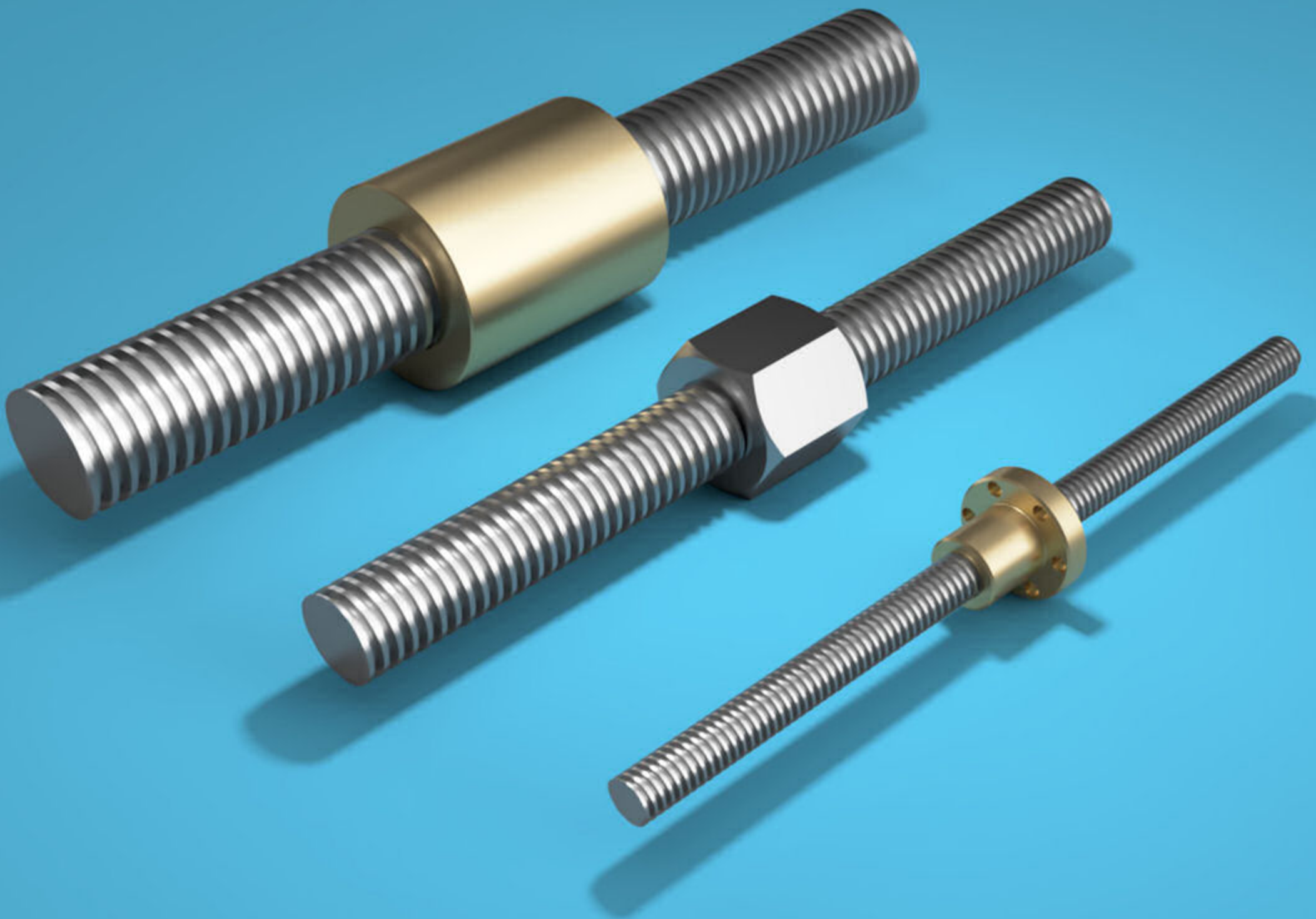


Power Lead Screws



ABSSAC

PRECISION MOTION SINCE 1982



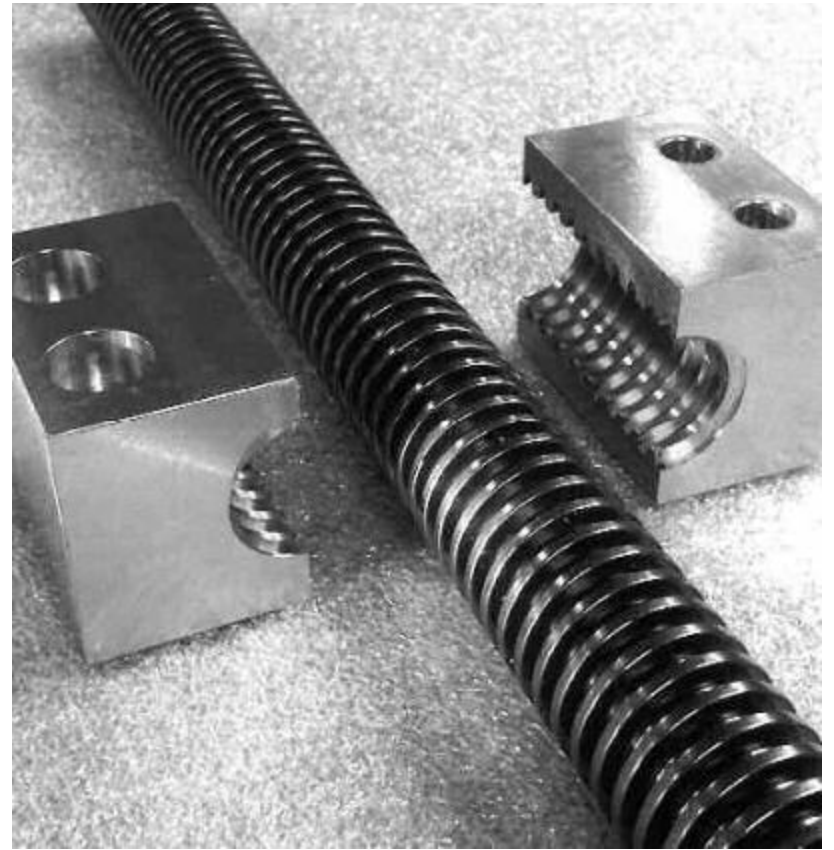
POWER SCREWS AND ASSOCIATED POWER NUTS



Bronze nuts available in flanged and threaded mount designs as standard.



Matching leads in both right and left hand formats are available.



Custom design.

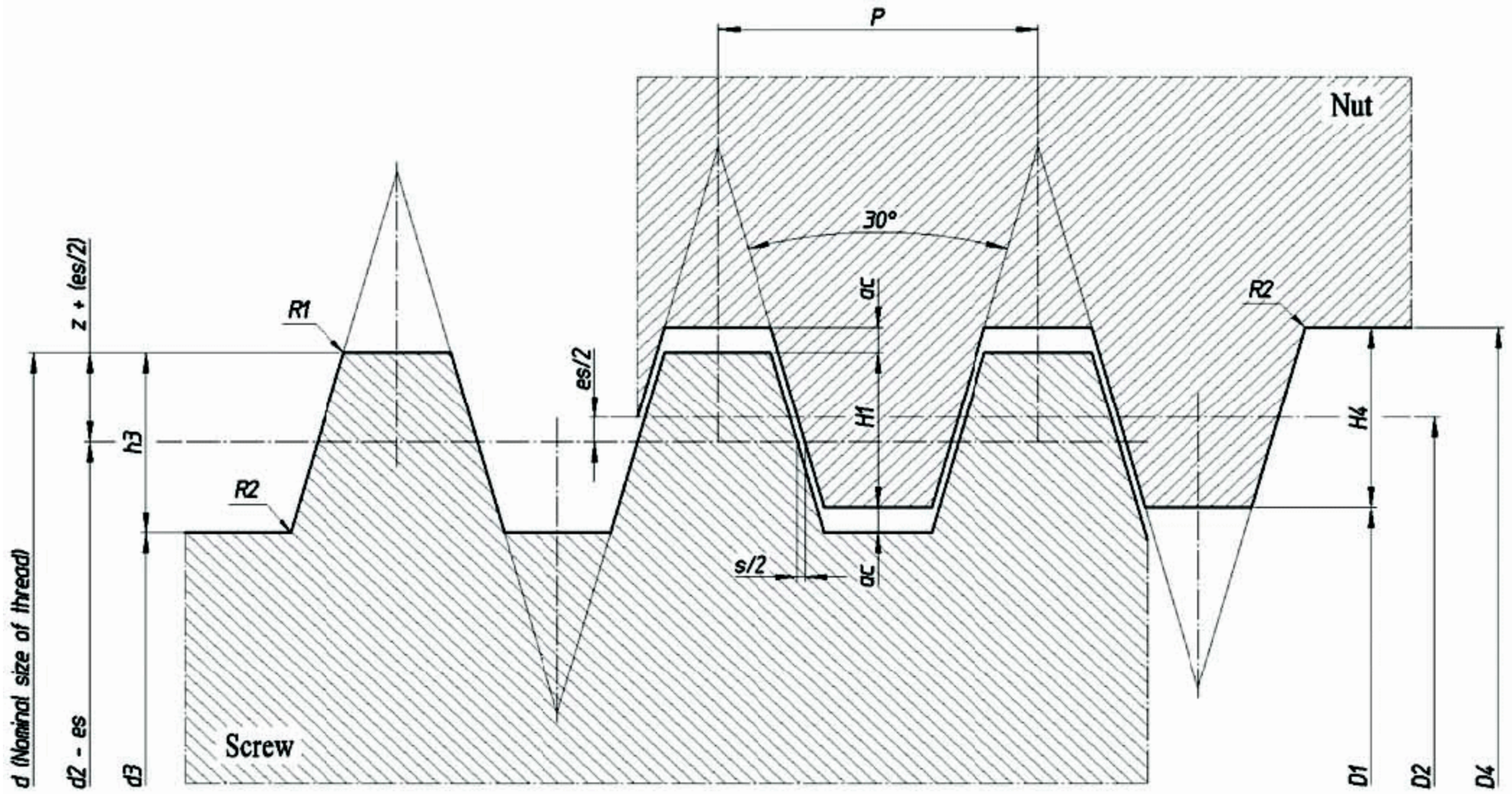


We offer a complete design service.





PROFILE FOR METRIC TRAPEZOIDAL THREADS TO ISO STANDARD 2901 2902 2903 2904



$$H_1 = 0.5 P$$

$$h_3 = H_4 = H_1 + a_c = 0.5 P + a_c$$

$$z = 0.25 P = H_1/2$$

$$d_3 = d - 2 h_3$$

$$d_2 = D_2 = d + 2 z = d + 0.5 P$$

$$D_2 = d + 2 a_c$$

$$a_c = \text{bottom play}$$

$$es = \text{top deviation for screw}$$

$$s = 0.26795 es$$

$$R_1 \text{ max.} = 0.5 a_c$$

$$R_2 \text{ max.} = a_c$$



PART NUMBER REFERENCE

Screw	Lead Accuracy mm/mm	Material	Grade	Page
Single Start sizes				5
Multi Start sizes				6
Nut Types				78
Single Start TRC45	.1/100	Carbon Steel	EN 100832 1C45 1.0503	910
Single Start TRC15	.2/200	Carbon Steel	EN 10084 C15E 1.1141	11
Multi Start TRC15	.2/200	Carbon Steel	EN 10084 C15E 1.1141	12
Single Start TR304	.2/200	Stainless Steel	INOX A2 AISI 304 1.4301	13
Multi Start TR304	.2/200	Stainless Steel	INOX A2 AISI 304 1.4301	14
Single Start TR316	.2/200	Stainless Steel	INOX A4 AISI 316 1.4401	15
Nut	Shape	Material	Grade	
FBN	Flanged	Bronze	EN 1982 CuSn5Zn5Pb5C CC491K	16
OFBN	Flanged	Bronze	EN 1982 CuSn12C CC483K	19
FBNNS	Flanged	Bronze	EN 1982 CuSn5Zn5Pb5C CC491K	22
FBNEL	Flanged	Bronze	EN 1982 CuSn12C CC483K	25
RBND	Cylindrical	Bronze	EN 1982 CuSn5Zn5Pb5C CC491K	28
RBN	Cylindrical	Bronze	EN 1982 CuSn7Zn4Pb7C CC493K	28
LRBN	Cylindrical	Bronze	EN 1982 CuSn12C CC483K	28
RSND	Cylindrical	Steel	EN 102773 11SMnPb37 1.0737	29
RSN	Cylindrical	Steel	EN 102773 11SMnPb30 1.0715	30
HSN	Hexagonal	Steel	EN 102773 11SMnPb37 1.0737	31
RPN	Cylindrical	Plastic	PA6 + Mo S2 DIN 7728	32
FPN	Flanged	Plastic	PA6 + Mo S2 DIN 7728	33
HEX	Hexagonal	Steel	EN 102773 11SMnPb37 1.0737	
RSSN	Cylindrical	Stainless Steel	INOX A1 AISI 303 1.4305	
RPN	Cylindrical	Plastic	PA6 + Mo S2 DIN 7728	



SINGLE START TRAPEZOIDAL SCREW LIST

Single Start	Carbon Steel				Stainless Steel			
	C45		C15		A2 (304)		A4 (316)	
	TRC45 accuracy 0.1mm / 300mm		TRC15 accuracy 0.2mm / 300mm		TR304 accuracy 0.2mm / 300mm		TR316 accuracy 0.2mm / 300mm	
THREAD	RH	LH	RH	LH	RH	LH	RH	LH
Tr 10 x 2	•	•	•	•	•	•	•	•
Tr 10 x 3	•	•	•	•	•	•	•	•
Tr 12 x 3	•	•	•	•	•	•	•	•
Tr 14 x 3	•	•	•	•	•	•	•	•
Tr 14 x 4	•	•	•	•	•	•	•	•
Tr 16 x 4	•	•	•	•	•	•	•	•
Tr 18 x 4	•	•	•	•	•	•	•	•
Tr 20 x 4	•	•	•	•	•	•	•	•
Tr 22 x 5	•	•	•	•	•	•	•	•
Tr 24 x 5	•	•	•	•	•	•	•	•
Tr 25 x 3	•	•	•	•	•	•	•	•
Tr 25 x 5	•	•	•	•	•	•	•	•
Tr 26 x 5	•	•	•	•	•	•	•	•
Tr 28 x 5	•	•	•	•	•	•	•	•
Tr 30 x 3	•	•	•	•	•	•	•	•
Tr 30 x 4	•	•	•	•	•	•	•	•
Tr 30 x 5	•	•	•	•	•	•	•	•
Tr 30 x 6	•	•	•	•	•	•	•	•
Tr 32 x 6	•	•	•	•	•	•	•	•
Tr 35 x 3	•	•	•	•	•	•	•	•
Tr 35 x 4	•	•	•	•	•	•	•	•
Tr 35 x 5	•	•	•	•	•	•	•	•
Tr 35 x 6	•	•	•	•	•	•	•	•
Tr 35 x 8	•	•	•	•	•	•	•	•
Tr 36 x 6	•	•	•	•	•	•	•	•
Tr 40 x 3	•	•	•	•	•	•	•	•
Tr 40 x 4	•	•	•	•	•	•	•	•
Tr 40 x 5	•	•	•	•	•	•	•	•
Tr 40 x 6	•	•	•	•	•	•	•	•
Tr 40 x 7	•	•	•	•	•	•	•	•
Tr 40 x 8	•	•	•	•	•	•	•	•
Tr 40 x 10	•	•	•	•	•	•	•	•
Tr 44 x 7	•	•	•	•	•	•	•	•
Tr 45 x 8	•	•	•	•	•	•	•	•
Tr 50 x 3	•	•	•	•	•	•	•	•
Tr 50 x 4	•	•	•	•	•	•	•	•
Tr 50 x 5	•	•	•	•	•	•	•	•
Tr 50 x 6	•	•	•	•	•	•	•	•
Tr 50 x 8	•	•	•	•	•	•	•	•
Tr 50 x 10	•	•	•	•	•	•	•	•
Tr 55 x 9	•	•	•	•	•	•	•	•
Tr 60 x 6	•	•	•	•	•	•	•	•
Tr 60 x 7	•	•	•	•	•	•	•	•
Tr 60 x 9	•	•	•	•	•	•	•	•
Tr 70 x 10	•	•	•	•	•	•	•	•
Tr 80 x 10	•	•	•	•	•	•	•	•
Tr 90 x 12	•	•	•	•	•	•	•	•
Tr 95 x 16	•	•	•	•	•	•	•	•
Tr 100 x 12	•	•	•	•	•	•	•	•
Tr 100 x 16	•	•	•	•	•	•	•	•
Tr 120 x 14	•	•	•	•	•	•	•	•
Tr 120 x 16	•	•	•	•	•	•	•	•
Tr 140 x 14	•	•	•	•	•	•	•	•

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MULTIPLE START TRAPEZOIDAL SCREW LIST

Multiple Start	Carbon Steel				Stainless Steel	
	C15		C45		A2 (304)	
	TRC15 accuracy 0.2mm / 300mm		TRC45 accuracy 0.1mm / 300mm		TR304 accuracy 0.2mm / 300mm	
THREAD	RH	LH	RH	LH	RH	LH
Tr 10 x 4 (P2)	•	•	•	•	•	•
Tr 12 x 6 (P3)	•	•	•	•	•	•
Tr 14 x 6 (P3)	•	•	•	•	•	•
Tr 16 x 8 (P4)	•	•	•	•	•	•
Tr 18 x 8 (P4)	•	•	•	•	•	•
Tr 20 x 8 (P4)	•	•	•	•	•	•
Tr 20 x 20 (P5)	•	•	•	•	•	•
Tr 22 x 10 (P5)	•	•	•	•	•	•
Tr 24 x 10 (P5)	•	•	•	•	•	•
Tr 25 x 10 (P5)	•	•	•	•	•	•
Tr 25 x 25 (P5)	•	•	•	•	•	•
Tr 26 x 10 (P5)	•	•	•	•	•	•
Tr 28 x 10 (P5)	•	•	•	•	•	•
Tr 30 x 12 (P6)	•	•	•	•	•	•
Tr 30 x 30 (P5)	•	•	•	•	•	•
Tr 32 x 12 (P6)	•	•	•	•	•	•
Tr 36 x 12 (P6)	•	•	•	•	•	•
Tr 40 x 14 (P7)	•	•	•	•	•	•
Tr 40 x 40 (P8)	•	•	•	•	•	•

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SINGLE START FLANGED NUTS

Single Start	FBN Bronze CuSn5Zn5Pb5-C		OFBN Bronze CuSn12-C		FBNNS Bronze CuSn5Zn5Pb5-C		FBNEL Bronze CuSn12-C		FPN Plastic PA6+MoS2	
	RH	LH	RH	LH	RH	LH	RH	LH	RH	LH
Tr 10 x 2	•	•								
Tr 10 x 3			•	•	•	•				
Tr 12 x 3	•	•	•	•	•	•			•	•
Tr 14 x 3	•	•								
Tr 14 x 4			•	•	•	•	•	•		
Tr 16 x 4	•	•	•	•	•	•	•	•	•	•
Tr 18 x 4	•	•	•	•	•	•	•	•		
Tr 20 x 4	•	•	•	•	•	•	•	•	•	•
Tr 22 x 5	•	•	•	•	•	•	•	•		
Tr 24 x 5	•	•	•	•						
Tr 25 x 3									•	•
Tr 25 x 5			•	•	•	•	•	•		
Tr 26 x 5	•	•	•	•						
Tr 28 x 5	•	•	•	•	•	•	•	•	•	•
Tr 30 x 3							•	•	•	•
Tr 30 x 4					•	•				
Tr 30 x 5					•	•				
Tr 30 x 6	•	•	•	•	•	•	•	•	•	•
Tr 32 x 6	•	•	•	•			•	•		
Tr 35 x 3					•	•				
Tr 35 x 4					•	•				
Tr 35 x 5					•	•				
Tr 35 x 6			•	•	•	•	•	•	•	•
Tr 35 x 8					•					
Tr 36 x 6	•	•	•	•						
Tr 40 x 3					•	•				
Tr 40 x 4					•	•	•			
Tr 40 x 5					•	•				
Tr 40 x 6					•	•				
Tr 40 x 7	•	•	•	•	•	•	•	•	•	•
Tr 40 x 8					•					
Tr 40 x 10							•		•	
Tr 44 x 7	•	•	•	•						
Tr 45 x 8			•	•	•	•				
Tr 50 x 3					•	•				
Tr 50 x 4					•	•				
Tr 50 x 5					•	•				
Tr 50 x 6					•	•	•			
Tr 50 x 8	•	•	•	•	•	•	•	•	•	•
Tr 50 x 10							•			
Tr 55 x 9			•	•	•					
Tr 60 x 6					•	•				
Tr 60 x 7					•	•				
Tr 60 x 9	•	•	•	•	•	•	•	•		
Tr 70 x 10	•	•	•	•						
Tr 80 x 10			•	•						
Tr 90 x 12			•	•						
Tr 95 x 16			•	•						
Tr 100 x 12			•	•						
Tr 100 x 16			•	•						
Tr 120 x 14			•	•						
Tr 120 x 16			•	•						
Tr 140 x 14			•	•						

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SINGLE START NUTS

Single Start	RBN Bronze CuSn7Zn5Pb7-C		RBND Bronze CuSn5Zn5Pb5-C		RSN Steel 11SMn30		RSSN Stainless Aisi 303 1.4305		RPN Plastic PA6+MoS2		HSN Steel 11SMnPb37	
	RH	LH	RH	LH	RH	LH	RH	LH	RH	LH	RH	LH
Tr 10 x 2	•	•	•	•	•	•	•	•	•	•	•	•
Tr 10 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 12 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 14 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 14 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 16 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 18 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 20 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 22 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 24 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 25 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 25 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 26 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 28 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 30 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 30 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 30 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 30 x 6	•	•	•	•	•	•	•	•	•	•	•	•
Tr 32 x 6	•	•	•	•	•	•	•	•	•	•	•	•
Tr 35 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 35 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 35 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 35 x 6	•	•	•	•	•	•	•	•	•	•	•	•
Tr 35 x 8	•	•	•	•	•	•	•	•	•	•	•	•
Tr 36 x 6	•	•	•	•	•	•	•	•	•	•	•	•
Tr 40 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 40 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 40 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 40 x 6	•	•	•	•	•	•	•	•	•	•	•	•
Tr 40 x 7	•	•	•	•	•	•	•	•	•	•	•	•
Tr 40 x 8	•	•	•	•	•	•	•	•	•	•	•	•
Tr 40 x 10	•	•	•	•	•	•	•	•	•	•	•	•
Tr 44 x 7	•	•	•	•	•	•	•	•	•	•	•	•
Tr 45 x 8	•	•	•	•	•	•	•	•	•	•	•	•
Tr 50 x 3	•	•	•	•	•	•	•	•	•	•	•	•
Tr 50 x 4	•	•	•	•	•	•	•	•	•	•	•	•
Tr 50 x 5	•	•	•	•	•	•	•	•	•	•	•	•
Tr 50 x 6	•	•	•	•	•	•	•	•	•	•	•	•
Tr 50 x 8	•	•	•	•	•	•	•	•	•	•	•	•
Tr 50 x 10	•	•	•	•	•	•	•	•	•	•	•	•
Tr 55 x 9	•	•	•	•	•	•	•	•	•	•	•	•
Tr 60 x 6	•	•	•	•	•	•	•	•	•	•	•	•
Tr 60 x 7	•	•	•	•	•	•	•	•	•	•	•	•
Tr 60 x 9	•	•	•	•	•	•	•	•	•	•	•	•
Tr 70 x 10	•	•	•	•	•	•	•	•	•	•	•	•
Tr 80 x 10	•	•	•	•	•	•	•	•	•	•	•	•
Tr 90 x 12	•	•	•	•	•	•	•	•	•	•	•	•
Tr 95 x 16	•	•	•	•	•	•	•	•	•	•	•	•
Tr 100 x 12	•	•	•	•	•	•	•	•	•	•	•	•
Tr 100 x 16	•	•	•	•	•	•	•	•	•	•	•	•
Tr 120 x 14	•	•	•	•	•	•	•	•	•	•	•	•
Tr 120 x 16	•	•	•	•	•	•	•	•	•	•	•	•
Tr 140 x 14	•	•	•	•	•	•	•	•	•	•	•	•

• Standard Product • Made To Order Only

SINGLE START TRAPEZOIDAL SCREWS

TYPE TRC45 - STEEL C45 1.0503

Stock no. for screw RIGHT	Stock no. for screw LEFT	Diameter x Lead	Thread Starts	Lead Accuracy $\mu\text{m}/300\text{mm}$	Straightness mm/mm	Weight kg/mt
• TRC45 10 T R	• TRC45 10 T L	Tr 10 x 2	1	100	0.5 / 300	0.48
• TRC45 10 A R	• TRC45 10 A L	Tr 10 x 3	1	100	0.5 / 300	0.42
• TRC45 12 A R	• TRC45 12 A L	Tr 12 x 3	1	100	0.5 / 300	0.65
• TRC45 14 R R	• TRC45 14 R L	Tr 14 x 3	1	100	0.5 / 300	0.93
• TRC45 14 A R	• TRC45 14 A L	Tr 14 x 4	1	100	0.5 / 300	0.86
• TRC45 16 A R	• TRC45 16 A L	Tr 16 x 4	1	100	0.5 / 300	1.17
• TRC45 18 A R	• TRC45 18 A L	Tr 18 x 4	1	100	0.5 / 300	1.53
• TRC45 20 A R	• TRC45 20 A L	Tr 20 x 4	1	100	0.5 / 300	1.94
• TRC45 22 A R	• TRC45 22 A L	Tr 22 x 5	1	100	0.5 / 300	2.29
• TRC45 24 A R	• TRC45 24 A L	Tr 24 x 5	1	100	0.5 / 300	2.78
• TRC45 25 R R	• TRC45 25 R L	Tr 25 x 3	1	100	0.2 / 300	3.30
• TRC45 25 A R	• TRC45 25 A L	Tr 25 x 5	1	100	0.2 / 300	3.05
• TRC45 26 A R	• TRC45 26 A L	Tr 26 x 5	1	100	0.2 / 300	3.33
• TRC45 28 A R	• TRC45 28 A L	Tr 28 x 5	1	100	0.2 / 300	3.92
• TRC45 30 P R	• TRC45 30 P L	Tr 30 x 5	1	100	0.2 / 300	4.57
• TRC45 30 A R	• TRC45 30 A L	Tr 30 x 6	1	100	0.2 / 300	4.38
• TRC45 32 A R	• TRC45 32 A L	Tr 32 x 6	1	100	0.2 / 300	5.06
• TRC45 35 P R	• TRC45 35 P L	Tr 35 x 5	1	100	0.2 / 300	6.40
• TRC45 35 A R	• TRC45 35 A L	Tr 35 x 6	1	100	0.2 / 300	6.16
• TRC45 35 M R	• TRC45 35 M L	Tr 35 x 8	1	100	0.2 / 300	5.85
• TRC45 36 A R	• TRC45 36 A L	Tr 36 x 6	1	100	0.2 / 300	6.56
• TRC45 40 P R	• TRC45 40 P L	Tr 40 x 5	1	100	0.2 / 300	8.51
• TRC45 40 O R	• TRC45 40 O L	Tr 40 x 6	1	100	0.2 / 300	8.26
• TRC45 40 A R	• TRC45 40 A L	Tr 40 x 7	1	100	0.2 / 300	8.03
• TRC45 40 M R	• TRC45 40 M L	Tr 40 x 8	1	100	0.2 / 300	7.90
• TRC45 40 I R	• TRC45 40 I L	Tr 40 x 10	1	100	0.2 / 300	7.49
• TRC45 44 A R	• TRC45 44 A L	Tr 44 x 7	1	100	0.2 / 300	9.90
• TRC45 45 A R	• TRC45 45 A L	Tr 45 x 8	1	100	0.2 / 300	10.23
• TRC45 50 P R	• TRC45 50 P L	Tr 50 x 5	1	100	0.2 / 300	13.70
• TRC45 50 O R	• TRC45 50 O L	Tr 50 x 6	1	100	0.2 / 300	13.35
• TRC45 50 A R	• TRC45 50 A L	Tr 50 x 8	1	100	0.2 / 300	12.90
• TRC45 50 I R	• TRC45 50 I L	Tr 50 x 10	1	100	0.2 / 300	12.37
• TRC45 55 A R	• TRC45 55 A L	Tr 55 x 9	1	100	0.2 / 300	15.51
• TRC45 60 O R	• TRC45 60 O L	Tr 60 x 6	1	100	0.2 / 300	19.67
• TRC45 60 N R	• TRC45 60 N L	Tr 60 x 7	1	100	0.2 / 300	19.36
• TRC45 60 A R	• TRC45 60 A L	Tr 60 x 9	1	100	0.2 / 300	18.74
• TRC45 70 A R	• TRC45 70 A L	Tr 70 x 10	1	100	0.4 / 300	25.80
• TRC45 80 A R	• TRC45 80 A L	Tr 80 x 10	1	100	0.4 / 300	34.39
• TRC45 90 A R	• TRC45 90 A L	Tr 90 x 12	1	200	0.5 / 300	43.07
• TRC45 95 W R	• TRC45 95 W L	Tr 95 x 16	1	200	1 / 300	45.90
• TRC45 A0 A R	• TRC45 A0 A L	Tr 100 x 12	1	200	1 / 300	53.99
• TRC45 A0 W R	• TRC45 A0 W L	Tr 100 x 16	1	200	1 / 300	51.37
• TRC45 C0 A R	• TRC45 C0 A L	Tr 120 x 14	1	200	1 / 300	77.72
• TRC45 C0 W R	• TRC45 C0 W L	Tr 120 x 16	1	200	1 / 300	76.34
• TRC45 E0 A R	• TRC45 E0 A L	Tr 140 x 14	1	200	1 / 300	107.87

