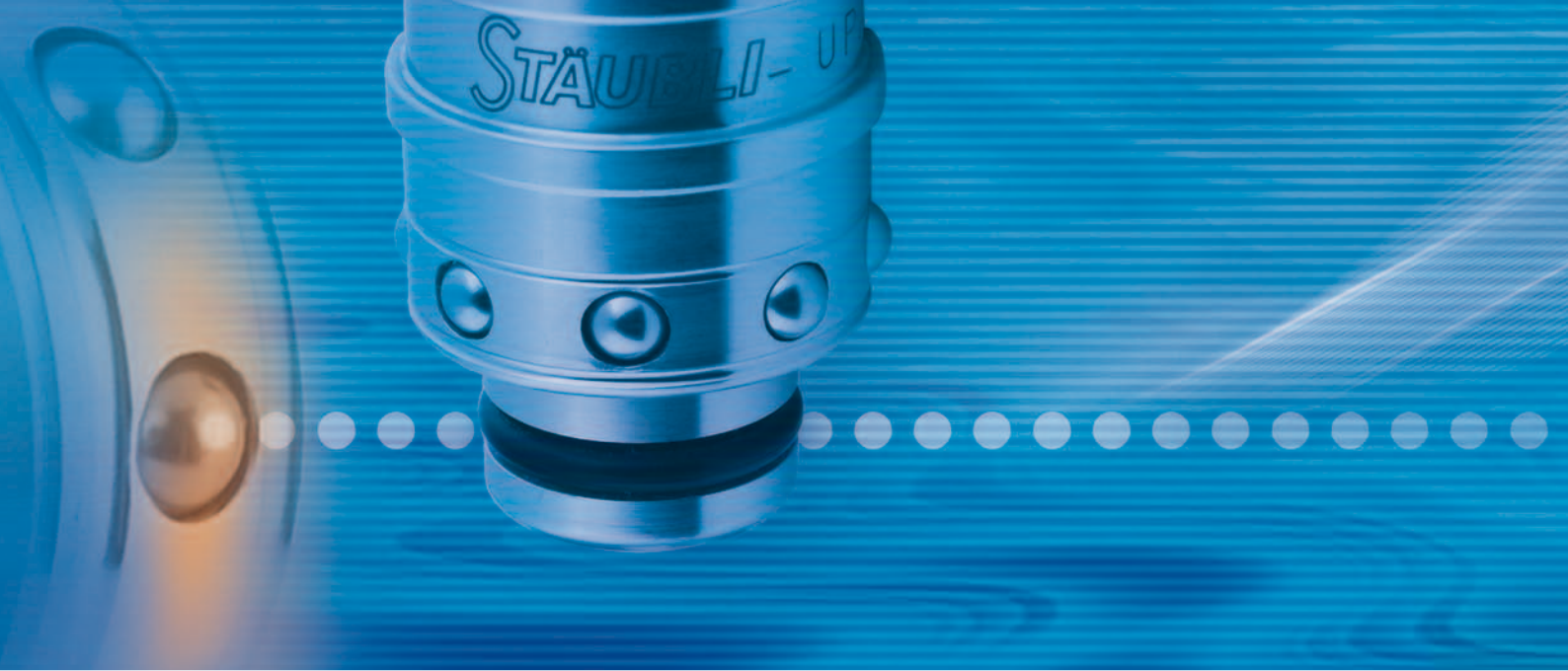


UPA All fluids

Full flow





High-quality, efficient...

Applications

Quick connections for fluid circuits:

- on distribution manifolds,
- on fillers,
- in your washing plants,
- for your fluid transfers,
- etc.

Fluids

Wide range of fluids, such as:

- air
- water
- nitrogen
- argon
- liquid and paste food products
- chemical products
- etc.



Connections with built-in safety

2 simultaneous opposing movements (pushing of plug into the socket + pulling back on the locking ring) are required for disconnection, thus eliminating any risk of accidental disconnection.

