Hydraulic locking cylinder with mechanical lock



The renewed focus on securing of watertight ports

Back in the 60's our company introduced hydraulic cylinders with internal mechanical locking. Since the first Bauer-locking cylinders were produced, several other producers have copied the original.



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This well known special cylinder was invented based on a need to have a convenient and safe way of properly securing watertight doors and ports on ships. The renewed focus on securing of watertight ports in mid 90's resulted in new rules ensuring increased safety on ferries and passenger vessels.

One important consequence from the more stringent requirements, was that locking cylinders now had to comply with new demanding fatigue and strength requirements: Our locking cylinders were the first on the market to comply with the new stringent requirements put into force by DNV: Our type approval confirms that our hydraulic locking cylinders withstand both the high cycle dynamic load test and a static strength test subjecting the lock to twice the maximum pushing force of the cylinder.

The standard mechanical locking cylinder should not be subjected to any load during the disengaging process. However, if such a release condition can not be avoided, we have available a special cylinder designed to handle disengagements while a constant load is resting on the rod. The latter number indicating maximum available stroke. Every locking cylinder can be delivered with inductive sensors confirming, by an electrical signal, the proper lock engagement.

The different cylinder sizes are as follows:

- Ø60/32×350
- Ø80/45×550
- Ø100/60×750