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MULTI START TRAPEZOIDAL SCREWS

TYPE TRC45 - STEEL C45 1.0503

Stock no. for screw RIGHT	Stock no. for screw LEFT	Diameter x Lead	Thread Starts	Lead Accuracy µm/300mm	Straightness mm/mm	Weight kg/mt
• TRC45 10 J R	• TRC45 10 J L	Tr 10 x 4 (P2)	2	100	0.5 / 300	0.48
• TRC45 12 B R	• TRC45 12 B L	Tr 12 x 6 (P3)	2	100	0.5 / 300	0.65
• TRC45 14 B R	• TRC45 14 B L	Tr 14 x 6 (P3)	2	100	0.5 / 300	0.93
• TRC45 16 B R	• TRC45 16 B L	Tr 16 x 8 (P4)	2	100	0.5 / 300	1.17
• TRC45 18 B R	• TRC45 18 B L	Tr 18 x 8 (P4)	2	100	0.5 / 300	1.53
• TRC45 20 B R	• TRC45 20 B L	Tr 20 x 8 (P4)	2	100	0.4 / 300	1.94
• TRC45 20 D R	• TRC45 20 D L	Tr 20 x 20 (P5)	4	100	0.4 / 300	1.84
• TRC45 22 B R	• TRC45 22 B L	Tr 22 x 10 (P5)	2	100	0.3 / 300	2.29
• TRC45 24 B R	• TRC45 24 B L	Tr 24 x 10 (P5)	2	100	0.3 / 300	2.78
• TRC45 25 B R	• TRC45 25 B L	Tr 25 x 10 (P5)	2	100	0.3 / 300	3.05
• TRC45 25 E R	• TRC45 25 E L	Tr 25 x 25 (P5)	5	100	0.3 / 300	3.05
• TRC45 26 B R	• TRC45 26 B L	Tr 26 x 10 (P5)	2	100	0.3 / 300	3.33
• TRC45 28 B R	• TRC45 28 B L	Tr 28 x 10 (P5)	2	100	0.3 / 300	3.92
• TRC45 30 B R	• TRC45 30 B L	Tr 30 x 12 (P6)	2	100	0.3 / 300	4.38
• TRC45 30 F R	• TRC45 30 F L	Tr 30 x 30 (P5)	6	100	0.3 / 300	4.57
• TRC45 32 B R	• TRC45 32 B L	Tr 32 x 12 (P6)	2	100	0.3 / 300	5.06
• TRC45 36 B R	• TRC45 36 B L	Tr 36 x 12 (P6)	2	100	0.3 / 300	6.56
• TRC45 40 B R	• TRC45 40 B L	Tr 40 x 14 (P7)	2	100	0.3 / 300	8.03
• TRC45 40 E R	• TRC45 40 E L	Tr 40 x 40 (P8)	5	100	0.3 / 300	7.90

- Standard Product
- Made To Order Only

SINGLE START TRAPEZOIDAL SCREWS

TYPE TRC15 - STEEL C15 1.1141

Stock no. for screw RIGHT	Stock no. for screw LEFT	Diameter x Lead	Thread Starts	Lead Accuracy $\mu\text{m}/300\text{mm}$	Straightness mm/mm	Weight kg/mt
• TRC15 10 T R	• TRC15 10 T L	Tr 10 x 2	1	200	0.7 / 1000	0.48
• TRC15 10 A R	• TRC15 10 A L	Tr 10 x 3	1	200	0.7 / 1000	0.42
• TRC15 12 A R	• TRC15 12 A L	Tr 12 x 3	1	200	0.7 / 1000	0.65
• TRC15 14 R R	• TRC15 14 R L	Tr 14 x 3	1	200	0.7 / 1000	0.93
• TRC15 14 A R	• TRC15 14 A L	Tr 14 x 4	1	200	0.7 / 1000	0.86
• TRC15 16 A R	• TRC15 16 A L	Tr 16 x 4	1	200	0.7 / 1500	1.17
• TRC15 18 A R	• TRC15 18 A L	Tr 18 x 4	1	200	0.7 / 1500	1.53
• TRC15 20 A R	• TRC15 20 A L	Tr 20 x 4	1	200	0.6 / 2000	1.94
• TRC15 22 A R	• TRC15 22 A L	Tr 22 x 5	1	200	0.6 / 2000	2.29
• TRC15 24 A R	• TRC15 24 A L	Tr 24 x 5	1	200	0.4 / 2000	2.78
• TRC15 25 R R	• TRC15 25 R L	Tr 25 x 3	1	200	0.4 / 2000	3.30
• TRC15 25 A R	• TRC15 25 A L	Tr 25 x 5	1	200	0.4 / 2000	3.05
• TRC15 26 A R	• TRC15 26 A L	Tr 26 x 5	1	200	0.4 / 2000	3.33
• TRC15 28 A R	• TRC15 28 A L	Tr 28 x 5	1	200	0.4 / 2000	3.92
• TRC15 30 R R	• TRC15 30 R L	Tr 30 x 3	1	200	0.4 / 3000	4.57
• TRC15 30 Q R	• TRC15 30 Q L	Tr 30 x 4	1	200	0.4 / 3000	4.57
• TRC15 30 P R	• TRC15 30 P L	Tr 30 x 5	1	200	0.4 / 3000	4.57
• TRC15 30 A R	• TRC15 30 A L	Tr 30 x 6	1	200	0.4 / 3000	4.38
• TRC15 32 A R	• TRC15 32 A L	Tr 32 x 6	1	200	0.4 / 3000	5.06
• TRC15 35 R R	• TRC15 35 R L	Tr 35 x 3	1	200	0.3 / 3000	6.77
• TRC15 35 Q R	• TRC15 35 Q L	Tr 35 x 4	1	200	0.3 / 3000	6.57
• TRC15 35 P R	• TRC15 35 P L	Tr 35 x 5	1	200	0.3 / 3000	6.40
• TRC15 35 A R	• TRC15 35 A L	Tr 35 x 6	1	200	0.3 / 3000	6.16
• TRC15 35 M R	• TRC15 35 M L	Tr 35 x 8	1	200	0.3 / 3000	5.85
• TRC15 36 A R	• TRC15 36 A L	Tr 36 x 6	1	200	0.3 / 3000	6.56
• TRC15 40 R R	• TRC15 40 R L	Tr 40 x 3	1	200	0.3 / 3000	8.95
• TRC15 40 Q R	• TRC15 40 Q L	Tr 40 x 4	1	200	0.3 / 3000	8.71
• TRC15 40 P R	• TRC15 40 P L	Tr 40 x 5	1	200	0.3 / 3000	8.51
• TRC15 40 O R	• TRC15 40 O L	Tr 40 x 6	1	200	0.3 / 3000	8.26
• TRC15 40 A R	• TRC15 40 A L	Tr 40 x 7	1	200	0.3 / 3000	8.03
• TRC15 40 M R	• TRC15 40 M L	Tr 40 x 8	1	200	0.3 / 3000	7.90
• TRC15 40 I R	• TRC15 40 I L	Tr 40 x 10	1	200	0.3 / 3000	7.49
• TRC15 44 A R	• TRC15 44 A L	Tr 44 x 7	1	200	0.3 / 3000	9.90
• TRC15 45 A R	• TRC15 45 A L	Tr 45 x 8	1	200	0.3 / 3000	10.23
• TRC15 50 R R	• TRC15 50 R L	Tr 50 x 3	1	200	0.3 / 3000	14.26
• TRC15 50 Q R	• TRC15 50 Q L	Tr 50 x 4	1	200	0.3 / 3000	13.96
• TRC15 50 P R	• TRC15 50 P L	Tr 50 x 5	1	200	0.3 / 3000	13.70
• TRC15 50 O R	• TRC15 50 O L	Tr 50 x 6	1	200	0.3 / 3000	13.35
• TRC15 50 A R	• TRC15 50 A L	Tr 50 x 8	1	200	0.3 / 3000	12.90
• TRC15 50 I R	• TRC15 50 I L	Tr 50 x 10	1	200	0.3 / 3000	12.37
• TRC15 55 A R	• TRC15 55 A L	Tr 55 x 9	1	200	0.3 / 3000	15.51
• TRC15 60 O R	• TRC15 60 O L	Tr 60 x 6	1	200	0.3 / 3000	19.67
• TRC15 60 N R	• TRC15 60 N L	Tr 60 x 7	1	200	0.3 / 3000	19.36
• TRC15 60 A R	• TRC15 60 A L	Tr 60 x 9	1	200	0.3 / 3000	18.74
• TRC15 70 A R	• TRC15 70 A L	Tr 70 x 10	1	200	0.3 / 3000	25.80
• TRC15 80 A R	• TRC15 80 A L	Tr 80 x 10	1	200	0.3 / 3000	34.39

• Standard Product • Made To Order Only

MULTI START TRAPEZOIDAL SCREWS

TYPE TRC15 - STEEL C15 1.1141

Stock no. for screw RIGHT	Stock no. for screw LEFT	Diameter x Lead	Thread Starts	Lead Accuracy µm/300mm	Straightness mm/mm	Weight kg/mt
• TRC15 10 J R	• TRC15 10 J L	Tr 10 x 4 (P2)	2	200	0.7 / 1000	0.48
• TRC15 12 B R	• TRC15 12 B L	Tr 12 x 6 (P3)	2	200	0.7 / 1000	0.65
• TRC15 14 B R	• TRC15 14 B L	Tr 14 x 6 (P3)	2	200	0.7 / 1000	0.93
• TRC15 16 B R	• TRC15 16 B L	Tr 16 x 8 (P4)	2	200	0.7 / 1500	1.17
• TRC15 18 B R	• TRC15 18 B L	Tr 18 x 8 (P4)	2	200	0.7 / 1500	1.53
• TRC15 20 B R	• TRC15 20 B L	Tr 20 x 8 (P4)	2	200	0.6 / 2000	1.94
• TRC15 20 D R	• TRC15 20 D L	Tr 20 x 20 (P5)	4	200	0.6 / 2000	1.84
• TRC15 22 B R	• TRC15 22 B L	Tr 22 x 10 (P5)	2	200	0.6 / 2000	2.29
• TRC15 24 B R	• TRC15 24 B L	Tr 24 x 10 (P5)	2	200	0.4 / 2000	2.78
• TRC15 25 B R	• TRC15 25 B L	Tr 25 x 10 (P5)	2	200	0.4 / 2000	3.05
• TRC15 25 E R	• TRC15 25 E L	Tr 25 x 25 (P5)	5	200	0.4 / 2000	3.05
• TRC15 26 B R	• TRC15 26 B L	Tr 26 x 10 (P5)	2	200	0.4 / 2000	3.33
• TRC15 28 B R	• TRC15 28 B L	Tr 28 x 10 (P5)	2	200	0.4 / 2000	3.92
• TRC15 30 B R	• TRC15 30 B L	Tr 30 x 12 (P6)	2	200	0.4 / 3000	4.38
• TRC15 30 F R	• TRC15 30 F L	Tr 30 x 30 (P5)	6	200	0.4 / 3000	4.57
• TRC15 32 B R	• TRC15 32 B L	Tr 32 x 12 (P6)	2	200	0.4 / 3000	5.06
• TRC15 36 B R	• TRC15 36 B L	Tr 36 x 12 (P6)	2	200	0.3 / 3000	6.56
• TRC15 40 B R	• TRC15 40 B L	Tr 40 x 14 (P7)	2	200	0.3 / 3000	8.03
• TRC15 40 E R	• TRC15 40 E L	Tr 40 x 40 (P8)	5	200	0.3 / 3000	7.90

- Standard Product
- Made To Order Only

SINGLE START TRAPEZOIDAL SCREWS TYPE TR304

A2 STAINLESS STEEL - AISI 304 1.4301

Stock no. for screw RIGHT	Stock no. for screw LEFT	Diameter x Lead	Thread Starts	Lead Accuracy $\mu\text{m}/300\text{mm}$	Straightness mm/mm	Weight kg/mt
• TR304 10 T R	• TR304 10 T L	Tr 10 x 2	1	200	0.7 / 1000	0.48
• TR304 10 A R	• TR304 10 A L	Tr 10 x 3	1	200	0.7 / 1000	0.42
• TR304 12 A R	• TR304 12 A L	Tr 12 x 3	1	200	0.7 / 1000	0.65
• TR304 14 R R	• TR304 14 R L	Tr 14 x 3	1	200	0.7 / 1000	0.93
• TR304 14 A R	• TR304 14 A L	Tr 14 x 4	1	200	0.7 / 1000	0.86
• TR304 16 A R	• TR304 16 A L	Tr 16 x 4	1	200	0.7 / 1500	1.17
• TR304 18 A R	• TR304 18 A L	Tr 18 x 4	1	200	0.7 / 1500	1.53
• TR304 20 A R	• TR304 20 A L	Tr 20 x 4	1	200	0.6 / 2000	1.94
• TR304 22 A R	• TR304 22 A L	Tr 22 x 5	1	200	0.6 / 2000	2.29
• TR304 24 A R	• TR304 24 A L	Tr 24 x 5	1	200	0.4 / 2000	2.78
• TR304 25 A R	• TR304 25 A L	Tr 25 x 5	1	200	0.4 / 2000	3.05
• TR304 26 A R	• TR304 26 A L	Tr 26 x 5	1	200	0.4 / 2000	3.33
• TR304 28 A R	• TR304 28 A L	Tr 28 x 5	1	200	0.4 / 2000	3.92
• TR304 30 P R	• TR304 30 P L	Tr 30 x 5	1	200	0.4 / 3000	4.57
• TR304 30 A R	• TR304 30 A L	Tr 30 x 6	1	200	0.4 / 3000	4.38
• TR304 32 A R	• TR304 32 A L	Tr 32 x 6	1	200	0.4 / 3000	5.06
• TR304 35 P R	• TR304 35 P L	Tr 35 x 5	1	200	0.3 / 3000	6.40
• TR304 35 A R	• TR304 35 A L	Tr 35 x 6	1	200	0.3 / 3000	6.16
• TR304 36 A R	• TR304 36 A L	Tr 36 x 5	1	200	0.3 / 3000	6.56
• TR304 40 P R	• TR304 40 P L	Tr 40 x 5	1	200	0.3 / 3000	8.51
• TR304 40 O R	• TR304 40 O L	Tr 40 x 6	1	200	0.3 / 3000	8.26
• TR304 40 A R	• TR304 40 A L	Tr 40 x 7	1	200	0.3 / 3000	8.03
• TR304 44 A R	• TR304 44 A L	Tr 44 x 7	1	200	0.3 / 3000	9.90
• TR304 50 P R	• TR304 50 P L	Tr 50 x 5	1	200	0.3 / 3000	13.70
• TR304 50 O R	• TR304 50 O L	Tr 50 x 6	1	200	0.3 / 3000	13.35
• TR304 50 A R	• TR304 50 A L	Tr 50 x 8	1	200	0.3 / 3000	12.90
• TR304 55 A R	• TR304 55 A L	Tr 55 x 9	1	200	0.3 / 3000	15.51
• TR304 60 O R	• TR304 60 O L	Tr 60 x 6	1	200	0.3 / 3000	19.67
• TR304 60 N R	• TR304 60 N L	Tr 60 x 7	1	200	0.3 / 3000	19.36
• TR304 60 A R	• TR304 60 A L	Tr 60 x 9	1	200	0.3 / 3000	18.74
• TR304 70 A R	• TR304 70 A L	Tr 70 x 10	1	200	0.3 / 3000	25.80
• TR304 80 A R	• TR304 80 A L	Tr 80 x 10	1	200	0.3 / 3000	34.39
• TR304 90 A R	• TR304 90 A L	Tr 90 x 12	1	200	1 / 300	43.07
• TR304 A0 A R	• TR304 A0 A L	Tr 100 x 12	1	200	1 / 300	53.99

• Standard Product • Made To Order Only

MULTI START TRAPEZOIDAL SCREWS TYPE TR304

A2 STAINLESS STEEL - AISI 304 1.4301

Stock no. for screw RIGHT	Stock no. for screw LEFT	Diameter x Lead	Thread Starts	Lead Accuracy $\mu\text{m}/300\text{mm}$	Straightness mm/mm	Weight kg/mt
• TR304 10 J R	• TR304 10 J L	Tr 10 x 4 (P2)	2	200	0.7 / 1000	0.48
• TR304 12 B R	• TR304 12 B L	Tr 12 x 6 (P3)	2	200	0.7 / 1000	0.65
• TR304 14 B R	• TR304 14 B L	Tr 14 x 4 (P3)	2	200	0.7 / 1000	0.93
• TR304 16 B R	• TR304 16 B L	Tr 16 x 8 (P4)	2	200	0.7 / 1500	1.17
• TR304 18 B R	• TR304 18 B L	Tr 18 x 8 (P4)	2	200	0.7 / 1500	1.53
• TR304 20 B R	• TR304 20 B L	Tr 20 x 8 (P4)	2	200	0.6 / 2000	1.94
• TR304 20 D R	• TR304 20 D L	Tr 20 x 20 (P5)	4	200	0.4 / 2000	1.84
• TR304 22 B R	• TR304 22 B L	Tr 22 x 10 (P5)	2	200	0.4 / 2000	2.29
• TR304 24 B R	• TR304 24 B L	Tr 24 x 10 (P5)	2	200	0.4 / 2000	2.78
• TR304 25 B R	• TR304 25 B L	Tr 25 x 10 (P5)	2	200	0.4 / 2000	3.05
• TR304 26 B R	• TR304 26 B L	Tr 26 x 10 (P5)	2	200	0.4 / 2000	3.33
• TR304 28 B R	• TR304 28 B L	Tr 28 x 10 (P5)	2	200	0.4 / 2000	3.92
• TR304 30 B R	• TR304 30 B L	Tr 30 x 12 (P6)	2	200	0.4 / 3000	4.38
• TR304 32 B R	• TR304 32 B L	Tr 32 x 12 (P6)	2	200	0.4 / 3000	5.06
• TR304 36 B R	• TR304 36 B L	Tr 36 x 12 (P6)	2	200	0.3 / 3000	6.56
• TR304 40 B R	• TR304 40 B L	Tr 40 x 14 (P7)	2	200	0.3 / 3000	8.03

- Standard Product
- Made To Order Only

SINGLE START TRAPEZOIDAL SCREWS TYPE TR316

STAINLESS STEEL INOX A4 - AISI 316

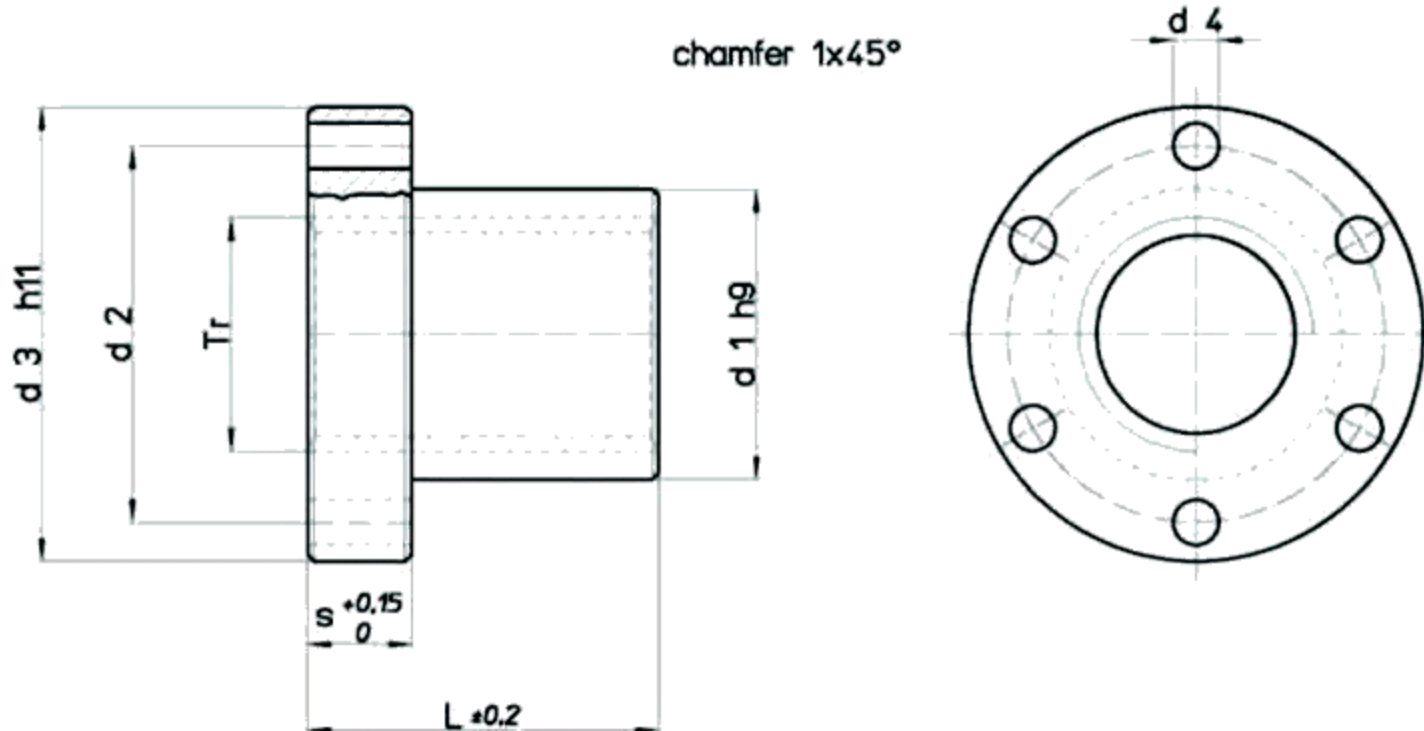
Stock no. for screw RIGHT	Stock no. for screw LEFT	Diameter x Lead	Thread Starts	Lead Accuracy $\mu\text{m}/300\text{mm}$	Straightness mm/mm	Weight kg/mt
• TR316 10 T R	• TR316 10 T L	Tr 10 x 2	1	200	1.5 / 300	0.48
• TR316 10 A R	• TR316 10 A L	Tr 10 x 3	1	200	1.5 / 300	0.42
• TR316 12 A R	• TR316 12 A L	Tr 12 x 3	1	200	1.5 / 300	0.65
• TR316 14 R R	• TR316 14 R L	Tr 14 x 3	1	200	1.5 / 300	0.93
• TR316 14 A R	• TR316 14 A L	Tr 14 x 4	1	200	1.5 / 300	0.86
• TR316 16 A R	• TR316 16 A L	Tr 16 x 4	1	200	1.5 / 300	1.17
• TR316 18 A R	• TR316 18 A L	Tr 18 x 4	1	200	1.5 / 300	1.53
• TR316 20 A R	• TR316 20 A L	Tr 20 x 4	1	200	1.5 / 300	1.94
• TR316 22 A R	• TR316 22 A L	Tr 22 x 5	1	200	1.5 / 300	2.29
• TR316 24 A R	• TR316 24 A L	Tr 24 x 5	1	200	1.5 / 300	2.78
• TR316 25 A R	• TR316 25 A L	Tr 25 x 5	1	200	1.5 / 300	3.05
• TR316 26 A R	• TR316 26 A L	Tr 26 x 5	1	200	1.5 / 300	3.33
• TR316 28 A R	• TR316 28 A L	Tr 28 x 5	1	200	1.5 / 300	3.92
• TR316 30 P R	• TR316 30 P L	Tr 30 x 5	1	200	1.5 / 300	4.57
• TR316 30 A R	• TR316 30 A L	Tr 30 x 6	1	200	1.5 / 300	4.38
• TR316 32 A R	• TR316 32 A L	Tr 32 x 6	1	200	1.5 / 300	5.06
• TR316 35 P R	• TR316 35 P L	Tr 35 x 5	1	200	1.5 / 300	6.40
• TR316 35 A R	• TR316 35 A L	Tr 35 x 6	1	200	1.5 / 300	6.16
• TR316 36 A R	• TR316 36 A L	Tr 36 x 5	1	200	1.5 / 300	6.56
• TR316 40 P R	• TR316 40 P L	Tr 40 x 5	1	200	1.5 / 300	8.51
• TR316 40 O R	• TR316 40 O L	Tr 40 x 6	1	200	1.5 / 300	8.26
• TR316 40 A R	• TR316 40 A L	Tr 40 x 7	1	200	1.5 / 300	8.03
• TR316 44 A R	• TR316 44 A L	Tr 44 x 7	1	200	1.5 / 300	9.90
• TR316 50 P R	• TR316 50 P L	Tr 50 x 5	1	200	1.5 / 300	13.70
• TR316 50 O R	• TR316 50 O L	Tr 50 x 6	1	200	1.5 / 300	13.35
• TR316 50 A R	• TR316 50 A L	Tr 50 x 8	1	200	1.5 / 300	12.90
• TR316 55 A R	• TR316 55 A L	Tr 55 x 9	1	200	1.5 / 300	15.51
• TR316 60 O R	• TR316 60 O L	Tr 60 x 6	1	200	1.5 / 300	19.67
• TR316 60 N R	• TR316 60 N L	Tr 60 x 7	1	200	1.5 / 300	19.36
• TR316 60 A R	• TR316 60 A L	Tr 60 x 9	1	200	1.5 / 300	18.74
• TR316 70 A R	• TR316 70 A L	Tr 70 x 10	1	200	1.5 / 300	25.80
• TR316 80 A R	• TR316 80 A L	Tr 80 x 10	1	200	1.5 / 300	34.39
• TR316 90 A R	• TR316 90 A L	Tr 90 x 12	1	200	1.5 / 300	43.07
• TR316 A0 A R	• TR316 A0 A L	Tr 100 x 12	1	200	1.5 / 300	53.99

• Standard Product • Made To Order Only

TRAPEZOIDAL NUT TYPE FBN - FLANGED BRONZE

Material: EN 1982 Cu Sn5 Zn5 Pb5-C - CC491K

Flanged bronze nut for movement with good wear resistance. Good lubrication is recommended. Caution: These nuts have flange and fastening hole dimensions which make them NON-INTERCHANGEABLE with other flanged nuts (FBNNS, OFBN, FBNEL, FPN).