The socket cannot be disconnected simply by pulling on the ring or hose.



Easy cleaning

The high-quality surface finish (Ra 0.8) in the fluid stream allows for easy and efficient cleaning.

Automatic coupling

By simply pushing the plug into the socket.



... and economical connections



Simplified maintenance

The seal can be replaced quickly and easily without wasting time or affecting your productivity.

All-stainless steel construction

The choice of materials gives UPA couplings excellent corrosion resistance.

Simplicity of connections

- sockets with cylindrical BSP male thread that can be equipped with a KES sealing kit.



- sockets with clamp profile according to ISO 2852.



Compliance with FDA and USP Class VI requirements

Connectors designed to satisfy the requirements of agri-foods and pharmaceutical industries:

- stainless steel materials,
- specific lubrication,
- FDA seals,
- USP Class VI seals.



The opportunity to spend less and contribute to a sustainable development programme
With Stäubli, you can rely on the performance of your equipment and reliability of long-term investments.



Technical characteristics

| | UPA 08 | UPA 12 | UPA 20 |
|------------------------------------|--------|--------|--------|
| Bore diameter (mm) | 8 | 12 | 20 |
| Max. working pressure (bar) | 30 | 30 | 20 |
| Shut-off Full flow | | | |

Tightness

Seals:

- Nitrile (NBR) as standard
- Ethylene-Propylene * (EPDM)
- Ethylene-Propylene * (EPDM) for FDA or USP ** option
- Fluorocarbon (FPM)
- Perfluoroelastomer (FFKM)

* **Important!** It is strongly recommended not to use or bring this seal into contact with fluids of mineral origin (oil, fat etc...).

** meets the requirements of Class VI – 70 °C in vivo tests § <88> by USP34, National Formulary 29, 2011.

Working temperatures

| Types of seal | Seal code | Working temperatures (°C) |
|---------------------------|--------------|-------------------------------------|
| Nitrile (NBR) | no code | - 10 to + 90 |
| Fluorocarbon (FPM) | JV | + 10 to + 200 |
| Ethylene-Propylene (EPDM) | JE or JE/FDA | - 20 to + 150 |
| | JE/USP | - 20 to + 70 ** steam: up to 150 |
| Perfluoroelastomer (FFKM) | JK | + 10 to + 250 |

Construction

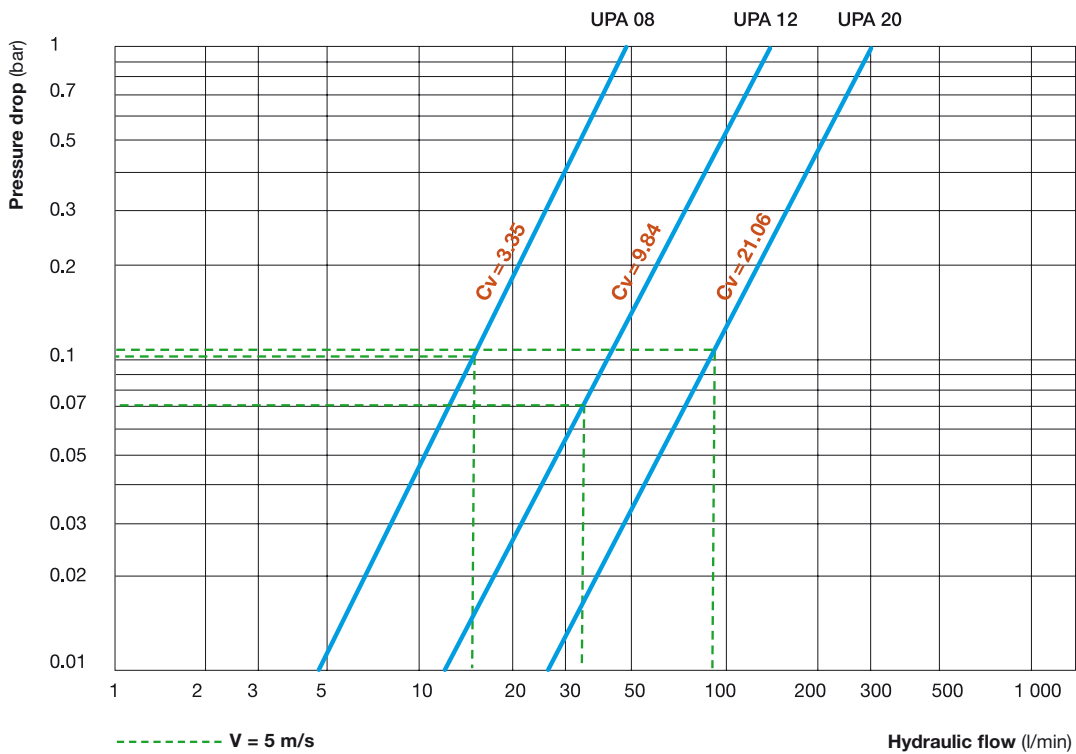
Mainly stainless steel 316 series.

