

Blind rivet nuts and bolts

Masterfix Mastergrip Blind rivet nuts and bolts

The Mastergrip blind rivet nuts and Masterbolt range is a highly specialized range of blind rivet nuts and bolts.

We offer in our standard stock program a wide variety of

- Sizes : M3 up to M12
- Alloys : aluminium, steel, stainless steel A2 and A4, EPDM
- Head types : cylindrical, countersunk, reduced countersunk
- Body types : round, Hex-T, open and closed end.

The Mastergrip Blind rivet nuts are equipped with knurled bodies, thus providing better grip and higher resistance to torque after setting in soft material.

The diameters of the Mastergrip Blind rivet nuts are adapted to the use of standard drill diameters.

The Masterbolt is a blind riveting bolt providing an external thread-connection and is available in 4 different thread sizes of each 4 different lengths. **All Masterbolts serve an 8.8 strength class.**

Advantages

Can be easily set in thin material

The time consuming tapping of a thread or welding of a blind rivet nut will now no longer be required

Blind rivet nuts have the same properties as a tapped thread in full material, because of the strong "flush flange" after deformation of the rivet nuts

Can be set from one side, where the rear of the material and the inside of the object are inaccessible

The material will not be damaged

Will not deform or cause discolouration of the material

Applications

Automotive industry

Hinges

HVAC applications

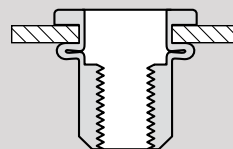
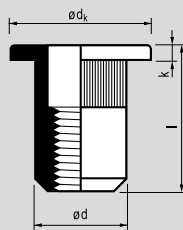
Furniture

Shipbuilding industry

Window frames

Info

Steel
Zinc plated



MASTERGRIP | open end | cylindrical head

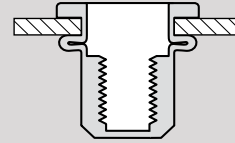
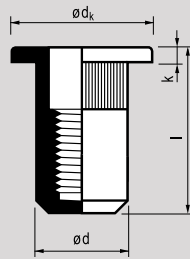
$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset d_k$ [+0/-0,5]	k \leq	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	!	10,5	0,5-2,5	23M03C01	7,0	0,9	4,9	3,0	4.900	990
	*	11,5	2,5-4,0	C02						
$\emptyset 5,0$										
M4	=	11,0	0,5-3,0	23M04C01*	9,0	1,1	5,9	4,5	7.840	1.660
	!	14,0	3,0-5,5	C02						
$\emptyset 6,0$										
M5	=	13,0	0,5-3,0	23M05C01*	10,0	1,1	6,9	7,8	11.070	2.760
	!	16,0	3,0-5,5	C02						
$\emptyset 7,0$	*	19,0	5,5-8,0	C03						
M6	=	16,0	0,5-3,0	23M06C01*	12,0	1,6	8,9	20,0	17.640	3.430
	!	18,5	3,0-5,5	C02						
$\emptyset 9,0$	*	21,0	5,5-8,0	C03						
M8	=	17,5	0,5-3,0	23M08C01*	15,0	1,6	10,9	29,0	27.440	4.410
	=	20,0	3,0-5,5	C02						
$\emptyset 11,0$	*	22,5	5,5-8,0	C03						
	*	25,0	8,0-10,5	C04						
M10	=	19,0	0,5-3,0	23M10C01*	16,0	2,1	11,9	32,0	29.400	4.900
	=	24,0	3,0-6,0	C02						
$\emptyset 12,0$	*	27,0	6,0-9,0	C03						
	*	30,0	9,0-12,0	C04						
M12	=	25,0	1,0-4,0	23M12C01	22,0	2,1	15,9	43,7	48.020	6.860
	*	28,0	4,0-7,0	C02						
$\emptyset 16,0$	*	31,0	7,0-10,0	C03						

* these rivets of range 23-C0 are also available in blister pack.



=	identical to old program
!	improved technical data
*	addition

Steel
Zinc plated

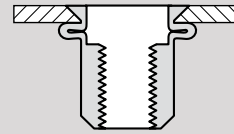
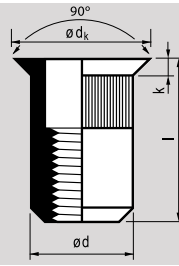


MASTERGRIP | closed end | cylindrical head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0/-0,5]	k [mm]	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	15,0	0,5-2,5	23M03CG1	7,0	0,9	4,9	3,0	4.900	900
	*	16,0	2,5-4,0	CG2						
$\emptyset 5,0$										
M4	=	16,0	0,5-3,0	23M04CG1	9,0	1,1	5,9	4,5	7.840	1.660
	*	19,0	3,0-5,5	CG2						
$\emptyset 6,0$										
M5	=	18,5	0,5-3,0	23M05CG1	10,0	1,1	6,9	7,8	11.070	2.760
	*	21,5	3,0-5,5	CG2						
$\emptyset 7,0$	*	24,5	5,5-8,0	CG3						
M6	=	21,5	0,5-3,0	23M06CG1	12,0	1,6	8,9	20,0	17.640	3.430
	*	24,0	3,0-5,5	CG2						
$\emptyset 9,0$	*	26,5	5,5-8,0	CG3						
M8	=	26,0	0,5-3,0	23M08CG1	15,0	1,6	10,9	29,0	27.440	4.410
	*	28,5	3,0-5,5	CG2						
$\emptyset 11,0$	*	31,0	5,5-8,0	CG3						
	*	33,5	8,0-10,5	CG4						
M10	*	28,0	0,5-3,0	23M10CG1	16,0	2,1	11,9	32,0	29.400	4.900
	*	33,0	3,0-6,0	CG2						
$\emptyset 12,0$	*	36,0	6,0-9,0	CG3						
	*	39,0	9,0-12,0	CG4						

=	identical to old program
!	improved technical data
*	addition

Steel
Zinc plated

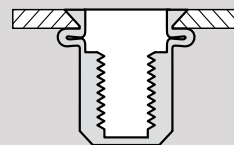
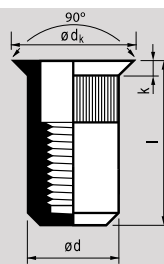


