

Pigging System

Sampling

Filtration

Safety valves



# Capacitive sampling valve



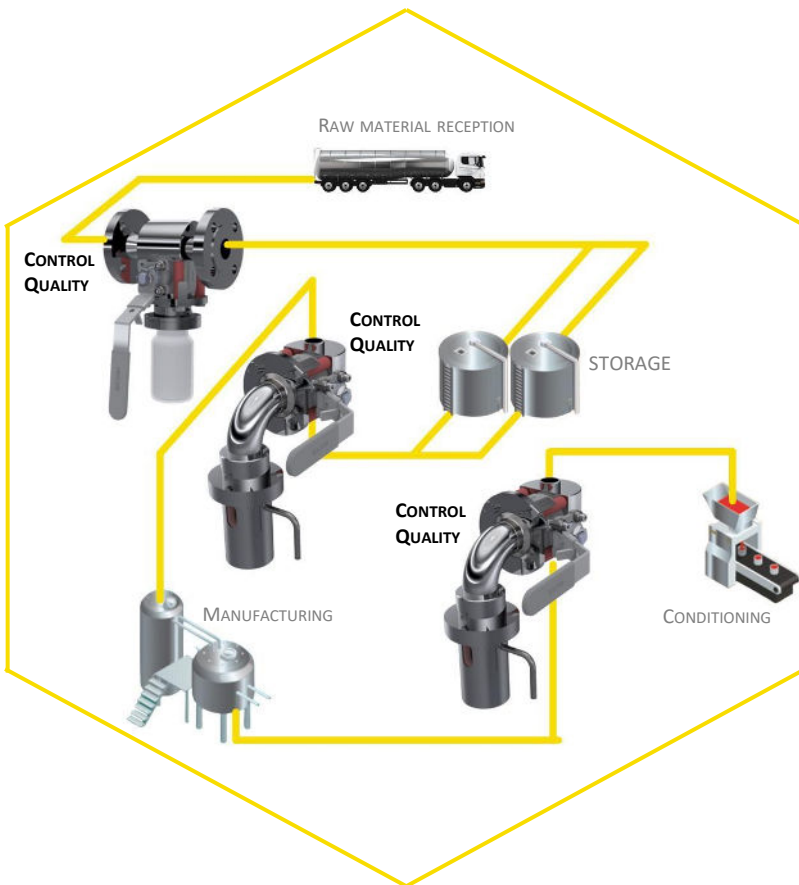
*The expertise  
of a designer  
and manufacturer*

CAPACITIVE  
 SAMPLING VALVE

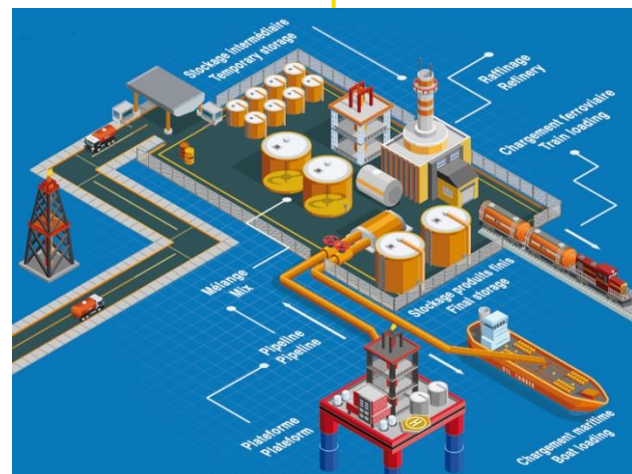
# APPLICATIONS AND DESIGN



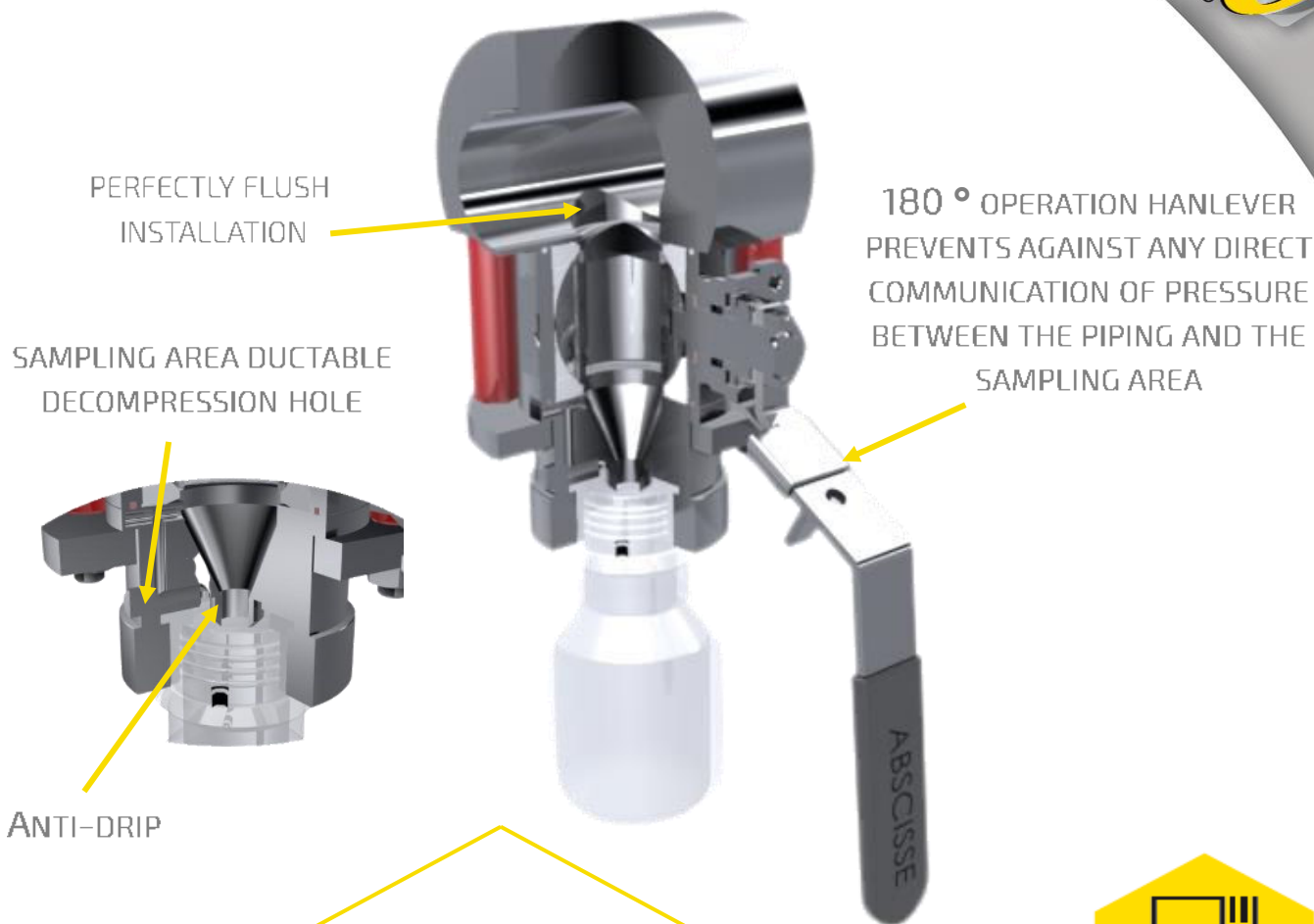
IN ORDER TO GUARANTEE PRODUCT TRACEABILITY AND QUALITY, WE HAVE DEVELOPED A COMPLETE RANGE OF CAPACITIVE BALL VALVES MEETING THE REQUIREMENTS OF THE CHEMICAL, PETROCHEMICAL, COSMETIC, SUGAR, NUCLEAR AND BITUMEN INDUSTRIES.



