Manual for connection of load cells to junction box and weighing indicators

Junction Box YZ-J4

Load cell	Connect to	Junction Box	Connect to	Indicator	
Each load cell cable, up to 4 pcs		*From junction box one cable, min 0,25mm² to indicator*			
EXC+	=>	EXC+	=>	EXC+	*
EXC-	=>	EXC-	=>	EXC-	*
SIG+	=>	SIG+	=>	SIG+	*
SIG-	=>	SIG-	=>	SIG-	*
GND	=>	GND	=>	GND	*

Important!

Turn all potentiometers max clockwise if you do not whish to make corner adjustment
Corner adjustment is in almost all application not necessary, without adjusting corner
the difference could be max ±0,1% between the corners.

Junction Box PT100SBE-4

Load cell	Connect to	Junction Box	Connect to	Indicator	
Each load cell cable, up to 4 pcs		*From junction box one cable, min 0,25mm² to indicator*			
EXC+	=>	EXC+	=>	EXC+	*
EXC-	=>	EXC-	=>	EXC-	*
SIG+	=>	SIG+	=>	SIG+	*
SIG-	=>	SIG-	=>	SIG-	*
GND	=>	GND	=>	GND	*
~~SEN+~~	not used	SEN+	=>	SEN+	**
~~SEN-~~	not used	SEN-	=>	SEN-	**

Important!

All Jumpers J1-J4 must be short circuit if you do not whish to make corner adjustment
Corner adjustment is in almost all application not necessary, without adjusting corner
the difference could be max ±0,1% between the corners.

Junction Box PT100SB-6 and PT100SB-8 (with corner adjustment)

Load cell	Connect to	Junction Box	Connect to	Indicator	
Each load cell cable, up to 8 pcs		*From junction box one cable, min 0,34mm² to indicator*			
EXC+	=>	EXC+	=>	EXC+	*
EXC-	=>	EXC-	=>	EXC-	*
SIG+	=>	SIG+	=>	SIG+	*
SIG-	=>	SIG-	=>	SIG-	*
GND	=>	GND	=>	GND	*
SEN+	=>	SEN+	=>	SEN+	**
SEN-	=>	SEN-	=>	SEN-	**

Important!

Follow the junction box manual how to make corner adjustments.

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Junction Box PT100SB-6 and PT100SB-8 (without corner adjustment)

Load cell	Connect to	Junction Box	Connect to	Indicator
Each load cell cable, up to 8 pcs		*From junction box one cable, min 0,34mm² to indicator*		
EXC+	=>	EXC+	=>	EXC+ *
EXC-	=>	EXC-	=>	EXC- *
SIG+	=>	SEN+	=>	SIG+ *
SIG-	=>	SEN-	=>	SIG- *
GND	=>	GND	=>	GND *

Junction Box LC-CB

Load cell	Connect to	Junction Box	Connect to	Indicator
Each load cell cable, up to 4 pcs		*From junction box one cable, min 0,25mm² to indicator*		
EXC+	=>	EXC+	=>	EXC+ *
EXC-	=>	EXC-	=>	EXC- *
SIG+	=>	SIG+	=>	SIG+ *
SIG-	=>	SIG-	=>	SIG- *
GND	=>	GND	=>	GND *

** On LCA-D SIG+ and SIG- are named I+ and I-*

** EXC and SIG are often marked as E and S only.*

*** If you have more than 10m distance from junction box to indicator we recomend you to choose a 6 wires cable and just connect the wires between SEN+ and SEN- between junction box and indicator If cable is shorter than 10 meters it´s ok not to use SEN function, in that case you must connect a short circuit wire on the indicator between +EXC to +SEN and -EXC to -SEN. However on many indicators there is a short circuit jumpers to be used on the electronic board, please check indicator manual.*

WARNINGS!!!

