

PO	TN
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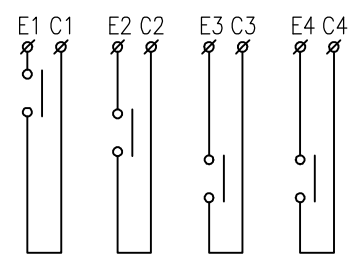
FOR	QUICK FLOAT LEVEL SWITCH
MOUNTING	TOP
ENCLOSURE	WEATHER PROOF (IP54)
MAX. PRESSURE	ATM kgf/cm <sup>2</sup>
MAX. TEMP	150 °C

CABLE ENTRY	PF 1/2"(F)
	■ PF 3/4" (F)_Adaptor

NO.	DESCRIPTION	MATERIAL	REMARK
1	HOUSING	ABS	
2	PROCESS CONN.	<input type="checkbox"/> ABS (Std.) <input checked="" type="checkbox"/> 304 SS	
3	CABLE	SILICONE	
4	FLOAT	316L SS	
5	GUIDE WIRE	316L SS	
6	WEIGHT	316L SS	

PROCESS CONN. SIZE	
<input type="checkbox"/>	80A JIS 10K FF
<input checked="" type="checkbox"/>	ANSI 4" 150# RF

SWITCH	
TYPE	MERCURY
RATING	AC 110V, 1A / DC 24V, 0.5A
FORM	4-SPST



LENGTH (mm)	SWITCH ACTION			
L1	400	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L2	1000	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L3	1550	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L4	1700	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L	2000			

- NOTE
- GENERAL DIMENSION TOLERANCE ±5mm EXCEPT AS NOTED.
  - Q'TY : 1 SET(S)
  - TAG NO. : LS-081-K
  - NOT APPLICABLE IN CASE OF CABLE LENGTH OVER 6000mm.

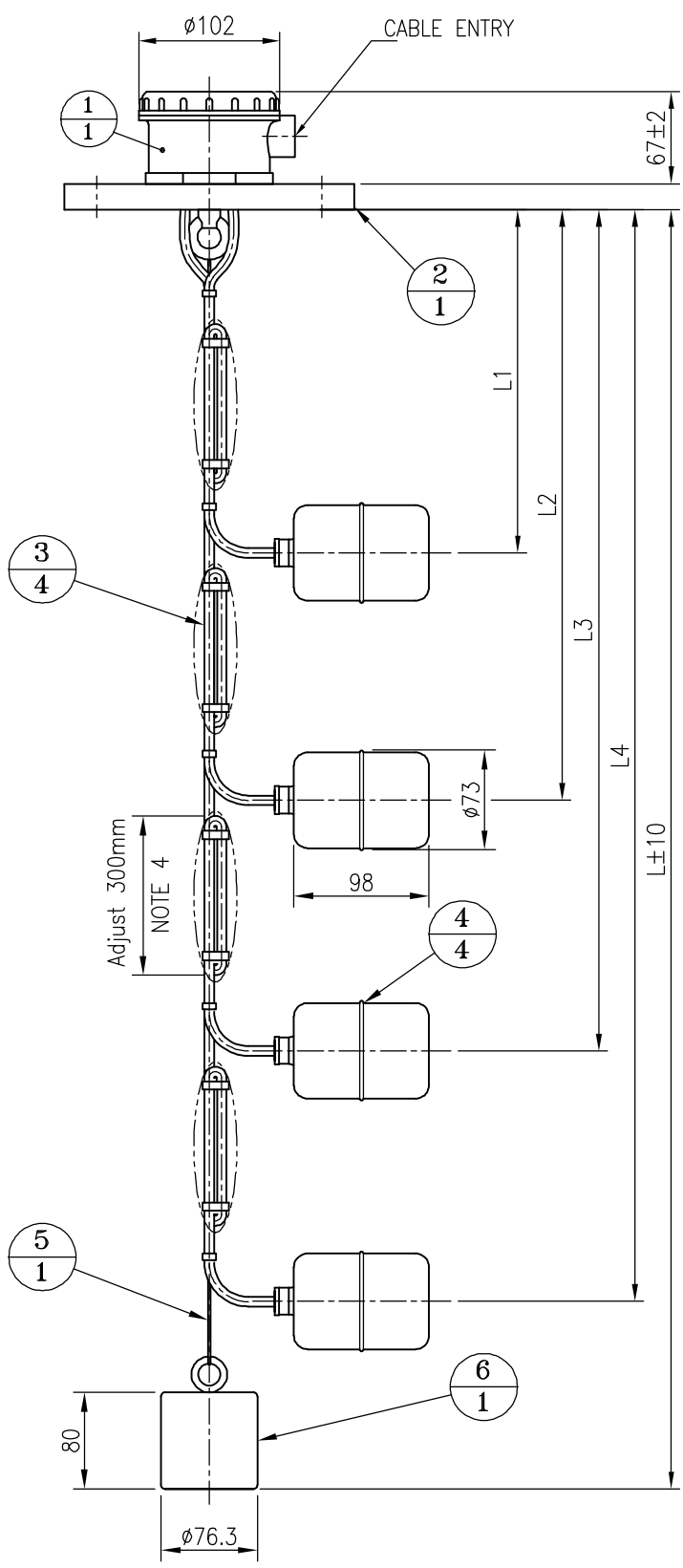
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△	MAY. 2018	1ST ISSUE	D Y KIM	B S SUNG	Y H KIM
NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

