6.2
3K-082	82	8.2	8.2	>7.2
3K-092	92	9.2	9.2	>8.2
3K-100	10	10.2	10.2	>9.2
3K-110	11	11.2	11.2	>10.2
3K-120	12	12.0	12.0	>11.0

3. INT-K Series Waterproof Connectors

Alignment Key and Polarized Key

INT-K series connector model types are composed of six letters.
The last letter indicated the key position and contact type (male or female).

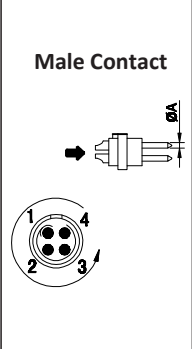
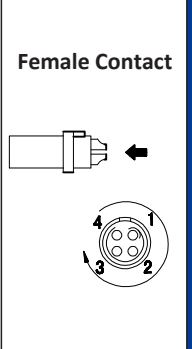
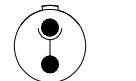
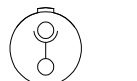




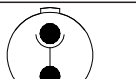
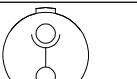














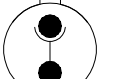
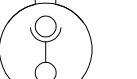




Front View of Receptacle



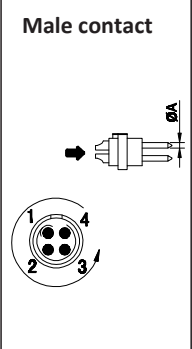
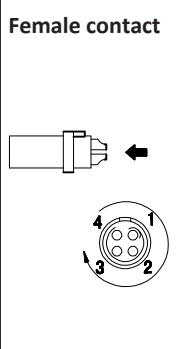

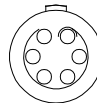

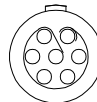








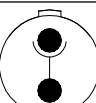
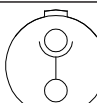
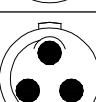
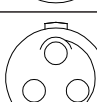
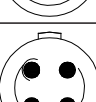
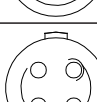
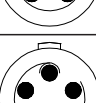
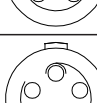
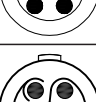
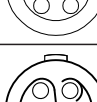
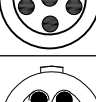
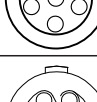
Code	Keys No.	Angles	Series				Contact Type	
			0K	1K	2K	3K	Plug	Receptacle
G	1		0°	0°	0°	0°	Male	Female
A	2	α	30°	30°	30°	30°	Male	Female
B	2		45°	45°	45°	45°	Male	Female
C	2		60°	60°	60°	60°	Male	Female
D	2	γ	95°	95°	95°	95°	Male	Female
E	2	β	120°	120°	120°	120°	Male	Female
F	2		145°	145°	145°	145°	Male	Female
L	2	γ	75°	75°	75°	75°	Female	Male

3. INT-B and K Series Waterproof Connectors

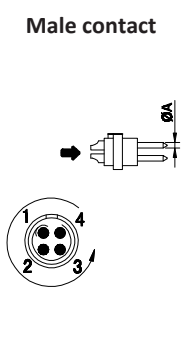
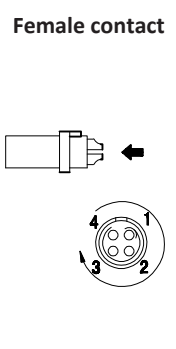

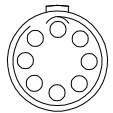

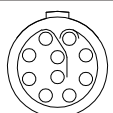

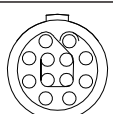
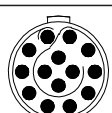
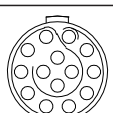
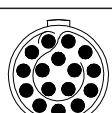
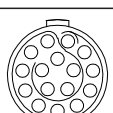
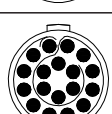
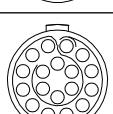
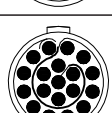
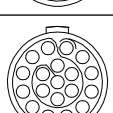
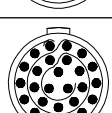
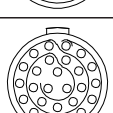
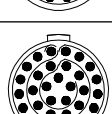
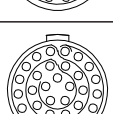
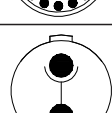
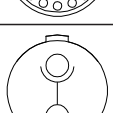
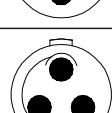
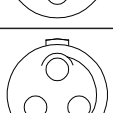
INT-B and INT-K Series Multiple Layout

	Male Contact 	Female Contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage (contact - contact) K/V rms	Test voltage (contact - shell) K/V rms	Rated current (A)
						Solder contact	PCB straight contact	PCB elbow contact			
00			302	2	0.5	●	●	●	1.00	0.95	5.0
			303	3	0.5	●	●	●	0.80	0.95	3.0
			304	4	0.5	●	●	●	0.80	0.65	2.0
0B 0K			302	2	0.9	●	●	●	1.30	1.05	10.0
			303	3	0.9	●	●	●	1.20	0.90	8.0
			304	4	0.7	●	●	●	0.85	0.70	7.0
			305	5	0.7	●	●	●	1.00	0.70	6.5
			306	6	0.5	●	●	●	0.85	0.65	2.5
			307	7	0.5	●	●	●	0.80	0.70	2.5
			309	9	0.5	●	●	○	0.60	0.50	2.0
1B 1K			302	2	1.3	●	●	●	1.50	1.35	15.0
			303	3	1.3	●	●	●	1.30	1.55	12.0
			304	4	0.9	●	●	●	1.35	1.45	10.0
			305	5	0.9	●	●	●	1.25	1.15	9.0

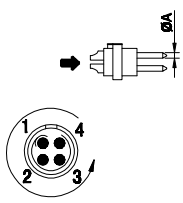
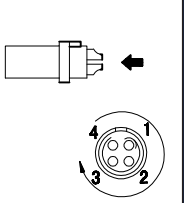





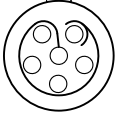
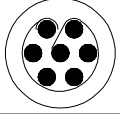
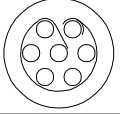
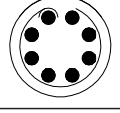
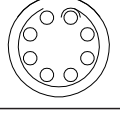
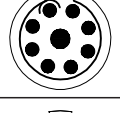
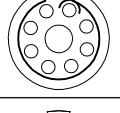
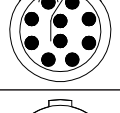
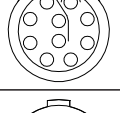
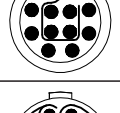
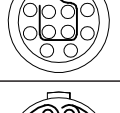


3. INT-B and K Series Waterproof Connectors

	Male contact 	Female contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage (contact - contact) K/V rms	Test voltage (contact - shell) K/V rms	Rated current (A)
						Solder contact	PCB straight contact	PCB elbow contact			
1B 1K			306	6	0.7	●	●	●	1.05	1.20	7.0
			307	7	0.7	●	●	●	0.95	1.05	7.0
			308	8	0.7	●	●	●	0.95	1.15	5.0
			310	10	0.5	●	●	●	0.90	1.50	2.5
			314	14	0.5	●	●	●	0.80	1.20	2.0
			316	16	0.5	●	●	○	0.80	1.25	1.5
2B 2K			302	2	2.0	●	●	●	2.10	1.75	25.0
			303	3	1.6	●	●	●	2.40	1.85	17.0
			304	4	1.3	●	●	●	1.85	1.85	15.0
			305	5	1.3	●	●	●	1.75	1.60	14.0
			306	6	1.3	●	●	●	1.35	1.45	12.0
			307	7	1.3	●	●	●	1.75	1.60	11.0










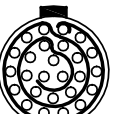



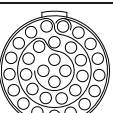
3. INT-B and K Series Waterproof Connectors

	Male contact 	Female contact 	Insulator	Contact No.	φA(MM)	Contact type			Test voltage (contact - contact) K/V rms	Test voltage (contact - shell) K/V rms	Rated current (A)
						Solder contact	PCB straight contact	PCB elbow contact			
2B 2K			308	8	0.9	●	●	●	1.50	1.25	10.0
			310	10	0.9	●	●	●	1.45	1.30	8.0
			312	12	0.7	●	●	●	1.25	1.35	7.0
			314	14	0.7	●	●	●	1.15	1.35	6.5
			316	16	0.7	●	●	●	0.95	1.25	6.0
			318	18	0.7	●	●	●	0.85	1.20	5.5
			319	19	0.7	●	●	●	0.95	1.25	5.0
			326	26	0.5	●	●	○	0.95	1.30	2.0
			332	32	0.5	●	●	○	0.80	1.20	1.5
3B 3K			302	2	3.0	●	○	-	2.10	1.55	35.0
			303	3	2.0	●	●	○	1.90	1.50	25.0

3. INT-B and K Series Waterproof Connectors

	Male contact 	Female contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage (contact - contact) K/V rms	Test voltage (contact - shell) K/V rms	Rated current (A)
						Solder contact	PCB straight contact	PCB elbow contact			
3B 3K			304	4	2.0	●	●	●	1.45	1.25	19.0
			305	5	1.6	●	●	○	1.90	1.25	19.0
			306	6	1.6	●	●	○	1.60	1.15	17.0
			307	7	1.6	●	●	○	1.70	1.25	15.0
			308	8	1.3	●	●	●	1.65	1.15	13.0
			309	8 1	1.3 2.0	●	●	-	1.35 1.35	1.05 1.05	6.0 15.0
			310	10	1.3	●	●	○	1.25	0.90	12.0
			312	12	0.9	●	●	●	1.45	1.00	9.0
			314	14	0.9	●	●	●	1.20	1.20	9.0

3. INT-B and K Series Waterproof Connectors

		316	16	0.9	●	●	●	1.20	0.85	8.0
		320	20	0.7	●	●	●	1.0	0.9	6.0
		322	22	0.7	●	●	●	1.0	0.9	5.5
		324	24	0.7	●	●	●	1.2	1.45	7.0
		326	26	0.7	●	●	●	0.95	0.7	4.0
		330	30	0.7	●	●	●	0.8	0.7	3.5
		332	32	0.7	●	●	●	0.75	0.7	3.0

- First choice alternative
- Special order alternative

4. INT-F Series Circular Connectors

Plug:



INT-S



INT-S (female)



INT-S



INT-SC (female)



INT-SS



INT-SS



INT-S



INT-WSO

Receptacle:

Panel Mount Receptacle



INT-D



INT-DEE



INT-DB



INT-DBP



INT-DBP



INT-DBPC



INT-DEU



INT-DBPLU

Cable Mount Receptacle



INT-K



INT-K(Z)



INT-KE

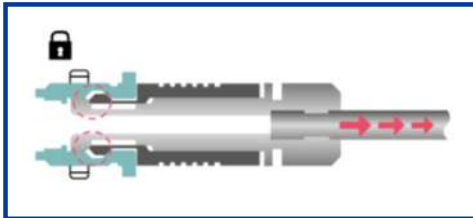


INT-KE(Z)

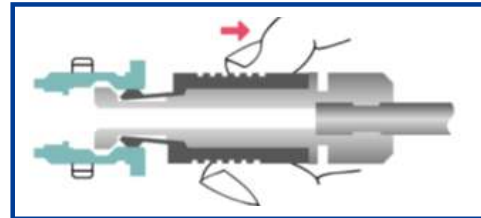
4. INT-F Series Circular Connectors

Push-Pull Self-Latching Connection System

INTE-AUTO designs original push pull automatic locking connector, which widely applies to many industries for its easy use, reliable, durable mating, and fast connection and disconnection.



Secure Locking When Cable Pulled



Pull the Outer Sleeve to Unlock

F Series Circular Connectors with the Following Main Features

1. Original push-pull self-locking system
2. Widely adopted by the industry
3. Unparalleled signal integrity
4. Fully secured against accidental disconnection
5. Designed for frequent connect disconnect operations
6. Ideal for compact product designs
7. Locking system integrated into the connector housing
8. Non-locking or emergency quick release solutions also available
9. Available over-molded injection and custom cable assembly

Technical Characteristics

Mechanical and Climatrical

Characteristics	Value	Standard
Endurance	>6000 cycles	IEC 60512-5 test 9a
Humidity	Up to 95% at 60°C	
Temperature Range	-40°C, +250°C	
Resistance to Vibration	10-2000Hz, 15g	IEC 60512-4 test 6d
Shock Resistance	100g, 6ms	IEC 60512-4 test 6c
Salt Spray Corrosion Test	>144h	IEC 60512-6 test 11f
Protection Index (mated)	IP 50/IP68	IEC 60529

Electrical

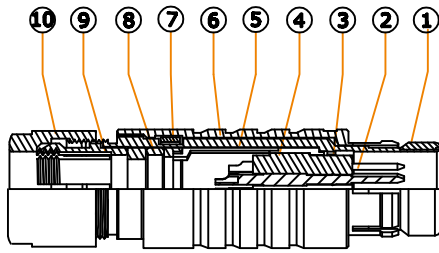
Characteristics	Value	Standard
Shielding Efficiency	at 10 MHz	>75 dB
	at 1 GHz	>40 dB
		IEC 60619-1-3

4. INT-F Series Circular Connectors

Part Section Showing Internal Components

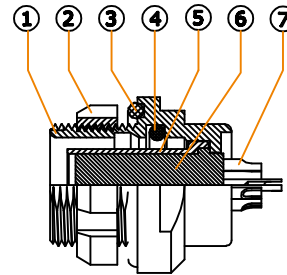
Straight Plug

- ① Latch Sleeve
- ② Male Contact
- ③ Insulator
- ④ Fixed Spacer
- ⑤ Inner Shell
- ⑥ Outer Shell
- ⑦ Gasket
- ⑧ Retaining Ring
- ⑨ Collet
- ⑩ Collet Nut

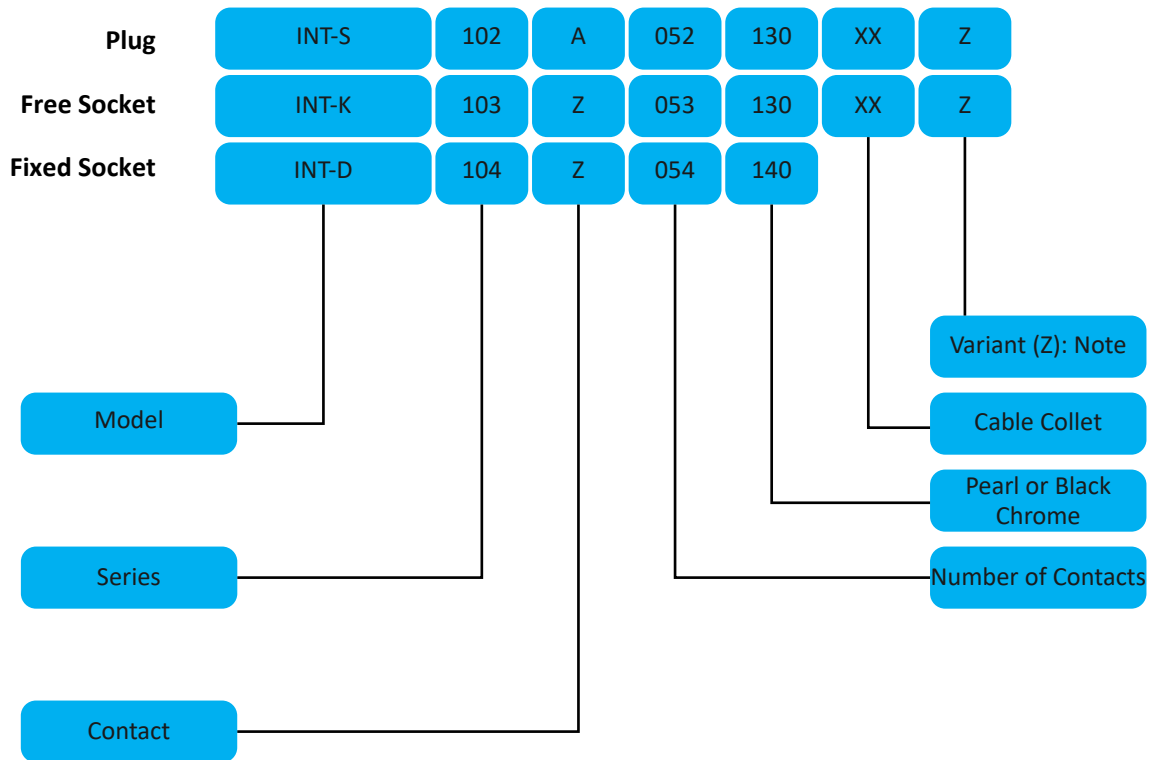


Receptacle

- ① Outer Shell
- ② Hexagonal Nut
- ③ Outer O-ring
- ④ Inside O-ring
- ⑤ Retaining Ring
- ⑥ Insulator
- ⑦ Female Contacts



Part Numbering System



INT13-S102A052-13050Z = 0F 3 pins straight plug, G key, half-shell code, pearl chrome plated brass housing, PPS insulator, male soldering contact type, 5.0 mm cable collet, nut for fitting bend relief

INT13-K103Z053-13060Z = 1F 4 pins free receptacle, G key, half-shell code, pearl chrome plated brass housing, PPS insulator, female soldering contact type, 6.0 mm cable collet, nut for fitting bend relief

INT13-D104Z054-140CLL = 2F 5 pins panel mounted socket, G key, half-shell code, black chrome plated brass housing, PPS insulator, female soldering contact type, nut fixed.

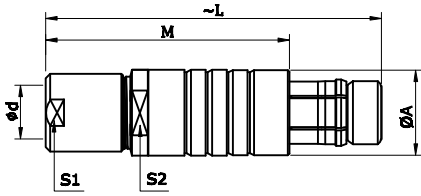
*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position.

4. INT-F Series Circular Connectors

Product Size

INT-S

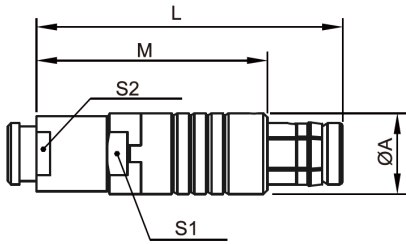
Cable mount plug, code (1, 2, 3), cable collet



Reference		Dimensions (mm)						
Model	Series	A	M	L	d max		S1	S2
					shielded clamp	sealed clamp		
INT-S	0F	9.4	26	37.2	4.7	4.3	8	8
INT-S	1F	12	34	45	6.7	6.2	9	10
INT-S	1.5F	13	36	46	7.2	6.7	12	11
INT-S	2F	15	36	48	8.7	8.7	13	13
INT-S	3F	18.7	43.4	58	10.0	10.0	16	17

INT-S

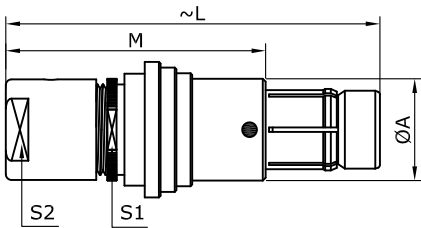
Cable mount plug, code (1, 2, 3), cable collet, nut for fitting bend relief



Reference		Dimensions (mm)					
Model	Series	A	L	M	S1	S2	
INT-S	0F	9.5	36	26	8	8	
INT-S	1F	12	45	34	9	9	
INT-S	2F	15	50	37.5	13	13	
INT-S	3F	18.7	58	44.2	16	17	

INT-SS

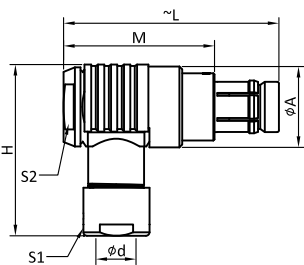
Cable mount plug, code (1, 2, 3), cable collet



Reference		Dimensions (mm)						
Model	Series	A	L	M	d max		S1	S2
					shielded clamp	sealed clamp		
INT-SS	0F	9	33	23	4.7	4.3	8	7
INT-SS	1F	12	37	26	6.7	6.2	11	12
INT-SS	1.5F	12.3	40	30	7.2	6.7	11.5	12
INT-SS	2F	15	43	31	8.7	8.7	13	13

INT-WSO

Elbow right-angle cable mount plug, code (1, 2, 3)

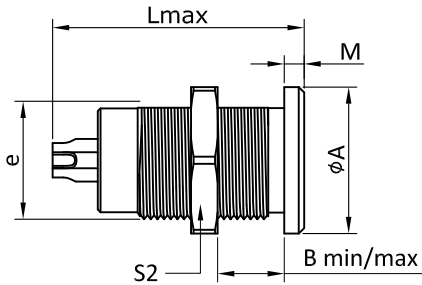


Reference		Dimensions (mm)							
Model	Series	A	L	M	H	d max		S1	S2
						shielded clamp	sealed clamp		
INT-WSO	0F	12	33	23	25	4.7	4.3	7	8
INT-WSO	1F	15	38	28.7	31	6.7	6.2	10	11
INT-WSO	1.5F	17	40	30	33	7.2	6.7	12	12
INT-WSO	2F	19	45	33	37	8.7	8.7	13	14

