

Mechanical Seals

MATERIAL MATCHING TABLE according to NF EN 12756/DIN 24960

Material for friction surfaces - Rotary part / stationary part

Descriptions	LI Code	NF EN 12756/ DIN 24960 Code
Carbons		
Metal impregnated carbon	A	A
Resin impregnated carbon	B	B
Carbon graphite synthetic resin impregnation	B1	B
Other carbons	--	C
Carbides (tungsten carbide U, silicium carbide Q other carbides J)		
Tungsten carbide, Co binder	U1	U1
Tungsten carbide, Ni binder	U2	U2
Tungsten carbide, CrNiMo binder	--	U3
Pure silicium carbide	U6	Q1
Silicium carbide with free silicium	U3	Q2
Silicium carbide and silicium carbon compound	U5	Q3
Carbon and silicium carbide compound, silicium on surface	U9	Q4
Other carbides	--	J
Metallic oxides		
Aluminium oxide	V	V
Chromium oxide	W	W
Other metallic oxides	--	X
Metals		
Carbon-steel	D	D
Cr-steel (ferritic / martensitic steel)	E	E
CrNi-steel (austenitic steel)	F	F
CrNiMo-steel (austenitic steel)	G	G
Metals with carbide coating	--	H
Hard metal coating	--	K
Alloy with high nickel content	M	M
Bronze	N	N
Special Cast Cr No-steel	S2	--
Grey cast iron	--	P
Alloy grey cast iron	--	R
Cr hardened cast steel	--	S
Other metals	T	T
Plastic materials (PTFE, reinforced Y, other plastic materials Z)		
PTFE, with fiberglass reinforcement	Y1	Y1
PTFE, with carbon reinforcement	Y4	Y2
Other plastic materials	Z	Z
Sheet gasket LATTY®flon 94 L	--	--

Material used for flexible parts

Descriptions	LI Code	NF EN 12756/ DIN 24960 Code
Elastomers, uncoated		
Butyl rubber	B	B
Ethylene-propylene rubber	E	E
Perfluorinated rubber	K / K2	K
Chloroprene rubber	--	N
Nitrile rubber	P	P
Silicone rubber	S	S
Fuoro rubber (FPM)	V	V
Other elastomers	--	X
Elastomers, coated		
Elastomers, coated with FEP	M6 / M5	M
Non-elastomer materials		
Graphite	--	G
PTFE	Y	T
Other non-elastomer materials	--	Y
Miscellaneous materials		
Miscellaneous materials for flexible parts	--	U

Materials used in other parts such as springs, metal bellows (except mechanical seal flanges and sleeves)

Descriptions	LI Code	NF EN 12756/ DIN 24960 Code
Carbon steel	D	D
Cr-steel	E	E
CrNi-steel	F	F
CrNiMo-steel	G	G
Alloy with high nickel content	M	M
Copper-tin alloy (bronze)	N	N
Other materials	T	T
Springs of hastelloy	C4	T2

Standard configuration



Range names

CARTseal® B 14

Single-action cartridge

The range of single-cartridge mechanical seals **CARTseal®** by **LATTY®** is available according to the diameters and types with moulded or machined clamps:



Moulded flanges **CARTseal® B 146**

Shaft ø
25 to 70 mm
1" to 2.750"

B 14610 - B 14610 Q

B 14610 PP - B 14610 PPQ



Machined clamps **CARTseal® B 148**

Shaft ø
≥ to 75 mm
≥ to 2.875"

B 14810 - B 14810 Q

B 14810 PP - B 14810 PPQ

Dual-double seal cartridge

The **CARTseal®** by **LATTY®** range of dual-cartridge mechanical seals is available with machined clamps: range **B 148**.



Machined clamps **CARTseal® B 148**

Shaft ø
25 to 100 mm
1" to 4"

B 14810 DB

B 14810 DBVP



CARTseal® B 236

Cartridge Version
of the **LATTY®seal B 23** pentagonal drive,
protected spring, mechanical seal.

Moulded flanges ►► **B 23612 - B 23612 Q**

ATEX

Certain mechanical seals **CARTseal®** comply
with the essential requirement
of the **Directive ATEX 94 / 9 / CE:**
GROUP II 2 and 3 GD cbk T6 to T3

- Group II : equipment used on the surface
- 2 et 3 : category* of equipment that may be used in
- G : gaseous atmosphere
- D : dust atmosphere
- c : protection by means of a construction
- b : protection by checking the inflammation source
- k : protection by means of an immersion (barrier fluid)
- T6 to T3 : temperature classes*

* For any other classes or categories, please contact us.





T -20 °C to +220 °C P 2.5 MPa (25 bar)

S 20 m/s

Chemical and petrochemical industries, water distribution and sewage, food processing industry, boiler plants, paper mills, etc.

All corrosive, abrasive and slightly clogging fluids.

CARTseal® B 14610

SINGLE SEAL CARTRIDGES

Revolutionary, **CARTseal® B 14610** leaves the competition behind with a mix of concepts linking ingenuity and technology. Primarily, **CARTseal® B 14610** is designed for the end user as testifies its exceptional modularity allowing full compliance with all types of environments and a reduced operating cost.

Secondly, **CARTseal® B 14610** is a paramount of technology targeted at performance, ease of use and safety: the patented drive system, unique working length, self-turning setting clamps partially illustrate this affirmation. **CARTseal® B 14610** is up to **NF EN 12756/DIN 24960**.