**HITROL** HITROL CO., LTD.

TITLE  
**QUICK FLOAT TYPE LEVEL SWITCH  
HQ-66S-4F**

SCALE	N.S	UNIT	mm	SHEET NO.	1/8
PROJECT		DRAWING NO.			
		HQ66-CD-01			

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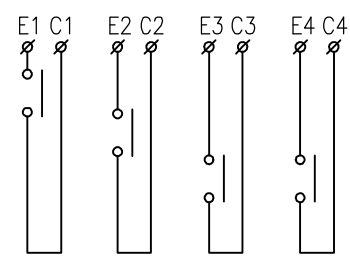
FOR	QUICK FLOAT LEVEL SWITCH
MOUNTING	TOP
ENCLOSURE	WEATHER PROOF (IP54)
MAX. PRESSURE	ATM kgf/cm <sup>2</sup>
MAX. TEMP	150 °C

CABLE ENTRY	PF 1/2"(F)
	■ PF 3/4" (F)_Adaptor

NO.	DESCRIPTION	MATERIAL	REMARK
1	HOUSING	ABS	
2	PROCESS CONN.	<input type="checkbox"/> ABS (Std.) <input checked="" type="checkbox"/> 304 SS	
3	CABLE	SILICONE	
4	FLOAT	316L SS	
5	GUIDE WIRE	316L SS	
6	WEIGHT	316L SS	

PROCESS CONN. SIZE	
<input type="checkbox"/>	80A JIS 10K FF
<input checked="" type="checkbox"/>	ANSI 4" 150# RF

SWITCH	
TYPE	MERCURY
RATING	AC 110V, 1A / DC 24V, 0.5A
FORM	4-SPST



LENGTH (mm)	SWITCH ACTION			
L1	1000	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L2	3000	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L3	4650	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L4	4800	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF	
L	5500			

- NOTE
- GENERAL DIMENSION TOLERANCE ±5mm EXCEPT AS NOTED.
  - Q'TY : 1 SET(S)
  - TAG NO. : LS-081-B
  - NOT APPLICABLE IN CASE OF CABLE LENGTH OVER 6000mm.

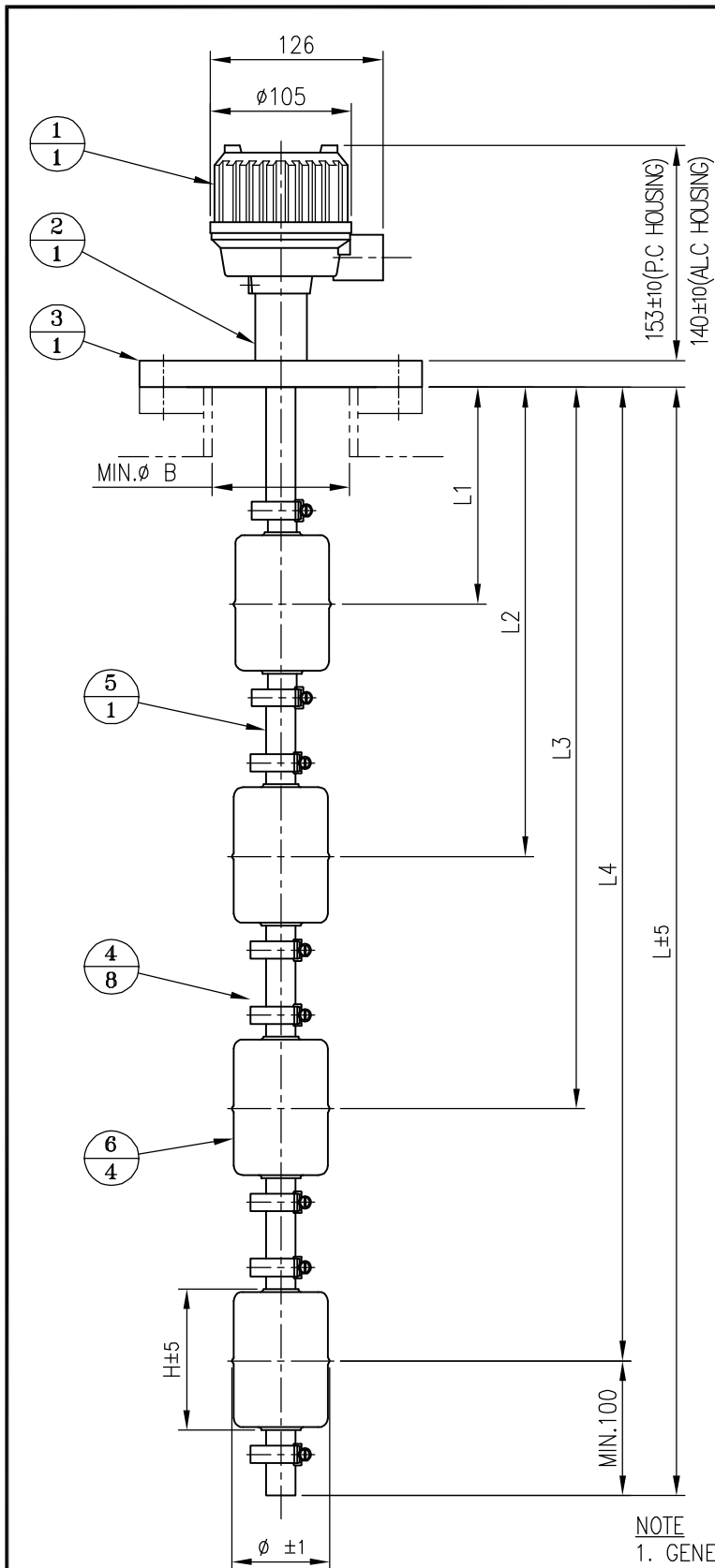
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△	MAY. 2018	1ST ISSUE	D Y KIM	B S SUNG	Y H KIM
NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

