

Cátalogo SAS 670 / 800 Ø 18 - 75 mm

Catalogue SAS 670 / 800 Ø 18 - 75 mm

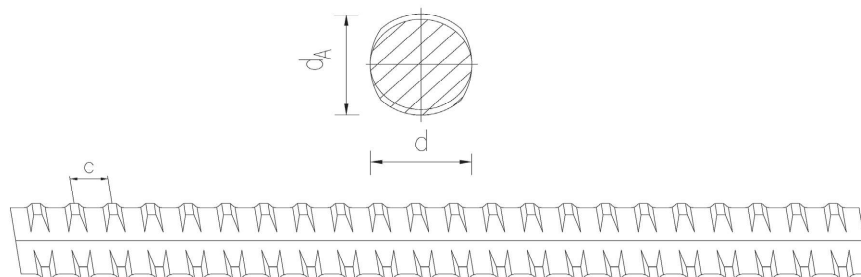


SAS SYSTEMS

 **SAH**
Stahlwerk Annahütte

SAS barras roscadas / SAS thread bars

SAS 670 / 800 Ø 18 - 75 mm



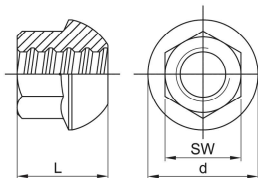
SAS barra roscada
laminada en caliente, corrugada - de paso derecho

SAS thread bar
hot rolled, ribbed - right hand thread

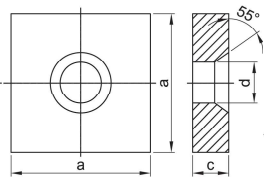
d	[mm]	18	22	25	28	30	35	43	50	57,5	63,5	75
max d _A	[mm]	21	25	28	32	34	40	48	55	63	70	82
c	[mm]	8	8	10	11	11	14	17	18	20	21	24
$f_{yk} (f_{0,2k}) / f_{tk} / A_{10}^{1)}$		670 N/mm ² / 800 N/mm ² / ≥ 5 %										
F _{yk} (F _{0,2k})	[kN]	170	255	329	413	474	645	973	1315	1740	2122	2960
F _{tk}	[kN]	204	304	393	493	565	770	1162	1570	2077	2534	3535
A	[mm ²]	254	380	491	616	707	962	1452	1963	2597	3167	4418
G	[kg/m]	2,00	2,98	3,85	4,83	5,55	7,55	11,40	15,40	20,38	24,86	34,68

1) Deformación total porcentual en caso de carga máxima / percentage total elongation at maximum force
Los pesos indicados son valores promedio. Los pesos reales pueden variar por tolerancias de fabricación.
Weight specifications are average values. The actual values may deviate due to fabrication tolerances.

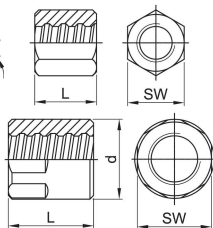
**tuerca de collar
esférico 55°
dome nut 55°**



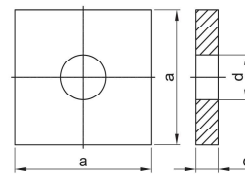
**placa de anclaje
cono 55°
anchor plate cone 55°**



