



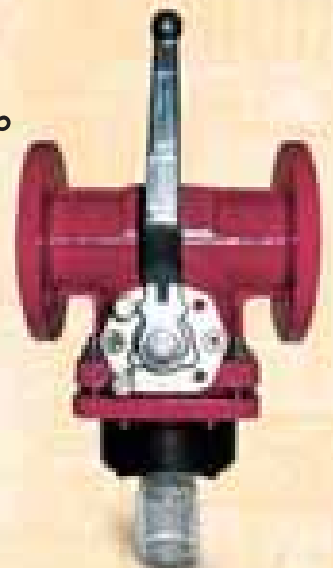
# AtoPro™

The new stainless steel and DCI PFA lined ball valve sampling system from atomac. Complete, variable, safe and easy to operate. Developed and produced with the latest technologies.

Complete Sampling System • AtoPro™ • For manual and automated operations



Stainless Steel • DCI/PFA lined executions



## AtoPro™ – stainless steel and lined ball sampling systems

The AtoPro™ sampling ball valve and its accessories are developed and produced with the latest technologies and offer you a complete, variable, safe and easy sampling system to operate.

The AtoPro™ can be used manually for taking a liquid sample or in an automated way under safety conditions covered by a stainless steel protection cabinet in combination with a detoxification filter system that avoids escape of toxic contaminated gasses into the environment.

Each stainless steel protection cabinet has a bottom outlet which can be used to control spillage of liquids.

Bottle adaptors of the AtoPro™ meet almost all common standards. Special bottle adaptor threads can be made as an option, to meet specific requirements.

The AtoPro™ and its accessories can be further completed with a heating jacket system as well angled adaptor pieces for use in vertical positions.

The AtoPro™ systems made out of stainless steel as well DCI PFA lined, can be prepared to suit clean room requirements.

### CHARACTERISTICS

- Cavity free design
- Temperature 180°C.
- DN25 – DN80
- PN 10-16
- Easy turning
- Sample capacities 15, 45 and 90 cm<sup>3</sup>
- Modular system
- Sophisticated bottle vent outlet
- Available with stainless steel 1.4408 or DCI-PFA lined bodies
- PFA-liner material with FDA approval
- Variable bottle adaptor system
- Suitable for horizontal & vertical installation
- Optional liner material PFA/PFA-Conductive
- ISO Flange for standardised automation systems



## How to operate the AtoPro™

### Manually

To get a fresh liquid sample, take care that the wrench is in the “up-side” position. Now the medium flow hits the top part of the ball cavity and fills it up with a fresh quantity of medium.

By turning the wrench 90° your sample will be automatically protected and separated from the medium flow and the line pressure.

After the complete turning down (180°), the trapped sample drops almost pressure less in the sample bottle.

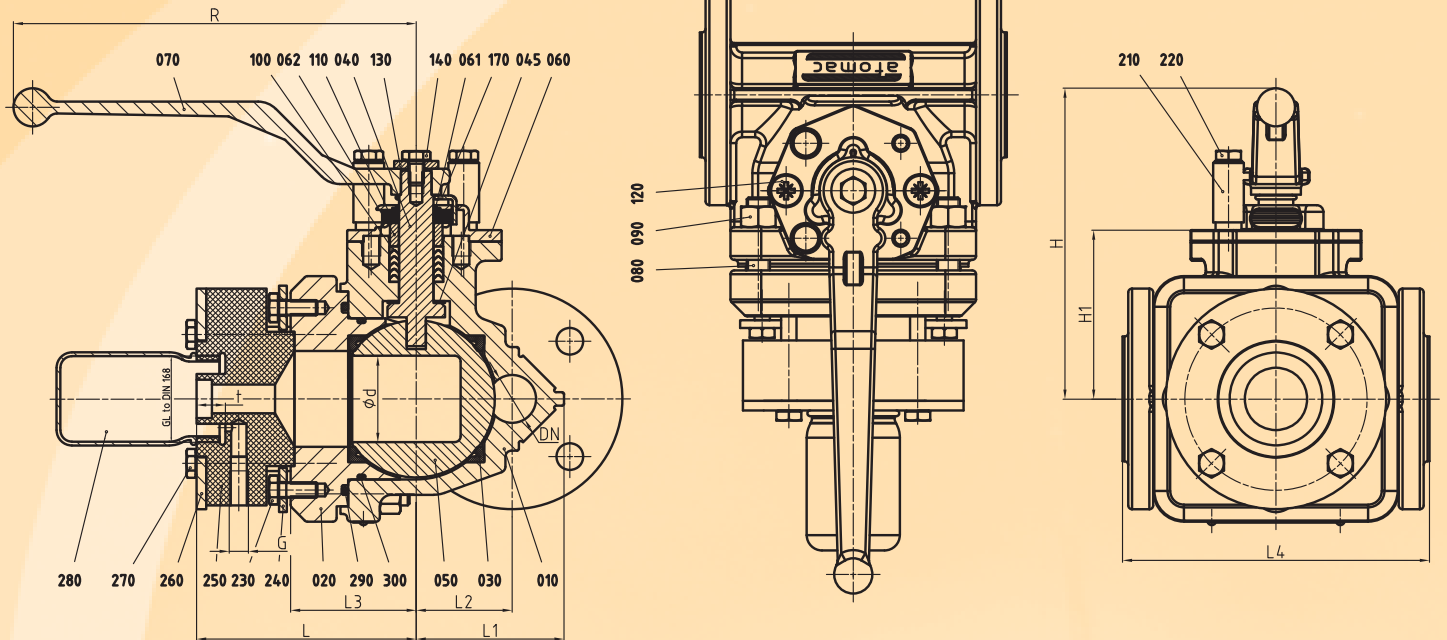
Repeat the above mentioned handling till you have the quantity of medium you need.

