

CAF Motorsports

Clean-break
fuel filling system
for cars and
motorcycles.





www.staubli-motorsport.com

Safety, efficiency, no fuel loss, CAF 20: the winning fuel filling stop!

Stäubli developed CAF 20 technology to satisfy your requirements for fuel filling.

On the vehicle

There is a light and compact plug that fits perfectly into a motorcycle or car fuel tank.

On the supply side

There is a connection combining safety and ergonomics. We can offer various models, all with the CAF 20 performance, to suit your needs, the type of vehicle and the external environment:

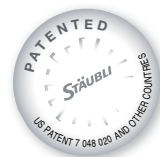
■ Refuelling with direct connection to hoses



- Socket with direct connection for hose from browser of drum.

■ Refuelling with bottle

- Filling bottles fitted with CAF 20 coupling:
 - 10 or 25 litres
 - straight or tilted version
 - with plate fitted with two SPT 08 dry break plugs for spill and vapour free filling of the bottle (option).



Co-axial design
Easy handling
Compact and lightweight
Clean-break



**Efficiency and safety,
guarantees performance.**

- Clean-break connection.
The **flush face** technology provides perfect tightness on connection and disconnection: no fuel loss for more cleanliness and safety.
- Safe.
Automatic opening and closing of the valving system only in connected position.
- Materials selected to provide **long term reliability**.

