

# USER FRIENDLY

A  
B  
D  
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I  
J  
K  
L

## **K 500**

BTV Manual

Bottom Tank Valves  
with Manual Actuators  
and PTFE Diaphragms

## **K 505**

BTV Pneumatic

Bottom Tank Valves  
with NC Pneumatic Actuators  
and PTFE Diaphragms

## **K 510**

BTV Pneumatic with sensors

Bottom Tank Valves  
with NC Pneumatic Actuators,  
PTFE Diaphragms  
and Position Sensors

## **K 550**

TCS Manual

Tri-Clamp Extended Sampling  
Valves With Manual Actuators  
And Diaphragms

## **K 551**

TCS Pneumatic

Tri-Clamp Extended Sampling  
Valves With Pneumatic  
Actuators And Diaphragms

## **K 552**

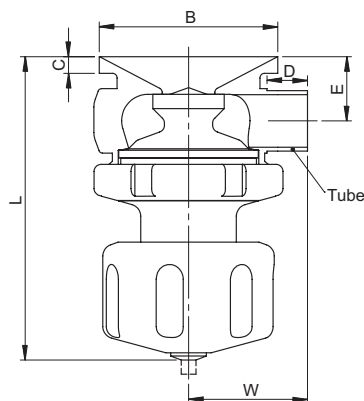
TCS Pneumatic with sensors

Tri-Clamp Extended Sampling  
Valves With Pneumatic  
Actuators, Programmable  
Double Position Sensors And  
Diaphragms



TECHNICAL INFORMATION \_ YBTVA0### 1 ## #

## BTV MANUAL



**YBTVA0### 1 ## #** - BOTTOM TANK VALVES WITH MANUAL ACTUATORS AND DIAPHRAGMS are designed to take off fluids from the tank bottom for most stringent applications such as bioreactors, fermenters and preparation tanks. The body shape and their internal design offer a very reliable component for Aseptic Processing Applications. They have a simple and safe design, with full drainability, without asymptotic seals and dead legs, offering fast cleanability and sterilization practices. They are designed to fulfill the most stringent demands of CIP-SIP and production activities in Aseptic Processing. Equipped with PTFE diaphragms acc. to USP Class VI-121°C, or EPDM USP Class VI or Silicone USP Class VI, Manual Actuators made from stainless steel and PTFE. Bottom tank valves (BTV) are available in 6 different designs and 3 different outlet configurations to fulfill customer needs: with short butt weld ends, 45°, TC, with or without satellite valve for downstream CIP-SIP for clean and sterile transfer.

CODE	CAD Size	B mm	C mm	D mm	E mm	W mm	Tube mm	L mm	T (*) C°	P bar
YBTVA012 ##### 1 ## #	A12	40.00	6.50	13.00	18.50	30.00	12.70x1.65	90.50	-80 / 200	-1 / 6
YBTVA019 ##### 1 ## #	A19	55.00	7.00	16.00	21.70	40.00	19.05x1.65	102.00	-80 / 200	-1 / 6
YBTVA025 ##### 1 ## #	A25	75.00	7.00	17.00	27.00	50.00	25.40x1.65	128.00	-80 / 200	-1 / 6
YBTVA038 ##### 1 ## #	A38	85.00	7.00	18.50	34.50	60.00	38.10x1.65	159.00	-80 / 200	-1 / 6
YBTVA050 ##### 1 ## #	A50	110.00	7.00	24.00	40.00	75.00	50.80x1.65	185.00	-80 / 200	-1 / 6

All dimensions are in mm - All data may change without prior notice

(\*) For PTFE only

**Body material:** 1.4435-BN2 - Low Ferrite - Low Sulphur

**Diaphragm material:** PTFE USP Class VI – 121°C or EPDM USP Class VI or Silicone USP Class VI

**Application Areas:** SAFE

**Surface Roughness:** Internal surface (manually polished)  
Ra ≤ 0.3µm (16µin)

**External surface:** Ra ≤ 0.8µm (32µin)

**Surface Treatment:** Manually polished (available also in EP version - Electropolishing after manual polishing)

**Labeling:** Each valve body is labeled for full LOT traceability

**Packaging:** Valve body is sealed in plastic bags and packaged in a closed box

**Standard Documentation:** Operating and Maintenance bulletin, Certificate of Conformity and Materials Certification 3.1

**Quality Control:** Quality Assurance System guarantees the control and traceability of the product.

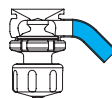
**Orders and Information:** For additional information, drawings or place an order call your nearest distributor.

## BODY CONFIGURATIONS

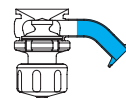
### 01 # Basic configurations



**01 A**  
Short butt weld outlet

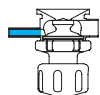


**01 B**  
45° elbow butt weld outlet

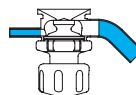


**01 C**  
45° TC outlet

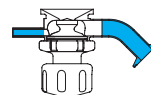
### 02 # Configurations with SIP Butt Weld Port



**02 A**  
Short butt weld outlet



**02 B**  
45° elbow butt weld outlet

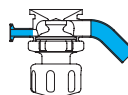


**02 C**  
45° TC outlet

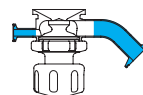
### 03 # Configurations with SIP TC Port



