

Data sheet

*Pneumatic servo system designed for industrial and automotive environments.
Integrated Staccato valves enable fast cylinder travel with high speed and position control.*



Key features

- Positioning system for double acting actuators
- Closed loop controller
- Available for wide range of actuators
- Position accuracy of up to 0.05 mm
- Travel speed up to 4 m/s
- Force up to 30 kN
- Integrated pressure sensors
- Analog 4-20 mA, analog 1-5 V communication

Configuration

Feature		Value	
1	Cylinder	Type	Double acting actuators
		Stroke length	5 to 5000 mm
		Diameter	Ø 10 to 200 mm
		Force at 5 barg	100 N (Ø 10) to 30 kN (Ø 200)
2	Staccato Valve	Article number	Valve orifice diameter
		211 6820-10	Ø 1.0 mm
		211 8200-15	Ø 1.5 mm
		211 8200-30	Ø 3.0 mm
		211 6810-40	Ø 4.0 mm
211 6810-51	Ø 5.1 mm		
3	Assembly	<ul style="list-style-type: none"> - Any position. - Hose length to cylinder, less than 1 m recommended for optimal performance. 	
4	Position sensor	SDAT-MHS position sensor	
5	Pressure Sensor	Integrated in valve system for monitoring both cylinder cavities.	
6	Weight	1.8 kg	
7	Customs stat no.	8481209090	
8	Country of Orgin	Sweden	

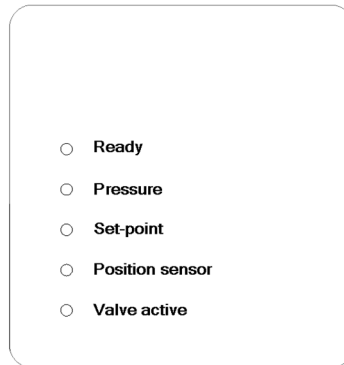
Properties

Feature	Value
Water and dust	IP67
Temperature range	0 to 60 °C

Interface

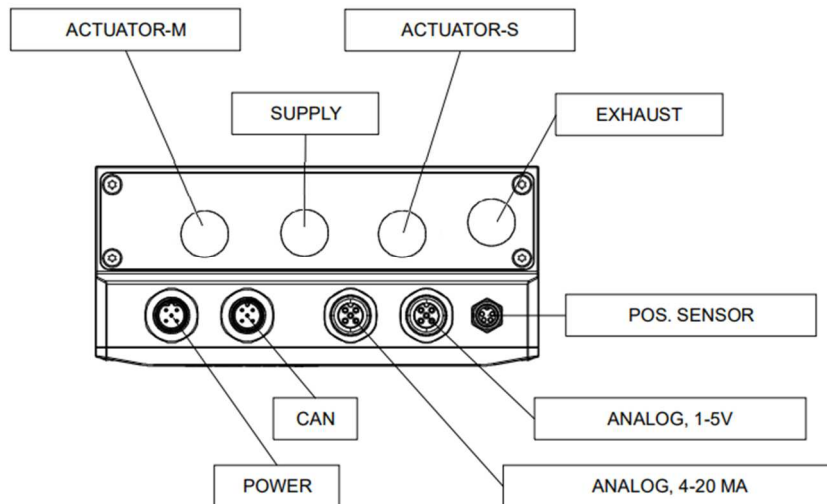
Feature	Value	
Voltage	Voltage range	24 ± 10 %
	Power consumption	10 W
Signal	Signal Type	Description
	Analog, current	M12 connector - 4 to 20 mA
	Analog, voltage	M12 connector - 1-5 V
Pressurized air	Pressure range	0.4 to 0.8 MPa (4 to 8 barg)
	Air quality	- Filtered: 50 µm - Lubricated or not lubricated