4. INT-F Series Circular Connectors

INT-D

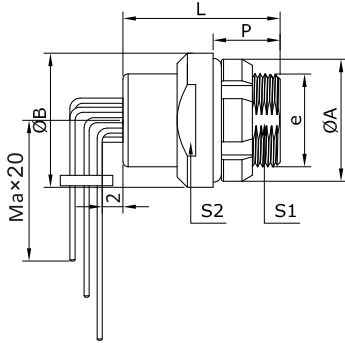
Panel mount receptacle, nut fixing, code (1, 2, 3)



Reference		Dimensions (mm)					
Model	Series	A	B	e	L	M	S2
INT-D	0F	11	0/9	M9*0.5	18.9	1.5	11
INT-D	1F	14	0/8	M12*1.0	23.9	1.5	14
INT-D	1.5F	16	0/10	M14*1.0	23.3	2	17
INT-D	2F	19	0/11	M15*1.0	25.8	2.2	17

INT-DBPC

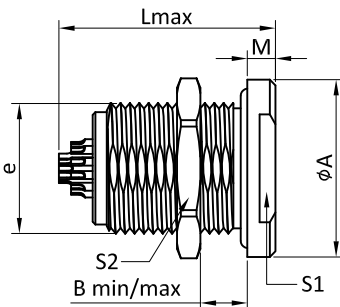
Hermetic panel mount receptacle, elbow 90°PCB contact, code (1, 2, 3)



Reference		Dimensions (mm)						
Model	Series	A	B	e	L	P	S1	S2
INT-DBPC	0F	12	14	M9*0.5	19.2	6.5	8.2	11
INT-DBPC	1F	18	18	M14*1.0	24.8	8	12.5	15
INT-DBPC	1.5F	18	19	M14*1.0	23.1	7	12	15
INT-DBPC	2F	20.8	21	M16*1.0	24.2	8	14.3	16

INT-DEE

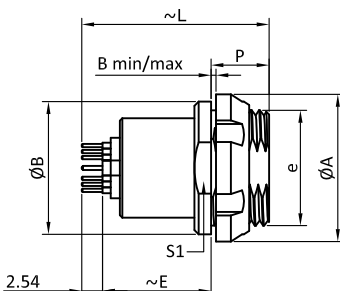
Hermetic panel mount receptacle, nut fixing, code (1, 2, 3)



Reference		Dimensions (mm)						
Model	Series	A	B	e	L	M	S1	S2
INT-DEE	0F	14	8/10	M9*0.5	20	2.5	11	11
INT-DEE	1F	18	0/12	M14*1.0	23.9	3.0	14	17
INT-DEE	1.5F	19	0/12	M14*1.0	23.3	3.0	15	17
INT-DEE	2F	20	0/13	M16*1.0	25.8	4.0	17	19

INT-DBP

Fixed panel mount receptacle, code (1, 2, 3), solder or PCB type

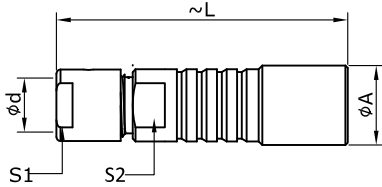


Reference		Dimensions (mm)						
Model	Series	A	B	P	E	e	L	S1
INT-DBP	0F	12	0/3.5	6.5	10	M9*0.5	20	8.2
INT-DBP	1F	15	0/4.0	8.0	12	M12*1.0	23	12.5
INT-DBP	1.5F	18	0/3.0	7.0	13	M14*1.0	23	12
INT-DBP	2F	16	0/5.0	9.0	11.5	M15*1.0	26	14.3

4. INT-F Series Circular Connectors

INT-K

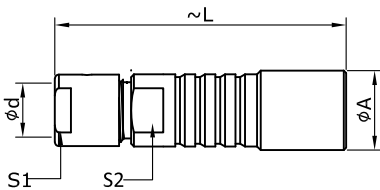
Cable mount receptacle, code (1, 2, 3), cable collet



Reference		Dimensions (mm)					
Model	Series	A	L	d max		S1	S2
				shielded clamp	sealed clamp		
INT-K	0F	10	36	4.7	4.3	7	7
INT-K	1F	13	43	6.7	6.2	10	10
INT-K	1.5F	13.5	45	7.2	6.7	12	11
INT-K	2F	16	48	8.7	8.7	13	12

INT-KE

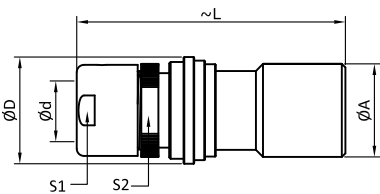
Cable sealed mount receptacle, code (1, 2, 3), cable collet



Reference		Dimensions (mm)					
Model	Series	A	L	d max		S1	S2
				shielded clamp	sealed clamp		
INT-KE	0F	10	36	4.7	4.3	7	7
INT-KE	1F	13	43	6.7	6.2	10	10
INT-KE	1.5F	13.5	45	7.2	6.7	12	11
INT-KE	2F	16	48	8.7	8.7	13	12

INT-KS

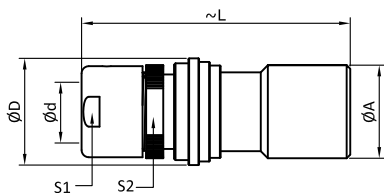
Short cable mount receptacle, code (1, 2, 3), cable collet



Reference		Dimensions (mm)					
Model	Series	A	L	M	d max	S1	S2
INT-KS	0F	10	32	23	3.8	8	8
INT-KS	1F	13	37	26	6.0	11	12
INT-KS	1.5F	13.5	36	30	6.2	11.5	12
INT-KS	2F	16	45	31	8.0	13	13

INT-KSE

Short sealed cable mount receptacle, code (1, 2, 3), cable collet

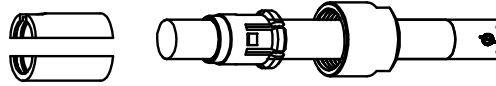


Reference		Dimensions (mm)					
Model	Series	A	L	M	d max	S1	S2
INT-KSE	0F	10	32	23	3.8	8	8
INT-KSE	1F	13	37	26	6.0	11	12
INT-KSE	1.5F	13.5	36	30	6.2	11.5	12
INT-KSE	2F	16	45	31	8.0	13	13

4. INT-F Series Circular Connectors

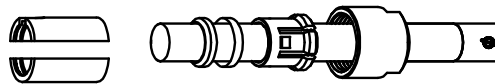
Cable Collet Size

INT-0F



Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
1.5-2.1	2.1	102 Series	3.6-4.1	4.1	102 Series
2.1-2.6	2.6	102 Series	4.1-4.3	4.3	102 Series
2.6-3.1	3.1	102 Series	4.3-4.7	4.7	102 Series
3.1-3.6	3.6	102 Series			

INT-0F



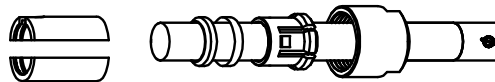
Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
1.5-2.1	2.1	102 Series	3.1-3.6	3.6	102 Series
2.1-2.6	2.6	102 Series	3.6-4.1	4.1	102 Series
2.6-3.1	3.1	102 Series	4.1-4.3	4.3	102 Series

INT-1F



Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
1.7-2.2	2.2	103 Series	4.2-4.7	4.7	103 Series
2.2-2.7	2.7	103 Series	4.7-5.2	5.2	103 Series
2.7-3.2	3.2	103 Series	5.2-5.7	5.7	103 Series
3.2-3.7	3.7	103 Series	5.7-6.2	6.2	103 Series
3.7-4.2	4.2	103 Series	6.2-6.7	6.7	103 Series

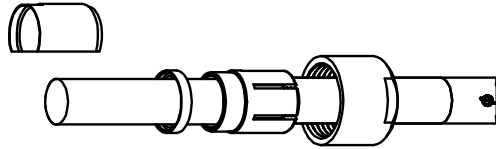
INT-1F



Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
1.7-2.2	2.2	103 Series	4.2-4.7	4.7	103 Series
2.2-2.7	2.7	103 Series	4.7-5.2	5.2	103 Series
2.7-3.2	3.2	103 Series	5.2-5.7	5.7	103 Series
3.2-3.7	3.7	103 Series	5.7-6.2	6.2	103 Series
3.7-4.2	4.2	103 Series			

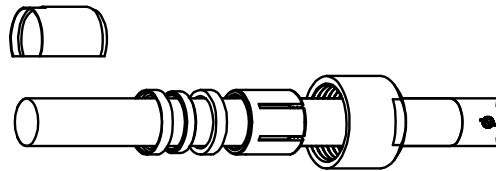
4. INT-F Series Circular Connectors

INT-1.5F



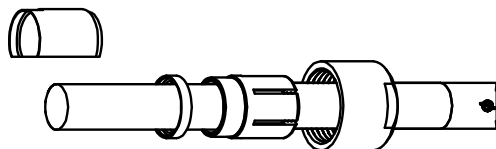
Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
2.2-2.7	2.7	1031 Series	4.7-5.2	5.2	1031 Series
2.7-3.2	3.2	1031 Series	5.2-5.7	5.7	1031 Series
3.2-3.7	3.7	1031 Series	5.7-6.2	6.2	1031 Series
3.7-4.2	4.2	1031 Series	6.2-6.7	6.7	1031 Series
4.2-4.7	4.7	1031 Series	6.7-7.2	7.2	1031 Series

INT-1.5F



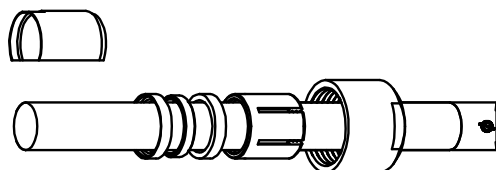
Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
2.2-2.7	2.7	1031 Series	4.7-5.2	4.7	1031 Series
2.7-3.2	3.2	1031 Series	5.2-5.7	5.7	1031 Series
3.2-3.7	3.7	1031 Series	5.7-6.2	6.2	1031 Series
3.7-4.2	4.2	1031 Series	6.2-6.7	6.7	1031 Series
4.2-4.7	4.7	1031 Series			

INT-2F



Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
2.9-4.0	4.0	104 Series	6.7-7.7	7.7	104 Series
4.0-4.7	4.7	104 Series	7.7-8.7	8.7	104 Series
4.7-5.7	5.7	104 Series	8.7-9.1	9.1	104 Series
5.7-6.7	6.7	104 Series			

INT-2F

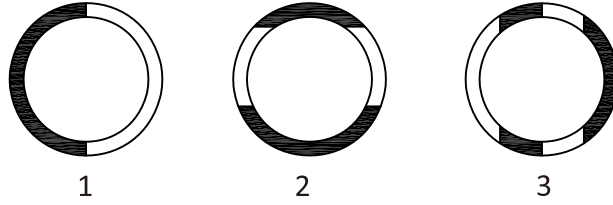


Cable dia Range	Collet ϕ (mm)	Cable Clamp Set	Cable dia Range	Collet ϕ (mm)	Cable Clamp Set
2.9-4.0	4.0	104 Series	5.7-6.7	6.7	104 Series
4.0-4.7	4.7	104 Series	6.7-7.7	7.7	104 Series
4.7-5.7	5.7	104 Series	7.7-8.7	8.7	104 Series

4. INT-F Series Circular Connectors

Code option















Code 1 is standard



INT-F Series Multipole Layout

	Male contact	Female contact	Code	Contact No.	ØA(MM)	Solder contact	PCB straight contact	PCB elbow contact	Test voltage(contact -shell)/k/v AC-rms	Test voltage(contact -contact)/k/v AC-rms	Rated current /A
0F			051	2	0.9	●	●	●	1.30	1.05	10.0
			052	3	0.9	●	●	●	1.20	0.90	8.0
			053	4	0.7	●	●	●	0.85	0.70	7.0
			054	5	0.7	●	●	●	1.00	0.70	6.5
			055	7	0.5	●	●	●	0.80	0.70	2.5
			056	9	0.5	●	●	●	0.60	0.50	2.0
1F			051	2	1.3	●	●	●	1.50	1.35	15.0
			052	3	1.3	●	●	●	1.30	1.55	12.0
			053	4	0.9	●	●	●	1.35	1.45	10.0
			054	5	0.9	●	●	●	1.25	1.15	9.0
			056	6	0.7	●	●	●	1.05	1.2	7.0
			057	7	0.7	●	●	●	0.95	1.05	7.0

4. INT-F Series Circular Connectors

			058	8	0.7	●	●	●	0.95	1.15	5.0
			059	10	0.5	●	●	●	0.90	1.50	2.5
			062	12	0.5	●	●	●	0.80	1.2	2.0
			065	16	0.5	●	●	●	0.80	1.25	1.5
1.5F			010	10	0.7	●	●	●	1.4	1.5	4.5
			012	12	0.7	●	●	●	1.4	1.5	4.2
			019	19	0.7	●	●	●	0.9		2.54

4. INT-F Series Circular Connectors

Male contact		Female contact									
2F		Code	Contact No.	ØA(MM)	Solder contact	PCB straight contact	PCB elbow contact	Test voltage(contact -shell)/v AC-rms	Test voltage(contact -contact)/v AC-rms	Rated current /A	
		051	2	1.6	●	○	○	1.80	2.20	20	
		040	3	1.6	●	○	○	1.6	2.0	18.0	
		037	4	1.3	●	○	○	1.80	2.20	15	
		053	5	1.3	●	○	○	1.75	2.20	14	
		065	6	0.9	●	○	○	1.7	2.0	6.5	
		066	8	0.9	●	○	○	1.50	1.50	6.20	
		086	16	0.7	●	○	○	1.0	1.50	4.0	
		092	19	0.7	●	○	○	0.80	1.20	3.50	
3F											
		051	2	2.0	●	●	●	2.5	3.0	26	
		053	4	2.0	●	●	●	1.8	1.8	20	
		058	15	0.9	●	●	●	1.4	1.6	5.3	
		102	27	0.7	●	●	●	1.2	1.5	3.0	

5. INT-S Series Half-Moon Connectors

Plug:



INT-TFA



INT-TFA(Z)

Receptacle:



INT-ZRA



INT-DCA



INT-DCA(Z)



INT-ZPL

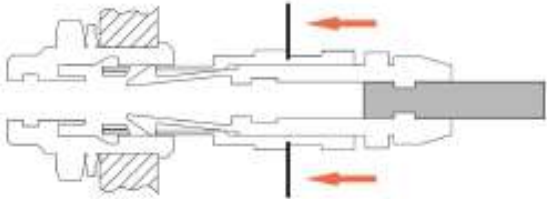
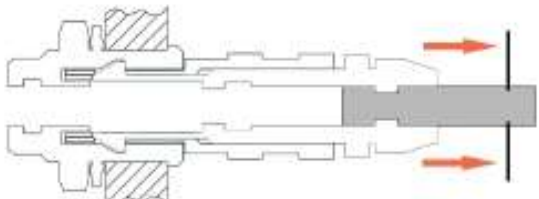
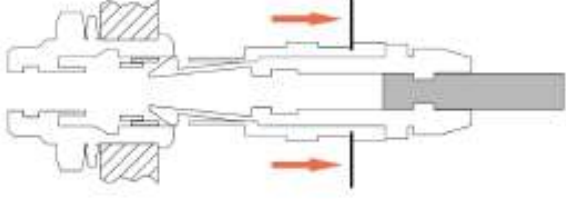


INT-ZXP

5. INT-S Series Half-Moon Connectors

Push-Pull Self-Latching Connection System



Drawing	Specification
	<p>Engaging</p> <p>The self-latching system allows the connector to be mated by simply pushing the plug into the receptacle.</p>
	<p>Latched</p> <p>Once firmly latched, the connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.</p>
	<p>Disengaging</p> <p>When required, the connector is disengaged by a single axial pull on the outer release sleeve. This first disengages the latches and then withdraws the plug from the socket.</p>

5. INT-S Series Half-Moon Connectors

S Series Half-Moon Connectors with the Following Main Features

1. Push-Pull self-latching connection system
2. Solder contacts
3. Multipole up to 14 contacts
4. Polarization by stepped insert (half-moon) for alignment
5. 360° screening for full EMC shielding
6. High-density installation for saving space

Technical Characteristics

Mechanical and Climatical

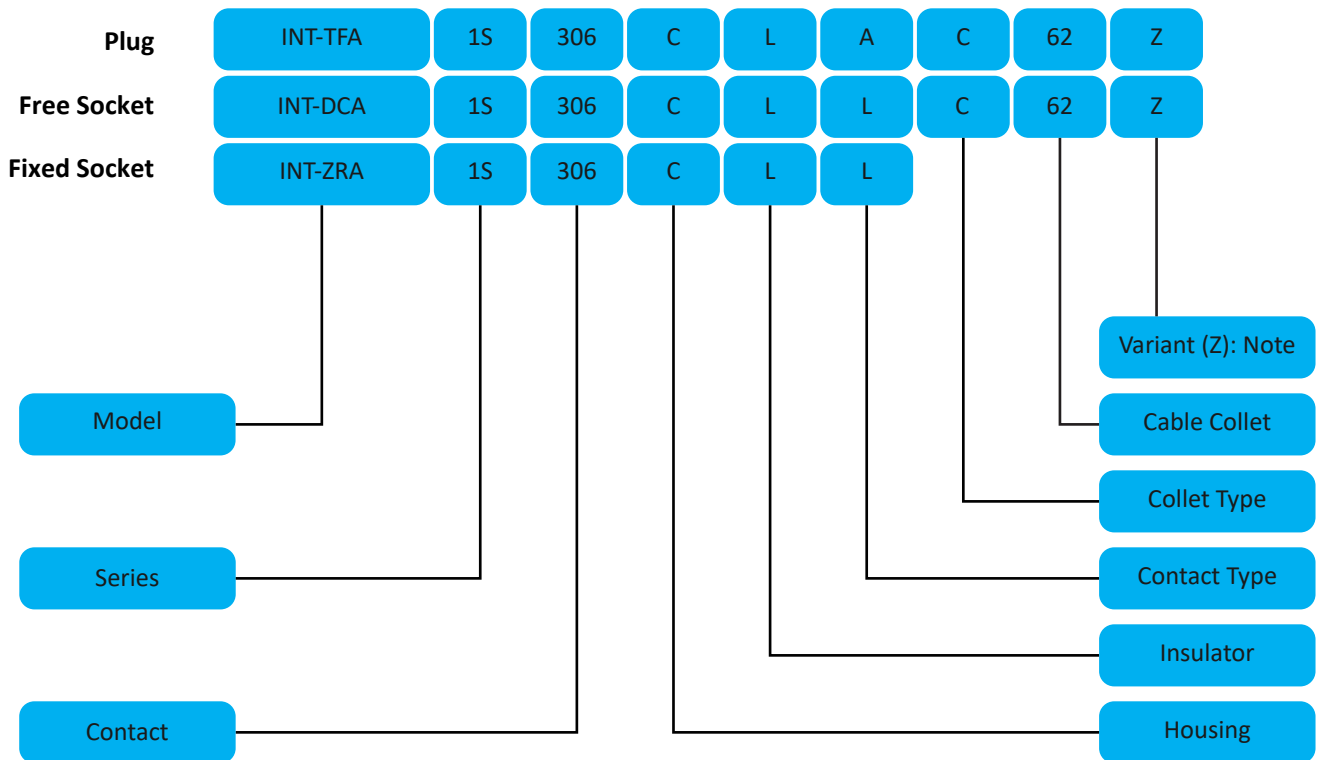
Characteristics	Value	Standard
Endurance	>6000 cycles	IEC 60512-5 test 9a
Humidity	Up to 95% at 60°C	
Temperature Range	-40°C, +250°C	
Resistance to Vibration	10-2000Hz, 15g	IEC 60512-4 test 6d
Shock Resistance	100g, 6ms	IEC 60512-4 test 6c
Salt Spray Corrosion Test	>144h	IEC 60512-6 test 11f
Protection Index (mated)	IP 50	IEC 60529
Climatical category	55/175/21	IEC 60068-1

Electrical

Characteristics	Value	Standard	
Shielding Efficiency	at 10 MHz	>75 dB	IEC 60619-1-3
	at 1 GHz	>80 dB	IEC 60619-1-3

5. INT-S Series Half-Moon Connectors

Part Numbering System



INT13-TFA.1S.306.CLAC62 = Straight plug, 1S series 6 contacts, 3 male and 3 female solder contacts, outer shell in chrome-plated brass, PPS insulator, cable collet for a 6.2 mm diameter cable.

INT13-DCA.1S.306.CLLC62Z = Free receptacle, 1S series 6 pins, 3 male and 3 female solder contacts, outer shell in chrome-plated brass, PPS insulator, cable collet for a 6.2 mm diameter cable, nut for fitting a bend relief.

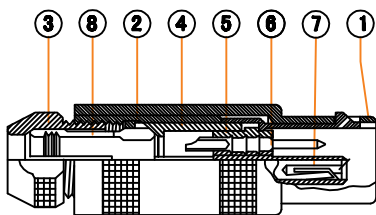
INT13-ZRA.1S.306.CLL = Fixed socket, 1S series 6 pins, 3 male and 3 female solder contacts, outer shell in chrome-plated brass, PPS insulator, nut fixing.

*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position.

