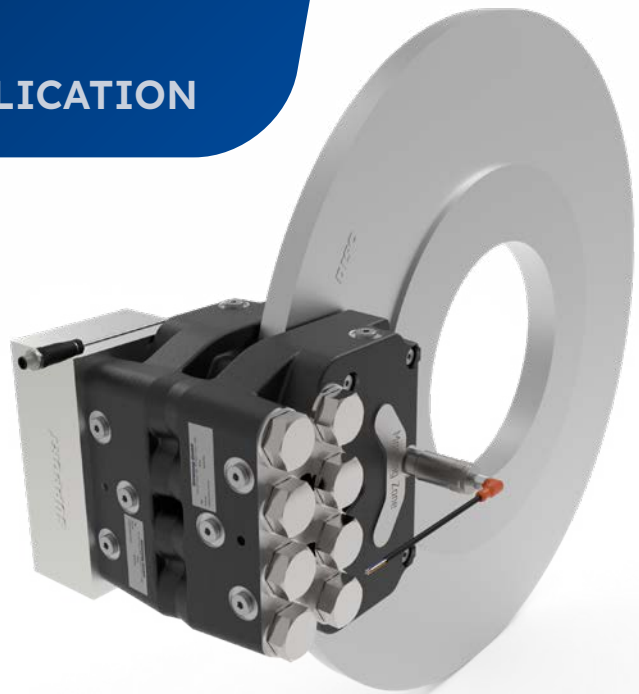
RegalRexnord™

CB90R-ULTRA ENERGY ROTOR BRAKE

HIGH-ENERGY BRAKING APPLICATION



SVENDBORG BRAKES™ Stromag™

PRODUCT CATALOG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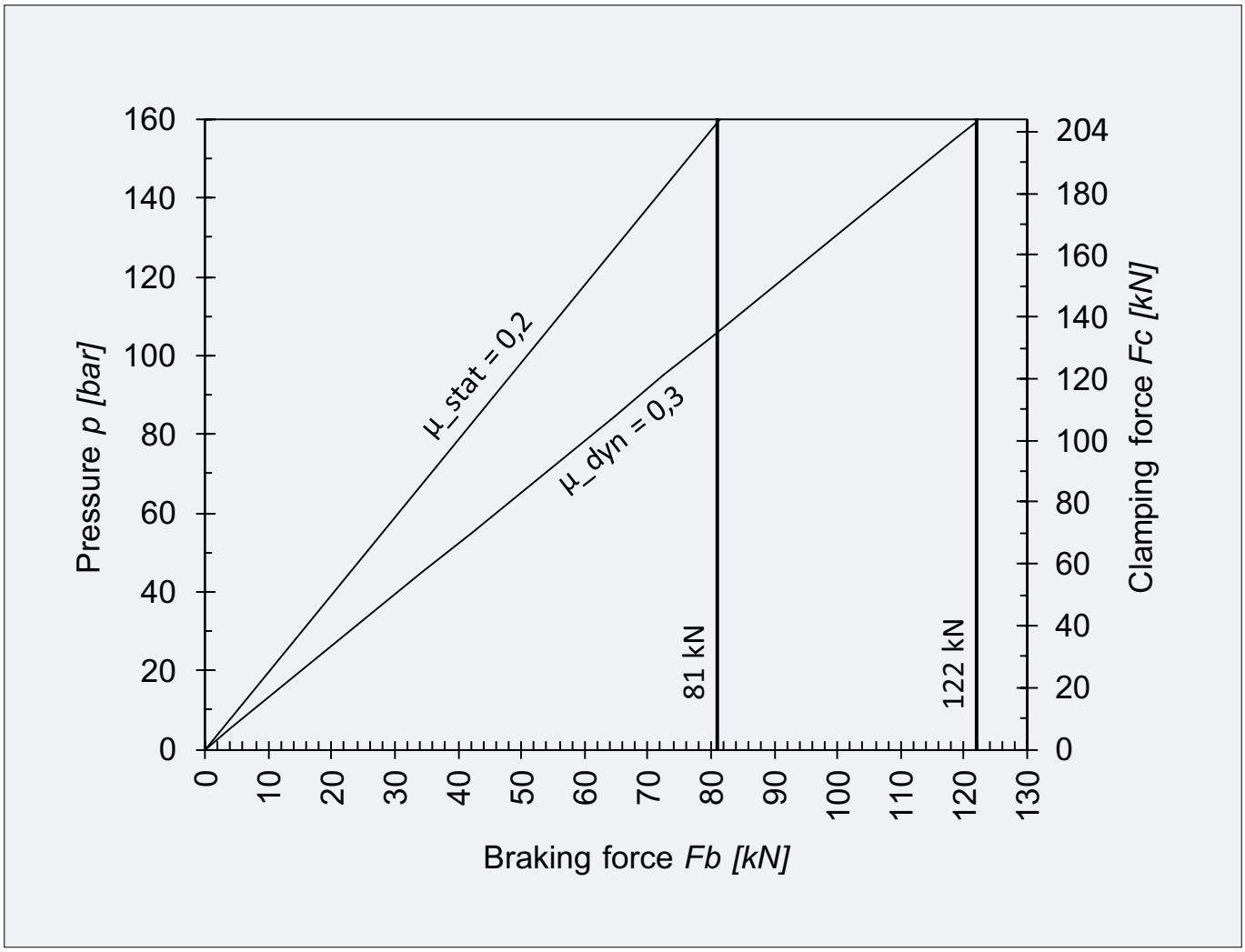
FEATURES