MASTERGRIP | open end | countersunk head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset d_k$ [+0,2/-0,5]	k	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	11,5	1,5-3,5	23M03V01	7,5	1,5	4,9	3,0	4.900	900
	*	12,5	3,5-5,0	V02						
$\emptyset 5,0$										
M4	!	12,5	1,5-4,0	23M04V01	8,5	1,5	5,9	4,0	7.860	2.210
	*	15,0	4,0-6,5	V02						
$\emptyset 6,0$										
M5	!	13,5	1,5-4,0	23M05V01	9,5	1,5	6,9	5,0	10.780	2.320
	*	16,0	4,0-6,5	V02						
$\emptyset 7,0$	*	18,5	6,5-9,0	V03						
M6	!	15,5	1,5-4,0	23M06V01	11,5	1,5	8,9	16,0	16.660	3.660
	*	18,0	4,0-6,5	V02						
$\emptyset 9,0$	*	20,5	6,5-9,0	V03						
M8	!	18,5	1,5-4,0	23M08V01	13,5	1,5	10,9	20,0	30.840	4.720
	*	21,0	4,0-6,5	V02						
$\emptyset 11,0$	*	23,5	6,5-9,0	V03						
M10	=	21,0	2,0-4,5	23M10V01	14,5	1,7	11,9	28,0	34.300	5.050
	*	24,0	4,5-7,5	V02						
$\emptyset 12,0$	*	27,0	7,5-10,5	V03						
M12	*	24,5	2,0-4,5	23M12V01	19,0	1,9	15,9	43,7	48.000	6.800
	*	27,5	4,5-7,5	V02						
$\emptyset 16,0$	*	31,0	7,5-10,5	V03						

=	identical to old program
!	improved technical data
*	addition

Steel
Zinc plated



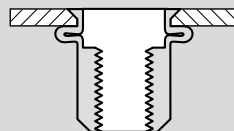
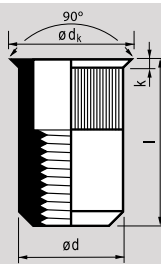
MASTERGRIP | closed end | countersunk head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0,2/-0,5]	k	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	16,0	1,5-3,5	23M03VG1	7,5	1,5	4,9	3,0	4.900	900
 $\emptyset 5,0$	*	17,0	3,5-5,0	VG2						
M4	!	17,5	1,5-4,0	23M04VG1	8,5	1,5	5,9	4,0	7.860	2.210
 $\emptyset 6,0$	*	20,0	4,0-6,5	VG2						
M5	!	20,0	1,5-4,0	23M05VG1	9,5	1,5	6,9	5,0	10.780	2.320
	*	22,5	4,0-6,5	VG2						
$\emptyset 7,0$	*	25,0	6,5-9,0	VG3						
M6	!	23,0	1,5-4,0	23M06VG1	11,5	1,5	8,9	16,0	16.660	3.660
	*	25,5	4,0-6,5	VG2						
$\emptyset 9,0$	*	28,0	6,5-9,0	VG3						
M8	!	27,0	1,5-4,0	23M08VG1	13,5	1,5	10,9	20,0	30.840	4.720
	*	29,5	4,0-6,5	VG2						
$\emptyset 11,0$	*	32,0	6,5-9,0	VG3						
M10	*	30,0	2,0-4,5	23M10VG1	14,5	1,7	11,9	28,0	30.840	4.900
	*	33,0	4,5-7,5	VG2						
$\emptyset 12,0$	*	36,0	7,5-10,5	VG3						
M12	*	34,5	2,0-4,5	23M12VG1	19,0	1,9	15,9	43,7	48.000	6.800
	*	37,5	4,5-7,5	VG2						
$\emptyset 16,0$	*	40,5	7,5-10,5	VG3						

=	identical to old program
!	improved technical data
*	addition

MFX 23-KVO

Steel
Zinc plated



MASTERGRIP | open end | reduced countersunk head

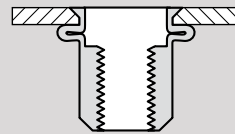
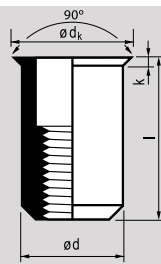
$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0/-0,5]	k	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	9,5	0,5-2,5	23M03KVO1	6,0	0,7	4,9	3,0	3.900	900
$\emptyset 5,0$										
M4	*	10,0	0,5-3,0	23M04KVO1	7,0	0,7	5,9	4,0	6.470	1.620
$\emptyset 6,0$										
M5	*	11,5	0,5-3,0	23M05KVO1	8,0	0,7	6,9	5,0	9.090	2.190
$\emptyset 7,0$										
M6	*	14,0	0,5-3,0	23M06KVO1	10,0	0,7	8,9	15,0	16.660	2.350
$\emptyset 9,0$										
M8	*	15,5	0,5-3,0	23M08KVO1	12,0	0,7	10,9	18,0	21.610	2.840
$\emptyset 11,0$										
M10	*	19,5	0,8-3,5	23M10KVO1	13,5	0,9	11,9	30,0	31.750	4.260
$\emptyset 12,0$										

Replacement for previous MFX 27-V0 program

=	identical to old program
!	improved technical data
*	addition

MFX 26-KVO

Steel
Zinc plated

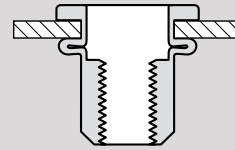
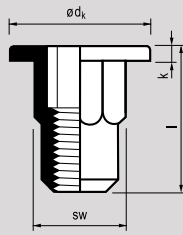


MASTERGRIP | open end | reduced countersunk head

$\varnothing d$	l [+0/-0,5]		Item nr.	$\varnothing d_k$ [+0/-0,3]	k	$\varnothing d$ [+0,03/-0,10]			
[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3 $\varnothing 4,8$	9,0	0,5-1,5	26M03KVO15	5,4	0,6	4,7	1,5	2.690	980
M4 $\varnothing 6,4$	10,4	0,5-2,0	26M04KVO20	6,9	0,6	6,3	5,0	6.800	1.080
M5 $\varnothing 7,2$	11,8	0,5-3,0	26M05KVO30	7,7	0,6	7,1	8,0	8.000	1.470
M6 $\varnothing 9,6$	14,6	0,7-3,3	26M06KVO33	10,5	0,8	9,5	12,5	11.400	1.960
M8 $\varnothing 10,6$	16,0	0,9-3,7	26M08KVO37	11,5	0,8	10,6	16,5	15.700	2.940
M10 $\varnothing 14,2$	18,5	1,0-3,6	26M10KVO36	15,3	0,8	14,2	34,0	18.700	3.920