Part Section Showing Internal Components

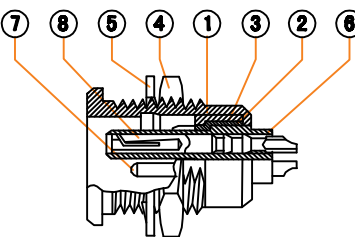
Straight Plug

- ① Outer Shell
- ② Latch Sleeve
- ③ Collet Nut
- ④ Center-Piece
- ⑤ Insulator
- ⑥ Male Contact
- ⑦ Female Contact
- ⑧ Collet



Fixed Receptacle

- ① Outer Shell
- ② Earthing Crown
- ③ Retaining Ring
- ④ Hexagonal Nut
- ⑤ Locking Washer
- ⑥ Insulator
- ⑦ Male Contact
- ⑧ Female Contact

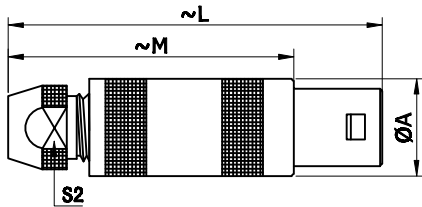


5. INT-S Series Half-Moon Connectors

Product Size

INT-TFA

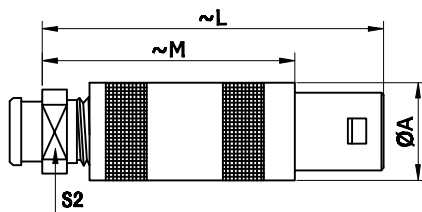
Straight plug, cable collet



Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
INT-TFA	00S	6.4	26.0	18.0	4.5
INT-TFA	0S	9.0	34.5	24.5	6.5
INT-TFA	1S	12.0	42.5	31.5	8.5
INT-TFA	2S	14.8	52.0	40.0	11.0
INT-TFA	3S	17.8	61.0	46.0	14.0

INT-TFA(Z)

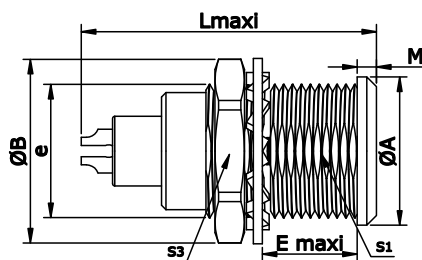
Straight plug, cable collet, nut for fitting a bend relief



Reference		Dimensions (mm)			
Model	Series	A	L	M	S2
INT-TFA(Z)	00S	6.4	26.0	18.0	4.5
INT-TFA(Z)	0S	9.0	34.5	24.5	6.5
INT-TFA(Z)	1S	12.0	42.5	31.5	8.5
INT-TFA(Z)	2S	14.8	52.0	40.0	11.0
INT-TFA(Z)	3S	17.8	61.0	46.0	14.0

INT-ZRA

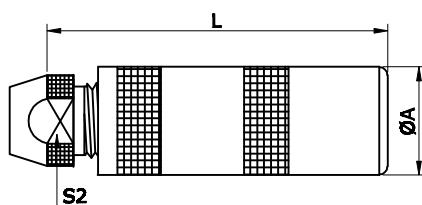
Panel mount fixed receptacle, nut fixing



Reference		Dimensions (mm)							
Model	Series	A	B	e	E	L	M	S1	S3
INT-ZRA	00S	8.0	10.2	M7 * 0.5	5.5	14.5	1.0	6.3	9.0
INT-ZRA	0S	10.0	12.4	M9 * 0.6	7.0	17.5	1.2	8.2	11.0
INT-ZRA	1S	14.0	15.8	M12 * 1.0	7.5	20.2	1.5	10.5	14.0
INT-ZRA	2S	18.0	19.2	M15 * 1.0	8.5	24.5	1.8	13.5	17.0
INT-ZRA	3S	22.0	25.0	M18 * 1.0	11.5	29.0	2.0	16.5	22.0

INT-DCA

Free cable receptacle, cable collet

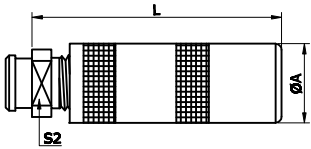


Reference		Dimensions (mm)		
Model	Series	A	L	S2
INT-DCA	00S	6.5	25.0	4.5
INT-DCA	0S	8.9	33.5	6.5
INT-DCA	1S	11.9	40.5	8.5
INT-DCA	2S	14.8	50.0	11.0
INT-DCA	3S	17.8	59.0	14.0

5. INT-S Series Half-Moon Connectors

INT-DCA(Z)

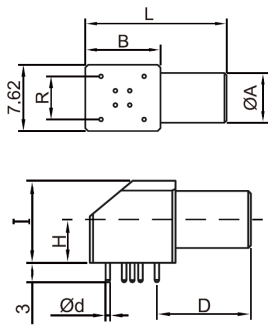
Free cable receptacle, cable collet, nut for fitting a bend relief



Reference		Dimensions (mm)		
Model	Series	A	L	S2
INT-DCA(Z)	00S	6.5	25.0	6
INT-DCA(Z)	0S	8.9	33.5	7
INT-DCA(Z)	1S	11.9	40.5	9
INT-DCA(Z)	2S	14.8	50.0	12.0
INT-DCA(Z)	3S	17.8	59.0	14.0

INT-ZPL

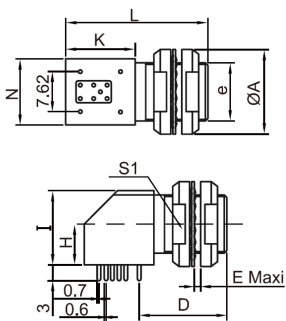
Elbow (90°) receptacle for printed circuit, solder or screw fixing



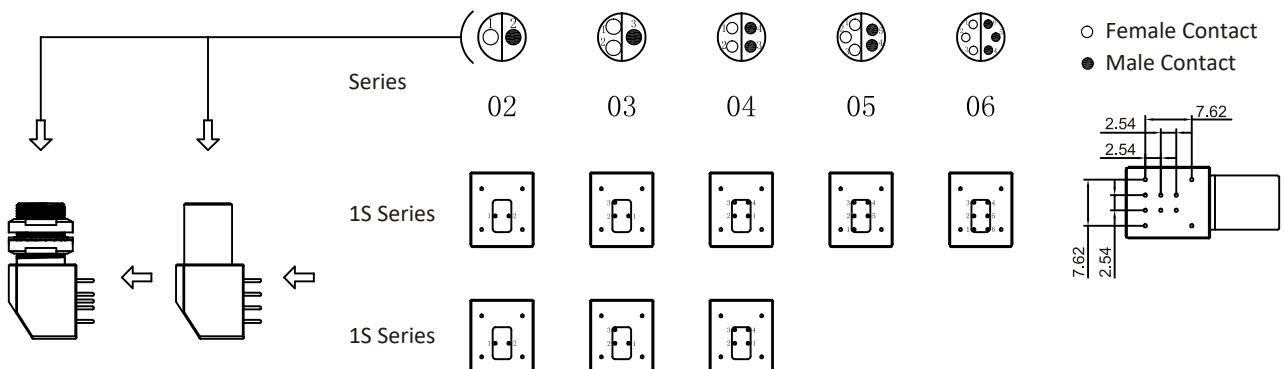
Reference		Dimensions (mm)							
Model	Series	A	B	N	I	H	D	d	L
INT-ZPL	0S	9	14.2	12	12.7	6.7	14.6	0.7	25
INT-ZPL	1S	11	13.3	13	14.2	7.5	16.6	0.7	27

INT-ZXP

Elbow (90°) receptacle for printed circuit, solder or screw fixing, back panel mounting

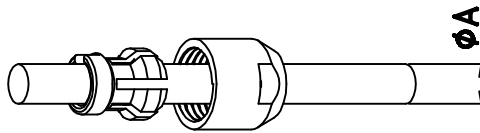


Reference		Dimensions (mm)									
Model	Series	A	K	N	I	H	A	L	D	S1	e
INT-ZXP	0S	12	14.2	12	12.7	6.7	12	25	14.6	10	M9*0.5
INT-ZXP	1S	14	13.3	13	14.2	7.5	15	27	16.6	13	M11*0.5



5. INT-S Series Half-Moon Connectors

Cable Collet Size



Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
0S-032	32	3.2	3.2	>2.2
0S-042	42	4.2	4.2	>3.2
0S-052	52	5.2	5.2	>4.2

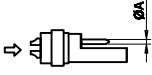

















Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
1S-042	42	4.2	4.2	>2.5
1S-052	52	5.2	5.2	>4.2
1S-062	62	6.2	6.2	>5.2

Cable Clamp Set		Cable Collet (mm)	Cable dia Range	
Type	Code	φA	Max	Min
2S-052	52	5.2	5.2	>4.2
2S-062	62	6.2	6.2	>5.2
2S-072	72	7.2	7.2	>6.2
2S-082	82	8.2	8.2	>7.2

INT-S Series Multipole Layout

	Male contact	Female contact	Insulator	Contact No.	φA(MM)	Contact type			Test voltage (contact - contact) K/V rms	Test voltage (contact - shell) K/V rms	Rated current (A)
						Solder contact	PCB straight contact	PCB elbow contact			
0S			302	2	0.9	●	●	●	1.50	2.10	10.0
			303	3	0.7	●	●	●	1.00	1.50	7.0
			304	4	0.7	●	●	●	1.00	1.50	7.0
1S			302	2	1.3	●	○	○	1.20	1.80	15.0
			303	3	0.9	●	●	○	1.20	1.80	10.0
			304	4	0.9	●	●	●	0.95	1.15	5.0
			305	2 3	0.9 0.7	●	●	●	1.50 1.50	2.10 2.10	10.0 7.0
			306	6	0.7	●	●	●	1.50	2.10	7.0

5. INT-S Series Half-Moon Connectors

Male contact 	Female contact 	Insulator	Contact No.	ØA(MM)	Contact type			Test voltage (contact - contact) K/V rms	Test voltage (contact - shell) K/V rms	Rated current (A)
					Solder contact	PCB straight contact	PCB elbow contact			
		302	2	1.6	●	○	○	1.70	2.40	20.0
		303	3	1.3	●	○	○	1.50	2.10	15.0
		304	4	1.3	●	○	○	1.70	2.40	15.0
		305	5	1.3	●	○	○	1.50	2.10	13.0
		306	6	1.3	●	○	○	1.50	2.10	12.0
		307	3 4	1.3 0.9	●	○	○	0.80 0.80	1.20 1.20	12.0 9.0
		308	8	0.9	●	○	○	0.80	1.20	9.0
		310	10	0.9	●	○	○	0.80	1.20	7.0

2S

- First choice alternative
- Special order alternative

6. INT-S & E Series Coaxial Connector

00S Plug



INT-TFA



INT-TFA(Z)



INT-TLA

00S Receptacle



INT-ZRA



INT-DCA



INT-DCA(Z)



INT-ZRN



INT-ZPL



INT-ZPS

0S Plug



INT-TFA



INT-TFA(Z)

0S Receptacle



INT-ZRA

1S Plug



INT-TFA



INT-TFA (Z)



INT-TLA

1S Receptacle



INT-ZRA

2S Plug



INT-TFA



INT-TFA (Z)



INT-ZRA

2S Receptacle

1E Plug (IP68)



INT-TGG



INT-TGG (Z)

1E Receptacle (IP68)

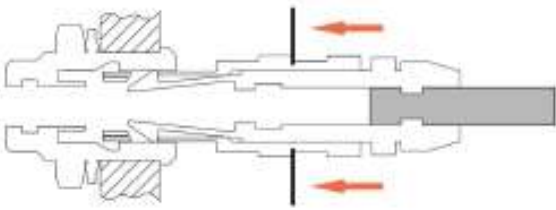
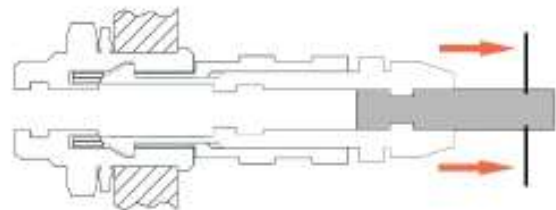
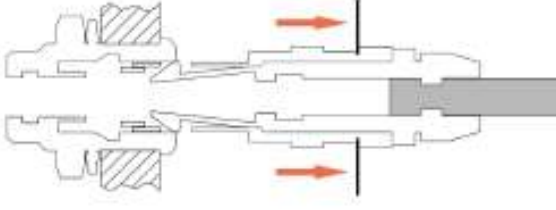


INT-ZGG

6. INT-S & E Series Coaxial Connector

Push-Pull Self-Latching Connection System



Drawing	Specification
	<p>Engaging The self-latching system allows the connector to be mated by simply pushing the plug into the receptacle.</p>
	<p>Latched Once firmly latched, the connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.</p>
	<p>Disengaging When required, the connector is disengaged by a single axial pull on the outer release sleeve. This first disengage the latches and then withdraws the plug from the socket.</p>

6. INT-S & E Series Coaxial Connector

Coaxial Connector with the Following Main Features

1. Push-Pull self-latching system
2. Coaxial (50Ω and 75Ω), unipole configuration
3. M7, M9, M12, M15 size are optional
4. Fast connection, reliable performances
5. 360° screening for full EMC shielding

Technical Characteristics

Mechanical and Climatological

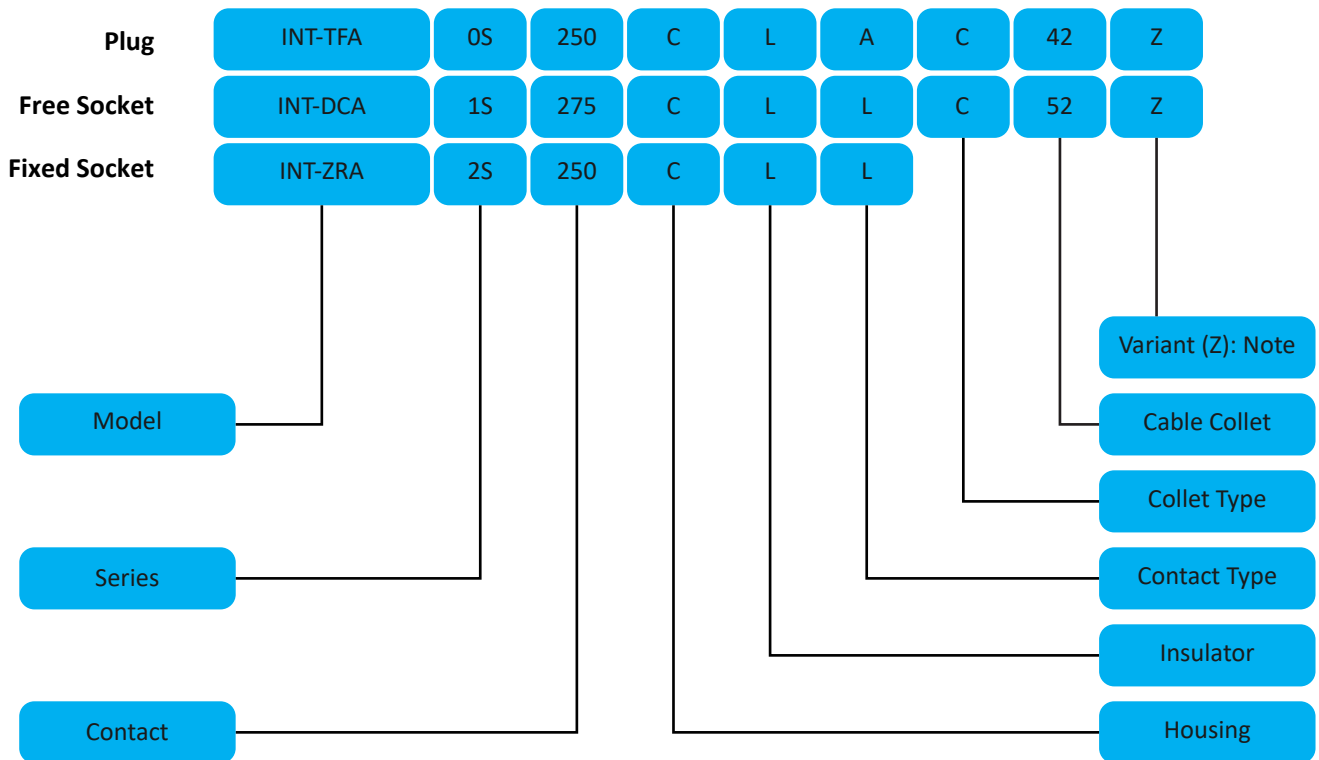
Characteristics	Value	Standard
Endurance	>6000 cycles	IEC 60512-5 test 9a
Humidity	Up to 95% at 60°C	
Temperature Range	-40°C, +250°C	
Resistance to Vibration	10-2000Hz, 15g	IEC 60512-4 test 6d
Shock Resistance	100g, 6ms	IEC 60512-4 test 6c
Salt Spray Corrosion Test	>144h	IEC 60512-6 test 11f
Protection Index (mated)	S series: IP50 E series: IP68	IEC 60529

Electrical

Characteristics	Value	Standard	
Shielding Efficiency	at 10 MHz	>75 dB	IEC 60619-1-3
	at 1 GHz	>40 dB	IEC 60619-1-3

6. INT-S & E Series Coaxial Connector

Part Numbering System



INT13-TFA.0S.250.CLAC42Z = 0S 1 pin straight plug, 50Ω, pearl chrome plated brass housing, PTFE insulator, male soldering contact type, 4.2 mm cable collet, nut for fitting bend relief

INT13-DCA.1S.275.CLLC52Z = 1S 1 pin free receptacle, 75Ω, pearl chrome plated brass housing, PTFE insulator, female soldering contact type, 5.2 mm cable collet, nut for fitting bend relief

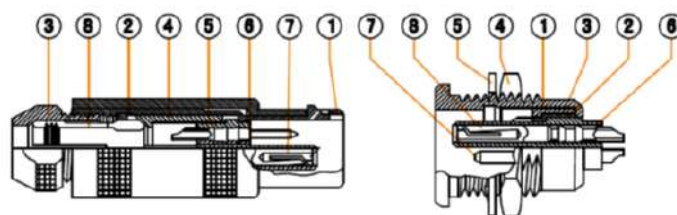
INT13-ZRA.2S.250.CLL = 2S 1 pin panel mounted socket, 50Ω, pearl chrome plated brass housing, PTFE insulator, female soldering contact type, nut fixed.

*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position

Part Section Showing Internal Components

Straight Plug

- ① Outer Shell
- ② Latch Sleeve
- ③ Collet Nut
- ④ Center-Piece
- ⑤ Insulator
- ⑥ Male Contact
- ⑦ Collet


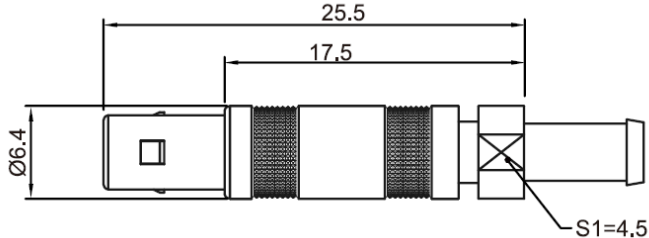

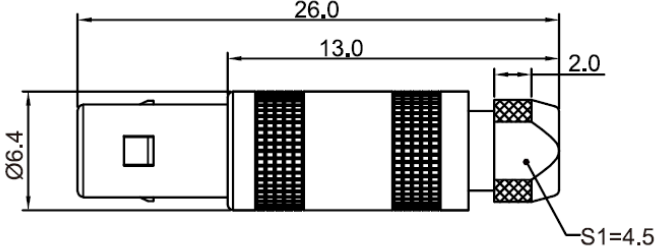

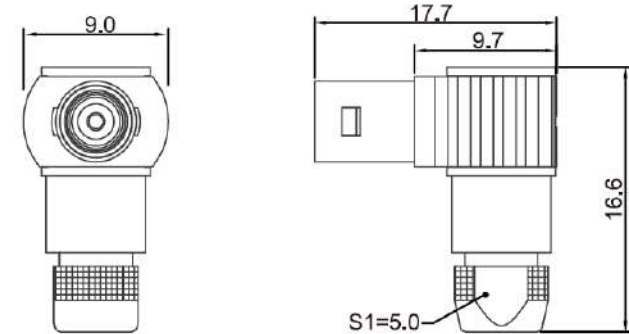

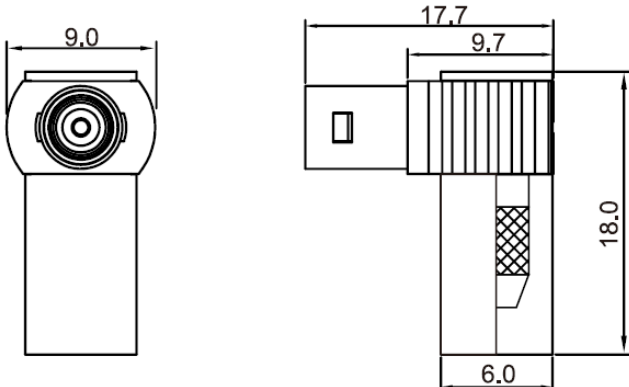

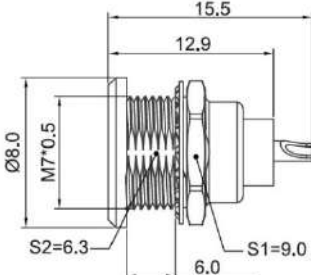


Fixed Receptacle


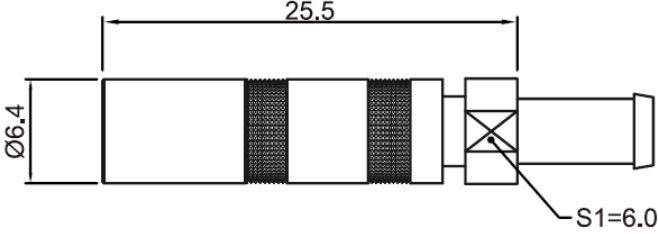

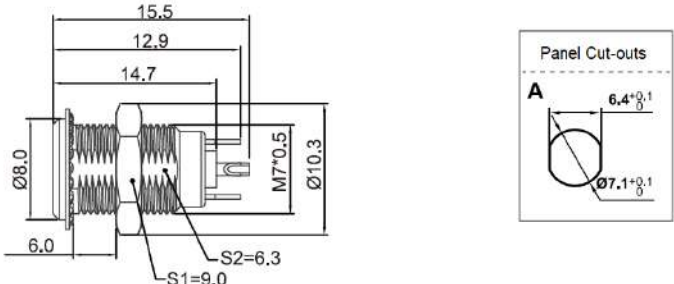

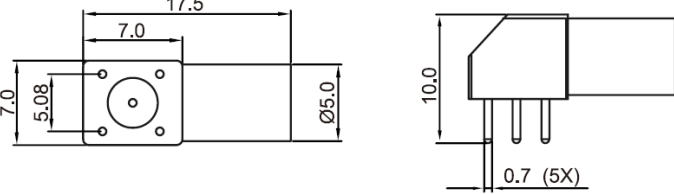

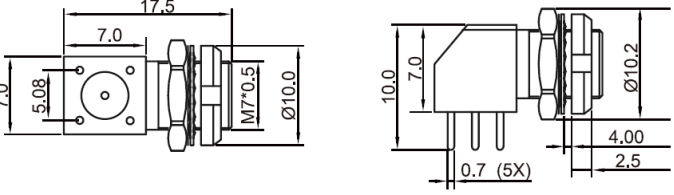
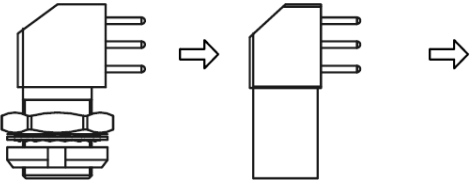
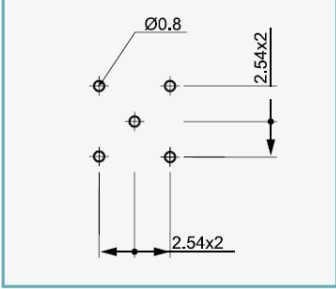
- ① Outer Shell
- ② Earthing Crown
- ③ Retaining Ring
- ④ Hexagonal Nut
- ⑤ Locking Washer
- ⑥ Insulator
- ⑦ Female Contact