**tuerca de anclaje recta
anchor nut flat**

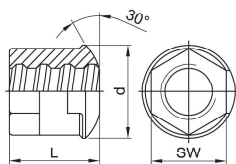


placa de anclaje recta anchor plate flat

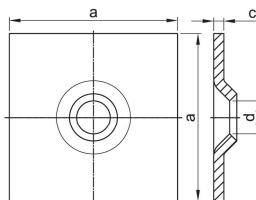


Ø [mm]	SW x L x d [mm]	[kg]	a x c x d [mm]	[kg]	SW x L x d [mm]	[kg]	a x c x d [mm]	[kg]	a x c x d [mm]	[kg]
	TR 2001		TR 2011		TR 2002		TR 2138		TR 2139	
18	32 x 35 x 43	0,18	100 x 25 x 27	2,20	36 x 45	0,29	-	-	100 x 25 x 23	1,85
22	36 x 45 x 53	0,32	110 x 30 x 32	2,62	41 x 50	0,39	-	-	110 x 30 x 27	2,68
25	41 x 50 x 60	0,43	125 x 30 x 35	3,39	46 x 55	0,53	110 x 25 x 30	2,2	125 x 30 x 30	3,48
28	46 x 55 x 67	0,62	135 x 35 x 40	4,59	50 x 60	0,67	115 x 30 x 30	2,85	120 x 30 x 34	3,18
30	50 x 60 x 71	0,66	145 x 35 x 40	5,32	55 x 65	0,90	130 x 30 x 36	3,7	130 x 35 x 36	4,36
35	60 x 70 x 83	1,30	170 x 40 x 47	8,36	65 x 70	1,38	150 x 35 x 42	5,7	150 x 40 x 42	6,63
43	70 x 85 x 102	2,22	210 x 50 x 58	15,90	80 x 90	2,62	185 x 45 x 50	11,4	185 x 55 x 50	13,93
50	80 x 95 x 116	3,31	240 x 55 x 70	22,59	80 x 100 x 90	2,94	210 x 50 x 60	16,2	215 x 60 x 60	20,44
57,5	90 x 115 x 137	5,32	275 x 60 x 75	32,80	90 x 120 x 102	4,42	250 x 55 x 67	25	245 x 65 x 67	28,83
63,5	100 x 125 x 151	7,26	300 x 65 x 82	42,20	100 x 145 x 114	6,89	265 x 60 x 74	30,6	270 x 70 x 74	37,7
75	120 x 150 x 178	12,2	325 x 70 x 88	53,10	100 x 130 x 108	4,04	320 x 70 x 86	53	325 x 70 x 86	54,7

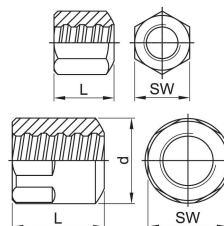
**tuerca con asiento
esférico 30°
dome nut 30°**



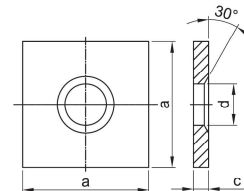
**placa de anclaje
abombada 30°
domed washer 30°**



**tuerca de anclaje
abombada 30°
bull nose nut 30°**

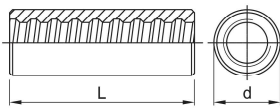


**placa de anclaje
cono 30°
anchor plate cone 30°**

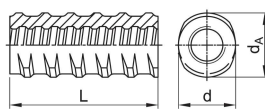


Ø [mm]	SW x L x d [mm]	[kg]	a x c x d [mm]	[kg]	SW x L x d [mm]	[kg]	a x c x d [mm]	[kg]
	TR 2944		TR 2132		TR 2963		TR 1928	
18	30 x 35 x 46	0,19	150 x 10 x 26	1,70	36 x 45	0,27	70 x 10 x 25	0,34
22	36 x 40 x 51	0,26	150 x 10 x 34	1,75	41 x 50	0,37	90 x 12 x 30	0,68
25	41 x 50 x 58	0,42	200 x 10 x 34	3,10	46 x 55	0,50	100 x 12 x 33	0,83
28	46 x 60 x 62	0,62	200 x 12 x 40	3,70	50 x 60	0,65	120 x 20 x 40	2,05
30	46 x 60 x 62	0,65	200 x 12 x 40	3,70	55 x 65	0,82	120 x 20 x 40	2,05
35	-	-	-	-	65 x 70	1,33	150 x 30 x 47	4,80
43	-	-	-	-	80 x 90	2,50	190 x 45 x 58	11,70
50	-	-	-	-	90 x 100 x 90	2,81	210 x 50 x 60	16,15
57,5	-	-	-	-	90 x 120 x 102	4,40	245 x 50 x 70	21,90
63,5	-	-	-	-	100 x 145 x 114	6,88	280 x 60 x 78	33,60