For more information, consult us.

Locking balls : stainless steel 304 series.



Hydraulic flow rate / pressure drop charts

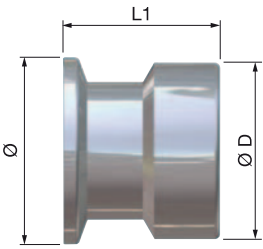
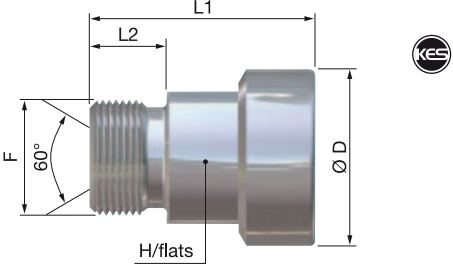


| Flow (l/min) for a speed of 5 m/s | | |
|-----------------------------------|--------|--------|
| UPA 08 | UPA 12 | UPA 20 |
| 15 | 34 | 94 |

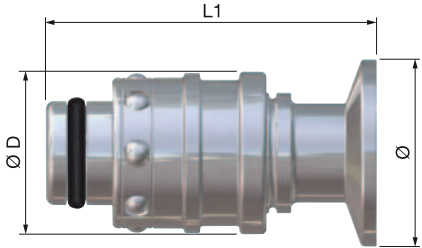
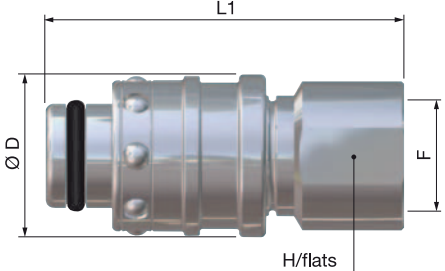
Test conditions:
 - Fluid: water
 - Direction of flow: socket → plug

Part-numbers

• Sockets

| Designations | Models | Fittings F or Ø | Dimensions (mm) | | | | Part-numbers |
|---|--------|--------------------|-----------------|------|----|---------|-----------------|
| | | | ØD | L1 | L2 | H/flats | |
| 1. Socket clamp profile  * Clamp profile according to ISO 2852 standard | UPA 08 | Ø 25 | 21 | 25 | | | UPA 08.1025/IC |
| | UPA 12 | Ø 34 | 32 | 28.5 | | | UPA 12.1034/IC* |
| | UPA 20 | Ø 50 | 41 | 37 | | | UPA 20.1050/IC* |
| 2. Socket male thread  | UPA 08 | G 1/4 | 21 | 31 | 11 | 17 | UPA 08.1151/IC |
| | UPA 12 | G 1/2 | 32 | 41 | 14 | 23 | UPA 12.1153/IC |
| | UPA 20 | G 3/4 | 41 | 50 | 16 | 32 | UPA 20.1154/IC |