6. INT-S & E Series Coaxial Connector


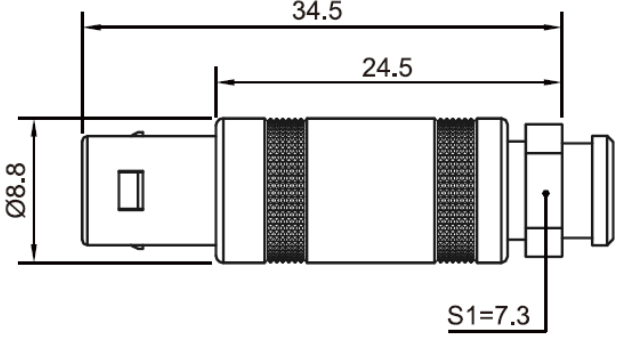

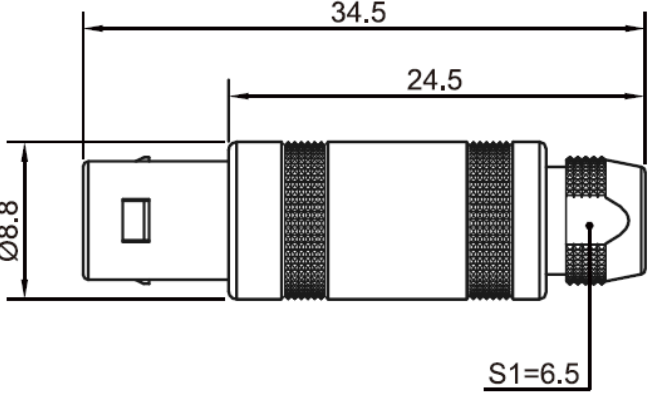

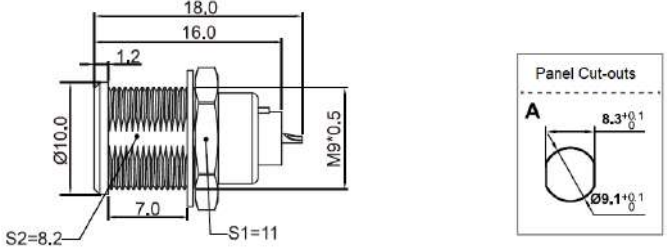
Product Size

Part Number	Product Photo	Size
INT13-TFA.00.250.CLADXXZ		
INT13-TFA.00.250.CLADXX		
INT13-TLA.00.250.CLA		
INT13-TLA.00.250.CLADXX		
INT13-ZRA.00.250.CLL		 <div data-bbox="1238 1877 1394 2067" style="border: 1px solid black; padding: 5px;"> <p>Panel Cut-outs</p> <p>A</p> <p>$6.4^{+0.1}_0$</p> <p>$\varnothing 7.1^{+0.1}_0$</p> </div>


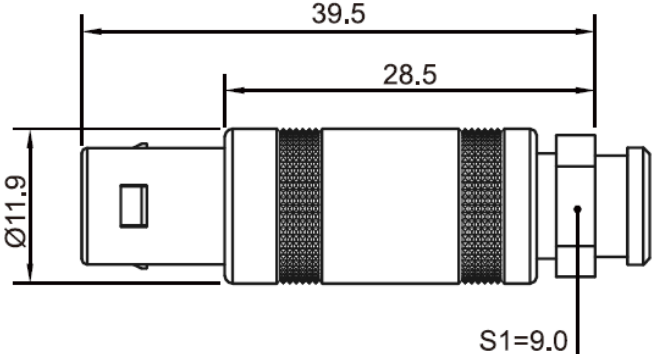

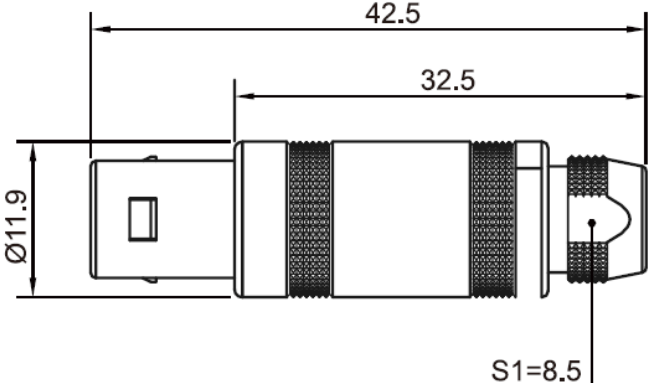

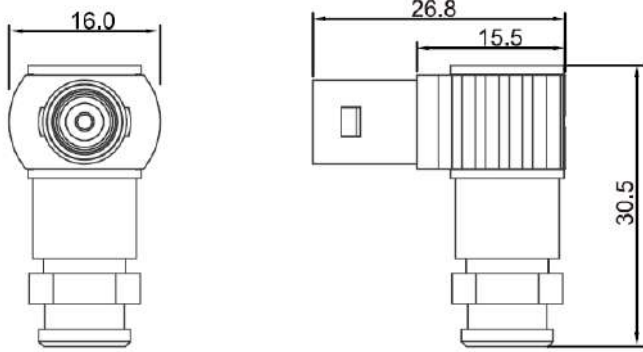

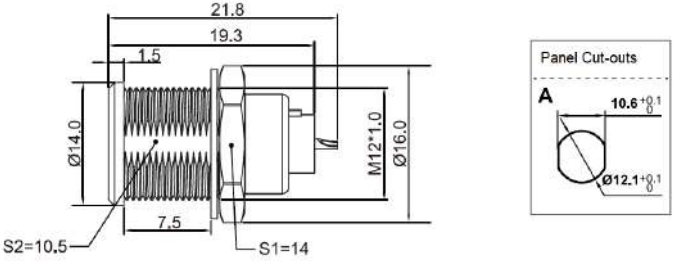
6. INT-S & E Series Coaxial Connector

<p>INT13- DCA.00.250.CLADXXZ</p>			
<p>INT13-ZRN.00.250.CLL</p>			
<p>INT13-ZPL.00.250.NTN</p>			
<p>INT13-ZPS.00.250.NTN</p>			
<p>PCB Panel Cut-outs</p> 			


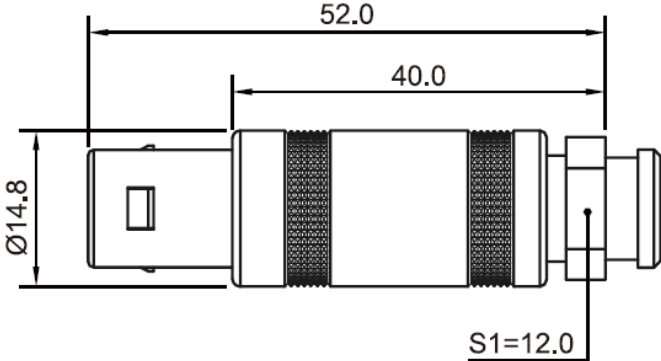

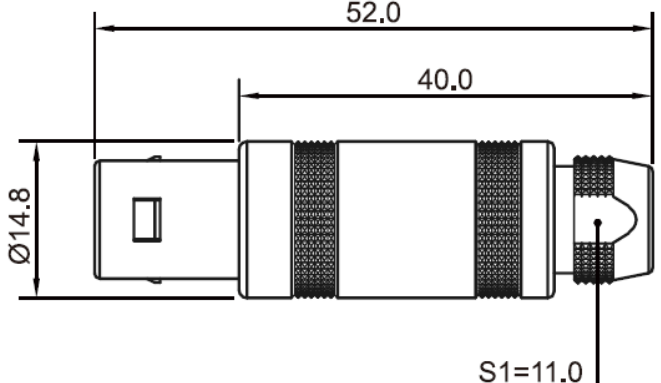

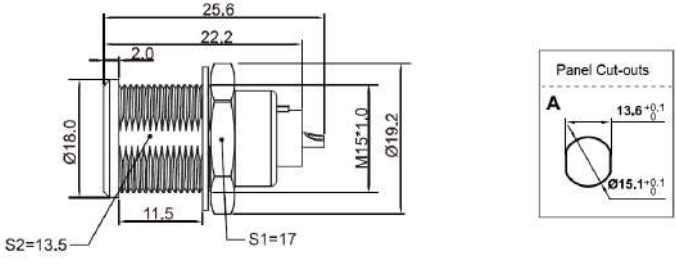

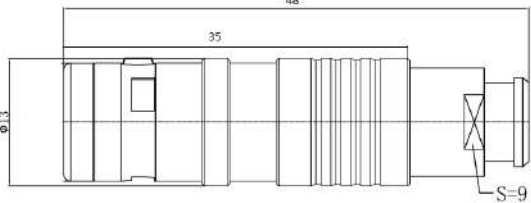

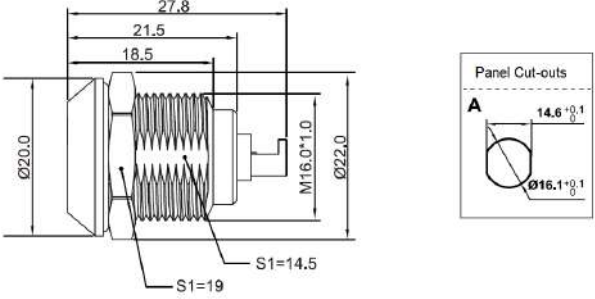
6. INT-S & E Series Coaxial Connector

<p>INT13- TFA.0S.250.CLADXXZ</p>		
<p>INT13- TFA.0S.250.CLADXX</p>		
<p>INT13-ZRA.0S.250.CLL</p>		

6. INT-S & E Series Coaxial Connector

<p>INT13-TFA.1S (Nut for fitting bend relief)</p>		
<p>INT13-TFA.1S</p>		
<p>INT13-TLA.1S</p>		
<p>INT13-ZRA.1S</p>		

6. INT-S & E Series Coaxial Connector

<p>INT13- TFA.2S.250.CLADXXZ</p>		
<p>INT13- TFA.2S.250.CLADXX</p>		
<p>INT13-ZRA.2S.250.CLL</p>		
<p>INT13- TGG.1E.250.CLADXXZ</p>		
<p>INT13-ZGG.1E.250.CLL</p>		

6. INT-S & E Series Coaxial Connector


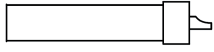










Cable Collet Size



Code	Cable Collet ϕA	Cable dia Range		Series				
	(mm)	Max	Min	00S	0S	1S	2S	1E
27	2.7	2.2	2.7	•		•		
29	2.9	2.4	2.9	•				
32	3.2	2.7	3.2	•	•			
35	3.5	3.1	3.5			•		
40	4.0	3.6	4.0		•	•	•	•
45	4.5	4.1	4.5		•			•
50	5.0	4.6	5.0		•	•		•
60	6.0	5.1	6.0			•		•
62	6.2	5.8	6.2			•		
65	6.5	6.1	6.5			•		
70	7.0	6.6	7.0				•	
80	8.0	7.1	8.0				•	

6. INT-S & E Series Coaxial Connector

Coaxial Connector Unipole Layout

 		Code	Ohm(Ω)	ϕ A(MM)	Solder contact	Voltage standing-wave ratio SWR(F=GHz)	Test voltage (KV/rms)	Work voltage (KV/rms)	Current rate (A)	IP Rating
00	 	250	50	0.7	1	1.09 +0.11*f/GHz	2.1	0.7	4	IP50
0S	 	250	50	0.9	1	1.02 +0.25*f/GHz	3.0	1.0	6	IP50
1S	 	250	50	1.6	1	1.01 +0.23*f/GHz	3.0	1.0	12	IP50
		275	75	1.3	1	1.02 +0.08*f/GHz	2.4	0.8	10	IP50
2S	 	250	50	2.0	1	1.01 +0.95*f/GHz	3.0	1.0	15	IP50
		275	75	1.6	1	1.02 +0.03*f/GHz	1.5	1.5	12	IP50
1E	 	250	50	0.9	1	1.09 +0.23*f/GHz	1.0	0.3	6	IP68

7. INT-P Series Plastic Connectors

Plug



INT-P-TAG



INT-P-TAG (Z)



INT-P-TAB (2P)



INT-P-TGG (3P)

Panel Mount Receptacle



INT-P-ZKG



INT-P-ZKG (elbow)



INT-P-ZLG



INT-P-ZLG



INT-P-ZLG



INT-P-ZLG



INT-P-ZLG



INT-P-ZLG



INT-P-ZKB (2P)



INT-P-ZGG (3P)

Cable Mount Receptacle



INT-P-ZRG



INT-P-ZRG (Z)

7. INT-P Series Plastic Connectors

Push-Pull Self-Latching Connection System



Drawing	Specification
	<p>Engaging The self-latching system allows the connector to be mated by simply pushing the plug into the receptacle.</p>
	<p>Latched Once firmly latched, the connection cannot be broken by pulling on the cable or any other component part other than the outer release sleeve.</p>
	<p>Disengaging When required, the connector is disengaged by a single axial pull on the outer release sleeve. This first disengage the latches and then withdraws the plug from the socket.</p>

7. INT-P Series Plastic Connectors

P Series Plastic Connector with the Following Main Features

1. Quick push-pull self-latching connection system
2. Solder and PCB (straight and elbow) contacts
3. Keying system (G key standard) for connector alignment
4. Multiple key options to avoid cross mating of similar connectors
5. High-temperature endurable plastic out shell (-25°C~125°C)
6. High density configuration for saving space
7. Can be sterilization
8. Available custom assembly solutions

Technical Characteristics

Mechanical and Climatical

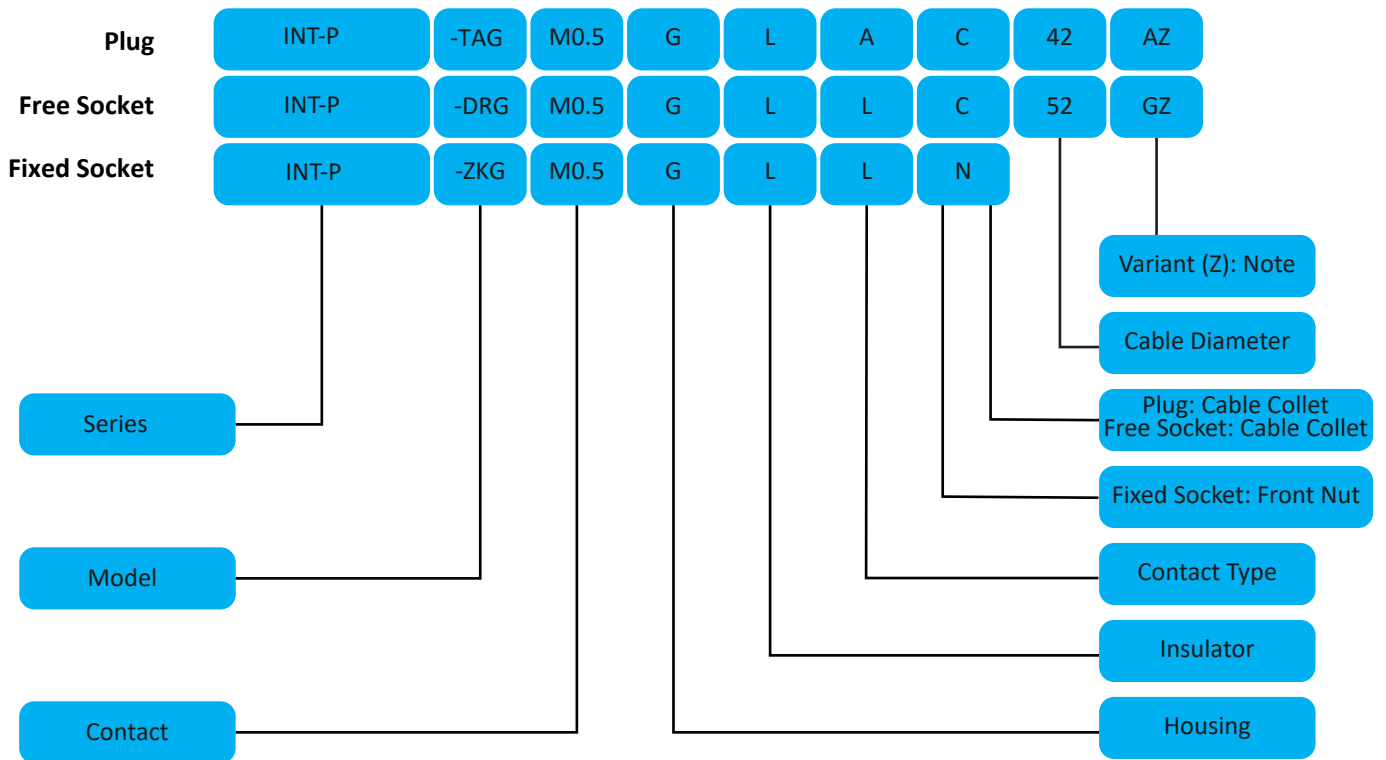
Characteristics	Value	Standard
Endurance	>1000 cycles	IEC 60512-5 test 9a
Humidity	Up to 95% at 60°C	
Temperature Range	-40°C, +150°C	
Resistance to Vibration	10-2000Hz, 15g	IEC 60512-4 test 6d
Shock Resistance	100g, 6ms	IEC 60512-4 test 6c
Salt Spray Corrosion Test	>72h	IEC 60512-6 test 11f
Protection Index (mated)	IP 50	IEC 60529
Climatical category	55/175/21	IEC 60068-1

Electrical

Characteristics		Value	Standard
Shielding Efficiency	at 10 MHZ	>75 dB	IEC 60619-1-3
	at 1 GHZ	>40 dB	IEC 60619-1-3

7. INT-P Series Plastic Connectors

Part Numbering System



INT13-P-TAG.M0.5GL.AC52A = 1P series 5 pins straight plug, G key (alpha=0), PC housing, PPS insulator, 5.2mm cable collet, blue nut.

INT13-P-ZRG.M0.5GL.LC52GZ = 1P series 5 pins free receptacle, G key (alpha=0), PC housing, PPS insulator, 5.2mm cable collet, nut for fitting bend relief

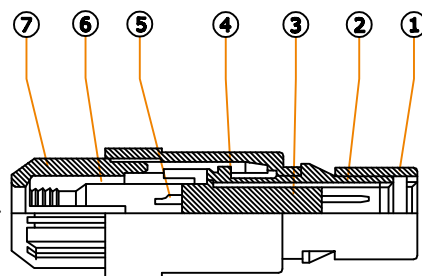
INT13-P-ZKG.M0.5GL.LN = 1P 5 pins panel mounted socket, G key(alpha=0), PC housing, PPS insulator, female soldering contact type, nut fixed

*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position.

