










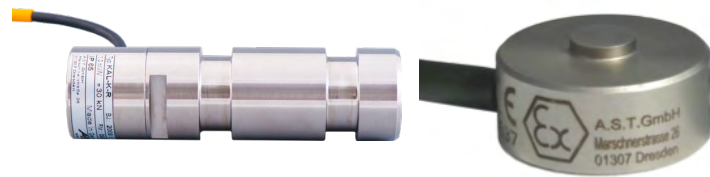






Type-series		Application
KAB-EX Bending beam Force transducer/ load cell 10kg ... 1000kg		Scales Vessel weighing Mechanical engineering
KAD-EX; KAD-S-EX; KAD-T-EX Force transducer/ load cell 5kN ... 50kN; 5kN ... 50kN; 5kN ... 20kN		Scales Vessel weighing Filling measurement
KAM-EX, KAM-B-EX Force transducer compression 1kN ... 200kN; 1kN ... 10kN		Mechanical engineering Automation Press- and joining technology
KAM-PR-EX Force transducer compression 100kN ... 350kN		Vessel weighing Filling measurement
KAM-S-EX Force transducer compression 100N ... 20kN		Mechanical engineering Oil production facilities
KAF-EX Tension/ compression Force transducer 1kN ... 500kN		Material testing Mechanical engineering
KAS-EX Tension/ compression Force transducer/ load cell 200kg ... 5000kg		Scales Mechanical engineering
KAL-EX Load pin free dimensions 10kN ... 5000kN		Transp. and hoisting devices Oil production facilities Coal mining
KAU-EX Force transducer/ load cell 10t ... 30t		Scales Weighing container
KAN-R-EX Force transducer 200kN		Lifting devices Container cranes Lifts
KAK-S-EX Force transducer tension 10t ... 50t		Assembly technology Bracing technology Load measurement in ropes



Classification according to EU-Type Examination Certificate TÜV 10 ATEX 555 391 X

	 Category 1		 Category 2		Category 3	
Application zone	Zone 0	Zone 20	Zone 1	Zone 21	Zone 2	Zone 22
Atmosphere	G	D	G	D	G	D
Safety level	very high		high		standard	
Sufficient safety	by 2 preventive measures in the case of 2 errors		by frequent equipment disturbances in the case of 1 error		by error free operation	
Approximate value for the time of reaction	> 1000 h/a		10 to 1000 h/a		< 10 h/a	
Intrinsic safety	ia		ib		ic	
Explosion group	Group [Ignition energy] IIC [20μJ]					
Temperature group (for gases)	Temperature Group [max. surface temperature] T4 [135 °C]					
Maximally permissible surface temperature	T200 °C (<Glowing temperature of coal dust)					
Ambient temperature range	-20 °C to +60 °C					
Intrinsically safe electric circuit	$U_i = 10V$ $I_i = 120mA$ $P_i = 0,65W$					

Type code	Labeling	Description
XKC 301	Zone 0	Gas: II 1G Ex ia IIC T4 -20°C < Ta < 60°C
XKC 304	Zone 20	Dust: II 1D Ex ia IIIC 20 T200°C -20°C < Ta < 60°C
XKC 302	Zone 1	Gas: II 2G Ex ib IIC T4 -20°C < Ta < 60°C
XKC 305	Zone 21	Dust: II 2D Ex ib IIIC T200°C -20°C < Ta < 60°C
XKC 303	Zone 2	Gas: II 3G Ex ic IIC T4 -20°C < Ta < 60°C
XKC 306	Zone 22	Dust: II 3D Ex ic IIIC T200°C -20°C < Ta < 60°C