



PACEline

CHW

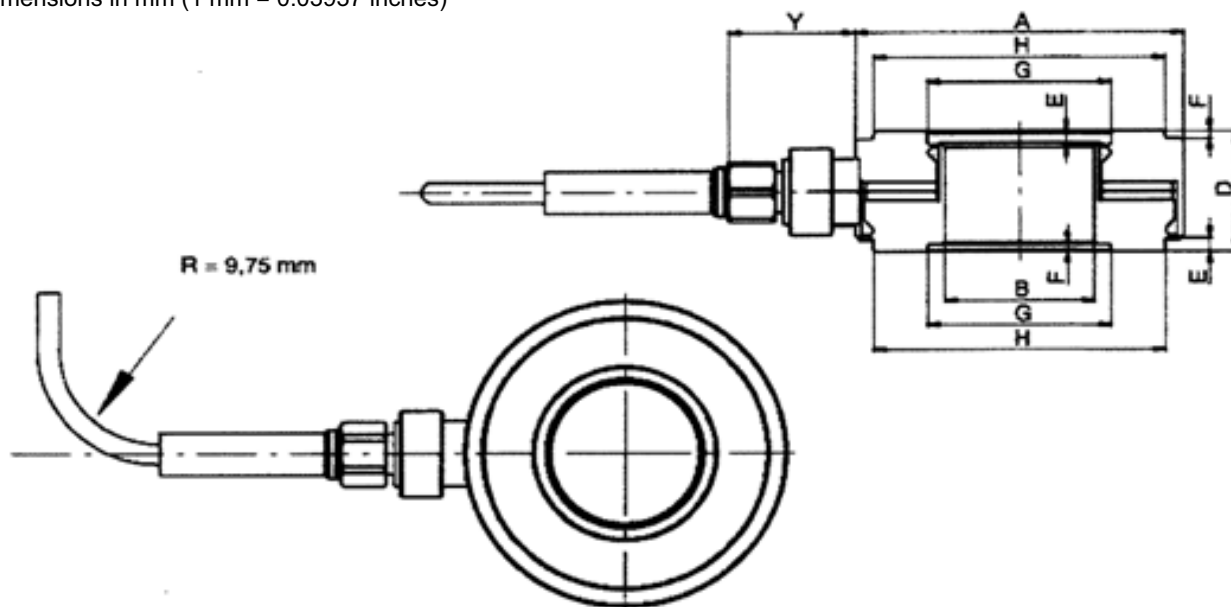
Piezoelectric force washers
for a wide range of
temperatures

Special features

- High nominal (rated) temperature of 300 °C (CHW-3), or 200 °C (CHW-2)
- Welded cable, hermetically welded sensor
- Rustless materials
- Compact design

Data sheet

Dimensions in mm (1 mm = 0.03937 inches)



Type	A	B	D	E	F	G	H	Y
CHW-2/60KN	28.5 ^{+0.05}	13H7	11-0.05	1.23	0.68	16	25.5	~10.9
CHW-3/60KN								

Specifications (data per VDI standards/VDE2638)

Type			CHW-2/60KN	CHW-3/60KN
Nominal (rated) force	F_{nom}	kN	60	
Accuracy				
Relative reversibility error	v	%	1	
Relative linearity error	d_{lin}	%	1	
Crosstalk from F_x/Y to F_z ²⁾		N/N	0.04	
Crosstalk from $M_{x,y}$ to F_z ²⁾		N/Nm	0.002	
Characteristic electrical values				
Sensitivity (typical) ¹⁾	S	pC/N	-4	-8
Insulation resistance at room temperature	R_{is}	Ω	10^{12}	
Temperature				
Nominal (rated) temperature range	$B_{T,nom}$	°C	-55...+200	-55...+300
Operating temperature range	$B_{T,G}$		-55...+200	-55...+300
Storage temperature range	$B_{T,S}$		-55...+200	-55...+300
Maximum temperature difference between pre-stress and operation		K	180	220
Characteristic mechanical values				
Maximum operating force	F_G	% of F_{nom}	110	
Force limit	F_L		135	
Breaking force	F_B		135	
Permissible lateral force ³⁾			10	
Nominal (rated) displacement	S_{nom}	μm	2	3.5
Resonance frequency	f_G	kHz	130	
Maximum bending moment ¹⁾ when $F_z = 0\%$ of F_{nom} $F_z = 50\%$ of F_{nom} $F_z = 100\%$ of F_{nom}	$M_{b, perm}$	Nm	0	220
			0	
Relative permissible oscillatory stress	F_{rb}	% of F_{nom}	100%	
General information				
Degree of protection per EN 60529			IP65	
Sensor material			Stainless steel, quartz	Stainless steel, gallium phosphate
Connection			Tightly welded cable	
Cable sheath material			Fluororubber	Polyimide
Cable length	L	m	4	
Plug			10-32 UNF	
Mass	m	g	36	

