

Typ/type RD DIN EN ISO 13918
Gewindebolzen mit reduziertem Schaft
threaded stud with reduced shaft

d_1	l_2	h_4^1	d_2	d_3^1	y_{min}	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁶ chuck ⁶	KRH ^{5,6} ferrule grip ⁶	Fußplatte ⁶ footplate ⁶ K22	Fußplatte ⁶ footplate ⁶ SK14
M6	20	2,5	4,7	7	4	H12407	100	0,34	RF6 (SR6)	H10586	H10667	H10723	H10876
M6	25	2,5	4,7	7	4	H12749	100	0,43	RF6 (SR6)	H10586	H10667	H10723	H10876
M6	30	2,5	4,7	7	4	H16699	100	0,52	RF6 (SR6)	H10586	H10667	H10723	H10876
M6	35	2,5	4,7	7	4	H12755	100	0,60	RF6 (SR6)	H10606	H10667	H10723	H10876
M6	40	2,5	4,7	7	4	H12757	100	0,69	RF6 (SR6)	H10606	H10667	H10723	H10876
M6	50	2,5	4,7	7	4	H15200	100	0,87	RF6 (SR6)	H10607	H10667	H10723	H10876
M6	60	2,5	4,7	7	4	H15969	100	1,05	RF6 (SR6)	H10607	H10667	H10723	H10876
M8	20	2,5	6,2	9	4	H12427	100	0,61	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	25	2,5	6,2	9	4	H12133	100	0,77	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	30	2,5	6,2	9	4	H12428	100	0,93	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	35	2,5	6,2	9	4	H13849	100	1,09	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	40	2,5	6,2	9	4	H12792	100	1,25	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	45	2,5	6,2	9	4	H12795	100	1,41	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	50	2,5	6,2	9	4	H12797	100	1,57	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	55	2,5	6,2	9	4	H14043	100	1,73	RF8 (SR8)	H10588	H10668	H10723	H10876
M8	60	2,5	6,2	9	4	H15533	100	1,89	RF8 (SR8)	H10959	H10668	H10723	H10876
M8	80	2,5	6,2	9	4	H14623	100	2,52	RF8 (SR8)	H10959	H10668	H10723	H10876
M8	100	2,5	6,2	9	4	H15226	100	3,16	RF8 (SR8)	H10959	H10668	H10723	H10876
M10	20	3	7,9	12	5	H12860	100	0,96	RF10 (SR10)	H10589	H10669	H10723	H10876
M10	25	3	7,9	12	5	H11856	100	1,21	RF10 (SR10)	H10590	H10669	H10723	H10876
M10	30	3	7,9	12	5	H12500	100	1,46	RF10 (SR10)	H10590	H10669	H10723	H10876
M10	35	3	7,9	12	5	H12863	100	1,72	RF10 (SR10)	H10590	H10669	H10723	H10876
M10	40	3	7,9	12	5	H12502	100	1,97	RF10 (SR10)	H10590	H10669	H10723	H10876
M10	50	3	7,9	12	5	H12505	100	2,47	RF10 (SR10)	H10590	H10669	H10723	H10876
M10	55	3	7,9	12	5	H12869	100	2,72	RF10 (SR10)	H35597	H10669	H10723	H10876
M10	70	3	7,9	12	5	H12877	100	3,48	RF10 (SR10)	H35597	H10669	H10723	H10876
M10	80	3	7,9	12	5	H15227	100	3,98	RF10 (SR10)	H35597	H10669	H10723	H10876
M10	100	3	7,9	12	5	H12880	100	5,01	RF10 (SR10)	H35597	H10669	H10723	H10876
M12	25	4	9,5	14	6	H12550	100	1,74	RF12 (SR12)	H10591	H10671	H10723	
M12	30	4	9,5	14	6	H12552	100	2,11	RF12 (SR12)	H10592	H10671	H10723	
M12	35	4	9,5	14	6	H12564	100	2,47	RF12 (SR12)	H10592	H10671	H10723	
M12	40	4	9,5	14	6	H12540	100	2,83	RF12 (SR12)	H10592	H10671	H10723	
M12	45	4	9,5	14	6	H12554	100	3,20	RF12 (SR12)	H10592	H10671	H10723	
M12	50	4	9,5	14	6	H12555	100	3,56	RF12 (SR12)	H10592	H10671	H10723	
M12	60	4	9,5	14	6	H12556	100	4,29	RF12 (SR12)	H35612	H10671	H10723	
M12	70	4	9,5	14	6	H12557	100	5,02	RF12 (SR12)	H35612	H10671	H10723	
M12	80	4	9,5	14	6	H14997	100	5,74	RF12 (SR12)	H35612	H10671	H10723	
M12	100	4	9,5	14	6	H12559	100	7,20	RF12 (SR12)	H35612	H10671	H10723	

¹ Richtwerte

¹ are approximate values

² 4.8 Festigkeit blank

² steel, grade 4.8 uncoated

³ Verpackungseinheit

³ packing-unit

⁴ Keramikring

⁵ Keramikringhalter

⁶ Eine Übersicht der Ausrüstungsteile finden sie im Kapitel "Verschleisssteile"

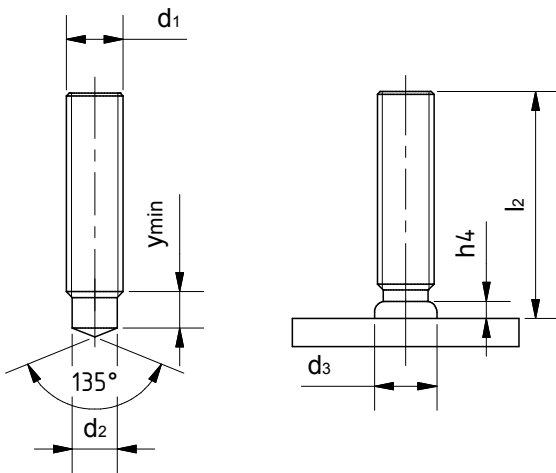
⁶ an overview can be found in chapter "wear parts"

Weitere Materialien und Abmessungen auf Anfrage

other materials or dimensions on request



Typ/type RD DIN EN ISO 13918
Gewindebolzen mit reduziertem Schaft
threaded stud with reduced shaft



