



Main features

- FLAT-body design
- Good linearity
- Designed integrate into machine
- With EEPROM for sensitivity detection (option)

Pancake like diaphragm load cell designed for the use in Fully electric Injection Molding Machines.

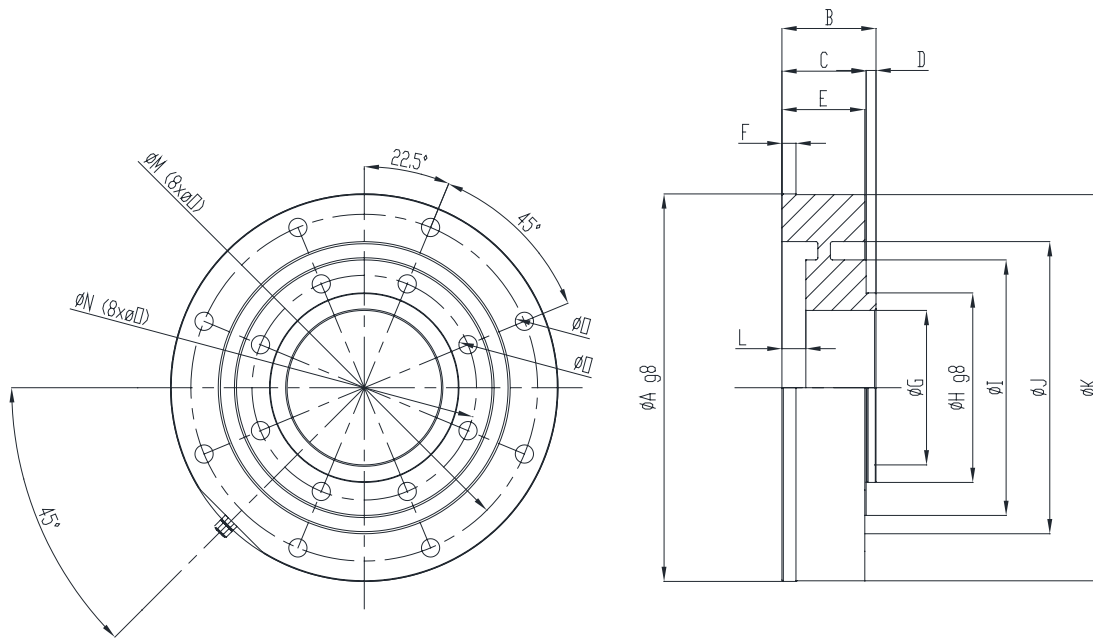
The Flat-Body design allows for easy integration into the injection unit without adding to the machine length. Available with standardized mV/V output or an EEPROM-Module to allow for higher mV/V-Output for better signal/noise ratio (to be used with special VDA-Amplifier).

High-grade steel for endless cycles and optional amplifier necessary.

TECHNICAL DATA

Strain gauge type	Foil (GF = 2.0 nominal)
Bridge resistance	350Ω (@ 4 strain gauges) 700Ω (@ 8 strain gauges)
Measuring range	60...650 kN
Sensitivity	1mV/V
Sensitivity tolerance	± 1%
Accuracy	< ± 1% FS
Linearity	< ± 0.6% FS
Hysteresis	< ± 0.6% FS
Repeatability	< ± 0.2% FS
Supply voltage	5VDC (max 8VDC)
Operating temperature range	-20...85°C
Storage temperature range	-20...85°C
Temperature effect on zero balance @ 10°C	0.15%
Temperature effect on output @ 10°C	0.15%
Maximum applicable load	150%
Rupture load	>200%
Protection class	IP54
Case material	Steel

MECHANICAL DIMENSIONS



Rated capacity / Nennleistung	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
60kN	181	40	37	3	36	5	72	80	112	138	174	14	154	93	9
80kN	181	40	37	3	36	5	72	80	112	138	174	14	154	93	9
150kN	181	65	60	5	59	10	70	80	112	138	180	17	160	93	9
200kN	181	65	60	5	59	10	70	80	112	138	180	17	160	93	9
300kN	276	67	60	7	59	10	110	135	182	208	275	17	247	160	13
500kN	276	67	60	7	59	10	110	135	182	208	275	17	247	160	13
650kN	322	67	60	7	59	10	173	180	230	270	321	15	298	194	13

ELECTRICAL CONNECTIONS

FUNCTION	OPTION O open leads	OPTION C	OPTION M	OPTION B	OPTION E
		cable and connector M16x6 680 09 0321 00 06	cable and connector M9x4 712 99 0409 10 04	connector M9x4 712 09 0411 00 04	cable and connector M16x8 680 09 0571 00 08
SIGNAL +	green	4	4	4	2
SIGNAL -	yellow	5	3	3	4
EXCITATION +	white	1-2	1	1	1
EXCITATION -	brown	3-6	2	2	6
EEPROM	-	-	-	-	7

EXTERNAL AMPLIFIERS

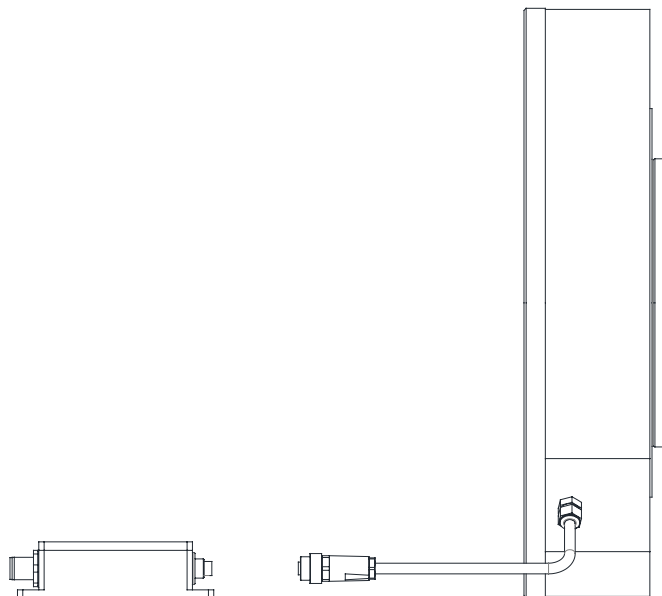
Strain-gauge amplifiers

VDA-amplifier*

MBA-amplifier*

VDA-amplifier for option E* (with EEPROM)

* See amplifier's datasheet for ordering information



ORDER CODE

Diaphragm load cell

DLC - - - - -

Measurement range	
60 kN	0060
80 kN	0080
150 kN	0150
200 kN	0200
300 kN	0300
500 kN	0500
650 kN	0650

Bridge Resistance	
350Ω (four strain gauges)	350
700Ω (eight strain gauges)	700

Cable length	
0.5m	005
3m	030
5m	050
10m	100
Define your own length (0,5m..15m)	XXX

Electrical Connection	
Open leads	O
Cable and connector M16x6	C
Cable and connector M9x4	M
Connector M9x4	F
Cable and connector M16x8 (with EEPROM)	E

Option EEPROM	
With PCB EEPROM (for detection of sensitivity)	E
Without PCB EEPROM	N

Output signal	
1 mV/V	1

Example: **DLC-0080-700-005-C-N-1**:

Diaphragm load cell, measurement range 0-80 kN and 1mV/V sensitivity, with eight strain gauges, 0,5m cable and connector M16