

SAS Schalungstechnik - Katalog

SAS Formwork ties - catalogue

SAS SYSTEMS



SAS Schalungsanker

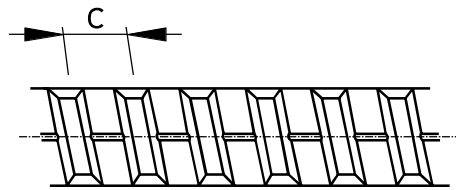
SAS Formwork Ties

Streckgrenze / Zugfestigkeit <i>yield stress / ultimate stress</i>	Nenn-ø nom.-ø	Tragkraft ¹ <i>working load</i>	Strecklast <i>yield load</i>	Bruchlast <i>ultimate load</i>	Fläche <i>cross section area</i>	Gewicht <i>weight</i>	Dehnung <i>elongation</i>		
	[mm]	[kN]	[kN]	[kN]	[mm²]	[m/to]	[kg/m]	A _{gt} [%]	A ₁₀ [%]

SAS 900 / 1100 FA - grade 160 FA

warmgewalzt, schweißbar / *hot rolled, weldable*

SAS 900 / 1100 - Typ FA	15	90	159	195	177	694,4	1,44	3	7
	20	160	283	345	314	390,6	2,56		
	26,5	280	495	606	551	223,2	4,48	2	7

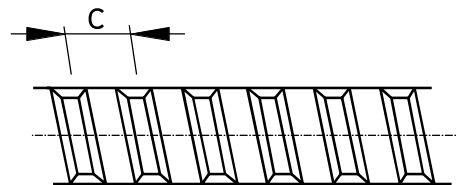


Längsnuten zwischen den Rippen / *longitudinal slots between ribs*

SAS 900 / 1050 FC - grade 150 FC

warmgewalzt / *hot rolled*

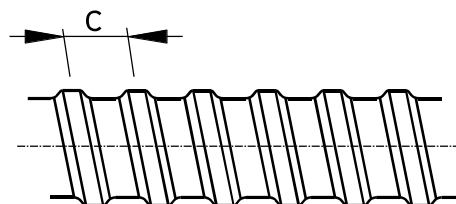
SAS 900 / 1050 - Typ FC	15	90	159	186	177	694,4	1,44	3	7
	20	160	283	330	314	390,6	2,56		
SAS 950 / 1050 E - grade 150	26,5	300	525	580	551	223,2	4,48	5	7



SAS 750 / 875 FS - grade 120 FS

kaltgerollt, schweißbar / *cold rolled, weldable*

SAS 750 / 875 FS	12,5	50	90	120	132,5	961,5	1,04	2	5,5
	15	80	142	165	189	675,7	1,48		
	20	140	245	285	326	390,6	2,56		



¹Geprüft nach DIN 18216

Proof acc. DIN 18216

Bezeichnung / <i>specification</i>	Seite / <i>page</i>			
	Ø12,5	Ø15	Ø20	Ø26,5
Anschweißflansch / <i>welding flange</i>	—	9	—	—
Anschweißstück / <i>welding bolt</i>	—	8	20	—
Beton-/Felsanker 2-schalig / <i>expansion shell 2-leaf</i>	—	14	—	28
Beton-/Felsanker 3-schalig / <i>expansion shell 3-leaf</i>	—	15	23	—
Bundmutter / <i>hexagonal nut with extension</i>	—	9	—	—
Flanschmutter / <i>flange nut</i>	4	10 +11	21	—
Flügelmutter / <i>wing nut</i>	—	11	21	27
Hakenanker / <i>hook anchor</i>	—	6	19	24
Kalottenplatte / <i>dome plate</i>	—	16	23	—
Kombiplatte / <i>combi plate</i>	—	15 -17	—	—
Kunststofffuß für Montageanker / <i>plastic coupler for fix anchor</i>	—	14	—	—
Montageanker, groß / <i>fix anchor, large</i>	—	14	22	28
Montageanker, klein / <i>fix anchor, small</i>	—	13	—	—
Plattenanker / <i>plate anchor</i>	—	15	23	—
Rundmutter / <i>round nut</i>	—	9	—	—
Schalungsanker Typ E / <i>Tie Rod Type E</i>	—	—	—	24
Schalungsanker Typ FA / <i>Tie Rod Type FA</i>	—	5	18	24
Schalungsanker Typ FC / <i>Tie Rod Type FC</i>	—	5	18	—
Schalungsanker Typ FS/ <i>Tie Rod Type FS</i>	4	5	18	—
Schlaufenanker / <i>loop anchor</i>	—	6	19	24
Sechskantmutter / <i>hexagonal nut</i>	—	9	20	26
Sechskantmutter, Volllast / <i>hexagonal nut</i>	4	9	20	26
Stahlkonus / <i>steel cone</i>	—	6	19	25
Stahl-Kunststoffkonus Typ MKK / <i>steel-plastic cone type MKK</i>	—	7	20	25
Unterlagsplatte, geprägt / <i>washer stamped</i>	—	13	—	—
Verbindungs- <i>muffe</i> , kurz, Sechskant / <i>coupler short, hexagonal</i>	—	—	—	27
Verbindungs- <i>muffe</i> , Sechskant / <i>coupler hexagonal</i>	4	10	21	27
Vollplatte, rechteckig / <i>plate rectangular</i>	—	—	—	28
Vollplatte, quadratisch / <i>plate square</i>	—	—	22	27+28
Vorlaufkonus Typ 30 / <i>cone type 30</i>	—	8	—	—
Vorlaufkonus Typ 30/M24 / Typ 40/M36 / <i>cone type 30/M24 / type 40/M36</i>	—	7	—	25
Wassersperre mit Absatz / <i>waterstop with landing</i>	—	12	21	—
Wassersperre mit Innenaufnahme / <i>waterstop</i>	—	11	—	—
Wassersperre / Stab / <i>waterstop / tie rod</i>	—	12	22	27
Wellenanker / <i>wave anchor</i>	—	5	19	24

Zubehör accessories

Ø12.5

SAS Schalungsanker Typ FS gerollt, schweißbar

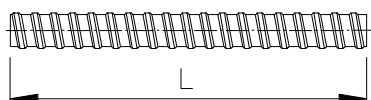
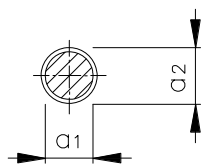
SAS Tie Rod Type FS cold rolled, weldable

schwarz / black

verzinkt / galvanized

12FS...

12FS...G



$a_1 = 12,5 \text{ mm}$

$a_2 = 14 \text{ mm}$

$L =$ variabel bis max. 6 m /
variable up to max. 6 m

Gewicht / weight 1,04 kg/m

Tragkraft / working load 50 kN

Werkstoff / material SAS 750 / 875

Sechskantmutter Volllast

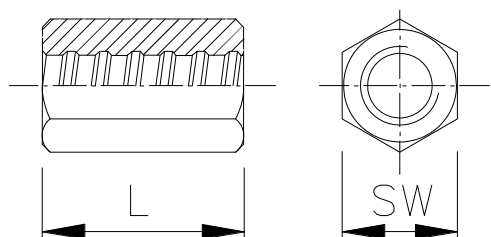
hexagonal nut

schwarz / black

verzinkt / galvanized

12F 22 050

12F 22 050 G



$L = 50 \text{ mm}$

$SW = 24 \text{ mm}$

Gewicht / weight 0,13 kg

Tragkraft / working load 50 kN

Werkstoff / material S355J2



Verbindungsuffe Sechskant

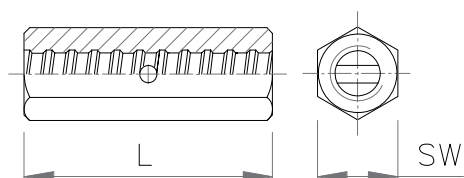
coupler hexagonal

schwarz / black

verzinkt / galvanized

12F 28 090

12F 28 090 G



$L = 90 \text{ mm}$

$SW = 24 \text{ mm}$

Gewicht / weight 0,24 kg

Tragkraft / working load 50 kN

Werkstoff / material S355J2

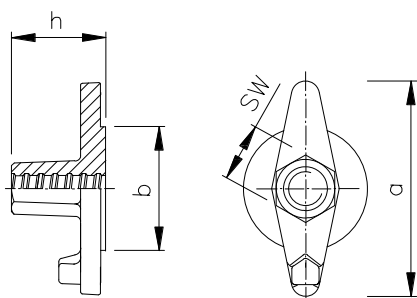


Flanschmutter

flange nut

verzinkt / galvanized

12F 31 070 G



$a = 110 \text{ mm}$

$b = \text{Ø}70 \text{ mm}$

$h = 50 \text{ mm}$

$SW = 24 \text{ mm}$

Gurtungsabstand/
girder spacing 35 mm

Gewicht / weight 0,43 kg

Tragkraft / working load 50 kN

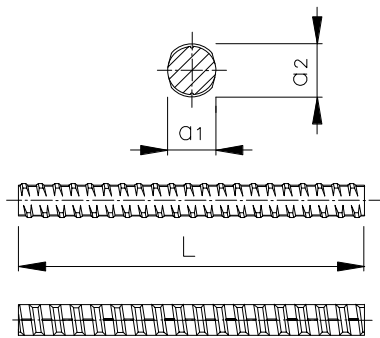
Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7



SAS Schalungsanker Typ FA¹ gewalzt, schweißbar SAS Tie Rod Type FA hot rolled, weldable

schwarz / black
verzinkt / galvanized

15FA...
15FA...G



$a_1 = 15 \text{ mm}$
 $a_2 = 17 \text{ mm}$
 $L = \text{variabel bis max. 15 m /}$
 $\text{variable up to max. 15 m}$
 $L = \text{verzinkt max. 6 m /}$
 $\text{galvanized max. 6 m}$

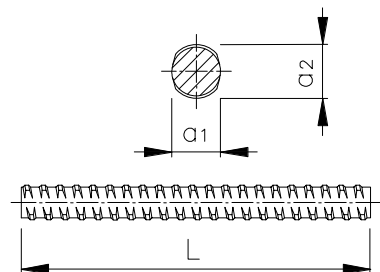
Gewicht / weight 1,44 kg/m
Tragkraft / working load 90 kN
Werkstoff / material SAS 900 / 1100

Ø 15,0 mm

SAS Schalungsanker Typ FC gewalzt SAS Tie Rod Type FC hot rolled

schwarz / black
verzinkt / galvanized

15FC
15FC...G



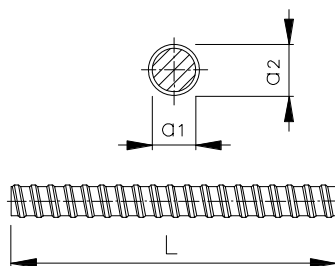
$a_1 = 15 \text{ mm}$
 $a_2 = 17 \text{ mm}$
 $L = \text{variabel bis max. 15 m /}$
 $\text{variable up to max. 15 m}$
 $L = \text{verzinkt max. 6 m /}$
 $\text{galvanized max. 6 m}$