Led

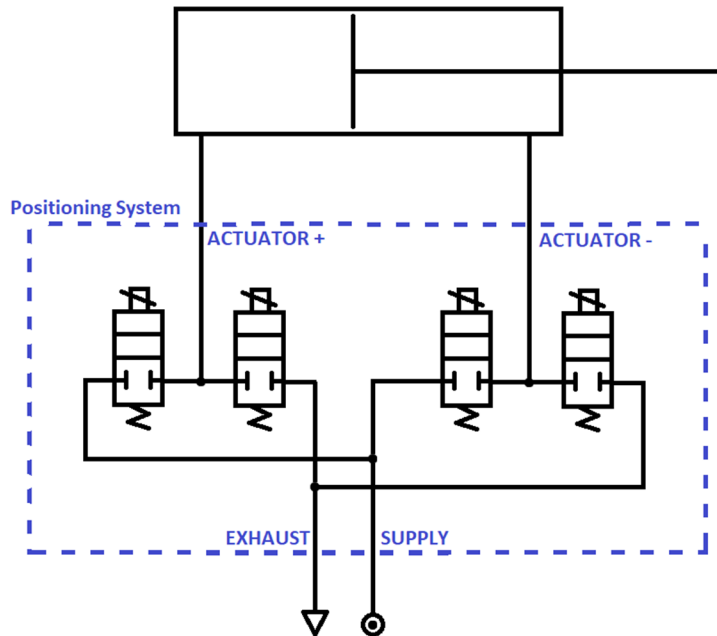


Led	Description
Ready	Led on indicates position system is functional. - Flashing, system not ready. - When system is started, system will initiate for 20 s. Led will blink during this time.
Pressure	Led on indicates pressure is ok. - Flashing indicates pressure is not ok.
Set-point	Led on indicates set-point is ok. - Flashing indicates set-point signal is not ok.
Position sensor	Led on indicates position sensor is ok. - Flashing indicates position sensor signal is not ok.
Valve active	On when if any of the valves in position sensor is active.

Connectors



Electrical input	Description	Contact type	Pinning	
			Pin	Signal
POS. SENSOR	Position sensor input.	M8-4POLE-A-FEMALE	1	+24V
			2	4-20 mA
			3	GND
			4	N.C
ANALOG, 1-5 V	Set-point input, 1-5 V analog voltage.	M12-5POLE-A-FEMALE	1	+24V
			2	Set-point, 1 to 5 V
			3	GND
			4	Position, 1 to 5 V
			5	GND
ANALOG, 4-20 mA	Set-point input, 4-20 mA analog current.	M12-5POLE-A-FEMALE	1	+24V
			2	Set-point, 4 to 20 mA
			3	GND
			4	Position, 4 to 20 mA
			5	GND
CAN	CAN communication.	M12-5POLE-A-MALE	1	N.C.
			2	N.C.
			3	CAN GND
			4	CAN H
			5	CAN L
POWER	Power supply.	M12-5POLE-B-MALE	1	+24V
			2	GND
			3	N.C.
			4	N.C.
			5	GND



Pneumatic input	Port type	Description
SUPPLY	G3/8	Supply pressure.
ACTUATOR +	G3/8	Actuator, chamber giving movement in positive direction ⁽¹⁾ .
ACTUATOR -	G3/8	Actuator, chamber giving movement in negative direction ⁽¹⁾ .
EXHAUST	G3/8	Exhaust port.

⁽¹⁾ Movement in positive/negative direction refers to movement giving increasing/decreasing signal from position sensor.

