Material Specifications:

- 94A Freudenberg AU30000 High Temp. Urethane (Blue)
- 85A NBR (Black)
- 85A Fluorocarbon / Viton (Black)
- 85A HNBR (Green)
- 85A EPDM (Black)
- 55D Virgin PTFE (White)
- 40% Bronze/PTFE (Bronze)
- 15% Glass/5% Moly PTFE (Black)
- 85D Polyacetal (POM) (White)
- 86D Virgin PEEK (Cream)
- 96A Hydrolysis Resistant Polyurethane (Red)
- 94A Cast Hydrolysis Resistant Polyurethane (Red)
- 55D Hytrel (Orange)
- 61D UHMW (White)
- 77D Polyamide (PA) (Black)
- 86D Synthetic Fabric Thermoset Resin (SFTR) (Turquoise)

MATERIAL			HPU	C-HPU Cast	Freudenberg® AU 30000 Urethane	Hytrel	NBR	HNBR	FPM	EPDM
Property	Specification	Unit								
Color			Red	Red	Blue	Orange	Black	Green	Brown	Black
Min Service Temp		°F	-5	-35	-40	-65	-35	-30	-30	-50
Max Service Temp		°F	240	230	250	275	230	300	425	300
Max Temp - Water/Steam		°F	195	195				245	300	300
Max Temp - Hot Air (short)		°F						355	570	355
Hardness	ASTM D 2240	Shore A	96±2	94±1	94+3/-4		85±5	85±5	85±5	85±5
Hardness	ASTM D 2240	Shore D	47±3	44±3	45±5	55				
Modulus 100%	ASTM D 412	psi	2900	2175	2030◀	2250	1740	1450	1160	
Modulus 300%	ASTM D 412	psi	5800	4160	3190◀					
Tensile Strength	ASTM D 412	psi	6200	7250	8992◀	6100▲	2300	2900	1450	1740
Elongation at break	ASTM D 412	%	300	350	550◀	520▲	150	200	200	80
Tear Strength	ASTM D 624 die C	lbf/inch	570	560	713		140	170	34	50
Abrasion	ASTM D 1630	mm3	17	20			130	130	200	140
Specific Gravity	ASTM D 792	g/cm3	1.19	1.19	1.17	1.19	1.32	1.32	2.51	1.23
Rebound Elasticity	DIN 53512	%					20		7	37
Modulus of Elasticity	DIN 53457	N/mm2								
Compressive Strength	ASTM D 695	psi								
Compressive Modulus	ASTM D 695	psi								
Compression Set										
70°C/24hr @ 20% def	ASTM D 395 Meth B	%	25	27		40%	6	14	8	7
100°C/24hr @ 20% def	ASTM D 395 Meth B	%	30	33	31		5	22	10	

* Lead time required	▼Spec - DIN 53505
▲Spec - ASTM D 638	◀Spec - DIN 53504
▶Spec - DIN 53455	●Spec - DIN 53479

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MATERIAL			PTFE Virgin	PTFE 15% Glass	PTFE 40% Bronze	POM	PA Nylon	UHMW-PE*	PEEK*	SFTR
Property	Specification	Unit								
Color			White	Grey	Brown	White	Black	Natural	Cream	Turquoise
Min Service Temp		°F	-325	-325	-325	-50	-40	-325		-40
Max Service Temp		°F	500	500	500	210	210	175	500	309
Max Temp - Water/Steam		°F								
Max Temp - Hot Air (short)		°F								
Hardness	ASTM D 2240	Shore A								
Hardness	ASTM D 2240	Shore D	50-65	58-63	61-67	85±3	77	61	86	86
Modulus 100%	ASTM D 412	psi								
Modulus 300%	ASTM D 412	psi								
Tensile Strength	ASTM D 412	psi	6000▲	3000▲	3300▲	10100	9400◀	5800▲	14000◀	
Elongation at break	ASTM D 412	%	300▲	280▲	250▲	40	120◀	350▲	50◀	
Tear Strength	ASTM D 624 die C	lbf/inch								
Abrasion	ASTM D 1630	mm3								
Specific Gravity	ASTM D 792	g/cm3	2.2	2.2	3.13	1.41	1.15●	0.93●	1.32●	1.3
Rebound Elasticity	DIN 53512	%								
Modulus of Elasticity	DIN 53457	N/mm2				3000	1800	98000	3600	
Compressive Strength	ASTM D 695	psi	3500	1055	1470	12800				54375
Compressive Modulus	ASTM D 695	psi	70000	63000	66000					406105
Compression Set										
70°C/24hr @ 20% def	ASTM D 395 Meth B	%								
100°C/24hr @ 20% def	ASTM D 395 Meth B	%								

* Lead time required	▼Spec - DIN 53505
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