Gewicht / weight 1,44 kg/m
Tragkraft / working load 90 kN
Werkstoff / material SAS 900 / 1050

SAS Schalungsanker Typ FS gerollt, schweißbar SAS Tie Rod Type FS cold rolled, weldable

schwarz / black
verzinkt / galvanized

15FS...
15FS...G



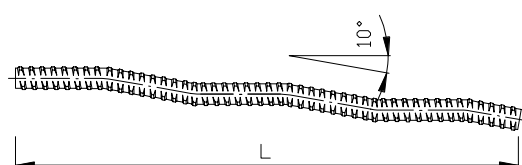
$a_1 = 15 \text{ mm}$
 $a_2 = 17 \text{ mm}$
 $L = \text{variabel bis max. 6 m /}$
 $\text{variable up to max. 6 m}$

Gewicht / weight 1,48 kg/m
Tragkraft / working load 80 kN
Werkstoff / material SAS 750 / 875

Wellenanker wave anchor

Typ FA
Typ FA

15FA 66 550 W
15FA 66 670 W



$L = 550 \text{ mm}$
Gewicht / weight = 0,79 kg
 $L = 670 \text{ mm}$

Gewicht / weight 0,96 kg
Betongüte / $\geq \text{C 20/25}$
concrete strength $\geq 25 \text{ MPa}$

Tragkraft / working load 90 kN
Werkstoff / material SAS 900 / 1100



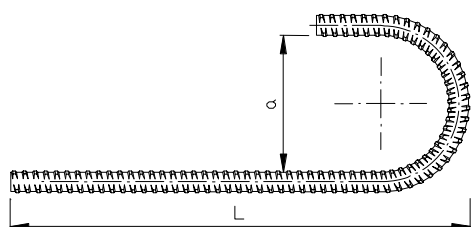
¹Kennzeichnung: Längsnuten zwischen Rippen
Marking: Longitudinal slots between ribs

Hakenanker hook anchor

Typ FA
Typ FA

15FA 64 250 H
15FA 64 450 H

Ø 15,0 mm



a = 120 mm

L = 250 mm

Gewicht / weight 0,72 kg

a = 120 mm

L = 450 mm

Gewicht / weight 1,00 kg

Betongüte / concrete strength $\geq C 20/25$
 $\geq 25 MPa$

Tragkraft / working load 90 kN

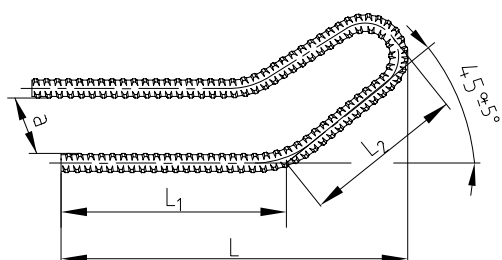
Werkstoff / material SAS 900 / 1100



Schlaufenanker loop anchor

Typ FA

15FA 65 550 S



a = 230 mm

L = 550 mm

L₁ = 360 mm

L₂ = 240 mm

Gewicht / weight 1,87 kg

Betongüte / concrete strength $\geq C 20/25$
 $\geq 25 MPa$

Tragkraft / working load 90 kN je Stabende / on each bar end

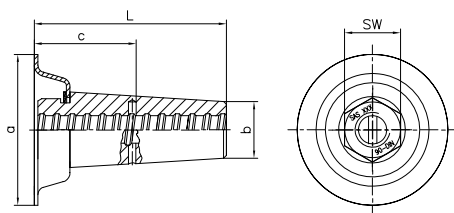
Werkstoff / material SAS 900 / 1100



Stahlkonus Typ 30 steel cone type 30

verzinkt / galvanized

15F 12 030



a = Ø80 mm

b = Ø30 mm

c = 55 mm

L = 102 mm

SW = 30 mm

Gewicht / weight 0,65 kg

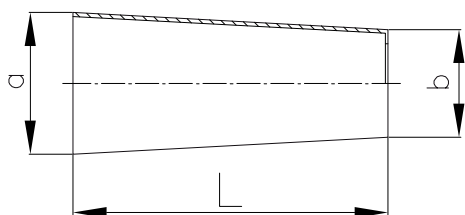
Tragkraft / working load 90 kN

Werkstoff / material S355J0



PE-Hülse für Stahlkonus Typ 30 PE-sleeve for steel cone type 30

15F 12 030 K



a = Ø40 mm

b = Ø30 mm

L = 81 mm

Gewicht / weight 0,01 kg

Werkstoff / material PE



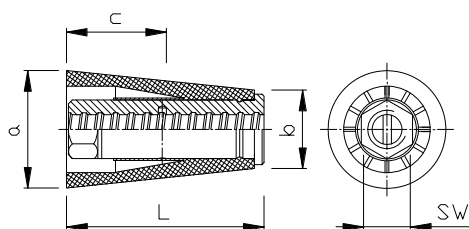
Zum einfachen Ausschrauben des Stahlkonus Typ 30. PE-Hülse wird vor der Montage auf den Konus gesteckt und verbleibt im Beton.

To ensure easy unscrewing of steel cone type 30. The PE-sleeve is put on the cone before installation and remains in the concrete.

Stahl-Kunststoffkonus Typ MKK steel-plastic cone type MKK

verzinkt / galvanized

15F 14 100



a = Ø 60mm

b = Ø 40mm

c = 50 mm

L = 101 mm

SW = 27 mm

Gewicht / weight 0,39 kg

Tragkraft / working load 90 kN

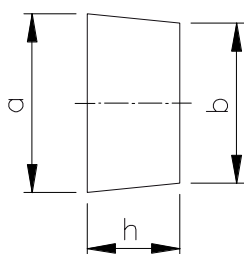
Werkstoff / material C45 + PP



Ø 15,0 mm

Betonstopfen für Stahl-Kunststoffkonus Typ MKK concrete plug for steel-plastic cone type MKK

15F 14 100 S



a = Ø59 mm

b = Ø53 mm

h = 30 mm

Gewicht / weight 0,15 kg

Werkstoff / material Beton / concrete

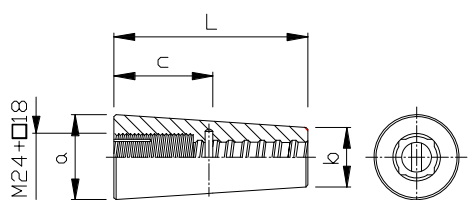


Zum Verschließen der Konuslöcher des Stahl-Kunststoffkonus.
For sealing of cone holes of the steel-plastic cone.

Vorlaufkonus Typ 30 / M24 cone type 30 / M24

verzinkt / galvanized

15F 15 030



a = Ø43 mm

b = Ø30 mm

c = 50 mm

L = 98 mm

Gewicht / weight 0,57 kg

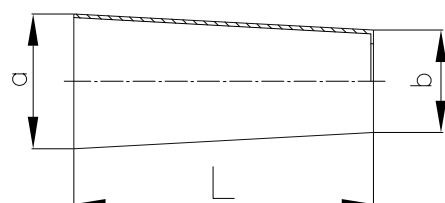
Tragkraft / working load 90 kN

Werkstoff / material S355J2



PE-Hülse für Vorlaufkonus Typ 30 + 30 / M 24 PE-sleeve for steel cone type 30 + 30 / M24

15F 15 030 K



a = Ø43 mm

b = Ø30 mm

L = 95 mm

Gewicht / weight 0,02 kg

Werkstoff / material PE

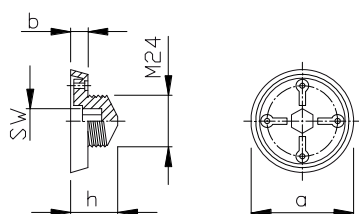


Zum einfachen Ausschrauben des Stahlkonus Typ 30 + 30 / M24. PE-Hülse wird vor der Montage auf den Konus gesteckt und verbleibt im Beton.

To ensure easy unscrewing of steel cone type 30 + 30 / M24. The PE-sleeve is put on the cone before installation and remains in the concrete.

Nagelplatte für Vorlaufkonus Typ 30 / M24 nail plate for cone type 30 / M24

15F 15 030 N

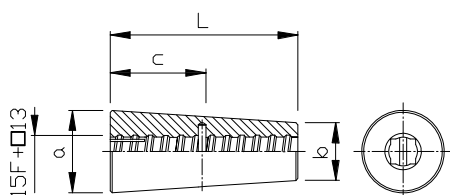


a = Ø48 mm
b = 8 mm
h = 22 mm
SW = 10 mm
Gewicht / weight 0,01 kg
Werkstoff / material PE



Vorlaufkonus Typ 30 cone type 30

15F 17 030

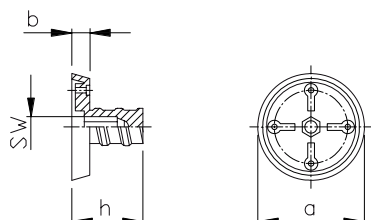


a = Ø43 mm
b = Ø30 mm
c = 50 mm
L = 98 mm
Gewicht / weight 0,64 kg
Tragkraft / working load 90 kN
Werkstoff / material S355J0



Nagelplatte für Vorlaufkonus Typ 30 nail plate for cone type 30

15F 17 030 N

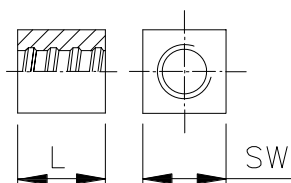


a = Ø48 mm
b = 8 mm
h = 32 mm
SW = 8 mm
Gewicht / weight 0,01 kg
Werkstoff / material PE



Anschweißstück¹ welding bolt

15F 20 030

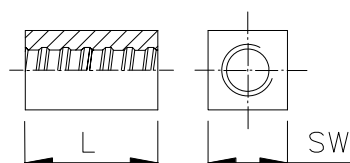


L = 30 mm
SW = 30 mm
Gewicht / weight 0,16 kg
Tragkraft / working load 60 kN
Werkstoff / material = S355J2



Anschweißstück¹ welding bolt

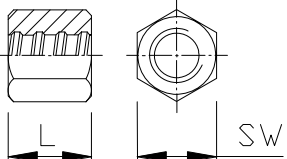
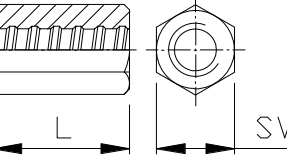
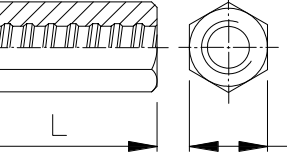
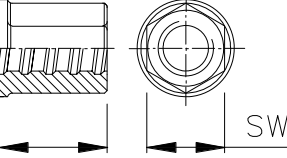
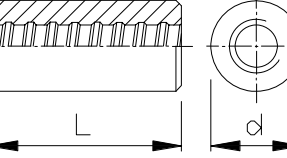
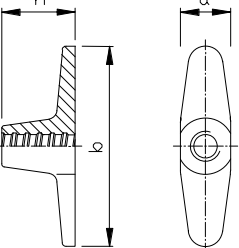
15F 20 050



L = 50 mm
SW = 30 mm
Gewicht / weight 0,26 kg
Tragkraft / working load 90 kN
Werkstoff / material = S355J2



¹Nachweis der Schweißnaht nach DIN 18800 / Kehlnaht > 3 mm.
Proof of welding acc. DIN 18800 / welded seam > 3 mm.