**03 A**  
Short butt weld outlet

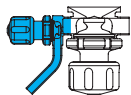


**03 B**  
45° elbow butt weld outlet

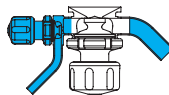


**03 C**  
45° TC outlet

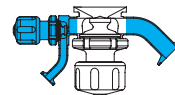
### 04 # Configurations with Satellite Valve for Sterile Transfer (Downstream CIP/SIP)



**04 A**  
Short butt weld outlet

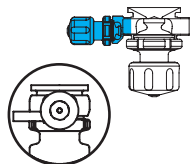


**04 B**  
45° elbow butt weld outlet

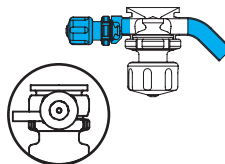


**04 C**  
45° TC outlet

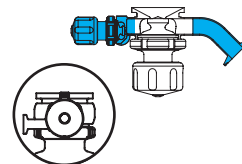
### 05 # Configurations with Tang. Left Satellite Valve for Sterile Transfer (Downstream CIP/SIP) Space saving design for tight areas



**05 A**  
Short butt weld outlet

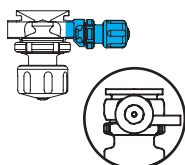


**05 B**  
45° elbow butt weld outlet

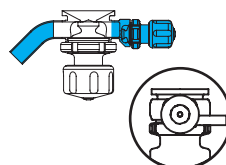


**05 C**  
45° TC outlet

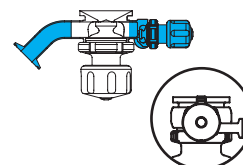
### 06 # Configurations with Tang. Right Satellite Valve for Sterile Transfer (Downstream CIP/SIP) Space saving design for tight areas



**06 A**  
Short butt weld outlet



**06 B**  
45° elbow butt weld outlet

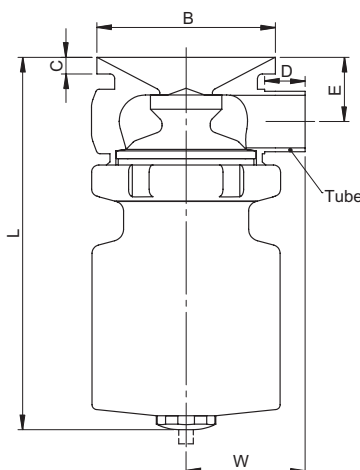


**06 C**  
45° TC outlet

**ATTENTION:** add the code of the configuration (example: "01 C")  
after the code of the valve (instead of: "## #") in order to achieve the complete valve code

TECHNICAL INFORMATION \_ YBTVA0### 2###

## BTV PNEUMATIC



**YBTVA0### PTFE 2### - BOTTOM TANK VALVES WITH NC PNEUMATIC ACTUATORS AND DIAPHRAGMS** are designed to take off fluids from the tank bottom for most stringent applications such as bioreactors, fermenters and preparation tanks. The body shape and their internal design offer a very reliable component for Aseptic Processing Applications. They have a simple and safe design, with full drainability, without asymptotic seals and dead legs, offering fast cleanability and sterilization practices. They are designed to fulfill the most stringent demands of CIP-SIP and production activities in Aseptic Processing. Equipped with PTFE diaphragms acc. to USP Class VI-121°C, or EPDM USP Class VI or Silicone USP Class VI, NC Pneumatic Actuators made from stainless steel. Bottom tank valves (BTV) are available in 6 different designs and 3 different outlet configurations to fulfill customer needs: with short butt weld ends, 45°, TC, with or without satellite valve for downstream CIP-SIP for clean and sterile transfer.

CODE	CAD Size	B mm	C mm	D mm	E mm	W mm	Tube mm	L mm	T (*) C°	P bar
YBTVA012 ### 2###	A12	40.00	6.50	13.00	18.50	30.00	12.70x1.65	100.00	-80 / 200	-1 / 6
YBTVA019 ### 2###	A19	55.00	7.00	16.00	21.70	40.00	19.05x1.65	115.00	-80 / 200	-1 / 6
YBTVA025 ### 2###	A25	75.00	7.00	17.00	27.00	50.00	25.40x1.65	157.00	-80 / 200	-1 / 6
YBTVA038 ### 2###	A38	85.00	7.00	18.50	34.50	60.00	38.10x1.65	198.00	-80 / 200	-1 / 6
YBTVA050 ### 2###	A50	110.00	7.00	24.00	40.00	75.00	50.80x1.65	243.00	-80 / 200	-1 / 6
YBTVA063 ### 2###	A63	125.00	10.00	24.00	48.00	85.00	63.50x1.65	278.00	-80 / 200	-1 / 6
YBTVA076 ### 2###	A76	150.00	10.00	30.00	58.00	100.00	76.20x1.65	308.00	-80 / 200	-1 / 4
YBTVA000 ### 2###	A00	180.00	15.00	30.00	72.50	115.00	101.60x2.11	425.00	-80 / 200	-1 / 4

All dimensions are in mm - All data may change without prior notice

(\*) For PTFE only

**Body material:** 1.4435-BN2 - Low Ferrite - Low Sulphur

**Diaphragm material:** PTFE USP Class VI - 121°C or EPDM USP Class VI or Silicone USP Class VI

**Application Areas:** SAFE

**Surface Roughness:** Internal surface (manually polished) Ra ≤ 0.3µm (16µin)

**External surface:** Ra ≤ 0.8µm (32µin)

**Surface Treatment:** Manually polished (available also in EP version - Electropolishing after manual polishing)

**Labeling:** Each valve body is labeled for full LOT traceability

**Packaging:** Valve body is sealed in plastic bags and packaged in a closed box

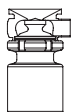
**Standard Documentation:** Operating and Maintenance bulletin, Certificate of Conformity and Materials Certification 3.1

**Quality Control:** Quality Assurance System guarantees the control and traceability of the product.

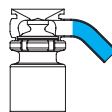
**Orders and Information:** For additional information, drawings or place an order call your nearest distributor.

