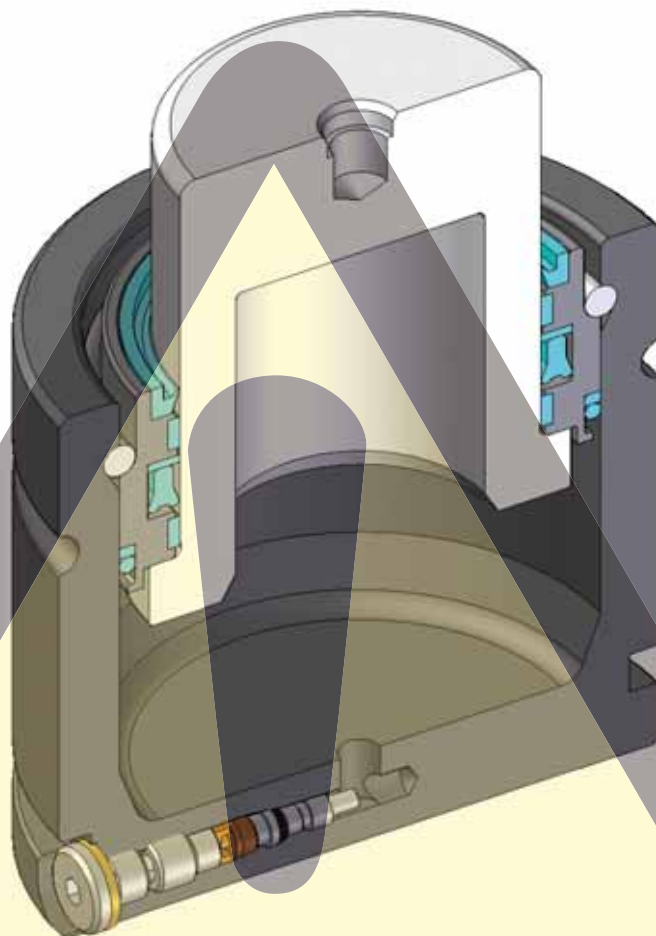


HR SERIES



PED
97/23/EC

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum - Mínima altura, máxima fuerza - Altura mínima, força máxima

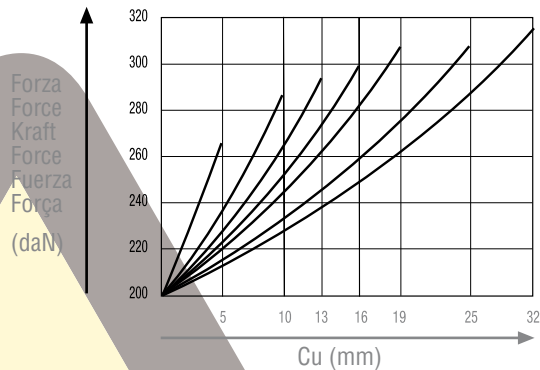
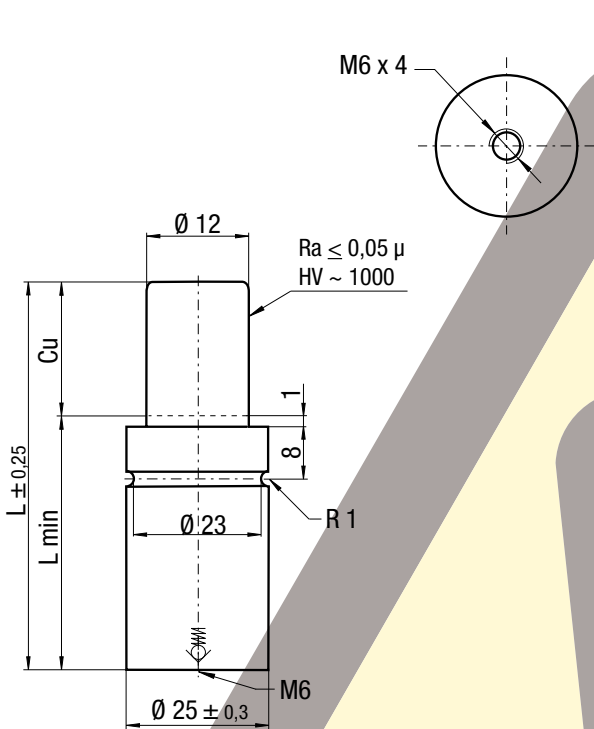


Range chart

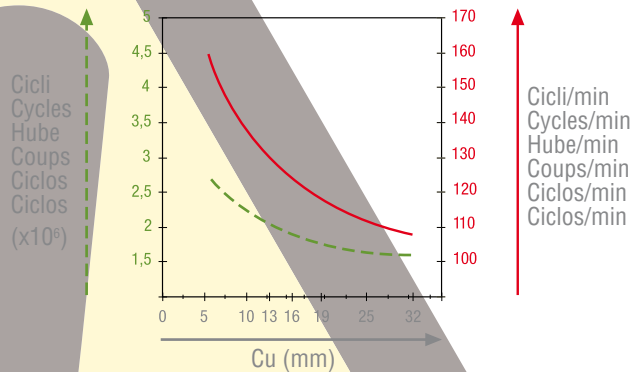
Model	Body Ø mm	Stroke Cu mm	Initial force daN	lifeplus concept		
				SKUDO	OSAS	OPAS
HR 200	25	5 - 32	200	-	-	-
HR 300	32	5 - 125	300	-	-	-
HR 500	38	5 - 125	470	-	-	-
HRF 500	M 38 X 1,5	5 - 125	470	-	-	-
HR 700	45	10 - 125	680	-	-	-
HR 700 N	45	10 - 125	680	-	-	-
HRF 700	M 45 X 1,5	10 - 125	680	-	-	-
HR 1000	50	10 - 125	1060	-	-	-
HR 1000 N	50	10 - 125	1060	-	-	-
HRF 1000	M 50 X 1,5	10 - 125	1060	-	-	-
HR 1500	63	10 - 125	1530	-	-	-
HR 1500 N	63	10 - 125	1530	-	-	-
HR 2400	75	10 - 125	2385	-	-	-
HR 2400 N	75	10 - 125	2385	-	-	-
HR 4200	95	16 - 125	4240	-	-	-
HR 4200 N	95	16 - 125	4240	-	-	-
HR 6600	120	16 - 125	6630	-	-	-
HR 11800	150	19 - 125	11780	-	-	-



Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



Polytropic end forces



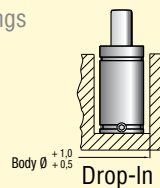
HR
HRF



(10) HR200-032-A

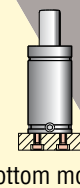
ORDER

Fixings

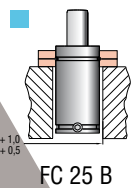


Body Ø ^{+1.0}/_{-0.5}

Drop-In



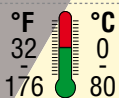
Bottom mount



Body Ø ^{+1.0}/_{+0.5}

FC 25 B

Max. Speed
1,8 m/s



P max
175 bar
2538 psi

P min
20 bar
290 psi

S
1,13
cm²



Maintenance kit
Disposable

Technical specifications

Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³		
HR 200 - 005 - A	5	40	35	200	-	-	~0,09
HR 200 - 010 - A	10	50	40	200	-	-	~0,10
HR 200 - 013 - A	13	56	43	200	-	-	~0,10
HR 200 - 016 - A	16	62	46	200	-	-	~0,11
HR 200 - 019 - A	19	68	49	200	-	-	~0,12
HR 200 - 025 - A	25	80	55	200	-	-	~0,13
HR 200 - 032 - A	32	94	62	200	-	-	~0,16

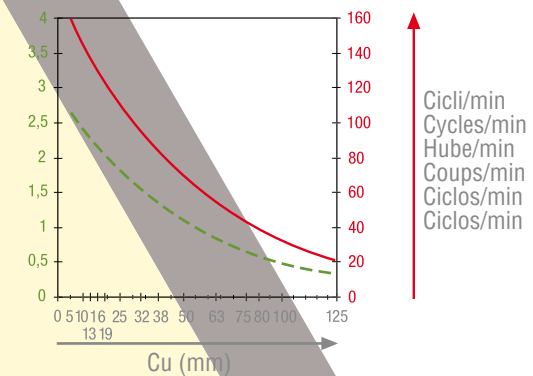
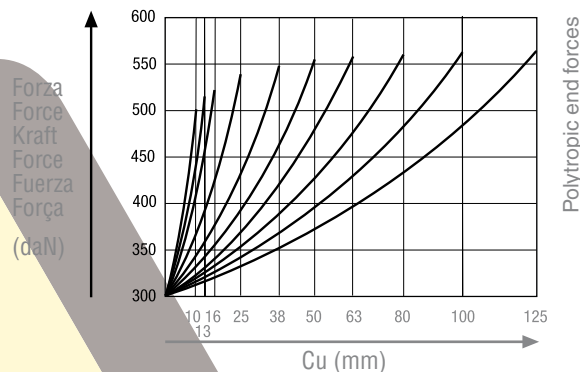
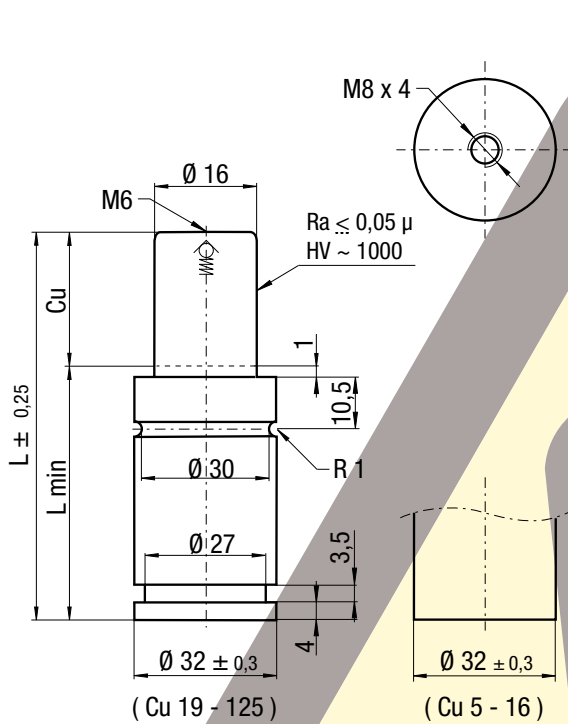
PHASING OUT from March 1st 2012

HR 300

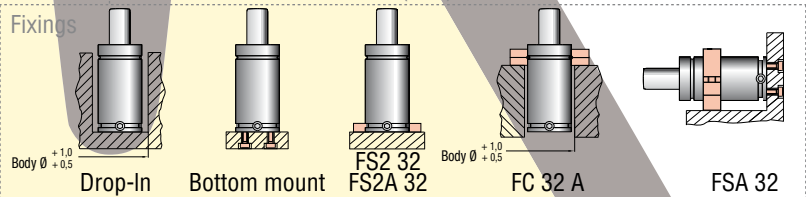
see **RV 350**



Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



ORDER (10) HR300-050-A



Max. Speed 1,8 m/s **°F** 32 **°C** 0 **P max** 150 bar **P min** 20 bar **S** 2,01 cm² **Maintenance kit** 39BMHR00300A

