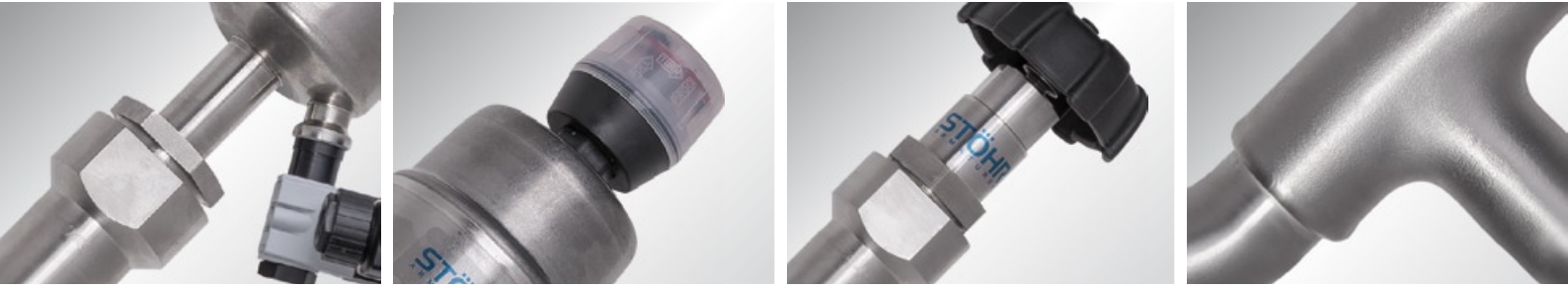


- VALVES AND COMPONENTS FOR GAS INDUSTRY
- CRYOGENIC AND HIGH-PRESSURE ENGINEERING
- AEROSPACE, MARINE AND ENERGY INDUSTRY

STÖHR
A R M A T U R E N



NoviS

Cryogenic valve series for installation into regular pipes



NoviS

The cost-effective valve series for cryogenic applications

The NoviS valve series 500 from STÖHR ARMATUREN offers a standardised and cost-effective valve for cryogenic applications for liquid nitrogen temperature (77 K/-196 °C).

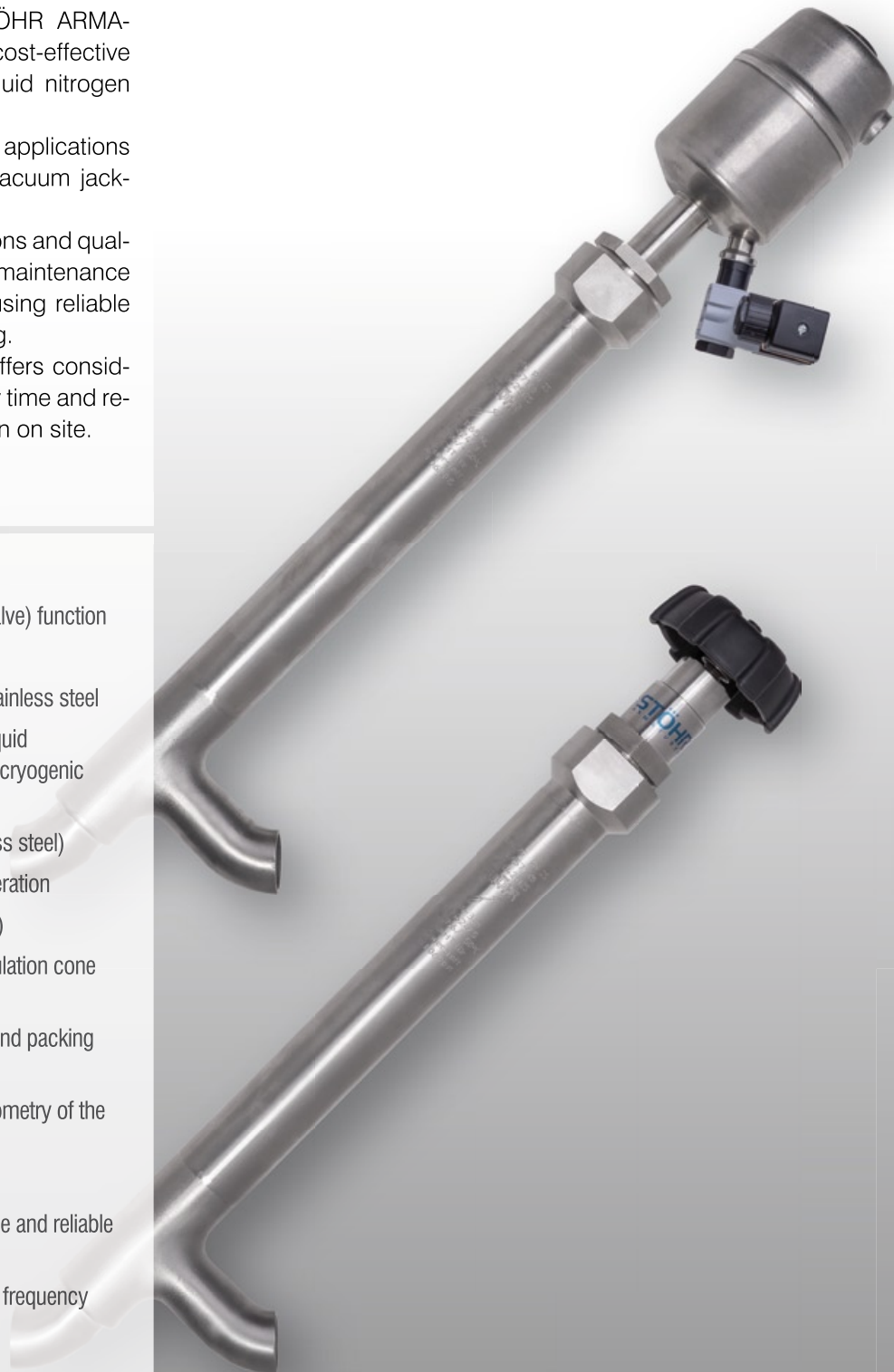
Our series 500 has been designed for applications that do not require the complexity of vacuum jacketed installation.

