

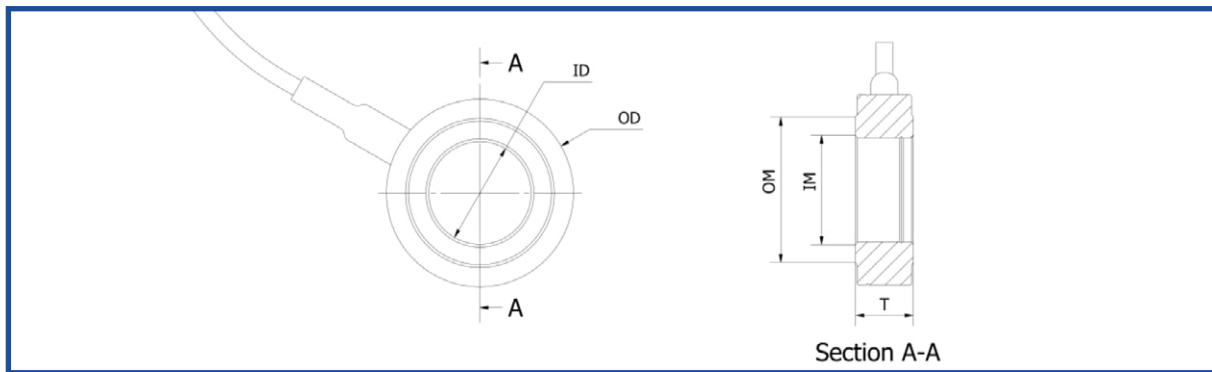
Product specification

Sizes	To fit bolt sizes from M20 to M72, (7/8" to 2 3/4")
Cable lengths	Standard: 1 meter (optionally 5 or 10 meter)
Full Scale Load (FS)	From 286 kN to 1794 kN dependent on Sensor size.
Maximum Load at ambient temperature	FS range x 1.3 (without affecting the validity of the calibration)
Temperature range	-40°C to 80°C
Storage Temperature	-40°C to 80°C
Minimum Load	10% FS
Total accuracy at ambient temperature (rms)	< 5 % FS (machined parallel surfaces in bolt-nut assembly)
Linearity	< 1.5 % FS
Hysteresis	< 0.9 % FS
Creep	< 0.1 % FS
Repeatability	< 0.5 % FS
Typical Temperature effects	< ± 0.08 % FS/°C
Sealing	IP66
Material	Stainless Steel 17-4 PH, Condition H1025
Classification	10.9 (upon special request: 12,9)
Sensor Output	Serial digital signal
Power Supply	Powered through electronic interface
Electrical Connection	Connector or Flying leads (three wire)
Intrinsic Safe Code	II 2 G, EEx ib IIC T4 (upon special request)

- !** Please note that the BoltSafe sensor should be placed directly under a nut and that imperfections in the joining surfaces should be avoided to obtain the best possible accuracy of the residual bolt load.

Please contact your local distributor if you have to use it in any other way.

Dimensions



BoltSafe Size	Clearance Hole ID	Outside Diameter OD	Overall Thickness A	Steel Weight	Clamping Load Class 10.9	Steps	Measuring surface IM	Measuring surface OM
7/8"	22,6 mm	47 mm	14 mm	133 gr	214 kN	2	25,8 mm	32,9 mm
1"	25,8 mm	52 mm	14 mm	160 gr	280 kN	2	29 mm	37,1 mm
1-1/8"	29 mm	57,1	14 mm	191 gr	354 kN	3	32,2 mm	41,4 mm
1-1/4"	32,3 mm	67 mm	17 mm	286 gr	437 kN	5	35,5 mm	45,7 mm
1-3/8"	35,5 mm	73 mm	17 mm	343 gr	529 kN	5	38,7 mm	50 mm
1-1/2"	38,7 mm	78 mm	17 mm	391 gr	629 kN	5	41,9 mm	54,3 mm
1-5/8"	41,9 mm	84 mm	17 mm	543 gr	739 kN	5	45,4 mm	58,6 mm
1-3/4"	45,1 mm	86 mm	20 mm	608 gr	857 kN	10	48,9 mm	63,6 mm
1-7/8"	48,2 mm	91 mm	20 mm	698 gr	983 kN	10	52,4 mm	67,9 mm
2"	51,4 mm	98 mm	20 mm	816 gr	1.119 kN	10	55,9 mm	72,2 mm
2-1/4"	57,8 mm	108,8 mm	23 mm	1.156 gr	1.416 kN	15	62,9 mm	81,8 mm
2-1/2"	64,3 mm	116,6 mm	23 mm	1.289 gr	1.748 kN	15	69,9 mm	90,6 mm
2-3/4"	70,8 mm	124 mm	23 mm	1.372 gr	2.000 kN	20	77 mm	99 mm

BoltSafe Size	Clearance Hole ID	Outside Diameter OD	Overall Thickness A	Steel Weight	Clamping Load Class 10.9	Steps	Measuring surface IM	Measuring surface OM
M20	20,4 mm	37 mm	14 mm	73 gr	166 kN	2	22 mm	22,7 mm
M22	22,4 mm	40 mm	14 mm	85 gr	208 kN	2	24,2 mm	31,4 mm
M24	24,4 mm	44 mm	14 mm	104 gr	239 kN	2	26,4 mm	33,3 mm
M27	27,4 mm	50 mm	14 mm	137 gr	315 kN	3	29,7 mm	38 mm
M30	30,6 mm	64,3 mm	17 mm	214 gr	385 kN	5	33 mm	42,8 mm
M33	33,6 mm	68,4 mm	17 mm	218 gr	480 kN	5	36,3 mm	46,6 mm
M36	36,6 mm	72,8 mm	17 mm	295 gr	560 kN	5	39,6 mm	51,1 mm
M39	39,6 mm	78 mm	17 mm	300 gr	670 kN	5	42,9 mm	55,9 mm
M42	42,6 mm	83 mm	20 mm	445 gr	772 kN	5	46,2 mm	60 mm
M45	45,6 mm	87,6 mm	20 mm	506 gr	905 kN	10	49,5 mm	64,7 mm
M48	48,6 mm	92 mm	20 mm	591 gr	1.018 kN	10	52,8 mm	69,5 mm
M52	52,6 mm	97,2 mm	20 mm	669 gr	1.221 kN	10	57,2 mm	74,2 mm
M56	56,6 mm	102 mm	20 mm	798 gr	1.408 kN	15	61,6 mm	78,7 mm
M60	60,8 mm	108 mm	23 mm	1.083 gr	1.647 kN	20	66 mm	83,4 mm
M64	64,8 mm	114 mm	23 mm	1.196 gr	1.794 kN	20	70,4 mm	88,2 mm
M72	72,8 mm	124 mm	23 mm	1.454 gr	2.500 kN	20	78,4 mm	110 mm

* On special request we can produce sensors able to withstand and measure 15% higher loads, dimensions remain the same. Contact us for more information.