



Form No. 2038

उत्पाद मानक

परिणामित्र

शाप/अभि. निर्देश

PRODUCT STANDARD

TRANSFORMER

SHOP/ENGG INSTRUCITONS

TR10050I

2 पृष्ठों में 1

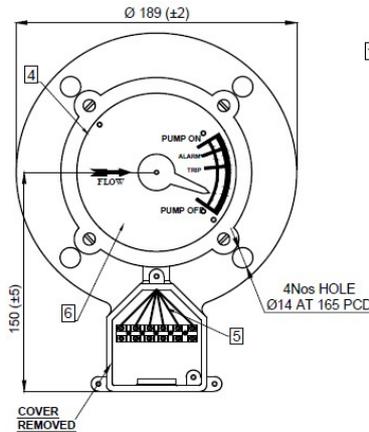
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TITLE- SPECIFICATION FOR OIL FLOW INDICATOR (OFI)**1. Dial size:** - 100 mm Dia. (Nominal)**2. Application:**

- i. To give continuous indication of liquid flow (Tolerance $\pm 3\%$ of full flow).
- ii. To operate Micro switch and give an alarm when flow drops to $70\% \pm 5\%$ of full flow.

3. General Description:

- i. The flow of liquid in the pipe displaces a vane and the movement is transmitted through magnetic coupling to the pointer. The indicator may be arranged for upward, downward or horizontal flow, the dial remains always in vertical plane.
- ii. This unit is weather proof type and suitable for outdoor application.
- iii. Length of the vane shaft to be suitable for particular NB of the pipe.
- iv. All hardware shall be Brass (plated) & SS.
- v. Instrument shall be finally painted with two coats of high glossy finishing paint.
- vi. Paint shade shall be generally Dark Gray shade, Powder coating if any other shade is not called in purchase order.
- vii. **All dimensions & materials mentioned in Figure-1 and Table-1 respectively are indicative and may vary supplier to supplier. However, design of OFI should meet mounting dimensions e.g. PCD, No. of holes, Size of holes etc. and performance parameters to ensure fitment in pipe line and functional requirement.**

**Fig.1 - Diagram of Magnetic flow indicator**

Sl. No.	Description	Material
1	Body/Base	Al./Al. Alloy
2	Vane shaft	Brass
3	Vane	SS
4	Dial	Aluminum
5	Terminal Box	Aluminum
6	Lens	Toughened Glass

Table 1 - Item Description and Material

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Rev
12दि. DT.
11/08/2023

CL.10 REMOVED

KDS *NM*

KDS NM

वितरण
DISTRIBUTION.

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स्वीकृत किया : sd sd

APPROVED : SRR SNA

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Rev
13दि. DT.
21/01/2026

Table-1, Fig-1 revised

KDS *NM*

KDS NM

TRE/TRM/FTM

TRX/TTG/

QC-TCB/QA-TCB/

JHANSI

तैयार किया PREPD.	जारी किया ISSUED	दिनांक DATE
sd/-AK Sinha Roy	टीआरई/मानक TRE/STD.	05.09.89

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COPYRIGHT AND CONFIDENTIAL The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the Company.		<p>4. Dial Marking: -</p> <ul style="list-style-type: none"> i. PUMP OFF which corresponds to no flow. ii. PUMP ON which corresponds to full flow. iii. ALARM which corresponds to flow falling to $70\% \pm 5\%$ of full flow. iv. ARROW to indicate the direction of flow. v. NB of pipe in mm vi. Full flow in Liters per minute. vii. Liquid- oil/water. viii. Standard dial with black markings on yellow background or equivalent to give clear visible indication. <p>5. Switch rating: - 5A, 240V AC and 0.25A, 240V DC (Micro switch)</p> <p>6. Mounting: - Suitable for vertical mounting on 4 holes of 14 dia. on 165 PCD holes to be off-center.</p> <p>7. Routine testing: -</p> <ul style="list-style-type: none"> i. Full flow and alarm test (by Water/Oil as testing medium). ii. 2.0 kV test for one minute between terminals & Body. iii. Static pressure test at 7 kg/cm^2 for 2 minutes for Body only. iv. Switch operation w.r.t dial marking & its contact test. v. Insulation resistance at 500V for one minute. <p>8. Type test: - Degree of protection test (IP55/IP67) of terminal box to be conducted once in 10 years at NABL approved Lab.</p> <p>9. Information to be given while ordering: -</p> <ul style="list-style-type: none"> i. ID of the pipe ii. Nature of liquid i.e. Hot Transformer Oil or Water. iii. Rate of flow in Liters per minutes. iv. Direction of flow when viewed facing the dial vertical upward/Downward, left to right or Right to left v. No. of switches (Two) vi. Shade of final finishing paint. 					
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पुनः Rev 12	दि. DT. 11/08/2023	CL.10 REMOVED  KDS	वितरण DISTRIBUTION.	सं.	स्वीकृत किया : sd APPROVED : SRR	sd SNA	
पुनः Rev 13	दि. DT. 21/01/2026	Table-1, Fig-1 revised  KDS	TRE/TRM/FTM TRX/TTG/ QC-TCB/QA-TCB/ JHANSI		तैयार किया PREPD. sd/-AK Sinha Roy	जारी किया ISSUED टीआरई/मानक TRE/STD.	दिनांक DATE 05.09.89