## BODY CONFIGURATIONS

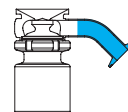
### 01 # Basic configurations



**01 A**  
Short butt weld outlet

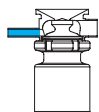


**01 B**  
45° elbow butt weld outlet

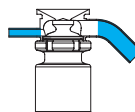


**01 C**  
45° TC outlet

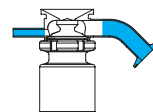
### 02 # Configurations with SIP Butt Weld Port



**02 A**  
Short butt weld outlet

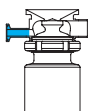


**02 B**  
45° elbow butt weld outlet

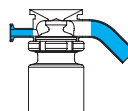


**02 C**  
45° TC outlet

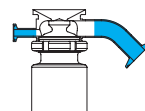
### 03 # Configurations with SIP TC Port



**03 A**  
Short butt weld outlet

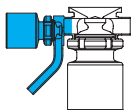


**03 B**  
45° elbow butt weld outlet

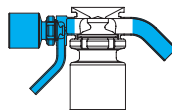


**03 C**  
45° TC outlet

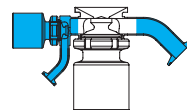
### 04 # Configurations with Satellite Valve for Sterile Transfer (Downstream CIP/SIP)



**04 A**  
Short butt weld outlet

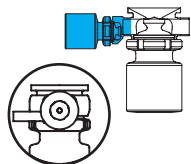


**04 B**  
45° elbow butt weld outlet

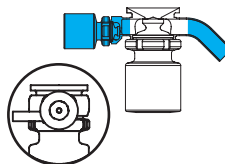


**04 C**  
45° TC outlet

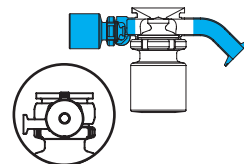
### 05 # Configurations with Tang. Left Satellite Valve for Sterile Transfer (Downstream CIP/SIP) Space saving design for tight areas



**05 A**  
Short butt weld outlet

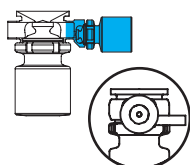


**05 B**  
45° elbow butt weld outlet

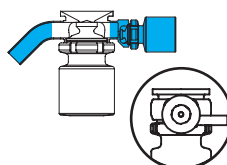


**05 C**  
45° TC outlet

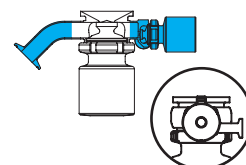
### 06 # Configurations with Tang. Right Satellite Valve for Sterile Transfer (Downstream CIP/SIP) Space saving design for tight areas



**06 A**  
Short butt weld outlet



**06 B**  
45° elbow butt weld outlet

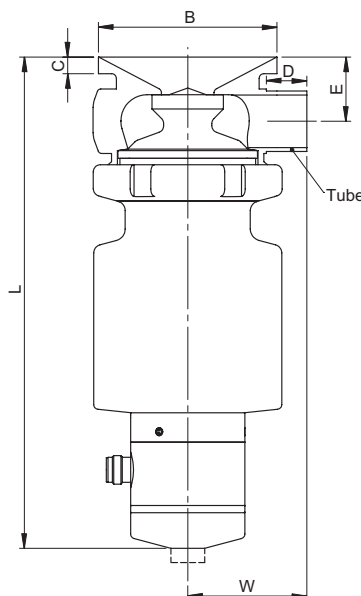


**06 C**  
45° TC outlet

**ATTENTION:** add the code of the configuration (example: "01 C")  
after the code of the valve (instead of: "## #") in order to achieve the complete valve code

TECHNICAL INFORMATION \_ YBTV A0## ##### 3 ## #

## BTV PNEUMATIC WITH SENSORS



**YBTV A0## ##### 3 ## #** - BOTTOM TANK VALVES WITH NC PNEUMATIC ACTUATORS, DIAPHRAGMS AND POSITION SENSORS are designed to take off fluids from the tank bottom for most stringent applications such as bioreactors, fermenters and preparation tanks. The body shape and their internal design offer a very reliable component for Aseptic Processing Applications. They have a simple and safe design, with full drainability, without asymptotic seals and dead legs, offering fast cleanability and sterilization practices. They are designed to fulfill stringent demands of CIP-SIP and production activities in Aseptic Processing. Equipped with PTFE diaphragms acc. to USP Class VI-121°C or EPDM USP Class VI or Silicone USP Class VI, NC Pneumatic Actuators and CAD Programmable Double Position Sensor made from stainless steel. Bottom tank valves (BTV) are available in 6 different designs and 3 different outlet configurations to fulfill customer needs: with short butt weld ends, 45°, TC, with or without satellite valve for downstream CIP-SIP for clean and sterile transfer.

