

ITS Series Pneumatic Cylinders – Extreme Resilience and Power



Tough cylinders for real forces!

Compressed air packs a punch, a powerful one: managing extreme forces, long strokes – and all that in places where other technologies are “out of their element”. Robustly designed and at ease in harsh environments, ITS series cylinders get the job done, reliably and with minimal maintenance.

Targeted configuration for any application

Immense systems covering a large area and often adverse operating conditions pose extreme, highly specific demands on automation technology. The ITS series provides the required flexibility to meet these demands. Thanks to a wide variety of freely selectable functional characteristics and accessories, optimal solutions can be configured for all application requirements.

- ▶ Versatile product spectrum for optimal flexibility in cylinder selection and system layout
- ▶ High corrosion resistance thanks to stainless steel as a standard material for the piston rod and tie rods
- ▶ Design with optimized materials for leaner cylinders and systems
- ▶ Elastic cushioning element for better absorption of residual energy, a lower noise level and less vibrations in the system
- ▶ Modular sealing system for simple, fast exchange of scraper modules without removing the cylinder
- ▶ Precise adjustment of the cushioning screw for an optimal alignment with application requirements
- ▶ Online configurator with comprehensive accessories and all stroke-relevant spare parts for simple, fast configuration up to documentation; configuration overview, itemized drawing with parts list, dimensioned drawing, as well as 3D models for all standard CAD tools

Innovative equipment details like the modular sealing system enable an even wider range of applications, as well as tailor-made solutions.

- ▶ Numerous variants with extensive accessories
- ▶ Unique modular sealing system
- ▶ Elastic cushioning element or pneumatic cushioning

Cylinder configurator



With piston forces up to five tons and stroke lengths up to 2700 mm

Custom versions for diverse applications

Air – it's hard to believe something that's invisible can be so strong. Nonetheless, combined with the right pneumatic cylinders and matching equipment, it can be used to automate heavy-duty tasks, simply and cost-effectively. ITS cylinders can move weights of up to five tons over a large stroke range, from just a few centimeters to well over two meters.

- ▶ Lumber and aluminum industry
- ▶ Steel and automotive industry
- ▶ Heavy-duty machinery and mining industry

And because the pneumatic solutions made possible by ITS series cylinders can not only manage powerful forces but also operate safely and effortlessly in highly demanding working environments, they offer the best solution for multiple applications and industries.

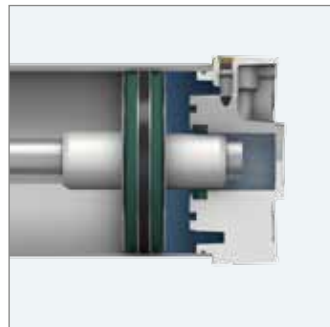
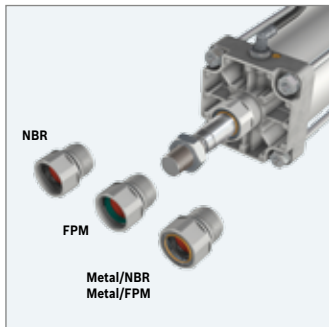


The ITS series ISO cylinder – meticulous design

High flexibility thanks to numerous equipment features

One distinguishing feature of the ITS cylinder is its modular sealing system. It enables customized, efficient solutions that are perfectly matched to the task at hand, with minimal maintenance. Additional features include the optimized cushioning concept and the option to use analog distance measuring sensors for multiple freely selectable measuring points, opening up an even greater variety of applications for ITS series cylinders.

Piston diameter	160 mm	200 mm	250 mm	320 mm
Maximum stroke	2,700 mm	2,700 mm	2,500 mm	2,500 mm
Extending piston force	12,436 N	19,416 N	30,337 N	49,705 N
Total weight (e.g. for 300 mm stroke)	19.6 kg	24.1 kg	41.4 kg	96.8 kg
Working pressure	1.5 bar to 10 bar			
Temperature range	Standard: -20°C to 80°C Heat-resistant: -10°C to 150°C			



