

Data Sheet



R&M Raceway System

Raceway System

The R&M Raceway System is a fiber optic ducting designed to perfectly route, isolate and protect fiber optic jumper and optical cables from the building entry to fiber distribution frames or between termination equipment, patch panels and fiber optic cabinets.

By routing the fiber optic cords separately from copper cabling, a very high safety and failure-free operation of the optical network is guaranteed.

The unique snap-fit Raceway solution can be quickly installed without any special tools, saving time and money. The simple and compact form is suitable for various applications.

The Raceway System is available in 6 sizes, providing a solution for any fiber routing application.

Fiber optic ducting is a unique system and can be easily mounted above equipment racks or below floors. It provides an easily accessible solution for every situation.

The following additional tools make the planning and ordering process easy:

- Site survey and ordering sheet
- Planning support, Visio Shapes drawing for an easy Visio or AutoCAD planning

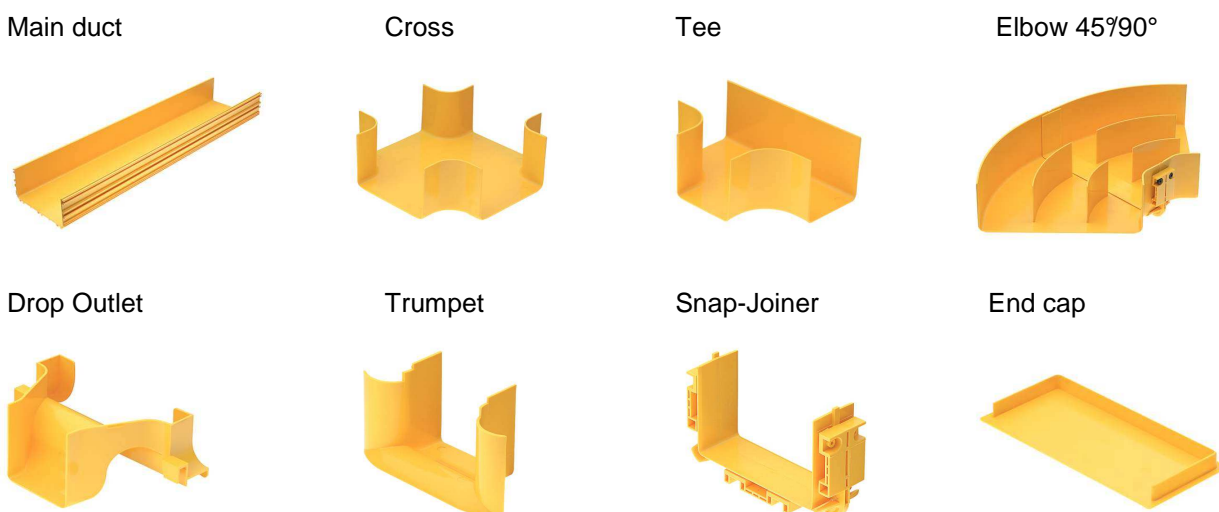
General

Material:	PC/ABS
Attribute:	Halogen free, RoHS, UV & Heat-resistant, Flame-retardant UL94/V0, resistance against electrical shock, UL2024 recognized
Color:	Yellow, RAL1021
Bend radius:	Radius R30

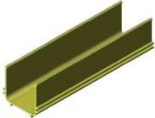
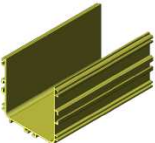
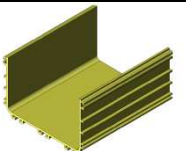
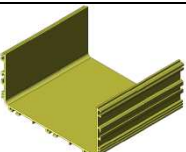
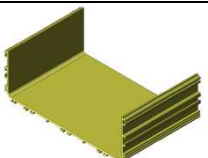
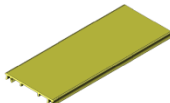
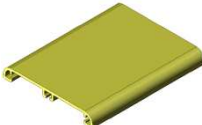