1) Must be calibrated under mounting conditions for quantitative results

2) F_z is the force in the measurement direction

3) Under at least 10% pre-stress

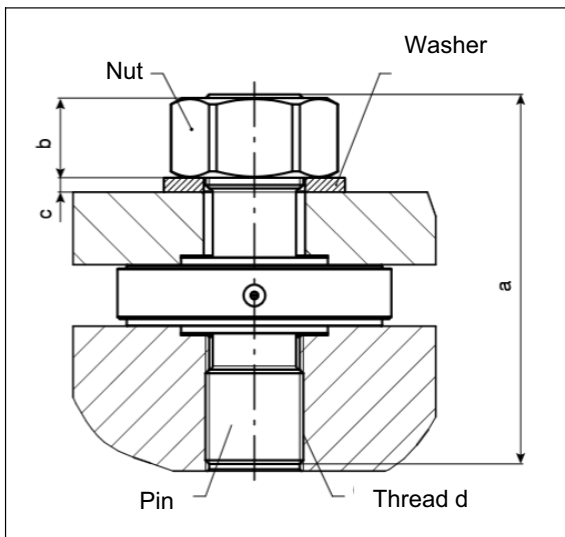
Scope of supply

1-CHW-2/60KN	Piezoelectric force washer CHW-2/60kN with test certificate and centering aid
1-CHW-3/60KN	Piezoelectric force washer CHW-3/60kN with test certificate and centering aid

Accessories

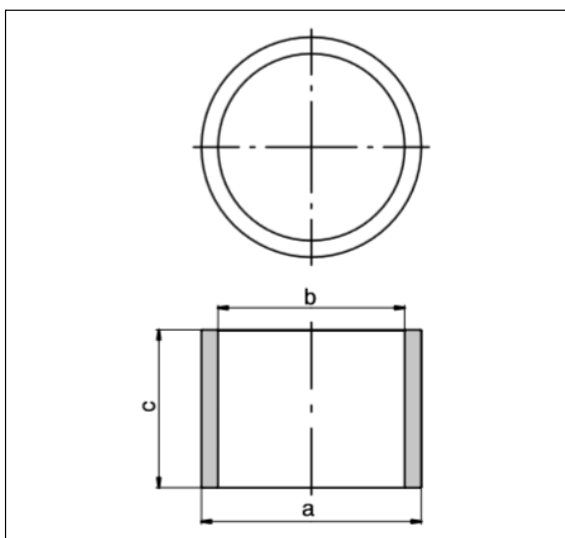
1-CCO	Coupling for piezoelectric cable, for 10-32 UNF plug at both ends
1-CSB4/1	Summing box for parallel connection of piezoelectric sensors
1-KAB143	Transducer connection cable, 10-32 UNF plug at both ends. Available in different lengths
1-KAB176	Transducer connection cable, 10-32 UNF plug at one end, charge amplifier connector: BNC. Available in different lengths.
1-CPS/100KN	Pre-stressing set, comprising pin, nut and washer for CHW-2/60KN and CHW-3/60KN

Dimensions of pre-stressing set



Type	a	b	c	d
CPS/100KN	46	10	1.6	M10x1

Dimensions of centering aid



Force washer	a	b	c
CHW-2/60KN and CHW-3/60KN	13 ^{G7}	11	15

Subject to modifications.
All product descriptions are for general information
only. They are not to be understood as a guarantee
of quality or durability.

Hottinger Baldwin Messtechnik GmbH
Im Tiefen See 45 · 64293 Darmstadt · Germany
Tel. +49 6151 803-0 · Fax +49 6151 803-9100
Email: info@hbm.com · www.hbm.com

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