

Wound Fiber Bundles

## Wound Fiber Bundles

### For Ruggedized Flexible Imaging Applications

SCHOTT Wound Fiber Bundles are used in a wide range of applications, including industrial remote vision systems, ordered array detectors, hazardous environment imaging, defense and research. Custom Wound Fiber Bundles are available on demand.

#### Standard Features

- Coherent, flexible fiber optic bundle used in applications where images must be transmitted from remote locations.
- They are composed of individual multi fibers, wound one layer at a time on a drum, bound only at the ends and flexible in the middle
- Bundle formats from 2 mm x 2 mm up to 40 mm x 35 mm. May be divided into - or made up of - multiple branches transmitting to a single output, or input.
- Their numerical aperture is typically 0.60 and standard lengths range from 610 mm to 4500 mm.
- SCHOTT can also produce custom image guide assemblies in any vertical or horizontal format required to meet nonstandard imaging applications.

#### Wound Fiber Bundles Typical Specifications:

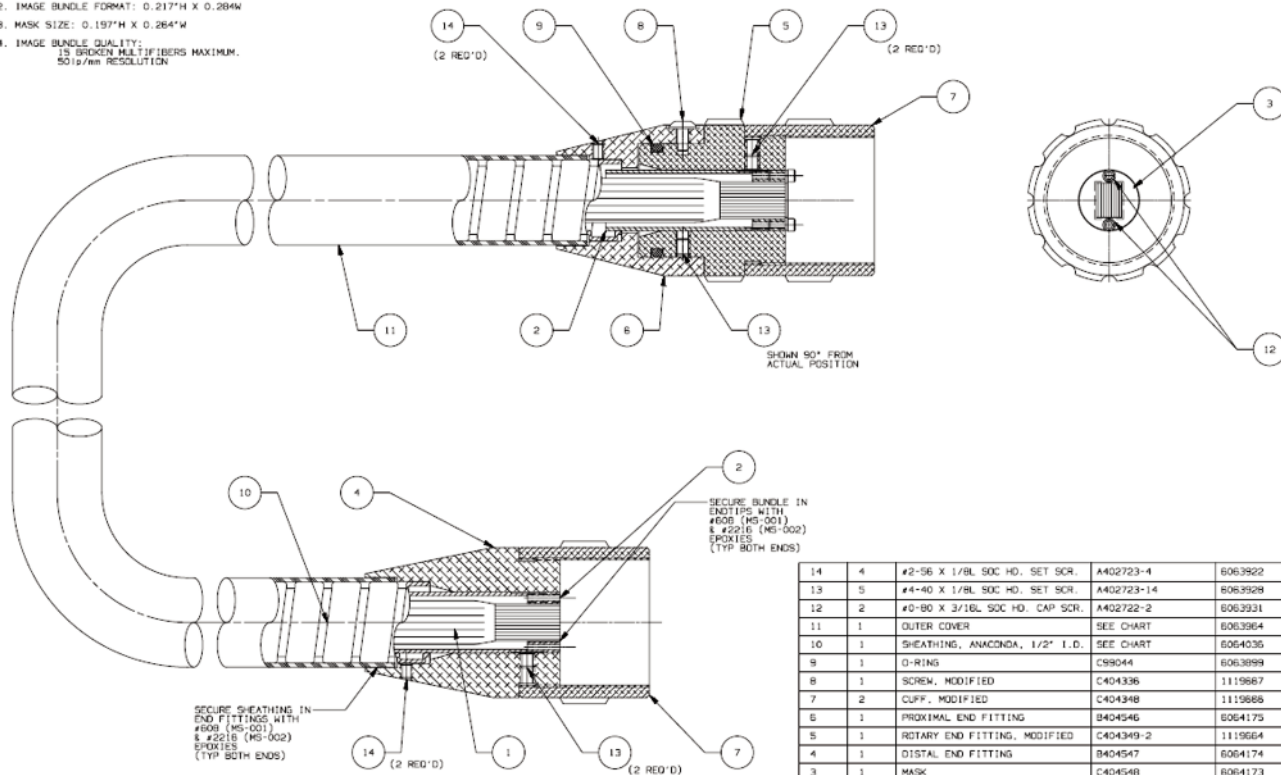
Glass Type	SCHOTT 75 Glass
Quality Area	1.8 mm x 1.8 mm - 38 x 33 mm with custom capabilities
Format Size	2 mm x 2 mm up to 40 mm x 35 mm
Single Fiber Size	60 $\mu$ m elements 6 x 6 array
Numerical Aperture	0.60
Resolution	45 lp/mm
Transmission	40% @ 500 nm - 1200 nm
Bending Radius	Determined by bundle diameter and sheathing
Temperature Resistance	- 40 °C to +125 °C (-40 °F to + 257 °F) up to 150 °C (302 °F) with alternative jacketing
Chemical Resistance	Select sheathing resistant against oil, grease, bases acid, fuel, water and PVC
Color of Cable	Blue, black (others upon request)
Weight of Cable	Determined by bundle diameter and sheathing

