

LCM
 LCR
 LCG
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 STR2
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 SpdContr
 Ending



Position locking compact cylinder

USSD/USSD-K Series

● Bore size: $\phi 20/\phi 25/\phi 32/\phi 40/\phi 50/\phi 63/\phi 80/\phi 100$

JIS symbol



Common specifications

Item		USSD/USSD-K							
Bore size	mm	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
Actuation		Double acting							
Working fluid		Compressed air							
Max. working pressure	MPa	1.0 (≈150 psi, 10 bar)							
Min. working pressure	MPa	0.25 (≈36 psi, 2.5 bar) (no load) Note							
Proof pressure	MPa	1.6 (≈230 psi, 16 bar)							
Ambient temperature	°C	-10 (14°F) to 60 (140°F) (no freezing)							
Port size		M5		Rc1/8		Rc1/4		Rc3/8	
Stroke tolerance	mm	USSD: ^{+1.0} ₀				USSD-K: ^{+2.0} ₀			
Working piston speed	mm/s	50 to 500					50 to 300		
Cushion		USSD: None				USSD-K: Rubber cushion			
Lubrication		Not required (use turbine oil class 1 ISO VG32 if necessary for lubrication)							
Lock force	N	150	235	386	603	943	1497	2464	3847
Option		Rod end male thread (N)							
Allowable absorbed energy J	Without cushion	0.016	0.021	0.025	0.092	0.1	0.12	0.27	0.56
	With cushion	0.157	0.157	0.402	0.628	0.98	1.56	2.51	7.92

Note: Depending on the installation condition, piston rod may start moving at 0.05 MPa. Therefore, pay attention to residual and exhaust pressure.

Individual specifications

Model No.	USSD (double acting single rod)	USSD-K (double acting single rod/high load)
Stroke tolerance mm	+1.0 0	+2.0 0
Cushion	None	Rubber cushion

Stroke length

Model	Bore size (mm)	Standard stroke (mm) (*4)	Max. stroke length (mm)	Min. stroke length (mm)	Min. stroke with switch (mm)
USSD	ø20	5, 10, 15, 20, 25, 30	30	1 (*3)	5 (*4)
	ø25, ø32, ø40, ø50	5, 10, 15, 20, 25, 30, 40, 50	50		
	ø63, ø80, ø100	5, 10, 20, 30, 40, 50			
USSD-K	ø20	5, 10, 15, 20, 25, 30, 40, 50	200 (*1)		5 (*4)
	ø25, ø32, ø40, ø50	10, 15, 20, 25, 30, 40, 50 60, 70, 80, 90, 100	300 (*1)		
	ø63, ø80, ø100	10, 20, 30, 40, 50, 60, 70 80, 90, 100			

*1 : Stroke length over standard to maximum is available in increments of 10. (Example) USSD-K-20: 60, 70, 80, 90, 100

Dimensions of custom stroke length (example: 64 mm stroke length) are the same as the next longer stroke length (example: 70 mm stroke length).

*2 : The custom stroke length is available in 1 mm increments. However, the total length is the same as that of the next longer standard stroke length.

*3 : The min. stroke length is available from 1 mm. Take into account the stroke tolerance when placing an order.

4 : 10 mm or shorter type is not available for 2-color display, off-delay, strong magnetic field proof, or with T1 or T8* switch.

*5 : From 101 to 200 for $\phi 20$, 151 to 300 for $\phi 25$ to $\phi 50$, or 201 to 300 for $\phi 63$ to $\phi 100$, internal structure and total length are different in some products.

Switch specifications

- 1-color/2-color display

Item	Proximity 2-wire	Proximity 2-wire			Proximity 3-wire				Reed 2-wire						
	T1H/T1V	T2H/T2V/ T2JH/T2JV	T2YH/ T2YV	T2WH/ T2WV	T3H/ T3V	T3PH/ T3PV	T3YH/ T3YV	T3WH/ T3WV	T0H/T0V		T5H/T5V		T8H/T8V		
Applications	For programmable controller, relay, compact solenoid valve	Dedicated for programmable controller			For programmable controller, relay				For programmable controller, relay		For programmable controller, relay, IC circuit (no indicator lamp), serial connection		For programmable controller, relay		
Output method	-				NPN output	PNP output	NPN output	NPN output	-						
Pwr. supp. V.	-				10 to 28 VDC				-						
Load voltage	85 to 265 VAC	10 to 30 VDC	24 VDC ±10%	30 VDC or less				12/24 VDC	100/110 VAC	5/12/24 VDC	100/110 VAC	12/24 VDC	110 VAC	220 VAC	
Load current	5 to 100 mA	5 to 20 mA (*3)		100 mA or less		50 mA or less		5 to 50 mA	7 to 20 mA	50 mA or less	20 mA or less	5 to 50 mA	7 to 20 mA	7 to 10 mA	
Indicator lamp	LED (Lit when ON)	LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)	Yellow LED (Lit when ON)	Red/green LED (Lit when ON)	Red/green LED (Lit when ON)	LED (Lit when ON)		Without indicator lamp		LED (Lit when ON)		
Leakage current	≤ 1 mA at 100 VAC, ≤ 2 mA at 200 VAC	1 mA or less			10 µA or less				0 mA						
Weight g	1 m:33	1 m:18	1 m:33	1 m:18	1 m:18		1 m:33	1 m:18	1 m:18			1 m:33			
	3 m:87	3 m:49	3 m:87	3 m:49	3 m:49		3 m:87	3 m:49	3 m:49			3 m:87			
	5 m:142	5 m:80	5 m:142	5 m:80	5 m:80		5 m:142	5 m:80	5 m:80			5 m:142			

*1 : Refer to Ending Page 1 for detailed switch specifications and dimensions.

*2 : Switches other than the above models, such as switches with connectors, are also available. Refer to Ending Page 1.

*3 : The max. load current is 20 mA at 25°C. The current is lower than 20 mA if the operating ambient temperature around the switch is higher than 25°C.
(5 to 10 mA at 60°C)

Theoretical thrust table

(Unit: N)

Bore size (mm)	Operating direction	Working pressure MPa								
		0.25	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
ø20	Push	78.5	94.2	1.26×10^2	1.57×10^2	1.88×10^2	2.20×10^2	2.51×10^2	2.83×10^2	3.14×10^2
	Pull	58.9	70.7	94.2	1.18×10^2	1.41×10^2	1.65×10^2	1.88×10^2	2.12×10^2	2.36×10^2
ø25	Push	1.23×10^2	1.47×10^2	1.96×10^2	2.45×10^2	2.95×10^2	3.44×10^2	3.93×10^2	4.42×10^2	4.91×10^2
	Pull	94.3	1.13×10^2	1.51×10^2	1.89×10^2	2.27×10^2	2.64×10^2	3.02×10^2	3.40×10^2	3.78×10^2
ø32	Push	2.01×10^2	2.41×10^2	3.22×10^2	4.02×10^2	4.83×10^2	5.63×10^2	6.43×10^2	7.24×10^2	8.04×10^2
	Pull	1.51×10^2	1.81×10^2	2.41×10^2	3.02×10^2	3.62×10^2	4.22×10^2	4.83×10^2	5.43×10^2	6.03×10^2
ø40	Push	3.14×10^2	3.77×10^2	5.03×10^2	6.28×10^2	7.54×10^2	8.80×10^2	1.01×10^3	1.13×10^3	1.26×10^3
	Pull	2.64×10^2	3.17×10^2	4.22×10^2	5.28×10^2	6.33×10^2	7.39×10^2	8.44×10^2	9.50×10^2	1.06×10^3
ø50	Push	4.91×10^2	5.89×10^2	7.85×10^2	9.82×10^2	1.18×10^3	1.37×10^3	1.57×10^3	1.77×10^3	1.96×10^3
	Pull	4.13×10^2	4.95×10^2	6.60×10^2	8.25×10^2	9.90×10^2	1.15×10^3	1.32×10^3	1.48×10^3	1.65×10^3
ø63	Push	7.79×10^2	9.35×10^2	1.25×10^3	1.56×10^3	1.87×10^3	2.18×10^3	2.49×10^3	2.81×10^3	3.12×10^3
	Pull	7.01×10^2	8.41×10^2	1.12×10^3	1.40×10^3	1.68×10^3	1.96×10^3	2.24×10^3	2.52×10^3	2.80×10^3
ø80	Push	1.26×10^3	1.51×10^3	2.01×10^3	2.51×10^3	3.02×10^3	3.52×10^3	4.02×10^3	4.52×10^3	5.03×10^3
	Pull	1.13×10^3	1.36×10^3	1.81×10^3	2.27×10^3	2.72×10^3	3.17×10^3	3.63×10^3	4.08×10^3	4.54×10^3
ø100	Push	1.97×10^3	2.36×10^3	3.14×10^3	3.93×10^3	4.71×10^3	5.50×10^3	6.28×10^3	7.07×10^3	7.85×10^3
	Pull	1.79×10^3	2.14×10^3	2.86×10^3	3.57×10^3	4.29×10^3	5.00×10^3	5.72×10^3	6.43×10^3	7.15×10^3

USSD/USSD-K Series

How to order

● Without switch (without magnet for switch)

USSD-K - **20** - **5** - **F** - **N** - **LB**

● With switch (built-in magnet for switch)

USSD-KL - **20** - **5** - **F** - **T0H** - **R** - **N** - **LB**

A Model No.

B Bore size (mm)

C Stroke length (mm)

D Lock direction

E Switch model No.

*3

*4

F Switch quantity

G Option

H Mounting bracket

*2

*4

Code	Description
A Model No.	
USSD	Double acting
USSD-L	Double acting/with switch
USSD-K	Double acting/high load
USSD-KL	Double acting/high load/with switch

B Bore size (mm)	
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50
63	ø63
80	ø80
100	ø100

C Stroke length (mm)	
Refer to the stroke length table on the following page.	

D Lock direction	
F	Forward locking
B	Backward locking

E Switch model No.					
Axial lead wire	Radial lead wire	Contact	Voltage AC DC	Display	Lead wire
T0H*	T0V*	Reed	● ●	1-color display	2-wire
T5H*	T5V*		● ●	Without indicator lamp	
T8H*	T8V*		● ●	1-color display	
T1H*	T1V*	Proximity	●	1-color display	2-wire
T2H*	T2V*		●		
T3H*	T3V*		●	1-color display	3-wire
T3PH*	T3PV*		●		
T2WH*	T2WV*		●		
T2YH*	T2YV*		●	2-color display	2-wire
T3WH*	T3WV*		●		
T3YH*	T3YV*		●		3-wire
T2JH*	T2JV*		●	Off-delay	

* Lead wire length (m)	
Blank	1 m (standard)
3	3 m (option)
5	5 m (option)

F Switch quantity	
R	1 on rod side
H	1 on head side
D	2

G Option	
Blank	Rod end female thread
N	Rod end male thread

H Mounting bracket	
LB	Axial foot
CB	Clevis bracket (pin and snap ring attached)

⚠ Precautions for model No. selection

*1 : Switches other than **E** Switch model No. are also available. (Made to order)

Refer to Ending Page 1 for details.

*2 : The mounting bracket is attached at shipment.

3 : T8 switch cannot be mounted for USSD-*L with bore size ø20 to ø32.

*4 : Switches and mounting brackets are shipped with the product.
Contact CKD if assembling before shipment is necessary.

[Example of model No.]

USSD-KL-20-5-F-T0H-R-N

Model: Position locking compact cylinder

A Model No. : Double acting/high load/with switch

B Bore size : ø20 mm

C Stroke length : 5 mm

D Lock direction : Forward locking

E Switch model No. : Reed axial lead wire 1 m

F Switch quantity : 1 on rod side

G Option : Rod end male thread

Stroke length

Series	Stroke length (mm)	Bore size (mm)							
		ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
USSD	Standard stroke length	5	●	●	●	●	●	●	●
		10	●	●	●	●	●	●	●
		15	●	●	●	●	●	●	●
		20	●	●	●	●	●	●	●
		25	●	●	●	●	●	●	●
		30	●	●	●	●	●	●	●
		40	●	●	●	●	●	●	●
		50	●	●	●	●	●	●	●
	Min. stroke length	*1	1						
	Custom stroke length	*1, *2	1						
USSD-K	Standard stroke length	5	●	●	●	●	●	●	●
		10	●	●	●	●	●	●	●
		15	●	●	●	●	●	●	●
		20	●	●	●	●	●	●	●
		25	●	●	●	●	●	●	●
		30	●	●	●	●	●	●	●
		40	●	●	●	●	●	●	●
		50	●	●	●	●	●	●	●
		60	●	●	●	●	●	●	●
		70	●	●	●	●	●	●	●
		80	●	●	●	●	●	●	●
		90	●	●	●	●	●	●	●
		100	●	●	●	●	●	●	●
	Min. stroke length	*1	1						
	Custom stroke length	*1, *2	1						

*1: The total length is the same as that of the next longer standard stroke length.
(Less than 5 mm with switch not available)
2-color display, off-delay, or 10 mm or shorter type with T1* or T8* switch is not available.

How to order switch

SW - T0H

Switch model No.
(Item ⑤ on page 848)

Dimensions for ordering mounting bracket

Bore size (mm)	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
Mounting bracket								
Foot (LB)	USSD-LB-20	USSD-LB-25	USSD-LB-32	USSD-LB-40	USSD-LB-50	USSD-LB-63	USSD-LB-80	USSD-LB-100
Clevis bracket (CB)	SSD-CB-20	SSD-CB-25	SSD-CB-32	SSD-CB-40	SSD-CB-50	SSD-CB-63	SSD-CB-80	SSD-CB-100

*1: The foot mounting bracket is provided as 2 pcs./set.

Specifications for rechargeable battery

(Catalog No. CC-1226A)

● Design compatible with rechargeable battery manufacturing process.

USSD -...- P4*

USSD-K

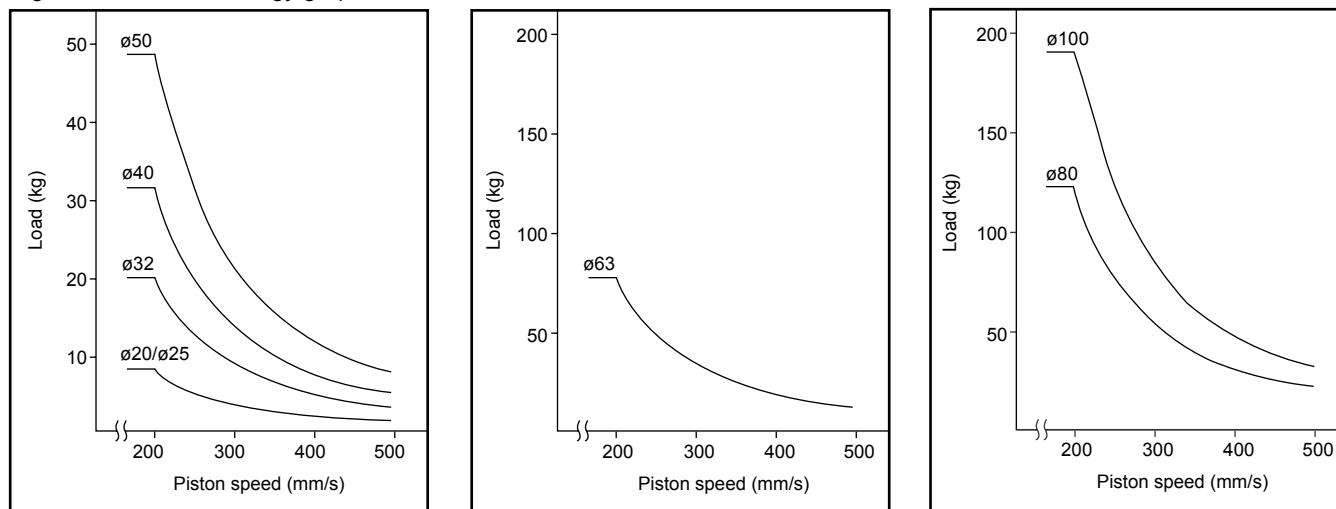
* Contact CKD for details.

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Ending

USSD/USSD-K Series

High load allowable energy graph/weight table

High load allowable energy graph



USSD Cylinder weight table (weight with switch includes weight for two cylinder switches) Unit: g

Stroke length (mm)	5		10		15		20		25		30		40		50	
Bore size (mm)	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch
ø20	173	228	185	260	198	273	211	286	223	298	236	311	-	-	-	-
ø25	247	338	262	353	278	369	294	385	310	401	325	416	357	448	388	479
ø32	342	456	364	478	386	500	408	522	429	543	451	565	495	609	538	652
ø40	493	636	520	663	546	689	573	716	600	743	626	769	679	822	732	875
ø50	859	1053	901	1095	943	1137	985	1179	1027	1221	1070	1264	1154	1348	1238	1432
ø63	1342	1621	1397	1676	-	-	1507	1786	-	-	1617	1896	1728	2007	1838	2117
ø80	2591	3004	2678	3091	-	-	2851	3264	-	-	3024	3437	3198	3611	3371	3784
ø100	4219	4786	4333	4900	-	-	4560	5127	-	-	4788	5355	5015	5582	5243	5810

USSD/USSD-K Series

Weight table

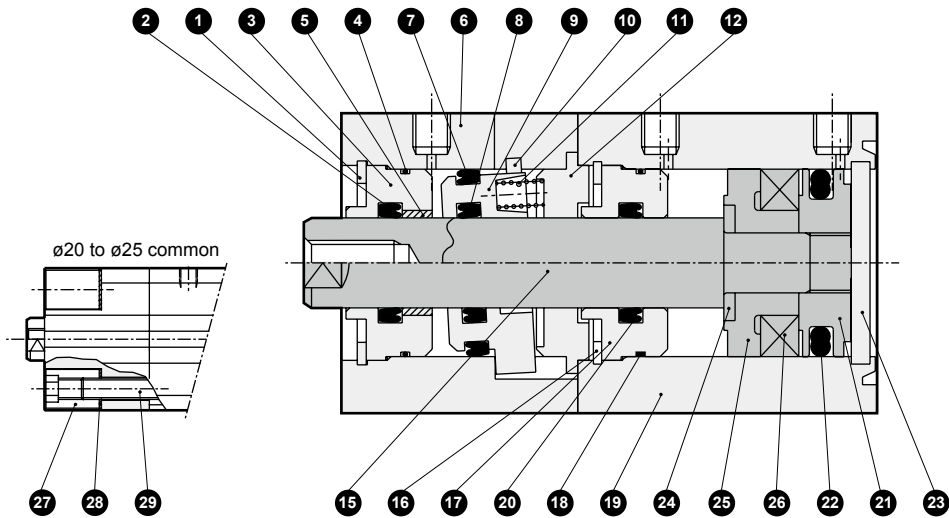
USSD-K Cylinder weight table (weight with switch includes weight for two cylinder switches) Unit: g

