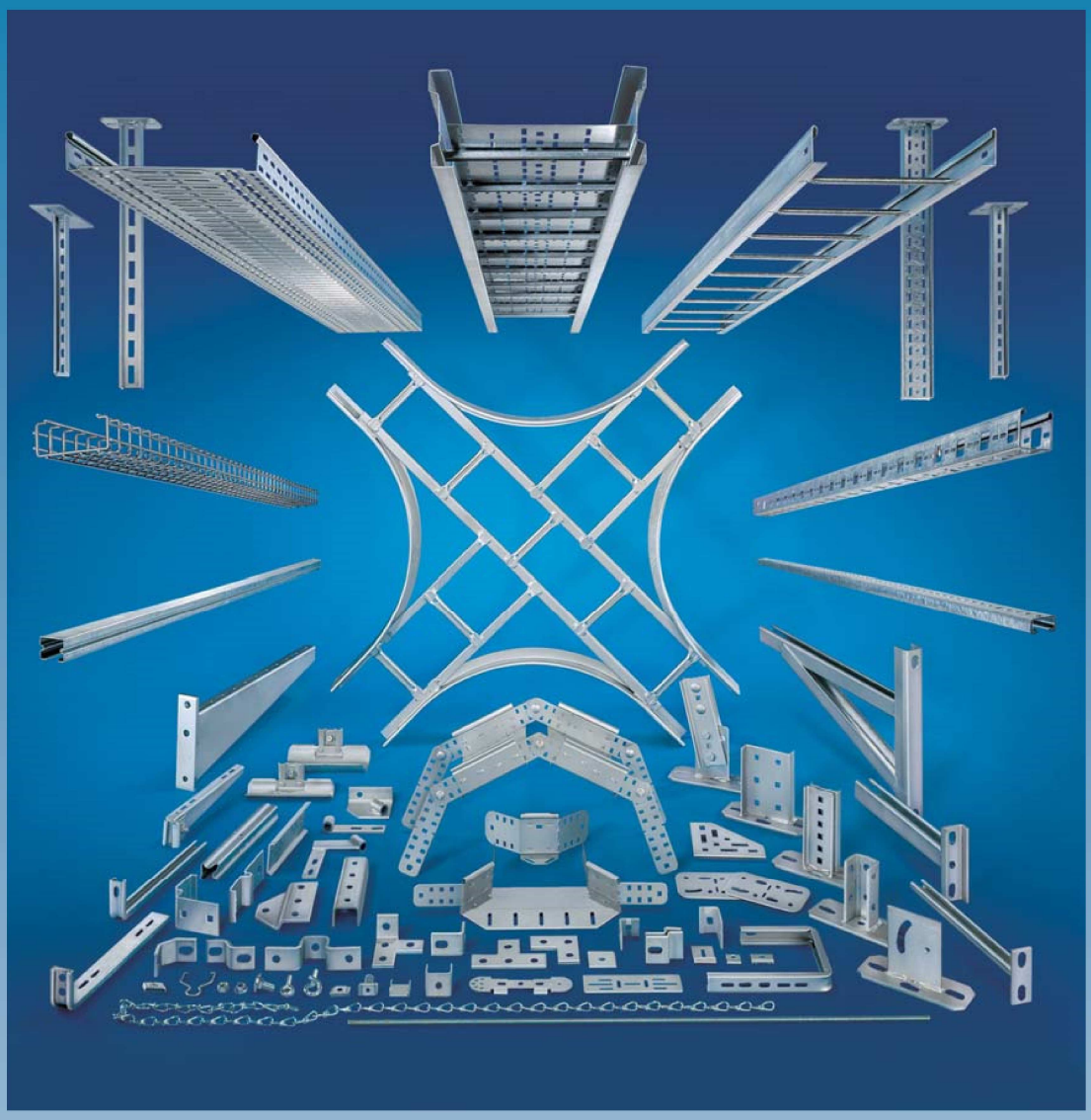
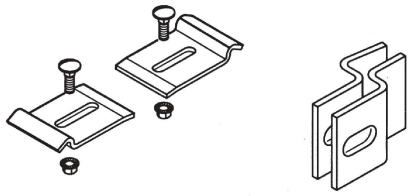
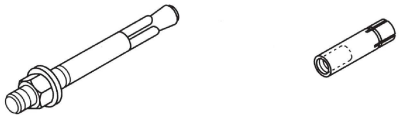
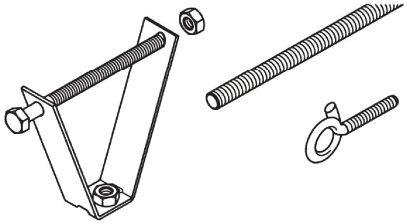
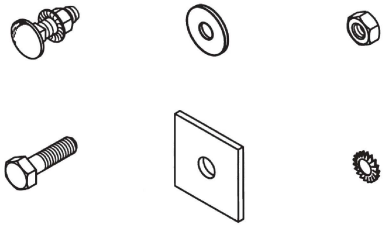
Kabelové nosné systémy



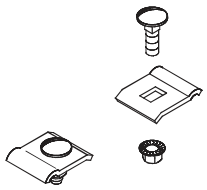
PUK

Obsah G

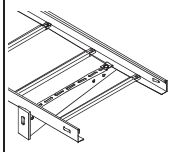
Příchytky		G3 - G4
Ocelové kotvy, hmoždinky		G5 - G6
Závěsný materiál		G7
Spojovací materiál		G8 - G11
Kotevní materiál		G12 - G14

Příchytky

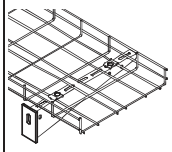
KLU



			kg/100
S F E			
KLU	FRSV 6x16	SEMS 6	2,5
KLU F	FRS 6x16E	SEMS 6E	2,5
KLU E	FRS 6x16E	SEMS 6E	2,5
⇨	FRSV 6x16, FRS6x16E		G8
	SEMS 6, SEMS 6E		G11

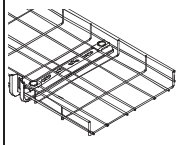


LG 50
LG 60
LGS 60
LG 100
KW, KWS
KUL, KUM
KUS
KT, KTS



G 50, G 100
GI

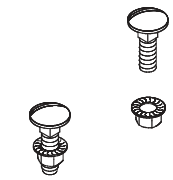
KWL, KW
KUL, KUM
KT



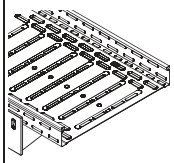
G 50, G 100
GI

DB,
KA 30,
KSL, KSLW

KLR



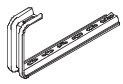
S E			
KLR	FRSV 6x12	SEMS 6	0,9
KLR E	FRSV 6x12E	SEMS 6E	0,9
S E			
KLR 6x25	FRS 6x25	SEMS 6	1,4
KLR 6x25E	FRS 6x25E	SEMS 6E	1,4
⇨	FRS 6x25		G8
	SEMS 6		G11



