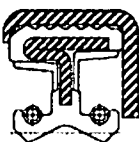
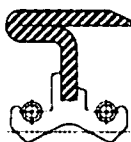
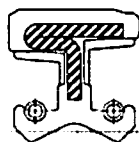
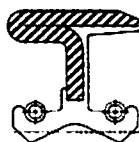
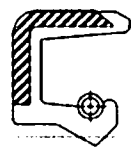
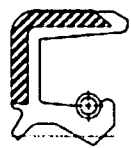
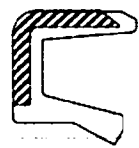

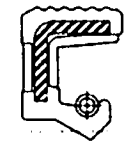
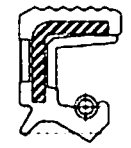
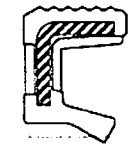
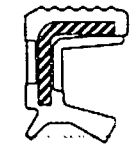
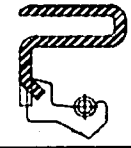
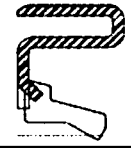
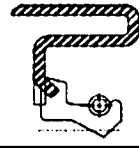
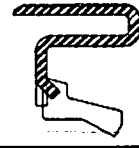
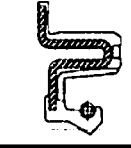
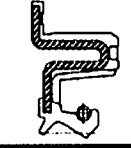
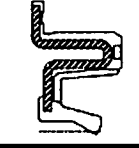
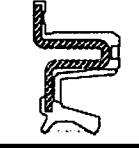

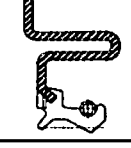
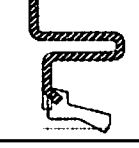
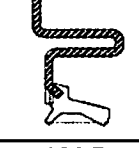


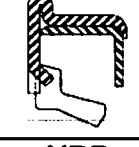
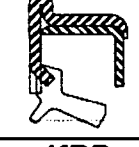
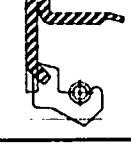
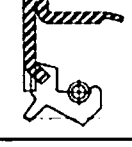
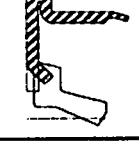
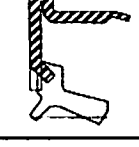
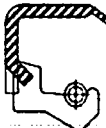
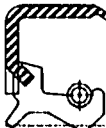
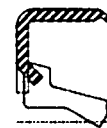
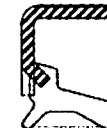
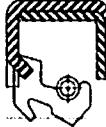
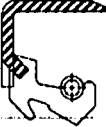
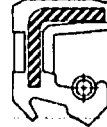


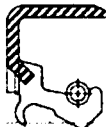
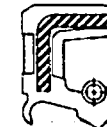

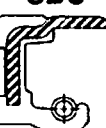
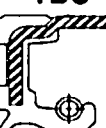
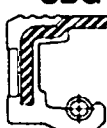
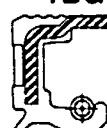










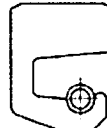
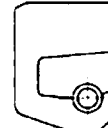
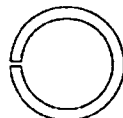
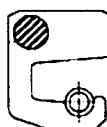
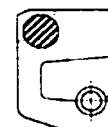

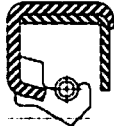
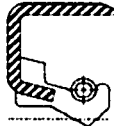
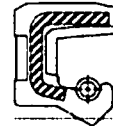

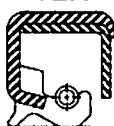
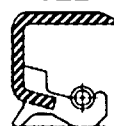
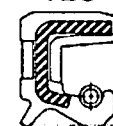

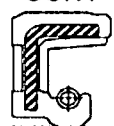
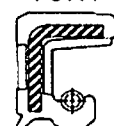
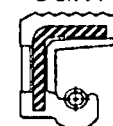
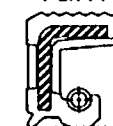
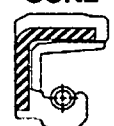
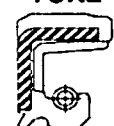
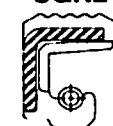
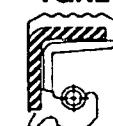
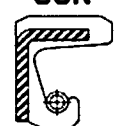
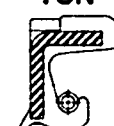
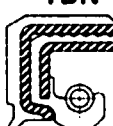
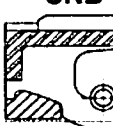


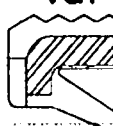
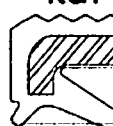
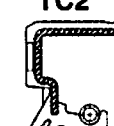


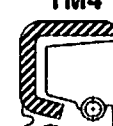

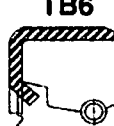
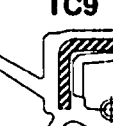