• Plugs

| Designations | Models | Fittings F or Ø | Dimensions (mm) | | | | Part-numbers |
|---|--------|--------------------|-----------------|----|----|---------|-----------------|
| | | | ØD | L1 | L2 | H/flats | |
| 1. Plug clamp profile  * Clamp profile according to ISO 2852 standard | UPA 08 | Ø 25 | 21 | 45 | | | UPA 08.6025/IC |
| | UPA 12 | Ø 34 | 29.5 | 60 | | | UPA 12.6034/IC* |
| | UPA 20 | Ø 50 | 39.5 | 70 | | | UPA 20.6050/IC* |
| 2. Plug female thread  | UPA 08 | G 1/4 | 21 | 50 | | 17 | UPA 08.6101/IC |
| | UPA 12 | G 1/2 | 29.5 | 65 | | 25 | UPA 12.6103/IC |
| | UPA 20 | G 3/4 | 39.5 | 70 | | 30 | UPA 20.6104/IC |

Other fittings: consult us.

How to build your part-numbers

- Seals materials

All sockets and plugs are fitted with a Nitrile seal as standard.

Other seal material: add the required code at the end of the part-numbers:

- **/JE** code: Ethylene-Propylene seal
- **/JV** code: Fluorocarbon seal
- **/JK** code: Perfluoroelastomer seal

- FDA or USP option

Sockets and plugs FDA or USP Class VI (only available with Ethylene-Propylene seal).

Add at the end of the part-numbers:

- for the sockets: the **/FDA** or **/USP** code
- for the plugs: the **/JE/FDA** or **/JE/USP** code

KES sealing-kit (to be ordered separately)



Composed of a retaining ring and an O-ring seal, the KES kits ensure a perfect sealing between the socket and your support.

The KES rings are fitted with a Nitrile seal as standard. Other seal material: add to the opposite part-numbers the code corresponding to the required seal material (see code above).

KES kit for FDA or USP option: add the **/JE/FDA** or **/JE/USP** to the opposite part-numbers.

This type of sealing is available on all the cylindrical BSP male sockets and plugs.

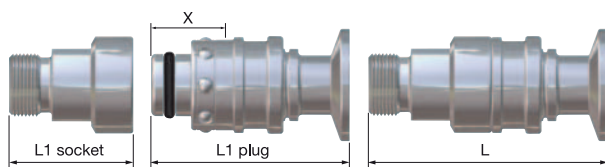
| KES sealing-kit | Models | Part-numbers |
|-----------------|--------|----------------------|
| | G 1/4 | KES01.9101/IC |
| | G 1/2 | KES01.9103/IC |
| | G 3/4 | KES01.9104/IC |

Part-numbers of the replacement seals for plugs

| Types of seal | Part-numbers | | |
|--------------------------------------|---------------------|---------------------|---------------------|
| | UPA 08 | UPA 12 | UPA 20 |
| Nitrile (NBR) | R 600 007 10 | R 600 011 10 | R 601 118 10 |
| Fluorocarbon (FPM) | R 600 007 13 | R 600 011 13 | R 601 118 13 |
| Ethylene-Propylene (EPDM) | R 600 007 18 | R 600 011 18 | R 601 118 18 |
| Ethylene-Propylene (EPDM) FDA or USP | R 600 007 27 | R 600 011 27 | R 601 118 27 |
| Perfluoroelastomer (FFKM) | R 600 007 33 | R 600 011 33 | R 601 118 33 |