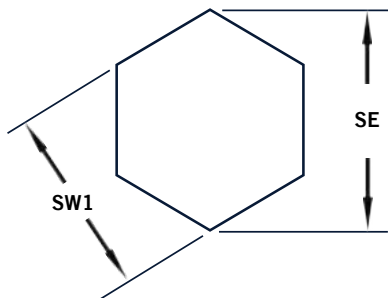
MFX 23-HCO

Steel
Zinc plated



MASTERGRIP | Hex-T open end | cylindrical head

$\emptyset d$		l [+/- 0,2]		Item nr.	$\emptyset dk$ [+0,3/-0,5]	h \leq	SW [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M4	*	13,0	0,5-3,0	23H04C01	9,5	1,1	6,0	5,0	4.900	1.400
SW1 6,1										
M5	*	14,5	0,5-3,0	23H05C01	10,5	1,1	7,0	7,0	8.800	1.900
SW1 7,1										
M6	*	17,0	0,5-3,0	23H06C01	12,5	1,6	9,0	14,0	16.600	2.900
SW1 9,1										
M8	*	19,0	0,5-3,0	23H08C01	14,5	1,6	11,0	22,0	21.500	3.000
SW1 11,1										
M10	*	24,0	0,8-4,0	23H10C01	16,5	2,1	13,0	35,0	29.400	3.400
SW1 13,1										

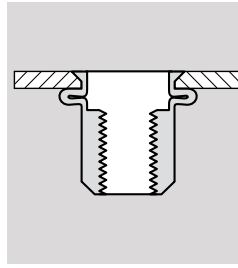
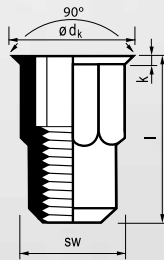


SW: Rivet nut exterior measurement flat side to flat side.
SW1: Hole interior measurement flat side to flat side.
SE: Hole interior measurement corner to corner.(not listed)

=	identical to old program
!	improved technical data
*	addition

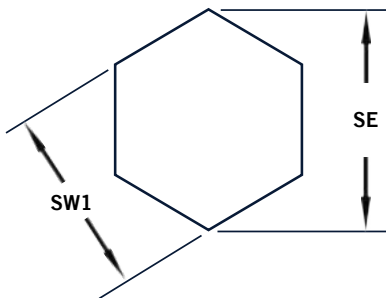
MFX 23-HKVO

Steel
Zinc plated



MASTERGRIP | Hex-T open end | reduced countersunk head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0/-0,6]	k \leq	SW [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	10,5	0,5-2,5	23H03KVO1	6,5	0,8	5,0	3,0	2.900	900
 SW1 5,1										
M4	!	12,5	0,5-3,0	23H04KVO1	7,0	0,8	6,0	5,0	3.530	1.470
 SW1 6,1										
M5	!	14,0	0,5-3,0	23H05KVO1	8,0	0,8	7,0	7,0	4.900	1.760
 SW1 7,1										
M6	!	16,0	0,5-3,0	23H06KVO1	10,0	0,8	9,0	14,0	14.700	2.940
 SW1 9,1										
M8	!	17,0	0,5-3,0	23H08KVO1	12,0	0,8	11,0	21,0	21.560	3.020
 SW1 11,1										
M10	!	20,5	0,8-4,0	23H10KVO1	14,5	0,8	13,0	35,0	29.400	3.430
 SW1 13,1										

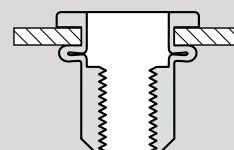
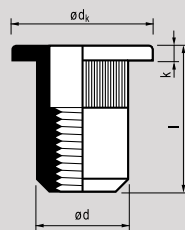


SW: Rivet nut exterior measurement flat side to flat side.
SW1: Hole interior measurement flat side to flat side.
SE: Hole interior measurement corner to corner.(not listed)

=	identical to old program
!	improved technical data
*	addition

MFX 24-C0

Stainless steel [A2]
Polished



MASTERGRIP | open end | cylindrical head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0/-0,5]	k [mm]	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M4	!	11,0	0,5-3,0	24M04C01*	9,0	1,1	5,9	7,0	7.800	2.600
	!	14,0	3,0-4,5	C02						
$\emptyset 6,0$										
M5	!	13,0	0,5-3,0	24M05C01*	10,0	1,1	6,9	12,0	11.760	3.920
	!	16,0	3,0-5,5	C02						
$\emptyset 7,0$	*	19,0	5,5-8,0	C03						
M6	!	16,0	0,5-3,0	24M06C01*	12,0	1,6	8,9	22,2	20.580	5.630
	!	18,5	3,0-5,5	C02						
$\emptyset 9,0$										
M8	!	17,5	0,5-3,0	24M08C01*	15,0	1,6	10,9	30,5	26.460	7.800
	!	20,0	3,0-5,5	C02						
$\emptyset 11,0$										
M10	!	19,0	0,5-3,0	24M10C01	16,0	2,1	12,9	39,0	35.280	8.800
	!	24,0	3,0-6,0	C02						
$\emptyset 13,0$										

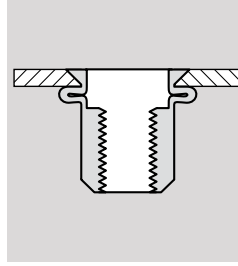
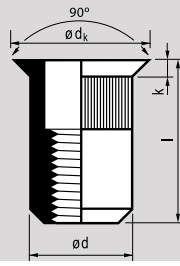
* these rivets of range 24-C0 are also available in blister pack.