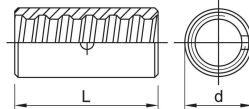
manguito estándar
coupler standard



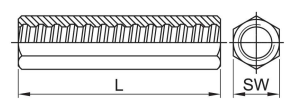
manguito de barra roscada
thread bar coupler



manguito de contacto
contact coupler

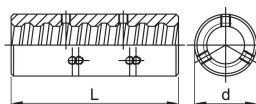


manguito hexagonal larga
hexagonal coupler long

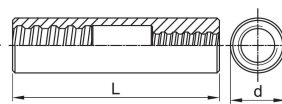


Ø [mm]	d x L [mm]	[kg]	d x dA x L [mm]	[kg]	d x L [mm]	[kg]	SW x L [mm]	[kg]
	TR 3003		TR 3087		TR 3006		TR 3010	
18	36 x 100	0,56	32 x 37 x 100	0,44	27 x 70	0,16	30 x 110	0,42
22	40 x 110	0,71	36 x 42 x 110	0,57	32 x 75	0,25	36 x 120	0,65
25	45 x 120	0,95	47 x 53 x 120	1,18	40 x 80	0,47	41 x 135	0,95
28	50 x 140	1,37	47 x 53 x 140	1,23	45 x 90	0,52	46 x 145	1,29
30	55 x 150	1,83	57 x 64 x 150	2,19	45 x 90	0,61	50 x 155	1,65
35	65 x 170	2,94	65 x 72 x 170	3,11	50 x 120	0,82	60 x 175	2,80
43	80 x 200	5,43	75 x 82 x 200	4,77	65 x 160	2,08	75 x 220	5,61
50	90 x 210	6,92	-	-	70 x 170	2,23	-	-
57,5	102 x 250	10,31	-	-	80 x 180	3,46	-	-
63,5	114 x 300	15,89	-	-	90 x 200	4,24	-	-
75	108 x 260	8,98	-	-	102 x 230	5,85	-	-

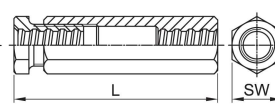
manguito con seguro antigiro
coupler with set screws



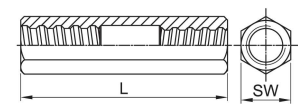
manguito reductor
reducing coupler



manguito tensor
turnbuckle

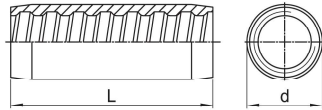


TR/T pieza perforada
TR/T stressing coupler

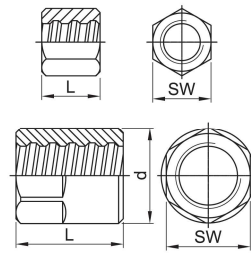


Ø [mm]	d x L [mm]	[kg]	d x L [mm]	[kg]	SW x L [mm]	[kg]	TR/T x SW x L [mm]	[kg]
	TR 3020 TR 3102		TR 3102		TR 3105		TR/T 3106	
18	36 x 100	0,56	-	-	41 x 175	1,51	-	-
22	40 x 110	0,71	40 x 145	1,00	46 x 190	1,72	-	-
25	45 x 120	0,94	45 x 160	1,40	50 x 205	1,83	-	-
28	50 x 140	1,36	50 x 180	1,79	60 x 225	1,90	28/32 x 50 x 230	2,41
30	55 x 150	1,84	55 x 195	2,50	65 x 250	3,30	-	-
35	65 x 170	2,95	60 x 215	2,97	80 x 270	4,78	35/40 x 65 x 280	4,84
43	80 x 200	5,42	80 x 250	6,74	90 x 325	6,08	43/50 x 80 x 330	8,29
50	90 x 210	6,82	85 x 275	7,82	100 x 345	17,06	-	-
57,5	102 x 250	10,00	102 x 290	10,00	100 x 390	21,75	57,5/63,5 x 90 x 335	12,4
63,5	114 x 300	15,59	108 x 330	12,38	100 x 405	23,42	-	-
75	108 x 260	8,68	108 x 335	12,42	110 x 405	21,00	-	-