**HITROL** HITROL CO., LTD.

TITLE  
**QUICK FLOAT TYPE LEVEL SWITCH**  
**HQ-66S-4F**

SCALE	N.S	UNIT	mm	SHEET NO.	2/8
PROJECT		DRAWING NO.			
		HQ66-CD-01			

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**NOTE**

1. GENERAL DIMENSION TOLERANCE  $\pm 3\text{mm}$  EXCEPT AS NOTED.
2. ACCURACY :  $\pm 5\text{mm}$
3. Q'TY : 1 SET(S)
4. TAG NO. : LS-078-A

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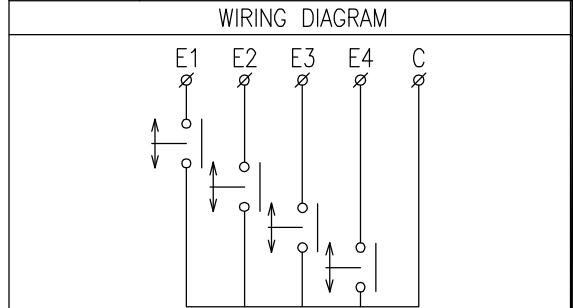
FOR	LEVEL SWITCH
MOUNTING	TOP, FLANGE
ENCLOSURE	WEATHER-PROOF(IP65)
MAX. PRESSURE	10 kgf/cm <sup>2</sup>
MAX. TEMP	80 °C

CABLE ENTRY	<input checked="" type="checkbox"/> PF 3/4" (F)
	<input type="checkbox"/>

NO.	DESCRIPTION	MATERIAL	REMARK
1	HOUSING	<input checked="" type="checkbox"/> P.C <input type="checkbox"/> ALC	
2	CONNECTOR	304 SS	
3	PROCESS CONN.	<input checked="" type="checkbox"/> 304 SS <input type="checkbox"/> 316L SS	
4	STOPPER	316L SS	
5	GUIDE PIPE	316L SS	
6	FLOAT	316L SS	

PROCESS CONN. SIZE/ B	FLOAT SIZE	GUIDE PIPE
<input type="checkbox"/> 80A JIS 10K FF(6t,4Holes)/ $\phi 77$	<input type="checkbox"/> $\phi 73 \times H105$	<input type="checkbox"/> $\phi 21.7$
<input type="checkbox"/> 100A JIS 10K FF(6t,4Holes)/ $\phi 99$	<input checked="" type="checkbox"/> $\phi 95 \times H119$	<input checked="" type="checkbox"/> $\phi 25.4$
<input checked="" type="checkbox"/> ANSI 4" 150# FF/ $\phi 99$		

SWITCH	
TYPE	REED
FORM	4-SPST



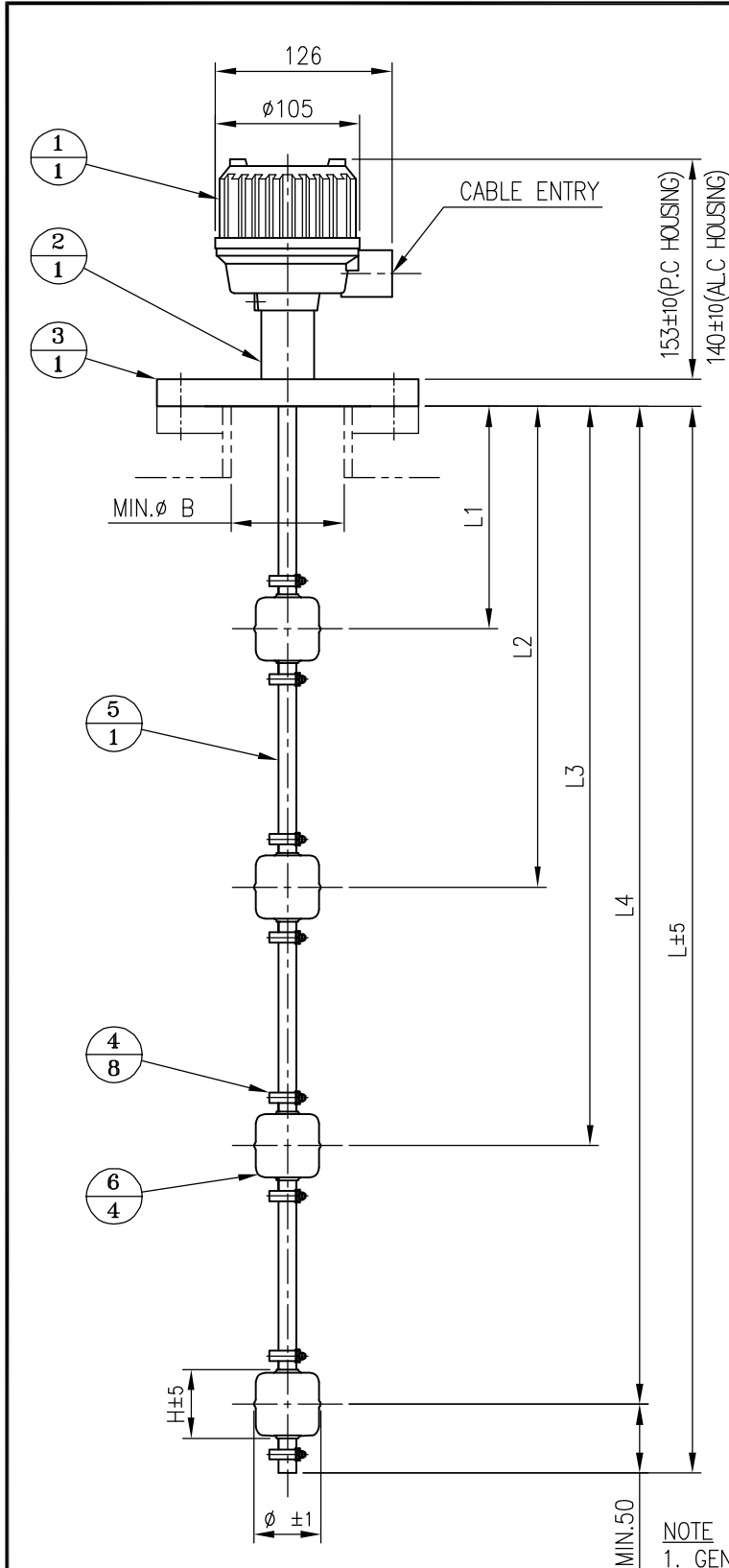
RATING		
FLOAT SIZE	MAX. VOLTAGE	MAX. CURRENT
$\phi 73 \times H105$	250VAC/24VDC	1A/0.5A
$\phi 95 \times H119$	250VAC/24VDC	1A/0.5A