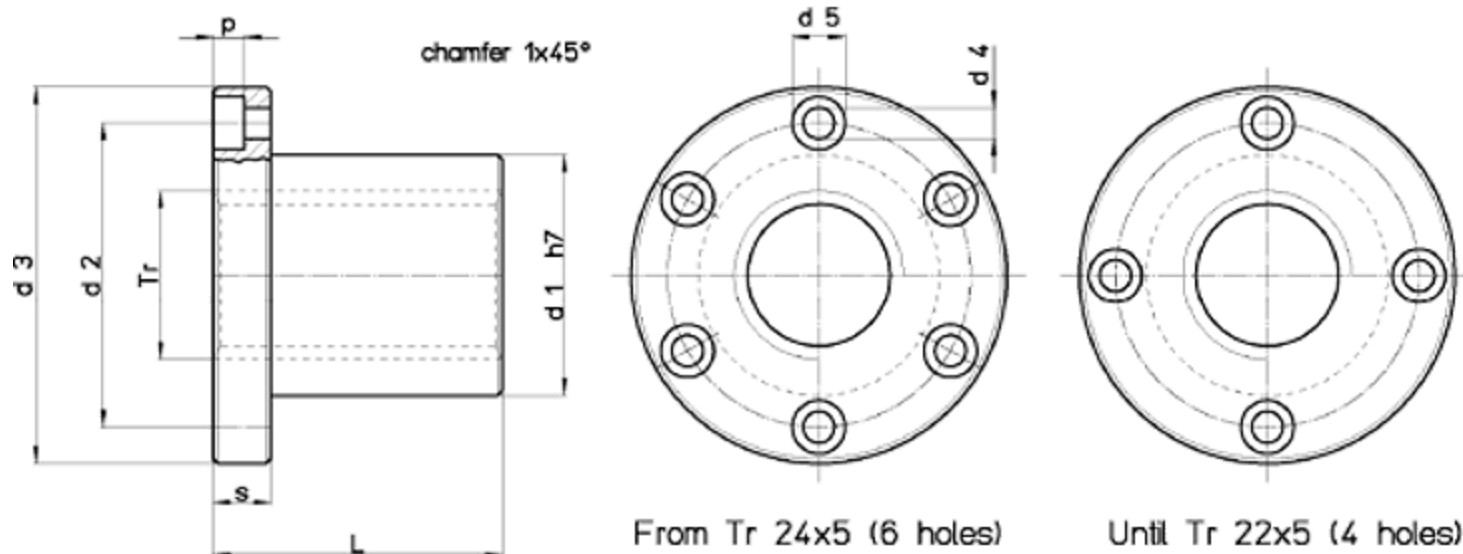
Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d1 mm	d2 mm	d3 mm	d4 mm	L mm	S mm	no. screw holes	Viti di fissaggio (classe 8.8)	Wt. kg/each	At mm2 (1)
FBN 10 T R	FBN 10 T L	Tr 10 x 2	1	25	34	42	5	25	10	6	M6	0.164	250
FBN 12 A R	FBN 12 A L	Tr 12 x 3	1	28	38	48	6	35	12	6	M6	0.276	400
FBN 12 B R	-	Tr 12 x 6 (P3)	2	28	38	48	6	35	12	6	M6	0.276	400
FBN 14 R R	FBN 14 R L	Tr 14 x 3	1	28	38	48	6	35	12	6	M6	0.272	460
FBN 14 B R	-	Tr 14 x 6 (P3)	2	28	38	48	6	35	12	6	M6	0.272	460
FBN 16 A R	FBN 16 A L	Tr 16 x 4	1	28	38	48	6	35	12	6	M6	0.26	530
FBN 16 B R	-	Tr 16 x 8 (P4)	2	28	38	48	6	35	12	6	M6	0.26	530
FBN 18 A R	FBN 18 A L	Tr 18 x 4	1	28	38	48	6	35	12	6	M6	0.247	610
FBN 18 B R	-	Tr 18 x 8 (P4)	2	28	38	48	6	35	12	6	M6	0.247	610
FBN 20 A R	FBN 20 A L	Tr 20 x 4	1	32	45	55	7	44	12	6	M6	0.37	870
FBN 20 B R	-	Tr 20 x 8 (P4)	2	32	45	55	7	44	12	6	M6	0.37	870
FBN 22 A R	FBN 22 A L	Tr 22 x 5	1	32	45	55	7	44	12	6	M6	0.36	1030
FBN 22 B R	-	Tr 22 x 10 (P5)	2	32	45	55	7	44	12	6	M6	0.36	1030
FBN 24 A R	FBN 24 A L	Tr 24 x 5	1	32	45	55	7	44	12	6	M6	0.337	1040
FBN 24 B R	-	Tr 24 x 10 (P5)	2	32	45	55	7	44	12	6	M6	0.337	1040
FBN 26 A R	FBN 26 A L	Tr 26 x 5	1	38	50	62	7	46	14	6	M6	0.516	1280
FBN 28 A R	FBN 28 A L	Tr 28 x 5	1	38	50	62	7	46	14	6	M6	0.472	1200
FBN 28 B R	-	Tr 28 x 10 (P5)	2	38	50	62	7	46	14	6	M6	0.472	1200
FBN 30 A R	FBN 30 A L	Tr 30 x 6	1	38	50	62	7	46	14	6	M6	0.472	1370
FBN 30 B R	-	Tr 30 x 12 (P6)	2	32	50	62	7	46	14	6	M6	0.472	1370
FBN 32 A R	FBN 32 A L	Tr 32 x 6	1	45	58	70	7	54	16	6	M6	0.779	1710
FBN 32 B R	-	Tr 32 x 12 (P6)	2	45	58	70	7	54	16	6	M6	0.779	1710
FBN 36 A R	FBN 36 A L	Tr 36 x 6	1	45	58	70	7	54	16	6	M6	0.694	1950
FBN 36 B R	-	Tr 36 x 12 (P6)	2	45	58	70	7	54	16	6	M6	0.694	1950
FBN 40 A R	FBN 40 A L	Tr 40 x 7	1	63	78	95	9	66	16	6	M6	1.788	2650
FBN 40 B R	-	Tr 40 x 14 (P7)	2	63	78	95	9	66	16	6	M6	1.788	2650
FBN 44 A R	FBN 44 A L	Tr 44 x 7	1	63	78	95	7	66	16	6	M6	1.657	2940
FBN 50 A R	FBN 50 A L	Tr 50 x 8	1	72	90	110	11	75	18	6	M6	2.500	4540
FBN 60 A R	FBN 60 A L	Tr 60 x 9	1	88	110	130	13	90	20	6	M6	4.260	5490
FBN 70 A R	FBN 70 A L	Tr 70 x 10	1	95	120	140	13	105	22	6	M6	5.303	7500

(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL NUT TYPE OFBN - FLANGED BRONZE

Material: EN 1982 Cu Sn12-C - CC483K

Tin bronze nut especially suitable for continuous movement with good wear resistance. Good lubrication is recommended. Flange dimensions make them fully interchangeable with FBNNS, FBNEL and FPN (total length and flange thickness change).



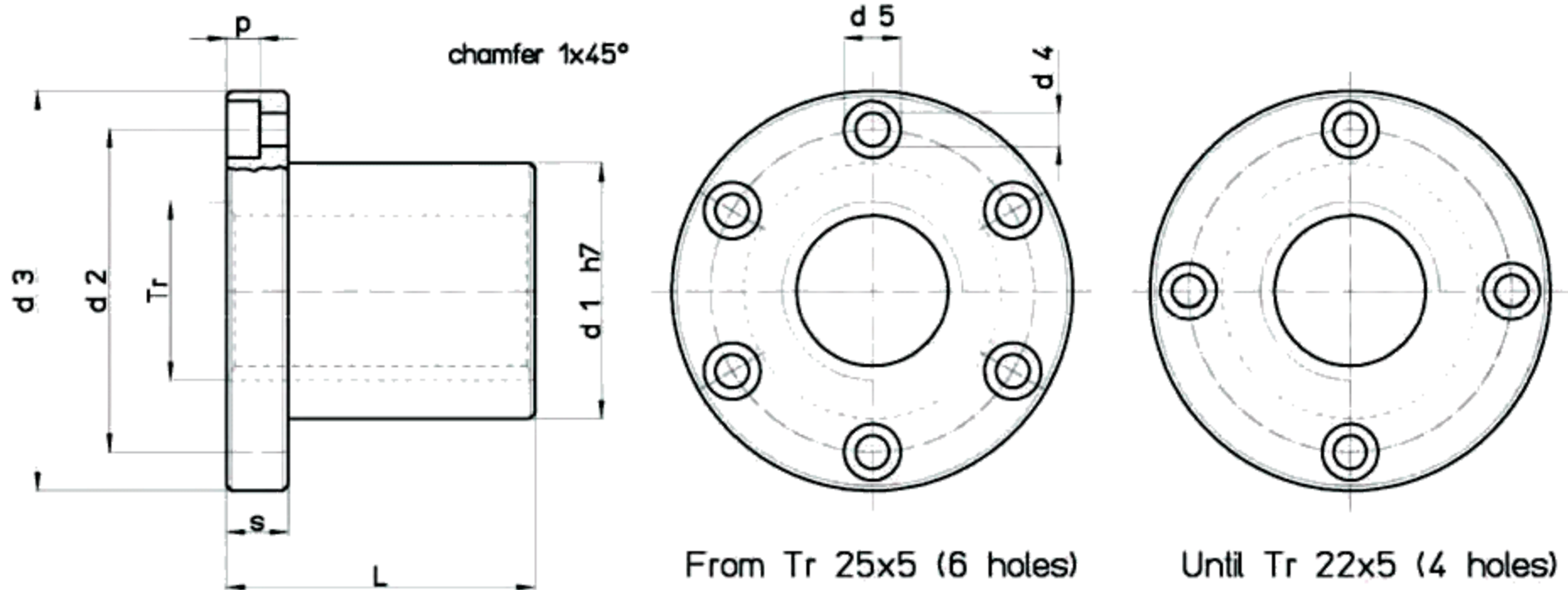
Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d1 mm	d2 mm	d3 mm	d4 mm	d5 mm	P mm	L mm	S mm	no. screw holes	Fastening Screws (class 8.8)	Wt. kg/each	At mm ² (1)
OFBN 10 A R	OFBN 10 A L	Tr 10 x 3	1	18	26	37	4.5	7.5	4.2	22	8	4	M4	0.164	250
OFBN 12 A R	OFBN 12 A L	Tr 12 x 3	1	18	26	37	4.5	7.5	4.2	22	8	4	M4	0.276	400
OFBN 12 B R	-	Tr 12 x 6 (P3)	2	18	26	37	4.5	7.5	4.2	22	8	4	M4	0.276	400
OFBN 14 A R	OFBN 14 A L	Tr 14 x 4	1	20	30	42	5.5	9.5	5.2	25	10	4	M5	0.272	460
OFBN 16 A R	OFBN 16 A L	Tr 16 x 4	1	22	32	45	5.5	9.5	5.2	30	10	4	M5	0.149	660
OFBN 16 B R	-	Tr 16 x 8 (P4)	2	22	32	45	5.5	9.5	5.2	30	10	4	M5	0.149	660
OFBN 18 A R	OFBN 18 A L	Tr 18 x 4	1	25	35	48	5.5	9.5	5.2	35	10	4	M5	0.188	880
OFBN 20 A R	OFBN 20 A L	Tr 20 x 4	1	30	40	52	5.5	9.5	5.2	40	10	4	M5	0.267	1130
OFBN 20 B R	-	Tr 20 x 8 (P4)	2	30	40	52	5.5	9.5	5.2	40	10	4	M5	0.267	1130
OFBN 20 D R	-	Tr 20 x 20 (P5)	4	30	40	52	5.5	9.5	5.2	40	10	4	M5	0.27	1100
OFBN 22 A R	OFBN 22 A L	Tr 22 x 5	1	30	40	52	5.5	9.5	5.2	45	10	4	M5	0.247	1225
OFBN 24 A R	OFBN 24 A L	Tr 24 x 5	1	35	48	62	6.5	11	6.5	45	12	6	M6	0.408	1520
OFBN 25 A R	OFBN 25 A L	Tr 25 x 5	1	35	48	62	6.5	11	6.5	45	12	6	M6	0.393	1590
OFBN 25 B R	-	Tr 25 x 10 (P5)	2	35	48	62	6.5	11	6.5	45	12	6	M6	0.393	1590
OFBN 25 E R	-	Tr 25 x 25 (P5)	5	35	48	62	6.5	11	6.5	45	12	4	M6	0.393	1590
OFBN 26 A R	OFBN 26 A L	Tr 26 x 5	1	35	48	62	6.5	11	6.5	45	12	6	M6	0.378	1660
OFBN 28 A R	OFBN 28 A L	Tr 28 x 5	1	40	53	68	6.5	11	6.5	50	12	6	M6	0.532	2000
OFBN 28 B R	-	Tr 28 x 10 (P5)	2	40	53	68	6.5	11	6.5	50	12	6	M6	0.532	2000
OFBN 30 A R	OFBN 30 A L	Tr 30 x 6	1	40	53	68	6.5	11	6.5	50	12	6	M6	0.497	2120
OFBN 30 B R	-	Tr 30 x 12 (P6)	2	40	53	68	6.5	11	6.5	50	12	6	M6	0.497	2120
OFBN 30 F R	-	Tr 30 x 30 (P5)	6	40	53	68	6.5	11	6.5	50	12	6	M6	0.492	2590
OFBN 32 A R	OFBN 32 A L	Tr 32 x 6	1	40	53	68	6.5	11	6.5	50	12	6	M6	0.455	2277
OFBN 35 A R	OFBN 35 A L	Tr 35 x 6	1	50	63	78	8.5	14	8.5	60	15	6	M8	0.883	3015
OFBN 36 A R	OFBN 36 A L	Tr 36 x 6	1	50	63	78	8.5	14	8.5	60	15	6	M8	0.854	3110
OFBN 40 A R	OFBN 40 A L	Tr 40 x 7	1	55	68	84	8.5	14	8.5	65	15	6	M8	1.066	3727
OFBN 40 B R	-	Tr 40 x 14 (P7)	2	55	68	84	8.5	14	8.5	65	15	6	M8	1.066	3727
OFBN 40 E R	-	Tr 40 x 40 (P8)	5	55	68	84	8.5	14	8.5	65	15	6	M8	1.075	3675
OFBN 44 A R	OFBN 44 A L	Tr 44 x 7	1	55	72	90	8.5	14	8.5	65	12	6	M8	1.029	4135
OFBN 45 A R	OFBN 45 A L	Tr 45 x 8	1	55	72	90	8.5	14	8.5	65	15	6	M8	0.999	4186
OFBN 50 A R	OFBN 50 A L	Tr 50 x 8	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.749	5780
OFBN 55 A R	-	Tr 55 x 9	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.475	6345
OFBN 60 A R	OFBN 60 A L	Tr 60 x 9	1	75	95	120	12.5	19	12.5	100	25	6	M12	2.927	8718

(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL NUT TYPE FBNNS - FLANGED BRONZE

Material: EN 1982 Cu Sn5 Zn5 Pb5-C - CC491K

Flanged bronze nut for movement of loads. Good lubrication is recommended.



From Tr 25x5 (6 holes)

Until Tr 22x5 (4 holes)

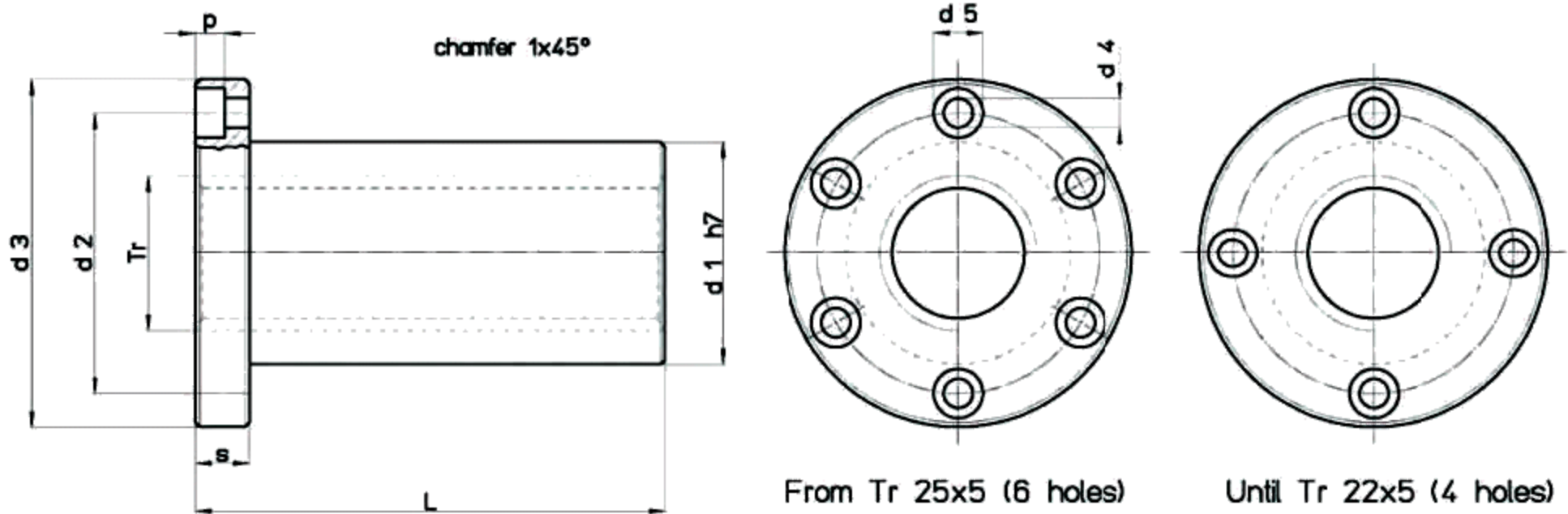
Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d1 mm	d2 mm	d3 mm	d4 mm	d5 mm	P mm	L mm	S mm	no. screw holes	Fastening Screws (class 8.8)	Wt. kg/each	At mm ² (1)
FBNNS 10 A R	FBNNS 10 A L	Tr 10 x 3	1	18	26	37	4.5	7.5	4.2	22	8	4	M4	0.088	294
FBNNS 12 A R	FBNNS 12 A L	Tr 12 x 3	1	18	26	37	4.5	7.5	4.2	22	8	4	M4	0.082	362
FBNNS 14 A R	FBNNS 14 A L	Tr 14 x 4	1	20	30	42	5.5	9.5	5.2	25	10	4	M5	0.123	470
FBNNS 16 A R	FBNNS 16 A L	Tr 16 x 4	1	22	32	45	5.5	9.5	5.2	30	10	4	M5	0.149	660
FBNNS 18 A R	FBNNS 18 A L	Tr 18 x 4	1	25	35	48	5.5	9.5	5.2	35	10	4	M5	0.188	880
FBNNS 20 A R	FBNNS 20 A L	Tr 20 x 4	1	30	40	52	5.5	9.5	5.2	40	10	4	M5	0.267	1130
FBNNS 22 A R	FBNNS 22 A L	Tr 22 x 5	1	30	40	52	5.5	9.5	5.2	40	10	4	M5	0.247	1225
FBNNS 25 A R	FBNNS 25 A L	Tr 25 x 5	1	35	48	62	6.5	11	6.5	45	12	6	M6	0.393	1590
FBNNS 28 A R	FBNNS 28 A L	Tr 28 x 5	1	40	53	68	6.5	11	6.5	50	12	6	M6	0.532	2000
FBNNS 30 R R	FBNNS 30 R L	Tr 30 x 3	1	40	53	68	6.5	11	6.5	50	12	6	M6	0.482	2238
FBNNS 30 Q R	FBNNS 30 Q L	Tr 30 x 4	1	40	53	68	6.5	11	6.5	50	12	6	M6	0.487	2200
FBNNS 30 P R	FBNNS 30 P L	Tr 30 x 5	1	40	53	68	6.5	11	6.5	50	12	6	M5	0.492	2160
FBNNS 30 A R	FBNNS 30 A L	Tr 30 x 6	1	40	53	68	6.5	11	6.5	50	12	6	M6	0.497	2120
FBNNS 35 R R	FBNNS 35 R L	Tr 35 x 3	1	50	63	78	8.5	14	8.5	60	15	6	M8	0.862	3160
FBNNS 35 Q R	FBNNS 35 Q L	Tr 35 x 4	1	50	63	78	8.5	14	8.5	60	15	6	M8	0.869	3110
FBNNS 35 P R	FBNNS 35 P L	Tr 35 x 5	1	50	63	78	8.5	14	8.5	60	15	6	M8	0.876	3060
FBNNS 35 A R	FBNNS 35 A L	Tr 35 x 6	1	50	63	78	8.5	14	8.5	60	15	6	M8	0.883	3015
FBNNS 35 M R	-	Tr 35 x 8	1	50	63	78	8.5	14	8.5	60	15	6	M8	0.898	2920
FBNNS 40 R R	FBNNS 40 R L	Tr 40 x 3	1	55	68	84	8.5	14	8.5	65	15	6	M8	1.03	3930
FBNNS 40 Q R	FBNNS 40 Q L	Tr 40 x 4	1	55	68	84	8.5	14	8.5	65	15	6	M8	1.039	3880
FBNNS 40 P R	FBNNS 40 P L	Tr 40 x 5	1	55	68	84	8.5	14	8.5	65	15	6	M8	1.048	3828
FBNNS 40 O R	FBNNS 40 O L	Tr 40 x 6	1	55	68	84	8.5	14	8.5	65	15	6	M8	1.057	3778
FBNNS 40 A R	FBNNS 40 A L	Tr 40 x 7	1	55	68	84	8.5	14	8.5	65	15	6	M8	1.066	3727
FBNNS 40 M R	-	Tr 40 x 8	1	55	68	84	8.5	14	8.5	65	15	6	M8	1.075	3675
FBNNS 45 A R	FBNNS 45 A L	Tr 45 x 8	1	55	72	90	8.5	14	8.5	65	15	6	M8	0.999	4186
FBNNS 50 R R	FBNNS 50 R L	Tr 50 x 3	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.679	6095
FBNNS 50 Q R	FBNNS 50 Q L	Tr 50 x 4	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.693	6030
FBNNS 50 P R	FBNNS 50 P L	Tr 50 x 5	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.707	5970
FBNNS 50 O R	FBNNS 50 O L	Tr 50 x 6	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.721	5905
FBNNS 50 A R	FBNNS 50 A L	Tr 50 x 8	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.749	5780
FBNNS 55 A R	-	Tr 55 x 9	1	65	80	100	10.5	17	10.5	80	20	6	M10	1.475	6345
FBNNS 60 O R	FBNNS 60 O L	Tr 60 x 6	1	75	95	120	12.5	19	12.5	100	25	6	M12	2.865	8950
FBNNS 60 N R	FBNNS 60 N L	Tr 60 x 7	1	75	95	120	12.5	19	12.5	100	25	6	M12	2.886	8875
FBNNS 60 A R	FBNNS 60 A L	Tr 60 x 9	1	75	95	120	12.5	19	12.5	100	25	6	M12	2.927	8718

(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL NUT TYPE FBNEL - FLANGED BRONZE

Material: EN 1982 Cu Sn12-C - CC483K

Flanged Bronze Nut of considerable length 3xTr suitable for operation under load with high loads and/or high movement speed. The special length of 3xTr greatly limits wear. Good lubrication is recommended.



Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d1 mm	d2 mm	d3 mm	d4 mm	d5 mm	P mm	L mm	S mm	no. screw holes	Fastening Screws (class 8.8)	Wt. kg/each	At mm ² (1)
FBNEL 14 A R	FBNEL 14 A L	Tr 14 x 4	1	20	30	42	5.5	9.5	5.2	42	10	4	M5	0.151	790
FBNEL 16 A R	FBNEL 16 A L	Tr 16 x 4	1	22	32	45	5.5	9.5	5.2	48	10	4	M5	0.183	1056
FBNEL 16 B R	-	Tr 16 x 8 (P4)	2	22	32	45	5.5	9.5	5.2	48	10	4	M5	0.183	1056
FBNEL 18 A R	FBNEL 18 A L	Tr 18 x 4	1	25	35	48	5.5	9.5	5.2	54	10	4	M5	0.233	1356
FBNEL 20 A R	FBNEL 20 A L	Tr 20 x 4	1	30	40	52	5.5	9.5	5.2	60	12	4	M5	0.368	1696
FBNEL 20 B R	-	Tr 20 x 8 (P4)	2	30	40	52	5.5	9.5	5.2	60	12	4	M5	0.368	1696
FBNEL 22 A R	FBNEL 22 A L	Tr 22 x 5	1	30	40	52	5.5	9.5	5.2	60	12	4	M5	0.338	1838
FBNEL 25 A R	FBNEL 25 A L	Tr 25 x 5	1	35	48	62	6.5	11	6.5	75	15	6	M6	0.586	2650
FBNEL 25 B R	-	Tr 25 x 10 (P5)	2	35	48	62	6.5	11	6.5	75	15	6	M6	0.586	2650
FBNEL 25 E R	-	Tr 25 x 25 (P5)	5	35	48	62	6.5	11	6.5	75	15	6	M6	0.586	2650
FBNEL 28 A R	FBNEL 28 A L	Tr 28 x 5	1	40	53	68	6.5	11	6.5	90	18	6	M6	0.903	3600
FBNEL 28 B R	-	Tr 28 x 10 (P5)	2	40	53	68	6.5	11	6.5	90	18	6	M6	0.903	3600
FBNEL 30 A R	FBNEL 30 A L	Tr 30 x 6	1	40	53	68	6.5	11	6.5	90	18	6	M6	0.841	3816
FBNEL 30 B R	-	Tr 30 x 12 (P6)	2	40	53	68	6.5	11	6.5	90	18	6	M6	0.841	3816
FBNEL 30 R R	FBNEL 30 R L	Tr 30 x 3	1	40	53	68	6.5	11	6.5	90	18	6	M6	0.784	3816
FBNEL 32 A R	FBNEL 32 A L	Tr 32 x 6	1	40	53	68	6.5	11	6.5	90	18	6	M6	0.765	4100
FBNEL 35 A R	FBNEL 35 A L	Tr 35 x 6	1	50	63	78	8.5	14	8.5	105	20	6	M8	1.439	5277
FBNEL 40 A R	FBNEL 40 A L	Tr 40 x 7	1	55	68	84	8.5	14	8.5	120	25	6	M8	1.937	6880
FBNEL 40 I R	-	Tr 40 x 10	1	55	68	84	8.5	14	8.5	120	25	6	M8	1.986	6597
FBNEL 40 B R	-	Tr 40 x 14 (P7)	2	55	68	84	8.5	14	8.5	120	25	6	M8	1.937	6597
FBNEL 40 Q R	-	Tr 40 x 4	1	55	68	84	8.5	14	8.5	120	25	6	M8	1.929	6597
FBNEL 50 O R	-	Tr 50 x 6	1	65	80	100	10.5	17	10.5	150	30	6	M10	3.007	10840
FBNEL 50 A R	FBNEL 50 A L	Tr 50 x 8	1	65	80	100	10.5	17	10.5	150	30	6	M10	3.075	10840
FBNEL 50 I R	-	Tr 50 x 10	1	65	80	100	10.5	17	10.5	150	30	6	M10	3.127	10600
FBNEL 60 A R	FBNEL 60 A L	Tr 60 x 9	1	75	95	120	12.5	19	12.5	180	35	6	M12	4.797	15700

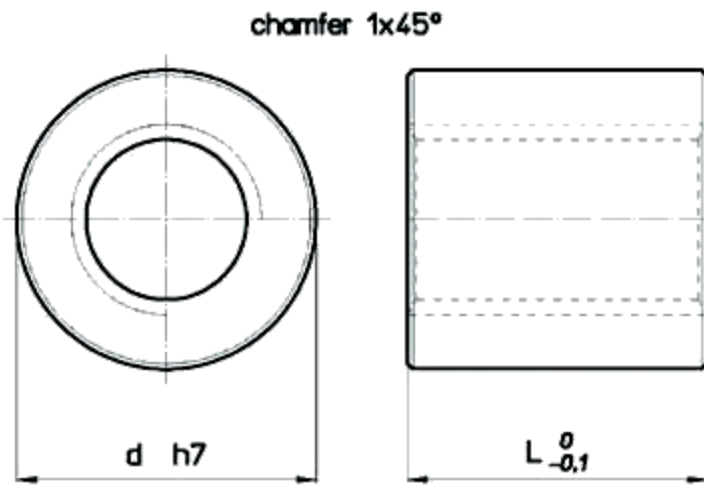
(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL NUT TYPE RBND - CYLINDRICAL BRONZE

Material: EN 1982 Cu Sn5 Zn5 Pb5-C - CC491K

Cylindrical Bronze Nut for movement with modest loads compared with OFBN and FBNEL.

Good lubrication is recommended.



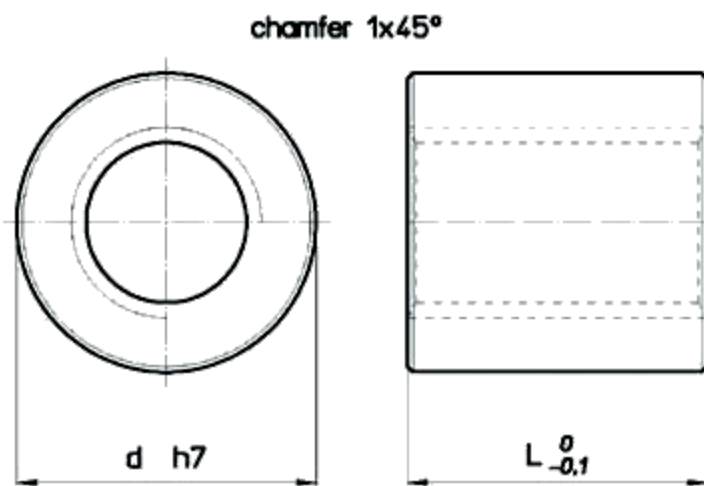
Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d mm	L mm	Wt. kg/each	At mm2 (1)
RBND 12 A R	RBND 12 A L	Tr 12 x 3	1	36	36	0.302	594
RBND 14 A R	RBND 14 A L	Tr 14 x 4	1	36	36	0.29	677
RBND 16 A R	RBND 16 A L	Tr 16 x 4	1	36	36	0.276	792
RBND 16 B R	-	Tr 16 x 8 (P4)	2	36	36	0.276	792
RBND 18 A R	RBND 18 A L	Tr 18 x 4	1	36	36	0.259	905
RBND 20 A R	RBND 20 A L	Tr 20 x 4	1	40	40	0.354	1130
RBND 20 B R	-	Tr 20 x 8 (P4)	2	40	40	0.354	1130
RBND 22 A R	RBND 22 A L	Tr 22 x 5	1	40	40	0.33	1225
RBND 25 A R	RBND 25 A L	Tr 25 x 5	1	45	45	0.47	1590
RBND 25 B R	-	Tr 25 x 10 (P5)	2	45	45	0.47	1590
RBND 28 A R	RBND 28 A L	Tr 28 x 5	1	45	45	0.42	1800
RBND 28 B R	-	Tr 28 x 10 (P5)	2	45	45	0.42	1800
RBND 30 A R	RBND 30 A L	Tr 30 x 6	1	50	50	0.6	2120
RBND 30 B R	-	Tr 30 x 12 (P6)	2	50	50	0.6	2120
RBND 35 A R	RBND 35 A L	Tr 35 x 6	1	55	55	0.75	2764
RBND 40 A R	RBND 40 A L	Tr 40 x 7	1	60	60	0.92	3440
RBND 40 B R	-	Tr 40 x 14 (P7)	2	60	60	0.92	3440
RBND 45 A R	RBND 45 A L	Tr 45 x 8	1	65	65	1.1	4186
RBND 50 A R	RBND 50 A L	Tr 50 x 8	1	70	70	1.3	5057
RBND 55 A R	-	Tr 55 x 9	1	80	80	2.07	6345
RBND 60 A R	RBND 60 A L	Tr 60 x 9	1	80	80	1.75	6975

TRAPEZOIDAL NUT TYPE RBN - CYLINDRICAL BRONZE

Material: EN 1982 Cu Sn7 Zn4 Pb7-C - CC493K

Cylindrical Bronze Nut for movement with modest loads compared with OFBN and FBNEL.