Technical specifications

Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³		 Kg
HR 300 - 005 - A	5	40	35	300	-	-	~0,17
HR 300 - 010 - A	10	50	40	300	-	-	~0,18
HR 300 - 013 - A	13	56	43	300	-	-	~0,19
HR 300 - 016 - A	16	62	46	300	-	-	~0,20
HR 300 - 019 - A	19	68	49	300	-	-	~0,22
HR 300 - 025 - A	25	80	55	300	-	-	~0,25
HR 300 - 032 - A	32	94	62	300	-	-	~0,27
HR 300 - 038 - A	38	106	68	300	-	-	~0,29
HR 300 - 050 - A	50	130	80	300	-	-	~0,34
HR 300 - 063 - A	63	156	93	300	-	-	~0,39
HR 300 - 075 - A	75	180	105	300	-	-	~0,42
HR 300 - 080 - A	80	190	110	300	-	-	~0,45
HR 300 - 100 - A	100	230	130	300	-	-	~0,53
HR 300 - 125 - A	125	280	155	300	-	-	~0,68

PHASING OUT from March 1st 2012



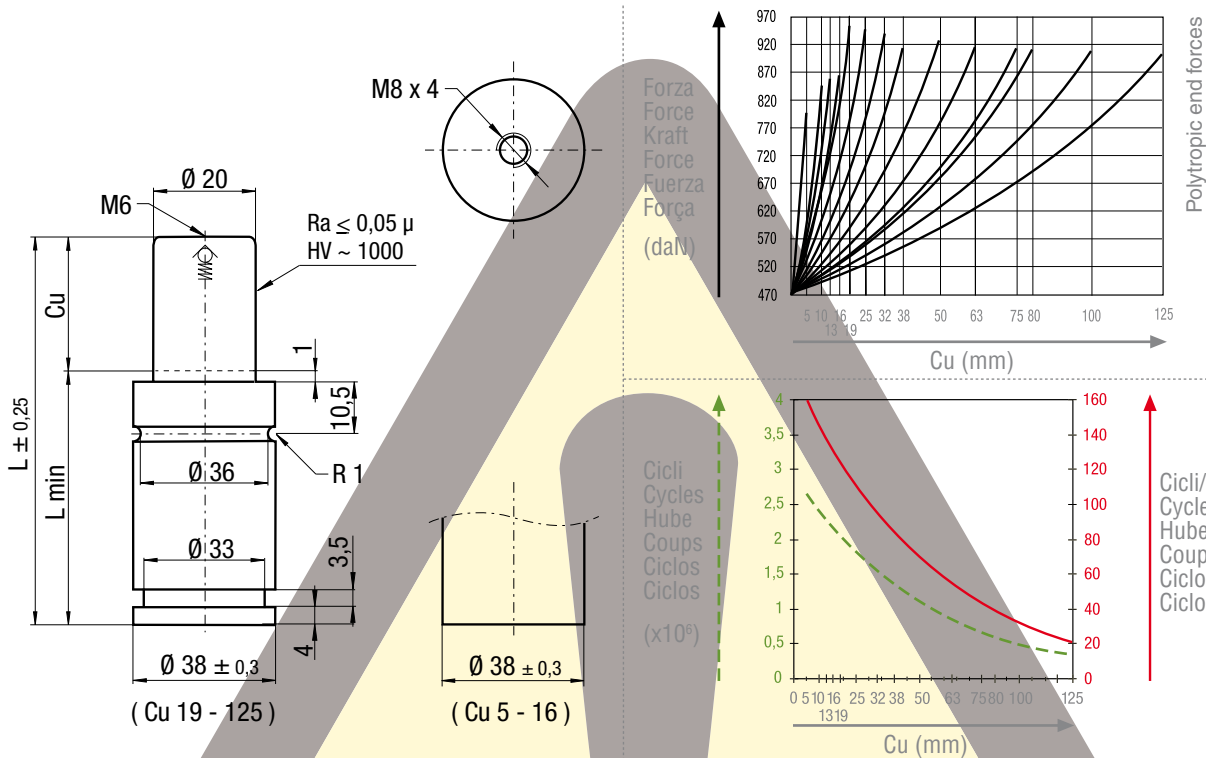
see **RV 500**

HR 500

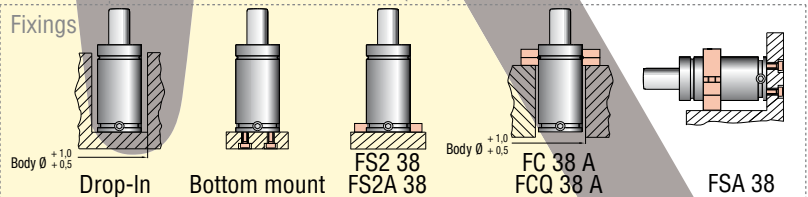
Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



HR
HRF



(10) HR500-050-A



Max. Speed
1,8 m/s

°F 32
176
°C 0
80



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
3,14
cm²



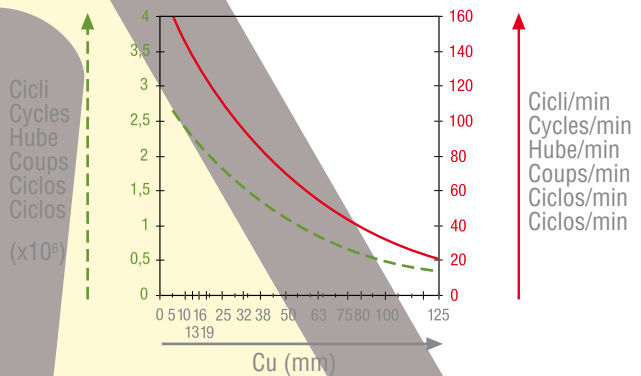
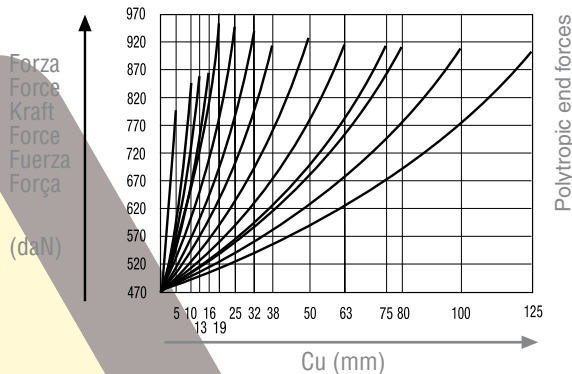
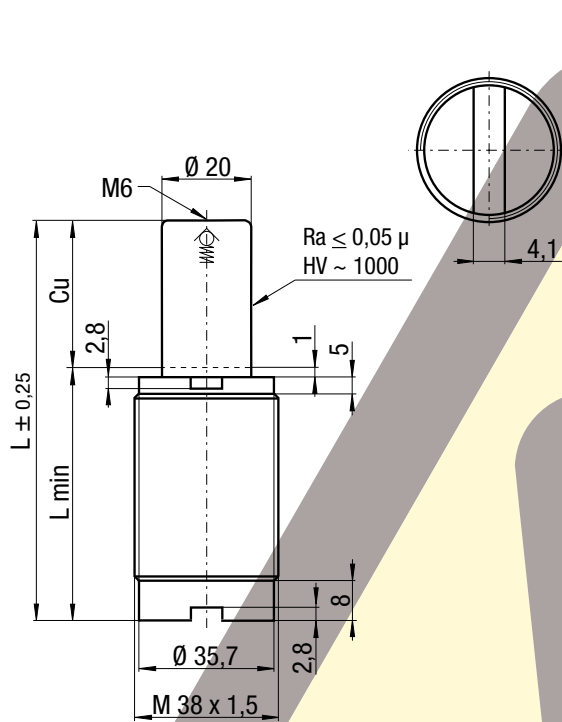
Maintenance kit
39BMHR00500A

Technical specifications

Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³		 Kg
HR 500 - 005 - A	5	40	35	470	-	-	~0,25
HR 500 - 010 - A	10	50	40	470	-	-	~0,27
HR 500 - 013 - A	13	56	43	470	-	-	~0,29
HR 500 - 016 - A	16	62	46	470	-	-	~0,31
HR 500 - 019 - A	19	68	49	470	-	-	~0,33
HR 500 - 025 - A	25	80	55	470	-	-	~0,36
HR 500 - 032 - A	32	94	62	470	-	-	~0,40
HR 500 - 038 - A	38	106	68	470	-	-	~0,44
HR 500 - 050 - A	50	130	80	470	-	-	~0,50
HR 500 - 063 - A	63	156	93	470	-	-	~0,57
HR 500 - 075 - A	75	180	105	470	-	-	~0,61
HR 500 - 080 - A	80	190	110	470	-	-	~0,66
HR 500 - 100 - A	100	230	130	470	-	-	~0,77
HR 500 - 125 - A	125	280	155	470	-	-	~0,90

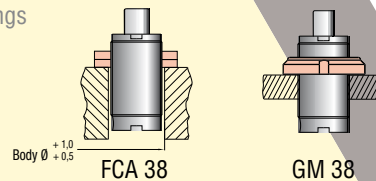


Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum -
Mínima altura, máxima fuerza - Altura mínima, força máxima

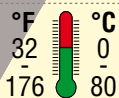


(10) HRF500-050-A

Fixings



Max. Speed
1,8 m/s



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
3,14
cm²

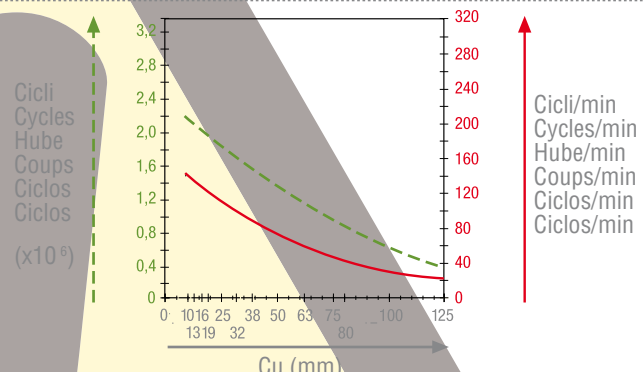
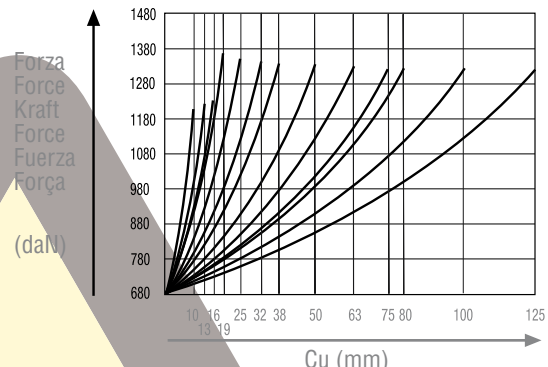
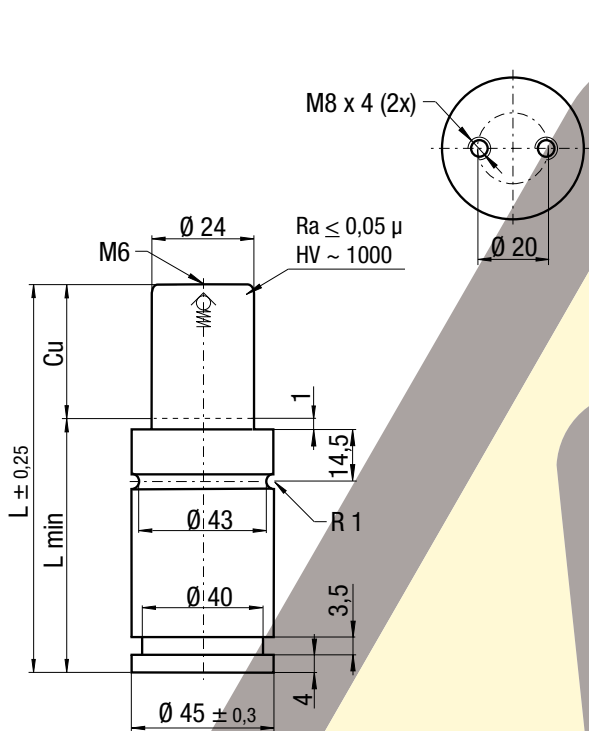