LENGTH (mm)	SWITCH ACTION	
L1 300	<input checked="" type="checkbox"/> $\uparrow$ <input type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L2 800	<input checked="" type="checkbox"/> $\uparrow$ <input type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L3 2250	<input type="checkbox"/> $\uparrow$ <input checked="" type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L4 2700	<input type="checkbox"/> $\uparrow$ <input checked="" type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L 3000		

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	JAN. 2017	1st ISSUE	D Y KIM	J H CHOI	B S SUNG
NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

	HITROL CO., LTD.	SCALE	UNIT	SHEET NO.
		N.S	mm	3 / 8
TITLE		PROJECT		
FLOAT TYPE LEVEL SWITCH		DRAWING NO.		
HR-30S-4F		HR30S-AD-01		

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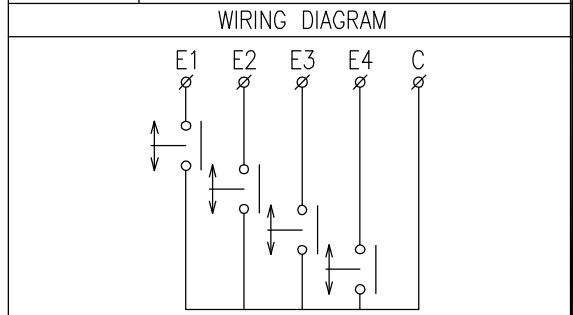
FOR	LEVEL SWITCH
MOUNTING	TOP, FLANGE
ENCLOSURE	WEATHER-PROOF(IP65)
MAX. PRESSURE	10 kgf/cm <sup>2</sup>
MAX. TEMP	80 °C

CABLE ENTRY	<input checked="" type="checkbox"/> PF 3/4" (F)
	<input type="checkbox"/>

NO.	DESCRIPTION	MATERIAL	REMARK
1	HOUSING	<input checked="" type="checkbox"/> P.C <input type="checkbox"/> ALC	
2	CONNECTOR	304 SS	
3	PROCESS CONN.	<input checked="" type="checkbox"/> 304 SS <input type="checkbox"/> 316L SS	
4	STOPPER	316L SS	
5	GUIDE PIPE	316L SS	
6	FLOAT	316L SS	

PROCESS CONN. SIZE/ B	FLOAT SIZE	GUIDE PIPE
<input type="checkbox"/> 50A JIS 10K FF(6t)/ø53	<input checked="" type="checkbox"/> ø49xH50	<input checked="" type="checkbox"/> ø 12.7
<input checked="" type="checkbox"/> ANSI 4" 150# FF/ø53		

SWITCH	
TYPE	REED
FORM	4-SPST



RATING		
FLOAT SIZE	MAX. VOLTAGE	MAX. CURRENT
ø49xH50	250VAC/24VDC	1A/0.5A

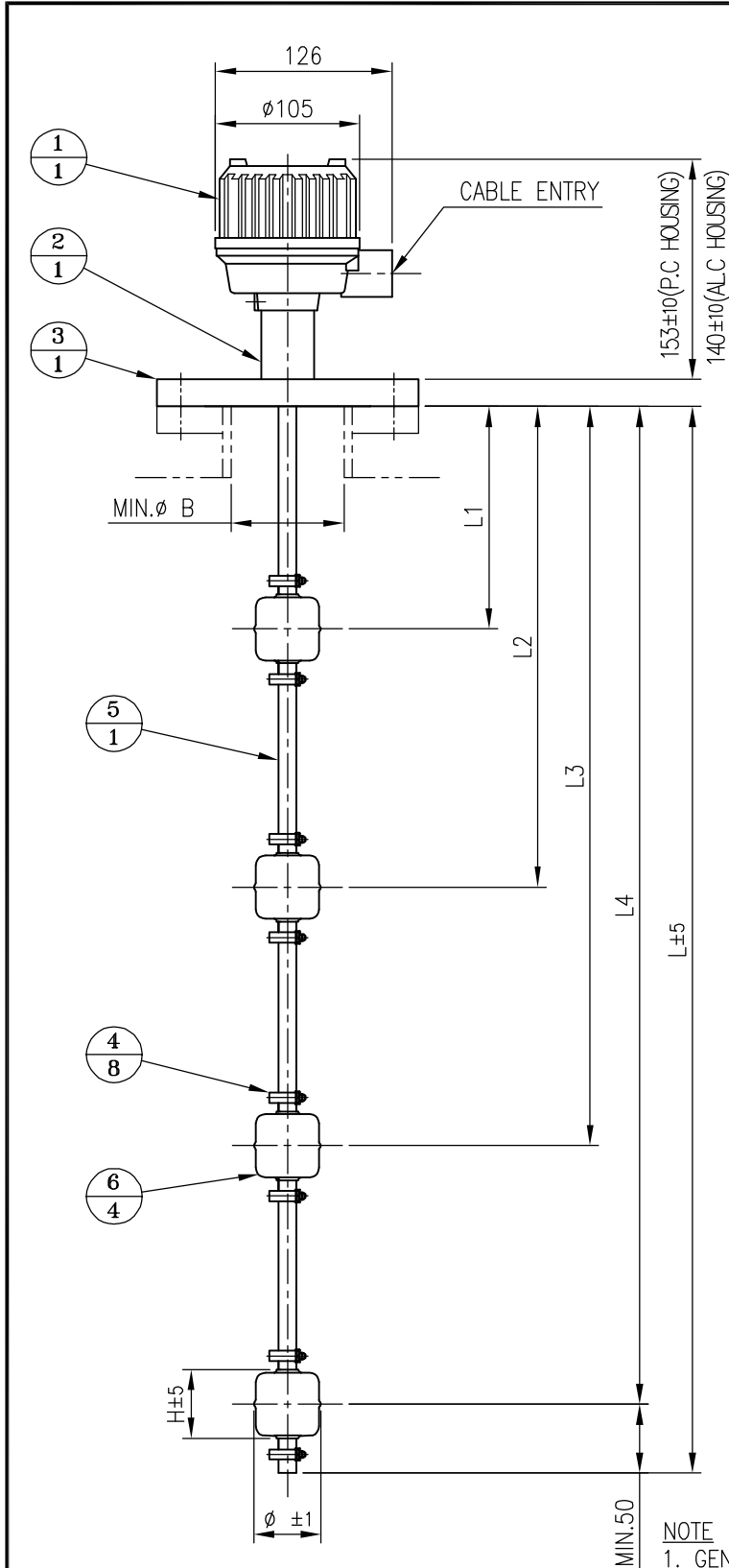
LENGTH (mm)	SWITCH ACTION	
L1	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L2	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L3	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L4	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L	900	

