

FEATURES OF YCC COMPOUNDS FOR O-RING

MATERIAL	標準										材質					
	JIS SYMBOL	1種A	1種B	4種C	4種D		4種E									
CHARACTERISTICS	YCC CODE	NBR	NBR	SILICONE	VITON		ACR/ACM	HNBR	SILICONE	EPDM	NEOPRENE		VITON			
	FEATURES	MINERAL OIL RESISTANCE	MINERAL OIL RESISTANCE	HEAT RESISTANCE	HEAT RESISTANCE		HEAT RESISTANCE	MINERAL OIL RESISTANCE	HEAT RESISTANCE	STEAM AND HOT WATER RESISTANCE	SALT WATER RESISTANCE		WATER SOLUTION RESISTANCE			
NORMAL CONDITION	HARDNESS (JIS HS)	70 ± 5	90 ± 5	70 ± 5	70 ± 5		70 ± 5	70 ± 5	50 ± 5	70 ± 5	70 ± 5		75 ± 5			
	TENSILE STRENGTH (kg/cm ²) MIN.	100	150	35	100		80	100	50	100	100		100			
	ELONGATION (%) MIN.	250	100	60	200		100	250	250	200	250		175			
	100% MODULUS (kg/cm ²) MIN.	28	—	—	20		—	—	—	—	—		35			
AGING RESISTANCE	TEMPERATURE (°C) / TIME (hrs.)	120°C/70	120°C/70	230°C/24	230°C/24		150°C/70	150°C/70	225°C/70	100°C/70	100°C/70		250°C/70			
	CHANGE OF HARDNESS (JIS HS) MAX.	+10	+10	+10	+5		+10	+10	+10	+10	+15		+10			
	CHANGE OF TENSILE STRENGTH(%) MAX.	-15	-25	-10	-10		-30	-20	-10	-20	-15		-25			
	CHANGE OF ELONGATION(%) MAX.	-45	-55	-25	-25		-30	-40	-25	-40	-40		-25			
COMPRESSION SET	TEMPERATURE (°C) / TIME (hrs.)	120°C/70	120°C/70	175°C/22	175°C/22		150°C/70	150°C/22	175°C/22	100°C/22	100°C/22		175°C/22			
	DEFLECTION(%) MAX.	40	40	30	40		70	25	30	40	35		30			
FLUID OIL RESISTANCE	TEMPERATURE (°C) / TIME (hrs.) ASTM OIL	120°C/70	120°C/70	175°C/70	175°C/70		150°C/70	150°C/70	—	—	100°C/70	CHANGE OF VOLUME	NORMAL TEMPERATURE /70			
	LUBRICATING OIL NO.1						—	—	—	—	LUBRICATING OIL NO.1		METHANOL +5			
	CHANGE OF HARDNESS (JIS HS)	-5 ~ +8	-5 ~ +8	-10 ~ +5	-10 ~ +5		-5 ~ +10	0 ~ +10	—	—	-10 ~ +10		NORMAL TEMPERATURE /70			
	CHANGE OF TENSILE STRENGTH(%)	-15	-20	-20	-20		-20	-30	—	—	-30		TOLUENE +10			
	CHANGE OF ELONGATION (%)	-40	-40	-20	-20		-35	-30	—	—	-30		NORMAL TEMPERATURE /70			
	CHANGE OF VOLUME (%)	-8 ~ +5	-8 ~ +5	0 ~ +10	-10 ~ +5		-5 ~ +5	-10	—	—	-10 ~ +15		NITRIC ACID 60%+3			
	TEMPERATURE (°C) / TIME (hrs.) ASTM OIL	120°C/70	120°C/70	—	175°C/70		150°C/70	150°C/70	—	—	100°C/70					
	LUBRICATING OIL NO.3						LUBRICATING OIL NO.3						LUBRICATING OIL NO.3	HYDROCHLORIC ACID 37%+3		
	CHANGE OF HARDNESS (JIS HS)	-15 ~ 0	-10 ~ +5	—	-10 ~ +5		-15 ~ 0	-0 ~ 15	—	—	-20		NORMAL TEMPERATURE /70			
	CHANGE OF TENSILE STRENGTH(%)	-25	-35	—	-20		-40	-30	—	—	-70		SULPHURIC ACID 98%+3			
CHANGE OF ELONGATION (%)	-35	-35	—	-20		-40	-30	—	—	—						
CHANGE OF VOLUME (%)	0 ~ +20	0 ~ +20	—	-5 ~ +5		0 ~ +20	20	—	—	—						
LOW TEMPERATURE RESISTANCE	TR VALUE (°C) ELONGATE 60%	-28	-23	-49	-15		-17	-26	-43	—	—		-20			