



Description

The OptiLine 50 Floor box system is an installation system for power and data links in office flooring.

OptiLine 50 floor boxes are made of polyamide or stainless steel and include a trim frame, a lid and a mounting frame for four, eight or fifteen 50x50 module wiring devices.

The lid of the plastic floor box can be decorated with floor material of 6 mm thickness, while the stainless steel box allows up to 15 mm thick decoration materials. Lid infills of grey linoleum or stainless steel are available as a suitable accessory.

The floor boxes have an integrated, convenient and tool-free quick fixation. However, an additional swivel fixing kit is available in the accessory range.

Application

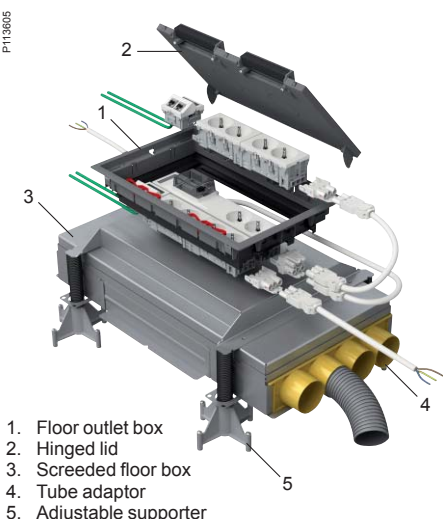
The OptiLine Floor box system is suitable for use in raised access floors, in-cavity floors and hollow core floors.

Benefits

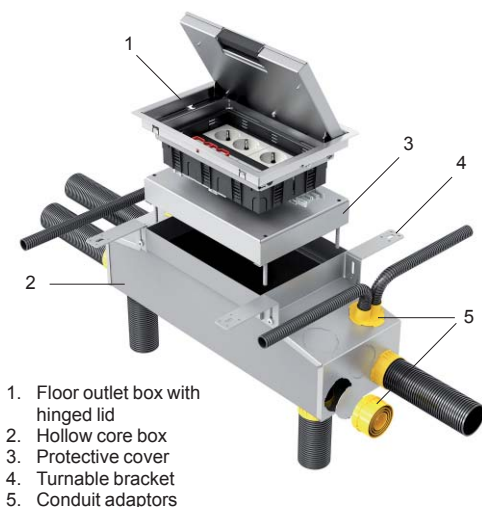
- Quick and easy installation, without tools
- Large outlet capacity, maximum 15 OptiLine 50 wiring devices
- Lids can be finished with most floor materials
- Choice of opening direction of the lid
- Adequate fitting space for installation couplers
- Halogen-free products
- Load up to 10 000 N

Exploded views

Floor outlet box / Screeded floor box



Floor outlet box / Hollow core box



Technical and Material data

PA6 (polyamide 6)	Density	1.13 g/cm ³
	Linear expansion	70-100x10 ⁻⁶ m/m °C
	Fire rating	UL94 V2 (3.2 mm)
	Colour	Blue RAL 5003
PA/ABS (polyamide/acrylonitrile butadiene styrene)	Density	1.12 g/cm ³
	Linear expansion	70x10 ⁻⁶ m/m °C
	Water absorption	0.9%
	Volume resistivity	10 ¹⁴ Ω cm
	Dielectric strength	19 kV/mm
	Fire rating	UL 94 HB (halogen-free)
PP (polypropylene)	Colour	Grey RAL 7011 Dark grey RAL 7043
	Density	0.905 g/cm ³
	Linear expansion	11x10 ⁻⁶ m/m °C
	Fire rating	UL94 HB
Sheet steel	Colour	Yellow
	Specification	S 350 GD
	Density	7.8 g/cm ³
Stainless steel	Surface treatment	Zinc coated
	Specification:	X5CrNi 18-10
	Density:	7.8 g/cm ³
Degree of protection	IP20	
Standards	The products comply with EN 60670-23. Load according to EN 50085-2-2. Swiss installation standard NIN 2010 (12 module floor outlet box only) The products satisfy the provisions for CE marking according to the Low Voltage Directive 73/23/EEC and 93/68/EEC	
Temperature range	Operating temperature from -25°C to +60°C	
Impact	2 J (IK07)	

Mounting instructions

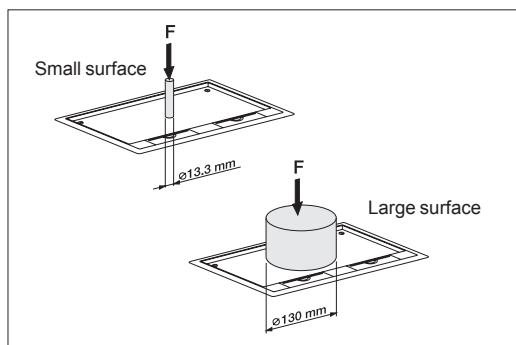
Mounting instructions are enclosed with the product. They are also available on PI@net.