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YBTV A025 ##### 3 ## #	A25	75.00	7.00	17.00	27.00	50.00	25.40x1.65	207.00	-80 / 200	-1 / 6
YBTV A038 ##### 3 ## #	A38	85.00	7.00	18.50	34.50	60.00	38.10x1.65	248.00	-80 / 200	-1 / 6
YBTV A050 ##### 3 ## #	A50	110.00	7.00	24.00	40.00	75.00	50.80x1.65	293.00	-80 / 200	-1 / 6
YBTV A063 ##### 3 ## #	A63	125.00	10.00	24.00	48.00	85.00	63.50x1.65	328.00	-80 / 200	-1 / 6
YBTV A076 ##### 3 ## #	A76	150.00	10.00	30.00	58.00	100.00	76.20x1.65	358.00	-80 / 200	-1 / 4
YBTV A000 ##### 3 ## #	A00	180.00	15.00	30.00	72.50	115.00	101.60x2.11	475.00	-80 / 200	-1 / 4

All dimensions are in mm - All data may change without prior notice

(\*) For PTFE only

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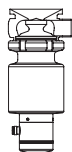
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**Quality Control:** Quality Assurance System guarantees the control and traceability of the product.

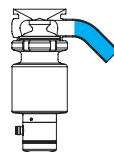
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## BODY CONFIGURATIONS

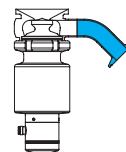
### 01 # Basic configurations



**01 A**  
Short butt weld outlet

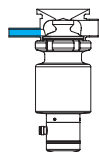


**01 B**  
45° elbow butt weld outlet

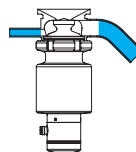


**01 C**  
45° TC outlet

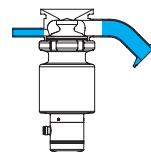
### 02 # Configurations with SIP Butt Weld Port



**02 A**  
Short butt weld outlet

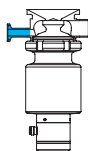


**02 B**  
45° elbow butt weld outlet

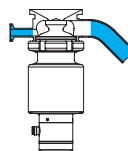


**02 C**  
45° TC outlet

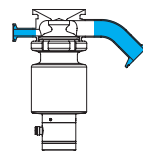
### 03 # Configurations with SIP TC Port



**03 A**  
Short butt weld outlet

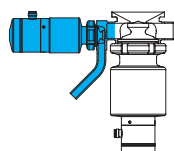


**03 B**  
45° elbow butt weld outlet

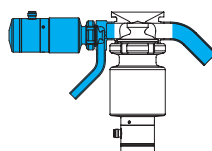


**03 C**  
45° TC outlet

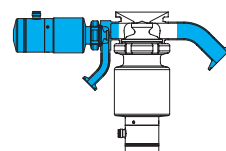
### 04 # Configurations with Satellite Valve for Sterile Transfer (Downstream CIP/SIP)



**04 A**  
Short butt weld outlet

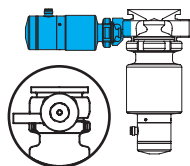


**04 B**  
45° elbow butt weld outlet

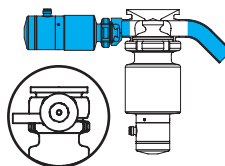


**04 C**  
45° TC outlet

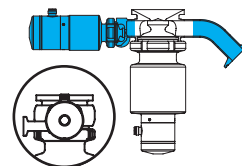
### 05 # Configurations with Tang. Left Satellite Valve for Sterile Transfer (Downstream CIP/SIP) Space saving design for tight areas



**05 A**  
Short butt weld outlet

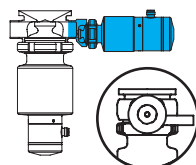


**05 B**  
45° elbow butt weld outlet

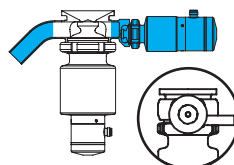


**05 C**  
45° TC outlet

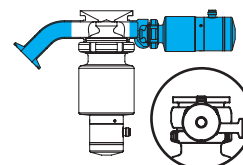
### 06 # Configurations with Tang. Right Satellite Valve for Sterile Transfer (Downstream CIP/SIP) Space saving design for tight areas



**06 A**  
Short butt weld outlet



**06 B**  
45° elbow butt weld outlet



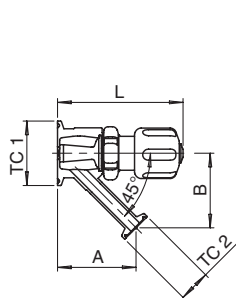
**06 C**  
45° TC outlet

**ATTENTION:** add the code of the configuration (example: "01 C")  
after the code of the valve (instead of: "## #") in order to achieve the complete valve code

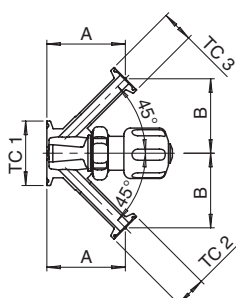


TECHNICAL INFORMATION \_ **YE12-TC##-PTFE-1###**

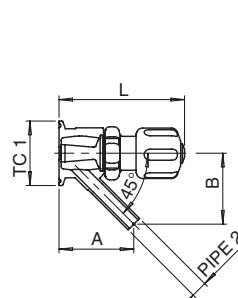
# TCS MANUAL



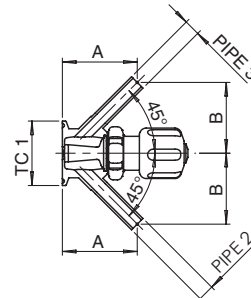
YE12-TC##-PTFE-1SO1  
Valve with TC Outlet



