

## CFW-XX PIEZOELECTRIC FORCE MEASURING SENSOR

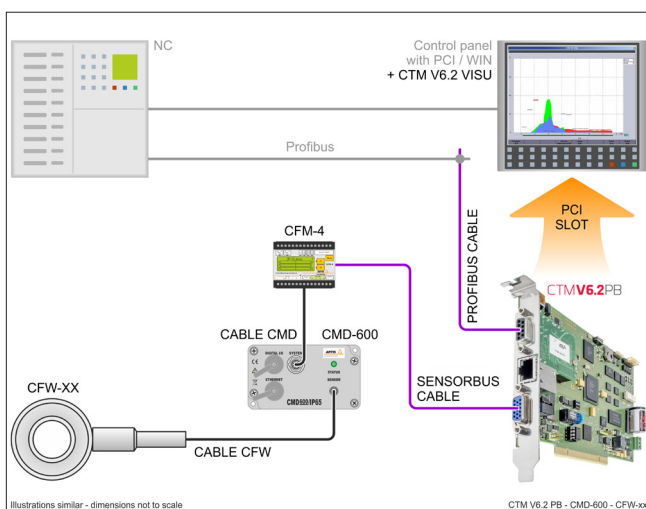
### Properties

- High sensitivity to detect smallest process force variations
- Suitable for rough environmental conditions
- Compact design
- Typical applications: hard turning and lathe finishing

The force measuring sensor is available in different sizes and – using the respective measuring transducer – suits all ARTIS monitoring units.

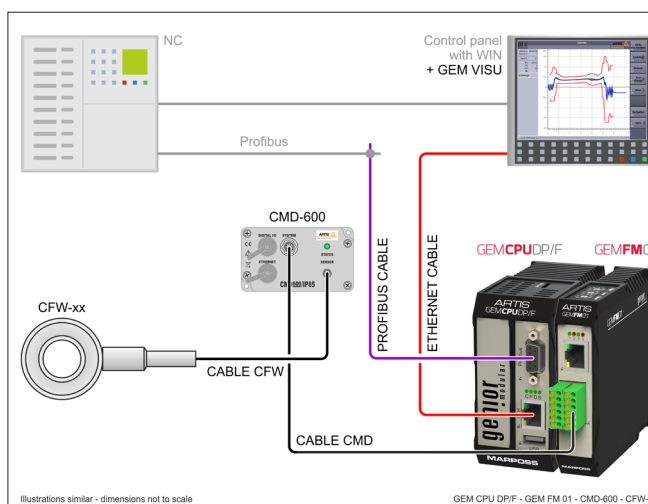


Illustration similar



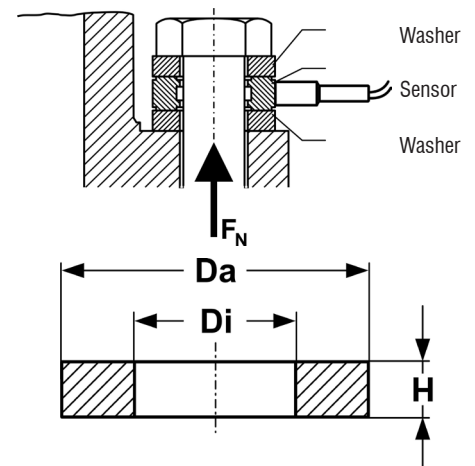
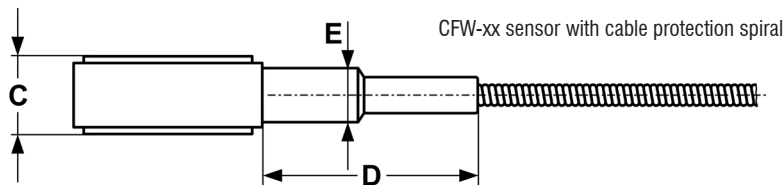
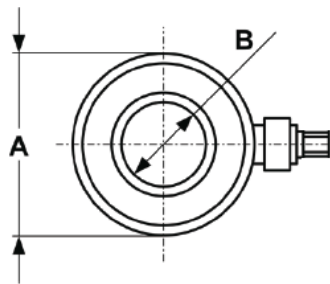
### Application example

**CFW-xx** with CMD-600 Charge Amplifier, CFM-4 Force Measuring Transducer and CTM V6.2 PB Tool and Process Monitoring System.



### Application example

**CFW-xx** with CMD-600 Charge Amplifier, GEMFM01 Force Measuring Transducer and GENIOR MODULAR Tool and Process Monitoring System.



		CFW-20* 03PZ0211003	CFW-50 03PZ0211005	CFW-100 03PZ0211006	CFW-140 03PZ0211023	Accessories	
NOM. FORCE		20 kN	50 kN	100 kN	140 kN	Cable CFW, 3 m 06739797057	
MAX. STRENGHT		120 % of nominal force					
DIMENSIONS	A	14.5	* <i>The type CFW-20 is only available without plug and does not have the corresponding thread</i>	22.8	28.6	34.5	Connection cable between CMD-600 and CFW sensor, length 3 m.
	B	6.5		10.5	13	17	
	C	8		10.3	11.3	12	
	D	—		36	36	36	CMD-600 0830Z712018
	E	—		9	9	9	
	Da <sub>-0.1</sub>	17		24	26.5	34	Digital charge amplifier, measuring range 50 – 600.00 pC.
	Dj <sup>+</sup> <sub>0.1</sub>	6.5		10	12.7	16	
	H	3	4	5	6		
FOR SCREWS		M6	M10	M12	M16	Cable CMD, 20 m 06739797059	
WEIGHT		0.009 kg	0.043 kg	0.070 kg	0.103 kg		
REC. PRE-LOAD		7 kN	18 kN	30 kN	45 kN	Connection cable between CDM-600 and CFM-4	
SENSITIVITY		-4 pC/N	-4.3 pC/N	-4.3 pC/N	-4.3 pC/N		
STORAGE TEMPERATURE		-40 °C to +120 °C				Set of washers M 6 04390140001	
OPERATING TEMPERATURE		-40 °C to +120 °C					
DEGREE OF PROTECTION		IP65					
INSULATION IMPEDANCE		>10 MΩ					
NOM. MEASURING PATH		2 μm	3.5 μm	5.8 μm	7.5 μm	Set of washers M10 04390140002	
BASIC RESONANCE FREQUENCY		60 kHz	55 kHz	45 kHz	35 kHz		
CROSSTALK							
from F <sub>xy</sub> to F <sub>z</sub>		0.03 N/N	0.03 N/N	0.004 N/N	0.03 N/N	Set of washers M12 04390140003	
from M <sub>xy</sub> to M <sub>z</sub>		0.002 N/Nm	0.002 N/Nm	0.002 N/Nm	0.002 N/Nm		
REL. LINEARITY ERROR		2 % of full scale					
MATERIAL (SENSOR & WASHER)		Stainless steel				Set of washers M16 04390140005	
SCOPE OF SUPPLY		Sensor, two washers					
CONFORMITY		CE, UKCA					



www.marposs.com

For a full list of address locations, please consult the Marposs official website

ODN6397EN03 – Edition 01/2025 – Specifications are subject to modifications  
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