Stroke length (mm)	5		10		15		20		25		30		40		50		60		70		80	
Bore size (mm)	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch
ø20	185	260	198	273	211	286	223	298	236	311	248	323	273	348	298	373	323	398	348	423	373	448
ø25	-	-	278	369	294	385	310	401	325	416	342	433	374	465	406	497	438	529	470	561	502	593
ø32	-	-	408	522	429	543	451	565	473	587	495	609	538	652	581	695	624	738	667	781	710	824
ø40	-	-	573	716	600	743	626	769	652	795	679	822	732	875	785	928	838	981	891	1034	944	1087
ø50	-	-	985	1179	1027	1221	1070	1264	1113	1307	1154	1348	1238	1432	1322	1516	1406	1600	1490	1684	1574	1768
ø63	-	-	1507	1786	-	-	1617	1896	-	-	1728	2007	1838	2117	1948	2227	2058	2337	2168	2447	2278	2557
ø80	-	-	2851	3264	-	-	3024	3437	-	-	3198	3611	3371	3784	3544	3957	3717	4130	3890	4303	4063	4476
ø100	-	-	4560	5127	-	-	4788	5355	-	-	5015	5582	5243	5810	5471	6038	5699	6266	5927	6494	6155	6722
Stroke length (mm)	90		100		110		120		130		140		150		160		170		180		190	
Bore size (mm)	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch
ø20	398	473	423	498	448	523	473	548	498	573	523	598	548	623	573	648	598	673	623	698	648	723
ø25	534	625	566	657	598	689	630	721	662	753	694	785	726	817	758	849	790	881	822	913	854	945
ø32	753	867	796	910	839	953	882	996	925	1039	968	1082	1011	1125	1053	1167	1096	1210	1139	1253	1182	1296
ø40	997	1140	1050	1193	1103	1246	1156	1299	1209	1352	1262	1405	1315	1458	1368	1511	1421	1564	1474	1617	1527	1670
ø50	1658	1852	1742	1936	1826	2020	1910	2104	1994	2188	2078	2272	2162	2356	2260	2454	2345	2539	2430	2624	2515	2709
ø63	2388	2667	2498	2777	2608	2887	2718	2997	2828	3107	2938	3217	3048	3327	3158	3437	3268	3547	3378	3657	3488	3767
ø80	4236	4649	4409	4822	4582	4995	4755	5168	4928	5341	5101	5514	5274	5687	5447	5860	5620	6033	5793	6206	5966	6379
ø100	6383	6950	6611	7178	6839	7406	7067	7634	7295	7862	7523	8090	7751	8318	7979	8546	8207	8774	8435	9002	8663	9230
Stroke length (mm)	200		210		220		230		240		250		260		270		280		290		300	
Bore size (mm)	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch	No switch	Switch
ø20	673	748	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ø25	886	977	929	1009	961	1041	993	1073	1025	1105	1057	1137	1089	1169	1121	1201	1153	1233	1185	1265	1217	1297
ø32	1225	1339	1268	1382	1311	1425	1354	1468	1397	1511	1440	1554	1483	1597	1526	1640	1569	1683	1612	1726	1655	1769
ø40	1580	1723	1633	1776	1686	1829	1739	1882	1792	1935	1845	1988	1898	2041	1951	2094	2004	2147	2057	2200	2110	2253
ø50	2600	2794	2685	2879	2770	2964	2855	3049	2940	3134	3025	3219	3110	3304	3195	3389	3280	3474	3365	3559	3450	3644
ø63	3598	3877	3707	3986	3817	4096	3927	4206	4037	4316	4147	4426	4257	4536	4367	4646	4477	4756	4587	4866	4697	4976
ø80	4139	6552	6311	6724	6484	6897	6657	7070	6830	7243	7003	7416	7176	7589	7349	7762	7522	7935	7695	8108	7868	8281
ø100	8891	9458	9120	9687	9348	9915	9576	10143	9804	10371	10032	10599	10260	10827	10488	11055	10716	11283	10944	11511	11172	11739

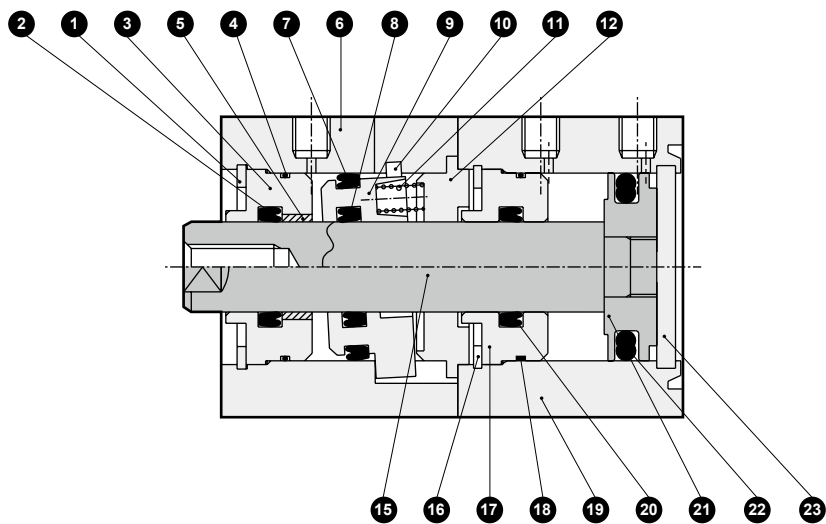
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
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RV3*
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SpdContr
Ending

Internal structure and parts list (ø20, ø25)

- USSD-L-20, 25-F
(Double acting, with switch, forward locking: F)



- USSD-20, 25-F
(Double acting, forward locking: F)



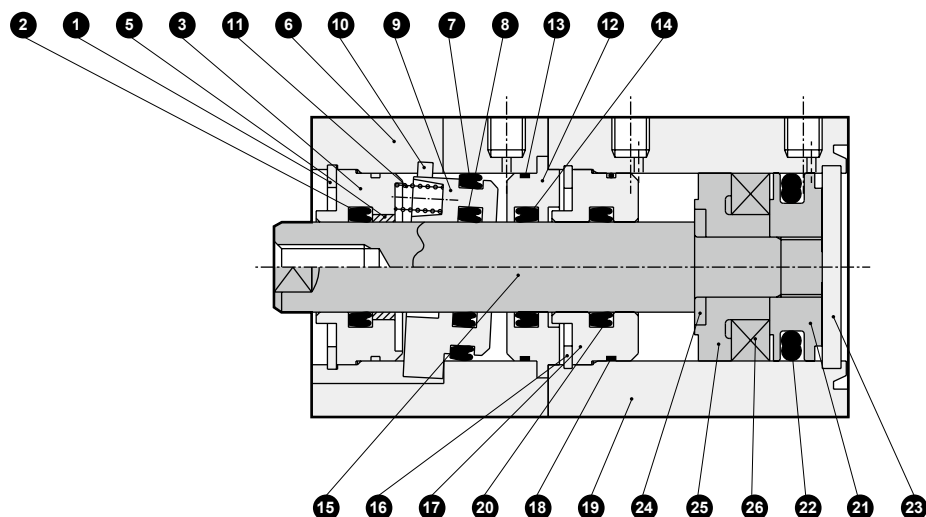
Cannot be disassembled

Parts list

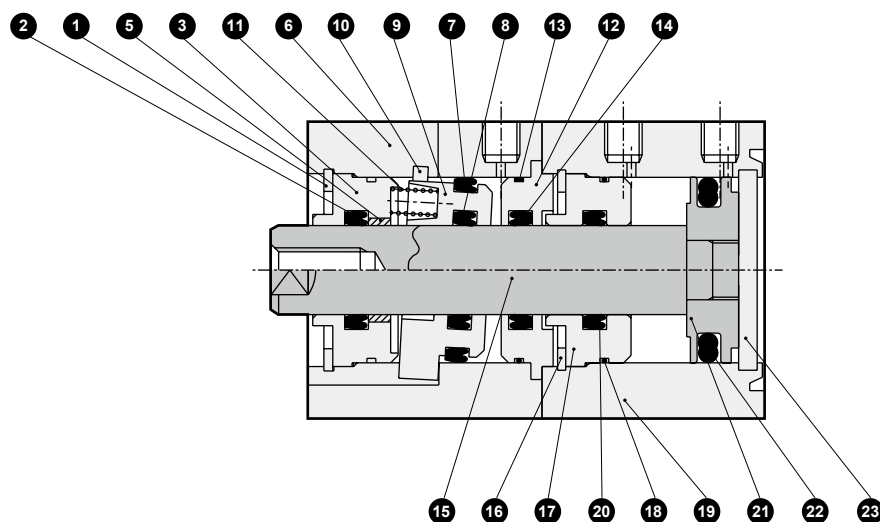
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	C type snap ring (2)	Steel	Zinc phosphate film	9	Lock metal	Special steel	Zinc chromate
2	Rod packing (2)	Nitrile rubber		10	Release lever	Steel	Black finish
3	Rod metal (2)	Special aluminum	Alumite	11	Spring	Steel	Black finish
4	Rod metal gasket (2)	Nitrile rubber		12	Joint	Aluminum alloy	
5	Bush (2)	Dry bearing		13	Rod metal gasket (3)	Nitrile rubber	(B type only)
6	Lock body	Aluminum alloy	Hard alumite	14	Rod packing (4)	Nitrile rubber	(B type only)
7	Piston packing (2)	Nitrile rubber		15	Piston rod	Stainless steel	Industrial chrome plating
8	Rod packing (3)	Nitrile rubber		16	C type snap ring (1)	Steel	Zinc phosphate film

Internal structure and parts list (ø20, ø25)

- USSD-L-20, 25-B
(Double acting, with switch, backward locking: B)



- USSD-20, 25-B
(Double acting, backward locking: B)



Cannot be disassembled

Parts list

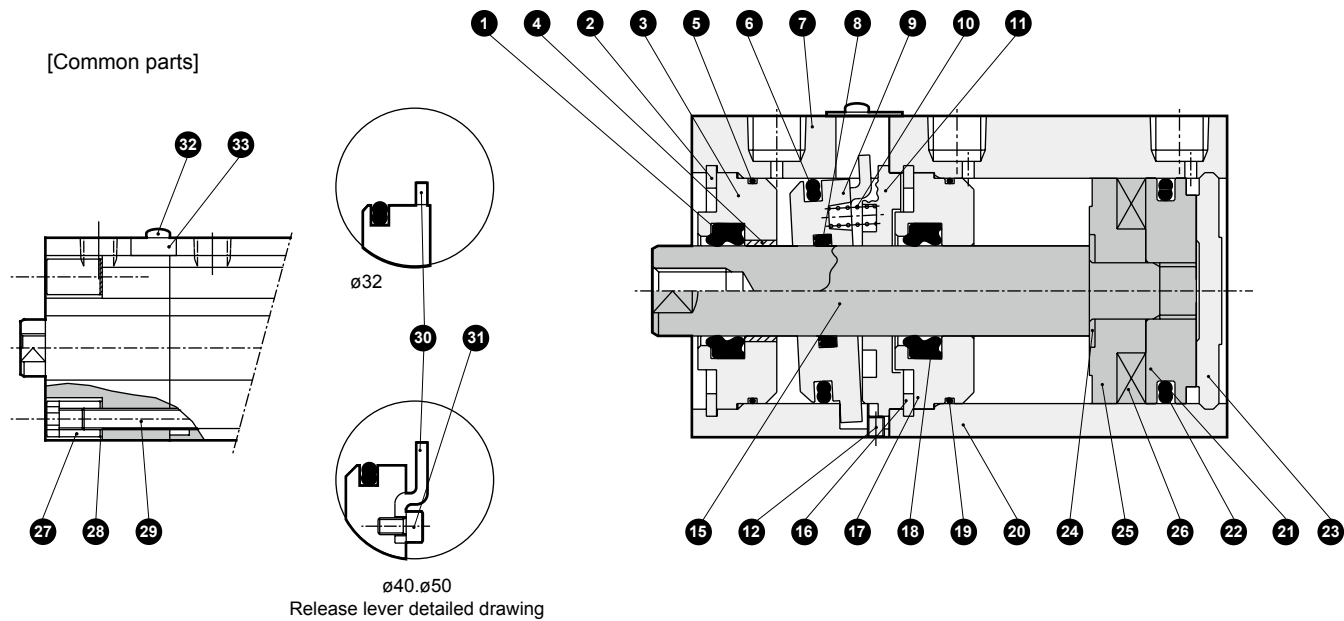
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
17	Rod metal (1)	Special aluminum	Alumite	24	Spacer washer	Stainless steel	With switch only
18	Rod metal gasket (1)	Nitrile rubber		25	Spacer	Special resin	With switch only
19	Cylinder body	Aluminum alloy	Hard alumite	26	Piston magnet	Plastic magnet	With switch only
20	Rod packing (1)	Nitrile rubber		27	Round nut	Steel	Zinc chromate
21	Piston	Stainless steel		28	Conical spring washer	Steel	Black finish
22	Piston packing (1)	Nitrile rubber		29	Hexagon socket set screw	Steel	Black finish
23	Cover	Stainless steel					

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

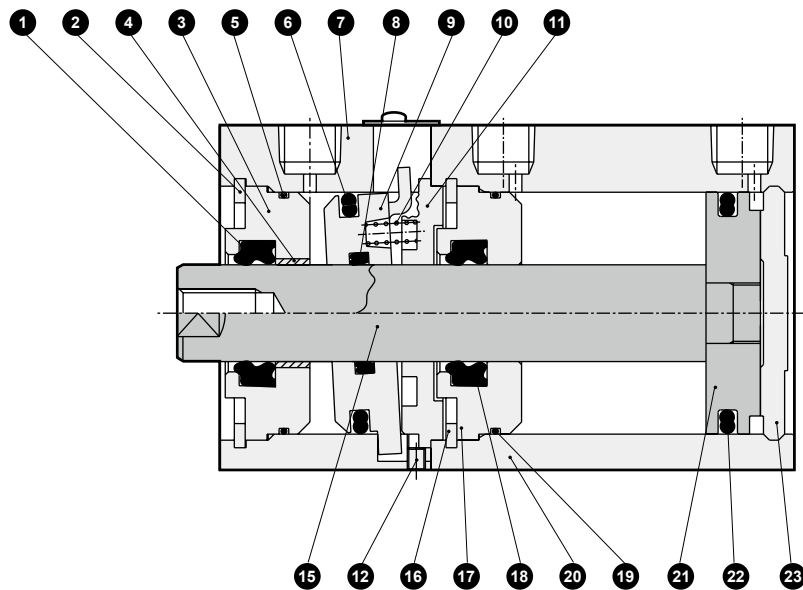
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LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Internal structure and parts list (ø32 to ø50)

- USSD-L-32 to 50-F
(Double acting, with switch, forward locking: F)



- USSD-32 to 50-F
(Double acting, forward locking: F)



Cannot be disassembled

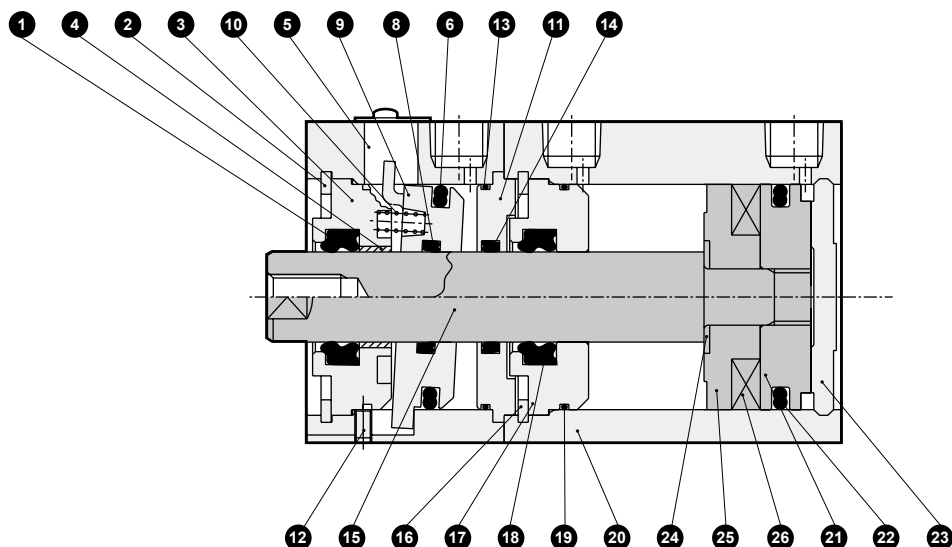
Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod packing (2)	Nitrile rubber		9	Lock metal	Special steel	Zinc chromate
2	C type snap ring (2)	Steel	Zinc phosphate film	10	Spring	Steel	Black finish
3	Rod metal (2)	Aluminum alloy	Alumite (*1)	11	Joint	Aluminum alloy	
4	Bush (2)	Dry bearing		12	Hexagon socket set screw	Steel	Black finish (ø40 to ø50)
5	Rod metal gasket (2)	Nitrile rubber		13	Rod metal gasket (3)	Nitrile rubber	(B type only)
6	Piston packing (2)	Nitrile rubber		14	Rod packing (4)	Nitrile rubber	(B type only)
7	Lock body	Aluminum alloy	Hard alumite	15	Piston rod	Steel	Industrial chrome plating
8	Rod packing (3)	Nitrile rubber		16	C type snap ring (1)	Steel	Zinc phosphate film

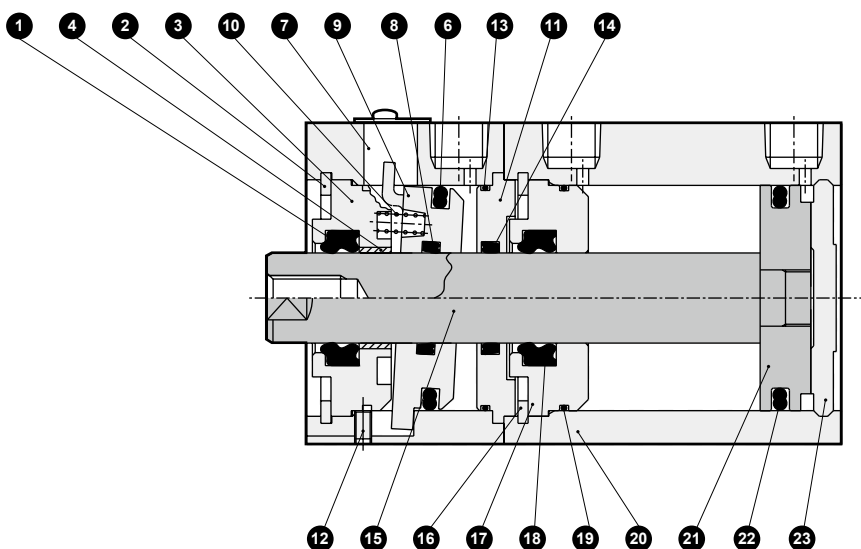
*1: If the lock direction is F with ø32, chromate is used for the surface treatment.

Internal structure and parts list (ø32 to ø50)

- USSD-L-32 to 50-B
(Double acting, with switch, backward locking: B)



- USSD-32 to 50-B
(Double acting, backward locking: B)



Cannot be disassembled

Parts list

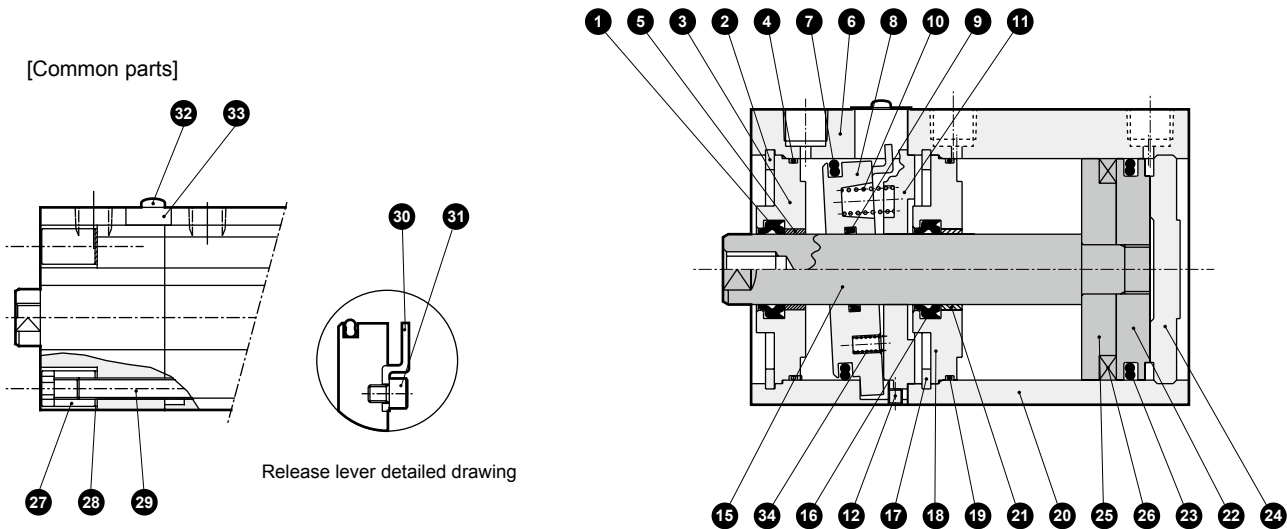
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
17	Rod metal (1)	Aluminum alloy	Alumite	25	Spacer	Special resin	With switch only
18	Rod packing (1)	Nitrile rubber		26	Piston magnet	Plastic magnet	With switch only
19	Rod metal gasket (1)	Nitrile rubber		27	Round nut	Steel	Zinc chromate
20	Cylinder body	Aluminum alloy	Hard alumite	28	Conical spring washer	Steel	Black finish
21	Piston	Aluminum alloy		29	Hexagon socket set screw	Steel	Black finish
22	Piston packing (1)	Nitrile rubber		30	Release lever	Steel	ø32 Black finish ø40 to ø50 Zinc chromate
23	Cover	Aluminum alloy		31	Hexagon socket head cap screw	Steel	ø40 to ø50
24	Spacer washer	Stainless steel	With switch only	32	Cross-recessed round machine screw	Steel	
				33	Dust cover	Stainless steel	