YE12-TC##-PTFE-1FT1  
Valve with TC Outlet & TC Inlet for CIP/SIP



YE12-TC##-PTFE-1SO2  
Valve with BW Outlet



YE12-TC##-PTFE-1FT2  
Valve with BW Outlet & BW Inlet for CIP/SIP

**YE12-TC##-PTFE-1### - TRI-CLAMP EXTENDED SAMPLING VALVES WITH MANUAL ACTUATORS AND DIAPHRAGMS** are designed to take sample of fluids from the tank for most stringent applications such as bioreactors, fermenters and preparation tanks. The body shape and their internal design offer a very reliable component for Aseptic Processing Applications. They have a simple and safe design, with full drainability up to 5° of inclined installation, without asymptotic seals and dead legs, offering fast cleanability and sterilization practices. They are designed to fulfill the most stringent demands of CIP-SIP and production activities in Aseptic Processing. Equipped with PTFE diaphragms acc. to USP Class VI-121°C, Manual Actuators made from stainless steel and PTFE. Tri-Clamp Extended Sampling Valves (TCS) are available for connections from 1" up to 3" in 2 different designs (Shut-Off and Flow-Through) and 2 different outlet configurations (1/2" Tri-Clamp and Butt-Weld). Adding upstream satellite valves (Steam, Water, Nitrogen, Air, etc...) and downstream additional valves (CIP Drain, SIP Condensate, etc...), a clean and sterile sampling can be achieved avoiding cross-contamination risk.

CODE	CAD Size	TC1 mm	TC2 mm	PIPE2 mm	TC3 mm	PIPE3 mm	A mm	B mm	L mm	T C°	P bar
YE12-TC50-PTFE-ISO1	E12	50.00	25.00	-	-	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC50-PTFE-ISO2	E12	50.00	-	12.70x1.65	-	-	58.50	55.50	98.50	-80 / 200	-1 / 6
YE12-TC50-PTFE-1FT1	E12	50.00	25.00	-	25.00	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC50-PTFE-1FT2	E12	50.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	98.50	-80 / 200	-1 / 6
YE12-TC64-PTFE-ISO1	E12	64.00	25.00	-	-	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC64-PTFE-ISO2	E12	64.00	-	12.70x1.65	-	-	58.50	55.50	98.50	-80 / 200	-1 / 6
YE12-TC64-PTFE-1FT1	E12	64.00	25.00	-	25.00	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC64-PTFE-1FT2	E12	64.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	98.50	-80 / 200	-1 / 6
YE12-TC77-PTFE-ISO1	E12	77.50	25.00	-	-	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC77-PTFE-ISO2	E12	77.50	-	12.70x1.65	-	-	58.50	55.50	98.50	-80 / 200	-1 / 6
YE12-TC77-PTFE-1FT1	E12	77.50	25.00	-	25.00	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC77-PTFE-1FT2	E12	77.50	-	12.70x1.65	-	12.70x1.65	56.50	55.50	98.50	-80 / 200	-1 / 6
YE12-TC91-PTFE-ISO1	E12	91.00	25.00	-	-	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC91-PTFE-ISO2	E12	91.00	-	12.70x1.65	-	-	58.50	55.50	98.50	-80 / 200	-1 / 6
YE12-TC91-PTFE-1FT1	E12	91.00	25.00	-	25.00	-	61.50	58.50	98.50	-80 / 200	-1 / 6
YE12-TC91-PTFE-1FT2	E12	91.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	98.50	-80 / 200	-1 / 6