CERTIFICATION AND VALIDATION OF PRODUCT QUALITY GO THROUGH MULTIPLE CONTROLS BEFORE AND AFTER EACH MANUFACTURING STEP



**IN CONSTANT WATCH, WE DEVELOP AND INNOVATE IN ORDER TO OFFER OUR BEST RESPOND TO CHANGING REQUIREMENTS**



**FLUSH CONSTRUCTION**

CONSTANT SAMPLING VOLUME

**180° OPERATION**

EASY AUTOMATION  
(ISO5211 TOP MOUNTING BOARD)

**ANTI-DRIP SYSTEME**

DUCTABLE DECOMPRESSION HOLE

**EUROPEAN DESIGN AND  
MANUFACTURING**



CAPACITIVE  
 SAMPLING VALVE

# TECHNICAL DEFINITION

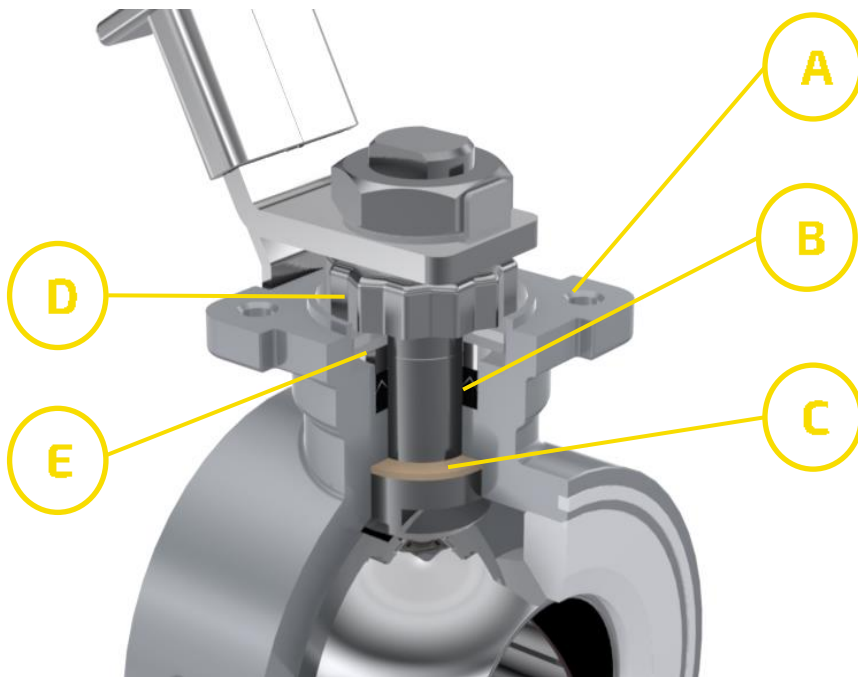


STANDARD SAMPLING CAPACITY  
**15, 30, 50 AND 100 cc**

DESIGNED FOR **ND15 TO ND150** PIPING

**TO BE WELDED BW** ON ISO 1127,  
 SCHEDULE, SMS3008, DIN11850,  
 BSOD, OR **FLANGES** ETC..

MOUNTING ON TANK OR HORIZONTAL OR  
 VERTICAL PIPING



**A** ISO5211 TOP FOR ACTUATOR MOUNTING

**B** ANTISTATIC GLAND-PACKING

**C** STEM THRUST SEAL IN PTFE/PEEK FOR A  
 LONGER LIFETIME AND TO AVOID METAL/METAL  
 FRICTION

**D** NUT LOCKERS ENSURE TO KEEP THE PACKING  
 NUT AND THE HANDLE NUT IN PLACE

**E** SPRING WASHERS TO COMPENSATE FOR THE  
 WEAR OF THE GLAND

Metalic parts	Standard capacity	Manufacturing
Carbone steel (1.0619)	15, 30, 50 or 100 cc	⊙
S/S 304L (1.4301)	15, 30, 50 or 100 cc	⦿
S/S 316L (1.4404)	15, 30, 50 or 100 cc	⊙
Uranus B6 (1.4539)	15, 30, 50 or 100 cc	⊗
Alloy C2000 (2.4602)	15, 30, 50 or 100 cc	⊗

