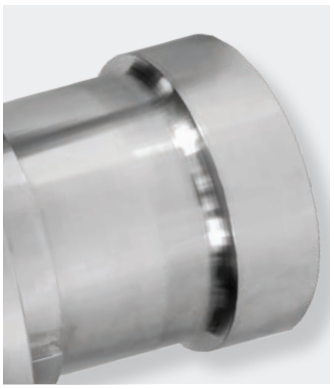
FAST MOVING TECHNOLOGY

STÄUBLI

TKU/TKM couplings

High flow transfer | Full flow

Count on a direct flow



Full flow

The TKU and TKM couplings have a spherical valve which ensures a direct flow of fluid, allowing for an optimal flow rate and pressure drop ratio.

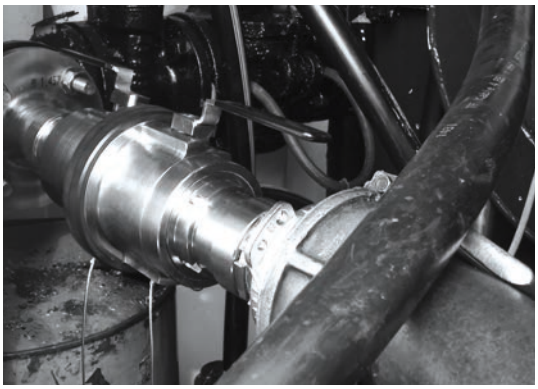
Completely safe operation

Safety is ensured as the valves can only be opened when both coupling halves are fully connected. For disconnection both valves must be closed completely.

Performance and reliability

The technology of the TKU and TKM couplings provides excellent compatibility with high flow, pressure peaks and vibrations.





TKU version

The TKU is a symmetrical coupling. There is no male or female differentiation. They can therefore be deployed in either direction. TKU requires an especially low connection force thanks to the use of lip seals in the interface.

TKM version

This non-unisex version has been designed for a wider range of media, thanks to the use of an O-ring as interface seal that us available in many different materials. The use of an O-ring as interface seal makes the TKM also suitable for depression applications.

Quick, simple connection

The system of cleats ensures quick, simple locking and safe connection.

To avoid misuse, the interfaces are designed in a way that TKU and TKM coupling halves cannot be connected to each other.

Ease of use and ease of handling

- Intuitive handling without predifined sequence required to move the levers.
- Each coupling half is equipped with an integrated swivel to prevent torsion of the hose, thus preventing the coupling causing any stress even under pressure.
- Depending on the application the swivel can be locked at the factory.
- The swivel on the hose connection side should remain movable, while at a fixed point a locked swivel simplifies the connection process.
- If not otherwise stated a pair of TKU or TKM will be delivered with the swivel movable in one coupling halve and locked in the other.
- TKU80 is fitted with additional handles for easier handling.

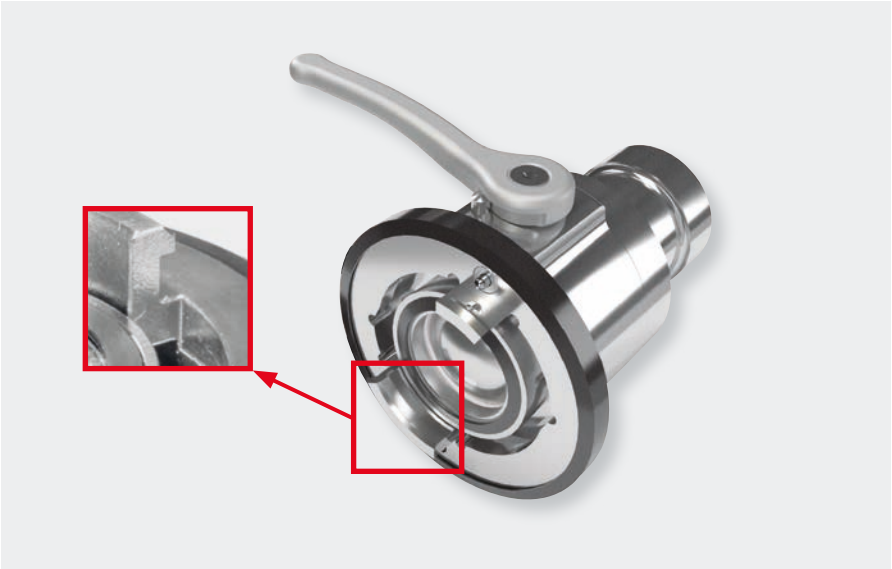
Applications

- Fluid distribution and transfer systems.
- Loading and unloading of tank trucks, vessels, containers and tanks.
- Fitting on fuelling vehicles, pump units.
- Fast connection of fuel supply hoses.
- Connection for cooling lines.
- Connections for test benches.

Protection caps

All coupling halves are equiped with PA caps to protect the coupling against dirt and mechanical impact. Each cap is attached with a steel cable to its coupling.

Available options



Mechanical coding

A key locking system prevents any circuit inversion and thus secures the process.

Colour code

Various colours are available for the levers, for easy identification of your circuits.

Technical specifications

	TKU38	TKU50	TKU80	TKM25	TKM38
Nominal diameter of the hose	DN38	DN50	DN80	DN25	DN38
Equivalent flow diameter (mm)	38	50	80	25	38
Maximum allowable pressure PS (bar)	25				
Shut-off double					
Minimum and maximum allowable temperatures TS (°C) according to seal type:					
- with Nitrile (NBR) seal	-			0 to +100	
- with Ethylene-Propylene (EPDM) seal	-			0 to +110	
- with Perfluoroelastomer (FFKM) seal	-			0 to +110	
- with Fluorocarbon (FKM) seal	0 to +110				

Sealing

- O-rings

  TKU:

  - Fluorocarbon (FKM)

  TKM:

  - Nitrile (NBR)
  - Ethylene-Propylene (EPDM)
  - Fluorocarbon (FKM)
  - Perfluoroelastomer (FFKM)
- Bearing of ball valve
  - PTFE
- Thread gasket (BSP)
  - PTFE

Connection

- Thread: female BSP or NPT

Other connections are available on request.

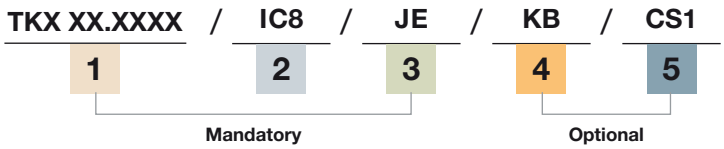
Construction

- Predominantly stainless steel.
- Polyamide dust caps.

Reminder of products / diameter correspondences

- TKU38 – 1 ½"
- TKU50 – 2"
- TKU80 – 3"
- TKM25 – 1"
- TKM38 – 1 ½"

How to create your part number



To create your part number, add the following components and options to the standard part number:

1 Standard part number

to be chosen ..... page 7

2 Material series (predominantly)

Code

- Stainless steel **IC8**

3 Type of seal

Code

TKU

- Fluorocarbon (FKM) ..... JV

TKM

- Nitrile (NBR) ..... JN
- Ethylene-Propylene (EPDM) ..... **JE**
- Fluorocarbon (FKM) ..... JV
- Perfluoroelastomer (FFKM) standard JK1
- Perfluoroelastomer (FFKM) FDA JK3

4 Colour code

Code

- Red ..... KR
- Blue ..... **KB**
- Black ..... KN
- Yellow ..... KJ

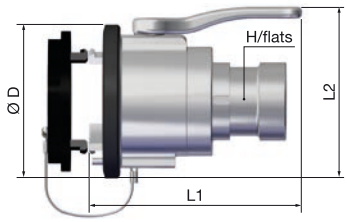
5 Mechanical coding

(TKM only)

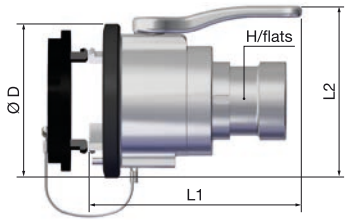
- Key-lock **CS1**

Part numbers

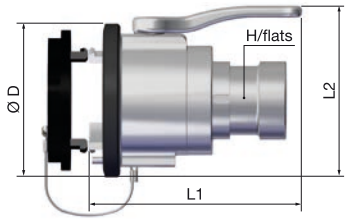
TKU Designation	Model	Thread F	Dimensions (mm)					Weight (kg)	Part numbers
			Ø D	L1	L2	H	Flats		
Tank side: fixed end connection, female thread, supplied with polyamide protective dust cap	**TKU38**	BSP 1 ½"	107	153	125	-	50	2.9	**TKU38.1107**
		NPT 1 ½"	107	153	125	-	50	2.9	**TKU38.1207**
	TKU50	BSP 2"	133	186	149	68	-	4.0	**TKU50.1108**
		NPT 2"	133	186	149	68	-	4.9	**TKU50.1208**
	TKU80	BSP 3"	209	396	291	100	-	20.1	**TKU80.110A**
		NPT 3"	209	396	291	100	-	20.4	**TKU80.120A**



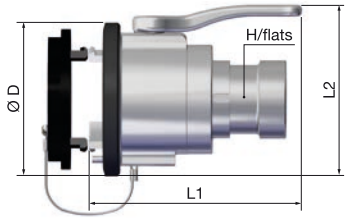
TKU Designation	Model	Thread F	Dimensions (mm)					Weight (kg)	Part numbers
			Ø D	L1	L2	H	Flats		
Hose side: rotating end connection, female thread, supplied with polyamide protective dust cap	**TKU38**	BSP 1 ½"	107	153	125	-	50	2.9	**TKU38.7107**
		NPT 1 ½"	107	153	125	-	50	2.9	**TKU38.7207**
	TKU50	BSP 2"	133	186	149	68	-	4.0	**TKU50.7108**
		NPT 2"	133	186	149	68	-	4.9	**TKU50.7208**
	TKU80	BSP 3"	209	396	291	100	-	20.1	**TKU80.710A**
		NPT 3"	209	396	291	100	-	20.4	**TKU80.720A**



TKM Designation	Model	Thread F	Dimensions (mm)					Weight (kg)	Part numbers
			Ø D	L1	L2	H	Flats		
Tank side: fixed end connection, female thread, supplied with polyamide protective dust cap	**TKM25**	BSP 1"	91	143	108	-	32	1.9	**TKM25.1105**
		NPT 1"	91	143	108	-	36	1.9	**TKM25.1205**
	TKM38	BSP 1 ½"	107	153	125	-	50	2.9	**TKM38.1107**
		NPT 1 ½"	107	153	125	-	50	2.9	**TKM38.1207**



TKM Designation	Model	Thread F	Dimensions (mm)					Weight (kg)	Part numbers
			Ø D	L1	L2	H	Flats		
Hose side (seal interface location): rotating end connection, female thread, supplied with polyamide protective dust cap	**TKM25**	BSP 1"	91	143	108	-	32	1.9	**TKM25.7105**
		NPT 1"	91	143	108	-	36	1.9	**TKM25.7205**
	TKM38	BSP 1 ½"	107	153	125	-	50	2.9	**TKM38.7107**
		NPT 1 ½"	107	153	125	-	50	2.9	**TKM38.7207**



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● Stäubli Units ○ Representatives/Agents

Global presence of the Stäubli Group

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