d_1	l_2	h_4^1	d_2	d_3^1	y_{min}	Artikel-Nr. ² part-no. ²	VE ³ units ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁶ chuck ⁶	KRH ^{5,6} ferrule grip ^{5,6}	Fußplatte ⁶ footplate ⁶
M16	30	6	13,2	18	11	H12589	100	3,81	RF 16 (KR16)	H10598	H10673	H10726
M16	35	6	13,2	18	11	H12590	100	4,48	RF 16 (KR16)	H10598	H10673	H10726
M16	40	6	13,2	18	11	H15623	100	5,14	RF 16 (KR16)	H10598	H10673	H10726
M16	45	6	13,2	18	11	H12592	100	5,81	RF 16 (KR16)	H10598	H10673	H10726
M16	50	6	13,2	18	11	H13702	100	6,48	RF 16 (KR16)	H10598	H10673	H10726
M16	55	6	13,2	18	11	H13657	100	7,14	RF 16 (KR16)	H10598	H10673	H10726
M16	60	6	13,2	18	11	H12594	100	7,81	RF 16 (KR16)	H10598	H10673	H10726
M16	65	6	13,2	18	11	H13034	100	8,47	RF 16 (KR16)	H10598	H10673	H10726
M16	70	6	13,2	18	11	H12595	100	9,14	RF 16 (KR16)	H10598	H10673	H10726
M16	80	6	13,2	18	11	H12596	100	10,47	RF 16 (KR16)	H10598	H10673	H10726
M16	90	6	13,2	18	11	H12597	100	11,80	RF 16 (KR16)	H10598	H10673	H10726
M16	100	6	13,2	18	11	H12598	100	13,14	RF 16 (KR16)	H10598	H10673	H10726
M20	40	7	16,5	23	13	H12608	100	8,00	RF20 (SR20 F)	H10601	H10673	H10726
M20	45	7	16,5	23	13	H12610	100	9,04	RF20 (SR20 F)	H10601	H10673	H10726
M20	50	7	16,5	23	13	H13072	100	10,80	RF20 (SR20 F)	H10601	H10673	H10726
M20	60	7	16,5	23	13	H13074	100	12,16	RF20 (SR20 F)	H10601	H10673	H10726
M20	65	7	16,5	23	13	H14482	100	13,20	RF20 (SR20 F)	H10601	H10673	H10726
M20	70	7	16,5	23	13	H14201	100	14,25	RF20 (SR20 F)	H10601	H10673	H10726
M20	80	7	16,5	23	13	H13803	100	16,33	RF20 (SR20 F)	H10601	H10673	H10726
M20	90	7	16,5	23	13	H14856	100	18,41	RF20 (SR20 F)	H10601	H10673	H10726
M20	100	7	16,5	23	13	H15252	100	20,49	RF20 (SR20 F)	H10601	H10673	H10726
M24	50	10	20	28	15	H14202	100	14,53	RF24 (KR24)	H10605	H13432	H10725
M24	55	10	20	28	15	H14203	100	16,03	RF24 (KR24)	H10605	H13432	H10725
M24	60	10	20	28	15	H14204	100	17,53	RF24 (KR24)	H10605	H13432	H10725
M24	70	10	20	28	15	H14206	100	20,53	RF24 (KR24)	H10605	H13432	H10725
M24	80	10	20	28	15	H15257	100	23,52	RF24 (KR24)	H10605	H13432	H10725
M24	90	10	20	28	15	H15258	100	26,52	RF24 (KR24)	H10605	H13432	H10725
M24	100	10	20	28	15	H14208	100	29,52	RF24 (KR24)	H10605	H13432	H10725

¹ Richtwerte

¹ are approximate values

² 4.8 Festigkeit blank

² steel, grade 4.8 uncoated

³ Verpackungseinheit

³ packing unit

⁴ Keramikring

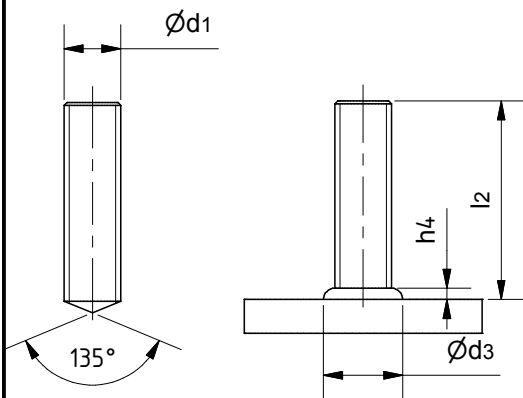
⁵ Keramikringhalter

⁶ Eine Übersicht der Ausrüstungsteile finden sie im Kapitel
"Verschleissteile"

⁶ an overview can be found in chapter "wear parts"

Weitere Materialien und Abmessungen auf
Anfrage

other materials or dimensions on
request



Typ/type DD

Gewindebolzen mit durchgehendem Gewinde
threaded stud with complete thread

d ₁	l ₂	h ₄ ¹	d ₃ ¹	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁶ chuck ⁶	KRH ^{5,6} ferrule grip ^{5,6}	Fußplatte ⁶ footplate ⁶ K22	Fußplatte ⁶ footplate ⁶ SK14
M6	20	4	8,5	H12717	100	0,38	UF6 (SN6)	H10586	H10667	H10723	H10876
M6	25	4	8,5	H12722	100	0,45	UF6 (SN6)	H10586	H10667	H10723	H10876
M6	30	4	8,5	H11480	100	0,55	UF6 (SN6)	H10586	H10667	H10723	H10876
M6	35	4	8,5	H12727	100	0,64	UF6 (SN6)	H10606	H10667	H10723	H10876
M6	40	4	8,5	H15212	100	0,73	UF6 (SN6)	H10606	H10667	H10723	H10876
M6	50	4	8,5	H13640	100	0,91	UF6 (SN6)	H10607	H10667	H10723	H10876
M6	60	4	8,5	H15220	100	1,08	UF6 (SN6)	H10607	H10667	H10723	H10876
M8	20	4	11	H10763	100	0,69	UF8 (SN8)	H10958	H10668	H10723	H10876
M8	25	4	11	H12763	100	0,84	UF8 (SN8)	H10588	H10668	H10723	H10876
M8	30	4	11	H12421	100	1,00	UF8 (SN8)	H10588	H10668	H10723	H10876
M8	35	4	11	H14454	100	1,16	UF8 (SN8)	H10588	H10668	H10723	H10876
M8	40	4	11	H12646	100	1,32	UF8 (SN8)	H10588	H10668	H10723	H10876
M8	45	4	11	H12073	100	1,48	UF8 (SN8)	H10588	H10668	H10723	H10876
M8	50	4	11	H11918	100	1,64	UF8 (SN8)	H10588	H10668	H10723	H10876
M8	55	4	11	H14615	100	1,80	UF8 (SN8)	H10588	H10668	H10723	H10876
M8	60	4	11	H13885	100	1,96	UF8 (SN8)	H10959	H10668	H10723	H10876
M8	80	4	11	H15030	100	2,60	UF8 (SN8)	H10959	H10668	H10723	H10876
M8	100	4	11	H12424	100	3,18	UF8 (SN8)	H10959	H10668	H10723	H10876
M10	20	4	13	H12508	100	1,09	UF10 (SN10)	H10589	H10669	H10723	
M10	25	4	13	H12510	100	1,34	UF10 (SN10)	H10589	H10669	H10723	
M10	30	4	13	H12802	100	1,57	UF10 (SN10)	H10590	H10669	H10723	
M10	35	4	13	H12471	100	1,84	UF10 (SN10)	H10590	H10669	H10723	
M10	40	4	13	H12512	100	2,09	UF10 (SN10)	H10590	H10669	H10723	
M10	50	4	13	H12515	100	2,60	UF10 (SN10)	H10590	H10669	H10723	
M10	55	4	13	H12812	100	2,85	UF10 (SN10)	H10590	H10669	H10723	
M10	60	4	13	H12513	100	3,08	UF10 (SN10)	H35597	H10669	H10723	
M10	70	4	13	H12820	100	3,60	UF10 (SN10)	H35597	H10669	H10723	
M10	80	4	13	H13683	100	4,10	UF10 (SN10)	H35597	H10669	H10723	
M10	100	4	13	H11933	100	5,11	UF10 (SN10)	H35597	H10669	H10723	
M12	25	5	16	H12533	100	1,95	UF12 (SN12)	H10591	H10671	H10723	
M12	30	5	16	H12536	100	2,31	UF12 (SN12)	H10592	H10671	H10723	
M12	35	5	16	H12538	100	2,64	UF12 (SN12)	H10592	H10671	H10723	
M12	40	5	16	H14002	100	3,04	UF12 (SN12)	H10592	H10671	H10723	
M12	45	5	16	H12897	100	3,40	UF12 (SN12)	H10592	H10671	H10723	
M12	50	5	16	H12542	100	3,76	UF12 (SN12)	H10592	H10671	H10723	
M12	60	5	16	H12669	100	4,49	UF12 (SN12)	H10592	H10671	H10723	
M12	70	5	16	H12670	100	5,22	UF12 (SN12)	H35612	H10671	H10723	
M12	80	5	16	H12714	100	5,94	UF12 (SN12)	H35612	H10671	H10723	
M12	100	5	16	H13333	100	7,40	UF12 (SN12)	H35612	H10671	H10723	

