



seal material and profile overview

complete in product range and services

at seal-mart we offer you:

- sealing solutions tailored to your specifications
- partnership from the design phase to serial production
- just-in-time manufacturing of seals and components up to 4.000 mm diameter
- production of industrial gaskets of any kind
- production of advanced engineering plastics products (AEPP)

quality makes the difference

quality is at the core of everything we do. production breakdowns due to sealing problems can cause huge losses. therefore, we make every effort to deliver high quality sealing products that meet our customers' needs. at seal-mart, we are constantly striving to enforce and improve our quality standards, since customers demand the highest quality sealing solutions to compete in their highly competitive markets.



superior manufacturing concept

at seal-mart we know that only state-of-the-art technology can provide us with an edge on our competitors. a rapidly changing environment demanded for a new production concept that surpasses our customers' requirements, such as:

- delivery on demand with short cycle times
- no mould or tooling limitations
- no stock requirements for our customers
- seal engineering to customer specification

to face this challenge, we manufacture seals with cutting edge CNC turning technology to satisfy the very specific needs of every customer, in every industry.

material data	DIN-standard	unit	polyurethanes							
			PU thermoplastic polyurethane elastomer	HPU hydrolysis-resistant polyurethane	GPU casted polyurethane elastomer	TPU low-temperature polyurethane	SPU self-lubricated polyurethane	XHPU thermoplastic polyurethane elastomer	XSPU thermoplastic polyurethane elastomer	
colour			green	red	red	blue	grey	dark red	grey/black	
hardness	53505	Shore A	95±2	95±2	95±2	95±2	95±2			
hardness	53505	Shore D	48±3	48±3	47±3	48±3	48±3	60±3	57±3	
density	53479	g/cm ³	1,20	1,20	1,20	1,17	1,24	1,22	1,26	
100% modulus	53504	N/mm ²	≥12	≥13	≥11	≥12	17	≥20	24	
tensile strength / yield stress	53504/53455	N/mm ²	≥40	≥50	≥45	≥50	50	≥50	45	
elongation at break	53504/53455	%	≥430	≥330	≥280	≥450	380	≥350	350	
modulus of elasticity - tensile strength	53457	N/mm ²								
compression set 70°C/24h 20% Def		%	≤30	≤27	≤30	≤27	25	26	24	
100°C/24h 20% Def		%	≤35	≤33	≤40	≤33	30	30	30	
100°C /22h	53517	%								
175°C /22h	53517	%								
rebound resilience	52512	%	42	29	43	50				
tear strength	53515	N/mm	≥100	≥100	≥40	≥80	120	170	160	
abrasion	53516	mm ³	18	17	25	15	17	20	20	
minimum service temperature		°C	-30	-20	-30	-50	-20	-20	-20	
maximum service temperature		°C	+110	+110	+110	+110	+110	+110	+110	

due to our innovative manufacturing system, we are able to provide you any special seal profile in any diameter

classification of sealing materials

in sealing technology, mainly representatives of two groups of macromolecular (polymeric) substances are used, i.e. substances of the groups of elastomers and thermoplastics.

macromolecular substances are organic compounds whose molecules exist of several thousands, often even millions, of atoms which are known as macro, giant, string or chain molecules. they can be created either by modification of highly molecular natural materials (e.g. natural rubber) or by depositing low-molecular elements (so called monomers) through various chemical reactions (synthetic materials, plastics).

we serve the following industries

- agricultural industry
- automotive industry
- cement, lime, ceramic & refractory industry
- chemical industry
- construction industry
- electronic industry
- food and pharmaceutical industry
- general mechanical engineering
- mining industry
- non-ferrous industry
- oil & gas industry
- plastic & rubber processing industry
- power supply industry
- pulp & paper industry
- shipbuilding industry
- steel industry
- textile industry
- water supply & water treatment industry
- wood & wood processing industry