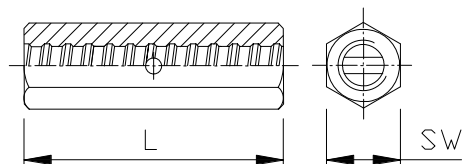
Sechskantmutter <i>hexagonal nut</i>	schwarz / <i>black</i> 15F 22 030 verzinkt / <i>galvanized</i> 15F 22 030 G
	L = 30 mm SW = 30 mm Gewicht / <i>weight</i> 0,13 kg Tragkraft / <i>working load</i> 60 kN Werkstoff / <i>material</i> S355J2C+C 
Sechskantmutter Volllast <i>hexagonal nut</i>	schwarz / <i>black</i> 15F 22 050 verzinkt / <i>galvanized</i> 15F 22 050 G
	L = 50 mm SW = 30 mm Gewicht / <i>weight</i> 0,21 kg Tragkraft / <i>working load</i> 90 kN Werkstoff / <i>material</i> S355J2C+C 
Sechskantmutter <i>hexagonal nut</i>	schwarz / <i>black</i> 15F 22 070 verzinkt / <i>galvanized</i> 15F 22 070 G
	L = 70 mm SW = 30 mm Gewicht / <i>weight</i> 0,30 kg Tragkraft / <i>working load</i> 90 kN Werkstoff / <i>material</i> S355J2C+C 
Bundmutter <i>hexagonal nut with extension</i>	verzinkt / <i>galvanized</i> 15F 24 035 G
	L = 35 mm SW = 30 mm Gewicht / <i>weight</i> 0,14 kg Tragkraft / <i>working load</i> 60 kN Werkstoff / <i>material</i> EN-GJMW-400-5 / EN-GJS-500-7 
Rundmutter <i>round nut</i>	schwarz / <i>black</i> 15F 25 070
	L = 70 mm SW = Ø30 mm Gewicht / <i>weight</i> 0,27 kg Tragkraft / <i>working load</i> 90 kN Werkstoff / <i>material</i> S355J2 
Anschweißflansch¹ <i>welding flange</i>	geschmiedet / <i>forged</i> 15F 27 130
	a = 32 mm b = 128 mm h = 47 mm Gewicht / <i>weight</i> 0,39 kg Tragkraft / <i>working load</i> 90 kN Werkstoff / <i>material</i> S355J2 

Ø 15,0 mm

Verbindungsmuffe Sechskant coupler hexagonal

schwarz / black 15F 28 100
verzinkt / galvanized 15F 28 100 G

Ø 15,0 mm



L = 100 mm

SW = 30 mm

Gewicht / weight 0,43 kg

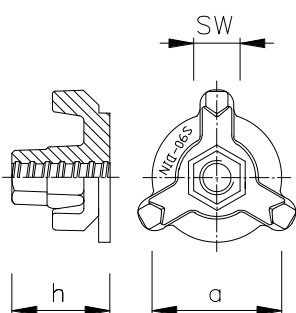
Tragkraft / working load 90 kN

Werkstoff / material S355J2



Flanschmutter 3-flügelig flange nut 3-wings

verzinkt / galvanized 15F 31 070 G



a = Ø70 mm

h = 54 mm

SW = 27 mm

Gewicht / weight 0,43 kg

Gurtungsabstand/
girder spacing 35 mm

Tragkraft / working load 90 kN

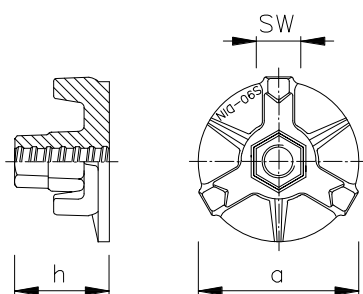
Werkstoff / material GE 300

EN-GJMW-400-5 / EN-GJS-500-7



Flanschmutter 3-flügelig flange nut 3-wings

verzinkt / galvanized 15F 31 090 G



a = Ø95 mm

h = 54 mm

SW = 27 mm

Gewicht / weight 0,66 kg

Gurtungsabstand/
girder spacing 35 mm

Tragkraft / working load 90 kN

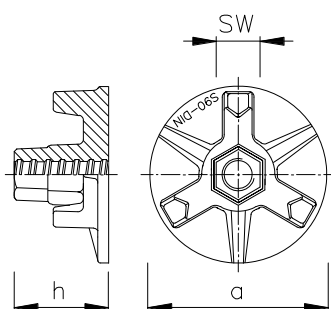
Werkstoff / material GE 300

EN-GJMW-400-5 / EN-GJS-500-7



Flanschmutter 3-flügelig flange nut 3-wings

verzinkt / galvanized 15F 31 100 G



a = Ø100 mm

h = 54 mm

SW = 27 mm

Gewicht / weight 0,70 kg

Gurtungsabstand/
girder spacing 35 mm

Tragkraft / working load 90 kN

Werkstoff / material GE 300

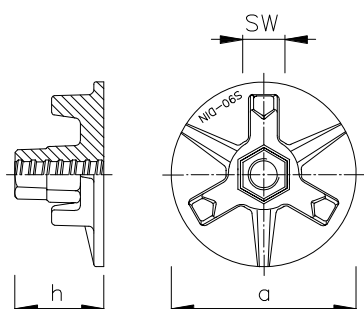
EN-GJMW-400-5 / EN-GJS-500-7



Flanschmutter 3-flügelig flange nut 3-wings

verzinkt / galvanized

15F 31 110G



$a = \varnothing 110 \text{ mm}$
 $h = 54 \text{ mm}$
 $SW = 27 \text{ mm}$
 Gewicht / weight 0,85 kg
 Gurtungsabstand/
girder spacing 35 mm
 Tragkraft / working load 90 kN
 Werkstoff / material GE 300
 EN-GJMW-400-5 / EN-GJS-500-7

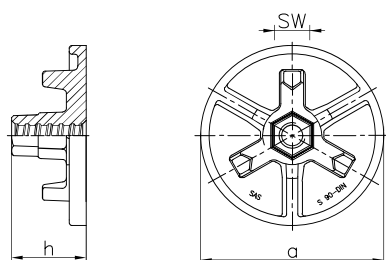


Ø 15,0 mm

Flanschmutter 3-flügelig flange nut 3-wings

verzinkt / galvanized

15F 31 130 G



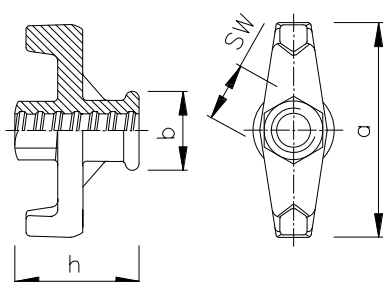
$a = \varnothing 130 \text{ mm}$
 $h = 54 \text{ mm}$
 $SW = 27 \text{ mm}$
 Gewicht / weight 1,16 kg
 Gurtungsabstand/
girder spacing 35 mm
 Tragkraft / working load 90 kN
 Werkstoff / material GE 300
 EN-GJMW-400-5 / EN-GJS-500-7



Flügelmutter wing nut

verzinkt / galvanized

15F 32 026 G

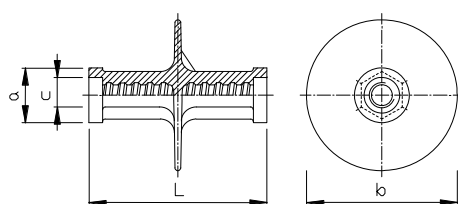


$a = 95 \text{ mm}$
 $b = \varnothing 36 \text{ mm}$
 $h = 54 \text{ mm}$
 $SW = 27 \text{ mm}$
 Gewicht / weight 0,32 kg
 Tragkraft / working load 90 kN
 Werkstoff / material GE 300
 EN-GJMW-400-5 / EN-GJS-500-7



Wassersperre mit Innenaufnahme für PVC-Rohre Ø26 waterstop for Ø26 plastic spacer tubes

15F 41 130

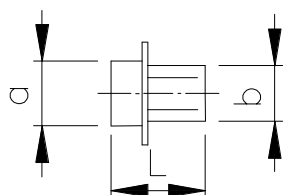


$a = \varnothing 40 \text{ mm}$
 $b = \varnothing 110 \text{ mm}$
 $c = \varnothing 26 \text{ mm}$
 $L = 130 \text{ mm}$
 Gewicht / weight 0,95 kg
 Tragkraft / working load 90 kN
 Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7



Anschlusskupplung für PVC / Faserbetonrohre adaptor for spacer tubes

15F 41 130 A



a = Ø26 mm

b = Ø22 mm

L = 33 mm

Gewicht / weight 1,09 kg / Verpackungseinheit (250 Stück)
1,09 kg / packing unit (250 pieces)

Werkstoff / material PE



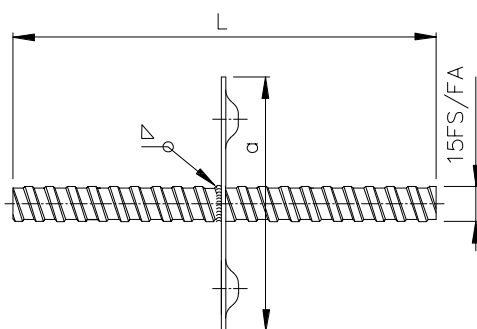
Wassersperre / Stab mit aufgeschweißter Scheibe waterstop / tie rod with welded plate

Typ FA

15FA 43 000

Typ FS

15FS 43 000



a = □120 mm

L = variabel / variable

Toleranz / tolerance ± 5 mm

Gewicht / weight 0,22 kg + Stab / tie rod

Tragkraft / working load 80 / 90 kN

Werkstoff / material:

Platte / plate S235JR

Stab / tie rod 15 FS/FA

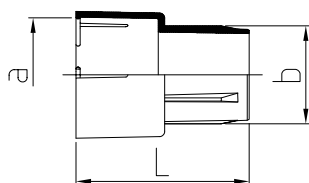
Stablänge bei Verwendung mit Stahl-Kunststoffkonus:
Wandstärke minus 10 cm.

Length in combination with steel -plastic cone:
thickness of wall minus 10 cm.



