


INTERPLANT STANDARD - STEEL INDUSTRY		
	SPECIFICATION FOR MAGNETIC FLOW SWITCHES	IPSS: 2-07-048-13 (First Revision)
	CORRESPONDING IS DOES NOT EXIST	Formerly : IPSS: 2-07-048-97

0. FOREWORD

- 0.1 This Interplant Standard has been prepared by the Standards Committee on Computerization and Automation, IPSS 2:7 with the active participation of the representatives of the steel plants, reputed consultancy organizations and established manufacturers. Originally, the standard was published in 1997. Based on recent developments and technological upgradation, it is revised and adopted in February, 2013.
- 0.2 Interplant Standards on design parameters primarily aim at achieving rationalization and unification of parts and assemblies of process and auxiliary equipment used in steel plants and these are intended to provide guidance to the steel plant engineers, consultants and manufacturers in their design activities.

1. SCOPE

- 1.1 This Interplant Standard covers the specification of mechanical flow switch.

2. SPECIFICAITON

- i) Type : Target type or paddle wheel type with magnetically coupled switching system.
- ii) Material : Body, flapper / piston and wetted parts
- a) For corrosive liquids : AISI 304 SS/ 316 SS
- b) For non corrosive liquids :
Brass / Teflon/ PVC/ Polypropylene
- iii) Accuracy : $\pm 1.0\%$
- iv) Repeatability : $\pm 1.0\%$
- v) Hysterisis : Between increasing and decreasing flow 10 to 30%
- vi) Switch: Reed type, shielded against outer magnetic field

- vii) Contacts : 1 NO + 1 NC (2 NO + 2 NC optional)
- viii) Contact rating : 240 V, 2A ac or 230 V, 0.5A dc
- ix) Operating Pressure: i) 0 -10 kg/cm²
ii) 0 -150 kg/cm²
- x) Operating temp : i) 0⁰C to + 80⁰C
ii) 0⁰C to + 200⁰C
- xi) Set point : Adjustable, on line
- xii) Mounting : i) Vertical with flow in upward direction
ii) Horizontal, as desired
- xiii) Pipe connection: Flanged as per IS 6392:1971 ` Steel Pipe Flanges
(Amendment 1)' Threaded (BSP/ Metric)
- xiv) Electrical connection: ¾ inch conduit through double compression type cable
gland
- xv) Optional features: a) Inbuilt sight glass as desired.
b) Intrinsically safe as desired
- xvi) Termination: Through terminal block for external wiring suitable for
full ring lugs
- xvii) Switch enclosure: To conform to IS 65 or better weather proof housing.