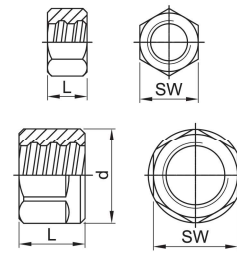
manguito acondicionado
coupler tempered



contratuera larga
lock nut long

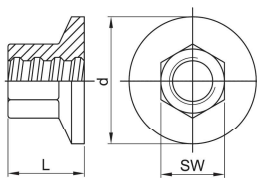


contratuera corta
lock nut short

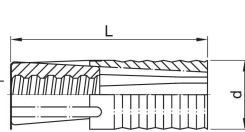


Ø [mm]	d x L [mm]	[kg]	SW x L x d [mm]	[kg]	SW x L x d [mm]	[kg]
	TR 3927		TR 2003		TR 2040	
18	-	-	30 x 40	0,16	30 x 22	0,10
22	36 x 90	0,40	36 x 45	0,25	36 x 22	0,12
25	38 x 100	0,45	41 x 50	0,34	41 x 22	0,15
28	42 x 120	0,65	46 x 55	0,50	46 x 30	0,26
30	50 x 130	1,18	50 x 60	0,67	50 x 30	0,31
35	56 x 150	1,47	55 x 65	0,78	55 x 40	0,47
43	65 x 170	2,02	70 x 80	1,60	70 x 50	0,99
50	75 x 180	2,76	80 x 90	2,27	80 x 50	1,26
57,5	85 x 220	5,00	90 x 100 x 102	3,56	90 x 60 x 102	1,93
63,5	95 x 240	8,30	100 x 115 x 114	5,26	100 x 70 x 114	3,03
75	-	-	100 x 120 x 108	3,49	100 x 80 x 108	2,28

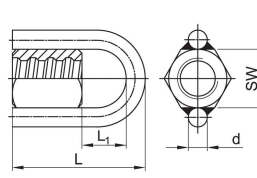
pieza de anclaje
anchor piece



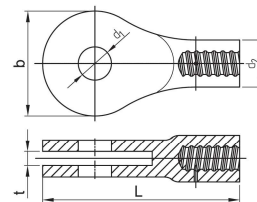
ancla de expansión
expansion shell



tuerca anular
ring nut

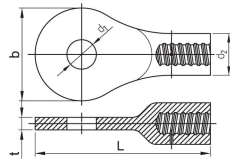


pieza de tenedor
fork piece

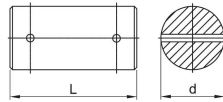


Ø [mm]	SW x L x d [mm]	[kg]	d x L [mm]	[kg]	SW x L x d x L1 [mm]	[kg]	t x b x L x d, x d2	[kg]
	TR 2073		TR 2136		TR 2927		TR 2090	
18	32 x 35 x 55	0,30	39 x 110	0,43	36 x 115 x 16 x 54	0,68	-	
22	36 x 45 x 65	0,41	49 x 120	0,67	41 x 125 x 16 x 59	0,81	-	
25	41 x 50 x 75	0,60	49 x 120	0,67	46 x 145 x 16 x 74	1,02	-	
28	46 x 55 x 85	0,82	59 x 150	1,01	50 x 155 x 16 x 79	1,19	-	
30	50 x 60 x 90	1,00	59 x 150	1,01	55 x 165 x 16 x 84	1,46	-	
35	60 x 70 x 105	1,54	-	-	65 x 184 x 20 x 94	2,36	27 x 167 x 315 x 56 x 75	7,40
43	70 x 85 x 130	2,51	-	-	-	-	29 x 197 x 384 x 63 x 92	~12,80
50	80 x 100 x 150	4,38	-	-	-	-	a solicitud / on request	
57,5	90 x 115 x 175	6,67	-	-	-	-	42 x 248 x 453,5 x 88 x 96	20,40
63,5	100 x 125 x 190	8,57	-	-	-	-	42 x 298 x 553 x 98 x 114	34,50
75	120 x 150 x 230	14,73	-	-	-	-	54 x 328 x 627 x 108 x 116	44,40