Modular sealing system for optimum adaptation to application

Adjustable pneumatic cushioning

Suitable for SM6-AL series analog distance measuring sensors

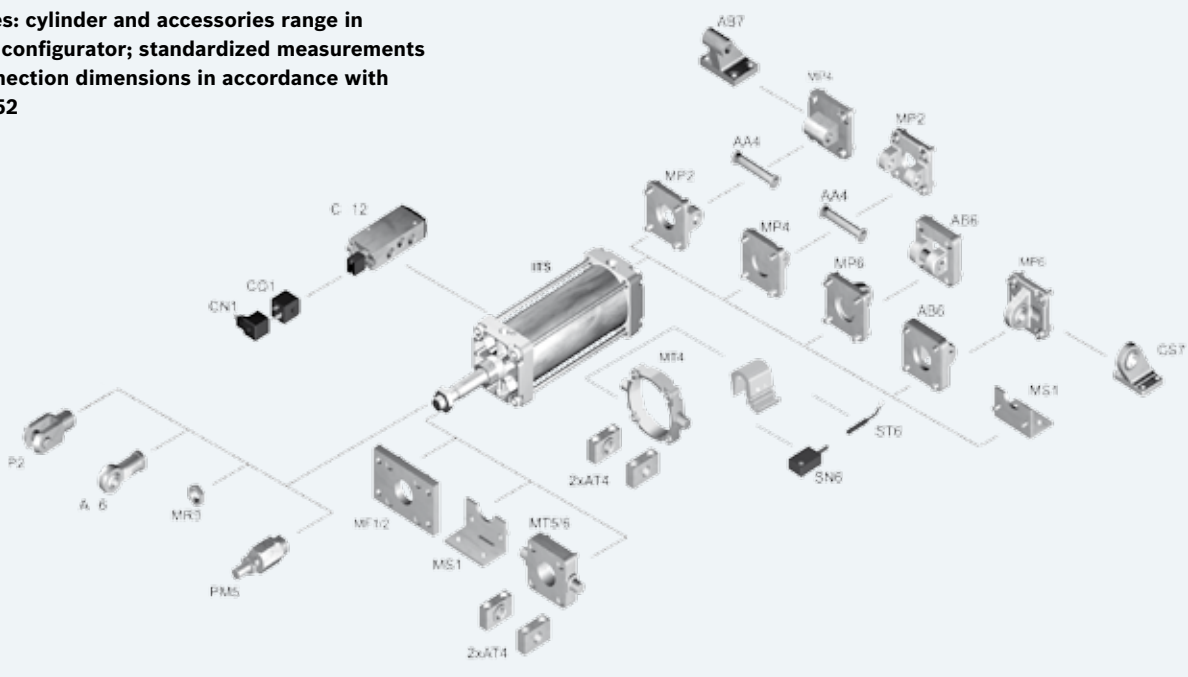
ITS variants and equipment options	Without pneumatic cushioning		With pneumatic cushioning		With through piston rod; without pneumatic cushioning		With through piston rod; with pneumatic cushioning	
	w/o magnet	w/ magnet	w/o magnet	w/ magnet	w/o magnet	w/ magnet	w/o magnet	w/ magnet
Heat-resistant up to	150°C	120°C	150°C	120°C	150°C	120°C	150°C	120°C
Extended piston rod	✓	✓	✓	✓	✓	✓	✓	✓
Modular sealing system	✓	✓	✓	✓	✓	✓	✓	✓
Trunnion mounting	✓	✓	✓	✓	✓	✓	✓	✓
Zone 21, category 2G/D* Zone 22, category 3G/D*	✓	✓	✓	✓	✓	✓	✓	✓
Rotated end covers	✓	✓	✓	✓	✓	✓	✓	✓
With assembled valve*	✓	✓	✓	✓	✓	✓	✓	✓

*Not available in combination with heat-resistant version.

Example: ITS series ISO cylinder, Ø 250 mm



ITS series: cylinder and accessories range in Internet configurator; standardized measurements and connection dimensions in accordance with ISO 15552



Bosch Rexroth AG

Pneumatics
Ulmer Straße 4
D - 30880 Laatzen
Phone +49 511 2136-0
Fax +49 511 2136-269
sales-pneumatics@boschrexroth.de
www.rexrothpneumatics.com

Canada

Bosch Rexroth Canada Corp.
3426 Mainway Drive
Burlington, Ontario L7M 1A8
Tel. +1 905 335-5511
Fax +1 905 335-4184

Australia

Bosch Rexroth Pty. Ltd.
3 Valediction Road
Kings Park NSW 2148
Sydney
Tel. +61 2 9831-7788
Fax +61 2 9831-5553

U.S.A.

Bosch Rexroth Corp.
1953 Mercer Road
Lexington, KY 40511-1021
Kentucky
Tel. +1 859 254-8031
Fax +1 859 254-4188

Great Britain

Bosch Rexroth Ltd.
Broadway Lane
South Cerney
Cirencester, GL7 5UH
Gloucestershire
Tel. +44 1285 86-3000
Fax +44 1285 86-3003

Further contacts:

www.boschrexroth.com/addresses

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