



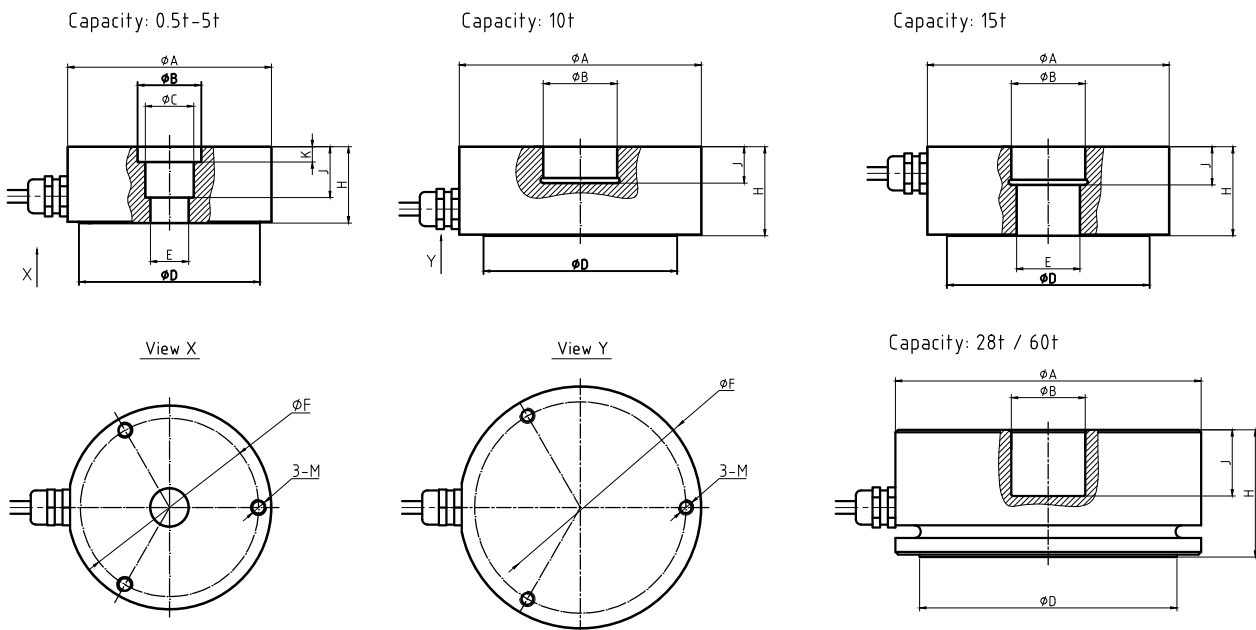
### Key feature:

- Material: Stainless steel
- Rated Capacities: 1t-60t
- OIML R60, NTEP HB44, CE and RoHS certified
- IP Rating: IP68
- Suitable for process weighing of hopper scales, silo scales, tank scales.
- High precision by OIML R60 C3, high reliability.

### Product description:

R540S is a large range capacity compression load cell, it is compact and low-profile, capacity is from 1t to 60t. It is widely suitable for applications in heavy-duty process weighing industry, it is with smooth electro-polished surfaces so that it is easy to be cleaned, and is ideally suited to weighing applications in clean-in-place/sterilize-in-place environments. Full stainless steel constructure, completely hermetically sealed by laser. Also it is designed with separate mandrel with self-aligning arc point to receive force vertically to ensure the high force accuracy.

### Dimensions (in mm& lb):



Rated Capacity	φA	φB	φC	φD	E	φF	M	H	J	K
t/mm										
0.5t-1t	80	25	19	71	M10	70	M6	25	15	1
2t-5t	80	25	19	71	φ15	70	M6	30	20	6
10t	95	29	-	75	-	83	M6	35	14.3	-
15t	95	29	-	79.5	φ24.9	-	-	35	15	-
28t	120	29	-	101	-	83	M6	50	26	-
60t	130	40	-	112	-	-	-	60	30	-

## R540S Load Cell Specifications

Parameter		Units	Specification		
Model No.			R540S		
Rated capacity (E <sub>max</sub> )		t	0.5t; 1t; 2t; 5t; 10t; 15t; 28t; 60t		
Min. dead load		kg	0		
Rated output		mV/V	2.0 ± 0.1%		
Zero balance		% of E <sub>max</sub>	± 1		
Combined error <sup>1)2)</sup>		% of E <sub>max</sub>	< ± 0.05		
Repeatability error		% of AL <sup>3)</sup>	< ± 0.02		
Creep; 30 minute		% of AL	< ± 0.03		
Min. dead load output return (DR); 30 min		% of AL	< ± 0.03		
Temp. effect on	Min. dead load output	% of E <sub>max</sub> /°C	< ± 0.002		
	Rated output <sup>2)</sup>	% of AL/°C	< ± 0.002		
Temperature range	Compensated	°C(°F)	-10 to +40 [+14 to +104]		
	Operating		-30 to +65 [-22 to +149]		
	Safe storage		-40 to +80 [-40 to +176]		
Excitation voltage	Recommended	V AC/DC	5 ~ 15		
	Maximum		20		
Terminal resistance	Excitation	Ω	0.5t-5t: 1150 ± 10	10t-60t: 1530 ± 10	
	Output		0.5t-5t: 1050 ± 3	10t-60t: 1400 ± 3	
Insulation resistance @50VDC		MΩ	>5000		
Breakdown voltage		V AC	>500		
Seal type / IP rating			Hermetically welded / IP68		
Load limit	Safe	% of E <sub>max</sub>	150		
	Ultimate		300		
Material	Spring element		Stainless steel		
	Cable		Φ6; 4-wire; PVC		
Cable length	m	0.5t	1t ... 15t	28t ... 60t	
		3	6	12	
Weight; approx	kg	0.5t-5t	10t-15t	28t-60t	
		1.0	2.0	5.0	
Fatigue life		cycles @E <sub>max</sub>	>1,000,000		
Deflection at E <sub>max</sub> ; approx		mm	<0.5		

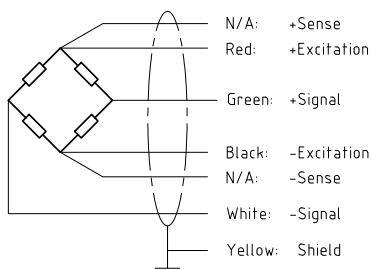
### Notes:

<sup>1)</sup> Error due to the combined effect of non-linearity and hysteresis

<sup>2)</sup> The sum of errors due to Temperature Effect on Output comply with the requirements of OIML R60 and NIST HB44

<sup>3)</sup> AL = Applied Load

Cable Colour Code: 4-wire [Optional: 6-wire]



Shield connected to load cell body

### Interchangeable Products:

Manufacturer	Model
Mettler Toledo	RLC
Vishay TedeA-Huntleigh	220