Good lubrication is recommended.



Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d mm	L mm	Wt. kg/each	At mm2 (1)
RBN 10 A R	RBN 10 A L	Tr 10 x 3	1	22	20	0.057	320
RBN 12 A R	RBN 12 A L	Tr 12 x 3	1	26	24	0.094	396
RBN 12 B R	-	Tr 12 x 6 (P3)	2	26	24	0.094	396
RBN 14 A R	RBN 14 A L	Tr 14 x 4	1	30	28	0.146	526
RBN 16 A R	RBN 16 A L	Tr 16 x 4	1	36	32	0.245	704
RBN 18 A R	RBN 18 A L	Tr 18 x 4	1	40	36	0.337	905
RBN 20 A R	RBN 20 A L	Tr 20 x 4	1	45	40	0.476	1130
RBN 22 A R	RBN 22 A L	Tr 22 x 5	1	45	40	0.456	1225
RBN 24 A R	RBN 24 A L	Tr 24 x 5	1	50	48	0.68	1620
RBN 26 A R	RBN 26 A L	Tr 26 x 5	1	50	48	0.648	1770
RBN 28 A R	RBN 28 A L	Tr 28 x 5	1	60	60	1.237	2400
RBN 30 A R	RBN 30 A L	Tr 30 x 6	1	60	60	1.195	2544
RBN 32 A R	RBN 32 A L	Tr 32 x 6	1	60	60	1.145	2733
RBN 36 A R	RBN 36 A L	Tr 36 x 6	1	75	72	2.232	3732
RBN 40 A R	RBN 40 A L	Tr 40 x 7	1	80	80	2.823	4587
RBN 44 A R	RBN 44 A L	Tr 44 x 7	1	80	80	2.639	5090
RBN 50 A R	RBN 50 A L	Tr 50 x 8	1	90	100	4.142	7224
RBN 60 A R	RBN 60 A L	Tr 60 x 9	1	100	120	5.716	10462
RBN 70 A R	RBN 70 A L	Tr 70 x 10	1	110	140	7.548	10200
RBN 80 A R	RBN 80 A L	Tr 80 x 10	1	120	160	9.6	18850

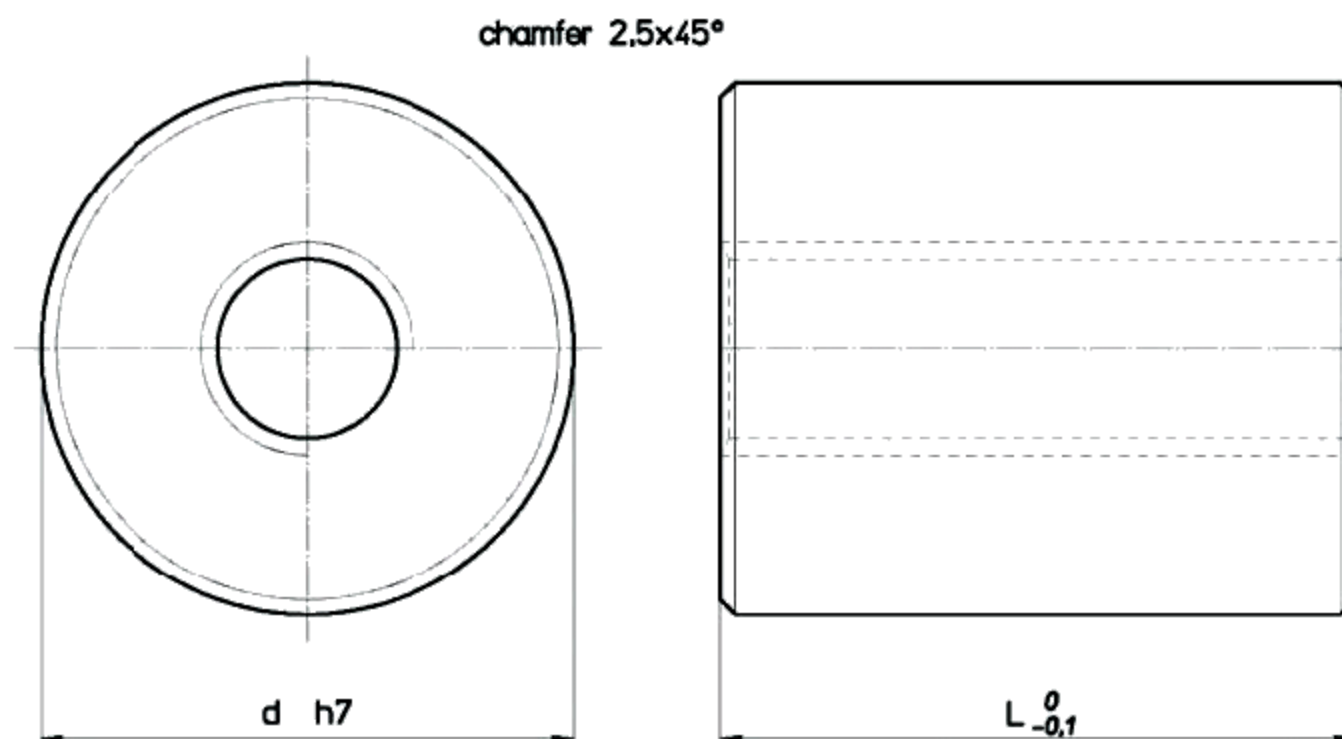
(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.



TRAPEZOIDAL NUT TYPE LRBN - CYLINDRICAL BRONZE

Material: EN 1982 Cu Sn12-C - CC483K

Large Cylindrical Nut with non-standard pitches.



Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d mm	L mm	Wt. kg/each	At mm ² (1)
LRBN 20 A R	LRBN 20 A L	Tr 20 x 4	1	78	60	2.43	1696
LRBN 25 A R	LRBN 25 A L	Tr 25 x 5	1	78	75	2.96	2650
LRBN 30 R R	LRBN 30 R L	Tr 30 x 3	1	78	90	3.3	3600
LRBN 30 Q R	LRBN 30 Q L	Tr 30 x 4	1	78	90	3.31	3560
LRBN 30 P R	LRBN 30 P L	Tr 30 x 5	1	78	90	3.32	3500
LRBN 30 A R	LRBN 30 A L	Tr 30 x 6	1	78	90	3.33	3435
LRBN 35 R R	LRBN 35 R L	Tr 35 x 3	1	88	105	4.85	5000
LRBN 35 Q R	LRBN 35 Q L	Tr 35 x 4	1	88	105	4.86	4900
LRBN 35 P R	LRBN 35 P L	Tr 35 x 5	1	88	105	4.87	4820
LRBN 35 A R	LRBN 35 A L	Tr 35 x 6	1	88	105	4.89	4750
LRBN 40 R R	LRBN 40 R L	Tr 40 x 3	1	98	120	6.8	6530
LRBN 40 Q R	LRBN 40 Q L	Tr 40 x 4	1	98	120	6.82	6447
LRBN 40 P R	LRBN 40 P L	Tr 40 x 5	1	98	120	6.83	6360
LRBN 40 O R	LRBN 40 O L	Tr 40 x 6	1	98	120	6.85	6277
LRBN 40 A R	LRBN 40 A L	Tr 40 x 7	1	98	120	6.87	6200
LRBN 40 I R	-	Tr 40 x 10	1	98	120	6.91	6597
LRBN 50 R R	LRBN 50 R L	Tr 50 x 3	1	108	150	9.74	10300
LRBN 50 Q R	LRBN 50 Q L	Tr 50 x 4	1	108	150	9.77	10180
LRBN 50 P R	LRBN 50 P L	Tr 50 x 5	1	108	150	9.79	10070
LRBN 50 O R	LRBN 50 O L	Tr 50 x 6	1	108	150	9.82	9965
LRBN 50 A R	LRBN 50 A L	Tr 50 x 8	1	108	150	9.87	9750
LRBN 50 I R	-	Tr 50 x 10	1	108	150	9.92	10600
LRBN 60 O R	-	Tr 60 x 6	1	118	180	13.29	14500
LRBN 60 N R	-	Tr 60 x 7	1	118	180	13.32	14380
LRBN 60 A R	-	Tr 60 x 9	1	118	180	13.36	14130

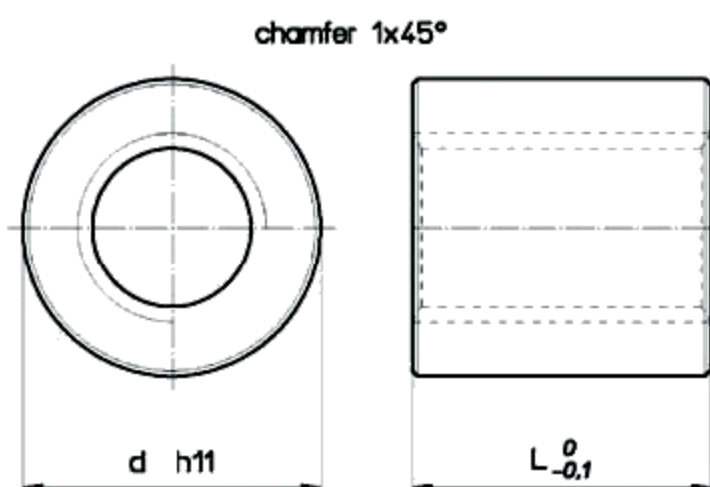
(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL NUT TYPE RSND - CYLINDRICAL STEEL

Material: EN 10277-3 11S Mn Pb 37 - 1.0737

Nut for fastening or manual movement with small load; steel-to-steel coupling tends to seize.

Can be MIG welded only. Electrode welding is not recommended because of the lead.

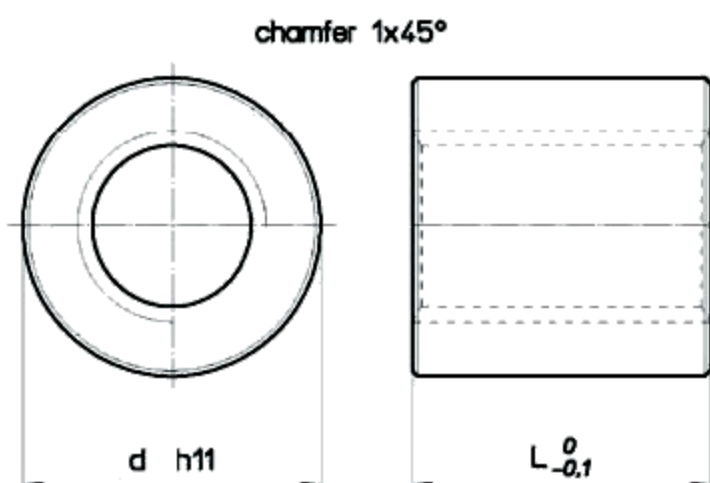


Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d mm	L mm	Wt. kg/each	At mm ² (1)
RSND 12 A R	RSND 12 A L	Tr 12 x 3	1	36	36	0.255	592
RSND 14 A R	RSND 14 A L	Tr 14 x 4	1	36	36	0.25	677
RSND 16 A R	RSND 16 A L	Tr 16 x 4	1	36	36	0.238	792
RSND 16 B R	-	Tr 16 x 8 (P4)	2	36	36	0.238	792
RSND 18 A R	RSND 18 A L	Tr 18 x 4	1	36	36	0.224	905
RSND 20 A R	RSND 20 A L	Tr 20 x 4	1	40	40	0.306	1130
RSND 20 B R	-	Tr 20 x 8 (P4)	2	40	40	0.306	1130
RSND 22 A R	RSND 22 A L	Tr 22 x 5	1	40	40	0.29	1225
RSND 25 A R	RSND 25 A L	Tr 25 x 5	1	45	45	0.4	1590
RSND 25 B R	-	Tr 25 x 10 (P5)	2	45	45	0.4	1590
RSND 28 A R	RSND 28 A L	Tr 28 x 5	1	45	45	0.36	1800
RSND 28 B R	-	Tr 28 x 10 (P5)	2	45	45	0.36	1800
RSND 30 A R	RSND 30 A L	Tr 30 x 6	1	50	50	0.52	2120
RSND 30 B R	-	Tr 30 x 12 (P6)	2	50	50	0.52	2120
RSND 35 A R	RSND 35 A L	Tr 35 x 6	1	55	55	0.65	2764
RSND 40 A R	RSND 40 A L	Tr 40 x 7	1	60	60	0.79	3440
RSND 40 B R	-	Tr 40 x 14 (P7)	2	60	60	0.79	3440
RSND 45 A R	RSND 45 A L	Tr 45 x 8	1	65	65	0.95	4186
RSND 50 A R	RSND 50 A L	Tr 50 x 8	1	70	70	1.12	5057
RSND 55 A R	-	Tr 55 x 9	1	80	80	1.78	6345
RSND 60 A R	RSND 60 A L	Tr 60 x 9	1	80	80	1.51	6975

TRAPEZOIDAL NUT TYPE RSN - CYLINDRICAL STEEL

Material: EN 10277-3 11S Mn 30 - 1.0715

Used as fastening nut for manual movement where load is negligible because steel-to-steel coupling used for moving under loads tends to seize. Material is weldable.



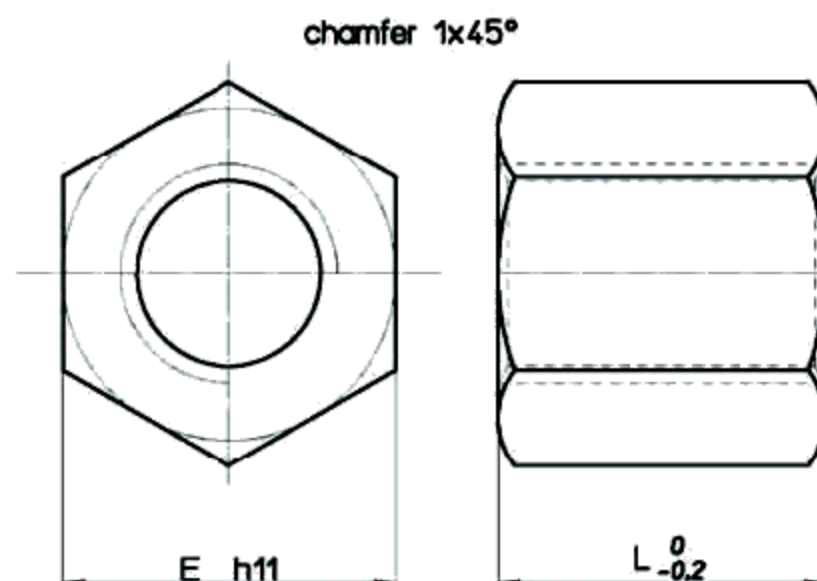
Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d mm	L mm	Wt. kg/each	At mm ² (1)
RSN 10 A R	RSN 10 A L	Tr 10 x 3	1	22	15	0.037	240
RSN 12 A R	RSN 12 A L	Tr 12 x 3	1	26	18	0.061	296
RSN 12 B R	-	Tr 12 x 6 (P3)	2	26	18	0.061	296
RSN 14 A R	RSN 14 A L	Tr 14 x 4	1	30	21	0.095	395
RSN 16 A R	RSN 16 A L	Tr 16 x 4	1	36	24	0.158	528
RSN 18 A R	RSN 18 A L	Tr 18 x 4	1	40	27	0.218	553
RSN 20 A R	RSN 20 A L	Tr 20 x 4	1	45	30	0.308	847
RSN 22 A R	RSN 22 A L	Tr 22 x 5	1	45	33	0.324	1010
RSN 24 A R	RSN 24 A L	Tr 24 x 5	1	50	36	0.44	1215
RSN 26 A R	RSN 26 A L	Tr 26 x 5	1	50	39	0.454	1440
RSN 28 A R	RSN 28 A L	Tr 28 x 5	1	60	42	0.747	1680
RSN 30 A R	RSN 30 A L	Tr 30 x 6	1	60	45	0.773	1908
RSN 32 A R	RSN 32 A L	Tr 32 x 6	1	60	48	0.79	2186
RSN 36 A R	RSN 36 A L	Tr 36 x 6	1	75	54	1.476	2800
RSN 40 A R	RSN 40 A L	Tr 40 x 7	1	80	60	1.826	3440
RSN 44 A R	RSN 44 A L	Tr 44 x 7	1	80	66	1.878	4200
RSN 50 A R	RSN 50 A L	Tr 50 x 8	1	90	75	2.68	5418
RSN 60 A R	RSN 60 A L	Tr 60 x 9	1	100	90	3.698	7847
RSN 70 A R	RSN 70 A L	Tr 70 x 10	1	110	105	4.884	10200
RSN 80 A R	RSN 80 A L	Tr 80 x 10	1	120	120	6.21	14137

(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL NUT TYPE HSN - HEXAGONAL IN STEEL

Material: EN 10277-3 11SMnPb37 - 1.0737

Fixing nut very convenient thanks to its hexagonal shape. Not suitable for operations with high loads, because the coupling steel-to-steel tends to seize. This nut can be MIG welded only. Electrode welding is not recommended because of the lead.



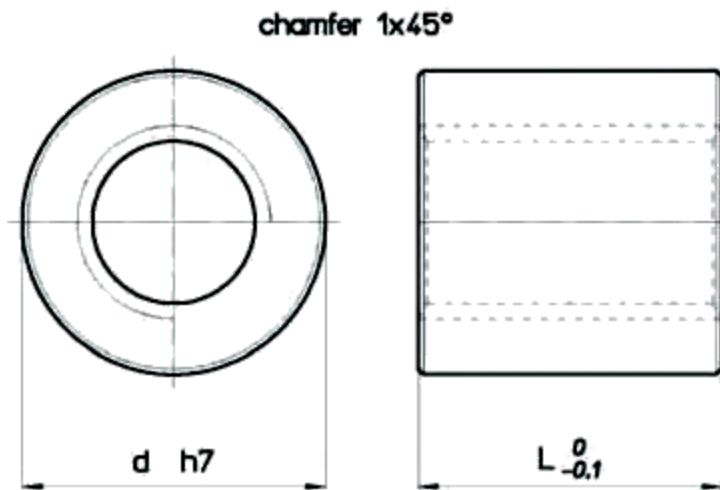
Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d mm	L mm	Wt. kg/each	At mm ² (1)
HSN 10 T R	HSN 10 T L	Tr 10 x 2	1	17	15	0.023	150
HSN 10 A R	HSN 10 A L	Tr 10 x 3	1	17	15	0.021	240
HSN 12 A R	HSN 12 A L	Tr 12 x 3	1	19	18	0.027	296
HSN 14 R R	HSN 14 R L	Tr 14 x 3	1	22	21	0.044	395
HSN 14 A R	HSN 14 A L	Tr 14 x 4	1	22	21	0.044	395
HSN 16 A R	HSN 16 A L	Tr 16 x 4	1	27	24	0.082	528
HSN 18 A R	HSN 18 A L	Tr 18 x 4	1	27	27	0.084	553
HSN 20 A R	HSN 20 A L	Tr 20 x 4	1	30	30	0.114	847
HSN 22 A R	HSN 22 A L	Tr 22 x 5	1	30	33	0.112	1010
HSN 24 A R	HSN 24 A L	Tr 24 x 5	1	36	36	0.2	1215
HSN 26 A R	HSN 26 A L	Tr 26 x 5	1	36	39	0.193	1440
HSN 28 A R	HSN 28 A L	Tr 28 x 5	1	41	42	0.291	1680
HSN 30 A R	HSN 30 A L	Tr 30 x 6	1	46	45	0.42	1908
HSN 32 A R	HSN 32 A L	Tr 32 x 6	1	46	48	0.411	2186
HSN 36 A R	HSN 36 A L	Tr 36 x 6	1	55	54	0.706	2800
HSN 40 A R	HSN 40 A L	Tr 40 x 7	1	65	60	1.172	3440
HSN 44 A R	HSN 44 A L	Tr 44 x 7	1	65	66	1.159	4200
HSN 50 A R	HSN 50 A L	Tr 50 x 8	1	75	75	1.783	5418
HSN 60 A R	HSN 60 A L	Tr 60 x 9	1	90	90	3.087	7847
HSN 70 A R	HSN 70 A L	Tr 70 x 10	1	90	105	2.837	10200

(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL NUT TYPE RPN - CYLINDRICAL PLASTIC

Material: PA6 + MoS2 DIN 7728

Highly wear resistant cylindrical plastic nut. Designed for low to medium loads. Lubricate RPN nuts occasionally with grease or oil to improve life. Do not use molybdenum disulfide MoS2 lubricants or graphite.



Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d mm	L mm	Wt. kg/each	At mm ² (1)
RPN 12 A R	RPN 12 A L	Tr 12 x 3	1	26	24	0.012	396
RPN 16 A R	RPN 16 A L	Tr 16 x 4	1	36	32	0.03	704
RPN 20 A R	RPN 20 A L	Tr 20 x 4	1	45	40	0.06	1130
RPN 25 A R	RPN 25 A L	Tr 25 x 5	1	50	48	0.083	1696
RPN 28 A R	RPN 28 A L	Tr 28 x 5	1	60	60	0.154	2400
RPN 28 B R	-	Tr 28 x 10 (P5)	2	60	60	0.154	2400
RPN 30 A R	RPN 30 A L	Tr 30 x 6	1	60	60	0.15	2544
RPN 35 A R	RPN 35 A L	Tr 35 x 6	1	75	72	0.29	3618
RPN 40 A R	RPN 40 A L	Tr 40 x 7	1	80	80	0.355	4587
RPN 50 A R	RPN 50 A L	Tr 50 x 8	1	90	100	0.523	7225

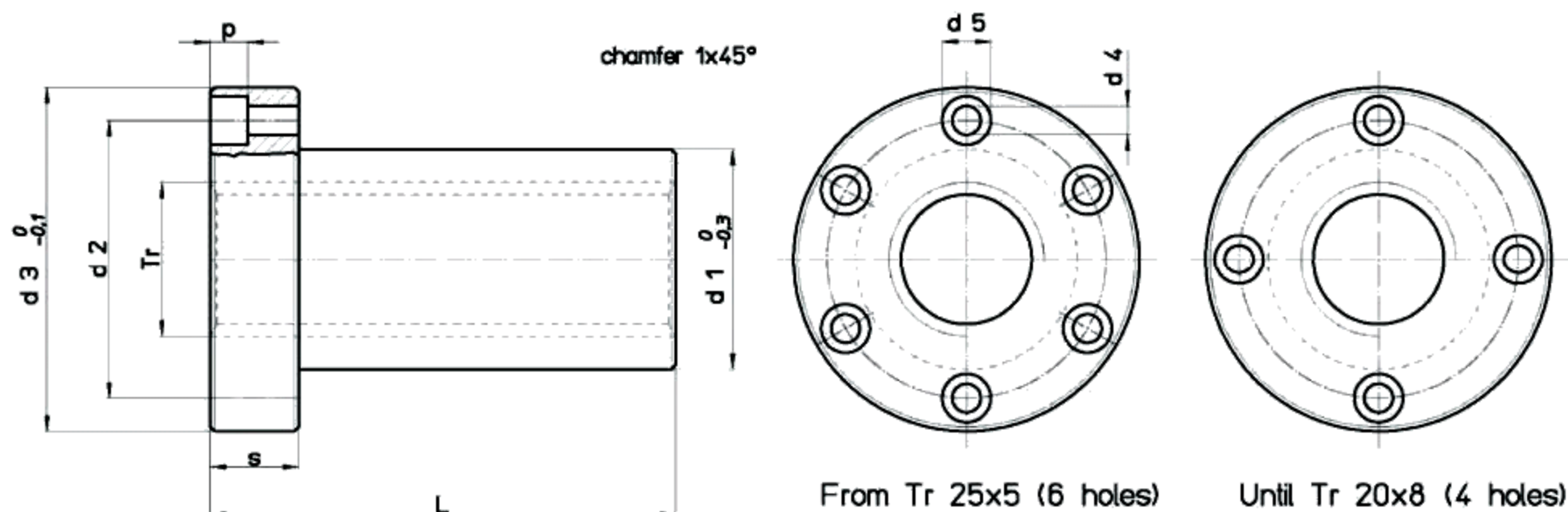
Important Note:

RPN plastic nuts are recommended to be used with stainless steel screws only.

TRAPEZOIDAL NUT TYPE FPN FLANGED SELF-LUBRICATING PLASTIC

Material: PA6 + MoS2 DIN 7728 + ADDITIVES

This type of nut is made of a very wear-resistant perfectly self-lubricating plastic. It doesn't require any other lubrication as long as it is in use. The 3 x d length gives better load distribution and limits wear. The flange dimensions make them fully interchangeable with the FBNNS, OFBN and FBNEL (total length and flange thickness are variable).



Nut Stock no. RIGHT	Nut Stock no. LEFT	Diameter x Lead	Thread Starts	d1 mm	d2 mm	d3 mm	d4 mm	d5 mm	P mm	L mm	S mm	no. screw holes	Fastening Screws (class 8.8)	Wt. kg/each	At mm ² (1)
FPN 12 A R	FPN 12 A L	Tr 12 x 3	1	18	26	37	4.5	7.5	4.2	36	12	4	M4	0.016	594
FPN 16 A R	FPN 16 A L	Tr 16 x 4	1	22	32	45	5.5	9.5	5.2	48	16	4	M5	0.03	1056
FPN 20 A R	FPN 20 A L	Tr 20 x 4	1	30	40	52	5.5	9.5	5.2	60	20	4	M5	0.057	1696
FPN 20 B R	-	Tr 20 x 8 (P4)	2	30	40	52	5.5	9.5	5.2	60	20	4	M5	0.057	1696
FPN 25 A R	FPN 25 A L	Tr 25 x 5	1	35	48	62	6.5	11	6.5	75	25	6	M6	0.094	2650
FPN 28 A R	FPN 28 A L	Tr 28 x 5	1	40	53	68	6.5	11	6.5	90	30	6	M6	0.142	3600
FPN 28 B R	-	Tr 28 x 10 (P5)	2	40	53	68	6.5	11	6.5	90	30	6	M6	0.142	3600
FPN 30 A R	FPN 30 A L	Tr 30 x 6	1	45	53	68	6.5	11	6.5	90	30	6	M6	0.135	3816
FPN 35 A R	FPN 35 A L	Tr 35 x 6	1	50	63	78	8.5	14	8.5	105	35	6	M8	0.221	5277
FPN 40 A R	FPN 40 A L	Tr 40 x 7	1	55	68	84	8.5	14	8.5	120	40	6	M8	0.289	6880
FPN 40 I R	-	Tr 40 x 10	1	55	68	84	8.5	14	8.5	120	40	6	M8	0.252	6597
FPN 50 A R	FPN 50 A L	Tr 50 x 8	1	65	80	100	10.5	17	10.5	150	50	6	M10	0.476	10840

(1) Total bearing surface between screw and nut teeth on plane perpendicular to axis.

