

ATEX approved air treatment systems

Tapflo is proud to announce that FESTO air treatment systems are now available in explosion proof execution as standard therefore can be used in potentially explosive atmospheres.

With the new standard introduction, the air treatment systems have been selected to optimize the air flow delivered to the pump. Furthermore, sets have been equipped with additional push-in fittings indicating the appropriate tube diameter for the air supply line.

Air quality

Recommended by Tapflo air quality according to PN-ISO8573
1:2010 is 6:7:4 (particles class 6, water class 7 and oil class 4).

1. ATEX compliance

<u>The air treatment systems correspond to the pumps ATEX zone</u> however please keep in mind that pump ATEX classification is less strict.

1. ATEX (directive 2014/34/EU) classification of FESTO air treatment systems:

Gas: II 2G Ex c T6

Dust: II 2D Ex c 60°C

2. ATEX (directive 2014/34/EU) classification of Tapflo TX pumps:

Gas & Dust: II 2 GD IIB c T4

Equipment group: II – all other explosive areas than mines;

Category group: 2 – high level of protection (can be used in zone 1);

Atmosphere: **G** – gas;

D - dust;

Explosion group: IIB – such as ethylene;
Type of protection: c – constructional safety;

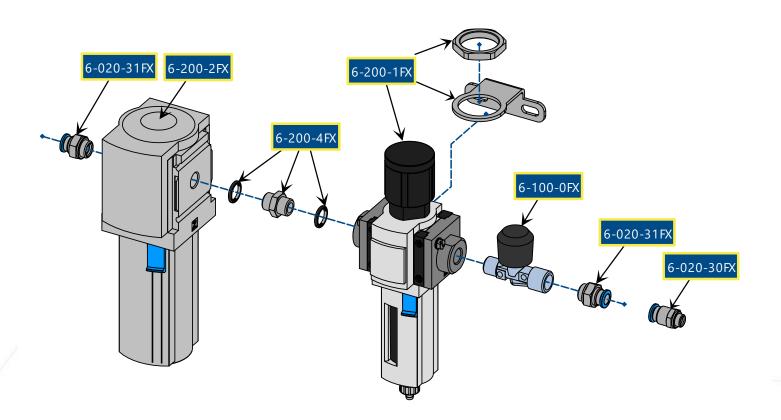
Temperature class: T4, T6– in the event of a malfunction, the maximum temperature

of a surface that may be exposed to gas T4 = 135 °C, T4 = 85°C



2. Ordering

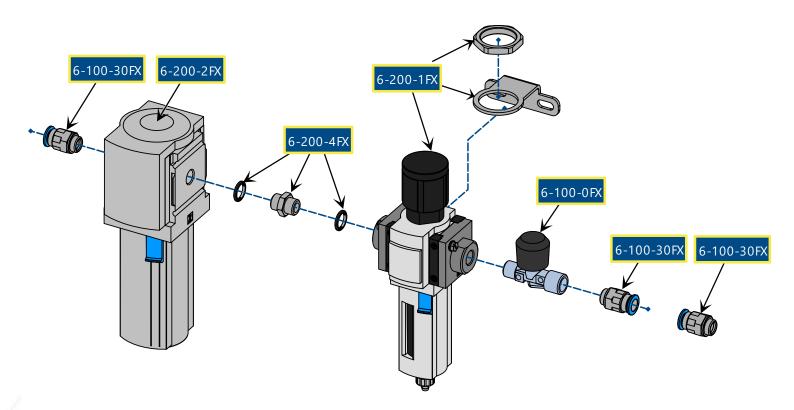
2.1. T20/25/30



Item number	Qty	Description	Connection size	6-020-001FX	6-020-002FX
6-100-0FX	1	Needle valve	1/4"	✓	✓
6-200-1FX	1	Filter-regulator	1/4"	× × 1/11 - 11	√ //
6-200-2FX	1	Water-separator	1/4		Y
6-020-30FX	1	Pump push-in fitting	1/8" / 8mm	// //	√ ✓
6-020-31FX	2	Push-in fitting	1⁄4" / 8mm		✓
6-200-4FX	/1	Nipple + sealing	1/4" / 1/4"		✓