Anschlusskupplung für PVC / Faserbetonrohre adaptor for plastic spacer tubes

15F 44 110 A



a = Ø26 mm

b = Ø22 mm

L = 40 mm

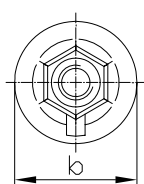
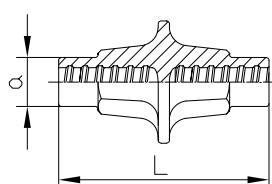
Gewicht / weight 0,90 kg / Verpackungseinheit (250 Stück)
0,90 kg / packing unit (250 pieces)

Werkstoff / material HDPE / PP



Wassersperre mit Absatz Ø26 waterstop with landing Ø26

15F 44 110 S



a = Ø26 mm

b = Ø65 mm

L = 112 mm

Gewicht / weight 0,56 kg

Tragkraft / working load 90 kN

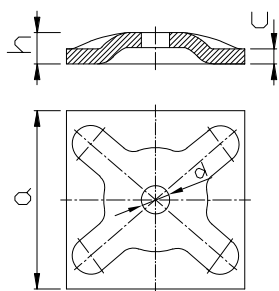
Werkstoff / material = EN-GJMW-400-5 / EN-GJS-500-7



Unterlagsplatte geprägt *washer stamped*

verzinkt / *galvanized*

15F 52 010 G



a = 120 mm

c = 10 mm

h = 21 mm

d = 20 mm

Gewicht / *weight* 1,05 kg

Tragkraft / *working load* 90 kN

Werkstoff / *material* S235JR

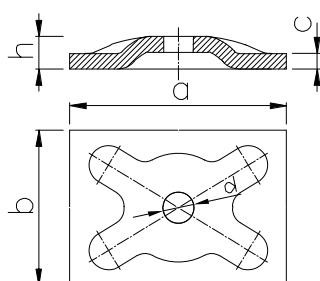


Ø 15,0 mm

Unterlagsplatte geprägt *washer stamped*

verzinkt / *galvanized*

15F 54 010 G



a = 140 mm

b = 100 mm

c = 10 mm

h = 21 mm

d = 20 mm

Gewicht / *weight* 1,03 kg

Tragkraft / *working load* 90 kN

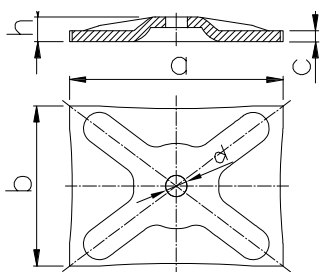
Werkstoff / *material* S235JR



Unterlagsplatte geprägt *washer stamped*

verzinkt / *galvanized*

15F 55 010 G



a = 200 mm

b = 150 mm

c = 10 mm

h = 23 mm

d = 20 mm

Gewicht / *weight* 2,26 kg

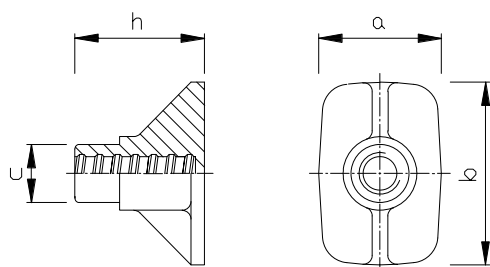
Tragkraft / *working load* 90 kN

Werkstoff / *material* S235JR



Montageanker klein *fix anchor small*

15F 61 055



a = 56 mm

b = 82 mm

c = Ø26 mm

h = 58 mm

Gewicht / *weight* 0,45 kg

Einbindetiefe /
embedding depth 108 mm

Betongüte /
concrete strength ≥ C 20/25
≥ 25 MPa

Werkstoff / *material* EN-GJMW-400-5 / EN-GJS-500-7

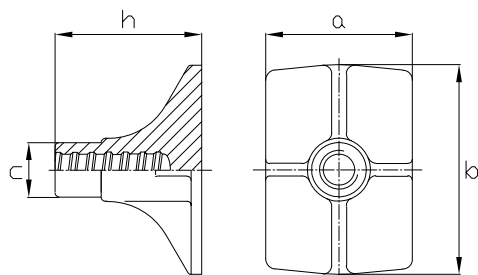
Zusatzbewehrung nach statischem Nachweis erforderlich.
Additional reinforcement acc. to analysis.



Montageanker groß fix anchor large

15F 61 070

Ø 15,0 mm



a = 70 mm
b = 100 mm
c = Ø26 mm
h = 70 mm

Gewicht / weight 0,60 kg

Einbindetiefe /
embedding depth 118 mm

Betongüte /
concrete strength $\geq C 20/25$
 $\geq 25 MPa$

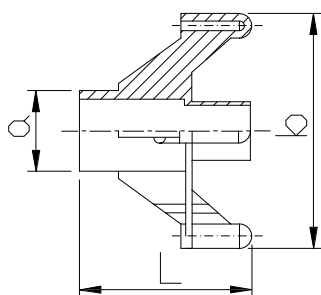
Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7

Zusatzbewehrung nach statischem Nachweis erforderlich.
Additional reinforcement acc. to analysis.



Kunststofffuß für Montageanker groß + klein plastic coupler for fix anchor large + small

15F 62 055



a = Ø33 mm
b = Ø70 mm
L = 70 mm

Gewicht / weight 0,04 kg

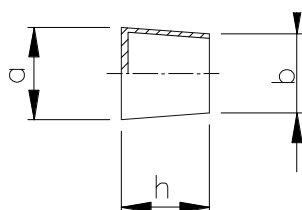
Für Montageanker /
for fix anchor 15F 61 070 + 15F 61 055

Werkstoff / material PE



Stopfen für Kunststofffuß für Montageanker groß + klein PE-plug for plastic coupler for fix anchor large + small

15F 62 055 A



a = 21 mm
b = 18 mm
h = 20 mm

Gewicht / weight 0,002 kg

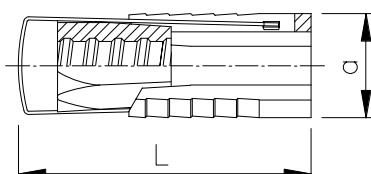
Werkstoff / material PE

für Kunststofffuß /
for plastic coupler 15F 62 055



Beton-/ Felsanker 2-schalig expansion shell 2-leaf

15F 63 034



a = Ø32 mm
L = 90 mm

Gewicht / weight 0,22 kg

Tragkraft / working load 60 kN

Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7

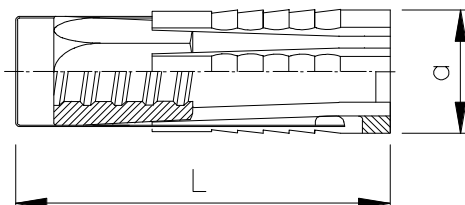
Bohrloch / bore hole Ø33 - 35 mm

Montage nach Einbauanweisung (siehe Seite 41-42)
Assembling acc. to installation manual. (page 41-42)



Beton-/ Felsanker 3-schalig expansion shell 3-leaf

15F 63 037



a = Ø33 mm

L = 120 mm

Gewicht / weight 0,36 kg

Tragkraft / working load 90 kN

Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7

Bohrloch / bore hole Ø34 - 37 mm

Montage nach Einbauanweisung (siehe Seite 41-42)
Assembling acc. to installation manual. (page 41-42)

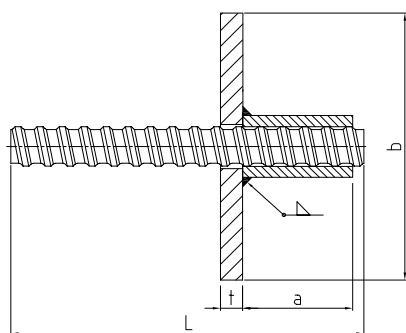


Ø 15,0 mm

Plattenanker plate anchor

Typ FS

15FS 63 160



a = 50 mm

b = □100 mm

t = 10 mm

L = 160 mm bzw. variabel / or variable
Toleranz / tolerance ± 5 mm

Gewicht / weight 1,16 kg

Betongüte / concrete strength ≥ C 20/25
≥ 25 MPa

Werkstoff Platte / material plate
S235JR

Vorlänge / front length 100 mm

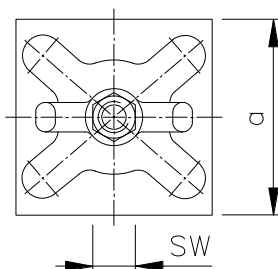
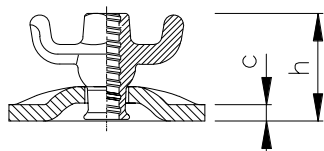
Zusatzbewehrung nach statischen Nachweisen erforderlich.
Additional reinforcement acc. to analysis.



Kombiplatte combi plate

verzinkt / galvanized

15F 72 010 G



a = □120 mm

c = 10 mm

h = 67

SW = 27 mm

Gewicht / weight 1,35 kg

Tragkraft / working load 90 kN

Werkstoff / material:

Platte / plate S235JR

Mutter / nut GE 300 / C 35

Flügelmutter beweglich um ca. 4°.
Wing nut moveable appr. 4°.



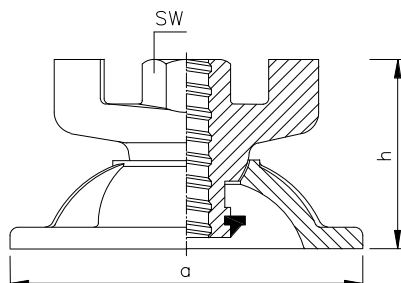
Kalottenplatte, quadratisch

dome plate, square

verzinkt / *galvanized*

15F 72 120G

Ø 15,0 mm



a = 120 mm

h = 65 mm

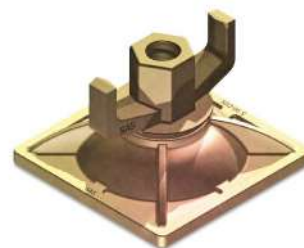
SW = 27 mm

Gewicht / *weight* 1,26 kg

Tragkraft / *working load* 90 kN

Werkstoff / *material*: GE 300 / C 35

EN-GJMW-400-5 / EN-GJS-500-7



Flügelmutter beweglich um ca. 11°.

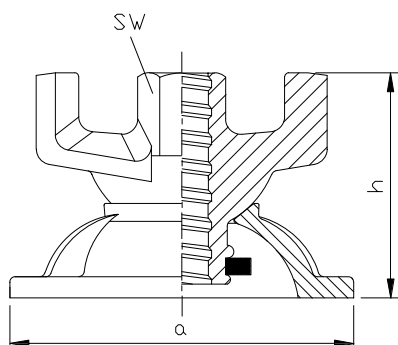
Wing nut moveable appr. 11°.

