

STOP GUESSING, **START KNOWING.**

Indirect Cavity Pressure Sensors IDS-E Line

8 ... 36 mm | 3 ... 80 kN



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Description

IDS-E series piezoelectric force sensors offer a high-precision solution for indirect cavity pressure measurement, ideal where direct measurement is constrained by space or mold geometry. They accurately measure force under ejector pins, providing a signal directly correlating to cavity pressure. Engineered with a symmetrical structure and rustless materials, IDS-E sensors ensure exceptional linearity, durability, and an undistorted signal. Their flat design and integrated cable facilitate easy installation, delivering consistent, high-fidelity data for process optimization.

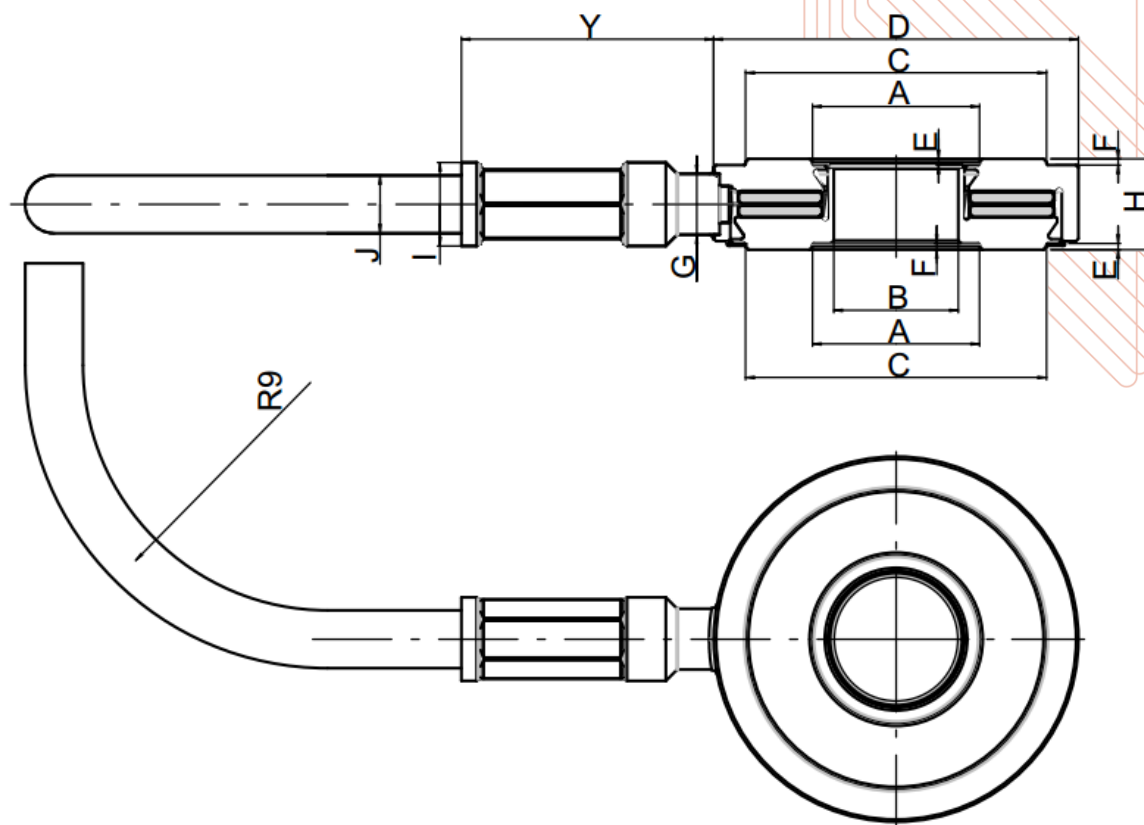
Key Features

- Indirect Cavity Pressure Measurement via Force on Ejector Pins
- Nominal Force Range from 3 kN to 80 kN
- Operating Temperature Range up to 120°C
- Extremely Flat, Symmetrical Design for Easy Integration
- Integrated Charge Cable for Robust Connection
- Ideal for Molds with Limited Space or Complex Geometries

Technical Data

Sensor Type	Indirect
Operating Principle	Piezoelectric, Charge Output
Sensing Element	Quartz
Dynamic Measuring Range	0 ... 3 to 80 kN (model dependent)
Limit Force	150 % of F _{nom}
Sensitivity [typical]	4.3 pC/N
Linearity	≤ ± 1 % FSO
Operating Temperature Range	-20 ... +120 °C
Internal Isolation Resistance	> 10 ¹³ Ohm [25 °C]
Protection Class	IP65
Interfaces	
Connector type	10-32UNF

