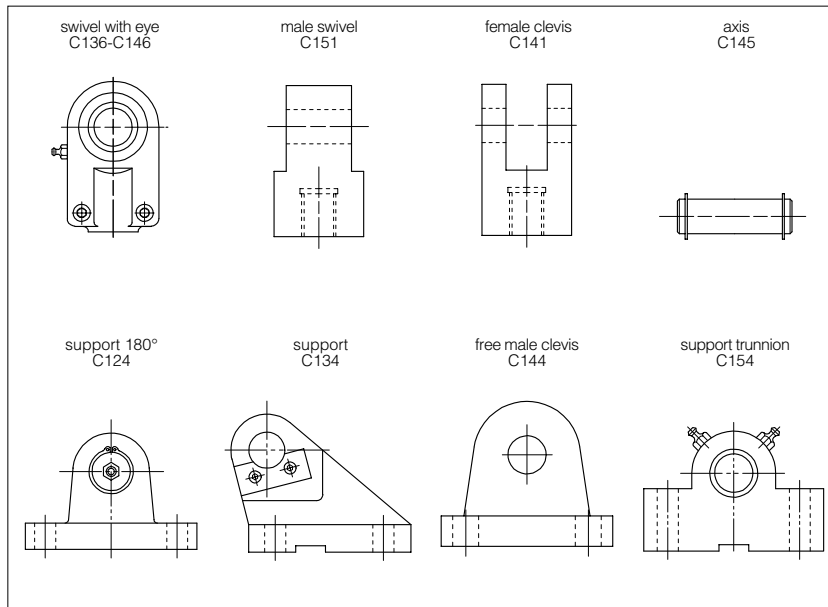


# Attachments for hydraulic cylinders









to ISO 6982 and ISO 8133, DIN 24555 and DIN 24556



For each bore, standard rod attachments (clevis and clevis with swivel eye) and free male attachments are available. Assembly variants are shown in the table below.

<b>1 MODEL CODE</b>		<b>12</b>
<b>C</b>	<b>- 141</b>	<b>12</b>
standard attachment		piston/rod diameter (mm)
attachments: <b>136</b> = swivel with eye <b>146</b> = swivel with eye <b>141</b> = female clevis <b>151</b> = male swivel <b>124</b> = support 180° <b>134</b> = support <b>144</b> = free male clevis <b>154</b> = support trunnion <b>145</b> = axis		

## 2 ATTACHMENTS: POSSIBLE COMPOSITIONS - SUMMARIZING TABLE

BORING	ATTACH. CODE	Ø ROD	ATTACHMENT CODE							
										
25	C-14425	12 18H (*)	C-13612	C-14612	C-14112	C-15112	C-14512		C-13425	C-15424
32	C-14432	14 22H (*)	C-13614	C-14614	C-14114	C-15114	C-14514	C-12414	C-13432	C-15432
40	C-14440	18 28H (*)	C-13618	C-14618	C-14118	C-15118	C-14518	C-12418	C-13440	C-15440
50	C-14450	22	C-13622	C-14622	C-14122	C-15122	C-14522	C-12422		
		28	C-13628	C-14628	C-14128	C-15128	C-14528	C-12428	C-13450	C-15450
		36H (*)	C-13622	C-14622	C-14122	C-15122	C-14522	C-12422		
63	C-14463	28	C-13628	C-14628	C-14128	C-15128	C-14528	C-12428		
		36	C-13636	C-14636	C-14136	C-15136	C-14536	C-12436	C-13463	C-15463
		45H (*)	C-13628	C-14628	C-14128	C-15128	C-14528	C-12428		
80	C-14480	36	C-13636	C-14636	C-14136	C-15136	C-14536	C-12436		
		45	C-13645	C-14645	C-14145	C-15145	C-14545	C-12445	C-13480	C-15480
		56H (*)	C-13636	C-14636	C-14136	C-15136	C-14536	C-12436		
100	C-144100	45	C-13645	C-14645	C-14145	C-15145	C-14545	C-12445		
		56	C-13656	C-14656	C-14156	C-15156	C-14556	C-12456	C-134100	C-154100
		70H (*)	C-13645	C-14645	C-14145	C-15145	C-14545	C-12445		
125	C-144125	56	C-13656	C-14656	C-14156	C-15156	C-14556	C-12456		
		70	C-13670	C-14670	C-14170	C-15170	C-14570	C-12470	C-134125	C-154125
		90H (*)	C-13656	C-14656	C-14156	C-15156	C-14556	C-12456		
160	C-144160	70 110H (*)	C-13670	C-14670	C-14170	C-15170	C-14570	C-12470	C-134160	C-154160
200	C-144200	90 140H (*)	C-13690	C-14690	C-14190	C-15190	C-14590	C-12490	C-134200	-
250	-	140	C-136140	C-146140	C-141140	C-151140	C-145140	-	-	-
320	-	180	C-136180	C-146180	C-141180	C-151180	C-145180	-	-	-