TRAPEZOIDAL SCREW SPECIFICATIONS

Diameter x Lead	d1 Major diameter tolerance 4h mm		d2 Effective or pitch dia. tolerance 7e mm		d3 Minor diameter tolerance 7h mm		Thread Starts	Lead Angle	(1) Efficiency η		(2) H1 mm	I Moment of inertia mm ⁴
	min.	max.	min.	max.	min.	max.			f=0.1	f=0.2		
Tr 10 x 2	9.820	10.000	8.739	8.929	7.191	7.500	1	4°02'	0.41	0.26	1	131
Tr 10 x 3	9.764	10.000	8.203	8.415	6.150	6.500	1	6°25'	0.52	0.35	1.5	70
Tr 10 x 4 (P2)	9.820	10.000	8.739	8.929	7.191	7.500	2	8°03'	0.58	0.40	1	131
Tr 12 x 3	11.764	12.000	10.191	10.415	8.135	8.500	1	5°12'	0.47	0.31	1.5	215
Tr 12 x 6 (P3)	11.764	12.000	10.191	10.415	8.135	8.500	2	10°19'	0.63	0.46	1.5	215
Tr 14 x 3	13.764	14.000	12.191	12.415	10.135	10.500	1	4°22'	0.43	0.27	1.5	518
Tr 14 x 4	13.700	14.000	11.640	11.905	9.074	9.500	1	6°03'	0.51	0.34	2	333
Tr 14 x 6 (P3)	13.764	14.000	12.191	12.415	10.135	10.500	2	8°41'	0.59	0.42	1.5	518
Tr 16 x 4	15.700	16.000	13.640	13.905	11.074	11.500	1	5°12'	0.47	0.31	2	738
Tr 16 x 8 (P4)	15.700	16.000	13.640	13.905	11.074	11.500	2	10°19'	0.63	0.46	2	738
Tr 18 x 4	17.700	18.000	15.640	15.905	13.074	13.500	1	4°33'	0.44	0.28	2	1434
Tr 18 x 8 (P4)	17.700	18.000	15.640	15.905	13.074	13.500	2	9°02'	0.60	0.43	2	1434
Tr 20 x 4	19.700	20.000	17.640	17.905	15.074	15.500	1	4°03'	0.41	0.26	2	2534
Tr 20 x 8 (P4)	19.700	20.000	17.640	17.905	15.074	15.500	2	8°03'	0.58	0.40	2	2534
Tr 20 x 20 (P5)	19.665	20.000	17.114	17.394	14.044	14.500	4	20°00'	0.76	0.60	2.5	1910
Tr 22 x 5	21.665	22.000	19.114	19.394	16.044	16.500	1	4°40'	0.45	0.28	2.5	3232
Tr 22 x 10 (P5)	21.665	22.000	19.114	19.394	16.044	16.500	2	9°16'	0.61	0.43	2.5	3232
Tr 24 x 5	23.665	24.000	21.094	21.394	18.019	18.500	1	4°14'	0.42	0.27	2.5	5175
Tr 24 x 10 (P5)	23.665	24.000	21.094	21.394	18.019	18.500	2	8°25'	0.59	0.41	2.5	5175
Tr 25 x 3	24.764	25.000	23.165	23.415	21.103	21.500	1	2°20'	0.29	0.17	1.5	9735
Tr 25 x 5	24.665	25.000	22.094	22.394	19.019	19.500	1	4°03'	0.41	0.26	2.5	6423
Tr 25 x 10 (P5)	24.665	25.000	22.094	22.394	19.019	19.500	2	8°03'	0.58	0.40	2.5	6423
Tr 25 x 25 (P5)	24.665	25.000	22.094	22.394	19.019	19.500	5	19°30'	0.75	0.60	2.5	6423
Tr 26 x 5	25.665	26.000	23.094	23.394	20.019	20.500	1	3°52'	0.40	0.25	2.5	7884
Tr 26 x 10 (P5)	25.665	26.000	23.094	23.394	20.019	20.500	2	7°42'	0.57	0.39	2.5	7884
Tr 28 x 5	27.665	28.000	25.094	25.394	22.019	22.500	1	3°34'	0.38	0.23	2.5	11539
Tr 28 x 10 (P5)	27.665	28.000	25.094	25.394	22.019	22.500	2	7°07'	0.55	0.37	2.5	11539
Tr 30 x 3	29.764	30.000	28.165	28.415	26.103	26.500	1	1°55'	0.25	0.14	1.5	22900
Tr 30 x 4	29.700	30.000	27.640	27.905	25.074	25.500	1	2°36'	0.31	0.18	2	19400
Tr 30 x 5	29.665	30.000	27.094	27.394	24.019	24.500	1	3°19'	0.36	0.22	2.5	16340
Tr 30 x 6	29.625	30.000	26.547	26.882	22.463	23.000	1	4°03'	0.41	0.26	3	13650
Tr 30 x 12 (P6)	29.625	30.000	26.547	26.882	22.463	23.000	2	8°03'	0.58	0.40	3	13650
Tr 30 x 30 (P5)	29.665	30.000	27.094	27.394	24.019	24.500	6	19°09'	0.75	0.59	2.5	16340
Tr 32 x 6	31.625	32.000	28.547	28.882	24.463	25.000	1	3°46'	0.39	0.24	3	17580
Tr 32 x 12 (P6)	31.625	32.000	28.547	28.882	24.463	25.000	2	7°30'	0.56	0.38	3	17580
Tr 35 x 3	34.764	35.000	33.165	33.415	31.103	31.500	1	1°38'	0.22	0.12	1.5	46128
Tr 35 x 4	34.700	35.000	32.640	32.905	30.074	30.500	1	2°13'	0.28	0.16	2	40150
Tr 35 x 5	34.665	35.000	32.094	32.394	29.019	29.500	1	2°48'	0.33	0.19	2.5	34810
Tr 35 x 6	34.625	35.000	31.547	31.882	27.463	28.000	1	3°25'	0.37	0.23	3	30000
Tr 35 x 8	34.550	35.000	30.493	30.868	25.399	26.000	1	4°42'	0.45	0.29	4	21980
Tr 36 x 6	35.625	36.000	32.547	32.882	28.463	29.000	1	3°19'	0.36	0.22	3	34540
Tr 36 x 12 (P6)	35.625	36.000	32.547	32.882	28.463	29.000	2	6°36'	0.53	0.36	3	34540

- 1) Useful effect for conversion of rotary movement to linear movement with friction coefficient f=0.1 and f=0.2.
- 2) Radial support dimension between screw and nut teeth.

TRAPEZOIDAL SCREW SPECIFICATIONS

Diameter x Lead	d1 Major diameter tolerance 4h mm		d2 Effective or pitch dia. tolerance 7e mm		d3 Minor diameter tolerance 7h mm		Thread Starts	Lead Angle	(1) Efficiency η		(2) H1 mm	I Moment of inertia mm ⁴
	min.	max.	min.	max.	min.	max.			f=0.1	f=0.2		
Tr 40 x 3	39.764	40.000	38.165	38.415	36.103	36.500	1	1°25´	0.20	0.11	1.5	83395
Tr 40 x 4	39.700	40.000	37.640	37.905	35.074	35.500	1	1°55´	0.25	0.14	2	74290
Tr 40 x 5	39.665	40.000	37.094	37.394	34.019	34.500	1	2°26´	0.30	0.17	2.5	65740
Tr 40 x 6	39.625	40.000	36.547	36.882	32.463	33.000	1	2°57´	0.34	0.20	3	57950
Tr 40 x 7	39.575	40.000	36.020	36.375	31.431	32.000	1	3°30´	0.38	0.23	3.5	51030
Tr 40 x 8	39.550	40.000	35.493	35.868	30.399	31.000	1	4°03´	0.41	0.26	4	44560
Tr 40 x 10	39.470	40.000	34.450	34.850	28.350	29.000	1	5°12´	0.47	0.31	5	31700
Tr 40 x 14 (P7)	39.575	40.000	36.020	36.375	31.431	32.000	2	6°58´	0.54	0.37	3.5	51030
Tr 40 x 40 (P8)	39.550	40.000	35.493	35.868	30.399	31.000	5	19°30´	0.75	0.60	4	44560
Tr 44 x 7	43.575	44.000	40.020	40.375	35.431	36.000	1	3°09´	0.35	0.21	3.5	81820
Tr 45 x 8	44.550	45.000	40.493	40.868	35.399	36.000	1	3°33´	0.38	0.23	4	81245
Tr 50 x 3	49.764	50.000	48.150	48.415	46.084	46.500	1	1°08´	0.16	0.09	1.5	121400
Tr 50 x 4	49.700	50.000	47.605	47.905	45.074	45.500	1	1°31´	0.21	0.12	2	202600
Tr 50 x 5	49.665	50.000	47.094	47.394	44.019	44.500	1	1°55´	0.25	0.14	2.5	184300
Tr 50 x 6	49.625	50.000	46.547	46.882	42.463	43.000	1	2°20´	0.29	0.17	3	167240
Tr 50 x 8	49.550	50.000	45.468	45.868	40.368	41.000	1	3°10´	0.35	0.21	4	136930
Tr 50 x 10	49.470	50.000	44.425	44.850	38.319	39.000	1	4°03´	0.41	0.26	5	105834
Tr 55 x 9	54.500	55.000	49.935	50.360	44.329	45.000	1	3°15´	0.36	0.22	4.5	189550
Tr 60 x 6	59.625	60.000	56.547	56.882	52.463	53.000	1	1°55´	0.25	0.14	3	386240
Tr 60 x 7	59.575	60.000	56.020	56.375	51.431	52.000	1	2°16´	0.28	0.16	3.5	343450
Tr 60 x 9	59.500	60.000	54.935	55.360	49.329	50.000	1	2°57´	0.34	0.20	4.5	302600
Tr 70 x 10	69.470	70.000	64.425	64.850	58.319	59.000	1	2°48´	0.33	0.19	5	587540
Tr 80 x 10	79.470	80.000	74.425	74.850	68.319	69.000	1	2°26´	0.30	0.17	5	1069390
Tr 90 x 12	89.400	90.000	83.335	83.830	76.246	77.000	1	2°36´	0.31	0.18	6	1658969
Tr 95 x 16	94.290	95.000	86.250	86.810	76.110	77.000	1	3°21´	0.37	0.22	8	1647164
Tr 100 x 12	99.400	100.000	93.330	93.830	86.215	87.000	1	2°19´	0.29	0.17	6	2712072
Tr 100 x 16	99.290	100.000	91.250	91.810	81.110	82.000	1	3°10´	0.35	0.21	8	2124553
Tr 120 x 14	119.330	120.000	112.290	112.820	103.157	104.00	1	2°16´	0.28	0.16	7	5558591
Tr 120 x 16	119.290	120.000	111.250	111.810	101.110	102.00	1	2°36´	0.31	0.16	8	5130342
Tr 140 x 14	139.330	140.000	132.290	132.820	123.157	124.00	1	1°55´	0.25	0.14	7	11292921
Tr 160 x 16	159.290	160.000	151.250	151.810	141.110	142.00	1	1°55´	0.25	0.14	8	19462609

- 1) Useful effect for conversion of rotary movement to linear movement with friction coefficient f=0.1 and f=0.2.
- 2) Radial support dimension between screw and nut teeth.

TRAPEZOIDAL NUT SPECIFICATIONS

Diameter x Lead	D4 Major diameter tolerance H mm		D2 Effective or pitch dia. tolerance 7H mm		D1 Minor diameter tolerance 4H mm		Thread Starts	Radial play between screw & nut		Axial play between screw & nut	
	min.	max.	min.	max.	min.	max.		min.	max.	min.	max.
Tr 10 x 2	10.5		9.000	9.250	8.000	8.236	1	0.071	0.511	0.019	0.137
Tr 10 x 3	10.5		8.500	8.780	7.000	7.315	1	0.085	0.577	0.023	0.155
Tr 10 x 4 (P2)	10.5		9.000	9.250	8.000	8.236	2	0.071	0.511	0.019	0.137
Tr 12 x 3	12.5		10.500	10.800	9.000	9.315	1	0.085	0.609	0.023	0.163
Tr 12 x 6 (P3)	12.5		10.500	10.800	9.000	9.315	2	0.085	0.609	0.023	0.163
Tr 14 x 3	14.5		12.500	12.800	11.000	11.315	1	0.085	0.609	0.023	0.163
Tr 14 x 4	14.5		12.000	12.355	10.000	10.375	1	0.095	0.715	0.025	0.192
Tr 14 x 6 (P3)	14.5		12.500	12.800	11.000	11.315	2	0.085	0.609	0.023	0.163
Tr 16 x 4	16.5		14.000	14.355	12.000	12.375	1	0.095	0.715	0.025	0.192
Tr 16 x 8 (P4)	16.5		14.000	14.355	12.000	12.375	2	0.095	0.715	0.025	0.192
Tr 18 x 4	18.5		16.000	16.355	14.000	14.375	1	0.095	0.715	0.025	0.192
Tr 18 x 8 (P4)	18.5		16.000	16.355	14.000	14.375	2	0.095	0.715	0.025	0.192
Tr 20 x 4	20.5		18.000	18.355	16.000	16.375	1	0.095	0.715	0.025	0.192
Tr 20 x 8 (P4)	20.5		18.000	18.355	16.000	16.375	2	0.095	0.715	0.025	0.192
Tr 20 x 20 (P5)	20.5		17.500	17.875	15.000	15.450	4	0.106	0.761	0.028	0.204
Tr 22 x 5	22.5		19.500	19.875	17.000	17.450	1	0.106	0.761	0.028	0.204
Tr 22 x 10 (P5)	22.5		19.500	19.875	17.000	17.450	2	0.106	0.761	0.028	0.204
Tr 24 x 5	24.5		21.500	21.900	19.000	19.450	1	0.106	0.806	0.028	0.216
Tr 24 x 10 (P5)	24.5		21.500	21.900	19.000	19.450	2	0.106	0.806	0.028	0.216
Tr 25 x 3	25.5		23.500	23.835	22.000	22.315	1	0.085	0.67	0.023	0.180
Tr 25 x 5	25.5		22.500	22.900	20.000	20.450	1	0.106	0.806	0.028	0.216
Tr 25 x 10 (P5)	25.5		22.500	22.900	20.000	20.450	2	0.106	0.806	0.028	0.216
Tr 25 x 25 (P5)	25.5		22.500	22.900	20.000	20.450	5	0.106	0.806	0.028	0.216
Tr 26 x 5	26.5		23.500	23.900	21.000	21.450	1	0.106	0.806	0.028	0.216
Tr 26 x 10 (P5)	26.5		23.500	23.900	21.000	21.450	2	0.106	0.806	0.028	0.216
Tr 28 x 5	28.5		25.500	25.900	23.000	23.450	1	0.106	0.806	0.028	0.216
Tr 28 x 10 (P5)	28.5		25.500	25.900	23.000	23.450	2	0.106	0.806	0.028	0.216
Tr 30 x 3	30.5		28.500	28.835	27.000	27.315	1	0.085	0.67	0.023	0.180
Tr 30 x 4	30.5		28.000	28.855	26.000	26.375	1	0.095	1.215	0.025	0.326
Tr 30 x 5	30.5		27.500	27.900	25.000	25.450	1	0.106	0.806	0.028	0.216
Tr 30 x 6	31		27.000	27.450	24.000	24.500	1	0.118	0.903	0.032	0.242
Tr 30 x 12 (P6)	31		27.000	27.450	24.000	24.500	2	0.118	0.903	0.032	0.242
Tr 30 x 30 (P5)	30.5		27.500	27.900	25.000	25.450	6	0.106	0.806	0.028	0.216
Tr 32 x 6	33		29.000	29.450	26.000	26.500	1	0.118	0.903	0.032	0.242
Tr 32 x 12 (P6)	33		29.000	29.450	26.000	26.500	2	0.118	0.903	0.032	0.242
Tr 35 x 3	35.5		33.500	33.835	32.000	32.315	1	0.085	0.67	0.023	0.180
Tr 35 x 4	35.5		33.000	33.355	31.000	31.375	1	0.095	0.715	0.025	0.192
Tr 35 x 5	25.5		32.500	32.900	30.000	30.450	1	0.106	0.806	0.028	0.216
Tr 35 x 6	36		32.000	32.450	29.000	29.500	1	0.118	0.903	0.032	0.242
Tr 35 x 8	36		31.000	31.500	27.000	27.630	1	0.132	1.007	0.035	0.270
Tr 36 x 6	37		33.000	33.450	30.000	30.500	1	0.118	0.903	0.032	0.242
Tr 38 x 12 (P6)	37		33.000	33.450	30.000	30.500	2	0.118	0.903	0.032	0.242



TRAPEZOIDAL NUT SPECIFICATIONS

Diameter x Lead	D4 Major diameter tolerance H mm	D2 Effective or pitch dia. tolerance 7H mm		D1 Minor diameter tolerance 4H mm		Thread Starts	Radial play between screw & nut		Axial play between screw & nut	
	min.max.	min.	max.	min.	max.		min.	max.	min.	max.
Tr 40 x 3	40.5	38.500	38.835	37.000	37.315	1	0.085	0.67	0.023	0.18
Tr 40 x 4	40.5	38.000	38.355	36.000	36.375	1	0.095	0.715	0.025	0.192
Tr 40 x 5	40.5	37.500	37.900	35.000	35.450	1	0.106	0.806	0.028	0.216
Tr 40 x 6	41	37.000	37.450	34.000	34.500	1	0.118	0.903	0.032	0.242
Tr 40 x 7	41	36.500	36.975	33.000	33.560	1	0.125	0.955	0.033	0.256
Tr 40 x 8	41	36.000	36.500	32.000	32.630	1	0.132	1.007	0.035	0.27
Tr 40 x 10	41	35.000	35.530	30.000	30.710	1	0.15	1.08	0.04	0.289
Tr 40 x 14 (P7)	41	36.500	36.975	33.000	33.560	2	0.125	0.955	0.033	0.256
Tr 40 x 40 (P8)	41	36.000	36.500	32.000	32.630	5	0.132	1.007	0.035	0.27
Tr 44 x 7	45	40.500	40.975	37.000	37.560	1	0.125	0.955	0.033	0.256
Tr 45 x 8	46	41.000	41.500	37.000	37.630	1	0.132	1.007	0.035	0.27
Tr 50 x 3	50.5	48.500	48.855	47.000	47.315	1	0.085	0.705	0.023	0.189
Tr 50 x 4	50.5	48.000	48.400	46.000	46.375	1	0.095	0.795	0.025	0.213
Tr 50 x 5	50.5	47.500	47.900	45.000	45.450	1	0.106	0.806	0.028	0.216
Tr 50 x 6	51	47.000	47.450	44.000	44.500	1	0.118	0.903	0.032	0.242
Tr 50 x 8	51	46.000	46.530	42.000	42.630	1	0.132	1.062	0.035	0.285
Tr 50 x 10	51	45.000	45.560	40.000	40.710	1	0.15	1.135	0.04	0.304
Tr 55 x 9	56	50.500	51.060	46.000	46.670	1	0.14	1.125	0.038	0.301
Tr 60 x 6	61	57.000	57.450	54.000	54.500	1	0.118	0.903	0.032	0.242
Tr 60 x 7	61	56.500	56.975	53.000	53.560	1	0.125	0.955	0.033	0.256
Tr 60 x 9	61	55.500	56.060	51.000	51.670	1	0.14	1.125	0.038	0.301
Tr 70 x 10	71	65.000	65.560	60.000	60.710	1	0.15	1.135	0.04	0.304
Tr 80 x 10	81	75.000	75.560	70.000	70.710	1	0.15	1.135	0.04	0.304
Tr 90 x 12	91	84.000	84.630	78.000	78.800	1	0.17	1.295	0.046	0.347
Tr 95 x 16	97	87.000	87.750	79.000	80.000	1	0.19	1.5	0.051	0.402
Tr 100 x 12	101	94.000	94.670	88.000	88.800	1	0.17	1.34	0.046	0.359
Tr 100 x 16	102	92.000	92.750	84.000	85.000	1	0.19	1.5	0.051	0.402
Tr 120 x 14	122	113.000	113.710	106.00	106.900	1	0.18	1.42	0.048	0.38
Tr 120 x 16	122	112.000	112.750	104.00	105.000	1	0.19	1.5	0.051	0.402
Tr 140 x 14	142	133.000	133.710	126.00	126.900	1	0.18	1.42	0.048	0.38
Tr 160 x 16	162	152.000	152.750	144.00	145.000	1	0.19	1.5	0.051	0.402



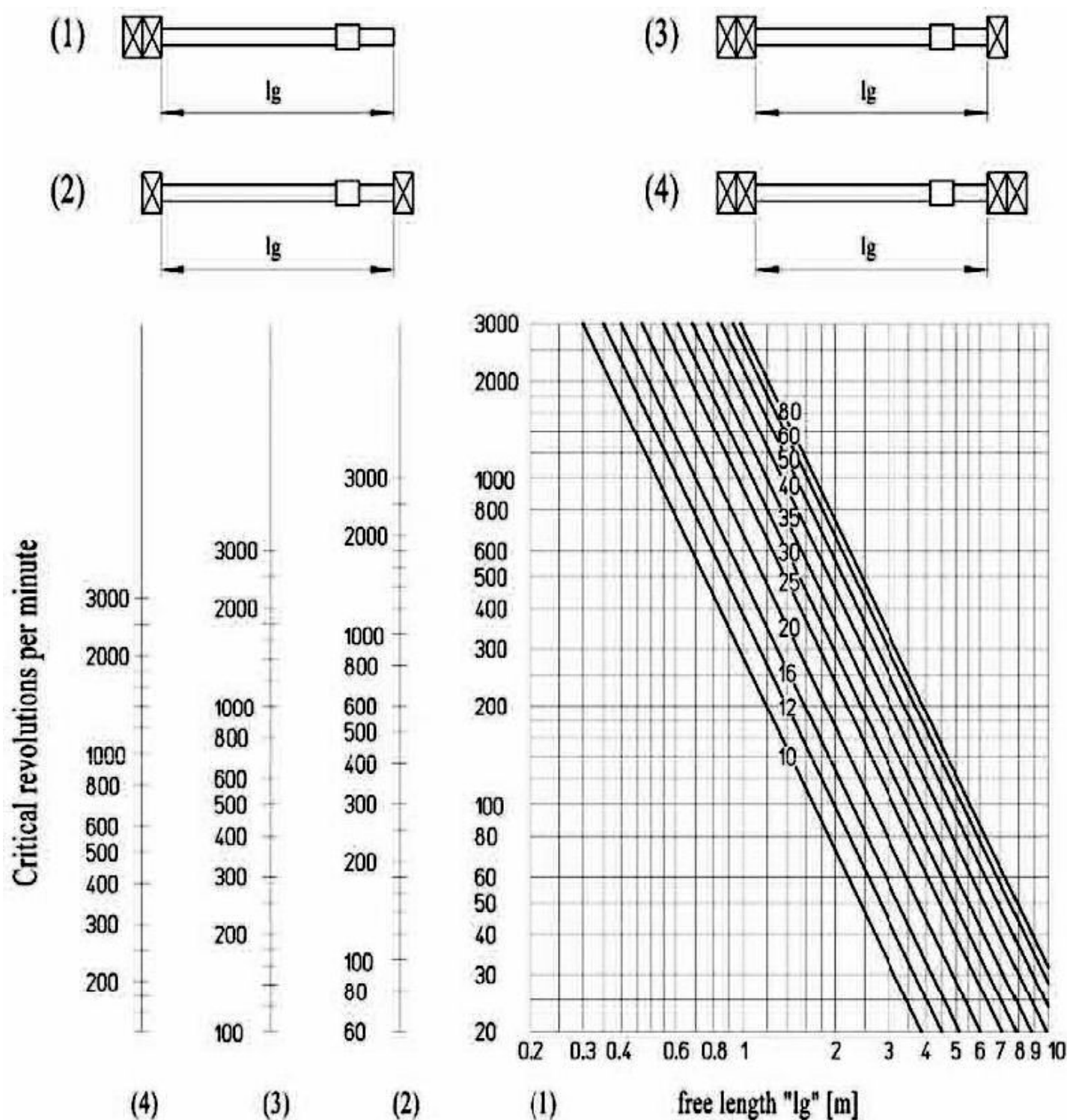
CRITICAL REVOLUTIONS PER MINUTE

The critical revolutions per minute is the rotating speed at which screw vibrations appear. This rotation speed must never be reached because the vibrations cause serious operating irregularities. Critical rpm depend on screw diameter, end constraints (bearings), free length "lg" and from the assembly accuracy. For values shown in Graph 2 assume a minimum safety factor related to the assembly accuracy as per following chart:

Chart No1 Assembly Accuracy Coefficient:

Assembly Accuracy	Conditions	Safety Coefficient
Good assembly accuracy: -Nut alignment to screw within 0.05mm	Bearing and nut seats obtained from CNC lathe onto an already finished structure.	1.3 -1.6
Average assembly accuracy: -Nut alignment to screw within 0.10mm	Bearing and nut seats processed on parts which are then assembled together. Alignments are checked by comparators with extreme care after mounting	1.7 -2.5
Low assembly accuracy: -Nut alignment to screw within 0.25mm	Bearing and nut seats processed on parts which are then assembled or welded together. Alignments are checked by comparators after mounting.	2.6 -4.5

Graph No.2 - Critical rpm



Example: find the critical rpm of a screw Tr 40 x 7 length 3000 mm with constraint conditions as in drawing 3 with average assembly accuracy. Graph 2 gives critical rotation speed =1000 rpm

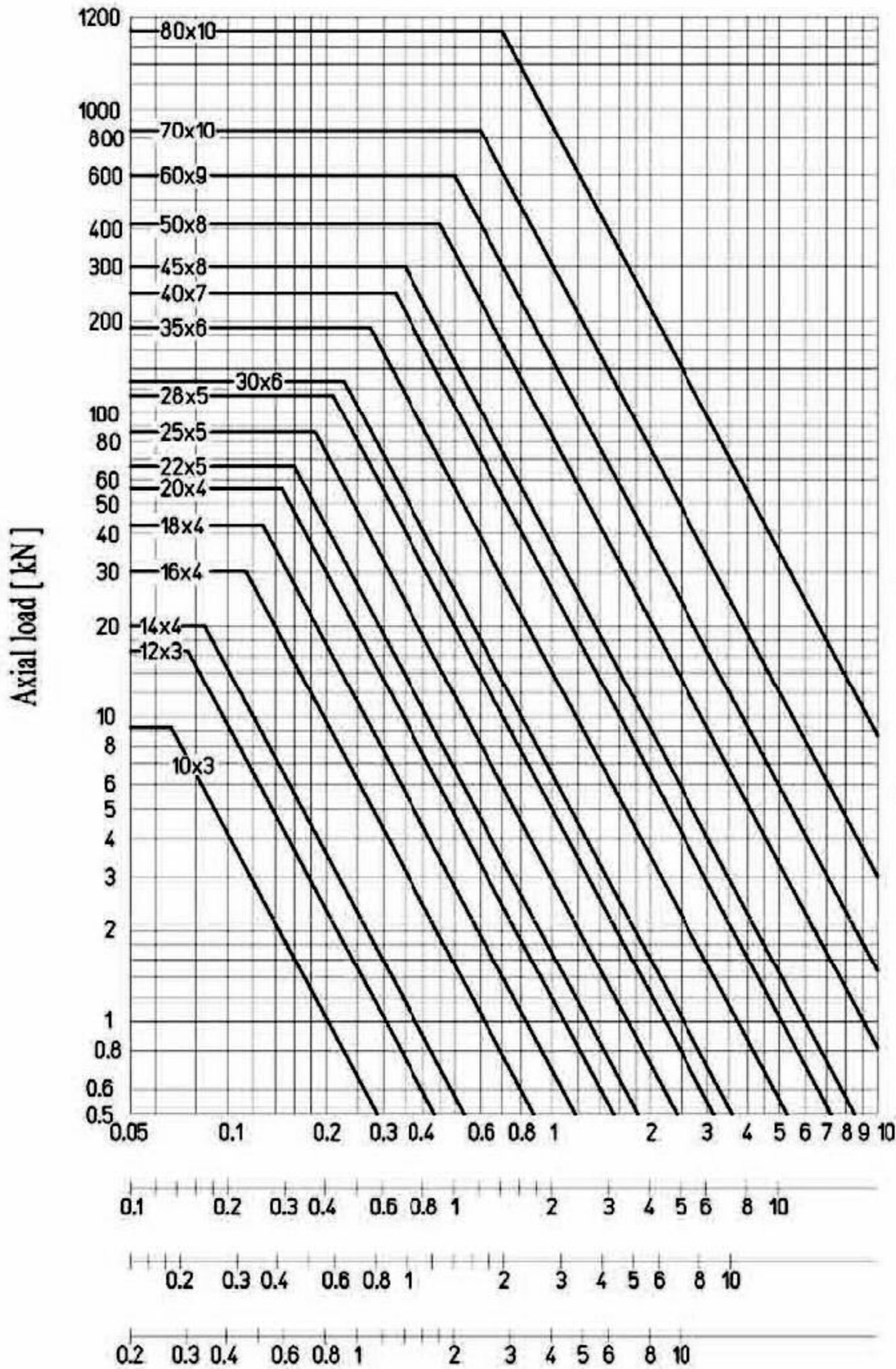
From chart No1 we calculate the Safety coefficient = 2.2.

We can reach the working speed at a maximum round speed of: $n_{max} = 1000/2.2 = 454$ rpm.