Maintenance kit
39BMHR00500A

Technical specifications

Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³		 Kg
HRF 500 - 005 - A	5	40	35	470	-	-	~0,22
HRF 500 - 010 - A	10	50	40	470	-	-	~0,25
HRF 500 - 013 - A	13	56	43	470	-	-	~0,27
HRF 500 - 016 - A	16	62	46	470	-	-	~0,29
HRF 500 - 019 - A	19	68	49	470	-	-	~0,31
HRF 500 - 025 - A	25	80	55	470	-	-	~0,33
HRF 500 - 032 - A	32	94	62	470	-	-	~0,37
HRF 500 - 038 - A	38	106	68	470	-	-	~0,40
HRF 500 - 050 - A	50	130	80	470	-	-	~0,47
HRF 500 - 063 - A	63	156	93	470	-	-	~0,54
HRF 500 - 075 - A	75	180	105	470	-	-	~0,59
HRF 500 - 080 - A	80	190	110	470	-	-	~0,63
HRF 500 - 100 - A	100	230	130	470	-	-	~0,75
HRF 500 - 125 - A	125	280	155	470	-	-	~0,88

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



ORDER (10) HR700-050-A

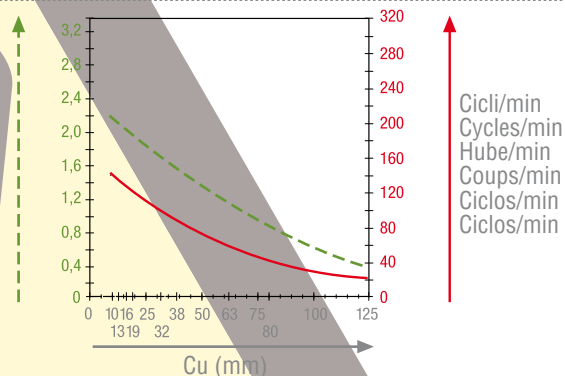
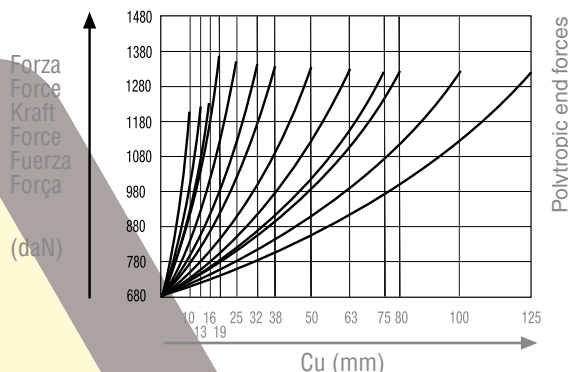
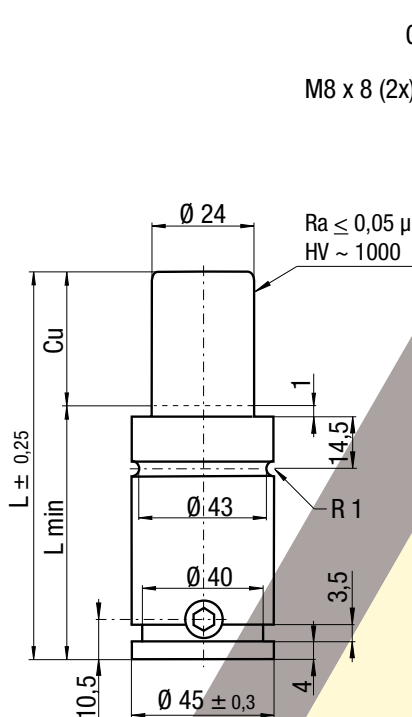
Fixings: Drop-In, Bottom mount (FB 45 - FBA 45), FS2 45 (FS2A 45), FC 45 A (FCQ 45 A), FSA 45

Max. Speed 1,8 m/s | **Temp** 32°F / 0°C to 176°F / 80°C | **Gas** N₂ | **P max** 150 bar / 2175 psi | **P min** 20 bar / 290 psi | **S** 4,52 cm² | **Maintenance kit** 39BMHR00700A

Technical specifications

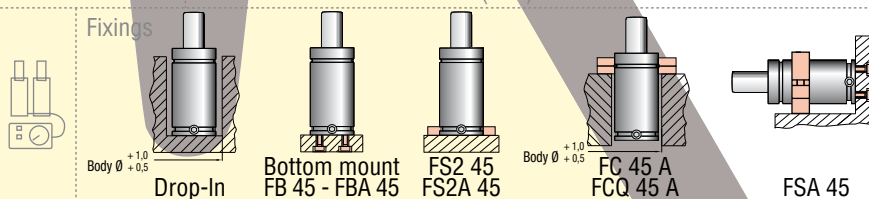
Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³		
HR 700 - 010 - A	10	52	42	680	-	-	~0,39
HR 700 - 013 - A	13	58	45	680	-	-	~0,42
HR 700 - 016 - A	16	64	48	680	-	-	~0,45
HR 700 - 019 - A	19	70	51	680	-	-	~0,48
HR 700 - 025 - A	25	82	57	680	-	-	~0,53
HR 700 - 032 - A	32	96	64	680	-	-	~0,58
HR 700 - 038 - A	38	108	70	680	-	-	~0,62
HR 700 - 050 - A	50	132	82	680	-	-	~0,71
HR 700 - 063 - A	63	158	95	680	-	-	~0,81
HR 700 - 075 - A	75	182	107	680	-	-	~0,85
HR 700 - 080 - A	80	192	112	680	-	-	~0,93
HR 700 - 100 - A	100	232	132	680	-	-	~1,04
HR 700 - 125 - A	125	282	157	680	-	-	~1,28

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum - Mínima altura, máxima fuerza - Altura mínima, força máxima



ORDER

(10) HR700-050-A-N



Max. Speed
1,8 m/s

°F 32
°C 0
176 80



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
4,52
cm²



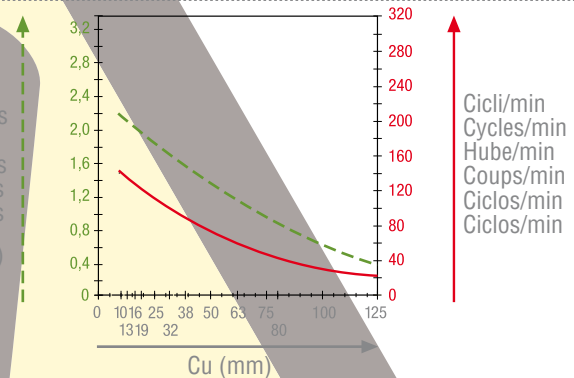
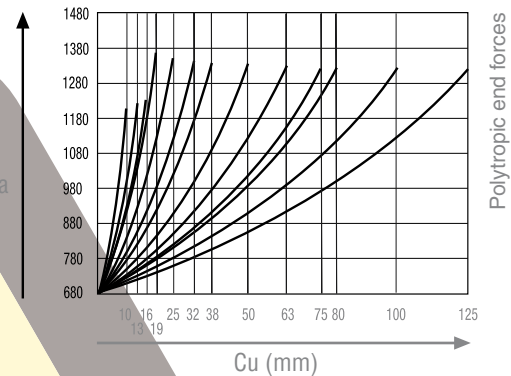
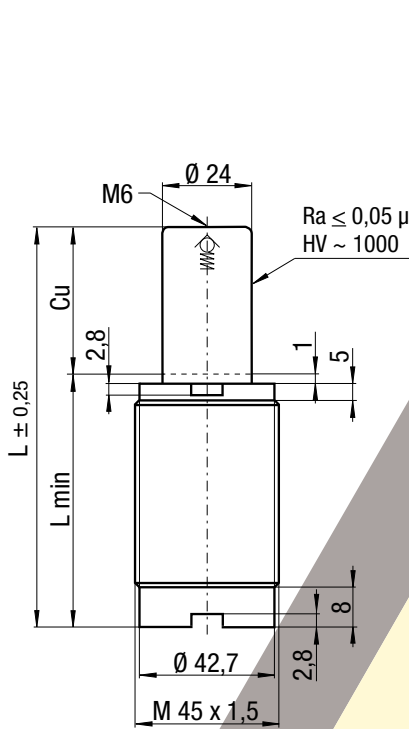
Maintenance kit
39BMHR00700A

Technical specifications

Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar+20 °C daN (±5%)	V ₀ cm ³	connecting hole G1/8" Jic 37° hose Minimesh hose	Kg
HR 700 - 010 - A - N	10	62	52	680	13	HR 700 - 010 - A - N	~0,48
HR 700 - 013 - A - N	13	68	55	680	17	HR 700 - 013 - A - N	~0,52
HR 700 - 016 - A - N	16	74	58	680	20	HR 700 - 016 - A - N	~0,55
HR 700 - 019 - A - N	19	80	61	680	21	HR 700 - 019 - A - N	~0,58
HR 700 - 025 - A - N	25	92	67	680	28	HR 700 - 025 - A - N	~0,64
HR 700 - 032 - A - N	32	106	74	680	36	HR 700 - 032 - A - N	~0,68
HR 700 - 038 - A - N	38	118	80	680	44	HR 700 - 038 - A - N	~0,72
HR 700 - 050 - A - N	50	142	92	680	58	HR 700 - 050 - A - N	~0,85
HR 700 - 063 - A - N	63	168	105	680	73	HR 700 - 063 - A - N	~0,94
HR 700 - 075 - A - N	75	192	117	680	86	HR 700 - 075 - A - N	~0,98
HR 700 - 080 - A - N	80	202	122	680	93	HR 700 - 080 - A - N	~1,03
HR 700 - 100 - A - N	100	242	142	680	116	HR 700 - 100 - A - N	~1,16
HR 700 - 125 - A - N	125	292	167	680	145	HR 700 - 125 - A - N	~1,35