¹ Richtwerte

¹ are approximate values

² 4.8 Festigkeit blank

² steel, grade 4.8 uncoated

³ Verpackungseinheit

⁴ Keramikring

⁵ Keramikringhalter

⁶ Eine Übersicht der Ausrüstungsteile
finden sie im Kapitel "Verschleissteile"

⁶ an overview can be found in chapter
"wear parts"

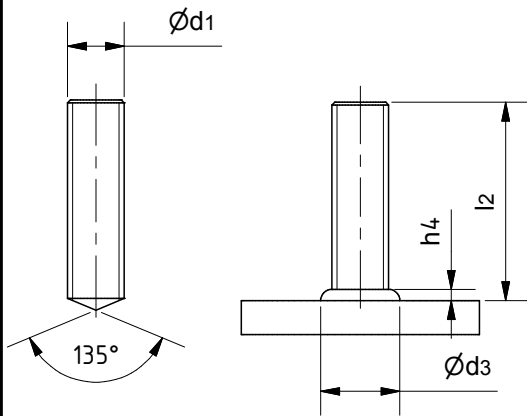
Weitere Materialien und Abmessungen auf
Anfrage

other materials or dimensions on request



Typ/type DD

Gewindebolzen mit durchgehendem Gewinde
threaded stud with complete thread



d_1	l_2	h_4^1	d_3^1	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁶ chuck ⁶	KRH ^{5,6} ferrule grip ^{5,6}	Fußplatte ⁶ footplate ⁶ K22
M16	30	7	21	H12586	100	4,27	UF16 (SN16)	H10961	H10673	H10726
M16	35	7	21	H14796	100	4,81	UF16 (SN16)	H10598	H10673	H10726
M16	40	7	21	H12983	100	5,60	UF16 (SN16)	H10598	H10673	H10726
M16	45	7	21	H15219	100	6,26	UF16 (SN16)	H10598	H10673	H10726
M16	50	7	21	H12987	100	6,93	UF16 (SN16)	H10598	H10673	H10726
M16	55	7	21	H16551	100	7,60	UF16 (SN16)	H10598	H10673	H10726
M16	60	7	21	H12990	100	8,26	UF16 (SN16)	H10598	H10673	H10726
M16	65	7	21	H14797	100	8,93	UF16 (SN16)	H10598	H10673	H10726
M16	70	7	21	H12588	100	9,59	UF16 (SN16)	H10598	H10673	H10726
M16	75	7	21	H16581	100	10,04	UF16 (SN16)	H10598	H10673	H10726
M16	80	7	21	H12997	100	10,93	UF16 (SN16)	H10598	H10673	H10726
M16	90	7	21	H13000	100	12,26	UF16 (SN16)	H10598	H10673	H10726
M16	100	7	21	H13002	100	13,59	UF16 (SN16)	H10598	H10673	H10726
M20	40	7	26	H13053	100	8,80	UF20 (SN20)	H10601	H10673	H10726
M20	45	7	26	H15222	100	9,85	UF20 (SN20)	H10601	H10673	H10726
M20	50	7	26	H13055	100	10,67	UF20 (SN20)	H10601	H10673	H10726
M20	60	7	26	H13057	100	12,97	UF20 (SN20)	H10601	H10673	H10726
M20	70	7	26	H13059	100	15,05	UF20 (SN20)	H10601	H10673	H10726
M20	80	7	26	H14377	100	17,14	UF20 (SN20)	H10601	H10673	H10726
M20	90	7	26	H15223	100	18,82	UF20 (SN20)	H10601	H10673	H10726
M20	100	7	26	H13313	100	21,30	UF20 (SN20)	H10601	H10673	H10726

¹ Richtwerte

¹ are approximate values

² 4.8 Festigkeit blank

² steel, grade 4.8 uncoated

³ Verpackungseinheit

³ packing-unit

⁴ Keramikring

⁵ Keramikringhalter

⁶ Eine Übersicht der Ausrüstungsteile
finden sie im Kapitel "Verschleiss-teile"

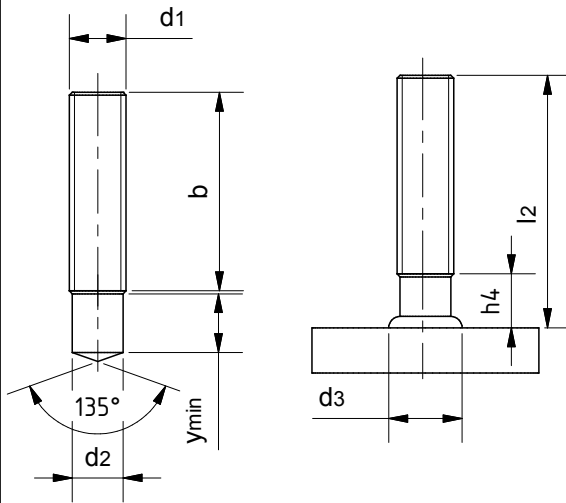
⁶ an overview can be found in chapter
"wear parts"