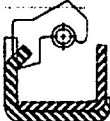

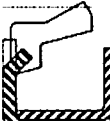
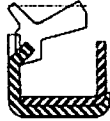
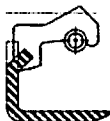
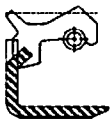
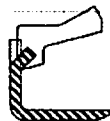

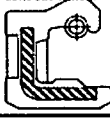

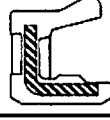
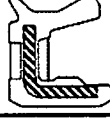
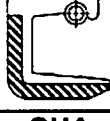
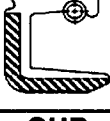

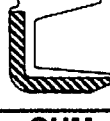

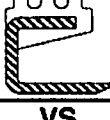

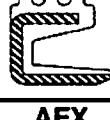




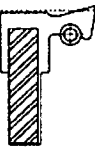
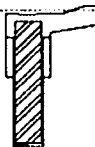
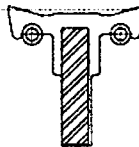
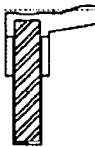


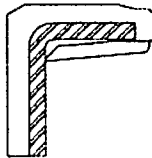
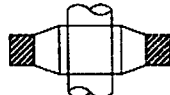


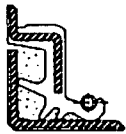
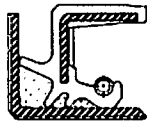
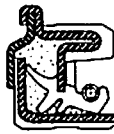

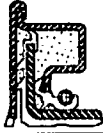
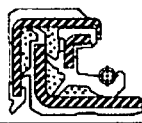
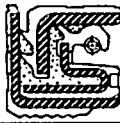
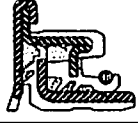


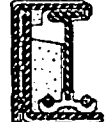

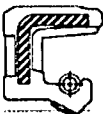
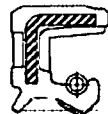
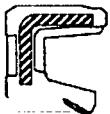
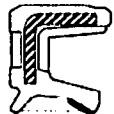
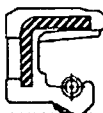

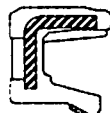
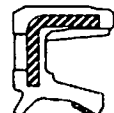
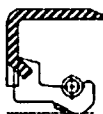
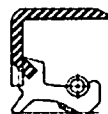
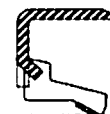
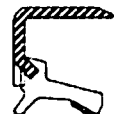
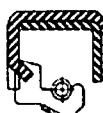

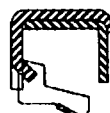

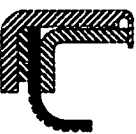
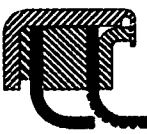

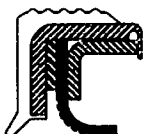
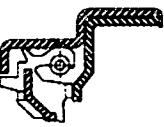
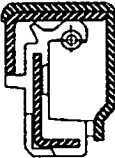
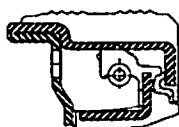
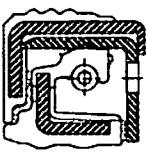
Lip Style		"S"	"T"	"V"	"K"
OD Style		Low-pressure single lip with garter spring without protection from contaminants.	Low-pressure dual lip with garter spring with protection from contaminants.	Non-pressure single lip without garter spring without protection from contaminants.	Non-pressure dual lip without garter spring with protection from contaminants.
"C"	Rubber cover OD for improving OD sealing ability.	SC	TC	VC	KC
		SB	TB	VB	KB
"B"	Precision ground OD surface with a lead-in chamfer for ease of installation.	SA	TA	VA	KA
		SF	TF	VF	KF
"A"	Precision ground OD surface with a inner case providing increased structural rigidity.	SM	TM	VM	KM
"F"	Rubber cover OD for improving OD sealing ability, with additional rubber fully protecting the inner case.				
"M"	Precision ground OD surface with a lead-in chamfer with an additional inner rubber lining.				

TCM Type	Design Characteristics	Seal Style			
"D"	Two opposing spring loaded lips, designed for applications where the separation of two media is required.	DA 	DB 	DC 	DM 
		SZ 	TZ 	VZ 	KZ 
"G"	Corrugated OD for applications where the housing material is subject to large thermal expansion or press fitting into a housing where installation is usually difficult.	SG 	TG 	VG 	KG 
		SH 	VH 	SH1 	VHY 
"J"	Rubber OD with flange will allow easy installation or replacement, gives additional structural rigidity and restricts the installation depth into the housing.	SCJ 	TCJ 	VCJ 	KCJ 
	Precision ground OD with flange will allow easy installation or replacement, gives additional structural rigidity and restricts the installation depth into the housing.	SBJ 	TBJ 	VBJ 	KBJ 
"P"	Precision ground, reinforced OD with minimum clearance flange that will allow easy installation or replacement and restricts the installation depth into the housing.	SAP 	TAP 	VAP 	KAP 
	Precision ground OD with minimum clearance flange that will allow easy installation or replacement and restricts the installation depth into the housing.	SBP 	TBP 	VBP 	KBP 