⊙ Standard

⦿ Occasional

⊗ On request

**TESTS ACCORDING ISO5208 & EN12266-2**

**CATEGORY A ACCORDING EN12266-1**

**FUGITIVES EMISSIONS ACCORDING  
«TA LUFT» §3.1.8.4 REQUIREMENTS**

**VACCUM RESISTANCE AT LEAST 10<sup>-3</sup> MBARS**

**ANTISTATIC GLAND PACKING ACCORDING  
ISO7121**



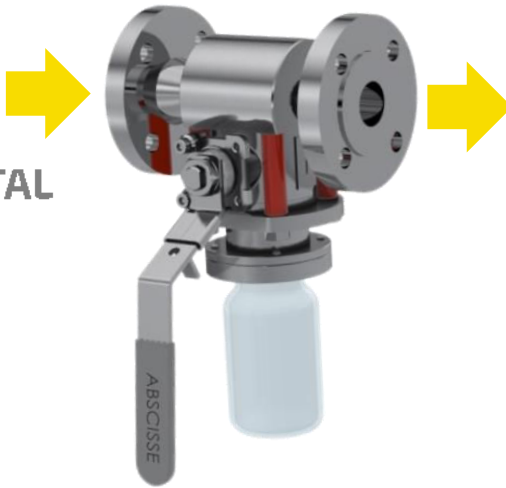
**TEMPERATURE LIMITS**

Seats	Minimum Temperature (carbon steel)	Minimum Temperature (stainless steel)	Maximum Temperature
TFM1600	-10°C / 14°F	-50°C / -58°F	190°C / 374°F
PTFE + 20% PEEK	-10°C / 14°F	-50°C / -58°F	280°C / 536°F
PE-UHWM	-10°C / 14°F	-50°C / -58°F	100°C / 212°F
PEEK	-10°C / 14°F	-50°C / -58°F	300°C / 572°F

**CAPACITIVE  
SAMPLING VALVE**

**INTEGRATION WITH PIPING**

**HORIZONTAL  
HOSE**



**VERTICAL  
HOSE**



**CONNECTION**

BUTT WELD END



TANK BOTTOM FLANGE (BASE OR SIDE WALL)



FLUSH BALL ONTO MACHINE SLEEVE  
PART FLANGES CONNECTION  
ACCORDING DIN3202F1  
(PN16, 40, ASA 150/300 ...)

FLUSH BALL ONTO  
MACHINE SLEEVE PART  
BW CONNECTION  
(ACCORDING SANDARD  
ISO, SCH, SMS,..)

FLUSH BALL ONTO MACHINE SLEEVE  
PART THREATED CONNECTIONS  
(ISO, SMS, DIN11850...)



FLUSH BALL ONTO MACHINE  
SLEEVE PART CLAMP CONNECTION  
(ISO, SMS, BSOD, DIN ...)



**ERGONOMICS, SAFETY OF USE AND ADAPTATION TO SERVICE CONDITIONS** DEFINE THE DESIGN AND CONNECTION OF THE SAMPLE COLLECTION OUTLET



BUTT WELDING END

SOCKET WELDING END

THREADED NPT OR BSP END

EXTENDED BEVELED END

« SCREW ON » END WITH COLLECTABLE VENT

FOR SCREW-ON BOTTLE

"SCREW-ON" ENDS FOR THE COLLECTED SAMPLE COLLECTION CAN BE MADE ACCORDING STANDARD IN DIN28, 38 OR GL45. VIALS CAN BE OPTIONALLY ENCRYPTED TO YOU.

THEY CAN BE MADE OF STERILE GLASS OR PLASTIC (PE, PTFE, ETC.)

**WE ADAPT THE SAMPLING OUTLETS TO THE VIALS ALREADY USED AS STANDARD BY OUR CUSTOMERS.**

**CAPACITIVE  
SAMPLING VALVE**

**OPTIONNAL CONSTRUCTION**

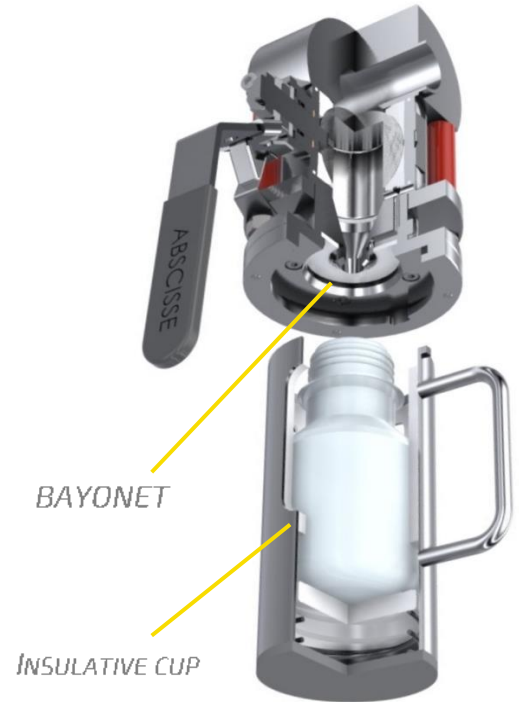
**HOT FLUIDS (>60°C – 140°F)**

**INSULATIVE HOUSING**

WHEN SAMPLING HOT FLUIDS SCREWING AND UNSCREWING THE VIAL IS DELICATE.

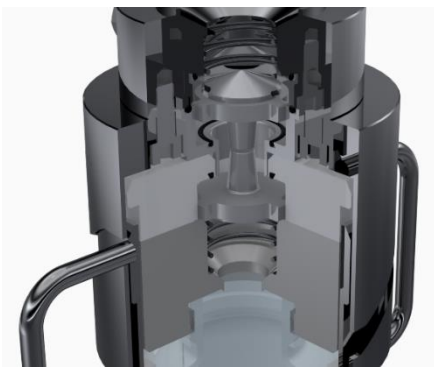
THE INSULATIVE CUP (STAINLESS STEEL AND PTFE) ISOLATES THE USER FROM THE COLLECTION BOTTLE.

WITH ITS BAYONET MOUNT, SPRING AND FILL CONTROL LIGHTS, USE IS MADE EASY.



**SENSITIVE FLUIDS**

**SHUTOFF NON RETURN VALVES**



SOME FLUIDS CAN OXIDIZE OR DETERIORATE ON CONTACT WITH AIR. THIS CAN DISTORT THE SAMPLE. THE USE OF SHUT-OFF VALVES ON THE SAMPLE OUTLET AND / OR THE COLLECTION CONTAINER ALLOWS THE ATMOSPHERE TO BE CONTROLLED DURING SAMPLING AS WELL AS DURING WITHDRAWAL AND TRANSPORT OPERATIONS.

