### **Transformer components**

# Oil Level Indicators

Reliable measurement for every transformer size

Unexpected or accidental oil leakages can occur in a transformer's lifetime. Oil Level Indicators provide a clear status on the oil level inside the transformer tank, the conservator, or the on-load tap-changer.

Available for both conservator type or hermetically sealed transformers, certain models offer up to 4 contacts to alarm or trip if the fluid reaches the minimum or the maximum preset values.







### Features:

- · Wide variety for every transformer size
- Robust design and field-proven reliability
- Quality driven production
- Quick Quotes and Deliveries

#### Features:

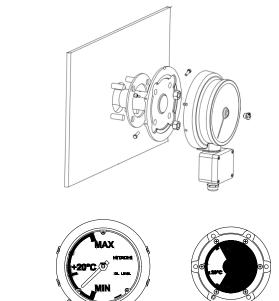
- Oil-filled transformers with or without conservator
- Conservator with rubber bags
- On-load tap changers (OLTC)
- Hermetically sealed transformers.

## Wide variety for every transformer size

Application	Model	Shaft Length (mm)	Outer Dimension (mm)	Switch	Product Number					
	KSS A									
		308*	□60	-	1ZTE001001E0001					
	1400 5									
	KSS B	308*	□80	-	1ZTE002003E0001					
	KSS F									
		308*	Ø82	-	1ZTE006005E0001					
	KSS G	308*	Ø100	-	1ZTE007002E0001					
	KSS J									
		51	□60	-	1ZTE010001E0001					
Transformers with conservator tank	KYS A	790*	Ø182	2xCO	1ZTE012001E0041					
	MAX									
				4xCO	1ZTE012002E0009					
							KYS B			
			Ø182	2xCO	1ZTE013001E0048					
	20°C 20°C	Up to 2000								
		Sp 15 25 55		4xCO	477504000550000					
					1ZTE013005E0009					
	KYS C		Ø140	2xCO	1ZTE014001E0039					
			21.0	4xCO	1ZTE014007E0003					
		790*	Ø220	2xCO	1ZTE015001E0026					
				4xCO 2xCO	1ZTE015002E0004 1ZTE016001E0008					
			Ø340	4xCO	1ZTE016002E0003					
Hermetically sealed transformers	KSS D	90	SW45	-	1ZTE004009E0021					
						KSS DP	90	SW45		
									-	1ZTE004009E0022
	NSS E	157	SW60	-	1ZTE005001E0001					
		210		-	1ZTE005002E0001					
	KYS E	239		1xCO	1ZTE009001B0001					
			Ø88							
		204			1ZTE009001B0002					
	For both use	KSS C	n/a	Ø40	-					
						1ZTE003001E0001				
KSS N										
		n/a	153 x 25	-	1ZTE011002E0001					
KSS P		n/a	98 x 65		1ZTE008002E0001					
			180 x 65		1ZTE008001E0001					
			262 x 65	-	1ZTE008002E0002					
			344 x 65		1ZTE008002E0003					
			426 x 65		1ZTE008002E0004					

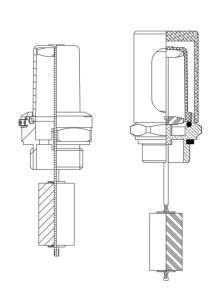
<sup>\*</sup> The following float levers are offered with the abovementioned length as standard, it can be freely adjusted by the customer during installation. Custom options are available on request, including dial design, color, floater arm length, floater type and C5 Medium corrosion protection.

### Robust design and field-proven reliability



KYS A, B & C structurally consist of two parts; the isolated flange and the indicator. Indicator unit has no contact with the oil. Indicator unit has ventilation holes to prevent water condensation.

The float movement associated with the oil level is radially transmitted to the magnetic coupling system of the indicator via the float lever. A magnet connected to the float-lever mechanism drives the polarized indicator magnet connected to the pointer. On KYS B, this movement can be axially transmitted through a special joint equipped with a gear system.



KSS C, D, DP, E and KYS E are suitable for incorporation in filling pipes with R11/2 internal thread.