*** Never overload a cell with more than 50%**

*** Never perform welding work near the load cell. The cell(s) must be mechnaically removed before welding work can be done.**

*** Always if possible make sure the cells does not stand in water, not even the IP68 models.**

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Vetek load cell range, color codes:

Color code;	For all below models (series)	
EXC+	Red	C2S, C8S, CLS,
EXC-	Black	CLT, D100, D200
SIG+	White	T20, TCA, TC4
SIG-	Yellow	TCE, TS

Color code;	For all below models (series)	
EXC+	Red	108 and VZ (all models),
EXC-	Black	202WA, 535, 651,
SIG+	Green	AR, ARL, BM-CFS, CP,
SIG-	White	PA-6181, SBS, SC

Color code;	For all below models (series)	
EXC+	Red	DT-101,
EXC-	Blue	
SIG+	Green	
SIG-	Yellow	

Color code;	For all below models (series)	
EXC+	Red	FXC, F60X
EXC-	White	
SIG+	Black	
SIG-	Blue	

Color code;	For all below models (series)	
EXC+	Red	SPSC, DSB
EXC-	Black	
SIG+	Green	
SIG-	White	
SEN+	Purple	
SEN-	Grey	

Color code;	For all below models (series)	
EXC+	Brown	AG, AH
EXC-	Green	
SIG+	Yellow	
SIG-	White	
SEN+	Grey	
SEN-	Pink	

Color code;	For all below models (series)	
EXC+	Green	VE420
EXC-	Black	
SIG+	Red	
SIG-	White	

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Example: Loadcells VZ563 with Junction Box YZ-J4 and indicator DFWL

Load cell VZ	Junction Box YZ	Cable from junction box to =>		Indicator DFWL
Each load cell cable, up to 4 pcs		*Any color code can be used on this cable of course.*		
Red	EXC+	EXC+	=>	EXC+
Black	EXC-	EXC-	=>	EXC-
Green	SIG+	SIG+	=>	SIG+
White	SIG-	SIG-	=>	SIG-
Shield	GND	GND	=>	GND

Make sure J2 and J3 jumber are on (short circuit)

Example: Loadcells VZ563, Junction Box YZ-J4 and indicator (transmitter) DGT1/4

Load cell VZ	Junction Box YZ	Cable from junction box to =>		Indicator DFWL	
Each load cell cable, up to 4 pcs		*Any color code can be used on this cable of course.*			
Red	EXC+	EXC+	=>	EXC+	
Black	EXC-	EXC-	=>	EXC-	
Green	SIG+	SIG+	=>	SIG+	
White	SIG-	SIG-	=>	SIG-	
				SEN+	**=> EXC+**
				SEN-	**=> EXC-**
Shield	GND	GND	=>	GND	

One should short-circuiting - SEN with -EXC and +SEN with +EXC by separate wires.

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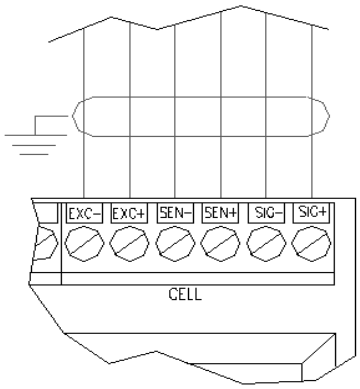
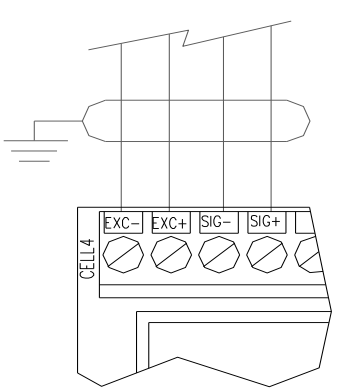
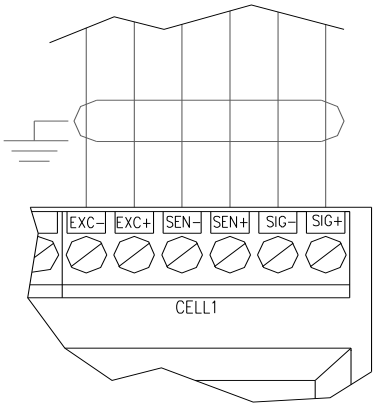
Vetek indicator range terminal connections