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

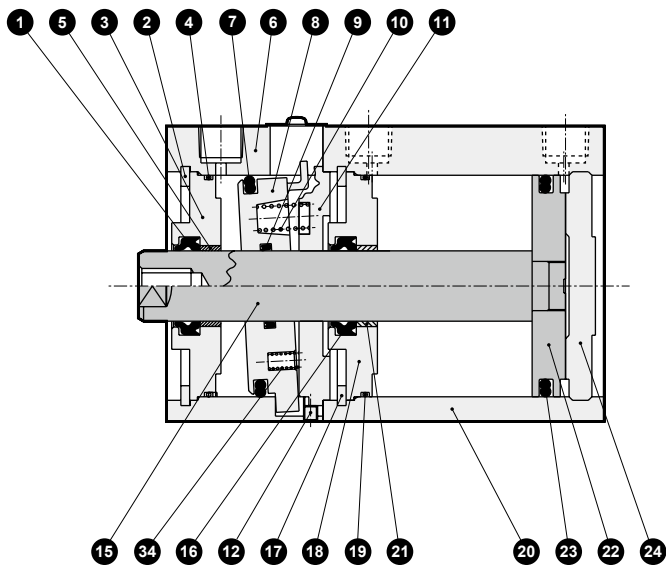
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Internal structure and parts list (ø63 to ø100)

- USSD-L-63 to 100-F
(Double acting, with switch, forward locking: F)



- USSD-63 to 100-F
(Double acting, forward locking: F)



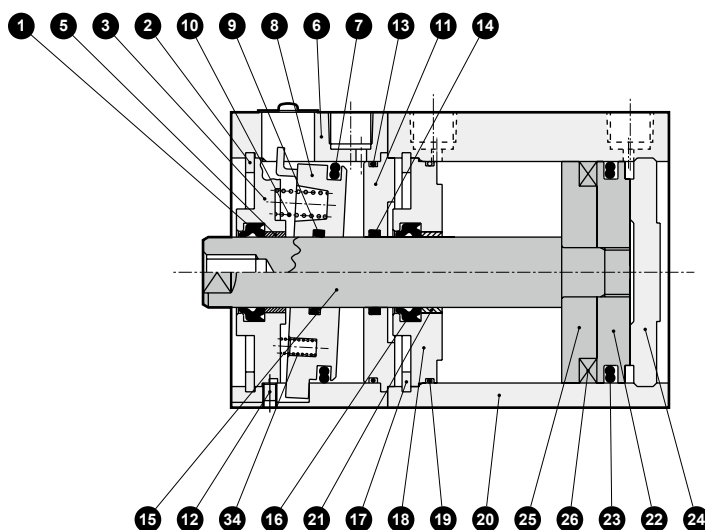
Cannot be disassembled

Parts list

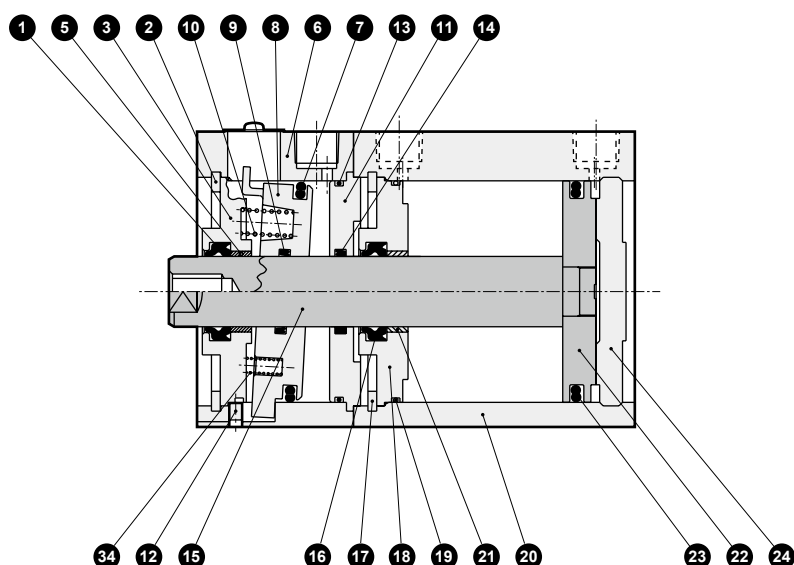
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod packing (2)	Nitrile rubber		9	Rod packing (3)	Nitrile rubber	
2	C type snap ring (2)	Steel	Zinc phosphate film	10	Spring (1)	Steel	Black finish
3	Rod metal (2)	Aluminum alloy	Alumite	11	Joint	Aluminum alloy	
4	Rod metal gasket (2)	Nitrile rubber		12	Hexagon socket set screw	Steel	Black finish
5	Bush (2)	Dry bearing		13	Rod metal gasket (3)	Nitrile rubber	(B type only)
6	Lock body	Aluminum alloy	Hard alumite	14	Rod packing (4)	Nitrile rubber	(B type only)
7	Piston packing (2)	Nitrile rubber		15	Piston rod	Steel	Industrial chrome plating
8	Lock metal	Special steel	Zinc chromate	16	Rod packing (1)	Nitrile rubber	

Internal structure and parts list (ø63 to ø100)

- USSD-L-ø63 to 100-B
(Double acting, with switch, backward locking: B)



- USSD-ø63 to 100-B
(Double acting, backward locking: B)



Cannot be disassembled

Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
17	C type snap ring (1)	Steel	Zinc phosphate film	26	Piston magnet	Plastic magnet	With switch only
18	Rod metal (1)	Aluminum alloy	Alumite	27	Round nut	Steel	Zinc chromate
19	Rod metal gasket (1)	Nitrile rubber		28	Conical spring washer	Steel	Black finish
20	Cylinder body	Aluminum alloy	Hard alumite	29	Hexagon socket set screw	Steel	Black finish
21	Bush (1)	Dry bearing		30	Release lever	Steel	Zinc chromate
22	Piston	Aluminum alloy	Chromate	31	Hexagon socket head cap screw	Steel	Black finish
23	Piston packing (1)	Nitrile rubber		32	Cross-recessed round machine screw	Steel	
24	Cover	Aluminum alloy	Chromate	33	Dust cover	Stainless steel	
25	Spacer	Aluminum alloy	Chromate (with switch only)	34	Spring (2)	Steel	Black finish (ø80/ø100 only)

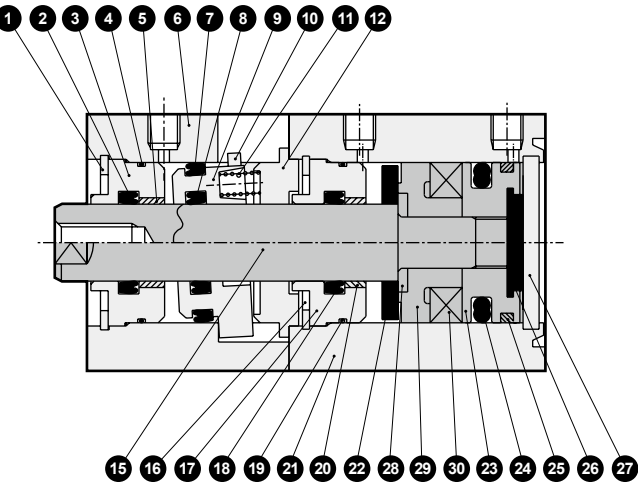
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
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HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

USSD-K Series

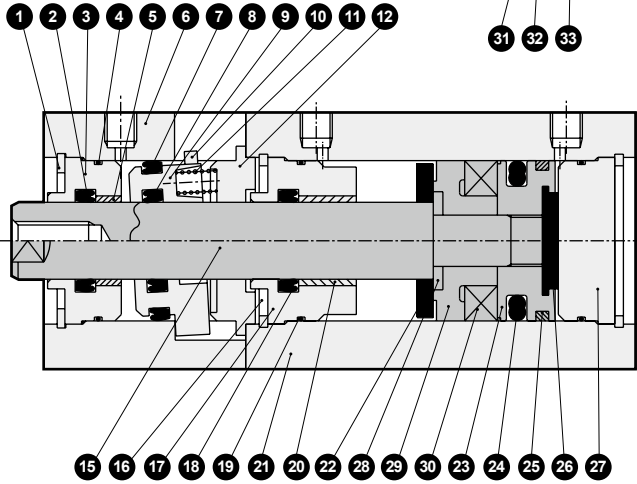
Internal structure and parts list (high load ø20, ø25)

- USSD-KL-20, 25-F (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, forward locking: F)

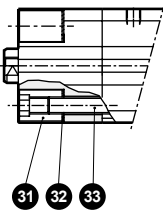
ø20: 100 stroke length or less
ø25: 150 stroke length or less



ø20: Over 100 to 200 stroke length
ø25: Over 150 to 300 stroke length

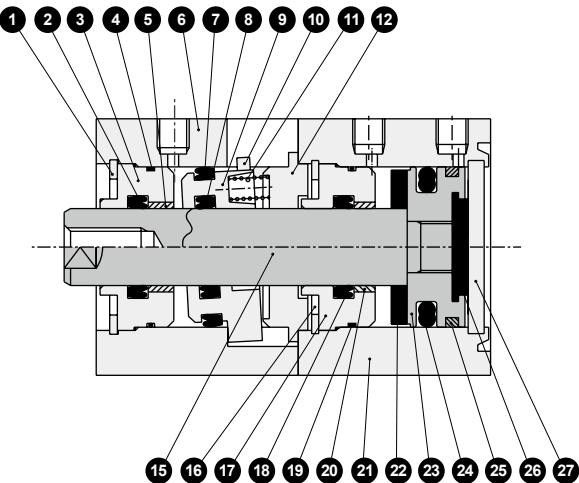


ø20 to ø25 common

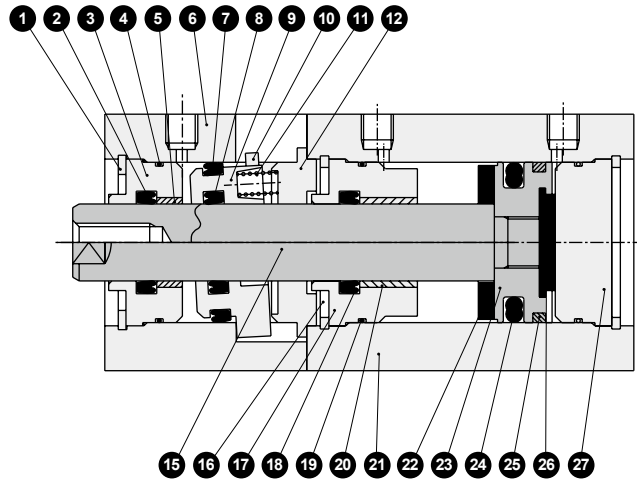


- USSD-K-20, 25-F (Internal structure varies depending on stroke length.)
(Double acting, high load, forward locking: F)

ø20: 100 stroke length or less
ø25: 150 stroke length or less



ø20: Over 100 to 200 stroke length
ø25: Over 150 to 300 stroke length



Cannot be disassembled

Parts list

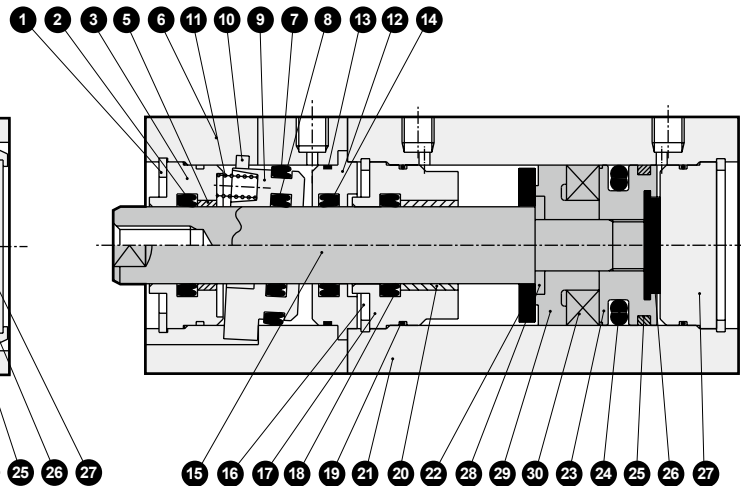
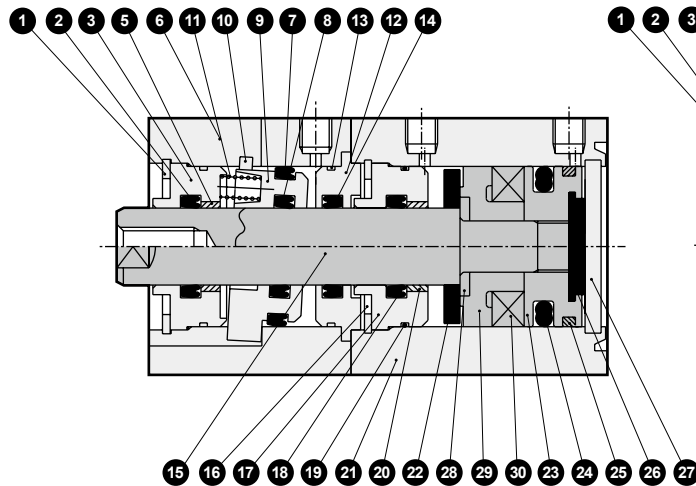
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	C type snap ring (2)	Steel	Zinc phosphate film	10	Release lever	Steel	Black finish
2	Rod packing (2)	Nitrile rubber		11	Spring	Steel	Black finish
3	Rod metal (2)	Special aluminum	Alumite	12	Joint	Aluminum alloy	
4	Rod metal gasket (2)	Nitrile rubber		13	Rod metal gasket (3)	Nitrile rubber	(B type only)
5	Bush (2)	Dry bearing		14	Rod packing (4)	Nitrile rubber	(B type only)
6	Lock body	Aluminum alloy	Hard alumite	15	Piston rod	Stainless steel	Industrial chrome plating
7	Piston packing (2)	Nitrile rubber		16	C type snap ring (1)	Steel	Zinc phosphate film
8	Rod packing (3)	Nitrile rubber		17	Rod metal (1)	Special aluminum	Alumite
9	Lock metal	Special steel	Zinc chromate	18	Rod packing (1)	Nitrile rubber	

Internal structure and parts list (high load ø20, ø25)

- USSD-KL-20, 25-B (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, backward locking: B)

ø20: 100 stroke length or less
ø25: 150 stroke length or less

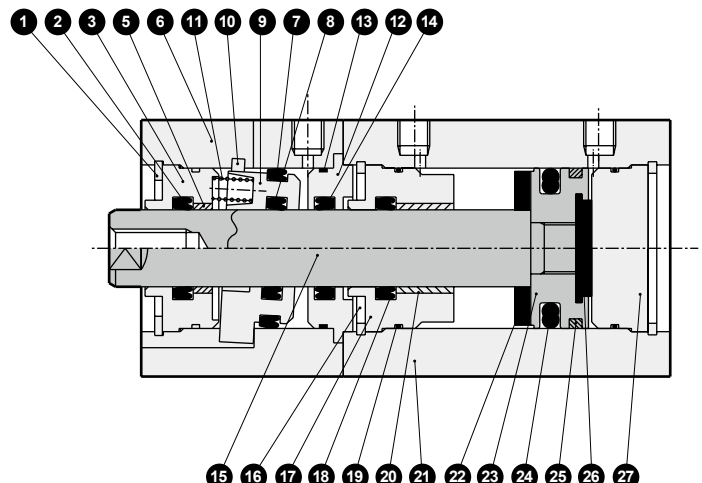
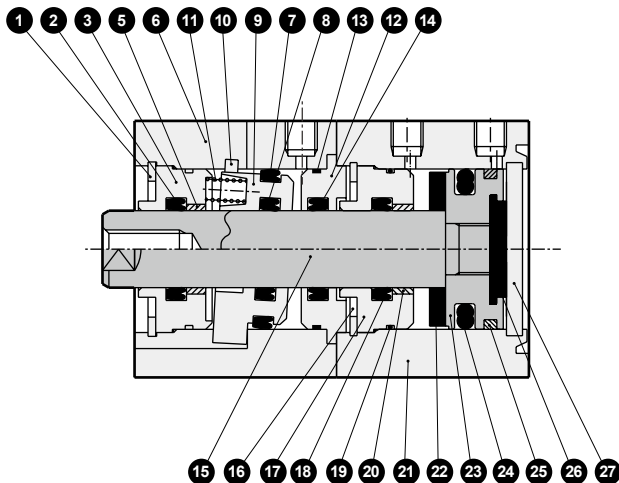
ø20: Over 100 to 200 stroke length
ø25: Over 150 to 300 stroke length



- USSD-K-20, 25-B (Internal structure varies depending on stroke length.)
(Double acting, high load, backward locking: B)

ø20: 100 stroke length or less
ø25: 150 stroke length or less

ø20: Over 100 to 200 stroke length
ø25: Over 150 to 300 stroke length



Cannot be disassembled

Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
19	Rod metal gasket (1)	Nitrile rubber		27	Cover	Stainless steel	(*1)
20	Bush (1)	Dry bearing		28	Spacer washer	Stainless steel	With switch only
21	Cylinder body	Aluminum alloy	Hard alumite	29	Spacer	Special resin	With switch only
22	Cushion rubber (R)	Urethane rubber		30	Piston magnet	Plastic magnet	
23	Piston	Stainless steel		31	Round nut	Steel	Zinc chromate
24	Piston packing (1)	Nitrile rubber		32	Conical spring washer	Steel	Black finish
25	Wear ring	Acetal resin		33	Hexagon socket set screw	Steel	Black finish
26	Cushion rubber (H)	Urethane rubber					

*1: For cover for long stroke, Material: Aluminum alloy Remarks: Alumite

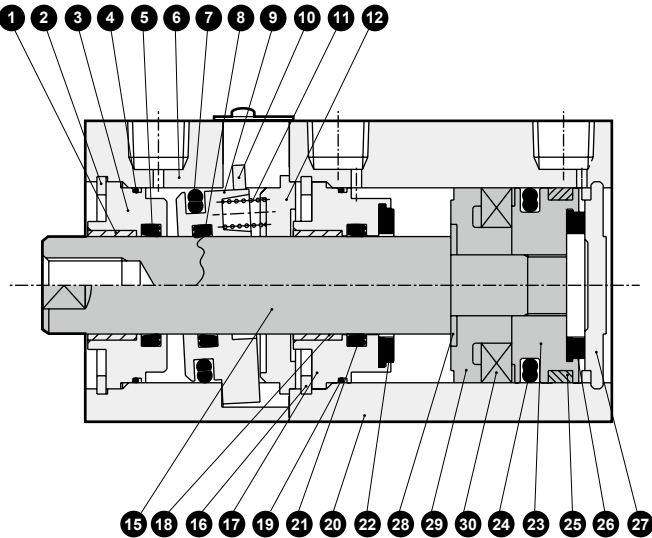
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
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LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

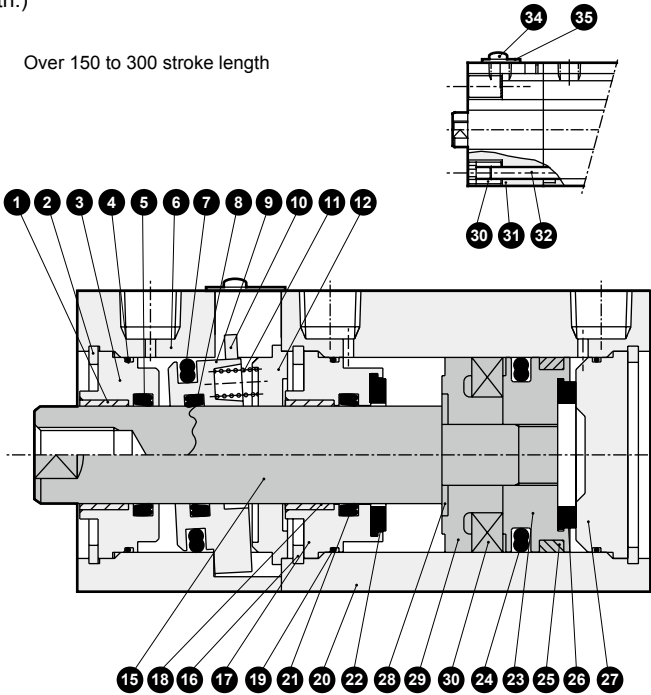
Internal structure and parts list (high load ø32)

- USSD-KL-32-F (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, forward locking: F)