Part Section Showing Internal Components

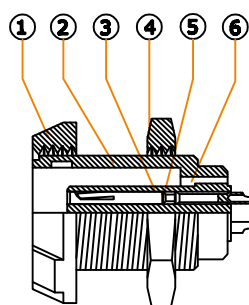
Straight Plug

- ① Outer Shell
- ② Latch Sleeve
- ③ Insulator
- ④ Male Contact
- ⑤ Split Insert Carrier
- ⑥ Collet
- ⑦ Nut



Fixed Receptacle

- ① Outer Shell
- ② Retaining Ring
- ③ Hexagonal Nut
- ④ Locking Washer
- ⑤ Insulator
- ⑥ Female Contact



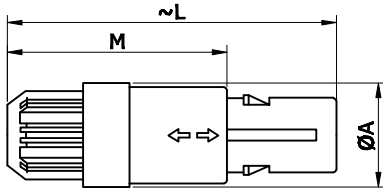
7. INT-P Series Plastic Connectors

Product Size

1P Series:

INT-P-TAG

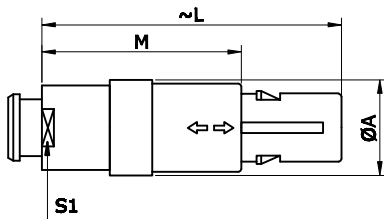
Straight plug, key (G) or keys (A, B, C, H, J), cable collet



Reference		Dimensions (mm)		
Model	Series	A	L	M
INT-P-TAG	1P	14	46.5	32

INT-P-TAG(Z)

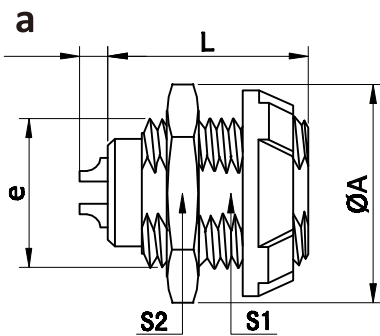
Straight plug, key (G) or keys (A, B, C, H, J), cable collet, nut for fitting a bend relief



Reference		Dimensions (mm)			
Model	Series	A	L	M	S1
INT-P-TAG(Z)	1P	14	45.5	32	9

INT-P-ZKG

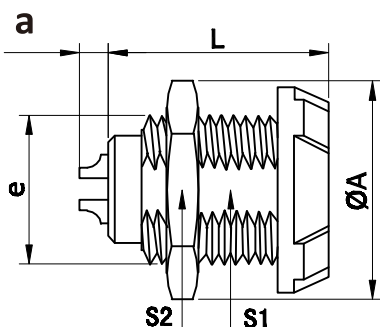
Fixed receptacle with two nuts, key (G) or keys (A, B, C, H, J), back panel mounting



Reference		Dimensions (mm)					
Model	Series	A	L	a	e	S1	S2
INT-P-ZKG	1P	18.5	20.5	2.7	M14*1.0	12.5	17

INT-P-ZLG

Fixed receptacle, all-in-one type, key (G) or keys (A, B, C, H, J), nut fixing

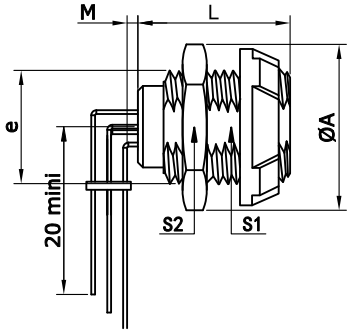


Reference		Dimensions (mm)					
Model	Series	A	L	a	e	S1	S2
INT-P-ZLG	1P	19.5	20.5	2.7	M14*1.0	12.5	17

7. INT-P Series Plastic Connectors

INT-P-ZKG(elbow)

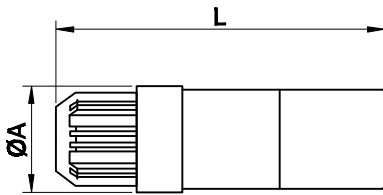
Fixed receptacle, key (G) or keys (A, B, C, H, J), elbow 90° contact for printed circuit



Reference		Dimensions (mm)					
Model	Series	A	L	M	e	S1	S2
INT-P-ZKG(elbow)	1P	19.5	20.5	2.0	M14 * 1.0	12.5	17.0

INT-P-ZRG

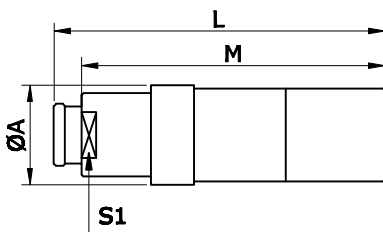
Free cable mount receptacle, key (G) or keys (A, B, C, H, J), cable collet



Reference		Dimensions (mm)	
Model	Series	A	L
INT-P-ZRG	1P	14	40

INT-P-ZRG(Z)


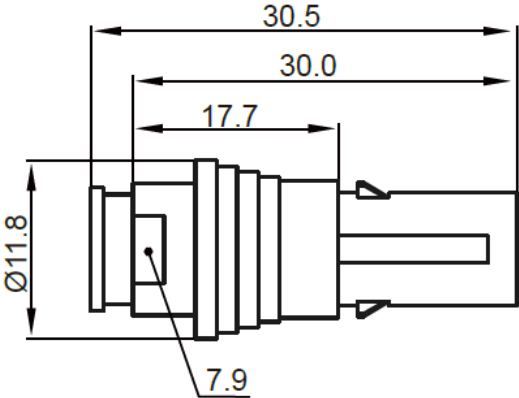

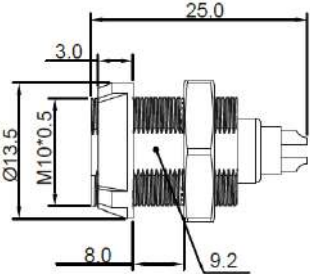
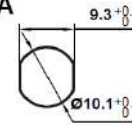

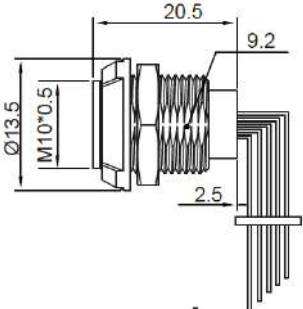
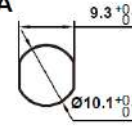
Free cable mount receptacle, key (G) or keys (A, B, C, H, J), cable collet, nut for fitting a bend relief



Reference		Dimensions (mm)			
Model	Series	A	L	M	S1
INT-P-ZRG(Z)	1P	14	43	38.7	9


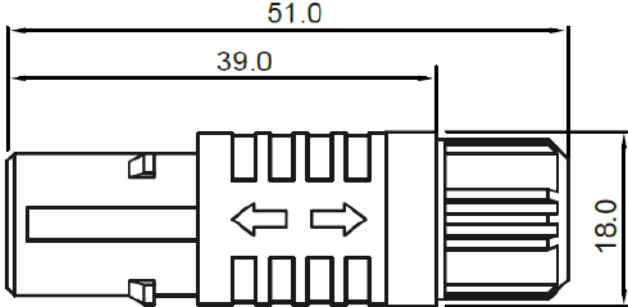

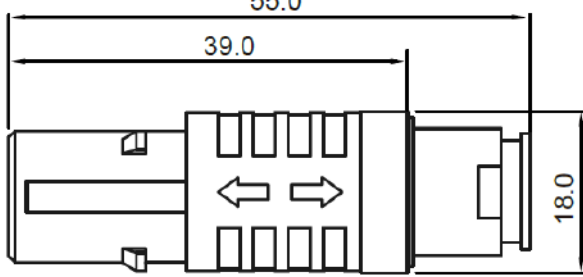

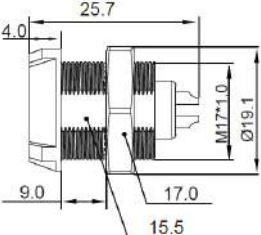
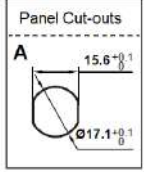

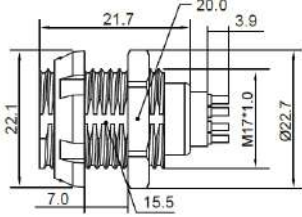
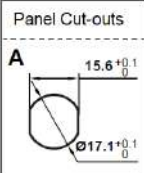

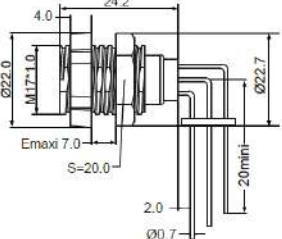
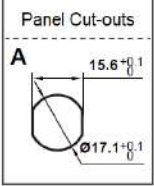
7. INT-P Series Plastic Connectors

OP Series

Part Number	Product Photo	Size
INT-P-TAG		
INT-P-ZKG		 <div data-bbox="1214 904 1378 1108" style="border: 1px solid black; padding: 5px;"> <p>Panel Cut-outs</p> <p>A</p>  </div>
INT-P-ZKG(elbow)		 <div data-bbox="1203 1225 1367 1429" style="border: 1px solid black; padding: 5px;"> <p>Panel Cut-outs</p> <p>A</p>  </div>


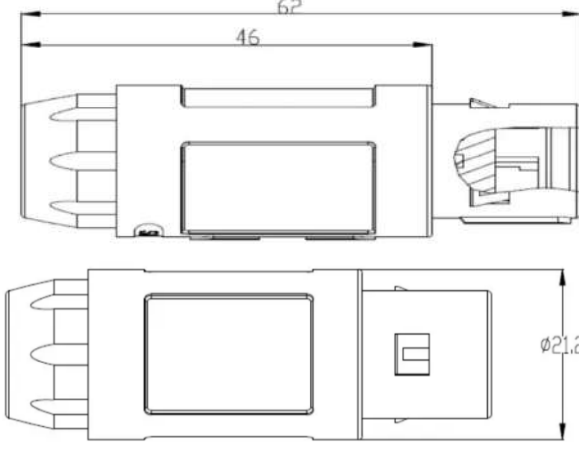

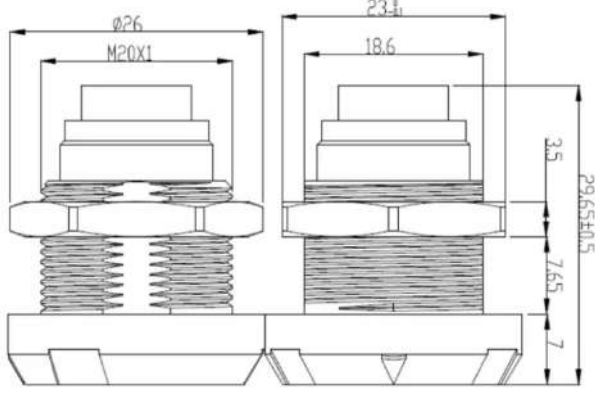
7. INT-P Series Plastic Connectors

2P Series

Part Number	Product Photo	Size
INT-P-CAB		
INT-P-CAB		
INT-P-ZLB		 
INT-P-ZKB		 
INT-P-ZKB(elbow)		 

7. INT-P Series Plastic Connectors

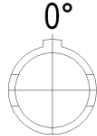
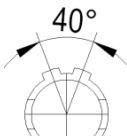
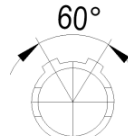
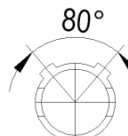
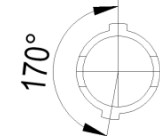
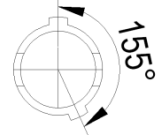
3P Series

Part Number	Product Photo	Size
INT-P-TGG		
INT-P-ZKG		

7. INT-P Series Plastic Connectors

Alignment Key and Polarized Keying System

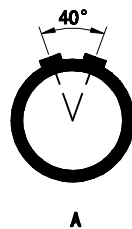
1P Series

Keying (plug front view)						
Key Code	G	A	B	C	H	J

Alignment keys:



G = standard key



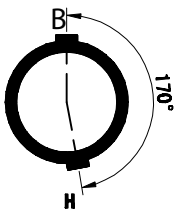
A = two keys with 40 degree



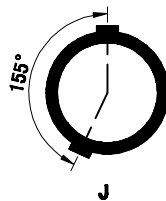
B = two keys with 60 degree



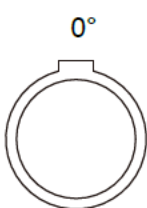

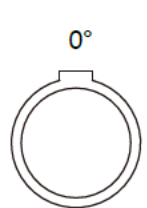
C = two keys with 80 degree



H = two keys with 170 degree

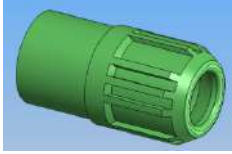
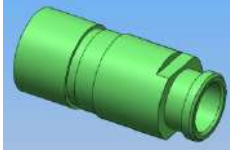
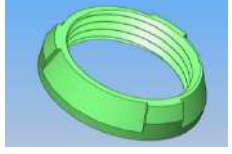
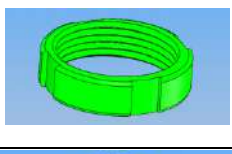
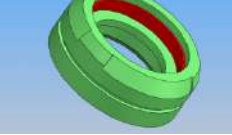


J = two keys with 155 degree

Keying (plug front view)			
Key Code	0P	2P	3P

7. INT-P Series Plastic Connectors

Collet Nut Code

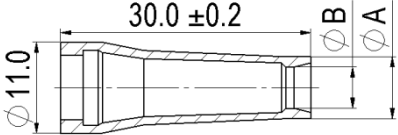
	Code	Color		Code	Color
	G	Gray		N	Black
	A	Blue		R	Red
	Code	Color		Code	Color
	G	Gray		N	Black
	A	Blue		R	Red
	Code	Color		Code	Color
	G	Gray		N	Black
	A	Blue		R	Red
	Code	Color		Code	Color
	G	Gray		N	Black
	A	Blue		R	Red
	Code	Color		Code	Color
	G	Gray		N	Black
	A	Blue		R	Red
				Code	Color
				V	Green

Bend Relief Code

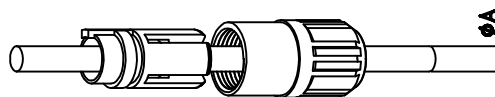
	Code	Color		Code	Color
	G	Gray		V	Green
	A	Blue		W	White
	J	Yellow		B	Brown
	N	Black		O	Orange
	R	Red	I	Beige	

7. INT-P Series Plastic Connectors

Bend Relief Size

	Size	ØA	AWG	
			ØB(Max.)	ØB(Min.)
	0P	4.0	3.9	2.7
		5.0	4.9	3.7
	1P	4.2	4.1	3.0
		5.2	5.1	4.0
		5.7	5.6	4.5
		6.5	6.4	5.2
	2P	5.2	5.1	4.0
		7.2	7.1	6.0
		8.0	7.9	6.8
		9.0	8.9	7.8
	3P	10.0	9.0	10.0

Cable Collet Size

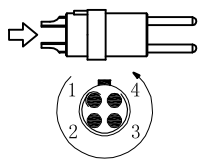
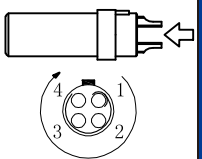
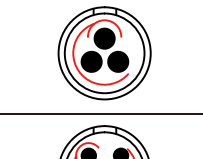
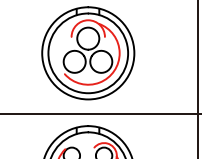
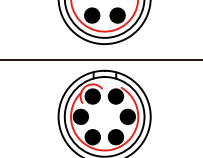
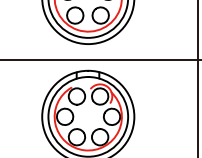








Cable Clamp Set	ØA(mm)	Cable φ(mm)	
		Min	Max
1P-039	3.9	2.7	3.9
1P-052	5.2	4.0	5.2
1P-065	6.5	5.3	6.5

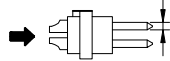
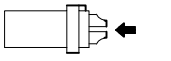
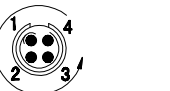
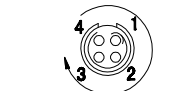




















Size	ØA	AWG min~max	Size	ØA	AWG min~max
2P	52	3.3~5.2mm	0P	40	2.7~3.9mm
	72	5.3~7.2mm	0P	50	3.7~4.9mm
	92	7.3~9.2mm	3P	10	9.0~10.0mm

7. INT-P Series Plastic Connectors

INT-P Series Multipole Layout

Series	Insulator	Pin Array		ØA (mm)	Contact resistance (mΩ)	Related current (A)	Test voltage (V)	Test current (V)
		Solder male contact	Solder female contact					
OP	02			0.9	6	10	1000	450
	03			0.9	6	8	875	400
	04			0.7	7.5	7	875	300
	05			0.7	7.5	6.5	750	350
	06			0.5	10	2.5	750	300
	07			0.5	10	2.5	750	250
	09			0.5	10	2	600	200

7. INT-P Series Plastic Connectors

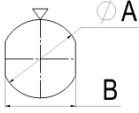
	 solder male contact		 solder female contact		Insulator	Contact No.	ØA(MM)	Solder contact	Contact tape				Rated current /A
			PCB straight contact	PCB elbow contact					Test voltage(contact -contact)k/v rms	Test voltage(contact -shell)k/v rms			
IP			02	2	1.3	●	●	●	1.30	1.10	10.0		
			03	3	1.3	●	●	●	1.30	1.10	10.0		
			04	4	0.9	●	●	●	1.35	1.45	10.0		
			05	5	0.9	●	●	●	1.25	1.15	9.0		
			06	6	0.7	●	●	●	1.05	1.20	7.0		
			07	7	0.7	●	●	●	0.95	1.05	7.0		
			08	8	0.7	●	●	●	0.95	1.15	5.0		
			09	9	0.5	●	●	●	0.85	1.20	3.0		
			10	10	0.5	●	●	●	0.90	1.50	2.5		
			14	14	0.5	●	●	●	0.80	1.20	2.0		

7. INT-P Series Plastic Connectors

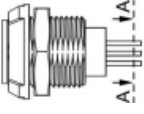
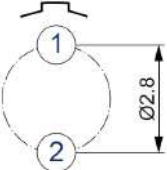
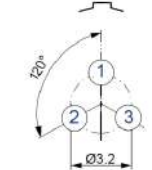
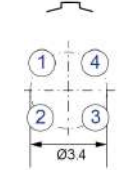
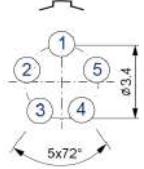
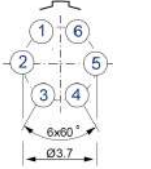
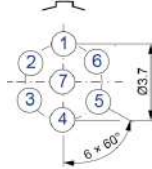
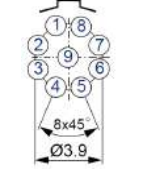
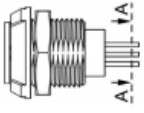
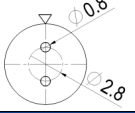
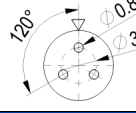
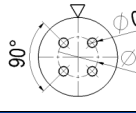
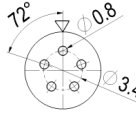
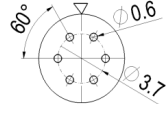
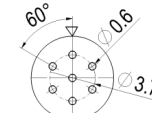
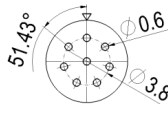
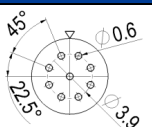
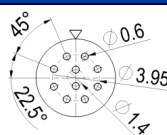
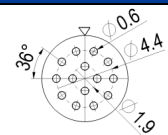
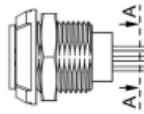
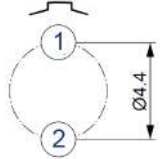
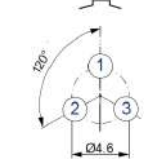
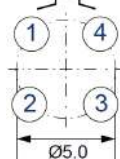
Series	Insulator	Pin Array		ϕA (mm)	Contact resistance (m Ω)	Related current (A)	Test voltage (V)	Test current (V)
		Solder male contact	Solder female contact					
2P	02			2.0	3	30	1650	600
	03			1.6	4	17	1800	600
	04			1.3	5	15	1800	500
	05			1.3	5	14	1500	500
	06			1.3	5	12	1500	550
	07			1.3	6	11	1680	400
	08			0.9	6	10	1200	400
	10			0.9	7.5	8	1200	450
	12			0.7	7.5	7	1350	400
	16			0.7	7.5	6	1200	400
	18			0.7	7.5	6	1200	400
	19			0.7	7.5	6	1200	400
	26			0.5	8	5.5	1200	400

