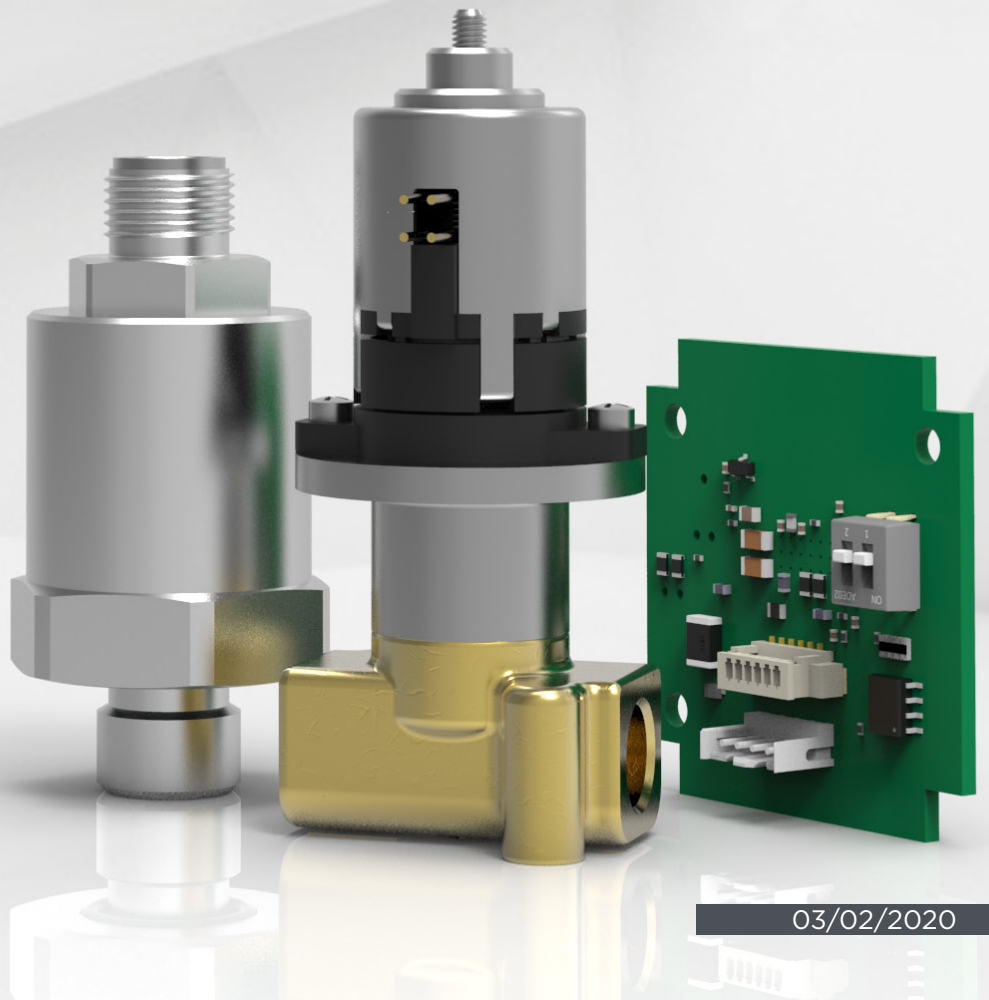


# DPS System

## Dynamic Pressure System



<b>Valve</b>	Port connection	G1/8
	Sealing materials	FKM
	Medium Temperature	25 °C
	Fluids	Water, air, inert gases
	Viscosity	Max. 21 mm/s
	Installation	With actuator upright
	MOPD	12 bar
	Orifice diameter	1,2 mm
	Travel per step	0,021 mm
	<b>Driver</b>	Power supply
System - Power range		12 W max
Electrical conformity		IEC/EN 61326-1
Ambient Temperature		From -40 to +85 °C
Protection		Valve sensorless stall detection   Full protected motor
Resolution step		Micro-step 1/4
Input		2xAnalog 0-5V
Communication bus		Bus RS-485 slave integrated
Response time		≤5 ms (typically)
<b>Pressure Transducer</b>	Port connection	G1/4 On request: 1/4 NPT
	Power supply	5V DC
	Output range	0,5-4,5 V Ratiometric
	Pressure range	0-20 bar
	Burst pressure	60 bar

