

IBK in-concrete duct system



System information





IBK in-concrete duct system

The requirements for installations in modern buildings develop continuously. The new OBO IBK system is matched to the latest technological standards.

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Newly developed. From the ground up.

Easy mounting, robustness and a perfect inclusion in the building, all of these are offered by the new in-concrete system. It is matched to the latest developments and trends in construction, both to the technology of concrete core activation and to current fire protection guidelines.

Thanks to many years of experience in development and project planning for underfloor installations, OBO knows the requirements for in-concrete systems. This is just one of the reasons OBO is the market leader in this field.





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Perfect integration: In-concrete ducts in modern buildings

The in-concrete duct system is suitable for use in concrete floor plates and concrete ceilings, irrespective of whether they are ceilings encased during construction or are ceilings made of filigree plates. Thanks to its continuous height adjustment of ducts and sockets, the system can be adapted to all kinds of project requirements.

The ducts are located in the neutral zone between the upper and lower reinforcement and can also be used for simultaneous concrete core activation, cooling and heating via the floor or the ceiling.





Matched

Example of concrete core activation: The planning for the installation of the IBK system takes all the other factors in the concrete into account.



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Comprehensively tested

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As with all OBO products, the IBK system has also been tested comprehensively according to all the current standards.



Use of the "neutral zone"

At least 100 mm of concrete beneath the IBK system is required for reasons of fire protection. The "neutral" zone above this can be used.

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Use our manufacturer's know-how. In every project phase.

Numerous factors must be taken into account during planning. For this reason, OBO supports planners and installation engineers with comprehensive support, particularly in the planning phase, but also in every other project phase.



Decades of experience

OBO has decades of experience in dealing with almost every kind of underfloor project and on almost every continent. Take advantage of consultation from our team of experts.

Checklist

When planning and building an IBK system, the following factors must be included in the planning:
Match with architecture
Match with statics
Match with building systems



On one level: mounting made easy

The IBK system is located between the upper and lower reinforcement of the concrete plate. This means that work between the strands of the steel mats makes mounting difficult. New, swivellable height adjustment units now allow considerably simpler installation. Height adjustment units, standardised for the entire system, are used. The floor plate of the accessory mounting box, the connection elements and the supports are all the same height.



Flexible mounting

The freely swivellable height adjustment units allow easy system mounting between the strands of the reinforcement.



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Completely released

Simply remove the height adjust-ment unit, insert it between the reinforcements and then fasten it to the socket body again.

One adjustment height

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All the elements are at the same height: Simply adjust all the com-ponents to this height and begin with mounting.

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IBK: robust, closed and secure

Details in the construction of the new IBK system ensure very practical benefits. Thus, for example, the system remains closed off with a mounting protection lid up to device installation and is thus protected against dirt without any masking. The protection lid prevents workplace accidents during the construction phase and is so robust that it is unaffected by concrete working and the mechanical processing of concrete areas.



Equipotential bonding

Contact claws on the connectors and the straps on the floor plate ensure equipotential bonding.







Robust construction

All the system components are designed for hard construction site use. They are subject to loads from walking, filling with concrete or compacting with a vibrator.

Closed system

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Safe against dust and dirt: The interior remains protected with a mounting protection lid up to device installation, without any masking.





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With the IBK system, the lengthy removal of polystyrene lined bodies is a thing of the past.



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Seamlessly integrated in the concrete

The integrated lined body of the box, its external wall, can be cast directly in the concrete. Thus, the concrete can be worked to the socket without any cavities requiring later filling. Whilst the outer wall is fixed in the concrete, the height of the inner lined body can be adjusted flexibly. Its side walls are designed for a standard height of 80 mm above the socket.

Perfectly height-adjustable

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Before another floor structure is added, for example, screed or fillers, the inner lined body is adjusted by a maximum of 65 mm to the later end height.

Perfect connection

Seamless transition from the concrete to the box body, without any cavities.