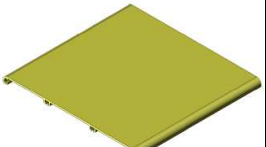
Dimensions



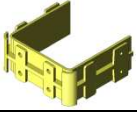

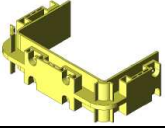

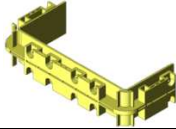

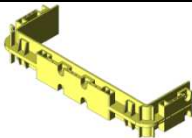

Width/height (mm):	30x50 / 50x50 / 100x100 / 160x100 / 220x100 / 300x100
Main duct (mm):	Standard 1000 / 2000
System Density:	150 up to – 6000 Patch cord 2-3mm

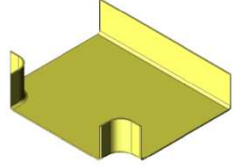

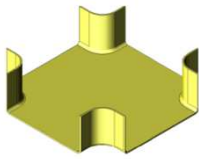

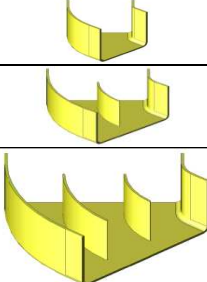

Basic assortment



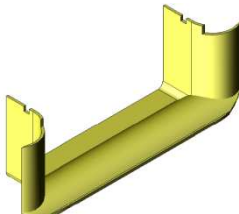
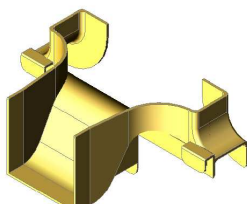

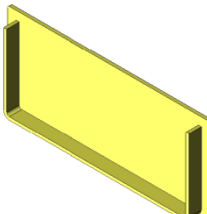
Raceway System Detail

Part No.	Image	Description	Material / Color
1		Main Duct 50(1.9") X 50(1.9") mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct 100(3.9") X 100(3.9") mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct 160(6.2") X 100(3.9") mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct 220(8.6") X 100(3.9") mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct 300(11.8") X 100(3.9") mm Length : 1,000mm	PC/ABS / Yellow
2		Main Duct Cover 50(1.9") mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct Cover 100(3.9")mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct Cover 160(6.2")mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct Cover 220(8.6") mm Length : 1,000mm	PC/ABS / Yellow
		Main Duct Cover 300(11.8") mm Length : 1,000mm	PC/ABS / Yellow

Part No.	Image	Description	Material	
3		JOINER 50(1.9") X 50(1.9") mm	PC/ABS / Yellow	
			FLAT HEAD SCREW FHS) M3 X L: 6mm	SCM440 / Ni
		JOINER 100(3.9") X 100(3.9") mm	PC/ABS / Yellow	
			FLAT HEAD SCREW FHS) M3 X L: 8mm	SCM440 / BLACK
		JOINER 160(6.2") X 100(3.9") mm	PC/ABS / Yellow	
			PAN HEAD SCREW WASHER S.D.S) M4 X L: 10mm	SCM440 / BLACK
		JOINER 220(8.6") X 100(3.9") mm	PC/ABS / Yellow	
			PAN HEAD SCREW WASHER S.D.S) M4 X L: 12mm	SCM440 / BLACK
		JOINER 300(11.8") X 100(3.9") mm	PC/ABS / Yellow	
			PAN HEAD SCREW WASHER S.D.S) M4 X L: 12mm	SCM440 / BLACK