### Automated

By operating the lever which is integrated in the Pneumatic 180° Norbro actuation system you rotate the AtoPro™ sampling valve in the necessary positions and repeat this till you have the quantity of medium you need.

The lever serves also as a safety device and reacts immediately if you let it loose. The AtoPro™ sampling valve will switch back to the original position and close the system off.

# Technical data for metallic AtoPro™ sampling valve



## Part List

item	description	material	material no.
010	body	GX 6 CrNiMo 18 10	1.4408
020	flange	GX 6 CrNiMo 18 10	1.4408
030	seat ring	PTFE / PTFE conductive <sup>°</sup>	
040	stem	X 6 CrNiMo Ti 17-12-2	1.4571
045	back-up-ring	PTFE/stainless steel	
050	ball	X 6 CrNiMo Ti 17-12-2	1.4571
060	top cap	GX 6 CrNi 18 9	1.4308
061	sleeve	PTFE	
062	spacer	X 14 CrMoS 17	1.4104
070	hand lever	GX 6 CrNi 18 9	1.4308
080	stud bolt	X 5 CrNi 18 10	1.4301-K70
090	hexagon nut	X 5 CrNi 18 10	1.4301-K70
100	packing material	PTFE-graphite	
110	belleville washer	X 12 CrNi 17 7	1.4310
120	countersunk screw	X 5 CrNi 18 10	1.4301 >

item	description	material	material no.
130	flat washer	X 5 CrNi 18 10	1.4301
140	hexagon bolt	X 5 CrNi 18 10	1.4301
170	grounding device	X 12 CrNi 17 7	1.4310
210	stop	X 5 CrNi 18 10	1.4301
220	hexagon bolt	X 5 CrNi 18 10	1.4301
230	hexagon bolt	X 5 CrNi 18 10	1.4301
240	flat washer	X 5 CrNi 18 10	1.4301
250	adapter	PTFE/PTFE conductive GL 45 <sup>°</sup>	
260	plate	X 5 CrNi 18 10	1.4301
270	hexagon bolt	X 5 CrNi 18 10	1.4301
280	bottle	glass	
290	O-ring	Viton	
300	O-ring	Viton	

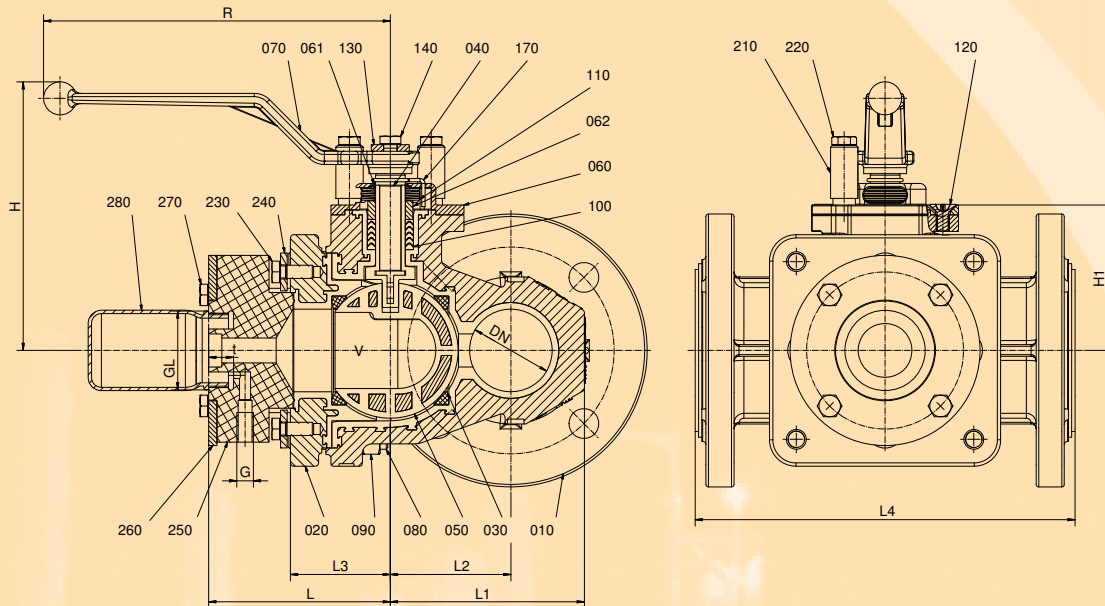
<sup>°</sup> optional

## Dimension/Weight

DN/DIN PN16		L	L1	L2	L3	L4	H	t	G	H1	R	GL DIN 168-1	Ød	max.sampl* vol. cm <sup>3</sup>	weight
025	mm	114,5	77	50	65,5	160	162	15	M10	88	210	GL45	20; 34; 45	15; 45; 90	kg 13,9
050	mm	114,5	102	63	65,5	230	162	15	M10	88	210	GL45	20; 34; 45	15; 45; 90	kg 18,3
080	mm	114,5	133	78	65,5	310	162	15	M10	88	210	GL45	20; 34; 45	15; 45; 90	kg 23,6

\* Max. sample quantity is 90 ml, all others to customer specs.