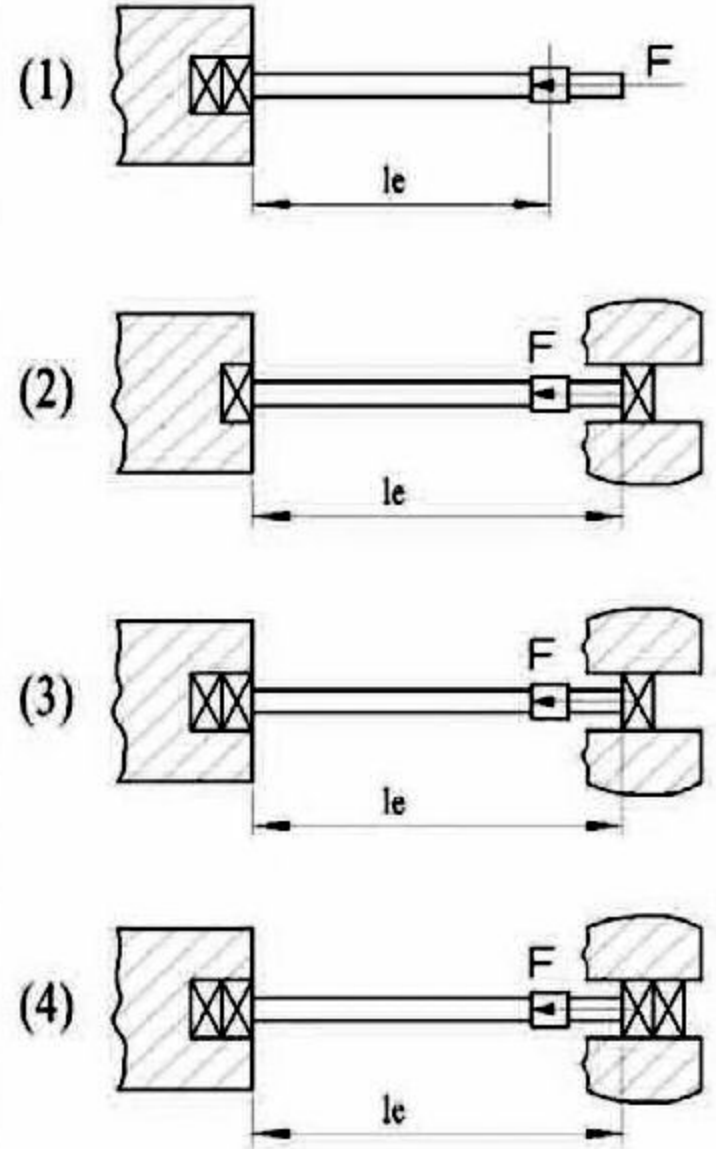
CRITICAL AXIAL LOAD (PEAK LOAD)

When there are compression loaded screws allowance must be made for limitations due to peak load to avoid screw bending due to excessive axial compression load. Admissible axial load depends on the core diameter (d_3) of the screw, end constraints (bearings) and free length 'le'.
Regarding the values given in Graph no.3, allow a minimum safety factor ≥ 2 .

Graph No.3 - Peak Load



free length "le"
for constraint type



(1) free length "le" [m]

(2)

(3)

(4)

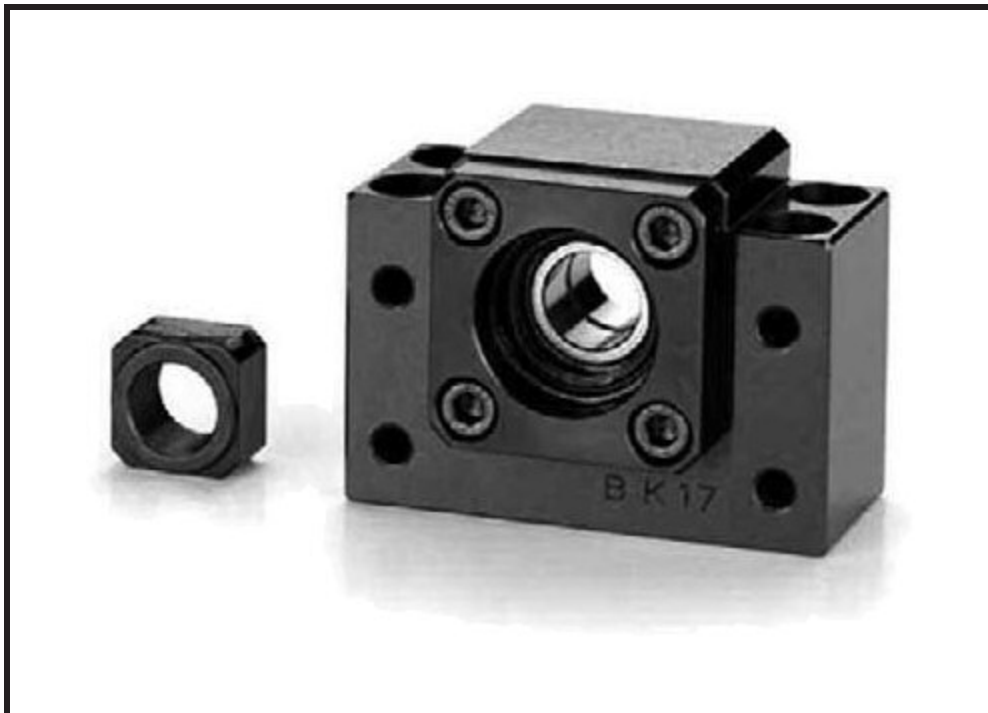
Example: find the admissible axial load of a Tr 30 x 6 screw 3000mm long with constraint conditions as in drawing 4. From Graph 3 Take $F_{max} = 11$ kN with safety factor of 2 and assume $F_{adm} = 11/2 = 5.5$ kN.



LEAD SCREW & BALL SCREWSUPPORT SYSTEMS

IDEAL COMPANION FOR TRANSPORT LEAD SCREWS AND BALL SCREWS.
FIXED TYPES CAN BE USED BOTH ENDS FOR EXTRA LOAD CAPACITY.

ALL TYPES FROM SIZE 10 TO SIZE 40 FROM STOCK.



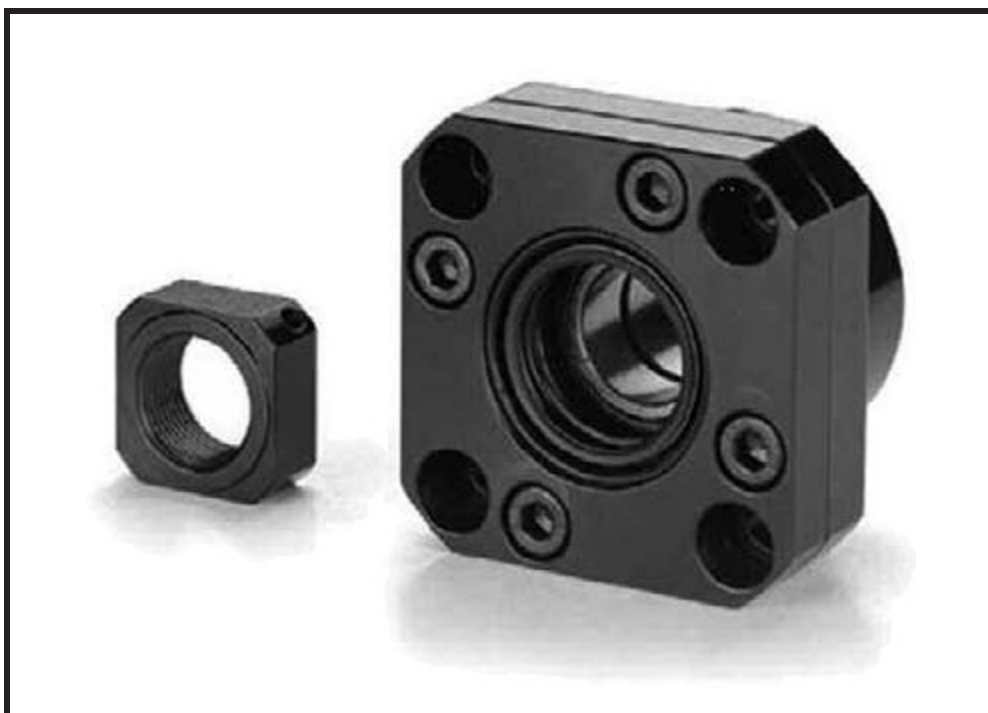
BK (FIXED) PEDESTAL TYPE

With paired precision a/c bearings
for drive endmounting



BF (SIMPLE) PEDESTAL TYPE

With single row radial bearing for
non drive endmounting



FK (FIXED) FLANGE TYPE

With paired precision a/c bearings
for drive endmounting



FF (SIMPLE) FLANGE TYPE

With single row radial bearing for
non drive endmounting

SCREW ENDS MACHINED TO SUIT THESE AND OTHER BEARING TYPES.

ALL TYPES OF MACHINED SCREW END FEATURES AVAILABLE.

Please call us for dimensional and performance information.



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USEAGE NOTES

- Do not disassemble the Support Unit of EK, BK, FK and AK.
- The Bearing of EK, BK, FK and AK are filled-upwith grease.
- When inserting a screwshaft into Support Unit, take care to prevent peeling the oil-seal lip.
- After inserting the fixed-side Support Unit, lock the lock nut using the set piece and hexagon socket-head setscrew.
- Customers special size orders are also available.



SUPPORT UNIT BK (fixed-side rectangular type)

Order Cooling	Model No.	Surface Treatment	Applicable ballscrew accuracy grade	Bearing
BK10_C7	BK10	Black Oxide	C7	7000AP0
BK10_C5			C5	
BK10_C3			C3	
BK10_C7N		Electroless Nickel Plating	C7	7000AP0
BK10_C5N			C5	
BK10_C3N			C3	
BK12_C7	BK12	Black Oxide	C7	7001AP0
BK12_C5			C5	
BK12_C3			C3	
BK12_C7N		Electroless Nickel Plating	C7	7001AP0
BK12_C5N			C5	
BK12_C3N			C3	
BK15_C7	BK15	Black Oxide	C7	7002AP0
BK15_C5			C5	
BK15_C3			C3	
BK15_C7N		Electroless Nickel Plating	C7	7002AP0
BK15_C5N			C5	
BK15_C3N			C3	
BK17_C7	BK17	Black Oxide	C7	7203AP0
BK17_C5			C5	
BK17_C3			C3	
BK17_C7N		Electroless Nickel Plating	C7	7203AP0
BK17_C5N			C5	
BK17_C3N			C3	
BK20_C7	BK20	Black Oxide	C7	7004AP0
BK20_C5			C5	
BK20_C3			C3	
BK20_C7N		Electroless Nickel Plating	C7	7004AP0
BK20_C5N			C5	
BK20_C3N			C3	



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)

Note:

1. (Bearings are no Preload for C7 type support units, and Max. Axial clearance is 0.018mm)
2. (Bearings make Preload for C5 type support units, and Axial clearance is 0mm)
3. (All of bearings use Japan's brand bearings)



SUPPORT UNIT BK (fixed-side rectangular type)

Order Cooling	Model No.	Surface Treatment	Applicable ballscrew accuracy grade	Bearing
BK25_C7	BK25	Black Oxide	C7	7205AP0
BK25B_C7			C7	7205BP0
BK25_C5			C5	7205AP0
BK25B_C5			C5	7205BP0
BK25_C3			C3	7205AP5
BK25_C7N		Electroless Nickel Plating	C7	7205AP0
BK25B_C7N			C7	7205BP0
BK25_C5N			C5	7205AP0
BK25B_C5N			C5	7205BP0
BK25_C3N			C3	7205AP5
BK30_C7	BK30	Black Oxide	C7	7206AP0
BK30B_C7			C7	7206BP0
BK30_C5			C5	7206AP0
BK30B_C5			C5	7206BP0
BK30_C3			C3	7206AP5
BK30_C7N		Electroless Nickel Plating	C7	7206AP0
BK30B_C7N			C7	7206BP0
BK30_C5N			C5	7206AP0
BK30B_C5N			C5	7206BP0
BK30_C3N			C3	7206AP5
BK35_C7	BK35	Black Oxide	C7	7207BP0
BK35_C5			C5	7207BP5
BK35_C3			C3	7207BP5
BK35_C7N		Electroless Nickel Plating	C7	7207BP0
BK35_C5N			C5	7207BP5
BK35_C3N			C3	7207BP5
BK40_C7			BK40	Black Oxide
BK40_C5	C5	7208BP5		
BK40_C3	C3	7208BP5		
BK40_C7N	Electroless Nickel Plating	C7		7208BP0
BK40_C5N		C5		7208BP5
BK40_C3N		C3		7208BP5



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)

Note:

1. (Bearings are no Preload for C7 type support units, and Max. Axial clearance is 0.018mm)
2. (Bearings make Preload for C5 type support units, and Axial clearance is 0mm)
3. (All of bearings use Japan's brand bearings)

SUPPORT UNIT BF (Supported-side rectangular type)

Order Cooling	Model No.	Surface Treatment	Applicable ballscrew accuracy grade	Bearing
BF10_C7	BF10	Black Oxide	C7	608ZZ
BF10_C3			C3 C5	608ZZ
BF10_C7N		Electroless Nickel Plating	C7	608DD
BF10_C3N			C3 C5	608DD
BF12_C7	BF12	Black Oxide	C7	6000ZZ
BF12_C3			C3 C5	6000ZZ
BF12_C7N		Electroless Nickel Plating	C7	6000DDU
BF12_C3N			C3 C5	6000DDU
BF15_C7	BF15	Black Oxide	C7	6002ZZ
BF15_C3			C3 C5	6002ZZ
BF15_C7N		Electroless Nickel Plating	C7	6002DDU
BF15_C3N			C3 C5	6002DDU
BF17_C7	BF17	Black Oxide	C7	6203ZZ
BF17_C3			C3 C5	6203ZZ
BF17_C7N		Electroless Nickel Plating	C7	6203DDU
BF17_C3N			C3 C5	6203DDU
BF20_C7	BF20	Black Oxide	C7	6004ZZ
BF20_C3			C3 C5	6004ZZ
BF20_C7N		Electroless Nickel Plating	C7	6004DDU
BF20_C3N			C3 C5	6004DDU
BF25_C7	BF25	Black Oxide	C7	6205ZZ
BF25_C3			C3 C5	6205ZZ
BF25_C7N		Electroless Nickel Plating	C7	6205DDU
BF25_C3N			C3 C5	6205DDU
BF30_C7	BF30	Black Oxide	C7	6206ZZ
BF30_C3			C3 C5	6206ZZ
BF30_C7N		Electroless Nickel Plating	C7	6206DDU
BF30_C3N			C3 C5	6206DDU
BF35_C7	BF35	Black Oxide	C7	6207ZZ
BF35_C3			C3 C5	6207ZZ
BF35_C7N		Electroless Nickel Plating	C7	6207DDU
BF35_C3N			C3 C5	6207DDU
BF40_C7	BF40	Black Oxide	C7	6208ZZ
BF40_C3			C3 C5	6208ZZ
BF40_C7N		Electroless Nickel Plating	C7	6208DDU
BF40_C3N			C3 C5	6208DDU



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)

Note:

1. (Bearings are no Preload for C7 type support units, and Max. Axial clearance is 0.018mm)
2. (Bearings make Preload for C5 type support units, and Axial clearance is 0mm)
3. (All of bearings use Japan's brand bearings)

SUPPORT UNIT FK (fixed-side round type)

Order Cooling	Model No.	Surface Treatment	Applicable ballscrew accuracy grade	Bearing
FK05_C7	FK05	Black Oxide	C7	605
FK05_C7N		Electroless Nickel Plating	C7	605
FK06_C7	FK06	Black Oxide	C7	606
FK06_C5			C5	706AP0
FK06_C3			C3	706AP5
FK06_C7N		Electroless Nickel Plating	C7	606
FK06_C5N			C5	706AP0
FK06_C3N			C3	706AP5
FK08_C7	FK08	Black Oxide	C7	608
FK08_C5			C5	708AP0
FK08_C3			C3	708AP5
FK08_C7N		Electroless Nickel Plating	C7	608
FK08_C5N			C5	708AP0
FK08_C3N			C3	708AP5
FK10_C7	FK10	Black Oxide	C7	7000AP0
FK10_C5			C5	
FK10_C3			C3	7000AP5
FK10_C7N		Electroless Nickel Plating	C7	7000AP0
FK10_C5N			C5	7000AP0
FK10_C3N			C3	7000AP5
FK12_C7	FK12	Black Oxide	C7	7001AP0
FK12_C5			C5	7001AP5
FK12_C3			C3	7001AP5
FK12_C7N		Electroless Nickel Plating	C7	7001AP0
FK12_C5N			C5	7001AP0
FK12_C3N			C3	7001AP5
FK15_C7	FK15	Black Oxide	C7	7002AP0
FK15_C5			C5	7002AP5
FK15_C3			C3	7002AP5
FK15_C7N		Electroless Nickel Plating	C7	7002AP0
FK15_C5N			C5	7002AP0
FK15_C3N			C3	7002AP5



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)

Note:

1. (Bearings are no Preload for C7 type support units, and Max. Axial clearance is 0.018mm)
2. (Bearings make Preload for C5 type support units, and Axial clearance is 0mm)
3. (All of bearings use Japan's brand bearings)

SUPPORT UNIT FK (fixed-side round type)

Order Cooling	Model No.	Surface Treatment	Applicable ballscrew accuracy grade	Bearing	
FK17_C7	FK17	Black Oxide	C7	7203AP0	
FK17_C5			C5	7203AP0	
FK17_C3			C3	7203AP5	
FK17_C7N		Electroless Nickel Plating	C7	7203AP0	
FK17_C5N			C5	7203AP0	
FK17_C3N			C3	7203AP5	
FK20_C7	FK20	Black Oxide	C7	7204AP0	
FK20B_C7			C7	7204BP0	
FK20_C5			C5	7204AP0	
FK20B_C5			C5	7204BP0	
FK20_C3			C3	7204AP5	
FK20_C7N			Electroless Nickel Plating	C7	7204AP0
FK20B_C7N		C7		7204BP0	
FK20_C5N		C5		7204AP0	
FK20B_C5N		C5		7204BP0	
FK20_C3N		C3		7204AP5	
FK25_C7		FK25		Black Oxide	C7
FK25B_C7			C7		7205BP0
FK25_C5	C5		7205AP0		
FK25B_C5	C5		7205BP0		
FK25_C3	C3		7205AP5		
FK25_C7N	Electroless Nickel Plating		C7		7205AP0
FK25B_C7N			C7	7205BP0	
FK25_C5N			C5	7205AP0	
FK25B_C5N			C5	7205BP0	
FK25_C3N			C3	7205AP5	
FK30_C7			FK30	Black Oxide	C7
FK30B_C7	C7				7206BP0
FK30_C5	C5	7206AP0			
FK30B_C5	C5	7206BP0			
FK30_C3	C3	7206AP5			
FK30_C7N	Electroless Nickel Plating	C7			7206AP0
FK30B_C7N		C7		7206BP0	
FK30_C5N		C5		7206AP0	
FK30B_C5N		C5		7206BP0	
FK30_C3N		C3		7206AP5	



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)

Note:

1. (Bearings are no Preload for C7 type support units, and Max. Axial clearance is 0.018mm)
2. (Bearings make Preload for C5 type support units, and Axial clearance is 0mm)
3. (All of bearings use Japan's brand bearings)



SUPPORT UNIT FF (Supported-side round type)

Order Cooling	Model No.	Surface Treatment	Applicable ballscrew accuracy grade	Bearing
FF06_C7		Black Oxide	C7	606ZZ
FF06_C3			C3 C5	606ZZ
FF06_C7N		Electroless Nickel Plating	C7	606VV
FF06_C3N			C3 C5	606VV
FF10_C7		Black Oxide	C7	608ZZ
FF10_C3			C3 C5	608ZZ
FF10_C7N		Electroless Nickel Plating	C7	608DD
FF10_C3N			C3 C5	608DD
FF12_C7		Black Oxide	C7	6000ZZ
FF12_C3			C3 C5	6000ZZ
FF12_C7N		Electroless Nickel Plating	C7	6000DDU
FF12_C3N			C3 C5	6000DDU
FF15_C7		Black Oxide	C7	6002ZZ
FF15_C3			C3 C5	6002ZZ
FF15_C7N		Electroless Nickel Plating	C7	6002DDU
FF15_C3N			C3 C5	6002DDU
FF17_C7		Black Oxide	C7	6203ZZ
FF17_C3			C3 C5	6203ZZ
FF17_C7N		Electroless Nickel Plating	C7	6203DDU
FF17_C3N			C3 C5	6203DDU
FF20_C7		Black Oxide	C7	6204ZZ
FF20_C3			C3 C5	6204ZZ
FF20_C7N		Electroless Nickel Plating	C7	6204DDU
FF20_C3N			C3 C5	6204DDU
FF25_C7		Black Oxide	C7	6205ZZ
FF25_C3			C3 C5	6205ZZ
FF25_C7N		Electroless Nickel Plating	C7	6205DDU
FF25_C3N			C3 C5	6205DDU
FF30_C7		Black Oxide	C7	6206ZZ
FF30_C3			C3 C5	6206ZZ
FF30_C7N		Electroless Nickel Plating	C7	6206DDU
FF30_C3N			C3 C5	6206DDU



Black Oxide (Application : General case)



Electroless Nickel Plating (Application : Clean room)

Note:

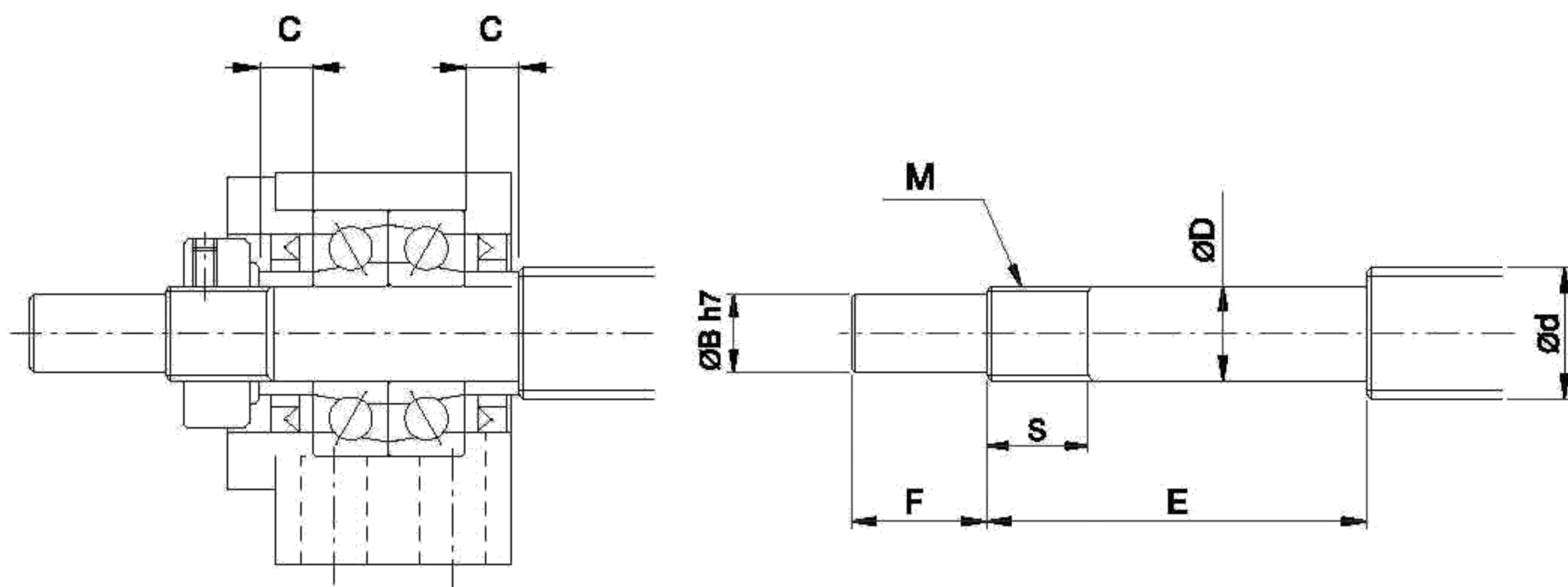
1. (Bearings are no Preload for C7 type support units, and Max. Axial clearance is 0.018mm)
2. (Bearings make Preload for C5 type support units, and Axial clearance is 0mm)
3. (All of bearings use Japan's brand bearings)



TYPE OF SUPPORT UNITS AND APPLICABLE BALL SCREW DIAMETERS

(mm) Fixed-side support unit ID (mm)	Fixed-side support unit applicable model	Supported-side support unit ID (mm)	Supported-side support unit applicable model	Applicable Ball Screw OD (mm)
5	EK05	-	-	Ø6
	FK05			
6	EK06	6	EF06	Ø8
	FK06		FF06	
8	EK08	6	EF08	Ø10
	FK08		FF06	
10	EK10	8	EF10	Ø10, Ø12, Ø14
	FK10		FF10	
	BK10		BF10	
	AK10		AF10	
12	EK12	10	EF12	Ø14, Ø15, Ø16
	FK12		FF12	
	BK12		BF12	
	AK12		AF12	
15	EK15	15	EF15	Ø20
	FK15		FF15	
	BK15		BF15	
	AK15		AF15	
17	BK17	17	BF17	Ø20, Ø25
	FK17		FF17	
20	EK20	20	EF20	Ø25, Ø28
	FK20		FF20	
	BK20		BF20	
	AK20		AF20	
25	FK25	25	FF25	Ø32, Ø36
	BK25		BF25	
30	FK30	30	FF30	Ø40, Ø45
	BK30		BF30	
35	BK35	35	BF35	Ø45
40	BK40	40	BF40	Ø50

RECOMMENDED SHAFT END SHAPE (Fixed-side) FOR SUPPORT UNITS TYPES



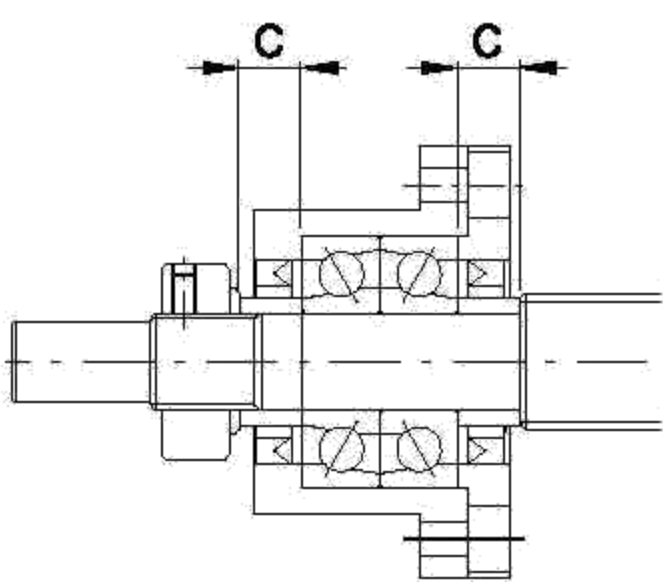
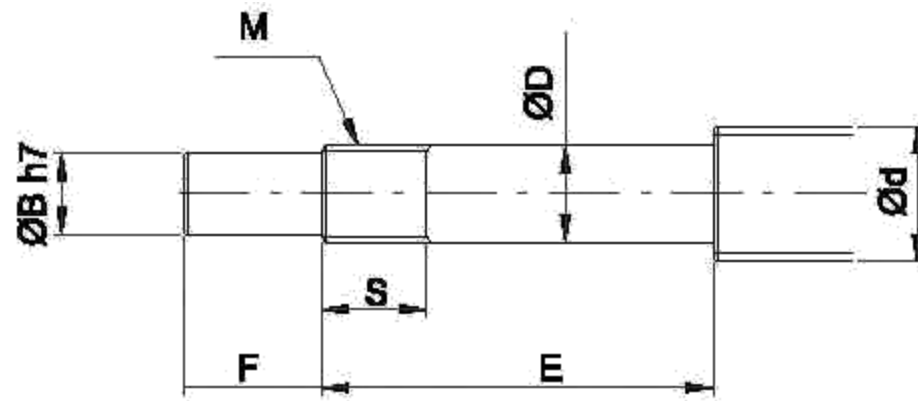
Type BK

Unit : mm

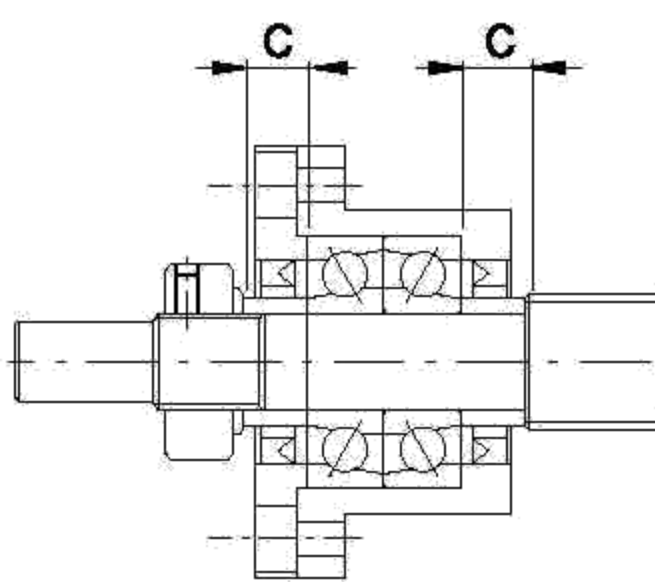
Support unit model No.	Ballscrew shaft OD	Shaft support portion OD			Metric screw thread		Metric screw thread		
		B	E	F	M	S	C		
Type BK	d	D							
BK10	12/14/15	10	-0.005 -0.012	8	36	15	M10x1	16	5.5
BK12	14/15/16	12	-0.005 -0.012	10	36	15	M12x1	14	5.5
BK15	18/20	15	-0.005 -0.014	12	40	20	M15x1	12	6
BK17	20/25	17	-0.005 -0.014	15	53	23	M17x1	17	7
BK20	25/28	20	-0.005 -0.014	17	53	25	M20x1	15	8
BK25	32/36	25	-0.005 -0.014	20	65	30	M25x1.5	18	9
BK30	36/40	30	-0.005 -0.015	25	72	38	M30x1.5	25	9
BK35	45	35	-0.005 -0.015	30	81	45	M35x1.5	28	12
BK40	50	40	-0.005 -0.015	35	93	50	M40x1.5	35	15