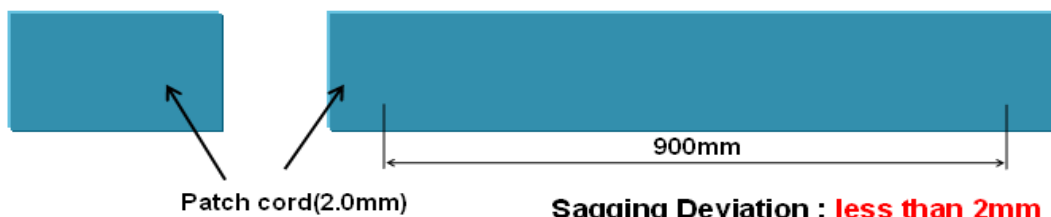
Part No.		Image	Description	Material	
4	509424		Horizontal TEE 100(3.9") X 100(3.9") mm	PC/ABS / Yellow	
	509425		Horizontal TEE 160(6.2") X 100(3.9")	PC/ABS / Yellow	
	509426		Horizontal TEE 220(8.6") X 100(3.9")	PC/ABS / Yellow	
	509427		Horizontal TEE 300(11.8") X 100(3.9")	PC/ABS / Yellow	
5	509520		Horizontal TEE Cover 100(3.9") mm	PC/ABS / Yellow	
	510307		Horizontal TEE Cover 160(6.2") mm	PC/ABS / Yellow	
	510308		Horizontal TEE Cover 220(8.6") mm	PC/ABS / Yellow	
	509523		Horizontal TEE Cover 300(11.8") mm	PC/ABS / Yellow	
6	509417		Horizontal CROSSES 100(3.9") X 100(3.9") mm	PC/ABS / Yellow	
	509418		Horizontal CROSSES 160(6.2") X 100(3.9")	PC/ABS / Yellow	
	509419		Horizontal CROSSES 220(8.6") X 100(3.9")	PC/ABS / Yellow	
	509420		Horizontal CROSSES 300(11.8") X 100(3.9") mm	PC/ABS / Yellow	
7	510306		Horizontal CROSSES Cover 100(3.9") mm	PC/ABS / Yellow	
	509517		Horizontal CROSSES Cover 160(6.2")	PC/ABS / Yellow	
	509518		Horizontal CROSSES Cover 220(8.6") mm	PC/ABS / Yellow	
	509519		Horizontal CROSSES Cover 300(11.8") mm	PC/ABS / Yellow	
8	509431		Horizontal Elbow 100(3.9") X 100(3.9")	PC/ABS / Yellow	
	509432		Horizontal Elbow 160(6.2") X 100(3.9")	PC/ABS / Yellow	
	509433		Horizontal Elbow 220(8.6") X 100(3.9")	PC/ABS / Yellow	
	510309		Horizontal Elbow 300(11.8") X 100(3.9")	PC/ABS / Yellow	
9	510310		Horizontal TEE Cover 100(3.9") mm	PC/ABS / Yellow	
	510311		Horizontal TEE Cover 160(6.2") mm	PC/ABS / Yellow	
	510312		Horizontal TEE Cover 220(8.6") mm	PC/ABS / Yellow	
	510313		Horizontal TEE Cover 300(11.8") mm	PC/ABS / Yellow	

Part No.		Image	Description	Material
10	509450		Vertical 45deg UP 100(3.9") X 100(3.9") mm	PC/ABS / Yellow
	509451		Vertical 45deg UP 160(6.2") X 100(3.9")	PC/ABS / Yellow
	509452		Vertical 45deg UP 220(8.6") X 100(3.9")	PC/ABS / Yellow
	509453		Vertical 45deg UP 300(11.8") X 100(3.9")	PC/ABS / Yellow
11	509543		Vertical 45deg UP 100(3.9") mm	PC/ABS / Yellow
	510327		Vertical 45deg UP 160(6.2") mm	PC/ABS / Yellow
	509545		Vertical 45deg UP 220(8.6") mm	PC/ABS / Yellow
	509546		Vertical 45deg UP 300(11.8") mm	PC/ABS / Yellow
12	509440		Vertical 45deg DOWN 100(3.9") X 100(3.9") mm	PC/ABS / Yellow
	509441		Vertical 45deg DOWN 160(6.2") X 100(3.9")	PC/ABS / Yellow
	509442		Vertical 45deg DOWN 220(8.6") X 100(3.9")	PC/ABS / Yellow
	509443		Vertical 45deg DOWN 300(11.8") X 100(3.9")	PC/ABS / Yellow
13	510318		Vertical 45deg DOWN Cover 100(3.9")	PC/ABS / Yellow
	510319		Vertical 45deg DOWN Cover 160(6.2")	PC/ABS / Yellow
	510320		Vertical 45deg DOWN Cover 220(8.6")	PC/ABS / Yellow
	510321		Vertical 45deg DOWN Cover 300(11.8")	PC/ABS / Yellow
14	509465		Horizontal Reduction 100(3.9") → 50(1.9") mm	PC/ABS / Yellow
	509466		Horizontal Reduction 160(6.2") → 100(3.9") mm	PC/ABS / Yellow
	509467		Horizontal Reduction 220(8.6") → 160(6.2") mm	PC/ABS / Yellow
	509468		Horizontal Reduction 300(11.8") → 220(8.6") mm	PC/ABS / Yellow
15	510333		Horizontal Reduction Cover 100(3.9") → 50(1.9") mm	PC/ABS / Yellow
	510334		Horizontal Reduction Cover 160(6.2") → 100(3.9") mm	PC/ABS / Yellow
	509555		Horizontal Reduction Cover 220(8.6") → 160(6.2") mm	PC/ABS / Yellow
	509556		Horizontal Reduction Cover 300(11.8") → 220(8.6") mm	PC/ABS / Yellow