(\*) : optional light male thread to DIN 24554, for other details see table B137, section 4 and 10

Notes: attachments C124, C134, C141 are always supplied with axis C145;  
 code C154 includes two pieces.

Examples:

- clevis C-14114 can be screwed at cylinder CK-32/14 or CK-32/22H and is coupled with male free attachment C-14432 through axis C-14514;
- free attachment C-14432 is also coupled with female clevis C rear attachment (ISO MP1) of cylinder CK-32.

**3 DIMENSIONS [mm]**

C-136 ISO 6982		Ø ROD tipic. diff.	ATTACH. CODE	KK	AX	B	C	CB	CH	CN	EN	H	LF	NC	MASS [Kg]	NOMINAL FORCE [kN]
14	22H	C-13616	M12x1,25	17	16	32	10,5	38	12	12	54	14	32	0,12	8	
18	28H	C-13618	M14x1,5	19	21	40	13	44	16	16	64	18	40	0,23	12,5	
22	36H	C-13622	M16x1,5	23	25	47	17	52	20	20	77	22	47	0,42	20	
28	45H	C-13628	M20x1,5	29	30	58	21	65	25	25	96	27	54	0,68	32	
36	56H	C-13636	M27x2	37	38	70	27	80	32	32	118	32	66	1,14	50	
45	70H	C-13645	M33x2	46	47	89	32	97	40	40	146	41	80	2,08	80	
56	90H	C-13656	M42x2	57	58	108	40	120	50	50	179	50	96	4,47	125	
70	110H	C-13670	M48x2	64	70	132	52	140	63	63	211	62	114	7,65	200	
90	140H	C-13690	M64x3	86	90	168	66	180	80	80	270	78	148	14,55	320	
90	-	C-13690A	M72x2	91	100	185	72	195	90	90	296	85	160	19	490	
110	-	C-136110	M80x3	96	110	210	84	210	100	100	322	98	178	28,2	500	
110	-	C-136110A	M90x3	106	125	235	88	235	110	110	364	105	190	32	655	
140	-	C-136140	M100x3	113	135	264	103	260	125	125	405	120	200	49,5	800	
180	-	C-136180	M125x4	126	165	326	130	310	160	160	488	150	250	85,5	1.250	
220	-	C-136220	M160x4	161	215	418	162	390	200	200	620	195	320	168	2.120	

C-146 ISO 8133 DIN 24555		Ø ROD tipic. diff.	ATTACH. CODE	KK	CX	EN	EF max	CH js13	AX min	LF min	EU h13	N max	MASS [Kg]	NOMINAL FORCE [kN]
12	18H	C-14612	M10x1,25	12 <sup>0</sup> <sub>-0,08</sub>	10 <sup>0</sup> <sub>-0,12</sub>	20	20	42	15	16	8	17	0,12	8
14	22H	C-14614	M12x1,25	16 <sup>0</sup> <sub>-0,08</sub>	14 <sup>0</sup> <sub>-0,12</sub>	22,5	48	17	20	11	21	21	0,21	12,5
18	28H	C-14618	M14x1,5	20 <sup>0</sup> <sub>-0,12</sub>	16 <sup>0</sup> <sub>-0,12</sub>	27,5	58	19	25	13	25	25	0,38	20
22	36H	C-14622	M16x1,5	25 <sup>0</sup> <sub>-0,12</sub>	20 <sup>0</sup> <sub>-0,12</sub>	32,5	68	23	30	17	30	30	0,66	32
28	45H	C-14628	M20x1,5	30 <sup>0</sup> <sub>-0,12</sub>	22 <sup>0</sup> <sub>-0,12</sub>	40	85	29	35	19	36	36	1,16	50
36	56H	C-14636	M27x2	40 <sup>0</sup> <sub>-0,12</sub>	28 <sup>0</sup> <sub>-0,12</sub>	50	105	37	45	23	45	45	2,10	80
45	70H	C-14645	M33x2	50 <sup>0</sup> <sub>-0,12</sub>	35 <sup>0</sup> <sub>-0,12</sub>	62,5	130	46	58	30	55	55	3,85	125
56	90H	C-14656	M42x2	60 <sup>0</sup> <sub>-0,15</sub>	44 <sup>0</sup> <sub>-0,15</sub>	80	150	57	68	38	68	68	8,05	200
70	110H	C-14670	M48x2	80 <sup>0</sup> <sub>-0,15</sub>	55 <sup>0</sup> <sub>-0,15</sub>	102,5	185	64	92	47	90	90	19,00	320
90	140H	C-14690	M64x3	100 <sup>0</sup> <sub>-0,2</sub>	70 <sup>0</sup> <sub>-0,2</sub>	120	240	86	116	57	110	110	28,00	500