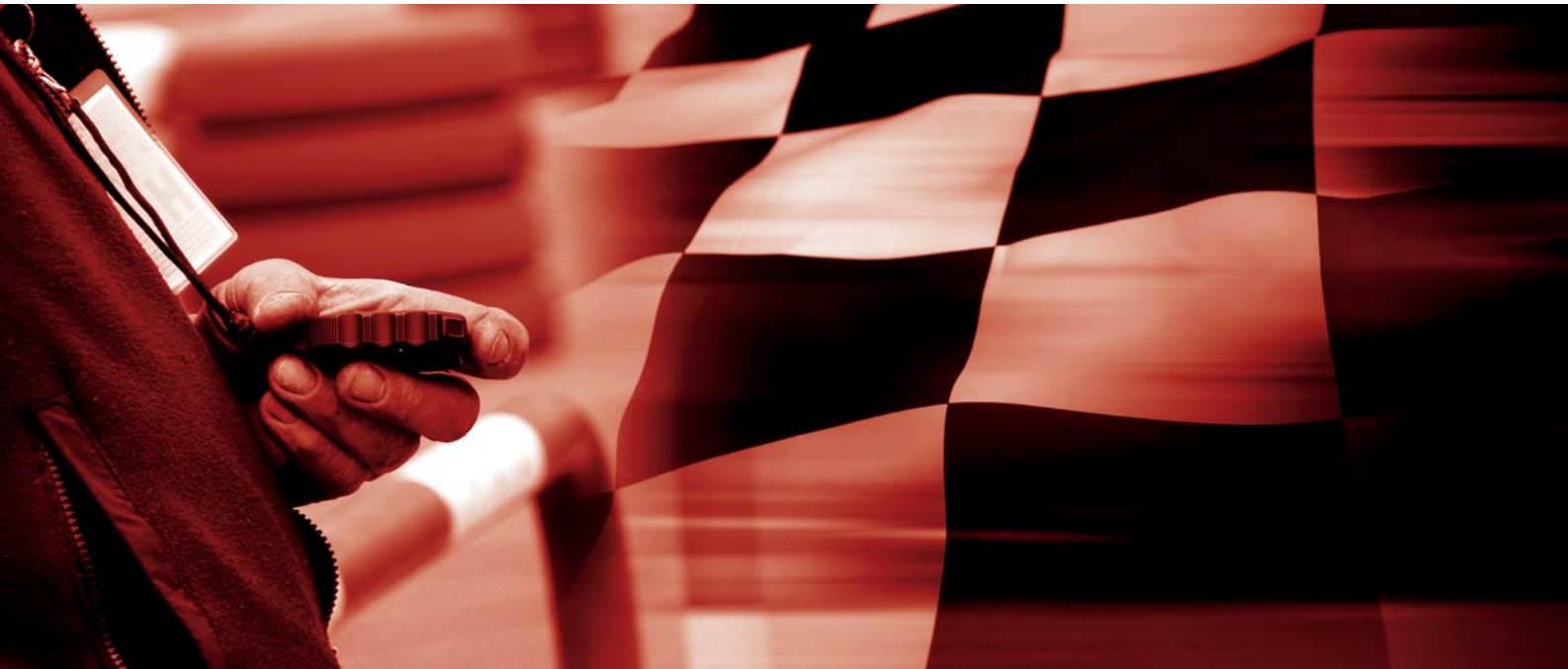


Save time at every stage.

- Ergonomic, connection and locking are made in complete safety by simply pushing the outer operating hand wheel.
- The **co-axial design** of the CAF 20 enables the filling and venting lines to be connected at the same time.
- Simply pull the inner operating hand wheel upwards to close the circuit automatically and disconnect the system in complete safety.



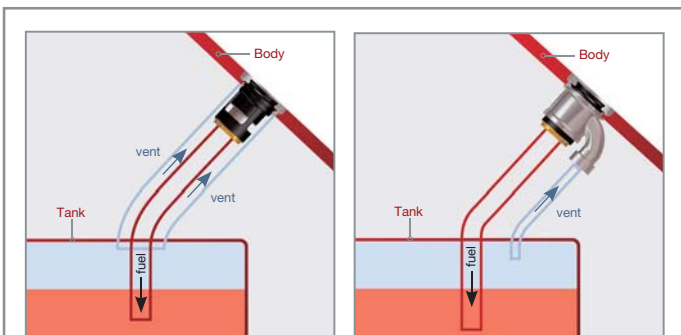
Clean-break



Numerous possibilities, designed for perfect adaptation to all types of configuration

Vehicle side

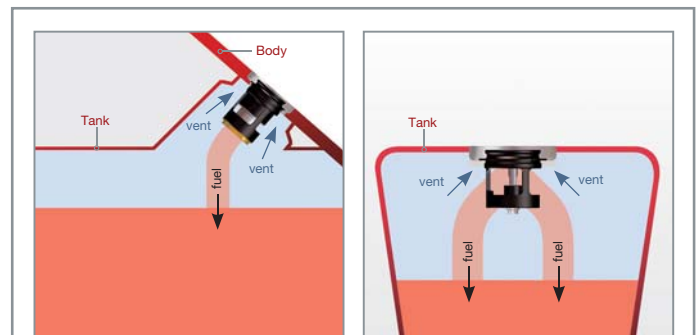
■ For remote tanks



Body mounted plug
used with co-axial assembly

Body mounted plug with collector
1 hose for fuel line and
1 hose for vent line

■ For direct tanks

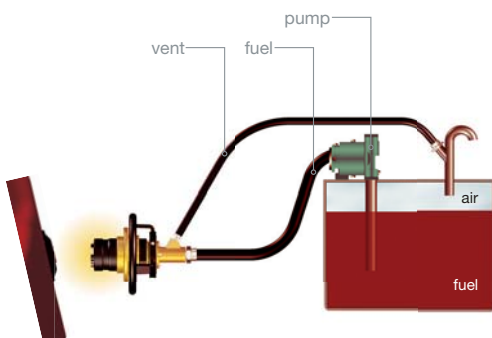


Body mounted plug
used without hose
or with a plunger hose

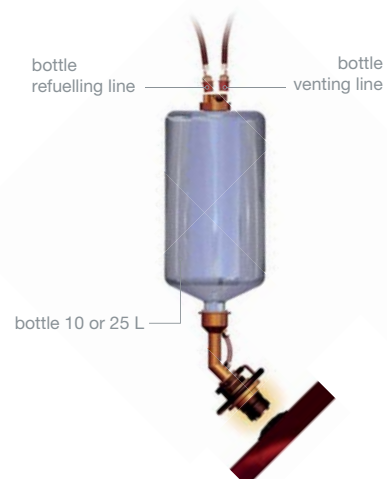
Tank mounted plug
Ideal for motorcycles
and vertical filling