RG, RGS,
RGL, RI

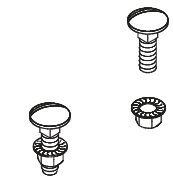
KW, KWS,
KUL, KUM
KUS
KT, KTS

KSL



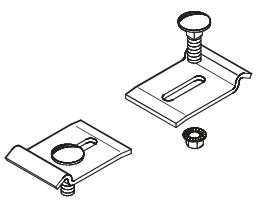
DB,
KA 30

KLRL

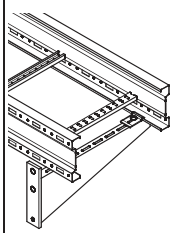


S E			
KLRL	FRSV 6x16	SEMS 6	1,0
KLRL E	FRSV 6x16E	SEMS 6E	1,0

WLKL



S F			
WLKL S	FRSV 6x16	SEMS 6	12,5
WLKL F	FRS 6x16E	SEMS 6E	12,5
⇨	FRSV 6x16, FRSV 6x16E		G8
	SEMS 6, SEMS 6E		G11



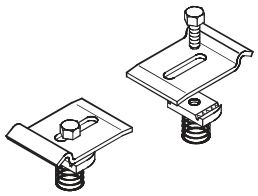
WL

KWS, KUS
KTS

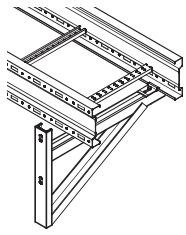
G

Příchytky

WLKLA



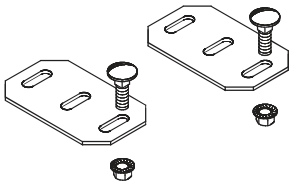
			kg/100
S F			
WLKLA S	SES 6x20	AMF 22 M 6	16,0
WLKLA F	SES 6x20E	AMF 22 M 6F	16,0
⇨	SES 6x20		G9
	SES 6x20E		G10
	AMF 22 M 6F		G12



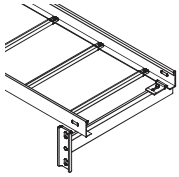
WL 120
WL 150
WL 200

KWSS,
KISS,
KTSS

KLUS



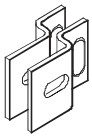
			kg/100
S E			
KLUS	FRSV 6x16	SEMS 6,	9,3
KLUS E	FRSV 6x16E	SEMS 6E	8,1
⇨	FRSV 6x16, FRS 6x16E		G8
	SEMS 6, SEMS 6E		G11



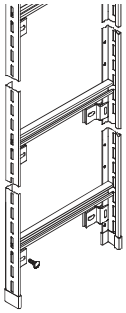
LG 50
LG 60
LG 100

KW
KWS
KUM
KUL
KUS
KT
KTS

LH

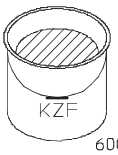


	kg/100
F	
LH F	25,0



STL 50
STU 50

KZ F

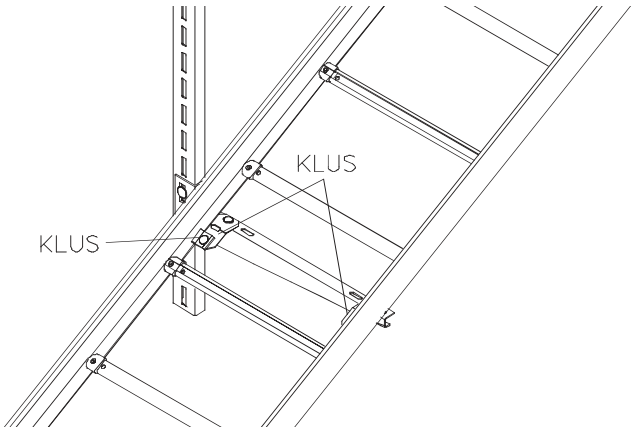


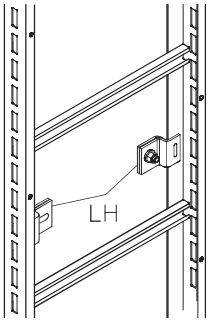
	kg/100
F	
KZ F	100

KZ S

	kg/100
S	
KZ S	40

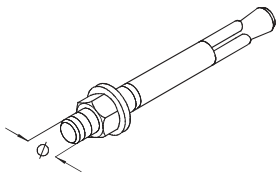
Zinková barva/sprej

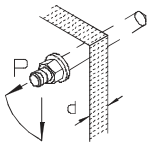




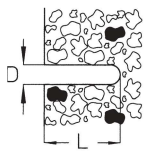
Ocelové kotvy, hmoždinky

SD



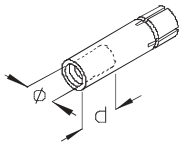


	ø mm	d mm	P_{zul}* kN	P_{zul}** kN	kg/100
SD 8/10	8	0-10	2,40	4,30	3,5
SD 10/10	10	0-10	4,30	7,60	6,2
SD 10/30	10	0-30	4,30	7,60	7,8
SD 12/10	12	0-20	7,60	11,90	11,0
SD 16/25	16	0-25	13,40	18,80	26,3
E4					
SD 8/10E4	8	0-10	2,00	4,80	3,6
SD 10/10E4	10	0-10	4,30	7,60	6,2
SD 12/10E4	12	0-20	5,70	9,50	10,9



D mm	L_{min} mm
8	75
10	90
10	110
12	115
16	140
8	75
10	90
12	115

SAZ

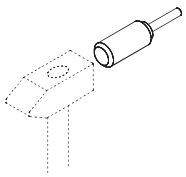


	ø mm	d mm	P_{zul}* kN	P_{zul}** kN	kg/100	D mm	L_{min} mm
SAZ 8	8	11-17	1,50		0,7	10	40
SAZ 10	10	13-19	1,50		0,8	12	40
SAZ 12	12	15-21	1,50		1,0	14	40

SAZ-B

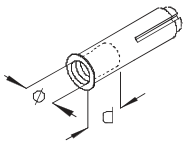
	kg/100
SAZ-B 8	10,0
SAZ-B 10	10,0
SAZ-B 12	20,0

SA-D



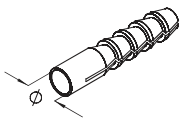
	ø mm	kg/100
SA-D 8	8	25,0
SA-D 10	10	30,0
SA-D 12	12	35,0

SA

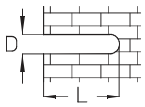


	ø mm	d mm	P_{zul}* kN	P_{zul}** kN	kg/100	D mm	L_{min} mm
SA 6	6	6-12		0,50	0,4	8	27
SA 8	8	11-17		1,80	0,5	10	33
SA 10	10	13-19		3,60	0,8	12	44
SA 12	10	15-21		5,70	1,6	15	54
E4							
SA 6E4	6	6-12		-	0,4	8	27
SA 8E4	8	11-17		-	0,5	10	33
SA 10E4	10	13-19		3,60	0,8	12	44
SA 12E4	10	15-21		5,70	1,6	15	54

KD



	PA						
KD 6	6				0,2	8	55
KD 8	8				0,3	10	70
KD 10	10				0,5	12	80
KD 12	12				0,7	14	95



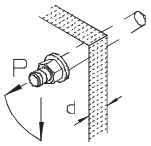
Speciální upevnění pro
* beton ≥ B25 příp. C20/C25 s trhlinami i bez nich
** beton ≥ B25 příp. C20/C25 bez trhlin

SEH

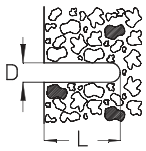
G10

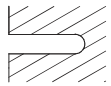
Platí aktuální schválená nařízení.