Kalottenplatte, rund

dome plate, round

verzinkt / *galvanized*

15F 73 130 G



a = Ø130 mm

h = 65 mm

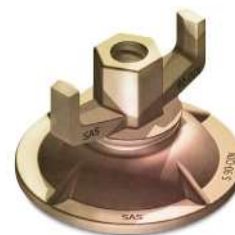
SW = 27 mm

Gewicht / *weight* 1,19 kg

Tragkraft / *working load* 90 kN

Werkstoff / *material*: GE 300 / C 35

EN-GJMW-400-5 / EN-GJS-500-7



Flügelmutter beweglich um ca. 9°.

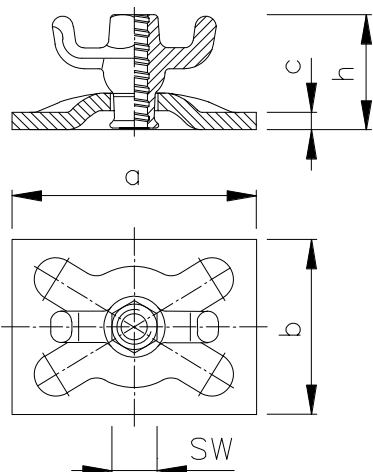
Wing nut moveable appr. 9°.

Kombiplatte

combi plate

verzinkt / *galvanized*

15F 74 010 G



a = 140 mm

b = 100 mm

c = 10 mm

h = 65 mm

SW = 27 mm

Gewicht / *weight* 1,34 kg

Tragkraft / *working load* 90 kN

Werkstoff / *material*:

Platte / *plate* S235JR

Mutter / *nut* GE 300 / C 35



Flügelmutter beweglich um ca. 5°.

Wing nut moveable appr. 5°.

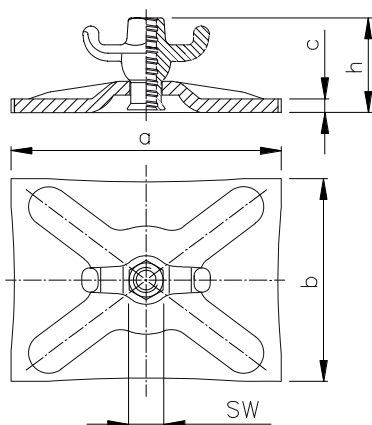
Ø15.0

Zubehör
accessories

Kombiplatte
combi plate

verzinkt / *galvanized*

15F 75 010 G



$a = 200$ mm

$b = 150$ mm

$c = 10$ mm

$h = 68$ mm

$SW = 27$ mm

Gewicht / *weight* 2,61 kg

Tragkraft / *working load* 90 kN

Werkstoff / *material*:

Platte / *plate* S235JR

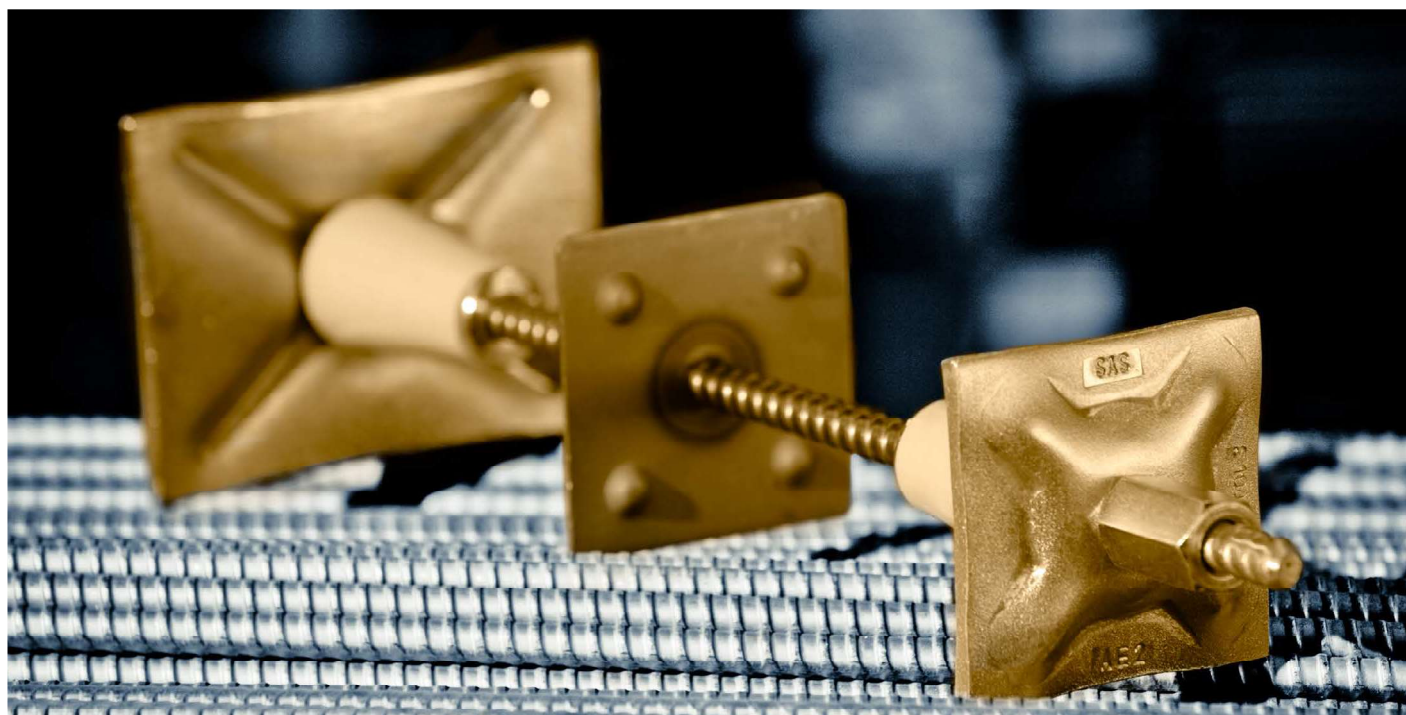
Mutter / *nut* GE 300 / C 35



Ø 15,0 mm

Flügelmutter beweglich um ca. 5°.

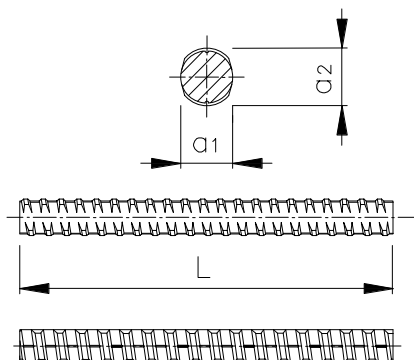
Wing nut moveable appr. 5°.



SAS Schalungsanker Typ FA¹ gewalzt, schweißbar SAS Tie Rod Type FA hot rolled, weldable

schwarz / black 20FA...
verzinkt / galvanized 20FA...G

Ø 20,0 mm



$a_1 = 20 \text{ mm}$
 $a_2 = 23 \text{ mm}$
 $L = \text{variabel bis max. 15 m /}$
 $\text{variable up to max. 15 m}$
 $L = \text{verzinkt max. 6 m /}$
 $\text{galvanized max. 6 m}$

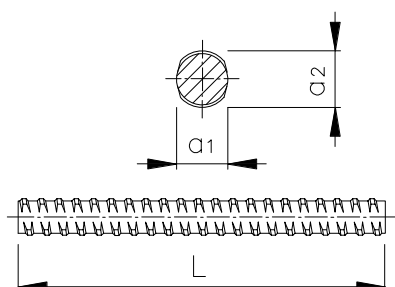
Gewicht / weight 2,56 kg/m

Tragkraft / working load 160 kN

Werkstoff / material SAS 900 / 1100

SAS Schalungsanker Typ FC gewalzt SAS Tie Rod Type FC hot rolled

schwarz / black 20FC...
verzinkt / galvanized 20FC...G



$a_1 = 20 \text{ mm}$
 $a_2 = 23 \text{ mm}$
 $L = \text{variabel bis max. 15 m /}$
 $\text{variable up to max. 15 m}$
 $L = \text{verzinkt max. 6 m /}$
 $\text{galvanized max. 6 m}$

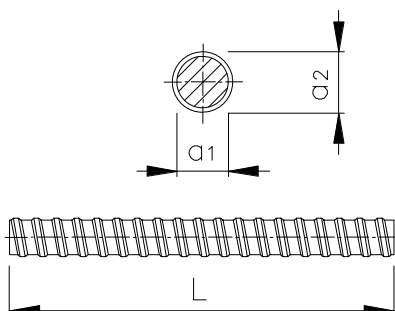
Gewicht / weight 2,56 kg/m

Tragkraft / working load 160 kN

Werkstoff / material SAS 900 / 1050

SAS Schalungsanker Typ FS gerollt, schweißbar SAS Tie Rod Type FS cold rolled, weldable

schwarz / black 20FS...
verzinkt / galvanized 20FS...G



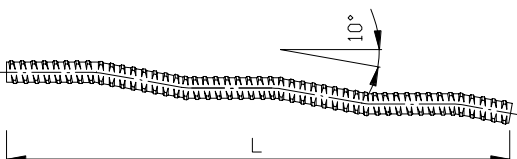
$a_1 = 20 \text{ mm}$
 $a_2 = 23 \text{ mm}$
 $L = \text{variabel bis max. 6 m /}$
 $\text{variable up to max. 6 m}$

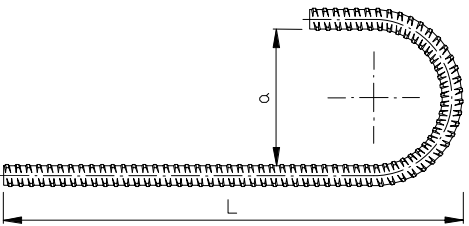
Gewicht / weight 2,56 kg/m

Tragkraft / working load 140 kN

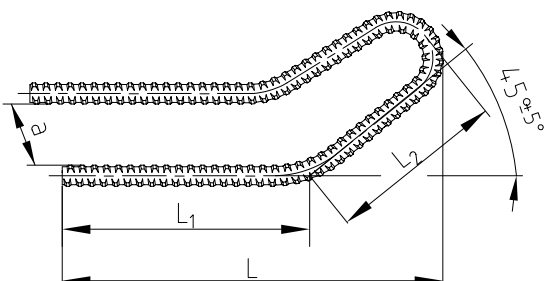
Werkstoff / material SAS 750 / 875

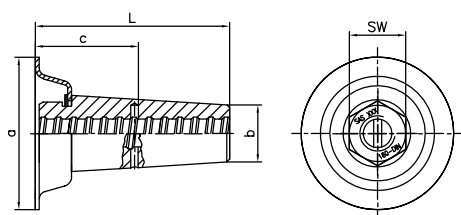
¹Kennzeichnung: Längsnuten zwischen Rippen
Marking: Longitudinal slots between ribs