The series 500 is built to high specifications and quality offering high flow rates where low maintenance and high integrity sealing is required, using reliable gland packing rather than bellow sealing.

The STÖHR ARMATUREN series 500 offers considerable benefits through reduced delivery time and reduced cost at acquisition and installation on site.

Product Features

- Shut-off (globe valve) or regulation (control valve) function
- Body housing in Y-form with stem extension
- Body housing and connections made from stainless steel
- Suitable for aggressive, neutral, gaseous or liquid media, specially optimized for gases down to cryogenic temperatures
- Manual or pneumatic actuator (also in stainless steel)
- Pneumatically actuated drive with smooth operation
- Fail-safe position selectable on order (NO, NC)
- Control valve is equipped with a standard regulation cone with equal percentage trim
- Proven and reliable tightness to outside by gland packing seal, even at cryogenic temperatures
- High flow capacity by streamlined internal geometry of the housing even in partially opened state
- Connections with standard welding-ends
- Long-lasting operating times, low-maintenance and reliable valve stem sealing
- Long service life with respect to the switching frequency



NOVIS series 500 types



NOVIS valve type	Manual globe valve	Pneumatic globe valve	Pneumatic globe valve with electrical position sensing device	Control valve
				
Actuation	manual	pneumatic	pneumatic	pneumatic
Execution	Standard execution	pilot valve	pilot valve + position sensor	IP-regulator
Length	257 mm	257 mm	257 mm	257 mm
Height	420 mm	505 mm	543 mm	601 mm
Total length	~ 477 mm	~ 560 mm	~ 599 mm	~ 657 mm
Connections	33.7 x 2.0 mm	33.7 x 2.0 mm	33.7 x 2.0 mm	33.7 x 2.0 mm
Weight	2.8 kg	5.3 kg	5.4 kg	5.7 kg
Kvs value	14.6 m ³ /h	14.6 m ³ /h	14.6 m ³ /h	11.0 m ³ /h
Product no.	206672	206673	206674	206675

electrical position indicator



NoviŠ 500

note on safety

The STÖHR product catalogue, checklists, our sales personnel and our sales representatives will assist you in identifying and selecting your valve. The decision regarding a special valve type to choose as well as the proper installation, commissioning,

operation and maintenance is, however, the responsibility of the system designer and user. The valve function, the type of sealing, material compatibility, operating pressure, operating temperature and the system environment must be taken into account.