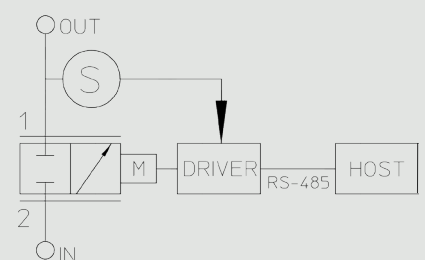
<b>Valve</b>	Body	Brass On request: PPS, Stainless Steel AISI series 300
	Armature tube	Stainless Steel AISI series 300
	Plunger	Stainless Steel AISI series 300
	Shutter	V=FKM On request: B=NBR
	Orifice	Brass On request: PPS, Stainless Steel AISI series 300
<b>Driver</b>	Material case	PPO
<b>Pressure Transducer</b>	Body	Stainless Steel AISI series 300
	O-Ring	V=FKM On request: B=NBR
	Ceramic sensor	Al <sub>2</sub> O <sub>3</sub> 96%

## DPS System

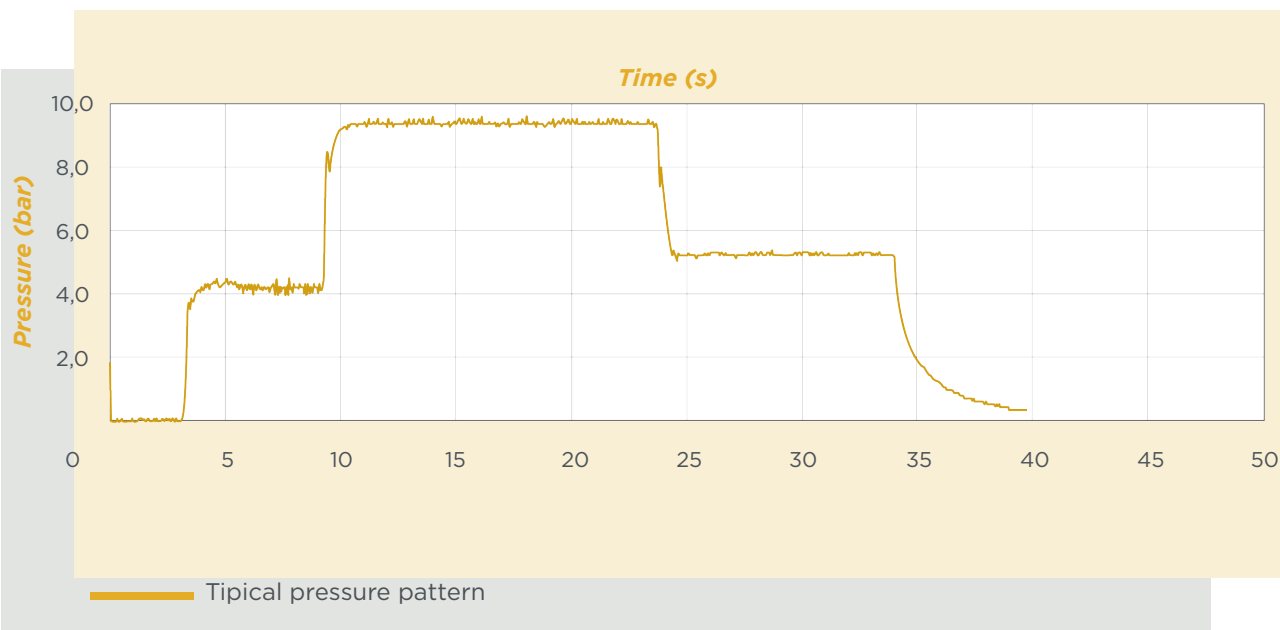
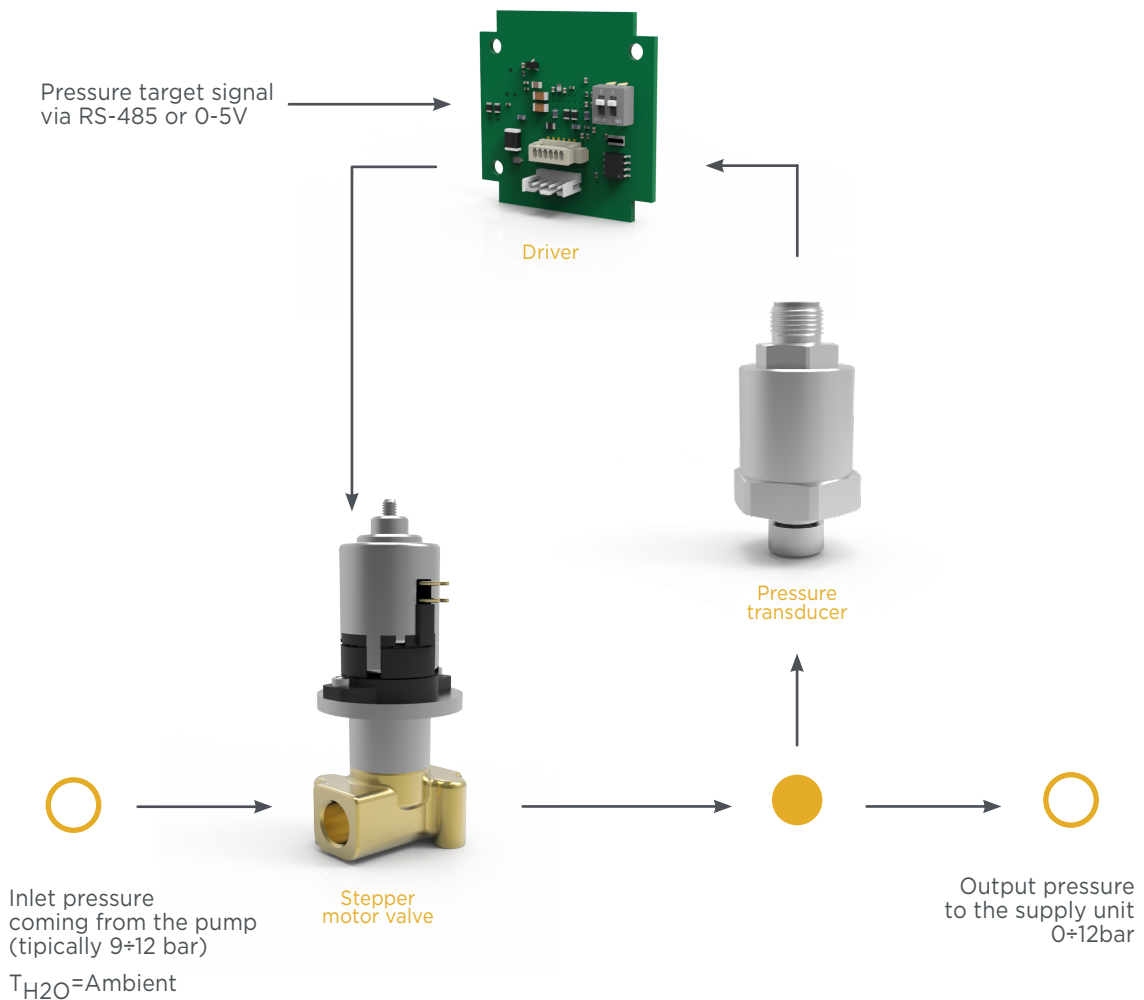


### Dynamic Pressure System

Dynamic Pressure System is a three-element system: stepper motor valve, driver and pressure transducer. Combined together these three elements give rise to a system that changes the brewing pressure in a few hundred of milliseconds and with a precision never seen before. DPS adjusts the brewing pressure in a dynamic way, depending on a specific target coming from the electronic control of the machine. The DPS system can easily be interfaced with the electronic of every machine.



# 03 Operation graph



# 04 DPS gra- phics

# 05 DPS code

DPS	12	JN1	V	12	R	24	T	0000
System name	MOPD	Body valve	Seal material	Ø orifice	Interface type with Master System	Driver supply voltage	Wiring	Future codes
DPS	12 bar	JN1	V=FKM	1,2 mm	R=RS-485	24V DC	T= Transducer	-

# 06 Drawings