Refuelling side

■ Direct connection to hose



■ Refuelling with bottle





Technical characteristics

Working temperature (°C)	0 to 50
Connecting force to 0 bar (daN)	15
Max working pressure of hose version (bar) <small>(you must also take the max. working pressure of the tank into account.)</small>	6

Weight (g)

socket for hose	1750
socket with bottle 10 l	2585
socket with bottle 25 l	4050
tilted socket with bottle 10 l	2990
tilted socket with bottle 25 l	4455
plate with 2 plugs (option FC)	475
direct tank mounted plug	92
body mounted plug	176
collector	132
Shut-off	double

Construction

Socket, plug and plate	mainly aluminium
Bottle	polyethylene

Seals

The CAF 20 solutions are compatible with ethanol fuels

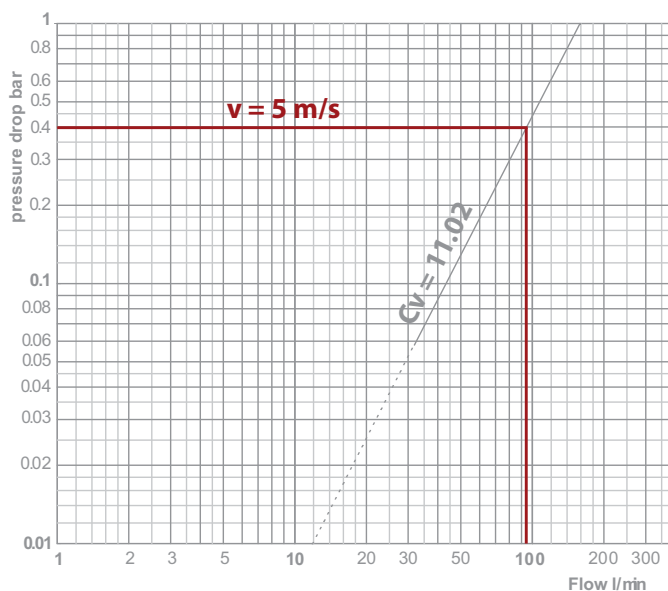
socket	JKV
plug	JV
SPT plug	JKV

Flow examples for socket with straight bottle (with water)

10 liters: 25 l/min

25 liters: 29 l/min

Hydraulic flow chart of socket for hose



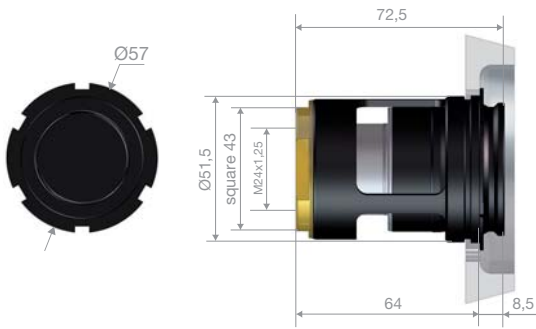
Test conditions:

