

Glass Fiber

Selection Guide

1 ASSEMBLY STYLE

- 1**
- B** =Bifurcated style for emitter and receiver
- I** =Individual style for emitter or receiver only
- M** =for M18 and M30 series sensors
- M18, M30

- 2**
- 1** =one sensing head
- 2** =two sensing heads
- 3** =three sensing heads
- 4** =four sensing heads
- 5** =five sensing heads
- 6** =six sensing heads
- 8** =eight sensing heads

3 BUNDLE DIAMETER OR DIMENSIONS

- .44 =0.7mm .50 =0.8mm .75 =1.2mm 1 =1.6mm 1.5 =2.3mm 2 =3.2mm 2.5 =4.0mm

4 FIBER OVERALL LENGTH

- 2 =2 feet (0.61m) 3 =3 feet (0.91m) 6 =6 feet (1.82m) T = other dimensions

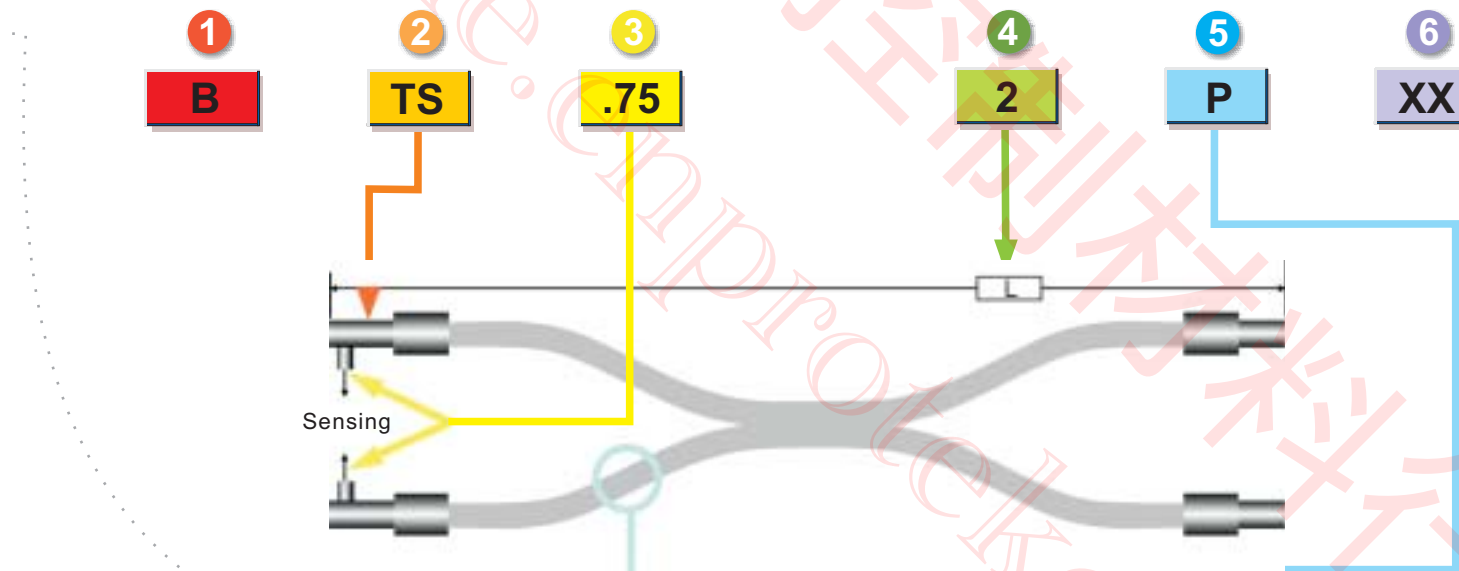
5 SHEATHING MATERIA AND DIAMETER

- HDP** =High density polyethylene
(max. electrical isolation, min. Flexibility)
- L** =Silicone rubber tubing
(max. flexibility, min. fiber protection)
- S** =Stainless steel flexible conduit
(φ7 φ6 φ4.5)
- P** =PVC with galvanized mono coil reinforcing wire
(φ7.6 φ6.6 φ5.4 φ4.4)
- T** =Teflon tubing
(max. chemical resistance, min. Flexibility)

2 SENSING END TIP STYLE

- 1**
- N** =Normal
- E** =Thread End tip
- M** =Miniature
- T** =Thread (#5/16"-24x1-1/2")
- S** =Thread (#8.32x0.5")
- P** =Probe bendable tip
- R** =Rectangular

- 2**
- S** =Straight tip
- V** =Vertical to the sensing face
- H** =Half angle tip (45°)
- A** =Angle tip (90°)



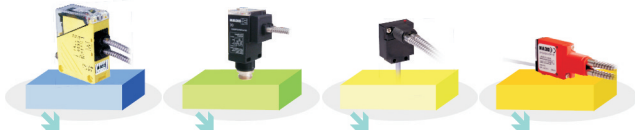
- 3**
- =Circular bundle termination
- R** =Rectangular bundle termination (plastic tip)
- E** =Rectangular bundle termination (plastic tip)
- M** =Miniature probe
- I** =Micro-miniature probe

6 MODIFICATIONS

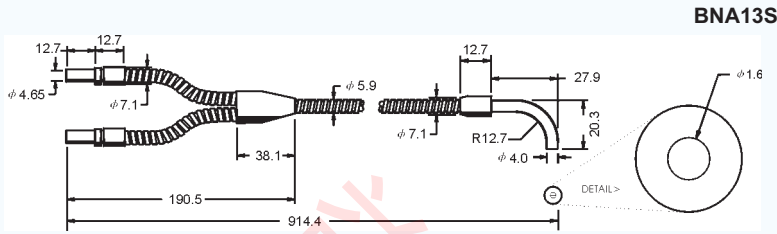
- F90** =can be used in 900°F environments.
- LLP** =Liquid Level Probe
- NC** =Non-Conductive
- OPP** =opposed mode
- SRE** =Silicone Rubber sheathing for Electrical insulation properties
- V** =Vertical, the fiber is vertical to the mesh of light bundle
- A0.09** =the length of the ferrule after the angle is 0.09 meter
- AC** =for acidic liquid level protection
- ASEN** =the sensor end is angled
- B0.027** =the length of the ferrule before the angle is 0.027 meter
- DA** =Double-angled, both the sensing end and the sensor end are angled

Glass Fibers

Diffuse Mode Bifurcated Cables



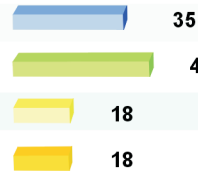
Dimensions (mm)



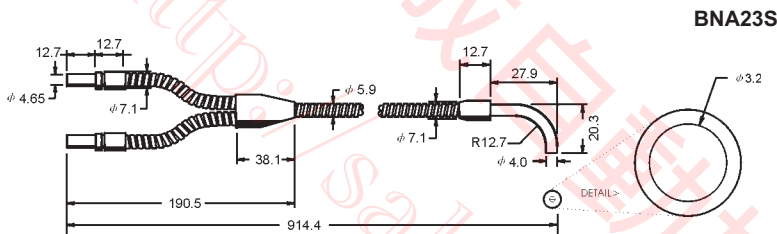
BNA13S

Model number	Length	Bundle	Sheath
BNA13P	910	φ 1.6	PVC
BNA13S	910	φ 1.6	SS

Range (mm)



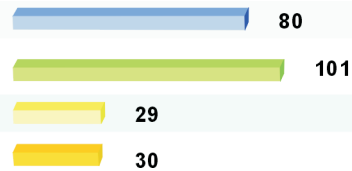
Dimensions (mm)



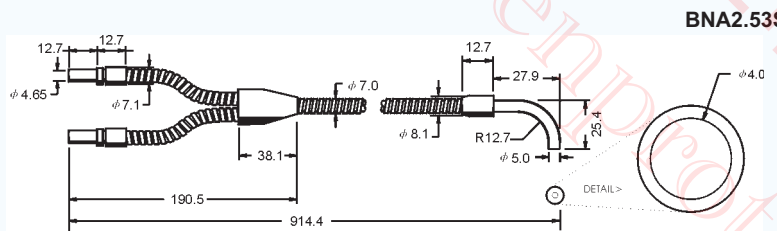
BNA23S

Model number	Length	Bundle	Sheath
BNA23P	910	φ 3.2	PVC
BNA23S	910	φ 3.2	SS

Range (mm)



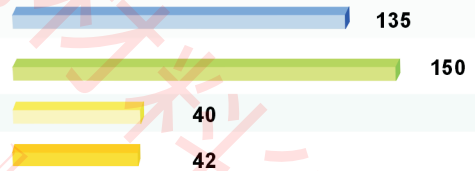
Dimensions (mm)



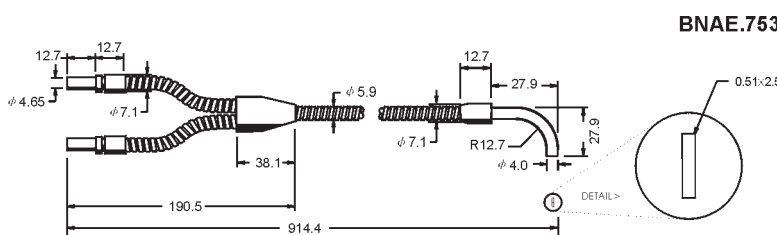
BNA2.53S

Model number	Length	Bundle	Sheath
BNA2.53P	910	φ 4.0	PVC
BNA2.53S	910	φ 4.0	SS

Range (mm)



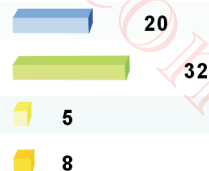
Dimensions (mm)



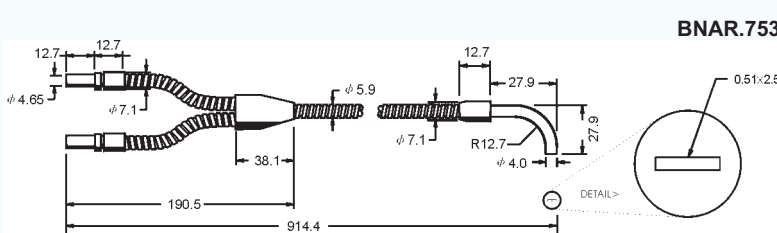
BNAE.753S

Model number	Length	Bundle	Sheath
BNAE.753P	910	0.51x2.54	PVC
BNAE.753S	910	0.51x2.54	SS

Range (mm)



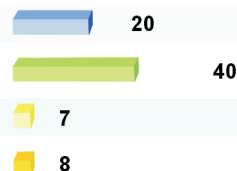
Dimensions (mm)



BNAR.753S

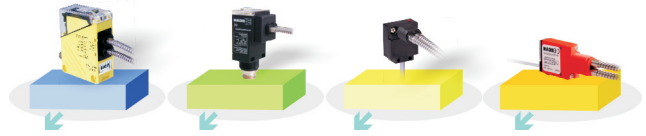
Model number	Length	Bundle	Sheath
BNAR.753P	910	0.51x2.54	PVC
BNAR.753S	910	0.51x2.54	SS

Range (mm)



Diffuse Mode Bifurcated Cables

Glass Fibers



Dimensions (mm)

BNAM.752S

Model number	Length	Bundle	Sheath
BNAM.752P	610	φ 1.2	PVC
BNAM.752S	610	φ 1.2	SS

Range (mm)

	15
	34
	12
	12

Dimensions (mm)

BNAM.753S

Model number	Length	Bundle	Sheath
BNAM.753S	910	φ 1.2	SS

Range (mm)

	15
	34
	12
	12

Dimensions (mm)

BNAI.442S

Model number	Length	Bundle	Sheath
BNAI.442P	610	φ 0.7	PVC
BNAI.442S	610	φ 0.7	SS

Range (mm)

	8
	6
	4
	4

Dimensions (mm)

BNH13S

Model number	Length	Bundle	Sheath
BNH13P	910	φ 1.6	PVC
BNH13S	910	φ 1.6	SS

Range (mm)

	35
	50
	18
	18

Dimensions (mm)

BNH23S

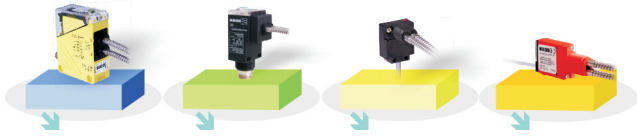
Model number	Length	Bundle	Sheath
BNH23P	910	φ 3.2	PVC
BNH23S	910	φ 3.2	SS

Range (mm)

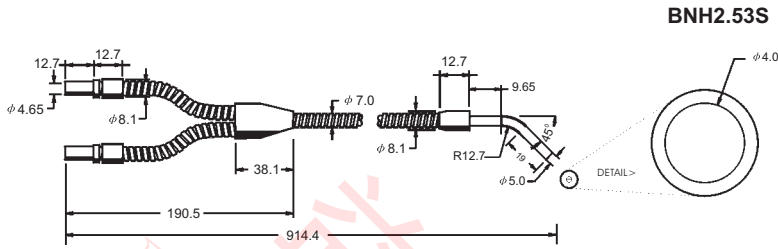
	80
	101
	29
	30

Glass Fibers

Diffuse Mode Bifurcated Cables

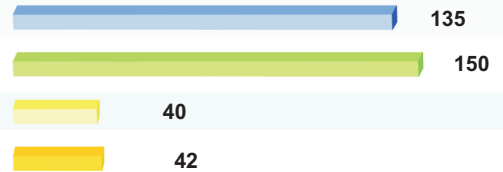


Dimensions (mm)

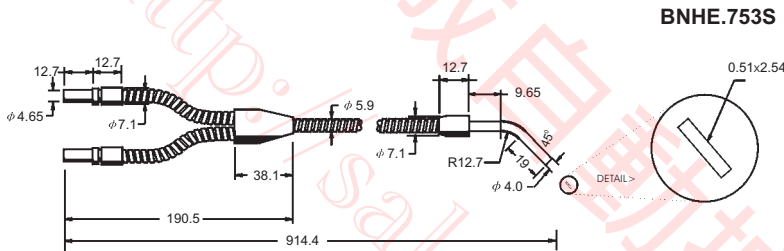


Model number	Length	Bundle	Sheath
BNH2.53P	910	φ 4.0	PVC
BNH2.53S	910	φ 4.0	SS

Range (mm)

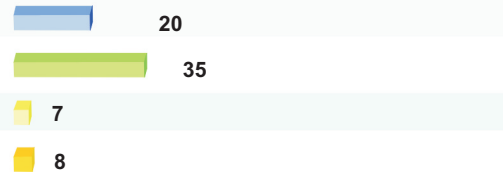


Dimensions (mm)

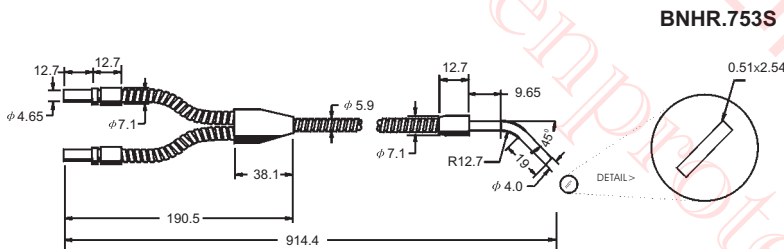


Model number	Length	Bundle	Sheath
BNHE.753P	910	0.51x2.54	PVC
BNHE.753S	910	0.51x2.54	SS

Range (mm)



Dimensions (mm)

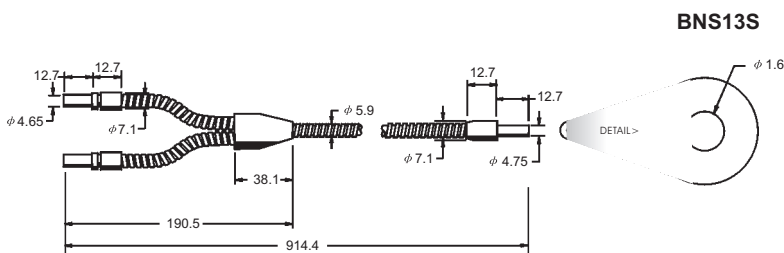


Model number	Length	Bundle	Sheath
BNHR.753P	910	0.51x2.54	PVC
BNHR.753S	910	0.51x2.54	SS

Range (mm)

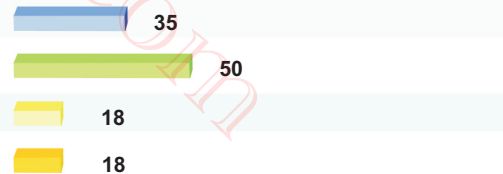


Dimensions (mm)

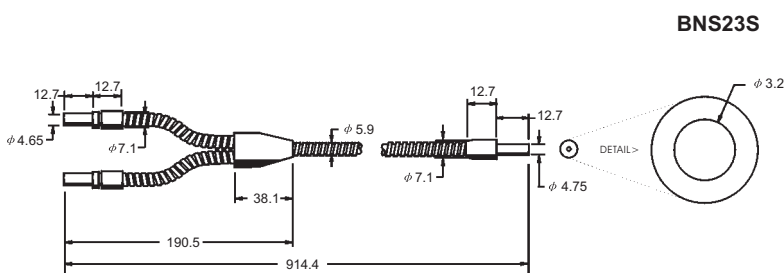


Model number	Length	Bundle	Sheath
BNS13P	910	φ 1.6	PVC
BNS13S	910	φ 1.6	SS

Range (mm)

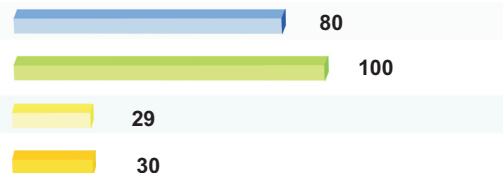


Dimensions (mm)



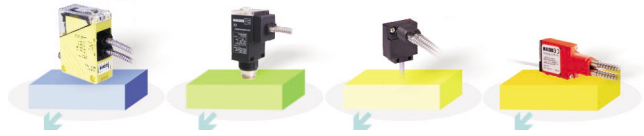
Model number	Length	Bundle	Sheath
BNS23P	910	φ 3.2	PVC
BNS23S	910	φ 3.2	SS

Range (mm)

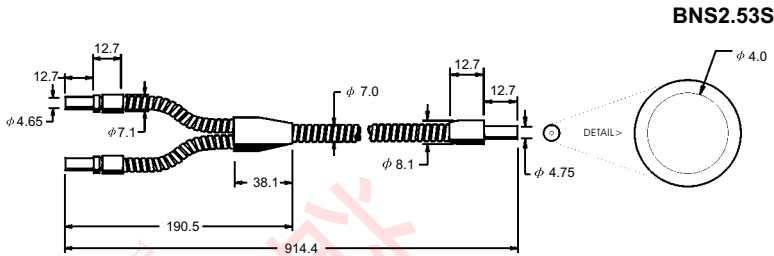


Glass Fibers

Diffuse Mode Bifurcated Cables

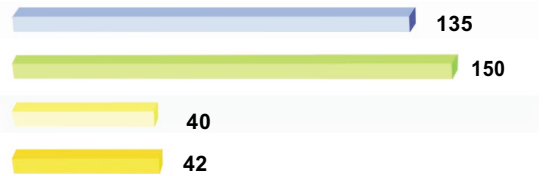


Dimensions (mm)

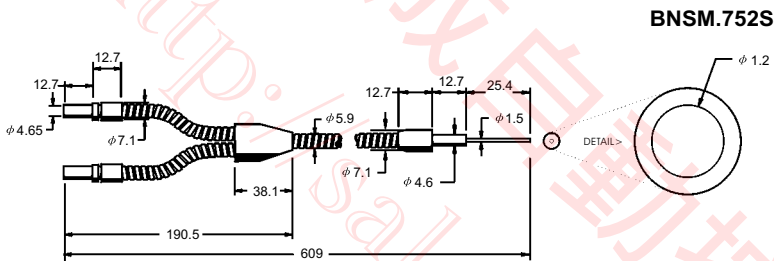


Model number	Length	Bundle	Sheath
BNS2.53P	910	$\phi 4.0$	PVC
BNS2.53S	910	$\phi 4.0$	SS

Range (mm)



Dimensions (mm)

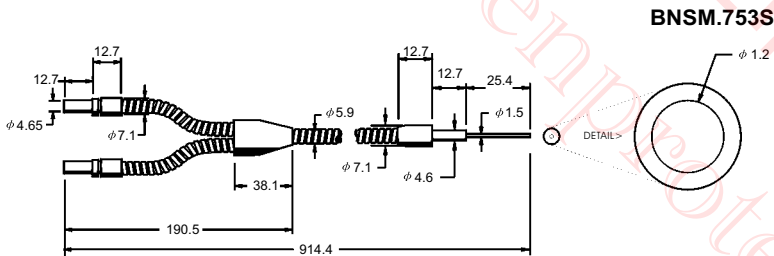


Model number	Length	Bundle	Sheath
BNSM.752S	610	$\phi 1.2$	SS

Range (mm)



Dimensions (mm)

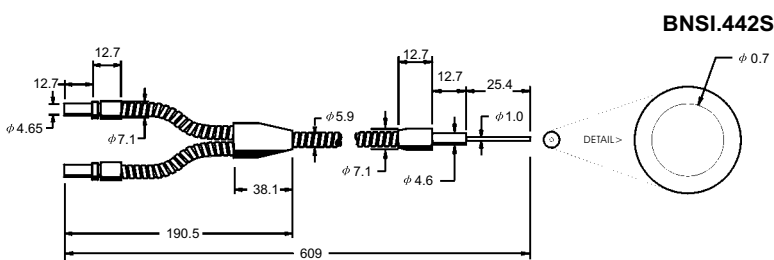


Model number	Length	Bundle	Sheath
BNSM.753S	910	$\phi 1.2$	SS

Range (mm)



Dimensions (mm)

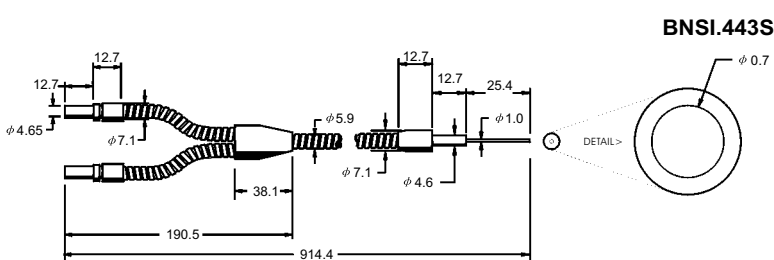


Model number	Length	Bundle	Sheath
BNSI.442S	610	$\phi 0.7$	SS

Range (mm)

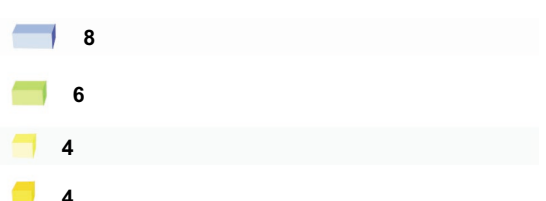


Dimensions (mm)



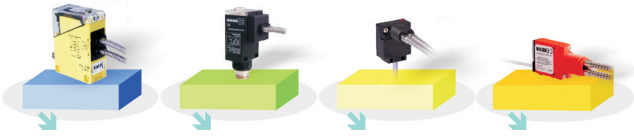
Model number	Length	Bundle	Sheath
BNSI.443S	910	$\phi 0.7$	SS

Range (mm)



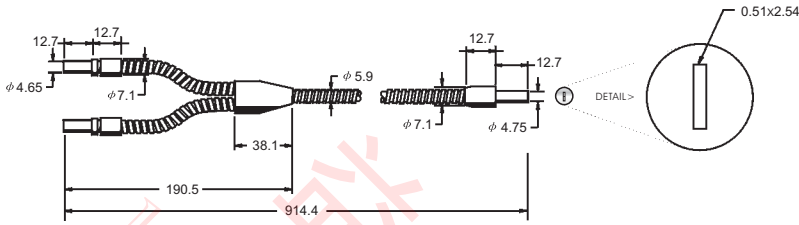
Glass Fibers

Diffuse Mode Bifurcated Cables







Dimensions (mm)

BNSR.753S



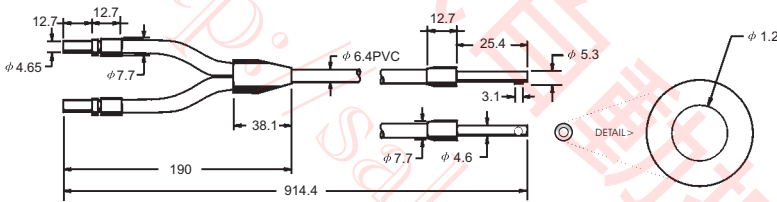
Model number	Length	Bundle	Sheath
BNSR.753P	910	0.51x2.54	PVC
BNSR.753S	910	0.51x2.54	SS

Range (mm)

 15
 25
 2
 5


Dimensions (mm)

BNV.753P



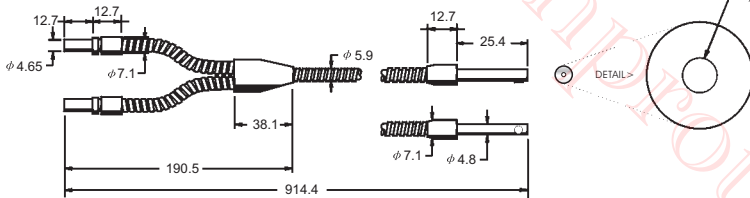
Model number	Length	Bundle	Sheath
BNV.753P	910	ϕ 1.2	PVC
BNV.753S	910	ϕ 1.2	SS

Range (mm)

 15
 34
 12
 12





Dimensions (mm)