150 stroke length or less

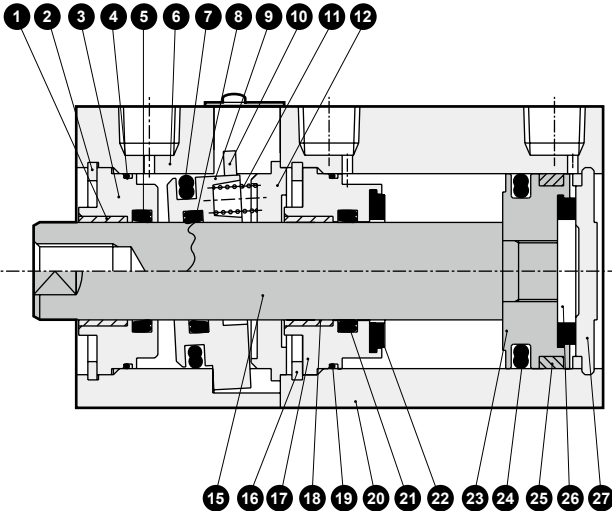


Over 150 to 300 stroke length

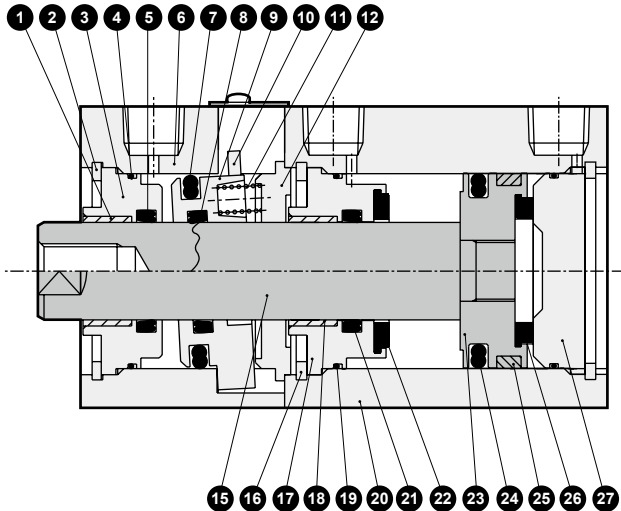


- USSD-K-32-F (Internal structure varies depending on stroke length.)
(Double acting, high load, forward locking: F)

150 stroke length or less



Over 150 to 300 stroke length



Cannot be disassembled

Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Bush (2)	Dry bearing		10	Release lever	Steel	Black finish
2	C type snap ring (2)	Steel	Zinc phosphate film	11	Spring	Steel	Black finish
3	Rod metal (2)	Special aluminum	Alumite (*1)	12	Joint	Aluminum alloy	
4	Rod metal gasket (2)	Nitrile rubber		13	Rod metal gasket (3)	Nitrile rubber	(B type only)
5	Rod packing (2)	Nitrile rubber		14	Rod packing (4)	Nitrile rubber	(B type only)
6	Lock body	Aluminum alloy	Hard alumite	15	Piston rod	Stainless steel	Industrial chrome plating
7	Piston packing (2)	Nitrile rubber		16	C type snap ring (1)	Steel	Zinc phosphate film
8	Rod packing (3)	Nitrile rubber		17	Rod metal (1)	Special aluminum	Chromate
9	Lock metal	Special steel	Zinc chromate	18	Bush (1)	DU dry bearing	

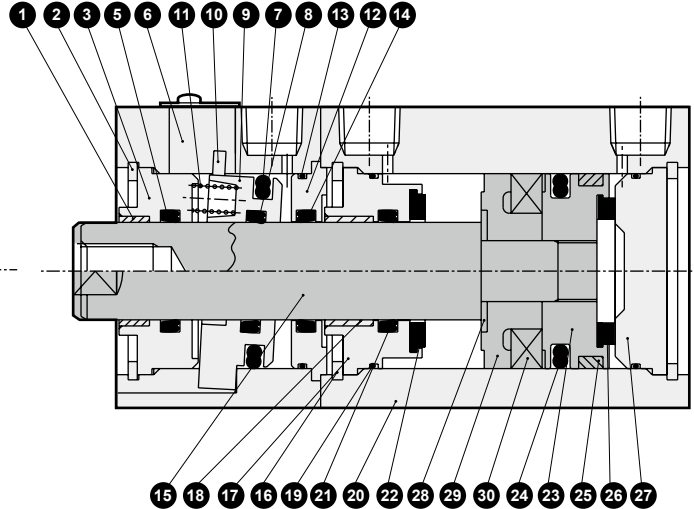
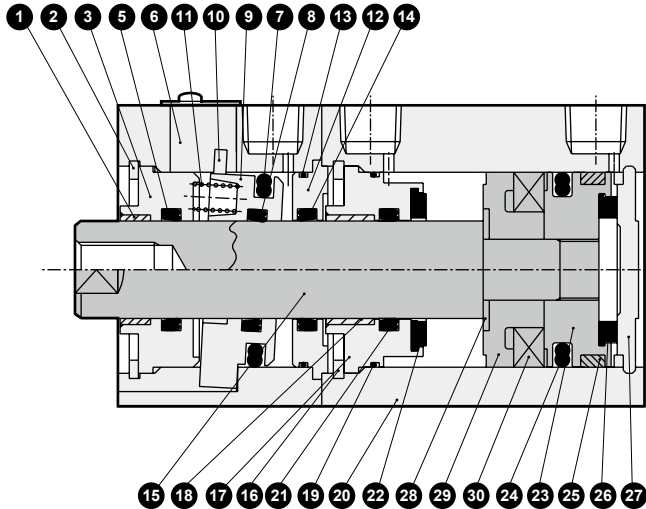
*1: If the lock direction is F, chromate is used for the surface treatment.

Internal structure and parts list (high load ø32)

- USSD-KL-32-B (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, backward locking: B)

150 stroke length or less

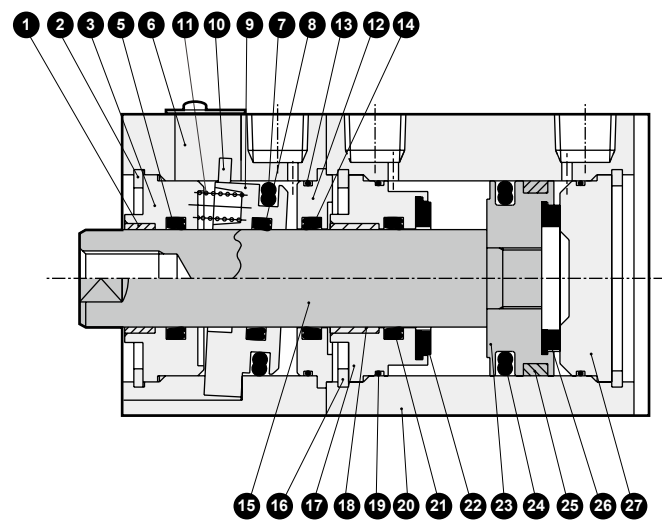
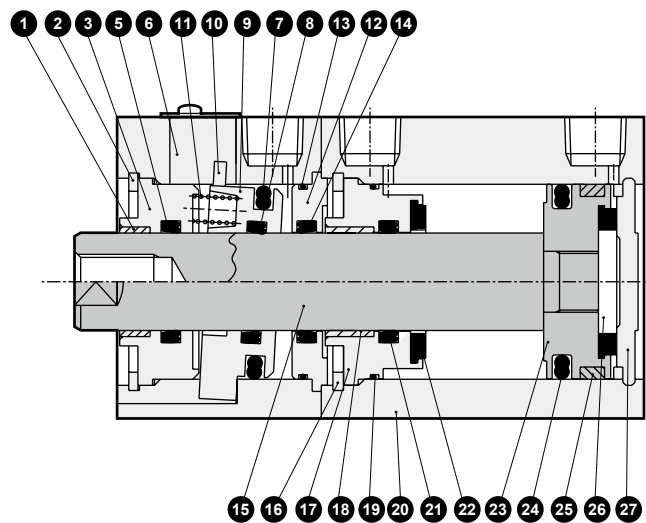
Over 150 to 300 stroke length



- USSD-K-32-B (Internal structure varies depending on stroke length.)
(Double acting, high load, backward locking: B)

150 stroke length or less

Over 150 to 300 stroke length



Cannot be disassembled

Parts list

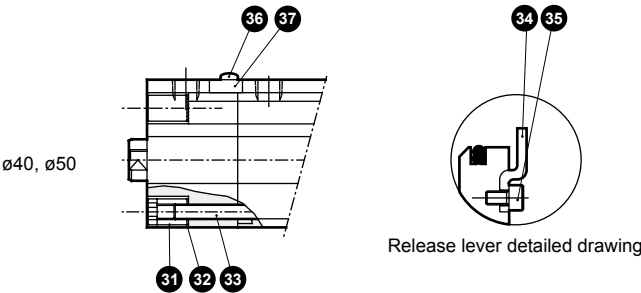
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
19	Rod metal gasket (1)	Nitrile rubber		28	Spacer washer	Stainless steel	With switch only
20	Cylinder body	Aluminum alloy	Hard alumite	29	Spacer	Special resin	With switch only
21	Rod packing (1)	Nitrile rubber		30	Piston magnet	Plastic magnet	With switch only
22	Cushion rubber (R)	Urethane rubber		31	Round nut	Steel	Zinc chromate
23	Piston	Stainless steel		32	Conical spring washer	Steel	Black finish
24	Piston packing (1)	Nitrile rubber		33	Hexagon socket set screw	Steel	Black finish
25	Wear ring	Acetal resin		34	Cross-recessed round machine screw	Steel	
26	Cushion rubber (H)	Urethane rubber		35	Dust cover	Stainless steel	
27	Cover	Aluminum alloy	Chromate (*1)				

*1: For cover for long stroke, Remarks: Alumite

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Internal structure and parts list (high load ø40, ø50)

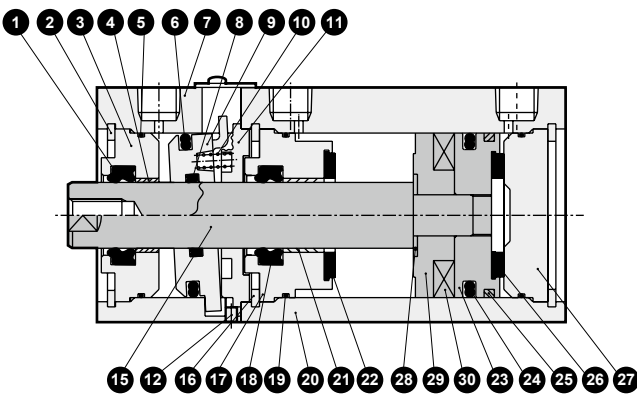
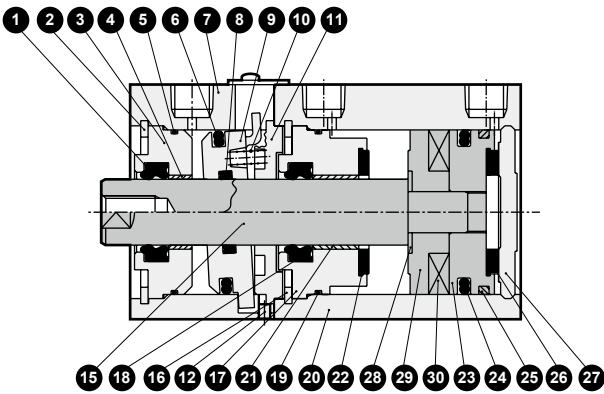
[Common parts]



- USSD-KL-40, 50-F (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, forward locking: F)

ø40/ø50: 150 stroke length or less

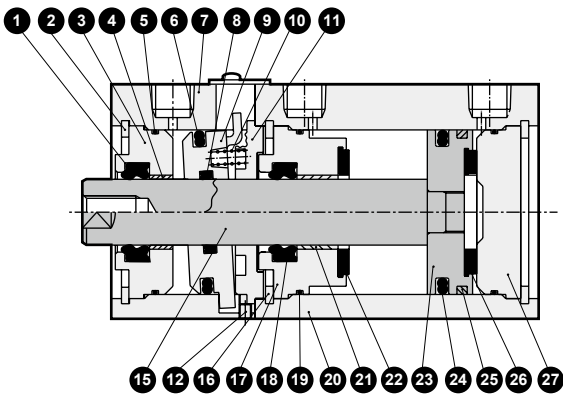
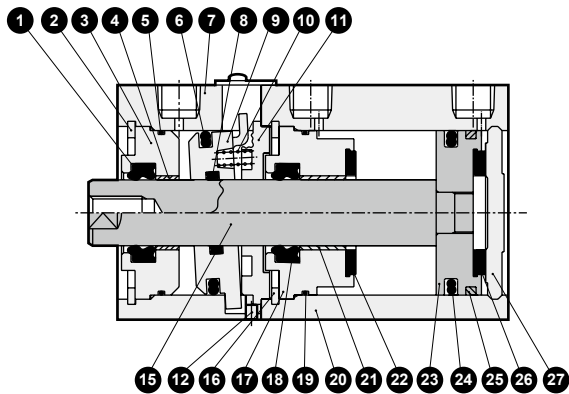
ø40/ø50: Over 150 to 300 stroke length



- USSD-K-40, 50-F (Internal structure varies depending on stroke length.)
(Double acting, high load, forward locking: F)

ø40/ø50: 150 stroke length or less

ø40/ø50: Over 150 to 300 stroke length



Cannot be disassembled

Parts list

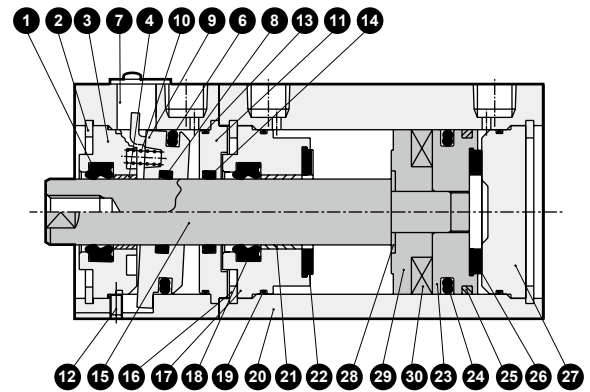
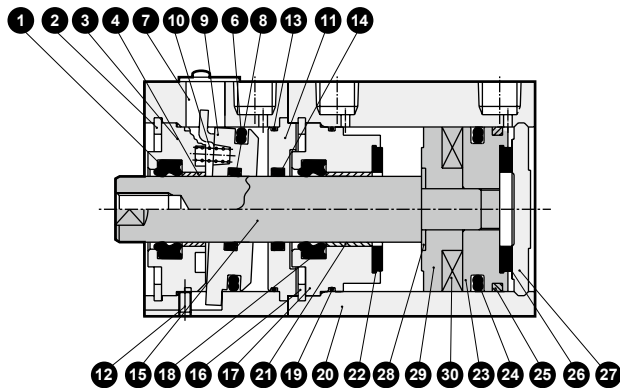
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod packing (2)	Nitrile rubber		10	Spring	Steel	Black finish
2	C type snap ring (2)	Steel	Zinc phosphate film	11	Joint	Aluminum alloy	
3	Rod metal (2)	Aluminum alloy	Alumite	12	Hexagon socket set screw	Steel	Black finish
4	Bush (2)	Dry bearing		13	Rod metal gasket (3)	Nitrile rubber	(B type only)
5	Rod metal gasket (2)	Nitrile rubber		14	Rod packing (4)	Nitrile rubber	(B type only)
6	Piston packing (2)	Nitrile rubber		15	Piston rod	Steel	Industrial chrome plating
7	Lock body	Aluminum alloy	Hard alumite	16	C type snap ring (1)	Steel	Zinc phosphate film
8	Rod packing (3)	Nitrile rubber		17	Rod metal (1)	Aluminum alloy	Chromate
9	Lock metal	Special steel	Zinc chromate	18	Rod packing (1)	Nitrile rubber	

Internal structure and parts list (high load ø40, ø50)

- USSD-KL-40, 50-B (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, backward locking: B)

ø40/ø50: 150 stroke length or less

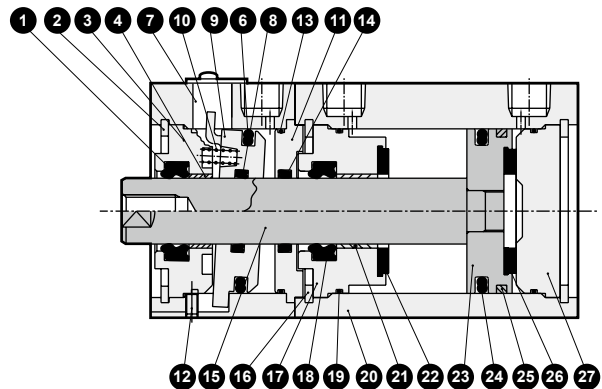
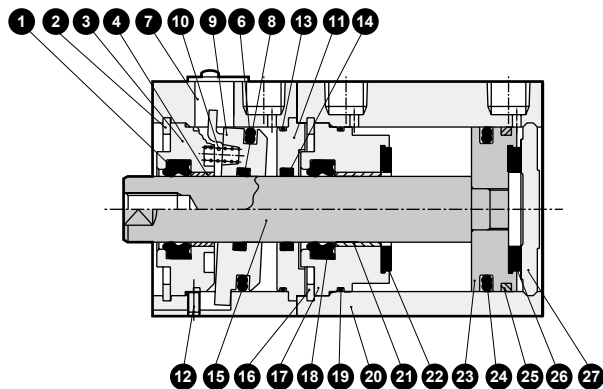
Over 150 to 300 stroke length



- USSD-K-40, 50-B (Internal structure varies depending on stroke length.)
(Double acting, high load, backward locking: B)

ø40/ø50: 150 stroke length or less

Over 150 to 300 stroke length



Cannot be disassembled

Parts list

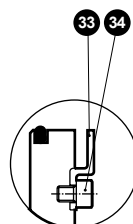
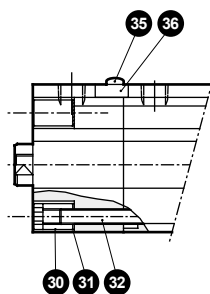
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
19	Rod metal gasket (1)	Nitrile rubber		29	Spacer	Special resin	With switch only
20	Cylinder body	Aluminum alloy	Hard alumite	30	Piston magnet	Plastic magnet	With switch only
21	Bush (1)	Dry bearing		31	Round nut	Steel	Zinc chromate
22	Cushion rubber (R)	Urethane rubber		32	Conical spring washer	Steel	Black finish
23	Piston	Aluminum alloy		33	Hexagon socket set screw	Steel	Black finish
24	Piston packing (1)	Nitrile rubber		34	Release lever	Steel	Zinc chromate
25	Wear ring	Acetal resin		35	Hexagon socket head cap screw	Steel	Black finish
26	Cushion rubber (H)	Urethane rubber		36	Cross-recessed round machine screw	Steel	
27	Cover	Aluminum alloy	Chromate (*1)	37	Dust cover	Stainless steel	
28	Spacer washer	Stainless steel	With switch only				

*1: For cover for long stroke, Remarks: Alumite

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

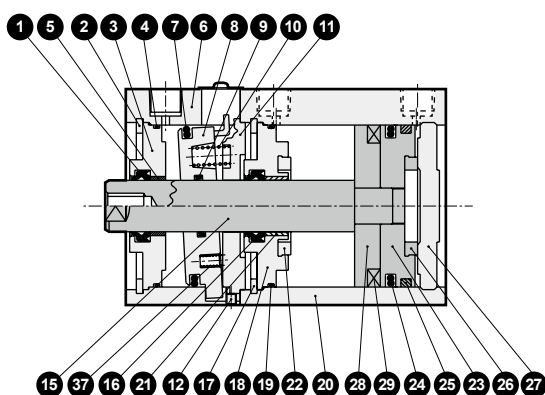
Internal structure and parts list (high load ø63 to ø100)

[Common parts]

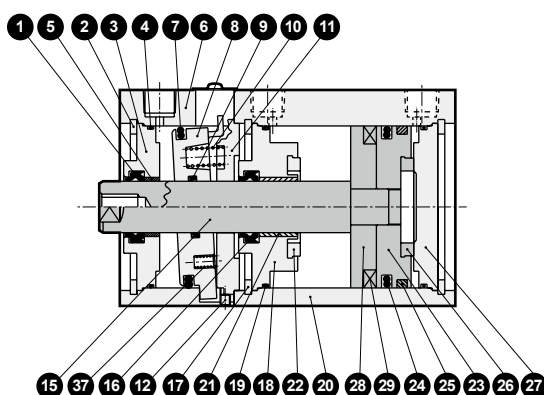


Release lever detailed drawing

- USSD-KL-63 to 100-F (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, forward locking: F)
200 stroke length or less