NOTE  
 1. GENERAL DIMENSION TOLERANCE ±3mm EXCEPT AS NOTED.  
 2. ACCURACY : ±5mm  
 3. Q'TY : 1 SET(S)  
 4. TAG NO. : \_\_\_\_\_ **LS-081-G**

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△	JAN. 2017	1st ISSUE	D Y KIM	J H CHOI	B S SUNG
NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

<b>HITROL</b> HITROL CO., LTD.		SCALE	UNIT	SHEET NO.
		N.S	mm	4 / 8
TITLE		PROJECT		
FLOAT TYPE LEVEL SWITCH HR-30S-4F		DRAWING NO.		
		HR30S-BD-01		

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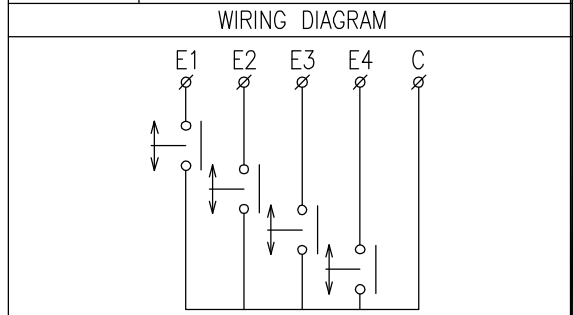
FOR	LEVEL SWITCH
MOUNTING	TOP, FLANGE
ENCLOSURE	WEATHER-PROOF(IP65)
MAX. PRESSURE	10 kgf/cm <sup>2</sup>
MAX. TEMP	80 °C

CABLE ENTRY	<input checked="" type="checkbox"/> PF 3/4" (F)
	<input type="checkbox"/>

NO.	DESCRIPTION	MATERIAL	REMARK
1	HOUSING	<input checked="" type="checkbox"/> P.C <input type="checkbox"/> A.L.C	
2	CONNECTOR	304 SS	
3	PROCESS CONN.	<input checked="" type="checkbox"/> 304 SS <input type="checkbox"/> 316L SS	
4	STOPPER	316L SS	
5	GUIDE PIPE	316L SS	
6	FLOAT	316L SS	

PROCESS CONN. SIZE/ B	FLOAT SIZE	GUIDE PIPE
<input type="checkbox"/> 50A JIS 10K FF(6t)/ø53	<input checked="" type="checkbox"/> ø49xH50	<input checked="" type="checkbox"/> ø 12.7
<input checked="" type="checkbox"/> ANSI 4" 150# RF/ø53		