BNV13S



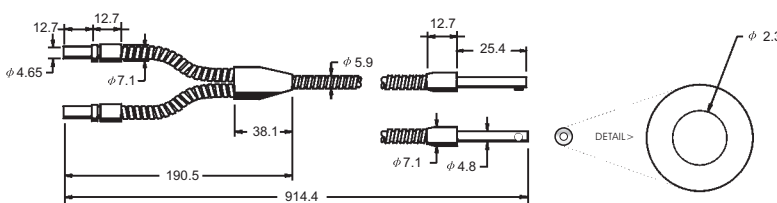
Model number	Length	Bundle	Sheath
BNV13P	910	ϕ 1.6	PVC
BNV13S	910	ϕ 1.6	SS

Range (mm)

 35
 50
 18
 18





Dimensions (mm)

BNV1.53S



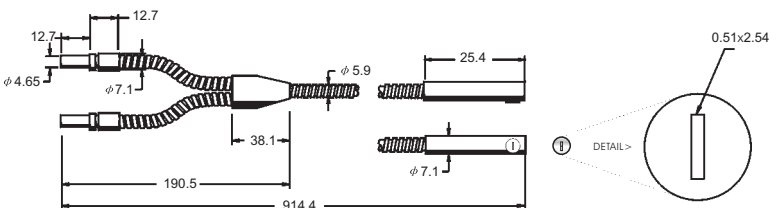
Model number	Length	Bundle	Sheath
BNV1.53P	910	ϕ 2.3	PVC
BNV1.53S	910	ϕ 2.3	SS

Range (mm)

 60
 80
 20
 20



Dimensions (mm)

BNVE.753S



Model number	Length	Bundle	Sheath
BNVE.753P	910	0.51x2.54	PVC
BNVE.753S	910	0.51x2.54	SS

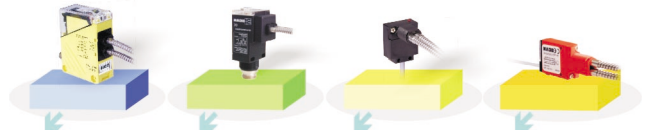
Range (mm)


Diffuse Mode

Glass Fibers

Bifurcated Cables



Dimensions (mm)

BNVR.753S

Model number	Length	Bundle	Sheath
BNVR.753P	910	0.51x2.54	PVC
BNVR.753S	910	0.51x2.54	SS

Range (mm)

Dimensions (mm)

BTA13S

Model number	Length	Bundle	Sheath
BTA13P	910	ϕ 1.6	PVC
BTA13S	910	ϕ 1.6	SS

Range (mm)

Dimensions (mm)

BTA23S

Model number	Length	Bundle	Sheath
BTA23P	910	ϕ 3.2	PVC
BTA23S	910	ϕ 3.2	SS

Range (mm)

Dimensions (mm)

BTA2.53S

Model number	Length	Bundle	Sheath
BTA2.53P	910	ϕ 4.0	PVC
BTA2.53S	910	ϕ 4.0	SS

Range (mm)

Dimensions (mm)

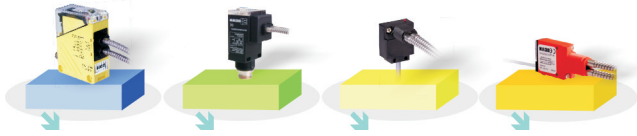
BTAE.753S

Model number	Length	Bundle	Sheath
BTAE.753P	910	0.51x2.54	PVC
BTAE.753S	910	0.51x2.54	SS

Range (mm)

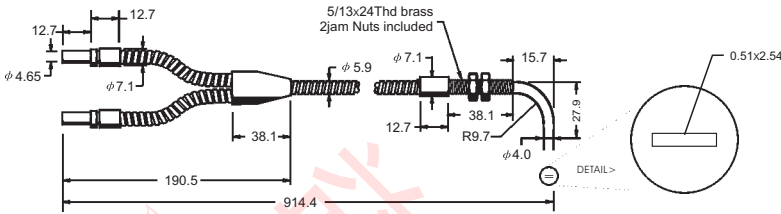
Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

BTAR.753S



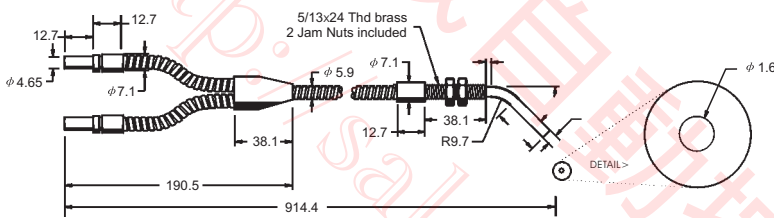
Model number	Length	Bundle	Sheath
BTAR.753P	910	0.51x2.54	PVC
BTAR.753S	910	0.51x2.54	SS

Range (mm)

	8
	15
	1
	2

Dimensions (mm)

BTH13S



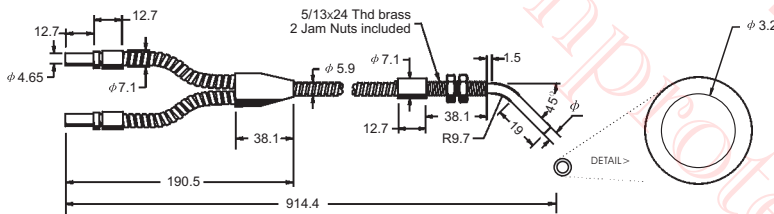
Model number	Length	Bundle	Sheath
BTH13P	910	phi 1.6	PVC
BTH13S	910	phi 1.6	SS

Range (mm)

	35
	50
	18
	18

Dimensions (mm)

BTH23S



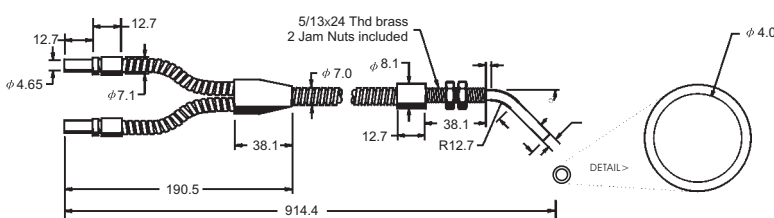
Model number	Length	Bundle	Sheath
BTH23P	910	phi 3.2	PVC
BTH23S	910	phi 3.2	SS

Range (mm)

	80
	101
	29
	30

Dimensions (mm)

BTH2.53S



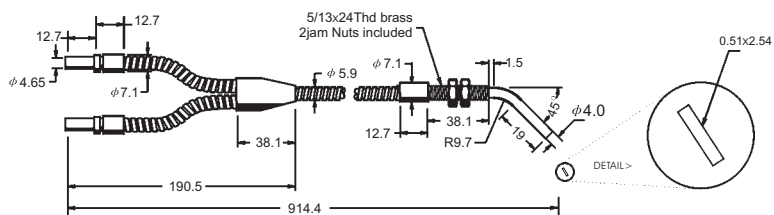
Model number	Length	Bundle	Sheath
BTH2.53P	910	phi 4.0	PVC
BTH2.53S	910	phi 4.0	SS

Range (mm)

	135
	150
	40
	42

Dimensions (mm)

BTHE.753S



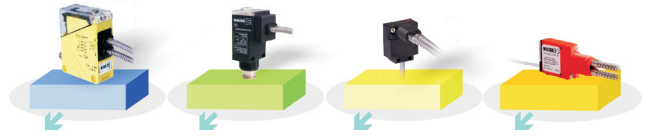
Model number	Length	Bundle	Sheath
BTHE.753P	910	0.51x2.54	PVC
BTHE.753S	910	0.51x2.54	SS

Range (mm)

	15
	25
	5
	5

Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

BTHR.753S

Model number	Length	Bundle	Sheath
BTHR.753P	910	0.51x2.54	PVC
BTHR.753S	910	0.51x2.54	SS

Range (mm)

- 25
- 45
- 10
- 10

Dimensions (mm)

BTS.752P

Model number	Length	Bundle	Sheath
BTS.752P	610	φ 1.2	PVC
BTS.752S	610	φ 1.2	SS

Range (mm)

- 15
- 34
- 12
- 12

Dimensions (mm)

BTS13S

Model number	Length	Bundle	Sheath
BTS13P	910	φ 1.6	PVC
BTS13S	910	φ 1.6	SS

Range (mm)

- 35
- 50
- 18
- 18

Dimensions (mm)

BTS23S

Model number	Length	Bundle	Sheath
BTS23P	910	φ 3.2	PVC
BTS23S	910	φ 3.2	SS
BTS26S	1820	φ 3.2	SS

Range (mm)

- 80
- 101
- 29
- 30

Dimensions (mm)

BNS2.53S

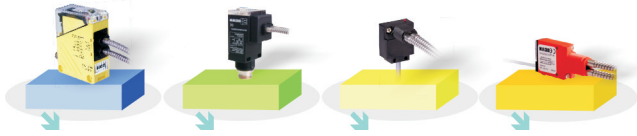
Model number	Length	Bundle	Sheath
BTS2.53P	910	φ 4.0	PVC
BTS2.53S	910	φ 4.0	SS

Range (mm)

- 135
- 150
- 40
- 42

Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

BTV.753S

Model number	Length	Bundle	Sheath
BTV.753S	910	φ 1.2	SS

Range (mm)

	15
	34
	12
	12

Dimensions (mm)

BTV1.53S

Model number	Length	Bundle	Sheath
BTV1.53S	910	φ 2.3	SS

Range (mm)

	40
	80
	20
	20

Dimensions (mm)

BEA13S

Model number	Length	Bundle	Sheath
BEA13P	910	φ 1.6	PVC
BEA13S	910	φ 1.6	SS

Range (mm)

	35
	50
	18
	18

Dimensions (mm)

BEA23S

Model number	Length	Bundle	Sheath
BEA23P	910	φ 3.2	PVC
BEA23S	910	φ 3.2	SS

Range (mm)

	80
	101
	29
	30

Dimensions (mm)

BEA2.53S

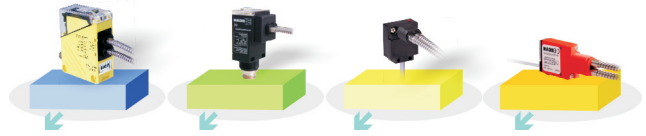
Model number	Length	Bundle	Sheath
BEA2.53P	910	φ 4.0	PVC
BEA2.53S	910	φ 4.0	SS

Range (mm)

	135
	150
	40
	42

Diffuse Mode Bifurcated Cables

Glass Fibers



Dimensions (mm)

BEAE.753S

Model number	Length	Bundle	Sheath
BEAE.753P	910	0.51x2.54	PVC
BEAE.753S	910	0.51x2.54	SS

Range (mm)

- 20
- 35
- 4
- 8

Dimensions (mm)

BEAR.753S

Model number	Length	Bundle	Sheath
BEAR.753P	910	0.51x2.54	PVC
BEAR.753S	910	0.51x2.54	SS

Range (mm)

- 25
- 45
- 10
- 8

Dimensions (mm)

BEH13S

Model number	Length	Bundle	Sheath
BEH13P	910	phi 1.6	PVC
BEH13S	910	phi 1.6	SS

Range (mm)

- 35
- 50
- 18
- 18

Dimensions (mm)

BEH23S

Model number	Length	Bundle	Sheath
BEH23P	910	phi 3.2	PVC
BEH23S	910	phi 3.2	SS

Range (mm)

- 80
- 101
- 29
- 30

Dimensions (mm)

BEH2.53S

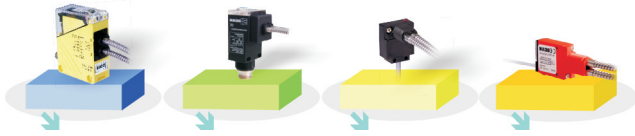
Model number	Length	Bundle	Sheath
BEH2.53P	910	phi 4.0	PVC
BEH2.53S	910	phi 4.0	SS

Range (mm)

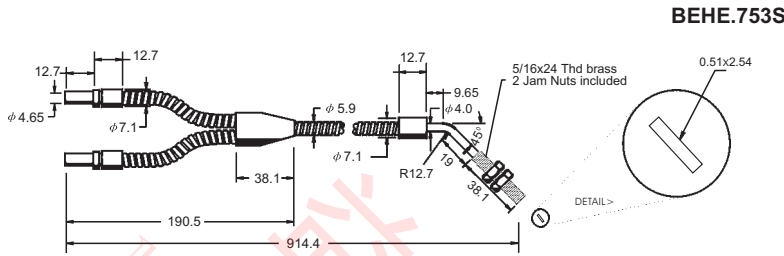
- 135
- 150
- 40
- 42

Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)



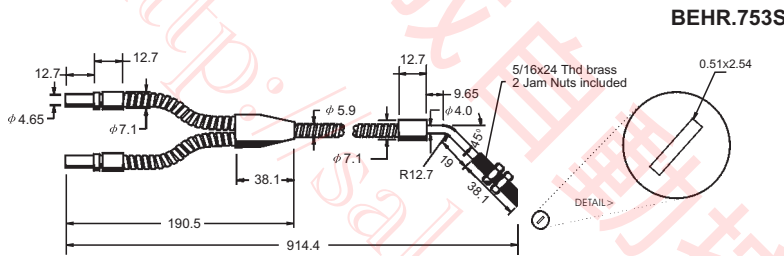
BEHE.753S

Model number	Length	Bundle	Sheath
BEHE.753P	910	0.51x2.54	PVC
BEHE.753S	910	0.51x2.54	SS

Range (mm)

	25
	40
	4
	8

Dimensions (mm)



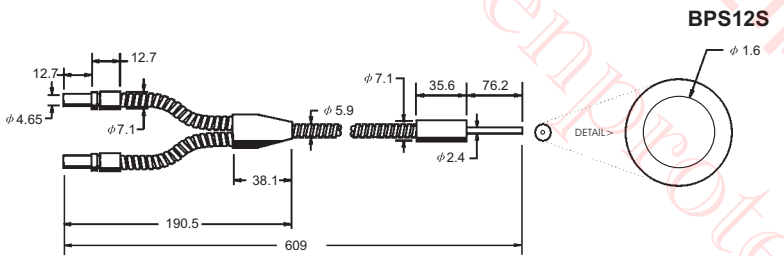
BEHR.753S

Model number	Length	Bundle	Sheath
BEHR.753P	910	0.51x2.54	PVC
BEHR.753S	910	0.51x2.54	SS

Range (mm)

	30
	45
	10
	10

Dimensions (mm)



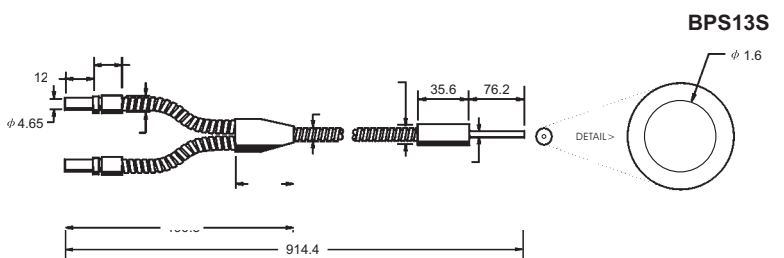
BPS12S

Model number	Length	Bundle	Sheath
BPS12P	610	φ 1.6	PVC
BPS12S	610	φ 1.6	SS

Range (mm)

	35
	50
	18
	18

Dimensions (mm)



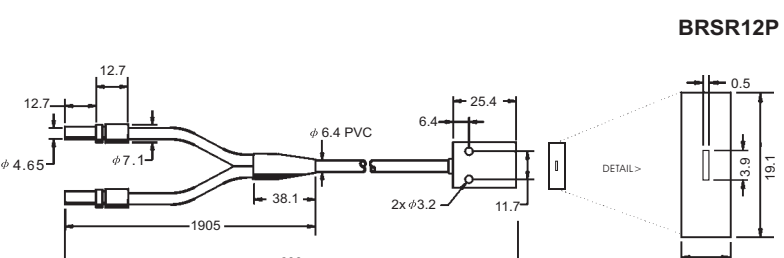
BPS13S

Model number	Length	Bundle	Sheath
BPS13P	910	φ 1.6	PVC
BPS13S	910	φ 1.6	SS

Range (mm)

	35
	50
	18
	18

Dimensions (mm)



BRSR12P

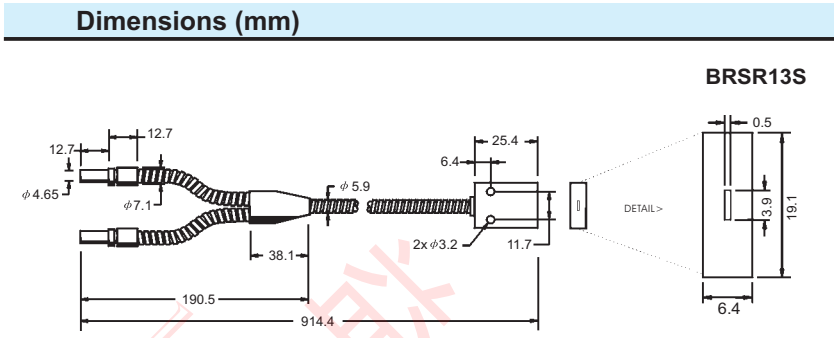
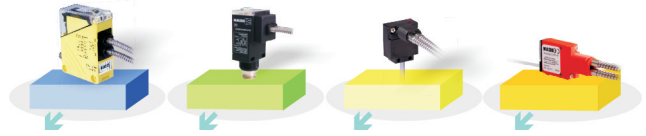
Model number	Length	Bundle	Sheath
BRSR12P	610	0.51x3.91	PVC
BRSR12S	610	0.51x3.91	SS

Range (mm)

	45
	70
	18
	16

Diffuse Mode Bifurcated Cables

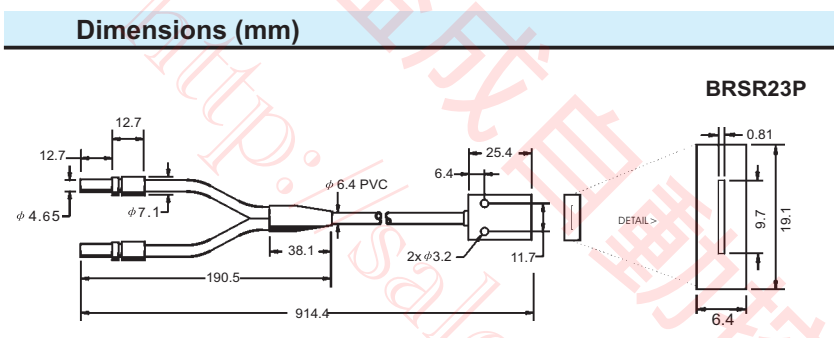
Glass Fibers



Model number	Length	Bundle	Sheath
BRSR13P	910	0.51x3.91	PVC
BRSR13S	910	0.51x3.91	SS

Range (mm)

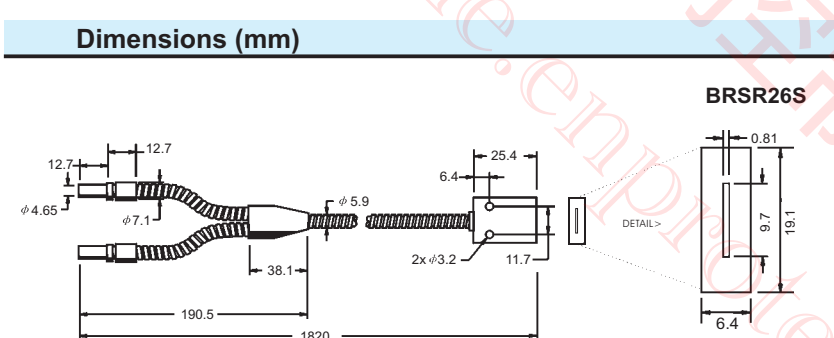
32
62
12
14



Model number	Length	Bundle	Sheath
BRSR23P	910	0.81x9.70	PVC
BRSR23S	910	0.81x9.70	SS

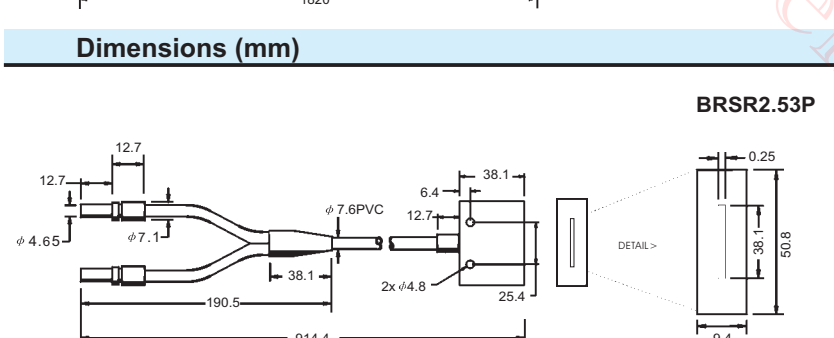
Range (mm)

130
260
48
55



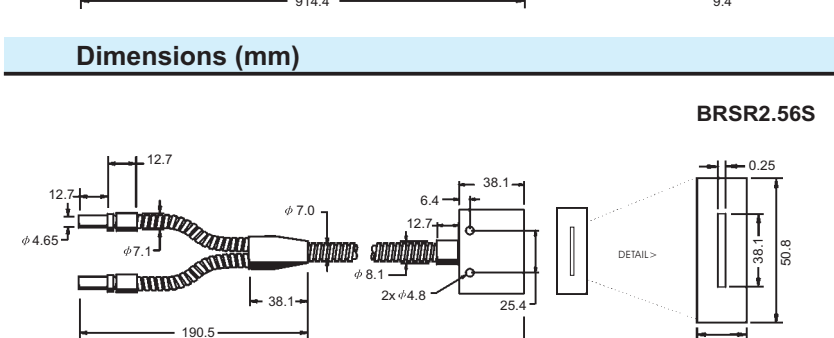
Model number	Length	Bundle	Sheath
BRSR26P	1820	0.81x9.70	PVC
BRSR26S	1820	0.81x9.70	SS

Range (mm)



Model number	Length	Bundle	Sheath
BRSR2.53S	910	2.5x38.1	SS
BRSR2.53P	910	2.5x38.1	PVC

Range (mm)

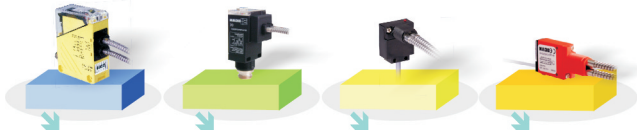


Model number	Length	Bundle	Sheath
BRSR2.56P	1820	0.25x38.1	PVC
BRSR2.56S	1820	0.25x38.1	SS

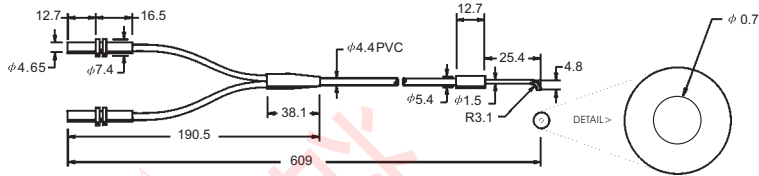
Range (mm)

Glass Fibers

Diffuse Mode Bifurcated Cables






Dimensions (mm)

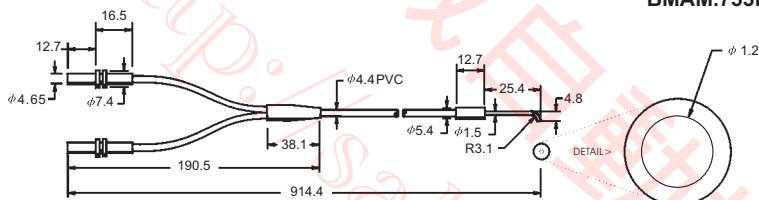


BMAM.442P

Model number	Length	Bundle	Sheath
BMAM.442P	610	ϕ 0.7	PVC
Range (mm)			





 8
 6
 4
 4

Dimensions (mm)

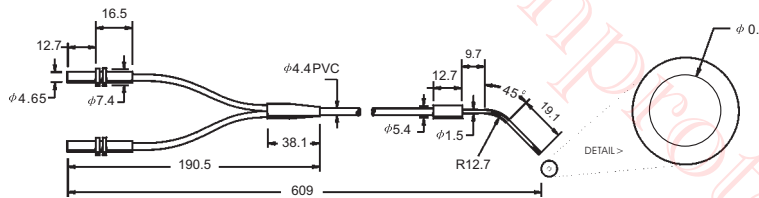


BMAM.753P

Model number	Length	Bundle	Sheath
BMAM.753P	910	ϕ 1.2	PVC
Range (mm)			

 15
 34
 12
 12

Dimensions (mm)

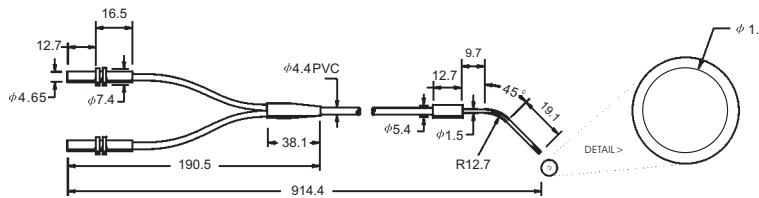


BMHM.442P

Model number	Length	Bundle	Sheath
BMHM.442P	610	ϕ 0.7	PVC
Range (mm)			





 8
 6
 4
 4

Dimensions (mm)