Art. No. 20075554	Floor outlet box, 4 modules
Art. No. 20075553	Floor outlet box, 8 modules
Art. No. 20061314	Floor outlet box, 15 modules
Art. No. 20063486	Screeded floor box
Art. No. 20075524	Hollow core box

Product Environmental Profile

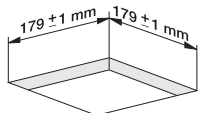
Product Environmental Profile documents are available on PI@net.

Max. load according to EN 50085-2-2

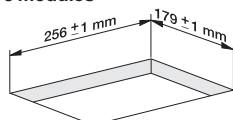


Hole dimensions

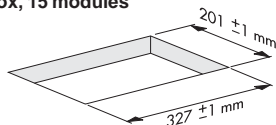
Floor box, 4 modules



Floor box, 8 modules



Floor box, 15 modules



Max. load according to EN 50085-2-2

Plastic floor box 15 modules

Small surface	Force (N)	Force (N)	Force (N)
Without inlay	2500	With stainless steel inlay	3000
Large surface	Force (N)	Force (N)	Force (N)
Without inlay	3000	With stainless steel inlay	5000

Metal floor box 4 modules

Small surface	Force (N)	Force (N)	Force (N)
Without inlay	3000	With stainless steel inlay	3000
Large surface	Force (N)	Force (N)	Force (N)
Without inlay	10000	With stainless steel inlay	10000

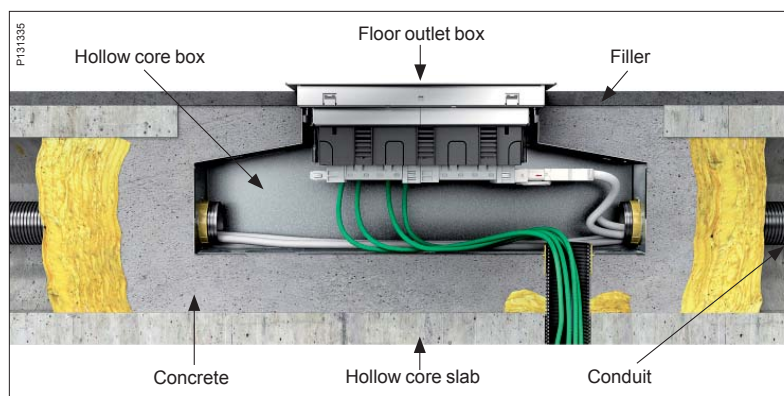
Metal floor box 8 modules

Small surface	Force (N)	Force (N)	Force (N)
Without inlay	3000	With stainless steel inlay	3000
Large surface	Force (N)	Force (N)	Force (N)
Without inlay	10000	With stainless steel inlay	10000

Metal floor box 15 modules

Small surface	Force (N)	Force (N)	Force (N)
Without inlay	3000	With stainless steel inlay	3000
Large surface	Force (N)	Force (N)	Force (N)
Without inlay	5000	With stainless steel inlay	10000





Application picture hollow core box









Installation depth

	INS60020		INS60010 INS60012 INS60014		INS60011 INS60013 INS60015		INS60034 INS60035 INS60036 INS60037		INS68104 INS68105	
	A min	B max	A min	B max	A min	B max	A min	B max	A min	B max
Steel floor box INS51045	120	72	105	88	112	80	117	105	110	—
Plastic floor box INS50045	110	62	95	78	102	70	107	95	100	—
Steel floor box INS51044	110–130	65–85	100–120	80–100	115–130	80–95	110–130	95–115	110–130	—
Steel floor box INS51043	110–130	65–85	100–120	80–100	115–130	80–95	110–130	95–115	110–130	—