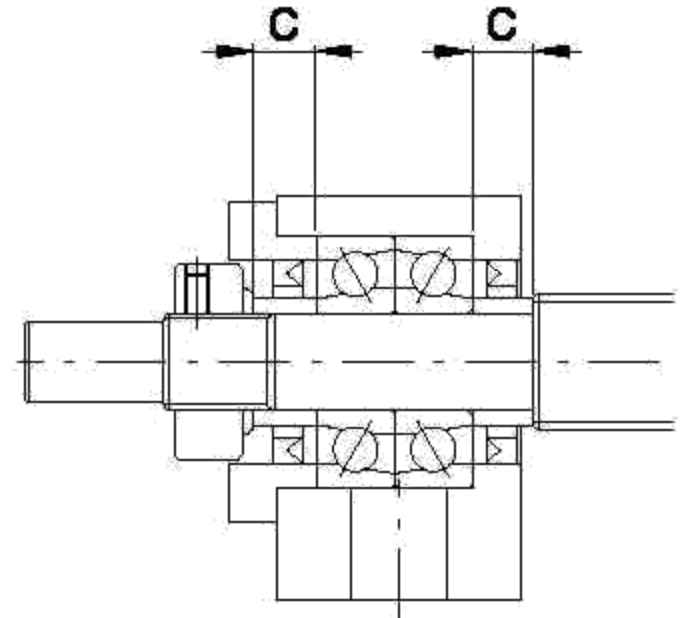
RECOMMENDED SHAFT END SHAPE (Fixed-side) FOR SUPPORT UNITS TYPES FK, EK AND AK



Type FK



Type FK



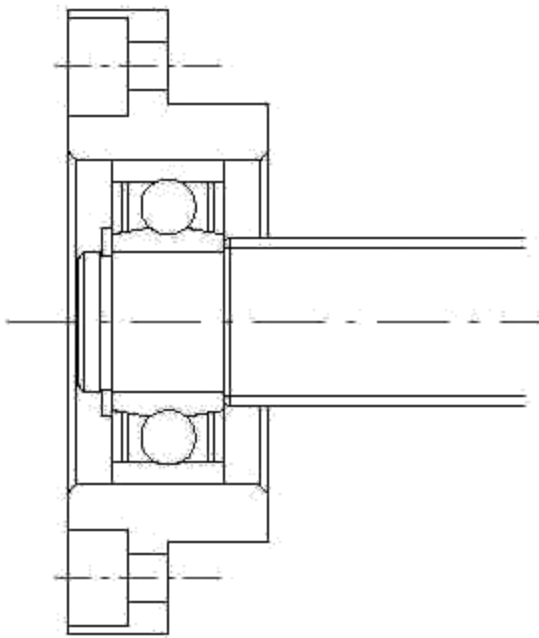
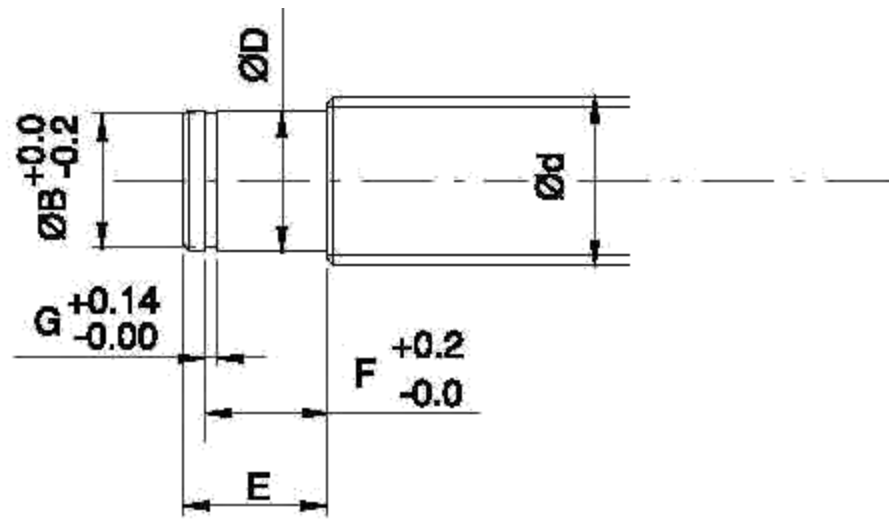
Type EK,AK

Unit : mm

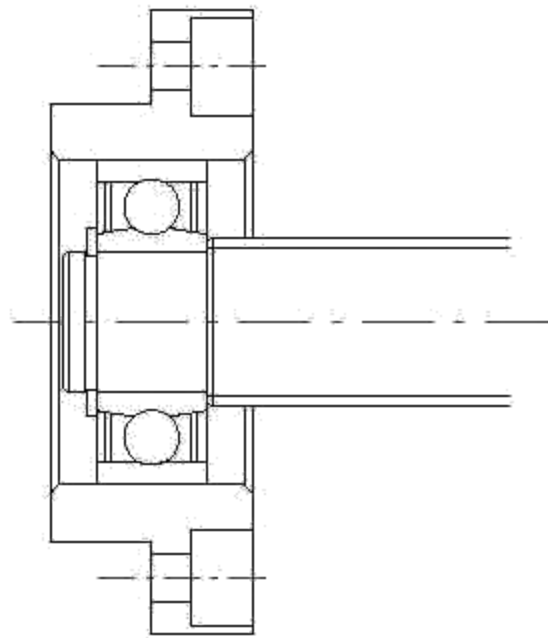
Support unit model No.			Ballscrew shaft OD	Shaft support portion OD			Metric screw thread		Metric screw thread		
Type BK	Type EK	Type AK	d	D	B	E	F	M	S	C	
FK05	EK05	-	8	5	-0.005 -0.012	4	25	6	M5x0.5	7	3.5
FK06	EK06	-	8	6	-0.005 -0.012	4	28	8	M6x0.75	8	5
FK08	EK08	-	10/12	8	-0.005 -0.012	6	32	9	M8x1	10	5.5
FK10	EK10	AK10	12/14/15	10	-0.005 -0.012	8	36	15	M10x1	11	5.5
FK12	EK12	AK12	14/15/16	12	-0.005 -0.012	10	36	15	M12x1	11	5.5
FK15	EK15	AK15	18/20	15	-0.005 -0.014	12	47	20	M15x1	13	10
FK17	-	-	20/25	17	-0.005 -0.014	15	58	23	M17x1	15	10
FK20	EK20	AK20	25/28/30	20	-0.005 -0.014	17	62	25	M20x1	17	11
FK25	-	-	30/32/36	25	-0.005 -0.014	20	76	30	M25x1.5	20	15
FK30	-	-	36/40	30	-0.005 -0.015	25	72	38	M30x1.5	25	9



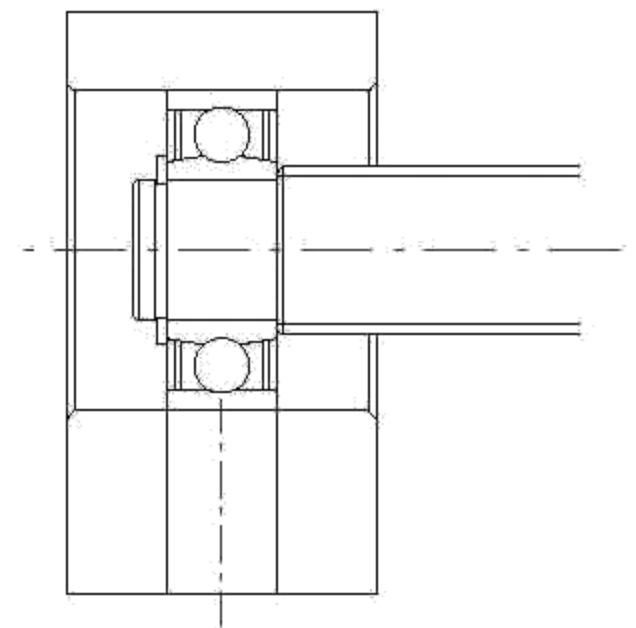
RECOMMENDED SHAFT END SHAPE (Supported-side) FOR SUPPORT UNITS TYPES FF, EF, BF AND AF



Type FF



Type FF



Type EF,BF,AF

Unit : mm

Support unit model No.				Ballscrew shaft OD	Shaft support portion OD					
Type FF	Type EF	Type BF	Type AF	d	D		E	B	F	G
FF06	EF06	-	-	8	6	-0.005 -0.012	9	5.7	6.8	0.8
-	EF08	-	-	10	6	-0.005 -0.012	9	5.7	6.8	0.8
FF10	EF10	BF10	AF10	12/14/15	8	-0.005 -0.012	10	7.6	7.9	0.9
FF12	EF12	BF12	AF12	14/15/16	10	-0.005 -0.012	11	9.6	9.15	1.15
FF15	EF15	BF15	AF15	18/20	15	-0.005 -0.014	13	14.3	10.15	1.15
FF17	-	BF17	-	20/25	17	-0.005 -0.014	16	16.2	13.15	1.15
FF20	EF20	(BF20) Note	AF20	25/28/30	20	-0.005 -0.014	19 (16)	19	15.35 (13.35)	1.35
FF25	-	BF25	-	30/32/36	25	-0.005 -0.014	20	23.9	16.35	1.35
FF30	-	BF30	-	36/40	30	-0.005 -0.015	21	28.6	17.75	1.75
-	-	BF35	-	40/45	35	-0.005 -0.015	22	33	18.75	1.75
-	-	BF40	-	50	40	-0.005 -0.015	23	38	19.75	1.95



BALLSCREW SUPPORT UNIT EQUIVALENT INTERCHANGEABLE FOR MAJOR MANUFACTURER

SYK & THK	SYK & THK	KURODA	NSK	SYK & THK	KURODA	NSK
BK10	EK05	-	-	FK05	-	-
BK12	EK06	BUK-6	WBK06-01A	FK06	-	WBK06-11
BK15	EK08	BUK-8F	WBK08-01A	FK08	BUM-8	WBK08-11
BK17	EK10	-	-	FK10	BUM-10	WBK10-11
BK20	EK12	-	-	FK12	BUM-12	WBK12-11
BK25	EK15	-	-	FK15	BUM-15	WBK15-11
BK30	EK20	-	-	FK17	-	-
BK35				FK20	BUM-20	WBK20-11
BK40				FK25	BUM-25	WBK25-11
	EF06	-	-	FK30	-	-
	EF08	BUK-6S	WBK08S-01			
BF10	EF10	-	-	FF06	-	-
BF12	EF12	-	-	FF10	-	-
BF15	EF15	-	-	FF12	-	-
BF17	EF20	-	-	FF15	-	-
BF20				FF17	-	-
BF25				FF20	-	-
BF30	SYK & THK	KURODA	NSK	FF25	-	-
BF35	AK10	BUK-10F	WBK10-01A	FF30	-	-
BF40	AK12	BUK-12F	WBK12-01A			
	AK15	BUK-15F	WBK15-01A			
	BK17	-	WBK17-01A			
	AK20	BUK-20F	WBK20-01A			
	-	BUK-25F	WBK25-01A			
	AF10	BUK-8S	WBK10S-01			
	AF12	BUK-10S	WBK12S-01			
	AF15	BUK-15S	WBK15S-01			
	BF17	-	WBK17S-01			
	AF20	BUK-20S	WBK20S-01			
	-	BUK-25S	WBK25S-01			



REFERENCE OF AXIAL LOAD OF FIXED-SIDE TYPE SUPPORT UNITS

Model No.		Bearing	Static Load (Kgf)	Allowable Axial Load (Kgf)	Limiting RPM (RPM)
FK06	EK06	706	106	53	
FK08	EK08	708	148	74	
BK10	AK10	7000A	266	133	16800
FK10	EK10				
BK12	AK12	7001A	305	153	15400
FK12	EK12				
BK15	AK15	7002A	350	175	13300
FK15	EK15				
BK17	FK17	7203A	610	305	11200
		7203B	565	363	7700
BK20		7004A	670	335	10500
FK20	AK20	7204A	845	423	9100
	EK20	7204B	780	501	6650
BK25	FK25	7205A	1050	525	8400
		7205B	960	617	5950
BK30	FK30	7206A	1510	755	7000
		7206B	1380	887	4970
BK35		7207B	1870	1202	4200
BK40		7208B	2340	1504	3710



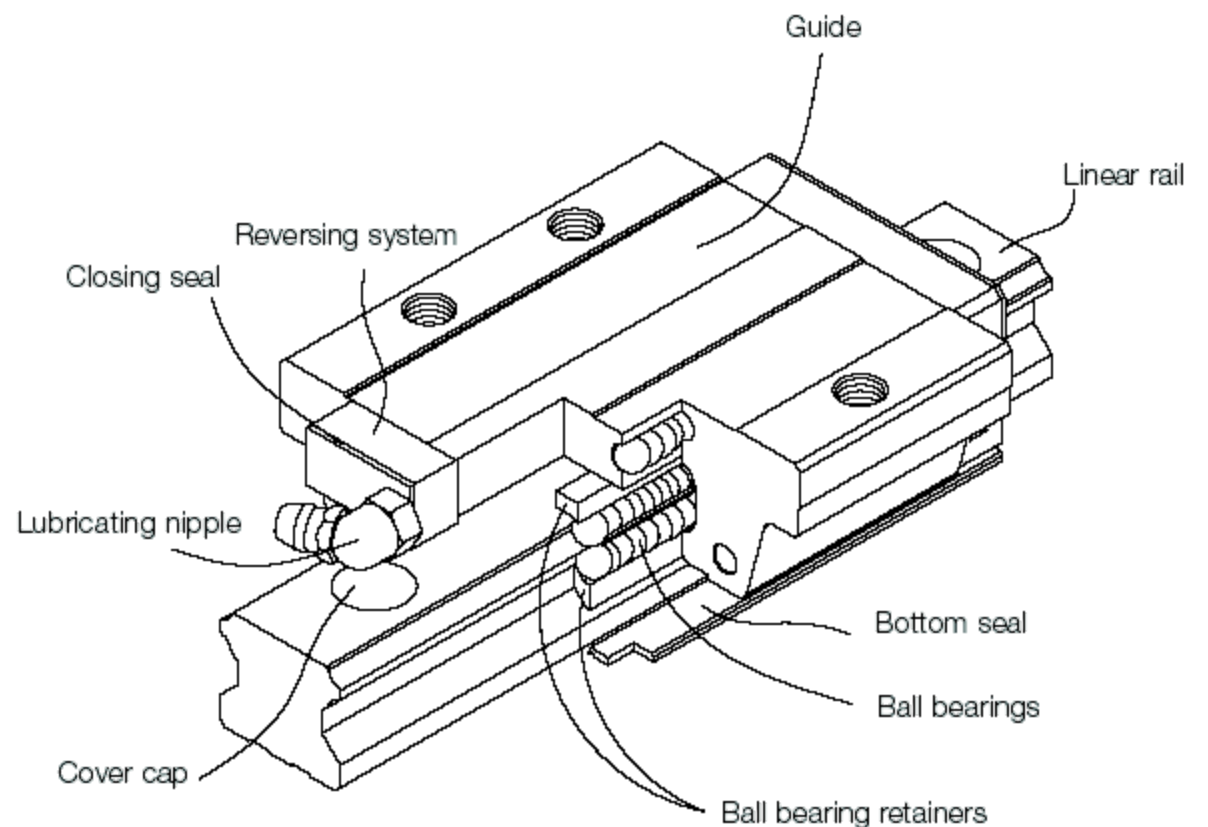
LINEAR GUIDES AND RAILS

At Absac, we concentrate on the flanged mount and square mount versions of linear guides. These items are in stock and have proven to be the best linear guide solution when teamed up with any of our ball and lead screw products. Dimensional data for these models can be accessed by the buttons above but we do encourage you to contact our knowledgeable sales team who can help you with the right selection..

By primarily using a four ball path design, within the slide, allows the guides to accept up to 30% more load and up to 30% stiffer than similar products in the market. An added bonus is that the ball bearings are retained within the housing so that should the guides come off the end of the rail, you will not be faced with all the ball bearings falling out. From experience, we know that this advantage can also significantly aid in the final assembly.

Typical Guide applications include:

- Grinders
- NC Lathes
- Machining centres
- Precision milling
- Automation technology
- Transportation technology
- Measuring applications
- Machines that require a high level of positional accuracy
- Ideal for use with our Transport ball screw ranges



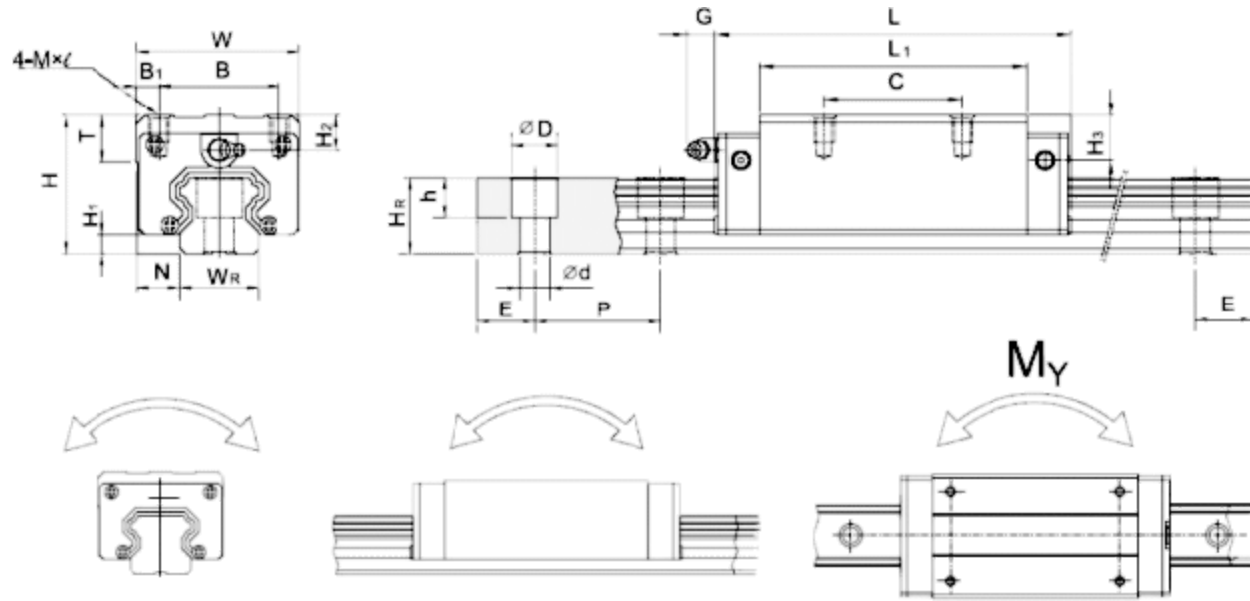
We also offer the advantage of supplying lightly pre-loaded heavy duty or extra heavy duty guide models to suit individual applications. When compared to other slide mechanisms such as dovetail slides, efficiency is far greater. The linear guides can carry loads in both horizontal and vertical directions. Please also note that the rails are pre drilled for ease of fitting and can be delivered cut to your desired length at no extra cost. Please note that all guides come with dust proofing seals at each end.

Available rail widths from 15mm to 65mm cater from the lightest to the heaviest load. If your application requires an accurate support and guide, our ex-stock range of linear rails may be the answer to your design challenges. Rails can be supplied from 100mm to 4000mm in length and in some cases can be attached to the application from beneath.

Typical Performance Data

HG Series 25, 30, 35	Normal	High	Precision	Super Precision	Ultra Precision
Accuracy Class	+/-0.1mm	+/-0.04mm	+/-0	+/-0	+/-0
Height Tolerance H1	+/-0.1mm	+/-0.04mm	+0/-0.04mm	+0/0.02mm	+0/-0.01mm
Width Tolerance N1	+/-0.1mm	+/-0.04mm	+0/-0.04mm	+0/0.02mm	+0/-0.01mm

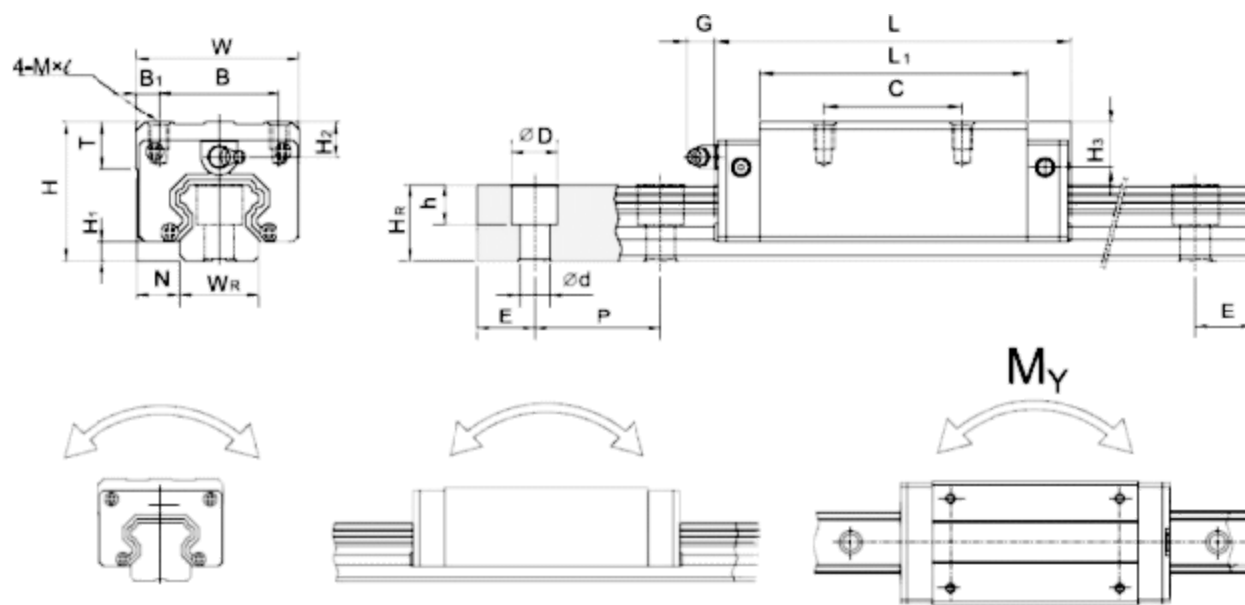
LINEAR GUIDES AND RAILS - DIMENSIONS



Model No.	Dimensions of Assembly (mm)			Dimensions of Block (mm)										Dimensions of Rail (mm)										Mounting Bolt for Rail (mm)	Basic Dynamic Load Rating C (kN)	Basic Static Load Rating C ₀ (kN)	Static Rated Moment			Weight	
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	K ₂	G	MxL	T	H ₂	H ₃	W _R	H _R	D	h	d	P	E				M _R (kN-m)	M _P (kN-m)	M _Y (kN-m)	Block (kg)	Rail (kg/m)
HGH 15CA	28	4.3	9.5	34	26	4	26	39.4	61.4	10	4.85	5.3	M4x5	6	7.95	7.7	15	15	7.5	5.3	4.5	60	20	M4x16	11.38	16.97	0.12	0.1	0.1	0.18	1.45
HGH 20CA	30	4.6	12	44	32	6	36	50.5	77.5	12.25	6	12	M5x6	8	6	7	20	17.5	9.5	8.5	6	60	20	M5x16	17.75	27.76	0.27	0.2	0.2	0.30	2.21
HGH 20HA							50	65.2	92.2	12.6															21.18	35.9	0.35	0.35	0.35	0.39	
HGH 25CA	40	5.5	12.5	48	35	6.5	35	58	84	16.8	6	12	M6x8	8	10	13	23	22	11	9	7	60	20	M6x20	26.48	36.49	0.42	0.33	0.33	0.51	3.21
HGH 25HA							50	78.6	104.6	19.6															32.75	49.44	0.56	0.57	0.57	0.69	
HGH 30CA	45	6	16	60	40	10	40	70	97.4	20.25	6	12	M8x10	8.5	9.5	13.8	28	26	14	12	9	80	20	M8x25	38.74	52.19	0.66	0.53	0.53	0.88	4.47
HGH 30HA							60	93	120.4	21.75															47.27	69.16	0.88	0.92	0.92	1.16	
HGH 35CA	55	7.5	18	70	50	10	50	80	112.4	20.6	7	12	M8x12	10.2	16	19.6	34	29	14	12	9	80	20	M8x25	49.52	69.16	1.16	0.81	0.81	1.45	6.3
HGH 35HA							72	105.8	138.2	22.5															60.21	91.63	1.54	1.4	1.4	1.92	
HGH 45CA	70	9.5	20.5	86	60	13	60	97	139.4	23	10	12.9	M10x17	16	18.5	30.5	45	38	20	17	14	105	22.5	M12x35	77.57	102.71	1.98	1.55	1.55	2.73	10.41
HGH 45HA							80	128.8	171.2	28.9															94.54	136.46	2.63	2.68	2.68	3.61	
HGH 55CA	80	13	23.5	100	75	12.5	75	117.7	166.7	27.35	11	12.9	M12x18	17.5	22	29	53	44	23	20	16	120	30	M14x45	114.44	148.33	3.69	2.64	2.64	4.17	15.08
HGH 55HA							95	155.8	204.8	36.4															139.35	196.2	4.88	4.57	4.57	5.49	
HGH 65CA	90	15	31.5	126	76	25	70	144.2	200.2	43.1	14	12.9	M16x20	25	15	15	63	53	26	22	18	150	35	M16x50	163.63	215.33	6.65	4.27	4.27	7	21.18
HGH 65HA							120	203.6	259.6	47.8															208.36	303.13	9.38	7.38	7.38	9.82	

Note: 1kgf= 9.81N

LINEAR GUIDES AND RAILS - DIMENSIONS



Model No.	Dimensions of Assembly (mm)			Dimensions of Block (mm)													Dimensions of Rail (mm)						Mounting Bolt for Rail (mm)	Basic Dynamic Load Rating C (kN)	Basic Static Load Rating C ₀ (kN)	Static Rated Moment			Weight		
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	K ₂	G	MxL	T	H ₂	H ₃	W _R	H _R	D	h	d	P				E	M _R (kN-m)	M _P (kN-m)	M _Y (kN-m)	Block (kg)	Rail (kg/m)
HGW 15CA	24	4.3	16	47	38	4.5	30	39.4	61.4	8	4.85	5.3	M5	6	3.95	3.7	15	15	7.5	5.3	4.5	60	20	M4x16	11.38	16.97	0.12	0.1	0.1	0.17	1.45
HGW 20CA	30	4.6	21.5	63	53	5	40	50.5	77.5	10.25	6	12	M6	8	6	7	20	17.5	9.5	8.5	6	60	20	M5x16	17.75	27.76	0.27	0.2	0.2	0.4	2.21
HGW 20HA								65.2	92.2	17.6															21.18	35.9	0.35	0.35	0.35	0.52	
HGW 25CA	36	5.5	23.5	70	57	6.5	45	58	84	11.8	6	12	M8	8	6	9	23	22	11	9	7	60	20	M6x20	26.48	36.49	0.42	0.33	0.33	0.59	3.21
HGW 25HA								78.6	104.6	22.1															32.75	49.44	0.56	0.57	0.57	0.8	
HGW 30CA	42	6	31	90	72	9	52	70	97.4	14.25	6	12	M10	8.5	6.5	10.8	28	26	14	12	9	80	20	M8x25	38.74	52.19	0.66	0.53	0.53	1.09	4.47
HGW 30HA								93	120.4	25.75															47.27	69.16	0.88	0.92	0.92	1.44	
HGW 35CA	48	7.5	33	100	82	9	62	80	112.4	14.6	7	12	M10	10.1	9	12.6	34	29	14	12	9	80	20	M8x25	49.52	69.16	1.16	0.81	0.81	1.56	6.3
HGW 35HA								105.8	138.2	27.5															60.21	91.63	1.54	1.4	1.4	2.06	
HGW 45CA	60	9.5	37.5	120	100	10	80	97	139.4	13	10	12.9	M12	15.1	8.5	20.5	45	38	20	17	14	105	22.5	M12x35	77.57	102.71	1.98	1.55	1.55	2.79	10.41
HGW 45HA								128.8	171.2	28.9															94.54	136.46	2.63	2.68	2.68	3.69	
HGW 55CA	70	13	43.5	140	116	12	95	117.7	166.7	17.35	11	12.9	M14	17.5	12	19	53	44	23	20	16	120	30	M14x45	114.44	148.33	3.69	2.64	2.64	4.52	15.08
HGW 55HA								155.8	204.8	36.4															139.35	196.2	4.88	4.57	4.57	5.96	
HGW 65CA	90	15	53.5	170	142	14	110	144.2	200.2	23.1	14	12.9	M16	25	15	15	63	53	26	22	18	150	35	M16x50	163.63	215.33	6.65	4.27	4.27	9.17	21.18
HGW 65HA								203.6	259.6	52.8															208.36	303.13	9.38	7.38	7.38	12.89	

Note: 1kgf= 9.81N



BLUE BRONZE NUT GREASE

LONG LIFE MULTIPURPOSE GREASE

Appearance	Smooth, blue grease
Worked penetration	290-320
Base type	Severely refined mineral oil
Thickener	Multicomplex soap technology
Temperature range	-30°C to 150°C
Base fluid viscosity at 40°C	180 cSt
Base fluid viscosity at 100°C Shell 4 ball (IP 239)(ASTM D2596)	17 cSt
Weld load	>800 kg
Mean hertz load	120 kg
Timken 'OK' Load (IP 326)(ASTM D2509)	60lb
Copper Corrosion test (IP 112)(ASTM D130)	1 a
Corrosion test Emcor (IP 220)	0:0
Water Washout Test (IP 215)(ASTM D1264)	2%

STORAGE

Storage temperature should be controlled to between 1 and 40°C.