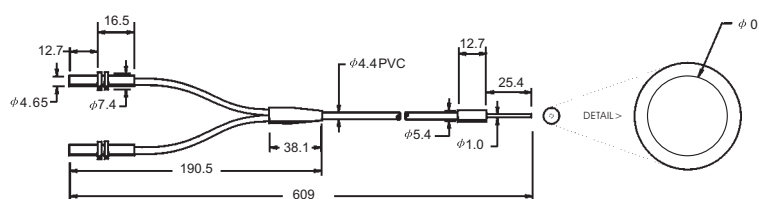


BMHM.753P

Model number	Length	Bundle	Sheath
BMHM.753P	910	ϕ 1.2	PVC
Range (mm)			





 15
 34
 12
 12

Dimensions (mm)



BMSI.442P

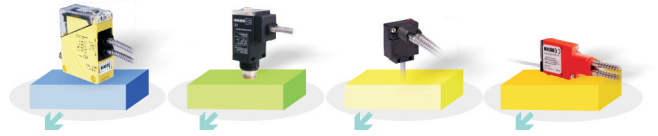
Model number	Length	Bundle	Sheath
BMSI.442P	610	ϕ 0.7	PVC
Range (mm)			

 8
 6
 4
 4

Glass Fibers

Diffuse Mode

Bifurcated Cables



Dimensions (mm)

BMSI.443P

Model number	Length	Bundle	Sheath
BMSI.443P	910	φ 0.7	PVC
Range (mm)			

- 8
- 6
- 4
- 4

Dimensions (mm)

BMSM.442P

Model number	Length	Bundle	Sheath
BMSM.442P	610	φ 0.7	PVC
Range (mm)			

- 8
- 6
- 4
- 4

Dimensions (mm)

BMSM.753P

Model number	Length	Bundle	Sheath
BMSM.753P	910	φ 1.2	PVC
Range (mm)			

- 15
- 34
- 12
- 12

Dimensions (mm)

BSAM.442P

Model number	Length	Bundle	Sheath
BSAM.442P	610	φ 0.7	PVC
Range (mm)			

- 8
- 6
- 4
- 4

Dimensions (mm)

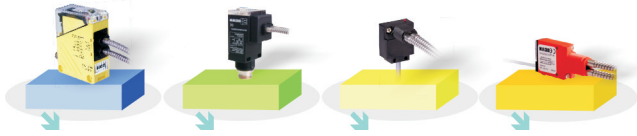
BSAM.753P

Model number	Length	Bundle	Sheath
BSAM.753P	910	φ 1.2	PVC
Range (mm)			

- 15
- 34
- 12
- 12

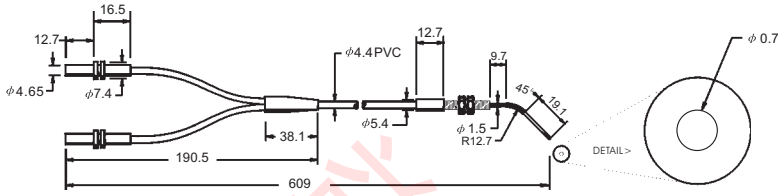
Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

BSHM.442P

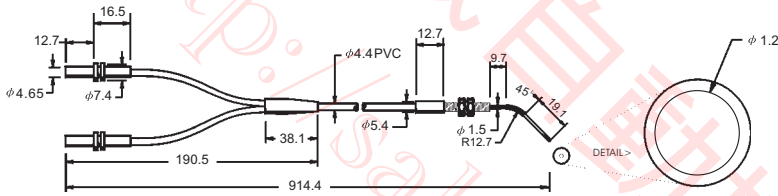


Model number	Length	Bundle	Sheath
BSHM.442P	610	φ 0.7	PVC
Range (mm)			

- 8
- 6
- 4
- 4

Dimensions (mm)

BSHM.753P

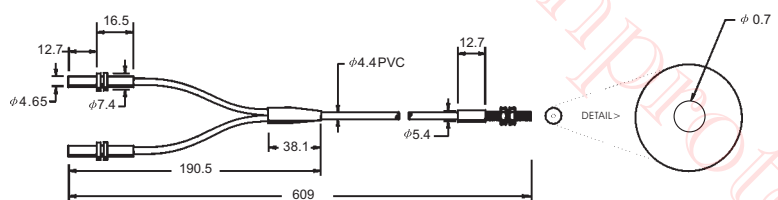


Model number	Length	Bundle	Sheath
BSHM.753P	910	φ 1.2	PVC
Range (mm)			

- 15
- 34
- 12
- 12

Dimensions (mm)

BSS.442P

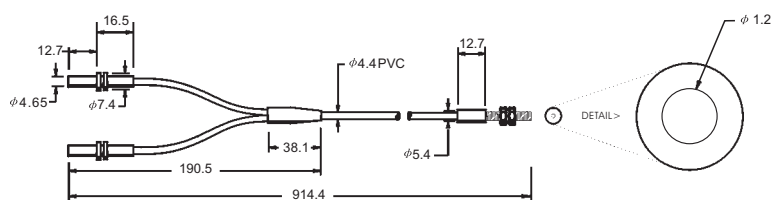


Model number	Length	Bundle	Sheath
BSS.442P	610	φ 0.7	PVC
Range (mm)			

- 8
- 6
- 4
- 4

Dimensions (mm)

BSS.753P

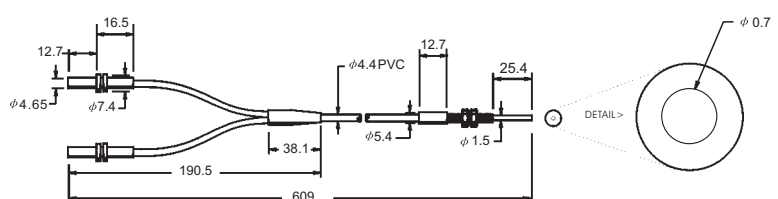


Model number	Length	Bundle	Sheath
BSS.753P	910	φ 1.2	PVC
Range (mm)			

- 15
- 34
- 12
- 12

Dimensions (mm)

BSSM.442P



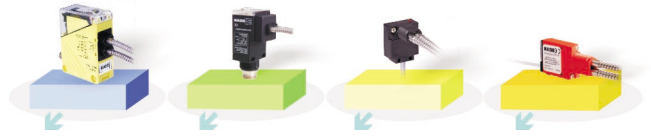
Model number	Length	Bundle	Sheath
BSSM.442P	610	φ 0.7	PVC
Range (mm)			

- 8
- 6
- 4
- 4

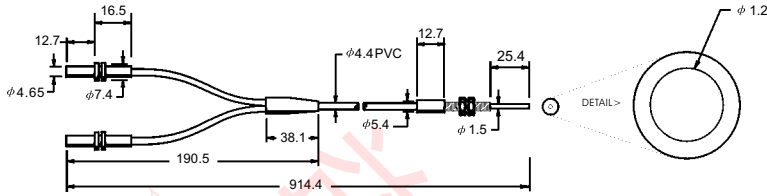
Glass Fibers

Diffuse Mode

Bifurcated Cables



Dimensions (mm)



BSSM.753P

Model number	Length	Bundle	Sheath
BSSM.753P	910	φ 1.2	PVC
Range (mm)			

15	15		
34	34		
12	12		
12	12		

Dimensions (mm)

Model number	Length	Bundle	Sheath
Range (mm)			

Dimensions (mm)

Model number	Length	Bundle	Sheath
Range (mm)			

Dimensions (mm)

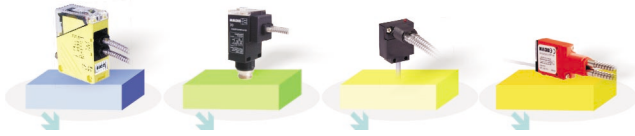
Model number	Length	Bundle	Sheath
Range (mm)			

Dimensions (mm)

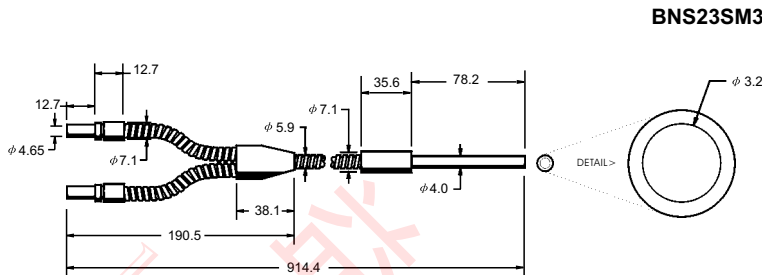
Model number	Length	Bundle	Sheath
Range (mm)			

Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)



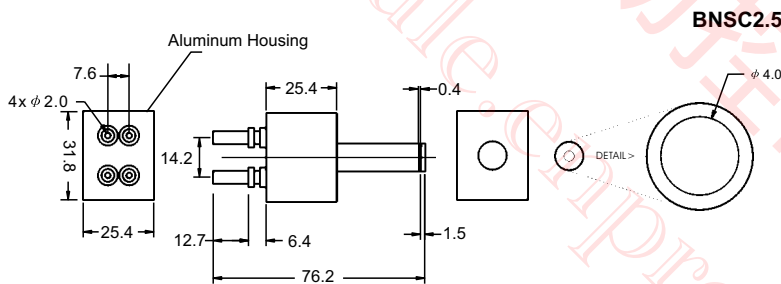
BNS23SM3

Model number	Length	Bundle	Sheath
BNS23SM3	910	φ 3.2	SS
Range (mm)			

80	80
101	101
29	29
30	30

This BF23S with three inch ferrule also has a mounting "bullet" found on probe style fibers, This allows use of the FMB-1 mounting bracket.

Dimensions (mm)



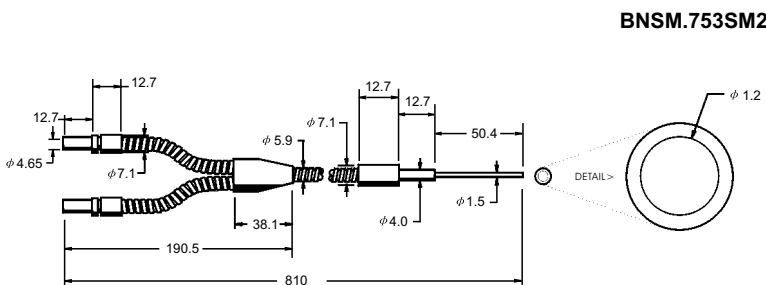
BNSC2.5

Model number	Length	Bundle	Sheath
BNSC2.5	760	φ 4.0	Aluminum
Range (mm)			

135	135
150	150
40	40
42	42

This Double Bifurcated Radial Circle fiber assembly is used to inspect the inside of a cylinder wall to detect the absence of A black coating. The M300 suffix indicates that the assembly is designed for use with SM312 Series sensors. The circular bundle is split between two model SM312FV sensors, which (in instance) provide a visible light source that yields a higher contrast ratio than would an infrared source in color sensing applications.

Dimensions (mm)



BNSM.753SM2

Model number	Length	Bundle	Sheath
BNSM.753SM2	810	φ 1.2	SS
Range (mm)			

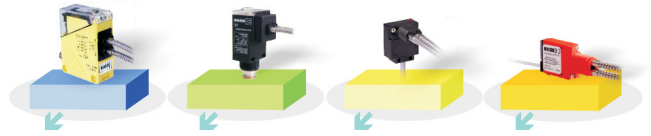
15	15
34	34
12	12
12	12

Standard model BM.752S is modified to create this special assembly. The overall length is extended to 36 inches and the miniature Sensing end is two inches long. Miniature ends are made of stainless steel and are not bendable. We can pre-bend the tubing before assembling the fiber in order to create a particular design. Multiple bends in the Sensing end can also be made.

Glass Fibers

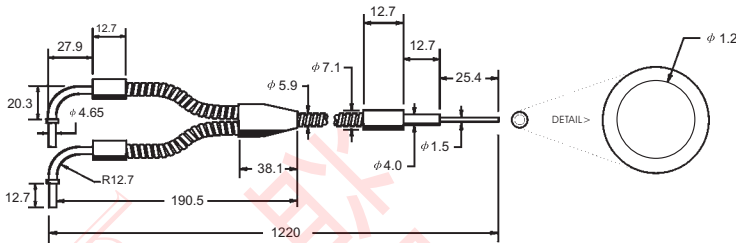
Diffuse Mode

Bifurcated Cables



Dimensions (mm)

BNSM.754SASEN



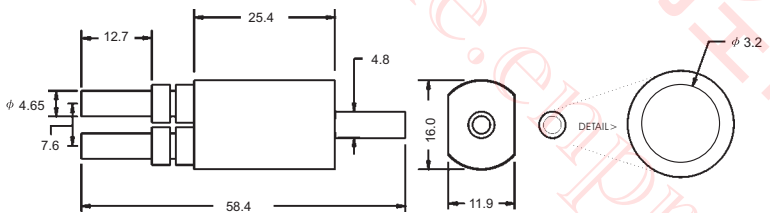
Model number	Length	Bundle	Sheath
BNSM.754SASEN	1220	φ 1.2	SS
Range (mm)			

15	
34	
12	
12	

Fiber optic assemblies may be designed to exactly fit a space-restricted area. This angle. The minimum bend radius of the sheathing of a standard fiber assembly would have been exceeded in this application. This modification can be made to virtually any standard fiber optic assembly.

Dimensions (mm)

BNSM300



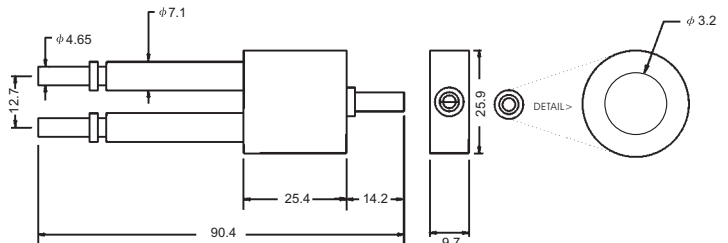
Model number	Length	Bundle	Sheath
BNSM300	58	φ 3.2	Aluminum
Range (mm)			

80	
101	
29	
30	

Most fiber optic assemblies use flexible sheathing to allow the sensing end to reach areas which are inaccessible to a larger self-contained photoelectric sensor. This assembly is a block which is used with MINI-BEAM fiber optic sensors. This fiber was designed for systems which require the sensor to be mounted on a movable arm. When a part is in place, the sensor moves to the inspection point. This type of assembly eliminates breakage caused by flexing of the sheathing of a standard fiber.

Dimensions (mm)

BNSMV B



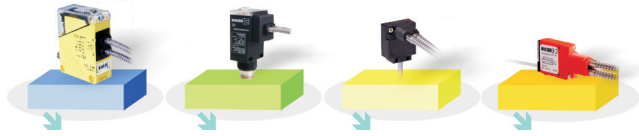
Model number	Length	Bundle	Sheath
BNSMV B	90	φ 3.2	Aluminum
Range (mm)			

80	
101	
29	
30	

This modification is similar to model BNSM300, shown above. This fiber assembly was designed for the VALU-BEAM family of self-contained sensors. As always, modifications are possible to the ferrule length, ferrule diameter and fiber bundle diameter of this assembly.

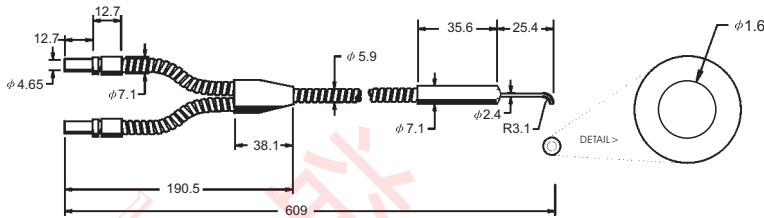
Glass Fibers

Diffuse Mode Bifurcated Cables



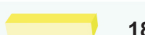



Dimensions (mm)

BPA12SM1x.25



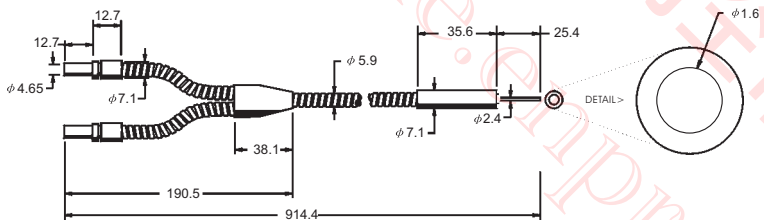
Model number	Length	Bundle	Sheath
BPA12SM1x.25	610	φ 1.6	SS
Range (mm)			

	35
	50
	18
	18





This modification of standard model BPA12S shows the minimum bend radius of the 0.09 inch diameter tubing used on standard probe fibers. The 1/4 inch distance after the angle is the minimum allowable for true 90%°D angle. Standard probe length is three inches, with the middle two inches bendable. One half inch on each end of the probe is not bendable due to the optical epoxy used. The one inch probe on model BP12SMA1x.25 is not bendable.

Dimensions (mm)

BPS13SM1



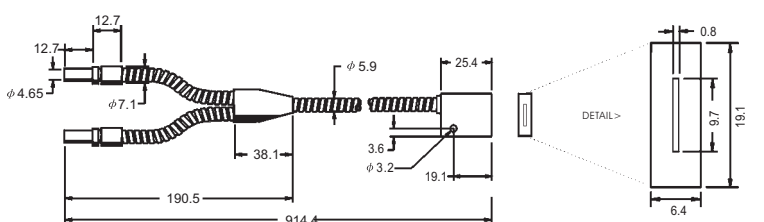
Model number	Length	Bundle	Sheath
BPS13SM1	910	φ 1.6	SS
Range (mm)			

	35
	50
	18
	18



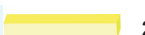

This model is similar to the assembly shown above. The standard three inch probe length is reduced to one inch. The 0.09 inch diameter stainless steel probe can be made as long as desired, allowing custom bending of the probe in the field. The probe on model is not bendable, due to its short length.

Dimensions (mm)

BRSR23SM1



Model number	Length	Bundle	Sheath
BRSR23SM1	910	0.8x9.7	SS
Range (mm)			

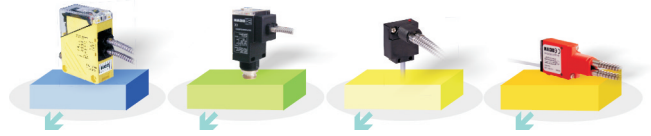
	101
	101
	29
	30

Model BRSR23SM1 is a cable exit modification to BRSR23S and has a Corner Cable Exit. This modification is also available on individual fiber optic assemblies, and fibers with a smaller rectangular bundle size. This model loses one of the two available mounting holes due to its modification.

Glass Fibers

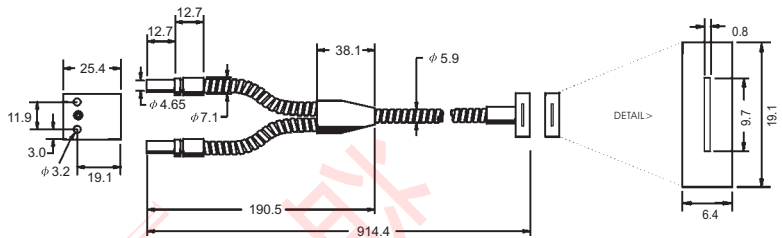
Diffuse Mode

Bifurcated Cables



Dimensions (mm)

Model number	Length	Bundle	Sheath
BRVE23S	910	0.8x9.7	SS
Range (mm)			



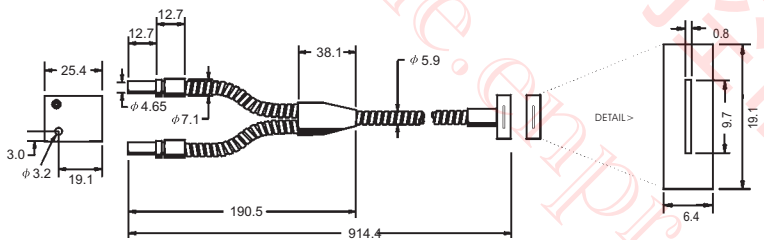
BRVE23S

80	80
101	101
29	29
30	30

Model BRVE23S is a cable exit modification to BRSR23S and has a Cable Side Center. This Modification is also available on individual fiber optic assemblies, and fibers with a smaller rectangular bundle size.

Dimensions (mm)

Model number	Length	Bundle	Sheath
BRVE23SMCSE	910	0.8x9.7	SS
Range (mm)			



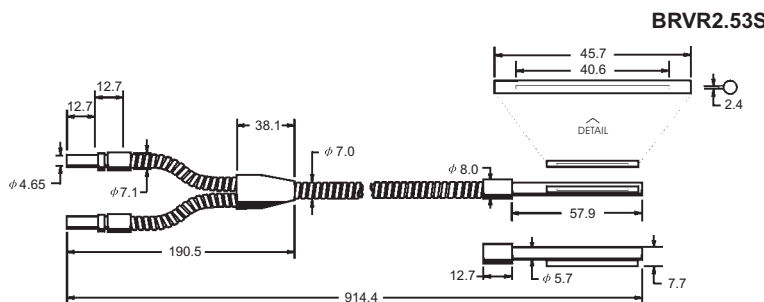
BRVE23SMCSE

80	80
101	101
29	29
30	30

Model BRVE23SMCSE is a cable exit modification to BRSR23S and a Cable Side Exit. This modification is also available on individual fiber optic assemblies, and fibers with a smaller rectangular bundle size. This model loses one two available mounting holes due to its modification.

Dimensions (mm)

Model number	Length	Bundle	Sheath
BRVR2.53S	910	0.2x40.6	SS
Range (mm)			



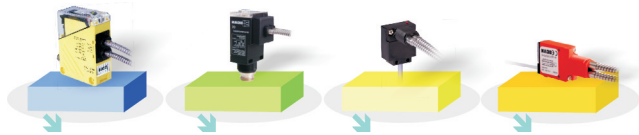
BRVR2.53S

135	135
150	150
40	40
42	42

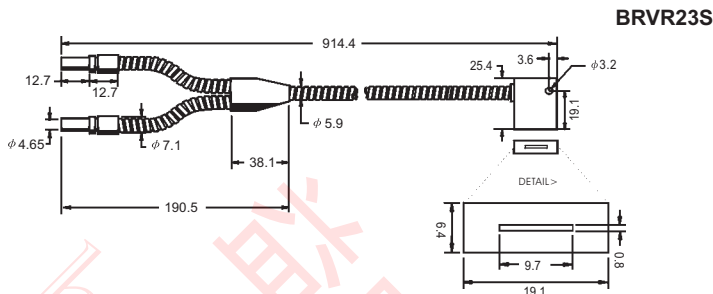
The model BRVR2.53S Bifurcated Rectangular Side Exit assembly is used in applications where space is limited. This assembly can be built as a bifurcated fiber assembly (shown above) or as an individual fiber assembly (Model IRVR2.53S).

Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

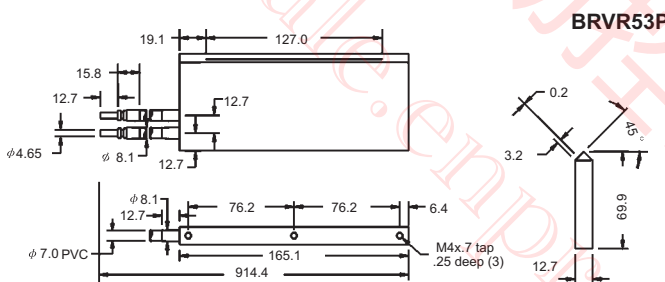


Model number	Length	Bundle	Sheath
BRVR23S	910	0.8x9.7	SS
Range (mm)			

	80
	101
	29
	30

Model BRVR23S is a cable exit modification of standard model BRSR23S. This assembly was designed for a register mark sensing application where there was very limited space for the sensor. The fiber optic sensing end could not be close to the surface of the web. Therefore a large rectangular fiber bundle was required. The fiber optic cable exits from the side of the plastic housing. Note that one of the two mounting holes is lost due to this modification.

Dimensions (mm)

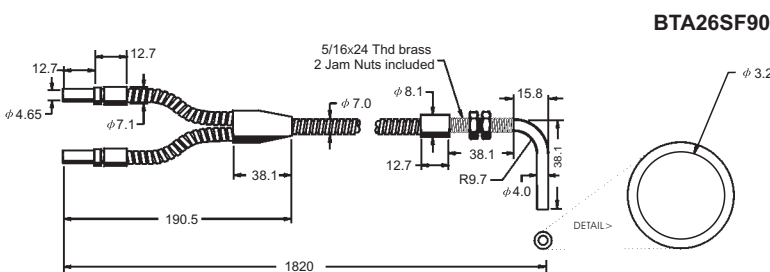


Model number	Length	Bundle	Sheath
BRVR53P	910	0.2x12.7	PVC
Range (mm)			

	135
	150
	40
	42

This special rectangular fiber assembly uses the maximum bundle size (0.156 inch diameter) in each ferrule to obtain this large sensing area. The assembly requires the use of one photoelectric sensor to cover the five inch wide window. The fiber optic block is beveled on the end where the fiber slot is located. The object in this application is folded paper which is placed on top of this fiber assembly. This configuration is used to allow the fibers to "look" at the object being sensed at a perpendicular angle.

Dimensions (mm)



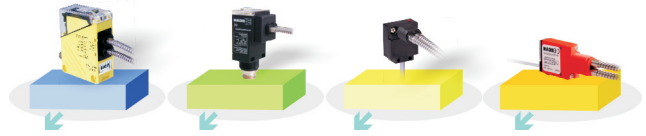
Model number	Length	Bundle	Sheath
BTA26SF90	1820	φ 3.2	SS
Range (mm)			

	80
	101
	29
	30

This modification of standard model BTA23S is used for high temperature applications. The maximum temperature limit of this special fiber assembly is 900%DF (+480%DC). The threaded portion of the fiber is changed from brass (on the standard model) to stainless steel (on this special). Stainless steel tubing has brass insert. The overall length has also been changed from 36 to 72 inches.