Weitere Materialien und Abmessungen auf
Anfrage

other materials or dimensions on
request



Typ/type PD DIN EN ISO 13918
Gewindebolzen mit Teilgewinde
threaded stud with partial thread



d ₁	l ₂	h ₄ ¹	d ₂	d ₃ ¹	b	y _{min}	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁷ chuck ⁷	KRH ^{5,7} ferrule grip ^{5,7}	Fußplatte ⁷ footplate ⁷ K22
M6	20	3,5	5,4	8,5		9	H12393	100	0,38	PF6 (P6)	H10586	H10667	H10723 ⁶
M6	30	3,5	5,4	8,5		9	H12738	100	0,55	PF6 (P6)	H10586	H10667	H10723 ⁶
M6	40	3,5	5,4	8,5	20		H12743	100	0,73	PF6 (P6)	H10606	H10667	H10723 ⁶
M6	50	3,5	5,4	8,5	20		H15211	100	0,91	PF6 (P6)	H10606	H10667	H10723 ⁶
M6	60	3,5	5,4	8,5	20		H14708	100	1,08	PF6 (P6)	H10607	H10667	H10723 ⁶
M8	20	3,5	7,2	10		9	H12410	100	0,69	PF8 (P8)	H10958	H10668	H10723 ⁶
M8	30	3,5	7,2	10		9	H12412	100	1,00	PF8 (P8)	H10588	H10668	H10723 ⁶
M8	40	3,5	7,2	10		9	H12415	100	1,32	PF8 (P8)	H10588	H10668	H10723 ⁶
M8	50	3,5	7,2	10	40		H12786	100	1,64	PF8 (P8)	H10588	H10668	H10723 ⁶
M8	60	3,5	7,2	10	40		H13874	100	1,96	PF8 (P8)	H10959	H10668	H10723 ⁶
M8	80	3,5	7,2	10	40		H14874	100	2,60	PF8 (P8)	H10959	H10668	H10723 ⁶
M8	100	3,5	7,2	10	40		H12418	100	3,18	PF8 (P8)	H10959	H10668	H10723 ⁶
M10	20	4	9	13		9,5	H12451	100	1,09	PF10 (P10)	H10589	H10669	H10723
M10	30	4	9	13		9,5	H12447	100	1,57	PF10 (P10)	H10590	H10669	H10723
M10	40	4	9	13		9,5	H12435	100	2,09	PF10 (P10)	H10590	H10669	H10723
M10	50	4	9	13	40		H12456	100	2,60	PF10 (P10)	H10590	H10669	H10723
M10	60	4	9	13	40		H12459	100	3,08	PF10 (P10)	H35597	H10669	H10723
M10	70	4	9	13	40		H12848	100	3,60	PF10 (P10)	H35597	H10669	H10723
M10	80	4	9	13	40		H12461	100	4,10	PF10 (P10)	H35597	H10669	H10723
M10	140	4	9	13	80		H15785	100	7,12	PF10 (P10)	H35597	H10669	H10723
M10	160	4	9	13	80		H15789	100	8,13	PF10 (P10)	H35597	H10669	H10723
M12	30	4,5	11	16		12	H12519	100	2,31	PF (P12)	H10592	H10671	H10723
M12	40	4,5	11	16		12	H11055	100	3,04	PF (P12)	H10592	H10671	H10723
M12	50	4,5	11	16	40		H12522	100	3,76	PF (P12)	H10592	H10671	H10723
M12	60	4,5	11	16	40		H12525	100	4,49	PF (P12)	H35612	H10671	H10723
M12	70	4,5	11	16	40		H12527	100	5,22	PF (P12)	H35612	H10671	H10723
M12	80	4,5	11	16	40		H15239	100	5,94	PF (P12)	H35612	H10671	H10723
M12	100	4,5	11	16	40		H12531	100	7,40	PF (P12)	H35612	H10671	H10723
M12	150	4,5	11	16	80		H15241	100	11,03	PF (P12)	H35612	H10671	H10723
M12	160	4,5	11	16	80		H12963	100	11,76	PF (P12)	H35612	H10671	H10723

¹ Richtwerte

¹ are approximate values

² 4.8 Festigkeit blank

² steel, grade 4.8 uncoated

³ Verpackungseinheit

³ packing unit

⁴ Keramikring

⁵ Keramikringhalter

⁶ Art.Nr. für SK14=H10876

⁶ part.no. for SK14=H10876

⁷ Eine Übersicht der Ausrüstungsteile finden sie im Kapitel "Verschleissteile"

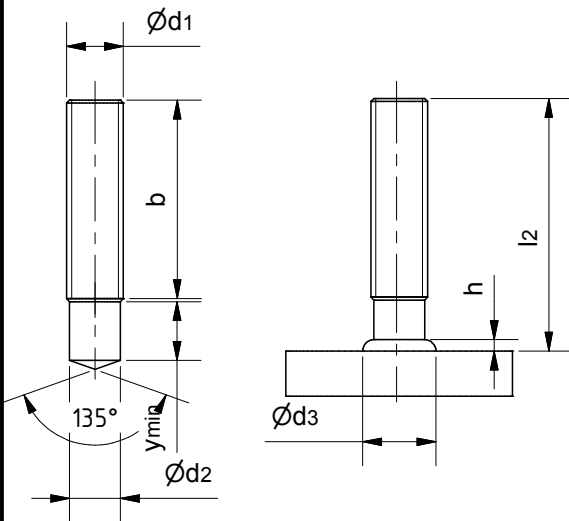
⁷ an overview can be found in chapter "wear parts"

Weitere Materialien und Abmessungen auf
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Typ/type PD DIN EN ISO 13918
Gewindebolzen mit Teilgewinde
threaded stud with partial thread