=	identical to old program
!	improved technical data
*	addition

MFX 24-V0

Stainless steel [A2]
Polished



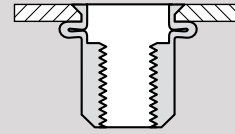
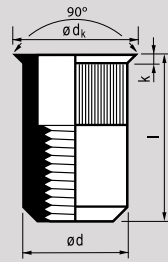
MASTERGRIP | open end | countersunk head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0,2/-0,5]	k \leq	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	11,5	1,5-3,5	24M03V01	7,5	1,5	4,9	3,5	5.800	1.400
 $\emptyset 5,0$	*	12,5	3,5-4,5	V02						
M4	!	12,5	1,5-4,0	24M04V01	8,5	1,5	5,9	9,0	10.130	3.720
 $\emptyset 6,0$										
M5	!	13,5	1,5-4,0	24M05V01	9,5	1,5	6,9	10,5	12.250	4.020
 $\emptyset 7,0$	*	16,0	4,0-6,5	V02						
M6	!	15,5	1,5-4,0	24M06V01	11,5	1,5	8,9	21,0	20.580	5.560
 $\emptyset 9,0$	*	18,0	4,0-6,5	V02						
M8	!	18,5	1,5-4,0	24M08V01	13,5	1,5	10,9	31,0	30.840	7.640
 $\emptyset 11,0$	*	21,0	4,0-6,5	V02						
M10	!	21,0	2,0-4,5	24M10V01	15,5	1,8	12,9	33,0	34.300	8.110
 $\emptyset 13,0$	*	24,0	4,5-7,5	V02						
M12	*	24,5	2,0-4,5	24M12V01	19,0	2,0	15,9	50,0	53.900	9.800
 $\emptyset 16,0$	*	27,5	4,5-7,5	V02						

=	identical to old program
!	improved technical data
*	addition

MFX 24-KVO

Stainless steel [A2]
Polished



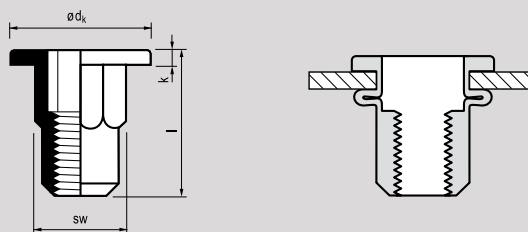
MASTERGRIP | open end | reduced countersunk head

Ø d		l [+0,5/-0]		Item nr.	Ø dk [+0/-0,5]	k [mm]	Ø d [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M4	!	10,0	0,5-3,0	24M04KVO1	7,0	0,9	5,9	9,0	6.860	2.940
Ø 6,0										
M5	!	11,5	0,5-3,0	24M05KVO1	8,0	0,9	6,9	10,5	11.760	4.030
Ø 7,0										
M6	!	14,0	0,5-3,0	24M06KVO1	10,0	0,9	8,9	21,0	18.620	5.230
Ø 9,0										
M8	!	15,5	0,5-3,0	24M08KVO1	12,0	0,9	10,9	31,0	25.480	5.400
Ø 11,0										
M10	!	19,5	0,8-3,5	24M10KVO1	14,5	1,1	12,9	32,0	33.320	5.880
Ø 13,0										










=	identical to old program
!	improved technical data
*	addition

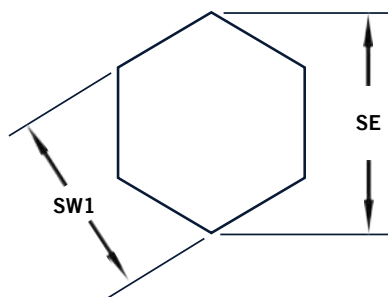
MFX 24-HCO

Stainless steel [A2]
Polished



MASTERGRIP | Hex-T open type | cylindrical head

$\emptyset d$		l [+0/-0,2]		Item nr.	$\emptyset dk$ [+0,3/-0,5]	k [mm]	SW [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M4	!	13,0	0,5-3,0	24H04C01	9,5	1,1	6,0	12,0	10.190	2.950
										
SW1 6,1										
M5	!	14,5	0,5-3,0	24H05C01	10,5	1,1	7,0	14,0	12.740	3.430
										
SW1 7,1										
M6	!	17,0	0,5-3,0	24H06C01	12,5	1,6	9,0	26,0	21.560	4.700
										
SW1 9,1										
M8	!	19,0	0,5-3,0	24H08C01	14,5	1,6	11,0	39,0	37.420	6.860
										
SW1 11,1										
M10	!	24,0	0,8-4,0	24H10C01	16,5	2,1	13,0	45,0	63.700	7.840
										
SW1 13,1										

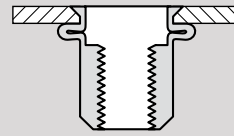
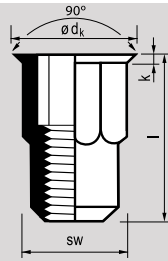


SW: Rivet nut exterior measurement flat side to flat side.
SW1: Hole interior measurement flat side to flat side.
SE: Hole interior measurement corner to corner.(not listed)

=	identical to old program
!	improved technical data
*	addition

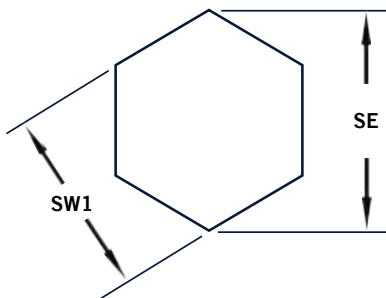
MFX 24-HKVO

Stainless steel [A2]
Polished



MASTERGRIP | Hex-T open end | reduced countersunk head

Ø d		l [+0,5/-0]		Item nr.	Ø dk [+0/-0,6]	k ±	SW [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M4	!	12,5	0,5-3,0	24H04KVO1	7,0	0,9	6,0	12,0	8.240	2.950
SW1 6,1										
M5	=	14,0	0,5-3,0	24H05KVO1	8,0	0,9	7,0	12,0	11.760	2.950
SW1 7,1										
M6	=	16,0	0,5-3,0	24H06KVO1	10,0	0,9	9,0	21,0	21.560	3.820
SW1 9,1										
M8	=	17,0	0,5-3,0	24H08KVO1	12,0	0,9	11,0	30,0	24.500	3.920
SW1 11,1										
M10	=	20,5	0,8-4,0	24H10KVO1	14,5	1,1	13,0	40,0	47.040	5.010
SW1 13,1										

