

Stopper Bolts

Shoulder / Straight / Hex Socket Head Cap Screw Type

Stopper Bolts – Shoulder Type

Standard Type		Hex Socket Type		Stopper		Screw			Accessory (Hex Nut)	
Straight Shape	SR Shape	Straight Shape	SR Shape	Material	Hardness	Material	*Strength Class	Surface Treatment	Material	Surface Treatment
UST	USRT	USTH	USRTH	Urethane (Black)	Shore A90	4137 Alloy Steel or Equivalent	10.9	Bright Chromate ^{*1}	1018 Carbon Steel or Equivalent	Trivalent Chromate
SUST	SUSRT	SUSTH	SUSRTH	Urethane (Black)	Shore A90	304 Stainless Steel	—	—	304 Stainless Steel or Equivalent	—
LUST	—	—	—	Low Repulsion Urethane (Gray)	Shore A60	4137 Alloy Steel or Equivalent	10.9	Bright Chromate ^{*1}	1018 Carbon Steel or Equivalent	Trivalent Chromate
PUST	—	PUSTH	—	Polyacetal (White)	—	4137 Alloy Steel or Equivalent	10.9	Bright Chromate ^{*1}	1018 Carbon Steel or Equivalent	Trivalent Chromate
PSST	—	PSSTH	—	Polyacetal (White)	—	304 Stainless Steel	—	—	304 Stainless Steel or Equivalent	—
USTS	—	—	—	Silicon (Light Gray)	Shore A60	4137 Alloy Steel or Equivalent	10.9	Bright Chromate ^{*1}	1018 Carbon Steel or Equivalent	Trivalent Chromate
SSTS	—	—	—	Silicon (Light Gray)	Shore A60	304 Stainless Steel	—	—	304 Stainless Steel or Equivalent	—

Standard Straight

Hex Socket Straight

^{*1} Incomplete threaded portion of 2 x pitch is under the neck.

Part Number Type	M (Coarse)	L Selection	Available Types										M (CrS)	D	B (C)	H	t	t ₁	m (ℓ)	B ₁	SR	
			UST	SUST	LUST	PUST	PSST	USTS	SSTS	USTH	SUSTH	PUSTH										PSSTH
Standard Type Straight	3	15 20 25 30 35 40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Hex Socket Type Straight	4	15 20 25 30 35 40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
UST	5	15 20 25 30 35 40 45 50	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SUST	6	20 25 30 35 40 45 50 60	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
LUST	8	20 25 30 35 40 45 50 60	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PUST	10	20 25 30 35 40 45 50 60 70	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PSST	12	30 40 50 60 70	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
USTS																						
SSTS																						

[Ⓢ] Silicon (USTS, SSTS): M4–M8; Hex Socket Type (USTH, SUSTH, PUSTH, PSSTH, USRTH, SUSRTH): M4–M10.

Stopper Bolts – Straight Type

Type	Stopper		Screw			Accessory (Hex Nut)	
	Material	Hardness	Material	*Strength Class	Surface Treatment	Material	Surface Treatment
USS	Urethane (Black)	Shore A90	4137 Alloy Steel	10.9	Trivalent Chromate	1018 Carbon Steel	Trivalent Chromate
USUS	Urethane (Black)	Shore A90	304 Stainless Steel	—	—	304 Stainless Steel or Equivalent	—
PUSS	Polyacetal (White)	—	4137 Alloy Steel	10.9	Trivalent Chromate	1018 Carbon Steel	Trivalent Chromate
SPUS	Polyacetal (White)	—	304 Stainless Steel	—	—	304 Stainless Steel or Equivalent	—

^{*1} For bolt strength class P.4016

Part Number Type	M (Coarse)	L Selection	ℓ ₁	d	E	d ₁	t	B	B ₁	(C)	m	Available Types		
												UNAH	UNAHH	SLUNA
USS	4	10 15 20 25 30 35	1.6	3.1	2.1	—	—	7	2	8.1	2.4	•	•	•
USUS	5	10 15 20 25 30 35 40	2.2	4	2.6	—	—	8	2.5	9.2	3.2	•	•	•
PUSS	6	15 20 25 30 35 40 45 50 60	2.6	4.8	3	—	—	10	3	11.5	3.6	•	•	•
SPUS	8	25 30 35 40 45 50 60	5.1	6.5	5.5	—	—	13	4	15	5	•	•	•
	10	30 35 40 45 50 60 70	6.9	8.3	7.3	—	—	17	5	19.6	6	•	•	•
	12	30 40 50 60 70	8	10	8.6	—	—	19	6	21.9	7	•	•	•

Stopper Bolts – Hex Socket Head Cap Screw Type

Type	Stopper		Bolts		Accessory (Hex Nut)
	Material	Hardness	Material	Material	Material
UUSCB	Urethane (Black)	Shore A90	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel
PSCB	Polyacetal (White)	—	304 Stainless Steel	304 Stainless Steel	304 Stainless Steel