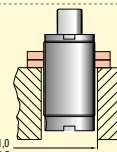
Info pg. 229

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima

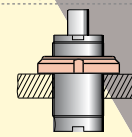


(10) HRF700-050-A

Fixings



FCA 45



GM 45

Max. Speed
1,8 m/s

°F 32
176

°C 0
80



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
4,52
cm²



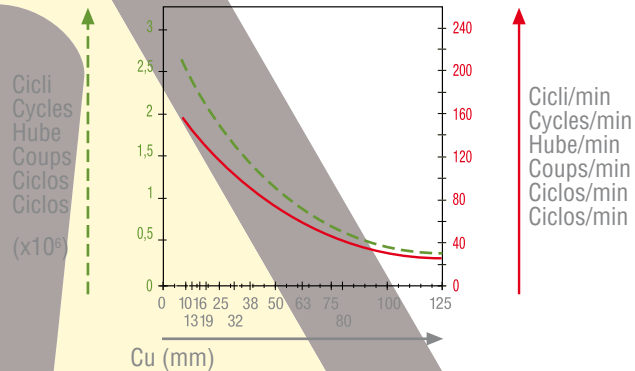
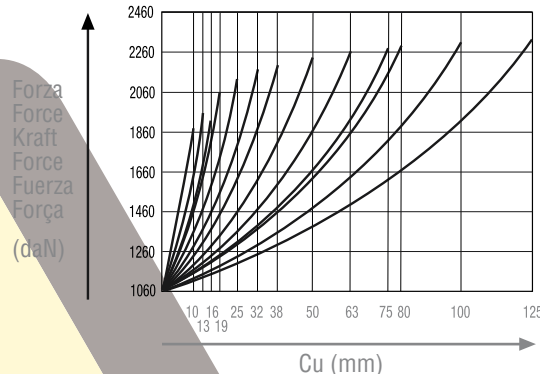
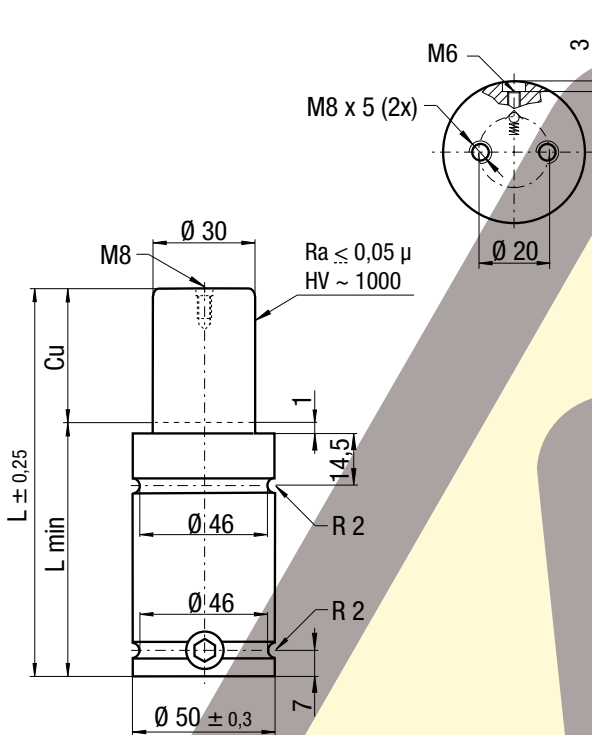
Maintenance kit
39BMHR00700A

Technical specifications

Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³		 Kg
HRF 700 - 010 - A	10	52	42	680	-	-	~0,35
HRF 700 - 013 - A	13	58	45	680	-	-	~0,39
HRF 700 - 016 - A	16	64	48	680	-	-	~0,42
HRF 700 - 019 - A	19	70	51	680	-	-	~0,45
HRF 700 - 025 - A	25	82	57	680	-	-	~0,50
HRF 700 - 032 - A	32	96	64	680	-	-	~0,55
HRF 700 - 038 - A	38	108	70	680	-	-	~0,60
HRF 700 - 050 - A	50	132	82	680	-	-	~0,70
HRF 700 - 063 - A	63	158	95	680	-	-	~0,80
HRF 700 - 075 - A	75	182	107	680	-	-	~0,83
HRF 700 - 080 - A	80	192	112	680	-	-	~0,89
HRF 700 - 100 - A	100	232	132	680	-	-	~0,99
HRF 700 - 125 - A	125	282	157	680	-	-	~1,26



Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum -
Mínima altura, máxima fuerza - Altura mínima, força máxima



ORDER (10) HR1000-050-A (10) HR1000-050-A-NA

Fixings

- Drop-In
- Bottom mount FB 50 - FBA 50
- FC 50 A FCQ 50 A
- FSA 50
- FHR01000

Max. Speed 1,8 m/s **°F** 32 **°C** 0 176 **°C** 80 **N₂**

P max 150 bar 2175 psi **P min** 20 bar 290 psi **S** 7,07 cm²

Maintenance kit 39BMHR01000A

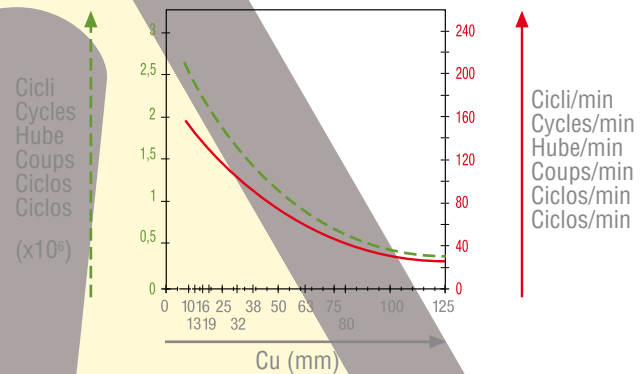
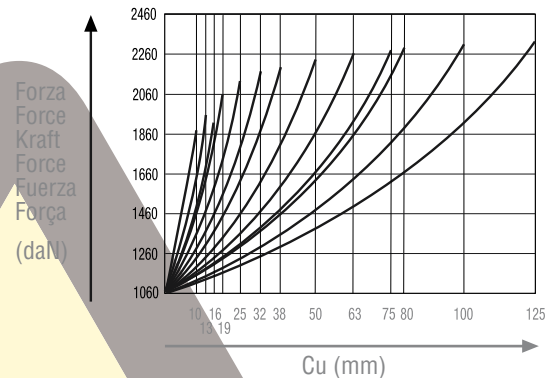
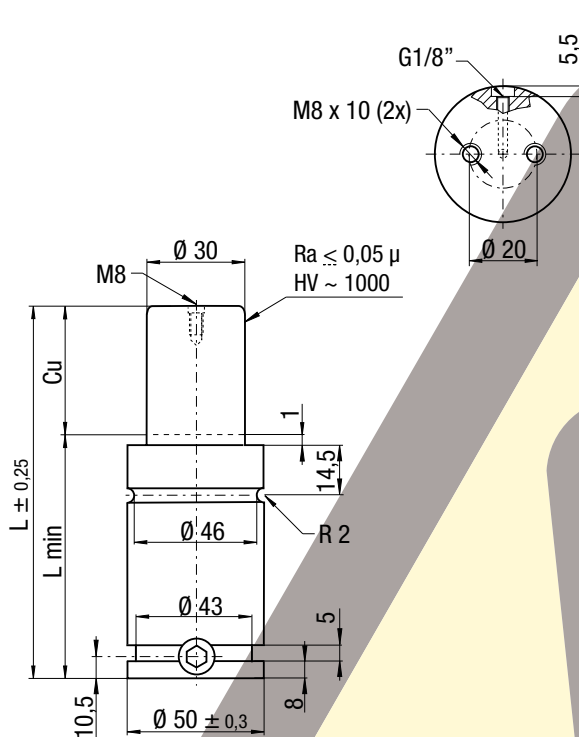
Technical specifications

Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar+20 °C daN (±5%)	V ₀ cm ³	connecting hole M6 Micro hose	Kg
HR 1000 - 010 - A	10	58	48	1060	25	HR 1000 - 010 - A - NA	~0,57
HR 1000 - 013 - A	13	64	51	1060	30	HR 1000 - 013 - A - NA	~0,59
HR 1000 - 016 - A	16	70	54	1060	35	HR 1000 - 016 - A - NA	~0,62
HR 1000 - 019 - A	19	76	57	1060	40	HR 1000 - 019 - A - NA	~0,65
HR 1000 - 025 - A	25	88	63	1060	49	HR 1000 - 025 - A - NA	~0,70
HR 1000 - 032 - A	32	102	70	1060	60	HR 1000 - 032 - A - NA	~0,77
HR 1000 - 038 - A	38	114	76	1060	70	HR 1000 - 038 - A - NA	~0,83
HR 1000 - 050 - A	50	138	88	1060	88	HR 1000 - 050 - A - NA	~0,94
HR 1000 - 063 - A	63	164	101	1060	109	HR 1000 - 063 - A - NA	~1,07
HR 1000 - 075 - A	75	188	113	1060	128	HR 1000 - 075 - A - NA	~1,16
HR 1000 - 080 - A	80	198	118	1060	136	HR 1000 - 080 - A - NA	~1,21
HR 1000 - 100 - A	100	238	138	1060	167	HR 1000 - 100 - A - NA	~1,43
HR 1000 - 125 - A	125	288	163	1060	206	HR 1000 - 125 - A - NA	~1,70

Info pg. 229

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima

PED FIAT
 97/23/EC Specification



HR
 HRF

ORDER (10) HR1000-050-A-N

Fixings: Drop-In, Bottom mount FB 50 - FBA 50, FS2 50 FS2A 50, FC 50 A FCQ 50 A, FSA 50

Max. Speed 1,8 m/s

Temperature: 32 °F / 0 °C to 176 °F / 80 °C

P max 150 bar / 2175 psi

P min 20 bar / 290 psi

S 7,07 cm²

Maintenance kit 39BMHR01000A

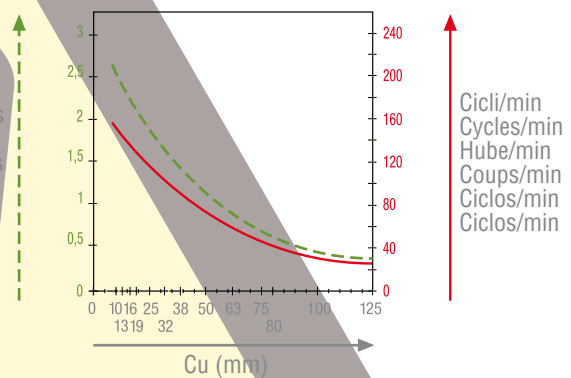
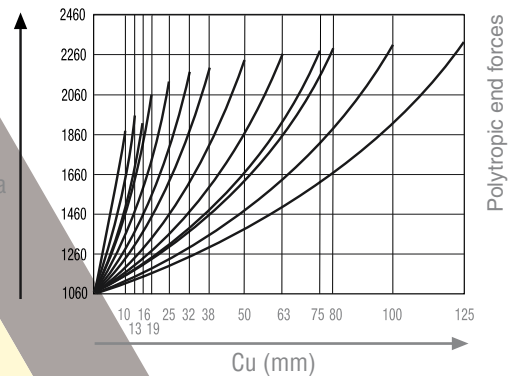
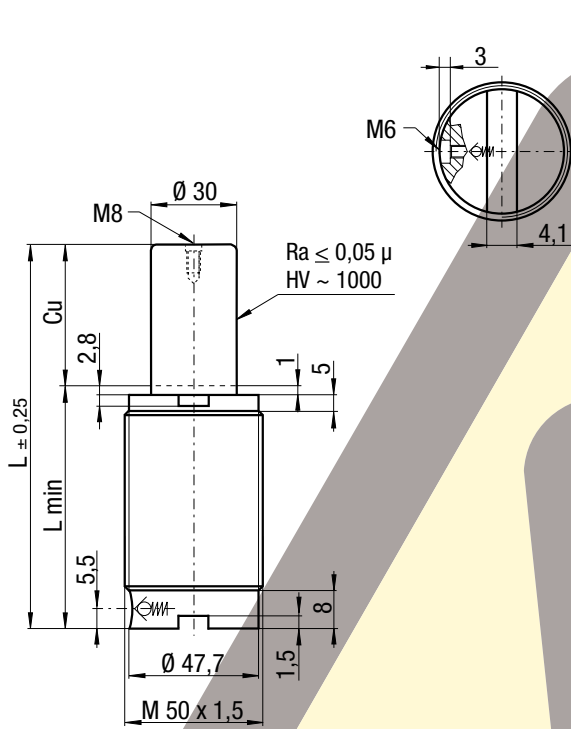
Technical specifications