U6B1V Metric		U6U6V Metric		U6B1V Imperial		U6U6V Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
78941	025	78959	025	79113	1.000	79128	1.000
78942	028	78960	028	79114	1.125	79129	1.125
78943	030	78961	030	79115	1.250	79130	1.250
78944	032	78962	032	79116	1.375	79131	1.375
78945	033	78963	033	79117	1.500	79132	1.500
78946	035	78964	035	79118	1.625	79133	1.625
78948	038	78965	038	79119	1.750	79134	1.750
78949	040	78966	040	79120	1.875	79135	1.875
78950	043	78967	043	79121	2.000	79136	2.000
78951	045	78968	045	79122	2.125	79137	2.125
78952	048	78969	048	79123	2.250	79138	2.250
78953	050	78970	050	79124	2.375	79139	2.375
78954	053	78971	053	79125	2.500	79140	2.500
78955	055	78972	055	79126	2.625	79141	2.625
78956	060	78973	060	79127	2.750	79142	2.750
78957	065	78974	065				
78958	070	78975	070				



CARTseal® B 14810

SINGLE SEAL CARTRIDGES

U3B1V Metric		U3U3V Metric		U3B1V Imperial		U3U3V Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
46180	075	46186	075	46204	2.875	46213	2.875
46181	080	46187	080	46205	3.000	46214	3.000
46182	085	46188	085	46206	3.125	46215	3.125
46183	090	46189	090	46207	3.250	46216	3.250
46184	095	46190	095	46208	3.375	46217	3.375
46185	100	46191	100	46209	3.500	46218	3.500
				46210	3.625	46219	3.625
				46211	3.750	46220	3.750
				46212	4.000	46221	4.000

Moulded Flanges range names B 146 - Shaft diameters equal to or less than 70 mm Machined clamps range names B 148 - Shaft diameters equal to or greater than 75 mm

The systematic use of silicium carbide U6 significantly improves the chemical resistance of friction faces.



T -20 °C to +220 °C P 2.5 MPa (25 bar)

S 20 m/s

Chemical and petrochemical industries, water distribution and sewage, food processing industry, boiler plants, paper mills, etc.

All corrosive, abrasive and slightly clogging fluids.

CARTseal® B 14610 Q

SINGLE SEAL CARTRIDGES

Upper version of **CARTseal® B 14610**, this model includes an auxiliary seal used as a quench feature. Its unique fibrous material makes it water absorbent, thus capable of supporting some water shortage.

Thanks to its quench device, **CARTseal® B 14610 Q** increases seal life expectancy on crystallizing, solidifying or vaporizing products.

U6B1V + Quench Metric		U6U6V + Quench Metric		U6B1V + Quench Imperial		U6U6V + Quench Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
78982	025	78999	025	79144	1.000	79159	1.000
78983	028	79000	028	79145	1.125	79160	1.125
78984	030	79001	030	79146	1.250	79161	1.250
78985	032	79002	032	79147	1.375	79162	1.375
78986	033	79003	033	79148	1.500	79163	1.500
78987	035	79004	035	79149	1.625	79164	1.625
78988	038	79005	038	79150	1.750	79165	1.750
78989	040	79006	040	79151	1.875	79166	1.875
78990	043	79007	043	79152	2.000	79167	2.000
78991	045	79008	045	79153	2.125	79168	2.125
78992	048	79009	048	79154	2.250	79169	2.250
78993	050	79010	050	79155	2.375	79170	2.375
78994	053	79011	053	79156	2.500	79171	2.500
78995	055	79013	055	79157	2.625	79172	2.625
78996	060	79014	060	79158	2.750	79173	2.750
78997	065	79015	065				
78998	070	79016	070				



CARTseal® B 14810 Q

SINGLE SEAL CARTRIDGES

U3B1V + Quench Metric		U3U3V + Quench Metric		U3B1V + Quench Imperial		U3U3V + Quench Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
46192	075	46198	075	46222	2.875	46231	2.875
46193	080	46199	080	46223	3.000	46232	3.000
46194	085	46200	085	46224	3.125	46233	3.125
46195	090	46201	090	46225	3.250	46234	3.250
46196	095	46202	095	46226	3.375	46235	3.375
46197	100	46203	100	46227	3.500	46236	3.500
				46228	3.625	46237	3.625
				46229	3.750	46238	3.750
				46230	4.000	46239	4.000

Cartridges



T -20 °C to +220 °C P 2.5 MPa (25 bar)
S 20 m/s

Chemical and petrochemical industries, water distribution and sewage, food processing industry, boiler plants and paper mills.

All corrosive, slightly abrasive and clogging fluids.

CARTseal® B 14610 PP

SINGLE SEAL CARTRIDGES

Designed specially for applications where flush circulation is useless or prohibited, **CARTseal® B 14610 PP** offers all the internal proven benefits of **CARTseal® B 14610** on a thinner flange configuration targeted at cost reduction.

U6B1V Metric		U6U6V Metric		U6B1V Imperial		U6U6V Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
79672	025	79690	025	79741	1.000	79756	1.000
79673	028	79691	028	79743	1.125	79757	1.125
79675	030	79692	030	79742	1.250	79758	1.250
79676	032	79693	032	79744	1.375	79759	1.375
79677	033	79694	033	79745	1.500	79760	1.500
79678	035	79695	035	79746	1.625	79761	1.625
79679	038	79696	038	79747	1.750	79762	1.750
79680	040	79697	040	79748	1.875	79763	1.875
79681	043	79698	043	79749	2.000	79764	2.000
79682	045	79699	045	79750	2.125	79765	2.125
79683	048	79700	048	79751	2.250	79766	2.250
79684	050	79701	050	79752	2.375	79767	2.375
79685	053	79702	053	79753	2.500	79768	2.500
79686	055	79703	055	79754	2.625	79769	2.625
79687	060	79704	060	79755	2.750	79770	2.750
79688	065	79705	065				
79689	070	79706	070				



CARTseal® B 14810 PP

SINGLE SEAL CARTRIDGES

U3B1V Metric		U3U3V Metric		U3B1V Imperial		U3U3V Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
47608	075	48640	075	60181	2.875	60209	2.875
60163	080	53994	080	60182	3.000	60210	3.000
59761	085	60190	085	60183	3.125	60211	3.125
58532	090	60191	090	60184	3.250	60212	3.250
60164	095	60192	095	60185	3.375	60213	3.375
60165	100	60193	100	60186	3.500	60214	3.500
				60187	3.625	60215	3.625
				60188	3.750	60216	3.750
				60189	4.000	60217	4.000

Moulded Flanges range names B 146 - Shaft diameters equal to or less than 70 mm **Machined clamps range names B 148** - Shaft diameters equal to or greater than 75 mm

The systematic use of silicium carbide U6 significantly improves the chemical resistance of friction faces.



T -20 °C to +220 °C P 2.5 MPa (25 bar)
S 20 m/s

Chemical and petrochemical industries, water distribution and sewage, food processing industry, boiler plants and paper mills.

All corrosive, slightly abrasive and clogging fluids.

CARTseal® B 14610 PPQ

SINGLE SEAL CARTRIDGES

Designed specially for applications where flush circulation is useless or prohibited, **CARTseal® B 14610 PPQ** offers all the internal proven benefits of **CARTseal® B 14610 Q** on a thinner flange configuration. Absence of medium crystallization underneath the faces, heating or cooling of the seal are now effectively realized.

U6B1V + Quench Metric		U6U6V + Quench Metric		U6B1V + Quench Imperial		U6U6V + Quench Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
79707	025	79724	025	79771	1.000	79787	1.000
79708	028	79725	028	79772	1.125	79788	1.125
79709	030	79726	030	79773	1.250	79789	1.250
79710	032	79727	032	79774	1.375	79790	1.375
79711	033	79728	033	79775	1.500	79791	1.500
79712	035	79729	035	79776	1.625	79792	1.625
79713	038	79730	038	79777	1.750	79793	1.750
79714	040	79731	040	79778	1.875	79794	1.875
79715	043	79732	043	79779	2.000	79795	2.000
79716	045	79733	045	79780	2.125	79796	2.125
79717	048	79734	048	79781	2.250	79797	2.250
79718	050	79735	050	79782	2.375	79798	2.375
79719	053	79736	053	79783	2.500	79799	2.500
79720	055	79737	055	79784	2.625	79800	2.625
79721	060	79738	060	79786	2.750	79801	2.750
79722	065	79739	065				
79723	070	79740	070				



CARTseal® B 14810 PPQ

SINGLE SEAL CARTRIDGES

U3B1V + Quench Metric		U3U3V + Quench Metric		U3B1V + Quench Imperial		U3U3V + Quench Imperial	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
58496	075	60223	075	60241	2.875	60266	2.875
60218	080	58391	080	60242	3.000	60267	3.000
60219	085	60224	085	60243	3.125	60268	3.125
60220	090	60225	090	60244	3.250	60269	3.250
60221	095	59399	095	60245	3.375	60270	3.375
60222	100	54682	100	60246	3.500	60271	3.500
				60247	3.625	60272	3.625
				60248	3.750	60273	3.750
				60249	4.000	60274	4.000



CARTseal® B 14810 DB

DOUBLE SEAL CARTRIDGES

CARTseal® B 14810 DB is today the ultimately sophisticated version of **CARTseal® B 14810**. Capable of operating as a pressureless tandem seal or as a pressured double seal, **CARTseal® B 14810 DB** guarantees, by inventory shrinkage, a TCO reduction, while maximum sealing flexibility and reliability are given by one product that fits many applications.

T -20 °C to +220 °C P 2.5 MPa (25 bar)
S 20 m/s

Chemical and petrochemical, automotive, food processing industry, etc.

All corrosive, abrasive and slightly clogging fluids.

U3U3V + U3B1V <i>Metric</i>		U3U3V + U3U3V <i>Metric</i>		U3B1V + U3B1V <i>Imperial</i>		U3U3V + U3U3V <i>Imperial</i>	
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
35783	025	35751	025	35799	1.000	35767	1.000
35784	028	35752	028	35800	1.125	35768	1.125
35785	030	37753	030	35801	1.250	35769	1.250
35786	032	35754	032	35802	1.375	35770	1.375
35787	033	35755	033	60515	1.500	35771	1.500
35788	035	35756	035	35804	1.625	35772	1.625
35789	038	35757	038	35805	1.750	35773	1.750
35790	040	35758	040	35806	1.875	35774	1.875
35791	043	35759	043	35807	2.000	35775	2.000
59417	045	59418	045	35808	2.125	35776	2.125
35793	048	35761	048	35809	2.250	35777	2.250
35794	050	35762	050	35810	2.375	35778	2.375
35795	055	35763	055	35811	2.500	35779	2.500
35796	060	35764	060	35812	2.625	35780	2.625
35797	065	35765	065	35813	2.750	35781	2.750
59411	070	35766	070	60301	2.875	60288	2.875
59243	075	60111	075	60302	3.000	60289	3.000
60117	080	60112	080	60303	3.125	60290	3.125
60118	085	60113	085	60304	3.250	60295	3.250
60119	090	60114	090	60305	3.375	60296	3.375
60120	095	60115	095	60306	3.500	60297	3.500
60121	100	60116	100	60307	3.625	60298	3.625
				60308	3.750	60299	3.750
				60309	4.000	60300	4.000



CARTseal® B 14810 DBVP

DOUBLE SEAL CARTRIDGES

CARTseal® B 14810 DBVP can operate either as a pressurized double mechanical seal or as a tandem mechanical seal without barrier pressure. **CARTseal® B 14810 DBVP** is equipped with a pumping screw (VP) which efficiently circulates the barrier fluid without requiring a costly and time-consuming installation of a motorized-pump.

All the features and benefits in connection with **B 14610** and **B 14810 DB** versions also apply to the **B 14810 DBVP**.

T -20 °C to +220 °C P 2.5 MPa (25 bar) S 20 m/s



CARTseal® B 14810 DBSA

DOUBLE SEAL CARTRIDGES

The GM **CARTseal® B 14810 DBSA** is a variant of our dual versions designed for applications in extremely harsh and corrosive environments. The "wet" parts of the seal are made of exotic materials or with optional coatings. The operating characteristics are identical to those of the standard versions.

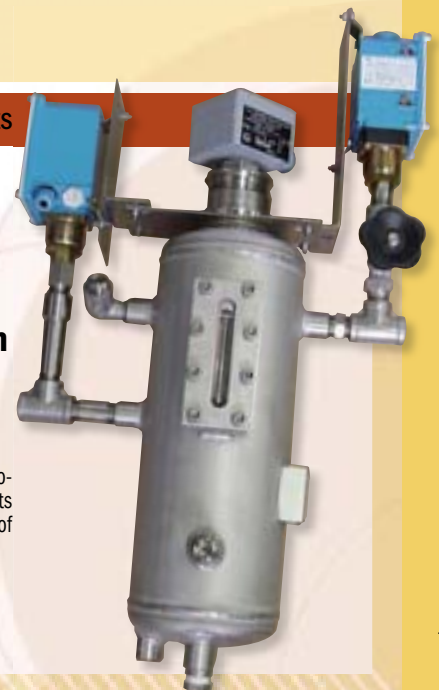
T -20 °C to +220 °C P 2.5 MPa (25 bar) S 20 m/s

ACCESSORIES

GDL/THERMO

Servo-control and lubrication

LATTY® international provides all servo-controls, thermo-syphon and lubrication units as required, specially suited to the operation of mechanical seals.



ECOLINE® range

by LATTY®



511

Chemical industry, sewage treatment and water conditioning, food industry.

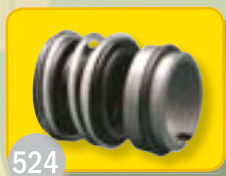
Any slightly corrosive, abrasive and non-clogging fluid.



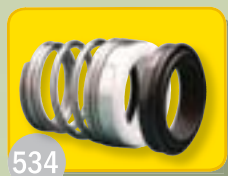
513



521



524



534

Ingenuously designed around an elastomer bellows acting as a seat for the face and secondary sealing element, ECOLINE's small dimensions make it suitable for any equipment.

ECOLINE is fitted with different types of stationary fits which makes it suitable for installation on a wide range of equipment.

The independence from the direction of rotation is a stock reduction factor.

Standard and derived series



T -20 °C to +180 °C P 1 MPa (10 bar)
S 10 m/s

LATTY®seal U 1000

COMPLETE UNBALANCED MECHANICAL SEALS

Streamlined to an extreme, **LATTY®seal U 1000** is the mechanical seal of choice for a wide variety of **NF EN 12756/DIN 24960** equipment. Ruggedness and simplicity are all factors of longevity and installation ease. Its conical spring concept makes it dependent on direction of rotation.

Chemical, food processing and bio-engineering industries, water circulation applications.

All corrosive, abrasive and slightly clogging fluids.

R G2BV						R S2BV			
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
70010200	018	70013145	030	70014431	043	40195	053	60017111	070
70011175	020	70013247	032	70015458	045	60015113	055	31296	075
60011176	022	45823	033	40572	048	60016062	060	60017032	080
70011174	024	70014419	035	70015329	050	60016082	065		
70012165	025	70014430	038						
70012122	028	70014287	040						



T -20 °C to +180 °C P 1 MPa (10 bar)
S 10 m/s

LATTY®seal U 1212

COMPLETE UNBALANCED MECHANICAL SEALS

Conceptually similar to **LATTY®seal U 1000** but fitted with silicon carbide faces, **LATTY®seal U 1212** is particularly suitable for the pumping of light slurry fluids onwidedly used **NF EN 12756/DIN 24960** pumps. Its conical spring concept makes it dependent on direction of rotation.

Chemical, food processing and bio-engineering industries, waste water and sewage applications.

All slightly corrosive, abrasive and non-clogging fluids.

R U3U3V									
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
34989	018	35037	028	35042	038	35045	050	53490	070
34895	020	35038	030	35043	040	21345	053	55558	075
41069	022	35039	032	38260	043	35046	055	60227343	080
36691	024	35040	033	35044	045	38261	060		
35036	025	35041	035	55385	048	21346	065		



T -20 °C to +220 °C P 1 MPa (10 bar)
S 15 m/s

LATTY®seal U 6810

COMPLETE UNBALANCED MECHANICAL SEALS

Targeted at the immense field of process pumps built to **NF EN 12756/DIN 24960**, **LATTY®seal U 6810** offers an instantaneous interchangeability of the rotating face permitting multiple use and cost reduction. Wide spectrum of rotating and stationary faces.

Chemical and petrochemical, food processing and bio-engineering industries, feed water applications, etc.

All corrosive, abrasive and slightly clogging fluids.

BU3V						BS2V					
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
55598	018	54158	035	55611	060	55559	018	55568	035	55575	060
55599	020	55607	038	55612	063	55560	020	43661	038	55576	063
55600	022	54157	040	55613	065	56984	022	55569	040	55577	065
55601	024	55608	043	55614	070	55562	024	55570	043	55578	070
55602	025	52459	045	55615	075	55563	025	55571	045	55579	075
55603	028	55609	048	55616	080	55564	028	55572	048	55580	080
55604	030	54156	050	55617	085	55565	030	55573	050	37882	085
55605	032	55610	053	55618	090	55566	032	55574	053	55581	090
55606	033	54155	055			55567	033	51607	055		



LATTY® seal U 6810

COMPLETE UNBALANCED MECHANICAL SEALS

U3U3V						BW					
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
51670	018	47007	035	43287	060	55582	018	52457	035	43284	060
50149	020	50156	038	33158	063	51500	020	55588	038	55595	063
50151	022	50157	040	55176	065	55583	022	55589	040	47008	065
50150	024	50158	043	55622	070	55584	024	55590	043	43285	070
50152	025	50159	045	49267	075	52458	025	55591	045	53053	075
19821	028	55619	048	55623	080	55585	028	55592	048	43286	080
50153	030	33080	050	55624	085	55586	030	43283	050	55596	085
50154	032	55620	053	55625	090	52639	032	55593	053	55597	090
50155	033	55621	055			55587	033	55594	055		



LATTY® seal B 23110

COMPLETE BALANCED MECHANICAL SEALS

Standard balanced mechanical seal with a single spring washer and pentagonal drive.

The areas of applications are huge due to the protection design for the spring washer: pumps conveying slurries for the sugar industry, paper industry, extracting industry, for heavy industries, all simple assemblies possible (cartridge, tandem, quench, etc.).

T -20 °C to + 160 °C P 2.5 MPa (25 bar)
S 20 m/s

BS2V Metric						BS2V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
71286	018	71296	038	71306	063	71315	0.750	71326	2.000	71336	3.250
71287	020	71297	040	71307	065	71316	0.875	71327	2.125	71337	3.375
71288	022	71298	043	71308	070	71318	1.000	71328	2.250	71338	3.500
71289	024	71299	045	71309	075	71319	1.125	71329	2.375	71339	3.625
71290	025	71300	048	71310	080	71320	1.250	71330	2.500	71340	3.750
71291	028	71301	050	71311	085	71321	1.375	71331	2.625	71341	3.875
71292	030	71302	053	71312	090	71322	1.500	71332	2.750	71342	4.000
71293	032	71303	055	71313	095	71323	1.625	71333	2.875		
71294	033	71304	058	71314	100	71324	1.750	71334	3.000		
71295	035	71305	060			71325	1.875	71335	3.125		

BU3V Metric						BU3V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
71400	018	71410	038	71419	063	71428	0.750	71439	2.000	71449	3.250
71401	020	71411	040	71420	065	71634	0.875	71440	2.125	71450	3.375
71402	022	71412	043	71421	070	71431	1.000	71441	2.250	71451	3.500
71403	024	70934	045	71422	075	71432	1.125	71442	2.375	71452	3.625
71404	025	71413	048	71423	080	71433	1.250	71443	2.500	71453	3.750
71405	028	71414	050	71424	085	71434	1.375	71444	2.625	71454	3.875
71406	030	71415	053	71425	090	71435	1.500	71445	2.750	71455	4.000
71407	032	71416	055	71426	095	71436	1.625	71446	2.875		
71408	033	71417	058	71427	100	71437	1.750	71447	3.000		
71409	035	71418	060			71438	1.875	71448	3.125		

BW Metric						BW Imperial					
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
71343	018	71353	038	71362	063	71373	0.750	71383	2.000	71393	3.250
71344	020	71354	040	71363	065	71374	0.875	71384	2.125	71394	3.375
71345	022	71355	043	71364	070	71375	1.000	71385	2.250	71395	3.500
71346	024	71356	045	71366	075	71376	1.125	71386	2.375	71396	3.625
71347	025	71248	048	71367	080	71377	1.250	71387	2.500	71397	3.750
71348	028	71357	050	71368	085	71378	1.375	71388	2.625	71398	3.875
71349	030	71358	053	71369	090	71379	1.500	71389	2.750	71399	4.000
71350	032	71359	055	71370	095	71380	1.625	71390	2.875		
71351	033	71360	058	71371	100	71381	1.750	71391	3.000		
71352	035	71361	060			71382	1.875	71392	3.125		



LATTY® seal B 23210

COMPLETE BALANCED MECHANICAL SEALS

Standard balanced mechanical seal with a single spring washer and pentagonal drive.

The areas of applications are huge due to the protection design for the spring washer: pumps conveying slurries for the sugar industry, paper industry, extracting industry, for heavy industries, all simple assemblies possible (cartridge, tandem, quench, etc.).

T -20 °C to + 160 °C P 2.5 MPa (25 bar)
S 20 m/s

U3U3V Metric						U3U3V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
71456	018	71466	038	71476	063	71486	0.750	71497	2.000	71507	3.250
71457	020	71467	040	71477	065	71487	0.875	71498	2.125	71508	3.375
71458	022	71468	043	71478	070	71488	1.000	71499	2.250	71509	3.500
71459	024	71469	045	71479	075	71489	1.125	71500	2.375	71510	3.625
71460	025	71470	048	71480	080	71490	1.250	71501	2.500	71511	3.750
71461	028	71471	050	71481	085	71491	1.375	71502	2.625	71512	3.875
71462	030	71472	053	71482	090	71492	1.500	71503	2.750	71513	4.000
71463	032	71473	055	71483	095	71494	1.625	71504	2.875		
71464	033	71474	058	71484	100	71495	1.750	71505	3.000		
71465	035	71475	060			71496	1.875	71506	3.125		



LATTY® seal B 23212

COMPLETE BALANCED MECHANICAL SEALS

Standard balanced mechanical seal with a single spring washer and pentagonal drive.

The areas of applications are huge due to the protection design for the spring washer: pumps conveying slurries for the sugar industry, paper industry, extracting industry, for heavy industries, all simple assemblies possible (cartridge, tandem, quench, etc.).

T -20 °C to +160 °C P 2.5 MPa (25 bar)

S 20 m/s

U3U3V Metric					
Article #	Ø	Article #	Ø	Article #	Ø
71514	018	71524	038	71534	063
71515	020	71525	040	71535	065
71516	022	71526	043	71536	070
71517	024	71527	045	71537	075
71518	025	71528	048	71538	080
71519	028	71529	050	71539	085
71520	030	71530	053	71540	090
71521	032	71531	055	71541	095
71522	033	71532	058	71214	100
71523	035	71533	060		

U3U3V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
71544	0.750	71554	2.000	71564	3.250
71545	0.875	71555	2.125	71565	3.375
71546	1.000	71556	2.250	71566	3.500
71547	1.125	71557	2.375	71567	3.625
71548	1.250	71558	2.500	71568	3.750
71549	1.375	71559	2.625	71569	3.875
71550	1.500	71560	2.750	71570	4.000
71551	1.625	71561	2.875		
71552	1.750	71562	3.000		
71553	1.875	71563	3.125		



CARTseal® B 23612

SINGLE SEAL CARTRIDGES

Cartridge version of the LATTY® seal B 23 pentagonal drive, protected spring, mechanical seal.

T -20 °C to +160 °C P 2.5 MPa (25 bar)

S 20 m/s

B U6V Metric					
Article #	Ø	Article #	Ø	Article #	Ø
79019	025	79026	040	79033	058
79020	028	79027	043	79034	060
79021	030	79028	045	79035	063
79022	032	79029	048	79036	065
79023	033	79030	050	79037	068
79024	035	79031	053	79038	070
79025	038	79032	055		

B U6V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
79179	1.000	79184	1.625	79189	2.250
79180	1.125	79185	1.750	79190	2.375
79181	1.250	79186	1.875	79191	2.500
79182	1.375	79187	2.000	79192	2.625
79183	1.500	79188	2.125	79193	2.750

U6U6V Metric					
Article #	Ø	Article #	Ø	Article #	Ø
79039	025	79046	040	79053	058
79040	028	79047	043	79054	060
79041	030	79048	045	79055	063
79042	032	79049	048	79057	065
79043	033	79050	050	79058	068
79044	035	79051	053	79059	070
79045	038	79052	055		

U6U6V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
79196	1.000	79201	1.625	79206	2.250
79197	1.125	79202	1.750	79207	2.375
79198	1.250	79203	1.875	79208	2.500
79199	1.375	79204	2.000	79209	2.625
79200	1.500	79205	2.125	79210	2.750

The areas of applications are huge due to the protection design for the spring washer: Pumps conveying slurries for the sugar industry, paper industry, extracting industry, for heavy industries, all simple assemblies possible (cartridge, tandem, quench, etc.).



CARTseal® B 23612 Q

SINGLE SEAL CARTRIDGES

Cartridge version of the LATTY® seal B 23 pentagonal drive, protected spring, mechanical seal.

With its quench **CARTseal® B 23610 Q** improves the life time of the mechanical seal used with crystallising, solidifying or vapouring products.

T -20 °C to +160 °C P 2.5 MPa (25 bar)

S 20 m/s

B U6V Metric					
Article #	Ø	Article #	Ø	Article #	Ø
79067	025	79074	040	79081	058
79068	028	79075	043	79082	060
79069	030	79076	045	79083	063
79070	032	79077	048	79084	065
79071	033	79078	050	79085	068
79072	035	79079	053	79086	070
79073	038	79080	055		

B U6V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
79211	1.000	79216	1.625	79221	2.250
79212	1.125	79217	1.750	79222	2.375
79213	1.250	79218	1.875	79223	2.500
79214	1.375	79219	2.000	79224	2.625
79215	1.500	79220	2.125	79225	2.750

U6U6V Metric					
Article #	Ø	Article #	Ø	Article #	Ø
79088	025	79095	040	79102	058
79089	028	79096	043	79103	060
79090	030	79097	045	79104	063
79091	032	79098	048	79105	065
79092	033	79099	050	79106	068
79093	035	79100	053	79107	070
79094	038	79101	055		

U6U6V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
79228	1.000	79233	1.625	79238	2.250
79229	1.125	79234	1.750	79239	2.375
79230	1.250	79235	1.875	79240	2.500
79231	1.375	79236	2.000	79241	2.625
79232	1.500	79237	2.125	79242	2.750

The areas of applications are huge due to the protection design for the spring washer: Pumps conveying slurries for the sugar industry, paper industry, extracting industry, for heavy industries, all simple assemblies possible (cartridge, tandem, quench, etc.).



LATTY®seal B 10712

COMPLETE BALANCED MECHANICAL SEALS

Solely designed for the sealing of highly abrasive or viscous media, **LATTY®seal B 10712** is the forgiving seal that heavy industry requires in terms of endurance and reliability. Its ability to receive abuses is unsurpassed.

Pulp and paper mills, sugar, waste water applications.

All corrosive, abrasive and highly clogging fluids.

T -20 °C to +180 °C P 1 MPa (10 bar)

S 10 m/s



LATTY®seal B 18212

COMPLETE BALANCED MECHANICAL SEALS

LATTY®seal B 18212, designed in compliance with **NF EN 12756/DIN 24960** is suitable for use in severe application cases due to its strength and reliability.

The use of an overdimensioned cylindrical spring and the friction faces made of silicium carbide U3 (Q2) or, for the most difficult cases of tungsten carbide with nickel binder U2 (U2), make it a complete balanced mechanical seal that has proven its efficiency within extremely severe atmospheres.

Iron and steel industry, sugar industry, paper industry, treatment of waste water, heavy industry, etc.

Any corrosive, abrasive and clogging fluid.

T -20 °C to +180 °C P 2.5 MPa (25 bar)

S 20 m/s

U3U3V

Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
75306	055	75308	070	75311	085	61808	100
62281	060	75309	075	66966	090		
75307	065	75310	080	63157697	095		



LATTY®seal U 11

UNBALANCED ROTARIES

Conceptually similar to **LATTY®seal U 1000** but fitted with a carbon face, **LATTY®seal U 11** fulfills a wide spectrum of applications on commonly used **NF EN 12756/DIN 24960** equipment. Its conical spring concept makes it dependent on direction of rotation.

Chemical, food processing and bio-engineering industries, water circulation applications.

All corrosive, non-abrasive and non-clogging fluids.

R BV

Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
74961103	014	74961110	028	64961117	043	64961125	063
74961104	016	74961111	030	74961118	045	74961126	065
74961105	018	74961112	032	64961119	048	64961128	070
74961106	020	64961113	033	74961120	050	64961129	075
74961107	022	74961114	035	64961121	053	64961130	080
74961108	024	74961115	038	74961122	055		
74961109	025	74961116	040	74961124	060		



LATTY®seal U 68

UNBALANCED ROTARIES

Targeted at the immense field of process pumps built to **NF EN 12756/DIN 24960**, **LATTY®seal U 68** offers an instantaneous interchangeability of the rotating face permitting multiple use and cost reduction. Wide spectrum of rotary faces.

Chemical and petrochemical, food processing and bio-engineering industries, feed water applications, etc.

All corrosive, abrasive and slightly clogging fluids.

BV

Article #	Ø	Article #	Ø
74960760	018	74960773	045
74960761	020	74960774	048
74960762	022	74960775	050
74960763	024	74960776	053
74960764	025	74960777	055
74960765	028	74960779	060
74960766	030	22162	063
74960767	032	74960781	065
74960768	033	74960783	070
74960769	035	74960784	075
74960770	038	74960785	080
74960771	040	74960925	085
74960772	043	74960926	090

U3V

Article #	Ø	Article #	Ø
74960786	018	74960799	045
74960787	020	74960800	048
74960788	022	74960801	050
74960789	024	74960802	053
74960790	025	74960803	055
74960791	028	74960805	060
74960792	030	74960806	063
74960793	032	74960807	065
74960794	033	74960809	070
74960795	035	74960810	075
74960796	038	74960811	080
74960797	040	74960927	085
74960798	043	74960928	090

T -20 °C to +220 °C P 1 MPa (10 bar)

S 15 m/s



T -20 °C to +220 °C P 1 MPa (10 bar)
S 15 m/s

LATTY®seal B 68

BALANCED ROTARIES

Targeted at high pressure process pumps built to **NF EN 12756/DIN 24960**, **LATTY®seal B 68** offers an instantaneous interchangeability of the rotating face permitting multiple use and cost reduction. Wide spectrum of rotary faces.

*Chemical and petrochemical, food processing and bio-engineering industries, feed water applications, etc.
All corrosive, abrasive and slightly clogging fluids.*

AV							
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
74961041	030	74961044	038	74961047	045	74961050	053
74961042	032	74961045	040	74961048	048	74961051	055
74961042	033	74961046	043	74961049	050	74961052	060
74961043	035						

Manufactured to order



T -20 °C to +160 °C P 2.5 MPa (25 bar)
S 20 m/s

LATTY®seal B 23

BALANCED ROTARIES

Standard balanced mechanical seal with a single spring washer and pentagonal drive.

The areas of applications are huge due to the protection design for the spring washer: pumps conveying slurries for the sugar industry, paper industry, extracting industry, for heavy industries, all simple assemblies possible (cartridge, tandem, quench, etc.).

B 231 BS Metric					
Article #	Ø	Article #	Ø	Article #	Ø
58990	018	59000	038	59010	063
58991	020	59001	040	59011	065
58992	022	59002	043	59012	070
58993	024	59003	045	59013	075
58994	025	59004	048	59014	080
58995	028	59005	050	59015	085
58996	030	59006	053	59016	090
58997	032	59007	055	59017	095
58998	033	59008	058	59018	100
58999	035	59009	060		

B 231 BS Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
66589	0.750	66599	2.000	66609	3.250
66590	0.875	66600	2.125	66610	3.375
66591	1.000	66601	2.250	66611	3.500
66592	1.125	66602	2.375	66612	3.625
66593	1.250	66603	2.500	66613	3.750
66594	1.375	66604	2.625	66614	3.875
66595	1.500	66605	2.750	59222	4.000
66596	1.625	66606	2.875		
66597	1.750	66607	3.000		
66598	1.875	66608	3.125		

B 232 U3S Metric					
Article #	Ø	Article #	Ø	Article #	Ø
56647	018	56657	038	56667	063
56648	020	56658	040	56668	065
56649	022	56659	043	56669	070
56650	024	56660	045	56670	075
56651	025	56661	048	56671	080
56652	028	56662	050	56672	085
56653	030	56663	053	56673	090
56654	032	56664	055	56674	095
56655	033	56665	058	56675	100
56656	035	56666	060		

B 232 U3S Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
66697	0.750	66707	2.000	66717	3.250
66698	0.875	66708	2.125	66718	3.375
66699	1.000	66709	2.250	66719	3.500
66700	1.125	66710	2.375	66720	3.625
66701	1.250	66711	2.500	66721	3.750
66702	1.375	66712	2.625	66722	3.875
66703	1.500	66713	2.750	66723	4.000
66704	1.625	66714	2.875		
66705	1.750	66715	3.000		
66706	1.875	66716	3.125		



T -20 °C to +220 °C P 1 MPa (10 bar)
S 15 m/s

LATTY®seal B 166 A3

BALANCED ROTARIES

Since no metal part is in contact with the media, the externally mounted **LATTY®seal B 166 A3** withstands highly corrosive media. Due to a lateral tightening screw and an engraved reference line, installation is quick and simple.

*Chemical, food industry, reactors applications.
All highly corrosive, abrasive and slightly clogging fluids.*

BV					
Article #	Ø	Article #	Ø	Article #	Ø
57712	025	52509	040	69914	058
56048	028	67882	043	56803	060
69080	030	64508	045	69901	063
63036	032	66447	048	58172	065
41521	033	62878	050	52109	070
53200	035	69913	053		
53090	038	62879	055		

U6V					
Article #	Ø	Article #	Ø	Article #	Ø
59830	025	62876	040	69923	058
51777	028	62877	043	69904	060
65198	030	56914	045	62258	063
69902	032	69903	048	69905	065
51778	033	70624	050	69906	070
51779	035	69922	053		
65013	038	62880	055		

Manufactured to order



LATTY®seal B 17 B

BALANCED ROTARIES

Using a State-of-the-Art welded bellows technology, **LATTY®seal B 17 B** provides no hang-up or shaft fretting due to the absence of any semi-dynamic O-rings. The centrifugal force and natural bellows respiration make **LATTY®seal B 17 B** a self cleaning seal. High rotation speeds are achievable.

Chemical, petrochemical, pulp and paper applications.
All corrosive, slightly abrasive and clogging fluids.

T -20 °C to +220 °C 2 MPa (20 bar)
 S 25 m/s

B 171 B AV					
Article #	Ø	Article #	Ø	Article #	Ø
61947	025	61954	040	61960	060
61948	028	61955	043	62779	063
61949	030	30384	045	61961	065
61950	032	61956	048	61962	070
61951	033	61957	050	61963	075
61952	035	61958	053	61964	080
61953	038	61959	055		

B 172 B U6V					
Article #	Ø	Article #	Ø	Article #	Ø
61996	025	62003	040	62010	060
61997	028	62004	043	62011	063
61998	030	62005	045	44749	065
61999	032	62006	048	62012	070
62000	033	62007	050	62013	075
62001	035	62008	053	62014	080
62002	038	62009	055		

Manufactured to order



LATTY®seal 10 S2V

STATIONNARIES

Designed to **NF EN 12756/DIN 24960** specification, this reaction bonded silicon carbide stationary handles both clean and solids containing media.

All corrosive, abrasive and slightly clogging fluids.

Limitation: Not to be used on highly basic or acidic media, on frequently starting equipment.

T -20 °C to +180 °C

S2V Metric			
Article #	Ø	Article #	Ø
64950304	016	74950319	048
74950305	018	74950320	050
74950306	020	74950321	053
74950307	022	74950322	055
74950308	024	45719	058
74950309	025	74950324	060
74950310	028	22562	063
74950311	030	74950326	065
74950312	032	64950327	068
74950313	033	74950328	070
74950314	035	64950329	075
74950315	038	74950330	080
74950316	040	64950331	085
74950317	043	64950332	090
74950318	045		

S2V Imperial			
Article #	Ø	Article #	Ø
74950306	0.750	45719	2.250
74950307	0.875	74950324	2.375
74950309	1.000	74950326	2.500
74950311	1.125	64950327	2.625
74950312	1.250	74950328	2.750
74950314	1.375	64950329	2.875
74950315	1.500	45718	3.000
74950317	1.625	74950330	3.125
74950318	1.750	64950331	3.250
74950319	1.875	64950331	3.375
74950321	2.000	64950332	3.500
74950322	2.125		

Manufactured to order



LATTY®seal 10 VV

STATIONNARIES

Designed to **NF EN 12756/DIN 24960** specification, this 99.5% pure aluminum oxide stationary handles both clean and solids containing media.

All corrosive, abrasive and slightly clogging fluids.

Limitation: Not to be exposed to sudden temperature shocks.

T -20 °C to +220 °C

VV Metric					
Article #	Ø	Article #	Ø	Article #	Ø
74950103	014	74950113	033	64950123	058
74950104	016	74950114	035	74950124	060
74950105	018	74950115	038	64950125	063
74950106	020	74950116	040	74950126	065
74950107	022	74950117	043	64950127	068
74950108	024	74950118	045	74950128	070
74950109	025	74950119	048	74950129	075
74950110	028	74950120	050	74950130	080
74950111	030	74950121	053	74950131	085
74950112	032	74950122	055	74950132	090

VV Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
74950106	0.750	74950118	1.750	74950128	2.750
74950107	0.875	74950119	1.875	74950129	2.875
74950109	1.000	74950121	2.000	45791	3.000
74950111	1.125	74950122	2.125	74950130	3.125
74950112	1.250	64950123	2.250	74950131	3.250
74950114	1.375	74950124	2.375	74950131	3.375
74950115	1.500	74950126	2.500	74950132	3.500
74950117	1.625	64950127	2.625		

Manufactured to order



T -20 °C to +220 °C

LATTY®seal 10 U3V

STATIONNARIES

Designed to **NF EN 12756/DIN 24960** specification, this reaction bonded silicon carbide stationary handles both clean and solids containing media.

All corrosive, abrasive and slightly clogging fluids.

Limitation: Not to be used on highly basic or acidic media, on frequently starting equipment pumping highly viscous fluids.

U3V Metric					
Article #	Ø	Article #	Ø	Article #	Ø
74950197	014	74950208	033	64950218	058
74950199	016	74950209	035	74950219	060
74950200	018	74950210	038	64950220	063
74950201	020	74950211	040	74950221	065
74950202	022	74950212	043	64950222	068
74950203	024	74950213	045	74950223	070
74950204	025	74950214	048	74950224	075
74950205	028	74950215	050	74950225	080
74950206	030	74950216	053	74950226	085
74950207	032	74950217	055	74950227	090

U3V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
74950201	0.750	74950213	1.750	74950223	2.750
74950202	0.875	74950214	1.875	74950224	2.875
74950204	1.000	74950216	2.000	45792	3.000
74950206	1.125	74950217	2.125	74950225	3.125
74950207	1.250	64950218	2.250	74950226	3.250
74950209	1.375	74950219	2.375	74950226	3.375
74950210	1.500	74950221	2.500	74950227	3.500
74950212	1.625	64950222	2.625		

Manufactured to order



T -20 °C to +180 °C

LATTY®seal 23-12 U3V

STATIONNARIES

Applicable to **LATTY®seal B 231** or **LATTY®seal B 232** and designed to **NF EN 12756/DIN 24960** specification, this reaction bonded silicon carbide insert, shrunk fit into a metal carrier, is particularly suitable for solids containing and highly viscous media. The metal carrier handles continuous stop and go situations.

All corrosive, abrasive and clogging fluids.

Limitation: Not to be used on highly basic or acidic media.

U3V Metric					
Article #	Ø	Article #	Ø	Article #	Ø
59101	018	59111	038	59121	063
59102	020	59112	040	59122	065
59103	022	59113	043	59124	070
59104	024	59114	045	59125	075
59105	025	59115	048	59126	080
59106	028	59116	050	59127	085
59107	030	59117	053	59128	090
59108	032	59131	055	59129	095
59109	033	59119	058	59130	100
59110	035	59120	060		

U3V Imperial					
Article #	Ø	Article #	Ø	Article #	Ø
59102	0.750	59117	2.000	59127	3.250
59103	0.875	59131	2.125	59127	3.375
59105	1.000	59119	2.250	59128	3.500
59107	1.125	59120	2.375	59129	3.625
59108	1.250	59122	2.500	59129	3.750
59110	1.375	59123	2.625	59130	3.875
59111	1.500	59124	2.750	59130	4.000
59113	1.625	59125	2.875		
59114	1.750	59125	3.000		
59115	1.875	59126	3.125		



T -20 °C to +220 °C

LATTY®seal 16-70 VF1

STATIONNARIES

Solely designed for the externally mounted **LATTY®seal B 166 A3**, this 99.5% pure aluminum oxide stationary face handles both clean and solids containing media.

All corrosive, abrasive and slightly clogging fluids.

Limitation: Not to be exposed to sudden temperature shocks.

VF1									
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
19878	025	19880	033	19881	043	25005	053	45818	063
19879	028	21547	035	19884	045	25006	055	45819	065
25001	030	25003	038	19882	048	25007	058	43657	070
25002	032	25004	040	19883	050	25008	060		

Manufactured to order



T -20 °C to +220 °C

LATTY®seal 16-70 U6F1

STATIONNARIES

Solely designed for the externally mounted **LATTY®seal B 166 A3**, this sintered silicon carbide stationary face is particularly suited for highly corrosive and solids containing media.

All highly corrosive, abrasive and slightly clogging fluids.

U6F1									
Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø	Article #	Ø
24987	025	24990	033	23953	043	24997	053	45821	063
19717	028	24991	035	24994	045	24998	055	28163	065
24988	030	24992	038	24995	048	24999	058	45822	070
24989	032	24993	040	24996	050	25000	060		

Manufactured to order