# Technical data for lined AtoPro™ sampling valve



## Part List

item	description	material	material no.
010	body	EN-GJS-400-LT, PFA/PFA-L° lined (GGG-40.3, PFA/PFA-L° lined)	EN-JS 1049 (0.7043)
020	side piece	EN-GJS-400-LT, PFA/PFA-L° lined (GGG-40.3, PFA/PFA-L° lined)	EN-JS 1049 (0.7043)
030	seat ring	PTFE/PTFE conductive°	
040	stem	X 2 CrNiMoN 22 5 3, PFA lined	1.4470
050	ball	GX 38 CrMo V 5-1, PFA/FEP° lined	1.2343
060	top cap	GX 6 CrNi 18 9 PTFE/PTFE conductive°	1.4308
061	sleeve	PTFE/PTFE conductive	
062	spacer	X 14 CrMoS 17	1.4104
070	hand lever	GB ZnAl4Cu 1 (galvanized)	2.2141
080	stud bolt	X 5 CrNi 18 10	1.4301-K70
090	hexagon nut	X 5 CrNi 18 10	1.4301-K70
100	packing material	PTFE/PTFE graphit°	
110	belleville washer	X 12 CrNi 17 7	1.4310
120	countersunk screw	X 5 CrNi 18 10	1.4301 >

item	description	material	material no.
130	flat washer	X 5 CrNi 18 10	1.4301
140	hexagon bolt	X 5 CrNi 18 10	1.4301
170	grounding device	X 12 CrNi 17 7	1.4310
210	stop	ST 37.2 (galvanized)	1.0037
220	hexagon bolt	X 5 CrNi 18 10	1.4301
230	hexagon bolt	X 5 CrNi 18 10	1.4301
240	flat washer	X 5 CrNi 18 10	1.4301
250	adapter	PTFE conductive G45	
260	plate	X 5 CrNi 18 10	1.4301
270	hexagon bolt	X 5 CrNi 18 10	1.4301
280	bottle	glass (100 ml)	

° optional

## Dimension

DN	L	L1	L2	L3	L4	V max. Sampl. vol. cm³	G	GL	t	H	H1	R	weight
025	109,5	90,5	60	60,5	160	90	M10	45	15	160	88	210	kg 13,9
050	109,5	117,5	73	60,5	230	90	M10	45	15	160	88	210	kg 18,9
080	109,5	148,5	88	60,5	310	90	M10	45	15	160	88	210	kg 25,3

## AtoPro™ – sampling systems designed to suit your requirements



Safety pneumatic automation for AtoPro™ sampling ball valves, consisting of a Norbro 180° spring return actuator type 25RB33. Manual operated by a Hoebriger automatic safety device with dead man function.



Example of a complete automated sampling unit, consisting of an AtoPro™ PFA lined sampling ball valve, safety pneumatic Norbro automation unit and a security stainless steel cabinet.

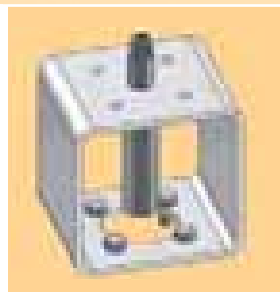


AtoPro™ sampling valves are available in stainless steel, ductile iron PFA lined or ductile iron PFA-conductive lined. Max. sample capacity is 90 cm<sup>3</sup>. Various bottle adaptor systems are available.

## Examples for AtoPro™ accessories



Built-on Heating Jacket



Bracket

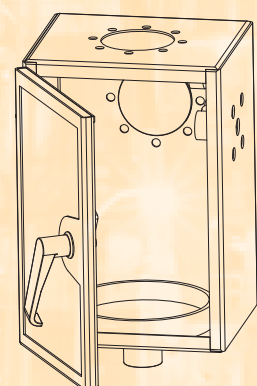
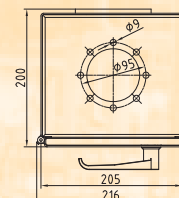
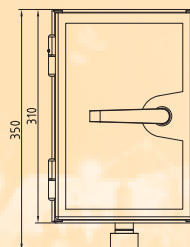


Standard and angled adaptor pieces



## Technical data for the stainless steel protection cabinets

These stainless steel cabinets with acid proof safety glass are designed to offer an extra protection during sampling activities. The cabinets are designed in a way that they will fit for vertical positions as well.





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AKH6, AKH7, AMP3,  
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ARV2, ARL, ARV/SG  
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AtoPro

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