7. INT-P Series Plastic Connectors

P Series Panel Holes Dimension

	Ref	A	B
	Size		
	01	14.0	12.6
	02	17.0	15.6

Panel Cut-out for Straight PCB Contacts

Size	Pin Array			
0P				
		02	03	04
				
		05	06	07
1P				
		02	03	04
				
	05	06	07	08
				
09	10	14		
2P				
		02	03	04

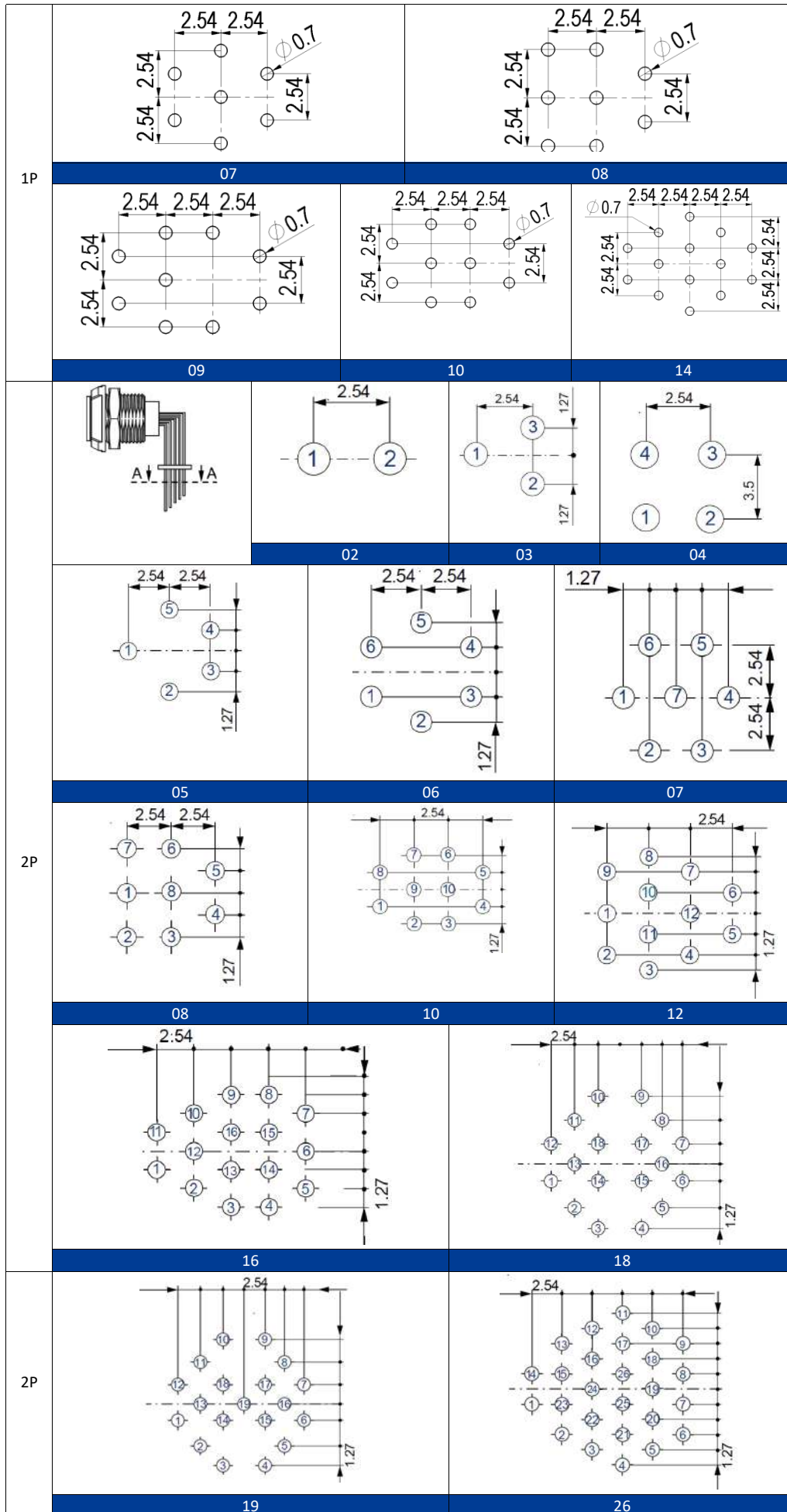
7. INT-P Series Plastic Connectors

2P				

Panel Cut-out for 90° Elbow Contacts

Size	Pin Array				
OP					
	1P				

7. INT-P Series Plastic Connectors



8. INT-B & K Series Hybrid Connector

Plug (Fluidic)



INT-TGG



INT-TGG (Z)

Receptacle (Fluidic)



INT-ZGG.2B (6+1)



INT-ZGG.3B (8+1)

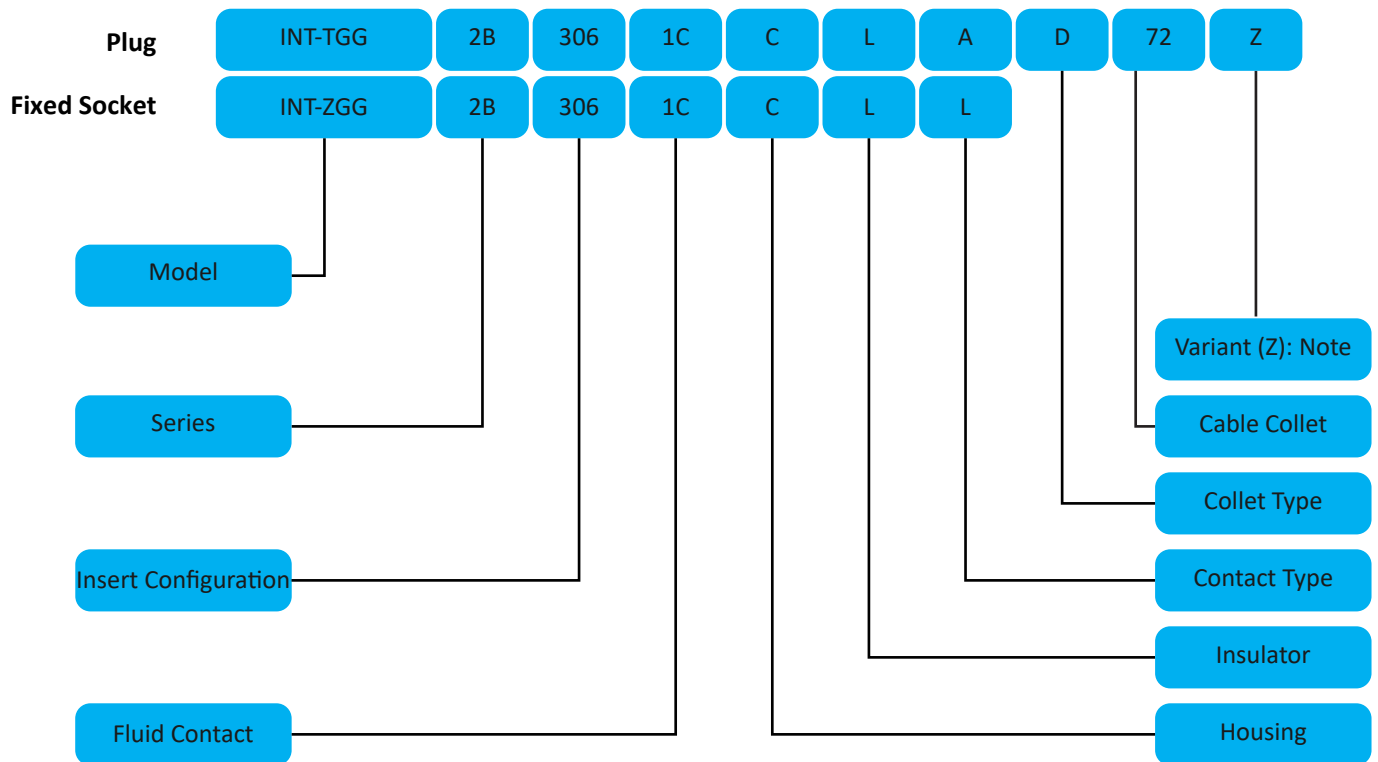
Hybrid Fluidic Connector with the Following Main Features

1. Security of the original Push-Pull self-latching system.
2. The alignment key (G, A, B, C) ensures excellent repeatability of performance during frequent mattings.
3. The P1 fluid contact mixed low voltage contacts allow hybrid configuration in the 2B and 3B series.
4. The possible outer cable diameters range from 4.0 to 11.0mm

The P1 fluidic contact has been designed to work in the 2B to 3B series. This kind of fluidic connector is used for medical and dentistry equipment. The connector is of the monotube type and primarily intended for use with air or inert gas.

8. INT-B & K Series Hybrid Connector

Part Numbering System




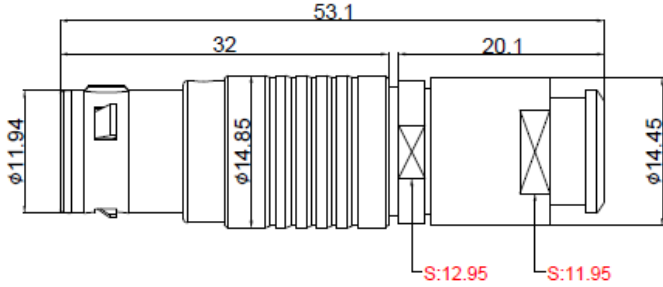

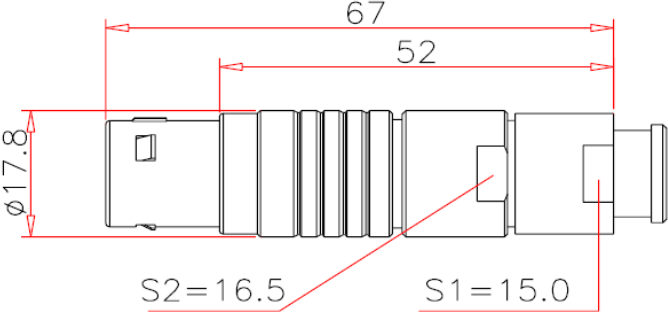

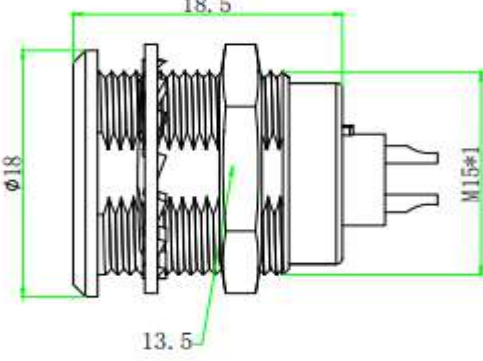

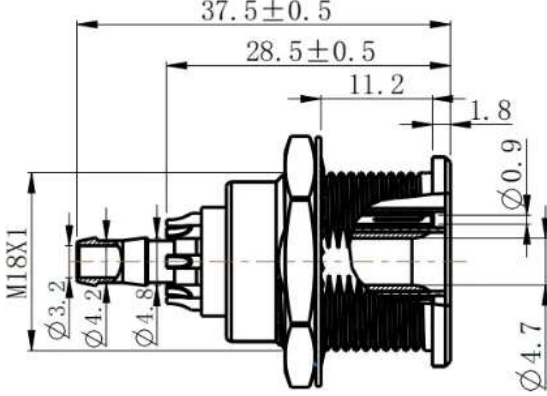
INT13-TGG.2B.306+1C.CLAD72Z = Straight plug with key (G), 2B series, mixed type to accept one P1 fluid contact and 6 low voltage electrical contacts, chrome-plated brass housing, PPS insulator, collet system to suit a 7.2mm diameter cable, and a nut for fitting a bend relief.

INT13-ZGG.2B.306+1C.CLL = Fixed socket with key (G), 2B series, mixed type to accept one P1 fluid contact and 6 low voltage electrical contacts, chrome-plated brass housing, PPS insulator, nut fixing

*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position.

8. INT-B & K Series Hybrid Connector

Product Size

Part Number	Product Photo	Size
INT-TGG.2B		
INT-TGG.3B		
INT-ZGG.2B		
INT-ZGG.3B		

8. INT-B & K Series Hybrid Connector

IP50 Plug (Coaxial)



INT-TGG (Z)



INT-TGG

IP68 Plug (Coaxial)



INT-TGG (Z)



INT-TGG

IP50 Receptacle (Coaxial)



INT-ZCG

IP68 Receptacle (Coaxial):



INT-ZEG

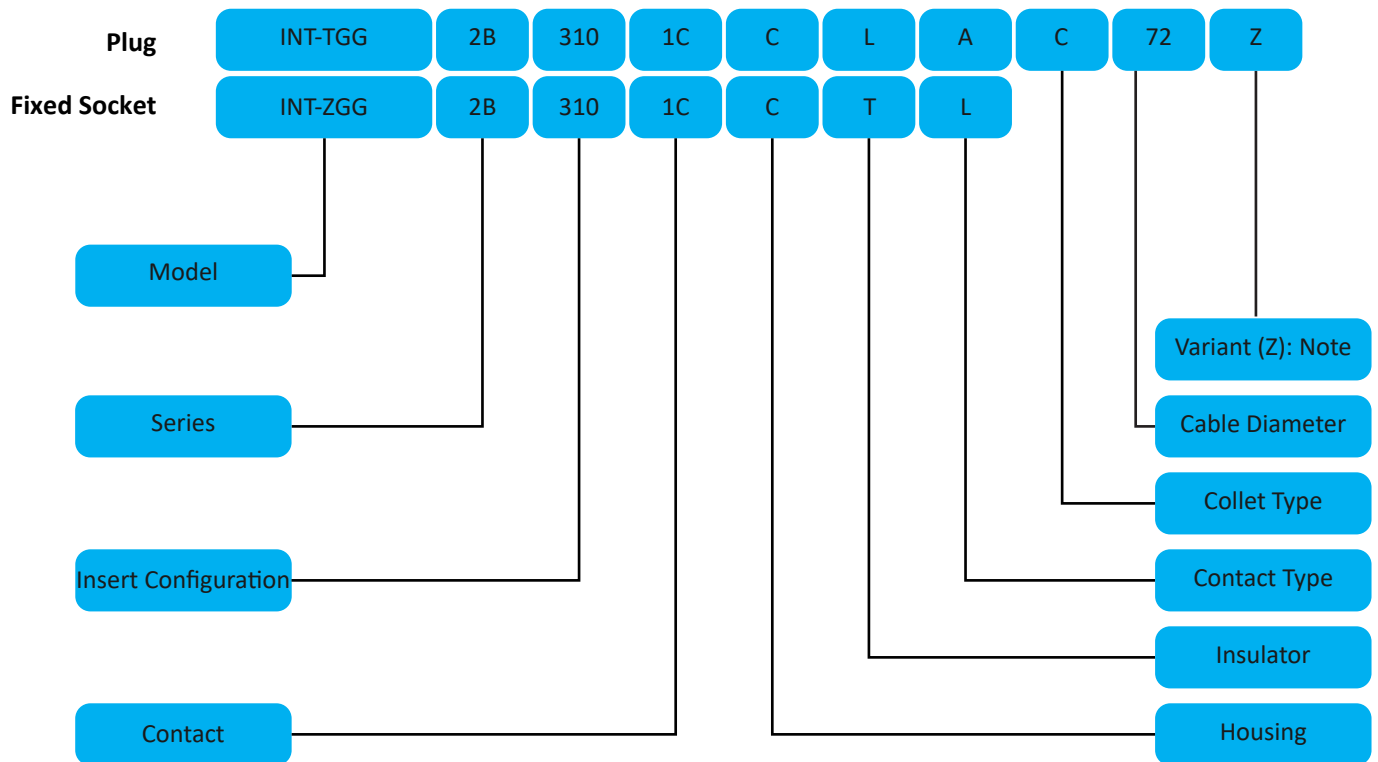
Hybrid Coaxial Connector with the Following Main Features

1. Fast push-pull self-locking connection
2. Ease of installation
3. High density mixed insert configuration for saving space
4. Keying system («G» key standard) for connector alignment
5. 360° screening for full EMC shielding
6. Rugged housing for extreme working conditions
7. Available custom cable assembly
8. Combined transmission of various media in one interface: electrical (signals, power, data)

The coaxial contact mixed low voltage contacts insert has been designed to work in the 2B and 2K series. Smaller, lighter, more powerful hybrid connectors, what apply for end devices in the areas of industry, medical technology, as well as test and measurement is also a key requirement for the connecting interfaces and transmission infrastructure. They are suited for use in harsh environments while ensuring high numbers of mating cycles.

8. INT-B & K Series Hybrid Connector

Part Numbering System




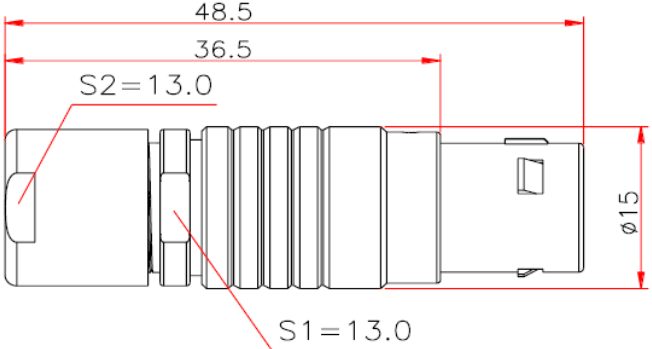

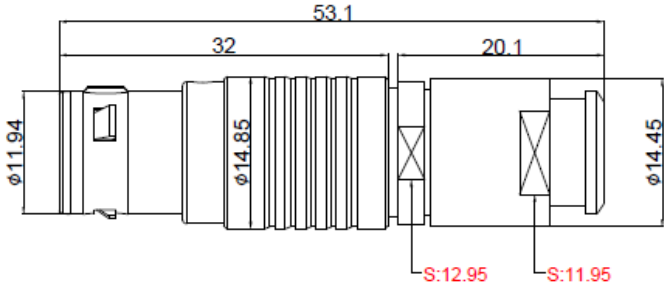

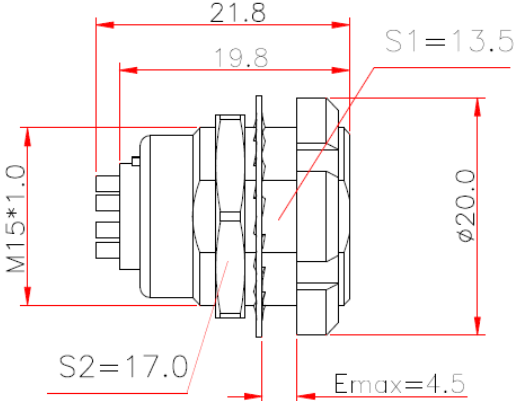

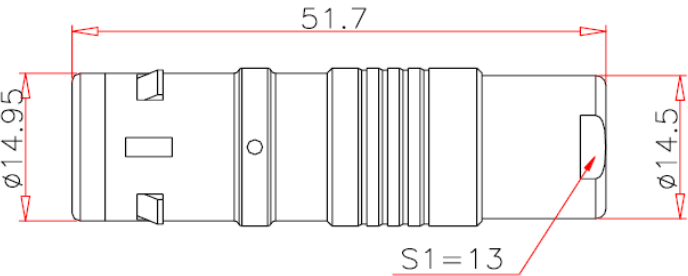
INT13-TGG.2B.310+1C.CLACXXZ = Straight plug with key (G), 2B series, coaxial contact and 10 low voltage electrical contacts, chrome-plated brass housing, PPS insulator, collet system to suit a 6.1 to 9.0 mm diameter cable, and a nut for fitting a bend relief.

INT13-ZGG.2K.310+1C.CTL = Waterproof fixed socket with key (G), 2K series, mixed type to accept one coaxial contact and 10 low voltage electrical contacts, chrome-plated brass housing, PPS insulator, nut fixing.


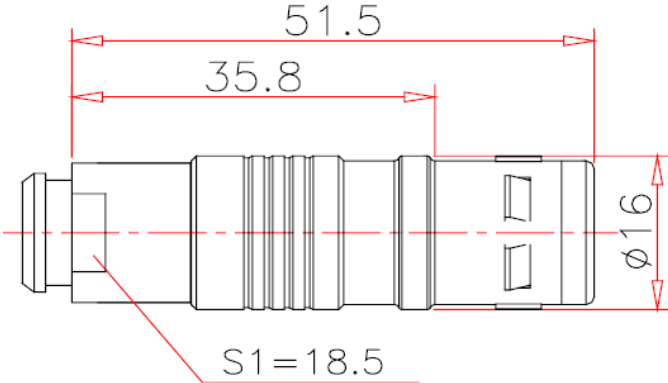

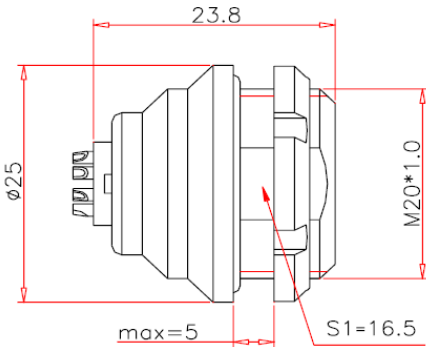
*NOTE: To order a model with cable collet and nut for fitting a bend relief, a letter "Z" is in the variant position.