Ocelové kotvy, hmoždinky

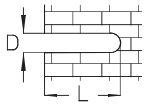


	ø mm	d mm	P_{zul} kN	kg/100	D mm	L mm
VAB-HB						
VAB-HB 10/20	10	0-20	8,0*	6,7	10	75
VAB-HB 12/25	12	0-25	11,1*	11,9	12	90
VAB-HB 16/30	16	0-30	15,9*	30,0	16	110
E4						
VAB-HB 10/20E4	10	0-20	8,0*	6,9	10	75
VAB-HB 12/25E4	12	0-25	11,1*	12,0	12	90
VAB-HB 16/30E4	16	0-30	15,9*	30,2	16	110
⇨ VAB-HB, VAB-HB M				G6		
VAB-HB B						
VAB-HB B10						
VAB-HB B12						
VAB-HB B16						
VAB-HB M						
VAB-HB M				23,0		
⇨ VA-AP				G6		
VA-AP						
VA-AP						
VAS-AS						
VAS-AS 8/15	8	0-15	**	4,2	10	80
VAS-AS 10/25	10	0-25	**	7,0	12	80
VAS-AS 12/40	12	0-40	**	11,8	14	80
E4						
VAS-AS 8/15E4	8	0-15	**	4,2	10	80
VAS-AS 10/25E4	10	0-25	**	7,2	12	80
VAS-AS 12/40E4	12	0-40	**	12,1	14	80
⇨ VAS-BS, VAS-SH, VAS-M				G6		
VAS-BS						
VAS-BS 14/20						
VAS-SH						
VAS-SH M8-10				0,5	16	90
VAS-SH M12				0,5	20	90
VAS-M						
VAS-M				23,0		
⇨ VA-AP				G6		
TBS						
TBS 8	8		1,3	0,14		
TBS 10	10		1,3	0,14		
včetně 1 x SES 8x110				G9		
1 x SEM 8				G11		

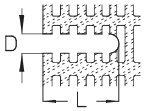




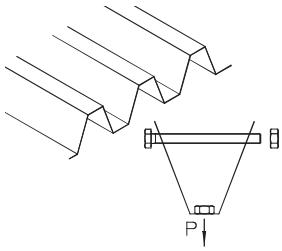
Hloubka 40–50 mm na 1 náplň



Hloubka 30–40 mm na 1 náplň



Hloubka 40–50 mm na 1 náplň



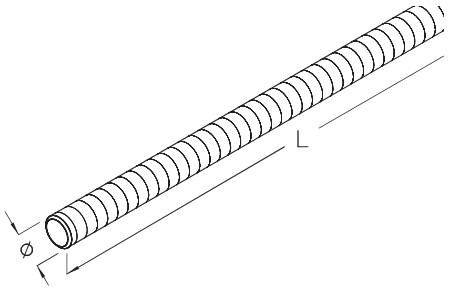
Speciální upevnění pro
* beton ≥ B25 příp. C20/C25 s trhlinami

** Hodnoty přípustného zatížení závisí na stavebním podkladu

Platí aktuální schválená nařízení.

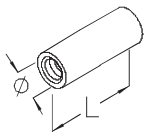
Závěsný materiál

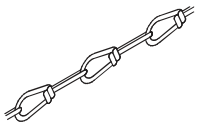
		ø mm	L mm	d mm	kg
GB DIN 975	GB M 8-10	8	1000		0,30
	GB M 8-05	8	500		0,15
	GB M 8-03	8	300		0,09
	GB M 10-10	10	1000		0,50
	GB M 10-05	10	500		0,25
	GB M 10-03	10	300		0,15
	GB M 12-10	12	1000		0,70
	GB M 12-05	12	500		0,35
	GB M 12-03	12	300		0,21
	GB M 8-10E	8	1000		0,30
	GB M 10-10E	10	1000		0,50
	GB M 12-10E	12	1000		0,70
VM	VM M 8	8	30		0,01
	VM M 10	10	30		0,03
	VM M 12	12	30		0,05
	VM M 8E	8	30		0,01
	VM M 10E	10	30		0,03
	VM M 12E	12	30		0,05
KNK	KNK			3	0,2/m
	⇨ KNK-NG				G7
	SHS				G7
	SHH				G7
KNK-NG	KNK-NG			3	0,003
DAS	DAS 8x30	8	30	7,0	0,02
SHS	SHS 6x40	6	40	5,2	0,02
	SHS 8x45	8	45	7,0	0,03
SHH	SHH 6x40	6	40	5,2	0,02

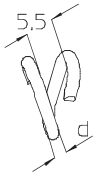


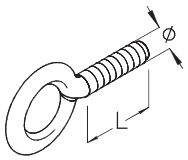
Průřez dle normy DIN 267 T4:

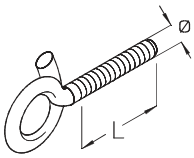
	mm²
GB M8:	36,6
GB M10:	58,0
GB M12:	84,3

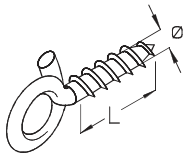


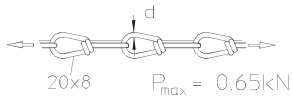




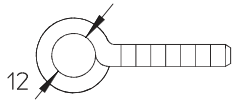




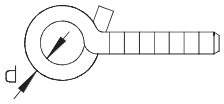




Protažení řetízku:
ca. 0,1 x L



Pmax = 1.0 kN

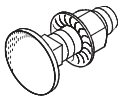


Pmax = 0.4 kN

G

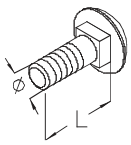
Spojovací materiál

KLS

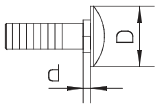


	ø mm	d mm	D mm	L mm	kg/100		
KLS 8x16	8			16	1,8	FRSV 8x16	SEM S 8
KLS 8x25	8			25	2,2	FRS 8x25	SEM S 8
KLS 10x20	10			20	3,9	FRSV 10x20	SEM S 10
F							
KLS 10x20F	10			20	4,0	FRSV 10x20F	SEM S 10F US 10x21F
E							
KLS 8x16E	8			16	1,8	FRSV 8x16	SEM S 8E
KLS 8x25E	8			25	2,2	FRS 8x25	SEM S 8E
KLS 10x20E	10			20	3,9	FRSV 10x20	SEM S 10E US 10x21E