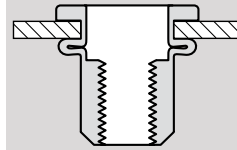
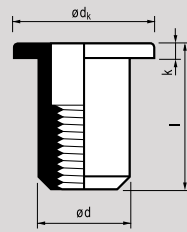


SW: Rivet nut exterior measurement flat side to flat side.
SW1: Hole interior measurement flat side to flat side.
SE: Hole interior measurement corner to corner.(not listed)

=	identical to old program
!	improved technical data
*	addition

MFX 28-C0

Stainless steel [A4]
AISI 316 Polished



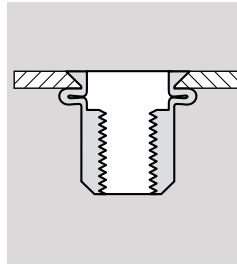
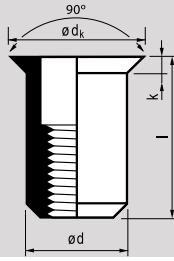
MASTERGRIP | open end | cylindrical head

$\varnothing d$		l [+0,5/-0]		Item nr.	$\varnothing dk$ [+0/-0,5]	l_k	$\varnothing d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M5	*	13,0	0,5-3,0	28M05C01	10,0	1,1	6,9	12,0	11.760	3.920
$\varnothing 7,0$										
M6	*	16,0	0,5-3,0	28M06C01	12,0	1,6	8,9	22,2	20.580	5.630
$\varnothing 9,0$										
M8	*	17,5	0,5-3,0	28M08C01	15,0	1,6	10,9	30,5	26.460	7.800
$\varnothing 11,0$										

=	identical to old program
!	improved technical data
*	addition

MFX 28-V0

Stainless steel [A4]
AISI 316 Polished



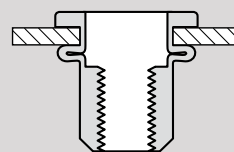
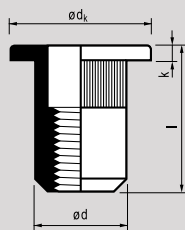
MASTERGRIP | open end | countersunk head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0,2/-0,5]	k [mm]	$\emptyset d$ [+0/-0,12]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M5	*	13,5	1,5-4,0	28M05V01	9,5	1,5	6,9	10,5	12.250	4.020
$\emptyset 7,0$										
M6	*	15,5	1,5-4,0	28M06V01	11,5	1,5	8,9	21,0	20.580	5.560
$\emptyset 9,0$										
M8	*	18,5	1,5-4,0	28M08V01	13,5	1,5	10,9	31,0	30.840	7.640
$\emptyset 11,0$										

=	identical to old program
!	improved technical data
*	addition

MFX 20-C0

Aluminium [AlMg 5]
Polished



MASTERGRIP | open end | cylindrical head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0/-0,5]	k \leq	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	10,5	0,5-2,5	20M03C01	7,0	0,9	4,9	2,0	2.000	700
	*	11,5	2,5-3,5	C02						
$\emptyset 5,0$										
M4	!	11,0	0,5-3,0	20M04C01*	9,0	1,1	5,9	4,0	2.840	1.070
	!	14,0	3,0-4,5	C02						
$\emptyset 6,0$										
M5	!	13,0	0,5-3,0	20M05C01*	10,0	1,1	6,9	5,0	4.900	1.170
	!	16,0	3,0-5,5	C02						
$\emptyset 7,0$	*	19,0	5,5-8,0	C03						
M6	!	16,0	0,5-3,0	20M06C01*	12,0	1,6	8,9	11,3	9.300	2.280
	!	18,5	3,0-5,5	C02						
$\emptyset 9,0$	*	21,0	5,5-8,0	C03						
M8	!	17,5	0,5-3,0	20M08C01*	15,0	1,6	10,9	14,6	14.700	2.450
	!	20,0	3,0-5,5	C02						
$\emptyset 11,0$	*	22,5	5,5-8,0	C03						
	*	25,0	8,0-10,5	C04						
M10	!	19,0	0,5-3,0	20M10C01*	16,0	2,1	11,9	20,0	21.500	3.820
	!	24,0	3,0-6,0	C02						
$\emptyset 12,0$	*	27,0	6,0-9,0	C03						
	*	30,0	9,0-12,0	C04						
M12	*	25,0	1,0-4,0	20M12C01	22,0	2,1	15,9	23,0	27.400	4.400
	*	28,0	4,0-7,0	C02						
$\emptyset 16,0$	*	31,0	7,0-10,0	C03						

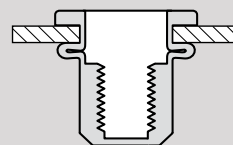
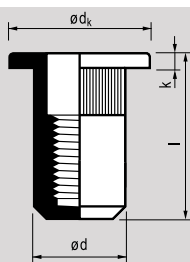
Replacement for previous MFX 22-C0 program

* these rivets of range 20-C0 are also available in blister pack.



=	identical to old program
!	improved technical data
*	addition

Aluminium [AlMg 5]
Polished

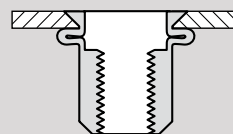
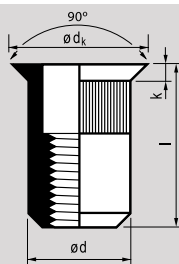