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In-concrete duct system installation principle



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1	In-concrete box	
2	Cover socket for device installation	
3	Mounting protection lid	
4	Inner lined body	
5	Electrical installation duct, 2- or 3-compartment, 38 or 48 mm high	
6	Connection strap with equipotential bonding	
7	Duct support	
8	Height adjustment unit	

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Local around the world. 3,600 employees. Over 60 countries. 40 subsidiaries.

The values of our company are supported by continuous proximity to our customers. For us, customer proximity means that whenever borders open and new markets are created, we will be there. This regional proximity has proved its worth: OBO is present on every continent – with more than 3,600 employees in over 60 countries.











Certified safety

Our high-quality range of products and services is globally certified and fulfils all the key international standards. This simplifies the planning and execution of deployments around the world and ensures cost optimisation. Efficient processes at OBO ensure that products are available at the right time. It doesn't matter where our customers are erecting or operating systems.

Experience with major projects

When the building size and the challenge of use increases, the complexity of the electrical infrastructure also increases. For decades, our electrical systems have contributed to the success of major projects. The comprehensive product range allows precise matching to the appropriate deployment location. Our customers can profit from the matching service process, which stretches from project planning through to delivery and consultation on the construction site.

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In-concrete box for GES9



	Dimen-				
	sion h		Pack.	Weight	
Туре	mm	Nominal size	pcs	kg/100 pcs.	Item No.
IBD 35038 9	135	9	1	850,000	7399 85 0
St Steel					/pc.
FS Strip-galva	nised				

In-concrete box for duct height 38 mm.

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Side walls are prepared for duct widths 250 and 350 mm.

With four adjustable placements for height adjustment units.

The integrated lined body can be adjusted to a maximum of 65 mm for compensating screed work.

In-concrete box for GESR9



Dimen-							
sion h		Pack.	Weight				
mm	Nominal size	pcs	kg/100 pcs.	Item No.			
135	R9	1	918,000	7399 85 6			
				/pc.			
FS Strip-galvanised							
reparec able pla	I for duct widths 250 and 350 mm. Icements for height adjustment units.	5 mm	for compensa	ating screed			
	sion h mm 135 sed for duc reparec able pla	sion h mm Nominal size 135 R9 sed for duct height 38 mm. repared for duct widths 250 and 350 mm. able placements for height adjustment units.	sion h Pack. mm Nominal size pcs 135 R9 1 sed for duct height 38 mm. repared for duct widths 250 and 350 mm. able placements for height adjustment units.	sion h mm Nominal size Pack. Weight pcs kg/100 pcs. 135 R9 1 918,000 sed for duct height 38 mm. repared for duct widths 250 and 350 mm.			

Underfloor installation duct, 3-compartment

			Dimen- sion h		l enath	Number of com- partments	section	Cross- section draw 2	Pack	Weight	
Туре	mm	mm	mm	mm	mm	pc.	mm ²	mm ²		kg/100 m	Item No.
S3 25038	90	70	38	250	2000	3	3168	2484	2	466,000	7400 32 8
S3 35038	120	110	38	350	2000	3	4248	3924	2	595,000	7400 34 0
St Steel											/m

FS Strip-galvanised

Underfloor installation duct for routing cables under the screed.

Connection element 38 mm



Туре	Dimen- sion B mm	Dimen- sion h mm		. Weight kg/100 pcs.	Item No.
IBVE 25038	250	38	1	131,400	7399 89 0
IBVE 35038	350	38	1	161,500	7399 89 6
St Steel					/pc.

FS Strip-galvanised

To connect underfloor installation ducts with in-concrete applications. With two adjustable placements for levelling units IBNEV.

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Vertical bend 38 mm





FS Strip-galvanised

For vertical direction changes of screed-covered underfloor installation ducts (wall connections, supplies).