Wellenanker wave anchor	Typ FA	20FA 66 700 W
	L =	700 mm
	Gewicht / weight	1,79 kg
	Betongüte / concrete strength	≥ C 20/25 ≥ 25 MPa
	Tragkraft / working load	160 kN
	Werkstoff / material	SAS 900 / 1100
		

Hakenanker hook anchor	Typ FA	20FA 64 600 H
	a =	150 mm
	L =	600 mm
	Gewicht / weight	2,23 kg
	Betongüte / concrete strength	≥ C 20/25 ≥ 25 MPa
	Tragkraft / working load	160 kN
	Werkstoff / material	SAS 900 / 1100
		

Ø 20,0 mm

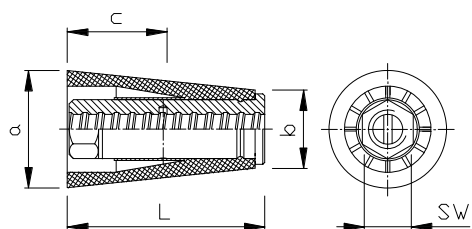
Schlaufenanker loop anchor	Typ FA	20FA 65 600 S
	a =	300 mm
	L =	600 mm
	L ₁ =	380 mm
	L ₂ =	320 mm
	Gewicht / weight	3,94 kg
	Betongüte / concrete strength	≥ C 20/25 ≥ 25 MPa
	Tragkraft / working load	160 kN je Stabende / on each bar end
	Werkstoff / material	SAS 900 / 1100
		

Stahlkonus Typ 33 steel cone type 33	verzinkt / galvanized	20F 12 033
	a =	Ø80 mm
	b =	Ø33 mm
	c =	68 mm
	L =	129 mm
	SW =	36 mm
		
Gewicht / weight 1,00 kg		
Tragkraft / working load 160 kN		
Werkstoff / material S355J2		

Stahl-Kunststoffkonus Typ MKK steel-plastic cone type MKK

verzinkt / galvanized

20F 14 126



a = Ø70 mm

b = Ø45 mm

c = 65 mm

L = 126 mm

SW = 32 mm

Gewicht / weight 0,80 kg

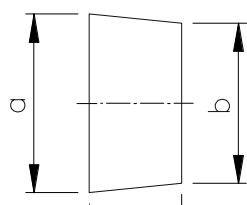
Tragkraft / working load 160 kN

Werkstoff / material S355J2 + PP



Betonstopfen für Stahl-Kunststoffkonus Typ MKK concrete plug for steel-plastic cone type MKK

20F 14 126 S



a = Ø69 mm

b = Ø60 mm

h = 40 mm

Gewicht / weight 0,20 kg

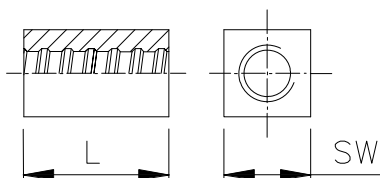
Werkstoff / material Beton / concrete

Zum Verschließen der Konuslöcher des Stahl-Kunststoffkonus.
For sealing of cone holes of the steel-plastic cone.



Anschweißstück¹ welding bolt

20F 20 060



L = 60 mm

SW = 40 mm

Gewicht / weight 0,57 kg

Tragkraft / working load 160 kN

Werkstoff / material S355J2



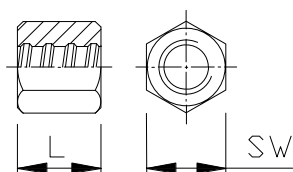
Sechskantmutter hexagonal nut

schwarz / black

20F 22 030

verzinkt / galvanized

20F 22 030 G



L = 30 mm

SW = 36 mm

Gewicht / weight 0,20 kg

Tragkraft / working load 70 kN

Werkstoff / material S355J2C+C



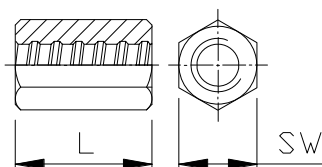
Sechskantmutter Volllast hexagonal nut

schwarz / black

20F 22 060

verzinkt / galvanized

20F 22 060 G



L = 60 mm

SW = 36 mm

Gewicht / weight 0,34 kg

Tragkraft / working load 160 kN

Werkstoff / material S355J2C+C



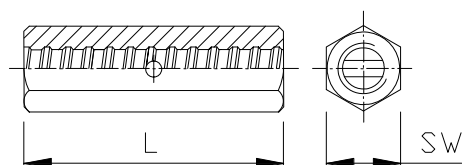
¹Nachweis der Schweißnaht nach DIN 18800 / Kehlnaht > 3 mm.

Proof of welding acc. DIN 18800 / welded seam > 3 mm.

Verbindungsmuffe Sechskant coupler hexagonal

schwarz / black
verzinkt / galvanized

20F 28 110
20F 28 110 G



L = 110 mm

SW = 36 mm

Gewicht / weight 0,63 kg

Tragkraft / working load 160 kN

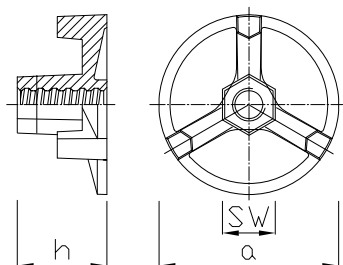
Werkstoff / material S355J2C+C



Flanschmutter 3-flügelig flange nut 3-wings

verzinkt / galvanized

20F 31 130 G



a = Ø130 mm

h = 65 mm

SW = 36 mm

Gewicht / weight 1,54 kg

Gurtungsabstand/
girder spacing 40 mm

Tragkraft / working load 160 kN

Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7

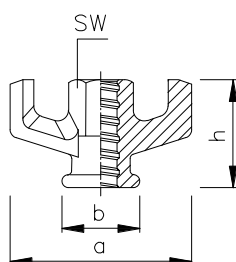


Ø 20,0 mm

Flügelmutter wing nut

verzinkt / galvanized

20F 32 036 G



a = 110 mm

b = Ø42 mm

h = 60 mm

SW = 36 mm

Gewicht / weight 0,45 kg

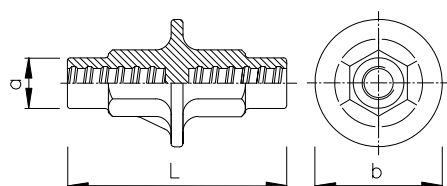
Tragkraft / working load 160 kN

Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7



Wassersperre mit Absatz Ø31 x 20 waterstop with landing Ø31 x 20

20F 41 150



a = Ø31 mm

b = Ø90 mm

L = 150 mm

Gewicht / weight 1,39 kg

Tragkraft / working load 160 kN

Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7



Wassersperre / Stab mit aufgeschweißter Scheibe waterstop / tie rod with welded plate

Typ FA
Typ FS

20FA 43 000
20FS 43 000

a = □120 mm

L = variabel / variable

Toleranz / tolerance ± 5 mm

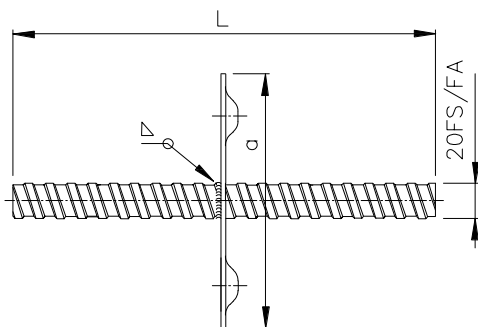
Gewicht / weight 0,22 kg + Stab / tie rod

Tragkraft / working load 140 / 160 kN

Werkstoff / material:

Platte / plate S235JR

Stab / Tie Rod 20FS / FA



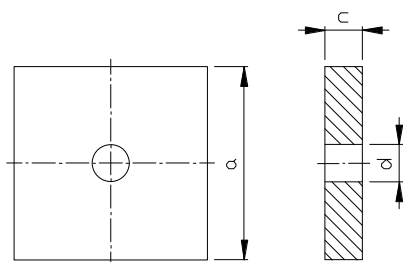
Stablänge bei Verwendung mit Stahl-Kunststoffkonus:
Wandstärke minus 13 cm.

Length in combination with steel-plastic cone:
thickness of wall minus 13 cm.

Ø 20,0 mm

Vollplatte plate

20F 52 020



a = □120 mm

c = 20 mm

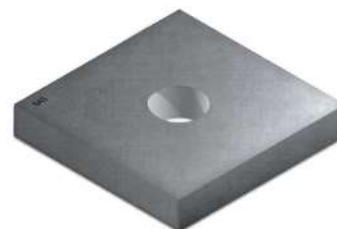
d = Ø25 mm

Gewicht / weight 2,15 kg

Tragkraft / working load 160 kN

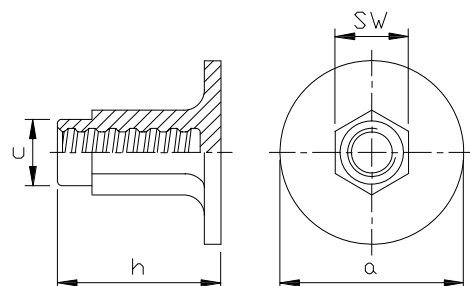
Gurtungsabstand /
girder spacing 50 mm

Werkstoff / material S235JR



Montageanker fix anchor

20F 61 080



a = 90 mm

c = Ø31 mm

h = 80 mm

SW = 39 mm

Gewicht / weight 0,78 kg

Betongüte /
concrete strenght ≥ C 20/25
≥ 25 MPa

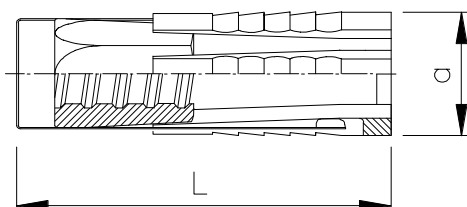
Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7



Zusatzbewehrung nach statischem Nachweis erforderlich.
Additional reinforcement acc. to analysis.

Beton-/ Felsanker 3-schalig expansion shell 3-leaf

20F 63 053



a = Ø39 mm

L = 110 mm

Gewicht / weight 0,45 kg

Bohrloch / bore hole Ø40 - 42 mm

Tragkraft / working load 120 kN

Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7

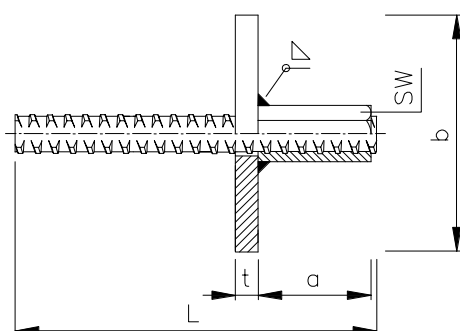


Montage nach Einbauanweisung (siehe Seite 41-42)
Assembling acc. to installation manual. (page 41-42)

Plattenanker plate anchor

Typ FA
Typ FS

20FA 63 275
20FS 63 275



a = 60 mm

b = □120 mm

SW = 36 mm

t = 15 mm

L = 275 mm bzw. variabel / or variable

Toleranz / tolerance ± 5 mm

Gewicht / weight 2,75 kg

Betongüte / concrete strength ≥ C 20/25
≥ 25 MPa

Werkstoff Platte / material plate S235JR

Werkstoff Stab / material bar 20 FA / 20 FS

Vorlänge / front length 200 mm

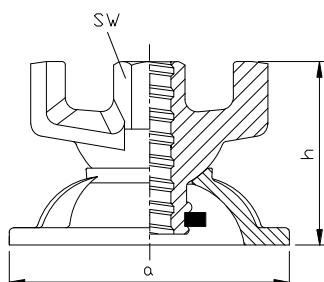
Zusatzbewehrung nach statischen Nachweisen erforderlich.
Additional reinforcement acc. to analysis.