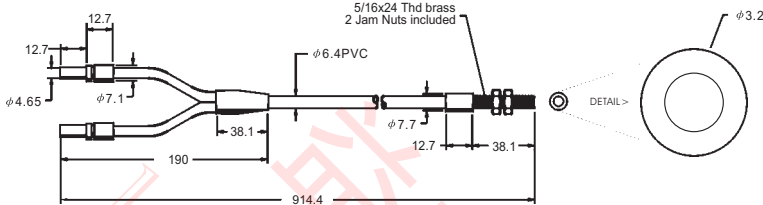
Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

BTS23L



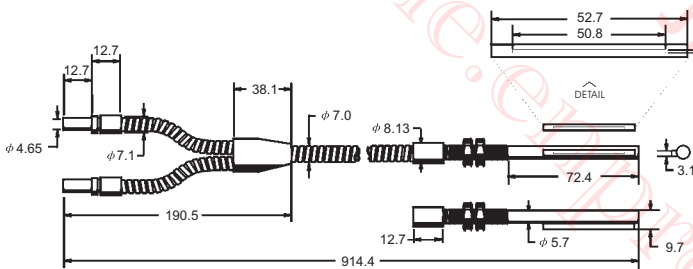
Model number	Length	Bundle	Sheath
BTS23L	910	φ 3.2	Silicone
Range (mm)			

80	80
101	101
29	29
30	30

The BTS23L has basically the same configuration as a standard BTS23P, with a few exceptions to conform to a particular application need. The BTS23P has a steel reinforcing coil, which has been eliminated in the BTS23L, and the PVC sheath has been replaced with a sheath of silicone rubber. The threaded brass end tip has been replaced with a nylon tip. It is for use in a high-voltage area, where the fiber must be of a non-conductive construction. This option can be applied to most standard fiber bundles, for similar environments.

Dimensions (mm)

BTVR2.53S



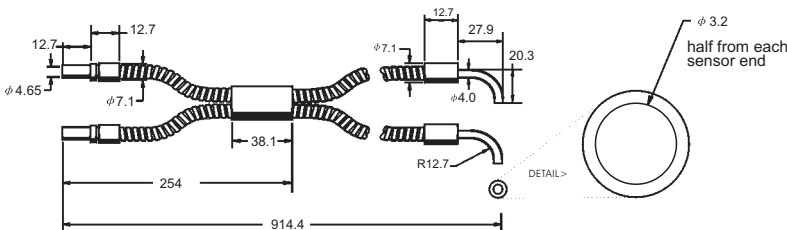
Model number	Length	Bundle	Sheath
BTVR2.53S	910	0.3x50.8	SS
Range (mm)			

135	135
150	150
40	40
42	42

The model BTVR2.53S is a threaded version of the model BRVR2.523S(previous page).

Dimensions (mm)

B2NAS23S



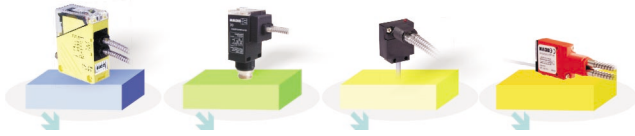
Model number	Length	Bundle	Sheath
B2NAS23S	910	φ 3.2	SS
Range (mm)			

80	80
101	101
29	29
30	30

This Double Bifurcated Angle fiber assembly is used for sensing at two locations with one photoelectric sensor. Since the fiber is used in the diffuse mode of sensing, an object is detected if light is returned to either end of the fiber. When the photoelectric sensor is programmed for light operate, a "light-OR" logic function is established. In dark operate, a "dark-AND" logic function results.

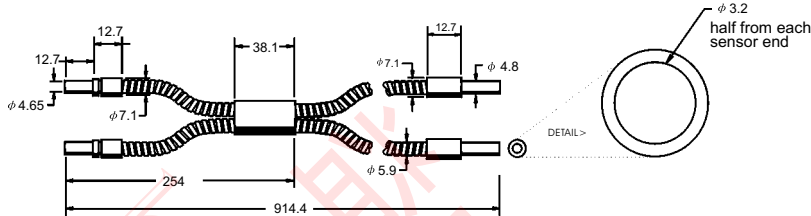
Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

B2NS23S



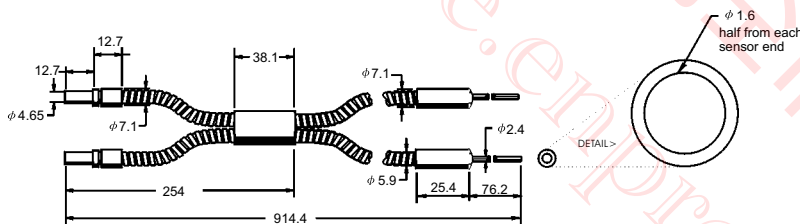
Model number	Length	Bundle	Sheath
B2NS23S	910	φ 3.2	SS
Range (mm)			

80	80
101	101
29	29
30	30

This Double Bifurcated fiber optic assembly has straight Ferrules on the sensing ends. This modification of standard model BNS23S has 1/8 inch diameter fiber bundles on both sensing ends. To determine the sensing range of this fiber use the excess gain curves for fiber model BTS23S, shown with each fiber optic sensor.

Dimensions (mm)

B2PS13S



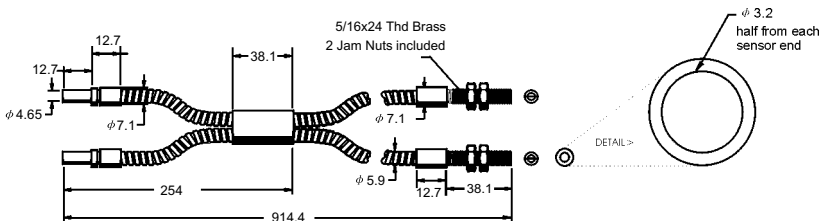
Model number	Length	Bundle	Sheath
B2PS13S	910	φ 1.6	SS
Range (mm)			

35	35
50	50
18	18
18	18

This special Double Bifurcated Probe style fiber was designed for a particular application requirement. The object being sensed was a small metallic object with a smooth shiny surface. The positioning of the part was not consistent (not always perpendicular to the sensing end). Therefore, the light from the sensing end was sometimes reflected away from the fiber. The solution was to use two sensing ends mounted at slightly different angles. The middle two inches of the three inch probe is bendable. The sensing ends were bent slightly to insure that if one end did not receive reflected light from the part, the other end would.

Dimensions (mm)

B2TS23S



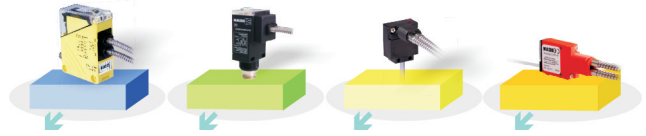
Model number	Length	Bundle	Sheath
B2TS23S	910	φ 3.2	SS
Range (mm)			

80	80
101	101
29	29
30	30

This Double Bifurcated Threaded fiber optic cable is a popular special assembly. Mounting the sensing ends is easy using the jam nuts. Each sensing end has a 1/8 inch diameter fiber bundle and performance equal to a single bifurcated assembly, like model BT23S. If the photoelectric sensor is programmed for light operate, a "light-OR" logic function results.

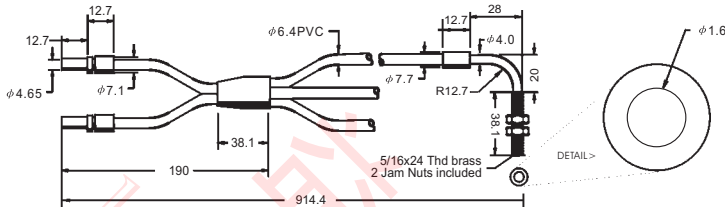
Diffuse Mode Bifurcated Cables

Glass Fibers



Dimensions (mm)

B3EA13P



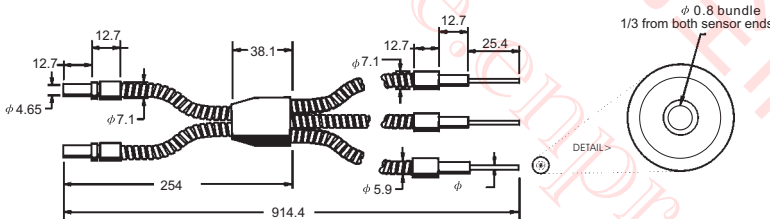
Model number	Length	Bundle	Sheath
B3EA13P	910	φ 1.6	PVC
Range (mm)			

- 35
- 50
- 18
- 18

This fiber is a Triple-Bifurcated Angle Threaded assembly with PVC sheathing and Modified Stainless Steel threads. It is designed for a machine requiring a three input "dark-AND" sensor. The machine punches out parts from a large sheet of plastic. The sensing ends are located just below the parts, in the die. At the end of a punch stroke, an interrogate ("gate") signal occurs to check the output from the photoelectric sensor. If any one of the three sensing ends sense a part (light operate) during the gate signal, the machine is shut down to avoid damage to the die.

Dimensions (mm)

B3NSM.53S



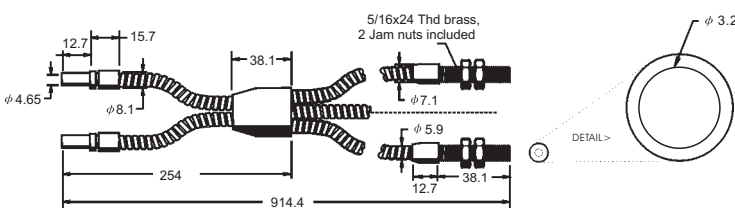
Model number	Length	Bundle	Sheath
B3NSM.53S	910	φ 0.8	SS
Range (mm)			

- 8
- 6
- 4
- 4

Model TBM.53S is a Trifurcated - Bifurcated Miniature fiber assembly, used in the proximity mode as a three-input "OR" sensor. When the bifurcated ends are attached to a high powered infrared sensor (in the light operate mode), an output occurs if an object is present in front of any one of the three sensing ends. A high powered sensor is required, due to the small diameter of the fiber bundles on the sensing ends. The object being sensed should be fairly reflective and the sensing environment should be clean.

Dimensions (mm)

B3TS23S



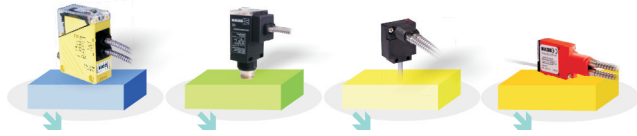
Model number	Length	Bundle	Sheath
B3TS23S	910	φ 3.2	SS
Range (mm)			

- 80
- 101
- 29
- 30

This Trifurcated-Bifurcated Threaded assembly is a three-legged version of the popular standard model BT23S. When determining the range of this fiber, use the excess gain curve for fiber model BT23S across from the photoelectric sensor you have chosen.

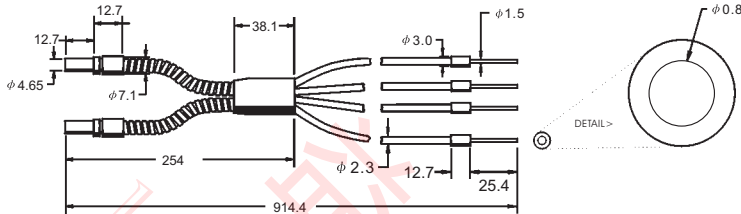
Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

B4MSM.53P



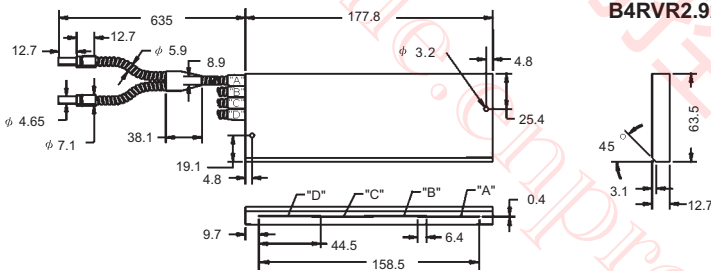
Model number	Length	Bundle	Sheath
B4MSM.53P	910	φ 0.8	SS/PVC
Range (mm)			

- 8
- 6
- 4
- 4

This Quad-Bifurcated Miniature fiber optic assembly with PVC sheathing allows a sensor to inspect four positions at one time. It was designed to detect when a hole is not centered in a metal washer. The four sensing ends are positioned 90% ϕ apart around the inside diameter of the washer. As the washer falls, guided through the inspection area, an interrogate ("gate") signal tells the photoelectric sensor when to "look". If the hole is off-center, one or more of the sensing ends will sense light reflected from the washer. The PVC sheathing on the sensing end legs of this assembly does not have a monocoil reinforcing wire.

Dimensions (mm)

B4RVR2.92S



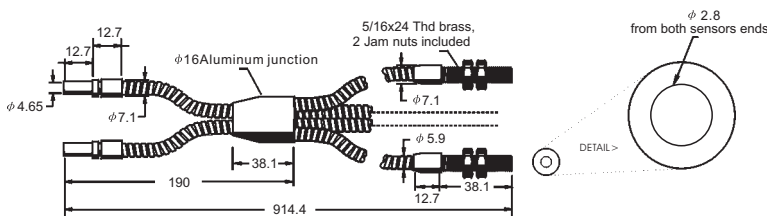
Model number	Length	Bundle	Sheath
B4RVR2.92S	910	44.5x0.38	SS
Range (mm)			

-
-
-
-

This special fiber assembly is a Quad-Bifurcated array. It is used in the diffuse sensing mode to "scan" a wide area. The four fiber optic slots are slightly offset from each other for the purpose of reducing the chance of direct optical crosstalk from one slot to the next. When used with four OMNI-BEAM model OSBFAC sensors, a web 6 - 1/4 inches wide can be inspected for surface defects. The fiber line can be made longer or shorter depending upon the application requirements. This design can be built as an individual fiber optic assembly.

Dimensions (mm)

B4TS23S



Model number	Length	Bundle	Sheath
B4TS23S	910	φ 2.8	SS
Range (mm)			

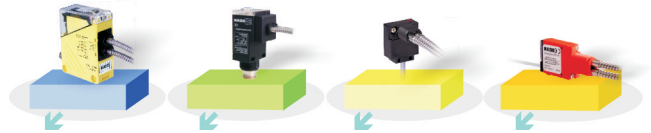
- 60
- 80
- 20
- 22

This fiber is similar to model DBT23S except it has four sensing ends. It is used in the diffuse sensing mode to set up a "light-OR" logic scheme. Both of the ferrule sensor ends contain the maximum bundle (0.156 inch diameter), and each sensing end has a fiber bundle diameter of 0.110 inches. The fiber strands are fully randomized from each ferrule, so that each sensing end contains 1/4 of the bundle from each ferrule. An aluminum the is used instead of a flat block at the bifurcation junction.

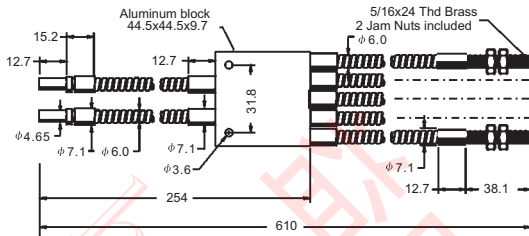
Diffuse Mode

Glass Fibers

Bifurcated Cables



Dimensions (mm)



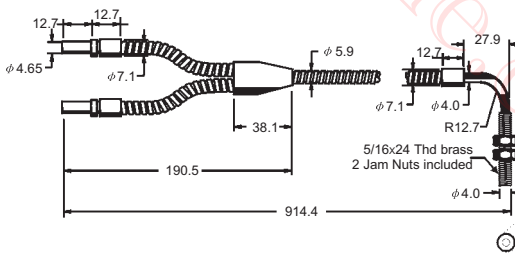
B5NS2.52S

Model number	Length	Bundle	Sheath
B5NS2.52S	610	φ 2.5	SS
Range (mm)			

	60
	80
	20
	22

This model is a Penta -Bifurcated Ferrule assembly that is Modified with Threaded Tip. It is used to set up a five input "OR" gate where if any one of the five sensing ends has light returned to it, an output occurs (when the photoelectric sensor is used in the "light operate" mode). The overall length of this assembly can be modified to suit your application. The ferrule ends which are used at the photoelectric sensor have the maximum allowable bundle size: 0.156 inch diameter. If more than five sensing ends are desired, the 0.098 inch diameter fiber bundles will be reduced in diameter.

Dimensions (mm)



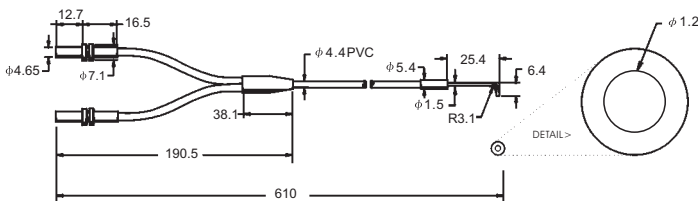
BEA23SF90

Model number	Length	Bundle	Sheath
BEA23SF90	910	φ 3.2	SS
Range (mm)			

	80
	101
	29
	30

The BAT23SM900 is the 90%%DF version of standard model BAT23S. The high temperature version requires a mechanical modification to eliminate the use of epoxy on the sensing end. The shrink junction is made of PVC tubing and should not be exposed to temperatures above 220 F. The material used for the threaded portion of the assembly is changed from brass to stainless steel, with brass insert.

Dimensions (mm)



BMAM.752P

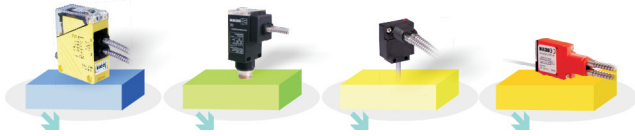
Model number	Length	Bundle	Sheath
BMAM.752P	610	φ 1.2	PVC
Range (mm)			

	15
	34
	12
	12

This Bifurcated Miniature Probe with a Modified Angle is used in applications where space is limited. It can be built either as a bifurcated (shown) or an individual fiber (IMAM.752P). The PVC sheathing used on miniature probe style fibers dose not have a monocoil reinforcing wire. Care should be taken not to exceed the minimum bend radius of this small sheathing

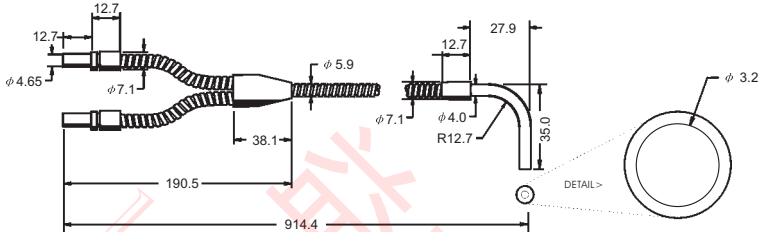
Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)

BNA23SM1.38



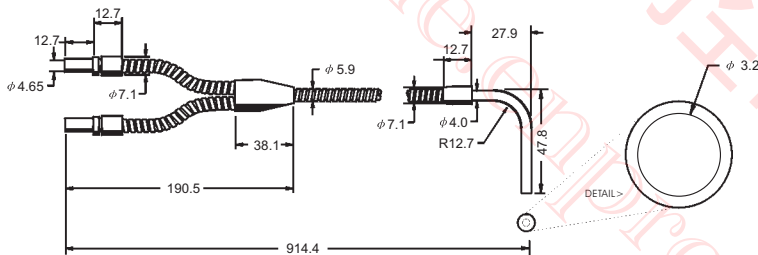
Model number	Length	Bundle	Sheath
BNA23SM1.38	910	φ 3.2	SS
Range (mm)			

	80
	101
	29
	30

This is a modified version of standard model BNA23S. The length of the ferrule after the angle is extended from .8 inches to 1.38 inches. This dimension can be made longer or can be made short as 1/2 inch. The smallest bent radius for the 3/16 inch stainless steeltubing is 3/8 inch. The 1.1 inch dimension (before the angle) can also be modified.

Dimensions (mm)

BNA23SM1.9



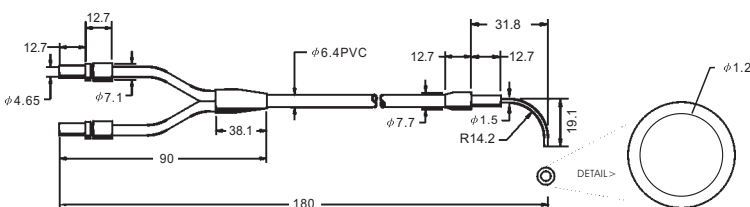
Model number	Length	Bundle	Sheath
BNA23SM1.9	910	φ 3.2	SS
Range (mm)			

	80
	101
	29
	30

This modification of the BA23S is for high temperature environments, up to 900%DF. The angle end does not contain epoxy, which breaks down at high temperatures. The high temperature construction of the scanning end requires 1.88 inches (or more) after the angle. The length of the ferrule (1.88 inches) can be made longer or modified to as short as 1.1 inches. The shrink junction is made of PVC and should not be exposed to temperatures above 220%DF.

Dimensions (mm)

BNAM.756P



Model number	Length	Bundle	Sheath
BNAM.756P	180	φ 1.2	PVC
Range (mm)			

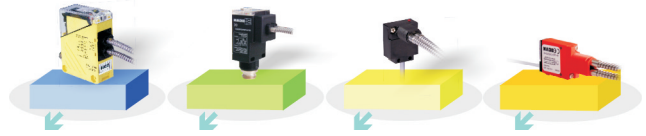
	15
	34
	12
	12

This miniature bifurcated shows many modifications of standard fiber BNAM.752P. The overall length is reduced legs are shorter, an angle is added at the sensing end and a large bend radius is used on small tubing to fit the nest of a special machine. The 0.06 inch diameter tubing is not bendable.

Glass Fibers

Diffuse Mode

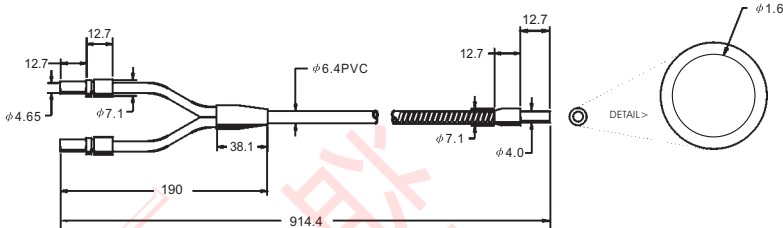
Bifurcated Cables



Dimensions (mm)

Model number	Length	Bundle	Sheath
BNS13L	910	φ 1.6	Silicone
Range (mm)			

BNS13L



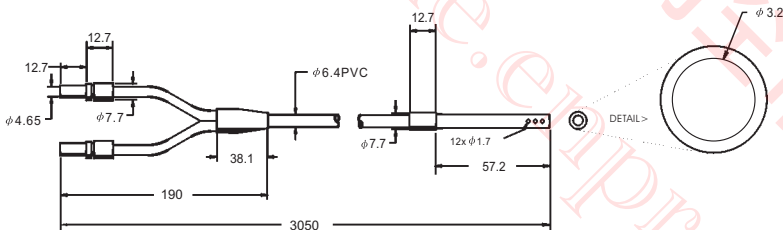
	35
	50
	18
	18

Silicon rubber sheathing is used for this modification of standard model BF13S. The non-conductive rubber is very soft and flexible. A short length (3 inches) of interlocking stainless steel is used inside the silicone sheathing on all three ends to protect the glass bundle. Silicone sheathing is used for its electrical insulating properties.

Dimensions (mm)

Model number	Length	Bundle	Sheath
BNS210PLLP	3050	φ 3.2	PVC
Range (mm)			

BNS210PLLP



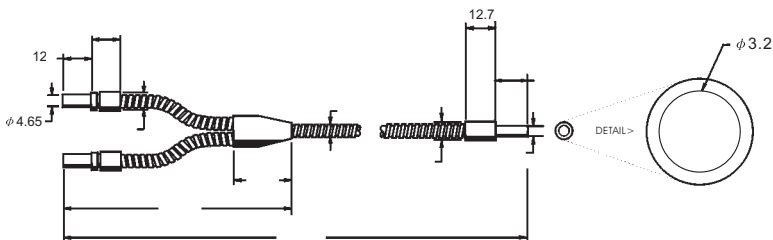
	80
	101
	29
	30

This liquid-level probe fiber has a 1/8 inch diameter glass rod sensing tip, protected by a stainless steel sleeve which has holes around the perimeter to allow liquid to enter and escape. When a liquid is present at the probe tip, the light from the sensor exits from the probe into the liquid, preventing light return to the receiver. The overall length of this assembly is 10 feet, and can be made in any length up to 60 feet.

Dimensions (mm)

Model number	Length	Bundle	Sheath
BNS23SF90	910	φ 3.2	SS
Range (mm)			

BNS23SF90

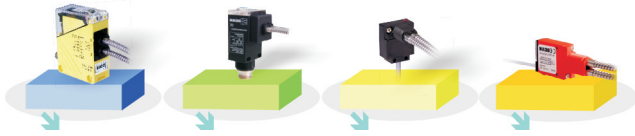


	80
	101
	29
	30

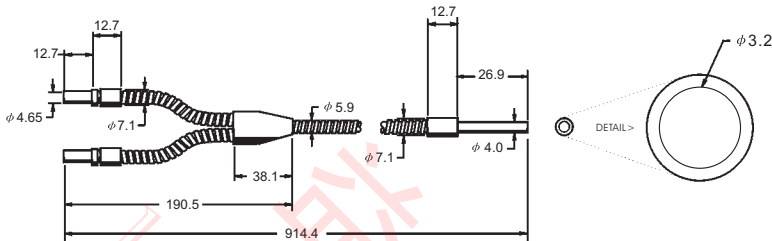
This modification of standard model BNS23S is for high temperature environments. The maximum allowable temperature for the standard fiber is 480%DF (249%DC). This modification allows the sensing end tip to survive in temperatures up to 900%DF (480%DC). The fiber bundle is randomly mixed at the sensing end tip. Specify a longer cable length if necessary.