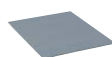







Floor outlet boxes

	Type	Colour	Dimensions A/B/C (mm)	Qty per package	EAN code	Ref. No.
Plastic floor box						
P111414	 <p>Complete rectangular floor outlet box, including mounting frame, quick fixation and two cable exits. The outlet capacity is maximum fifteen 50x50 mm OptiLine 50 wiring devices. Cable exit capacity: 1850 mm², max. cable Ø 12 mm. The hinged lid can be installed in two positions and is easily removed. It can be fitted with an insert of floor material of up to 6 mm thickness. Material: PA/ABS, steel.</p>					
	15 module box	Grey	75/222/348	1	3606485135656	INS50045
Metal floor boxes						
P130797	 <p>Complete square floor outlet box, including mounting frame, quick fixation and cable exit. The total height of the floor box is adjustable from 85 mm to 115 mm, in steps of 5 mm. The outlet capacity is maximum four 50x50 mm OptiLine 50 wiring devices. Cable exit capacity: 1245 mm², max cable Ø 15 mm. The hinged lid can be installed in two positions and is easily removed. It can be fitted with an insert of floor material of up to 15 mm thickness. Material: Stainless steel.</p>					
	4 module box	—	81/199/199	1	3606480482489	INS51043
P130547	 <p>Complete rectangular floor outlet box, including mounting frame, quick fixation and cable exit. The total height of the floor box is adjustable from 85 mm to 115 mm, in steps of 5 mm. The outlet capacity is maximum eight 50x50 mm OptiLine 50 wiring devices. Cable exit capacity: 1245 mm², max cable Ø 15 mm. The hinged lid can be installed in two positions and is easily removed. It can be fitted with an insert of floor material of up to 15 mm thickness. Material: Stainless steel.</p>					
	8 module box	—	81/199/276	1	3606480483042	INS51044
P112322	 <p>Complete rectangular floor outlet box, including mounting frame, quick fixation and two cable exits. The outlet capacity is maximum fifteen 50x50 mm OptiLine 50 wiring devices. Cable exit capacity: 2490 mm², max. cable Ø 15 mm. The hinged lid can be installed in two positions and is easily removed. It can be fitted with an insert of floor material of up to 15 mm thickness. Material: Stainless steel.</p>					
	15 module box	—	86/222/348	1	3606485135663	INS51045

Accessories

Screeded floor boxes						
<p>Metal screeded floor box for embedment in screeded floors with minimum 100 mm thickness. With openings for feeding on all four sides, equipped with blank plates on three sides. Suitable for both flush floor trunking and tube feeding. The screeded floor box has an adjustable internal height of between 98 and 125 mm. When used in a thicker floor, adjustable supporters should be used. NOTE: Please be aware of the minimum bending radius of cabling during wiring and installation of the floor outlet box. Material: Sheet steel.</p>						
P130548	 <p>Screeded floor box 4 modules</p>					
	—	—	125/302/405	1	3606480482496	ISM50343
P130546	 <p>Screeded floor box 8 modules</p>					
	—	—	124/301/482	1	3606480483059	ISM50342
P110915	 <p>Screeded floor box 15 modules</p>					
	—	—	100/338/524	1	3606485135687	ISM50340
Hollow core box						
<p>Metal screeded floor box for embedment in the cavity of hollow core slabs with cavities of at least Ø 170 mm. With knock-outs for conduit adaptors, four upwards, 2x3 sideways and six downwards. Equipped with brackets for rough height fixation 0-75 mm and fine-adjustment screws for fine tuning to the finished floor level. The top entry is covered with a lid for good safety during the construction time. Suitable for 8-module floor box. Material: Sheet steel.</p>						
P131349	 <p>Hollow core box 8 modules</p>					
	—	—	166/184/502	1	3606480483066	ISM50356
Conduit adaptors						
<p>Conduit adaptor for two conduits 20 mm. Material: PP.</p>						
P131533	 <p>Conduit adaptor 2x20 mm</p>					
	Yellow	58/58/32	10	3606480483073	ISM50370	
<p>Conduit adaptor for conduits 25, 32, 40 or 50 mm. Diameter choice by punching out to right size. Material: PP.</p>						
P131534	 <p>Conduit adaptor 1x25, 32, 40 or 50 mm</p>					
	Yellow	58/58/32	10	3606480483080	ISM50371	