Code	Cu mm	L mm	Lmin mm	Fo at 150 bar +20 °C daN (±5%)	Vo cm ³	connecting hole G1/8" Jic 37° hose Minimesse hose	Kg
HR 1000 - 010 - A - N	10	68	58	1060	25	HR 1000 - 010 - A - N	~0,57
HR 1000 - 013 - A - N	13	74	61	1060	30	HR 1000 - 013 - A - N	~0,59
HR 1000 - 016 - A - N	16	80	64	1060	35	HR 1000 - 016 - A - N	~0,62
HR 1000 - 019 - A - N	19	86	67	1060	40	HR 1000 - 019 - A - N	~0,65
HR 1000 - 025 - A - N	25	98	73	1060	49	HR 1000 - 025 - A - N	~0,70
HR 1000 - 032 - A - N	32	112	80	1060	60	HR 1000 - 032 - A - N	~0,77
HR 1000 - 038 - A - N	38	124	86	1060	70	HR 1000 - 038 - A - N	~0,83
HR 1000 - 050 - A - N	50	148	98	1060	88	HR 1000 - 050 - A - N	~0,94
HR 1000 - 063 - A - N	63	174	111	1060	109	HR 1000 - 063 - A - N	~1,07
HR 1000 - 075 - A - N	75	198	123	1060	128	HR 1000 - 075 - A - N	~1,16
HR 1000 - 080 - A - N	80	208	128	1060	136	HR 1000 - 080 - A - N	~1,21
HR 1000 - 100 - A - N	100	248	148	1060	167	HR 1000 - 100 - A - N	~1,43
HR 1000 - 125 - A - N	125	298	173	1060	206	HR 1000 - 125 - A - N	~1,70

Info pg. 229



Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum - Mínima altura, máxima fuerza - Altura mínima, força máxima



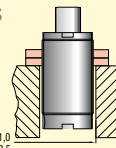
(10) HRF1000-050-A

ORDER

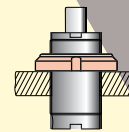
(10) HRF1000-050-A-NA



Fixings

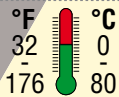


FCA 50



GM 50

Max. Speed
1,8 m/s



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
7,07
cm²



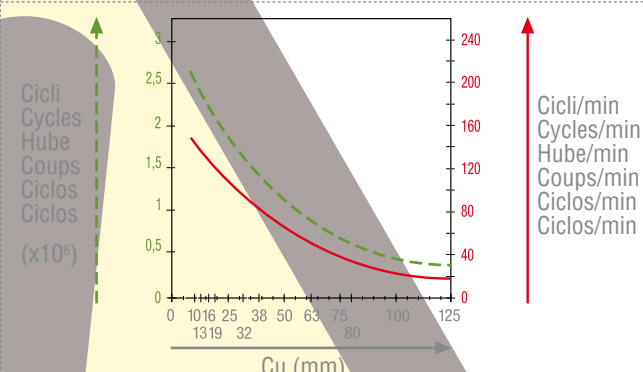
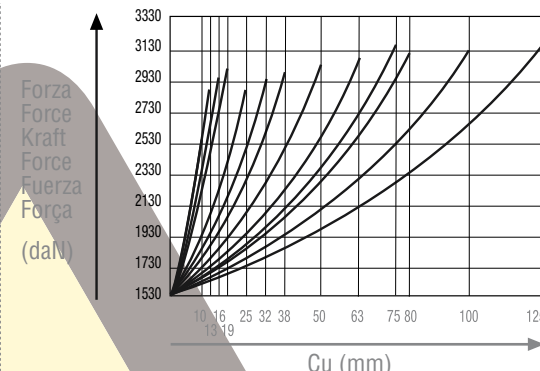
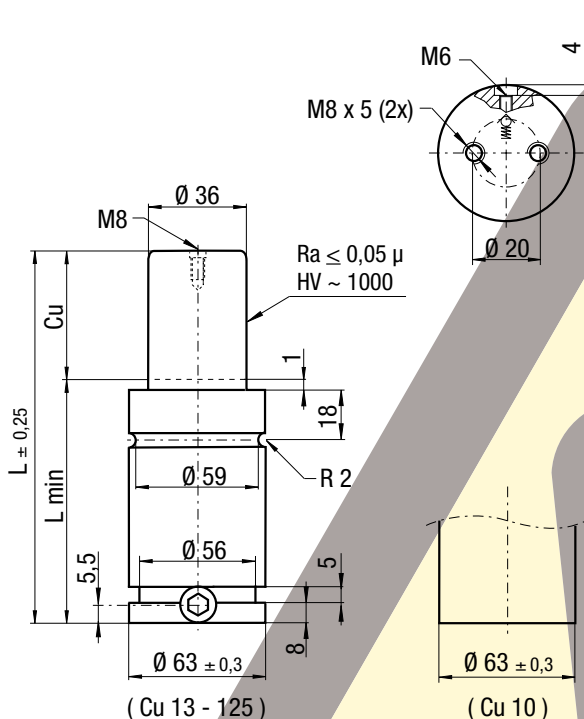
Maintenance kit
39BMHR01000A

Technical specifications

Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar/+20 °C daN (±5%)	V ₀ cm ³	connecting hole M6 Micro hose	kg
HRF 1000 - 010 - A	10	58	48	1060	25	HRF 1000 - 010 - A - NA	~0,53
HRF 1000 - 013 - A	13	64	51	1060	30	HRF 1000 - 013 - A - NA	~0,55
HRF 1000 - 016 - A	16	70	54	1060	35	HRF 1000 - 016 - A - NA	~0,57
HRF 1000 - 019 - A	19	76	57	1060	40	HRF 1000 - 019 - A - NA	~0,60
HRF 1000 - 025 - A	25	88	63	1060	49	HRF 1000 - 025 - A - NA	~0,66
HRF 1000 - 032 - A	32	102	70	1060	60	HRF 1000 - 032 - A - NA	~0,73
HRF 1000 - 038 - A	38	114	76	1060	70	HRF 1000 - 038 - A - NA	~0,79
HRF 1000 - 050 - A	50	138	88	1060	88	HRF 1000 - 050 - A - NA	~0,90
HRF 1000 - 063 - A	63	164	101	1060	109	HRF 1000 - 063 - A - NA	~1,03
HRF 1000 - 075 - A	75	188	113	1060	128	HRF 1000 - 075 - A - NA	~1,13
HRF 1000 - 080 - A	80	198	118	1060	136	HRF 1000 - 080 - A - NA	~1,18
HRF 1000 - 100 - A	100	238	138	1060	167	HRF 1000 - 100 - A - NA	~1,39
HRF 1000 - 125 - A	125	288	163	1060	206	HRF 1000 - 125 - A - NA	~1,66

Info pg. 229

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



HR HRF

ORDER (10) HR1500-050-A (10) HR1500-050-A-NA

Fixings: Drop-in, Bottom mount (FB 50 - FBA 50), FS2 63 (FS2A 63), FC 63 A (FCQ 63 A)

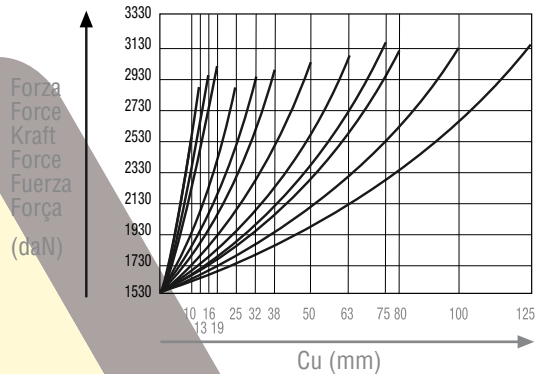
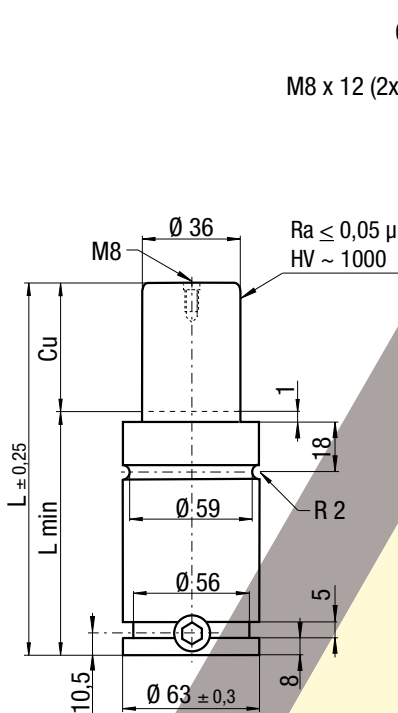
Max. Speed 1,8 m/s **°F** 32 / 176 **°C** 0 / 80 **N₂** **P max** 150 bar / 2175 psi **P min** 20 bar / 290 psi **S** 10,18 cm² **Maintenance kit** 39BMHR01500A

Technical specifications

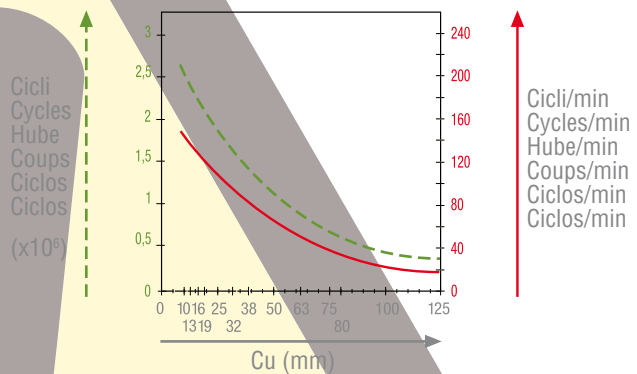
Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar +20 °C daN (±5%)	V ₀ cm ³	connecting hole M6 Micro hose	Kg
HR 1500 - 010 - A	10	64	54	1530	32	HR 1500 - 010 - A - NA	~1,02
HR 1500 - 013 - A	13	70	57	1530	39	HR 1500 - 013 - A - NA	~1,05
HR 1500 - 016 - A	16	76	60	1530	47	HR 1500 - 016 - A - NA	~1,10
HR 1500 - 019 - A	19	82	63	1530	54	HR 1500 - 019 - A - NA	~1,15
HR 1500 - 025 - A	25	94	69	1530	68	HR 1500 - 025 - A - NA	~1,25
HR 1500 - 032 - A	32	108	76	1530	85	HR 1500 - 032 - A - NA	~1,35
HR 1500 - 038 - A	38	120	82	1530	99	HR 1500 - 038 - A - NA	~1,44
HR 1500 - 050 - A	50	144	94	1530	128	HR 1500 - 050 - A - NA	~1,61
HR 1500 - 063 - A	63	170	107	1530	158	HR 1500 - 063 - A - NA	~1,81
HR 1500 - 075 - A	75	194	119	1530	187	HR 1500 - 075 - A - NA	~1,90
HR 1500 - 080 - A	80	204	124	1530	199	HR 1500 - 080 - A - NA	~2,06
HR 1500 - 100 - A	100	244	144	1530	246	HR 1500 - 100 - A - NA	~2,38
HR 1500 - 125 - A	125	294	169	1530	306	HR 1500 - 125 - A - NA	~2,86