MASTERGRIP | closed end | cylindrical head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0/-0,5]	k	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	15,0	0,5-2,5	20M03CG1	7,0	0,9	4,9	2,0	2.000	700
 $\emptyset 5,0$	*	16,0	2,5-3,5	CG2						
M4	*	16,0	0,5-3,0	20M04CG1	9,0	1,1	5,9	4,0	2.800	1.000
 $\emptyset 6,0$	*	19,0	3,0-4,5	CG2						
M5	*	18,5	0,5-3,0	20M05CG1	10,0	1,1	6,9	5,0	4.900	1.100
	*	21,5	3,0-5,5	CG2						
$\emptyset 7,0$	*	24,5	5,5-8,0	CG3						
M6	*	21,5	0,5-3,0	20M06CG1	12,0	1,6	8,9	11,0	9.300	2.200
	*	24,0	3,0-5,5	CG2						
$\emptyset 9,0$	*	26,5	5,5-8,0	CG3						
M8	*	26,0	0,5-3,0	20M08CG1	15,0	1,6	10,9	14,6	14.700	2.400
	*	28,5	3,0-5,5	CG2						
$\emptyset 11,0$	*	31,0	5,5-8,0	CG3						
	*	33,5	8,0-10,5	CG4						
M10	*	28,0	0,5-3,0	20M10CG1	16,0	2,1	11,9	19,9	21.500	3.800
	*	33,0	3,0-6,0	CG2						
$\emptyset 12,0$	*	36,0	6,0-9,0	CG3						
	*	39,0	9,0-12,0	CG4						

=	identical to old program
!	improved technical data
*	addition

Aluminium [AlMg 5]
Polished



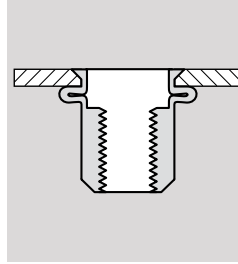
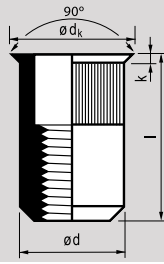
MASTERGRIP | open end | countersunk head

$\emptyset d$		l [+0,5/-0]		Item nr.	$\emptyset dk$ [+0,2/-0,5]	k [mm]	$\emptyset d$ [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	11,5	1,5-3,5	20M03V01	7,5	1,5	4,9	2,0	2.000	700
	*	12,5	3,5-4,5	V02						
$\emptyset 5,0$										
M4	*	12,5	1,5-4,0	20M04V01	8,5	1,5	5,9	4,0	2.840	1.070
	*	15,0	4,0-5,5	V02						
$\emptyset 6,0$										
M5	*	13,5	1,5-4,0	20M05V01	9,5	1,5	6,9	5,0	4.900	1.170
	*	16,0	4,0-6,5	V02						
$\emptyset 7,0$	*	18,5	6,5-9,0	V03						
M6	*	15,5	1,5-4,0	20M06V01	11,5	1,5	8,9	11,3	9.300	2.280
	*	18,0	4,0-6,5	V02						
$\emptyset 9,0$	*	20,5	6,5-9,0	V03						
M8	*	18,5	1,5-4,0	20M08V01	13,5	1,5	10,9	14,6	14.700	2.400
	*	21,0	4,0-6,5	V02						
$\emptyset 11,0$	*	23,5	6,5-9,0	V03						
M10	*	21,0	2,0-4,5	20M10V01	14,5	1,7	11,9	20,0	21.500	3.820
	*	24,0	4,5-7,5	V02						
$\emptyset 12,0$	*	27,0	7,5-10,5	V03						
M12	*	24,5	2,0-4,5	20M12V01	19,0	1,9	15,9	23,0	27.400	4.400
	*	27,5	4,5-7,5	V02						
$\emptyset 16,0$	*	31,0	7,5-10,5	V03						

=	identical to old program
!	improved technical data
*	addition

MFX 20-KVO

Aluminium [AlMg 5]
Polished



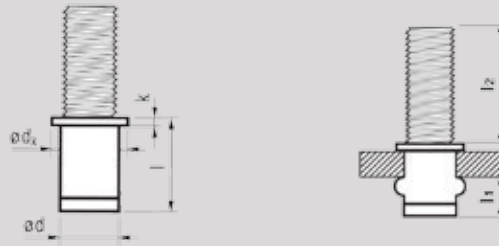
MASTERGRIP | open end | reduced countersunk head

Ø d		l [+0,5/-0]		Item nr.	Ø dk [+0/-0,5]	k	Ø d [+0/-0,2]			
[mm]		[mm]	[mm]		[mm]	[mm]	[mm]	[Nm]	[N]	[N]
M3	*	9,5	0,5-2,5	20M03KVO1	6,0	0,7	4,9	2,0	1.700	700
Ø 5,0										
M4	*	10,0	0,5-3,0	20M04KVO1	7,0	0,7	5,9	4,0	2.840	1.080
Ø 6,0										
M5	*	11,5	0,5-3,0	20M05KVO1	8,0	0,7	6,9	4,5	5.250	1.180
Ø 7,0										
M6	*	14,0	0,5-3,0	20M06KVO1	10,0	0,7	8,9	9,6	9.680	1.960
Ø 9,0										
M8	*	15,5	0,5-3,0	20M08KVO1	12,0	0,7	10,9	14,0	15.680	2.060
Ø 11,0										






Replacement for previous MFX 21-VO program

=	identical to old program
!	improved technical data
*	addition

Steel
Zinc plated



MASTERBOLT I cylindrical head

$\varnothing d$	l [+1,0/-0,5]		Item nr.	$\varnothing d_k$	k	$\varnothing d$	l_1	l_2
[mm]	[mm]	[mm]		[mm]	[mm]	[mm]	[mm]	[mm]
M4	8,0	0,5-2,0	29M042010	8,0	0,5	5,4	3,5	10
	8,0	0,5-2,0	2015	8,0	0,5	5,4	3,5	15
$\varnothing 5,5$	8,0	2,0-3,0	3010	8,0	0,5	5,4	4,0	10
	8,0	2,0-3,0	3015	8,0	0,5	5,4	4,0	15
M5	9,0	0,5-2,0	29M052010	9,0	0,8	6,5	4,5	10
	9,0	0,5-2,0	2015	9,0	0,8	6,5	4,5	15
$\varnothing 6,6$	10,5	2,0-3,5	3510	9,0	0,8	6,5	4,5	10
	10,5	2,0-3,5	3515	9,0	0,8	6,5	4,5	15
M6	10,0	0,5-2,5	29M062510	10,0	1,0	7,7	5,0	10
	10,0	0,5-2,5	2515	10,0	1,0	7,7	5,0	15
$\varnothing 7,8$	11,5	2,5-4,0	4010	10,0	1,0	7,7	5,0	10
	11,5	2,5-4,0	4015	10,0	1,0	7,7	5,0	15
M8	12,5	1,0-3,0	29M083015	12,0	1,5	9,8	7,0	15
	12,5	1,0-3,0	3020	12,0	1,5	9,8	7,0	20
$\varnothing 9,9$	15,0	3,0-5,0	5015	12,0	1,5	9,8	7,0	15
	15,0	3,0-5,0	5020	12,0	1,5	9,8	7,0	20

Rivet bolts are comparable to DIN bolts - Class 8.8

Masterfix RUBNUT

The elastic Masterfix RUBNUT blind rivet nut is available in various lengths and sizes with grip ranges from 0.4 up to 56.0 mm.