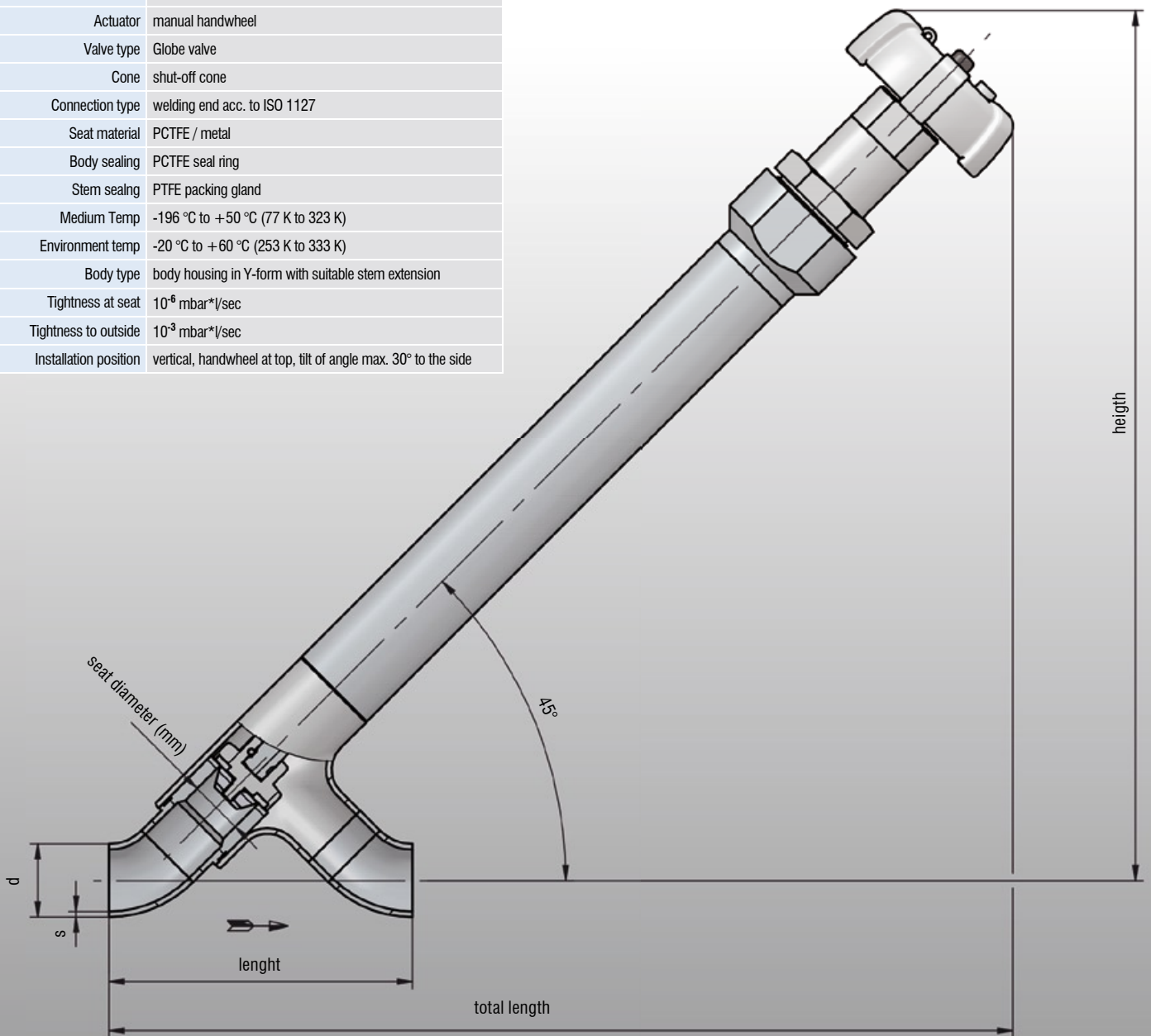
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NoviS

