

### **Turbo-Lux® 3**

Orifice flow meters

FM, LPCB and VdS approved fire pump test meter



- » Nominal size from 2" / DN 50 to 12" / DN 300
- » Pump rate from 50 - 5 000 USgpm (185 - 19 000 lpm)  
Measuring range from 20 - 10 000 USgpm (75 - 38 000 lpm)
- » **NEW:** with measuring accuracy certificate for bypass meter - standard
- » Easy to install with grooved connection
- » Clever installation just with one screw (no tools)
- » Horizontal, vertical or any other flow direction possible
- » Long lifespan

## 1 TECHNICAL DATA

<b>Measuring principle</b>	Orifice plate flowmeter with variable flowmeter as indication
<b>Input</b>	
» Nominal size	2"/DN 50 grooved ends (Ø60.3 mm) 2½"/DN 65 grooved ends (Ø73.0 mm) 2½"/DN 65 grooved ends (Ø76.1 mm) 3"/DN 80 grooved ends (Ø88.9 mm) 4"/DN 100 grooved ends (Ø114.3 mm) 6"/DN 150 grooved ends (Ø165.1 mm) 6"/DN 150 grooved ends (Ø168.3 mm) 8"/DN 200 grooved ends (Ø219.1 mm) 10"/DN 250 grooved ends (Ø273.0 mm) 12"/DN 300 grooved ends (Ø323.9 mm)
» Pressure limit	PN 16 (232 psig)
» Hydrostatically strength/ Pressure strength	64 bar (928 psig) for 5 min. (FM) 40 bar (580 psig) for 5 min. (LPCB) 64 bar (928 psig) for 10 min. (VdS)
<b>Measuring accuracy</b>	±2.0 % of full scale value (FM) ±5.0 % of measured value (LPCB) ±2.5 % of full scale value (VdS)
<b>Application conditions</b>	
» Temperature limit	+4 °C to +50 °C (+39 °F to +122 °F)
» Medium	Water
<b>Design/ Material</b>	
» Orifice plate 2"/DN 50 - 4"/DN 100 6"/DN 150 - 12"/DN 300	Housing tube in stainless steel with turned grooved connection coated steel (RAL 5015) with rolled grooved connection <sup>1)</sup>
» Differential pressure tube	Brass
» Float	Stainless steel
» Bypass orifice	Stainless steel
» Filter	Stainless steel
» Seal	NBR
<b>Certifications</b>	FM Approval 3056052 LPCB Certificate Number 1385a VdS G415006

