

DX-EFS Flow Switches are used for the monitoring of liquid flow in pipes. When the liquid flow stops or starts its paddle actuates a microswitch (NO/NC) , hereby electrical equipments are protected .The flow switch is suitable to use all kinds of non-corrosive liquid.

Flow adjustable via screw mechanism.The products are factory setted. Users can change the adjustment according to application needs.



Certification



II 1/2G Ex db IIC TX¹ Ga/Gb For Gas

II 2D Ex tb IIIC TX² Db For Dust

-20°C ≤ Tamb ≤ +60°C , IP 66/68 (2 Metre / 2 Meters)

*Have a look at the temperature class chart.

DX-EFS

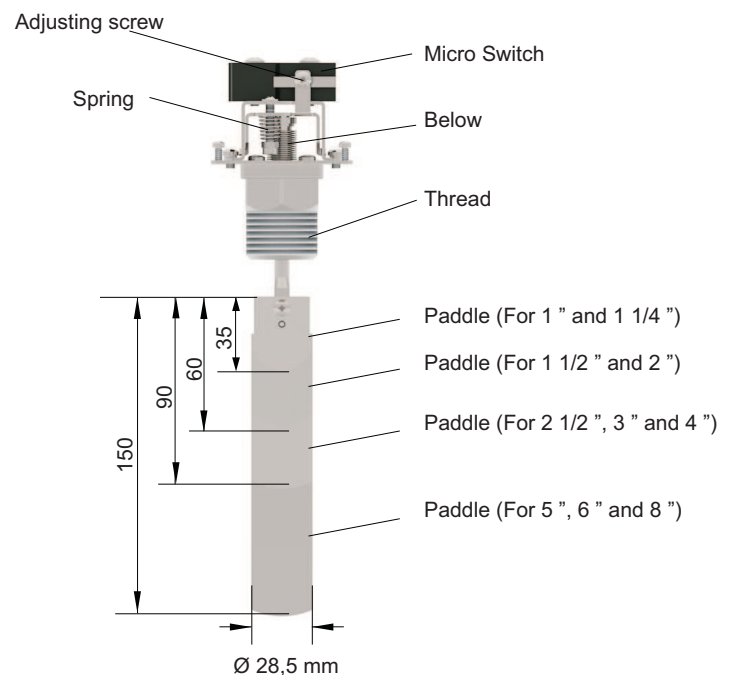
FLOW SWITCH

DX-EFS 41

DX-EFS 61

Advantages :

- * Hot and cold water can be used
- * Suitable for hot and cold liquids.
- * Air tight design.



INSTALLATION :

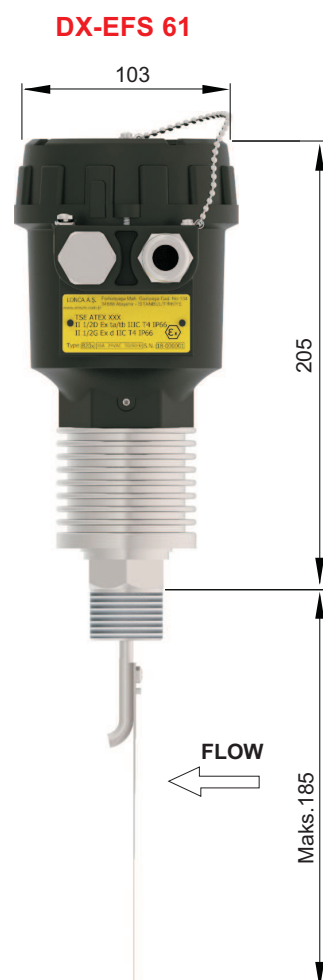
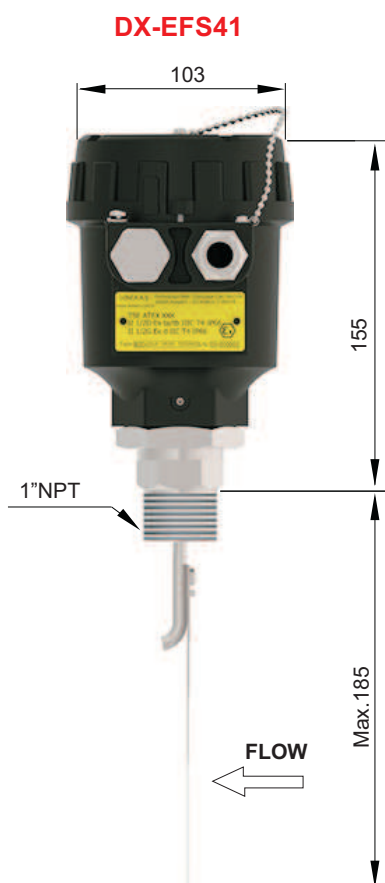
- * Pay attention for right mounting, direction is shown on the switch housing.
- * Install on the return pipe.
- * The switch must be mounted far from elbows, corners , pumps.

