



HHJ 30 G 5

**Features & benefits** ↓

- Compact
- Usable in all positions
- Protected against ejection of the plunger

**Standard supplied with** ↓

- High Flow female coupler A 118

**Available on request** ↓

- Cylinders manufactured in conformity with customer specifications
- Collar thread
- Base mounting holes

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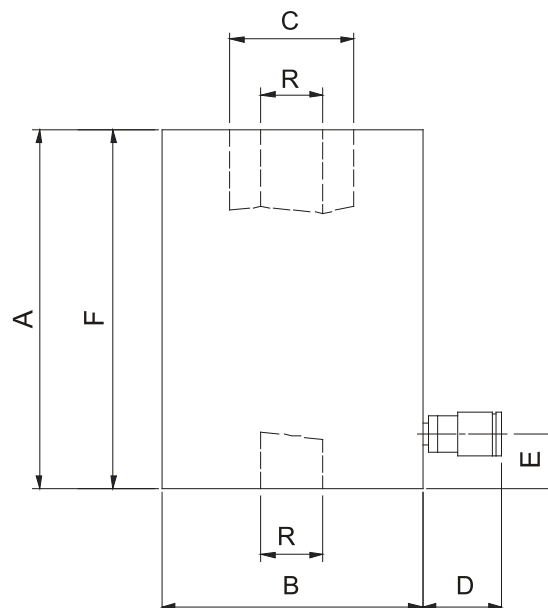


**Hollow plunger cylinders - Gravity return**


<b>model</b>	<b>HHJ 30 G 5</b>	
art no	100.111.053	
max. working pressure	bar/Mpa	720 / 72
<b>tonnage</b>	<b>t</b>	30
<b>stroke</b>	<b>mm</b>	50
<b>closed height</b>	<b>mm</b>	120
capacity	kN/t	293.7 / 29.9
effective pressure area	cm <sup>2</sup>	40.8
required oil content (effective)	cc	204
connection	A 118	
cylinder type	hollow plunger	
acting type	single	
return type	gravity	
material	steel	
weight, ready for use	kg	10.0

**Hollow plunger cylinders - Gravity return (dimensions)**


<b>model</b>	<b>HHJ 30 G 5</b>	
dimension A	mm	120
dimension B	mm	118
dimension C	mm	70
dimension D	mm	90
dimension E	mm	33
dimension F	mm	120
dimension R	mm	33





**Features & benefits** ↓

- Compact
- Usable in all positions
- Protected against ejection of the plunger
- Hollow saddle
  - Prevents damage to the plunger
  - Easy to replace with threaded or flat saddle

**Standard supplied with** ↓

- High Flow female coupler A 118
- Hollow saddle, with the exception of the HHJ 5 S 2.5, HHJ 12 S 5 and HHJ 12 S 15 cylinders

**Available on request** ↓

- Cylinders manufactured in conformity with customer specifications
- Collar thread
- Base mounting holes