Properties

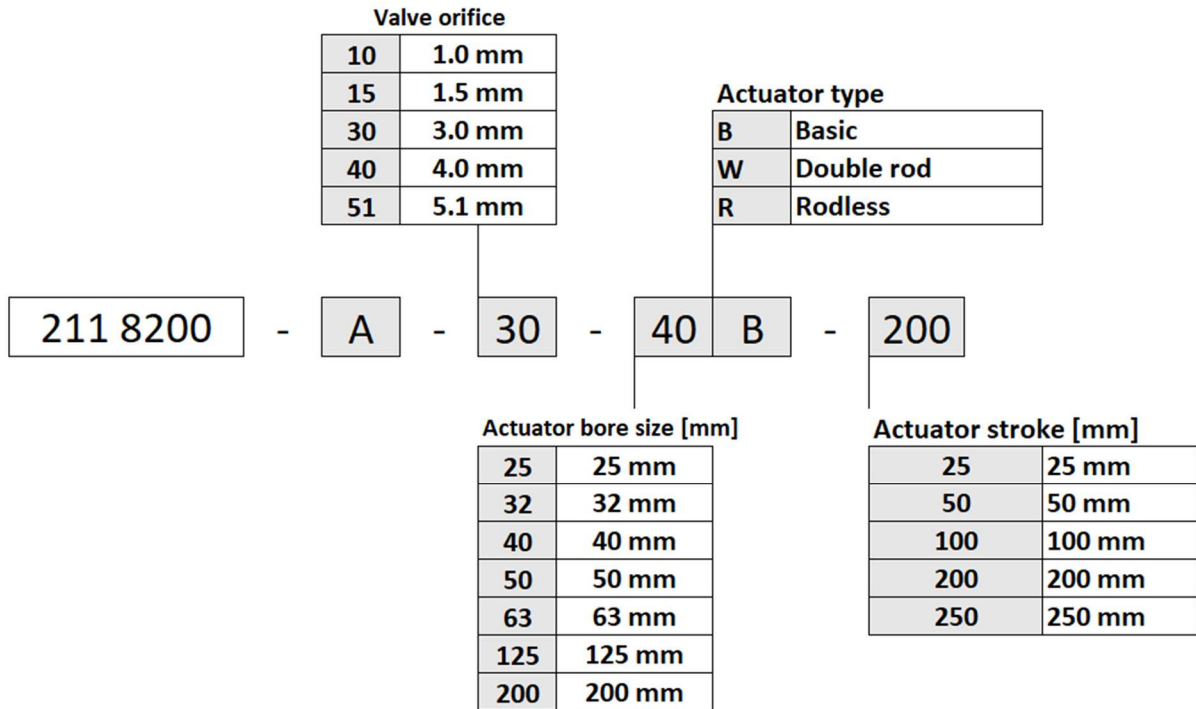
Maximum speed

Valve diameter	Cylinder diameter					
	Ø 25	Ø 32	Ø 35	Ø 40	Ø 50	Ø 63
Ø 1,0	0,3 m/s	0,2 m/s	0,1 m/s	0,1 m/s	0,1 m/s	0,0 m/s
Ø 1,5	0,7 m/s	0,4 m/s	0,3 m/s	0,3 m/s	0,2 m/s	0,1 m/s
Ø 3,0	2,6 m/s	1,6 m/s	1,3 m/s	1,0 m/s	0,7 m/s	0,4 m/s
Ø 4,0	4,7 m/s	2,9 m/s	2,4 m/s	1,8 m/s	1,2 m/s	0,7 m/s
Ø 5,1	7,6 m/s	4,6 m/s	3,9 m/s	3,0 m/s	1,9 m/s	1,2 m/s