SWITCH	
TYPE	REED
FORM	4-SPST



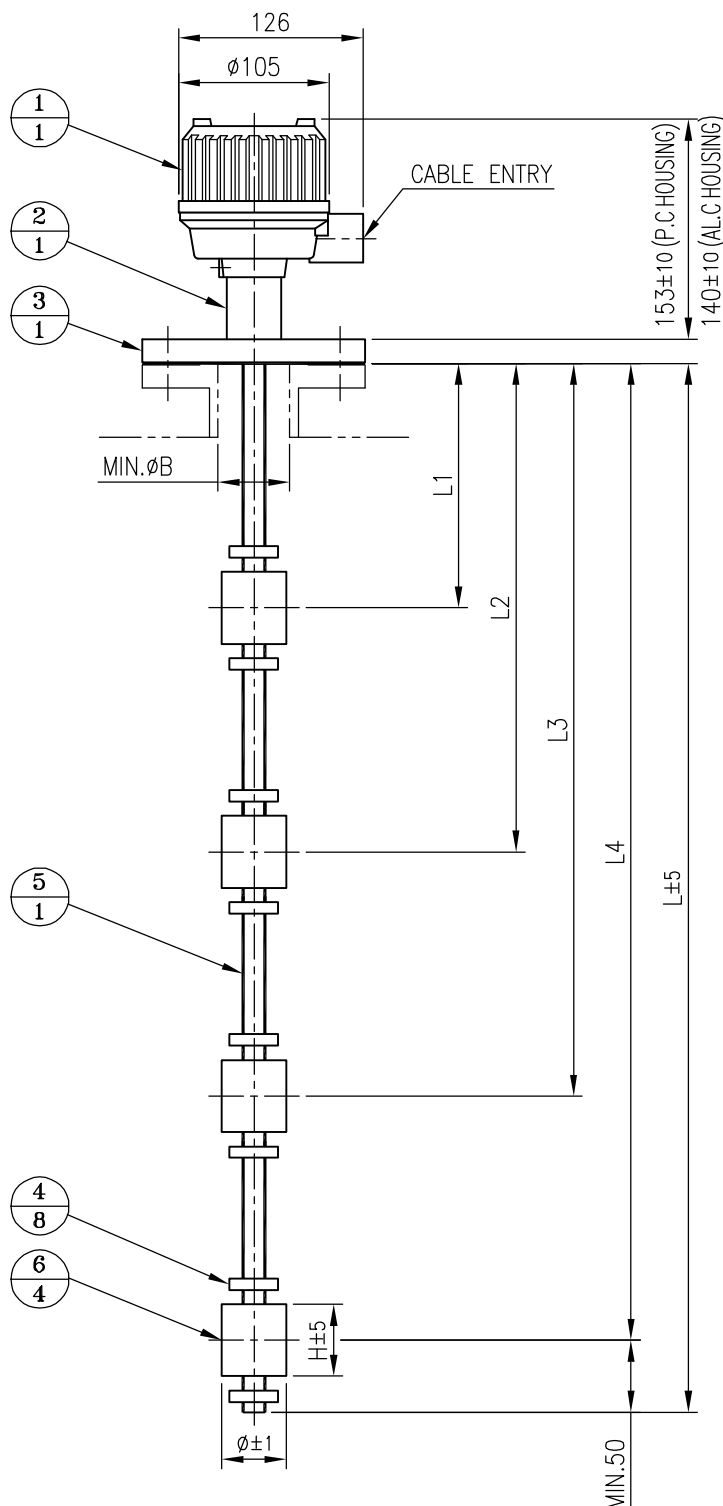
RATING		
FLOAT SIZE	MAX. VOLTAGE	MAX. CURRENT
ø49xH50	250VAC/24VDC	1A/0.5A
LENGTH (mm)	SWITCH ACTION	
L1	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L2	<input checked="" type="checkbox"/> ↑ <input type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L3	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L4	<input type="checkbox"/> ↑ <input checked="" type="checkbox"/> ↓	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L	1500	

NOTE  
 1. GENERAL DIMENSION TOLERANCE ±3mm EXCEPT AS NOTED.  
 2. ACCURACY : ±5mm  
 3. Q'TY : 1 SET(S)  
 4. TAG NO. : \_\_\_\_\_ **LS-081-D**

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△	JAN. 2017	1st ISSUE	D Y KIM	J H CHOI	B S SUNG
NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

<b>HITROL CO., LTD.</b>	SCALE	UNIT	SHEET NO.
	N.S	mm	5 / 8
	PROJECT		
TITLE			DRAWING NO.
<b>FLOAT TYPE LEVEL SWITCH</b> <b>HR-30S-4F</b>			HR30S-BD-01

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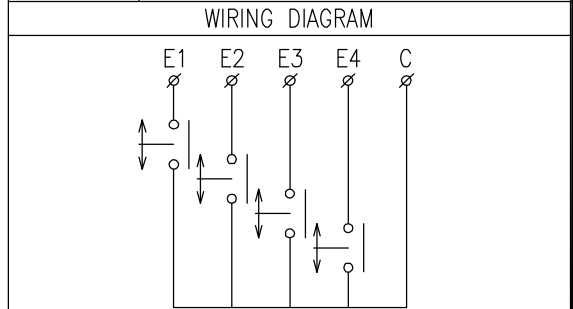
FOR	FLOAT TYPE LEVEL SWITCH
MOUNTING	TOP
ENCLOSURE	WEATHER-PROOF (IP65)
MAX. PRESSURE	0.5 kgf/cm <sup>2</sup>
MAX. TEMP.	80 °C

CABLE ENTRY	<input checked="" type="checkbox"/> PF 3/4"(F) <input type="checkbox"/>
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NO.	DESCRIPTION	MATERIAL	REMARK
1	HOUSING	<input checked="" type="checkbox"/> P.C <input type="checkbox"/> ALC	
2	CONNECTOR	304 SS	
3	PROCESS CONN.	<input checked="" type="checkbox"/> 304 SS <input type="checkbox"/> 316L SS	TEFLON LINED
4	STOPPER	TEFLON	
5	GUIDE PIPE	316L SS	TEFLON LINED
6	FLOAT	TEFLON	

PROCESS CONN. SIZE/ $\phi$ B	FLOAT SIZE	GUIDE PIPE
<input type="checkbox"/> 50A JIS 10K FF(6t)/ $\phi$ 50	<input checked="" type="checkbox"/> $\phi$ 45xH50	<input checked="" type="checkbox"/> $\phi$ 15
<input checked="" type="checkbox"/> ANSI 4" 150# FF/ $\phi$ 50		

SWITCH	
TYPE	REED
FORM	4-SPST



RATING		
FLOAT SIZE	MAX. VOLTAGE	MAX. CURRENT
$\phi$ 45xH50	250VAC/24VDC	1A/0.5A

LENGTH (mm)	SWITCH ACTION	
L1	<input checked="" type="checkbox"/> $\uparrow$ <input type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L2	<input checked="" type="checkbox"/> $\uparrow$ <input type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L3	<input type="checkbox"/> $\uparrow$ <input checked="" type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L4	<input type="checkbox"/> $\uparrow$ <input checked="" type="checkbox"/> $\downarrow$	<input checked="" type="checkbox"/> ON <input type="checkbox"/> OFF
L	3000	