TCM Type	Design Characteristics	Seal Style						
"L"	Precision ground OD with a rolled leading edge to aid in the alignment during installation.	SL 	TL 	VL 	KL 			
"X"	The cavity will allow pre-lubrication of the seal to combat initial dry running or where space is limited and a secondary lip for dust exclusion is required.	TXA 	TXB 	TXC 	TXM 			
"X1"	Similar to the "X" type, but with a larger cavity for pre-lubrication of the seal to combat initial dry running or where space is limited and a secondary lip for dust exclusion is required.	TX1A 	TX1B 	TX1C 	TX1M 			
"BC" "BG"	This design provides the benefit of a metal-to-metal press fit and the rubber OD sealing ability to counter rough or worn housings.	SBC 	TBC 	SBG 	TBG 			
"U"	Triple flat lip design for use in heavy dirt applications, commonly used in agriculture equipment.	UA 	UB 	UC 	UM 			
"VA"	Grease retention seals with variations depending on the application or installation conditions.	VA1 	VA2 	VA3 	VA4 	VA5 	VA6 	
"SQ"	For use where radial space is limited and can be supplied with a split for ease of installation.	SQ 			SQ1 			
"SQS"	Same as the SQ type, with an addition of a spring inset for added rigidity.	SQS 			SQS1 			

TCM Type	Design Characteristics	Seal Style			
"E"	<p>The metal case reinforcement of the lip flex section makes this type suitable for low to medium pressure applications depending on the shaft speed and runout.</p> <p>Pressure rating, 10 - 30 psi.</p>	SEA 	SEB 	SEC 	SEM 
		TEA 	TEB 	TEC 	TEM 
"N1"	<p>The shorter flex section makes this type suitable for lower pressure applications depending on the shaft speed and runout.</p> <p>Pressure rating, 30 - 50 psi.</p>	SCN1 	TCN1 	SGN1 	TGN1 
"N2"	<p>The shorter flex section makes this type suitable for medium pressure applications depending on the shaft speed and runout.</p> <p>Pressure rating, 50 - 90 psi.</p>	SCN2 	TCN2 	SGN2 	TGN2 
"N"	<p>The shortest flex section of the N type series makes it suitable for higher-pressure applications depending on the shaft speed and runout.</p> <p>Pressure rating, 90+ psi.</p>	SCN 	TCN 	TDN 	CNB 
"TH" "G1"	<p>TH – For heavy-duty dirt exclusion, and OD sealing ability in the housing, is required.</p> <p>G1- "G" type OD, and a lip profile for limited radial space applications.</p>	TCH 	TBH 	VG1 	KG1 
"2/4"	<p>Type 2 – used when a secondary dust lip is needed</p> <p>Type 4 – used for linear applications such as motorcycle forks.</p>	TC2 	TB2 	TC4 	TM4 
		TC6 	TB6 	TC9 	TB9 
"6/9"	<p>Type 6 – used for added dust or fine contaminate protection.</p> <p>Type 9 – has the ability to act as a rotary shaft and an axial face seal.</p>				

TCM Type	Design Characteristics	Seal Style			
"O"	External Seals This external lip type performs and has the same design characteristics as the standard radial lip seals, but these are designed for a press fit on the shaft and to seal in a housing.	OSA	OTA	OVA	OKA
					
		OSB	OTB	OVB	OKB
					
		OSC	OTC	OVC	OKC
					
		OSM	OTM	OVM	OKM
					
		OUA	OUB	OUC	OUM
					
"VA" "VS" "AFS" "AFX"	VA, VS – designed to be fixed on the shaft sealing axially against a perpendicular counter face. AFS, AFX – Performs the same as the VA, VS with an additional metal face added for protection.	VA	VS	AFS	AFX
					
Piston Seals "VS" "EC" "BS"	Designed for reciprocating ram type applications Valve Stem – Designed for valve guides End Cap – Designed for static applications to act as a plug or barrier. Bonded Seal – Designed as a addition to threaded fasteners	PSC	PSV	PDC	PSV
					
		VSC2	VSC4	EC	BS
					

TCM Type	Design Characteristics	Seal Style			
"AP"	AP Product Line This patented AP series seal is designed for heavy dirt exclusion. With a press fit on the shaft and also in the housing makes this series easily replaceable without damage to the shaft or housing.	AJ	AO	AP	APY
					
		AP1	AP3	AP4	AP5
					
"PL"	Teflon* Lined Seals Designed for low friction, high speed applications, or when the reductions of under lip running temperatures are required.	AP6	AP7	AP8	AP7Y
					
		SC-PL	TC-PL	VC-PL	KC-PL
					
		SF-PL	TF-PL	VF-PL	KF-PL
					
		SB-PL	TB-PL	VB-PL	KB-PL
					
"PA"	Teflon* Seals Designed for dry running, low friction applications, also can handle certain pressure applications.	SA-PL	TA-PL	VA-PL	KA-PL
					
"ST"	Oil Bath Seals Designed to operate on trailer and truck axles.	PA1	PA3	PA4	PA6
					
		ST	ST2	ST5	ST34
					

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