Glass Fibers

Diffuse Mode Bifurcated Cables



Dimensions (mm)







BNS23M1.06

Model number	Length	Bundle	Sheath
--------------	--------	--------	--------

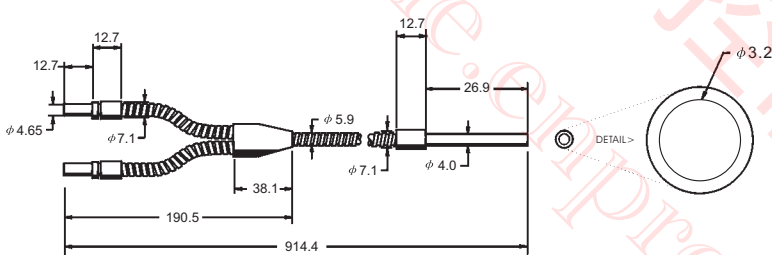
BNS23M1.06	910	φ 3.2	SS
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Range (mm)

	80
	101
	29
	30

This special assembly is an example of a modification to the sensing end ferrule of standard model BNS23S. Here, the ferrule length is 1.06 inches. A ferrule end tip can be ordered in nearly any length. The ferrule diameter can also be modified. This style of end tip is hard stainless steel, and is not bendable.

Dimensions (mm)

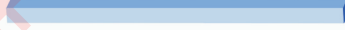





BNS23SM2

Model number	Length	Bundle	Sheath
--------------	--------	--------	--------

BNS23SM2	910	φ 3.2	SS
----------	-----	-------	----

Range (mm)

	80
	101
	29
	30

This modification of the ferrule end tip extends for a total length of two inches. A ferrule-style fiber is typically mounted through a 3/16 inch diameter hole, using a set screw to secure it. By using a long ferrule tip, easy adjustment of sensing distance is possible by sliding the ferrule in and out through the mounting hole.

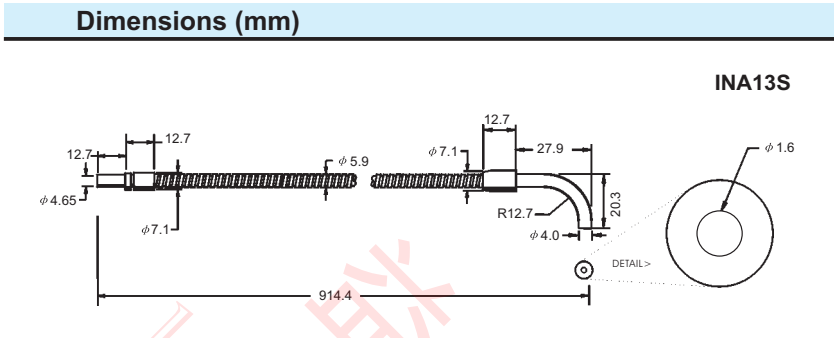
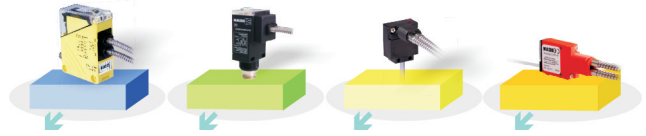
Dimensions (mm)

Model number	Length	Bundle	Sheath
--------------	--------	--------	--------

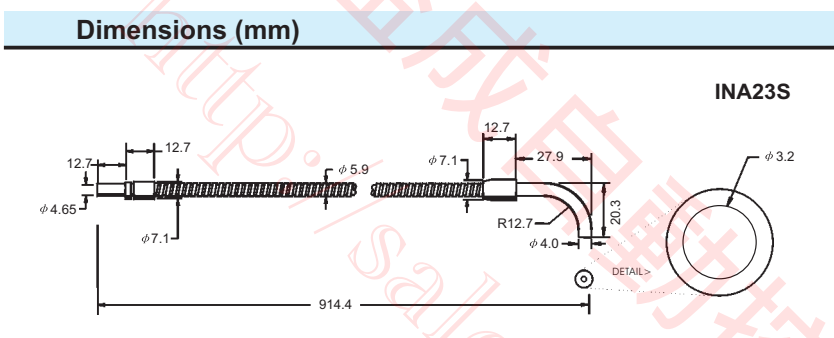
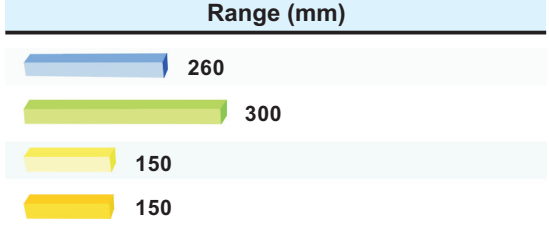
Range (mm)

Glass Fibers

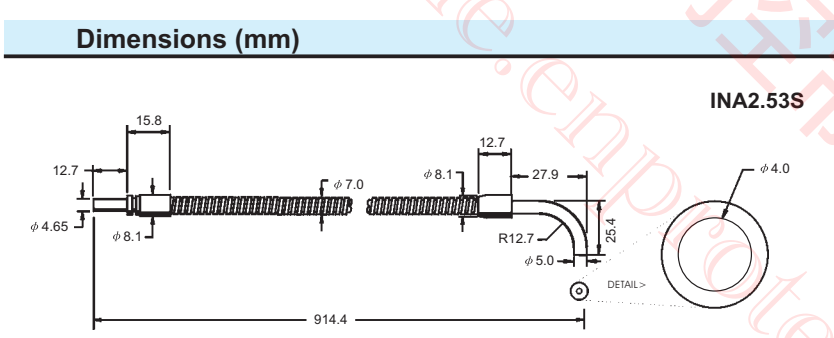
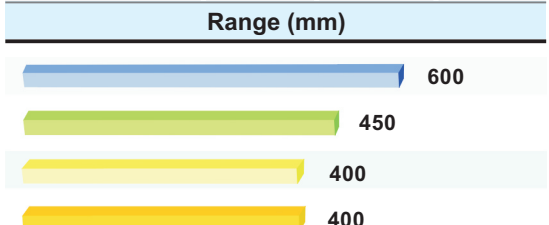
Opposed Mode Individual Cables



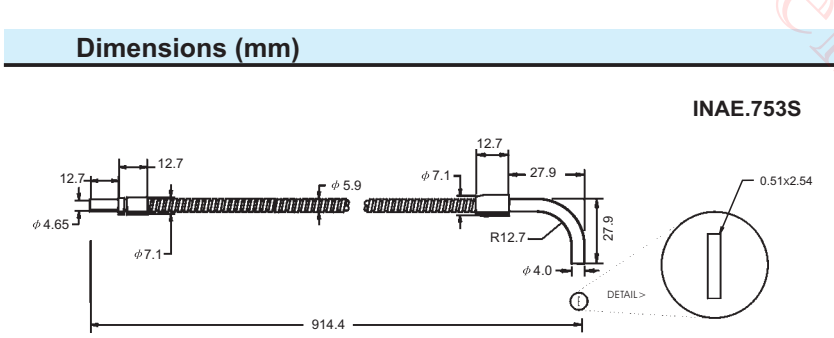
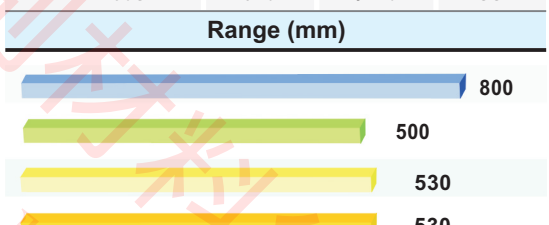
Model number	Length	Bundle	Sheath
INA13P	910	φ 1.6	PVC
INA13S	910	φ 1.6	SS



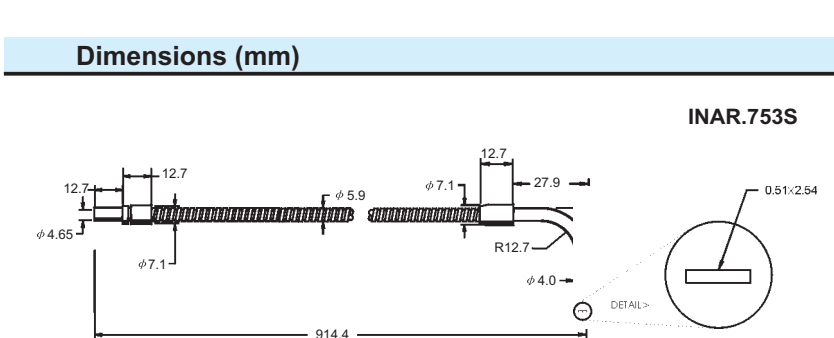
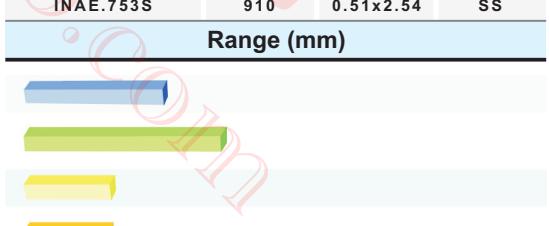
Model number	Length	Bundle	Sheath
INA23P	910	φ 3.2	PVC
INA23S	910	φ 3.2	SS



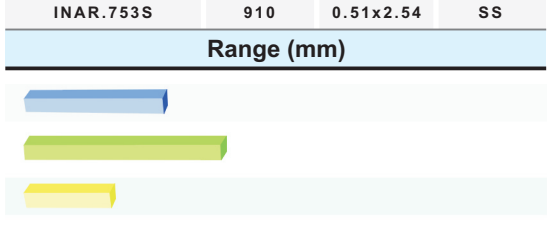
Model number	Length	Bundle	Sheath
INA2.53P	910	φ 4.0	PVC
INA2.53S	910	φ 4.0	SS



Model number	Length	Bundle	Sheath
INAE.753P	910	0.51x2.54	PVC
INAE.753S	910	0.51x2.54	SS

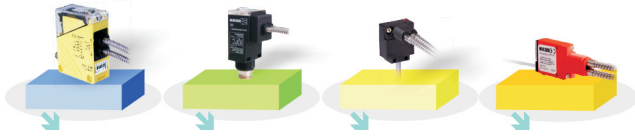


Model number	Length	Bundle	Sheath
INAR.753P	910	0.51x2.54	PVC
INAR.753S	910	0.51x2.54	SS

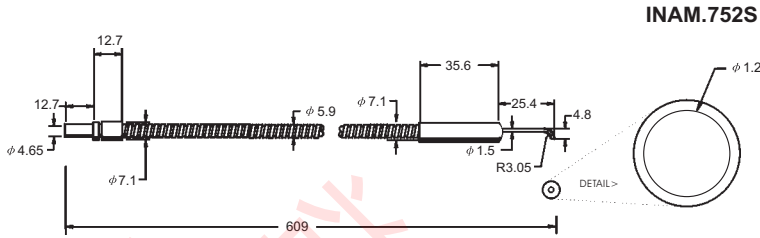


Glass Fibers

Opposed Mode Individual Cables



Dimensions (mm)

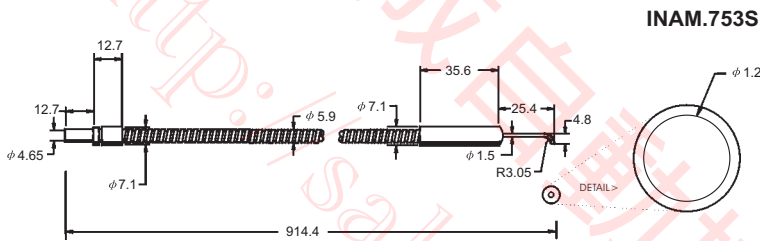


Model number	Length	Bundle	Sheath
INAM.752P	610	φ 1.2	PVC
INAM.752S	610	φ 1.2	SS

Range (mm)

- 220
- 200
- 100
- 100

Dimensions (mm)

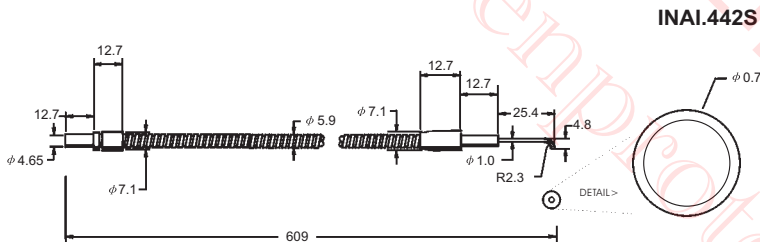


Model number	Length	Bundle	Sheath
INAM.753S	910	φ 1.2	SS

Range (mm)

- 220
- 200
- 100
- 100

Dimensions (mm)

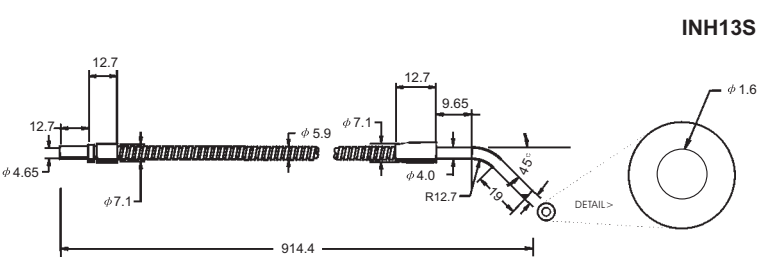


Model number	Length	Bundle	Sheath
INAI.442P	610	φ 0.7	PVC
INAI.442S	610	φ 0.7	SS

Range (mm)

- 55
- 50
- 25
- 25

Dimensions (mm)

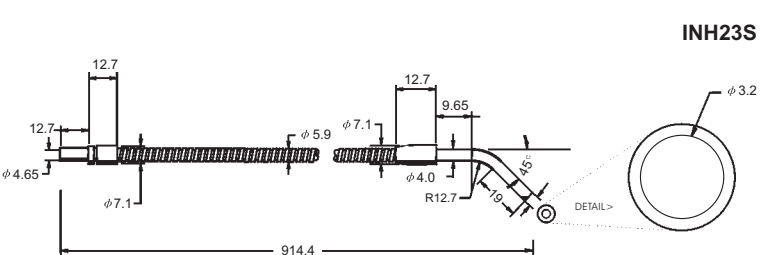


Model number	Length	Bundle	Sheath
INH13P	910	φ 1.6	PVC
INH13S	910	φ 1.6	SS

Range (mm)

- 260
- 300
- 150
- 150

Dimensions (mm)



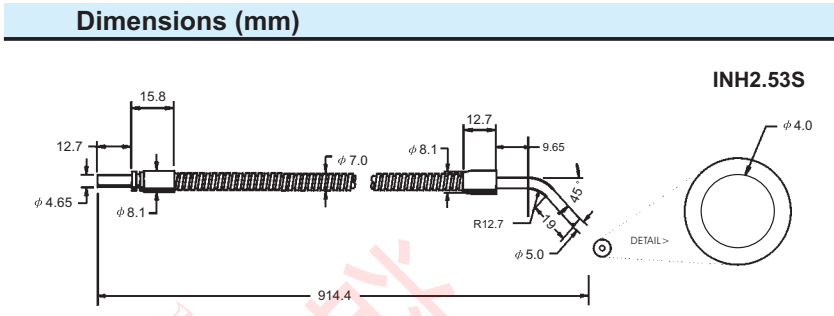
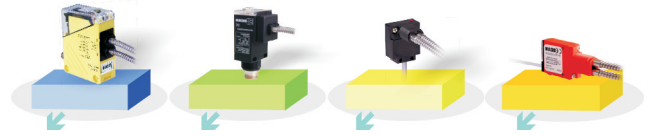
Model number	Length	Bundle	Sheath
INH23P	910	φ 3.2	PVC
INH23S	910	φ 3.2	SS

Range (mm)

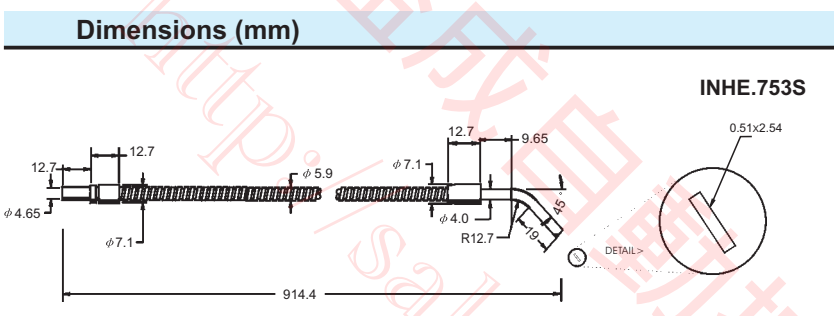
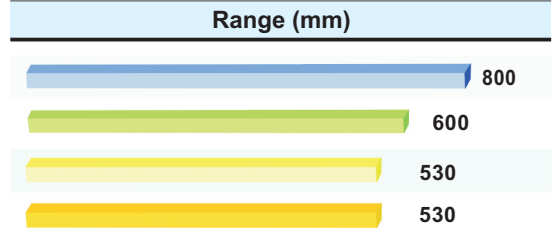
- 600
- 450
- 400
- 400

Glass Fibers

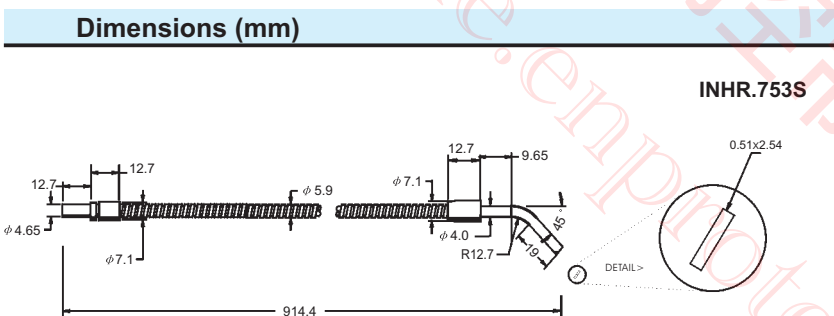
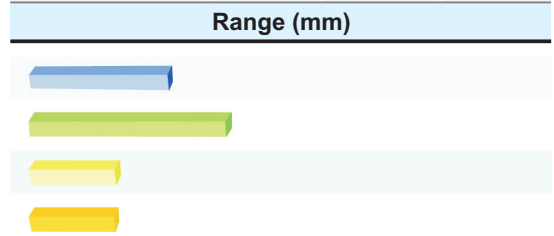
Opposed Mode Individual Cables



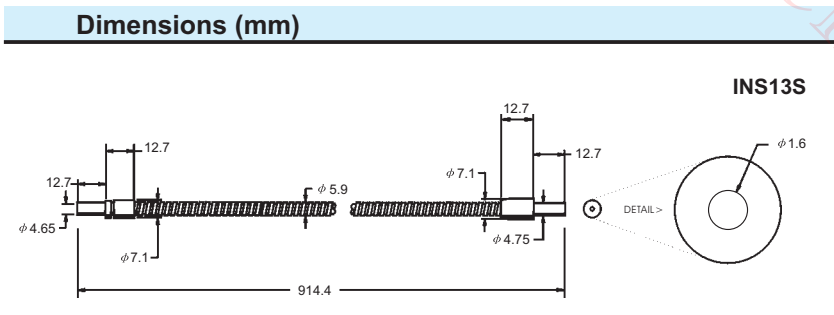
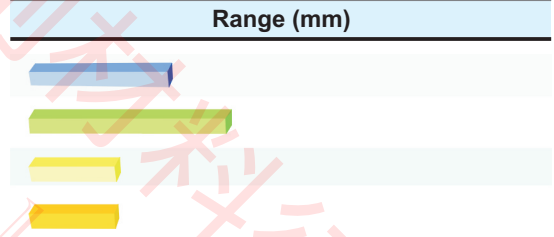
Model number	Length	Bundle	Sheath
INH2.53P	910	φ 4.0	PVC
INH2.53S	910	φ 4.0	SS



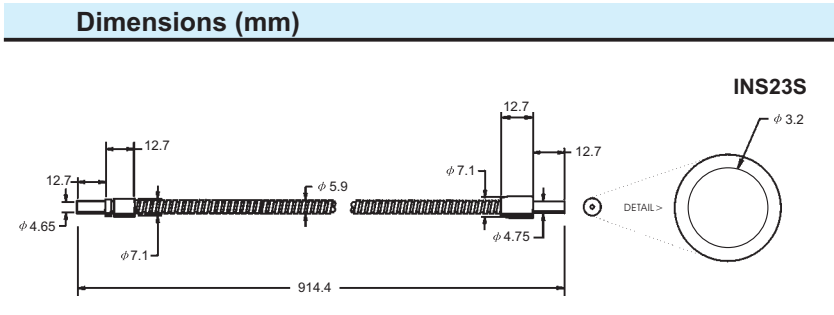
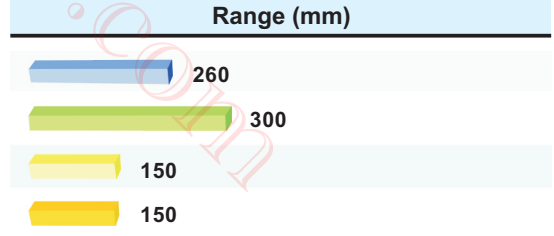
Model number	Length	Bundle	Sheath
INHE.753P	910	0.51x2.54	PVC
INHE.753S	910	0.51x2.54	SS



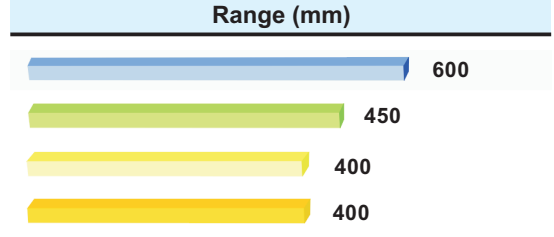
Model number	Length	Bundle	Sheath
INHR.753P	910	0.51x2.54	PVC
INHR.753S	910	0.51x2.54	SS



Model number	Length	Bundle	Sheath
INS13P	910	φ 1.6	PVC
INS13S	910	φ 1.6	SS

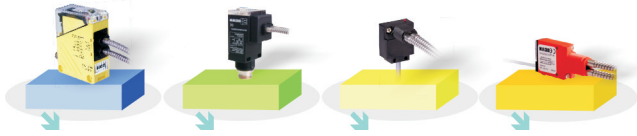


Model number	Length	Bundle	Sheath
INS23P	910	φ 3.2	PVC
INS23S	910	φ 3.2	SS



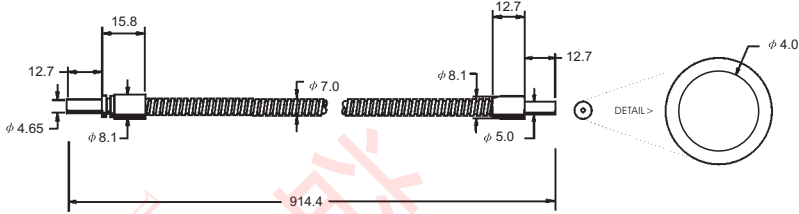
Glass Fibers

Opposed Mode Individual Cables



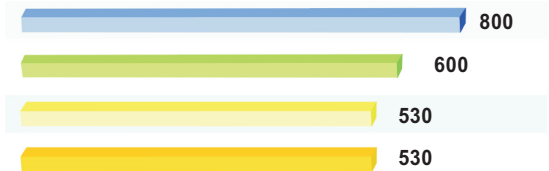
Dimensions (mm)

INS2.53S



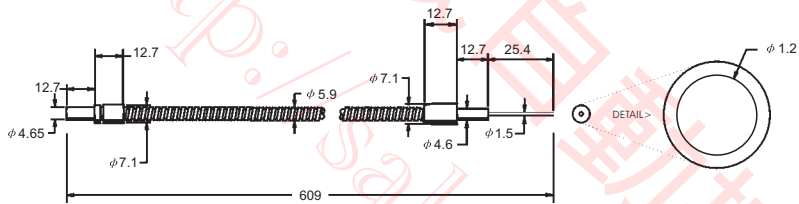
Model number	Length	Bundle	Sheath
INS2.53P	910	φ 4.0	PVC
INS2.53S	910	φ 4.0	SS

Range (mm)



Dimensions (mm)

INSM.752S



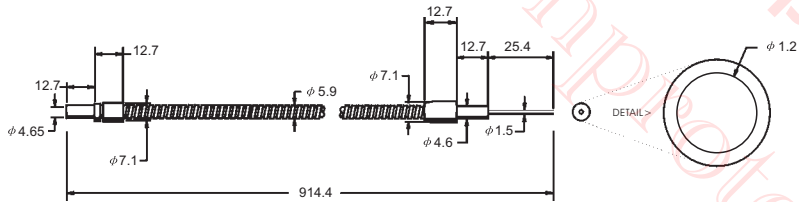
Model number	Length	Bundle	Sheath
INSM.752S	610	φ 1.2	SS

Range (mm)



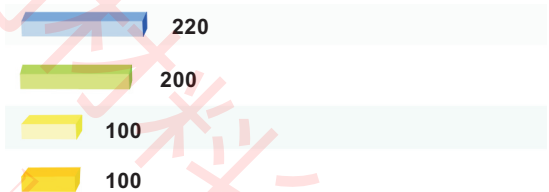
Dimensions (mm)