**FREEZING AND CRYSTALLIZING FLUIDS**

**HEATING JACKET**

TO AVOID CHANGES IN THE STATE OF CERTAIN FLUIDS, A CONTROLLING TEMPERATURE JACKET CAN BE MADE.

THIS MAY CONCERN:

- CONNECTION TO THE PIPING
- THE SAMPLING VALVE BODY
- THE SAMPLE OUTLET
- THE COLLECTION BOTTLE

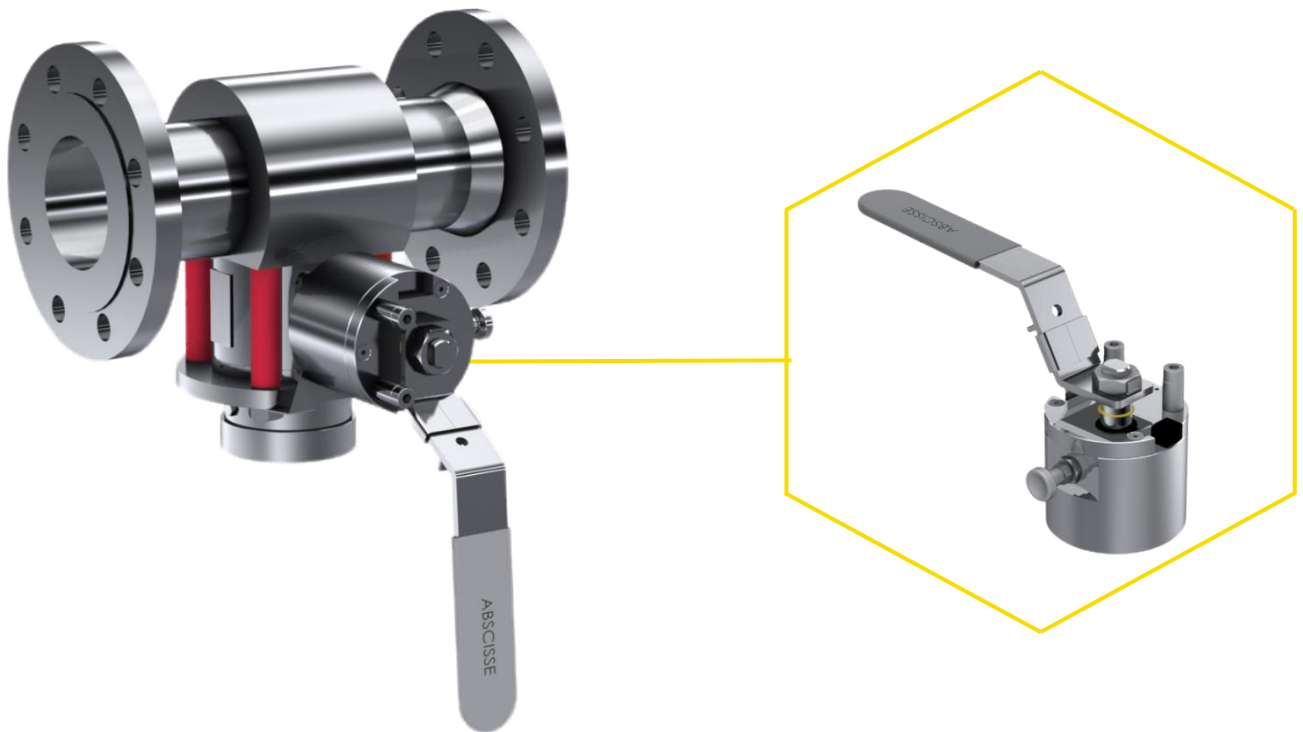




# OPTIONNAL CONSTRUCTION

## RATCHET WHEEL OPERATION BOX : NUMBER OF OPERATIONS LIMITER

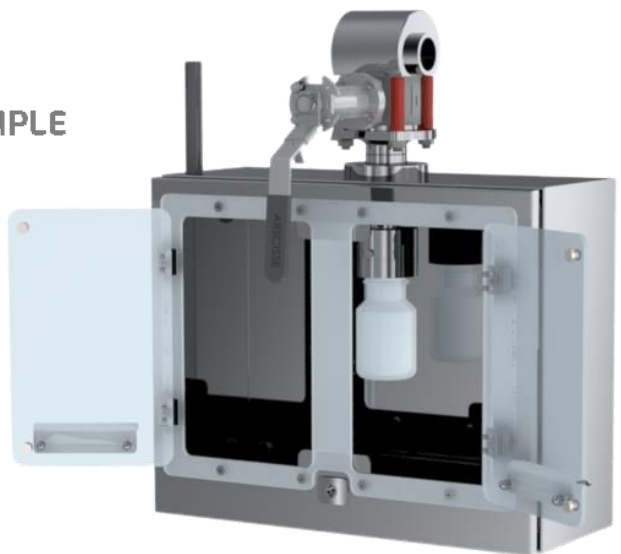
TO AVOID THE RISK OF THE BOTTLE OVERFLOWING, CAUSED BY TOO MANY OPERATIONS, WE HAVE DESIGNED A RACKET WHEEL WITH REARMING DEVICE THAT MECHANICALLY BLOCKS THE LEVER ONCE A PREDEFINED VOLUME HAS BEEN REACHED (2 TO 5 OPERATIONS).



## CONTAINMENT CABINET : CONFINING THE COLLECTION OF THE SAMPLE

FOR SENSITIVE OR DANGEROUS FLUIDS, A BOX ALLOWS SAMPLING IN A CONFINED AREA.

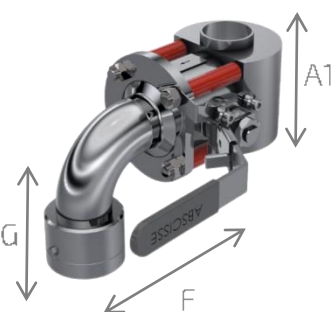
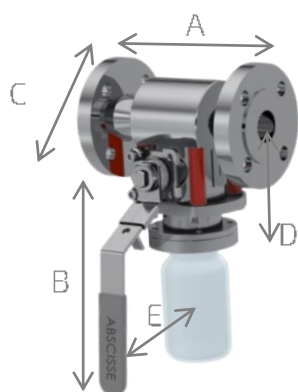
THIS BOX CAN BE FITTED WITH NOZZLES FOR CONNECTION TO GAS TREATMENT, TO THE COLLECTION OF DRIPS OR TO A WASHING DEVICE.



