BALLUFF

sensors worldwide

Linear Position Transducer

Continuous absolute position sensor in a rugged, sealed stainless steel housing

MICROPULSE® ProCompact
Tough applications demand a tough position sensor

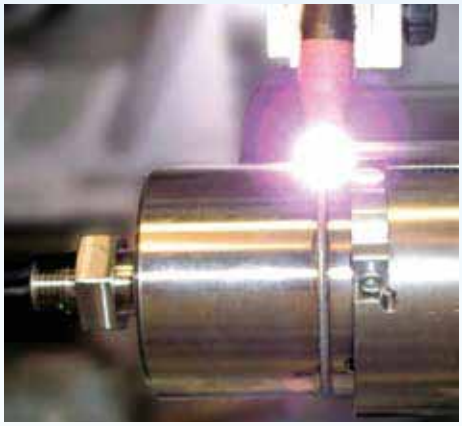
Real-world applications for linear position sensors can be challenging. High humidity, ambient temperature variations, high pressure washdown, and exposure to caustic chemicals can all take a toll on ordinary linear feedback sensors.

The Micropulse® ProCompact linear position transducer is designed to thrive in just such demanding conditions. The ProCompact's hermitically-sealed, welded stainless steel housing shrugs off environmental challenges that would drastically shorten the lifespan of an ordinary feedback sensor.

The Micropulse ProCompact transducer incorporates Balluff's non-contact magnetostrictive technology, providing superior long-term reliability and service life compared to competing contact-based sensors such as linear or rotary potentiometers.

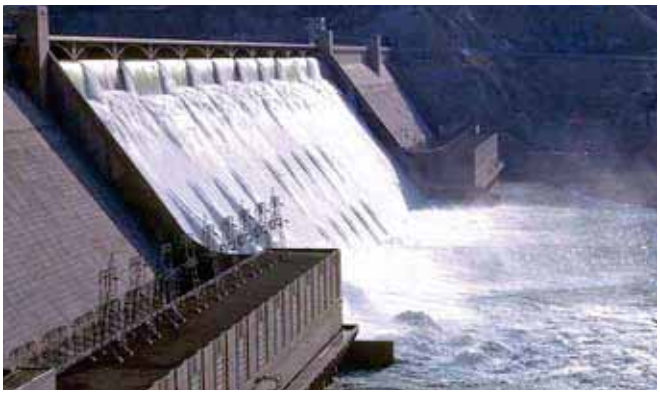
Standard mounting threads

Standard 3/4"-16 UNF (optional M18 x 1.5) mounting threads allow the ProCompact transducer to be installed into hydraulic or pneumatic cylinders that have been prepared for standard rod-style position feedback transducers.



Welded, sealed housing offers superior protection

The ProCompact's sealed housing is able to withstand the most severe environmental conditions. Right out of the box, the ProCompact is environmentally protected to IP68. For even more demanding applications, the threaded fitting on the ProCompact housing can accommodate a cable protection system, offering environmental protection up to IP69K.



Civil engineering

Hydropower, flood control, inland navigation, and water management facilities can benefit from precision position feedback on hydraulically-operated mechanisms. The wet, humid, condensate-forming conditions can quickly ruin standard instrumentation. From blade pitch control and wicket gate control on Kaplan turbines, to flow control on Pelton turbines, to gate control on navigation locks, the Micropulse® ProCompact is built to withstand the rigors of wet environments.

Railroad maintenance of way

Linear position transducers are used extensively on rail maintenance equipment in applications such as rail grinding, tamping, and ballast cleaning. These demanding applications often expose the transducers to high heat, extreme cold, and moisture, as well as high levels of shock and vibration. The ProCompact transducer is the ideal solution.

Shown with typical cable protection system installed. Consult factory for cable protection methods.

