

FAST MOVING TECHNOLOGY

*STÄUBLI*

# SAF 45 refuelling system

Fuel | Motorsports





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# Designed for performance and safety

## Optimal flow

The SAF 45 coupling has a flow rate which complies with FIA regulations. The coaxial design enables safe and efficient refuelling during pit stops, this is due to single fuel and vent hose.

## Performance reliability

The socket is fitted with a polyurethane sleeve which increases durability and enables it to withstand shocks. The design ensures smooth transition from the plug during connection and disconnection.

## Simple operation

The main components are made from high resistance aluminium in order to keep the weight to a minimum.

## Safe and secure connection

The patented safety system prevents any fuel from being released until the socket has fully connected with the plug. Once this connection has been made, the valve will open and allow fuel to flow until the operator releases the levers.

## Secure connection

To secure the connection between the socket and the plug, push and hold down the two levers.

## Clean-break, non-spill design


The clean-break, non-spill design prevents any spillage on connection and disconnection.

## Confidence guaranteed

The operators safety is high priority for Stäubli, which is why the users can have full confidence in the electrical conductivity between all components of the refuelling line.



US PATENT 7 048 020  
Chinese Patent  
n° ZL200410086022.0  
and other countries

 **The opportunity to spend less and contribute to a sustainable development programme**

With Stäubli, you can rely on:

- the performance of your equipment
- reliability of long-term investments

# Technical specifications



Minimum and maximum allowable temperatures TS (°C)	0 and 50
Connecting force to 0 bar (daN)	31
Retaining force to 0 bar (daN)	21

Weight	
Coaxial socket	5300 g
Coaxial socket + bottle	11800 g
Tank mounted plug	1300 g
Plug for hose (without collector)	1510 g
Vent collector	390 g
Drain plug	1340 g
Shut-off	double



The bottle socket is available in both straight and tilted versions.