Accessories

	Type	Colour	Dimensions A/B/C (mm)	Qty per package	EAN code	Ref. No.
Adjustable supporter						
P11916	Adjustable supporter, intended for height adjustment of the screeded floor box to the finished floor level. To be used for cast floors with a thickness ranging from 126 to 290 mm. Material: PP, PA6.					
	Supporter	Grey, black	111/111/63-255	4	3606480297977	ISM50341
Front cover						
P108223	Front cover intended to cover one or more open compartments in the outlet grid. The length is 250 mm, but the profile may easily be cut to the desired length. Material: PA/ABS.					
	Front cover	Dark grey	250/50/13	10	3606480215292	INS50250
Mounting plate						
P110598 P110599	Blank mounting plate to be used to enable future extension of VDI outlets. To be snap-fitted in the front opening. Material: PC/ABS.					
	Mounting plate	White Dark grey	50/20/50	1	3606485115368 3606485115375	INS64000 INS64001
Lid infill, linoleum						
P86843	Lid infill to be used in the lid of floor outlet boxes. Provided with self-adhesive tape underneath. If the lid infill is to be used in a metal floor box, a 9 mm thick extra spacer material is required. Material: Linoleum.					
	For 4 module box	Grey	6/139/167	1	3606480031007	ISM50807
P86844	For 8 module box	Grey	6/139/245	1	3606480031014	ISM50808
P112335	For 15 module box	Grey	6/162/316	1	3606485135700	ISM50819
						
Lid infill, stainless steel						
P93887	Lid infill to be used in the lid of floor outlet boxes. Provided with a protective film on the upper surface and a soft rubber layer with self-adhesive tape underneath. If the lid infill is to be used in a metal floor box, a 9 mm thick extra spacer material is required. Material: Stainless steel, silicone rubber.					
	For 4 module box	—	6/139/167	1	3606480025761	ISM50817
P93888	For 8 module box	—	6/139/245	1	3606480025761	ISM50818
P112555	For 15 module box	—	6/162/316	1	3606485135694	ISM50820
						
Swivel fixing						
P117436	Swivel fixings to be mounted on either short side of a floor outlet box. Intended for use as additional fixing method in raised floors with a panel thickness ranging from 23 mm to 53 mm. Material: PA6, steel.					
	Swivel fixing	Blue	58/12/25	2	3606480031052	ISM50823
Flexible conduit						
P85081	Flexible conduit (split tube), diameter 25 mm, to be used for cable feeding from floor outlet box to desktop. Cables to be installed by using mounting tool ISM50852. Material: PP.					
	Flexible conduit	Grey metallic	Ø25/2000	2	3606480150340	ISM50850
Mounting tool						
P85094	Mounting tool for installation of cables in 25 mm split-tube flexible conduits. Material: PP.					
	Mounting tool	—	115/36/70	1	3606480150357	ISM50852
Separation clip						
P85095	Clip to be snap-fitted around two flexible conduits, separating power and low voltage cables. Separation distance between cables = 25 mm. To be mounted at 200 mm intervals. Material: PP.					
	Separation clip	Grey metallic	34/28/70	6	3606480160776	ISM50851