**Accessories** ↓

- Saddles: threaded and flat saddles

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Hollow saddle

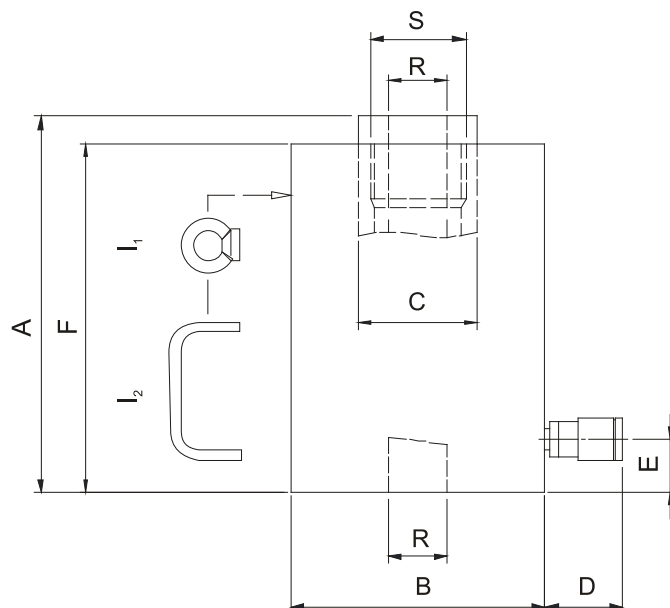


**Hollow plunger cylinders - Spring return**


model		HHJ 5 S 2.5	HHJ 12 S 5	HHJ 12 S 15	HHJ 17 S 5	HHJ 20 S 5	HHJ 20 S 15
art no		100.111.002	100.111.021	100.111.029	100.112.023	100.112.033	100.112.030
max. working pressure	bar/Mpa	720 / 72	720 / 72	720 / 72	720 / 72	720 / 72	720 / 72
tonnage	t	5	12	12	17	20	20
stroke	mm	25	50	150	50	50	150
closed height	mm	87	156	298	192	182	389
capacity	kN/t	54.3 / 5.5	126.7 / 12.9	126.7 / 12.9	169.6 / 17.3	223.9 / 22.8	223.9 / 22.8
effective pressure area	cm <sup>2</sup>	7.5	17.6	17.6	23.6	31.1	31.1
required oil content (effective)	cc	19	88	264	118	156	467
connection		A 118	A 118	A 118	A 118	A 118	A 118
cylinder type		hollow plunger	hollow plunger	hollow plunger	hollow plunger	hollow plunger	hollow plunger
acting type		single	single	single	single	single	single
return type		spring	spring	spring	spring	spring	spring
material		steel	steel	steel	steel	steel	steel
weight, ready for use	kg	1.9	6.3	11.0	7.3	8.6	18.0

**Hollow plunger cylinders - Spring return (dimensions)**


model		HHJ 5 S 2.5	HHJ 12 S 5	HHJ 12 S 15	HHJ 17 S 5	HHJ 20 S 5	HHJ 20 S 15
dimension A	mm	87	156	298	192	182	389
dimension B	mm	60	86	86	90	100	100
dimension C	mm	28	40	40	46	50	50
dimension D	mm	90	90	90	90	90	90
dimension E	mm	24	27	27	31	31	31
dimension F	mm	87	156	298	178	170	377
dimension R	mm	17	21	21	27	27	27
dimension S	threadsize				M38x1,5	M38x1,5	M38x1,5
I type							I <sub>2</sub>