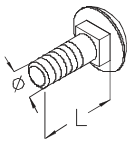
FRSV DIN 603



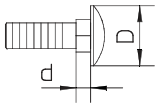
	ø mm	d mm	D mm	L mm	kg/100
FRSV 6x12	6	1,5	16	12	0,5
FRSV 6x16	6	1,5	16	16	0,7
FRSV 8x16	8	2,0	20	16	1,3
FRSV 10x20	10	2,5	24	20	2,3
F					
FRSV 10x20F	10	2,5	24	20	2,3
E					
FRSV 6x12E	6	1,5	16	12	0,5
FRSV 6x16E	6	1,5	16	16	0,7
FRSV 8x16E	8	2,0	20	16	1,3
FRSV 10x20E	10	2,5	24	20	2,3



FRS

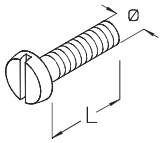


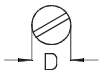
	ø mm	d mm	D mm	L mm	kg/100
FRS 6x25	6	4	16	25	0,9
FRS 8x20	8	5	20	20	1,4
FRS 8x25	8	5	20	25	1,5
FRS 8x35	8	5	20	35	1,9
FRS 10x30	10	6	24	30	2,8
FRS 12x30	12	8	30	30	4,6
F					
FRS 10x20F	10	6	24	20	2,3
FRS 10x30F	10	6	24	30	2,8
FRS 12x30F	12	8	30	30	4,6
FRS 6x16E	6	4	16	16	0,7
FRS 6x20E	6	4	16	20	0,8
FRS 6x25E	6	4	16	25	0,9
FRS 8x20E	8	5	20	20	1,4
FRS 8x25E	8	5	20	25	1,5
FRS 8x35E	8	5	20	35	1,9
FRS 10x30E	10	6	24	30	2,8
FRS 12x30E	12	8	30	30	4,6



Spojovací materiál

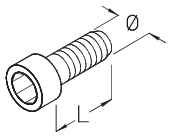
FKS DIN 84

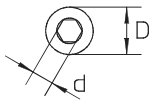




	ø mm	d mm	D mm	L mm	kg/100
FKS 6x10	6	4	12	10	0,4
FKS 6x20	6	4	12	20	0,6
FKS 6x25	6	4	12	25	0,7
FKS 8x20	8	5	16	20	1,3
E					
FKS 6x10E	6	4	12	10	0,4
FKS 6x20E	6	4	12	20	0,6
FKS 6x25E	6	4	12	25	0,7

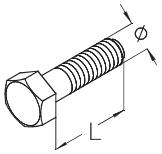
IK DIN 912

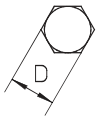




IK 6x20	6	5	10,2	20	0,7
IK 8x20	8	6	13,3	20	1,3
IK 8x25	8	6	13,3	25	1,5
IK 8x30	8	6	13,3	30	1,7
IK 8x40	8	6	13,3	40	2,1
IK 10x20	10	8	16,3	20	2,3
IK 10x25	10	8	16,3	25	2,5
IK 10x30	10	8	16,3	30	2,8
IK 10x40	10	8	16,3	40	3,3
IK 12x20	12	10	18,3	20	3,2
IK 12x25	12	10	18,3	25	3,6
IK 12x30	12	10	18,3	30	3,9
IK 12x40	12	10	18,3	40	4,7
IK 12x50	12	10	18,3	50	5,5
E					
IK 8x20E	8	6	13,3	20	1,3
IK 8x25E	8	6	13,3	25	1,5
IK 8x30E	8	6	13,3	30	1,7
IK 8x40E	8	6	13,3	40	2,1
IK 10x20E	10	8	16,3	20	2,3
IK 10x25E	10	8	16,3	25	2,5
IK 10x30E	10	8	16,3	30	2,8
IK 10x40E	10	8	16,3	40	3,3
IK 12x20E	12	10	18,3	20	3,2
IK 12x25E	12	10	18,3	25	3,6
IK 12x30E	12	10	18,3	30	3,9
IK 12x40E	12	10	18,3	40	4,7
IK 12x50E	12	10	18,3	50	5,5

SES DIN 933



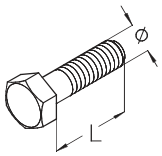


SES 6x16	6		10	16	0,5
SES 6x20	6		10	20	0,6
SES 6x25	6		10	25	0,7
SES 6x30	6		10	30	0,8
SES 8x16	8		13	16	1,1
SES 8x20	8		13	20	1,2
SES 8x25	8		13	25	1,4
SES 8x30	8		13	30	1,6
SES 8x40	8		13	40	1,9
SES 8x110	8		13	110	4,1
SES 10x20	10		17(16)	20	2,1
SES 10x25	10		17(16)	25	2,4
SES 10x30	10		17(16)	30	2,6
SES 10x40	10		17(16)	40	3,1
SES 12x20	12		19(18)	20	3,1
SES 12x25	12		19(18)	25	3,4
SES 12x30	12		19(18)	30	3,8
SES 12x40	12		19(18)	40	4,5
SES 12x50	12		19(18)	50	5,2

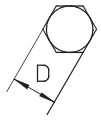
G

Spojovací materiál

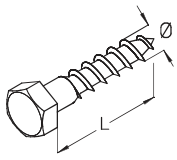
SES — DIN 933



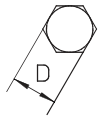
	ø mm	d mm	D mm	L mm	kg/100
F E					
SES 10x20F	10		17(16)	20	2,1
SES 10x25F	10		17(16)	25	2,4
SES 10x30F	10		17(16)	30	2,6
SES 12x20F	12		19(18)	20	3,1
SES 12x30F	12		19(18)	30	3,8
SES 12x40F	12		19(18)	40	4,5
SES 12x50F	12		19(18)	50	5,2
SES 12x70F	12		19(18)	70	6,6
SES 6x16E	6		10	16	0,5
SES 6x20E	6		10	20	0,6
SES 8x20E	8		13	20	1,2
SES 8x25E	8		13	25	1,4
SES 10x20E	10		17	20	2,1
SES 10x30E	10		17	30	2,6



SEH



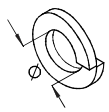
SEH 8x50	8		13	50	1,8
SEH 8x60	8		13	60	2,1
SEH 10x50	10		17	50	3,2
SEH 10x60	10		17	60	3,6
SEH 10x80	10		17	80	4,5



