



Glass harnesses were supplied to the cabinets at the Elizabeth gallery at the Royal Maritime Museum, Greenwich.  
Thanks to VBK.

- Polymer or Glass optical fibres
- Supplied loose, on reels or made into harnesses
- High transmission grades for superior results

We can offer a wide range of fibre optic cables and are happy to offer both glass and PMMA (polymer). The choice of material will depend on the type of project, likely fibre lengths and client preference. We have extensive experience of preparing PMMA harnesses and have supplied glass fibre optics for many years, so we are well placed to help you make the decision.

There are distinct differences between the two materials, a summary of which is shown below.

**PMMA Harnesses**

On site porting & finishing possible

White light transmission losses are typically 3% per metre

Robust 0.75mm dia. fibres are resistant to breakage

PMMA harnesses tend to be cheaper than the equivalent sized glass

Little colour shift over long lengths

Randomisation of fibres possible

Acceptance angle 60° (large core 80°)

Maximum number of tails for a 30mm port is 150 of FSPTe3 (active dia. 1.6mm)

**Glass Harnesses**

Porting & finishing in factory only

White light transmission losses are typically 5% per metre

Thin 0.05mm dia fibres are fragile

Glass harnesses tend to be more expensive than equivalent sized PMMA

Longer lengths can exhibit colour shift

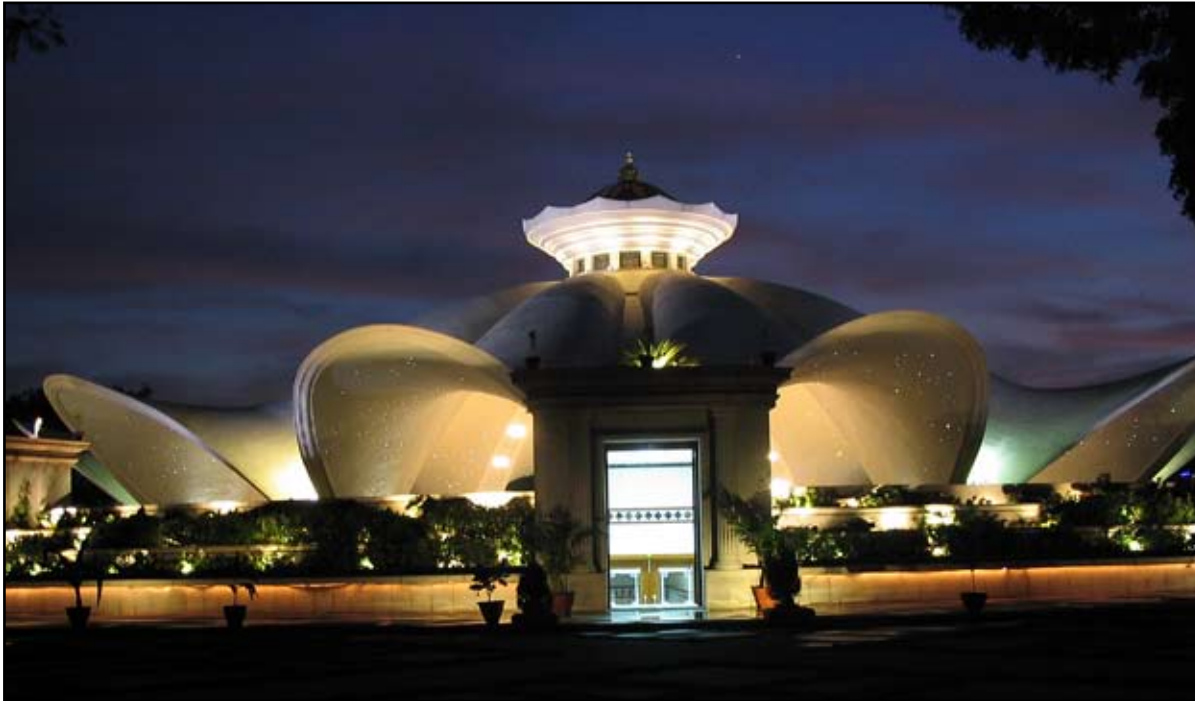
Fine randomisation of fibres possible

Acceptance angle 60°

Maximum number of tails for a 30mm port is 200 of size 2 (active dia. 1.6mm)

Glass End Lit Fibre					
Size	Active Diameter	Ferrule Diameter	Min. Bend Radius	No of Fibres/Tail	Max. Tails
0.75	0.98mm	2.96mm	25mm	300	530
1	1.12mm	2.96mm	25mm	400	400
1.5	1.50mm	3.50mm	45mm	600	265
2	1.60mm	3.50mm	60mm	800	200
3	1.95mm	3.50mm	80mm	1200	133
4	2.26mm	4.46mm	90mm	1600	100
7	2.98mm	5.95mm	100mm	2800	57
8	3.20mm	8.00mm	110mm	3200	48
12	3.90mm	8.00mm	125mm	4800	32
14	4.20mm	8.00mm	140mm	5600	27
18	4.80mm	8.00mm	150mm	7200	21
24	5.55mm	8.00mm	160mm	9600	16
30	6.18mm	8.00mm	170mm	12000	13
32	6.40mm	8.00mm	180mm	12800	12
36	6.80mm	8.00mm	190mm	14400	11
42	7.50mm	10.85mm	200mm	16800	9
48	7.95mm	10.85mm	200mm	19200	8

Additional Information	
Common End	F30 (30mm)
Sleeving	Megolon
Randomised	8:1 (size 7 & above)



Sri Ramachandra Medical College, Chennai, India. Thanks to Versalite Lighting.

PMMA End Lit Fibre									
Description	No. Fibres (mm)	Active Dia. (mm)	Active Area (mm <sup>2</sup> )	Outer Dia. (mm)	Min. bend radius (mm)	Outer Tubing	Max. Tails All Projectors Except AD/AG	Max. Tails AD/AG	Drum size (m)
FSPT End Lit Multiple Fibre									
FSPTe3	3	1.6	1.3	4	5	Black polymer	150	332	1000
FSPTe6	6	2.1	2.65	5	7.5	Black polymer	75	166	1000
FSPTe12	12	3	5.3	6	10	Black polymer	37	82	1000
FSPTe25	25	4.3	11.05	6.8	15	Black polymer	18	40	1000
FSPTe37	37	5	16.35	9	18.5	Black polymer	12	26	1000
FSPTe50	50	6	22.1	10	20	Black polymer	9	20	500
FSPTe62	62	6.5	27.04	11	25	Black polymer	7	16	500
FSPTe75	75	7.5	33.15	11.2	25	Black polymer	6	12	400
FSPT150	150	11	66.3	14.7	35	Black PVC	3	6	152
FSPT225	225	13	99.45	18.8	40	Black PVC	2	4	76
OptiCore™									
Large core fibre									
OCF800	1	7.5	44.18	9	90	Black PVC		14	
OCF1100	1	11	95.05	12	120	Black PVC		8	
OCF1200	1	12	113.11	14	140	Black PVC		6	
Single fibres									
Clad									
FSPT1	1	1				Black PVC			1000
FSPT1.5	1	1.5				Black PVC			500
Single fibres									
Un clad									
FSPTU0.75	1	0.75				None	450	1000	2700
FSPTU1	1	1				None			1500
FSPTU1.5	1	1.5				None			700