On C-14612, C-14614, C-14618 greaser is not provided

C-141 ISO 8133		Ø ROD tipic. diff.	ATTACH. CODE	KK	CK H9	CM A16	ER max	CE js13	AV min	LE min	CL h13	EL max	EK	MASS [Kg]	NOMINAL FORCE [kN]
12	18H	C-14112 C-14512	M10x1,25	10	12	12	32	14	13	26	29	10	0,06	8	
14	22H	C-14114 C-14514	M12x1,25	12	16	17	36	16	19	34	37	12	0,20	12,5	
18	28H	C-14118 C-14518	M14x1,5	14	20	17	38	18	19	42	45	14	0,20	20	
22	36H	C-14122 C-14522	M16x1,5	20	30	29	54	22	32	62	66	20	0,50	32	
28	45H	C-14128 C-14528	M20x1,5	20	30	29	60	28	32	62	66	20	0,95	50	
36	56H	C-14136 C-14536	M27x2	28	40	34	75	36	39	83	87	28	1,75	80	
45	70H	C-14145 C-14545	M33x2	36	50	50	99	45	54	103	107	36	3,70	125	
56	90H	C-14156 C-14556	M42x2	45	60	53	113	56	57	123	129	45	5,60	200	
70	110H	C-14170 C-14570	M48x2	56	70	59	126	63	63	143	149	56	9,30	320	
90	140H	C-14190 C-14590	M64x3	70	80	78	168	86	83	163	169	70	20,90	500	

Note: the clevis C-141 are always supplied with the axis C-145\*

C-151 ISO 8133		Ø ROD tipic. diff.	ATTACH. CODE	KK	AW	B	CA	CB	CK H9	EM h13	ER	LE	MASS [Kg]	NOMINAL FORCE [kN]
12	18H	C-15112	M10x1,25	14	15	32	18	10	12	12	13	0,08	8	
14	22H	C-15114	M12x1,25	16	22	36	22	12	16	17	19	0,15	12,5	
18	28H	C-15118	M14x1,5	18	25	38	20	14	20	17	19	0,22	20	
22	36H	C-15122	M16x1,5	22	35	54	30	20	30	29	32	0,50	32	
28	45H	C-15128	M20x1,5	28	40	60	30	20	30	29	32	1,10	50	
36	56H	C-15136	M27x2	36	50	75	40	28	40	34	39	1,50	80	
45	70H	C-15145	M33x2	45	70	99	50	36	50	50	54	2,50	125	
56	90H	C-15156	M42x2	56	100	113	65	45	60	53	57	4,20	200	
70	110H	C-15170	M48x2	63	116	126	90	56	70	59	63	11,80	320	
90	140H	C-15190	M64x3	85	160	168	110	70	80	78	83	17,00	500	

C-124 ISO 8132		Ø ROD tipic. diff.	ATTACH. CODE	CK H9	CL h16	CM A12	FL js12	HB H13	LE min.	MR max.	RC js14	TB js14	UD max.	UH max.	MASS [Kg]	NOMINAL FORCE [kN]
	14	22H	C-12414	12	28	12	34	9	22	12	20	50	40	70	0,31	8
	18	28H	C-12418	16	36	16	40	11	27	16	26	65	50	90	0,59	12,5
	22	36H	C-12422	20	45	20	45	11	30	20	32	75	58	98	0,9	20
	28	45H	C-12428	25	56	25	55	13,5	37	25	40	85	70	113	1,6	32
	36	56H	C-12436	32	70	32	65	17,5	43	32	50	110	85	143	2,8	50
	45	70H	C-12445	40	90	40	76	22	52	40	65	130	108	170	5	80
	56	90H	C-12456	50	110	50	95	26	65	50	80	170	130	220	10,1	125
	70	110H	C-12470	63	140	63	112	33	75	63	100	210	160	270	15,4	200
	90	140H	C-12490	80	170	80	140	39	95	80	125	250	210	320	30	320