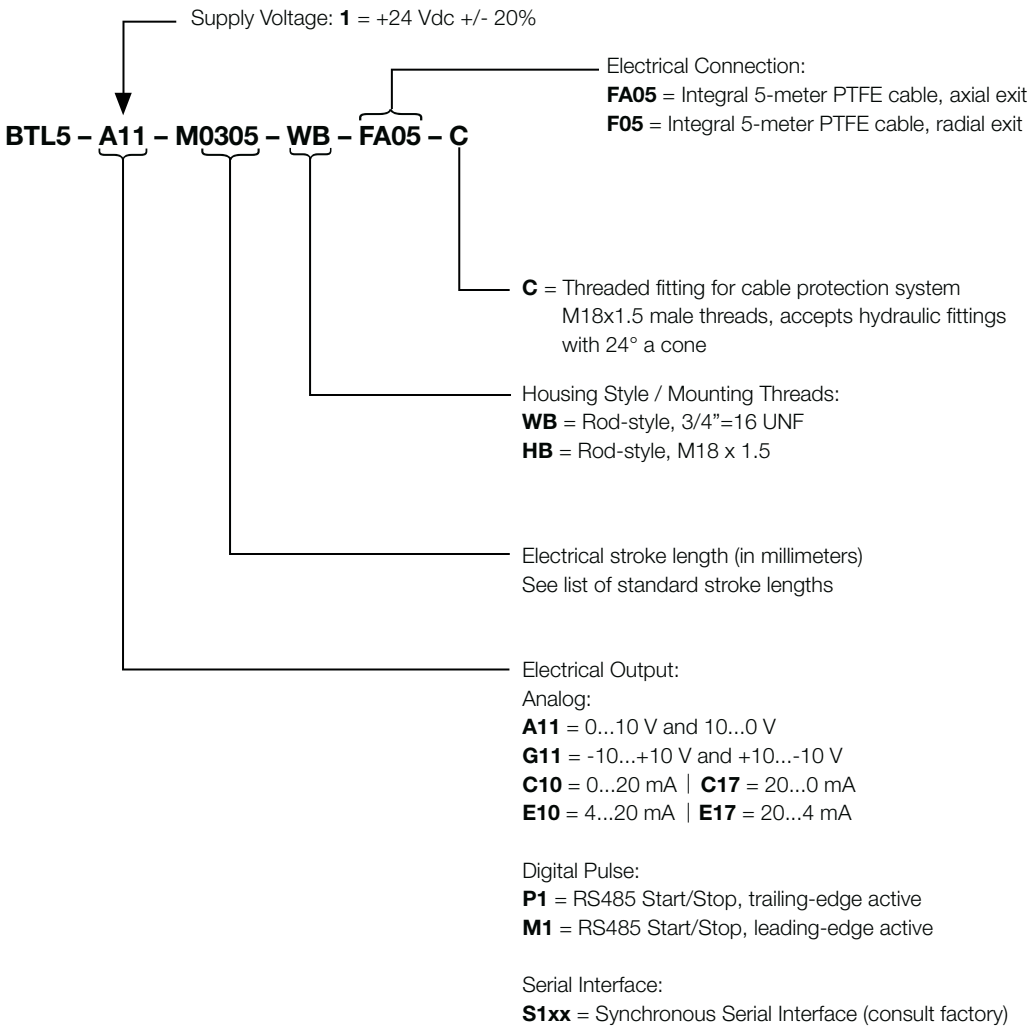
Steel production

Extreme heat, high shock and vibration, grit, grime, and moisture; applications for linear feedback sensors don't get much tougher than those found in steel processing. Steel rolling mills, for example, rely on accurate, reliable position feedback for applications such as roller gap control. The ProCompact, with its sealed, stainless steel housing withstands these demands and continues to deliver outstanding performance over the long haul.

Forest products

Today's sawmill operations must maintain peak efficiency in order to be competitive. High throughput and minimal equipment downtime are critical. Equipment used in this industry is exposed to high shock loads and vibration, high and low temperature extremes, and in some cases, even physical damage. The ProCompact's rugged, compact housing withstands these conditions, and can even eliminate the need for additional protective enclosures.