FS

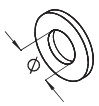
FS 6	6,4		11		0,04
FS 8	8,2		14		0,08
FS 10	10,5		18		0,13
FS 12	12,5		20,5		0,17
E					
FS 6E	6,4		11		0,04
FS 8E	8,2		14		0,08
FS 10E	10,5		18		0,13
FS 12E	12,5		20,5		0,17

FR

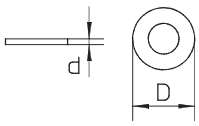


E4					
FR B6 E4	6,1		11,8		0,1

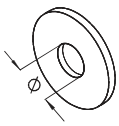
US — DIN 125



US 6x12	6,4	1,6	12,5		0,1
US 6x18	6,4	1,6	18,0		0,3
US 8x17	8,4	2,0	17,0		0,2
US 8x25	8,4	2,0	25,0		0,7
US 10x21	10,5	2,0	21,0		0,4
US 10x30	10,5	2,5	30,0		1,2
US 13x24	13,0	2,5	24,0		0,6
US 13x40	13,0	3,0	40,0		2,7
US 17x30	17,0	3,0	30,0		1,1



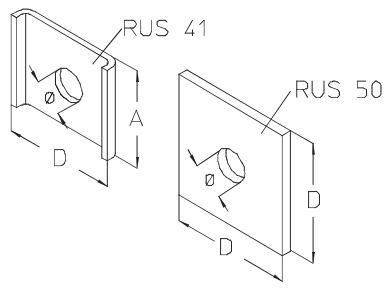
DIN 9021



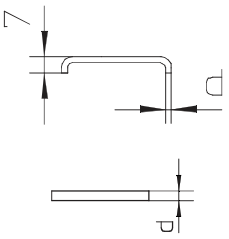
E					
US 6x12E	6,4	1,5	12,5		0,1
US 6x18E	6,4	1,6	18,0		0,3
US 8x17E	8,4	1,5	17,0		0,2
US 8x25E	8,4	2,0	25,0		0,7
US 10x21E	10,5	2,0	21,0		0,4
US 10x30E	10,5	2,5	30,0		1,2
US 13x24E	13,0	2,5	24,0		0,6

Spojovací materiál

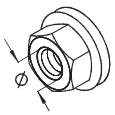
RUS



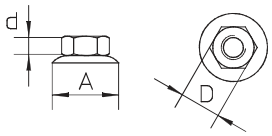
	ø	d	D	A	
	mm	mm	mm	mm	kg/100
F E					
RUS 41-L13F	13	2,5	46	40	4,00
RUS 41-L13E	13	1,8	46	40	2,84
RUS 50-L13F	13	4	50		7,54
RUS 50-L13E	13	4	50		7,54



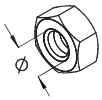
SEMS DIN 6923



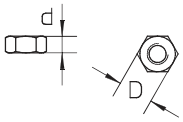
SEMS M 6	6	5,5	10	14	0,3
SEMS M 8	8	7,5	13	17	0,7
SEMS M 10	10	9,5	15	21	1,6
E					
SEMS M 6E	6	5,5	10	14	0,3
SEMS M 8E	8	7,5	13	17	0,7



SEM DIN 934

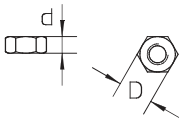


SEM 6	6	5	10	0,3
SEM 8	8	6,5	13	0,5
SEM 10	10	8	17(15)	1,2
SEM 12	12	10	19(18)	1,7
F				
SEM 10F	10	8	17(15)	1,2
SEM 12F	12	10	19(18)	1,7
E				
SEM 6E	6	5	10	0,3
SEM 8E	8	6,5	13	0,5
SEM 10E	10	8	17(15)	1,2
SEM 12E	12	10	19(18)	1,7

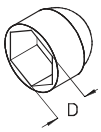


SEMSS DIN 985

E				
SEMSS 6	6	6	10	0,2
SEMSS 6E	6	6	10	0,2



SSK

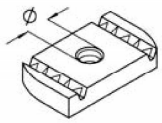


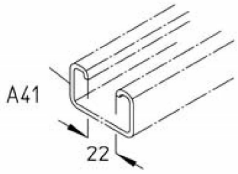
SSK 6			10	0,1
SSK 8			13	0,1
SSK 10			17	0,2

G

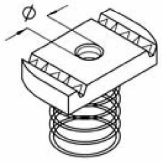
Kotevní matice, šrouby

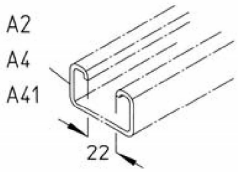
AM 22



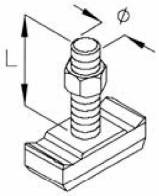


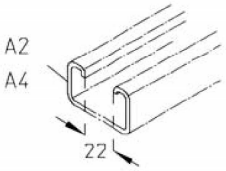
AMF 22



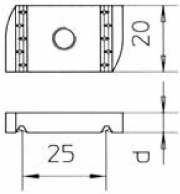


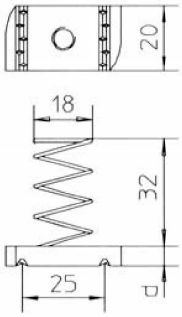
HS 22

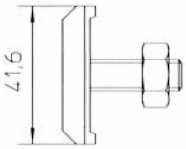




	ø mm	d mm	L mm	kg/100
AM 22 M6	6	6		2,6
AM 22 M8	8	6		2,4
AM 22 M10	10	8		3,3
AM 22 M12	12	9,5		4,2
F				
AM 22 M6F	6	6		2,8
AM 22 M8F	8	6		2,6
AM 22 M10F	10	8		3,5
AM 22 M12F	12	9,5		4,2
AMF 22 M6	6	6		2,8
AMF 22 M8	8	6		2,6
AMF 22 M10	10	8		3,5
AMF 22 M12	12	9,5		4,4
F				
AMF 22 M6F	6	6		3,0
AMF 22 M8F	8	6		2,8
AMF 22 M10F	10	8		3,7
AMF 22 M12F	12	9,5		4,7
HS 22 12x30	12		30	9,5
HS 22 12x40	12		40	10,0
HS 22 12x50	12		50	10,8
HS 22 12x60	12		60	11,4
HS 22 16x40	16		40	16,2
HS 22 16x60	16		60	18,6