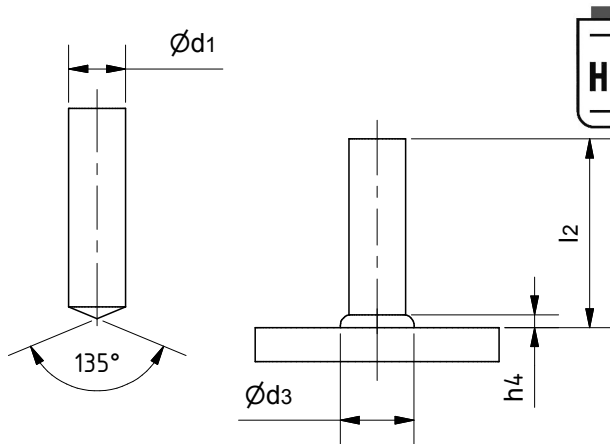


d_1	l_2	h_4^1	d_2	d_3^1	b	y_{min}	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse Mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁶ chuck ⁶	KRH ^{5,6} ferrule grip ^{5,6}	Fußplatte ⁶ footplate ⁶ K22
M16	30	6	14,7	19,5	13,5		H12567	100	4,27	PF16 (P16)	H10961	H10672	H10726
M16	35	6	14,7	19,5	13,5		H12568	100	4,81	PF16 (P16)	H10598	H10672	H10726
M16	40	6	14,7	19,5	13,5		H12569	100	5,60	PF16 (P16)	H10598	H10672	H10726
M16	45	6	14,7	19,5	13,5		H12570	100	6,26	PF16 (P16)	H10598	H10672	H10726
M16	50	6	14,7	19,5	13,5		H12571	100	6,93	PF16 (P16)	H10598	H10672	H10726
M16	60	6	14,7	19,5	40		H12572	100	8,26	PF16 (P16)	H10598	H10672	H10726
M16	65	6	14,7	19,5	40		H12573	100	8,93	PF16 (P16)	H10598	H10672	H10726
M16	70	6	14,7	19,5	50		H12574	100	9,59	PF16 (P16)	H10598	H10672	H10726
M16	75	6	14,7	19,5	50		H16082	100	10,04	PF16 (P16)	H10598	H10672	H10726
M16	80	6	14,7	19,5	50		H12575	100	10,93	PF16 (P16)	H10598	H10672	H10726
M16	90	6	14,7	19,5	50		H12576	100	12,26	PF16 (P16)	H10598	H10672	H10726
M16	100	6	14,7	19,5	80		H12577	100	13,59	PF16 (P16)	H10598	H10672	H10726
M16	140	6	14,7	19,5	80		H13026	100	18,92	PF16 (P16)	H10598	H10672	H10726
M16	160	6	14,7	19,5	80		H13028	100	21,58	PF16 (P16)	H10598	H10672	H10726
M20	40	7	18,38	24,5	15,5		H13063	100	8,80	PF20(P20)	H10601	H13432	H10725
M20	45	7	18,38	24,5	15,5		H15221	100	9,85	PF20(P20)	H10601	H13432	H10725
M20	50	7	18,38	24,5	35		H13065	100	10,67	PF20(P20)	H10601	H13432	H10725
M20	60	7	18,38	24,5	40		H13067	100	12,97	PF20(P20)	H10601	H13432	H10725
M20	70	7	18,38	24,5	40		H13069	100	15,05	PF20(P20)	H10601	H13432	H10725
M20	90	7	18,38	24,5	50		H14862	100	18,82	PF20(P20)	H10601	H13432	H10725
M20	100	7	18,38	24,5	70		H15253	100	21,30	PF20(P20)	H10601	H13432	H10725

¹ Richtwerte¹ are approximate values² 4.8 Festigkeit blank² steel, grade 4.8 uncoated³ Verpackungseinheit³ packing unit⁴ Keramikring⁵ Keramikringhalter⁶ Eine Übersicht der Ausrüstungsteile finden sie im Kapitel "Verschleissteile"⁶ an overview can be found in chapter "wear parts"

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Typ/type UD DIN EN ISO 13918
Zylinderstift
unthreaded stud

d_1	l_2	h_4^1	d_3^1	Artikel-Nr. ² part-no. ²	VE ³ units ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁶ chuck ⁶	KRH ^{5,6} ferrule grip ^{5,6}	Fußplatte ⁶ footplate K22	Fußplatte ⁶ footplate ⁶ SK14
6	25	4	8,5	H16231	100	0,59	UF6 (SN6)	H10586	H10667	H10723	H10876
6	35	4	8,5	H14667	100	0,81	UF6 (SN6)	H10606	H10667	H10723	H10876
6	40	4	8,5	H14669	100	0,92	UF6 (SN6)	H10606	H10667	H10723	H10876
8	20	4	11	H11175	100	0,85	UF8 (SN8)	H10958	H10668	H10723	H10876
8	30	4	11	H11176	100	1,25	UF8 (SN8)	H10588	H10668	H10723	H10876
8	35	4	11	H15303	100	1,45	UF8 (SN8)	H10588	H10668	H10723	H10876
8	40	4	11	H11177	100	1,64	UF8 (SN8)	H10588	H10668	H10723	H10876
8	50	4	11	H11178	100	2,04	UF8 (SN8)	H10588	H10668	H10723	H10876
8	60	4	11	H11179	100	2,43	UF8 (SN8)	H35637	H10668	H10723	H10876
8	80	4	11	H11181	100	3,22	UF8 (SN8)	H35637	H10668	H10723	H10876
8	100	4	11	H11183	100	4,01	UF8 (SN8)	H35637	H10668	H10723	H10876
10	20	4	13	H14442	100	1,34	UF10 (SN10)	H10589	H10669	H10723	
10	25	4	13	H15574	100	1,65	UF10 (SN10)	H10589	H10669	H10723	
10	30	4	13	H14920	100	1,96	UF10 (SN10)	H10590	H10669	H10723	
10	35	4	13	H13460	100	2,23	UF10 (SN10)	H10590	H10669	H10723	
10	40	4	13	H13747	100	2,58	UF10 (SN10)	H10590	H10669	H10723	
10	50	4	13	H70032	100	3,19	UF10 (SN10)	H10590	H10669	H10723	
10	100	4	13	H14902	100	6,28	UF10 (SN10)	H35597	H10669	H10723	
12	50	5	16	H15154	100	4,61	UF12 (SN12)	H10592	H10671	H10723	
14,6	Auf Anfrage on request	6	18,5	Auf Anfrage on request	100		PF16(P16)				
16	Auf Anfrage on request	7	21	Auf Anfrage on request	100		UF16(SN16)				

Auf Anfrage
on request

¹ Richtwerte

¹ are approximate values

² 4.8 Festigkeit blank

² steel, grade 4.8 uncoated

³ Verpackungseinheit

³ packing unit

⁴ Keramikring

⁵ Keramikringhalter

⁶ Eine Übersicht der Ausrüstungsteile finden sie im Kapitel "Verschleisssteile"

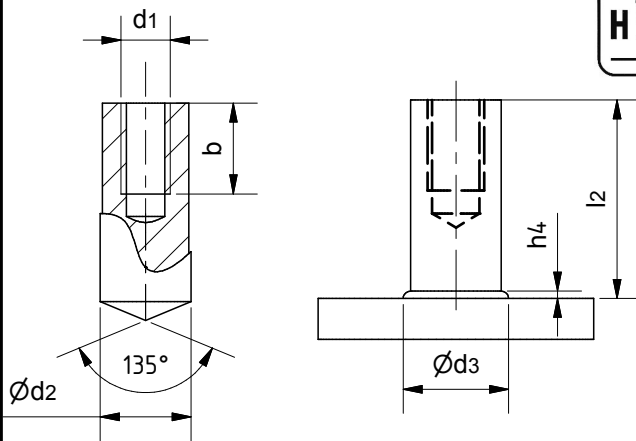
⁶ an overview can be found in chapter "wear parts"

Weitere Materialien und Abmessungen auf
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Typ/type ID DIN EN ISO 13918
Innengewindebuchse
stud with internal thread