**CAPACITIVE SAMPLING VALVE**

**CONSTRUCTION 15CC**

**INDICATIVE DIMENSIONS (\*\*\*)**



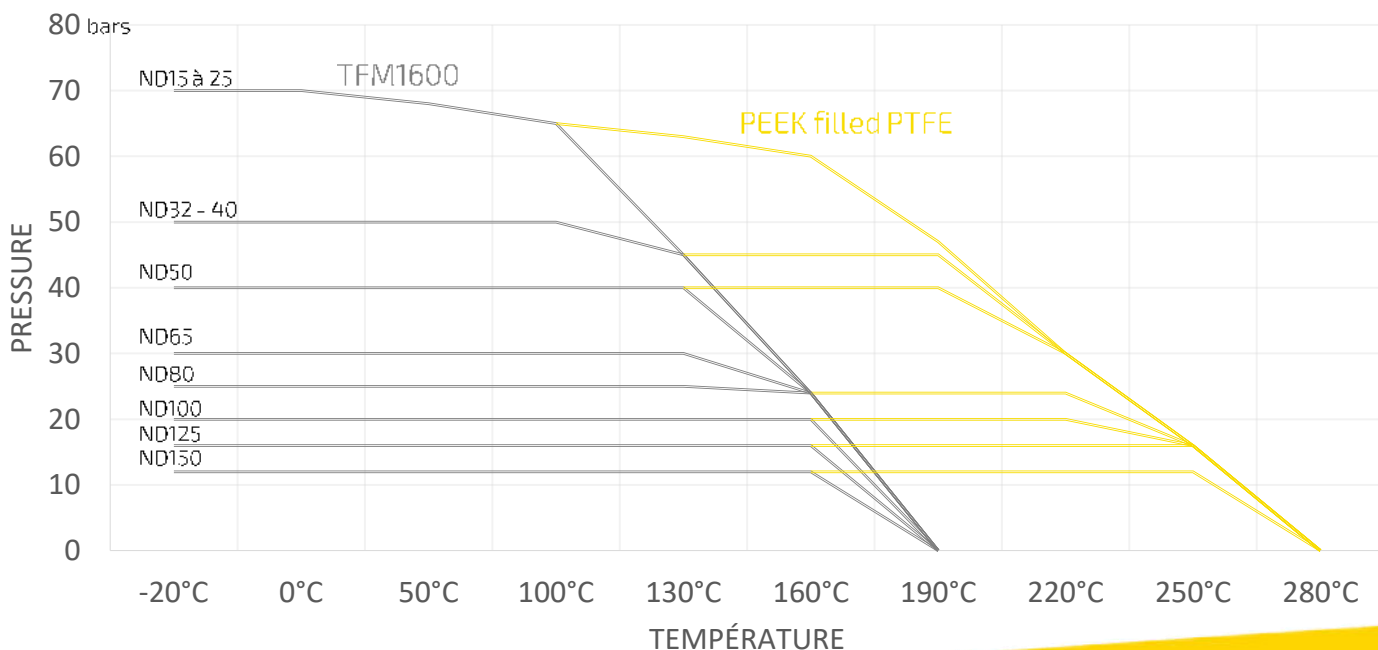
ND	A Flanges (*)	A1 BW	B on 180°	C (**)	D	E	F	G
15	130	80	158	95	112	121,7	153	132
20	150	80	158	105	115	121,7	156	132
25	160	80	158	115	118	121,7	160	132
32	180	85	158	140	123	204	165	132
40	200	85	158	150	126	204	168	132
50	230	85	158	165	137	204	179	132
65	290	85	158	185	148	204	190	132
80	310	85	158	200	155	204	197	132
100	350	85	158	220	168	204	210	132
125	400	85	158	250	184	204	226	132
150	480	85	158	285	196	204	238	132

(\*) DIN3202-F1

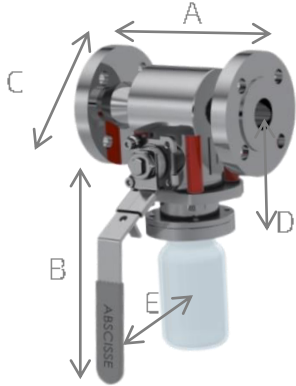
(\*\*) EN1092-1 type 11B – PN40 up to ND40 – PN16 for the others as standard - Other type of flanges on request

(\*\*\*) Dimensions in mm – variable dimensions depending on the type of bottle

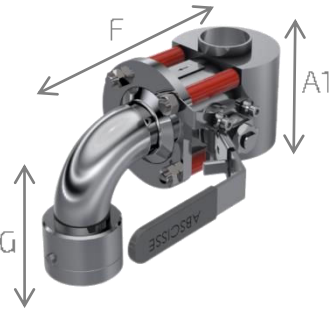
**PRESSURE / TEMPERATURE CURVE**



## INDICATIVE DIMENSIONS (\*\*\*)



ND	A Flanges (*)	A1 BW	B on 180°	C (**)	D	E	F	G
15	130	96	188	95	123	135,7	137	111
20	150	96	188	105	125	135,7	140	111
25	160	96	188	115	129	135,7	143	111
32	180	96	188	140	133	135,7	147	111
40	200	96	188	150	136	239	150	111
50	230	96	188	165	142	239	156	111
65	290	96	188	185	155	239	169	111
80	310	96	188	200	162	239	176	111
100	350	96	188	220	180	239	194	111
125	400	96	188	250	193	239	207	111
150	480	96	188	285	208	239	222	111