8. INT-B & K Series Hybrid Connector

Product Size

Part Number	Product Photo	Size
INT-TGG.2B		
INT-TGG.2B		
INT-ZCG.2B		
INT-TGG.2K		

8. INT-B & K Series Hybrid Connector

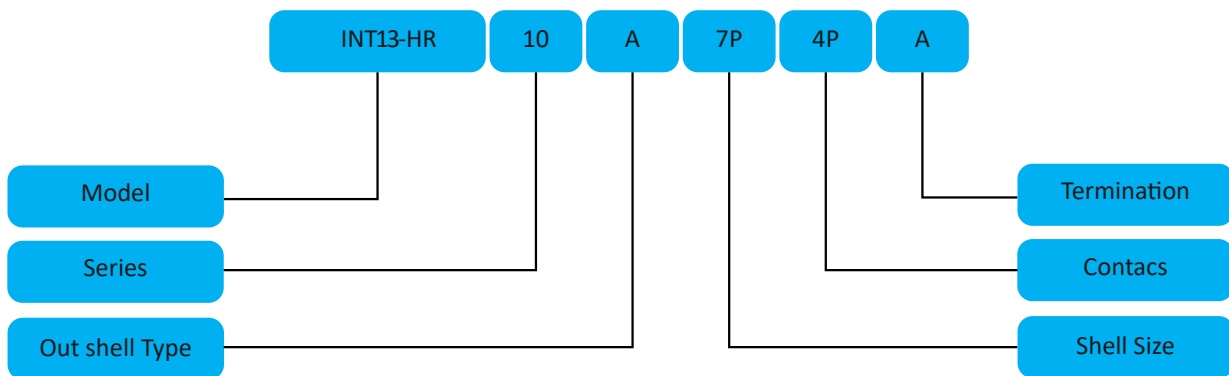
Part Number	Product Photo	Size
INT-TGG.2K		 <p>51.5 35.8 φ16 S1=18.5</p>
INT-ZEG.2K		 <p>23.8 φ25 M20*1.0 S1=16.5 max=5</p>

9. INT-HR10 Series Miniature Camera Connector

HR10 Series Connector with the Following Main Features

1. Push-pull coupling mechanism assures easy and quick connecting & disconnecting.
2. Smart design, well-balanced, simplified layout in the limited space.
3. Straight solder contacts, PCB contacts.
4. Five-key system permits only one way of coupling when blind mating.
5. Series of multi-core, high-density installation space-saving.
6. Easy wiring and mounting, no use of screws make wiring and mounting easier.

Part Numbering System




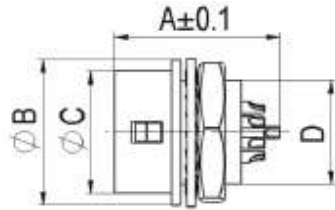
Technical Characteristics

No.	Out Shell Size	01			02		
	Pin Array						
	Specification	4	6	7	7	10	12
1.	Contact Diameter (mm)	0.6			0.8	0.6	
2.	Contact Resistance (mΩ)	10			6.5	10	
3.	Working Voltage (KV/DC)	0.3			0.45	0.3	
	Working Voltage (KV/AC)	0.2			0.35	0.2	
4.	Experimental Voltage (KV/DV)	0.9			1.2	0.9	
	Experimental Voltage (KV/AV)	0.5			0.8	0.5	
5.	Working Current (A)	2			3.5	2	
6.	Work temperature (°C)	-40°C~125°C					
7.	Lifetime	1000 times					


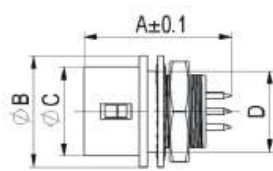
9. INT-HR10 Series Miniature Camera Connector

Product Size


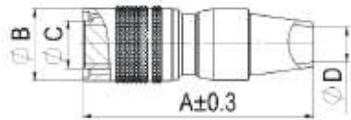
Fixed Socket with Solder Pin

						
Size	Item NO.	Pin Array	A	B	C	D
01	INT13-HR10A-7R-4S(73)	4	14	11	8.85	M8*0.5
	INT13-HR10A-7R-6S(73)	6	14	11	8.85	M8*0.5
	INT13-HR10A-7R-7S(73)	7	14	11	8.85	M8*0.5
02	INT13-HR10A-10R-7S(73)	7	16	14	11.9	M11*0.75
	INT13-HR10A-10R-10S(73)	10	16	14	11.9	M11*0.75
	INT13-HR10A-10R-12S(73)	12	16	14	11.9	M11*0.75

Fixed Receptacle with PCB Pin


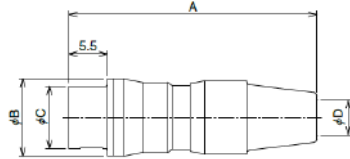
						
Size	Item NO.	Pin Array	A	B	C	D
01	INT13-HR10A-7R-4SA(73)	4	15.5	11	8.85	M8*0.5
	INT13-HR10A-7R-6SA(73)	6	15.5	11	8.85	M8*0.5
	INT13-HR10A-7R-7SA(73)	7	15.5	11	8.85	M8*0.5
02	INT13-HR10A-10R-7SA(73)	7	15.5	14	11.9	M11*0.75
	INT13-HR10A-10R-10SA(73)	10	15.5	14	11.9	M11*0.75
	INT13-HR10A-10R-12SA(73)	12	15.5	14	11.9	M11*0.75

Plug with Solder Pin

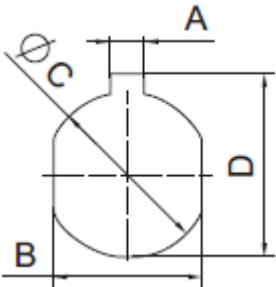
						
Size	Item NO.	Pin Array	A	B	C	D
01	INT13-HR10A-7P-4P(73)	4	35.5	11	8.85	5
	INT13-HR10A-7P-6P(73)	6	35.5	11	8.85	5
	INT13-HR10A-7P-7P(73)	7	35.5	11	8.85	5
02	INT13-HR10A-10P-7P(73)	7	44	14	11.9	7
	INT13-HR10A-10P-10P(73)	10	44	14	11.9	7
	INT13-HR10A-10P-12P(73)	12	44	14	11.9	7

9. INT-HR10 Series Miniature Camera Connector

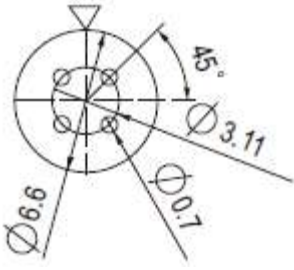
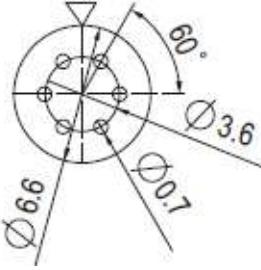
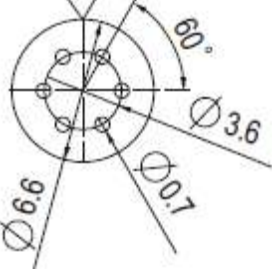

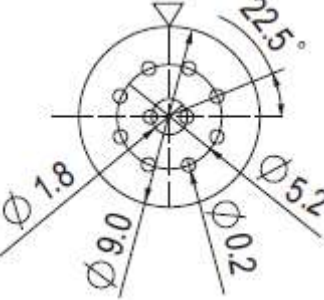
Free Receptacle with Solder Pin

						
Size	Item NO.	Pin Array	A	B	C	D
01	INT13-HR10A-7R-4J(73)	4	35.5	11	8.85	5
	INT13-HR10A-7R-6J(73)	6	35.5	11	8.85	5
	INT13-HR10A-7R-7J(73)	7	35.5	11	8.85	5
02	INT13-HR10A-10R-7J(73)	7	44	14	11.9	7
	INT13-HR10A-10R-10J(73)	10	44	14	11.9	7
	INT13-HR10A-10R-12J(73)	12	44	14	11.9	7

Panel Holes Dimension for Fixed Receptacle

	Drawing	A	B	C	D
	Size				
	01	1.6	7.3	8.1	9.0
02	2.5	10.1	11.1	12	

PCB Drilling Pattern

Size	Pin Array		
01			
	04	06	07
	02		
07		10	12

10. INT-BP Series Fluidic Connector

Metal Fluidic Connector



INT-BP12



INT-BP15



INT-BP16



INT-BP44

Metal Fluidic Connector with the Following Main Features


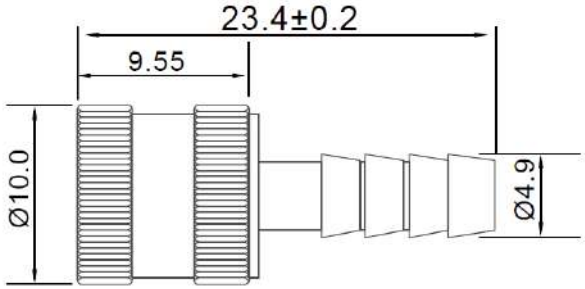

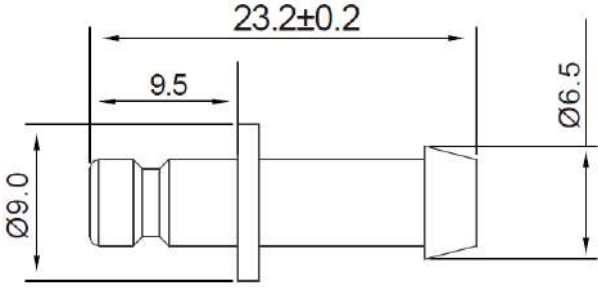

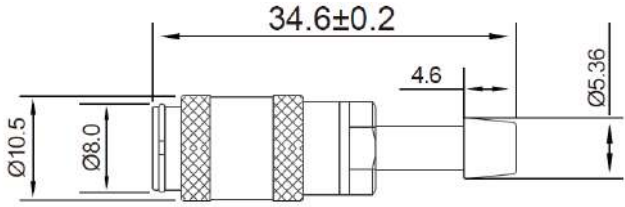

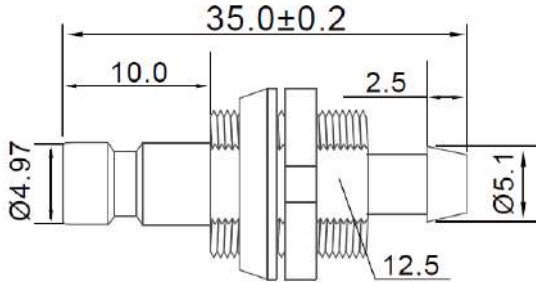
NIBP connectors are widely used in medical appliances, instruments and industries with wind (water) piping interconnection. They can be realized fast connection and disconnection.

Technical Specifications

Tube Diameter	5.00mm or 4.00mm
Work Temperature	-20°C ,+120°C
Certifications	RoHS compliant
Material Connector	Copper alloy housing, nickel plating
Connection	Quick connect and disconnect (Bayonet)
Life Cycles	1000 times

10. INT-BP Series Fluidic Connector

Product Size

Part Number	Product Photo	Size
INT13-BP44		 <p>23.4±0.2 9.55 Ø10.0 Ø4.9</p>
INT13-BP12		 <p>23.2±0.2 9.5 Ø9.0 Ø6.5</p>
INT13-BP15		 <p>34.6±0.2 10.5 8.0 4.6 Ø5.36</p>
INT13-BP16		 <p>35.0±0.2 10.0 2.5 12.5 Ø5.1</p>

10. INT-BP Series Fluidic Connector

PLastic Fluidic Connector



INT-P-TAG



INT-P-TAG(Z)



INT-P-ZKG

Plastic Fluidic Connector with the Following Main Features


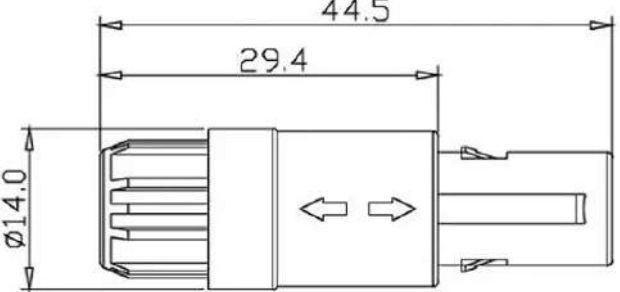

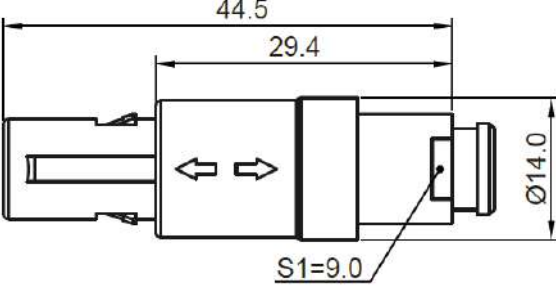

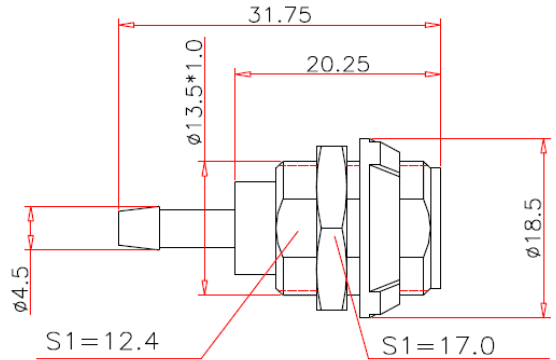
1. Quick push-pull self-latching connection system
2. Fluidic contacts
3. Can be sterilization
4. Keying system (G key standard) for connector alignment
5. High-temperature durable plastic out shell (-25°C~125°C)
6. Available custom cable assembly solutions

Technical Specifications

Shell Style/Model	1P (Plastic (Mechanical Keying))
Housing Material	PC
Insulator Material	PPS
Tube Inner Diameter	4mm
Docking Metal Head Diameter	4.5mm, with slot
Life Cycles	Max. Mating: 1000 times
Air Leakage	Volume 500ml ³ , pressure 400mmHg, leakage is less than 6mmHg within 3min.
Salt Spray	> 144hrs
Temp (min)	-20°C
Temp (max)	125°C
Humidity (max)	<=95% [at 60°C / 140 F]
Vibration	15 g [10 Hz - 2000 Hz]
Shock Resistance	100 g [6 ms]

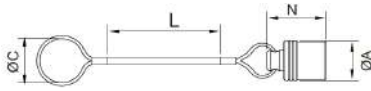
10. INT-BP Series Fluidic Connector

Product Size

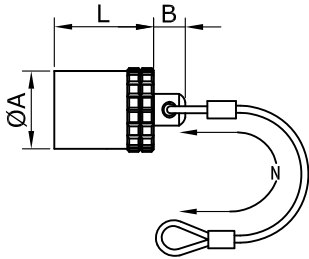
Part Number	Product Photo	Size
INT13-TAG.A0.1GZ.ZC65G		
INT13-TAG.A0.1GZ.ZC65GZ		
INT13-ZKG.A0.1GZ.ZG		

11. Accessories

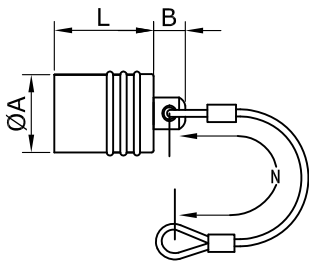
Dust Cap for Plug



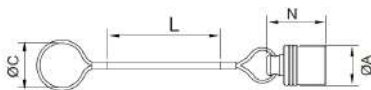
Reference		Dimensions (mm)			
Model	Series	A	L	N	ΦC
INT-BFG-0B-100-NAS	0B	10	65	17	8
INT-BFG-1B-100-NAS	1B	12	75	17	10
INT-BFG-2B-100-NAS	2B	15	80	18	13
INT-BFG-3B-100-NAS	3B	19	95	23	16



Reference		Dimensions (mm)			
Model	Series	A	B	L	N
INT-BFG-0K-100-NAS	0K	14.0	6	12.5	85
INT-BFG-1K-100-NAS	1K	16	6	15.5	85
INT-BFG-2K-100-NAS	2K	19.5	6	17.5	85
INT-BFG-3K-100-NAS	3K	23.0	6	22.0	120

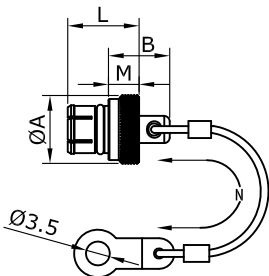


Reference		Dimensions (mm)			
Model	Series	A	B	L	N
INT-BFG-0F-200-NAS	0F	9.8	4	12.5	65
INT-BFG-1F-200-NAS	1F	12	4	13.5	85
INT-BFG-1.5F-200-NAS	1.5F	14	4	12.5	85
INT-BFG-2F-200-NAS	2F	16	4	15	120

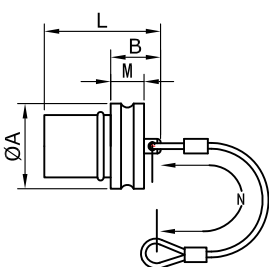


Reference		Dimensions (mm)			
Model	Series	A	L	N	ΦC
INT-BFG-0S-100-NAS	0S	10	65	17	8
INT-BFG-1S-100-NAS	1S	12	75	17	10
INT-BFG-2S-100-NAS	2S	15	80	18	13

Dust Cap for Receptacle

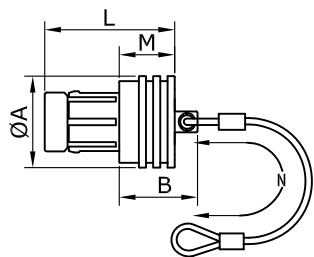


Reference		Dimensions (mm)				
Model	Series	A	B	L	M	N
INT-BRE-00-200-NAS	00	7.5	7.5	8.8	3.5	60
INT-BRE-0*-200-NAS	0S-0B	9.5	9.5	10.5	4.5	85
INT-BRE-1*-200-NAS	1S-1B	11.0	11.0	15.5	5.0	85
INT-BRE-2*-200-NAS	2S-2B	12.0	12.0	14.0	6.0	85
INT-BRE-3*-200-NAS	3S-3B	14.0	14.0	18.0	8.0	120

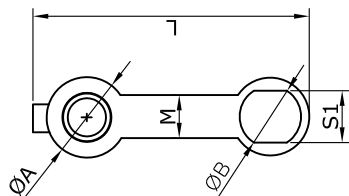


Reference		Dimensions (mm)				
Model	Series	A	B	M	L	N
INT-BRE-0K-200-NAS	0K	15	7	4	15	85
INT-BRE-1K-200-NAS	1K	17	5.8	6	20	85
INT-BRE-2K-200-NAS	2K	20.5	5.8	8	24	85

11. Accessories



Reference		Dimensions (mm)				
Model	Series	A	B	L	M	N
INT-BRE-0F-200-NAS	0F	10	7	12.8	3	60
INT-BRE-1F-200-NAS	1F	14	12	23.4	8.5	85
INT-BRE-15F-200-NAS	1.5F	14	11.7	21.6	8.5	85



Reference		Dimensions (mm)				
Model	Series	A	B	L	M	S1
INT-BRP-0B-200-NAS	0B	11.9	9.0	40	6.3	8.0
INT-BRP-1B-200-NAS	1B	14.1	12.0	60	7.2	10.5
INT-BRP-2B-200-NAS	2B	16.1	15.0	60	7.2	13.5

Bend Relief



INT-GMA

Main Characteristics:

Material: TPU (Thermoplastic Polyurethane)

Temperature Range in Dry Atmosphere: -60°C +200°C

Shell Size	Cable ϕ		Dimension (mm)		Part Number
	min	max	A	L	
00	2.8	3.1	2.8	22	INT-GMA.0*.028.DN
0B	2.5	3.0	3.0	24	INT-GMA.0*.030.DN
0S	3.0	3.5	3.5	24	INT-GMA.0*.035.DN
0K	3.5	4.0	4.0	24	INT-GMA.0*.040.DN
0F	3.7	4.2	4.2	24	INT-GMA.0*.042.DN
	4.0	4.5	4.5	24	INT-GMA.0*.045.DN
	4.5	5.0	5.0	24	INT-GMA.0*.050.DN
1B	3.5	4.0	4.0	30	INT-GMA.1*.040.DN
1S	4.0	4.5	4.5	30	INT-GMA.1*.045.DN
1K	4.5	5.0	5.0	30	INT-GMA.1*.050.DN
1F	5.5	6.0	6.0	30	INT-GMA.1*.060.DN
2B	4.5	5.0	5.0	36	INT-GMA.2*.050.DN
2K	5.5	6.0	6.0	36	INT-GMA.2*.060.DN
	6.50	7.0	7.0	36	INT-GMA.2*.070.DN
	7.5	8.0	8.0	36	INT-GMA.2*.080.DN
3S	4.5	5.0	5.0	42	INT-GMA.3*.050.DN
3B	5.5	6.0	6.0	42	INT-GMA.3*.060.DN
3K	6.5	7.0	7.0	42	INT-GMA.3*.070.DN
	7.5	8.0	8.0	42	INT-GMA.3*.080.DN
	8.5	9.0	9.0	42	INT-GMA.3*.090.DN
	9.5	10.0	10.0	42	INT-GMA.3*.010.DN

Note:

The letter «N» of the part number indicates black color bend relief. For ordering a bend relief with another color, replace the letter «N» with the code of the required color.

A bend relief made from thermoplastic polyurethane can be fitted over INTE-AUTO plugs and cable receptacles that are supplied with nuts for fitting such bend relief. They are available in eight different colors. Each color has the code listed below.