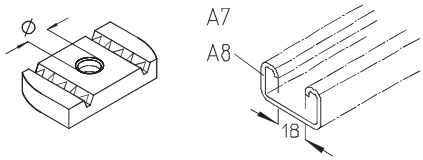




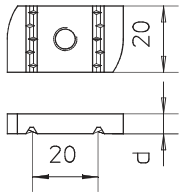


Kotevní matice, šrouby

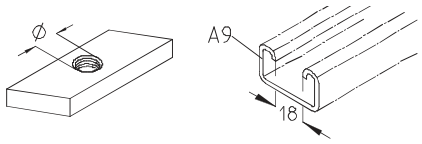
AM 18



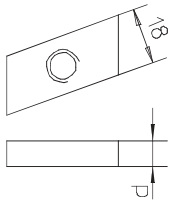
	ø mm	d mm	L mm	kg/100
AM 18 M6	6	6		2,6
AM 18 M8	8	6		2,4
AM 18 M10	10	8		3,3
AM 18 M12	12	9,5		4,2
F E4				
AM 18 M6F	6	6		2,8
AM 18 M8F	8	6		2,6
AM 18 M10F	10	8		3,5
AM 18 M12F	12	9,5		4,5
AM 18 M8E4	8	6		2,9
AM 18 M10E4	10	8		3,6



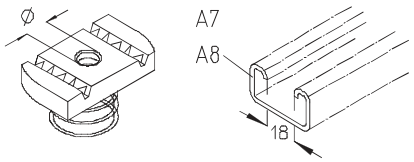
AMA 18



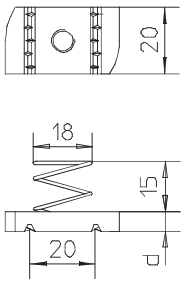
F E			
AMA 18 M6F	6	5	2,7
AMA 18 M8F	8	6	3,0
AMA 18 M10F	10	8	3,8
AMA 18 M6E	6	6	2,7
AMA 18 M8E	8	6	3,0
AMA 18 M10E	10	8	3,8



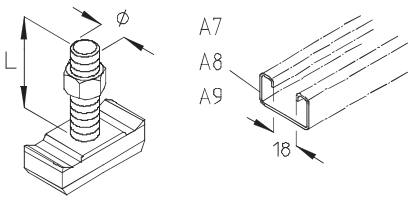
AMF 18



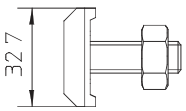
AMF 18 M6	6	6	2,7
AMF 18 M8	8	6	2,5
AMF 18 M10	10	8	3,4
AMF 18 M12	12	9,5	4,3
F			
AMF 18 M6F	6	6	2,9
AMF 18 M8F	8	6	2,7
AMF 18 M10F	10	8	3,6
AMF 18 M12F	12	9,5	4,6



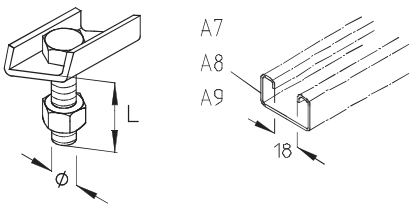
HS 18



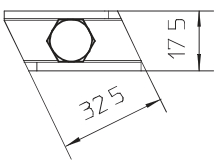
HS 18 10x30	10	30	5,9
HS 18 10x40	10	40	6,3
HS 18 10x50	10	50	6,9
HS 18 10x60	10	60	7,4
HS 18 12x30	12	30	7,4
HS 18 12x40	12	40	7,9
HS 18 12x60	12	60	9,4
HS 18 16x40	16	40	13,4
HS 18 16x60	16	60	16,0
HS 18 16x80	16	80	18,8
E			
HS 18 10x30E4	10	30	6,0
HS 18 10x40E4	10	40	6,5
HS 18 10x50E4	10	50	7,0



AKB



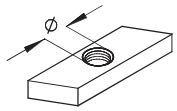
AKB 6x25	6	25	2,4
AKB 8x25	8	25	3,5
AKB 8x35	8	35	3,7
AKB 8x45	8	45	4,0
AKB 10x35	10	35	5,4
AKB 10x45	10	45	5,9
AKB 12x35	12	35	7,0
AKB 12x45	12	45	7,7

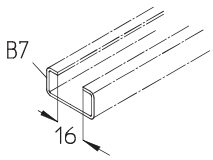


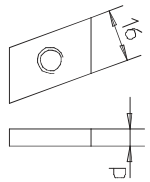
G

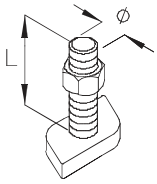
Kotevní matice, šrouby

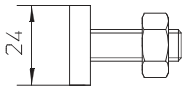
	ø mm	d mm	L mm	kg/100
AM 16				
F				
AM 16 M6F	6	5		1,0
AM 16 M8F	8	5		1,0
HS 16				
HS 16 8x20	8		20	3,0
HS 16 8x40	8		40	3,9
HS 16 10x30	10		30	4,6
HS 16 10x50	10		50	5,8
AM 12				
F **E**				
AM 12 M6F	6	5		1,0
AM 12 M8F	8	5		0,9
AM 12 M8E	8	5		0,9
HS 12				
HS 12 6x30	6		30	1,6
HS 12 6x40	6		40	1,7
HS 12 8x20	8		20	2,0
HS 12 8x30	8		30	2,3
HS 12 8x40	8		40	2,6
HS 12 10x20	10		20	3,0
HS 12 10x30	10		30	3,5
HS 12 10x40	10		40	3,9
E4				
HS 12 10x20E4	10		20	3,1
HS 12 10x30E4	10		30	3,6
HS 12 10x40E4	10		40	4,0
AM 11				
F **E**				
AM 11 M6F	6	5		0,6
AM 11 M6E	6	5		0,6

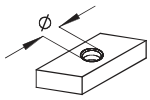


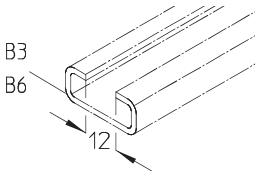


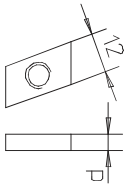


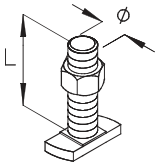


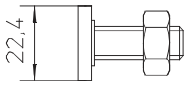


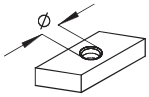


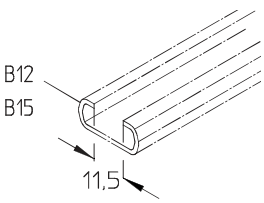


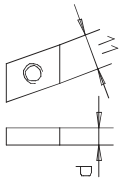






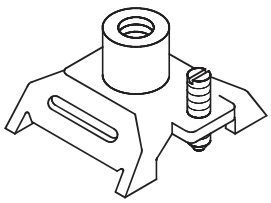


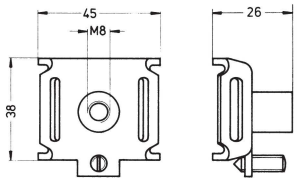




Držáky, pásky

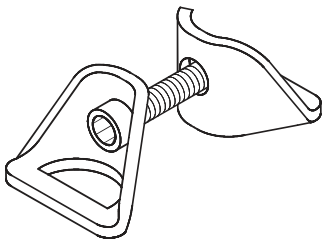
		L m	kg
GP			
F			
GP			0,07

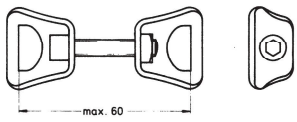




SC

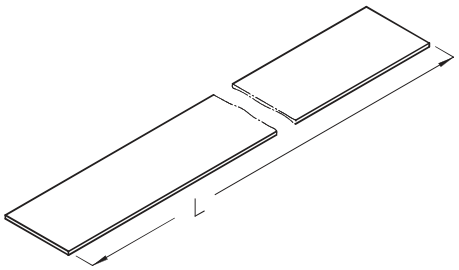
F			
SC			0,07
			D4
včetně	1 x IK 8x40E		