Compatible OptiLine 45 steel trunking products

	Type	Colour	Dimensions A/B/C (mm)	Qty per package	EAN code	Ref. No.
P11057	Underscreed floor trunking with two compartments					
	Floor trunking with two compartments and integrated separation wall, intended for embedded use in screeded floors, in combination with screeded floor boxes of plastic or metal. Available in two heights, 28 and 38 mm. Material: Sheet steel, galvanized.					
	150x28 mm	—	28/150/2000	2 m	8428031087913	4260101
	150x38 mm	—	38/150/2000	2 m	8428031087982	4260111
	200x28 mm	—	28/200/2000	2 m	8428031087920	4260102
P11058	200x38 mm	—	38/200/2000	2 m	8428031087999	4260112
	Underscreed floor trunking with three compartments					
	Floor trunking with three compartments and integrated separation walls, intended for embedded use in screeded floors, in combination with screeded floor boxes of plastic or metal. Available in two heights, 28 and 38 mm. Material: Sheet steel, galvanized.					
	250x28 mm	—	28/250/2000	2 m	8428031087968	4260106
	250x38 mm	—	38/250/2000	2 m	8428031088033	4260116
P131607	Fixation clamp					
	Clamp intended to fix a 28 mm high floor trunking to the concrete floor and to hold the position at the screeded floor-box junction. Material: Sheet steel, galvanized.					
	For 150 mm	—	30/157/40	1	8428031147129	ISM50151
	For 200 mm	—	30/257/40	1	8428031147136	ISM50152
	For 250 mm	—	30/307/40	1	8428031147143	ISM50153
P11059	Same as above but for 38 mm high floor trunking. Material: Sheet steel, galvanized.					
	For 150 mm	—	40/157/40	1	8428031147167	ISM50156
	For 200 mm	—	40/257/40	1	8428031147174	ISM50157
	For 250 mm	—	40/307/40	1	8428031147181	ISM50158
P131678	Vertical corner with two compartments					
	Vertical corner with two compartments and an integrated separation wall. Intended to guide cables from vertical to horizontal direction. The bend of the corner is chamfered, allowing a proper bending radius of the cables. Material: Sheet steel, galvanized.					
	For 150x28 mm trunking	—	201/150/201	1	8428031096267	4260133
	For 150x38 mm trunking	—	201/150/201	1	8428031096335	4260140
	For 200x28 mm trunking	—	201/200/201	1	8428031096274	4260134
P131678	For 200x38 mm trunking	—	201/200/201	1	8428031096489	4260141
	Vertical corner with three compartments					
	Vertical corner with three compartments and two integrated separation walls. Intended to guide cables from vertical to horizontal direction. The bend of the corner is chamfered, allowing a proper bending radius of the cables. Material: Sheet steel, galvanized.					
	For 250x28 mm trunking	—	201/250/201	1	8428031096311	4260138
	For 250x38 mm trunking	—	201/250/201	1	8428031096526	4260145
P85796	Earthing kit					
	Kit including earth wire with flat pin connectors and earthing clamps. Intended to provide an earth connection between two metal floor trunking bodies, or other sheet metal products. Material: Spring steel, copper.					
	Earthing kit	Yellow/green	L = 200 L = 300	10 10	3606480028519 3606480028526	ISM10953 ISM10954

Compatible Thorsman UFB products

	Type	Colour	Dimensions A/B/C (mm)	Qty per package	EAN code	Ref. No.
	Conduit adaptor					
	Adaptor for the connection of 1–4 conduits to the screeded floor box. The adaptor has four openings for Ø 50 mm (dimensions acc. to EN 60423) conduits. For smaller diameters, reduction sleeves can be used. They are easily pushed into the open ends of the adaptor. All entrances are provided with a knock-out opening on the inside to prevent unintentional leakage of concrete into the screeded box when the entrance is not in use. Material: PP.					
P67900		Yellow	55/40/257	10	7315885197756	5197 755
	Reduction sleeve					
	Reduction sleeve for the fitting of conduits smaller than Ø 50 mm in adaptor UFB-AP. The reduction sleeve is available for four different dimensions: Ø 16, Ø 20, Ø 32 and Ø 40 mm (dimensions acc. to EN 60423). The opening for the feeding conduit should be positioned at the bottom edge of the reduction sleeve, for a stable position of the conduit. Material: PP.					
P67901		Yellow	Ø50/39	10	7315885197824	5197 820
		Yellow	Ø50/39	10	7315880046820	5197 825
		Yellow	Ø50/39	10	7315885197831	5197 830
		Yellow	Ø50/39	10	7315880046837	5197 835
	Floor trunking adaptor for 28 mm high trunking					
	Adaptor to be fitted to the side entrance of the screeded floor box for the connection of 28 mm high floor trunking to the box. Material: Sheet steel S 235 JR.					
P67897		—	55/40/257	10	7332418017633	5197 761
		—	55/40/257	10	7332418017640	5197 762
		—	55/40/282	10	7332418017657	5197 763
	Floor trunking adaptor for 38 mm high trunking					
	Adaptor to be fitted to the side entrance of the screeded floor box for the connection of 38 mm high floor trunking to the box. Material: Sheet steel S 235 JR.					
P67898		—	55/40/257	10	7332418017664	5197 771
		—	55/40/257	10	7332418017671	5197 772
		—	55/40/282	10	7332418017688	5197 773