

Chemical Industry

The mechanical seals listed here comprise some of the **high-quality standard seals** (also DIN standard) as well as mainly cartridge mechanical seals, available acc. to **API 682, customer-specific standards** and **adapted** to the resp. aggregate. Further mechanical seal designs are available.

Mechanical seal, style / Series:	Typical applications:	Technical Data (physical parameters):	
Single mechanical seals "non-cartridge"			
201 S 202	In plastic centrifugal pumps; for acids and lyes; e.g. in acid recovery.	p _{max} : 50 bar t: 280° C v _{max} : 35 m/s	
208 N / 210 N	For universal applications: mechanical seal acc. to DIN EN 12756 (24960).	210 N p _{max} : 28 bar t: -80° C to +220° C v _{max} : 28 m/s	208 N 50 bar -80° C to +220° C 35 m/s
600	Outboard "non-metal" mechanical seal for corrosive media.	p _{max} : 10 bar t: -80° C up to +220° C v _{max} : 20 m/s	
600 MD	Dry-running single mech. seal outside the medium for mixers, agitators and reactors with top drive; e.g. in fine chemistry. Media: gas phase/gas cushion ; chemical substances, coloured paint pigments, additives, brightening agents a.o.	p: vacuum up to 10 bar (dep. on dia) t: -20° C up to +150° C dia: 60 – 180 mm v _{max} : 3 m/s	
Single and double mechanical seals cartridge			
207 207 S 209 209 D/S	Universal cartridge single mechanical seal Lyes, acids, dyes, mash, oleum, synthetic resin, red mud, phosgene a.o. standardization.	207 p _{max} : 50 bar t _{max} : 220° C v _{max} : 35 m/s	209 D/S 25 bar 200° C 25 m/s
517 / 557	Double-acting agitator mech. seal for top drive with even shaft; flange acc. to DIN 28138; mech. seal with and without integrated bearing available.	517 p: vacuum up to 16 resp. 50 bar t: -80° C to +200° C v: 10 m/s	557 +250° C
562	Double mech. seal for agitators/ mixers, bottom drive; e.g. for sealing of coating latex.	p: vacuum up to 16 bar t _{max} : 200° C v _{max} : 10 m/s	
577	Double-acting, short design mech. seal for agitators and bead mills; typical applications in the dyeing and varnish industry. Further applications: e.g. in rotating filters, aniline etc.	p _{max} : 20 bar t _{max} : 260° C v _{max} : 25 m/s	
770	General for HTF applications like in plastic and fibre production – for heat transfer oils – synthetic or mineral-oil based – up to a max. of 400° C – tandem safety mech. seal for pumps.	p _{max} : 28 bar t _{max} : 360° C (400° C) v _{max} : 25 m/s	
809 851 BT	Universal cartridge double mech. seal (API plan 52 or 53). Some typical applications: VCM pumps (vinyl chloride monomer), solvents, chemical mix products, intermediate products, ammonia mixture, cyclohexane a.o.	p _{max} : vacuum up to 30 bar (851 BT: 50 bar) t _{max} : 260° C v _{max} : 25 m/s	
821	"Customized" double mech. seal (API plan 53) for demanding applications such as polyester melting, phenolic resin, phenol distillation, latex, liquid residues, sodium hydroxide solution, kaolin – in macerators (wet macerators) a.o.	p _{max} : 12/16 bar t _{max} : -120° C to +260° C v _{max} : 25 m/s	
877 X 877 XC	Double mech. seal for chemical standard pumps; TA-Luft applications – for installation spaces acc. to DIN 24960 C.	p _{max} : 20 bar t _{max} : 220° C v _{max} : 25 m/s	
881 881 D	Double mech. seal for technically maximum-demanding requirements, incl. frequently changing operating conditions: e.g. in fat chemistry – fatty acids, nitriles, hydrogenation, catalytic hydrogenating processes with metallic catalysts, chrome catalyst, acetone; in reactor circulation pumps a.o.	p: 50/150 bar t _{max} : 260° C v _{max} : 25 m/s	

All mechanical seals are available in compliance with **ATEX**. Dimensions: Dia: 15 mm to 450 mm, sizes in inches possible.

Safety instructions for areas of applications and technical data:

The statements in this leaflet are based on the current state-of-the-art technology, including extensive testing and practical experience. Please note: The physical parameters (technical data) given here will interact with each other and cannot be fully utilized all at the same time. The listed temperature ranges are, among others, dependent on the kind of secondary seal used, the accessories for the seal and the other technical parameters. Due to the variety of uses and the individual technical arrangements only general pointers, which may not be applicable in every case, can be given for a successful application. No responsibilities can be accepted for statements made in this leaflet and therefore it is recommended to always undertake tests prior to application.