All dimensions are in mm - All data may change without prior notice

**Body material:** 1.4435-BN2 - Low Ferrite - Low Sulphur

**Diaphragm material:** PTFE USP Class VI – 121°C

**Application Areas:** SAFE

**Surface Roughness:** Internal surface (manually polished)  
Ra ≤ 0.3µm (16µin)

**External surface:** Ra ≤ 0.8µm (32µin)

**Surface Treatment:** Manually polished (available also in EP version - Electropolishing after manual polishing)

**Labeling:** Each valve body is labeled for full LOT traceability

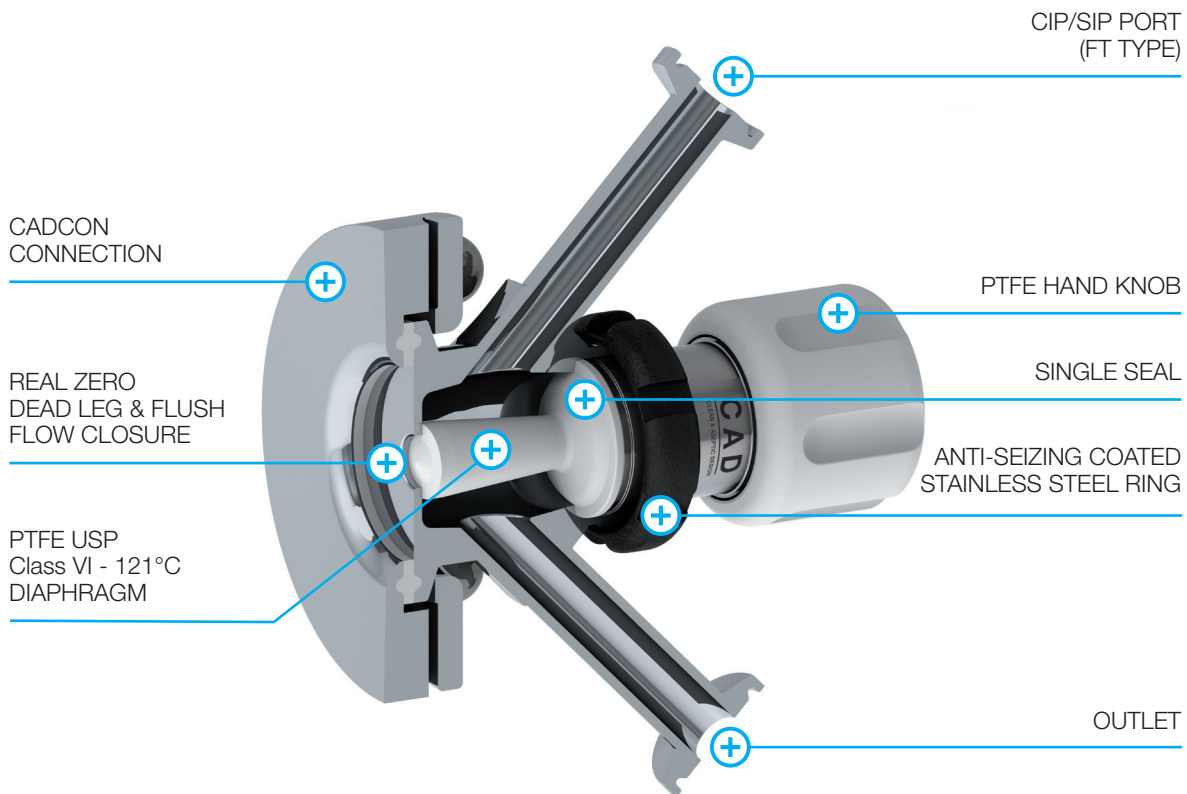
**Packaging:** Valve body is sealed in plastic bags and packaged in a closed box

**Standard Documentation:** Operating and Maintenance bulletin, Certificate of Conformity and Materials Certification 3.1

**Quality Control:** Quality Assurance System guarantees the control and traceability of the product.

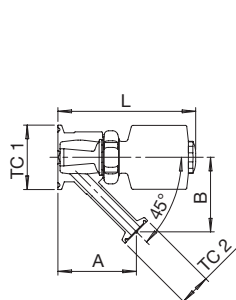
**Orders and Information:** For additional information, drawings or place an order call your nearest distributor.

## EXAMPLE OF VALVE ASSEMBLED ON CADCON CONNECTION

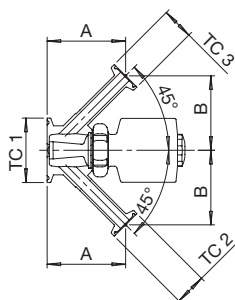


TECHNICAL INFORMATION \_ **YE12-TC##-PTFE-2###**

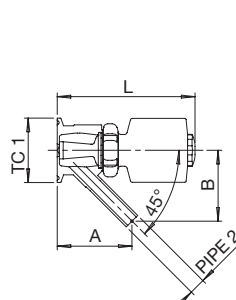
## TCS PNEUMATIC



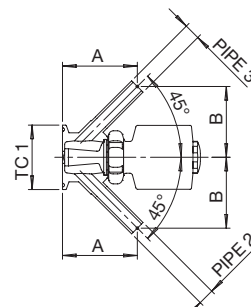
YE12-TC##-PTFE-2SO1  
Valve with TC Outlet



YE12-TC##-PTFE-2FT1  
Valve with TC Outlet & TC Inlet for CIP/SIP



YE12-TC##-PTFE-2SO2  
Valve with BW Outlet



YE12-TC##-PTFE-2FT2  
Valve with BW Outlet & BW Inlet for CIP/SIP

### YE12-TC##-PTFE-2### - TRI-CLAMP EXTENDED SAMPLING VALVES WITH PNEUMATIC ACTUATORS

AND DIAPHRAGMS are designed to take sample of fluids from the tank for most stringent applications such as bioreactors, fermenters and preparation tanks. The body shape and their internal design offer a very reliable component for Aseptic Processing Applications. They have a simple and safe design, with full drainability up to 5° of inclined installation, without asymptotic seals and dead legs, offering fast cleanability and sterilization practices. They are designed to fulfill the most stringent demands of CIP-SIP and production activities in Aseptic Processing. Equipped with PTFE diaphragms acc. to USP Class VI-121°C, Pneumatic Actuators made from stainless steel. Tri-Clamp Extended Sampling Valves (TCS) are available for connections from 1" up to 3" in 2 different designs (Shut-Off and Flow-Through) and 2 different outlet configurations (1/2" Tri-Clamp and Butt-Weld). Adding upstream satellite valves (Steam, Water, Nitrogen, Air, etc...) and downstream additional valves (CIP Drain, SIP Condensate, etc...), a clean and sterile sampling can be achieved avoiding cross-contamination risk.