Info pg. 229

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum -
Mínima altura, máxima fuerza - Altura mínima, força máxima



Polytropic end forces



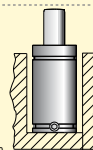
Cicli/min
Cycles/min
Hube/min
Coups/min
Ciclos/min
Ciclos/min

ORDER

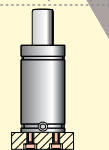
(10) HR1500-050-A-N



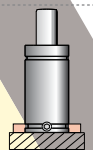
Fixings



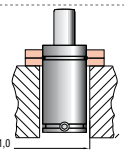
Drop-In
Body Ø +1,0
+0,5



Bottom mount
FB 50 - FBA50



FS2 63
FS2A 63



FC 63 A
FCQ 63 A
Body Ø +1,0
+0,5

Max. Speed
1,8 m/s

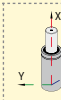
°F 32
°C 0
176 80



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
10,18
cm²



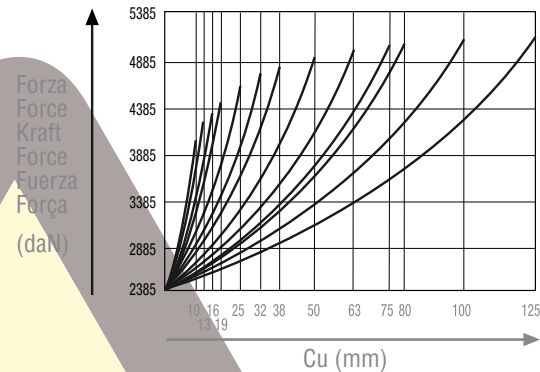
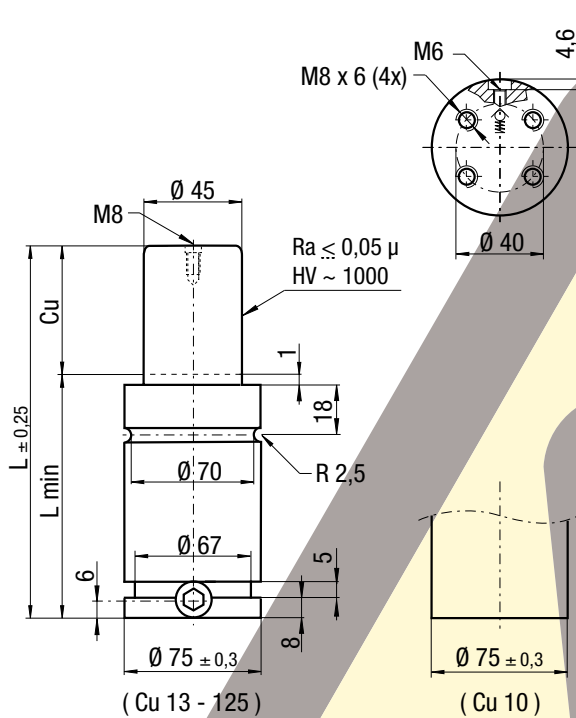
Maintenance kit
39BMHR01500A

Technical specifications

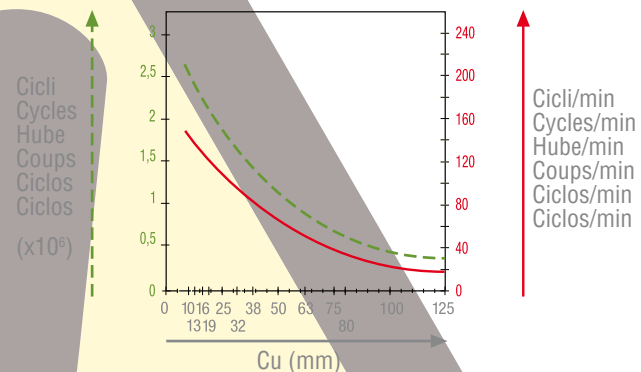
Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³	connecting hole G1/8" Jic 37° hose Minimess hose	Kg
HR 1500 - 010 - A - N	10	74	64	1530	32	HR 1500 - 010 - A - N	~1,02
HR 1500 - 013 - A - N	13	80	67	1530	39	HR 1500 - 013 - A - N	~1,05
HR 1500 - 016 - A - N	16	86	70	1530	47	HR 1500 - 016 - A - N	~1,10
HR 1500 - 019 - A - N	19	92	73	1530	54	HR 1500 - 019 - A - N	~1,15
HR 1500 - 025 - A - N	25	104	79	1530	68	HR 1500 - 025 - A - N	~1,25
HR 1500 - 032 - A - N	32	118	86	1530	85	HR 1500 - 032 - A - N	~1,35
HR 1500 - 038 - A - N	38	130	92	1530	99	HR 1500 - 038 - A - N	~1,44
HR 1500 - 050 - A - N	50	154	104	1530	128	HR 1500 - 050 - A - N	~1,61
HR 1500 - 063 - A - N	63	180	117	1530	158	HR 1500 - 063 - A - N	~1,81
HR 1500 - 075 - A - N	75	204	129	1530	187	HR 1500 - 075 - A - N	~1,90
HR 1500 - 080 - A - N	80	214	134	1530	199	HR 1500 - 080 - A - N	~2,06
HR 1500 - 100 - A - N	100	254	154	1530	246	HR 1500 - 100 - A - N	~2,38
HR 1500 - 125 - A - N	125	304	179	1530	306	HR 1500 - 125 - A - N	~2,86

Info pg. 229

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



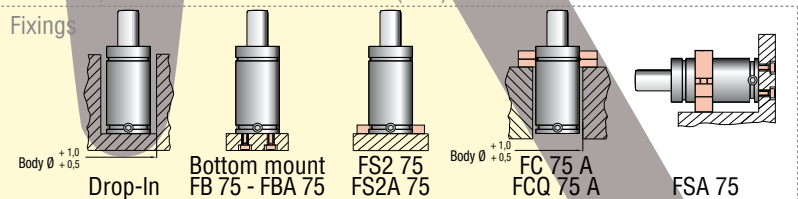
Polytropic end forces



Cicli/min
Cycles/min
Hubs/min
Coups/min
Ciclos/min

HR
HRF

(10) HR2400-050-A
ORDER (10) HR2400-050-A-NA



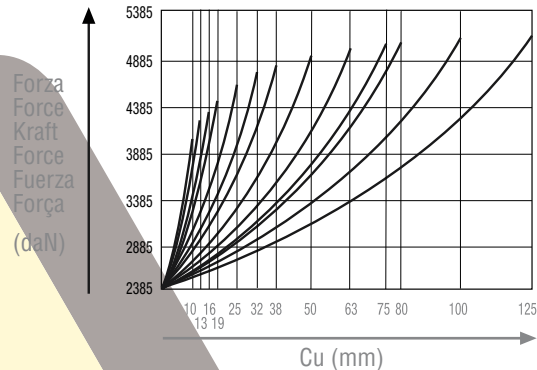
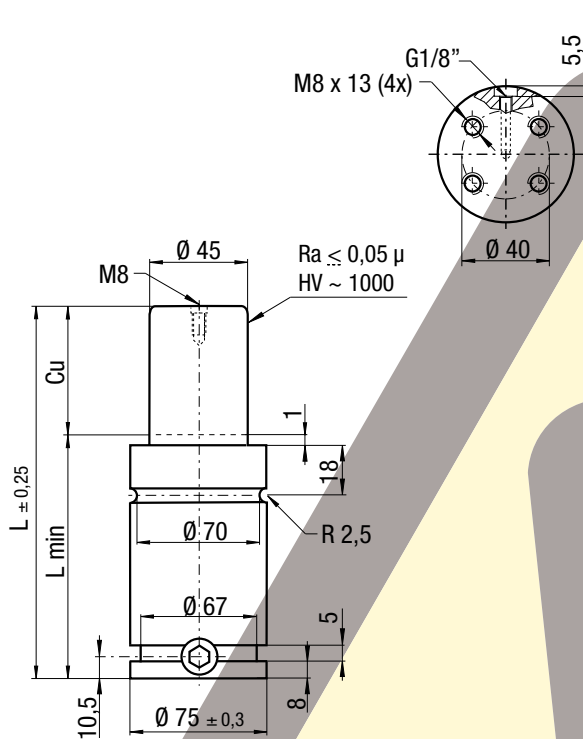
Max. Speed 1,8 m/s	°F 32 176	°C 0 80	N ₂	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 15,90 cm ²		Maintenance kit 39BMHR02400A
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Technical specifications

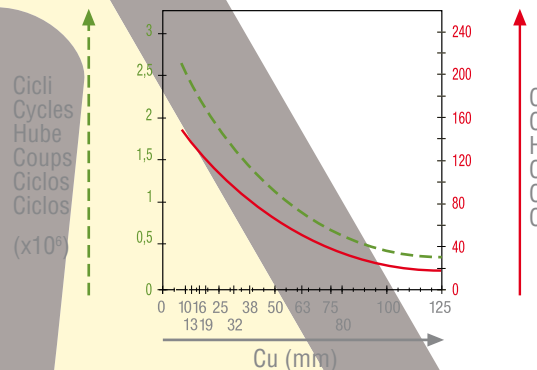
Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar +20 °C daN (±5%)	V ₀ cm ³	connecting hole M6 Micro hose	Kg
HR 2400 - 010 - A	10	65	55	2385	50	HR 2400 - 010 - A - NA	~1,47
HR 2400 - 013 - A	13	71	58	2385	61	HR 2400 - 013 - A - NA	~1,52
HR 2400 - 016 - A	16	77	61	2385	72	HR 2400 - 016 - A - NA	~1,58
HR 2400 - 019 - A	19	83	64	2385	82	HR 2400 - 019 - A - NA	~1,65
HR 2400 - 025 - A	25	95	70	2385	104	HR 2400 - 025 - A - NA	~1,77
HR 2400 - 032 - A	32	109	77	2385	129	HR 2400 - 032 - A - NA	~1,93
HR 2400 - 038 - A	38	121	83	2385	150	HR 2400 - 038 - A - NA	~2,05
HR 2400 - 050 - A	50	145	95	2385	193	HR 2400 - 050 - A - NA	~2,30
HR 2400 - 063 - A	63	171	108	2385	240	HR 2400 - 063 - A - NA	~2,55
HR 2400 - 075 - A	75	195	120	2385	283	HR 2400 - 075 - A - NA	~2,75
HR 2400 - 080 - A	80	205	125	2385	301	HR 2400 - 080 - A - NA	~2,85
HR 2400 - 100 - A	100	245	145	2385	372	HR 2400 - 100 - A - NA	~3,28
HR 2400 - 125 - A	125	295	170	2385	462	HR 2400 - 125 - A - NA	~3,93

Info pg. 229

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum - Mínima altura, máxima fuerza - Altura mínima, força máxima