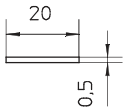




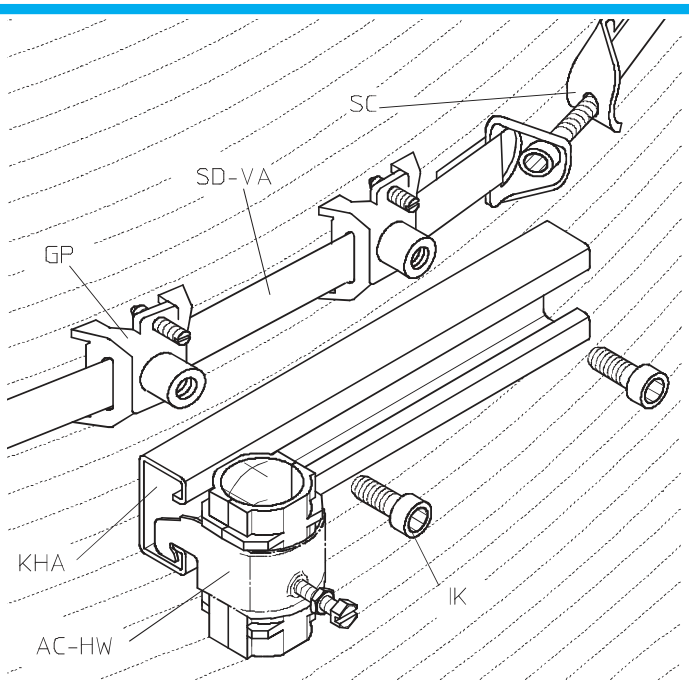
SD-VA

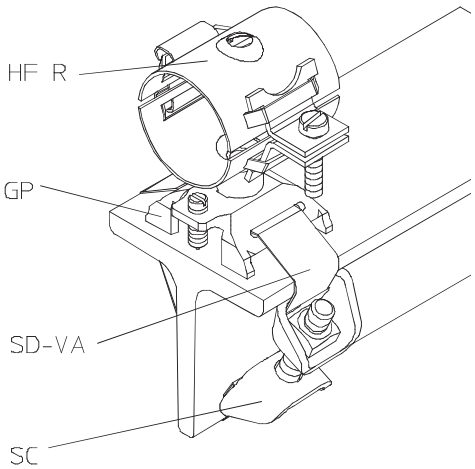
E		
SD-1 VA	1,0	0,08
SD-50 VA	50,0	4,00





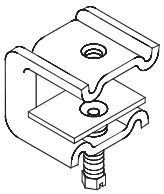
P_{Bruch} = 5 KN
P_{zul} ≤ 2 KN

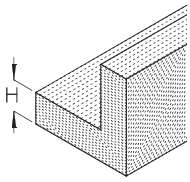




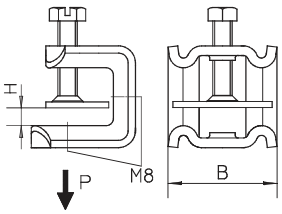
Držáky

MKD

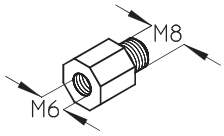




	H mm	B mm	P N	kg
F				
MKD 21	6-21	44	1500	0,19
MKD 40	20-40	44	1300	0,22
E				
MKD 21 VA	6-21	44	1500	0,19
MKD 40 VA	20-40	44	1300	0,22

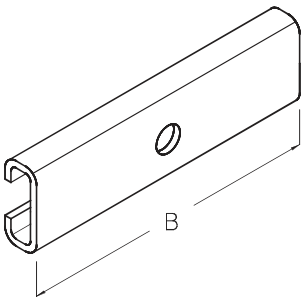


RGW



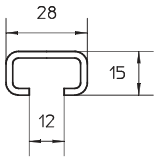
Z				
RGW 8/6				0,01
E				
RGW 8/6 VA				0,01

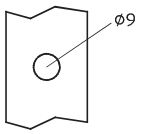
AN

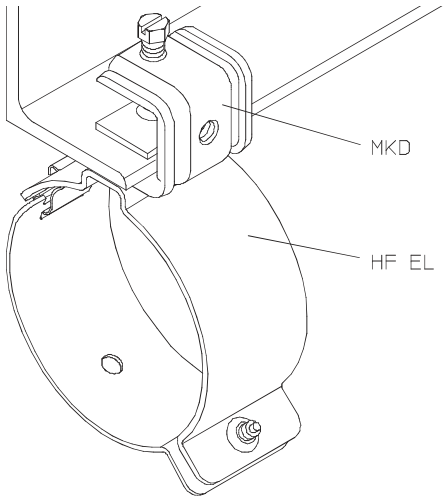


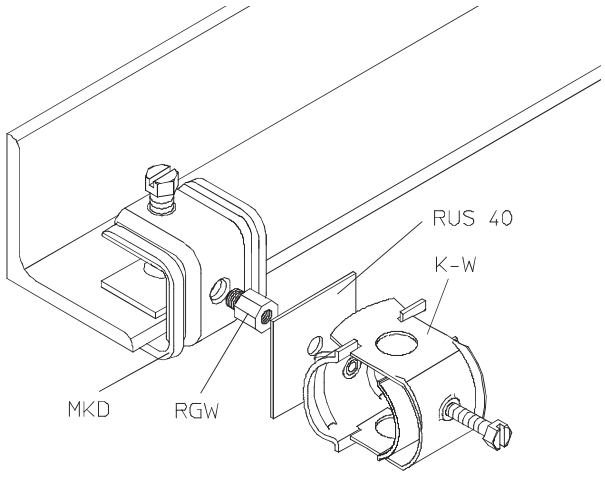
F				
AN 100		100		8,00

K B		A5
K HB		A6



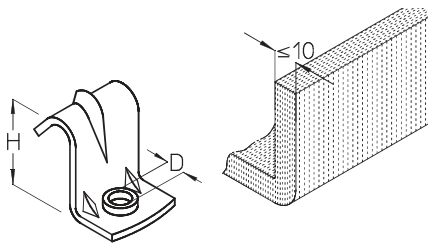




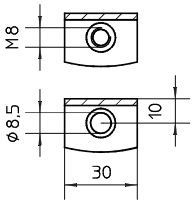


Držáky

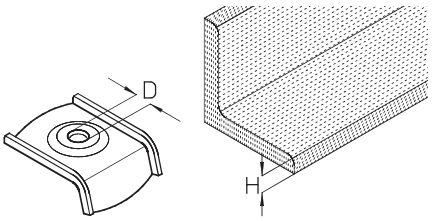
SN



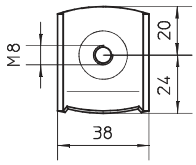
	H mm	D mm	L mm	P kN	kg
F					
SN 25 M/G	25	M 8			0,04
SN 35 M/G	35	M 8			0,05
SN 25 O/G	25	8,5			0,04
SN 35 O/G	35	8,5			0,05