d_1	l_2	d_2	b	h_4^1	d_3^1	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter ⁶ chuck ⁶	KRH ^{5,6} ferrule grip ^{5,6}	Fußplatte ⁶ footplate ⁶
M6	15	10	9	4	13	H13453	100	0,79	UF10 (SN10)	H10589	H10669	H10723
M6	20	10	9	4	13	H13736	100	1,10	UF10 (SN10)	H10589	H10669	H10723
M6	25	10	9	4	13	H14507	100	1,41	UF10 (SN10)	H10590	H10669	H10723
M6	30	10	9	4	13	H13407	100	1,71	UF10 (SN10)	H10590	H10669	H10723
M6	40	10	9	4	13	H14879	100	2,33	UF10 (SN10)	H10590	H10669	H10723
M6	50	10	9	4	13	H16388	100	2,95	UF10 (SN10)	H10590	H10669	H10723
M6	60	10	9	4	13	H13242	100	3,56	UF10 (SN10)	H10590	H10669	H10723
M8	15	12	9,5	5	16	H14560	100	0,98	UF12 (SN12)	H10591	H10671	H10723
M8	20	12	12	5	16	H12691	100	1,43	UF12 (SN12)	H10591	H10671	H10723
M8	25	12	12	5	16	H11106	100	1,87	UF12 (SN12)	H10592	H10671	H10723
M8	30	12	12	5	16	H14837	100	2,32	UF12 (SN12)	H10592	H10671	H10723
M8	50	12	12	5	16	H16390	100	4,10	UF12 (SN12)	H10592	H10671	H10723
M8	100	12	12	5	16	H16391	100	8,53	UF12 (SN12)	H35612	H10671	H10723
M8	25	14,6	12	6	18,5	H15350	100	3,00	PF16 (P16)	H10594	H10672	H10726
M10	25	16	15	7	21	H16044	100	3,30	UF16 (SN16)	H10961	H10673	H10726
M10	40	16	15	7	21	H15313	100	5,66	UF16 (SN16)	H10598	H10673	H10726
M10	50	16	15	7	21	H16392	100	7,24	UF16 (SN16)	H10598	H10673	H10726
M10	100	16	15	7	21	H16175	100	15,10	UF16 (SN16)	H10598	H10673	H10726
M12	25	18,2	18	7	23	H17055	100		PF20 (P20 F)	H10599	H13432	H10725
M12	40	18,38	18	7	23	H13731	100	7,00	PF20 (P20 F)	H10599	H13432	H10725
M12	50	18,38	18	7	23	H16394	100	9,05	PF20 (P20 F)	H10599	H13432	H10725

¹ Sind Richtwerte⁴ Keramikring¹ are approximate values⁵ Keramikringhalter² 4.8 Festigkeit blank⁶ Eine Übersicht der Ausrüstungsteile finden sie im Kapitel "Verschleissteile"² steel, grade 4.8 uncoated⁶ an overview can be found in chapter "wear parts"³ Verpackungseinheit

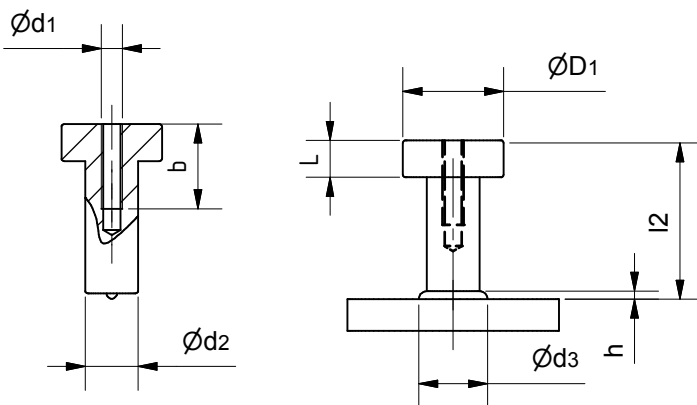
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Typ/type KBMI

Kopfbolzen mit Innengewinde
shear connector with internal thread



d2	l2	d1	b	D1	L1	d3	h	Artikel Nr. ² part.no. ²	KR ³ ferrule	KRH ⁴ ferrule grip	Bolzenhalter chuck
10	30	M4	16	19	7	13	4	H11115	UF 10	H10703	H10624
10	30	M5	16	19	7	13	4	H11116	UF 10	H10703	H10624
10	30	M6	16	19	7	13	4	H11117	UF 10	H10703	H10624
10	50	M6	16	19	7	13	4	H11118	UF 10	H10703	H10624
10	75	M6	16	19	7	13	4	H11119	UF 10	H10703	H10624
10	100	M6	16	19	7	13	4	H11120	UF 10	H10703	H10624
10	175	M6	16	19	7	13	4	H11818	UF 10	H10703	H10624
12	30	M8	16	25	8	16	4	H13556	UF 12	H10704	H10625
13	50	M8	16	25	8	17	5	H11122	UF 13	H10705	H10625
13	75	M8	16	25	8	17	5	H11123	UF 13	H10705	H10625
13	100	M8	16	25	8	17	5	H11124	UF 13	H10705	H10625
16	50	M10	16	32	8	21	7	H11125	UF 16	H10706	H10626
19	50	M12	20	32	10	26	9	Auf Anfrage on request	UF 19	H10706	H10626

² Unlegierter Stahl galZn

² steel uncoated gavanized

³ Keramikring

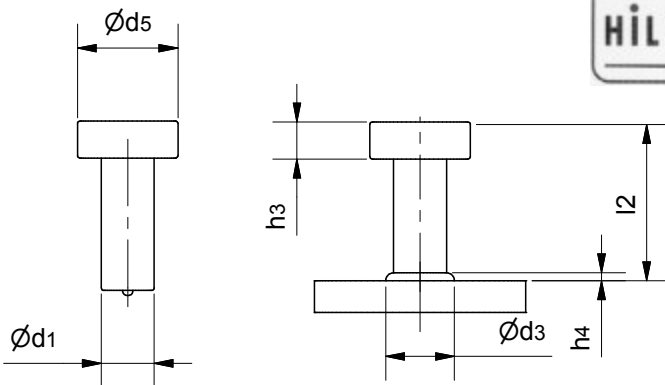
⁴ Keramikringhalter

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Typ/type SD DIN EN ISO 13918
KÖCO-Kopfbolzen
KÖCO-shear connector