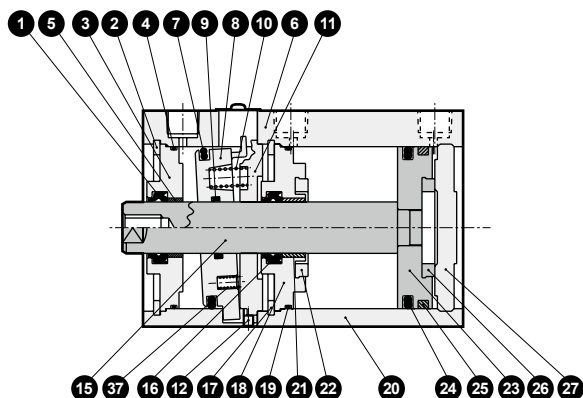


Over 200 to 300 stroke length

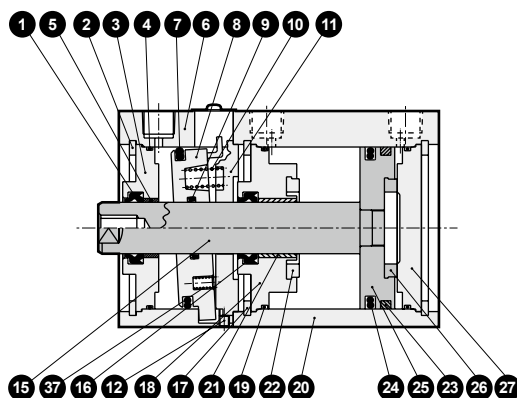


- USSD-K-63 to 100-F (Internal structure varies depending on stroke length.)
(Double acting, high load, forward locking: F)

200 stroke length or less



Over 200 to 300 stroke length



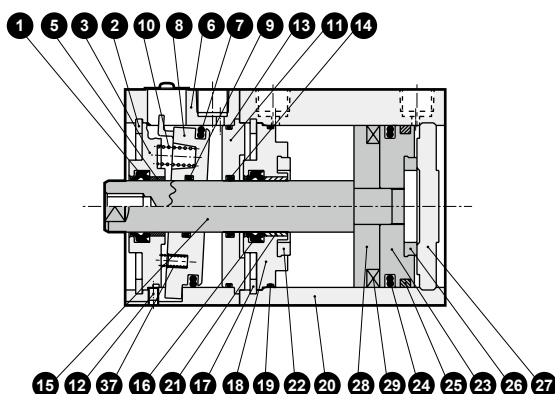
Cannot be disassembled

Parts list

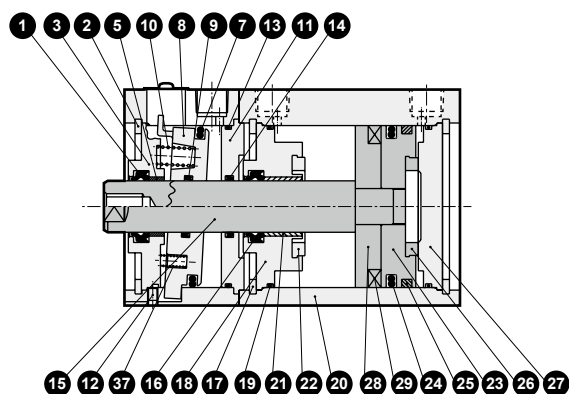
No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
1	Rod packing (2)	Nitrile rubber		10	Spring (1)	Steel	Black finish
2	C type snap ring (2)	Steel	Zinc phosphate film	11	Joint	Aluminum alloy	
3	Rod metal (2)	Aluminum alloy	Alumite	12	Hexagon socket set screw	Steel	Black finish
4	Rod metal gasket (2)	Nitrile rubber		13	Rod metal gasket (3)	Nitrile rubber	(B type only)
5	Bush (2)	Dry bearing		14	Rod packing (4)	Nitrile rubber	(B type only)
6	Lock body	Aluminum alloy	Hard alumite	15	Piston rod	Steel	Industrial chrome plating
7	Piston packing (2)	Nitrile rubber		16	Rod packing (1)	Nitrile rubber	
8	Lock metal	Special steel	Zinc chromate	17	C type snap ring (1)	Steel	Zinc phosphate film
9	Rod packing (3)	Nitrile rubber		18	Rod metal (1)	Aluminum alloy	Alumite

Internal structure and parts list (high load ø63 to ø100)

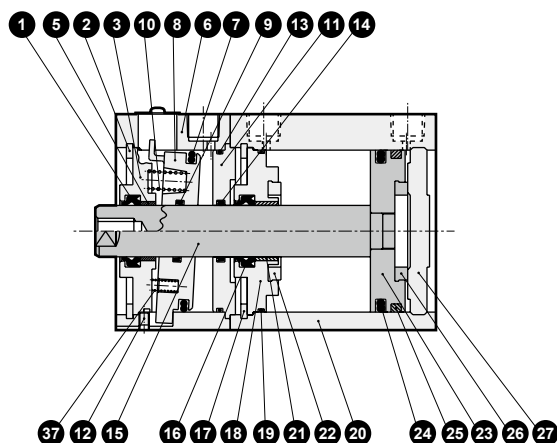
- USSD-KL-63 to 100-B (Internal structure varies depending on stroke length.)
(Double acting/high load, with switch, backward locking: B)
200 stroke length or less



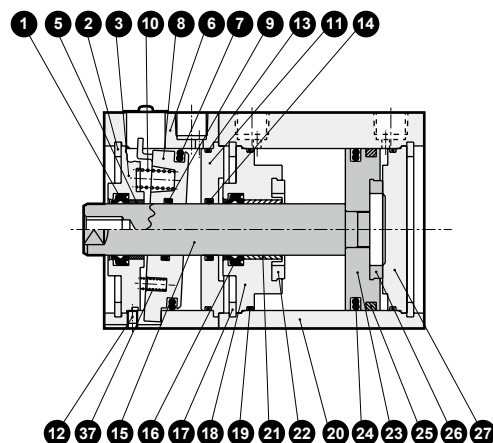
Over 200 to 300 stroke length



- USSD-K-63 to 100-B (Internal structure varies depending on stroke length.)
(Double acting, high load, backward locking: B)
200 stroke length or less



Over 200 to 300 stroke length



Cannot be disassembled

Parts list

No.	Part name	Material	Remarks	No.	Part name	Material	Remarks
19	Rod metal gasket (1)	Nitrile rubber		28	Spacer	Aluminum alloy	Chromate (with switch only)
20	Cylinder body	Aluminum alloy	Hard alumite	29	Piston magnet	Plastic magnet	With switch only
21	Bush (1)	Dry bearing		30	Round nut	Steel	Zinc chromate
22	Cushion rubber (R)	Urethane rubber		31	Conical spring washer	Steel	Black finish
23	Piston	Aluminum alloy	Chromate	32	Hexagon socket set screw	Steel	Black finish
24	Piston packing (1)	Nitrile rubber		33	Release lever	Steel	Zinc chromate
25	Wear ring	Acetal resin		34	Hexagon socket head cap screw	Steel	Black finish
26	Cushion rubber (H)	Urethane rubber		35	Cross-recessed round machine screw	Steel	
27	Cover	Aluminum alloy	Chromate (*1)	36	Dust cover	Stainless steel	
				37	Spring (2)	Steel	Black finish (ø80/ø100 only)

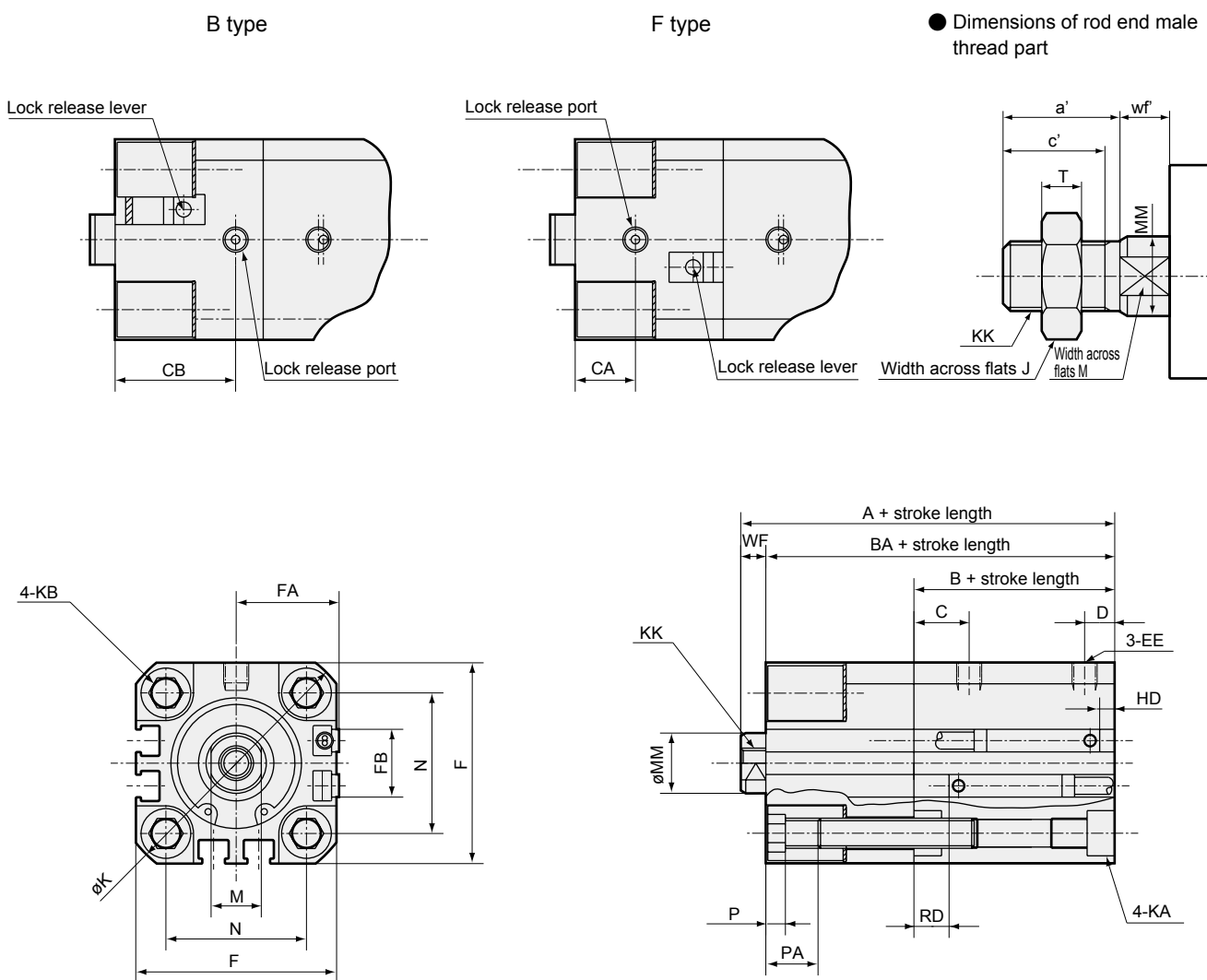
*1: For cover for long stroke, Remarks: Alumite

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Dimensions (ø20, ø25)

- USSD-20, 25
- USSD-L-20, 25 (with switch/TOH/V, T5H/V, T2H/V, T3H/V, T2WH/V, T3WH/V)



Code	Without switch			Common dimensions with switch										
Bore size (mm)	A *1	B *1	BA *1	A *1	B *1	BA *1	C	CA	CB	D	EE	F	FA	FB
ø20	51	19.5	46.5	61	29.5	56.5	8	10	22	5.5	M5	36	18.5	12.5
ø25	59	22.5	54	69	32.5	64	11	12	26	6	M5	40	20.5	13.5
Code	Common dimensions with switch													
Bore size (mm)	KB	K	KA		KK	M	MM	N	WF	P	PA			
ø20	M6	47	9 spot face depth 5.5, M6 depth 11		M5 depth 7	8	10	25.5	4.5	3.5	10			
ø25	M6	51	9 spot face depth 5.5, M6 depth 11		M6 depth 12	10	12	28	5	3.5	10			
Code	Reed TOH/TOV, T5H/T5V			Proximity T2H/T2V, T3H/T3V			Proximity T2WH/T2WV, T3WH/T3WV							
Bore size (mm)	HD	RD		HD	RD		HD	RD						
ø20	3	6.5		3	6.5		3	6.5						
ø25	3	9.5		3	9.5		3	9.5						

*1 : To calculate A + stroke length, B + stroke length or BA + stroke length when using custom stroke length, apply the next longer standard stroke length (instead of the custom stroke length) to the stroke length value.
(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

*2 : HD and RD dimensions for 5 mm stroke length differ from these dimensions according to the setting.

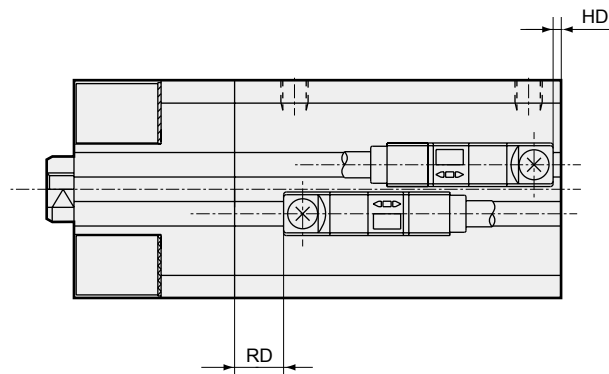
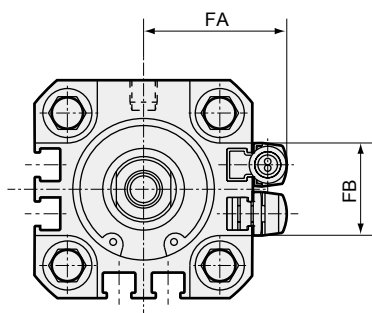
Rod end male thread part dimensions

Code	a'	c'	J	KK	M	MM	T	wf'
Bore size (mm)								
ø20	14	12	13	M8	8	10	5	4.5
ø25	17.5	15	17	M10×1.25	10	12	6	5

Dimensions (ø20, ø25)

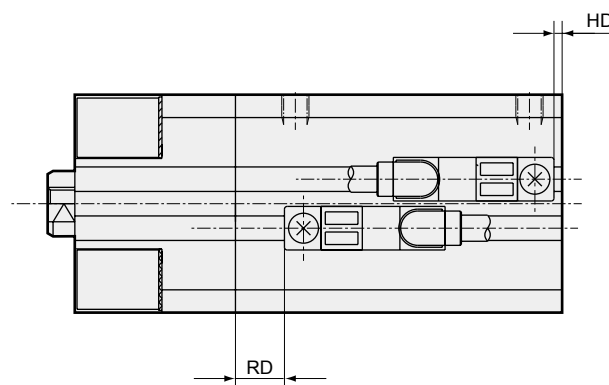
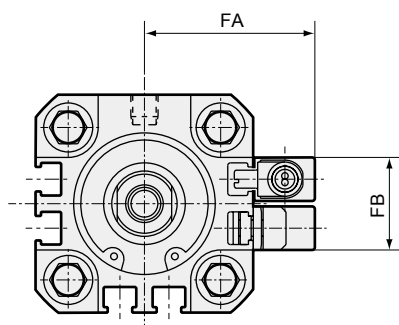


- USSD-L-20, 25 (2-color display, off-delay, T2Y^{H/V}, T3Y^{H/V}, T2J^{H/V}, T8^{H/V})



Code	FA	FB	T2Y ^{H/V} , T3Y ^{H/V} , T2J ^{H/V}	
Bore size (mm)			RD	HD
ø20	24.3	16	5	1.5
ø25	26.3	17	8	1.5

- USSD-L-20, 25 (with T1* switch/T2YD, T2YDT, T1^{H/V})



Code	FA	FB	RD	HD
Bore size (mm)				
ø20	29.3	16	5	1.5
ø25	31.3	17	8	1.5

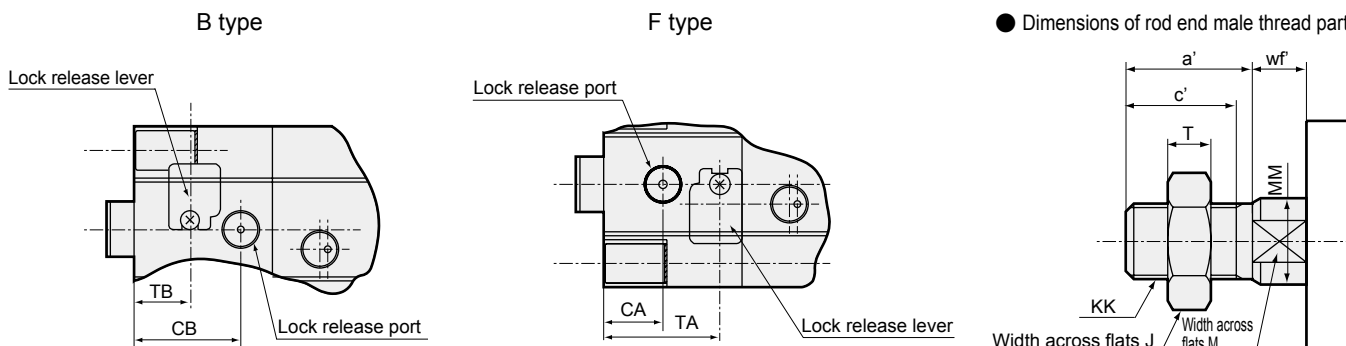
LCM
 LCR
 LCG
 LCW
 LCX
 STM
 STG
 STS/STL
 STR2
 UCA2
 ULK*
 JSK/M2
 JSG
 JSC3/JSC4
 USSD
 UFCD
 USC
 UB
 JSB3
 LMB
 LML
 HCM
 HCA
 LBC
 CAC4
 UCAC2
 CAC-N
 UCAC-N
 RCS2
 RCC2
 PCC
 SHC
 MCP
 GLC
 MFC
 BBS
 RRC
 GRC
 RV3*
 NHS
 HRL
 LN
 Hand
 Chuk
 MechHnd/Chuk
 ShkAbs
 FJ
 FK
 SpdContr
 Ending



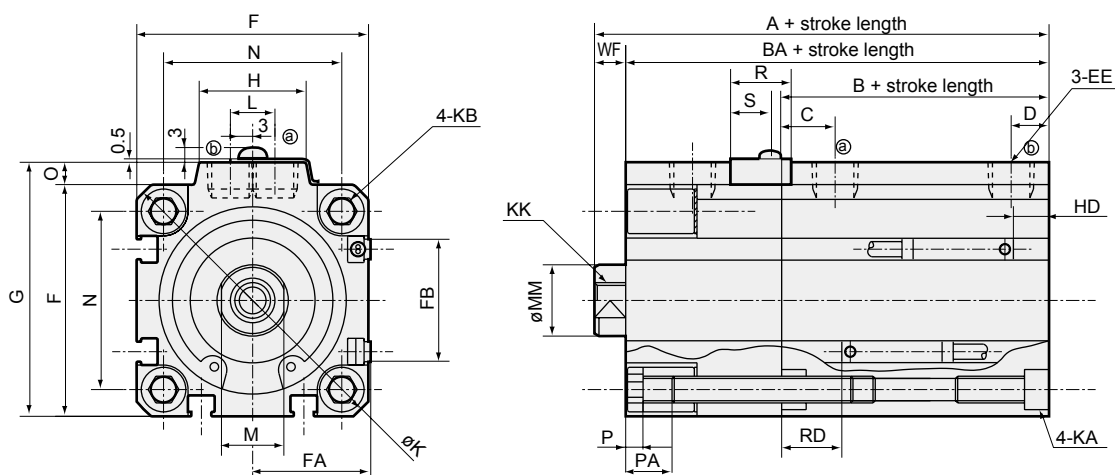
Dimensions (ø32 to ø63)

- USSD-32 to 63
- USSD-L-32 to 63 (with switch/TOH/V, T5H/V, T2H/V, T3H/V, T2WH/V, T3WH/V)

- Dimensions of rod end male thread part



Note) The figure below shows F type.



