

NC-8420

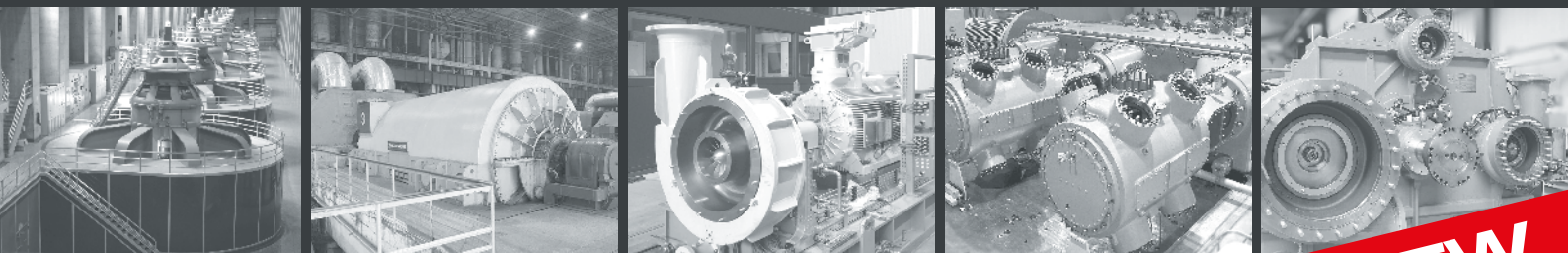
4 ÷ 20mA PROXIMITY TRANSMITTER SYSTEM

COMPOSITION

- NC-8420 Power Loop Transmitter
- ST-NC/8 No-contact Probe
- CPT-NC/8 Extension Cable

APPLICATION

- Eddy Current Non-contact Transmitter
- Relative vibrations and axial displacements on machines with sleeve bearings
- Rotational speed on polar wheels



NEW

RELATIVE VIBRATIONS, AXIAL DISPLACEMENT,
MONITORING AND PROTECTION OF ROTATING MACHINERY

PROXIMITY TRANSDUCER - MEASURING CHAIN

The three elements can be ordered separately in case of spare parts.

PROXIMITOR NC-8420 Module



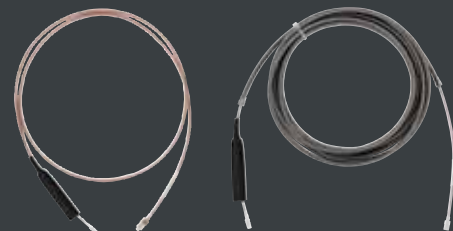
PROBE WITH INTEGRATED CABLE ST-NC/8



ST-NC/8RM Reverse Mount



EXTENSION CABLE (OPTION) CPT-NC/8



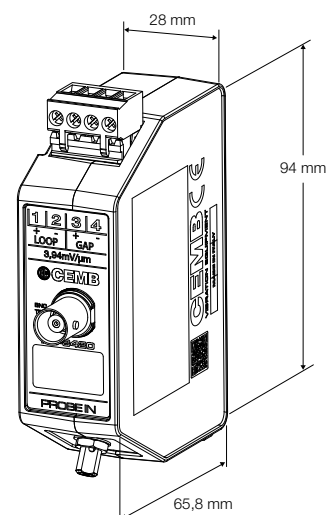
TECHNICAL CHARACTERISTICS OF MEASURING CHAIN

NC-8420 Module	ST-NC/8	CPT-NC/8
Calibration Range 1m ÷ 9m	Total length Cable + Probe Body 0,5m ÷ 9m	Extension cable length 0,5m ÷ 8,5m
Enviromental operating field (*) -40°C ÷ 80° - IP40	Enviromental operating field (*) -55°C ÷ 180° - IP69K	Enviromental operating field (*) -55°C ÷ 180° - IP65
External connections Removable screw terminal block Mini coaxial connector for probe BNC connector for raw signal reading via portable analyzer	Cable type Standard coaxial or stainless steel armored cable	Cable type Standard coaxial or stainless steel armored cable
Target Material AISI 4140 (Default) - Other options	Oil resistance Yes	Oil resistance Yes
Body dimensions 28 x 94 x 66mm	Probe Body Length 40mm ÷ 220mm (INOX)	-