500

Manual Globe Valve

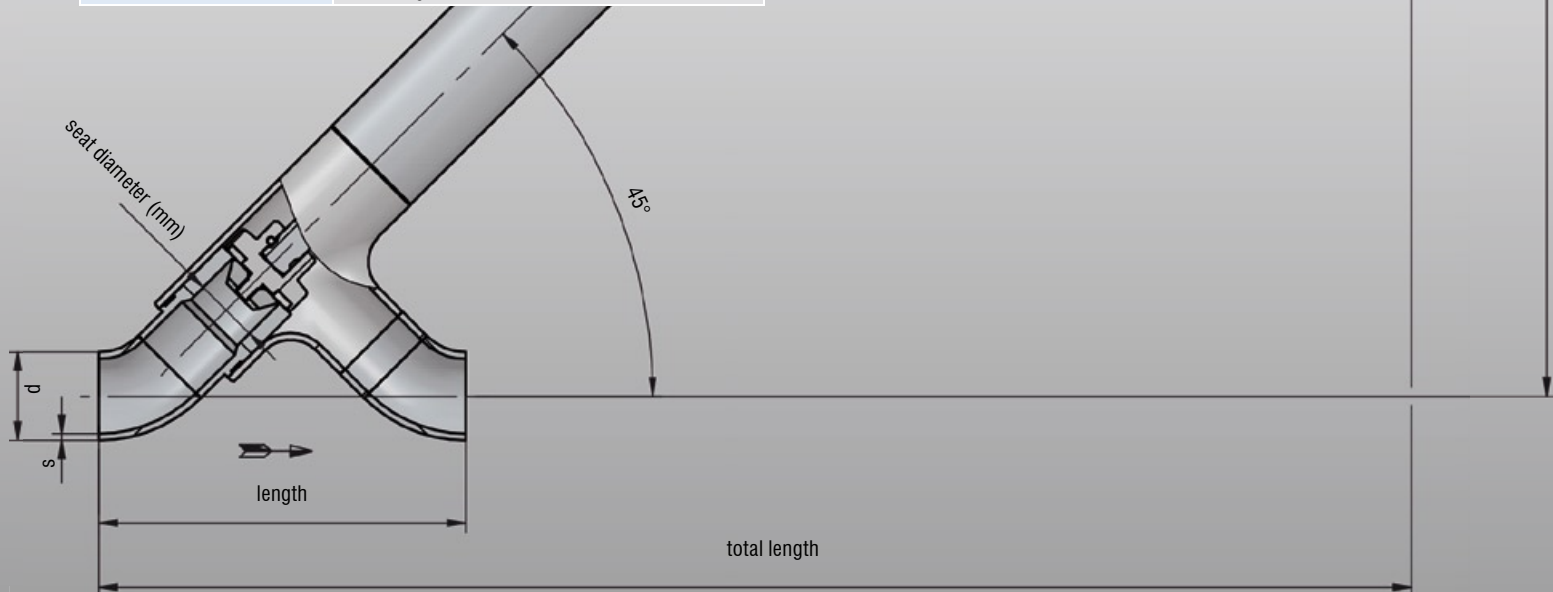
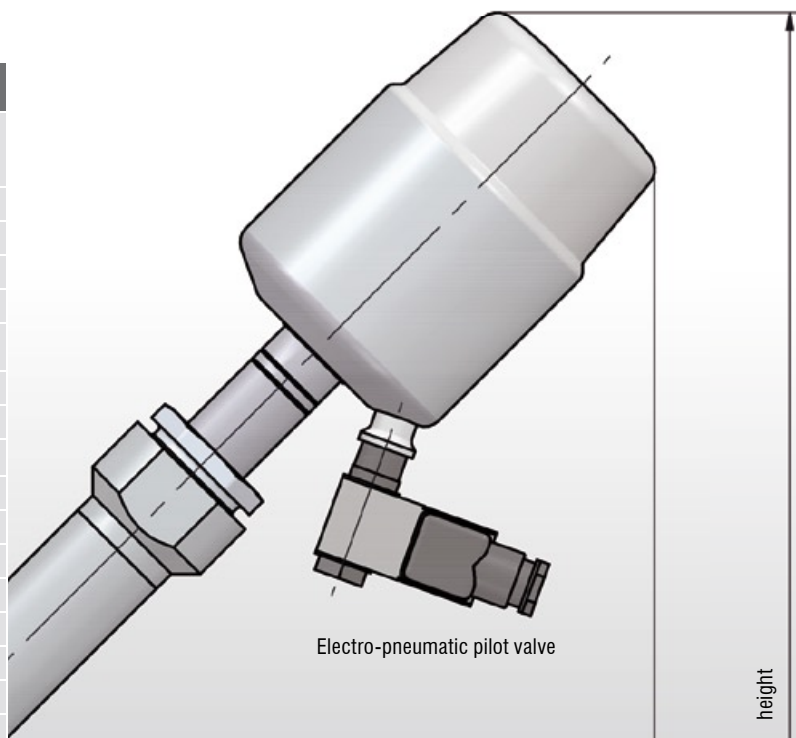
Technical Data	Specification
Medium	Suitable for aggressive, neutral, gaseous or liquid media; specially optimised for gases down to cryogenic temperatures (77 K / -196 °C); not for Oxygen use!
Body material and connections	SS 1.4541
Actuator	manual handwheel
Valve type	Globe valve
Cone	shut-off cone
Connection type	welding end acc. to ISO 1127
Seat material	PCTFE / metal
Body sealing	PCTFE seal ring
Stem sealing	PTFE packing gland
Medium Temp	-196 °C to +50 °C (77 K to 323 K)
Environment temp	-20 °C to +60 °C (253 K to 333 K)
Body type	body housing in Y-form with suitable stem extension
Tightness at seat	10 ⁻⁶ mbar*/l/sec
Tightness to outside	10 ⁻³ mbar*/l/sec
Installation position	vertical, handwheel at top, tilt of angle max. 30° to the side