Part No.		Image	Description	Material
16	509460		Outlet Trumpet 50(1.9") mm	PC/ABS / Yellow
	509461		Outlet Trumpet 100(3.9") mm	PC/ABS / Yellow
	509462		Outlet Trumpet 160(6.2")mm	PC/ABS / Yellow
	509463		Outlet Trumpet 220(8.6") mm	PC/ABS / Yellow
	509464		Outlet Trumpet 300(11.8") mm	PC/ABS / Yellow
17	510332		Top Outlet 100x100	PC/ABS / Yellow
18	509478		Drop Mounting Bracket 3.0T X 432 X 105 mm	SPCC / Yellow
	509479		Drop Mount Bracket 3.0T X359 X 82 mm	SPCC / Yellow
20	510335		End Cap 100(3.9") mm	PC/ABS / Yellow
	509474		End Cap 160(6.2") mm	PC/ABS / Yellow
	509475		End Cap 220(8.6") mm	PC/ABS / Yellow
	509476		End Cap 300(11.8") mm	PC/ABS / Yellow

Raceway System Loading Test

Part	Size / mm(inch)	patch cord/2.0mm (50% Pile up)		patch cord/2.0mm (70% Pile up)	
		Capacity(ea)	Weight(g)	Capacity(ea)	Weight(g)
Main Duct	100 x 100 (4")	1,390	6,950	1,900	9,500
	160 x 100 (6")	2,250	11,250	3,100	15,500
	220 x 100 (8")	3,100	15,500	4,300	21,500
	300 x 100 (12")	4,240	21,200	5,900	29,500
Distance Between Mounting Brackets		900mm			



Before and After loading Patch cords 50% and 70%

Raceway System Strong and Durability ASTM D Test reports

Hardness 785

Sample : FIBER OPTIC DUCT

TEST RESULTS				
TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
20 mm Vertical Burning Test(V-0, V-1, V-2)	-		V-0	UL 94 : 1996(*)
* Specimen: (23 ± 2) °C, (50 ± 5) %, 48 hr				

Tensile 638

Sample : FIBER OPTIC DUCT(PC/ABS)

TEST RESULTS				
TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
Tensile Strength	MPa		56.0	ASTM D 638 : 2003(*)
* Test Specimen:TYPE I , Speed of Testing:50 mm/min				

Flexural 790

Sample : FIBER OPTIC DUCT(PC/ABS)

TEST RESULTS				
TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
Flexural Strength	MPa		80.5	ASTM D 790 : 2003(*)
* Speed of Testing:3.2 mm/min, Support Span:102 mm				

Impact 256

Sample : FIBER OPTIC DUCT(PC/ABS)

TEST RESULTS				
TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
Izod Impact Test	J/m		680	ASTM D 256 : 2006
USAGE QUALITY CONTROL				