CE 2284



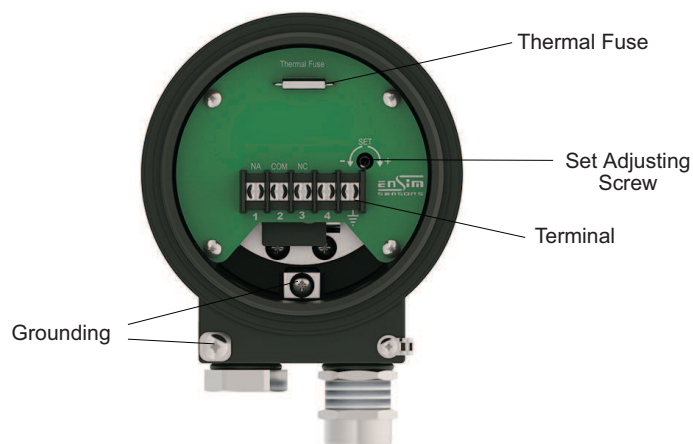
Technical Specifications :

	DX-EFS 41	DX-EFS 61
Fluid	Liquid, Air, Gas	Liquid, Air, Gas
Working Temperature	(-) 40 °C / (+) 145 °C	(-) 40 °C / (+) 175 °C
Working Pressure	Max. 20 bar	Max. 20 bar
Ambient Temperature	(-) 20 °C / (+) 60 °C	(-) 20 °C / (+) 60 °C
Paddle Material	304 Stainless Steel Opt. 316 Stainless Steel	304 Stainless Steel Opt. 316 Stainless Steel
Switch Bracket	304 Stainless Steel	304 Stainless Steel
Connection Material	304 Stainless Steel Opt. 316 Stainless Steel	304 Stainless Steel Opt. 316 Stainless Steel
Paddle Rod Material	304 Stainless Steel Opt. 316 Stainless Steel	304 Stainless Steel Opt. 316 Stainless Steel
Case Material	Aluminium	Aluminium
Bellow Material	316 Stainless Steel	316 Stainless Steel
Electrical Connection	M 20 x 1,5 mm ²	M 20 x 1,5 mm ²
Protection Class	IP 66 / 68	IP 66 / 68
Connection	1 " NPT Male	1 " NPT Male
Pipe Diameter	Up to 1 " ... 8 " pipe	Up to 1 " ... 8 " pipe
Contact	15 A 250 VAC , NO / NC	15 A 250 VAC , NO / NC



Electrical Connection :

For DX-EFS 41, 61



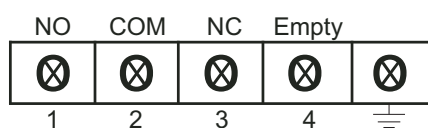
Instruction of the switching set;

Open the switch cover.

To set high flow , turn opposite of the clockwise the adjustment screw.

