

## Force Transducer KMD

Electronic Control Systems:Sensors:Force Transducer

### Product description

Type	KMD
Description	Force Transducer
Product description	Force transducers are designed to measure static and dynamic tensile forces in different applications.

Our force transducers stand out for:

- extremely high overload capacity and fatigue strength
- simple, direct installation
- high accuracy
- built-in measuring signal amplifier
- cost effective solution

Applications:

- force measurement on cranes and winches: as transducer for safe load indicators and rated capacity indicators
- weight control in conjunction with a display unit
- tensile force measurements on vehicles, ships and tractors
- control of belt tension on conveyor systems

Construction type	eye shackle
Order No.	on request

### Technical data

Testing	MP certificate
Operating voltage	9 ... 36 V DC
Current consumption	< 40 mA
Measuring range	0,5 ... 1000 t (depending on type)
Ovrange limit	200 %
Signal output	4 ... 20 mA (3-wire)
Class accuracy	1.0 % FS (standard), 0.5 % FS (on request)
Accuracy	+/- 0.03 % FS/K
Temperature comp. zero point	+/- 0.03 % FS/K
Electrical connection	Plug Canon MS 3102-R16S-10P
Material	stainless steel
Mounting position	any
Weight approx.	2 ... 230 kg (depending on type)

### Environmental conditions

Operating temperature	-25 ... +75 °C
Storage temperature	-30 ... +80 °C
Degree of protection (IP)	IP 67
Saltwater-proof	for all types on request

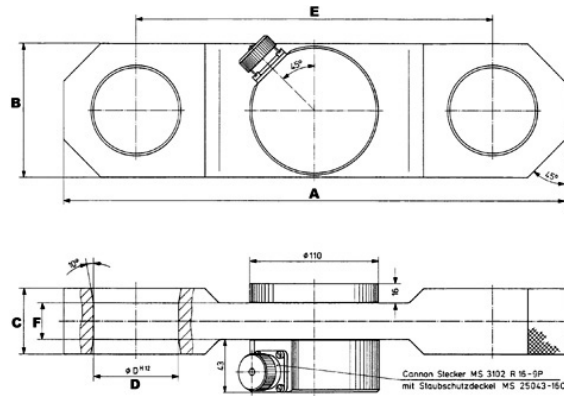
### Accessories

Options

Connecting cables, shackle, bolts, pivoting bearings, redundant versions for special requirements, special design on request

Upon request, the force transducers can be supplied with other bore diameters as well. Bolt clearance should not exceed 2% of bore diameter. Special designs of 0.5 through 1.000 t are possible on request. For the measuring ranges 3 t through 20 t, light special shackles of alloyed, forged SAE steel are available. For accuracy requirements better than class 0.5, maintenance-free ball-and-socket joints can be mounted in the force transducers of these measuring ranges.

**Drawing**



KRAFTMESSDOSE	Typ	Nennlast		Maße						Gewicht [kg]
		[Mpt]	[kN]	A	B	C	D	E	F	
513735	15	14,2	410	110	40	44	300	32	14,2	
513763	20	196,2	420	120	50	57	300	35	17,0	
513789	25	245,3	420	120	53	45,5	300	45	19,3	
513805	30	294,3	470	130	60	50,5	340	45	24,8	
513831	40	392,4	480	140	67	60,5	340	60	29,2	
602135	50	490,5	480	140	77	60,5	340	60	33,0	
602146	60	588,6	520	160	87	70,5	360	60	43,8	
602166	100	981,0	740	200	110	100,5	500	70	92,2	
602181	120	1177,2	740	210	110	110,5	500	70	93,5	
602189	150	1471,5	740	200	122	91	500	90	108,3	