Advantages

From one side applicable, using common tools

Absorb vibration due to high elasticity

Suitable for thin, thick and brittle materials

Watertight seal

No electric conduction

Can very easily be dismantled

Applications

Housing of ventilators and fans, dish washers, refrigerators, etc.

Fixing for print covers

Head lights for cars

Sirens and horns

Electronic sensors

Pipes, glass and plywood

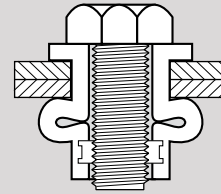
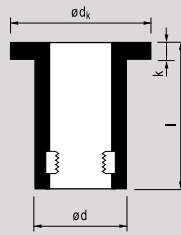
Etc.

Note:











- Prevent contact with oil and/or solvents
- RUBNUTS should not be used in surroundings with temperatures below -30°C and above +30°C

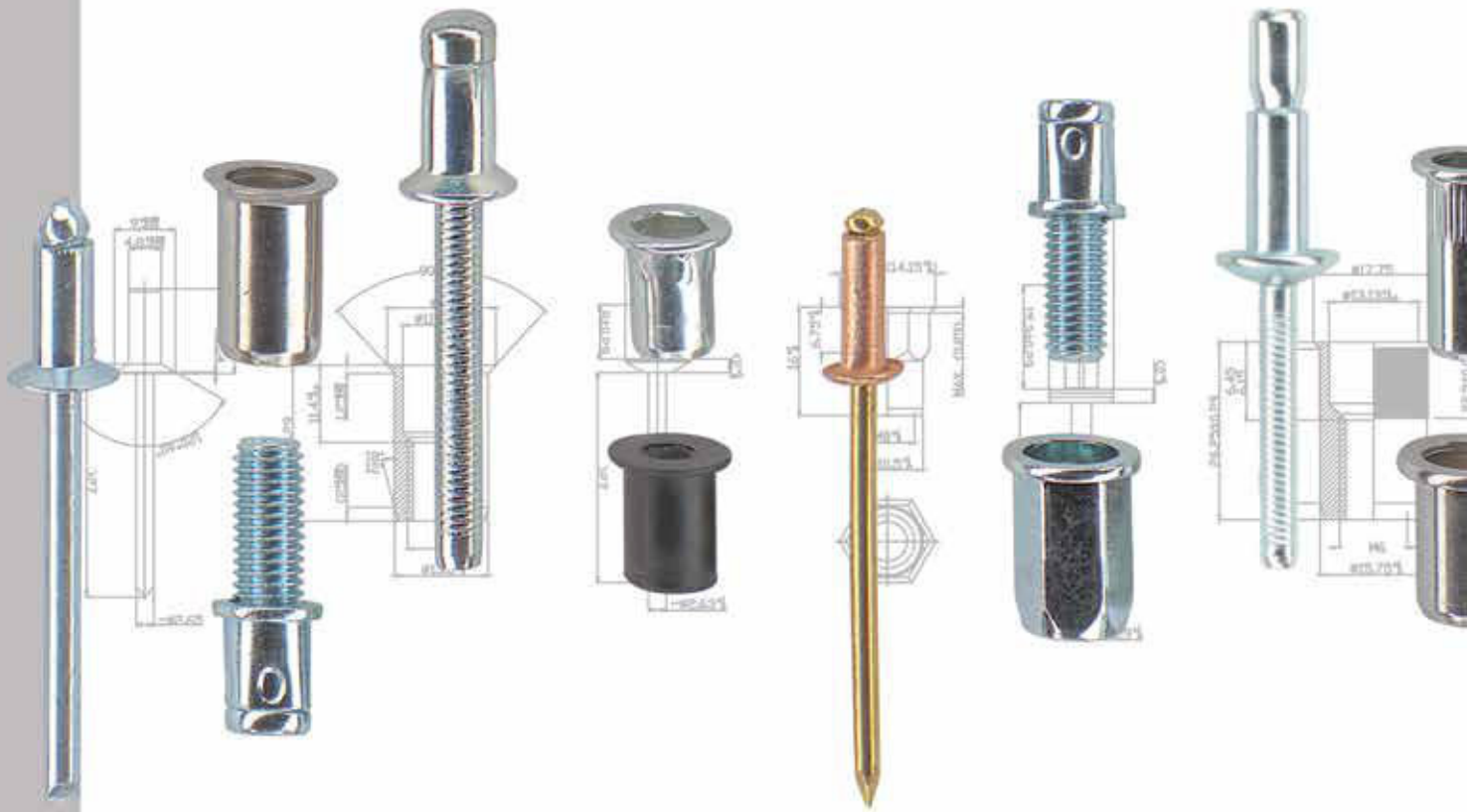
Info

E.P.D.M. body
Brass nut insert



RUBNUT | open end | cylindrical head

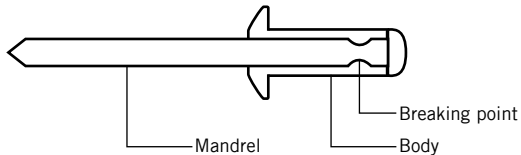
$\varnothing d$	l		Item nr.	$\varnothing d_k$ [+0,5/-0,8]	k [+/-0,3]	$\varnothing d$	 tightning torque [Nm]	Hardness Shore A
[mm]	[mm]	[mm]		[mm]	[mm]	[mm]		
M3	12,6	0,4-4,0	25M03C0040	11,0	1,2	7,9	0,25-0,50	60
 \varnothing [8,3 max]								
M4	12,6	0,4-4,0	25M04C0040	11,0	1,2	7,9	0,25-0,40	70
 \varnothing [8,3 max]								
M5	14,1	0,4-4,9	25M05C0049	12,7	0,9	9,6	0,35-0,50	60
	21,5	4,0-10,0	CO116	14,0	0,9	9,6	0,30-0,90	60
\varnothing [9,9 max]	26,5	7,9-15,0	CO163	14,0	1,3	9,6	0,30-0,70	60
	39,0	20,5-30,0	CO300	14,0	1,3	9,6	0,60-1,00	60
M6	16,0	0,4-4,0	25M06C0028	16,0	1,3	12,7	0,60-1,00	60
	21,1	0,8-4,7	CO047	19,1	4,8	12,7	0,80-1,00	70
\varnothing [13,0 max]	26,7	6,4-11,5	CO110	16,3	2,0	12,7	0,80-1,00	70
M8	18,3	0,4-4,0	25M08C0040	21,5	3,2	15,9	1,00-1,50	60
	27,9	3,9-9,5	CO095	21,5	5,7	15,9	1,00-1,60	60
\varnothing [16,2 max]								
M8	50,0	15,0-35,0	25M08C0390	20,0	1,6	18,0	3,00-4,00	60
 \varnothing [18,3 max]								
M10	55,0	19,0-38,0	25M10C0400	22,5	1,3	20,0	4,50-5,50	60
 \varnothing [20,3 max]								
M12	79,0	38,0-56,0	25M12C0640	27,0	1,3	24,0	6,00-7,00	60
 \varnothing [24,3 max]								



Technical info

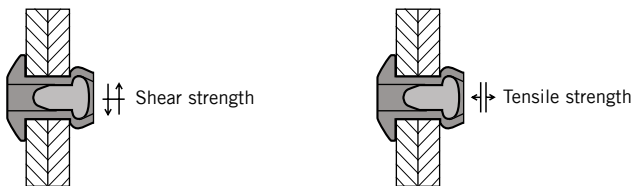
Blind rivet breaking point

The rivet is made of two parts namely, the body and the mandrel. The body is deformed when the rivet is set and it is this part which clamps the materials together. The function of the mandrel is to deform the body of the rivet. The mandrel is therefore always stronger than the body. The mandrel breaks off at its specific breaking point. The breaking point ensures that the mandrel breaks off at the right moment so that the body is correctly deformed. The breaking load can be adjusted so that the mandrel breaks at a sooner or a later point of time.



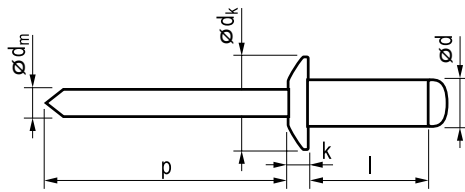
Tensile and shear strength