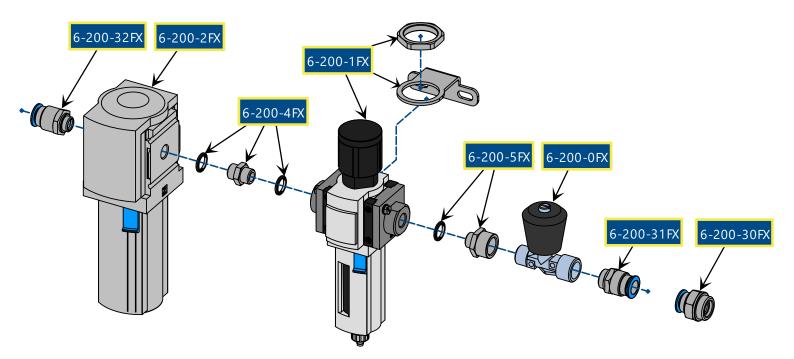
2.2. T50/70/80/100/120/125



Item number	Qty	Description	Connection size	6-100-001FX	6-100-002FX
6-100-0FX	1	Needle valve	1/4"		
6-200-1FX	1	Filter-regulator	1/4"		✓
6-200-2FX	1	Water-separator	1/4		✓
6-100-30FX	3	Push-in fitting	1⁄4" 10mm		✓/
6-200-4FX	1	Nipple + sealing	1/4" 1/4"	~// \/	✓



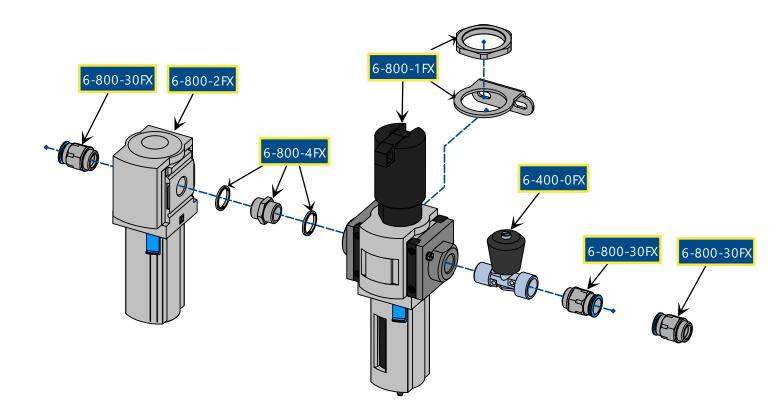
2.3. T200/220/225



Item number	Qty	Description	Connection size	6-200-001FX	6-200-002FX
6-200-0FX	1	Needle valve	3/8"	✓	✓
6-200-1FX	1	Filter-regulator	1/4"	✓	✓
6-200-2FX	1	Water-separator	1/4"	11111	1/2 1
6-200-30FX	1	Pump push-in fitting	½" 12mm	V 1	✓
6-200-31FX	1	Push-in fitting	3/8" 12mm	✓	<i>✓ ✓</i>
6-200-32FX	1	Push-in fitting	1⁄4" 12mm	√ // /	✓
6-200-4FX	1	Nipple + sealing	1/4" 1/4"		✓
6-200-5FX	1	Reducing nipple + sealing	1⁄4" 3/8"	/	✓



