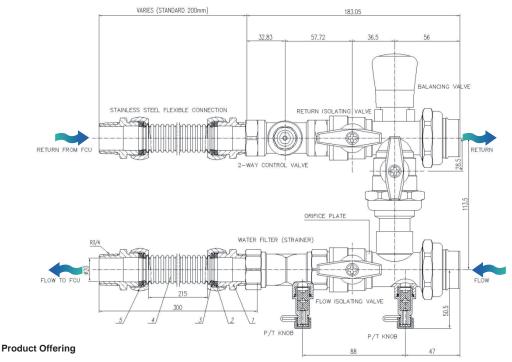


(Fan Coil Unit Link)

**Technical Details** 





application of chilled water or heating water fan coil units

ATS FCU-Link is a set

of valves, connectors, and unions designed specifically for the



ATS FCU-Link System is a set of valves, connectors and unions designed specifically for the application of chilled water or heating water

It consists of

Supply and Return Full Port Isolating Ball

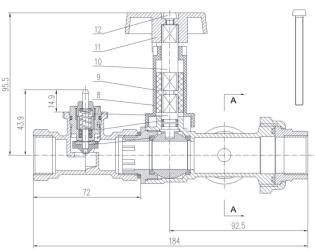
- Regulating Flow Valve (Balancing Valve).
- 3. 4. Fixed orifice plate measuring station.
- Two P/T measuring knobs.
- 5. Hi quality with stainless steel mesh water filter (Strainer)
- 6. Two way control Valve
- On/OFF, Proportional, Actuator
- 8. Unions for easy assembling and dismantling.
- Two stainless steel flexible connection (300 mm length).
- Bypass with full port isolating valve for flushing.

#### **Standard Features**

- Factory Assembled (no chance for assembling mistakes)
- Factory pressure tested (no chance for leakage)
- Smooth internal surface makes it frictionless set of valves.
- Valves' raised hands for insulation purposes
- Helical stainless steel flexible connection meets any FCU center to center pipe distance, and has null pressure drop at any twisting angle.
- Fixed orifice single Kv value flow measuring station with +/- 3 accuracy cut the time required for balancing.
- PN 20 tested at 40 bars and 20C
- 8. Unions with O-ring technology can be tightened by hands for easy assembling.
- Very Compact, 180 mm ONLY.
- 10. One set can cover wide range of flow rates as below
  - V02 20mm (0.03 ~ 0.82 l/s) (0.50~13 gpm). V02 25mm (0.83 ~ 1.26 l/s) (13.1~20 gpm).
- Special DZR alloy.
- Actuator is supplied in separate box to avoid damage during packing installation.
- Three Year Warranty.

#### **Optional Features**

- Up to 20m cable length for the actuator to be directly connected to wall thermostat without junction
- High quality Wall thermostat
- Any length for the stainless steel flexible connections.
- 1. CONNECTOR
- 2. SEALING GASKET
- 3. CLIP RING
- 4. WAVY TUBE
- 5. CONNECT NUT



- 8. PITCH COVER
- 9. CONNECT COVER
- 10. CONNECT STAFF
- 11. CRISSCROSS ROUND HEAD SCREW
- 12. CRISSCROSS ROUNDHEADSCREW



### **Technical Specification**

Material	
	D7D haras HDb50 4
Valve housing	DZR, brass, HPb59-1
Cover	DZR, brass, HPb59-1
Gasket	PTFE
Ball	Brass
Sealing ring	PTFE
O-Ring	EPDM281
Running axis	DZR, brass, HPb59-1
Pitch cover	POM
Connector cover	POM
Connect staff	HPb59-1
Handle	Aluminum Alloy
Crisscross round head screw	Steel
Hexagonal nut	DZR, brass, HPb59-1
O-Ring	EPDM-281
Female nut connector	Brass, HPb69-1
Handle wheel cover	POM
Crisscross round head screw	Steel
Handle wheel	POM
Flexible connection tube	Stainless steel 304
Hex round head screw	Steel
Adjust connector	DZR, brass, HPb59-1
O-Ring	EPDM281
Adjust staff	DZR, brass, HPb59-1
Connector cover	DZR, brass, HPb59-1
Class/Rating	
Temperature max	100 °C
Pressure Class max	PN 20

