

Submersible Borehole Pump

Ixo N



Type Series Booklet



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Type Series Booklet Ixo N

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Building Services: Water Supply

Submersible Borehole Pumps

Ixo N



Main applications

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

Fluids handled

- Clean to turbid water not containing aggressive, abrasive or solid substances
- River water, lake water and groundwater

Designation

Example: Ixo N 45 E

Designation key

Code	Description	
Ixo	Type series	
N	New generation	
4	Number of stages	
5	Maximum permissible flow rate [m ³ /h]	
E	Drive	
	E	Single-phase AC motor
	D	Three-phase motor

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m ³ /h]	≤ 8
	Q [l/s]	≤ 2,22
Head	H [m]	≤ 65
Fluid temperature	T [°C]	≥ +5
		≤ +35

Design details

Design

- 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 maximum mesh width of 2 mm

Drive

Jacket-cooled single-phase AC motor:

- Thermal overload protection
- 230 V, 50 Hz
- IP68 enclosure
- Capacitor installed
- Motor power cable (H07 RNF) 23 m with mains plug

Jacket-cooled three-phase motor:

- 400 V, 50 Hz
- IP68 enclosure
- Motor power cable 23 m

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

Part No.	Description	Material
01-93	Lubricating oil	White oil, food and pharmaceuticals approved
101	Pump casing	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
108	Stage casing	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
143	Suction strainer	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
210	Shaft	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
230	Impeller	Chrome nickel steel 1.4301 EN 10088 (AISI 304)
433	Mechanical seal, motor end	Steatite, hard carbon, NBR
433	Mechanical seal, pump end	Aluminium oxide, silicon carbide, NBR
811	Motor housing	Chrome nickel steel 1.4301 EN 10088 (AISI 304)

Product advantages

- Corrosion-resistant design with high-quality stainless steel
- 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
- Service-friendly thanks to easy check of capacitor without having to completely dismantle the pump

Product information

Product information as per Regulation No. 1907/2006 (REACH)

For information as per chemicals Regulation (EC) No. 1907/2006 (REACH), see <http://www.ksb.com/reach>.

Technical data

Ixo N D, 3~400 V

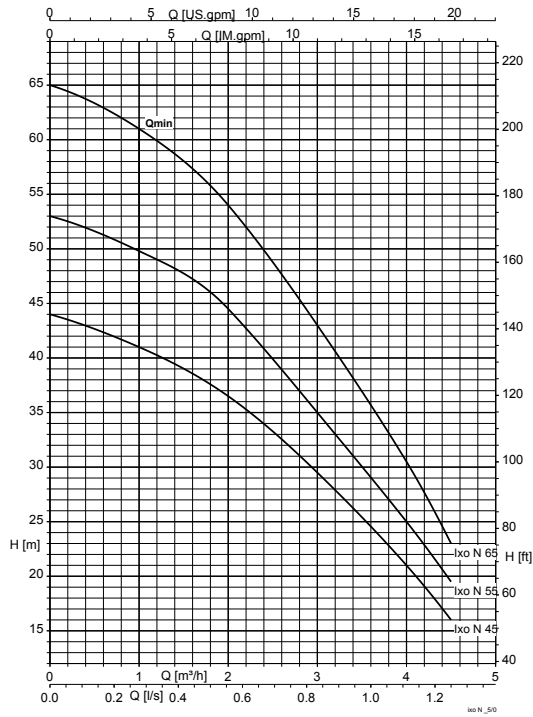
Size	Number of stages	Nominal diameter discharge-side connection (ISO 228)	P ₁	P ₂	I _N		Capacitor		Power cable length (H07 RNF)	Mat. No.	[kg]
					1~230 V	3~400 V	Capacitor	Capacitor			
			[kW]	[kW]	[A]	[A]	[μF]	[V]	[m]		
Ixo N 45 D	4	G 1 1/4	0,90	0,55	-	1,6	-	-	23	39300177	15,5
Ixo N 55 D	5	G 1 1/4	1,10	0,75	-	1,9	-	-	23	39300178	16,2
Ixo N 65 D	6	G 1 1/4	1,30	0,90	-	2,2	-	-	23	39300179	16,7
Ixo N 48 D	4	G 1 1/4	1,20	0,90	-	2,2	-	-	23	39300180	16,2
Ixo N 58 D	5	G 1 1/4	1,50	1,10	-	2,6	-	-	23	39300181	17,3