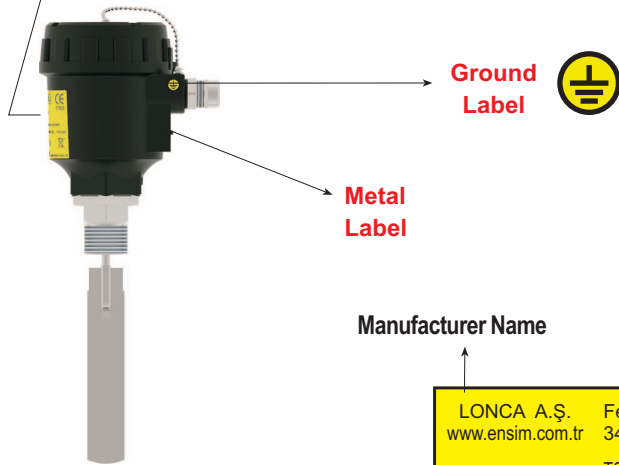
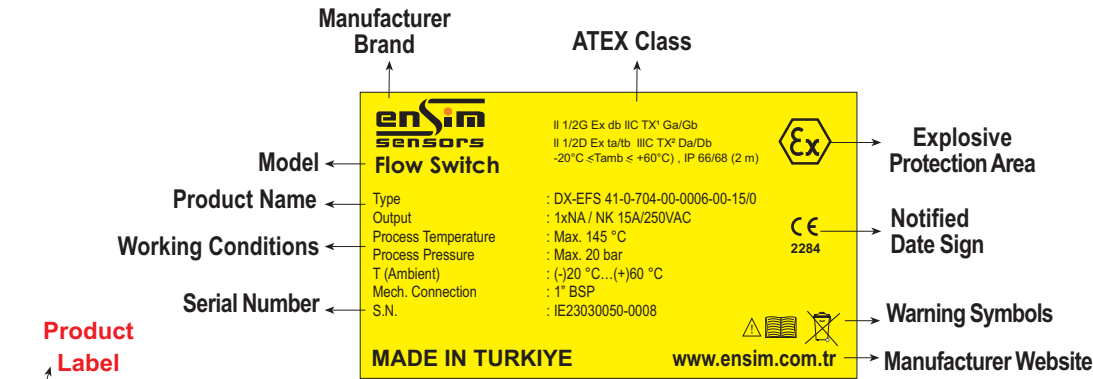
To set low flow , turn clockwise the adjustment screw.

Close the switch cover.

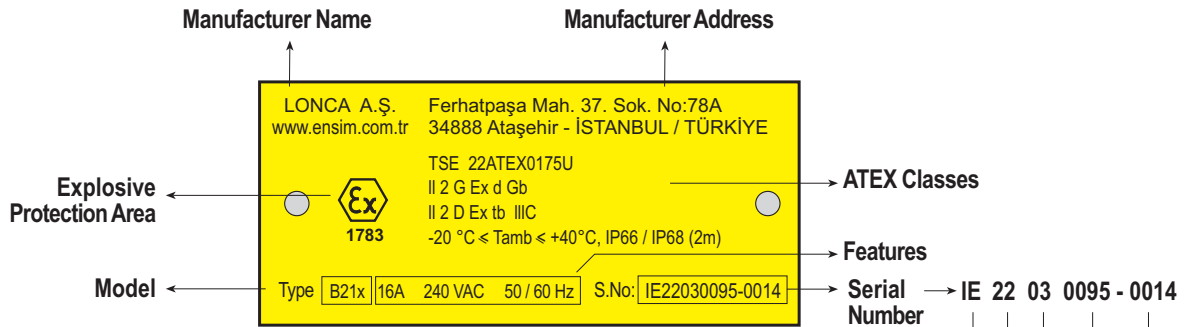


For DX-EFS 41 and DX-EFS 61

DIAMETER (inch)	PALLET LENGHT (mm)	Q max (m3/h)	MINIMUM ADJUSTMENT (m3/h)		MAXIMUM ADJUSTMENT (m3/h)	
			SWITCH ACTION	SWITCH RETURN	SWITCH ACTION	SWITCH RETURN
1	35	3,6	0.8	0.5	1.9	1.6
1 1/4	35	6	1.2	0.6	2.7	2.2
1 1/2	60	9	1.8	1.0	3.8	3.4
2	60	15	3.0	2.3	6.4	5.5
2 1/2	90	24	4.2	3.8	7.5	6.5
3	90	42	6.2	4.4	11.8	10.0
4	90	60	14.0	11.5	28	27.1
5	150	94	27	22	55	53
6	150	120	40	35	84	80
8	150	240	80	70	170	160



DO NOT OPEN WHEN ENERGIZED
KEEP TIGHT WHEN CIRCUIT ALIVE



Note : If the ATEX certificate metal label is damaged,
you can contact the manufacturer with the serial number.