# Wound Fiber Bundles

Dimensions: in (mm); not to scale

Product improvements may result in specification or feature changes without notice.

- NOTES:
1. FIBER GEOMETRY: 10+ ELEMENTS, 60+ MULTIFIBER, 6X6 SQUARE ARRAY.
  2. IMAGE BUNDLE FORMAT: 0.217" H X 0.284" W
  3. MASK SIZE: 0.197" H X 0.264" W
  4. IMAGE BUNDLE QUALITY: 15 BROKEN MULTIFIBERS MAXIMUM, 50 lp/mm RESOLUTION



14	4	#2-56 X 1/8L SOC HD. SET SCR.	A402723-4	6063922
13	5	#4-40 X 1/8L SOC HD. SET SCR.	A402723-14	6063928
12	2	#0-80 X 3/16L SOC HD. CAP SCR.	A402722-2	6063931
11	1	OUTER COVER	SEE CHART	6063964
10	1	SHEATHING, ANACONDA, 1/2" I.D.	SEE CHART	6064036
9	1	O-RING	C98044	6063899
8	1	SCREW, MODIFIED	C404336	1119687
7	2	CUFF, MODIFIED	C404348	1119686
6	1	PROXIMAL END FITTING	B404546	6064175
5	1	ROTARY END FITTING, MODIFIED	C404349-2	1119664
4	1	DISTAL END FITTING	B404547	6064174
3	1	MASK	C404548	6064173
2	2	END TIP	C404549	6064172
1	1	IMAGE BUNDLE	SEE CHART	1170469
ITEM	QTY.	DESCRIPTION	MATERIAL	SAP NO.

WoundFiber Bundle 1119683

## Wound Fiber Bundles 4 mm x 4 mm Format

Description	Part No.	Length (mm)	Flexible length (mm)
Flexible .500" diameter cable 4 mm x 4 mm Format +/- .2mm	1119691	606	530
	1119690	906	830
	1119689	1216	1140
	1119688	1826	1750
	1119687	2756	2680
	1119693	3806	3730
	1119692	4566	4490

## Wound Fiber Bundles 5 mm x 6.7 mm Format

Description	Part No.	Length (mm)	Flexible length (mm)
Flexible 1.300" diameter cable 5 mm x 6.7 mm Format +/- .2 mm	1119683	886	810
	1119682	1116	1040
	1119681	1796	1720
	1119680	2716	2640
	1119686	3776	3700
	1119685	4536	4460

## Wound Fiber Bundles 8 mm x 10 mm Format

Description	Part No.	Length (mm)	Flexible length (mm)
Flexible 1.300" diameter cable 8 mm x 10 mm Format +/- .2 mm	1119148	886	810
	1119147	1216	1140
	1119145	1796	1720
	1119144	2716	2640
	1119150	3776	3700
	1119149	4536	4460

Lighting and Imaging

**SCHOTT AG**

Otto-Schott-Str. 2

55127 Mainz

Germany

Phone: +49 (0) 6131/66-7752

Fax: +49 (0) 6131/66-7850

E-mail: [lightingimaging@schott.com](mailto:lightingimaging@schott.com)

[www.schott.com/lightingimaging](http://www.schott.com/lightingimaging)

**SCHOTT**  
glass made of ideas