rubber elastomers						thermoplastics						
hydrogenated acrylonitrile-butadiene	NBR acrylonitrile-butadiene-rubber	FKM VITON® / fluoro-rubber	EPDM ethylene propylene rubber	TFE/P - ALFAS tetrafluoroethylene propylene rubber	MVQ silicone rubber	POM polyacetal	PTFE polytetrafluoroethylene - virgin PTFE	PTFE + 15% Glass Fibre + 5% MoS ₂	PTFE + 40% Bronze	PTFE + 25% Carbon	PA polyamide	PEEK polyaryletherketone
black	black	brown	black	black	reddish brown	black	white	grey	brown	black	black	cream
85±2	85±2	83±2	85±2	85±2	85±2							
						82	57	60	64	65	77	86
1,22	1,31	2,30	1,22	1,60	1,52	1,41	2,17	2,25	3,00	2,10	1,15	1,32
≥10	≥11	≥5	≥9	8	≥5							
≥18	≥16	≥8	≥12	13	≥7	62	27	18	22	15	65	97
≥180	≥130	≥200	≥110	200	≥130	40	300	200	280	180	120	≥50
						2600					1800	3600
≤22	≤22		≤15									
		≤20		29	≤15							
29	28	7	38		44							
20	21	15	21	19	8							
90	90	150	120	110								
-25	-30	-20	-50	-10	-60	-50	-200	-200	-200	-200	-40	
+150	+100	+200	+150	+200	+200	+100	+260	+260	+260	+260	+100	260

(up to 4.000 mm). do not hesitate to contact our technical department for further informations



seals



hydraulics & pneumatics



piston seals



rod seals



wiper



guide rings



back-up rings



others



rotary seals



oil seals



roto slide seals



v-rings



others



static seals



d-rings



o-rings



x-rings



others

PISTON SEALS

K01-P *	K01-R *	K02-P *	K02-PD	K02-R *	K02-RD
K02-SA **	K03-P	K03-F	K03-S	K04-P	K04-PD
K05-P *	K05-R	K05-SA *	K05-SB *	K05-SC *	K05-SD *
K05-SE *	K05-SF *	K05-SG *	K05-SH *	K05-SI *	K06-P *
K06-R *	K06-SA *	K07-P *	K08-E *	K08-D *	K08-P *
K08-ES *	K08-DS *	K08-SA *	K08-SB *	K08-SC *	K08-SD *
K08-SE *	K08-SF *	K08-SG *	K09-N	K09-D	K09-H
K09-F	K09-SA *	K09-SB *	K09-SC **	K09-SD *	K09-SE **
K09-SF **	K09-SG **	K09-SH *	K09-SI **	K09-SJ *	K09-SK *
K09-SL *	K09-SM *	K1012-T	K1012-M*	K1012-SA*	K1315-T
K16-A *	K16-B	K16-SA ***	K17-P *	K17-R	K17-SA *
K17-SB *	K19-F *	K20-R	K21-P	K22-P	K22-R
K23-N	K23-D	K23-H	K23-F *	K23-SA *	K23-SB **
K23-SC **	K23-SD **	K23-SE *	K23-SF *	K24-P	K32-P
K35-P *	K60 *	K61 *	K62 **	K63 ***	K64 ***

* machined or molded

** molded or machined with minor design change

*** molded only

no mark - only machined

PISTON SEALS

K65 **	K66 *	K67 ***	K68 ***	K69 ***	K70 ***
K71 ***	K72 ***	K73 ***	K74 ***	K75 *	K76 *
K77 *	K78 **	K79 **	K80 **	K81 **	K82 **
K83 **	K84 **	K85 **	K86 *	K88 *	

ROD SEALS

S20-R	S21-P	S22-P	S22-R	S24-P	S24-SA *
S2527-F	S2931-F *	S32-P	S35-P	S60 *	S61 *
S62 **	S63 **	S64 *	S65 **	S66 *	S67 **
S68 **	S69 **	S70 **	S73 *	S74 **	S75 **
S76 *	S78 ***				

ROD SEALS

S01-P *	S01-R *	S01-SA *	S01-SB *	S01-SC *	S02-P *
S02-PD	S02-R	S02-RD	S02-S *	S02-SA **	S03-P
S03-F	S03-S	S03-SA *	S04-P	S04-PD	S05-P
S05-R	S05-SA *	S05-SG *	S05-SH *	S06-P *	S06-R *
S06-SA *	S07-P	S07-SA *	S08-P	S08-PE	S08-R
S08-SA *	S08-SB *	S09-E *	S09-D *	S09-P	S09-ES
S09-DS *	S09-SA *	S09-SB *	S09-SC *	S09-SD *	S09-SE *
S09-SF *	S09-SG *	S1012-M*	S1012-T	S1012-SA	S1315-T
S16-A	S16-B	S16-SA *	S16-SB **	S17-P *	S17-R
S17-SA *	S17-SB *	S17-SC *	S18-P *	S18-R	S19-F *