ATS, DN 20, PN 20

### Markings

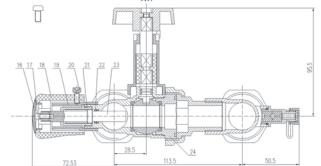
Valve hous

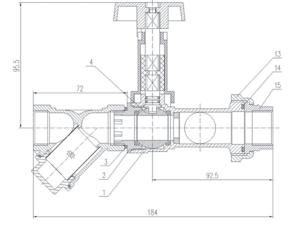
### **Orifice Selection**

Orifice Size	Flow Range Ltr/s
Low flow	0.03 - 0.2
Medium flow	0.07 – 0.5
High flow	0.12 - 0.8

- 16. HANDLE WHEEL COVER
- 17. CRISSCROSS
  ROUNDHEADSCREW
  18. HANLE WHEEL
- 18. HANLE WHEEL
  19. SCALE COVER
  20. HEXAGGONAL ROUND
  HEAD SCREW
  21. ADJUST CONNECTOR
  22. O-RING
  23. ADJUST STAFF

- 1. BODY 2. COVER 3. GASKET
- 4. BALL 13. HEXAGGONAL
- NUT 14. O-RING 15. FEMALE NUT



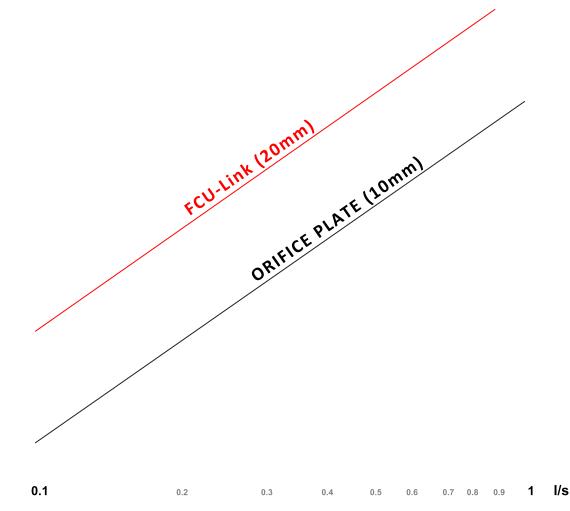




# **FLOW MEASUREMENT CURVE**

DIFFERENTIAL PRESSURE DATA FOR DN 20MM

kPa



## CALCULATION OF FLOW RATE:

$$Q= \frac{Kvs \sqrt{\Delta P}}{36}$$

Where:

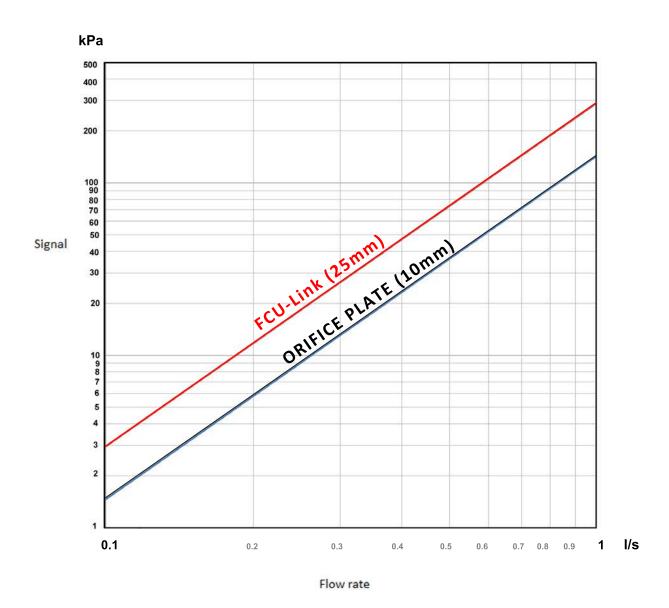
Q = Flow rate (Ltr/s)  $\Delta P$  = Signal (kPa) Kvs = Signal Coefficient

10 mm Orifice Plate	Kvs value
Orifice Plate	3
FCU-Link DN 20MM	1.4



# **FLOW MEASUREMENT CURVE**

### DIFFERENTIAL PRESSURE DATA FOR DN 25MM



## CALCULATION OF FLOW RATE:

$$Q= \frac{Kvs \sqrt{\Delta P}}{36}$$

Where:

Q = Flow rate (Ltr/s)  $\Delta P$  = Signal (kPa) Kvs = Signal Coefficient

10 mm Orifice Plate	Kvs value
Orifice Plate	3
FCU-Link DN 25MM	2.1

