

KEY DATA - XBC

PARAMETER	DATA
Max. caliper volume supported	15 - 20 cm ³
Max. output pressure	120 bar
Max. pressure without damage	180 bar
Max. local pressure gradient	> 600 bar/sec
Time to lock (0 to 80 bar)	< 150 ms
Time to revlease (80 to 0 bar)	< 150 ms
Pressure control accuracy (constant target @ 100 bar)	+/- 1 bar
System input voltage	10 - 18 V
Max. power consumption	800 W
Packaging Volume	< 4 L
System mass	< 4,5 kg



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VISIT [XBC-TECHNOLOGY.COM](https://www.lsp-ias.com)
FOR MORE INFORMATION



XBC / BRAKE BY WIRE SYSTEM
Redundancy and Safety



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SETTING BENCHMARK IN REDUNDANCIES, SAFETY AND PERFORMANCE FOR AUTONOMOUS DRIVING

LSP's new XBC system brings decades of braking expertise from motorsport, passenger cars, and hypercars into a cutting-edge solution for autonomous driving. Designed for flexibility and easy integration, XBC offers autonomous vehicle developers a fully redundant, safe, high-performance and future-ready braking system.



ENGINEERED FOR AUTONOMOUS DRIVING - COMBINING SAFETY, SYSTEM REDUNDANCY, AND A MODULAR DESIGN FOR SEAMLESS INTEGRATION AND FAIL- OPERATIONAL FUNCTIONALITY.

	Hydraulic Schematics	Same deceleration in Base Brake degraded modes	Brake By-Wire control	Number of pressure sources	Basic Stability functions	Advanced Stability functions
ELECTRIC CONNECTIONS		✓	Axle level	2	✓	✗
HYDRAULIC CONNECTIONS		✗	Central	2	✓	✓
CAN		✗	Wheel level	4	✓	✗

BENCHMARK IN REDUNDANCIES

Dual Pressure Sources:

2 fully redundant Brake pressure actuators

Higher system availability:

max deceleration possible in many degraded modes

System Redundancy:

Additional redundancies with Regen and EPB



BEST IN CLASS FEATURES

Safety Compliance:

ASIL-D functional safety compliant as per ISO 26262

Robust Diagnostics:

Real-time safety and fault checks

EE Architectures:

Benefit from a smart, seamless fit across all EE architecture for versatility

Low Noise levels

Compact Packaging

FULL SYSTEM MODULARITY

Scalability of system parameters

A variety of hydraulic layouts

Ready for autonomous driving