The tensile strength is the maximum force the rivet, rivet nut or rivet bolt can bear lengthways (see arrows) before it gives out. The tensile strength is obtained through tests and is always the smallest average value. The shear strength is the maximum force the rivet, rivet nut or rivet bolt can bear vertical to its length (see arrows) before it gives out. The shear strength is obtained through tests and is always the smallest average value. By changing the breaking point, the shear strength will be increased or decreased. Both tensile and shear strength are expressed in Newton ($1 \text{ kg} = 10 \text{ N}$).



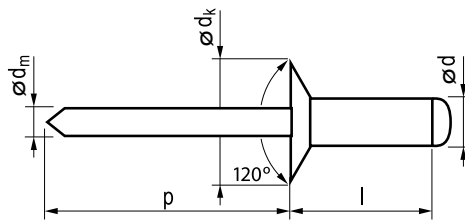
Technical details

Dimensioning rivets

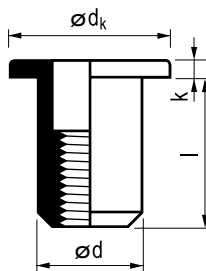


Standard rivet (all sizes in mm)

- Ø d = Rivet body diameter
- Ø d_k = Head diameter
- Ø d_m = Mandrel diameter
- k = Head height
- l = Rivet body length
- p = Mandrel length

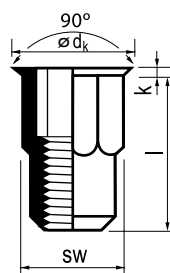


Dimensioning rivet nuts



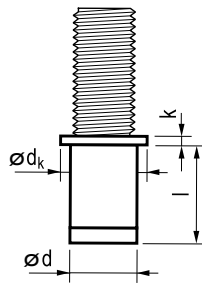
Standard rivet nut (all sizes in mm)

- Ø d = Rivet nut body diameter
- Ø d_k = Head diameter
- k = Head height
- l = Rivet nut body length
- sw = Key size



Technical details

Dimensioning rivet bolts



Standard rivet bolt (all sizes in mm)

$\varnothing d$ = Rivet nut body diameter

$\varnothing d_k$ = Head diameter

k = Head height

l = Rivet nut body length

Technical details

Aluminium AL 99,5

Low weight

Easy to deform

Highly electrical and warmth conductive

Aluminium alloys AlMg

Solid and strong - easy to polish

If the degree of Mg increases, the strength of the rivet increases and the deformability decreases

Steel

Suitable for heavy constructions

Easy to deform

Easy to coat (e.g. with anti-corrosion coating)

Stainless steel

Highly resistant to corrosion

Suitable for heavy constructions

A4 has a higher resistance to acids than A2

Copper

Highly electrical and warmth conductive

Easy to deform

Suitable for soldering

Material features

Contact corrosion

When different metals come in contact with each other, contact corrosion will arise. The table below shows how the different materials combine.

Material rivet body	Material to be connected			
	Aluminium	Copper	Steel	Stainl.steel
Aluminium	++	--	+	+
Copper	--	++	--	+
Steel	+	--	++	++
Stainl. steel	+	+	++	++
i Monell [®]	--	+	++	+

++ very good | + good | - moderate | -- bad

Coatings

Corrosion can never be reduced to 0%. However, coatings can help to reduce the chance of corrosion or delay corrosion:

Painting

2-Components painting is possible in many colors. All RAL-colours can be delivered on request.

Zinc plating

This is a coating obtained through electrolysis and consists of a Zinc-iron alloy. This coating is characterized by a high resistance to wear and tear.

Material features

STANLEY
Engineered Fastening

Edition September 2015