Kalottenplatte, rund dome plate, round

verzinkt / galvanized

20F 73 130 G



a = Ø130 mm

h = 85 mm

SW = 36 mm

Gewicht / weight 1,80 kg

Tragkraft / working load 160 kN

Werkstoff / material GE 300

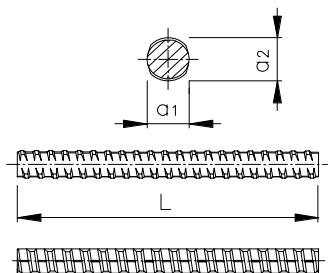


Flügelmutter beweglich um ca. 5°.
Wing nut moveable appr. 5°.

Ø 20,0 mm

SAS Schalungsanker Typ FA¹ gewalzt, schweißbar SAS Tie Rod Type FA hot rolled, weldable

schwarz / black 26FA...
verzinkt / galvanized 26FA...G

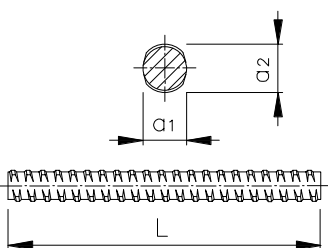


$a_1 = 26,5 \text{ mm}$
 $a_2 = 31 \text{ mm}$
 $L =$ variabel bis max. 15m / *variable up to max. 15m*
 $L =$ verzinkt max. 6 m / *galvanized max. 6 m*

Gewicht / weight 4,48 kg/m
Tragkraft / working load 280 kN
Werkstoff / material SAS 900 / 1100

SAS Schalungsanker Typ E gewalzt SAS Tie Rod Type E hot rolled

schwarz / black 26E...
verzinkt / galvanized 26E...G



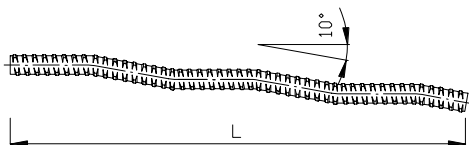
$a_1 = 26,5 \text{ mm}$
 $a_2 = 31 \text{ mm}$
 $L =$ variabel bis max. 12m / *variable up to max. 12m*
 $L =$ verzinkt max. 6 m / *galvanized max. 6 m*

Gewicht / weight 4,48 kg/m
Tragkraft / working load 300 kN
Werkstoff / material SAS 950 / 1050

Wellenanker wave anchor

Typ FA 26FA 66 800 W

Ø 26,5 mm

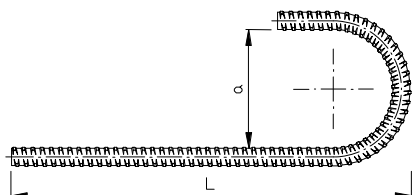


$L = 800 \text{ mm}$
Gewicht / weight = 3,58 kg
Betongüte / $\geq C 20/25$
concrete strength $\geq 25 \text{ MPa}$
Tragkraft / working load 220 kN
Werkstoff / material SAS 900 / 1100



Hakenanker hook anchor

Typ FA 26FA 64 800 H

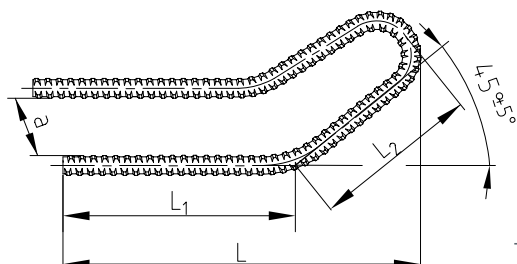


$a = 260 \text{ mm}$
 $L = 800 \text{ mm}$
Gewicht / weight 6,00 kg
Betongüte / $\geq C 20/25$
concrete strength $\geq 25 \text{ MPa}$
Tragkraft / working load 220 kN
Werkstoff / material SAS 900 / 1100



Schlaufenanker loop anchor

Typ FA 26FA 65 800 S



$a = 350 \text{ mm}$
 $L = 840 \text{ mm}$
 $L_1 = 550 \text{ mm}$
 $L_2 = 360 \text{ mm}$
Gewicht / weight 8,69 kg
Betongüte / $\geq C 20/25$
concrete strength $\geq 25 \text{ MPa}$
Tragkraft / working load 280 kN je Stabende / *on each bar end*
Werkstoff / material SAS 900 / 1100



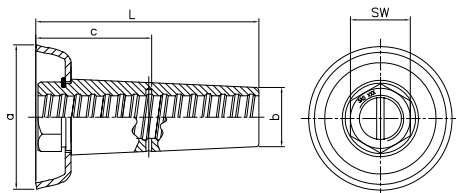
¹Kennzeichnung: Längsnuten zwischen Rippen
Marking: Longitudinal slots between ribs

Ø26.5

Stahlkonus Typ 40
steel cone type 40

verzinkt / *galvanized*

26E 12 040



a = Ø98 mm

b = Ø40 mm

c = 80 mm

L = 152 mm

SW = 41 mm

Gewicht / *weight* 1,49 kg

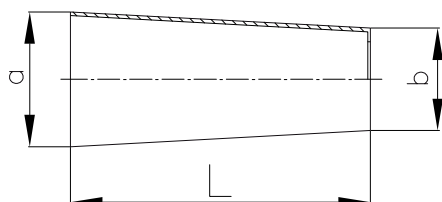
Tragkraft / *working load* 300 kN

Werkstoff / *material* S355J2



PE-Hülse für Stahlkonus Typ 40
PE-sleeve for steel cone type 40

26E 12 040 K



a = Ø52,5 mm

b = Ø40 mm

L = 120 mm

Gewicht / *weight* 0,01 kg

Werkstoff / *material* PE



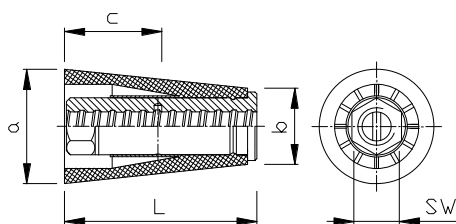
Zum einfachen Ausschrauben des Stahlkonus Typ 40, PE-Hülse wird vor der Montage auf den Konus gesteckt und verbleibt im Beton.

To ensure easy unscrewing of steel cone type 40. The PE-sleeve is put on the cone before installation and remains in the concrete.

Stahl-Kunststoffkonus Typ MKK
steel-plastic cone type MKK

verzinkt / *galvanized*

26E 14 135



a = Ø103 mm

b = Ø57 mm

c = 70 mm

L = 135 mm

SW = 46 mm

Gewicht / *weight* 1,71 kg

Tragkraft / *working load* 300 kN

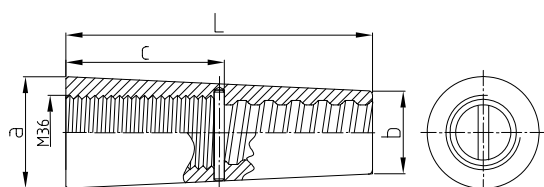
Werkstoff / *material* S355J0 + PP



Vorlaufkonus Typ 40 / M36
cone type 40 / M36

verzinkt / *galvanized*

26E 15 040



a = Ø54 mm

b = Ø40 mm

c = 76 mm

L = 148 mm

Gewicht / *weight* 1,18 kg

Tragkraft / *working load* 260 kN

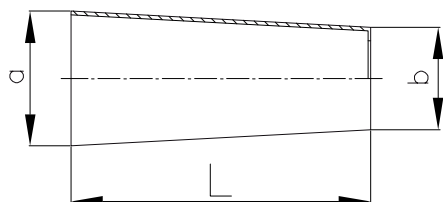
Werkstoff / *material* S355J2



Ø 26,5 mm

PE-Hülse für Vorlaufkonus Typ 40 / M36 PE-sleeve for cone type 40 / M36

26E 15 040 K



a = Ø54 mm
b = Ø40 mm
L = 145 mm

Gewicht / weight 0,02 kg

Werkstoff / material PE

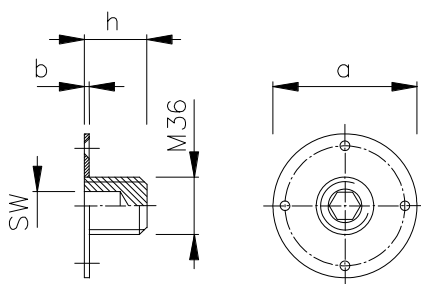
Zum einfachen Ausschrauben des Stahlkonus Typ 40 / M36. PE-Hülse wird vor der Montage auf den Konus gesteckt und verbleibt im Beton.

To ensure easy unscrewing of steel cone type 40 / M36. The PE-sleeve is put on the cone before installation and remains in the concrete.