These types of magnetic oil level indicators are used in hermetically sealed transformers without gas cushion. They show the level of the oil in the filling pipe and thus offers the possibility to monitor for:

- Gas formation in the transformer
- Accumulations of air pockets in the tank
- Indication of large leaks from the tank

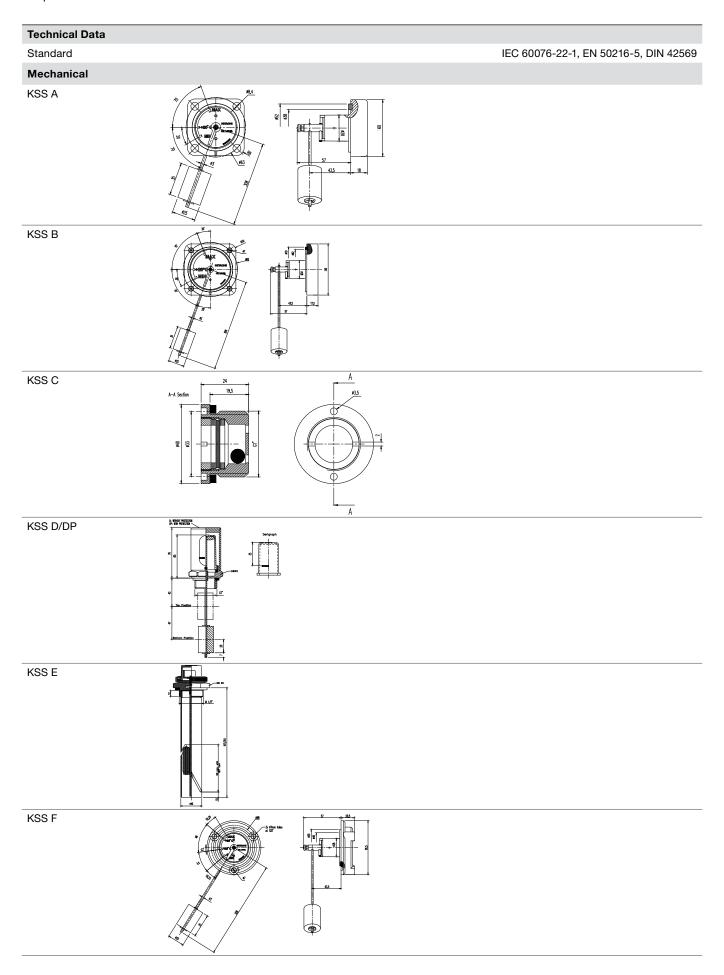
When incorporated in hermetically sealed transformers with nitrogen gas cushioning it is only possible to monitor for large leaks from the tank.