NoviS 500

Pneumatic Valve (Globe or Control valve)

Technical data	Specification
Medium	Suitable for aggressive, neutral, gaseous or liquid media, specially optimised for gases down to cryogenic temperatures (77K / -196 °C); not for Oxygen use!
Body material and connections	SS 1.4541
Actuator	pneumatic drive
Fail-safe position	normally open (NO) or closed (NC), select on order
Valve type	Globe valve or control valve
Cone	shut-off cone for globe valve, standard regulation cone with equal percentage trim for control valve
Connection type	welding ends acc. to ISO 1127
Seat material	PCTFE metal
Body sealing	PCTFE seal ring
Stem sealing	PTFE packing gland
Medium Temp	-196 °C to +50 °C (77 K to 323 K)
Environment temp	-20 °C to +60 °C (253 K to 333 K)
Body type	body housing in Y-form with suitable stem extension
Tightness at seat	10 ⁻⁶ mbar * l/sec
Tightness to outside	10 ⁻³ mbar * l/sec (He leak rate)
Installation position	vertical, actuator at top, tilt angle of max. 30° to the side
Operating pressure	compressed air at 6 bar
Equipment options	electrical position sensing device, electro-pneumatic IP-regulator
Standard execution	Globe valve: Valve incl. pneumatic actuator, electro-magnetic pilot valve, shut-off cone Control valve: Valve + pneumatic actuator, IP-Regulator, standard regulation cone





STÖHR ARMATUREN offers fittings both for ambient and cryogenic temperatures, with its highly precise control valves, globe valves and check valves for installation in valve boxes, fitted in vacuum jackets or regular installation into pipes; relief valves, overflow valves or filters, all made of stainless steel and sealed with bellows and in various body types.

STÖHR offers various standard valve series from low to high pressure like STICKS (series 900), UNIVERS (series 1200, 1600 or 4200), BALANS (series 7100) or MAGROS (series 1500), all built to high quality standards, offering many options to adapt to customer needs. In addition, special valves like FREES, ELLIPS (series 1700) or AXIUS (series 1400) are available with option to modify, or even customised specifically for your application requirements. STÖHR ARMATUREN is the experienced valve development partner for your project.

Since its foundation in 1938, STÖHR ARMATUREN has specialised in engineering and manufacture of valves for gases and fluids for use in the industrial gas industry, chemical and pharmaceutical industry, aerospace, marine engineering, energy technology and research since the 1960s. Our customers are well-known companies and scientific institutes worldwide.

Cryogenic temperature down to 2 K, high pressure up to 800 bar, high leak tightness, media compatibility, short shutter speed and various kinds of actuation characterise our products.

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