



#### Main features

- FLAT-body design
- Good linearity
- Designed integrate into machine

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

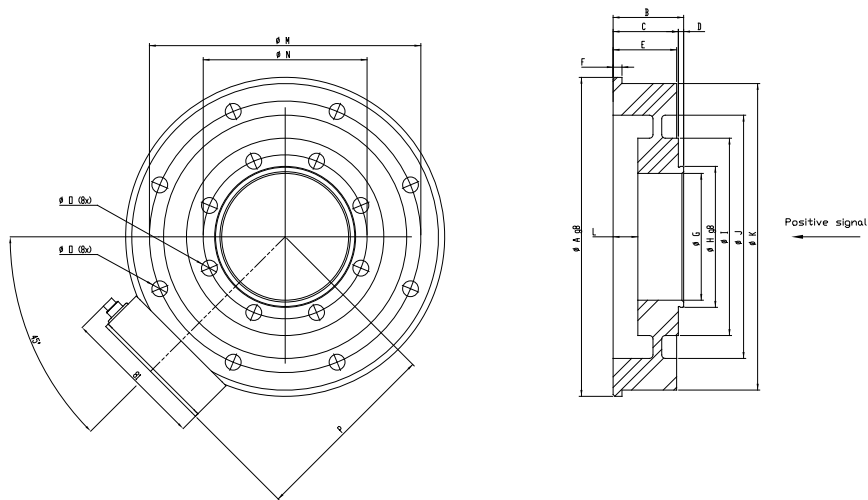
The Flat-Body design allows for easy integration into the injection unit without adding to the machine length.

#### TECHNICAL DATA

OUTPUT SIGNAL	VOLTAGE	CURRENT
Measuring range	60...650kN	
Sampling rate	5 kHz	
Low-pass filter	1 kHz	
Zero output signal	0 V (V)	4 mA (I)
Full scale output signal	+10 V (V) compression	20 mA (I) compression
	-10 V (V) stretching	-
Accuracy	<math>\pm 1\%</math> FS	
Accuracy of zero point	<math>\pm 0,1\%</math> FS	
Linearity	<math>\pm 0,6\%</math> FS	
Hysteresis	<math>\pm 0,6\%</math> FS	
Repeatability	<math>\pm 0,2\%</math> FS	
Allowed load	$\geq 5$ k $\Omega$	0...500 $\Omega$
Repeatability	>25 ms	
Reset voltage	12...36VDC, 0 VDC	
Supply voltage	12...36VDC	
Power consumption	0.5 W	1 W
Inverse polarity protection	Yes	
Accidental short-circuit protection	Yes	
Dielectric strenght (1)	50V	
Operating temperature range	0...70°C	
Storage temperatur range	0...70°C	
Temperature effects (zero)	$\pm 0,02$ % FS/°C	
Temperature effects (span)	$\pm 0,02$ % FS/°C	
Maximum applicable load	150%	
Rupture load	>200%	
Protection class	IP54	
EC Conformity	According to Directive 2014/30/EU	
Case material	Steel	

(1) Uses 50V 2J Voltage suppressor

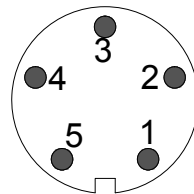
## MECHANICAL DIMENSIONS



Rated capacity	A	B	C	D	E	F	G	H	I	J	K	L	M	N	o	P
60 kN	181	40	37	3	36	5	72	80	112	138	174	14	154	93	9	108
80 kN	181	40	37	3	36	5	72	80	112	138	174	14	154	93	9	108
150 kN	181	65	60	5	59	10	70	80	112	138	180	17	160	93	9	111
200 kN	181	65	60	5	59	10	70	80	112	138	180	17	160	93	9	111
300 kN	276	67	60	7	59	10	110	135	182	208	275	17	247	160	13	158,5
500 kN	276	67	60	7	59	10	110	135	182	208	275	17	247	160	13	158,5
650 kN	322	67	60	7	59	10	173	180	230	270	321	15	298	194	13	181,5

## ELECTRICAL CONNECTIONS

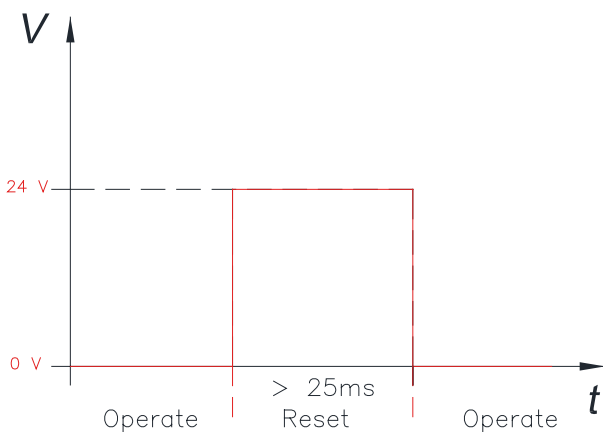
FUNCTION	CONNECTOR OUTPUT 09 0415 00 05 M9 X 5
+ 24V	1
GROUND	2
RESET	3
- SIG	4
+ SIG	5



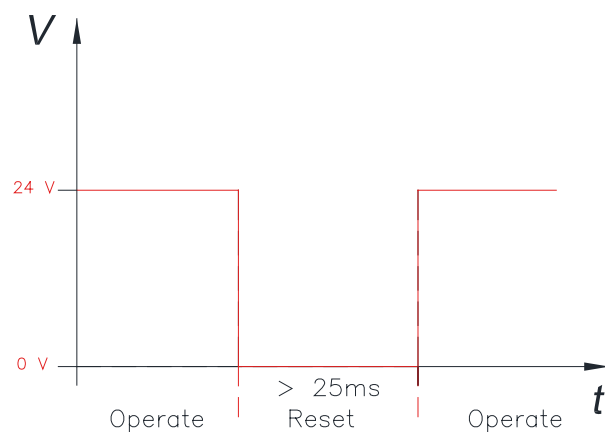
- 1 Exc +
- 2 Exc -
- 3 Reset
- 4 Sig -
- 5 Sig +

## RESET FUNCTION

Reset control input	Reset	12...36V
	Operate	0V/open
Minimum reset pulse duration	> 25 ms	



Reset control input	Reset	0V
	Operate	12...36V/open
Minimum reset pulse duration	> 25 ms	



## ORDER CODE

Diaphragm load cell

**DLCA - VDA -**



Amplifier	
Digital amplifier VDA	VDA

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

Electrical Connection	
Connector M9 x 5	D

Output signal	
0...±10VDC	V
4...20mA	I

RESET	
External reset (24V), without power-on reset (2·10 <sup>6</sup> reset cycles allowed)	HO
External reset (24V), with power-on reset (infinite reset cycles allowed)	HR
External reset (0V), without power-on reset (2·10 <sup>6</sup> reset cycles allowed)	LO
External reset (0V), with power-on reset (infinite reset cycles allowed)	LR
Static (no external reset)	ST

Example: **DLCA-VDA-0080-D-V-HR**

Diaphragm load cell, measurement range 0-80 kN and 0-10Vdc signal, with connector M9 and external reset (24V).