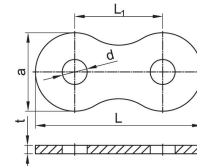
pieza perforada
eye piece



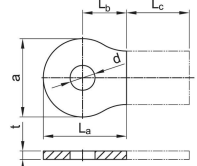
perno de pieza perforada
bolt eye piece



eclisa de soldeo de pieza perforada
strap connection eye piece

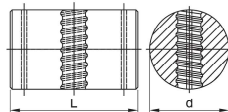


eclisa de soldeo de pieza perforada
welding plate eye piece

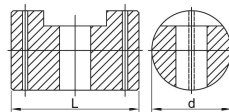


Ø [mm]	a x L x t x d ₁ x d ₂	[kg]	d x L [mm]	[kg]	a x t x d x d ₁ x L x L ₁ [mm]	[kg]	a x b x t x d ₁ x L _a x L _b x L _c [mm]
	TR 2080		TR 2081		TR 3080		TR 3081
18	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
35	167 x 315 x 22,5 x 53 x 75	7,4	50 x 100	1,5	167 x 18 x 114 x 53 x 354 x 187	7,0	167 x 114 x 18 x 53 x 177 x 93,5 x L _c
43	197 x 384 x 25 x 63 x 92	12,8	60 x 110	2,4	197 x 20 x 134 x 63 x 414 x 217	9,6	197 x 134 x 20 x 63 x 207 x 108,5 x L _c
50	a solicitud / on request						
57,5	248 x 453,5 x 38 x 88 x 96	20,4	85 x 145	6,4	248 x 30 x 160 x 88 x 526 x 278	21,9	248 x 160 x 30 x 88 x 263 x 139 x L _c
63,5	298 x 553 x 38 x 98 x 114	34,5	95 x 145	8,1	298 x 30 x 200 x 98 x 626 x 328	31,8	298 x 200 x 30 x 98 x 313 x 164 x L _c
75	328 x 587 x 50 x 108 x 116	44,4	105 x 165	11,2	328 x 35 x 220 x 108 x 691 x 363	45,8	328 x 220 x 35 x 108 x 345,5 x 181,5 x L _c

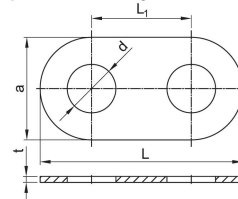
tuerca articulada
joint nut



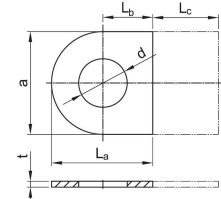
perno articulado
joint bolt



eclisa de unión de tuerca articulada y perno articulado
strap connection joint bolt & nut

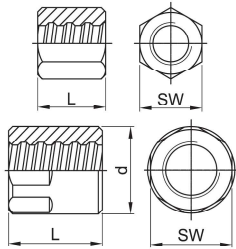


eclisa de soldeo de tuerca articulada y perno articulado
welding plate joint bolt & nut

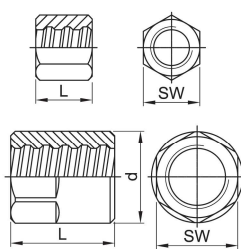


Ø [mm]	d x L [mm]	[kg]	d x L [mm]	[kg]	a x t x d ₁ x L x L ₁ [mm]	[kg]	a x t x d ₁ x L _a x L _b x L _c [mm]	[kg]
	TR 2020		TR 2021		TR 2022		TR 2023	
18	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-
35	120 x 193	16,0	120 x 193	14,6	260 x 15 x 123 x 512 x 252	11,0	260 x 15 x 123 x 256 x 126 x L _c	
43	140 x 212	23,8	140 x 212	21,2	320 x 15 x 145 x 626 x 306	16,6	320 x 15 x 145 x 313 x 153 x L _c	
50	a solicitud / on request							
57,5	150 x 222	27,0	150 x 222	24,6	420 x 20 x 155 x 780 x 360	40,2	420 x 20 x 155 x 390 x 180 x L _c	
63,5	190 x 265	53,4	190 x 265	50,2	460 x 25 x 195 x 894 x 434	59,6	460 x 25 x 195 x 447 x 217 x L _c	
75	190 x 279	55,0	190 x 279	52,0	470 x 35 x 195 x 912 x 442	88,4	470 x 35 x 195 x 456 x 221 x L _c	

