

Urethane / Rubbers

Pilot Type

Urethane / Rubbers - Pilot Type

RoHS 10

Standard Type	Configurable Type	Material	Hardness	Color
DXSK	DXFS	Ether Polyurethane	Shore A95	Natural Color
DXHK	DXFH		Shore A90	Natural Color
DXMK	DXFM		Shore A70	Natural Color
DXLK	DXFL	Ester Polyurethane	Shore A50	Natural Color
—	RBKN		Nitrile Rubber (NBR Nitrile Rubber)	Shore A70
—	RBKC	Shore A65		Black
—	RBKU	Low Elasticity Rubber (HANENITE®GP-35LE)	Shore A35	Black
—	RBKS		Shore A70	Light Gray
—	RBKA	Silicon Rubber (SI)	Shore A50	Milky White
—	RBKF		Shore A80	Black
—	—	Fluoro Rubber (FPM)	Shore A80	Black

Standard Type has no hole.

Tolerance

T	Urethane	Rubber
30 or Less	±0.2	±0.3
31-50	±0.3	—

D Tolerance

T	Urethane	Rubber
40 or Less	±0.2	±0.5
40-60	±0.3	±0.7
61-100	±0.4	—

C Tolerance

T	Urethane	Rubber
40 or Less	+0.2	+1.0
41 or more	0	0

Ⓞ The milky white color of silicone rubber shore A 50 is translucent.

Urethane / Rubbers

Cap Type

Urethane / Rubbers - Cap Type

Standard Type	Configurable Type	Material	Hardness	Color
UTCS	UTNS	Ether Polyurethane	Shore A95	Natural Color
UTCH	UTNH		Shore A90	Natural Color
UTCM	UTNM	Ester Polyurethane	Shore A70	Natural Color
UTCL	UTNL		Shore A50	Natural Color
RBCN	RBNN	Nitrile Rubber (NBR Nitrile Rubber)	Shore A70	Black
RBCC	RBNC		Shore A65	Black
RBCU	RBNU	Low Elasticity Rubber (HANENITE®GP-35LE)	Shore A35	Black
RBCS	RBNS		Shore A70	Light Gray
RBCA	RBNA	Silicon Rubber (SI)	Shore A50	Milky White
RBCF	RBNF		Shore A80	Black
—	—	Fluoro Rubber (FPM)	Shore A80	Black

Tolerance

T	Urethane	Rubber
30 or Less	±0.2	±0.3
31-50	±0.3	—

D Tolerance

T	Urethane	Rubber
40 or Less	±0.2	±0.5
40-60	±0.3	±0.6
61-100	±0.4	—

V Tolerance

V	Urethane	Rubber
2-50	-0.2	0
	-0.3	-1.0
51~	-0.2	0
	-0.4	-1.2

Ⓞ The milky white color of silicone rubber Shore A50 is translucent.
Ⓞ For Urethane Type, I.D. tolerance has been changed.

Standard Type (No Hole Type)

Part Number Type	D	V Selection		T Selection		L Selection									
DXSK Shore A95 DXHK Shore A90 DXMK Shore A70 DXLK Shore A50	8	5	3	5	8	10	8	10	13	15					
	10	8	3	5	8	10	15	9	14	16	18	21	23		
	15	8	3	5	8	10	15	11	13	15	16	18	20	23	25
	20	10	5	8	10	15	20	15	20	25	30	35			
	25	15	5	10	15	20	25	15	20	25	30	35	40		
	30	20	5	10	15	20	25	15	20	25	30	35	40		
	40	30	5	10	15	20	25	15	20	25	30	35	40		
	50	40	5	10	15	20	25	15	20	25	30	35	40		
60	30	5	10	15	20	25	15	20	25	30	35	40			

Urethane Configurable Type (Hole Configurable Type)

Part Number	1 mm Increment				
	D	V<D	T	L	C
DXFS Shore A95	6-15	3-14	2-30	4-10	0 No Hole 2-40
				11-25	
				26-40	
				7-10	
DXFH Shore A90	16-30	6-29	5-40	11-25	0 No Hole 10-70
				26-40	
				40-60	
				7-10	
DXFM Shore A70	31-45	10-44	5-50	11-25	0 No Hole 10-70
				26-40	
				41-65	
				66-70	
DXFL Shore A50	46-60	15-59	5-50	11-25	0 No Hole 10-70
				26-40	
				41-65	
				66-80	

- Ⓞ C≤V-4
- Ⓞ L-T≤Vx3
- Ⓞ For Urethane Configurable Type, configurable dimension range has been shortened.