Designed for the effective lubrication and protection of all types of Abszac bronze nuts.

FEATURES

Temperature range 30°C to 150°C.

Revolutionary multicomplex soap technology.

Greatly extended lubrication intervals typically 3 times longer than conventional soap thickened greases.

Good corrosion resistance.

Blue in colour for high visibility.

DIRECTIONS FOR USE

Apply manually.

Compatible with other soap thickened greases.

However, for best results, the previous lubricant should be removed prior to application.

Please call us for a quotation.



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STANDARD CONDITIONS OF SALE

1. Interpretation
 - 1.1 In these Conditions:

"Buyer" means the person who accepts a quotation of the Seller for the sale of the Goods or whose order for the Goods is accepted by the Seller

"Goods" means the goods (including any instalment of the goods or any parts for them) which the Seller is to supply in accordance with these Conditions

"Seller" means ABSSAC LIMITED a company incorporated in England and whose registered number is 1677177.

"Conditions" means the standard terms and conditions of sale set out in this document and (unless the context otherwise requires) includes any special terms and conditions agreed in writing between the Buyer and the Seller

"Contract" means the Contract for the purchase and sale of the Goods

"Writing" includes telex, cable, facsimile transmission, E-Mail and comparable means of communication
 - 1.2 Any reference in these Conditions to any provision of a statute shall be construed as a reference to that provision as amended, re-enacted or extended at the relevant time
 - 1.3 The headings in these Conditions are for convenience only and shall not affect their interpretation
2. Basis of the sale
 - 2.1 Subject to Condition 3 below, the Seller shall sell and the Buyer shall purchase the Goods in accordance with any oral or written order of the Buyer which is accepted by the Seller, or any written quotation of the Seller which is accepted by the Buyer, subject to these Conditions which shall govern the Contract to the exclusion of any other terms and conditions subject to which any such quotation is accepted or purported to be accepted, or any such order is made or purported to be made, by the Buyer
 - 2.2 No variation, addition or waiver of any of these Conditions shall be effective unless it is in Writing and signed by a duly authorised representative of both the Seller and the Buyer
 - 2.3 The Seller's employees or agents are not authorised to make any representations concerning the Goods unless confirmed by the Seller in Writing. In entering into the Contract the Buyer acknowledges that it does not rely on any such representations which are not so confirmed
 - 2.4 Samples supplied and advice or recommendations as to storage, application or use of the Goods given by the Seller or its employees or agents to the Buyer or its employees or agents are for guidance only and any such matter which is not confirmed in Writing by the Seller is followed or acted upon entirely at the Buyer's own risk and accordingly the Seller shall not be liable for any such advice or recommendation which is not so confirmed then the Buyer should depend on their accuracy only after obtaining specific written confirmation to that effect from the Seller
 - 2.5 Any typographical, clerical or other error or omission in any sales literature, quotation, price list, acceptance of offer, invoice or other document or information issued by the Seller shall be subject to correction without any liability on the part of the Seller
3. Quotations and acceptance of orders
 - 3.1 Quotations issued by the Seller are invitations to order Goods from the Seller. No Contract will exist until the Seller has accepted the Buyer's order in accordance with condition 3.3.
 - 3.2 Subject to condition 3.1 the price in the quotation should be valid for a period of 30 days from the date of the quotation unless otherwise advised by the Seller in Writing
 - 3.3 The Seller shall not be bound by any order submitted by the Buyer unless and until confirmed by the Seller in Writing
 - 3.4 Scheduled call off purchase orders made by the Buyer with the Seller are for twelve month periods only, or until 19th December of that year, depending which comes first unless otherwise agreed in Writing by the Seller
 - 3.5 The Buyer is committed to purchasing any remaining amount of products on his purchase order if the Buyer decides to cancel the order mid schedule unless otherwise agreed in Writing by the Seller
- 3.6 No order which has been accepted by the Seller may be cancelled by the Buyer except with the agreement in Writing of the Seller on the terms that the Buyer shall indemnify the Seller in full against all loss (including loss of profit), costs (including the costs of all labour and materials used), damages, charges and expenses incurred by the Seller as a result of cancellation.
- 3.7 Compliance with United States Export Regulations

It is Absac's policy to request, if applicable, the end use and end user details in all sales and repairs of USA origin products and in all transfers of technical data or software to ensure compliance with applicable u.s. export control laws and regulations. Because the products you are purchasing may be used outside of the United States, we will need confirmation of the following from the (buyer). It is on the onus of the buyer to ensure that Absac is informed of the following information.

 - 1.1 (Buyer) will not export or re-export any USA origin products, technology or software to Cuba, Iran, Iraq, Libya, North Korea, Sudan, or Syria, unless otherwise authorized by the United States Government.
 - 2.1 (Buyer) will not sell, transfer, export or re-export any USA origin products for use in activities which involve the development, production, use or stockpiling of nuclear, chemical or biological weapons or missiles, nor use USA origin products in any facilities which are engaged in activities relating to such weapons.
 - 3.1 (Buyer) acknowledge that u.s. law prohibits the sale, transfer, export or re-export or other participation in any export transaction involving USA origin products with individuals or companies listed in the u.s. Commerce Department's Table of Denial Orders, the u.s. Treasury Department's list of Specially Designated Nationals or the u.s. Department of State's list of individuals debarred from receiving Munitions List items.
 - 4.1 (Buyer) will abide by all applicable u.s. export control laws and regulations for any products purchased from USA origin products, software or technology.
 - 5.1 (Buyer) agree that the export control requirements in No. 1-4 above shall survive the completion, early termination, cancellation or expiration of the applicable purchase order, agreement or contract.
4. Specifications
 - 4.1 The Buyer shall be responsible to the Seller for ensuring the accuracy of the terms of any order (including any applicable specification) submitted by the Buyer, and for giving the Seller any necessary information relating to the Goods within a sufficient time to enable the Seller to perform the Contract in accordance with its terms
 - 4.2 The quantity, quality and description of any specification for the Goods shall be those set out in the Seller's quotation (if accepted by the Buyer) or the Buyer's order (if accepted by the Seller)
 - 4.3 If Goods are supplied in accordance with the Buyer's specifications the Buyer shall be solely responsible for the specifications and ensuring that they are accurate
 - 4.4 If any technical calculations are made by the Seller using information supplied by the Buyer the Buyer accepts that they are responsible for supplying accurate technical information and accordingly the Seller is not liable in respect of calculations based on incorrect information given
 - 4.5 If Goods are to be manufactured or any process is to be applied to the Goods by the Seller in accordance with a specification or request submitted by the Buyer or should any change be made to the Goods at the request of the Buyer the Buyer shall indemnify the Seller against all loss damages costs and expenses awarded against or incurred by the Seller in connection with or paid or agreed to be paid by the Seller in settlement of any claims for infringement of any patent, copy right, design, trade mark or other industrial or intellectual property rights of any person which results from the Seller's use of the Buyers specification

- 4.6 The Seller reserves the rights to make any changes in the specification of the Goods which are required to conform with any applicable statutory or EC requirements or, where the Goods are to be supplied to the Seller's specification, which do not materially affect their quality or performance
- 4.7 At all times the buyer has the responsibility to adequately guard and maintain the product supplied in accordance with relevant operation manuals, service factors and health and safety legislation applicable for any product supplied by ABSSAC Limited.
- 4.8 The seller (Abszac Limited) shall not in any event be liable for any consequential damages, secondary charges, expenses for installing or disconnecting, or losses or injuries to persons or property resulting from any alleged defect in the product or any use of the product, and in manner that exceeds its design, duty cycle and or ability.
- 4.9 It remains the responsibility of the buyer to test any samples or other products that the seller will provide for fatigue, stress and general ability in the application. All products that the seller provides and are used in both real and test situations are considered by Abszac Ltd to have been thoroughly tested to meet and exceed the anticipated life and duty requirement of the product in its application by the buyer. It remains the responsibility of the buyer to give all technical information to the seller and all buyers are responsible for meeting health and safety measures and adequately guarding users and all associated parties against all and any possible failures in line with the health and safety requirements.
Other Where recommended guidelines of serviceable or replaceable parts and maintenance/inspection requirements are exceeded or ignored by the user and/or buyer, no warranty or other claim can or will exist. Where minimum or maximum values/sizes/limits/dimensions/fitting instructions and technical data of parts are ignored/abused/extended/not applied/not actioned or used in excess of the design or standard parameters of the product by the user and/or buyer then no warranty claim or other claim can exist.
No warranty or other claim can exist or be made by the user or buyer or other to the seller or its agent or other for any part used in motor sport, military or aviation. No warranty is given to this type of application.
All or any secondary or further processes/disassembly/machining/ heating/drying/coating or any other additional process the originally supplied product or associated part/product after dispatch from the seller or its agent voids any warranty claim or other claim.
It remains the responsibility of the buyer or user to advise us the seller of any and all certification/test/traceable certification requirement.
Conversations may be recorded as part of our ongoing customer service program.
5. Packaging
- 5.1 Packaging for the Goods shall be at the discretion of the Seller which has the right to pack the Goods in such a manner and with such materials and in such quantities as in his absolute discretion thinks fit unless detailed packaging instructions are received from the Buyer prior to agreeing a price for the Goods which the Seller agrees to in Writing
6. Price of the Goods
- 6.1 Price of the Goods shall be the Seller's quoted price or, where no price has been quoted (or a quoted price is no longer valid) the price listed in the Seller's published price list current at the date of acceptance of this order. Where the Goods are supplied for export from the United Kingdom, the Seller's published export price list shall apply. All prices quoted are valid for 30 days only or until earlier acceptance by the Buyer, after which time they may be altered by the Seller without given giving written notice to the Buyer
- 6.2 The price is exclusive of any applicable value added tax, which the Buyer shall be additionally liable to pay to the Seller
- 6.3 All prices stated shall be subject to variation at the sole discretion of the Seller at any time without prior notice and the Seller shall notify the Buyer of any variation before delivery of the Goods
7. Payment
- 7.1 Liability for payment for the Goods supplied to customers who have a trading account with the Seller shall arise on delivery and payment in cash is due 30 days from the date of the invoice or as otherwise specifically agreed in Writing by the Seller. Payment shall be due and the company shall be entitled to sue for the price whether or not property in the Goods has passed by virtue of condition 10 and notwithstanding the delivery may not have taken place as a result of the Buyer's wrongful or refusal to accept delivery. The time of payment of the price shall be of the essence of the Contract
- 7.2 Liability for payment for the Goods supplied on a proforma invoice basis for customers who do not have a trading account with the Seller shall be prior to delivery of the Goods. The time of payment of the price shall be of the essence of the Contract. It is the Buyer's responsibility to give written notice to the Seller of any payment under proforma invoice arrangements
- 7.3 Sums paid after the due date shall pay interest until the day payment is received at the rate of 5% per annum above the base rate from time to time of National Westminster Bank Plc occurring from day to day from the date of delivery until the date of payment in full
- 7.4 If the recovery of sums outstanding from the Buyer is passed to a debt collection agency the Buyer shall pay the Seller's costs in instructing the said debt collection agency and all ancillary legal costs
- 7.5 Without prejudice to any other rights or remedies of the Seller any in default of the Buyer in making payment on the due date shall entitle the Seller to suspend deliveries under the Contract or any other Contract so long as the default continues and break the Contract as repudiated by the Buyer and determined if the Buyer has not within 14 days of receiving written notice from the Seller paid all sums due to the Seller.
8. Delivery
- 8.1 Delivery shall take place when the Goods are unloaded at or delivered to the Buyer's premises or other delivery location agreed between the Seller and the Buyer except that if the Buyer collects or arranges collection of the Goods from the Seller's premises, or nominates a carrier for the Goods delivery shall take place when the Goods are loaded on the collection or carriers vehicle
- 8.2 Any dates quoted for delivery of the Goods are approximate only and the Seller will not be liable for any delay in delivery of the Goods however so caused. Time for delivery shall not be of the essence of the Contract unless previously agreed by the Seller in Writing. The Goods may be delivered by the Seller in advance of the quoted delivery date upon giving responsible notice to the Buyer
- 8.3 The Buyer shall accept immediate delivery or arrange to collect the Goods or arrange suitable storage, failing which the company may either:
- 8.3.1 effect delivery by whatever means they think most appropriate; or
- 8.3.2 arrange storage at the Buyer's risk and expense pending delivery; or
- 8.3.3 re-sell or otherwise dispose of the Goods without prejudice to any other rights the Seller may have against the Buyer for breach of Contract or otherwise
- 8.4 Where the agreement provides for delivery by instalments each delivery shall constitute a separate Contract and failure by the Seller to deliver any one or more of the instalments in accordance with these Conditions or any claim by the Buyer in respect of any one or more instalments shall not entitle the Buyer to treat the Contract as a whole as repudiated
- 8.5 The Buyer shall not be entitled to reject the Goods by reason only of short delivery

- 8.6 The quantity of the Goods delivered under the Contract shall be recorded by the Seller upon dispatch from the Seller's factory or warehouse and the Seller's records shall be accepted by the Buyer as conclusive evidence of the quantity delivered.
- 8.7 It is the Buyer's responsibility to notify the seller if Goods have not been received by the Buyer within seven days of the date of receipt of the Seller's invoice, therefore, if no notification is made the Buyer shall be deemed to have received the Goods.
- 8.8 If the Seller fails to deliver the Goods (or any instalment) for any reason other than any cause beyond the Seller's reasonable control or the Buyer's fault, and the Seller is accordingly liable to the Buyer, the Seller's liability shall be limited to the excess (if any) of the cost to the Buyer (in the cheapest available market) of similar Goods to replace those not delivered over the price of the Goods. The seller is under no obligation or liability in respect of failure to complete or delay or failure to deliver the goods comprised in any order or contract caused directly or indirectly by act of war or terrorism, strikes, lockouts, labour troubles, breakdowns, delays in transport, accidents, delay in obtaining material, fire, government prohibition, delivery of necessary fuel requirements, any and all problems or other restrictions relating to design or other manufacturing difficulties that arise during an order.
- 8.9 If the Buyer fails to take delivery of the Goods or fails to give the Seller adequate delivery instructions at the time stated for delivery (otherwise than by reason of any cause beyond the Buyer's reasonable control or by reason of the Seller's fault) then, with out prejudice to any other right or remedy available to the Seller, the Seller may:
- 8.9.1 store the Goods until actual delivery and charge the Buyer for the reasonable costs (including insurance) of storage;
or
- 8.9.2 sell the Goods at the best price readily obtainable and (after deducting all reasonable storage and selling expenses) account to the Buyer for the excess over the price under the Contract or charge the Buyer for any shortfall below the price under the Contract
9. Examinations and claims
- 9.1 The Buyer shall upon delivery examine the Goods and shall promptly (but in any event within seven working days of delivery) notify in Writing the Seller and the carrier, where relevant, of any apparent damage defect or shortage.
- 9.2 The Buyer shall comply with the carriers rules, regulations and requirements so as, when appropriate, to the Seller to make a claim against the carrier in respect of any damage or loss in transit.
- 9.3 Claims in respect of damage defects or shortage not apparent on examination and under clause 9.1 must be notified in Writing to the Seller within 7 days of the date of delivery
- 9.4 Notification under clauses 9.1 to 9.3 above shall be first made by telephone then by notice in Writing delivered by facsimile transmission or by first class recorded delivery mail and addressed to Abssac Limited Units 19/20 Bond Industrial Estate Wickhamford Evesham Worcs WR11 7RH.
- 9.5 In default of such notification the seller shall be deemed conclusively to have properly preformed its obligations under the Contract.
10. Property and risk
- 10.1 All risk including that of dam age to or loss of the Goods shall pass to the Buyer:
- 10.1.1 at the time when the Seller notifies the Buyer that the Goods are available for collection the case of Goods to be supplied at the Seller's premises
or
- 10.1.2 at the time of delivery but prior to unloading or if the Buyer wrongfully fails to take delivery of the Goods at the time when the Seller has tendered to delivery of the Goods in the case of Goods to be supplied otherwise than at the Seller's premises
or;
- 10.1.3 at the time of delivery of the Goods to a carrier for delivery to the Buyer in the case of Goods to be supplied in a manner otherwise than as set out in Conditions 10.1.1 or 10.1.2 above
- 10.2 The Buyer shall fully insure the Goods against all risks from the times stipulated forthe passing of risk in condition 10.1 above up to the time when the proprietary rights in such Goods pass to the Buyer
- 10.3 Property (both legal and beneficial) in the Goods shall remain in the company until all sums owing to the Seller whether under the Contract or any other Contract at any time between the Seller and the Buyer made prior to the date of the Contract ("the Indebtedness) shall have been paid in full, until such time the Buyer shall hold the Goods as bailee for the Seller
- 10.4 The Buyer shall not be entitled to pledge or in any way charge by way of security for any indebtedness any of the Goods which remain the property of the Seller, but if the Buyer does so all moneys owing by the Buyer to the Seller shall (without prejudice to any other right or remedy of the Seller) forthwith become due and payable
- 10.5 The Buyer until otherwise notified by the Seller or on the happening of any of the event specified in Condition 10.7 ("the Events") may in the ordinary course of business sell the Goods and pass property in them ("the Re-Sale") subject to the stipulations ("the Stipulations") imposed in Condition 1 0.5
- 10.6 The Stipulations are that until the Indebtedness has been fully discharged;
- 10.6.1 the Goods shall not be converted into any other product or mixed with any other Goods to make another product ("the New Product") nor will the Buyer sell the New Product and property in it ("the Sale") but if the Buyer in breach of the above provision does convert or mix the Goods property in the New Product shall atthe earliest moment that such vesting is possible, vest and remain in the Seller whether or not property in the Goods is at the moment extinguished
- 10.6.2 the Re-Sale shall be for the account of the Seller and, unless the Seller by written notice requires the paymentto it of the proceeds ofthe Re-Sale ("the Proceeds") to the extent of the Indebtedness, in which case the Buyer shall forthwith on receipt of such notice or as soon as thereafter as it shall receive the Proceeds makes its payment, the Buyer shall retain the Proceeds in a separate bank accountto the order of the Seller and not mix them with any other monies
- 10.6.3 in the event of a breach by the Buyer of its obligations under additions 10.6.1 the Seller shall have the right to trace the Proceeds in to any other moneys which may have been mixed and the Buyer shall indemnify the Seller on a full indemnity basis against loss, damage, costs or expenses incurred in such tracing
- 10.6.4 until the Re-Sale the Seller has have the right to repossess the Goods or take possession of the New Product at any time and for this purpose shall have the right to enter on to any premises or land in the ownership or possession of the Buyer and remove the Goods and/or the New Product not withstanding that they are affixed to such premises or land and the Buyer shall indemnifythe Seller on a full indemnity basis against all loss, damage, costs or expenses so arising including loss, damage, costs or expenses in respect of third party claims. Such taking of possession re delivery shall be without prejudice in the obligation of the Buyer to purchase Goods
- 10.6.5 the Goods and the New Product shall until their Re-Sale or Sale be stored separately, protected and insured and identified and clearly marked as the Seller's property
- 10.7 The Events are;
- 10.7.1 The giving of any notice to the Buyer that a receiver, manager, administrative receiver, supervisor, nominee or administrator is to be or has been appointed over any of the property or assets of the Buyer or that a petition to wind up the Buyer is to be or has been presented or that an application for an administration order is to be or has been made or any notice of a resolution to wind up the Buyer (say for the purposes of bona fide reconstruction or amalgamation)
- 10.7.2 A decision by the Buyer that the Buyer intends to make any arrangement or composition with its creditors generally.
- 10.7.3 Where the Buyer pursuant to section 123 or 268 of the Insolvency Act 1986 appears to be unable to pay a debt or appears to have no reasonable prospects of being able to pay a debt

- 10.7.4 any distress or execution levied as threatened to be levied on any property or assets of the Buyer
- 10.7.5 the inability of the Buyer to pay its debts as they fall due
- 10.7.6 on receipt of notification from the company under Condition 10.5 or on the happening of any of the Events the Buyer shall immediately deliver the Goods and the New Product property in which the Product is reserved to or is vested in the Seller to such address as the Seller shall specify in default of which or in the alternative, the Seller shall have the right to enter on any premises or land in the ownership or possession of the Buyer in order to recover the Goods and the New Product and the Buyer shall indemnify the Seller on a full indemnity basis against all loss, damage, costs or expenses as arising including loss, damage, cost or expenses in respect of third party claims
11. Breach by or insolvency by the Buyer
- 11.1 if the Buyer shall not comply with any of its obligations to the Seller or upon the occurrence of any of the Events referred to in clause 10.7 the Seller shall have the right forthwith to terminate the Contract but without affecting any other claim right or remedy of the Seller against the Buyer and without any liability to the Buyer, and if the Goods have been delivered but not paid for the price shall become immediately due and payable notwithstanding any previous agreement or arrangement to the contrary
12. Export Terms
- 12.1 In these Conditions "Incoterms" mean the international rules for the interpretation of trade terms of the International Chambers of Commerce as in force at the date when the Contract is made. Unless the Context otherwise requires, any term or expression which is defined in or given a particular meaning by the provisions Incoterms shall have the same meaning in these Conditions, but if there is any conflict between the provisions of Incoterms and these Conditions, the latter shall prevail
- 12.2 Where the Goods are supplied for export from the United Kingdom, the provisions of this clause 12 shall (subject to any special terms agreed in Writing between the Buyer and the Seller) apply notwithstanding any other provision of these Conditions
- 12.3 The Buyer shall be responsible for complying with any legislation or regulations governing the importation of the Goods in to the country or destination and for the payment of any duties on them
- 12.4 Unless otherwise agreed in Writing between the Buyer and the Seller, the Goods shall be delivered fob the air or sea port of shipment and the Sellers shall be under no obligation to give notice under section 32(3) of the Sale Of Goods Act 1979
- 12.5 The Buyer shall be responsible for arranging for testing and inspection of the Goods at the Sellers premises before shipment. The Seller shall have no liability for any claim in respect of any defect in the Goods which would be apparent on inspection and which is made after shipment, or in respect of any damage during transit
- 12.6 Payment of all amounts due to the Seller shall be made by irrevocable letter of credit opened by the Buyer in favour of the Seller and confirmed by a bank acceptable by the Seller, or by telegraphic transfer in to the Sellers aforementioned bank account or if the Seller agrees in Writing on or before acceptance of the Buyer order to waive this requirement, by acceptance by the Buyer and delivery to the Seller of a bill of exchange drawn on the Buyer payable 60 days after sight of the order to the Seller at such branch of National Westminster Bank in England as may be specified in the bill of exchange
- 12.7 Unless otherwise specifically agreed between the Seller and the Buyer all Exports sales shall be made by delivery to the Buyer's premises and the Seller's prices shall be increased to cover the Seller's costs in making such deliveries
- 12.8 The Buyer warrants that if an import licence or permit is required for the importation of the Goods into the county or destination then such import licence or permit has been obtained or would be obtain prior to shipment
13. Cancellation, suspension and termination
- 13.1 If the Buyer shall purport to cancel the whole or any part of the Contract the Seller may by notice in Writing to the Buyer elect to treat the Contract as repudiated and the Buyers shall thereupon be liable to pay the Seller by way of liquidated damages a sum equal to all the expenses incurred by the Seller in connection with the Contract including an appropriate amount in respect of administration overheads, costs and loss of profit. The Sellers reasonable estimate of the expenses incurred shall be final and binding on the parties
- 13.2 If for any cause whatsoever beyond its control the Seller is unable to make any delivery on the applicable delivery date or preform any of its obligations under the Contract the Seller may be notice in Writing to the Seller terminate the Contract or suspend the Contract without liability of any loss or damage thereby occurred by the Buyer
14. Intellectual property
- 14.1 The Buyer shall not infringe any patent, trade name, registered design, copyright industrial or other intellectual property right belonging to the Seller in relation to the Goods or any other goods or matters supplied by the Seller with or in relation to the Goods
- 14.2 The Buyer shall promptly report to the Seller particulars of any use by any person of a patent, trade name, registered design, trade mark or get up of Goods which might amount to infringement of any patent, trade mark, registered design, copy right, industrial or other intellectual property right attaching to the Goods or to unfair competition on passing off
- 14.3 In the event that it comes to the notice of the Buyer that any person alleges that a patent, trade name, registered design, copy right, industrial or other intellectual property right is invalid or that they infringe any rights of that person or that they are open to any form of attack the Buyer shall not make any omissions but shall promptly report the matter to the Seller
- 14.4 The Seller shall have conduct of all proceedings relating to any patent, trade name, registered design, copy right, industrial or other intellectual property right attaching to the Goods
15. Force majeure
- 15.1 In so far as the performance of the Contract by the Seller may be affected by any strike, any lack of available, shipping or transport or materials, any restriction regulation or decree by any local or municipal authority or government department or by any cause beyond the Seller's reasonable control (which shall be construed without reference to the proceeding causes) the Seller may elect at its absolute discretion either;
- 15.1.1 to terminate the Contract or;
- 15.1.2 to proceed to preform or continue performance under the Contract within a reasonable time after the termination of such events of circumstance
- 15.2 In the event that the Seller makes an election under clause 15.1 the Buyer shall accept the Goods or such part of them as are delivered to it notwithstanding any delay
16. Exclusion of Contract (rights of the third party) Act 1999
- 16.1 Nothing in these Conditions will confer on any third party any benefit or the right to enforce any terms of these Conditions
17. Proper law
- 17.1 The Contract is and shall be deemed to be made in England and shall in all respects be governed by English Law and shall be subject to the non-exclusive jurisdiction of the English Court General
18. General
- 18.1 Any notice required or permitted to be given by either party to the other under these Conditions shall be in Writing and addressed to that other party at its registered office or principal place of business or such other address as may at the relevant time having been notified pursuant to this provision to the party giving the notice

- 18.2 No waiver by the Seller of any breach of the Contract by the Buyer shall be considered as a waiver of any subsequent breach of the same or any other provision
- 18.3 If any provision of these Conditions is held by any competent authority to be invalided or unenforceable in whole or in part the validity of the other provisions of these Conditions and the remainder of the provision in question shall not be affected
- 18.4 No liability, warranty or any other claim can or will exist for any product(s) during or as a consequence of or any consequence whatsoever resulting directly or indirectly from or in connection with any of the following regardless of any other contributory cause or event from :
- Terrorism Terrorism is defined as any act or acts including and not limited to the use or threat of force/violence/harm or damage to life or property or the threat of such harm or damage including harm or damage by nuclear and or chemical and or biological and or radiological means. Caused or occasioned by any persons or groups or so claimed in whole or in part for political religious ideological or similar purposes. Or, any action taken in controlling preventing suppressing or in anyway relating to the above.
- War War or invasion, act of foreign enemy hostilities of a warlike operation or operations (whether war be declared or not) civil war rebellion revolution insurrection civil commotion assuming the proportions of or amounting to an uprising military or usurped power. Or any action taken in controlling preventing suppressing or in any way relating to any of the above.
- 18.5 Any dispute arising under or in connection with these Conditions or the sale of the Goods shall be referred to arbitration by a single arbitrator appointed by agreement or (in default) nominated on the application of either party by the president for the time being of the Law Society.
- Abssac Limited may make changes to the contents/ improvements and/or changes in the product(s) or service(s) described in this publication at any time.

August 2013.