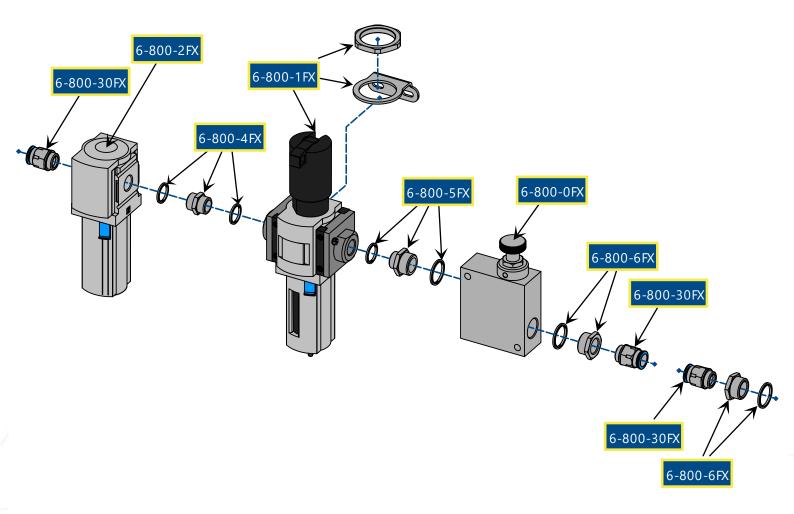
2.4. T400/420/425



Item number	Qty	Description	Connection size	6-400-001FX	6-400-002FX
6-400-0FX	1	Needle valve	1/2"	/ / /	1-1-
6-800-1FX	1	Filter-regulator	1/2"	✓	/ /
6-800-2FX	1	Water-separator	1/2"		/
6-800-30FX	3	Push-in fittings	½" 16mm	1	~
6-800-4FX	1	Nipple + sealing	1/2" 1/2"		Y



2.5. T800/820/825



Item number	Qty	Description	Connection size	6-800-001FX	6-800-002FX	
6-800-0FX	1	Needle valve	3/4"	√ // /	✓ /	
6-800-1FX	1	Filter-regulator	1/2"	√	✓/	
6-800-2FX	1	Water-separator	1/2"	# 1 -	V	
6-800-30FX	3	Push-in fittings	½" 16mm	✓	✓ ✓	
6-800-4FX	1	Nipple + sealings	1/2" 1/2"	/ / /	/ /	
6-800-5FX	1	Reducing nipple + sealings	1/2" 3/4"		4	
6-800-6FX	1*/2**	Reduction + sealings	3/4" 1/2"	✓ ✓	✓	

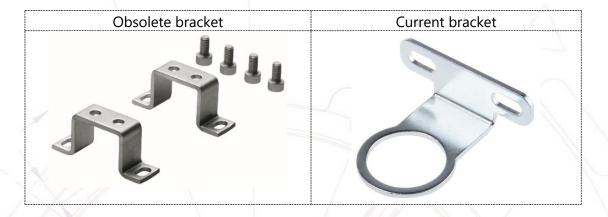
^{*} Plastic & SS pumps: 6-800-001FX & 6-800-001FX

^{**} Aluminum pumps: 6-820-001FX & 6-820-002FX



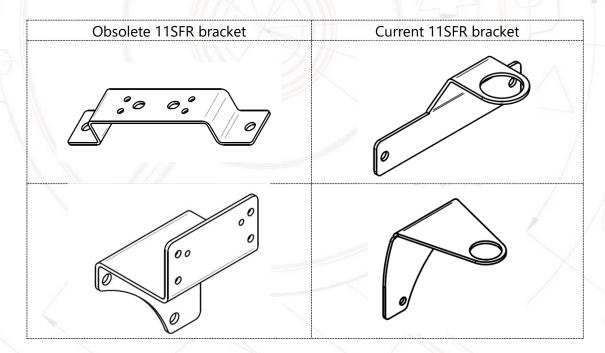
3. Installation

New mounting bracket standard - mounting holes spacing differs from previous one.



➤ New <u>11SFR</u> standard – New air treatment system does not fit previous standard bracket of built-on execution. In order to fix the new air treatment system on the pump keep in mind to order revised bracket <u>6-xxx-1175</u>.

Note! Air treatment system mounting bracket code does not change. To order obsolete use code 6-xxx-1175/N.





Airflow is a complex issue, to ease air supply installation we have prepared the below table indicating suggested pneumatic hoses internal diameters outgoing from main supply line. Please keep in mind that using insufficient hoses parameters can decrease pump maximum capacity.

Pump size	Hose internal diameter [mm]		
<u>T9</u>	<u>6</u>		
<u>T20</u>	<u>6</u>		
<u>T50</u>	<u>8</u>		
<u>T100</u>	8		
<u>T200</u>	<u>9</u>		
<u>T400</u>	<u>12</u>		
<u>T800</u>	12		

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Air flow

When calculating air flow losses please keep in mind that they are much higher in comparison to water. It is crucial to use appropriate hose diameters and keep the air supply line as short as possible.