INSM.753S



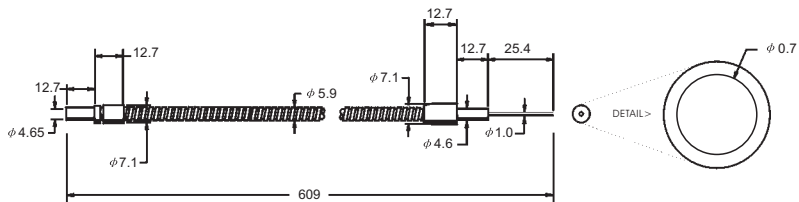
Model number	Length	Bundle	Sheath
INSM.753S	910	φ 1.2	SS

Range (mm)



Dimensions (mm)

INSI.442S



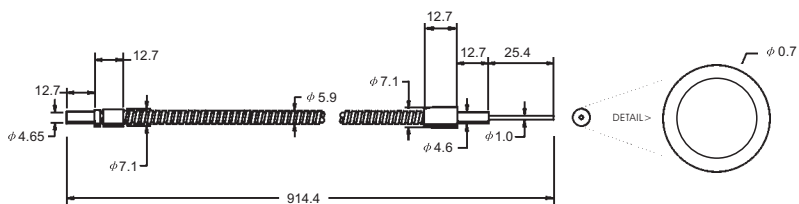
Model number	Length	Bundle	Sheath
INSI.442S	610	φ 0.7	SS

Range (mm)



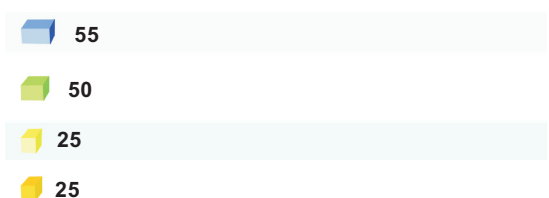
Dimensions (mm)

INSI.443S



Model number	Length	Bundle	Sheath
INSI.443S	910	φ 0.7	SS

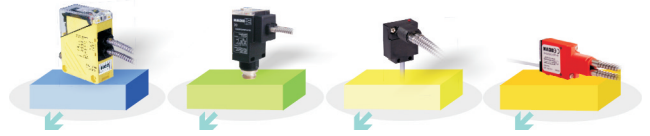
Range (mm)



Glass Fibers

Opposed Mode

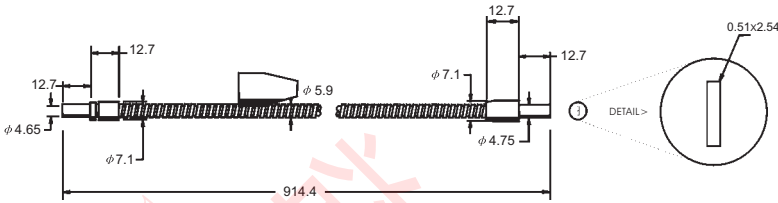
Individual Cables



Dimensions (mm)

Model number	Length	Bundle	Sheath
INSR.753P	910	0.51x2.54	PVC
INSR.753S	910	0.51x2.54	SS

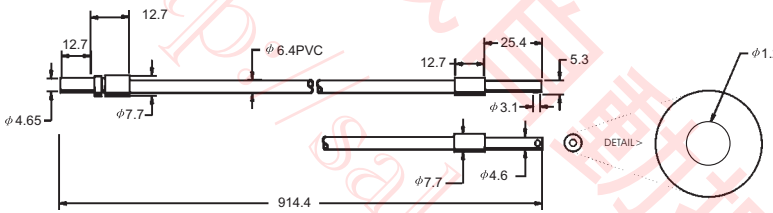
INSR.753S



Dimensions (mm)

Model number	Length	Bundle	Sheath
INV.753P	910	phi 1.2	PVC
INV.753S	910	phi 1.2	SS

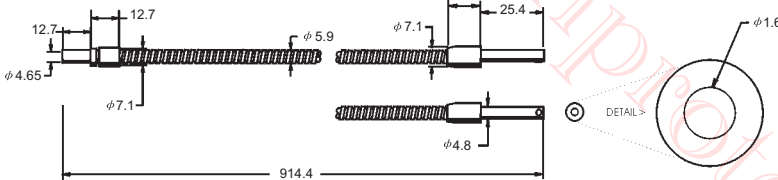
INV.753P



Dimensions (mm)

Model number	Length	Bundle	Sheath
INV13P	910	phi 1.6	PVC
INV13S	910	phi 1.6	SS

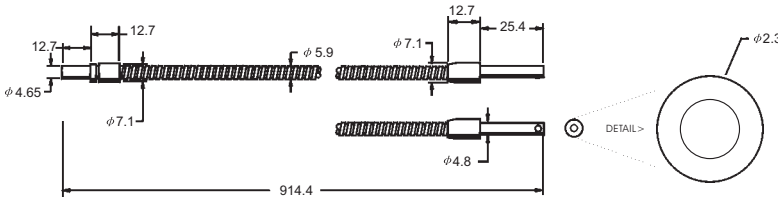
INV13S



Dimensions (mm)

Model number	Length	Bundle	Sheath
INV1.53P	910	phi 2.3	PVC
INV1.53S	910	phi 2.3	SS

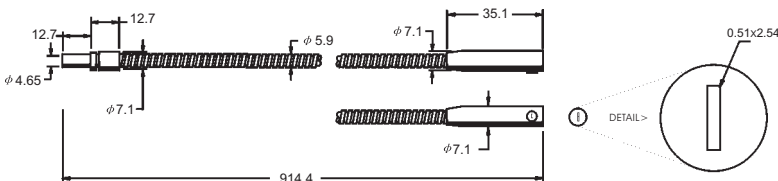
INV1.53S



Dimensions (mm)

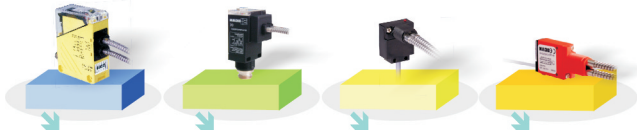
Model number	Length	Bundle	Sheath
INVE.753P	910	0.51x2.54	PVC
INVE.753S	910	0.51x2.54	SS

INVE.753S

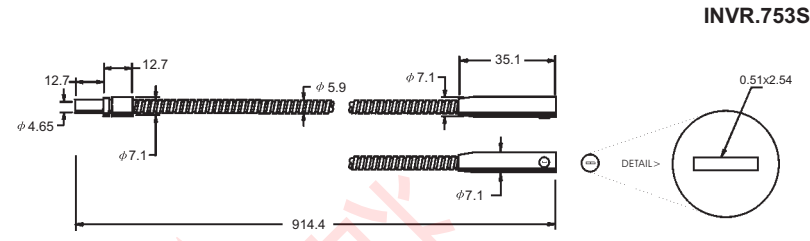


Glass Fibers

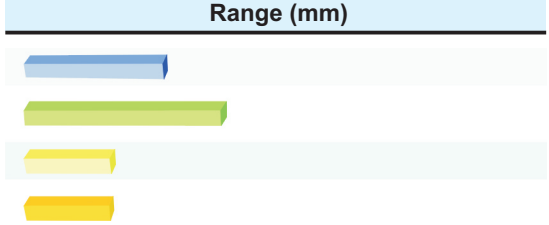
Opposed Mode Individual Cables



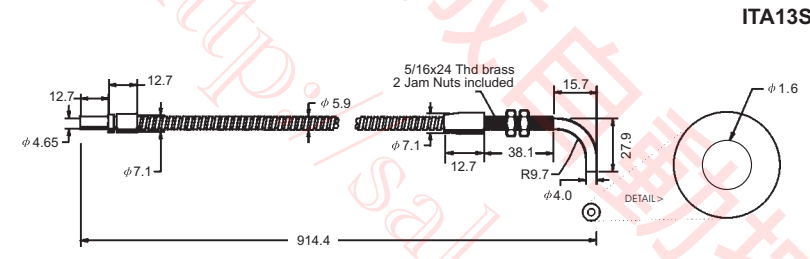
Dimensions (mm)



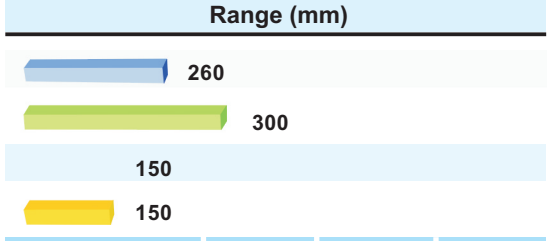
Model number	Length	Bundle	Sheath
INVR.753P	910	0.51x2.54	PVC
INVR.753S	910	0.51x2.54	SS



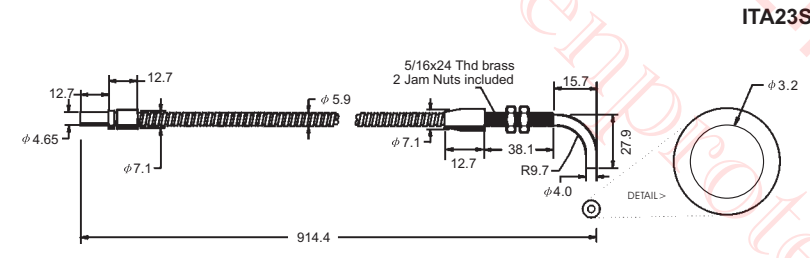
Dimensions (mm)



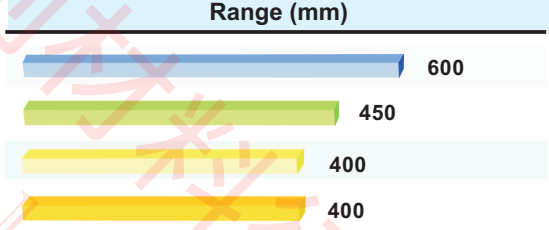
Model number	Length	Bundle	Sheath
ITA13P	910	φ 1.6	PVC
ITA13S	910	φ 1.6	SS



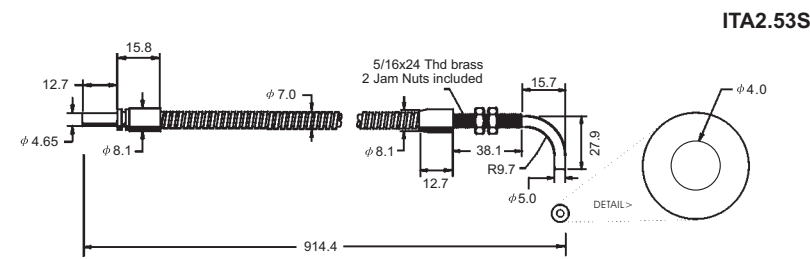
Dimensions (mm)



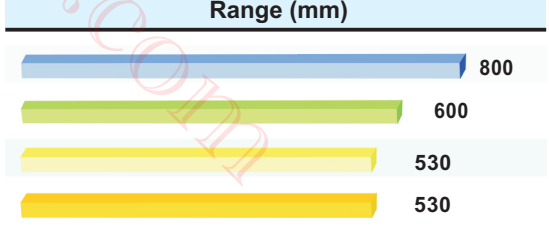
Model number	Length	Bundle	Sheath
ITA23P	910	φ 3.2	PVC
ITA23S	910	φ 3.2	SS



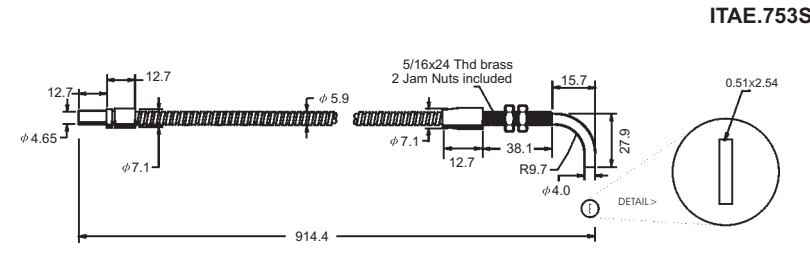
Dimensions (mm)



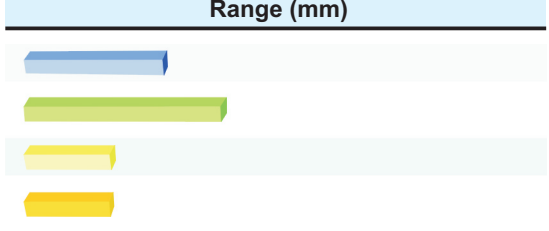
Model number	Length	Bundle	Sheath
ITA2.53P	910	φ 4.0	PVC
ITA2.53S	910	φ 4.0	SS



Dimensions (mm)

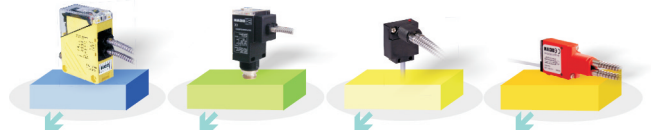


Model number	Length	Bundle	Sheath
ITAE.753P	910	0.51x2.54	PVC
ITAE.753S	910	0.51x2.54	SS



Opposed Mode Individual Cables

Glass Fibers



Dimensions (mm)

ITAR.753S

Model number	Length	Bundle	Sheath
ITAR.753P	910	0.51x2.54	PVC
ITAR.753S	910	0.51x2.54	SS

Range (mm)

Dimensions (mm)

ITH13S

Model number	Length	Bundle	Sheath
ITH13P	910	φ 1.6	PVC
ITH13S	910	φ 1.6	SS

Range (mm)

Dimensions (mm)

ITH23S

Model number	Length	Bundle	Sheath
ITH23P	910	φ 3.2	PVC
ITH23S	910	φ 3.2	SS

Range (mm)

Dimensions (mm)

ITH2.53S

Model number	Length	Bundle	Sheath
ITH2.53P	910	φ 4.0	PVC
ITH2.53S	910	φ 4.0	SS

Range (mm)

Dimensions (mm)

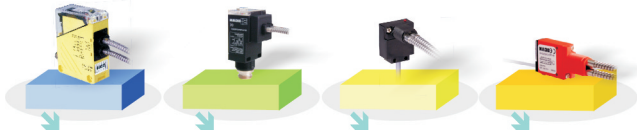
ITHE.753S

Model number	Length	Bundle	Sheath
ITHE.753P	910	0.51x2.54	PVC
ITHE.753S	910	0.51x2.54	SS

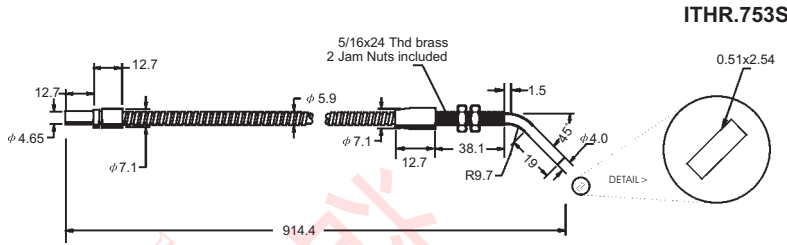
Range (mm)

Glass Fibers

Opposed Mode Individual Cables



Dimensions (mm)

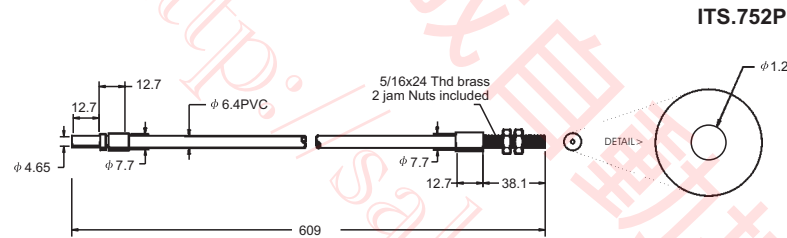


Model number	Length	Bundle	Sheath
ITHR.753P	910	0.51x2.54	PVC
ITHR.753S	910	0.51x2.54	SS

Range (mm)

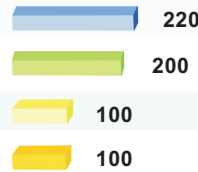


Dimensions (mm)

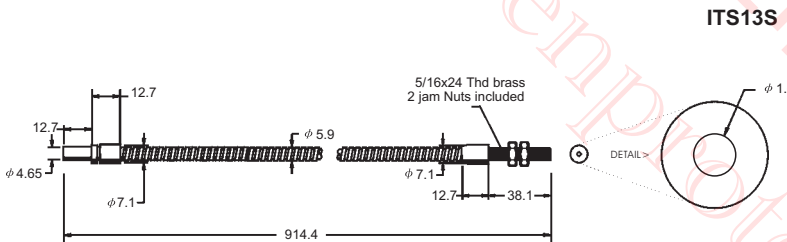


Model number	Length	Bundle	Sheath
ITS.752P	610	φ 1.2	PVC
ITS.752S	610	φ 1.2	SS

Range (mm)

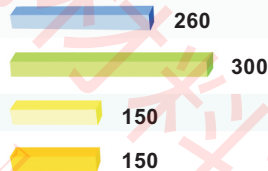


Dimensions (mm)

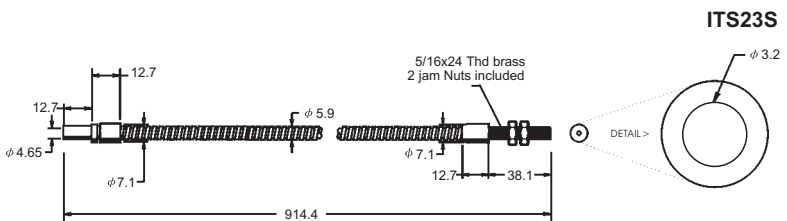


Model number	Length	Bundle	Sheath
ITS13P	910	φ 1.6	PVC
ITS13S	910	φ 1.6	SS

Range (mm)



Dimensions (mm)

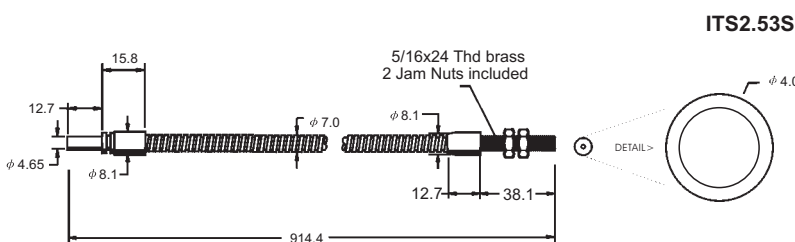


Model number	Length	Bundle	Sheath
ITS23P	910	φ 3.2	PVC
ITS23S	910	φ 3.2	SS
ITS26S	1820	φ 3.2	SS

Range (mm)

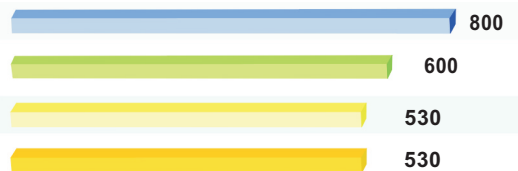


Dimensions (mm)



Model number	Length	Bundle	Sheath
ITS2.53P	910	φ 4.0	PVC
ITS2.53S	910	φ 4.0	SS

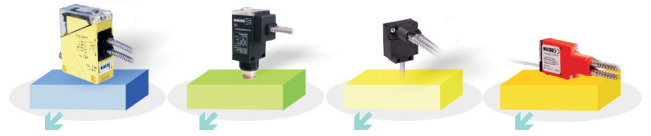
Range (mm)



Glass Fibers

Opposed Mode

Individual Cables



Dimensions (mm)

ITV.753S

Model number	Length	Bundle	Sheath
ITV.753S	910	φ 1.2	SS
Range (mm)			
	220		
	200		
	100		
	100		

Dimensions (mm)

ITV1.53S

Model number	Length	Bundle	Sheath
ITV1.53S	910	φ 2.3	SS
Range (mm)			
	300		
	300		
	180		
	180		

Dimensions (mm)

IEA13S

Model number	Length	Bundle	Sheath
IEA13P	910	φ 1.6	PVC
IEA13S	910	φ 1.6	SS
Range (mm)			
	260		
	300		
	150		
	150		

Dimensions (mm)

IEA23S

Model number	Length	Bundle	Sheath
IEA23P	910	φ 3.2	PVC
IEA23S	910	φ 3.2	SS
Range (mm)			
	600		
	450		
	400		
	400		

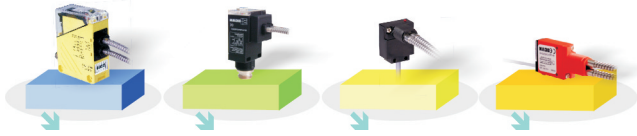
Dimensions (mm)

IEA2.53S

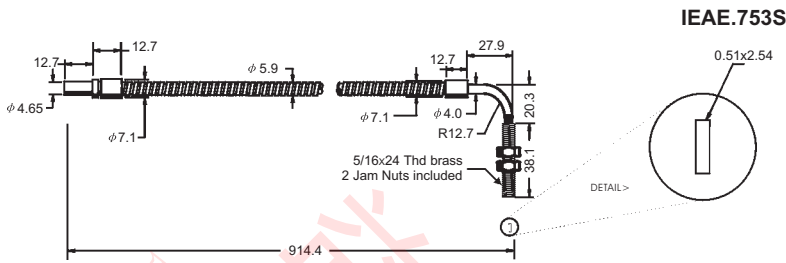
Model number	Length	Bundle	Sheath
IEA2.53P	910	φ 4.0	PVC
IEA2.53S	910	φ 4.0	SS
Range (mm)			
	800		
	500		
	530		
	530		

Glass Fibers

Opposed Mode Individual Cables

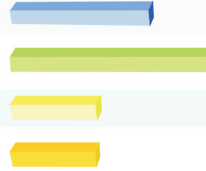


Dimensions (mm)

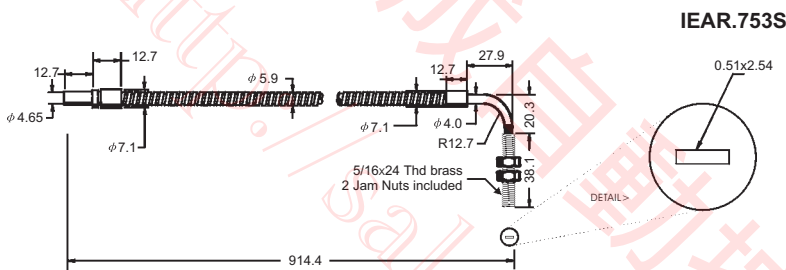


Model number	Length	Bundle	Sheath
IEAE.753P	910	0.51x2.54	PVC
IEAE.753S	910	0.51x2.54	SS

Range (mm)

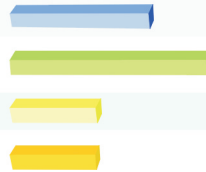


Dimensions (mm)

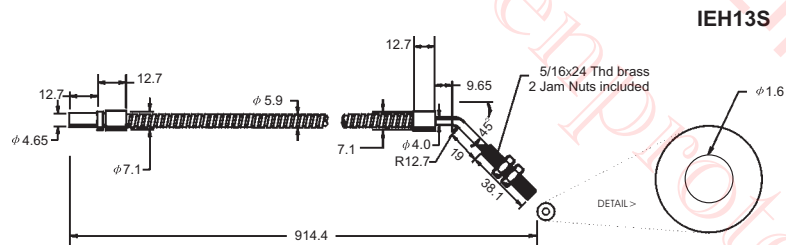


Model number	Length	Bundle	Sheath
IEAR.753P	910	0.51x2.54	PVC
IEAR.753S	910	0.51x2.54	SS

Range (mm)

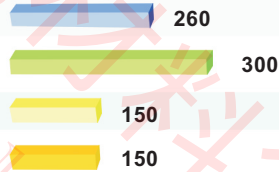


Dimensions (mm)

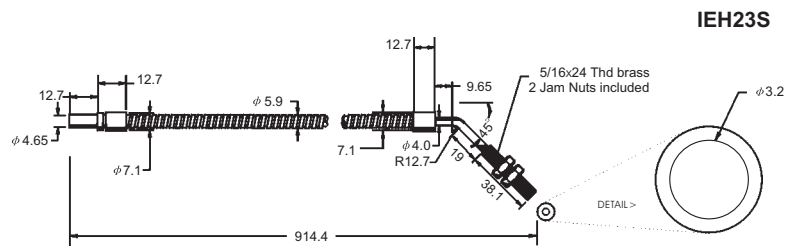


Model number	Length	Bundle	Sheath
IEH13P	910	φ 1.6	PVC
IEH13S	910	φ 1.6	SS

Range (mm)



Dimensions (mm)

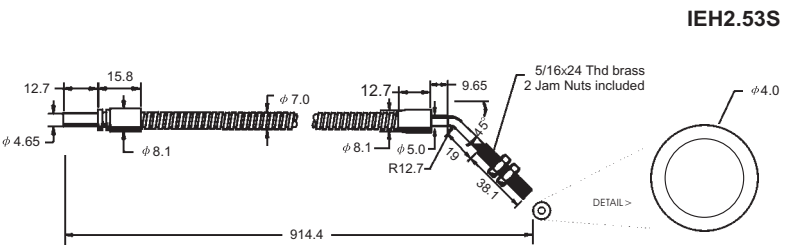


Model number	Length	Bundle	Sheath
IEH23P	910	φ 3.2	PVC
IEH23S	910	φ 3.2	SS

Range (mm)

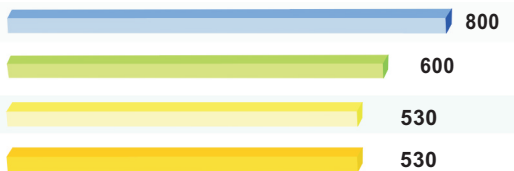


Dimensions (mm)