Code	Without switch			Common dimensions with switch											
Bore size (mm)	A *1	B *1	BA *1	A *1	B *1	BA *1	C	CA	CB	D	EE	F	FA	FB	G
ø32	63.5	23	56.5	73.5	33	66.5	8	12	25.5	8	RC1/8	45	23	20.5	49.5
ø40	71.5	29.5	64.5	81.5	39.5	74.5	12	15	27	8.5	RC1/8	52	26.5	27.5	57
ø50	77.5	30.5	69.5	87.5	40.5	79.5	10.5	15	30	10.5	RC1/4	64	32.5	28.5	71
ø63	88.5	36	80.5	98.5	46	90.5	13	15.5	34	11	RC1/4	77	39	28.5	84
Code	Common dimensions with switch														
Bore size (mm)	H	KB	K	KA		KK	L	M	MM	N	O	WF	P	PA	
ø32	24	M6	60	9 spot face depth 5.5, M6 depth 11		M8 depth 13	10	14	16	34	4.5	7	3.5	10	
ø40	24	M6	69	9 spot face depth 5.5, M6 depth 11		M8 depth 13	10	14	16	40	5	7	3.5	10	
ø50	33	M8	86	11 spot face depth 6.5, M8 depth 13		M10 depth 15	15	17	20	50	7	8	4	12.5	
ø63	33	M10	103	14 spot face depth 9, M10 depth 25		M10 depth 15	15	17	20	60	7	8	4	13.5	
Code	R	S	TA	TB	Reed TOH/TOV, T5H/T5V		Proximity T2H/T2V, T3H/T3V		Proximity T2WH/T2WV, T3WH/T3WV						
Bore size (mm)					HD *2	RD *2	HD *2	RD *2	HD *2	RD *2					
ø32	14	9	29.5	12.4	3.5		9		3.5		9				
ø40	12	6	30.3	14.7	7.0		12.0		7.0		12.0				
ø50	14	7	33	15.7	7.5		12.5		7.5		12.5				
ø63	17	8.5	37	16.2	12.5		13.0		12.5		13.0				

*1 : To calculate A + stroke length, B + stroke length or BA + stroke length when using custom stroke length, apply the next longer standard stroke length (instead of the custom stroke length) to the stroke length value.
(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

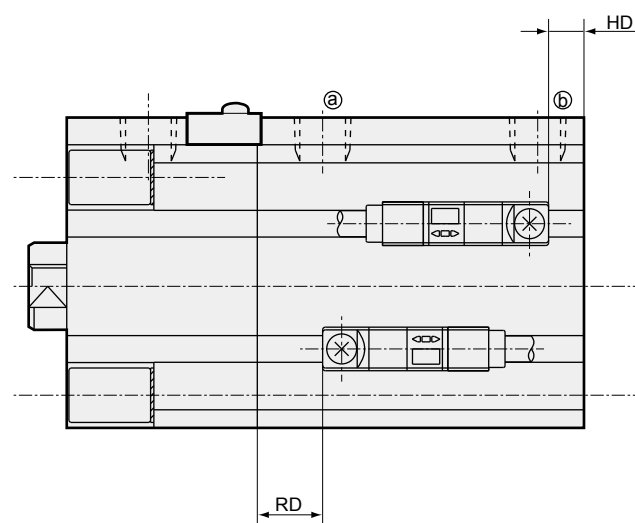
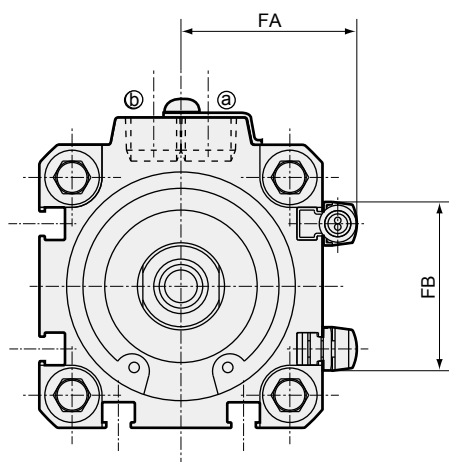
*2 : HD and RD dimensions for 5 mm stroke length differ from these dimensions according to the setting.

Rod end male thread part dimensions								
Code	a'	c'	J	KK	M	MM	T	wf'
Bore size (mm)								
ø32	23.5	20.5	22	M14×1.5	14	16	8	5
ø40	23.5	20.5	22	M14×1.5	14	16	8	5
ø50	28.5	26	27	M18×1.5	17	20	11	5
ø63	28.5	26	27	M18×1.5	17	20	11	5

Dimensions (ø32 to ø63)



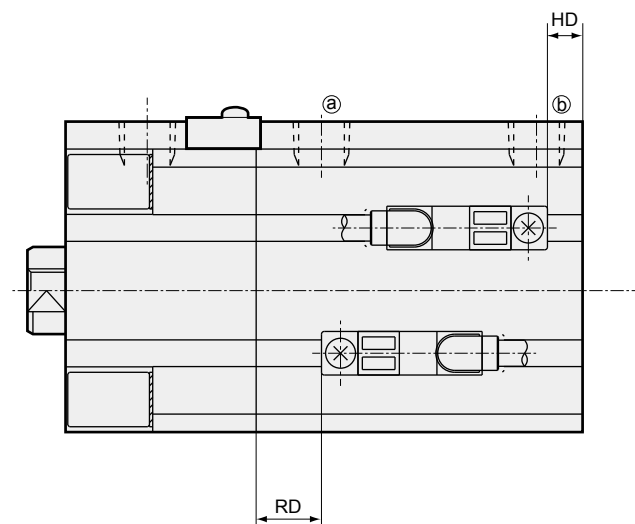
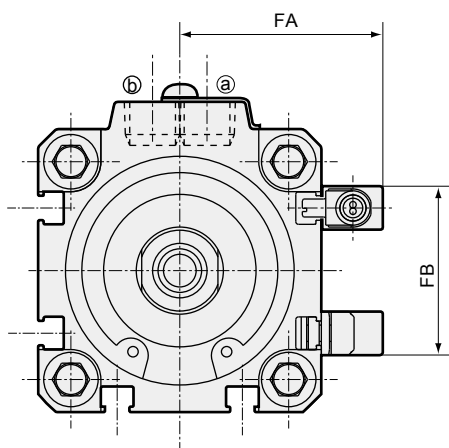
- USSD-L-32 to 63 (2-color display, off-delay, T8* with switch T2Y^{H/V}, T3Y^{H/V}, T2J^{H/V}, T8^{H/V})



Note) The figure above shows F type.

Code Bore size (mm)	FA	FB	T2Y ^{H/V} , T3Y ^{H/V} , T2J ^{H/V}		T8 ^{H/V}	
			RD	HD	RD	HD
ø32	28.8	24	7.5	2	-	-
ø40	32.3	31	10.5	5.5	6	1
ø50	38.3	32	11	6	6.5	1.5
ø63	44.8	32	11.5	11	7	6.5

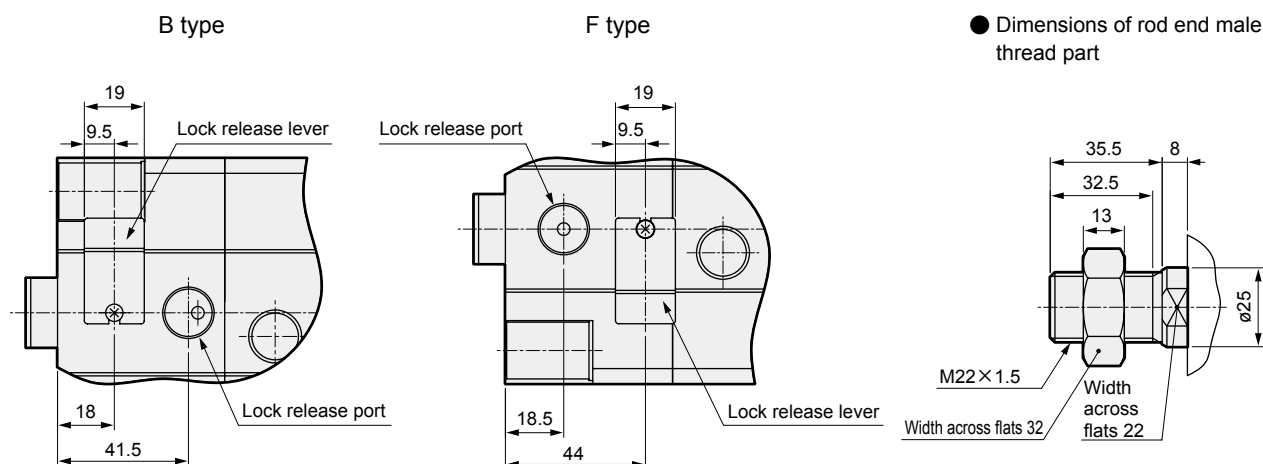
- USSD-L-32 to 63 (with T1* switch/T2YD, T2YDT, T1^{H/V})



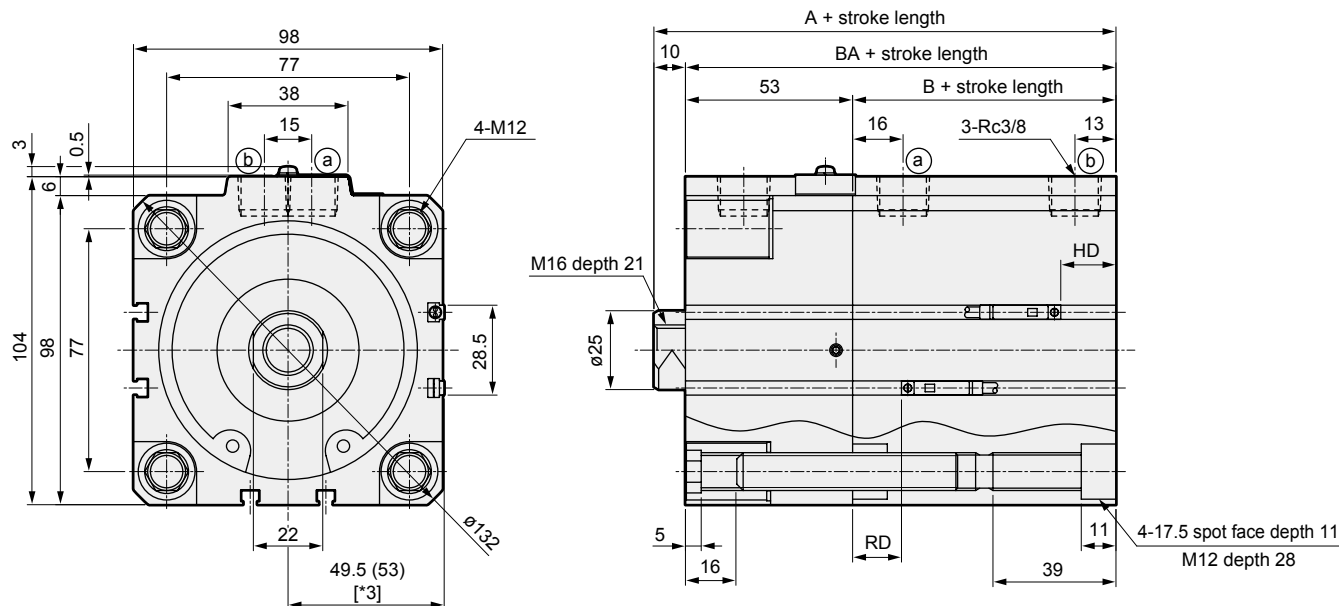
Note) The figure above shows F type.

Code Bore size (mm)	FA	FB	RD	HD
ø32	33.8	24	7.5	2
ø40	37.3	31	10.5	5.5
ø50	43.3	32	11	6
ø63	49.8	32	11.5	11

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



Note) The figure below shows F type.



Code	Without switch			With switch			Reed T0H/T0V, T5H/T5V		Proximity T2H/T2V, T3H/T3V		Proximity T2WH/T2WV, T3WH/T3WV	
Bore size (mm)	A *1	B *1	BA *1	A *1	B *1	BA *1	HD *1	RD *1	HD *1	RD *1	HD *1	RD *1
ø80	106.5	43.5	96.5	116.5	53.5	106.5	17.5	15.5	17.5	15.5	17.5	15.5

*1 : To calculate A+ stroke length or B+ stroke length when using a custom stroke length, apply the next longer standard stroke length instead of the custom stroke length.

(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

*2 : HD and RD dimensions for 5 mm stroke length differ from these dimensions according to the setting.

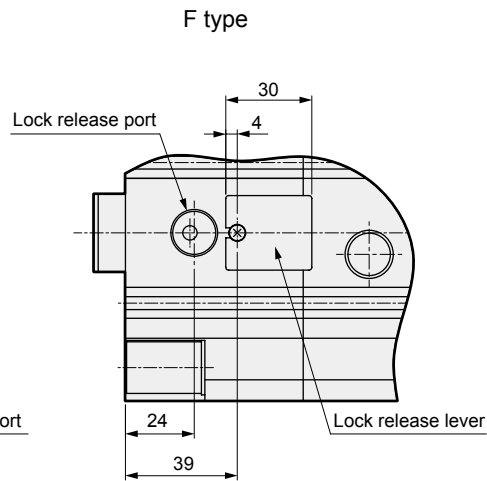
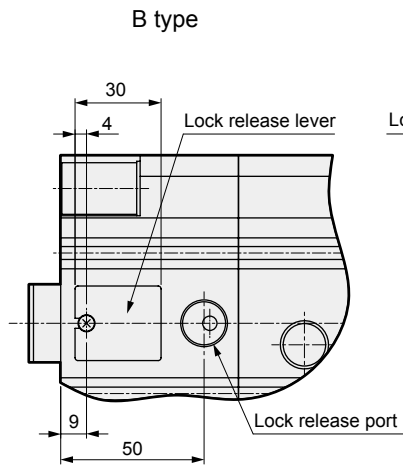
*3 : Dimensions in () are for the radial lead wire.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MecHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Endino

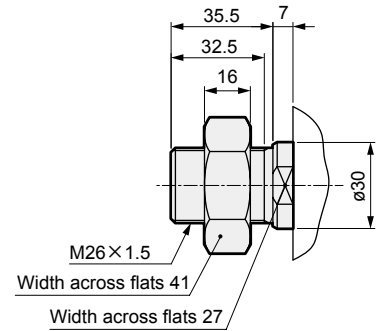
Dimensions (ø100)



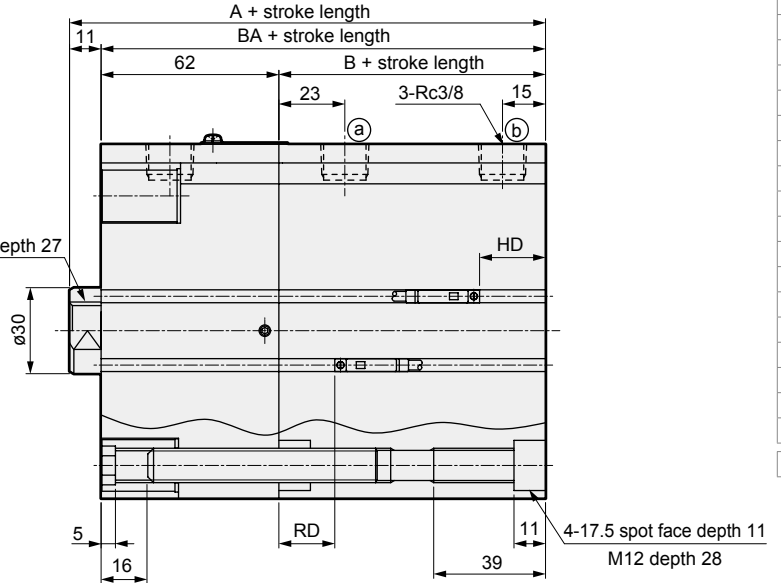
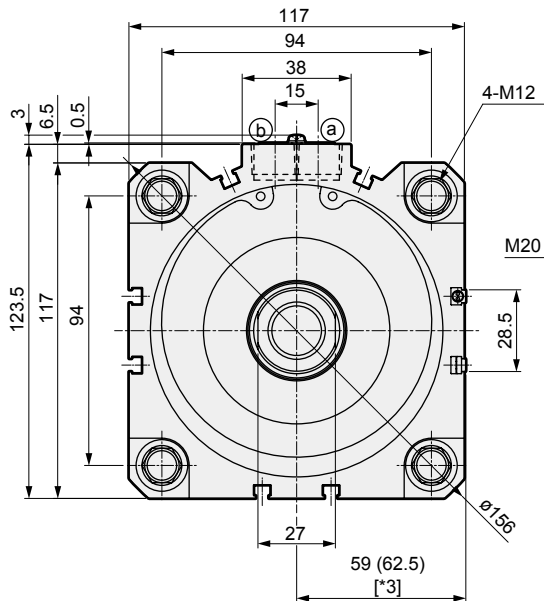
- USSD-100
- USSD-L-100 (with switch/TOH/V, T5H/V, T2H/V, T3H/V, T2WH/V, T3WH/V)



- Dimensions of rod end male thread part



Note) The figure below shows F type.



Code	Without switch			With switch			Reed T0H/T0V, T5H/T5V		Proximity T2H/T2V, T3H/T3V		Proximity T2WH/T2WV, T3WH/T3WV	
Bore size (mm)	A *1	B *1	BA *1	A *1	B *1	BA *1	HD *1	RD *1	HD *1	RD *1	HD *1	RD *1
ø100	126	53	115	136	63	125	23	19.5	23	19.5	23	19.5

*1 : To calculate A+ stroke length or B+ stroke length when using custom stroke length, apply the next longer standard stroke length (instead of the custom stroke length) to the stroke length value.
(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

*2 : HD and RD dimensions for 5 mm stroke length differ from these dimensions according to the setting.

*3 : Dimensions in () are for the radial lead wire.

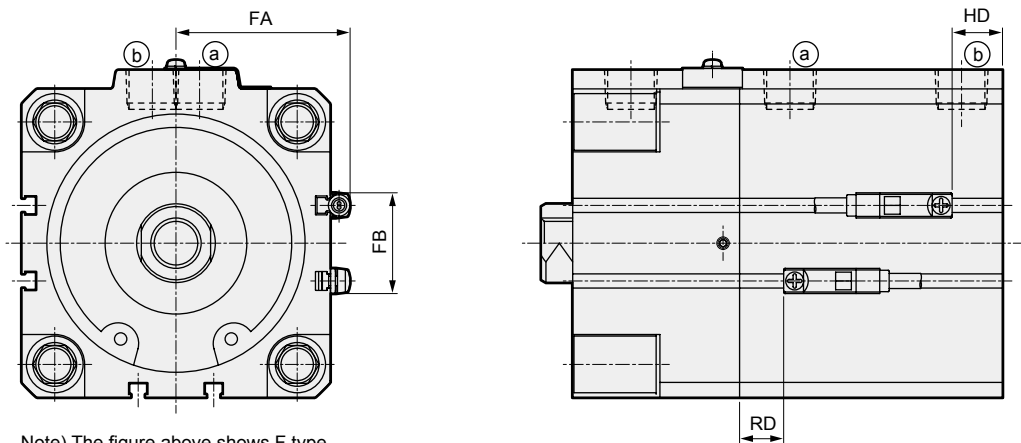
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

USSD Series

Double acting/single rod (ø80 to ø100)

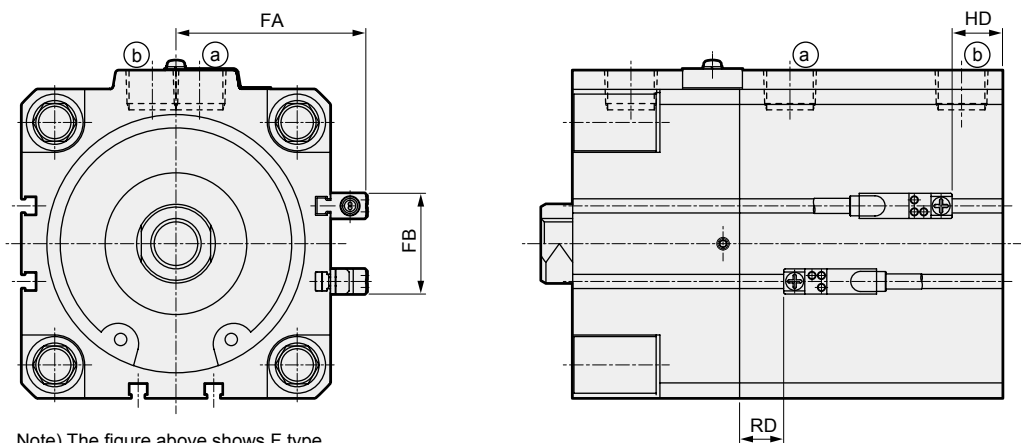
Dimensions (ø80 to ø100) 

- USSD-L-80 to 100 (with 2-color display, off-delay, T8* with switch T2Y^{H/V}, T3Y^{H/V}, T2J^{H/V}, T8^{H/V})



Code Bore size (mm)	FA	FB	T2Y ^{H/V} , T3Y ^{H/V} , T2J ^{H/V}		T8 ^{H/V}	
			RD	HD	RD	HD
ø80	55.3	32	14	16	9.5	11.5
ø100	64.8	32	18	21.5	13.5	7