d ₁	l ₂	h ₄ ¹	d ₅	d ₃ ¹	h ₃	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter chuck	Fußplatte foot Assembly
6	35	2,5	13	8,5	5	H15748	12.000,00	1,23	UF6 (SN6)	H10622	H10701
6	50	2,5	13	8,5	5	H13789	10.000,00	1,56	UF6 (SN6)	H10622	H10701
6	75	2,5	13	8,5	5	H14041	6.000,00	2,12	UF6 (SN6)	H10622	H10701
6	100	2,5	13	8,5	5	H14001	4.500,00	2,67	UF6 (SN6)	H10622	H10701
10	30	2,5	19	13	7	H13268	5.500,00	3,12	UF10 (SN10)	H10624	H10703
10	50	2,5	19	13	7	H13678	4.500,00	4,36	UF10 (SN10)	H10624	H10703
10	75	2,5	19	13	7	H12697	3.300,00	5,90	UF10 (SN10)	H10624	H10703
10	100	2,5	19	13	7	H12694	2.400,00	7,44	UF10 (SN10)	H10624	H10703
10	125	2,5	19	13	7	H12494	1.900,00	8,98	UF10 (SN10)	H10624	H10703
10	150	2,5	19	13	7	H12495	1.400,00	10,52	UF10 (SN10)	H10624	H10703
10	175	2,5	19	13	7	H13682	1.000,00	12,06	UF10 (SN10)	H10624	H10703
12	30	3	25	17	8	H13269	4.000,00	5,26	UF12 (SN10)	H10625	H10704
13	25	3	25	17	8	H13286	4.000,00	5,11	UF13 (SN13)	H10625	H10705
13	50	3	25	17	8	H13679	2.500,00	7,72	UF13 (SN13)	H10625	H10705
13	75	3	25	17	8	H12698	1.800,00	10,32	UF13 (SN13)	H10625	H10705
13	100	3	25	17	8	H12684	1.400,00	12,93	UF13 (SN13)	H10625	H10705
13	125	3	25	17	8	H12635	1.100,00	15,53	UF13 (SN13)	H10625	H10705
13	150	3	25	17	8	H12699	900,00	18,14	UF13 (SN13)	H10625	H10705
13	175	3	25	17	8	H12496	700,00	20,74	UF13 (SN13)	H10625	H10705
13	200	3	25	17	8	H12700	500,00	23,35	UF13 (SN13)	H10625	H10705
13	225	3	25	17	8	H16611	400,00	25,59	UF13 (SN13)	H10625	H10705
13	250	3	25	17	8	H16612	1.200,00	28,56	UF13 (SN13)	H10625	H10705
13	300	3	25	17	8	H16071	1.000,00	33,77	UF13 (SN13)	H10625	H10705
13	350	3	25	17	8	H16072	800,00	38,98	UF13 (SN13)	H10625	H10706
16	35	4,5	32	21	8	H13270	2.000,00	9,79	UF16(SN16)	H10626	H10706
16	50	4,5	32	21	8	H14173	1.500,00	12,15	UF16(SN16)	H10626	H10706
16	75	4,5	32	21	8	H13316	1.200,00	16,1	UF16(SN16)	H10626	H10706
16	100	4,5	32	21	8	H12627	900,00	20,04	UF16(SN16)	H10626	H10706
16	125	4,5	32	21	8	H12912	750,00	23,99	UF16(SN16)	H10626	H10706
16	150	4,5	32	21	8	H12626	600,00	27,94	UF16(SN16)	H10626	H10706
16	175	4,5	32	21	8	H12472	500,00	31,88	UF16(SN16)	H10626	H10706
16	200	4,5	32	21	8	H13439	400,00	35,83	UF16(SN16)	H10626	H10706
16	225	4,5	32	21	8	H16304	350,00	39,77	UF16(SN16)	H10626	H10706
16	250	4,5	32	21	8	H15071	300,00	43,72	UF16(SN16)	H10626	H10706
16	300	4,5	32	21	8	H15147	180,00	51,61	UF16(SN16)	H10626	H10706

¹ Richtwerte

⁴ Keramikring

¹ are approximate values

² Stahl S235J2+C470

² steel S235J2+C470

³ Verpackungseinheit Fass

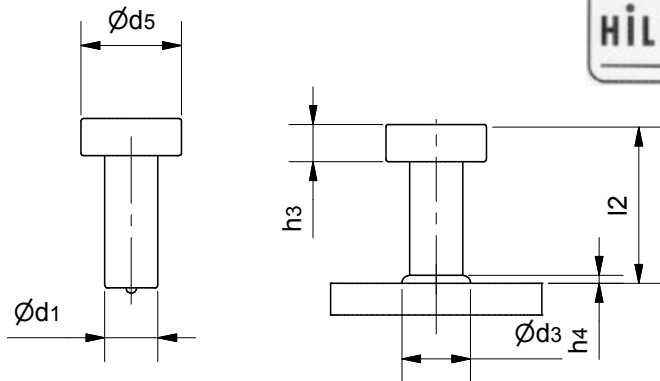
³ packing-unit barrel

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Typ/type SD DIN EN ISO 13918
KÖCO-Kopfbolzen
KÖCO-shear connector



d_1	l_2	h_4^1	d_5	d_3^1	h_3	Artikel-Nr. ² part-no. ²	VE ³ unit ³	Masse mass kg/100	KR ⁴ ferrule	Bolzenhalter chuck	Fußplatte foot Assembly
19	50	6	32	23	10	H13688	1.250	16,11	UF19 (SN19)	H10626	H10706
19	60	6	32	23	10	H14360	1.100	18,20	UF19 (SN19)	H10626	H10706
19	75	6	32	23	10	H12655	950	21,67	UF19 (SN19)	H10626	H10706
19	80	6	32	23	10	H13424	850	22,70	UF19 (SN19)	H10626	H10706
19	90	6	32	23	10	H14326	800	25,40	UF19 (SN19)	H10626	H10706
19	100	6	32	23	10	H12701	700	27,23	UF19 (SN19)	H10626	H10706
19	125	6	32	23	10	H12702	600	32,80	UF19 (SN19)	H10626	H10706
19	150	6	32	23	10	H12516	500	38,36	UF19 (SN19)	H10626	H10706
19	175	6	32	23	10	H12643	400	43,93	UF19 (SN19)	H10626	H10706
19	200	6	32	23	10	H12703	350	49,49	UF19 (SN19)	H10626	H10706
19	225	6	32	23	10	H15469	300	55,06	UF19 (SN19)	H10626	H10706
19	250	6	32	23	10	H14925	250	60,62	UF19 (SN19)	H10626	H10706
22	50	6	35	29	10	H14868	1.000	20,00	UF22 (SN22)	H10628	H10707
22	75	6	35	29	10	H12704	700	28,44	UF22 (SN22)	H10628	H10707
22	90	6	35	29	10	H13248	600	32,80	UF22 (SN22)	H10628	H10707
22	100	6	35	29	10	H12656	550	35,90	UF22 (SN22)	H10628	H10707
22	125	6	35	29	10	H12517	450	43,36	UF22 (SN22)	H10628	H10707
22	150	6	35	29	10	H12706	350	50,82	UF22 (SN22)	H10628	H10707
22	175	6	35	29	10	H12644	310	58,28	UF22 (SN22)	H10628	H10707
22	200	6	35	29	10	H12707	250	65,74	UF22 (SN22)	H10628	H10707
22	225	6	35	29	10	H14606	225	73,20	UF22 (SN22)	H10628	H10707
22	250	6	35	29	10	H14896	200	80,66	UF22 (SN22)	H10628	H10707
22	300	6	35	29	10	H14677	500	95,58	UF22 (SN22)	H10628	H10707
22	350	6	35	29	10	H15389	400	110,50	UF22 (SN22)	H10628	H10707
22	400	6	35	29	10	H15070	350	125,42	UF22 (SN22)	H10628	H10707
25	75	7	40	31	12	H15856	450	38,04	UF25(SN25)	Auf Anfrage on request	
25	100	7	40	31	12	H15150	400	47,67	UF25(SN25)		
25	125	7	40	31	12	H15581	340	57,31	UF25(SN25)		
25	150	7	40	31	12	H15279	280	66,94	UF25(SN25)		
25	175	7	40	31	12	H15695	220	76,54	UF25(SN25)		
25	200	7	40	31	12	H15456	200	86,21	UF25(SN25)		
25	225	7	40	31	12	H16354	170	95,84	UF25(SN25)		
25	250	7	40	31	12	H16180	150	105,47	UF25(SN25)		
25	300	7	40	31	12	H16368	350	124,74	UF25(SN25)		

1 Richtwerte

4 Keramikring

1 are approximate values

² Stahl S235J2+C470² steel S235J2+C470³ Verpackungseinheit Fass³ packing-unit barrel