Rubber Configurable (Hole Configurable Type)

Part Number	1 mm Increment					Available Types			
	D	V (V<D)	T	L	C	RBKN RBKC	RBKU	RBKS RBKA	RBKF
RBKN Shore A70	6-15	3-14	2-30	4-10	0 No Hole 2-40	•	•	•	•
				11-20		•	•	•	•
				21-30		•	•	•	•
				31-50		•	•	•	•
RBKC Shore A65	16-30	6-29	5-40	7-10	0 No Hole 10-50	•	•	•	•
				11-20		•	•	•	•
				21-30		•	•	•	•
				31-50		•	•	•	•
RBKU Shore A35	31-45	10-44	5-30	7-10	0 No Hole 10-50	•	•	•	•
				11-20		•	•	•	•
				21-30		•	•	•	•
				31-50		•	•	•	•
RBKS Shore A70	46-60	15-59	5-50	7-10	0 No Hole 10-50	•	•	•	•
				11-20		•	•	•	•
				21-30		•	•	•	•
				31-50		•	•	•	•

- Ⓞ C≤V-4
- Ⓞ L-T≤Vx3
- Ⓞ L≤30 for RBKU, RBKS and RBKF

Part Number Example

Part Number - V - T - L
DXHK20 - 10 - 10 - 18

Part Number - D - V - T - L - C
DXFL - D49 - V30 - T6 - L42 - C0

Standard Type

Part Number Type	D	V Selection		T Selection		L Selection				d		
UTCS Shore A95	6	2									1	
UTCH Shore A90	8	3	4	2	3	4	5	4	5	6		8
UTCM Shore A70	9	3	5	2	5	7		4	5	6	10	1.5
UTCL Shore A50	10	4	6	2	3	5	6	4	8	10	12	
RBCN Shore A70	12		6	2	3	5	6		7	8	9	10
RBCC Shore A65	15		8	2	4	7	8	4	6	8	10	
RBCU Shore A35	20		12	2	3	5	10		7	10	15	20
RBCS Shore A70	25		15	2	3	5	10	12	10	15	25	30
RBCA Shore A50	30		20	2	3	5	10	20	10	15	20	30
RBCF Shore A80	30		20	2	3	5	10	25	10	15	20	30

Urethane Configurable Type

Part Number	1 mm Increment				d
	D	V	T	L	
UTNS Shore A95	6-15	2-11	2-30	4-10	1
				11-25	
				26-40	
				7-10	
UTNH Shore A90	16-30	12-26	5-40	11-25	1.5
				26-40	
				41-60	
				7-10	
UTNM Shore A70	31-45	27-41	5-50	11-25	2
				26-40	
				41-65	
				7-10	
UTNL Shore A50	46-60	42-56	5-50	11-25	2
				26-40	
				41-65	
				66-70	

- Ⓞ (Y)=T+L Ⓞ V≤D-4
- Ⓞ For Urethane Configurable Type, configurable dimension range has been shortened.

Part Number Example

Part Number - D - V - T - L
RBNN - D60 - V50 - T5 - L20

Part Number - V - T - L
UTCH8 - 3 - 2 - 4

Rubber Configurable Type

Part Number	1 mm Increment				d	Available Types			
	D	V	T	L		RBNN RBNC	RBNU	RBNS RBNA	RBNF
RBNN Shore A70	6-15	2-11	2-10	4-10	1	•	•	•	•
				11-20		•	•	•	•
				21-28		•	•	•	•
				29-48		•	•	•	•
RBNC Shore A65	16-30	12-26	5-40	7-10	1.5	•	•	•	•
				11-20		•	•	•	•
				21-28		•	•	•	•
				29-48		•	•	•	•
RBNU Shore A35	31-45	27-41	5-15	7-10	1.5	•	•	•	•
				11-20		•	•	•	•
				21-28		•	•	•	•
				29-45		•	•	•	•
RBNS Shore A70	46-60	42-56	5-15	7-10	2	•	•	•	•
				11-20		•	•	•	•
				21-28		•	•	•	•
				29-45		•	•	•	•

- Ⓞ (Y)=T+L Ⓞ V≤D-4 Ⓞ (Y)≤50
- Ⓞ (Y)≤30 for RBNU, RBNS and RBNF. Caps used to protect inserted tip.