Sensor Dimensions



Type	A	B	C	D	E	F	G	H	I	J	Y
IDS-E-3	4.05	2.7H7	6.5	8-0.05	0.12	0.15	2	3-0.05	~2.7	1.9	~8.3
IDS-E-7	5.5	4.1H7	9.9	12±0.05	0.2	0.2	2	3-0.05	~2.7	1.9	~8.3
IDS-E-14	7.8	6.1H7	13.9	16-0.05	0.29	0.32	2	3.5-0.05	~2.7	1.9	~8.3
IDS-E-26	9.8	8.1H7	17.9	20-0.05	0.3	0.32	2	3.5-0.05	~2.7	1.9	~8.3
IDS-E-36	11.8	10.1H7	21.9	24-0.05	0.29	0.32	2	3.5-0.05	~2.7	1.9	~8.3
IDS-E-62	13.8	12.1H7	27.9	30-0.05	0.5	0.45	2	4-0.05	~2.7	1.9	~8.3
IDS-E-80	15.8	14.1H7	33.9	36-0.05	0.52	0.52	2	5-0.05	~2.7	1.9	~8.3

Scope of Supply

	Order Code
Piezoelectric force washer IDS-E-3 with test certificate; cable length 1m	IDS-E-3
Piezoelectric force washer IDS-E-7 with test certificate; cable length 1m	IDS-E-7
Piezoelectric force washer IDS-E-14 with test certificate; cable length 1m	IDS-E-14
Piezoelectric force washer IDS-E-26 with test certificate; cable length 1m	IDS-E-26
Piezoelectric force washer IDS-E-36 with test certificate; cable length 1m	IDS-E-36
Piezoelectric force washer IDS-E-62 with test certificate; cable length 1m	IDS-E-62
Piezoelectric force washer IDS-E-80 with test certificate; cable length 1m	IDS-E-80
Piezoelectric force washer IDS-E-3 with test certificate; cable length 0.5m	IDS-E-3-0.5M
Piezoelectric force washer IDS-E-7 with test certificate; cable length 0.5m	IDS-E-7-0.5M
Piezoelectric force washer IDS-E-14 with test certificate; cable length 0.5m	IDS-E-14-0.5M
Piezoelectric force washer IDS-E-26 with test certificate; cable length 0.5m	IDS-E-26-0.5M
Piezoelectric force washer IDS-E-36 with test certificate; cable length 0.5m	IDS-E-36-0.5M
Piezoelectric force washer IDS-E-62 with test certificate; cable length 0.5m	IDS-E-62-0.5M
Piezoelectric force washer IDS-E-80 with test certificate; cable length 0.5m	IDS-E-80-0.5M

Accessories

	Order Code
Transducer connection cable (material: PFA), 0.5 m long, 10-32 UNF connector plug at both ends; for extension in combination with 1-CCO	1-KAB143-0.5
Transducer connection cable (material: PFA), 2 m long, 10-32 UNF connector plug at both ends; for extension in combination with 1-CCO	1-KAB143-2
Transducer connection cable (material: PFA), 3 m long, 10-32 UNF connector plug at both ends; for extension in combination with 1-CCO	1-KAB143-3
Transducer connection cable (material: PFA), 7 m long, 10-32 UNF connector plug at both ends; for extension in combination with 1-CCO	1-KAB143-7
Transducer connection cable (material: PFA), 10 m long, 10-32 UNF connector plug at both ends; for extension in combination with 1-CCO	1-KAB143-10
Transducer connection cable (material: PFA), 1 m long; 10-32 UNF connector plug on transducer side, BNC on amplifier side (e.g. suitable for digital charge amplifier CMD600); for extension in combination with 1-CCO	1-KAB176-1
Transducer connection cable (material: PFA), 2 m long; 10-32 UNF connector plug on transducer side, BNC on amplifier side (e.g. suitable for digital charge amplifier CMD600); for extension in combination with 1-CCO	1-KAB176-2
Transducer connection cable (material: PFA), 3 m long; 10-32 UNF connector plug on transducer side, BNC on amplifier side (e.g. suitable for digital charge amplifier CMD600); for extension in combination with 1-CCO	1-KAB176-3
Coupling for piezoelectric sensors, both ends for plug 10-32UNF	1-CCO
Summing box for connecting piezoelectric sensors in parallel, 10-32 UNF connectors	1-CSB4/1