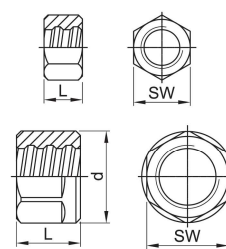
tuercas de anclaje EP recta
anchor nut EP flat



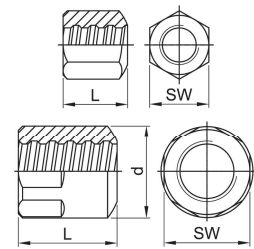
contratuercas EP larga
lock nut EP long



contratuercas EP corta
lock nut EP short

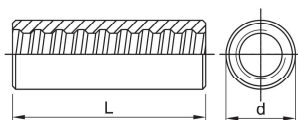


tuercas de anclaje EP abombada 30°

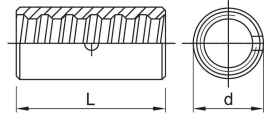


Ø [mm]	SW x L x d [mm]	[kg]	SW x L x d [mm]	[kg]	SW x L x d [mm]	[kg]	SW x L x d [mm]	[kg]
	TR 2002 EP		TR 2003 EP		TR 2040 EP		TR 2963 EP	
18	36 x 55	0,40	30 x 50	0,20	30 x 30	0,11	36 x 55	0,38
22	41 x 60	0,45	36 x 60	0,33	36 x 30	0,16	41 x 60	0,43
25	46 x 70	0,73	41 x 65	0,48	41 x 30	0,21	46 x 70	0,64
28	50 x 75	0,82	46 x 70	0,64	46 x 40	0,34	50 x 75	0,67
30	55 x 80	1,14	50 x 75	0,84	50 x 40	0,41	55 x 80	0,98
35	65 x 85	1,75	55 x 80	1,00	55 x 65	0,75	65 x 85	1,70
43	80 x 105	3,30	70 x 100	2,12	70 x 80	1,69	80 x 105	3,20
50	80 X 115 X 90	3,43	80 X 110	2,78	80 X 80	2,02	90 X 115	2,94
57,5	90 x 140 x 102	5,60	90 x 120 x 102	4,70	90 x 100 x 102	3,80	90 x 140 x 102	5,50
63,5	100 x 170 x 114	8,60	100 x 140 x 108	6,20	100 x 115 x 108	5,00	100 x 170 x 114	8,50

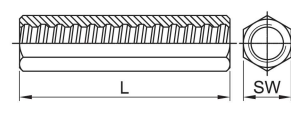
manguito EP estándar
coupler EP standard



manguito de contacto EP
contact coupler EP



manguito hexagonal EP largo
hexagonal coupler EP long



Ø [mm]	Ø x L [mm]	[kg]	Ø x L [mm]	[kg]	SW x L [mm]	[kg]
	TR 3003 EP		TR 3006 EP		TR 3010 EP	
18	36 x 115	0,64	27 x 70	0,16	30 x 130	0,50
22	40 x 125	0,78	32 x 75	0,25	36 x 140	0,76
25	45 x 150	1,24	36 x 80	0,47	41 x 165	1,16
28	50 x 160	1,56	45 x 90	0,52	46 x 175	1,56
30	55 x 165	2,02	45 x 90	0,61	50 x 185	1,97
35	60 x 190	2,67	50 x 120	0,82	60 x 205	3,28
43	80 x 225	6,16	65 x 160	2,08	75 x 250	6,38
50	90 X 235	7,72	70 X 170	2,21	-	-
57,5	102 x 275	11,14	80 x 180	3,46	-	-
63,5	108 x 285	11,90	90 x 200	4,24	-	-
75	108 x 290	9,70	102 x 230	5,85	-	-