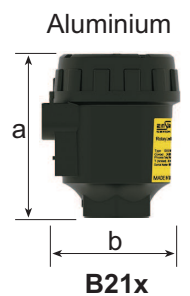
Housing:

ORDER CODE	TYPE	MATERIAL	PROTECTION CLASS	TEMPERATURE (°C)	SIZE a x b (mm)
704	B21x	Aluminium	IP 66 / 68	(-) 40...(+) 200	132 x 104

Cover Seal : NBR Nitrile Rubber 120 °C, Opt. FPM (Viton) 200 °C)

EU-Type Examination Certificate Number : TSE 22ATEX 0175U

The marking of the equipment :



Temperature Class Table

STD. MODEL	DX-EFS (Metal)
Working Temperature	(-) 20 °C... (+) 145 °C / 175 °C
Without opening the cover standby time	20 min.

Thermal Protection Insurance is 105 ° C

(-) 20°C < T Ambien < (+) 30°C...(+) 60°C		Working Temperature :(-) 20...(+) 175°C	GROUP II
DX-EFS 41, 61 (Metal)			
T Ambient MAX. AMBIENT TEMPERATURE ZONE 21 / 1	T Process MAX. PROCESS TEMPERATURE ZONE 20 / 0	TEMPERATURE CLASS	
60°C	<80°C	T6	
60°C	<95°C	T5	
60°C	<125°C	T4	
60°C	<145°C	T3	
60°C	<175°C	T2	

(-) 20°C < T Ambient < (+) 30°C...(+) 60°C		Working Temperature :(-) 20...(+) 60°C	GROUP III
DX-EFS 41, 61 (Metal)			
T Ambient MAX. AMBIENT TEMPERATURE ZONE 21 / 1	T Process MAX. PROCESS TEMPERATURE ZONE 20 / 0	TEMPERATURE CLASS	
60°C	<60°C	T60°C	

Order Form: **Please consider sample models when coding!..**

1 MODEL DX-EFS

Stainless Type.....41 High Temperature Type.....61

2 CERTIFICATE

None.....0 (EN10204-3-1) Material Certification.....1

3 HOUSING

Aluminium , B21x , IP66 / 68.....704

4 ELECTRICAL CONNECTION

With Terminal (For Housing Models).....00 Special x

5 CONNECTION

Thread 1" BSP Male (Std.).....0006 Special x

6 CONNECTION MATERIAL

304 Stainless Steel.....001 Special x
316 Stainless Steel.....002

7 PADDLE DIMENSION

(35-60-90-150mm) Four Paddle (Std.).....00 Special x

8 OUTPUT

Relay NO / NC (15A).....15 Special x

9 OPTIONAL

None...../ 0 Muff 1" BSP 304 St.St...../ M1
Reduction 1" BSP - 1 1/4" BSP 304 St.St...../ R1 Muff 1 1/4" BSP 304 St.St...../ M2
Reduction 1" BSP - 1 1/2" BSP 304 St.St...../ R2 Muff 1 1/2" BSP 304 St.St...../ M3
Reduction 1" BSP - 1 1/4" BSP 316 St.St...../ R3 Muff 1" BSP 316 St.St...../ M4
Reduction 1" BSP - 1 1/2" BSP 316 St.St...../ R4 Muff 1 1/4" BSP 316 St.St...../ M5
Reduction 1" BSP - 1 1/4" BSP ST 37 Steel...../ R5 Muff 1 1/2" BSP 316 St.St...../ M6
Reduction 1" BSP - 1 1/2" BSP ST 37 Steel...../ R6 Muff 1" St 37 Steel...../ M7
Reduction 1" BSP - 2" BSP 304 St.St...../ R7 Muff 1 1/4" ST 37 Steel...../ M8
Protection plate 304 St.St...../ K1 Muff 1 1/2" ST 37 Steel...../ M9
Shelter - (For the outside of the tank) 304 St.St. / K2 M12 x 5 pin socket (Max. 60 V)...../ S1
External LED socket...../ L1
Change for body - Cover/ Z1
Special.....x

SAMPLE

DX-EFS 41-0-704-00-056-01-00-15/0

ATEX Sertifikalı Akış Şalteri , DX-EFS 41 , Pas.Çelik , NPT Erkek Diş , Dört Pedallı , NA / NK Röle Çıkışı

Flow Switch with ATEX Certified , DX-EFS 41, Stainless Steel, NPT Male Thread, Four Paddle , NO / NC Relay Output