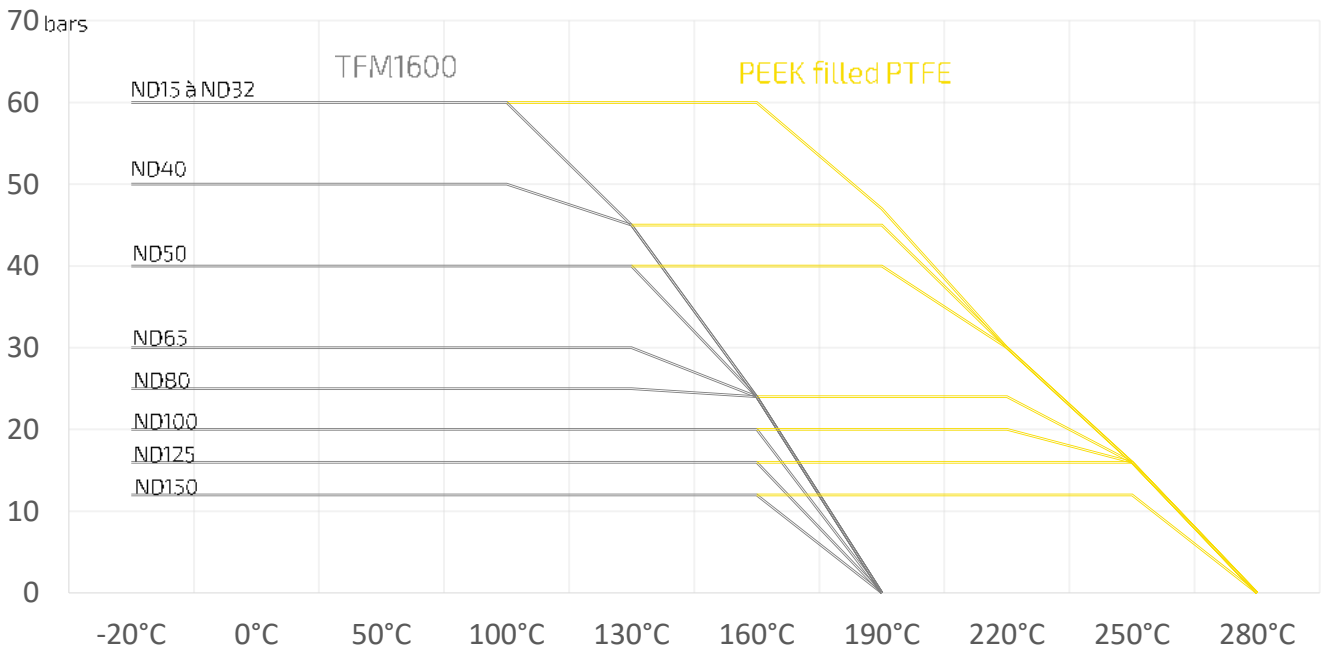


(\*) DIN3202-F1

(\*\*) EN1092-1 type 11B – PN40 up to ND40 – PN16 for the others as standard - Others type of flanges on request

(\*\*\*) Dimensions in mm – variable dimensions depending on the type of bottle

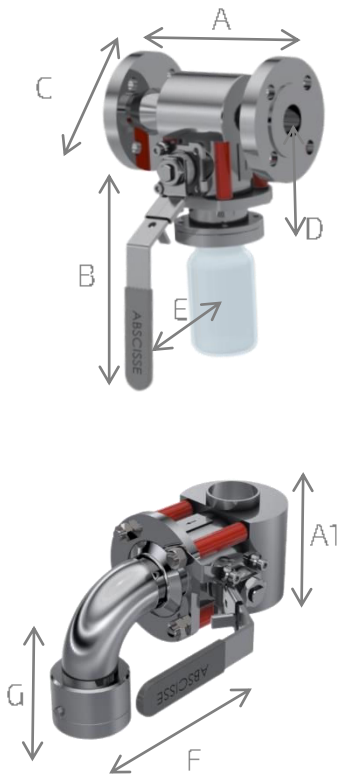
## PRESSURE / TEMPERATURE CURVE



## CAPACITIVE SAMPLING VALVE

# CONSTRUCTION 50CC

### INDICATIVE DIMENSIONS (\*\*\*)



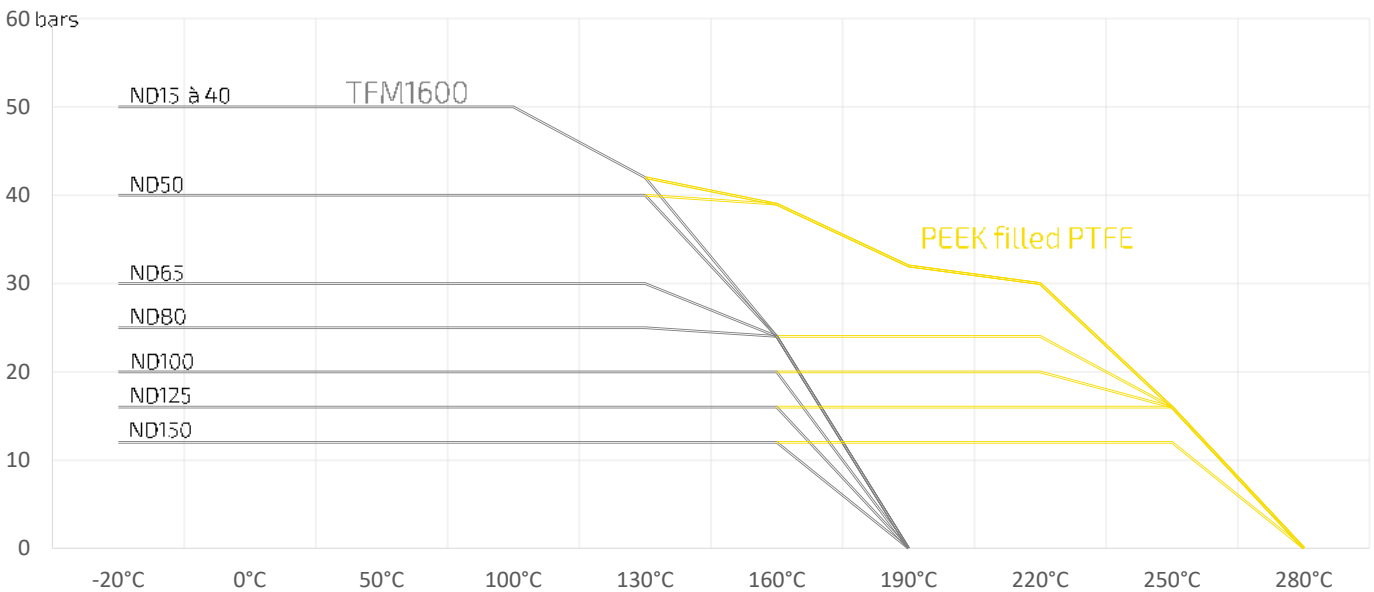
ND	A Flanges (*)	A1 BW	B on 180°	C (**)	D	E	F	G
15	130	110	188	95	123	140,7	158	117
20	150	110	188	105	126	140,7	161	117
25	160	110	188	115	131	140,7	166	117
32	180	110	188	140	134	140,7	169	117
40	200	110	188	150	136	140,7	172	117
50	230	110	188	165	144	242	180	117
65	290	110	188	185	151	242	186	117
80	310	110	188	200	160	242	195	117
100	350	110	188	220	177	242	213	117
125	400	110	188	250	190	242	226	117
150	480	110	188	285	204	242	240	117