- USSD-L-80 to 100 (with T1* switch T1^{H/V})



Code Bore size (mm)	FA	FB	RD	HD
ø80	60.3	32	14	16
ø100	69.8	32	18	21.5

MEMO

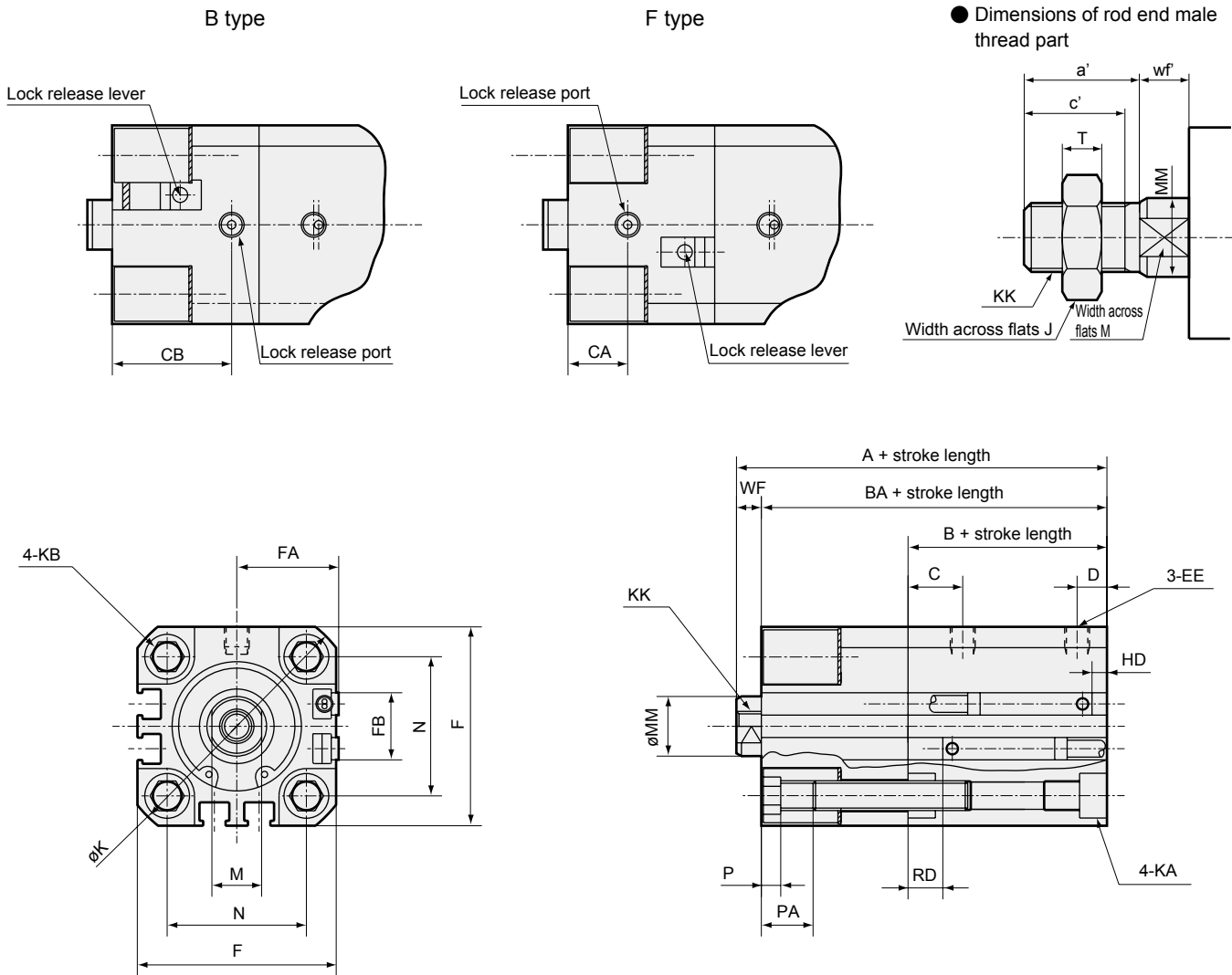
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

USSD-K Series



Dimensions (high load ø20, ø25)

- USSD-K-20, 25
- USSD-KL-20, 25 (with switch/TOH/V, T5H/V, T2H/V, T3H/V, T2WH/V, T3WH/V)



Code	Without switch			Common dimensions with switch											
Bore size (mm)	A ⁺¹ ₋₂	B ⁺¹ ₋₂	BA ⁺¹ ₋₂	A ⁺¹ ₋₂	B ⁺¹ ₋₂	BA ⁺¹ ₋₂	C	CA	CB	D	EE	F	FA	FB	
ø20	56(67.5)	24.5(36)	51.5(63)	66(77.5)	34.5(46)	61.5(73)	8	10	22	5.5(8)	M5	36	18.5	12.5	
ø25	64(77.5)	27.5(41)	59(72.5)	74(87.5)	37.5(51)	69(82.5)	11	12	26	6(11)	M5	40	20.5	13.5	
Code	Common dimensions with switch														
Bore size (mm)	KB	K	KA		KK	M	MM	N	WF	P	PA				
ø20	M6	47	9 spot face depth 5.5, M6 depth 11		M5 depth 7	8	10	25.5	4.5	3.5	10				
ø25	M6	51	9 spot face depth 5.5, M6 depth 11		M6 depth 7	10	12	28	5	3.5	10				
Code	Reed TOH/TOV, T5H/T5V			Proximity T2H/T2V, T3H/T3V			Proximity T2WH/T2WV, T3WH/T3WV								
Bore size (mm)	HD ⁺² ₋₃	RD ⁺² ₋₃		HD ⁺² ₋₃	RD ⁺² ₋₃		HD ⁺² ₋₃	RD ⁺² ₋₃		HD ⁺² ₋₃	RD ⁺² ₋₃				
ø20	6.0(12.5)	8.5(13.5)		6(12.5)	8.5(13.5)		6(12.5)	8.5(13.5)		6(12.5)	8.5(13.5)				
ø25	5.5(14)	12(17)		5.5(14)	12(17)		5.5(14)	12(17)		5.5(14)	12(17)				

*1 : To calculate A+ stroke length, B+ stroke length or BA+ stroke length when using a custom stroke length, apply the next longer standard stroke length instead of the custom stroke length.
(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

*2 : When longer than ø20: 100 mm stroke or ø25: 150 mm stroke, A, B, BA, D, HD, and RD dimensions are indicated in () and there is no KA spot face.

*3 : HD and RD dimensions for 5-stroke will be adjusted at product shipment and are thus different from these.

Rod end male thread part dimensions								
Code	a'	c'	J	KK	M	MM	T	wf'
Bore size (mm)								
ø20	14	12	13	M8	8	10	5	4.5
ø25	17.5	15	17	M10×1.25	10	12	6	5

Dimensions (high load (ø32 to ø63))

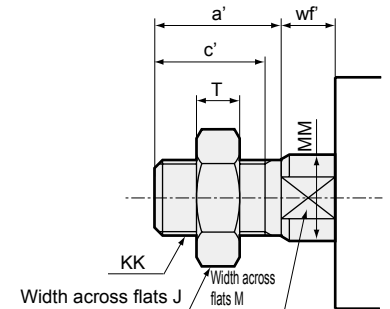
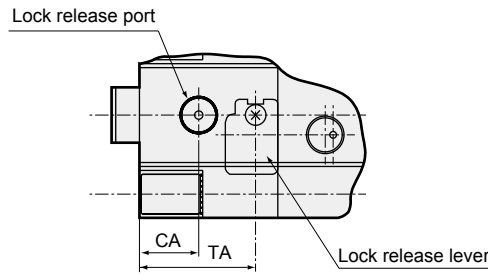
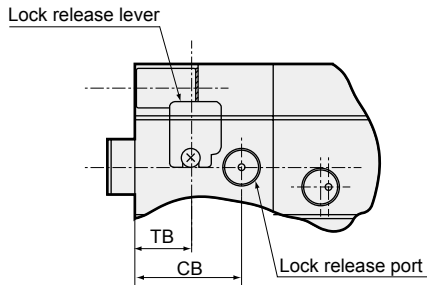


- USSD-K-32 to 63
- USSD-KL-32 to 63 (with switch/TOH/V, T5H/V, T2H/V, T3H/V, T2WH/V, T3WH/V)

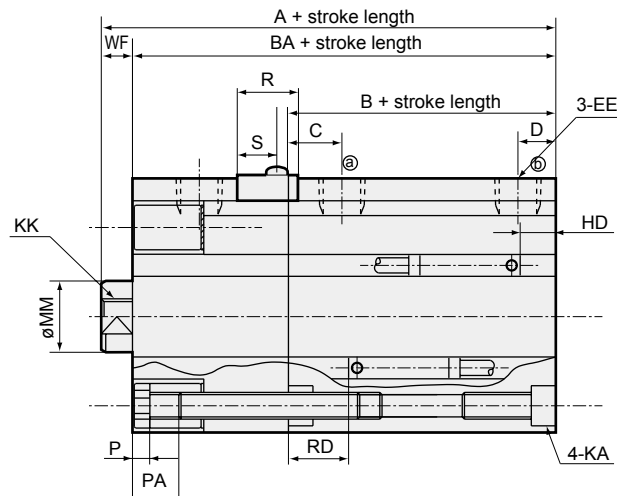
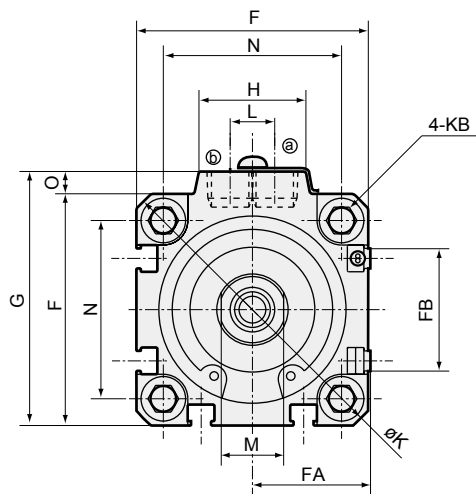
B type

F type

- Dimensions of rod end male thread part



Note) The figure below shows F type.



Code	Without switch			Common dimensions with switch											
Bore size (mm)	A *1	B *1	BA *1	A *1	B *1	BA *1	C	CA	CB	D	EE	F	FA	FB	G
ø32	73.5(81)	33(40.5)	66.5(74)	83.5(91)	43(50.5)	76.5(84)	8	12	25.5	8	RC1/8	45	23	20.5	49.5
ø40	81.5(91)	39.5(49)	74.5(84)	91.5(101)	49.5(59)	84.5(94)	12	15	27	8.5(12)	RC1/8	52	26.5	27.5	57
ø50	87.5(101)	40.5(54)	79.5(93)	97.5(111)	50.5(64)	89.5(103)	10.5	15	30	10.5	RC1/4	64	32.5	28.5	71
ø63	98.5(108.5)	46(56)	90.5(100.5)	108.5(118.5)	56(66)	100.5(110.5)	13	15.5	34	11(13)	RC1/4	77	39	28.5	84
Code	Common dimensions with switch														
Bore size (mm)	H	KB	K	KA		KK	L	M	MM	N	O	WF	P	PA	
ø32	24	M6	60	9 spot face depth 5.5, M6 depth 11		M8 depth 13	10	14	16	34	4.5	7	3.5	10	
ø40	24	M6	69	9 spot face depth 5.5, M6 depth 11		M8 depth 13	10	14	16	40	5	7	3.5	10	
ø50	33	M8	86	11 spot face depth 6.5, M8 depth 13		M10 depth 15	15	17	20	50	7	8	4	12.5	
ø63	33	M10	103	14 spot face depth 9, M10 depth 25		M10 depth 15	15	17	20	60	7	8	4	13.5	
Code	R	S	TA	TB	Reed TOH/TOV, T5H/T5V		Proximity T2H/T2V, T3H/T3V		Proximity T2WH/T2WV, T3WH/T3WV						
Bore size (mm)					HD *2	RD *2	HD *2	RD *2	HD *2	RD *2					
ø32	14	9	29.5	12.4	8.5(16)	14(14)	8.5(16)	14(14)	8.5(16)	14(14)					
ø40	12	6	30.3	14.7	9.5(19)	19.5(19.5)	9.5(19)	19.5(19.5)	9.5(19)	19.5(19.5)					
ø50	14	7	33	15.7	10(19)	20(25)	10(19)	20(25)	10(19)	20(25)					
ø63	17	8.5	37	16.2	17.5(23)	18(23)	17.5(23)	18(23)	17.5(23)	18(23)					

*1 : To calculate A+ stroke length, B+ stroke length or BA+ stroke length when using a custom stroke length, apply the next longer standard stroke length instead of the custom stroke length.

(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

*2 : When longer than ø32 to ø50: 150 mm stroke or ø63: 200 mm stroke, A, B, BA, HD, D, and RD dimensions are indicated in (), and there is no KA spot face.

*3 : HD and RD dimensions for 5-stroke will be adjusted at product shipment and are thus different from these.

Rod end male thread part dimensions

Code	a'	c'	J	KK	M	MM	T	wf'
Bore size (mm)								
ø32	23.5	20.5	22	M14×1.5	14	16	8	5
ø40	23.5	20.5	22	M14×1.5	14	16	8	5
ø50	28.5	26	27	M18×1.5	17	20	11	5
ø63	28.5	26	27	M18×1.5	17	20	11	5

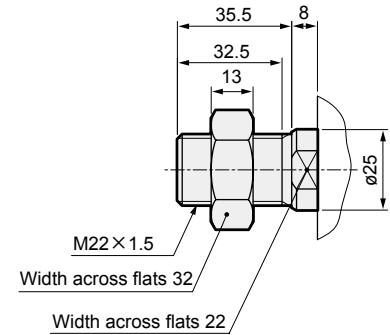
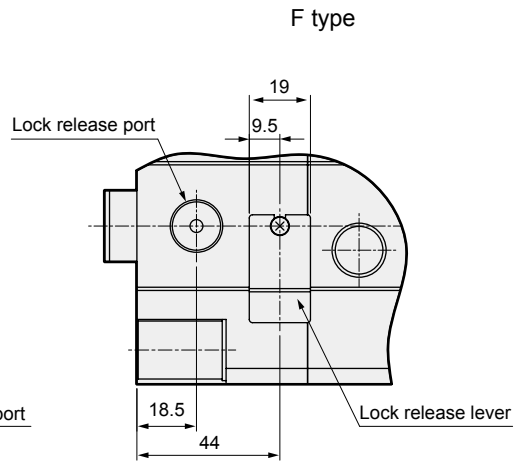
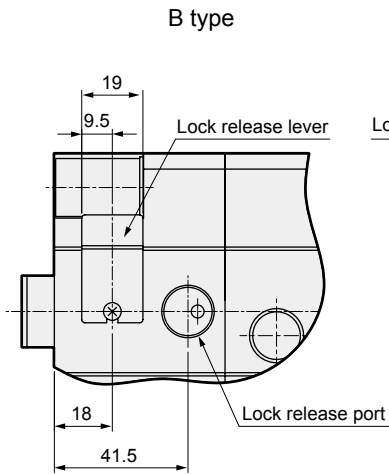
LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending



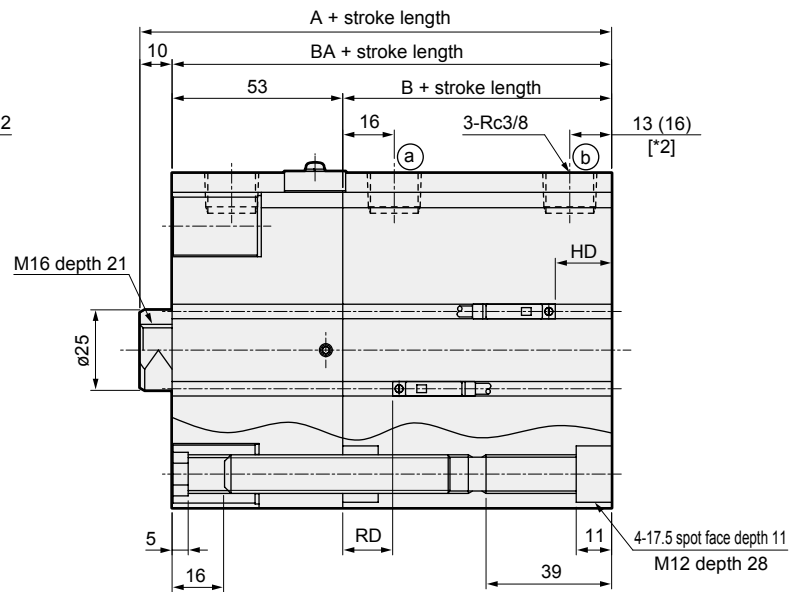
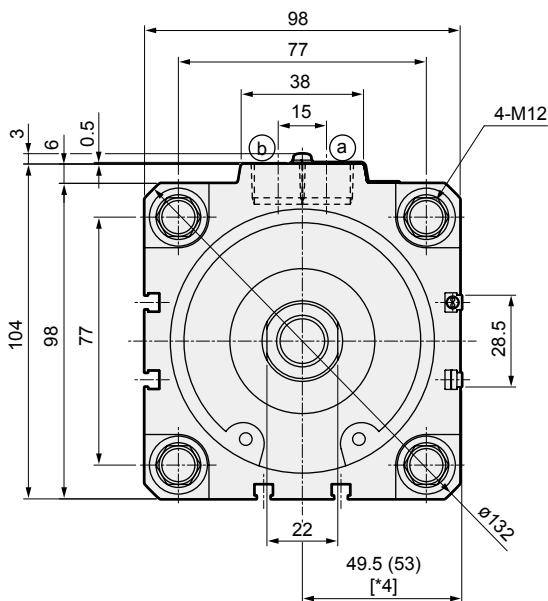
Dimensions (high load ø80)

- USSD-K-80
- USSD-KL-80 (with switch/TOH/V, T5H/V, T2H/V, T3H/V, T2WH/V, T3WH/V)

- Dimensions of rod end male thread part



Note) The figure below shows F type.



Code	Without switch			With switch			Reed T0H/T0V, T5H/T5V		Proximity T2H/T2V, T3H/T3V		Proximity T2WH/T2WV, T3WH/T3WV	
Bore size (mm)	A *1	B *1	BA *1	A *1	B *1	BA *1	HD *1	RD *1	HD *1	RD *1	HD *1	RD *1
ø80	116.5 (126.5)	53.5 (63.5)	106.5 (116.5)	126.5 (136.5)	63.5 (73.5)	116.5 (126.5)	22 (28)	20.5 (25.5)	22.5 (28)	20.5 (25.5)	22.5 (28)	20.5 (25.5)

*1 : To calculate A+ stroke length or B+ stroke length when using custom stroke length, apply the next longer standard stroke length (instead of the custom stroke length) to the stroke length value.
(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

*2 : When longer than 200 mm stroke, A, B, BA, HD and RD dimensions are indicated in (), and there is no mounting hole spot face.

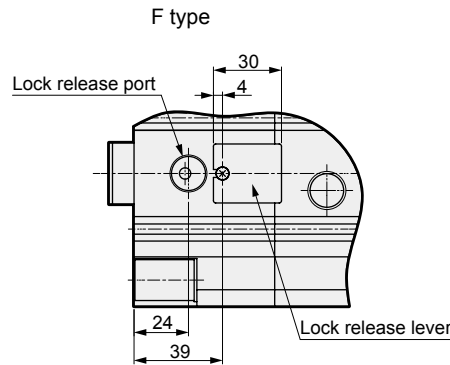
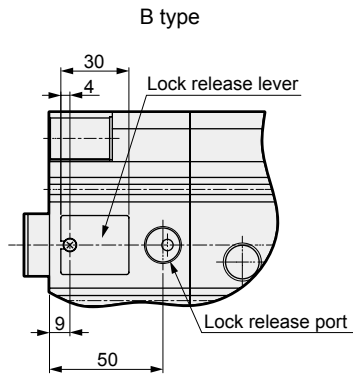
*3 : HD and RD dimensions for 5 mm stroke length differ from these dimensions according to the setting.

*4 : Dimensions in () are for the radial lead wire.