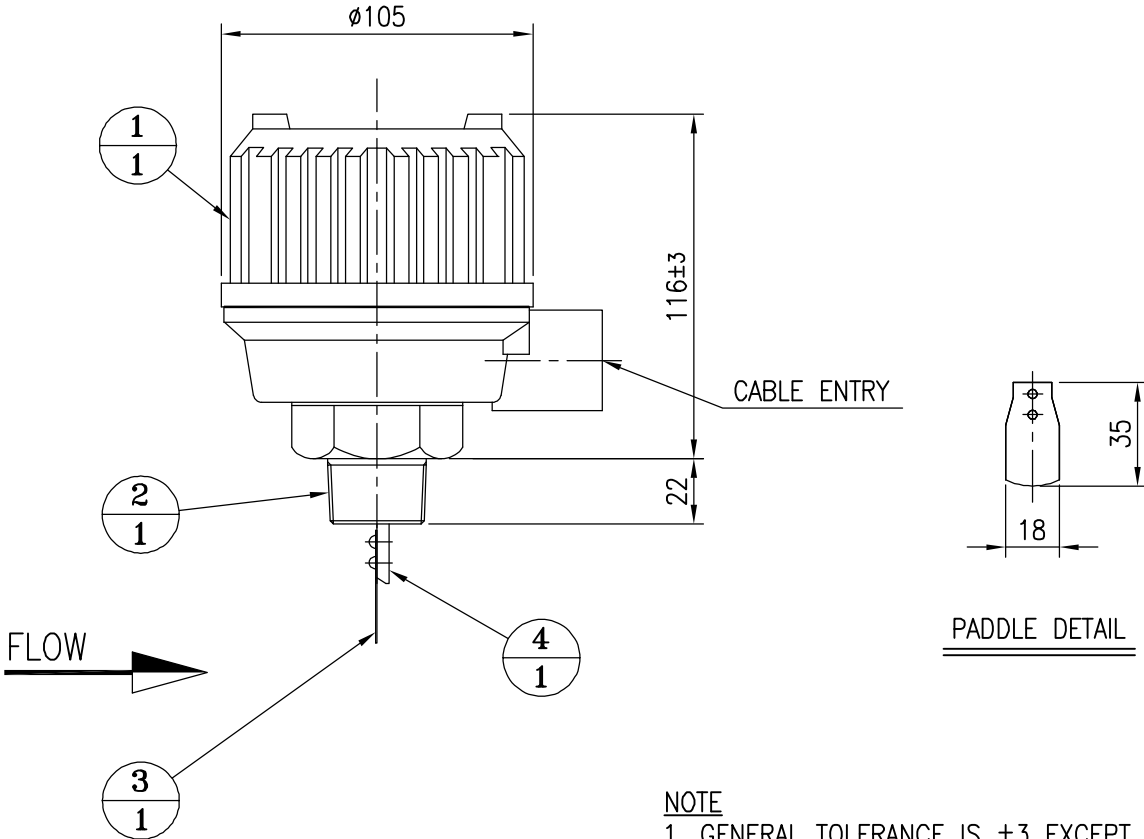
NOTE  
 1. GENERAL TOLERANCE  $\pm$ 3mm EXCEPT AS NOTED.  
 2. ACCURACY :  $\pm$ 5mm  
 3. Q'TY : 1 SET(S)  
 4. TAG NO. : LS-081-E

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NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

<b>HITROL</b> HITROL CO., LTD.		SCALE	UNIT	SHEET NO.
		N.S	mm	6 / 8
TITLE		PROJECT		
FLOAT TYPE LEVEL SWITCH HR-30T-4F		DRAWING NO. HR30T-BAD-01		

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**NOTE**  
1. GENERAL TOLERANCE IS ±3 EXCEPT AS NOTED.

FOR	FLOW SWITCH	
MOUNTING	SCREW	
ENCLOSURE	WEATHER PROOF (IP65)	
AMBIENT TEMP.	-20 ~ +60 °C	
MAX. PRESSURE	10	kgf/cm <sup>2</sup>
MAX. TEMP	120	°C

CABLE ENTRY	<input checked="" type="checkbox"/> PF 3/4"(F)
	<input type="checkbox"/>

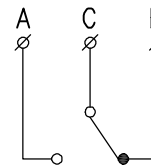
NO.	DESCRIPTION	MATERIAL	REMARKS
1	HOUSING	<input checked="" type="checkbox"/> P.C <input type="checkbox"/> A.L.C	
2	PROCESS CONN.	<input checked="" type="checkbox"/> 304 SS <input type="checkbox"/> 316L SS	
3	PADDLE	316L SS	t0.2
4	SHAFT	316L SS	

BELLOWS MATERIAL	OPERATING PRESS. & TEMP.
<input type="checkbox"/> RUBBER	Up to 5kg/cm <sup>2</sup> & 60°C
<input checked="" type="checkbox"/> SUS 316L	Up to 10kg/cm <sup>2</sup> & 120°C

PROCESS CONN. SIZE
<input type="checkbox"/> PT 1/2"(M)
<input type="checkbox"/> PT 3/4"(M)
<input checked="" type="checkbox"/> PT 1"(M)

TAG NO.	Q'TY	REMARKS
	2	Line size : 1"