11. Accessories

Code	Color	Code	Color
A	Blue	M	Brown
B	White	N	Black
G	Gray	R	Red
J	Yellow	S	Orange

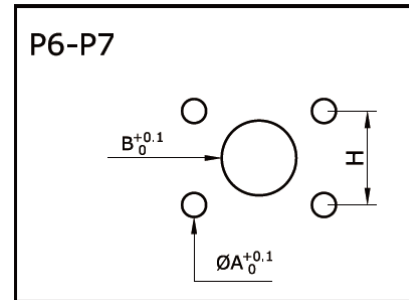
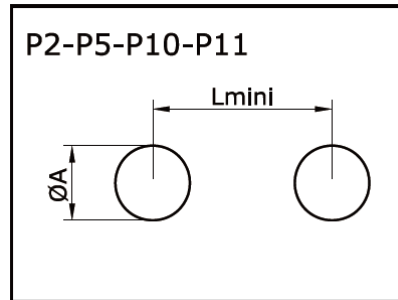
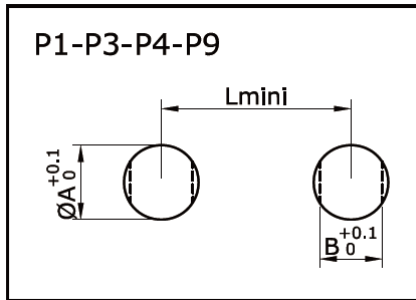
Housings, Contacts, Contact Variants

Ref.	Series	Material	Code	Colour	Code	Colour
Housings	F series	Brass	130	Natural Chrome Plated	140	Black Chrome Plated
	B series	Brass	C	Natural Chrome Plated	S	Black Chrome Plated
	K series	Brass	C	Natural Chrome Plated	S	Black Chrome Plated
	S series	Brass	C	Natural Chrome Plated	S	Black Chrome Plated
	P series	Plastic	C	Gray Color Outshell	N	Black Color Plastic

Ref.	Series	Material	Code	Color	Surface Treatment	Code	Color	Surface Treatment
Contacts	F series	Brass	A	Male Contact	Gold Plated	Z	Female Contact	Gold Plated
	B series	Brass	A	Male Contact	Gold Plated	L	Female Contact	Gold Plated
	K series	Brass	A	Male Contact	Gold Plated	L	Female Contact	Gold Plated
	S series	Brass	A	Male Contact	Gold Plated	L	Female Contact	Gold Plated
	P series	Brass	A	Male Contact	Gold Plated	L	Female Contact	Gold Plated

Ref.	Series	Material	Code	Variants	Surface Treatment	Code	Variants	Surface treatment	Code	Variants	Surface Treatment
Contact Variants	F series	Brass	L	Solder	Gold Plated	N	PCB	Gold Plated	V	Elbow PCB	Gold Plated
	B series	Brass	L	Solder	Gold Plated	N	PCB	Gold Plated	V	Elbow PCB	Gold Plated
	K series	Brass	L	Solder	Gold Plated	N	PCB	Gold Plated	V	Elbow PCB	Gold Plated
	S series	Brass	L	Solder	Gold Plated	N	PCB	Gold Plated	V	Elbow PCB	Gold Plated
	P series	Brass	L	Solder	Gold Plated	N	PCB	Gold Plated	V	Elbow PCB	Gold Plated

12. Panel Cut-out



B Series

Series	P1			P2		P3			P4			P5		P9			P10	
	$\varnothing A$	B	L	$\varnothing A$	L	$\varnothing A$	B	L	$\varnothing A$	B	L	$\varnothing A$	L	$\varnothing A$	B	L	$\varnothing A$	L
00	7.1	6.4	12.5	7.1	11.5	-	-	-	-	-	-	-	-	7.1	6.4	12.0	-	-
0B	9.1	8.3	14.5	9.1	13.5	14.1	12.6	20.1	10.1	9.1	15.0	8.3	10.5	9.1	8.3	15.0	-	-
1B	12.1	10.6	18.5	-	-	16.1	14.6	22.0	14.1	12.6	21.0	11.2	14.0	12.1	10.6	19.0	11.1	17.0
2B	15.1	13.6	22.5	-	-	19.2	17.1	28.0	16.1	15.1	23.0	13.9	18.0	15.1	13.6	23.0	-	-
3B	18.2	16.6	27.0	-	-	-	-	-	20.2	18.6	29.5	-	-	18.2	16.6	27.0	-	-

Cut-out Types

Model	Type	Model	Type
INT-ZCG	P1	INT-HCG	P3
INT-ZEG	P1	INT-MEG	P9
INT-ZHG	P1	INT-MGG	P9
INT-ZXG	P2/P10	INT-MHG	P9
INT-TAG	P1	INT-DFG	P1

Mounting Nut Torque

Series	Torque (Nm)	
	Metal shell	Plastic shell
00	1.0	0.4
0B	2.5	0.4
1B	4.5	0.7
2B	6.0	0.8
3B	9.0	1.0

B Series

Series	P1			P6			P7		
	$\varnothing A$	B	L	$\varnothing A$	B	L	$\varnothing A$	B	L
0K	14.1	12.6	20.5	-	-	-	-	-	-
1K	16.1	14.6	22.5	-	-	-	-	-	-
2K	20.2	18.6	29.0	-	-	-	-	-	-
3K	24.2	22.6	35.5	3.5	22.6	20.6	3.5	23.1	23.0

Cut-out Types

Model	Type
INT-ZCG	P1
INT-ZEG	P1

Mounting Nut Torque

Series	Torque (Nm)
0K	5
1K	7
2K	9
3K	12

12. Panel Cut-out

S Series

Series	P1			P2		P3			P4			P6			P7			P10	
	∅ A	B	L	∅ A	L	∅ A	B	L	∅ A	B	L	∅ A	B	H	∅ A	B	H	∅ A	L
00	7.1	6.4	12.5	7.1	11.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-
0S	9.1	8.3	14.5	9.1	13.5	12.1	10.6	20.0	10.1	9.1	15.0	-	-	-	-	-	-	-	-
1S	12.1	10.6	18.5	12.1	19.0	14.1	12.6	21.0	12.1	10.6	18.0	3.3	12.1	12.7	2.7	11.1	12.4	11.1	17.0
2S	15.1	13.6	22.5	15.1	21.5	16.1	14.6	22.0	16.1	15.1	23.1	3.3	15.1	15.5	-	-	-	-	-
3S	18.2	16.6	27.0	18.2	27.0	20.2	18.6	30.0	20.2	18.6	29.0	3.3	18.2	18.0	-	-	-	-	-

Cut-out Types

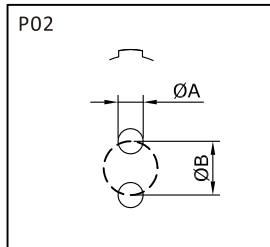
Model	Type
INT-ZRA	P1
INT-ZRD	P1

Mounting Nut Torque

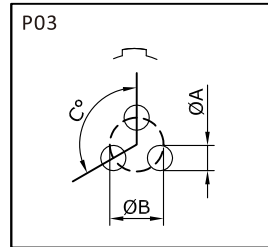
Series	Torque (Nm)	
	Metal shell	Plastic shell
0S	2.5	0.4
1S	4.5	0.7
2S	6.0	0.8
3S	9.0	1.0

13. PCB Drilling Pattern

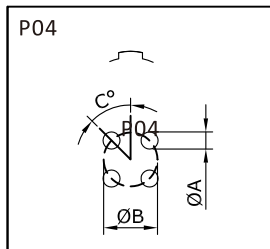
Fixed Receptacle with Straight Print Contact (B-K Series)



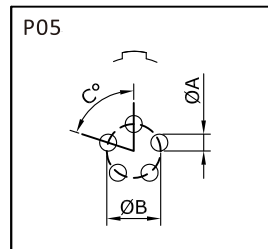
Series	Dimensions(mm)	
	A	B
00	0.6	1.2
0B-0K	0.8	2.2
1B-1K	0.8	2.8
2B-2K	0.8	4.4



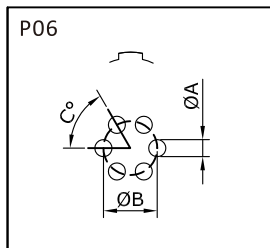
Series	Dimensions(mm)		
	A	B	C
00	0.6	1.35	120°
0B-0K	0.8	2.30	120°
1B-1K	0.8	3.00	120°
2B-2K	0.8	4.60	120°
3B-3K	0.8	5.60	120°



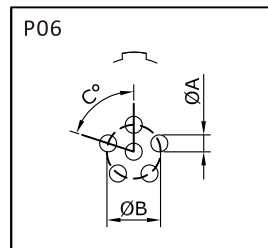
Series	Dimensions(mm)		
	A	B	C
00	0.6	1.6	45°
0B-0K	0.8	2.5	45°
1B-1K	0.8	3.1	45°
2B-2K	0.8	5.0	45°
3B-3K	0.8	6.2	45°



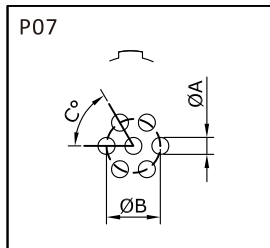
Series	Dimensions(mm)		
	A	B	C
0B-0K	0.6	2.8	72°
1B-1K	0.8	3.4	72°
2B-2K	0.8	5.2	72°
3B-3K	0.8	6.7	72°



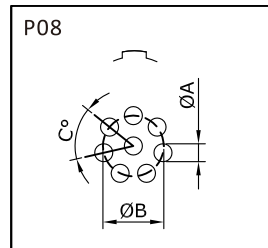
Series	Dimensions(mm)		
	A	B	C
0B-0K	0.6	3.0	60°
1B-1K	0.8	3.7	60°



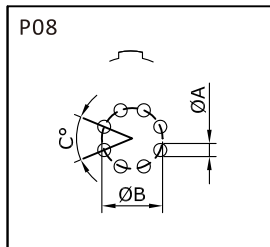
Series	Dimensions(mm)		
	A	B	C
2B-2K	0.8	5.6	72°
3B-3K	0.8	7.1	72°



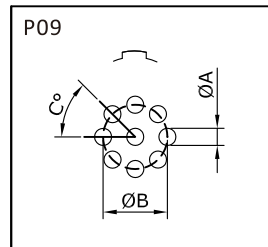
Series	Dimensions(mm)		
	A	B	C
0B-0K	0.6	3.0	60°
1B-1K	0.8	3.7	60°
2B-2K	0.8	5.8	60°
3B-3K	0.8	7.08	60°



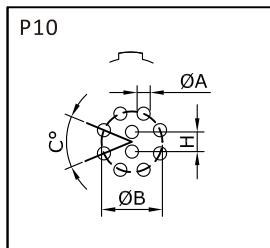
Series	Dimensions(mm)		
	A	B	C
1B-1K	0.8	3.8	51°26'



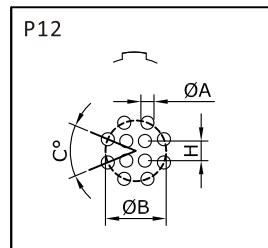
Series	Dimensions(mm)		
	A	B	C
2B-2K	0.8	6.4	45°
3B-3K	0.8	7.5	45°



Series	Dimensions(mm)		
	A	B	C
0B-0K	0.6	3.2	45°
3B-3K	0.8	7.5	45°

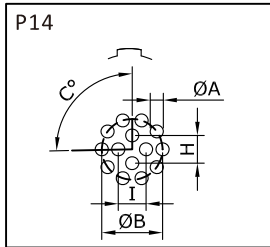


Series	Dimensions(mm)			
	A	B	C	H
1B-1K	0.6	3.95	45°	1.40
2B-2K	0.8	6.2	45°	2.15
3B-3K	0.8	7.9	45°	2.80

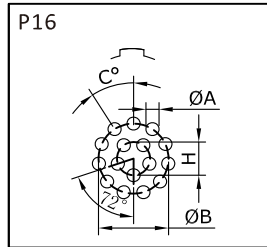


Series	Dimensions(mm)			
	A	B	C	H
2B-2K	0.8	6.5	45°	2.80
3B-3K	0.8	8.2	45°	3.40

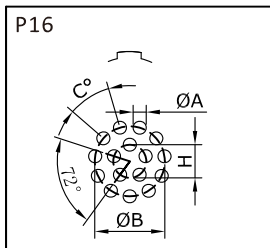
13. PCB Drilling Pattern



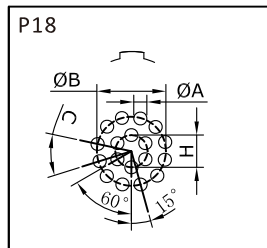
Series	Dimensions(mm)				
	A	B	C	H	I
1B-1K	0.6	4.4	90°	1.90	1.80
2B-2K	0.8	6.5	90°	2.65	2.65
3B-3K	0.8	8.2	90°	3.40	3.40



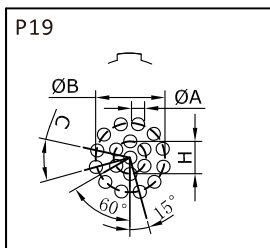
Series	Dimensions(mm)			
	A	B	C	H
1B-1K	0.6	4.4	32°44'	2.0



Series	Dimensions(mm)			
	A	B	C	H
2B-2K	0.8	6.6	32°44'	3.10
3B-3K	0.8	8.4	32°44'	3.86

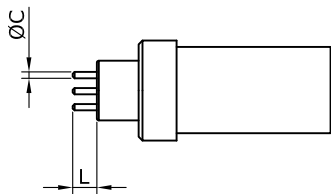


Series	Dimensions(mm)			
	A	B	C	H
2B-2K	0.8	6.7	30°	3.5
3B-3K	0.8	8.4	30°	4.34



Series	Dimensions(mm)			
	A	B	C	H
2B-2K	0.8	6.7	30°	3.50

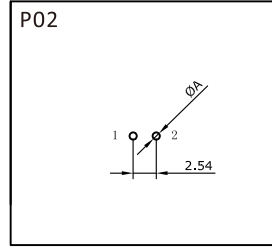
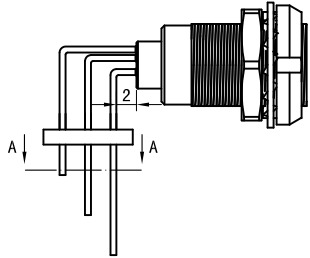
Length of Straight Print Contacts (For Receptacle)



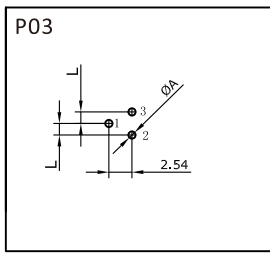
Series	Contact No.	Dimensions(mm)	
		Ø C	L
00	302	0.5	3.0
	303	0.5	3.0
	304	0.5	3.0
0B 0K	302/303	0.7	3.2
	304/305	0.5	3.2
	306/307/309	0.5	3.2
1B 1K	302/303/303/304/305	0.7	3.0
	306/307/308	0.7	3.0
	310/314/316	0.5	4.0
2B 2K	302/303/304/305/306/307	0.7	3.0
	308/310/314/316/318/319	0.7	3.0
	326/332	0.5	3.0
3B 3K	303/304/305/306/307	0.7	3.0
	308/309/310/312/314/316/318	0.7	3.0
	320/322/324/326/330	0.5	5.0

13. PCB Drilling Pattern

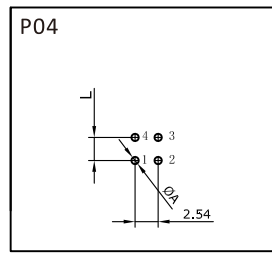
Fixed Receptacle with Elbow Print Contact (B-K Series)



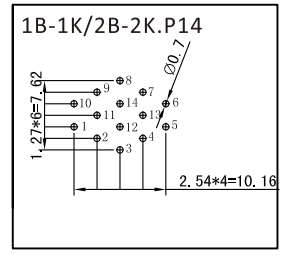
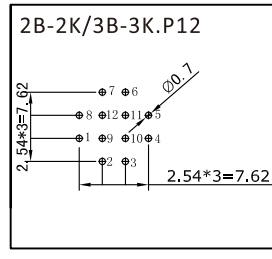
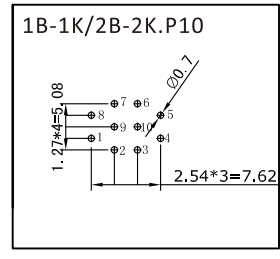
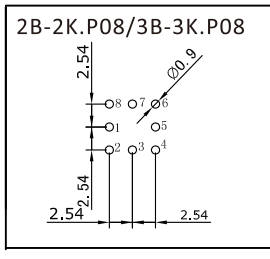
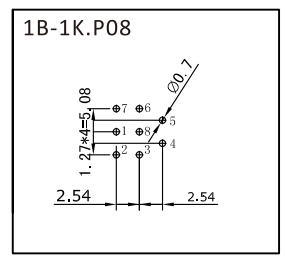
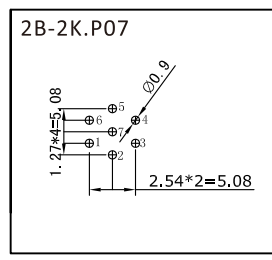
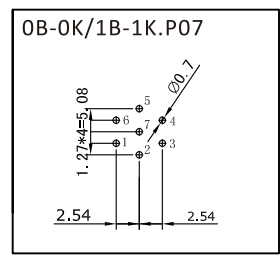
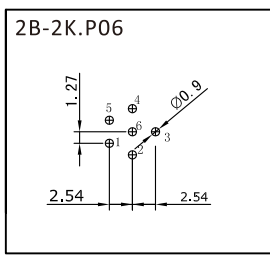
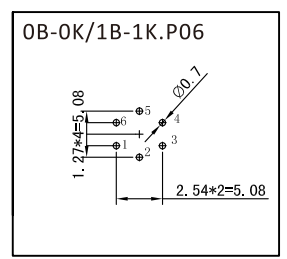
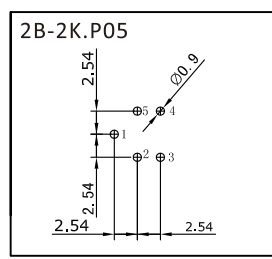
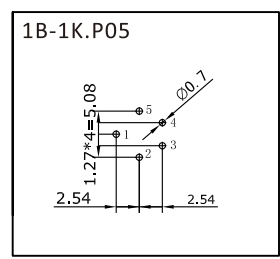
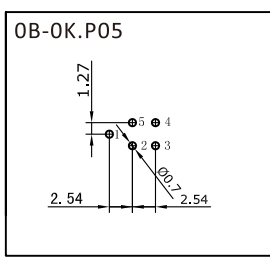
Series	Dimensions (mm)	
	A	
00	0.6	
0B-0K	0.7	
1B-1K	0.9	
2B-2K	0.9	



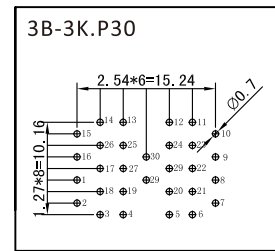
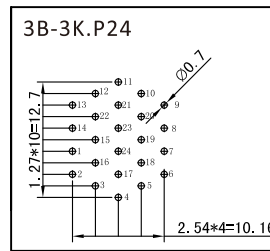
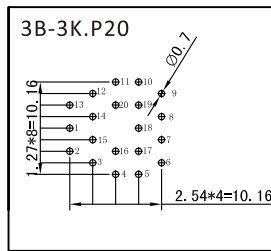
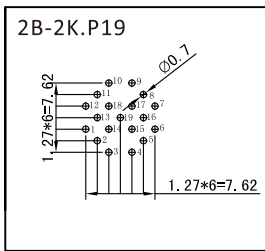
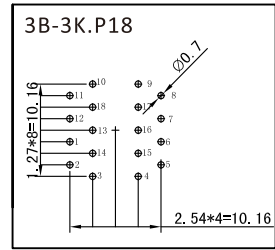
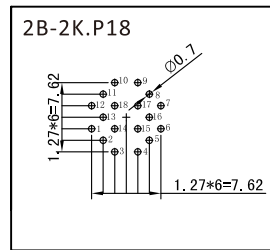
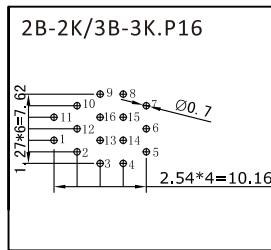
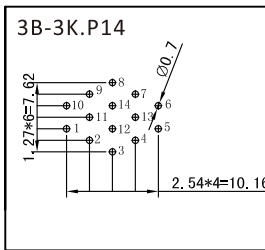
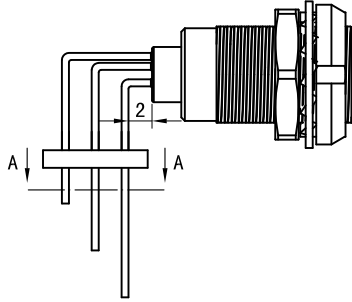
Series	Dimensions(mm)	
	A	L
00	0.6	1.27
0B-0K	0.7	1.27
1B-1K	0.9	1.27
2B-2K	0.9	2.54



Series	Dimensions(mm)	
	A	L
00	0.6	2.54
0B-0K	0.7	2.54
1B-1K	0.7	2.54
2B-2K	0.9	3.50



13. PCB Drilling Pattern



14. Customized Cable Assembly



14. Customized Cable Assembly





Shenzhen INTE-AUTO Technology Co., Ltd.
Shenzhen Yinte Electronic Technology Co., Ltd.

INTE AUTO
PRODUCT CATALOGUE



Tel: +86-755-23011350



Fax: +86-755-23239501

www.inte-auto.com



www.pushpullconnector.com

info@inte-auto.com



5F, No.7, A area, Baoan Internet Industrial Zone,
Baoyuan Road, Shenzhen, 518102, China