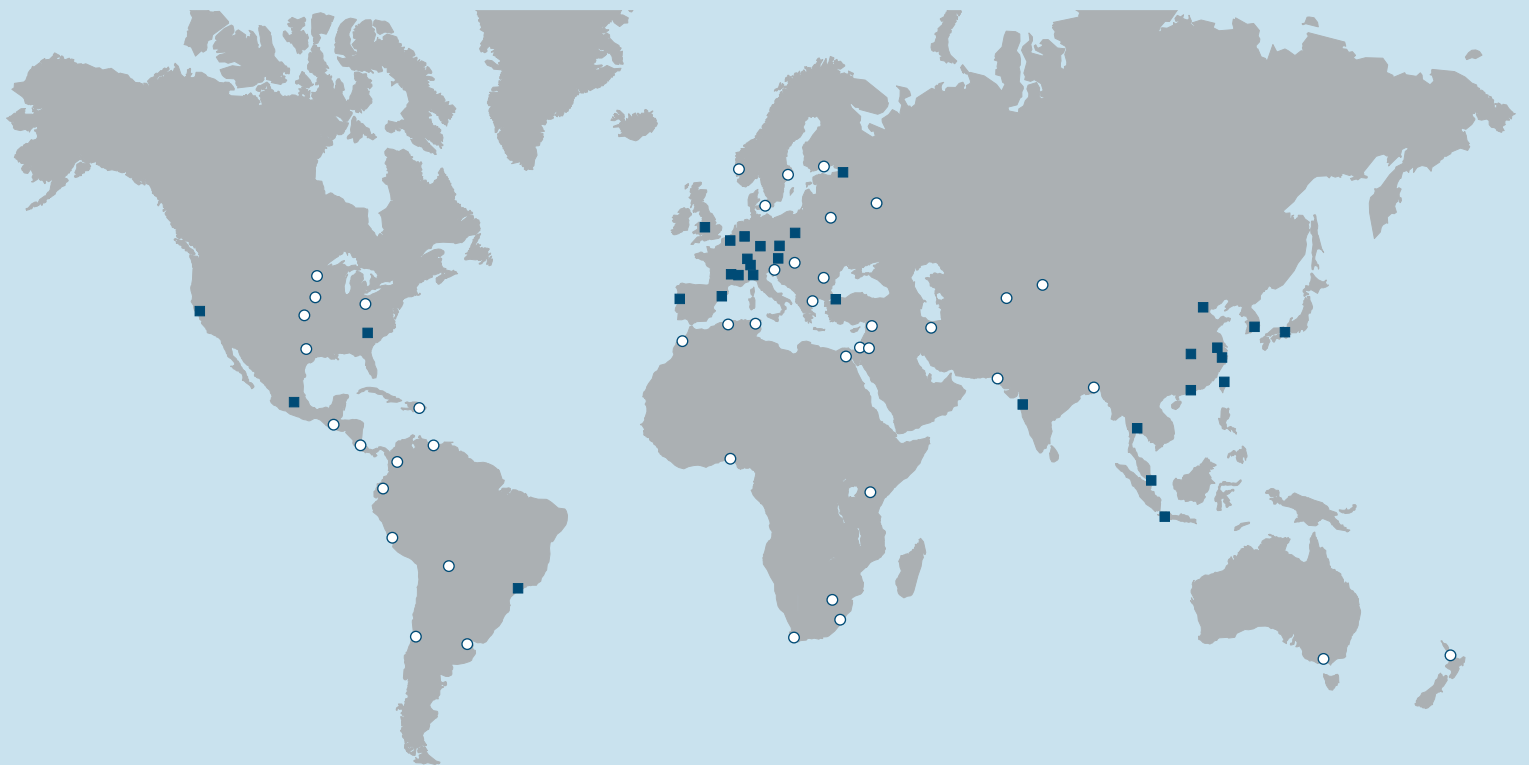
Overall dimensions in connected position

$$L = (L1 \text{ socket} + L1 \text{ plug}) - X$$



| Model | X (mm) |
|--------|--------|
| UPA 08 | 16.5 |
| UPA 12 | 22 |
| UPA 20 | 25 |

For contact details: www.staubli.com/connectors/contacts



Global presence of the Stäubli Group

- Stäubli units
- Agents

International sales coordination

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