C-134 DIN 24556		BORING	ATTACH. CODE	CF K7	UK	UJ	CG +0/+0,3 h14	CP js11	FM	LG	LJ	TA js13	RE js13	HB	LO	SR max.	CO H9	KC	FO	GL js13	MASS [Kg]	NOMINAL FORCE [kN]
	25	C-13425	12	60	75	10	30	40	28	29	40	55	9	56	12	10	3,3	16	46	0,52	8	
	32	C-13432	16	80	95	14	40	50	37	38	55	70	11	74	16	16	4,3	18	61	1,05	12,5	
	40	C-13440	20	90	120	16	50	55	39	40	58	85	13,5	80	20	16	4,3	20	64	1,72	20	
	50	C-13450	25	110	140	20	60	65	48	49	70	100	15,5	98	25	25	5,4	22	78	2,72	32	
	63	C-13463	30	135	160	22	70	85	62	63	90	115	17,5	120	30	25	5,4	24	97	5,15	50	
	80	C-13480	40	170	190	28	80	100	72	73	120	135	22	148	40	36	8,4	24	123	9,3	80	
	100	C-134100	50	215	240	35	100	125	90	92	145	170	30	190	50	36	8,4	35	155	18,3	125	
	125	C-134125	60	260	270	44	120	150	108	110	185	200	39	225	60	50	11,4	35	187	35	200	
	160	C-134160	80	340	320	55	160	190	140	142	260	240	45	295	80	50	11,4	35	255	63	320	
	200	C-134200	100	400	400	70	200	210	150	152	300	300	48	335	100	63	12,4	35	285	109	500	

C-144 ISO 8133		BORING	ATTACH. CODE	CK H8	E max	EM h13	FL JS14	MR max	LE min	AA	HB H13	R JS14	MASS [Kg]	NOMINAL FORCE [kN]
	25	C-14425	10	40	12	23	12	13	40	5,5	28,3	0,30	8	
	32	C-14432	12	45	16	29	17	19	47	6,6	33,2	0,45	12	
	40	C-14440	14	63	20	29	17	19	59	9	41,7	0,90	20	
	50	C-14450	20	75	30	48	29	32	74	13,5	52,3	1,30	32	
	63	C-14463	20	90	30	48	29	32	91	13,5	64,3	1,90	50	
	80	C-14480	28	115	40	58	34	39	117	17,5	82,7	4,00	80	
	100	C-144100	36	130	50	79	50	54	137	17,5	96,9	6,25	125	
	125	C-144125	45	165	60	87	53	57	178	24	125,9	11,40	200	
	160	C-144160	56	205	70	103	59	63	219	30	154,9	20,80	320	
	200	C-144200	70	245	80	132	78	82	269	33	190,2	38,80	500	

C-154 ISO 8132		BORING	ATTACH. CODE	CR H7	FK js12	FN max.	HB H13	NH max.	TH js14	UL max.	CO N9	KC 0/+0,3	FH max.	FS H16	MASS [Kg]	NOMINAL FORCE [kN]
	25	C-15425	12	34	49	9	17	40	63	10	3,3	25	8	0,46	8	
	32	C-15432	16	40	59	11	21	50	80	16	4,3	30	10	0,83	12,5	
	40	C-15440	20	45	69	11	21	60	90	16	4,3	38	10	1,21	20	
	50	C-15450	25	55	80	13,5	26	80	110	25	5,4	45	12	2,15	32	
	63	C-15463	32	65	100	17,5	33	110	150	25	5,4	52	15	4,63	50	
	80	C-15480	40	76	120	22	41	125	170	36	8,4	60	16	7,78	80	
	100	C-154100	50	95	140	26	51	160	210	36	8,4	75	20	14,3	125	
	125	C-154125	63	112	177	33	61	200	265	50	11,4	85	25	23,4	200	
	160	C-154160	80	140	220	39	81	250	325	50	11,4	112	31	53,1	320	

The code is referred to two pcs