

Submersible Borehole Pump

Ixo



Type Series Booklet



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Type Series Booklet Ixo

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Building Services: Water Supply

Submersible Borehole Pumps

Ixo



Main applications

- Water supply systems
- Spray irrigation systems
- Washing plants
- Rainwater harvesting
- Water extraction

Fluids handled

Pump for handling clean to turbid water not containing aggressive, abrasive or solid substances.

- River, lake and groundwater

Operating data

Operating properties

Characteristic		Value
Flow rate	Q	Up to 8 m ³ /h (2.22 l/s)
Head	H	Up to 65 m
Fluid temperature	t	35°C

Designation

Example: Ixo 45 E

Key to the designation

Code	Description
Ixo	Type series
4	Number of stages
5	Max. flow rate in m ³ /h 8 = 8 m ³ /h
E	E = single-phase AC motor D = three-phase motor

Design details

Design

Pump

- Centrifugal pump
- Close-coupled design
- Multistage
- For fully or partly submerged operation (min. immersion depth 0.1 m)
- Low-level inlet
- Suction strainer with a max. mesh width of 2.5 mm

Drive

- Jacket-cooled single-phase A.C. motor
- Thermal overload protection
- 230 V - 50 Hz
- IP68 enclosure
- 23-metre motor power cable
- Starting device with capacitor and mains plug

or

- Jacket-cooled three-phase motor
- 400 V - 50 Hz
- IP68 enclosure
- 23-metre motor power cable

Bearings

- Deep-groove ball bearings
- Grease-lubricated for life

Shaft seal

- Double shaft seal with oil reservoir fitted in between

Materials

Overview of available materials

Component	Material
Pump casing	Stainless steel
Impellers/stage casings	Stainless steel
Shaft	Stainless steel
Motor housing	Stainless steel
Lubricating oil	White oil (food and pharmaceuticals approved)
Mechanical seal	
Motor end	Steatite, carbon, NBR
Pump end	Aluminium, carbon, NBR

Product benefits

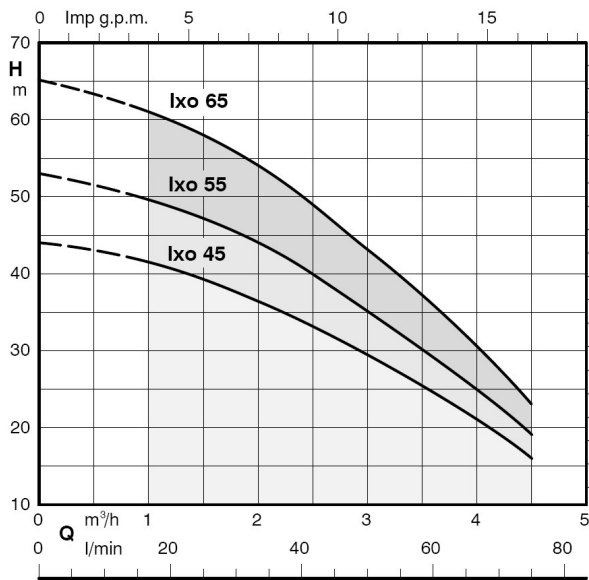
- Corrosion-resistant due to internal stainless steel components
- Low current requirement at high efficiency ensures energy-efficient and environmentally friendly use of resources.
- Integrated motor protection prevents motor overload.
- Zero motor leakage and longer service life due to double mechanical seal
- Low-level inlet with strainer for better tank capacity utilisation