Socket CAF 20.1104/JKV → plug CAF 20.5324/JV
Fluid: water

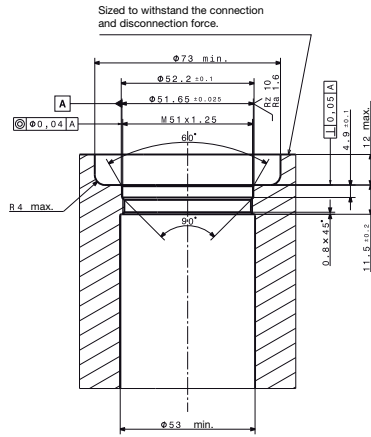
Part-numbers

Plugs

■ Body mounted plug

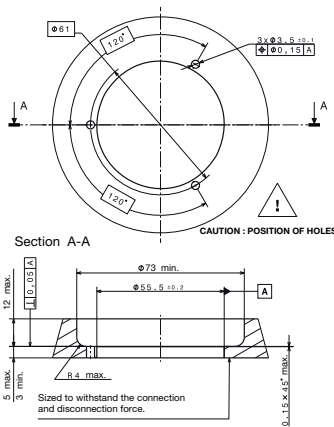
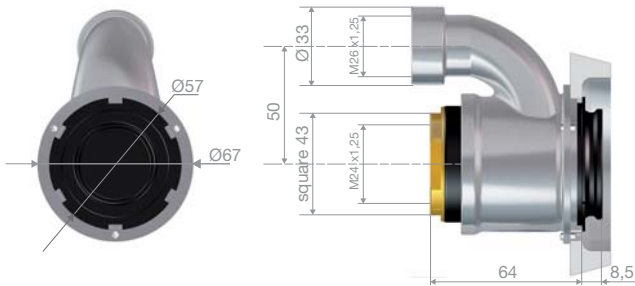


Installation dimensions



ref. CAF20.5324/JV

■ Body mounted plug (M24) with collector (M26)

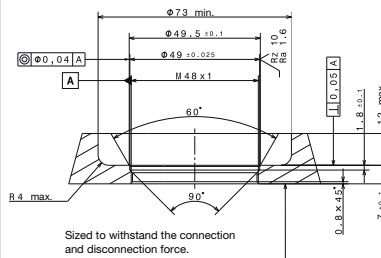
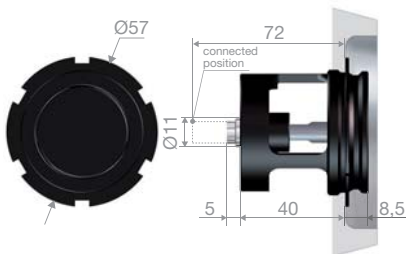


ref. CAF20.5324/JV

+

ref. CAF20.9326/JV

■ Direct tank mounted plug



ref. CAF20.5000/JV

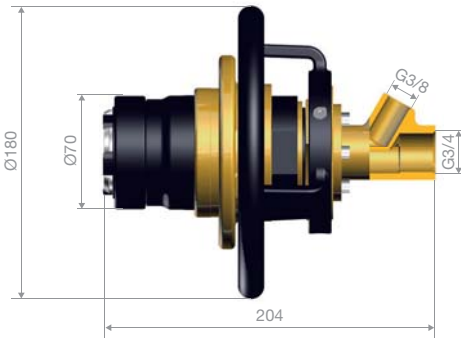
■ Tank cap: in case of plug dismantling

ref. CAF 20.9001

■ Fitting plug tool

ref. CAF20.9000

Sockets

	Installation dimensions	Part numbers
<p>■ Socket with tilted bottle</p> 	<ul style="list-style-type: none"> • 10 l version L1 = 306 L2 = 221 Ø = 206 • 25 l version L1 = 469 L2 = 295 Ø = 280 	<p>ref. CAF20.1010/JKV/RO</p> <p>ref. CAF20.1025/JKV/RO</p>
<p>■ Socket with bottle</p> 	<ul style="list-style-type: none"> • 10 l version L = 400 Ø = 206 • 25 l version L = 563 Ø = 280 	<p>ref. CAF20.1010/JKV</p> <p>ref. CAF20.1025/JKV</p>
<p>■ Option: plate with two SPT 08 plugs for the bottle clean filling.</p> 	<p>L = 46</p>	<p>add /FC at the end of the part-numbers.</p> <p><small>All characteristics and part-numbers of SPT couplings in our documentation Z 413.</small></p>
<p>■ Socket for hose</p> 	<ul style="list-style-type: none"> • Hose for fuel line: female G 3/4 • Hose for vent line: female G 3/8 	<p>ref. CAF20.1104/JKV</p>

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