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In-concrete box 48 mm for GES

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	Dimen- sion h		Pack.	Weight	
Туре	mm	Nominal size	pcs	kg/100 pcs.	Item No.
IBD 35048 9	145	9	1	872,500	7399 85 2
St Steel					/pc.
FS Strip-galva	nised				
		ict height 48 mm.			

Side walls are prepared for duct widths 250 and 350 mm. With four adjustable placements for height adjustment units.

The integrated lined body can be adjusted to a maximum of 65 mm for compensating screed work.

In-concrete box 48 mm for GESR



	nmen-				
_	ion h าm	Nominal size	Pack pcs	. Weight kg/100 pcs.	Itom No
IBD 35048 R9 14		R9	1	940.000	7399 85 8
St Steel FS Strip-galvanised				1010,000	/pc.
With four adjustab	epared ble pla	t height 38 mm. I for duct widths 250 and 350 mm. cements for height adjustment units dy can be adjusted to a maximum of		for compense	ating screed

Underfloor installation duct, 3-compartment

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Туре	e			Dimen- sion h mm		Length mm	Number of com- partments pc.	Cross- section draw 1 mm ²	section		Weight kg/100 m	Item No.	
S3 2	25048	90	70	48	250	2000	3	4048	3174	2	500,000	7400 33 2	
S3 3	35048	120	110	48	350	2000	3	5428	5014	2	607,000	7400 34 4	
St S	teel											/m	ı

FS Strip-galvanised

Underfloor installation duct for routing cables under the screed.

Connection element 48 mm



Туре	Dimen- sion B mm	Dimen- sion h mm		Weight kg/100 pcs.	Item No.
IBVE 25048	250	48	1	133,800	7399 89 2
IBVE 35048	380	48	1	161,500	7399 89 8
St Steel					/pc.

FS Strip-galvanised

To connect underfloor installation ducts with in-concrete applications. With two adjustable placements for levelling units IBNEV.

Vertical bend 48 mm





FS Strip-galvanised

For vertical direction changes of screed-covered underfloor installation ducts (wall connections, supplies).

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Height adjustment unit



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	Height			
	adjustment			
	range	Pack.	Weight	
Туре	mm	pcs	kg/100 pcs.	Item No.
IBNEV 110	35 - 105	10	30,000	7399 92 0
IBNEV 150	75 - 145	10	33,000	7399 92 3
IBNEV 190	115 - 185	10	36,000	7399 92 6
IBNEV 230	155 - 225	10	40,000	7399 92 9
St Steel				/pc.

FS Strip-galvanised

Height adjustment kit for IBK system components. For levelling boxes, connectors and supports.

Support for 250 mm duct

IBST 250 250 1 64,200 7399 91 0 St Steel /pc. /pc.	Туре	Duct width mm			Weight kg/100 pcs.	Item No.
	IBST 250	250		1	64,200	7399 91 0
FS Strip-galvanised	St Steel					/pc.
	FS Strip-ga	Ivanised				

To support and elevate underfloor installation ducts. With two adjustable placements for levelling units.

Support for 350 mm duct

Туре	Duct width mm		Weight kg/100 pcs.	Item No.
IBST 350	350	1	77,500	7399 91 2
St Steel				/pc.
FS Strip-ga	Ivanised			

To support and elevate underfloor installation ducts. With two adjustable placements for levelling units.

Fastening bracket for GES9

Туре	Pack. Weight pcs kg/100 pcs. Item No.
IB BGES9	4 5,000 7399 87 0
St Steel	/рс.
FS Strip-galvanised	

Fastening bracket for square GES9 service outlet to be mounted in in-concrete box.

Fastening bracket for GESR9

Type IB BGESR9	Pack. Weight pcs kg/100 pcs. Item No. 6 7,500 7399 87 2
St Steel	/pc.

FS Strip-galvanised

Fastening bracket for round GESR9 service outlet to be mounted in in-concrete box.





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