Ixo N E, 1~230 V

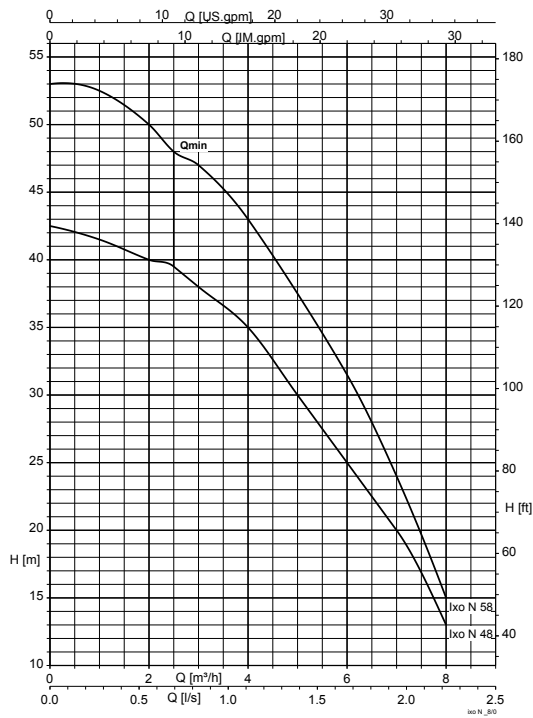
Size	Number of stages	Nominal diameter discharge-side connection (ISO 228)	P ₁	P ₂	I _N		Capacitor		Power cable length (H07 RNF)	Mat. No.	[kg]
					1~230 V	3~400 V	Capacitor	Capacitor			
			[kW]	[kW]	[A]	[A]	[μF]	[V]	[m]		
Ixo N 45 E	4	G 1 1/4	0,90	0,55	4,1	-	20	450	23	39300172	16
Ixo N 55 E	5	G 1 1/4	1,10	0,75	5,0	-	20	450	23	39300173	17,7
Ixo N 65 E	6	G 1 1/4	1,30	0,90	6,0	-	25	450	23	39300174	18,2
Ixo N 48 E	4	G 1 1/4	1,20	0,90	6,0	-	25	450	23	39300175	17,2
Ixo N 58 E	5	G 1 1/4	1,50	1,10	7,0	-	25	450	23	39300176	18,8

Characteristic curves

Ixo N 45/55/65; n = 2900 rpm



Ixo N 48/58; n = 2900 rpm



Dimensions

Ixo N

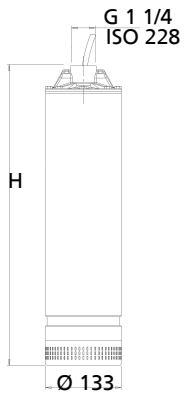


Fig. 1: Pump set dimensions

Dimensions

Size	H
	[mm]
Ixo N 45 E/D	504
Ixo N 55 E/D	553
Ixo N 65 E/D	577
Ixo N 48 E/D	529
Ixo N 58 E/D	553

Installation information

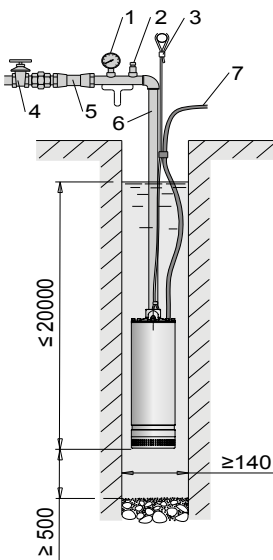


Fig. 2: Pump set suspended from discharge line [mm]

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

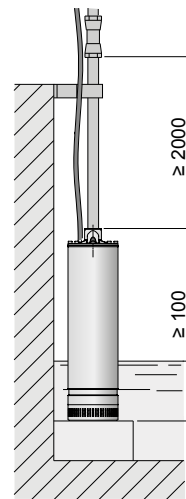


Fig. 3: Pump set standing on floor [mm]

Accessories
Pump accessories

Overview of pump accessories

	Description	Connection	Mat. No.	[kg]
-	Stainless steel wire rope, 15 m, with fastening elements	-	42200727	1
-	Check valve made of brass, double socket, internal thread	Rp 1 1/4	01041318	0,9
	Hexagon nipple made of brass, external thread (required for direct connections between pump and check valve)	R 1 1/4	00240354	0,3
	Reducing socket made of brass	Rp 1 1/4	01063985	0,2
-	Connection part made of brass for Controlmatic	Rp 1 1/4 / G 1	39019530	0,2
	Safety switch STECKMAT (1~230 V) Trips in approx. 0.03 seconds, from approx. 0.03 A	-	00534217	0,5
	E62.1, float switch housing: polypropylene	-	11037759	0,6
	E62.1, float switch housing: polypropylene	-	11037760	0,9
	Weight for float switch not suitable for drinking water applications	-	01076688	0,3
	Pump foot Equipped for floating-suction water intake	-	39300171	2



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