- Active hydraulically actuated rotor brake for high-energy braking applications
- Braking torque adjustable by adjusting the pressure
- Wear sensor with detection of pre-worn and full-worn condition of lining pad
- Temperature sensor (PT100)
- Retraction system of lining pads
- Controlled retraction system of lining pads with constant airgap (CR)
- Mineral or synthetic oil
- Protection class C3-H standard ISO 12944-2
- Option:
  - Full retraction of lining pads
  - VCI packing

Operating condition

Operating temperature:	-30°C to +60°C
Option:	-40°C to +60°C
Relative humidity:	≤ 70%

DIAGRAM 1: PRESSURE-FORCE-DIAGRAM



μ: Average friction coefficient

CB90R-Ultra Energy Rotor Brake

Table 1: Technical data

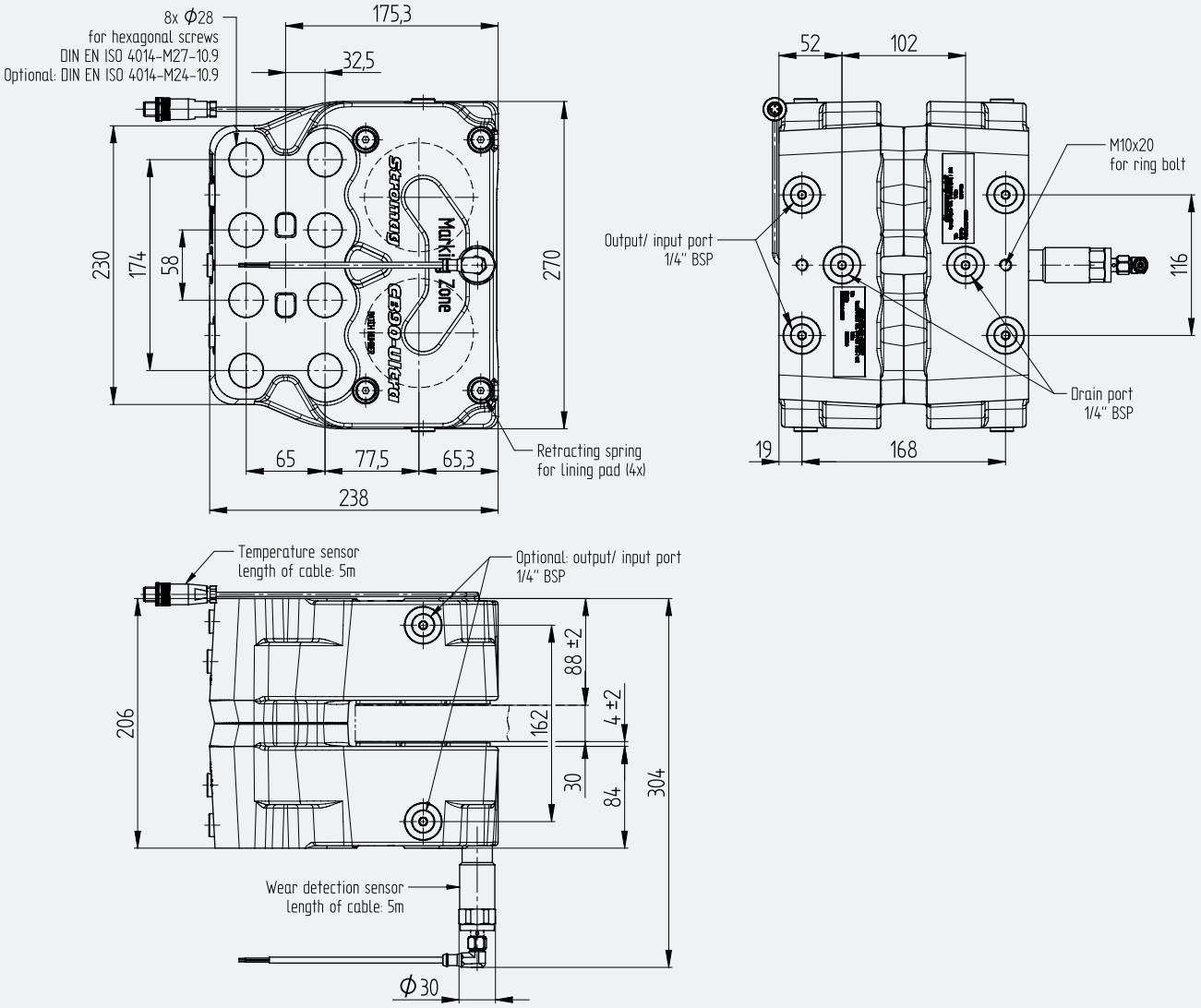
Designation CB90R-ULTRA Energy					
Lining Pad				EF3-1	RBS-5
Article no.				381-01324	381-01325
The following parameters apply to BOTH versions					
Operation mode				static	dynamic
Average braking force [1] at max. pressure		F_B	N	81 000	122 000
Braking torque for the braking-Ø		T_B	Nm	$T_B = F_B \times (\frac{D}{2} + 0{,}0525)$	
Max. pressure		p	bar	160	
Disc speed			m/s	≤ 100	
Oil volume	new pads	V_{neu}	cm^3	180	
	worn pads	$V_{verschl.}$	cm^3	333	
	per 1 mm stroke	$V_{1\ mm}$	cm^3	25,5	
Brake weight		m	kg	61	
Disc thickness [2]		e	mm	30	
Max. dissipated energy per braking operation [3]			MJ	14	

1) The fluctuation of the friction coefficient causes a tolerance of ±10%.
2) For other disc thicknesses contact us.
3) In combination with a disc size of Ø1000x30 mm. For other values contact us.