1) optional in stainless steel with rolled grooved connection

### 1.1 Dimensions and weights

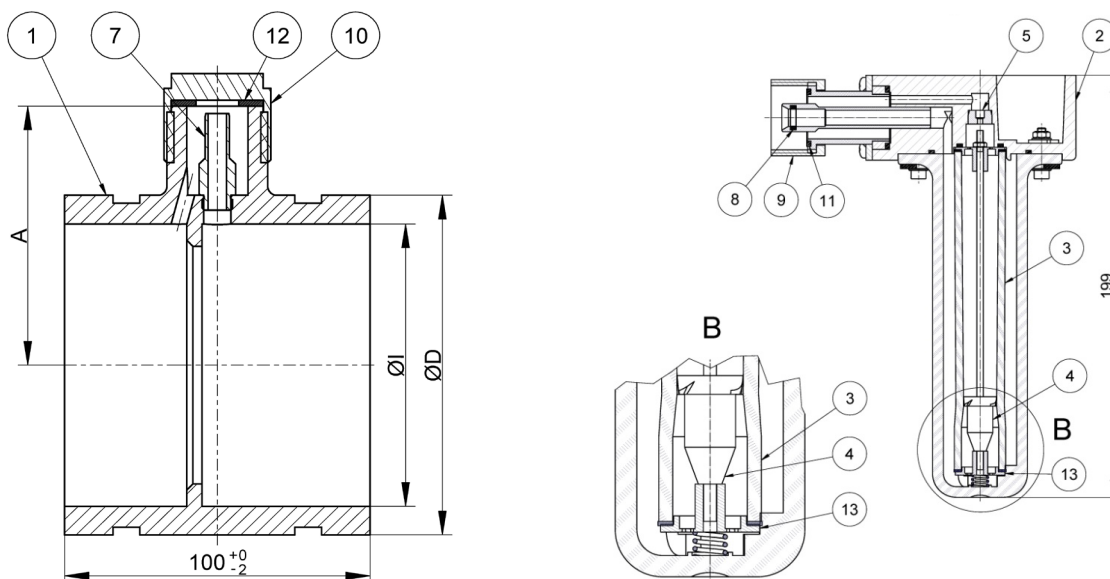


Fig. 1 Turbo-Lux® 3 orifice plate and bypass meter, Drawing and dimensions 2"/DN 50 - 4"/DN 100

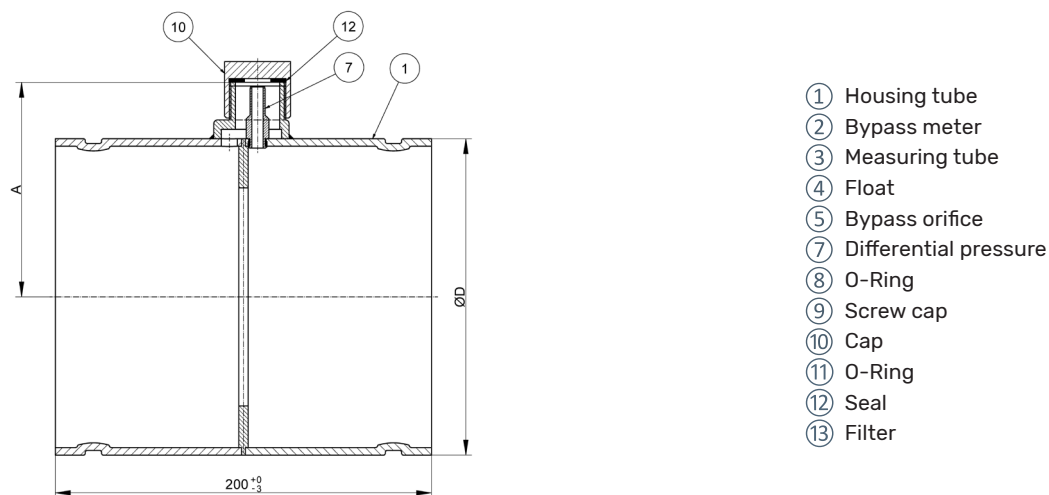


Fig. 2 Turbo-Lux® 3 orifice plate, Drawing and dimensions 6"/DN 150 - 12"/DN 300

Nominal size	Dimensions mm (inch)			Weight
	Length	Ø Diameter (outside)	Packaging size	
2"/DN 50	100 (3.937)	60.3 (2.375)	380 x 270 x 250	2.0 (4.41)
2½"/DN 65	100 (3.937)	73.0 (2.875)	380 x 270 x 250	2.1 (4.63)
2½"/DN 65	100 (3.937)	76.1 (3.000)	380 x 270 x 250	2.1 (4.63)
3"/DN 80	100 (3.937)	88.9 (3.500)	380 x 270 x 250	2.3 (5.07)
4"/DN 100	100 (3.937)	114.3 (4.500)	380 x 270 x 250	3.2 (7.06)
6"/DN 150	200 (7.874)	165.1 (6.500)	380 x 270 x 250	4.9 (10.80)
6"/DN 150	200 (7.874)	168.3 (6.625)	380 x 270 x 250	4.9 (10.80)
8"/DN 200	200 (7.874)	219.1 (8.625)	380 x 270 x 250	6.4 (14.11)
10"/DN 250	200 (7.874)	273.0 (10.750)	500 x 350 x 300	9.1 (20.06)
12"/DN 300	200 (7.874)	323.9 (12.750)	500 x 350 x 350	10.9 (24.03)

Tab. 1 Dimensions and weights

## 2 DESCRIPTION CODE

**Turbo-Lux® 3 (Fire Pump Test Meter)** Inlet min. 5 x D and outlet path min. 2 x D

**7ME5835 - 0AA00 -**    **0 /**

①      ②                      ③

① **Measuring accuracy certificate for orifice plate flowmeter (SET: orifice plate and bypass meter)**