Nagelplatte für Vorlaufkonus Typ 40 / M36 nail plate for cone type 40 / M36

26E 15 040 N



a = Ø75 mm
b = 5 mm
h = 35 mm
SW = 17 mm

Gewicht / weight 0,37 kg

Werkstoff / material Stahl / steel



Sechskantmutter hexagonal nut

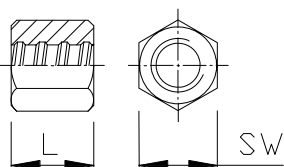
schwarz / black 26E 22 030
verzinkt / galvanized 26E 22 030 G

L = 30 mm
SW = 46 mm

Gewicht / weight 0,27 kg

Tragkraft / working load 90 kN

Werkstoff / material S355J2C+C



Sechskantmutter hexagonal nut

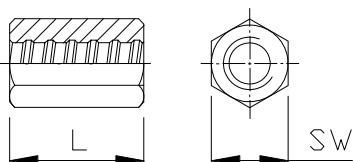
schwarz / black 26E 22 060
verzinkt / galvanized 26E 22 060 G

L = 60 mm
SW = 46 mm

Gewicht / weight 0,54 kg

Tragkraft / working load 200 kN

Werkstoff / material S355J2C+C



Sechskantmutter Volllast hexagonal nut

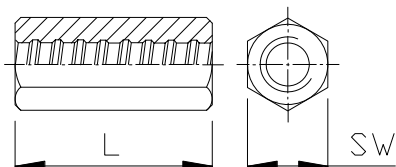
schwarz / black 26E 22 080
verzinkt / galvanized 26E 22 080 G

L = 80 mm
SW = 46 mm

Gewicht / weight 0,74 kg

Tragkraft / working load 300 kN

Werkstoff / material S355J2C+C



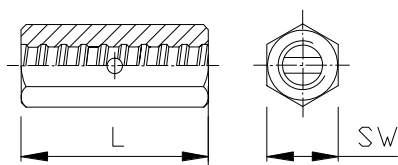
Ø 26,5 mm

Ø26.5

Zubehör accessories

Verbindungsmuffe kurz, Sechskant *coupler short, hexagonal*

schwarz / black 26E 28 120
verzinkt / galvanized 26E 28 120 G

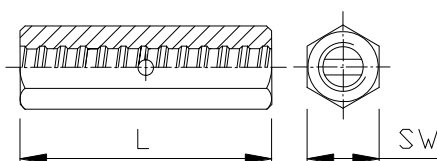


L = 120 mm
SW = 46 mm
Gewicht / weight 1,09 kg
Tragkraft / working load 200 kN
Werkstoff / material S355J2C+C



Verbindungsmuffe Sechskant *coupler hexagonal*

schwarz / black 26E 28 150
verzinkt / galvanized 26E 28 150 G

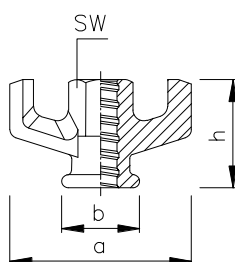


L = 150 mm
SW = 46 mm
Gewicht / weight 1,36 kg
Tragkraft / working load 300 kN
Werkstoff / material S355J2C+C



Flügelmutter *wing nut*

verzinkt / galvanized 26E 32 046 G



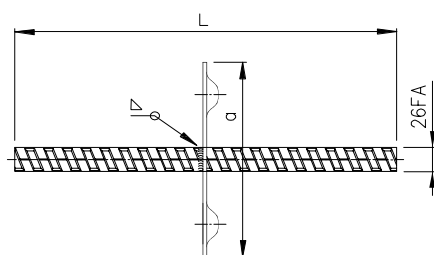
a = 155 mm
b = Ø52 mm
h = 65 mm
SW = 46 mm
Gewicht / weight 0,90 kg
Tragkraft / working load 260 kN
Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7



Ø 26,5 mm

Wassersperre / Stab mit aufgeschweißter Scheibe *waterstop / tie rod with welded plate*

Typ FA 26FA 43 000



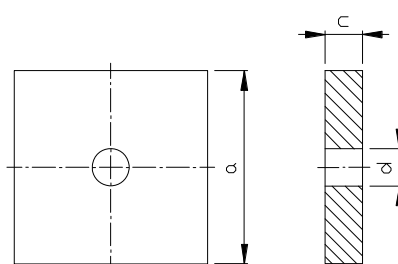
a = □120 mm
L = variabel / variable
Toleranz / tolerance ± 5 mm
Gewicht / weight 0,22 kg + Stab / tie rod
Tragkraft / working load 220 kN
Werkstoff / material:
Platte / plate S235JR
Stab / tie rod 26FA



Stablänge bei Verwendung mit Stahl-Kunststoffkonus: Wandstärke minus 14 cm. / Length in combination with steel-plastic cone: thickness of wall minus 14 cm.

Vollplatte *plate*

26 E 52 020

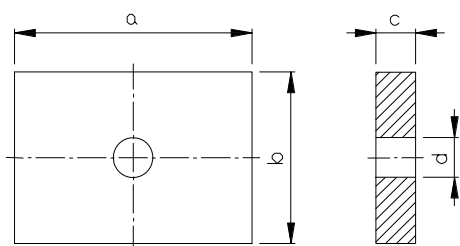


a = □120 mm
c = 20 mm
d = Ø32 mm
Gewicht / weight 2,10 kg
Tragkraft / working load 160 kN
Gurtungsabstand / girder spacing 50 mm
Werkstoff / material S235JR

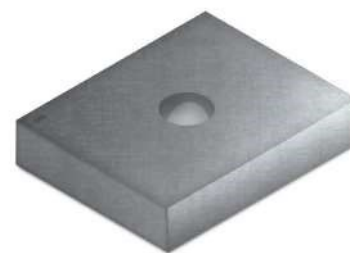


Vollplatte rechteckig
plate rectangular

26E 52 030

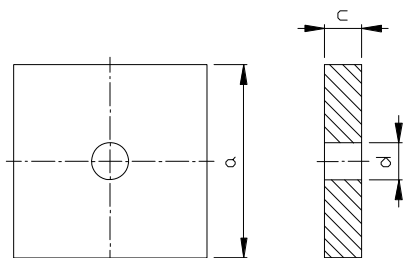


a = 150 mm
b = 120 mm
c = 30 mm
h = Ø32 mm
Gewicht / weight 3,99 kg
Tragkraft / working load 260 kN
Gurtungsabstand / girder spacing 50 mm
Werkstoff / material S235JR



Vollplatte quadratisch
plate square

26E 52 035

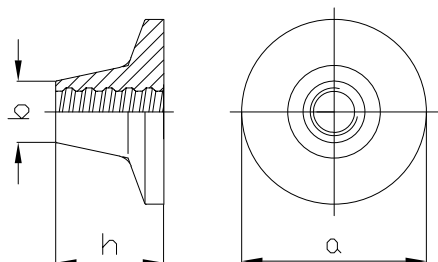


a = □150 mm
c = 35 mm
d = Ø32 mm
Gewicht / weight 5,70 kg
Tragkraft / working load 300 kN
Gurtungsabstand / girder spacing 50 mm
Werkstoff / material S235JR



Montageanker
fix anchor

26E 61 120



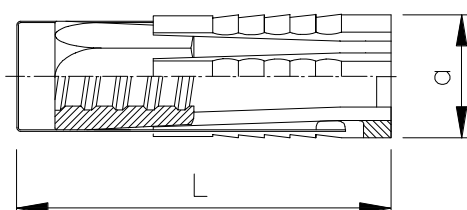
a = Ø120 mm
b = Ø40 mm
h = 70 mm
Gewicht / weight 1,90 kg
Betongüte / concrete strength $\geq C 20/25$
 $\geq 25 \text{ MPa}$
Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7



Zusatzbewehrung nach statischem Nachweis erforderlich.
Additional reinforcement acc. to analysis.

Beton-/ Felsanker 2-schalig
expansion shell 2-leaf

26E 63 063



a = Ø50 mm
L = 120 mm
Gewicht / weight 0,58 kg
Bohrlich / bore hole Ø51- 53 mm
Tragkraft / working load 150 kN



Werkstoff / material EN-GJMW-400-5 / EN-GJS-500-7

Montage nach Einbauanweisung (siehe Seite 41-42)
Assembling acc. to installation manual. (page 41-42)

Keilklemme leichte Ausführung
cam clamp light version

verzinkt / *galvanized* 10F 11 008



90 x 60 mm

Gewicht / *weight* 0,26 kg

Für Rundeisen bis Ø8 mm.

For round bars up to Ø8 mm.

Keilklemme aus Guß
cam clamp cast iron

verzinkt / *galvanized* 10F 11 010



110 x 40 mm

Gewicht / *weight* 0,43 kg

Keil geschmiedet, vergütet. / *Wedge forged, tempered.*

Für Rundeisen Ø5 - 10 mm. / For round bars up to Ø5 - 10 mm .

Keilklemme aus Guß
cam clamp cast iron

verzinkt / *galvanized* 10F 11 013



110 x 40 mm

Gewicht / *weight* 0,46 kg

Keil geschmiedet, vergütet. / *Wedge forged, tempered.*

Für Rundeisen Ø8 - 13 mm. / For round bars up to Ø8 - 13 mm .

Federklemme verstärkt
spring clamp strengthened

verzinkt / *galvanized* 10F 12 200



110 x 75 mm

Gewicht / *weight* 0,42 kg

Für Rundeisen Ø5 - 10 mm. / *For round bars up to Ø5 - 10 mm.*

Bewährtes Feder-Exzenter-System / *reliable spring-excentric-system.*

Sonderzubehör special accessories

Spindelspanner für Keilklemme *spindle-spanner for cam clamp*

10F 16 012



Gewicht / *weight* 1,42 kg

Für Rundeisen bis Ø12 mm. / *For round bars up to Ø12 mm.*

Hebelspanner für Federklemme *level-spanner for spring clamp*

verzinkt / *galvanized* 10F 17 100



Gewicht / *weight* 2,70 kg

Tragkraft / *working load* 25 kN

Für Rundeisen bis Ø12 mm. / *For round bars up to Ø12 mm.*

Spindelspanner für Federklemme *spindle-spanner for spring clamp*

verzinkt / *galvanized* 10F 18 100



Gewicht / *weight* 1,20 kg

Für Rundeisen bis Ø12 mm. / *For round bars up to Ø12 mm.*

Spannstabausdreher *tie rod remover*

verzinkt / *galvanized* 15F 71 001



Gewicht / *weight* 0,40 kg

Für SAS Schalungsanker Ø15 Typ FA / FC / FS.
For SAS Tie Rods Ø15 Type FA / FC / FS.

Spannstabausdreher *tie rod remover*

verzinkt / *galvanized* 10F 71 002 G



Gewicht / *weight* 1,90 kg

Für SAS Schalungsanker Ø15 + Ø20 Typ FA / FC.
For SAS Tie Rods Ø15 + Ø20 Type FA / FC.

Konenschlüssel
cone wrench

verzinkt / *galvanized* 15F 16 100



SW = 27 mm

Gewicht / *weight* 1,10 kg

Für Stahl-Kunststoffkonus Typ MKK.
For steel-plastic cone type MKK.

4-Kant-Konenschlüssel
square cone wrench

verzinkt / *galvanized* 15F 16 110



Gewicht / *weight* 1,60 kg

- 13 mm für Vorlaufkonus Typ 30 / *for cone type 30*
- 18 mm für Vorlaufkonus Typ 30 / M24 / *for cone type 30 / M24*

Konenschlüssel Typ 40/M36
cone wrench type 40/M36

verzinkt / *galvanized* 26E 15 041



Gewicht / *weight* 1,96 kg

Für Stahlkonus Typ 40/M36 (26E 15 040)
for cone type 40/M36 (26E 15 040)

Sonderzubehör
special accessories

V-Halter
V-holder

verzinkt / *galvanized* 15F 66 300
20F 66 300
26E 66 300



Gewicht / *weight*

Ø15 0,42 kg

Ø20 0,43 kg

Ø26,5 0,44 kg

Halterung für Schlaufenanker 45°
For fixing loop anchor 45°