**Hollow plunger cylinders - Spring return**

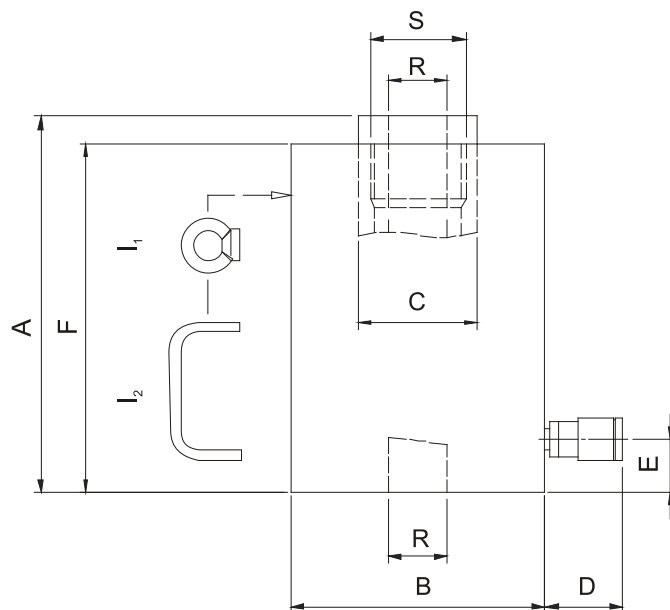


model	HHJ 30 S 7.5	HHJ 30 S 15	HHJ 45 S 15	HHJ 60 S 7.5	HHJ 110 S 7.5
art no	100.112.055	100.112.034	100.112.061	100.112.081	100.112.101
max. working pressure	bar/Mpa 720 / 72	720 / 72	720 / 72	720 / 72	720 / 72
<b>tonnage</b>	<b>t</b> 30	30	45	60	110
<b>stroke</b>	<b>mm</b> 75	150	150	75	75
<b>closed height</b>	<b>mm</b> 226	362	388	272	315
capacity	kN/t 293.7 / 29.9	293.7 / 29.9	453.5 / 46.2	610.4 / 62.2	1107.8 / 113
effective pressure area	cm <sup>2</sup> 40.8	40.8	63	84.8	153.9
required oil content (effective)	cc 306	612	945	636	1155
connection	A 118	A 118	A 118	A 118	A 118
cylinder type	hollow plunger	hollow plunger	hollow plunger	hollow plunger	hollow plunger
acting type	single	single	single	single	single
return type	spring	spring	spring	spring	spring
material	steel	steel	steel	steel	steel
weight, ready for use	kg 15.0	25.0	35.5	34.5	78.3

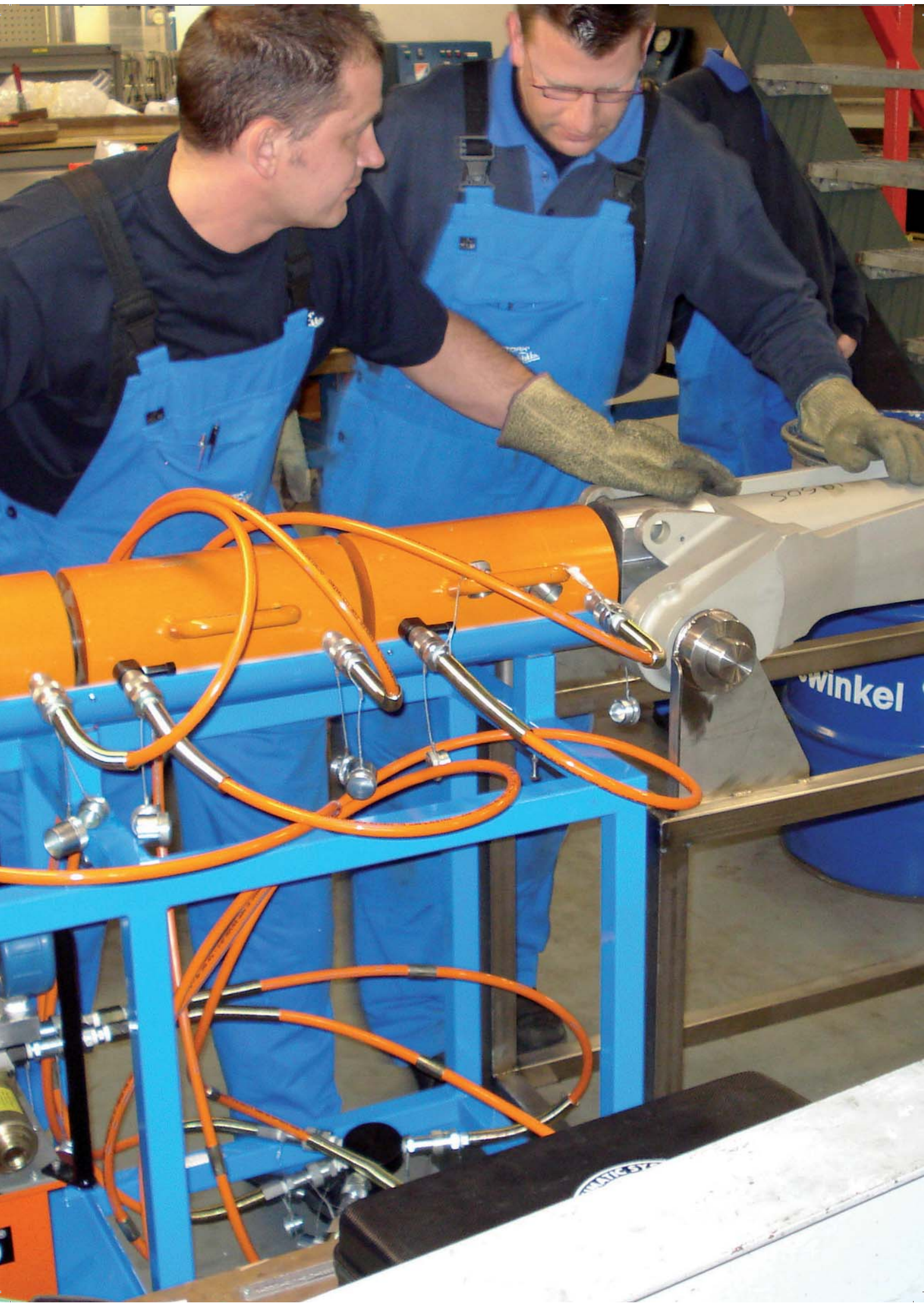
**Hollow plunger cylinders - Spring return (dimensions)**