Polytropic end forces

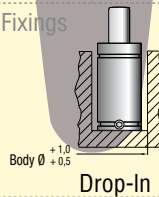


Cicli/min
Cycles/min
Hube/min
Coups/min
Ciclos/min
Ciclos/min

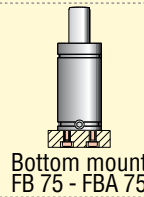
ORDER

(10) HR2400-050-A-N

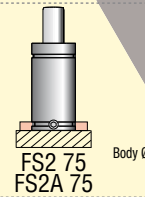
Fixings



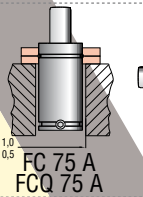
Drop-in



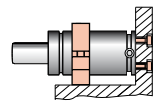
Bottom mount
FB 75 - FBA 75



FS2 75
FS2A 75



FC 75 A
FCQ 75 A



FSA 75

Max. Speed
1,8 m/s

°F 32
°C 0
176 80



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
15,90
cm²



Maintenance kit
39BMHR02400A

Technical specifications

Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar/20 °C daN (±5%)	V ₀ cm ³	connecting hole G1/8" Jic 37° hose Minimess hose	Kg
HR 2400 - 010 - A - N	10	75	65	2385	50	HR 2400 - 010 - A - N	~1,76
HR 2400 - 013 - A - N	13	81	68	2385	61	HR 2400 - 013 - A - N	~1,82
HR 2400 - 016 - A - N	16	87	71	2385	72	HR 2400 - 016 - A - N	~1,89
HR 2400 - 019 - A - N	19	93	74	2385	82	HR 2400 - 019 - A - N	~1,94
HR 2400 - 025 - A - N	25	105	80	2385	104	HR 2400 - 025 - A - N	~2,03
HR 2400 - 032 - A - N	32	119	87	2385	129	HR 2400 - 032 - A - N	~2,16
HR 2400 - 038 - A - N	38	131	93	2385	150	HR 2400 - 038 - A - N	~2,30
HR 2400 - 050 - A - N	50	155	105	2385	193	HR 2400 - 050 - A - N	~2,56
HR 2400 - 063 - A - N	63	181	118	2385	240	HR 2400 - 063 - A - N	~2,79
HR 2400 - 075 - A - N	75	205	130	2385	283	HR 2400 - 075 - A - N	~2,90
HR 2400 - 080 - A - N	80	215	135	2385	301	HR 2400 - 080 - A - N	~3,12
HR 2400 - 100 - A - N	100	255	155	2385	372	HR 2400 - 100 - A - N	~3,62
HR 2400 - 125 - A - N	125	305	180	2385	462	HR 2400 - 125 - A - N	~4,02

Info pg. 229

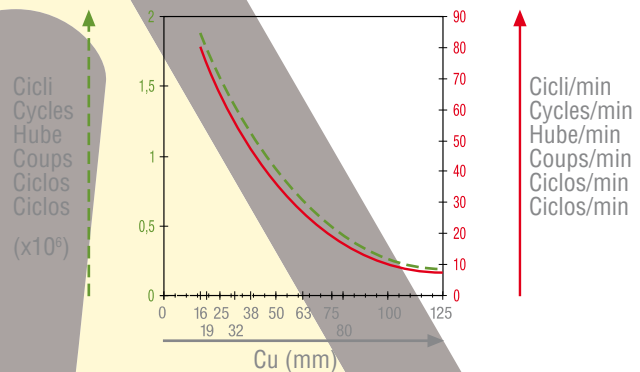
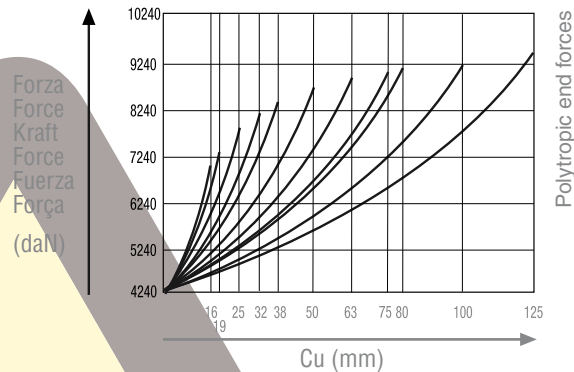
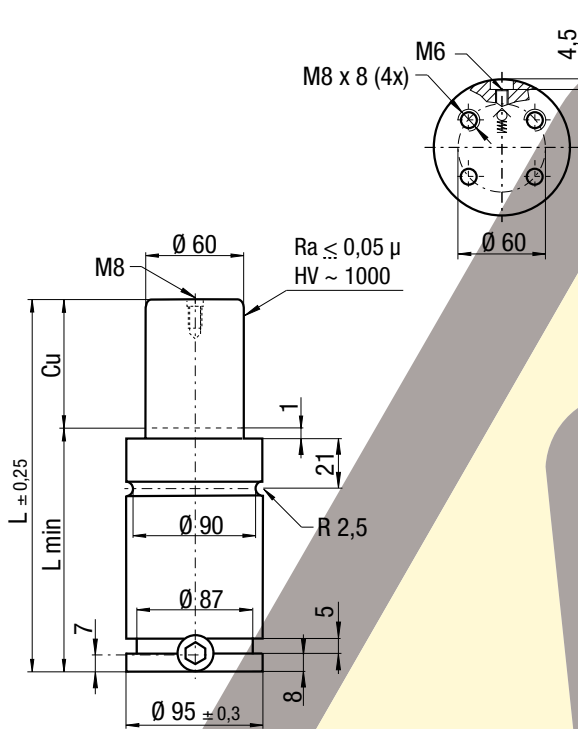
PHASING OUT from March 1st 2012



see **RV 4200**

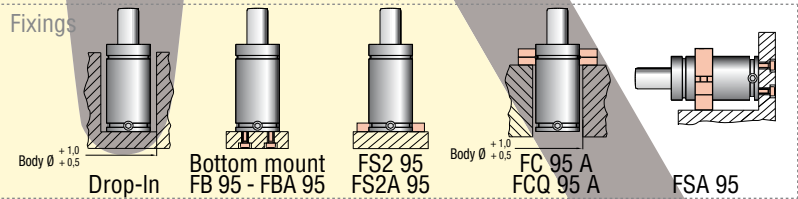
HR 4200

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



HR
HRF

ORDER (10) HR4200-050-A
 (10) HR4200-050-A-NA



Max. Speed 1,8 m/s	°F 32 176	°C 0 80	N₂	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 28,27 cm ²	Maintenance kit 39BMHR04200A
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Technical specifications

Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar/+20 °C daN (±5%)	V ₀ cm ³	connecting hole M6 Micro hose	Kg
HR 4200 - 016 - A	16	97	81	4240	144	HR 4200 - 016 - A - NA	~3,40
HR 4200 - 019 - A	19	103	84	4240	162	HR 4200 - 019 - A - NA	~3,45
HR 4200 - 025 - A	25	115	90	4240	198	HR 4200 - 025 - A - NA	~3,65
HR 4200 - 032 - A	32	129	97	4240	240	HR 4200 - 032 - A - NA	~3,82
HR 4200 - 038 - A	38	141	103	4240	276	HR 4200 - 038 - A - NA	~4,00
HR 4200 - 050 - A	50	165	115	4240	348	HR 4200 - 050 - A - NA	~4,44
HR 4200 - 063 - A	63	191	128	4240	425	HR 4200 - 063 - A - NA	~4,95
HR 4200 - 075 - A	75	215	140	4240	497	HR 4200 - 075 - A - NA	~5,20
HR 4200 - 080 - A	80	225	145	4240	527	HR 4200 - 080 - A - NA	~5,41
HR 4200 - 100 - A	100	265	165	4240	647	HR 4200 - 100 - A - NA	~6,00
HR 4200 - 125 - A	125	315	190	4240	797	HR 4200 - 125 - A - NA	~6,70

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PHASING OUT from March 1st 2012

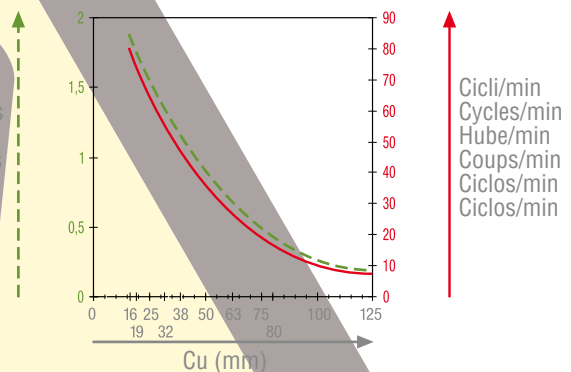
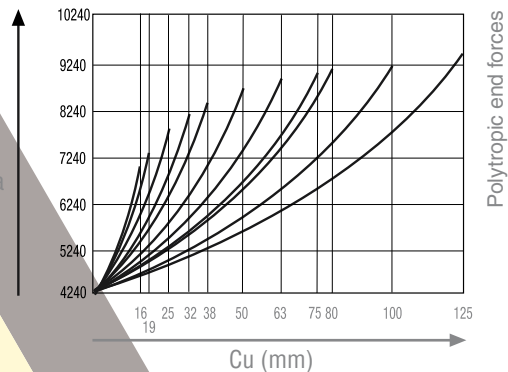
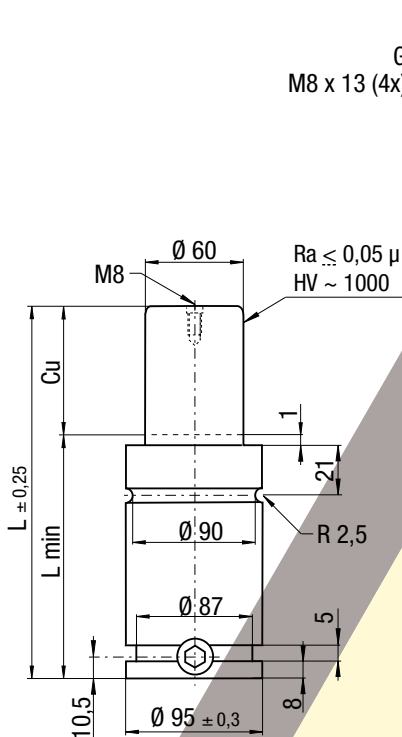
HR 4200N
linkable G1/8"

see **RV 4200**



FIAT PED
Specification 97/23/EC

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
Hauteur - Hauteur minimum, force maximum - Mínima altura, máxima fuerza - Altura mínima, força máxima

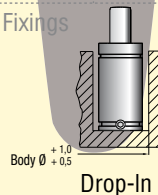


ORDER

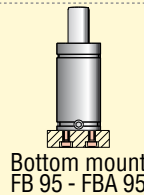
(10) HR4200-050-A-N



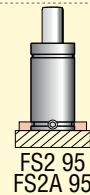
Fixings



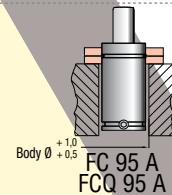
Drop-In



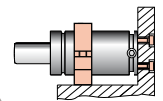
Bottom mount
FB 95 - FBA 95



FS2 95
FS2A 95

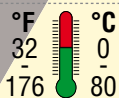


FC 95 A
FCQ 95 A



FSA 95

Max. Speed
1,8 m/s



P max
150 bar
2175 psi

P min
20 bar
290 psi

S
28,27
cm²



Maintenance kit
39BMHR04200A

Technical specifications

Code	Cu mm	L mm	Lmin mm	Fo at 150 bar/+20 °C daN (±5%)	Vo cm ³	connecting hole G1/8" Jic 37° hose Minimess hose	Kg
HR 4200 - 016 - A - N	16	107	91	4240	144	HR 4200 - 016 - A - N	~4,00
HR 4200 - 019 - A - N	19	113	94	4240	162	HR 4200 - 019 - A - N	~4,05
HR 4200 - 025 - A - N	25	125	100	4240	198	HR 4200 - 025 - A - N	~4,16
HR 4200 - 032 - A - N	32	139	107	4240	240	HR 4200 - 032 - A - N	~4,39
HR 4200 - 038 - A - N	38	151	113	4240	276	HR 4200 - 038 - A - N	~4,56
HR 4200 - 050 - A - N	50	175	125	4240	348	HR 4200 - 050 - A - N	~4,81
HR 4200 - 063 - A - N	63	201	138	4240	425	HR 4200 - 063 - A - N	~5,35
HR 4200 - 075 - A - N	75	225	150	4240	497	HR 4200 - 075 - A - N	~5,55
HR 4200 - 080 - A - N	80	235	155	4240	527	HR 4200 - 080 - A - N	~5,83
HR 4200 - 100 - A - N	100	275	175	4240	647	HR 4200 - 100 - A - N	~6,51
HR 4200 - 125 - A - N	125	325	200	4240	797	HR 4200 - 125 - A - N	~7,26