CODE	CAD Size	TC1 mm	TC2 mm	PIPE2 mm	TC3 mm	PIPE3 mm	A mm	B mm	L mm	T C°	P bar
YE12-TC50-PTFE-2SO1	E12	50.00	25.00	-	-	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC50-PTFE-2SO2	E12	50.00	-	12.70x1.65	-	-	58.50	55.50	108.00	-80 / 200	-1 / 6
YE12-TC50-PTFE-2FT1	E12	50.00	25.00	-	25.00	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC50-PTFE-2FT2	E12	50.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	108.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-2SO1	E12	64.00	25.00	-	-	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-2SO2	E12	64.00	-	12.70x1.65	-	-	58.50	55.50	108.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-2FT1	E12	64.00	25.00	-	25.00	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-2FT2	E12	64.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	108.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-2SO1	E12	77.50	25.00	-	-	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-2SO2	E12	77.50	-	12.70x1.65	-	-	58.50	55.50	108.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-2FT1	E12	77.50	25.00	-	25.00	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-2FT2	E12	77.50	-	12.70x1.65	-	12.70x1.65	56.50	55.50	108.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-2SO1	E12	91.00	25.00	-	-	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-2SO2	E12	91.00	-	12.70x1.65	-	-	58.50	55.50	108.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-2FT1	E12	91.00	25.00	-	25.00	-	61.50	58.50	108.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-2FT2	E12	91.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	108.00	-80 / 200	-1 / 6

All dimensions are in mm - All data may change without prior notice

**Body material:** 1.4435-BN2 - Low Ferrite - Low Sulphur

**Diaphragm material:** PTFE USP Class VI – 121°C

**Application Areas:** SAFE

**Surface Roughness:** Internal surface (manually polished)  
Ra ≤ 0.3µm (16µin)

**External surface:** Ra ≤ 0.8µm (32µin)

**Surface Treatment:** Manually polished (available also in EP version - Electropolishing after manual polishing)

**Labeling:** Each valve body is labeled for full LOT traceability

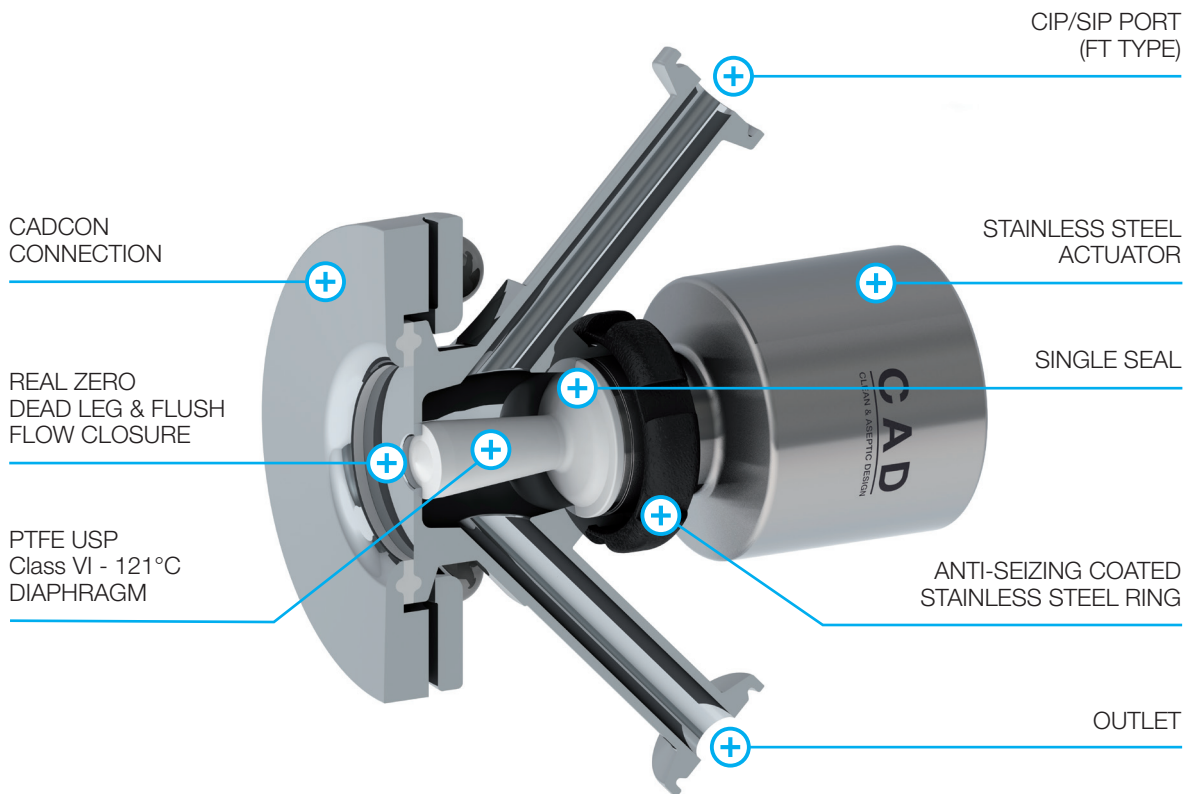
**Packaging:** Valve body is sealed in plastic bags and packaged in a closed box

**Standard Documentation:** Operating and Maintenance bulletin, Certificate of Conformity and Materials Certification 3.1