model	HHJ 30 S 7.5	HHJ 30 S 15	HHJ 45 S 15	HHJ 60 S 7.5	HHJ 110 S 7.5
dimension A	mm 226	362	388	272	315
dimension B	mm 118	120	140	166	238
dimension C	mm 60	60	65	80	130
dimension D	mm 90	90	70	70	70
dimension E	mm 33	32	36	41	40
dimension F	mm 214	350	376	257	295
dimension R	mm 33	33	39	45	80
dimension S	threadsize M50x1,5	M50x1,5	M54x1,5	M65x1,5	M105x2
I type		I <sub>1</sub>	I <sub>2</sub>	I <sub>2</sub>	I <sub>1</sub>











**Features & benefits** ↓

- Usable in all positions
- Protected against ejection of the plunger
- Protected against overpressure on return side
- Hollow saddle
  - Prevents damage to the plunger
  - Easy to replace with threaded or flat saddle

**Standard supplied with** ↓

- High Flow female coupler A 118 on inlet port
- High Flow female coupler with pressure relief valve A 418 on outlet port
- Hollow saddle

**Available on request** ↓

- Cylinders manufactured in conformity with customer specifications
- Collar thread
- Base mounting holes

**Accessories** ↓

- Saddles: threaded and flat saddles

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Hollow saddle



**Hollow plunger cylinders - Hydraulic return**


model	HHJ 30 H 15	HHJ 60 H 20	HHJ 100 H 10	HHJ 100 H 20
art no	100.122.045	100.122.031	100.122.051	100.122.053
max. working pressure	bar/Mpa 720 / 72	720 / 72	720 / 72	720 / 72
<b>tonnage</b>	<b>t</b> 30	60	100	100
<b>stroke</b>	<b>mm</b> 150	200	100	200
<b>closed height</b>	<b>mm</b> 285	334	265	395
capacity (press)	kN/t 293.7 / 29.9	610.4 / 62.2	1018.5 / 103.9	1018.5 / 103.9
capacity (retract)	kN/t 131 / 13.4	452.4 / 46.1	706.9 / 72.1	706.9 / 72.1
effective pressure area (press)	cm <sup>2</sup> 40.8	84.8	141.5	141.5
effective pressure area (retract)	cm <sup>2</sup> 18.2	62.8	98.2	98.2
required oil content (press)	cc 613	1696	1415	2830
required oil content (retract)	cc 274	1256	982	1964
connection	A 118	A 118	A 118	A 118
cylinder type	hollow plunger	hollow plunger	hollow plunger	hollow plunger
acting type	double	double	double	double
return type	hydraulic	hydraulic	hydraulic	hydraulic
material	steel	steel	steel	steel
weight, ready for use	kg 23.0	40.0	53.0	78.0

**Hollow plunger cylinders - Hydraulic return (dimensions)**


model	HHJ 30 H 15	HHJ 60 H 20	HHJ 100 H 10	HHJ 100 H 20
dimension A	mm 285	334	265	395
dimension B	mm 120	166	210	210
dimension C	mm 70	80	100	100
dimension D1	mm 70	70	70	70
dimension D2	mm 85	85	85	85
dimension E	mm 40	41	52	52
dimension F	mm 275	319	245	375
dimension P	mm 50	39	55	75
dimension R	mm 33	45	54	54
dimension S	threadsize M50x1,5	M65x1,5	M72x2	M72x2
l type	l <sub>2</sub>	l <sub>2</sub>	l <sub>1</sub>	l <sub>1</sub>

