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Covimat 205 DD

The Covimat 205 DD is a rotational viscometerthat was developed for low-viscosity media and especially for applications in the paint sector. It provides **measurement data without taking samples** and therefore without labor, material and time loss - **reliably 24 hours a day, 365 days a year.**

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MEASURING HEAD

The measuring unit of the Covimat 205 contains the electronics, which perform two functions:
- The motor rotates the measuring body at a specified speed.
- It measures the viscosity and outputs a corresponding analog signal.

The speed can be set via a selector switch in 5 fixed steps or specified via an external control signal. The viscosity is measured using a torsion element. A standard 4-20 mA measuring signal proportional to the viscosity is output. This can be recorded or utilized via a control system provided by the customer.

Explosion-proof according to ATEX.

MEASURING CAGE

The Covimat 205 DD measuring cell is designed for small throughput volumes of up to 5 l/min, low sample volumes and low viscosities. It is used in a wide range of color applications. The measuring cell is completely closed to the outside. The measurement is carried out via a magnetic coupling.

MEASURING BOB

The viscosity measuring range is adapted to the specific requirements (1 - 13,200 mPas) by selecting the measuring body and combining different inserts.

DOUBLE GAP:

The double gap viscosity measuring system DD+ is specially designed for low-viscosity materials that require a high measuring resolution thanks to a bearing-free rotating body with the largest possible surface area. It is specified with a maximum flow rate of 500 l/min at a maximum nominal connection diameter of 35 mm for use in the main lines of large paint mixing systems. The measuring range and resolution can be specifically adapted by changing the speed.

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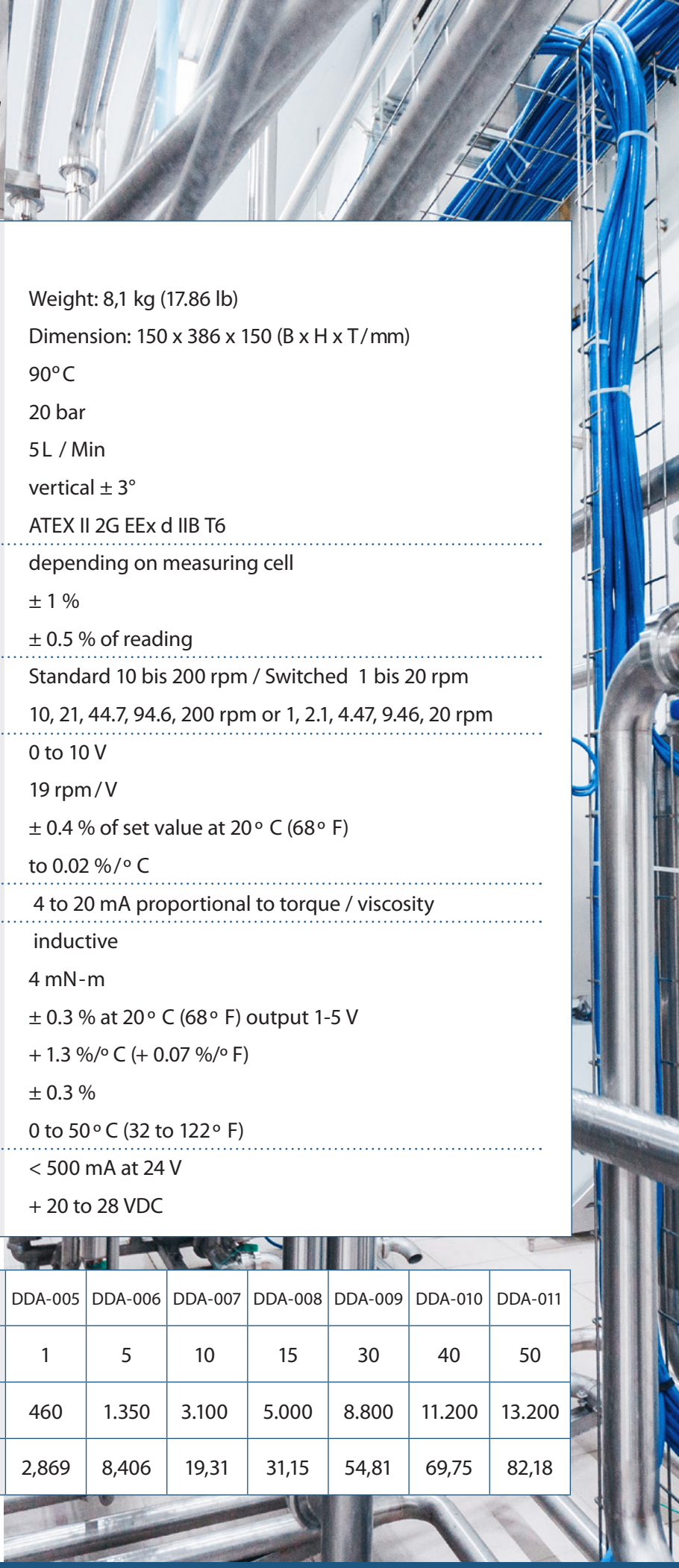

MEASURING BOB

Covimat 205 DD Dimensions	Weight: 8,1 kg (17.86 lb)
	Dimension: 150 x 386 x 150 (B x H x T/mm)
Maximum product temperature	90° C
Maximum pressure	20 bar
Maximum flow rate	5 L / Min
Installation	vertical ± 3°
Safety	ATEX II 2G EEx d IIB T6
Viscosity range	depending on measuring cell
Accuracy	± 1 %
Repeatability	± 0.5 % of reading
RPM Range	Standard 10 bis 200 rpm / Switched 1 bis 20 rpm
Fixed Speeds	10, 21, 44.7, 94.6, 200 rpm or 1, 2.1, 4.47, 9.46, 20 rpm
External speed control	0 to 10 V
Transfer function	19 rpm / V
Rotational speed accuracy	± 0.4 % of set value at 20° C (68° F)
Temperature coefficient – speed	to 0.02 %/° C
Output signal	4 to 20 mA proportional to torque / viscosity
Torsion angle measurement	inductive
Maximum torque	4 mN-m
Torque tolerance	± 0.3 % at 20° C (68° F) output 1-5 V
Termperature coefficient – torque	+ 1.3 %/° C (+ 0.07 %/° F)
Linearity	± 0.3 %
Temperature range	0 to 50° C (32 to 122° F)
Supply Current	< 500 mA at 24 V
Supply voltage range	+ 20 to 28 VDC

Measuring system	DDA-005	DDA-006	DDA-007	DDA-008	DDA-009	DDA-010	DDA-011
Min. Viscosity [mPas]	1	5	10	15	30	40	50
Max. Viscosity [mPas]	460	1.350	3.100	5.000	8.800	11.200	13.200
Resolution [mPas/0,1 mA]	2,869	8,406	19,31	31,15	54,81	69,75	82,18

proRheo GmbH • Bahnhofstraße 40/2 • 75382 Althengstett
07051 924 890 • office@prorheo.de • www.prorheo.de