<b>0</b>	without
<b>1</b>	with (max. pump-rating 3 500 USgpm)

② **Nominal size / Pump rating / Flow range**

	Nominal size	Pump rating	Flow range		Approval		
	grooved ends	USgpm	USgpm	LPM	FM	LPCB	VdS
<b>EB</b>	2"/DN 50 (Ø60.3)	50	20 - 100	75 - 375	X	X	X
<b>UC</b>	2½"/DN 65 (Ø73.0)	100	40 - 200	150 - 750	X	-	-
<b>FC</b>	2½"/DN 65 (Ø76.1)	100	40 - 200	150 - 750	X	X	X
<b>GD</b>	3"/DN 80 (Ø88.9)	150	60 - 300	220 - 1100	X	X	X
<b>GE</b>	3"/DN 80 (Ø88.9)	200	80 - 400	300 - 1500	X	X	X
<b>HF</b>	4"/DN 100 (Ø114.3)	250	100 - 500	380 - 1900	X	X	X
<b>HG</b>	4"/DN 100 (Ø114.3)	300	120 - 600	460 - 2 300	X	X	X
<b>HH</b>	4"/DN 100 (Ø114.3)	400	160 - 800	600 - 3 000	X	X	X
<b>HJ</b>	4"/DN 100 (Ø114.3)	450	180 - 900	680 - 3 400	X	X	X
<b>XK</b>	6"/DN 150 (Ø165.1)	500	200 - 1 000	760 - 3 800	X	X	X
<b>XL</b>	6"/DN 150 (Ø165.1)	750	300 - 1 500	1 130 - 5 650	X	X	X
<b>XM</b>	6"/DN 150 (Ø165.1)	1 000	400 - 2 000	1 500 - 7 500	X	X	X
<b>XN</b>	6"/DN 150 (Ø165.1)	1 250	500 - 2 500	1 900 - 9 500	X	X	X
<b>KK</b>	6"/DN 150 (Ø168.3)	500	200 - 1 000	760 - 3 800	X	X	X
<b>KL</b>	6"/DN 150 (Ø168.3)	750	300 - 1 500	1 130 - 5 650	X	X	X
<b>KM</b>	6"/DN 150 (Ø168.3)	1 000	400 - 2 000	1 500 - 7 500	X	X	X
<b>KN</b>	6"/DN 150 (Ø168.3)	1 250	500 - 2 500	1 900 - 9 500	X	X	X
<b>LP</b>	8"/DN 200 (Ø219.1)	1 500	600 - 3 000	2 200 - 11 000	X	X	X
<b>LQ</b>	8"/DN 200 (Ø219.1)	2 000	800 - 4 000	3 000 - 15 000	X	X	X
<b>LR</b>	8"/DN 200 (Ø219.1)	2 500	1 000 - 5 000	3 800 - 19 000	X	X	X
<b>LS</b>	8"/DN 200 (Ø219.1)	3 000	1 200 - 6 000	4 500 - 22 500	X	X	X*
<b>MT</b>	10"/DN 250 (Ø273.0)	3 500	1 400 - 7 000	5 300 - 26 500	X	-	-
<b>MU</b>	10"/DN 250 (Ø273.0)	4 000	1 600 - 8 000	6 000 - 30 000	X	-	-
<b>MV</b>	10"/DN 250 (Ø273.0)	4 500	1 800 - 9 000	6 800 - 34 000	X	-	-
<b>NW</b>	12"/DN 300 (Ø323.9)	5 000	2 000 - 10 000	7 600 - 38 000	X	-	-

\*VdS-limited flow range up to 10 m/s (corresponds to 20 800 lpm)

③ **Options**

<b>00R</b>	Housing tube in colour RAL 3000, option for nominal size 6"/DN 150 to 12"/DN 300
<b>00S</b>	Housing tube made in stainless steel, option for nominal size 6"/DN 150 to 12"/DN 300

**Bypass Flowmeter (Replacement)**

**7ME5835 - 0AA01 - 0**   **0**

②

**Replacement cap (incl. gasket)**

**7ME5835-0AA01- 0AA0**