

KOLBENSTANGEN

Kolbenstangen, hartverchromt

C45, 20MnV6, 42CrMo4+QT

Abmessungsbereich	<Ø20	≥Ø20
Passung	f7 / f8	f7
Chromschichthärte	mindestens 800 HV	mindestens 800 HV
Chromschichtstärke	mindestens 15 µm	mindestens 20 µm
Korrosionsbeständigkeit (ISO 9227-NSS)	144 Stunden Rating 9	200 Stunden Rating 9
Rauheit	maximal 0,25 µm	maximal 0,25 µm
Geradheit	0,3 : 1.000 mm	0,3 : 1.000 mm
Rundheit	50% der Durchmesserertoleranz	50% der Durchmesserertoleranz

Kolbenstangen, hartverchromt, induktiv gehärtet

C45, 42CrMo4+QT, 38MnV6

Randschichthärte	54 – 63 HRC
Einhärtetiefe	0,75 – 3 mm (je nach Durchmesser)

Edelstahl Kolbenstangen, hartverchromt

AISI 431 / 1.4057, AISI 304 / 1.4301, AISI 329 / 1.4460, AISI 630 / 1.4542 / 17-4 PH

Korrosionsbeständigkeit (ISO 9227-NSS)	500 - 1.500 Stunden (je nach Werkstoff) Rating 10
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NIKROM 500

280X

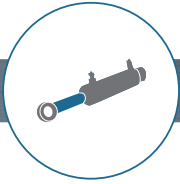
Schichtdicke	≥30 µm Nickel + ≥20 µm Chrom
Korrosionsbeständigkeit (ISO 9227-NSS)	1.500 Stunden Rating 10

Kolbenstangen, doppelt verchromt

20MnV6

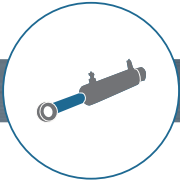
Schichtdicke	2 x ≥20 µm Chrom
Korrosionsbeständigkeit (ISO 9227-NSS)	500 Stunden Rating 9

Abnahmeprüfzeugnis 3.1 | EN 10204



Verchromte Kolbenstangen Chrome plated rods

Ø (mm)	Zoll	kg / m	C45	20MnV6	E355	42CrMo4 +QT	C45 ind. geh.	42CrMo4 +QT ind. geh.	38MnV6 ind. geh.	1.4057	1.4301	1.4460	20MnV6 2x20 µm	NIKROM 500
4		0,099	x											
5		0,154	x							x				
6		0,222	x							x				
8		0,4	x	x			x				x			
9,525	3/8"	0,559	x											
10		0,62	x	x			x			x	x			
11		0,75		x										
12		0,89	x	x			x	x		x	x			
12,7	1/2"	0,889	x											
14		1,21	x	x		x	x	x		x	x			
15		1,39	x	x										
15,875	5/8"	1,553	x	x										
16		1,58	x	x		x	x	x		x	x			
17		1,78	x											
18		2	x	x		x	x	x		x	x	x		x
19,05	3/4"	2,236	x	x										
20		2,47	x	x		x	x	x		x	x	x	x	x
22		2,98	x	x		x	x	x		x		x	x	x
24		3,548	x	x			x							
25		3,853	x	x		x	x	x		x	x	x	x	x
25,4	1"	3,976		x			x	x						
26		4,17		x										
28		4,83	x	x		x	x	x		x	x	x	x	x
28,575		5,14	x											
30		5,55	x	x		x	x	x	x	x	x	x	x	x
31,75	1 1/4"	6,212	x	x			x	x						
32		6,313	x	x		x	x	x		x	x	x	x	x
34,925	1 3/8"	7,52		x				x						
35		7,553	x	x		x	x	x	x	x	x	x	x	x
36		7,99	x	x		x	x	x		x		x	x	x
37		8,44		x			x							
38		8,903		x		x	x							
38,1	1 1/2"	8,945		x				x						
40		9,865	x	x		x	x	x	x	x	x	x	x	x
42		10,876	x	x				x					x	
43		11,46	x											
44,45	1 3/4"	12,175	x	x				x						
45		12,5	x	x		x	x	x	x	x		x	x	x
46		12,985		x										
48		14,2		x										
50		15,414	x	x		x	x	x	x	x	x	x	x	x
50,8	2"	15,873		x			x	x						
52		16,617		x										
54		17,98		x										
55		18,7	x	x		x	x	x		x	x	x	x	x
56		19,335	x	x		x	x	x		x		x	x	x
57,15	2 1/4"	20,127		x			x	x						