DGT1 model

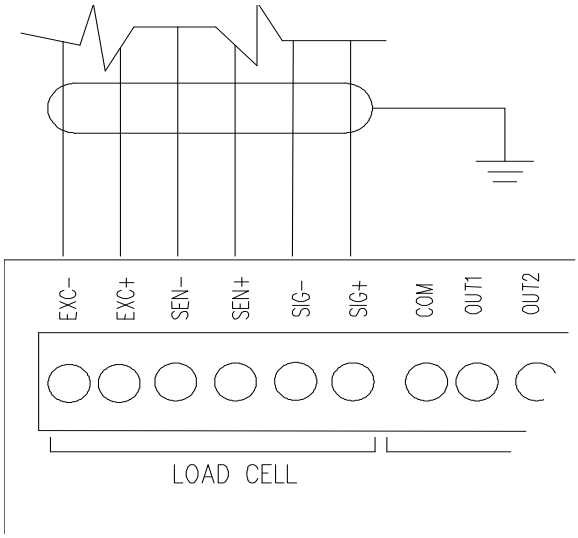


DGT4, DGT20 and DGT60 models (4 channels)

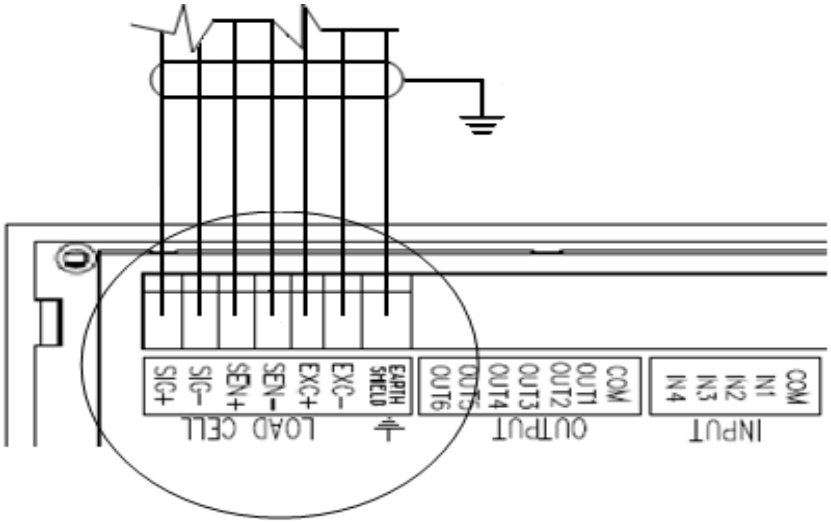




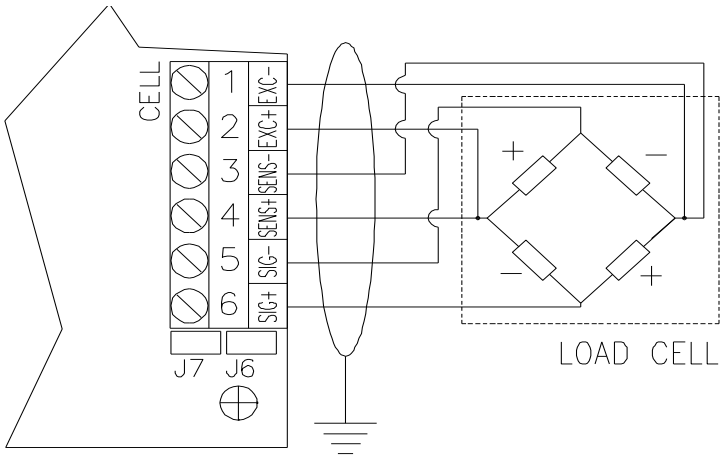
DGTQ models



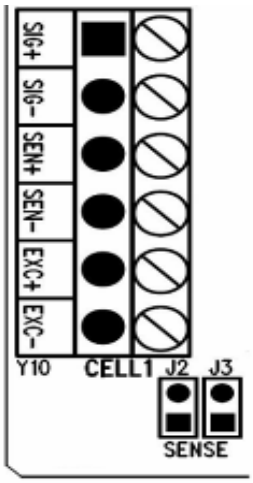
DGTP and DGTPK models