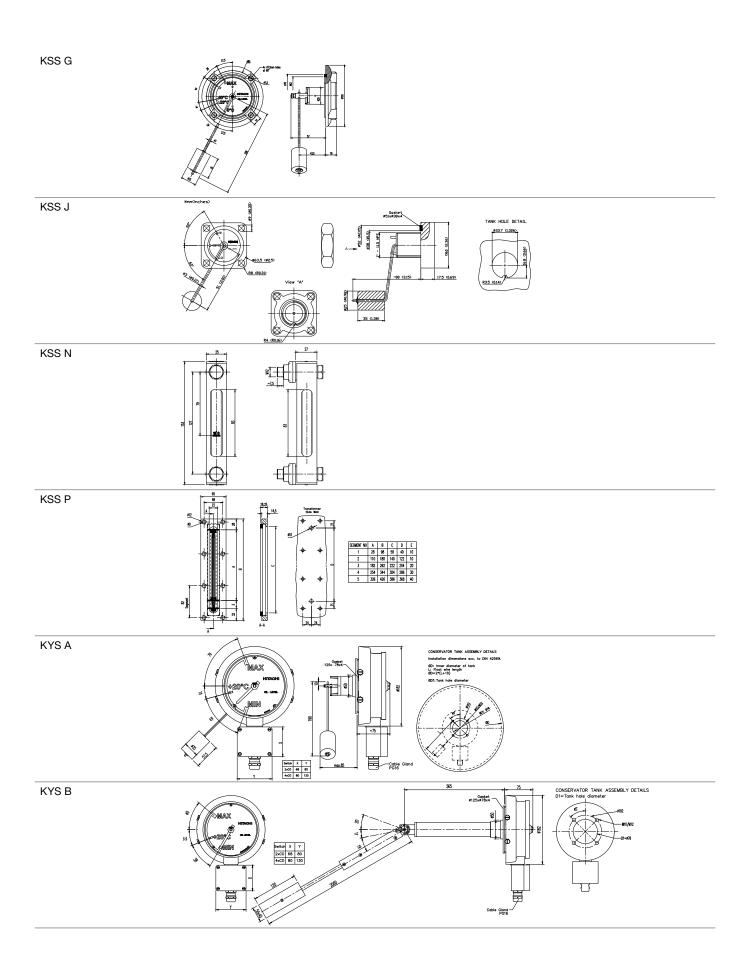
### **Quality-driven production**

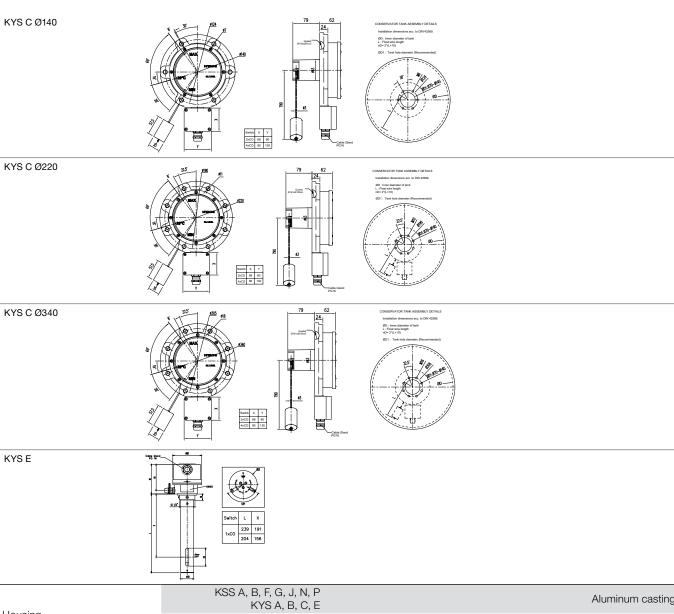
Quality is a priority for us. We offer technology leadership, backed by a proven record of addressing diverse challenges and improving standard practices. Our product portfolio is the result of research, manufacturing, and servicing transformers, making us unique in the industry.

### **Quick quotes and deliveries**

We offer standard pricelists and quick delivery times for our standard products listed herein. If required, our engineers can also offer customized solutions for your application.







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Housing	KSS A, B, F, G, J, N, P KYS A, B, C, E	Aluminum casting
nousing	KSS C, D, E	Brass
Color	where applicable	RAL 7033
Sight window	KSS A, B, D, E, F, G, J, P KYS A, B, C	Polycarbonate
	KSS C, N	Glass
Dial type	KSS A, B, F, G, J KYS A, B	Pointer
	KYS C	Circular red&white backgrounds
Dial material	KSS A, B, F, G, J KYS A, B, C	Aluminum sheet
	KSS A	60x60 mm
	KSS B	80x80 mm
	KSS C	Ø40 mm
	KSS D	SW45
	KSS E	SW60
Outer dimension (mm)	KSS F	Ø82 mm
	KSS G	Ø100 mm
	KSS J	60x60 mm
	KYS A, B	Ø182 mm
	KYS C	Ø140, Ø220, Ø340 mm
	KYS E	Ø88 mm

	KSS A, B, F, G	308 mm
	KSS D	90 mm
	KSS E	157/210 mm
	KSS J	51 mm
Shaft length	KSS N	153 mm
	KSS P	98/180/262/344/426 mm
	KYS A, C	790 mm
	KYS B	2000 mm (ETO possible)
	KYS E	204/239 mm
Floater type	where applicable	Foam
	KSS A, B, F, G, J KYS A, C	Radial
Float movement	KSS C, D, E KYS E	Vertical
	KYS B	Axial
Sealing material	KSS A, B, C, D, F, G, J, N KYS A, B, C, E	NBR
	KSS E, P	Cork
Application	KSS A, B, F, G, J, N, P KYS A, B, C	Transformers with conservator tank
Аррисацоп	KSS C, D, E, N, P KYS E	Hermetically sealed transformers
Tank connection	KSS A, B, C, F, G, J, N, P KYS A, B, C	Side mounting
Tallik Gorin Gottori	KSS D, E KYS E	Top mounting
	KSS A, B, F, G, J	Ø40 mm
	KSS C, D	G1"
	KSS E	G1 ½"
Tank hole diameter	KYS A, B	Ø76 mm
Tallite Tiolo didinioto.	KYS C Ø140	Ø70 to Ø82 mm
	KYS C Ø220	Ø70 to Ø140 mm
	KYS C Ø340	Ø70 to Ø140 mm
	KYS E	G1 ½"
Protection	KSS D	with or without
Operation		
Operating oil temperature		-40°C to +110°C
Electrical (for KYS series)	10/0 A B 0	2.22 4.22
Switches	KYS A, B, C	2xCO or 4xCO
	KYS E	1xC0
Switch ratings		5A 125VAC
Cable glands	KYS A, B, C	3A 250 VAC 1xPG16
Environmental	NIOA, D, C	IXPGIO
Ambient temperature		from -40°C up to 80°C
Degree of protection	KYS A, B, C, E	IP65 in accordance with IEC 60529
Corrosion protection	π. о., о, с	C4 Medium
OSTOCION PROTOCION		O4 IVIEUIUITI