Verchromte Kolbenstangen Chrome plated rods

Ø (mm)	Zoll	kg / m	C45	20MnV6	E355	42CrMo4 +QT	C45 ind. geh.	42CrMo4 +QT ind. geh.	38MnV6 ind. Geh.	1.4057	1.4301	1.4460	20MnV6 2x20 µm	NIKROM 500
60		22,2	x	x		x	x	x	x	x	x	x	x	x
63		24,5	x	x		x	x	x		x		x	x	x
63,5	2 1/2"	24,86		x				x						
64		25,24		x										
65		26,04	x	x		x	x	x				x	x	x
70		30,21	x	x		x	x	x	x	x		x	x	x
75		34,68		x		x	x	x			x			x
76,2	3"	35,893		x				x						
77		37		x										
78		37,49		x										
80		39,5	x	x		x	x	x		x		x	x	x
82,55	3 1/4"	41,99		x				x						
85		44,55	x	x		x	x	x						x
88,9	3 1/2"	48,727		x		x		x						
90		49,94	x	x		x	x	x		x	x	x	x	x
95		55,64	x	x		x	x	x						
100		61,65	x	x		x	x	x		x		x	x	x
101,6	4"	63,6		x				x						
105		68		x		x		x						
110		74,6	x	x		x	x	x		x		x	x	x
114,3	4 1/2"	80,227		x										
115		81,53		x		x		x						x
120		88,8	x	x		x	x	x		x		x	x	x
125		96,33	x	x		x	x	x		x		x		x
130		104,2	x	x		x	x	x						x
135		112,36	x	x										
140		120,84	x	x		x	x	x		x		x		x
145		129,61	x											
150		139	x	x		x	x	x		x				x
160		157,75	x	x		x	x	x		x		x		x
165		167,8		x										
170		178,2	x	x				x						
180		199,66	x	x		x	x	x		x		x	x	
190		224	x	x										
200		246,6	x	x		x	x	x						
210		271,9	x	x										
220		298,4	x	x										
240		355,13	x											
250		385,33	x	x			x							
300		559	x		x									

chromed bars

rods, chrome plated

C45, 20MnV6, 42CrMo4+QT

size range	<Ø20	≥Ø20
tolerance	f7 / f8	f7
chrome layer hardness	minimum 800 HV	minimum 800 HV
chrome layer thickness	minimum 15 µm	minimum 20 µm
corrosion resistance (ISO 9227-NSS)	144 hours I rating 9	200 hours I rating 9
roughness	maximum 0,25 µm	maximum 0,25 µm
straightness	0,3 : 1.000 mm	0,3 : 1.000 mm
roundness	50% of the dimension tolerance	50% of the dimension tolerance

rods, chrome plated, induction hardened

C45, 42CrMo4+QT, 38MnV6

surface hardness	54 – 63 HRC
hardening depth	0,75 – 3 mm (depending on diameter)

stainless steel rods, chrome plated

AISI 431 / 1.4057, AISI 304 / 1.4301, AISI 329 / 1.4460, F51 / 1.4462, AISI 630 / 1.4542 / 17-4 PH

corrosion resistance (ISO 9227-NSS)	500 hours - 1500 hours (depending on steelgrade) I rating 10
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NIKROM 500

X280

layer thickness	≥30 µm nickel + ≥20 µm chrome
corrosion resistance (ISO 9227-NSS)	1.500 hours I rating 10

rods, 2 times chrome plated

20MnV6

chrome layer thickness	2 x ≥20 µm chrome
corrosion resistance (ISO 9227-NSS)	500 hours I rating 9

certificate 3.1 | EN 10204



C+R HYDRAULICS

C+R HYDRAULICS GmbH –
National und International in der ersten Liga



München
Dornacher Straße 3a · 85622 Feldkirchen
Tel +49 89 90 47 53 0 · muenchen@cr-hydraulics.de

Stuttgart
Daimlerstr. 127 · 70372 Stuttgart
Tel. +49 711 25 08 200 · stuttgart@cr-hydraulics.de

Wuppertal
Hahnerberger Straße 137 · 42349 Wuppertal
Tel. +49 202 31 77 06 15 · wuppertal@cr-hydraulics.de

Netherlands
Mr F.J. Haarmanweg 59 B · NL-4538 AN Terneuzen
Tel. +31 115 741 050 · netherlands@cr-hydraulics.nl