(*) For IECEx or ATEX applications, refer to the data on the certificate

TECHNICAL CHARACTERISTICS OF NC-8420

Measurement Type	Relative vibration, axial displacement
Power Supply	24Vdc (18 ÷ 32Vdc) current loop 4 ÷ 20mA (2 wires)
Output Signal	Analog (mA)
Insulation	≥10 ₈ Ω between signal and housing
Linearity	±2% (Range 0,5 ÷ 2,5mm; T= 100°C)
Dynamic Frequency Range	1,5 ÷ 10KHz Vibration 0 ÷ 500Hz Axial displacement
Storage Conditions	-60°C ÷ +120°C without condensation



NC-8420 is fully compatible with the previous proximitors generation TR-NC/8

ORDER INFORMATION

NC-8420/A/B/C/D/E

/A: Calibration Length

- 1: 1m
- 3: 3m
- 5: 5m
- 7: 7m
- 9: 9m

/B: Measurement Type

- 1: Relative vibration
- 2: Axial displacement

/C: Measuring Range


- 1: 0÷100 µm peak-to-peak vibration
- 2: 0÷125 µm peak-to-peak vibration
- 3: 0÷200 µm peak-to-peak vibration
- 4: 0÷250 µm peak-to-peak vibration
- 5: ± 0,5 mm axial displacement
- 6: ± 0,75 mm axial displacement
- 7: ± 1 mm axial displacement

/D: Target Metal Type (*)

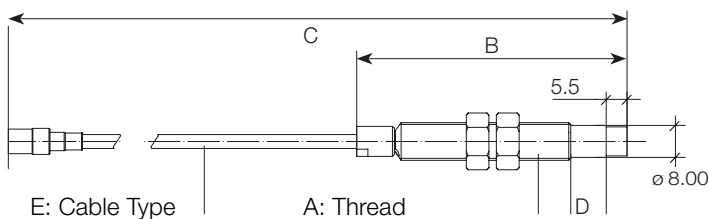
- | | |
|----------------------|-----------------------|
| 1: AISI 4140 | 10: UNI 18CrNiMo |
| 2: AISI 410 | 11: UNI 21CrMoV5-7 |
| 3: AISI 304 | 12: UNI 23CrMoNiWv88 |
| 4: AISI 630 | 13: UNI 26NiCrMoV14-5 |
| 5: C45 | 14: UNI 36NiCrD15 |
| 6: INCOLOY | 15: UNI 36NiCrMo16 |
| 7: ER7T-ER8 | 16: DIN 1.4571 |
| 8: ASTM 276 SDX | 17: DIN 1.4462 |
| 9: ASTM 668 UST-52-3 | 18: DIN 1.7225 |

(*) Additional target metals available on request

/E: Certification

- 1: Standard
- 2:  II 1G Ex ia IIC T6,T5 Ga (ATEX)
- 3: Ex ia IIC T6,T5 Ga (IECEX)

STANDARD PROBE – ST-NC/8



ST-NC/8/A/B/C/D/E

/A: Thread Type

- 0: M10x1
- 1: 3/8" -24 UNF

/B: Probe Body Length [mm]

- Step 10mm – min. 40mm (4) – max. 220mm (22)
- 5: 50mm (standard)

/C: Total Length (Body + Cable) [mm]

- Step 500mm – min. 500mm (5) – max. 9000mm (90)
- 10: 1000mm (standard)

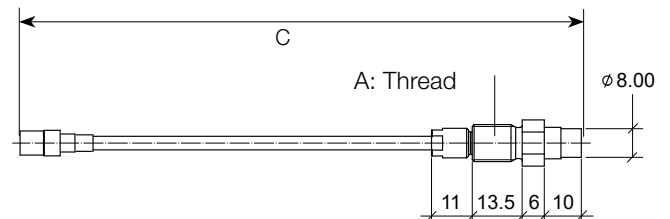
/D: Non-threaded Length (only for M10x1)

- Step 10mm – min. 0mm (0) – max. 120mm (12)
- 0: 0mm (standard)