(\*) DIN3202-F1

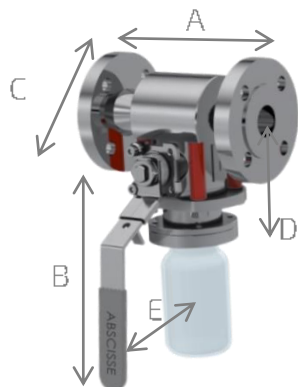
(\*\*) EN1092-1 type 11B – PN40 up to ND40 – PN16 for the others as standard - Other type of flanges on request

(\*\*\*) Dimensions in mm – variable dimensions depending on the type of bottle

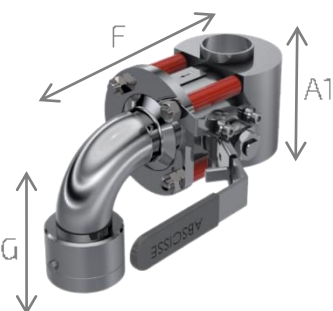
### PRESSURE / TEMPERATURE CURVE



## INDICATIVE DIMENSIONS (\*\*\*)



ND	A Flanges (*)	A1 BW	B on 180°	C (**)	D	E	F	G
15	150	130	225	95	152	158,5	204	131
20	150	130	225	105	152	158,5	204	131
25	160	130	225	115	152	158,5	204	131
32	180	130	225	140	160	158,5	212	131
40	200	130	225	150	160	158,5	212	131
50	230	130	225	165	165	158,5	217	131
65	290	130	225	185	173	158,5	225	131
80	310	130	225	200	180	259	231	131
100	350	130	225	220	195	259	246	131
125	400	130	225	250	205	259	257	131
150	480	130	225	285	229	259	281	131

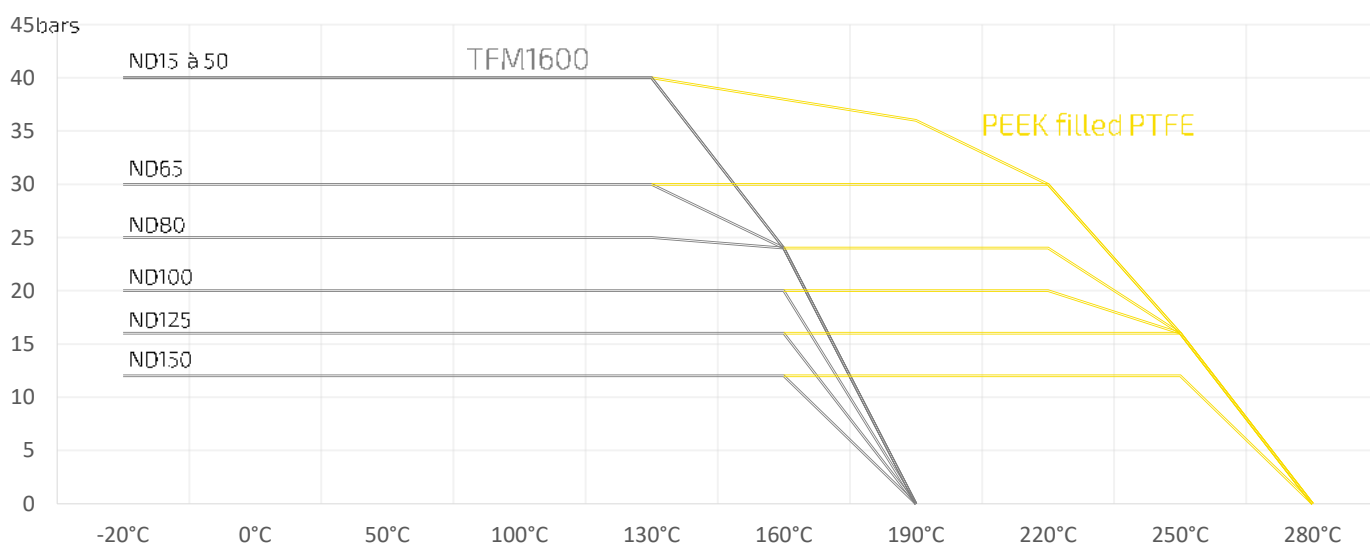


(\*) DIN3202-F1 except ND15

(\*\*) EN1092-1 type 11B – PN40 up to ND40 – PN16 for the others as standard - Other type of flanges on request