Weitere Materialien und Abmessungen auf
Anfrage

other materials or dimensions on
request



KÖCO Gewindebolzen K800

KÖCO threaded stud K800

KÖCO Gewindebolzen – jetzt mit Streckgrenze 640 N/mm² Das bedeutet gegenüber der Standardklasse 4.8:

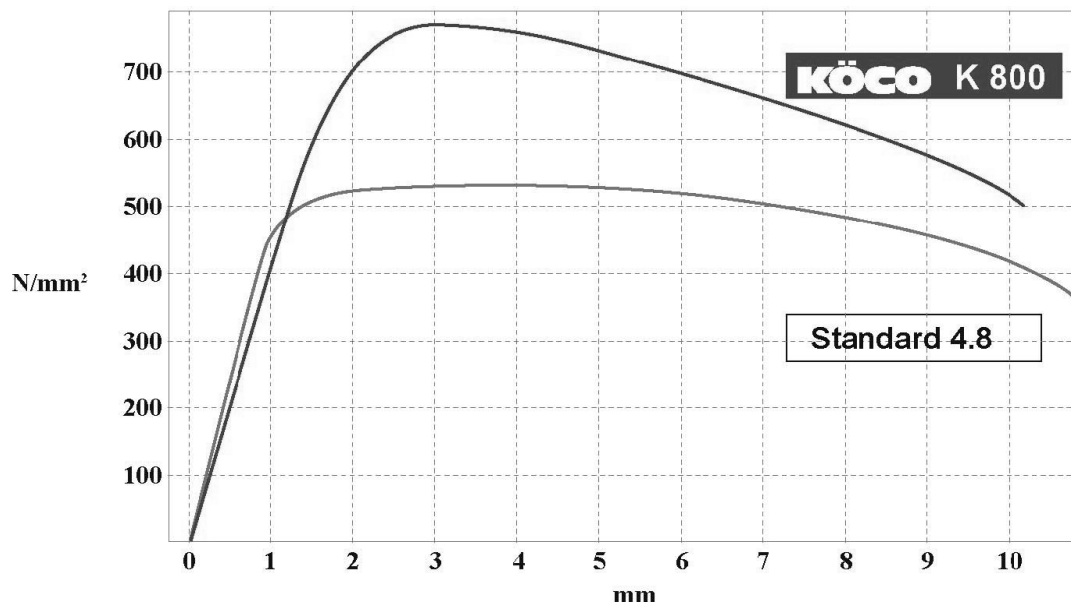
- Verdoppelung der Nennwerte von Zugfestigkeit und Streckgrenze
- Keine Versprödung beim Bolzenschweißen
- kleinere Bolzendurchmesser bei gleicher Tragfähigkeit
- Gewichts- und Kostensenkung
- Ersatz von Normschrauben 8.8 durch KÖCO-Schweißbolzen K 800 möglich

KÖCO threaded studs – now in yield strength 640 N/mm² Advantages compared to the standard property class 4.8:

- nominal values of tensile strength and yield strength doubled
- no embrittlement during stud welding
- smaller stud diameters with equal load capacity
- weight and cost reduction
- replacement of 8.8 standard screws with KÖCO K 800 welding studs possible

Zugprobe (Beispiel) / tensile test (example)

	S ₀ [N/mm ²]	E [N/mm ²]	R _{p0,2} [N/mm ²]	F _m [N]	R _m [N/mm ²]
Probe/sample 1 - K 800 (M 20)	245,00	28605	669	188688	771
Probe/sample 2 - K 800 (M 20)	245,00	28182	666	189723	774
Probe/sample 3 - S235J2 (M 20)	245,00	32325	486	131070	534
Probe/sample 4 - S235J2 (M 20)	245,00	33519	477	130671	534



Bruchkraft Standard 4.8/ fracture load standard 4.8

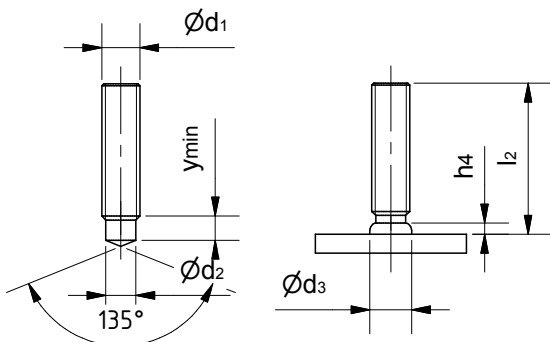
ca.130 KN

Bruchkraft K 800/ fracture load standard K800

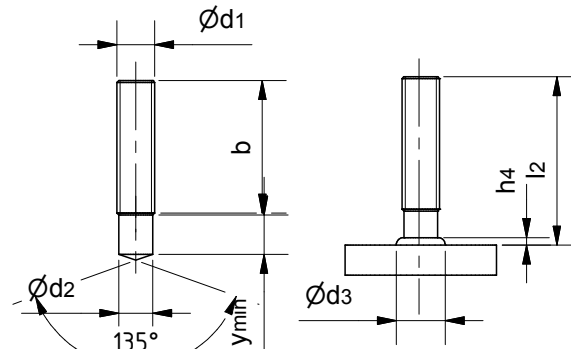
ca.190 KN

KÖCO Gewindebolzen K800

KÖCO threaded stud K800



Gewindebolzen Typ RD Maße nach DIN EN ISO 13918
threaded stud RD, dimensions acc. to EN ISO 13918



Gewindebolzen Typ PD Maße nach DIN EN ISO 13918
threaded stud PD, dimensions acc. to EN ISO 13918

d1	l2	h4	d2	d3	ymin
M8	20-100	2,5	6,2	9	4
M10	20-100	3	7,9	12,5	5
M12	25-100	4	9,5	15,5	6
M16	30-100	5	13,2	19,5	1
M20	40-100	6	16,5	24,5	13

d1	l2	h4	d2	d3	ymin	b
M8	15-45	3,5	7,19	10	9	
	50-100					40
M10	20-45	4	9,03	12,5	9,5	
	50-100					40
	100-120					80
M12	25-50	4,5	10,86	15,5	11,5	
	55-100					40
	140-160					80
M16	30-45	6	14,7	19,5	13,5	
	50-100					40
	120-					80

Information zum Werkstoff K 800:

K800 hat eine Mindeststreckgrenze von 640 N/mm² bei einer Zugfestigkeit von ca. 800 N/mm² und kann Schrauben der Festigkeitsklasse 8.8 nach ISO 898 ersetzen.

Der niedrige Kohlenstoffgehalt von ca. 0,1% verhindert Versprödung beim Schweißen. Beim K800 wird die hohe Festigkeit allein durch Kaltumformung erzielt.

Information about the material K 800:

K800 has a minimum yield strength of 640 N/mm² with a minimum tensile strength of approx. 800 N/mm² and can replace screws of the strength category 8.8 according to ISO 898.

The low carbon content of approx. 0.1% prevents embrittlement during welding. The high level of strength in K800 is achieved exclusively by cold forming.