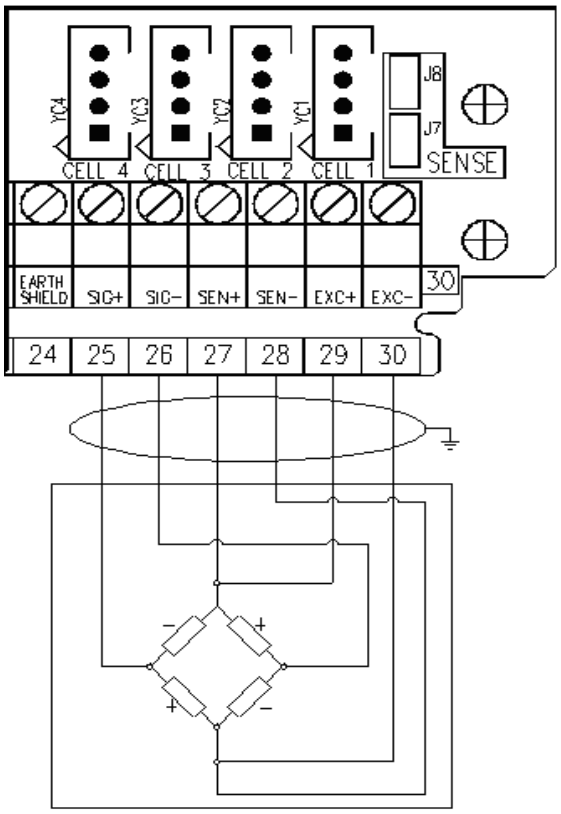
DFW



DFWL

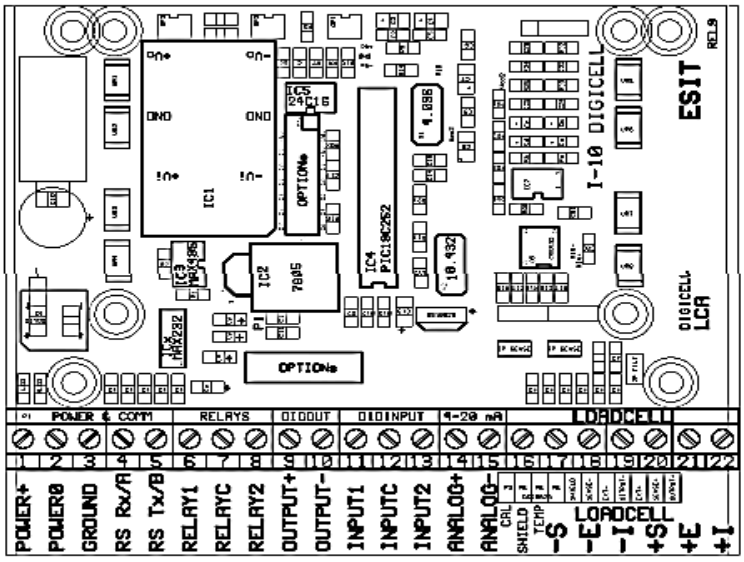


3590 all models



LOAD CELL

LCA-D



On LCA-D SIG+ and SIG- are named I+ and I-

All other models are very easy to see the load cells connection markings directly on the product.