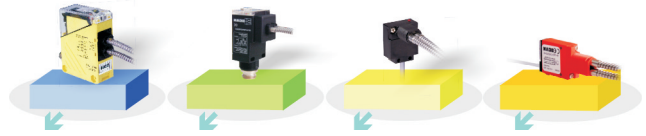
Model number	Length	Bundle	Sheath
IEH2.53P	910	φ 4.0	PVC
IEH2.53S	910	φ 4.0	SS

Range (mm)



Opposed Mode Individual Cables

Glass Fibers



Dimensions (mm)

IEHE.753S

Model number	Length	Bundle	Sheath
IEHE.753P	910	0.51x2.54	PVC
IEHE.753S	910	0.51x2.54	SS

Range (mm)

Dimensions (mm)

IEHR.753S

Model number	Length	Bundle	Sheath
IEHR.753P	910	0.51x2.54	PVC
IEHR.753S	910	0.51x2.54	SS

Range (mm)

Dimensions (mm)

IMAM.442P

Model number	Length	Bundle	Sheath
IMAM.442P	610	φ 0.7	PVC

Range (mm)

Dimensions (mm)

IMAM.753P

Model number	Length	Bundle	Sheath
IMAM.753P	910	φ 1.2	PVC

Range (mm)

Dimensions (mm)

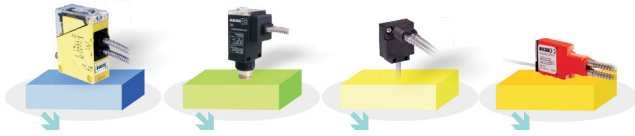
IMHM.442P

Model number	Length	Bundle	Sheath
IMHM.442P	610	φ 0.7	PVC

Range (mm)

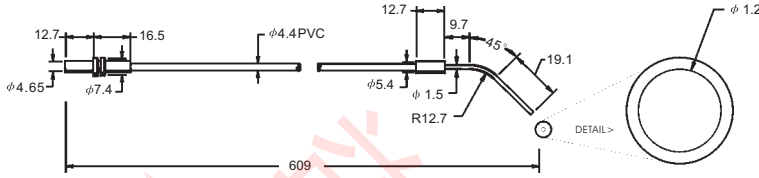
Glass Fibers

Opposed Mode Individual Cables



Dimensions (mm)

IMHM.753P

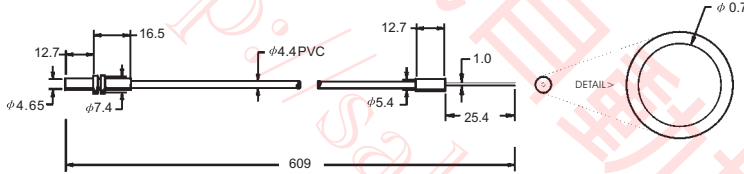


Model number	Length	Bundle	Sheath
IMHM.753P	910	φ 1.2	PVC
Range (mm)			

- 220
- 200
- 100
- 100

Dimensions (mm)

IMSI.442P

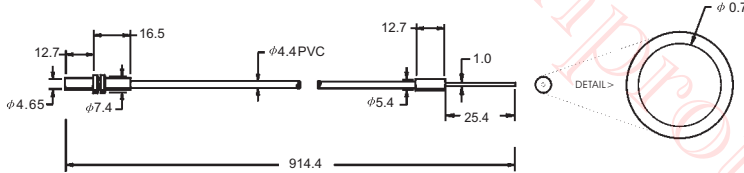


Model number	Length	Bundle	Sheath
IMSI.442P	610	φ 0.7	PVC
Range (mm)			

- 55
- 50
- 25
- 25

Dimensions (mm)

IMSI.443P

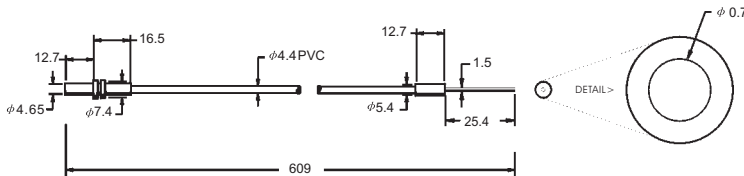


Model number	Length	Bundle	Sheath
IMSI.443P	910	φ 0.7	PVC
Range (mm)			

- 55
- 50
- 25
- 25

Dimensions (mm)

IMSM.442P

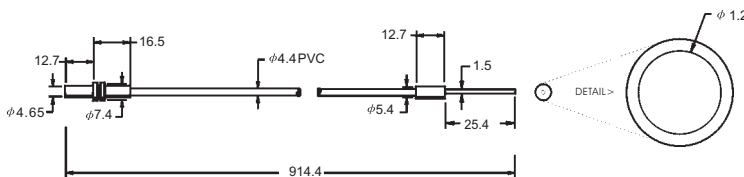


Model number	Length	Bundle	Sheath
IMSM.442P	610	φ 0.7	PVC
Range (mm)			

- 55
- 50
- 25
- 25

Dimensions (mm)

IMSM.753P



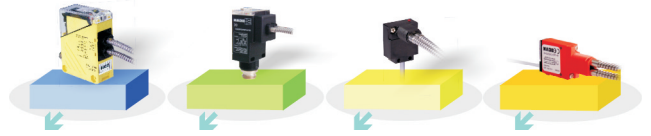
Model number	Length	Bundle	Sheath
IMSM.753P	910	φ 1.2	PVC
Range (mm)			

- 220
- 200
- 100
- 100

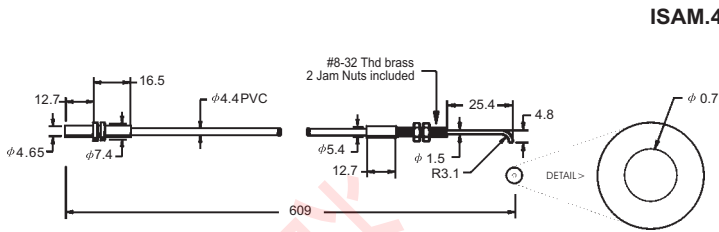
Glass Fibers

Opposed Mode

Individual Cables



Dimensions (mm)

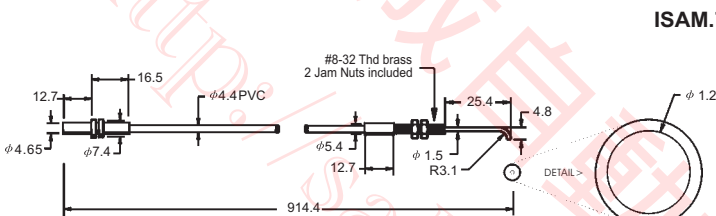


ISAM.442P

Model number	Length	Bundle	Sheath
ISAM.442P	610	φ 0.7	PVC
Range (mm)			

- 55
- 50
- 25
- 25

Dimensions (mm)

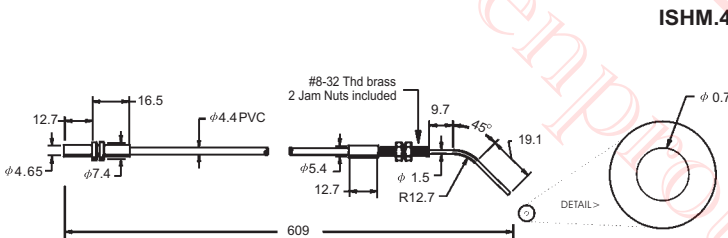


ISAM.753P

Model number	Length	Bundle	Sheath
ISAM.753P	910	φ 1.2	PVC
Range (mm)			

- 220
- 200
- 100
- 100

Dimensions (mm)

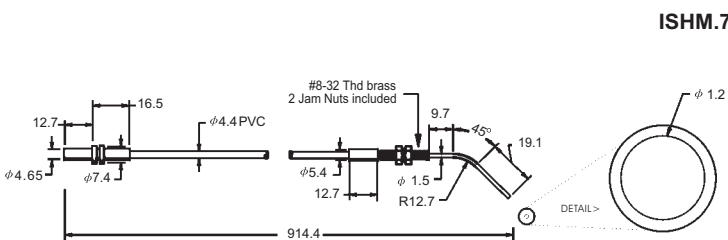


ISHM.442P

Model number	Length	Bundle	Sheath
ISHM.442P	610	φ 0.7	PVC
Range (mm)			

- 55
- 50
- 25
- 25

Dimensions (mm)

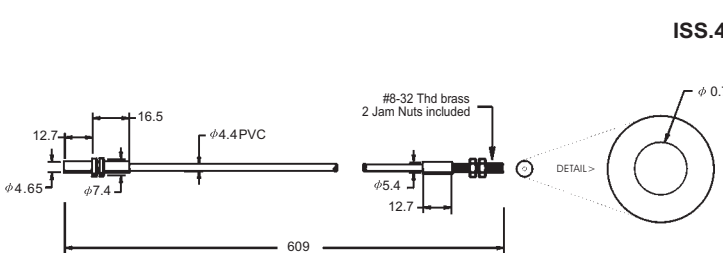


ISHM.753P

Model number	Length	Bundle	Sheath
ISHM.753P	910	φ 1.2	PVC
Range (mm)			

- 220
- 200
- 100
- 100

Dimensions (mm)



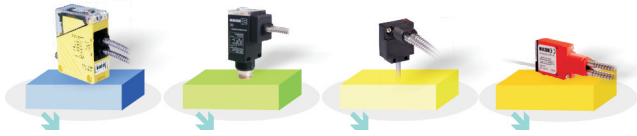
ISS.442P

Model number	Length	Bundle	Sheath
ISS.442P	610	φ 0.7	PVC
Range (mm)			

- 55
- 50
- 25
- 25

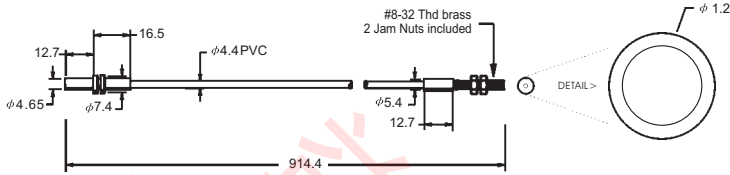
Glass Fibers

Opposed Mode Individual Cables



Dimensions (mm)

ISS.753P

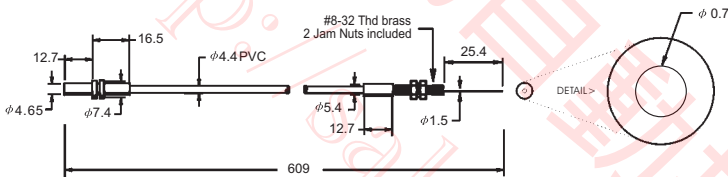


Model number	Length	Bundle	Sheath
ISS.753P	910	φ 1.2	PVC
Range (mm)			

- 220
- 200
- 100
- 100

Dimensions (mm)

ISSM.442P

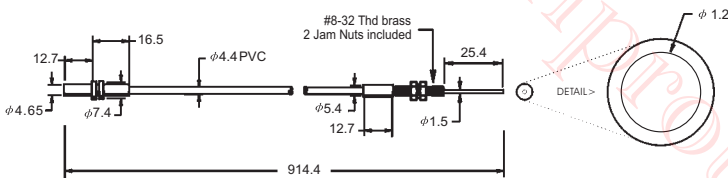


Model number	Length	Bundle	Sheath
ISSM.442P	610	φ 0.7	PVC
Range (mm)			

- 55
- 50
- 25
- 25

Dimensions (mm)

ISSM.753P

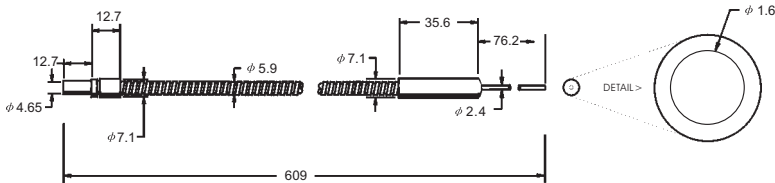


Model number	Length	Bundle	Sheath
ISSM.753P	910	φ 1.2	PVC
Range (mm)			

- 220
- 200
- 100
- 100

Dimensions (mm)

IPS12S

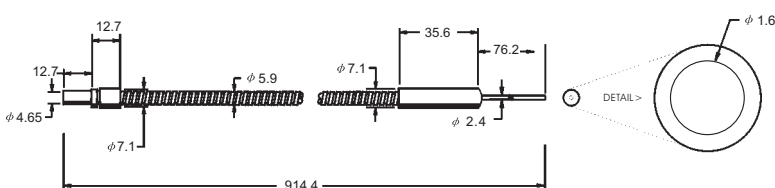


Model number	Length	Bundle	Sheath
IPS12P	610	φ 1.6	PVC
IPS12S	610	φ 1.6	SS
Range (mm)			

- 260
- 300
- 150
- 150

Dimensions (mm)

IPS13S

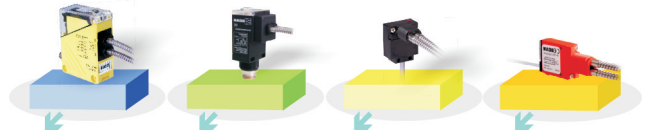


Model number	Length	Bundle	Sheath
IPS13P	910	φ 1.6	PVC
IPS13S	910	φ 1.6	SS
Range (mm)			

- 260
- 300
- 150
- 150

Glass Fibers

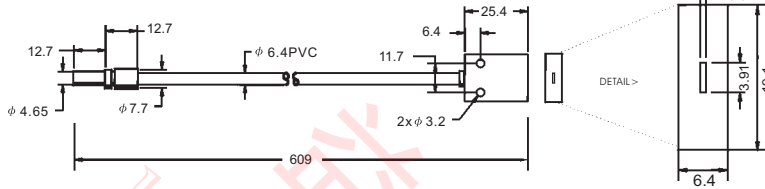
Opposed Mode Individual Cables



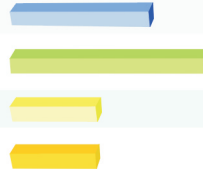
Dimensions (mm)

Model number	Length	Bundle	Sheath
IRSR12P	610	0.51x3.91	PVC
IRSR12S	610	0.51x3.91	PVC

IRSR12P



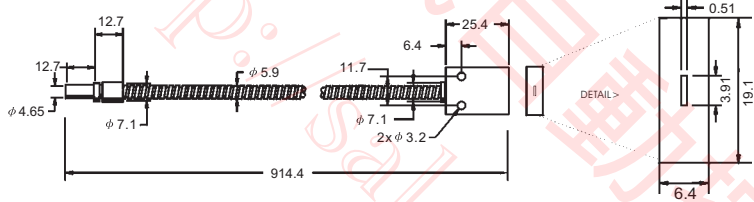
Range (mm)



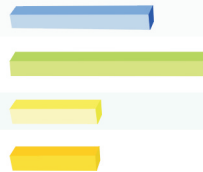
Dimensions (mm)

Model number	Length	Bundle	Sheath
IRSR13P	910	0.51x3.91	PVC
IRSR13S	910	0.51x3.91	SS

IRSR13S



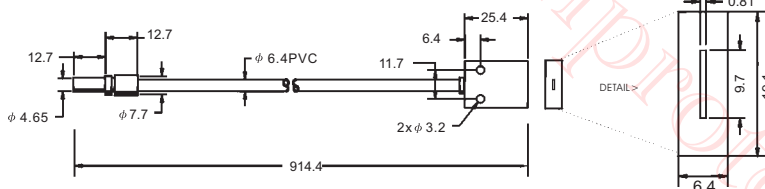
Range (mm)



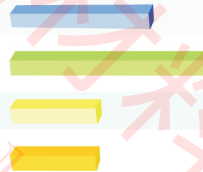
Dimensions (mm)

Model number	Length	Bundle	Sheath
IRSR23P	910	0.81x9.7	PVC
IRSR23S	910	0.81x9.7	SS

IRSR23P



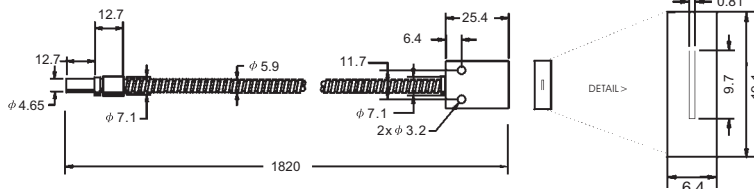
Range (mm)



Dimensions (mm)

Model number	Length	Bundle	Sheath
IRSR26P	1820	0.81x9.7	PVC
IRSR26S	1820	0.81x9.7	SS

IRSR26S



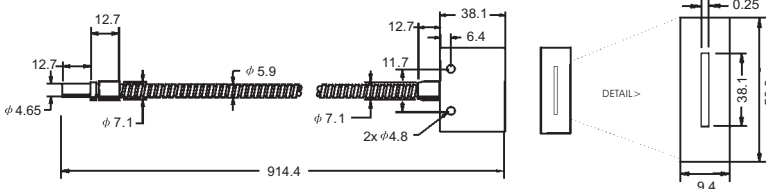
Range (mm)



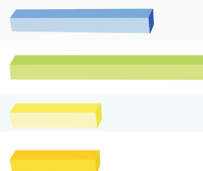
Dimensions (mm)

Model number	Length	Bundle	Sheath
IRSR2.53P	910	0.25x38.1	PVC
IRSR2.53S	910	0.25x38.1	SS

IRSR2.53S

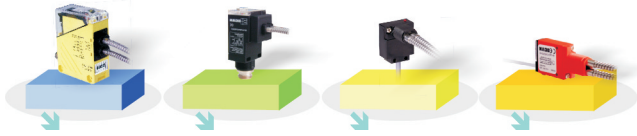


Range (mm)



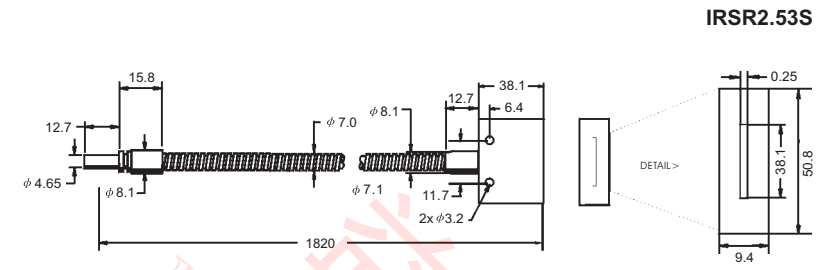
Glass Fibers

Opposed Mode Individual Cables



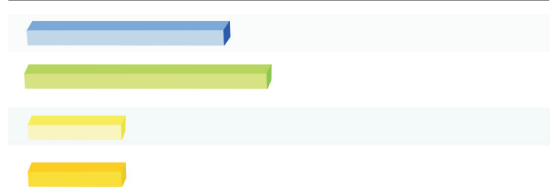
Dimensions (mm)

Model number	Length	Bundle	Sheath
IRSR2.56P	1820	0.25x38.1	PVC
IRSR2.56S	1820	0.25x38.1	SS



Range (mm)

Dimensions (mm)



Model number	Length	Bundle	Sheath

Range (mm)

Dimensions (mm)

Model number	Length	Bundle	Sheath

Range (mm)

Dimensions (mm)

Model number	Length	Bundle	Sheath

Range (mm)

Dimensions (mm)

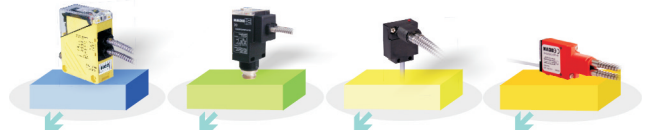
Model number	Length	Bundle	Sheath

Range (mm)

Glass Fibers

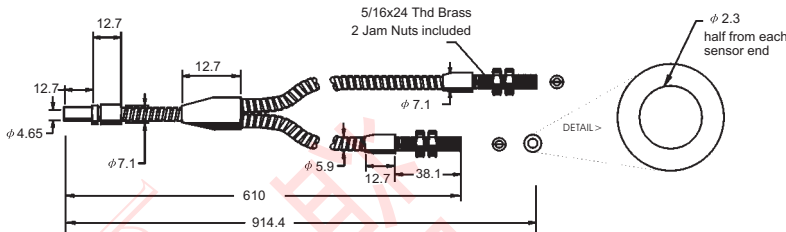
Opposed Mode

Individual Cables



Dimensions (mm)

I2TS23S



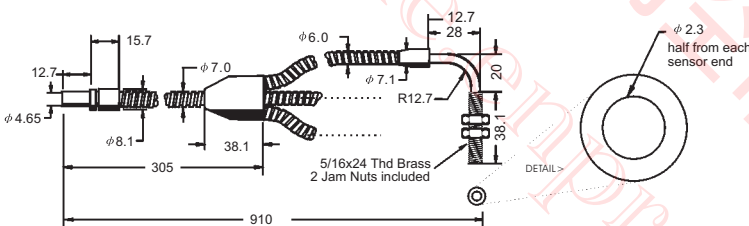
Model number	Length	Bundle	Sheath
I2TS23S	910	φ 2.3	SS
Range (mm)			

	220
	370
	180
	180

Most bifurcated fiber assemblies are used in the diffuse (proximity) sensing mode, but this one is used (in pairs) in the opposed mode. The common end of one cable connects to an emitter, and the common end of the other cable, to a receiver. The two opposed beams created with the branched ends must both be broken in order to obtain an output from the sensor ("dark-AND" logic). Threaded ends are used to extend the opposed sensing range with addition of lenses L9 or L16F.

Dimensions (mm)

I3EA2.53S



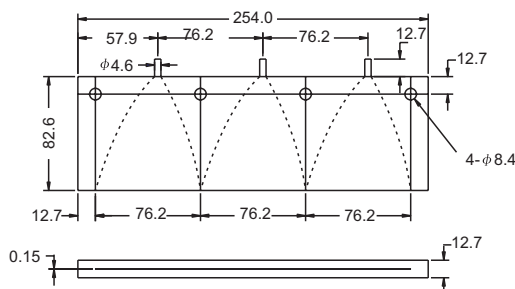
Model number	Length	Bundle	Sheath
I3EA2.53S	910	φ 2.3	SS
Range (mm)			

	220
	370
	180
	180

This assembly was designed as a Trifurcated-Ferruled Version of model IEAT23S. However, the bundle size on the sensing end tips is 0.09 inches in diameter. Opposed sensing range can be increased with the use of L9 or L16F lenses. The lenses should be used on all three ends of the two opposed fibers to achieve the maximum sensing range.

Dimensions (mm)

I3RSR2.53S

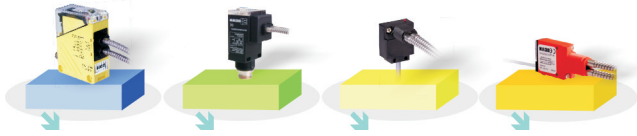


Model number	Length	Bundle	Sheath
I3RSR2.53S	250	0.15x76.2	Aluminum
Range (mm)			

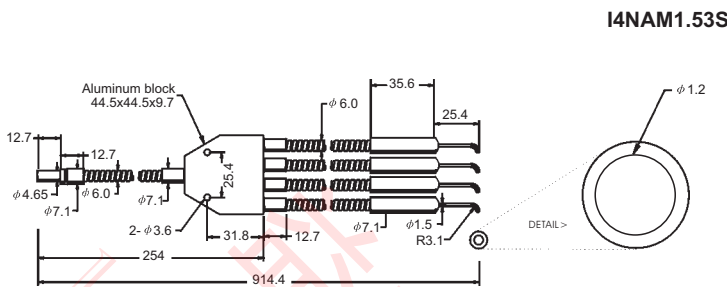
This Triple-Individual Rectangular assembly is used in the opposed mode (2 required) to cover an area nine inches wide. It may be used with high-powered sensor pair SM51EB6 and SM51RB6 equipped with FOF-500 fittings, for detecting small holes in opaque webs.

Glass Fibers

Opposed Mode Individual Cables



Dimensions (mm)

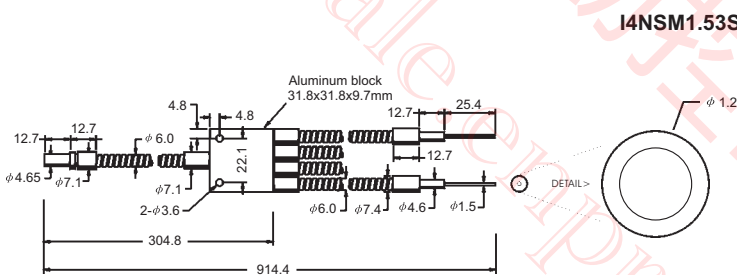


Model number	Length	Bundle	Sheath
I4NAM1.53S	910	φ 1.2	SS
Range (mm)			

	220
	200
	100
	100

This fiber is an example of using multiple opposed miniature beams with one photoelectric sensor. Each sensing end has the same end tip as model IAM.752S for easy mounting via the "bullet" and the FMB-1 Mounting bracket. This model is used in pairs, typically with a high powered infrared sensor. A pair of opposed 0.046 inch diameter fibers have 1/4 of the excess gain of a pair of 0.06 inch diameter fibers (e.g. IT13S), this corresponds to a range reduction of 50%.

Dimensions (mm)

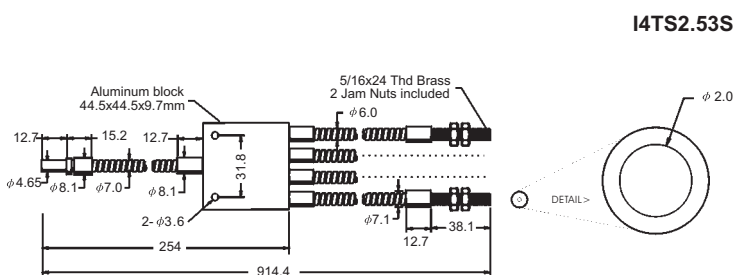


Model number	Length	Bundle	Sheath
I4NSM1.53S	910	φ 1.2	SS
Range (mm)			

	220
	200
	100
	100

This assembly is similar to model I4NAM1.53S. shown on the previous page. The sensing end tips on this model have a one inch long straight probe, without a right angle. The miniature end tips are not bendable. A typical application for this style of fiber is to determine if all parts are in place. When using a sensor in the dark-operate mode, an output will occur only when all four beams are blocked ("dark-AND" logic).