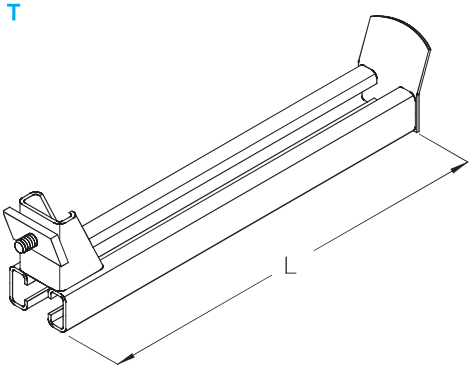
SK



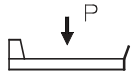
	H mm	D mm	L mm	P kN	kg
F					
SK 4 M8	4	M 8			0,04
SK 6 M8	6	M 8			0,04
SK 8 M8	8	M 8			0,04
SK 10 M8	10	M 8			0,04
SK 12 M8	12	M 8			0,04



T

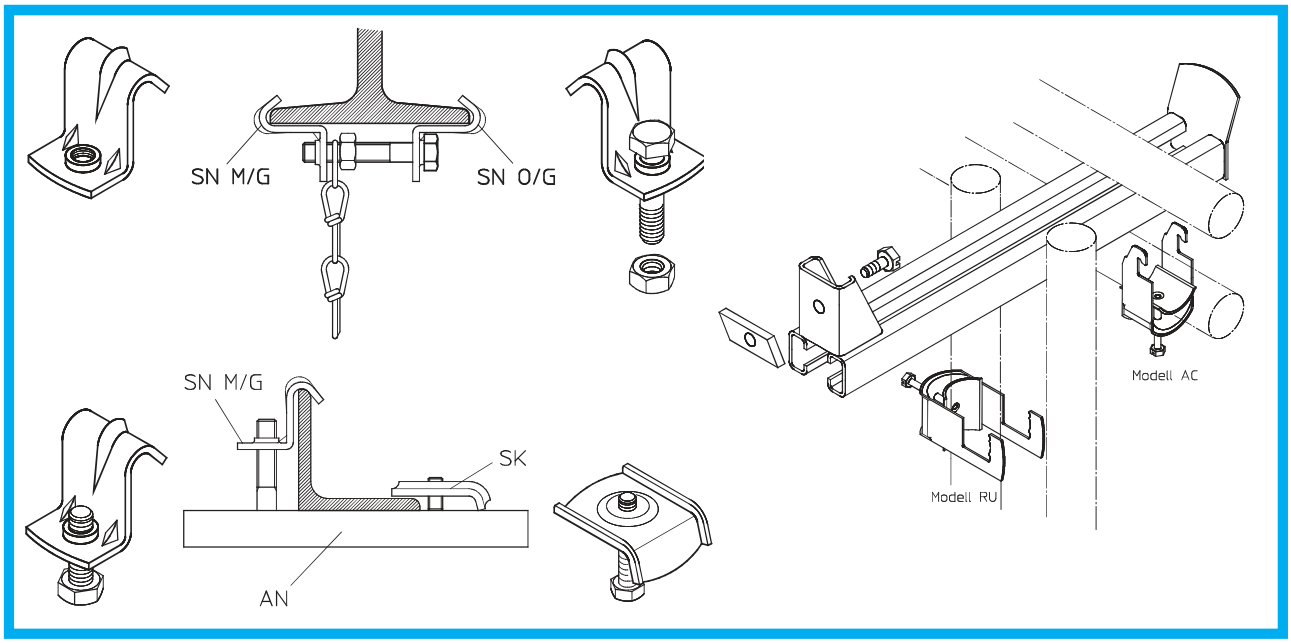


	L mm	P kN	kg
F			
T 20/AM 18	200	3,0	0,50
T 25/AM 18	250	2,4	0,58
T 30/AM 18	300	2,0	0,66
T 35/AM 18	350	1,7	0,74
T 40/AM 18	400	1,5	0,84
T 45/AM 18	450	1,4	0,93
T 50/AM 18	500	1,2	1,00
T 60/AM 18	600	1,0	1,18



včetně 1 x SES 8x20
1 x AMA 18 M 8F

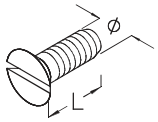
K AC	A2
K RU	A13



D

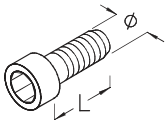
Spojovací materiál

SSV — DIN 963

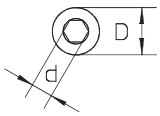


	ø mm	L mm	d mm	D mm	kg/100
SSV 6x10	6	10			0,30
SSV 6x25	6	25			0,50
SSV 6x40	6	40			0,80
E					
SSV 6x10E	6	10			0,30
SSV 8x10E	8	10			0,50

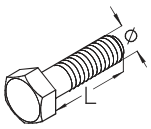
IK — DIN 912



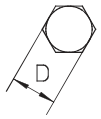
	ø mm	L mm	d mm	D mm	kg/100
IK 8x20	8	20	6	13,3	1,34
IK 8x25	8	25	6	13,3	1,50
IK 8x30	8	30	6	13,3	1,69
IK 8x40	8	40	6	13,3	2,09
E					
IK 8x10VA	8	10	6	13,3	1,03



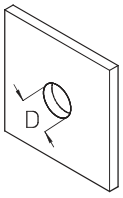
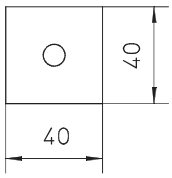
SES — DIN 933



	ø mm	L mm	d mm	D mm	kg/100
SES 8x16	8	16		13	1,10
SES 8x20	8	20		13	1,20
SES 8x25	8	25		13	1,40
SES 8x30	8	30		13	1,60
SES 8x40	8	40		13	1,90
SES 8x110	8	110		13	4,10



RUS



	D mm	kg/100
F		
RUS 40-L 7F	7	1,88
RUS 40-L 9F	9	1,85