Accuracy

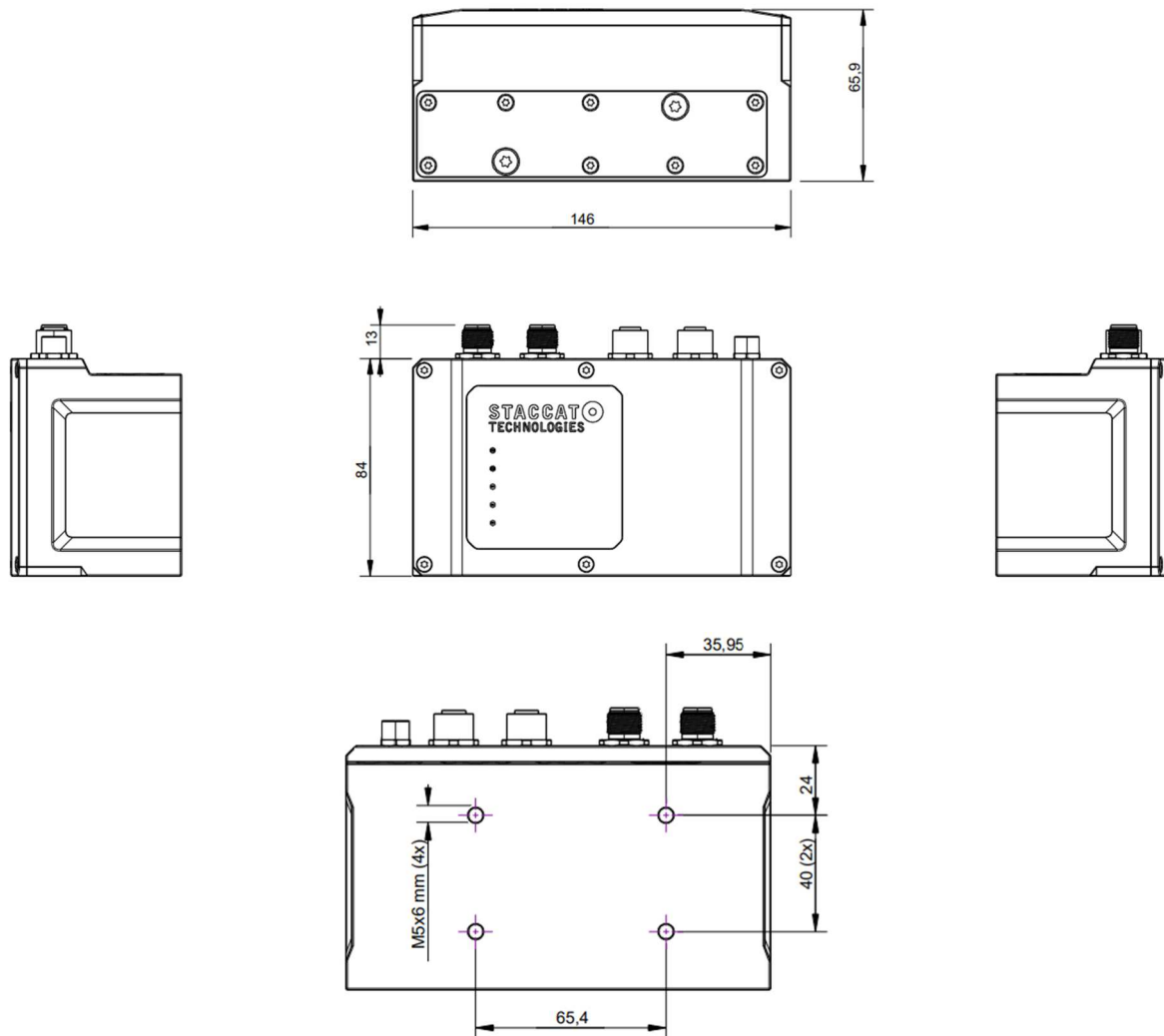
Valve diameter	Cylinder diameter					
	Ø 25	Ø 32	Ø 35	Ø 40	Ø 50	Ø 63
Ø 1,0	± 0,13 mm	± 0,08 mm	± 0,07 mm	± 0,05 mm	± 0,03 mm	± 0,02 mm
Ø 1,5	± 0,29 mm	± 0,18 mm	± 0,15 mm	± 0,11 mm	± 0,07 mm	± 0,05 mm
Ø 3,0	± 1,15 mm	± 0,70 mm	± 0,59 mm	± 0,45 mm	± 0,29 mm	± 0,18 mm
Ø 4,0	± 2,05 mm	± 1,25 mm	± 1,04 mm	± 0,80 mm	± 0,51 mm	± 0,32 mm
Ø 5,1	± 3,33 mm	± 2,03 mm	± 1,70 mm	± 1,30 mm	± 0,83 mm	± 0,52 mm