Dimensions (mm)



Model number	Length	Bundle	Sheath
I4TS2.53S	910	φ 2.0	SS
Range (mm)			

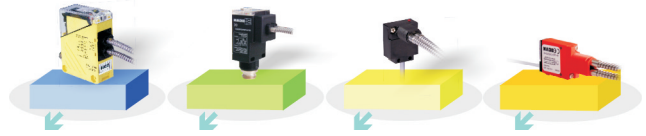
	260
	350
	150
	150

The I4TS2.53S is a four-channel version of model ITS2.53S. It has slightly larger fiber bundles on the sensing ends, allowing more excess gain. It was designed for use in a rotary index table to insure that all four parts were in place before the table could advance. Using two fibers and one sensor set for dark operate, a programmable controller "look" for a signal from the sensor when the parts should be in place. If the controller does not receive a signal, the controller stops the machine and sounds an alarm.

Opposed Mode

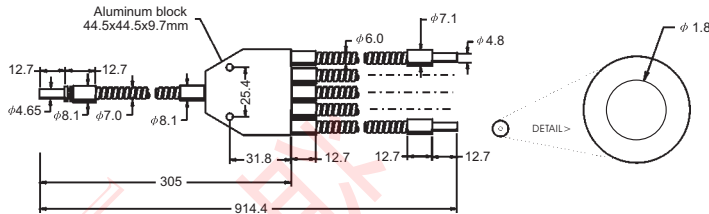
Glass Fibers

Individual Cables



Dimensions (mm)

I5NS2.53S



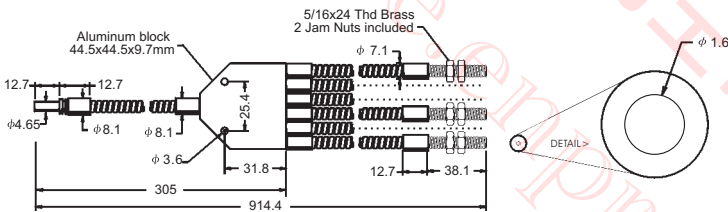
Model number	Length	Bundle	Sheath
I5NS2.53S	910	φ1.8	SS
Range (mm)			

	260
	280
	150
	150

This five-ferruled fiber is used in pairs to create 5 opposed beams using one photoelectric sensor. If the sensor is used in the light operate mode, a "light-or" logic function results. If "A" or "B" or "C", etc. senses light, the output is energized. To determine the sensing range of the fiber, use the excess gain curve for Model IT13S, located with the photoelectric sensor used for the application. The fiber optic cable uses the largest possible fiber optic bundle at the sensor end: 0.156 inch diameter.

Dimensions (mm)

I6TS2.53S



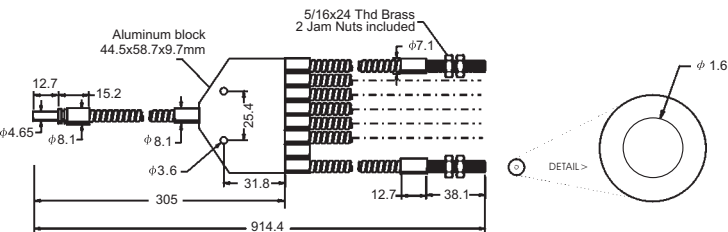
Model number	Length	Bundle	Sheath
I6TS2.53S	910	φ1.6	SS
Range (mm)			

	260
	300
	150
	150

The I6TS2.53S is used in pairs (in the opposed mode) as six beams must be broken before the sensor responds. The fiber bundle diameter at the photoelectric sensor end is the largest (0.156 inch diameter) available. At each of the sensing ends, the bundle diameter is 0.06 inch. When determining the maximum sensing distance, use the excess gain curve for model IT13S. The number of legs on the fiber is not limited to six, and can be of different lengths. The end tip design may also be modified.

Dimensions (mm)

I8TS2.53S



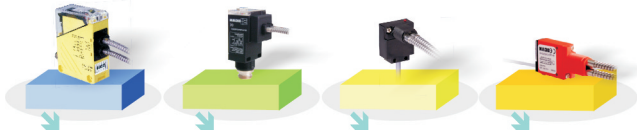
Model number	Length	Bundle	Sheath
I8TS2.53S	910	φ1.6	SS
Range (mm)			

	260
	250
	150
	150

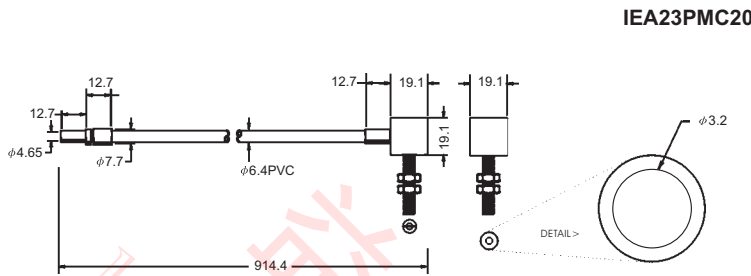
This Octa-Ferruled fiber Modified with Threaded Tips is used in pairs to set up an eight input "AND" gate, where all eight fiber beams must be broken to obtain an output (when the photoelectric sensor is used in the "dark operate" mode). This fiber is similar to model HF2.53SMTT, except it has eight ends instead of six. The maximum fiber bundle diameter (0.156 inches) is used on the photoelectric sensor end, which creates 0.055 inch diameter bundles at all eight scanning ends.

Glass Fibers

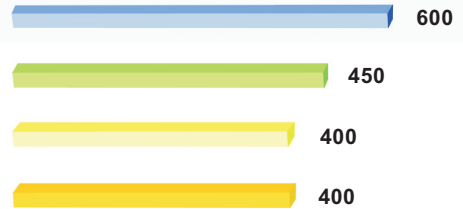
Opposed Mode Individual Cables



Dimensions (mm)

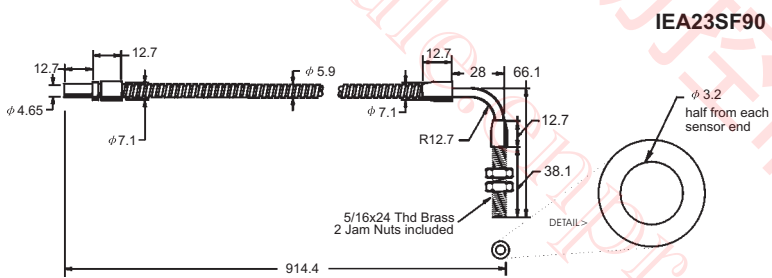


Model number	Length	Bundle	Sheath
IEA23PMC20	910	φ 3.2	PVC
Range (mm)			

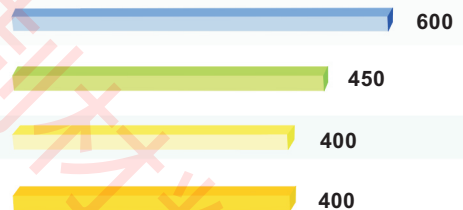


This special purpose fiber optic assembly is used in the manufacture of automobile batteries. It is subjected to continuous splash of electrolyte (acid). Carpenter 20 grade stainless steel is used for the threaded portion and for the right-angled block to withstand the acid environment. Modifications of the length, sheathing end top material are possible on this model.

Dimensions (mm)

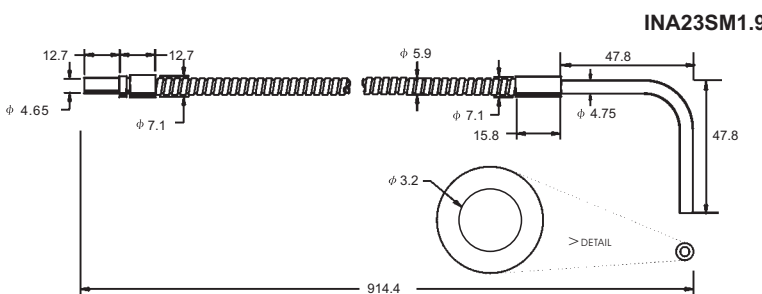


Model number	Length	Bundle	Sheath
IEA23SF90	910	φ 3.2	SS
Range (mm)			

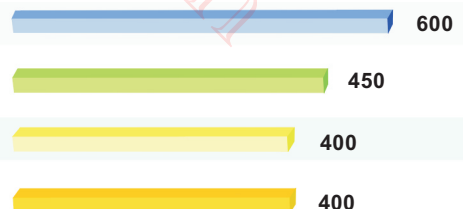


Model IEA23SF90 is modified for high temperature operation to make this special fiber. Optical grade epoxy is eliminated at the sensing end of the fiber so that it can operate at up to 900 F (480 C). This change in manufacturing requires a slight dimensional change in the length of the angled portion of the sensing end. The material for the threaded portion is changed from brass to stainless steel, with brass insert.

Dimensions (mm)



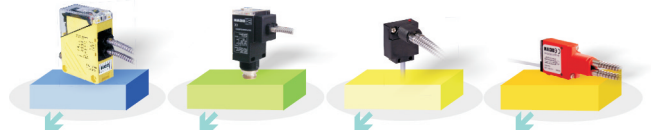
Model number	Length	Bundle	Sheath
INA23SM1.9	910	φ 3.2	SS
Range (mm)			



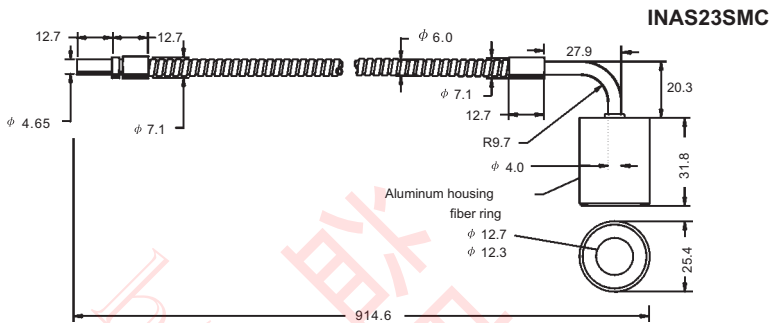
This fiber optic assembly is an individual fiber version of model BNA23SM1.9. This assembly is modified for high temperature applications, Up to 900 F (480 C). They are used in pairs in the opposed mode, and usually with high powered infrared sensors. A typical application is part presence detection in small kilns and ovens. One INA23SM1.9 may also be used with model SBAR1GHF to sense hot metal or hot glass.

Opposed Mode Individual Cables

Glass Fibers



Dimensions (mm)

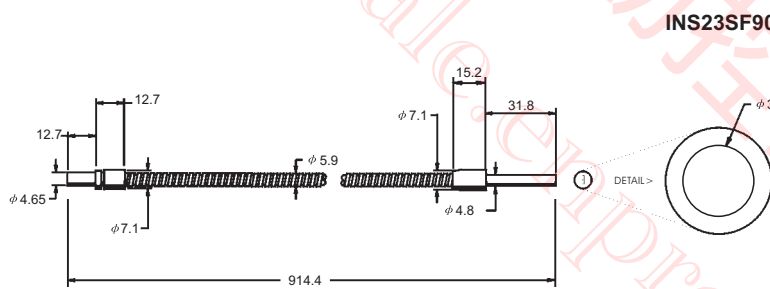


Model number	Length	Bundle	Sheath
INAS23SMC	910	φ 3.2	SS
Range (mm)			

600	600
450	450
400	400
400	400

This Individual Axial Circle fiber was designed for a special application to inspect the entire circumference of small opaque discs for chips and cracks. The disc is stopped momentarily between an opposed pair of fibers at the inspection station. The size of the fiber circle is slightly less than that of the disc. If no light passes to the receiver, the disc is accepted and advanced to the assembly area. This circular style of fiber can be made in a wide variety of diameters and line widths. The only restriction is the maximum bundle size per sensor ferrule (0.156 inch diameter).

Dimensions (mm)

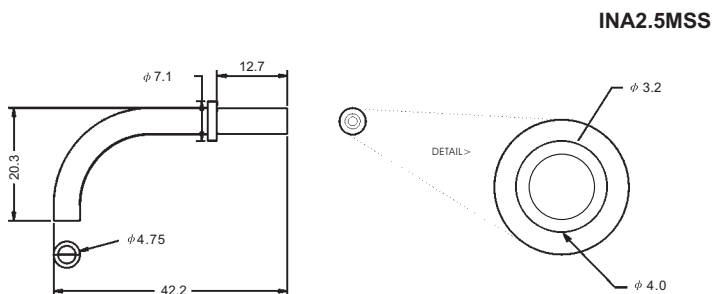


Model number	Length	Bundle	Sheath
INS23SF90	910	φ 3.2	SS
Range (mm)			

600	600
450	450
400	400
400	400

This fiber optic assembly is a high temperature modification of standard model INS23S. Suffix "F90" stands for modified for 900 F (480 C). Dimensional differences include crimp collar diameter and ferrule length. These changes are necessary for manufacturing of the end tip without epoxy. Ferrule length can be extended like model BTS23SM2.

Dimensions (mm)



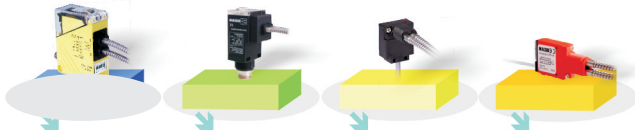
Model number	Length	Bundle	Sheath
INA2.5MSS	42	φ 3.2	SS
Range (mm)			

600	600
450	450
400	400
400	400

This special fiber assembly is the shortest possible modification to model IA23S. The entire ferrule is stainless steel and is not bendable. It is used in pairs with FOF-400 fiber optic fittings and LR400/PT400 sensors where space limitations prevent the use of right angle sensors. They may also be used with other sensors to provide various degrees of convergent-proximity node sensing. The bundle diameter and overall length can be modified for your application.

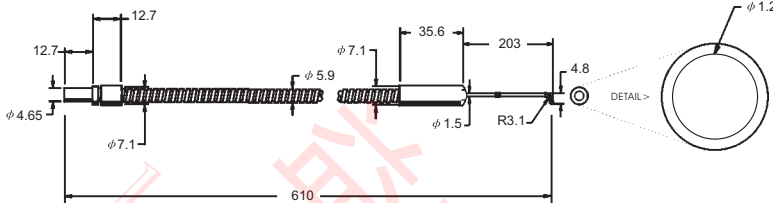
Glass Fibers

Opposed Mode Individual Cables



Dimensions (mm)

INSM.752SM8



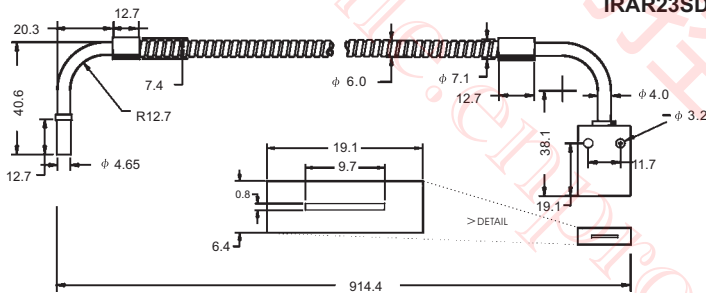
Model number	Length	Bundle	Sheath
INSM.752SM8	610	φ 1.2	SS
Range (mm)			

	220
	200
	100
	100

This fiber is a modification of standard model INSM.752S. The length of the miniature end (before the angle) is extended from one inch to eight inches. This modification was required due to very limited access space in an inspection area. This style of fiber can also be built with modification to the length after the bend and to the fiber bundle diameter. The minimum bend radius of the 0.06 inch diameter tubing used is 1/8 inch. This assembly uses hardened tubing, which is not bendable.

Dimensions (mm)

IRAR23SDA

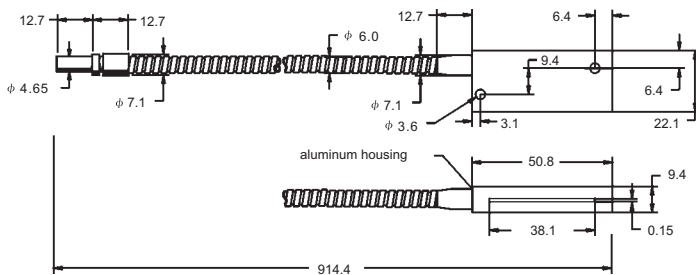


Model number	Length	Bundle	Sheath
IRAR23SDA	910	0.8x9.7	SS
Range (mm)			

	600
	450
	400
	400

This modification of standard model IRS23S has an angle at both ends. Both modifications were due to space limitations. The angle of the stainless steel tubing can be modified to suit a particular application. This type of modification can also be made to larger rectangular fibers like models IRS2.53S and BRS53S.

Dimensions (mm)



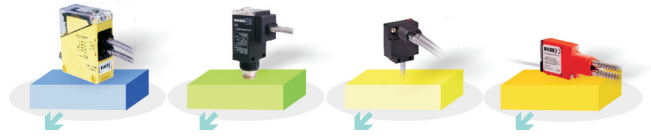
Model number	Length	Bundle	Sheath
IRVR1.73S	910	0.15x38.1	SS
Range (mm)			

	350
	400
	180
	180

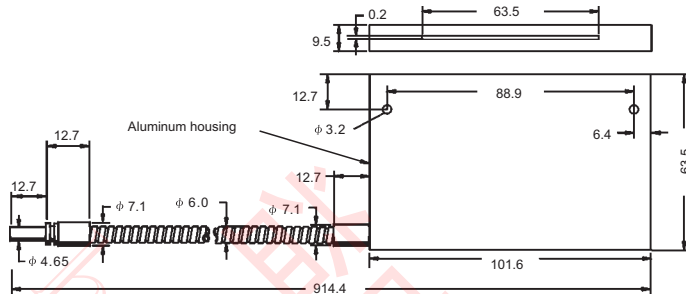
Model IRVR2.53S was too large to for an application requiring a long, thin rectangular fiber window. A machined housing was needed to fit the space allocated for the sensing end. The rectangular window slits modified to only 0.006 inches wide, the smallest available. The mounting holes also had to be moved to allow the cable to exit from the side of the housing. The 1.5 inch length of the fiber windows cannot be made longer in this housing style, but the window width can increase up to 0.013 inches.

Opposed Mode Individual Cables

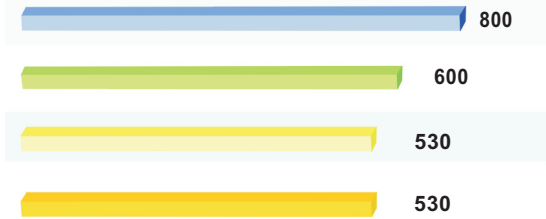
Glass Fibers



Dimensions (mm)

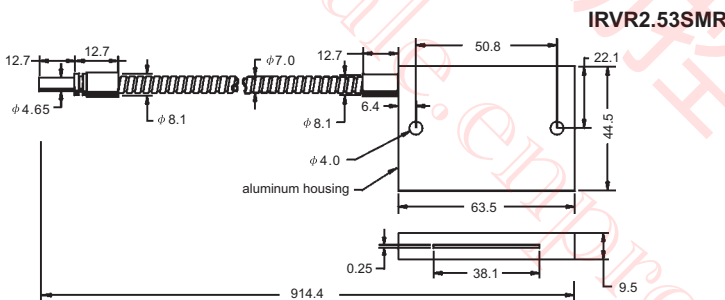


Model number	Length	Bundle	Sheath
IRVR2.53SM2.5	910	0.2x63.5	SS
Range (mm)			

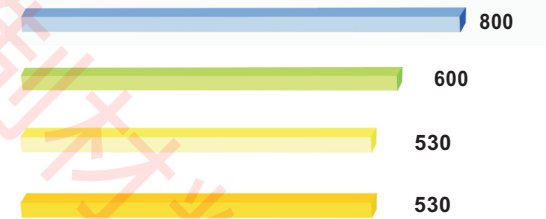


Model IRVR2.53SM2.5 is used in applications where the required beam size is greater than 1.5 inches long. This model incorporates a different housing and cable exit than the standard IRVR2.53S. The 0.156 inch diameter fiber bundle on the photoelectric sensor end is the largest possible for efficient coupling of the light from the LED source into the fiber optic bundle. A typical application is counting small parts falling through the fiber window using sensor model OSBFAC. Also available is model IR2.53SM3. It has a fiber window 3.00 x 0.006 inches.

Dimensions (mm)

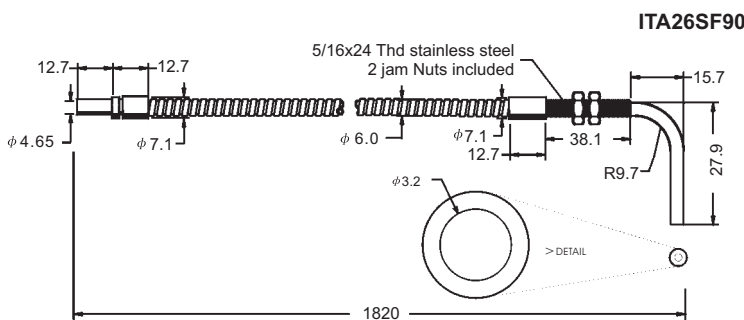


Model number	Length	Bundle	Sheath
IRVR2.53SMR	910	0.25x38.1	SS
Range (mm)			

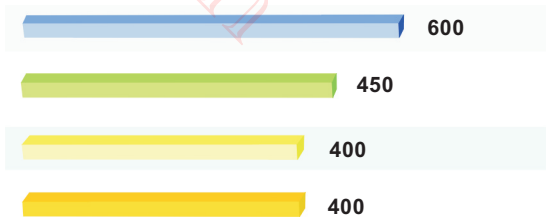


This customer-designed fiber is a modification of standard model IRVR2.53S. The cable exit and the mounting hole location are changed. This is one of many modifications possible to the large rectangular fiber optic assemblies.

Dimensions (mm)



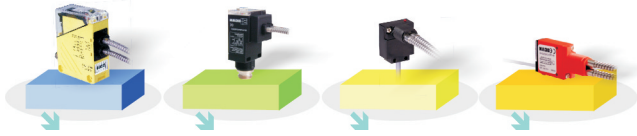
Model number	Length	Bundle	Sheath
ITA26SF90	1820	φ 3.2	SS
Range (mm)			



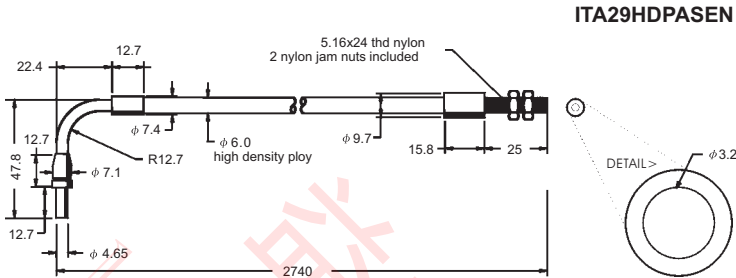
This assembly is a high temperature modification of standard fiber ITA23S. The length of the fiber is increased to six feet to allow the photoelectric control to reside outside of the high temperature environment. The end tip is constructed without the use of epoxy, allowing the fiber to operate in 900%DF (480%DC) heat. Stainless steel is substituted for brass on the threaded end tip. This cable can be built in any length up to 60 feet.

Glass Fibers

Opposed Mode Individual Cables



Dimensions (mm)



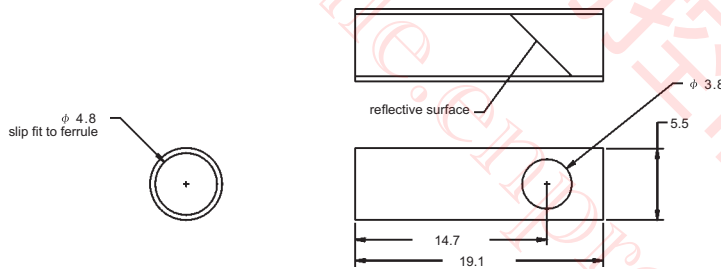
ITA29HDPASEN

Model number	Length	Bundle	Sheath
ITA29HDPASEN	2740	φ 3.2	HDP
Range (mm)			

600	600
450	450
400	400
400	400

This fiber optic assembly is a modified version of the IT23S. The sheathing has been changed to High Density Poly and the overall length is 9 feed. The threaded end is changed from brass to nylon and the thread length is only 1 inch. These changes are needed for an application requiring a sensing end and sheathing that are not conductive. The threaded end allows for the addition of a lens to increase the overall sensing range. The right angle bend on the sensor end permits mounting the photoelectric sensor in an area where space is restricted.

Dimensions (mm)



Model number	Length	Bundle	Sheath
NA	19	N/A	SS
Range (mm)			

This special fiber attachment is typically used with model INS23S fibers to "bend" the light at a right angle to the length of the fiber ferrule. It is also used with model BNS23SM2 when model BNV1.53S is too large in diameter to fit in the allocated space. The NA slips over the ferrule and is held in place with an adhesive, (not supplied). The highly-polished reflective surface of the NA is recessed in the stainless tube. Therefore, this assembly should not be used in a dirty environment. Excess gain is reduced 50% when using the model NA.

Dimensions (mm)

Model number	Length	Bundle	Sheath
Range (mm)			