/E: Cable Armor

- 0: unarmored
- 1: armored

REVERSE MOUNT PROBES – ST-NC/8RM



ST-NC/8RM/A/C

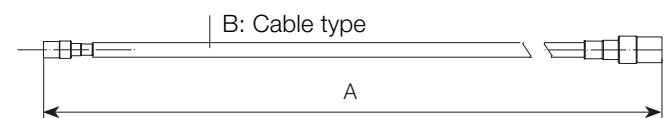
/A: Thread Type

- 0: M10x1
- 1: 3/8" -24 UNF

/C: Total Length (Body + Cable) [mm]

- Step 500mm – min. 500mm (5) – max. 9000mm (90)
- 10: 1000mm (standard)

EXTENSION CABLE - CPT-NC/8



CPT-NC/8/A/B

/A: Cable Length [mm]

- Passo 500mm – minimo 1500mm (15) max. 8500 mm (85)
- 40: 4000mm (standard)

/B: Cable Armor

- 0: unarmored
- 1: armored

OPTIONAL ACCESSORIES

SR-6

Mechanical adapter for mounting NC-8420 proximity systems.
Simple alignment of sensors on the rotor shaft.

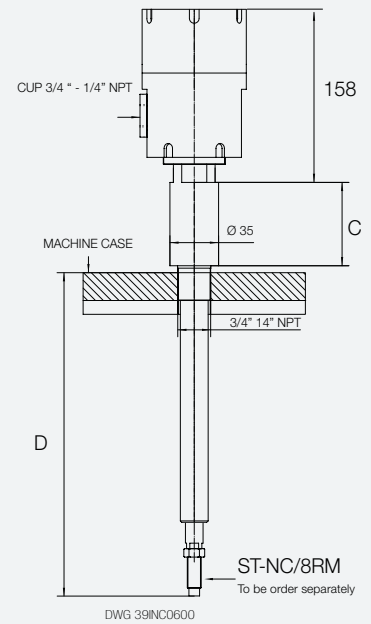
SR-6 / C / D

/C: Mechanical adapter length

Step 15 mm – minimum 0 mm (0) – maximum 225 mm (225)

/D: Rod length [mm]

Step 5 mm – minimum 100 mm (100) – maximum 750 mm (750)



SR-7

Mechanical adapter for mounting NC-8420 proximity systems.
Simple alignment of sensors on the rotor shaft.

SR-7 / C / D / E / F

/C: Mechanical adapter length

Step 10 mm – minimum 20 mm (20) – maximum 120 mm (120)

/D: Rod length [mm]

Step 10 mm – minimum 40 mm (40) – maximum 220 mm (220)

/E: Mechanical adapter threading

0: 3/4" -14 NPT

1: 1/2" -14 NPT

2: 1/2" GAS

5: M20x1,5

/F: Cable fitting

0: 3/4" -14 NPT

6: M16x1,5

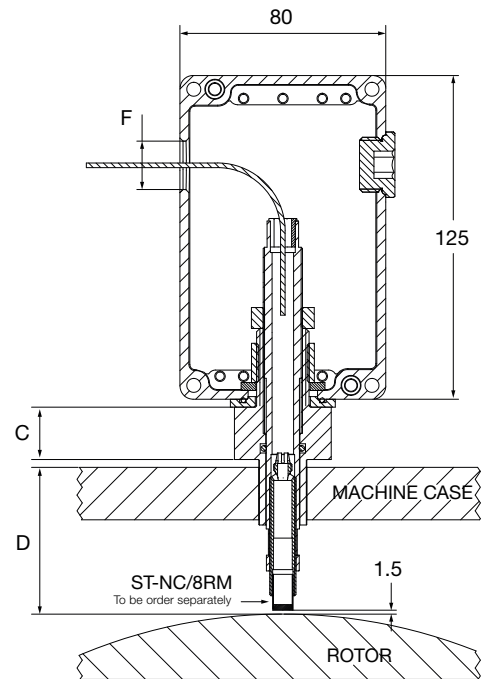
1: 1/2" -14 NPT

8: PG11

2: 1/2" GAS

9: PG9

5: M20x1,5



ZENER BARRIER Z787

(for classified area) cod. 800208787

GALVANIC BARRIER KCD2-STC-Ex1

(for classified area) cod. 800208981

PLASTIC TAG

B5MAG10 CY002

cod. 040STR000

STAINLESS STEEL TAG

B5MAG10 CY002

cod. 980710835