## Construction

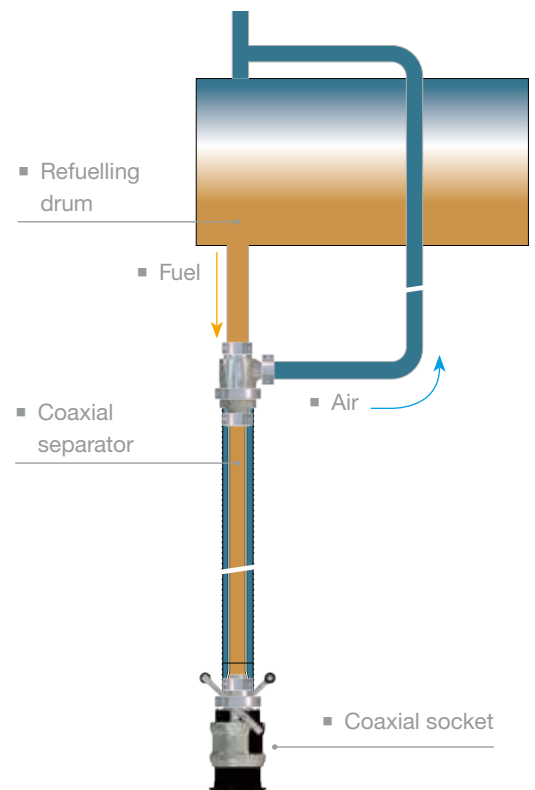
### Mainly aluminium

### Seals

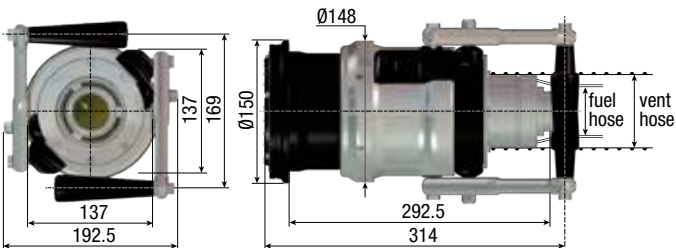
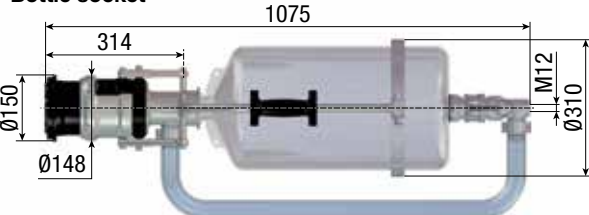
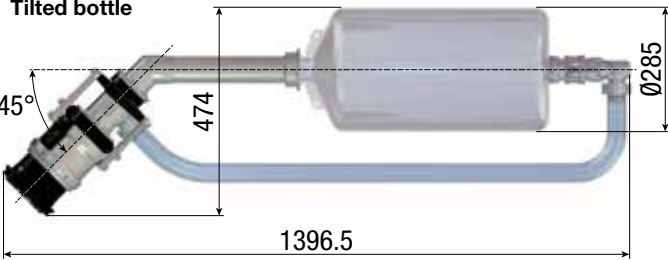
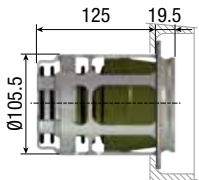
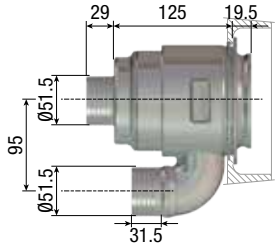
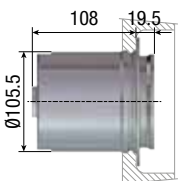
- Perfluoroelastomer (JKV) in the fluid stream.

### Other

- Fluorocarbon

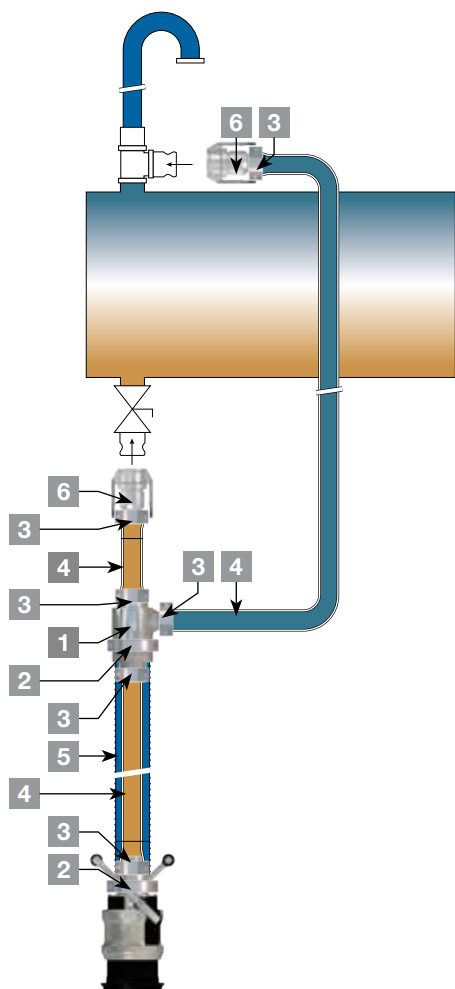


**PART NUMBERS**

Socket		Part numbers
<b>Coaxial socket</b> 		<b>Car</b> fuel hose : ID = 38 mm vent hose : ID = 75 mm
		<b>SAF 45.1838/CX/JKV</b>
		<b>Motorcycle</b> fuel hose : ID = 55 mm vent hose : ID = 90 mm
		<b>SAF 45.1855/CX/JKV</b>
<b>Bottle socket</b>		
		<b>SAF 45.1025/JKV</b>
<b>Tilted bottle</b>		
		<b>SAF 45.1025/RO/JKV</b>
<b>Plug</b>		<b>Part numbers</b>
<b>Tank mounted plug</b> 		<b>SAF 45.5000/JV</b>
<b>For hose 51 mm (2")</b> 		<b>Plug</b> <b>SAF 45.5851/JV</b>
		<b>Vent collector</b> <b>SAF 45.9051</b>
<b>Drain plug for vent line</b>		<b>Part numbers</b>
<b>Tank mounted plug</b> 		<b>SAF 45.5000/DN/JV</b>
<b>Drain tool</b>		<b>Part numbers</b>
Stäubli's specific drain tool allows the bottle or the line to be completely drained (filling and vent line) after use.		<b>R12981000</b>