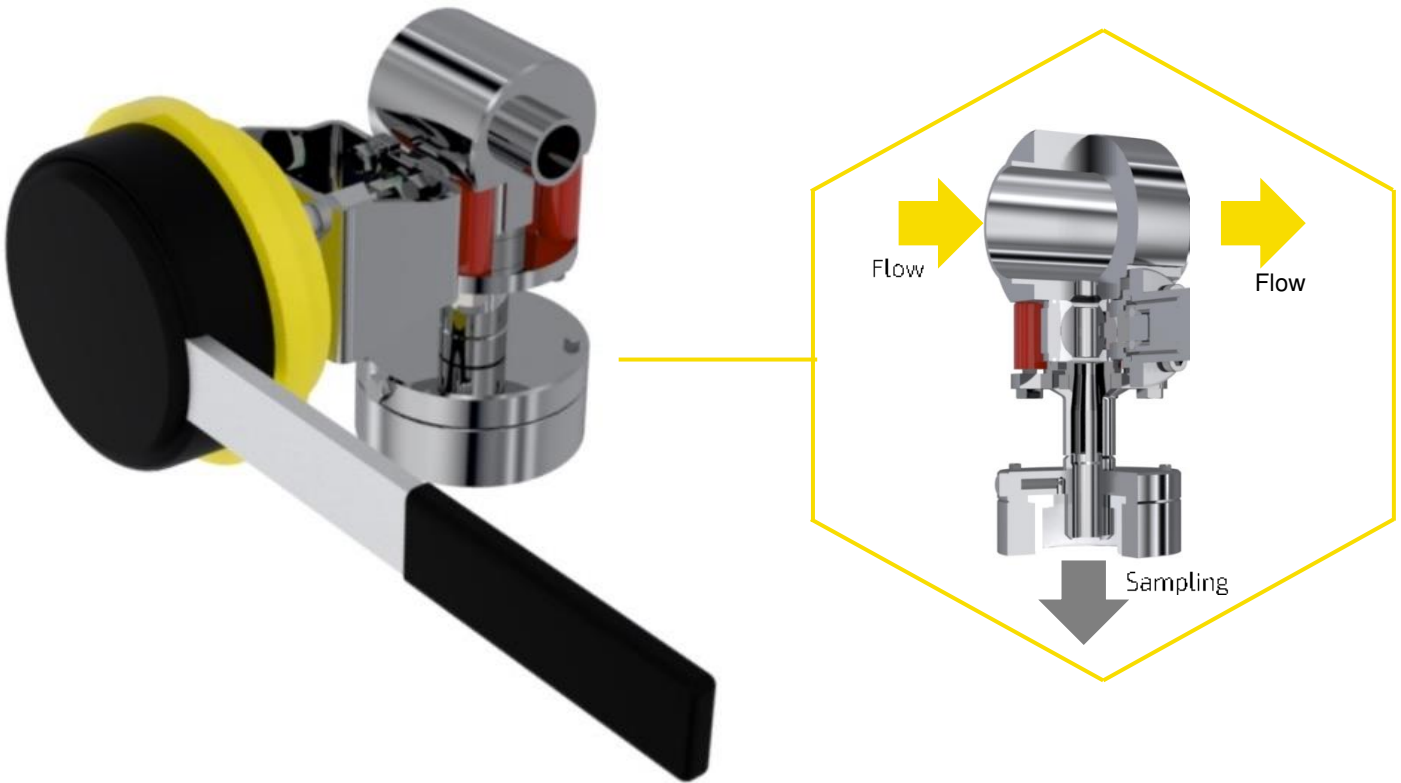
(\*\*\*) Dimensions in mm – variable dimensions depending on the type of bottle

## PRESSURE / TEMPERATURE CURVE



CAPACITIVE  
SAMPLING VALVE

## SAMPLING LARGE VOLUME FLUSH CONSTRUCTION WITH PASS-THROUGH SPHERE



WHEN IT IS NECESSARY TO TAKE A LARGE VOLUME OF PRODUCT TO CARRY OUT DIFFERENT ANALYZES, A CONSTRUCTION USING A CONVENTIONAL SPHERE IS RECOMMENDED.

TO REDUCE THE PRESSURE IN THE VIAL, A SMALL DIAMETER SPHERE IS OFTEN USED.

THE COMBINATION OF THIS WITH A "DEAD MAN" TYPE CONTROL LEVER GUARANTEES THE SAFETY OF SAMPLES.

THE REPRESENTATIVENESS OF THE SAMPLE IS ALWAYS OPTIMAL:

- FLUSH CONSTRUCTION, CONNECTIONS,
- SAMPLING OUTPUTS AND OPTIONS IDENTICAL TO THE CAPACITIVE BALL VERSION

THE SAMPLE COLLECTION OUTPUT IS IDENTICAL TO THAT OF CAPACITIVE BALL VALVES.

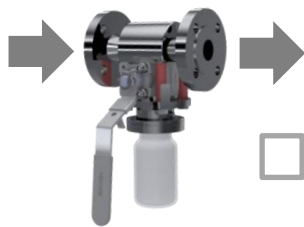
# ELEMENTS REQUIRED FOR DEFINITION

## I°/ Fluid to sample

Type : .....  
 Pressure : ..... Bars (kg/cm<sup>2</sup>) ..... PSI  
 Temperature (T°) : ..... °C ..... °F  
 Other characteristics: .....

## II°/ Sizing

Capacity / Volume : 15ml or 30ml or 50 ml or 100ml  
 ND : ..... standards: ..... Ø: ..... Thickness: .....  
 Connection : .....  
 Piping orientation:



Horizontal



Vertical

## III°/ Materials

Metalic parts : .....  
 Seats : .....

## IV°/ Commande

Manual  Actuator: .....

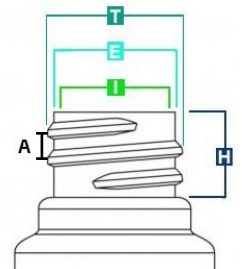
## V°/ Bottle :

Client's providing vial:

A: ..... E: ..... H: ..... I: ..... T: ..... Std: .....

Vial supplied by AB6:

Material: ..... Volume: ..... ml



## VI°/ Other options :

.....  
 .....  
 .....



**They trust us :**

AGRANA, AIR LIQUIDE, AREVA, BASF, BLEOINA, CEMOI, CENEXI, COCA-COLA, COLGATE-PALMOLIVE, OANONE, ORT, FAREVA, FIRMENICH, GERFLOR, GYMA, HENKEL, JOHNSON&JOHNSON, LA MARTINIQUAISE, L'OREAL, LESIEUR, LESSAFRE, MOET & CHANOON, NESTLE, PIERRE FABRE, PERNO RICARO, ROQUETTE, SANOFI, LABORATOIRES SARBEC, SERVIER, SEQENS, SOLVAY, TEREOS, TORAY, VALRHONA, VEOLIA, YOPLAIT, YVES ROCHER. .



Your partner:



**QUILINOX**<sup>®</sup>  
ALL ABOUT F-LUIDS



*The expertise  
of a designer  
and manufacturer*