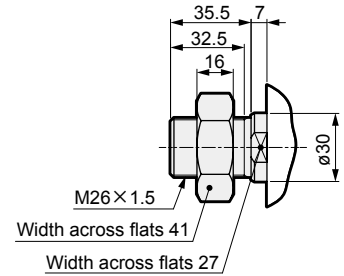
Dimensions (high load ø100)



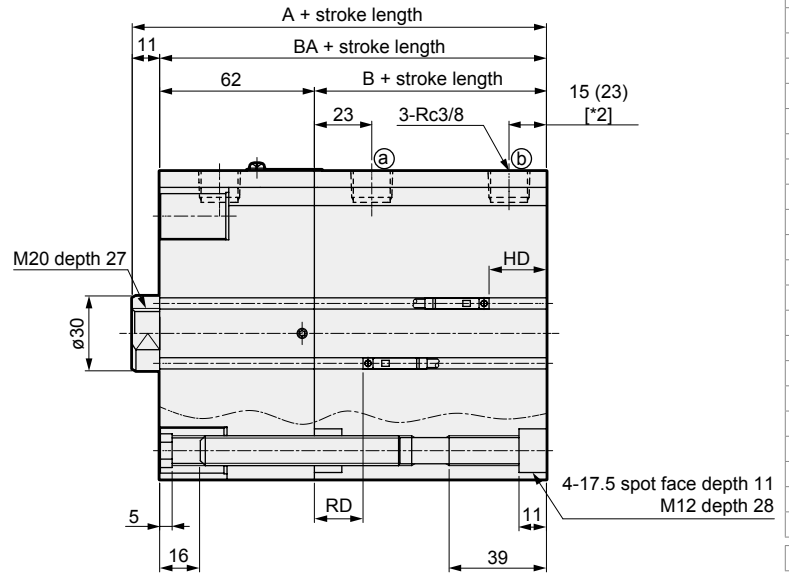
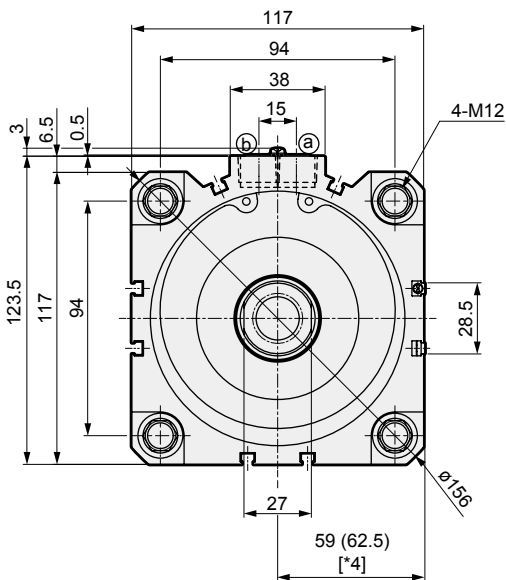
- USSD-K-100
- USSD-KL-100 (with switch/TOH/V, T5H/V, T2H/V, T3H/V, T2WH/V, T3WH/V)



- Dimensions of rod end male thread part



Note) The figure below shows F type.



Code	Without switch			With switch			Reed TOH/TOV, T5H/T5V		Proximity T2H/T2V, T3H/T3V		Proximity T2WH/T2WV, T3WH/T3WV	
Bore size (mm)	A *1	B *1	BA *1	A *1	B *1	BA *1	HD *1	RD *1	HD *1	RD *1	HD *1	RD *1
ø100	136 (136)	63 (73)	125 (135)	146 (156)	73 (83)	135 (145)	28 (33.5)	24.5 (29.5)	28 (33.5)	24.5 (29.5)	28 (33.5)	24.5 (29.5)

*1 : To calculate A+ stroke length or B+ stroke length when using custom stroke length, apply the next longer standard stroke length (instead of the custom stroke length) to the stroke length value.
(Example) If the custom stroke length is 7 mm, apply the standard stroke length of 10 mm.

*2 : When longer than 200 mm stroke, A, B, BA, HD and RD dimensions are indicated in (), and there is no mounting hole spot face.

*3 : HD and RD dimensions for 5 mm stroke length differ from these dimensions according to the setting.

*4 : Dimensions in () are for the radial lead wire.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

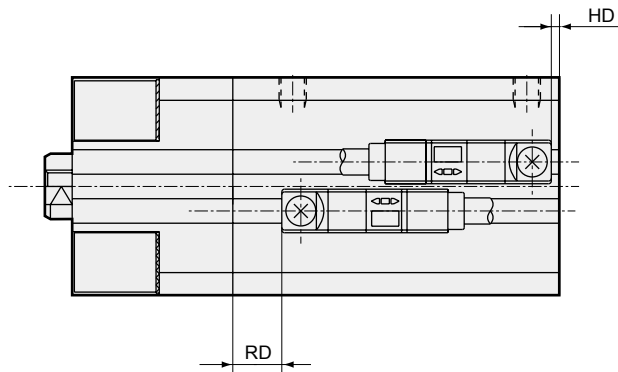
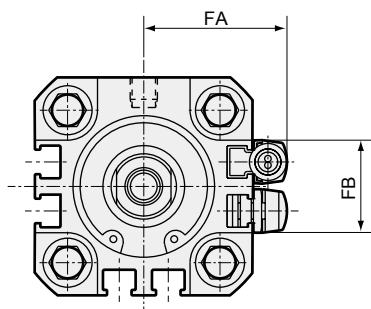
USSD-K Series

Double acting/high load (ø20, ø25)

Dimensions (ø20, ø25)



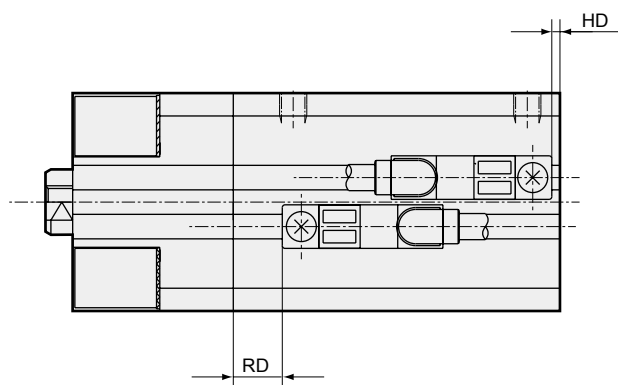
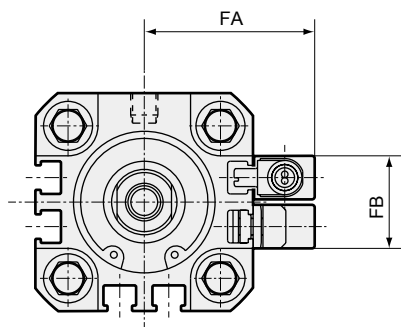
- USSD-KL-20, 25 (2-color display, off-delay, T8* with switch T2Y^{H/V}, T3Y^{H/V}, T2J^{H/V}, T8^{H/V})



*1: When longer than ø20: 100 mm stroke length or ø25: 150 mm stroke length, HD and RD dimensions are indicated in ().

Code	FA	FB	T2Y ^{H/V} , T3Y ^{H/V} , T2J ^{H/V}		T8 ^{H/V}	
			RD *1	HD *1	RD *1	HD *1
Bore size (mm)						
ø20	24.3	16	7(12)	4.5(11)	2.5(7.5)	0(6.5)
ø25	26.3	17	10.5(15.5)	4(12.5)	6(11)	0(8)

- USSD-KL-20, 25 (with T1* switch, T1^{H/V})



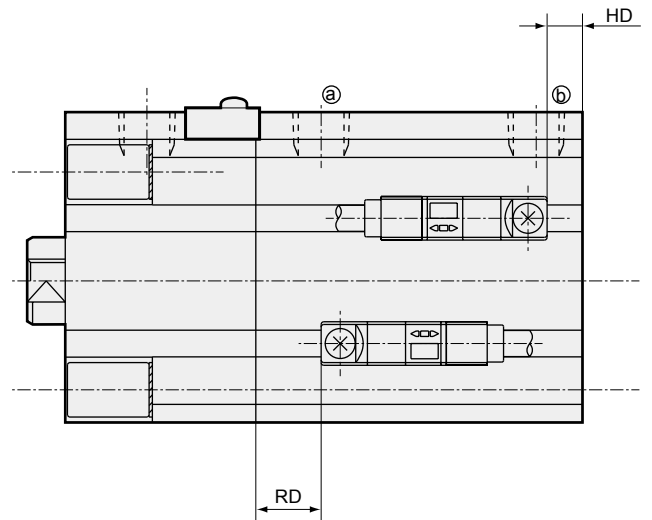
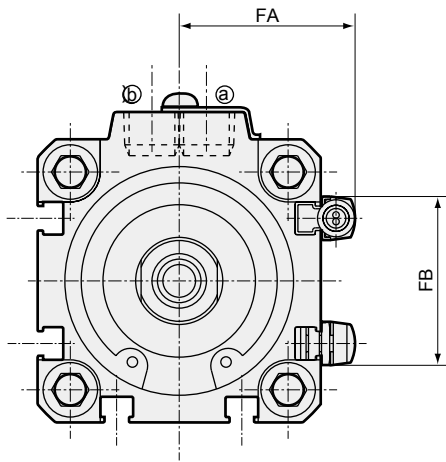
*1: When longer than ø20: 100 mm stroke length or ø25: 150 mm stroke length, HD and RD dimensions are indicated in ().

Code	FA	FB	RD *1	HD *1
Bore size (mm)				
ø20	29.3	16	7(12)	4.5(11)
ø25	31.3	17	10.5(15.5)	4(12.5)

Dimensions (ø32 to ø100)



- USSD-KL-32 to 100 (2-color display, off-delay, T8* with switch T2Y^{H/V}, T3Y^{H/V}, T2J^{H/V}, T8^{H/V})

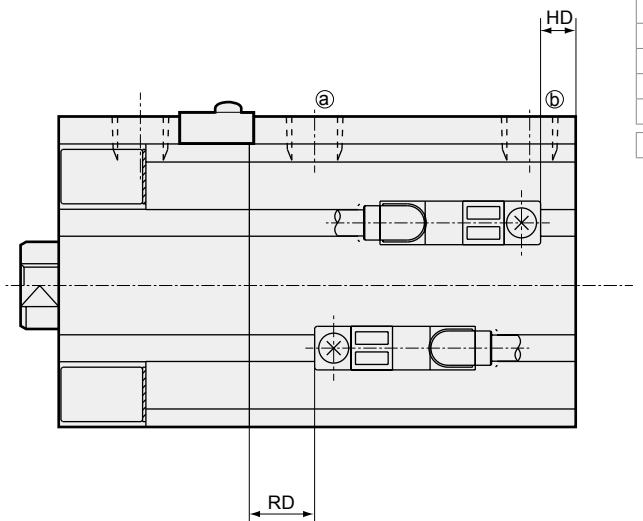
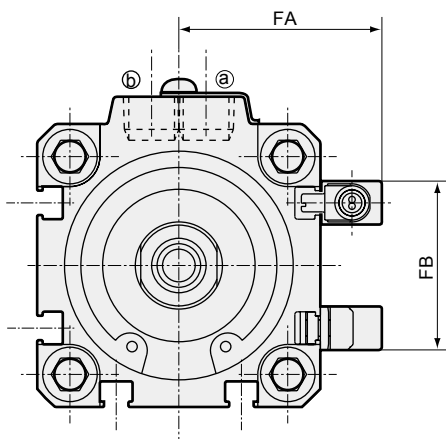


Note) The figure above shows F type.

*1: When longer than ø32 to 50: 150 mm stroke or ø63: 200 mm stroke, HD and RD dimensions are indicated in ().

Code Bore size (mm)	FA	FB	T2Y ^{H/V} , T3Y ^{H/V} , T2J ^{H/V}		T8 ^{H/V}	
			RD *1	HD *1	RD *1	HD *1
ø32	28.8	24	12.5(12.5)	8(14.5)	8(8)	3.5(10)
ø40	32.3	31	18(18)	8(17.5)	13.5(13.5)	3.5(13)
ø50	38.3	32	18.5(23.5)	8.5(17.5)	14(19)	4(13)
ø63	44.8	32	16.5(21.5)	16(21.5)	12(17)	11.5(17)
ø80	55.3	32	19(24)	20.5(26.5)	14.5(19.5)	16(22)
ø100	64.8	32	23(28)	26.5(32)	18.5(23.5)	22(27.5)

- USSD-KL-32 to 100 (with T1* switch/T2YD, T2YDT, T1^{H/V})



Note) The figure above shows F type.

*1: When longer than ø32 to 50: 150 mm stroke or ø63: 200 mm stroke, HD and RD dimensions are indicated in ().

Code Bore size (mm)	FA	FB	RD *1	HD *1
ø32	33.8	24	12.5(12.5)	8(14.5)
ø40	37.3	31	18(18)	8(17.5)
ø50	43.3	32	18.5(23.5)	8.5(17.5)
ø63	49.8	32	16.5(21.5)	16(21.5)
ø80	60.3	32	19(24)	20.5(26.5)
ø100	69.8	32	23(28)	26.5(32)

USSD/USSD-K Series

Accessory

Dimensions (Mounting bracket)



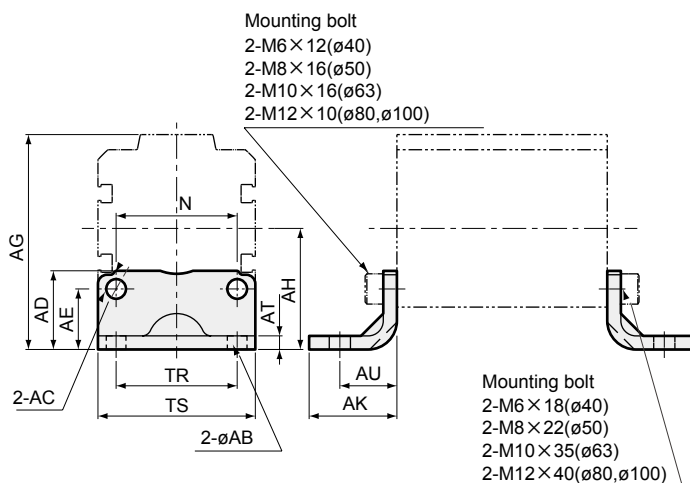
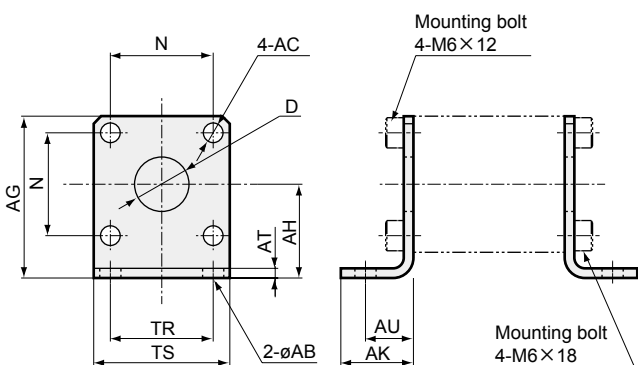
● Mounting bracket Axial foot (LB)

ø20/ø25/ø32

ø40/ø50/ø63/ø80/ø100

Material: Steel
Zinc chromate treatment

Material: Steel
Zinc chromate treatment



* 8 hexagon socket head cap screws are attached for installation.

Model No.	Bore size	AB	AC	AG	AH	AO	AT	AU	AK	D	N	TR	TS	Weight (g)
USSD-LB-20	ø20	7	6.5	42	24	8	3.2	15.9	24	12	25.5	24	36	140
USSD-LB-25	ø25	7	6.5	46	26	8	3.2	15.9	24	14	28	28	40	150
USSD-LB-32	ø32	7	6.5	53.5	31	8	3.2	15.9	24	18	34	34	45	180

* 4 hexagon socket head cap screws are attached for installation.

Model No.	Bore size	AB	AC	AD	AE	AG	AH	AK	AT	AU	N	R	TR	TS	Weight (g)
USSD-LB-40	ø40	7	6.5	26	20	71	40	29	4.5	19	40	15	40	52	170
USSD-LB-50	ø50	9	9	23	15	79	40	34	4.5	22	50	25	46	64	270
USSD-LB-63	ø63	11	11	33	21	96.5	51	40	4.5	25	60	23	60	77	420
USSD-LB-80	ø80	13	13	42	23	116.5	61.5	50	6	35	77	27	77	98	890
USSD-LB-100	ø100	13	13	48	22	134	69	50	6	35	94	36	94	117	1050

Dimensions (Mounting bracket)



● Mounting bracket Clevis bracket (CB)

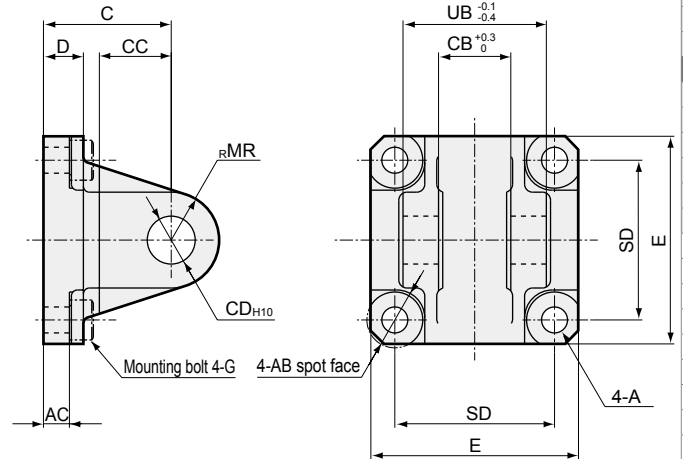
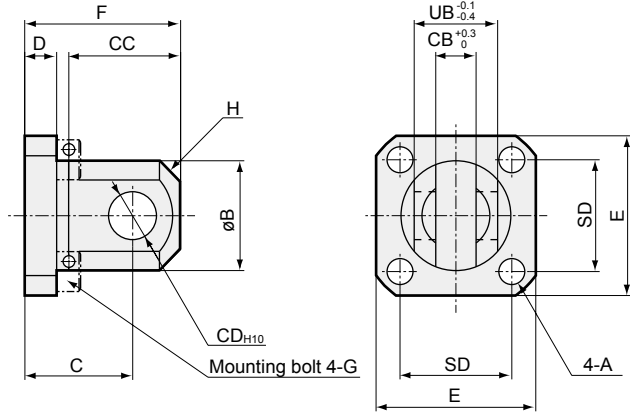
* Pin (including C ring) and snap ring are attached.
* When used for oscillating, high load cylinder is recommended.

ø20/ø25

ø32/ø40/ø50/ø63/ø80/ø100

Material: Cast iron
Painting

Material: Cast iron
Painting



* 4 hexagon socket head cap screws are attached for installation.

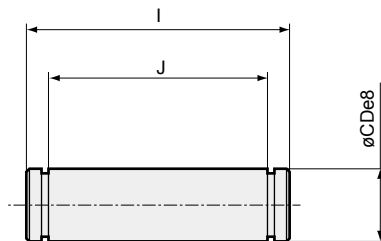
Model No.	Bore size	A	B	C	CB	CC	CD	D	E	F	G	H	SD	UB	Wt (g)
SSD-CB-20	ø20	6.5	24	23	8.1	22	10	8	36	33	M6×22	C4	25.5	19	140
SSD-CB-25	ø25	6.5	27.5	27	10.1	28	12	8	40	39	M6×22	C5	28	21	180

* 4 hexagon socket head cap screws are attached for installation.

Model No.	Bore size	A	AB	AC	C	CB	CC	CD	D	E	G	MR	SD	UB	Weight (g)
SSD-CB-32	ø32	6.5	13	9.5	30	10.1	16	12	10	45	M6×25	12	34	21	230
SSD-CB-40	ø40	6.5	14	6.5	32	18.1	18	12	10	52	M6×20	12	40	36	290
SSD-CB-50	ø50	9	16	6.5	32	18.1	18	12	10	64	M8×25	12	50	36	390
SSD-CB-63	ø63	11	20	7.5	37	20.1	24	14	10	77	M10×40	16	60	40	630
SSD-CB-80	ø80	14	20	10.5	52	28.1	30	20	14	98	M12×40	20	77	56	1530
SSD-CB-100	ø100	14	20	10.5	52	28.1	30	20	16	118	M12×40	20	94	56	1900

● Clevis bracket (CB) attached pin dimensions table

Material: Steel
Zinc chromate treatment



Model No.	Bore size	I	J	CD	Weight (g)	Applicable snap ring
SSD-P-20	ø20	25	20	10	17	E type 9
SSD-P-25	ø25	27	22	12	25	E type 9
SSD-P-32	ø32	27	22	12	25	E type 9
SSD-P-40	ø40	43.5	36.2	12	39	C type for shaft 12
SSD-P-50	ø50	43.5	36.2	12	39	C type for shaft 12
SSD-P-63	ø63	47.5	40.2	14	58	C type for shaft 12
SSD-P-80	ø80	64	56.2	20	156	C type for shaft 20
SSD-P-100	ø100	64	56.2	20	156	C type for shaft 20

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending