

FAST MOVING TECHNOLOGY

*STÄUBLI*

# TDU 24

**Cooling | High flow transfer**



# Direct flow for cooling applications



## Applications

- Thermoregulation
- Connections for cooling of electronic equipment, in use in super computer, data center, telecommunications...
- Broadcasting
- Water cooling unit (chiller)
- Rear door
- Heatexchanger
- Connections for cooling in chemical, pharma, industrial machinery and plastics
- Cooling of power converters
- Water cooling jackets
- Inerting applications

## Full flow

The TDU 24 coupling has a spherical valve which ensures a direct flow of fluid, allowing for an optimal flow rate and pressure drop ratio.

## Two symmetrical parts for TDU 24 unisex

The TDU 24 is a symmetrical coupling. There is no male or female differentiation and both sides that need to be connected are fitted with identical interfaces.

## Ease of use and ease of handling

- The integrated swivel prevents torsion of the hose, preventing the coupling from causing any stress even under pressure.
- The locking for the swivel allows an easier connection when used on a fixed point.
- Intuitive handling without predefined sequence required to move the levers.

## Quick, simple and safe connection

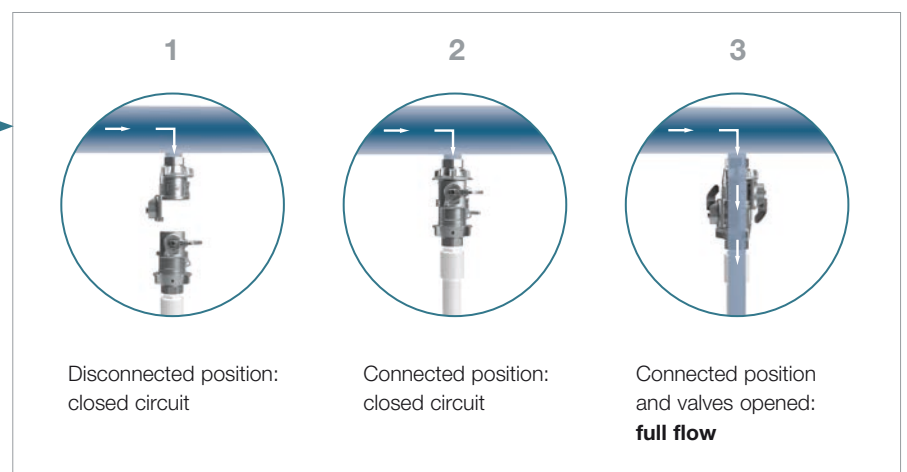
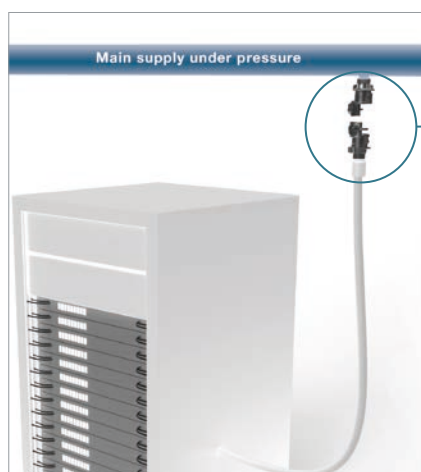
The TDU locking system is independent of the fluid stream. It allows connection even if one side is under pressure.

## 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.

## Optional color code

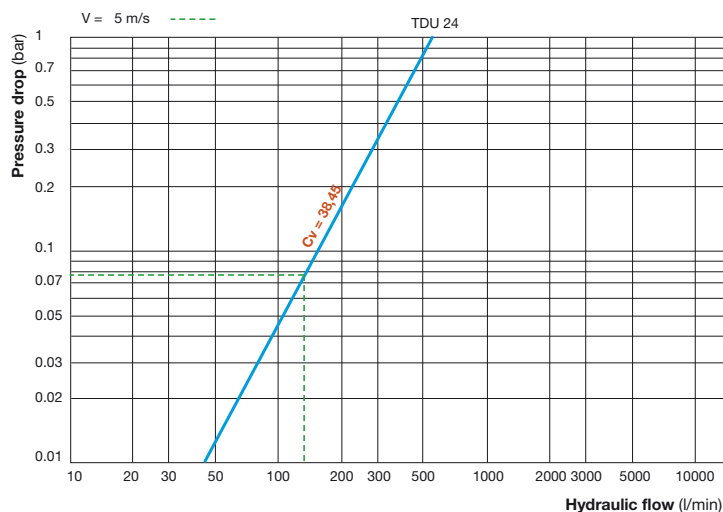
For easy circuit identification, two colors (blue /KB and red /KR) are available.



## Technical specifications

Nominal diameter DN (mm)	24
Maximum allowable pressure PS (bar)	10
Minimum and maximum allowable temperatures TS (°C) with Ethylene-Propylene (EPDM) seal	-10 to +80
Shut-off double	

### Hydraulic flow rate / pressure drop charts



Flow at 5 m/s:  
136 l/min

Test conditions:  
Fluid: water  
Density: 998 kg/m<sup>3</sup>  
Viscosity: 1.08 cSt

### Sealing

- O-ring: Ethylene-Propylene (EPDM)
- Bearing of ball valve: PTFE/PEEK

### Connection

- Thread: male BSP, female NPT
- Hose barb

Other connections are available on request.

### Construction

- Stainless steel

According to your application, each product is available in fixed or swivelling.

## Part numbers

Description	Connection F	Dimensions (mm)					Weight (kg)	Part numbers
		A	B	C	Total length	H/flats		
<b>Female thread</b> 	NPT 1"	56.6	95.5	82.4	124.4	41	1.3	TDU24.7205/IC1/JE
	BSP 1"	56.6	95.5	85.4	127.4	46	1.3	TDU24.7105/IC1/JE
	BSP 1 1/2"	56.6	95.5	99.4	141.4	55	1.5	TDU24.7107/IC1/JE
<b>Male thread with front seal</b> 	BSP 1"	56.6	95.5	101.4	143.4	46	1.4	TDU24.7155/IC1/JE
<b>Hose barb</b> 	Hose barb 25 mm	56.6	95.5	123.9	165.9		1.3	TDU24.7825/IC1/JE
<b>90° hose barb</b> 	90° hose barb 25 mm	56.6	95.5	114.9	170.6		1.4	TDU24.7825/IC1/JE/RE
	90° hose barb 32 mm	56.6	95.5	123.9	183.1		1.4	TDU24.7832/IC1/JE/RE



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