Technical data

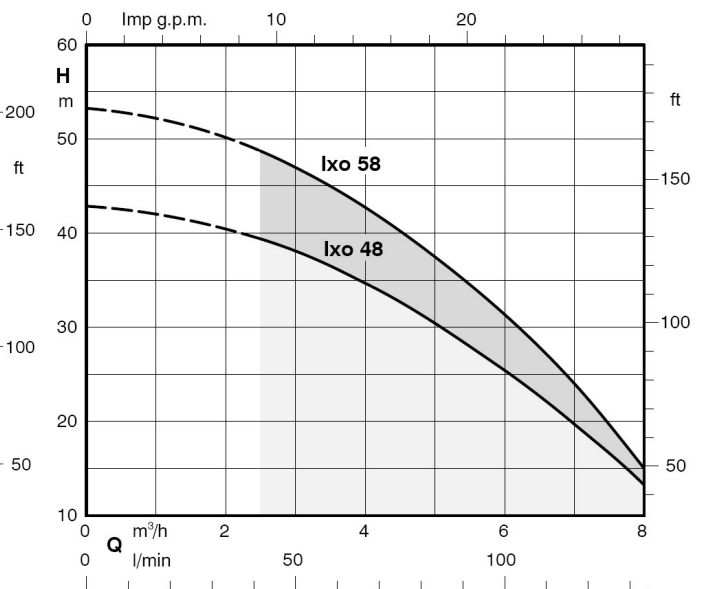
Selection table

Size	Number of stages	ISO 228	P ₁	P ₂	1~230 V	3~230 V	3~400 V	Capacitor		Cable H07RN-F [m]	Mat. No.	[kg]
			[kW]	[kW]	[A]	[A]	[A]	[μF]	[V]			
Ixo 45 E	4	G 1¼	0,85	0,55	4	-	-	20	450	23	39019480	15.3
Ixo 55 E	5	G 1¼	1,1	0,75	5	-	-	20	450	23	39019481	16.4
Ixo 65 E	6	G 1¼	1,3	0,9	6	-	-	25	450	23	39019482	17.6
Ixo 48 E	4	G 1¼	1,3	0,9	6	-	-	25	450	23	39019483	16.8
Ixo 58 E	5	G 1¼	1,55	1,1	7	-	-	25	450	23	39019484	17.2
Ixo 45 D	4	G 1¼	0,85	0,55	-	2,7	1,6	-	-	23	39019485	14.3
Ixo 55 D	5	G 1¼	1,1	0,75	-	3,3	1,9	-	-	23	39019486	14.8
Ixo 65 D	6	G 1¼	1,3	0,9	-	3,8	2,2	-	-	23	39019487	16.1
Ixo 48 D	4	G 1¼	1,3	0,9	-	3,8	2,2	-	-	23	39019488	15.2
Ixo 58 D	5	G 1¼	1,55	1,1	-	4,5	2,6	-	-	23	39019489	15.7

Characteristic curves

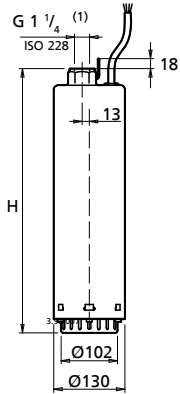


Ixo 45 - 65

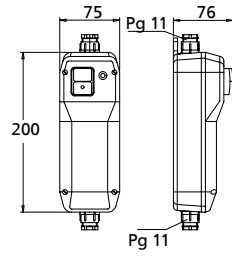


Ixo 48 - 58

Dimensions



Ixo dimensions



Dimensions of starting device (0.4 kg) for Ixo E

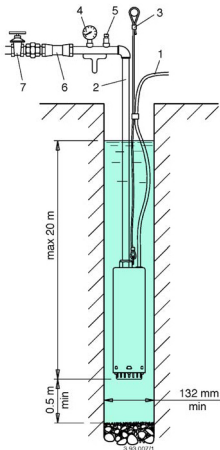
(1)	Internal thread
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Dimensions

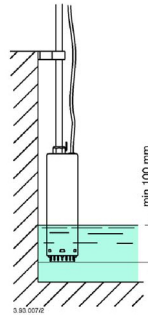
Pump	H [mm]
Ixo 45 E	448
Ixo 55 E	472
Ixo 65 E	496
Ixo 48 E	448
Ixo 58 E	472
Ixo 45 D	448
Ixo 55 D	472
Ixo 65 D	496
Ixo 48 D	448
Ixo 58 D	472

Notes on installation

Suspended pump



Min. immersion depth


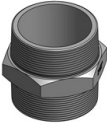
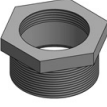





Horizontal installation
Possible with Ixo 45 and Ixo 48 only. The pump must be fully submerged.



1	Power cable	5	Vent valve
2	Discharge line	6	Lift check valve
3	Safety rope	7	Gate valve
4	Pressure gauge		

Accessories

Pump accessories

	Description	Connection/ cable length	Mat. No.	[kg]
	Stainless steel wire rope, 15 m, with fastening elements		42200727	L 1
	Fastening rope made of nylon, 15 m		39019788	L 0.5
	Check valve made of brass, double socket, internal thread	Rp 1 1/4	01041318	L 0.9
	Hexagon nipple made of brass, external thread (required for direct connections between pump and check valve)	R 1 1/4	00240354	L 0.3
	Reducing socket made of brass	Rp 1 1/4 x 1	01063985	L 0.2
	Connection part made of brass for Controlmatic	Rp 1 1/4 / G 1	39019530	L 0.2
	Float switch for filling, with shockproof plug (NC contact), circuit open in upper float position, 230 V AC, 50 Hz, max. 8 A (H 07 RN-F3G1), 3 m		11037759	L 0.6
	Float switch for filling, with shockproof plug (NC contact), circuit open in upper float position, 230 V AC, 50 Hz, max. 8 A (H 07 RN-F3G1), 5 m		11037760	L 0.9
	Weight for float switch Not suitable for drinking water applications		01076688	L 0.3
	Safety switch STECKMAT (1~230 V) Tripping in approx. 0.03 s even in the event of minor and harmless leakage currents as low as approx. 0.03 A		00534217	L 0.5
Mains water back-up set				
	Float switch and plug	10 m	40981828	2.5
		20 m	40981043	1.8
	Solenoid valve with 3 m cable and shockproof plug	R 1/2	40981618	0.4
		R 1	42207828	0.4
		R 2	19071879	5

Automatic control units

	Description	Mat. No.	[kg]
	Cervomatic EDP.2 automatic control unit	01185581	2.5
	Controlmatic E automatic control unit	90053395	1.3



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