Ordering Example:



Standard Stroke Lengths[1]

mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
0025	1	0254	10	0661	26	1524	60	3200	126	4470	176
0051	2	0280	11	0711	28	1676	66	3556	140	4572[3]	180[3]
0077	3	0305	12	0762	30	1753	69	3658	144	4674	184
0090	3.5	0330	13	0813	32	1829	72	3759	148	4775	188
0102	4	0381	15	0914	36	1981	78	3861	152	4877	192
0127	5	0407	16	1016	40	2134	84	3962[2]	156[2]	4978	196
0152	6	0457	18	1067	42	2261	89	4064	160	5080	200
0178	7	0508	20	1220	48	2490	98	4166	164		
0203	8	0560	22	1270	50	2743	108	4267	168		
0230	9	0610	24	1372	54	2997	118	4369	172		

[1] Non-standard stroke lengths available; consult factory
[2] Max. stroke for Synchronous Serial Interface is 3962 mm (156 in)
[3] Max. stroke for analog outputs is 4572 mm (180 in.)

MICROPULSE® ProCompact
Dimensions and general specifications

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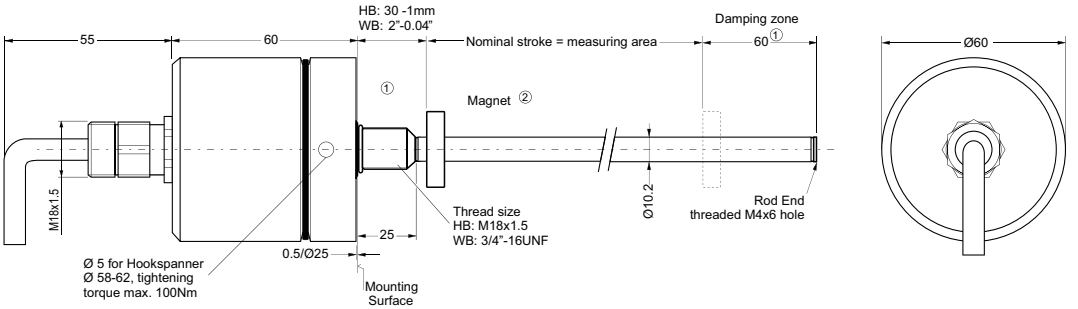
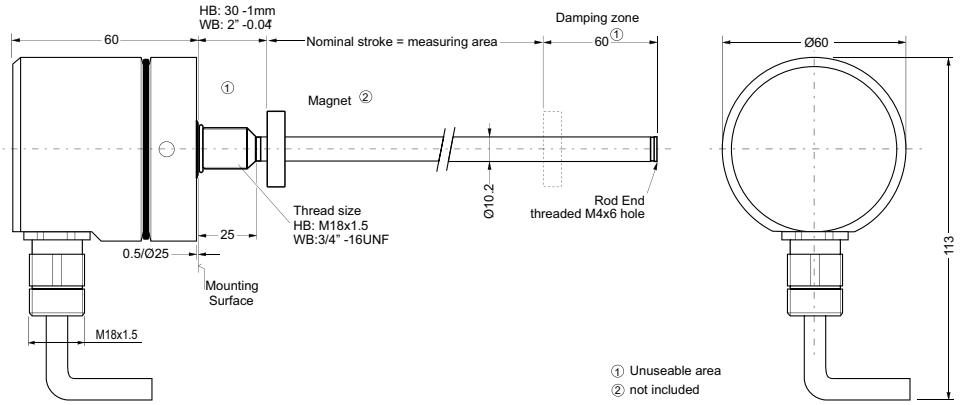
Series	BTL ProCompact
Mechanical Specifications	
Measurement type	Linear displacement
Measurement range	25 mm to 5080 mm (1" to 200")
Shock rating	100 g / 6 ms per IEC 68-2-27
Continuous shock	100 g / 2 ms per IEC 68-2-29
Vibration rating	12 g, 10 to 2000 Hz per IEC 68-2-6
Environmental protection	Stand-alone: IP68 (submersion at 5 bar / 48 hours) With cable protection system: IP69K
Housing material	Stainless steel, 1.4572
Pressure rating (rod)	600 bar (8700 psi)
Operating temperature	-40°C to +85°C
Storage temperature	-40°C to +100°C
Humidity	90% non-condensing
Connection type	Integral cable
Cable type / temperature	PTFE jacket / -40°C to +200°C





www.balluff.com/ProCompact

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