Order code

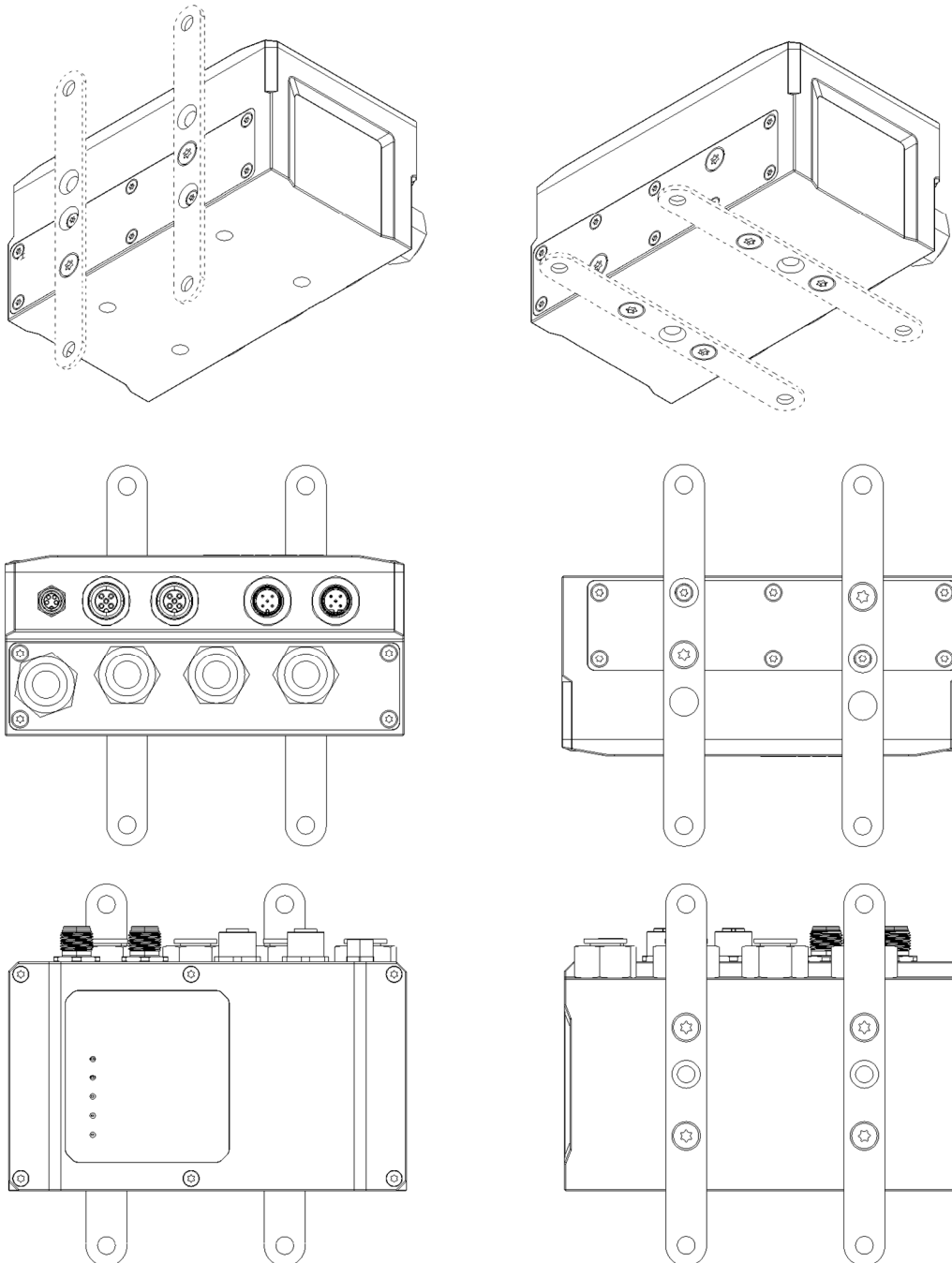


Accessory	Order Code	Description/Comment
CAN adapter	3203001-PA1	Can Adapter, enables CAN communication between PC and positioning unit.
Mounting plate	2116840-PA1	
Power adapter	3202001-PA1	

Dimensions



Mounting plate option



Mounting plate and fittings shown in figure above sold separately.