**Quality Control:** Quality Assurance System guarantees the control and traceability of the product.

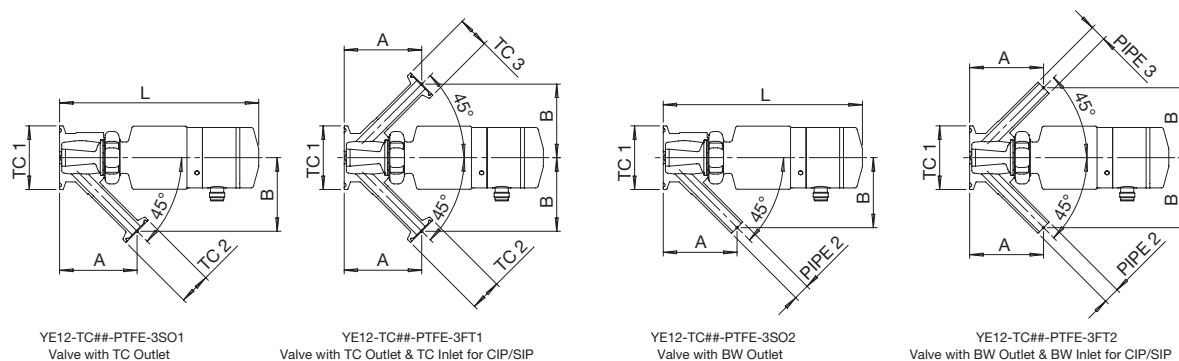
**Orders and Information:** For additional information, drawings or place an order call your nearest distributor.

## EXAMPLE OF VALVE ASSEMBLED ON CADCON CONNECTION



TECHNICAL INFORMATION \_ YE12-TC##-PTFE-3###

## TCS PNEUMATIC WITH SENSOR



**YE12-TC##-PTFE-3### - TRI-CLAMP EXTENDED SAMPLING VALVES WITH PNEUMATIC ACTUATORS, PROGRAMMABLE DOUBLE POSITION SENSORS AND DIAPHRAGMS** are designed to take sample of fluids from the tank for most stringent applications such as bioreactors, fermenters and preparation tanks. The body shape and their internal design offer a very reliable component for Aseptic Processing Applications. They have a simple and safe design, with full drainability up to 5° of inclined installation, without asymptotic seals and dead legs, offering fast cleanability and sterilization practices. They are designed to fulfill the most stringent demands of CIP-SIP and production activities in Aseptic Processing. Equipped with PTFE diaphragms acc. to USP Class VI-121°C, Pneumatic Actuators and Programmable Double Position Sensors made from stainless steel. Tri-Clamp Extended Sampling Valves (TCS) are available for connections from 1" up to 3" in 2 different designs (Shut-Off and Flow-Through) and 2 different outlet configurations (1/2" Tri-Clamp and Butt-Weld). Adding upstream satellite valves (Steam, Water, Nitrogen, Air, etc...) and downstream additional valves (CIP Drain, SIP Condensate, etc...), a clean and sterile sampling can be achieved avoiding cross-contamination risk.

CODE	CAD Size	TC1 mm	TC2 mm	PIPE2 mm	TC3 mm	PIPE3 mm	A mm	B mm	L mm	T C°	P bar
YE12-TC50-PTFE-3SO1	E12	50.00	25.00	-	-	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC50-PTFE-3SO2	E12	50.00	-	12.70x1.65	-	-	58.50	55.50	158.00	-80 / 200	-1 / 6
YE12-TC50-PTFE-3FT1	E12	50.00	25.00	-	25.00	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC50-PTFE-3FT2	E12	50.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	158.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-3SO1	E12	64.00	25.00	-	-	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-3SO2	E12	64.00	-	12.70x1.65	-	-	58.50	55.50	158.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-3FT1	E12	64.00	25.00	-	25.00	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC64-PTFE-3FT2	E12	64.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	158.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-3SO1	E12	77.50	25.00	-	-	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-3SO2	E12	77.50	-	12.70x1.65	-	-	58.50	55.50	158.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-3FT1	E12	77.50	25.00	-	25.00	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC77-PTFE-3FT2	E12	77.50	-	12.70x1.65	-	12.70x1.65	56.50	55.50	158.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-3SO1	E12	91.00	25.00	-	-	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-3SO2	E12	91.00	-	12.70x1.65	-	-	58.50	55.50	158.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-3FT1	E12	91.00	25.00	-	25.00	-	61.50	58.50	158.00	-80 / 200	-1 / 6
YE12-TC91-PTFE-3FT2	E12	91.00	-	12.70x1.65	-	12.70x1.65	56.50	55.50	158.00	-80 / 200	-1 / 6

All dimensions are in mm - All data may change without prior notice

**Body material:** 1.4435-BN2 - Low Ferrite - Low Sulphur

**Diaphragm material:** PTFE USP Class VI – 121°C

**Application Areas:** SAFE

**Surface Roughness:** Internal surface (manually polished)  
Ra ≤ 0.3µm (16µin)

**External surface:** Ra ≤ 0.8µm (32µin)

**Surface Treatment:** Manually polished (available also in EP version - Electropolishing after manual polishing)

**Labeling:** Each valve body is labeled for full LOT traceability

**Packaging:** Valve body is sealed in plastic bags and packaged in a closed box

**Standard Documentation:** Operating and Maintenance bulletin, Certificate of Conformity and Materials Certification 3.1

**Quality Control:** Quality Assurance System guarantees the control and traceability of the product.

**Orders and Information:** For additional information, drawings or place an order call your nearest distributor.

## EXAMPLE OF VALVE ASSEMBLED ON CADCON CONNECTION