SWITCH	
TYPE	MICRO
RATING	AC 250V, 15A / DC 125V, 0.5A
FORM	1-SPDT

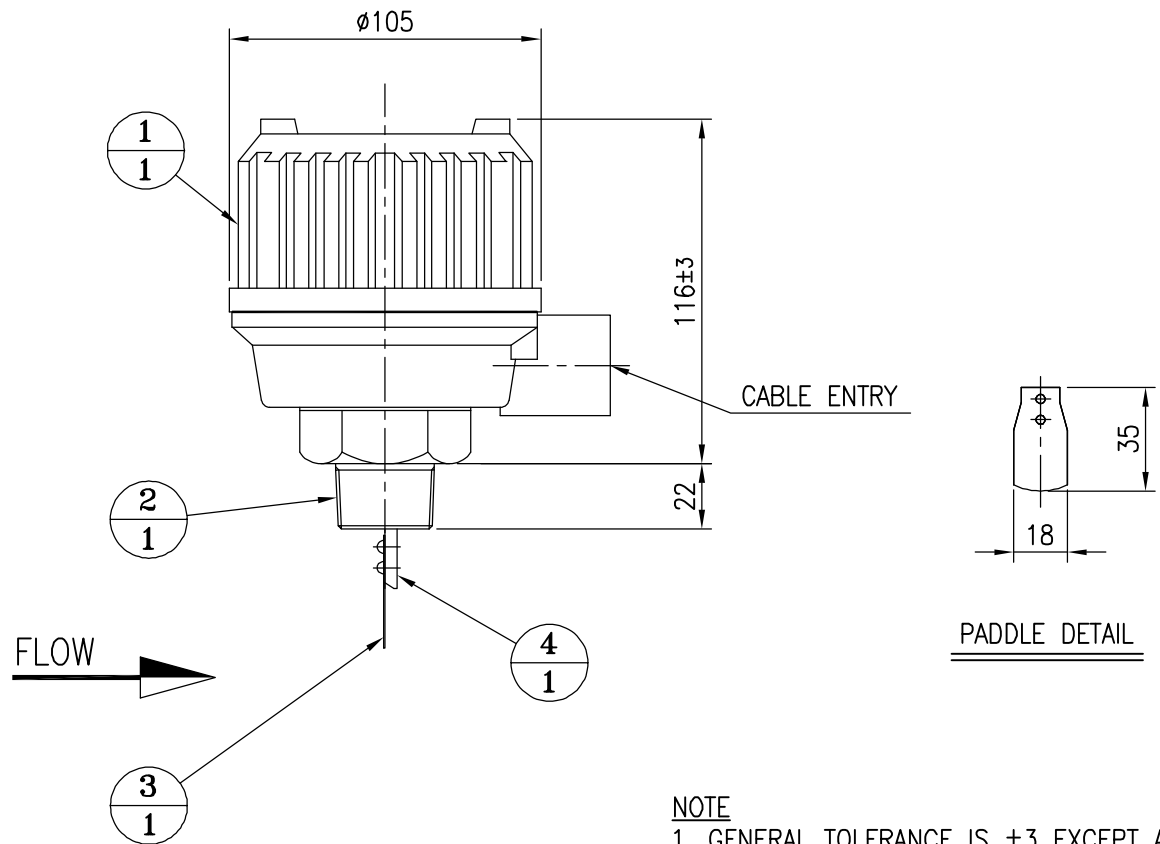


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△	AUG. 2019	1ST ISSUE	H J KIM	B S SUNG	Y H KIM
NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

**HITROL** HITROL CO., LTD.  
TITLE  
**PADDLE TYPE FLOW SWITCH  
HFS-2T**

SCALE	UNIT	SHEET NO.
N.S	mm	7 / 8
PROJECT		
DRAWING NO. HFS2T-B-01		

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PADDLE DETAIL

**NOTE**  
1. GENERAL TOLERANCE IS ±3 EXCEPT AS NOTED.

FOR	FLOW SWITCH	
MOUNTING	SCREW	
ENCLOSURE	WEATHER PROOF (IP65)	
AMBIENT TEMP.	-20 ~ +60 °C	
MAX. PRESSURE	10	kgf/cm <sup>2</sup>
MAX. TEMP	120	°C

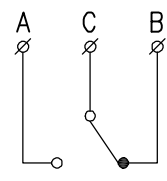
PROCESS CONN. SIZE		
<input type="checkbox"/>	PT 1/2"(M)	
<input type="checkbox"/>	PT 3/4"(M)	
<input checked="" type="checkbox"/>	PT 1"(M)	

TAG NO.	Q'TY	REMARKS
	3	Line size : 1"

CABLE ENTRY	<input checked="" type="checkbox"/> PF 3/4"(F)
	<input type="checkbox"/>

NO.	DESCRIPTION	MATERIAL	REMARKS
1	HOUSING	<input checked="" type="checkbox"/> P.C <input type="checkbox"/> A.L.C	
2	PROCESS CONN.	<input checked="" type="checkbox"/> 304 SS <input type="checkbox"/> 316L SS	
3	PADDLE	316L SS	t0.2
4	SHAFT	316L SS	

SWITCH	
TYPE	MICRO
RATING	AC 250V, 15A / DC 125V, 0.5A
FORM	1-SPDT



BELLOWS MATERIAL	OPERATING PRESS. & TEMP.
<input type="checkbox"/> RUBBER	Up to 5kg/cm <sup>2</sup> & 60°C
<input checked="" type="checkbox"/> SUS 316L	Up to 10kg/cm <sup>2</sup> & 120°C

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△	AUG. 2019	1ST ISSUE	H J KIM	B S SUNG	Y H KIM
NO.	DATE	REVISION	REV'D BY	CHK'D BY	APP'D BY

HITROL CO., LTD.		SCALE	UNIT	SHEET NO.
		N.S	mm	8 / 8
TITLE <b>PADDLE TYPE FLOW SWITCH</b> <b>HFS-2T</b>		PROJECT		
		DRAWING NO. HFS2T-B-01		