Part Number Type	M (Coarse)	L Selection	A	E	H	B	(C)	B ₁	d ₁	d	ℓ ₁	t	m	Part Number Example	
														Part Number	L
UUSCB	4	10 12 15 20	7	4	3.1	7	8.1	3	2.1	1.6	4.5	3	2.4	UST8	- 40
PSCB	5	12 15 20 25	8.5	5	4	8	9.2	4	2.6	2.2	4.5	3	3.2	USS6	- 30
	6	15 20 25 30	10	6	4.8	10	11.5	5	3	2.6	4.5	3	3.6	PSCB4	- 10
	8	20 25 30 40	13	8	6.5	13	15	6	5.5	5.1	5.5	4	5		
	10	25 30 40 50	16	10	8.3	17	19.6	8	7.3	6.9	5.5	4	6		

Head Socket / Tip Hex Socket

MC Nylon / Urethane Type

Head Hex Socket – MC Nylon Type

Type	Stopper		Screw		Accessory (Hex Nut)	
	Material	Hardness	Material	*Strength Class	Material	Surface Treatment
UNAHM	MC Nylon	—	4137 Alloy Steel	8.8	1018 Carbon Steel or Equivalent	Trivalent Chromate

^{*1} For bolt strength class P.4016

[Ⓢ] Bolts and MC Nylon are put together using adhesives.
[Ⓢ] Contact Nut A to the MC Nylon for use.
[Ⓢ] If strong forces are applied, the MC Nylon may be damaged.
[Ⓢ] Do not use if load is in B direction.
[Ⓢ] For tightening, use a Hexagonal Hole, not Nut A.

Part Number Type	M (Coarse)	L Selection	t	D	d	B	H	m
UNAHM	4	10 15 20 25 30	3	10	2.4	2	7	2.4
	5	15 20 25 30 40	4	12	3	2.5	9	3.2
	6	15 20 25 30 40 50	4	15	3.5	3	10	3.6
	8	25 30 40 50	5	20	4.7	4	13	5
	10	30 40 50	5	25	6	5	15	6
	12	30 40 50	6	30	7	6	18	7
	16	30 40 50	6	40	9.5	8	22	10

Head Hex Socket – Urethane Type

Type	Stopper		Screw		Accessory (Hex Nut)	
	Material	Hardness	Material	*Strength Class	Material	S
UNAH	Urethane (Black)	Shore A90	4137 Alloy Steel	10.9	1018 Carbon Steel or Equivalent	Trivalent Chromate
UNAHH	Urethane (Blue)	Shore A60	4137 Alloy Steel	10.9	1018 Carbon Steel or Equivalent	Trivalent Chromate
SLUNA	Low Repulsion Urethane (Gray)	Shore A60	304 Stainless Steel	—	304 Stainless Steel or Equivalent	—

^{*1} For bolt strength class P.4016

Part Number Type	M (Coarse)	L Selection	t	D	A	d	B	H	ℓ	m	Available Types		
											UNAH	UNAHH	SLUNA
UNAH	3	10 15	3	7.5	5.5	3.3	2.5	6	Full Thread	1.8	•	•	•
UNAHH	4	10 15 20 (*25) (*30)	3	10	7	4.2	3	7	Full Thread (22)	2.4	•	•	•
SLUNA	5	10 15 20 25 *30 (*40)	4	12.5	8.5	5.5	4	9	Full Thread (24)	3.2	•	•	•
	6	10 15 20 25 30 *40 (*50)	4	15	10	6	5	10	Full Thread (26)	3.6	•	•	•
	8	10 15 20 25 30 *40 *50 (*60)	5	20	13	7.3	6	13	Full Thread (30)	5	•	•	•
	10	10 15 20 25 30 40 *50 (*60) (*70)	5	25	16	10	8	15	Full Thread (34)	6	•	•	•
	12	15 20 25 30 40	6	30	18	13	10	18	Full Thread	7	•	•	•
	16	20 25 30 40	6	40	24	17	14	22	Full Thread	10	•	•	•

[Ⓢ] L sizes in () are not available for SLUNA. [Ⓢ] ℓ dimension for *marked L dimension is in ().

Tip Hex Socket – Urethane Type

Type	Stopper		Screw		Accessory (Hex Nut)	
	Material	Hardness	Material	*Strength Class	Material	S
UNBH	Urethane (Black)	Shore A90	4137 Alloy Steel	10.9	1018 Carbon Steel or Equivalent	Trivalent Chromate
UNBHH	Urethane (Blue)	Shore A60	4137 Alloy Steel	10.9	1018 Carbon Steel or Equivalent	Trivalent Chromate

^{*1} For bolt strength class P.4016

Part Number Type	M (Coarse)	L Selection	t ₁	D	B ₁	H ₁	ℓ	m	(ℓ ₁)
UNBH	3	10 15	4	7.5	1.5	14	Full Thread	1.8	1.8
UNBHH	4	10 15 20 25 30	4	10	2	14	Full Thread	2.4	2.2
	5	15 20 25 30 40	5	12.5	2.5	15	Full Thread	3.2	2.8
	6	15 20 25 30 40 50	5	15	3	15	Full Thread	3.6	3
	8	25 30 40 50 60	6	20	4	16	Full Thread	5	4
	10	30 40 50 60 70	6	25	5	16	Full Thread	6	5

Part Number Example

Part Number - L
 UNAH4 - 20
 UNBH5 - 25