WIPER

A01-A	A01-B	A01-SA **	A01-SB *	A01-SC *	A01-SD *
A02-A *	A02-B *	A02-I	A02-SA *	A02-SB *	A02-SC **
A02-SD **	A02-SE **	A03-A	A03-SA **	A03-SB **	A03-SC **
A03-SD **	A04-A	A04-B	A05-A	A05-B *	A05-I
A06-A	A07-A	A07-SA *	A08-A	A08-B	A09-A
A10-A	A11-A *	A11-I	A11-SA *	A11-SB *	A11-SC *
A11-SD *	A11-SE *	A11-SF **	A11-SG **	A11-SH **	A11-SI **
A11-SJ **	A11-SK **	A11-SL **	A11-SM *	A11-SN *	A12-A
A12-B	A13-A	A25-F *	A26-F *	A27-F	A27-SA *

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seals



hydraulics & pneumatics



piston seals



rod seals



wiper



guide rings



back-up rings



others



rotary seals



oil seals



roto slide seals



v-rings



others



static seals



d-rings



o-rings



x-rings



others

WIPER

A27-SB *	A27-SC *	A27-SD *	A60 *	A61 *	A62-A **
A62-B **	A62-C **	A63 **	A64 ***	A65 **	A66 *
A67 **	A68 *	A69 **	A70 **	A71 **	A72 **
A73 **	A74 *				

GUIDE RINGS

F01 *	F02 *	F03	F04	F05 *	F06
F07	F08				

BACK UP RINGS

ST08 *	ST09 *	ST10	ST11	ST12	ST13
ST60 ***					

OIL SEALS

R01-P	R01-R	R01-AF	R01-AS	R01-F	R02-P
R02-R	R60-A **	R60-B **	R60-C **	R60-D **	R60-E **
R60-F **	R60-G **	R60-R **	R60-Y **	R60-V **	R61-A **
R61-B **	R61-C **	R61-D **	R61-E **	R61-F **	R61-G **

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** molded or machined with minor design change

*** molded only

no mark - only machined

OIL SEALS

R61-R **	R61-Y **	R61-V **	R62-A **	R62-B **	R62-C **
R62-D **	R62-E **	R63-A **	R63-B **	R63-C **	R63-D **
R64 **	R65 **	R66 ***	R67 ***	R68 ***	R69 ***
R70 ***	R71 ***	R72 **	R73-A **	R73-B **	R73-C **
R74-A ***	R74-B ***	R75 **	R76 **	R77-A **	R77-B **
R78 **	R79 **	R80-A **	R80-B **	R80-C **	R81 **
R82-A **	R82-B **	R83 **	R84 ***	R85 ***	R86 ***
R87 ***	R88 ***	R89 ***	R90 ***	R91 ***	R92 ***
R93 ***	R98 *	R99 ***	R100 ***	R101 ***	R102 ***
R103-A **	R103-B **	R103-V **	R104-A **	R104-V **	R105-A **
R105-B **	R105-V **	R106 **	R107 **	R108 **	R109 **
R110 **	R111 ***	R112 ***	R113 ***	R114-A ***	R114-B ***
R114-V ***	R115 ***	R116 ***	R117 ***		

V-RINGS

R06-P *	R06-R	R06-SA *	R06-SB *	R06-SC *	R06-SD *
R06-SE *	R06-SF *	R07-P *	R07-R		

ROTARY OTHERS

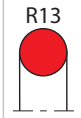
R03-P	R03-R	R04-A	R05-A	R08-A	R11-F
R19-F *	R94-A ***	R94-V ***	R95-A ***	R95-V ***	R96 ***
R97 ***	R118 ***	R119 ***	R120 ***	R121 ***	

D-RINGS



R35-A

O-RINGS



R13 *

X-RINGS



R16-R *

STATIC OTHERS

R12-F	R12-SA *	R12-SB *	R14	R15-P	R20-P
R30-A	ST61 *	ST62 *	ST63 *	ST64 *	

ROTO SLIDE SEALS

R09-F *	R09-FS	R10-F *	R10-FS
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*** molded only

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