Table 2: Electrical data

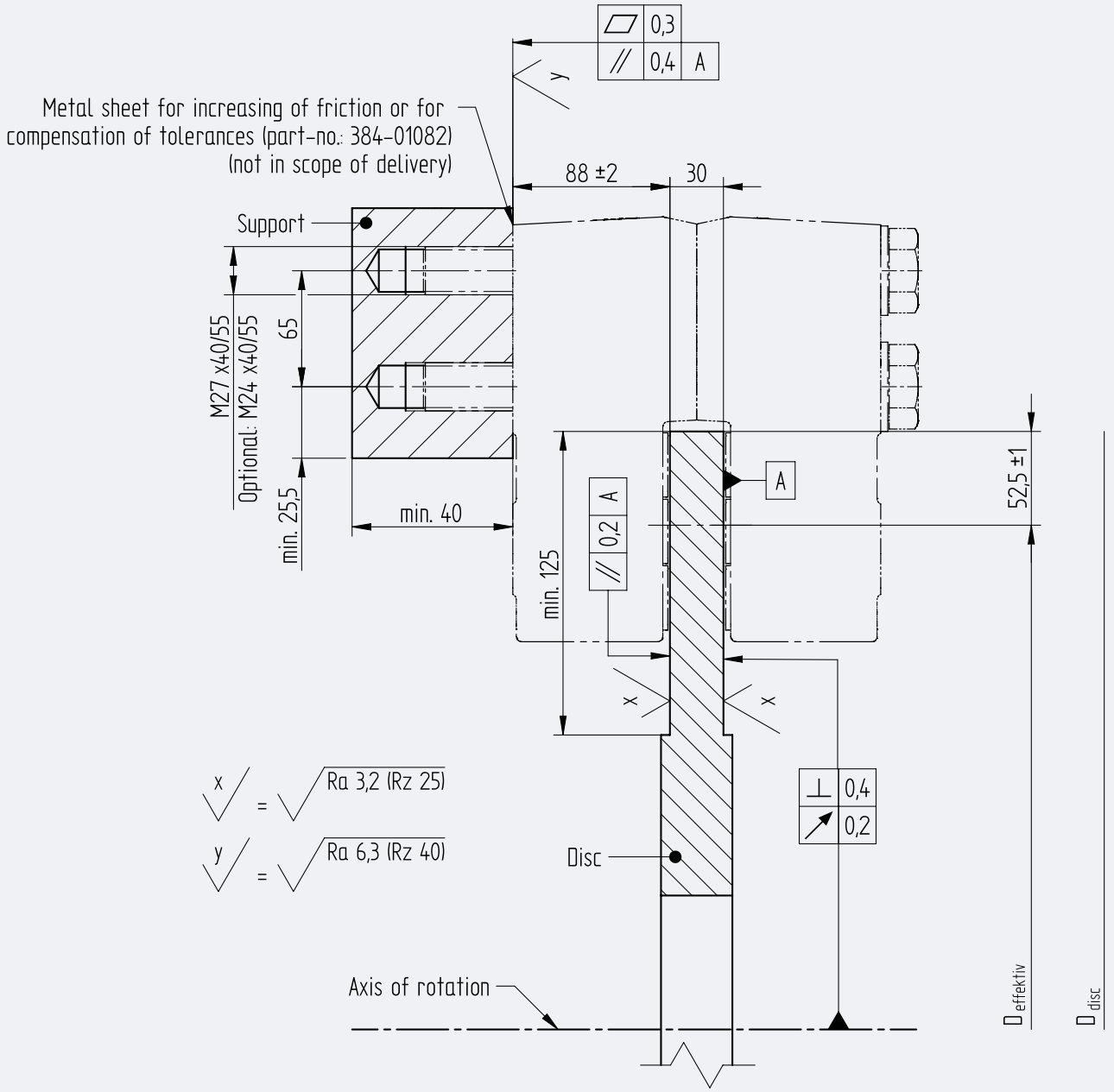
Sensor	Wear detection	Temperature (PT 100)
Data sheet	381-01130	062-01003
Operating current	2 … 100 mA	max. 1 mA
Operating voltage	10 … 36 V DC	f (R)
Resistance		R(- 40°C) = 84,27 Ω
		R(0°C) = 100,00 Ω
		R(100°C) = 138,51 Ω
		R(200°C) = 175,86 Ω

Figure 1: Brake (sketch is not to scale)



The braking force will be available only after the bedding in process of the lining pads.
Due to continuous development and improvement all dimensions and characteristics are subjects to change without any notice.

Figure 2: Mounting conditions (sketch is not to scale)



Material of disc:
Steel S235J or S355J standard NF EN10025 or casting EN GJS 400-18LT standard NF EN1563.
Please contact our technical service for any other operating conditions or for technical questions.

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