## PART NUMBERS

# Complete filling line



Car	Quantity for a complete line	Part numbers
	1	SAF 45.9038/CX

**1 Coaxial separator**  
 a, b and c:  
 for hose ID = 38 mm  
 d: for hose ID = 75 mm



	2	SAF 45.9003
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**2 Clamps**  
 (clamps and screws)  
 for hoses ID = 75 mm



	6	SAF 45.9001
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**3 Clamps**  
 (clamps and screws)  
 for hoses ID = 38 mm



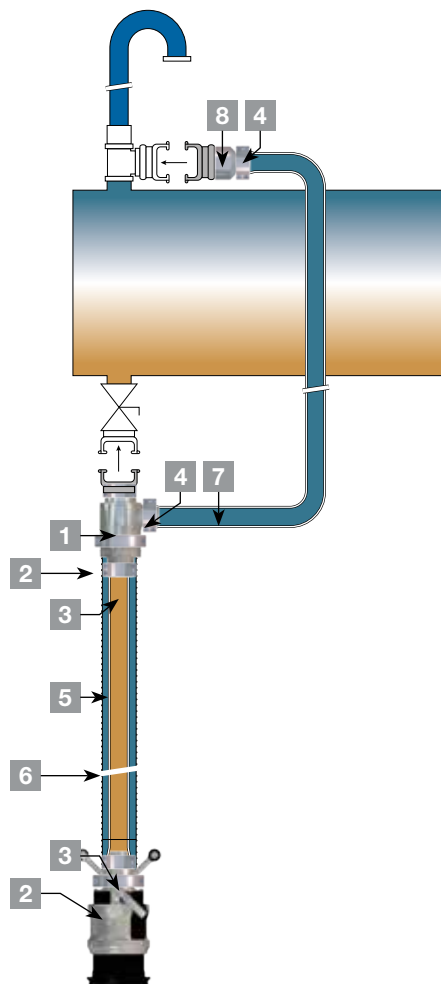
<b>4 Hoses ID = 38 mm (30 meter roll)</b>	-	FILLFLEX 38
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<b>5 Hoses ID = 75 mm (20 meter roll)</b>	-	VENTFLEX 75
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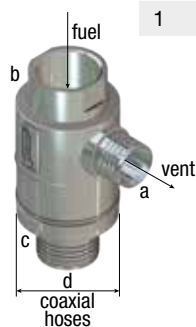
<b>6 Cam locking type coupling</b> for hoses ID = 38 mm	2	SAF 45.9010
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PART NUMBERS



Motorcycle	Quantity for a complete line	Part numbers
<b>1 Coaxial separator</b> a: for hose ID = 38 mm b: G2" female c: for hose ID = 55 mm d: for hose ID = 90 mm	1	SAF 45.9055/CX
<b>2 Clamps (clamps and screws)</b> for hoses ID = 90 mm	2	SAF 45.9004
<b>3 Clamps (clamps and screws)</b> for hoses ID = 55 mm	2	SAF 45.9002
<b>4 Clamps (clamps and screws)</b> for hoses ID = 38 mm	2	SAF 45.9001
<b>5 Hoses ID = 55 mm (20 meter roll)</b>	-	FILLFLEX 55
<b>6 Hoses ID = 90 mm (20 meter roll)</b>	-	VENTFLEX 90
<b>7 Hoses ID = 38 mm (20 meter roll)</b>	-	FILLFLEX 38
<b>8 Adaptor G2 female</b> for hoses ID = 38 mm	1	SAF 45.9011





■ Stäubli Units    ○ Agents

## Global presence of the Stäubli Group

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