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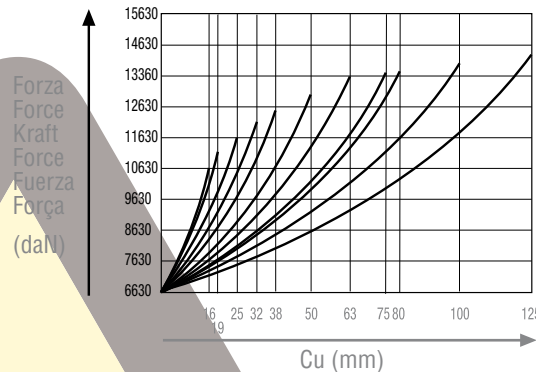
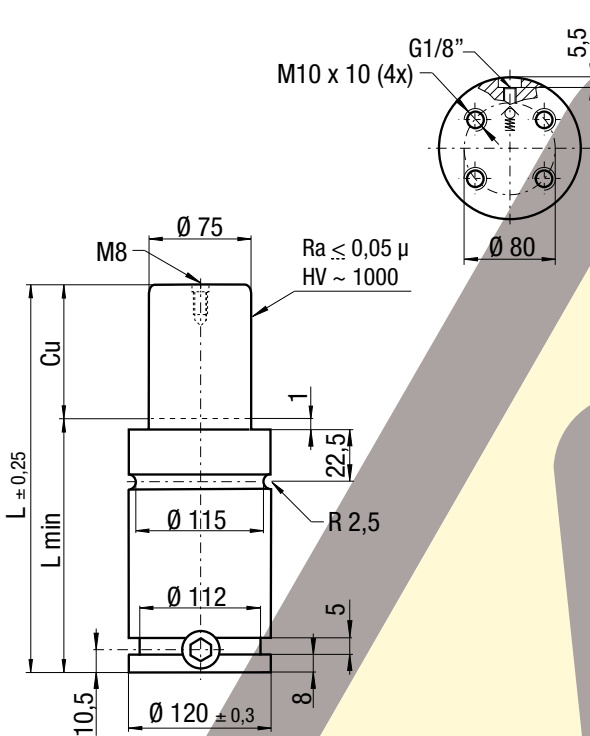
PHASING OUT from March 1st 2012



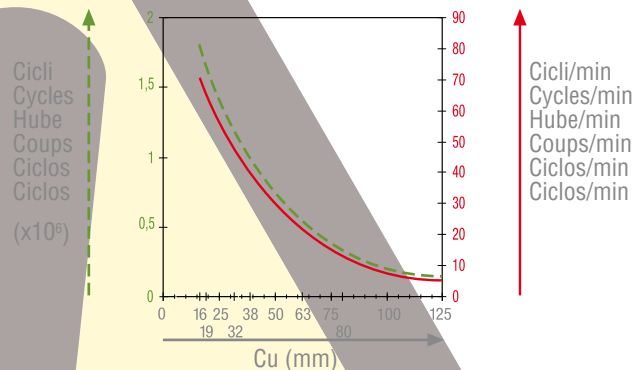
see **RV 6600**

HR 6600

Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



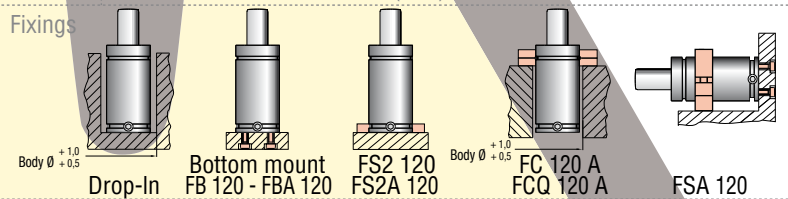
Polytropic end forces



Cicli/min
 Cycles/min
 Hubs/min
 Coups/min
 Ciclos/min
 Ciclos/min

HR
 HRF

ORDER (10) HR6600-050-A
 (10) HR6600-050-A-N



Max. Speed 1,8 m/s	°F 32 176	°C 0 80	N₂	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 44,18 cm ²	Maintenance kit 39BMHR06600A
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Technical specifications

Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar/+20 °C daN (±5%)	V ₀ cm ³	connecting hole G1/8" Jic 37° hose Minimess hose	Kg
HR 6600 - 016 - A	16	107	91	6630	239	HR 6600 - 016 - A - N	~6,60
HR 6600 - 019 - A	19	113	94	6630	267	HR 6600 - 019 - A - N	~6,65
HR 6600 - 025 - A	25	125	100	6630	325	HR 6600 - 025 - A - N	~6,82
HR 6600 - 032 - A	32	139	107	6630	390	HR 6600 - 032 - A - N	~7,18
HR 6600 - 038 - A	38	151	113	6630	448	HR 6600 - 038 - A - N	~7,57
HR 6600 - 050 - A	50	175	125	6630	561	HR 6600 - 050 - A - N	~8,18
HR 6600 - 063 - A	63	201	138	6630	684	HR 6600 - 063 - A - N	~8,81
HR 6600 - 075 - A	75	225	150	6630	797	HR 6600 - 075 - A - N	~8,95
HR 6600 - 080 - A	80	235	155	6630	845	HR 6600 - 080 - A - N	~9,10
HR 6600 - 100 - A	100	275	175	6630	1034	HR 6600 - 100 - A - N	~10,7
HR 6600 - 125 - A	125	325	200	6630	1271	HR 6600 - 125 - A - N	~12,5

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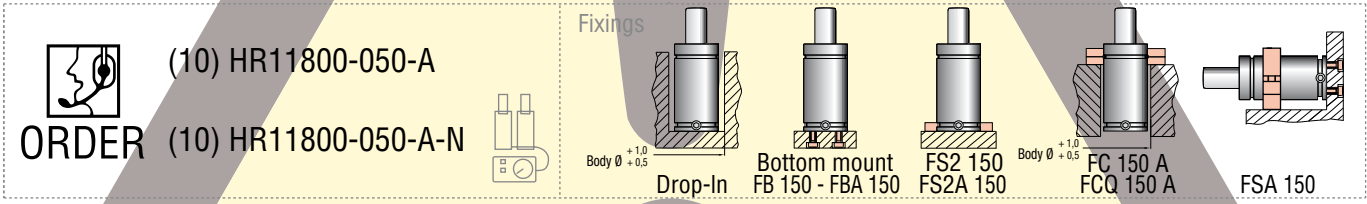
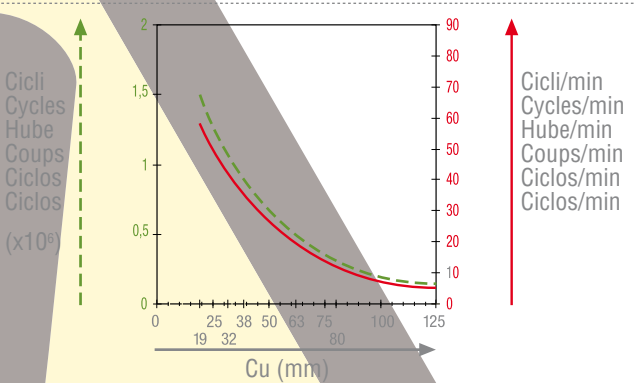
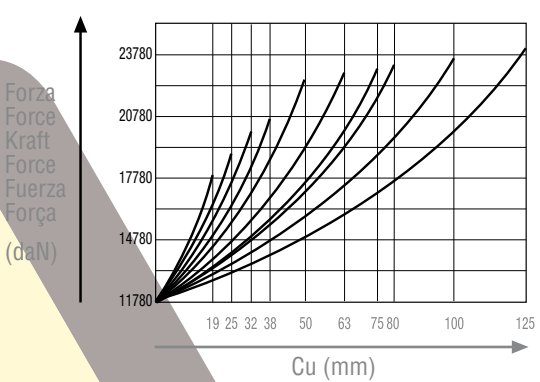
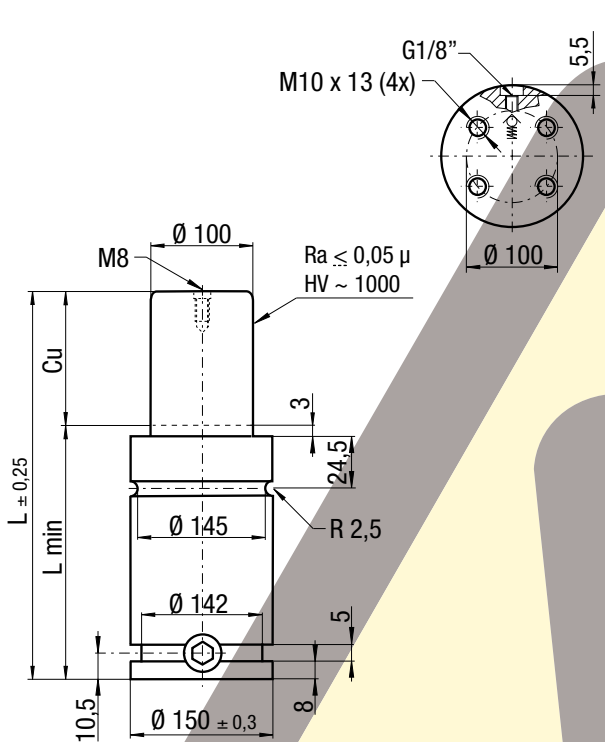
PHASING OUT from March 1st 2012

HR 11800

see **RV 9500**



Minima altezza, massima forza - Miniature height, maximum force - Minimale Höhe, maximale Leistung
 Hauteur - Hauteur minimum, force maximum -
 Mínima altura, máxima fuerza - Altura mínima, força máxima



Max. Speed 1,8 m/s	°F 32 176	°C 0 80	N₂	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 78,54 cm ²	Maintenance kit 39BMHR11800A
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Technical specifications

Code	Cu mm	L mm	Lmin mm	F ₀ at 150 bar/+20 °C daN (±5%)	V ₀ cm ³	connecting hole G1/8" Jic 37° hose Minimess hose	Kg
HR 11800 - 019 - A	19	116	97	11780	559	HR 11800 - 019 - A - N	~9,57
HR 11800 - 025 - A	25	128	103	11780	663	HR 11800 - 025 - A - N	~9,96
HR 11800 - 032 - A	32	142	110	11780	784	HR 11800 - 032 - A - N	~10,41
HR 11800 - 038 - A	38	154	116	11780	887	HR 11800 - 038 - A - N	~10,81
HR 11800 - 050 - A	50	178	128	11780	1095	HR 11800 - 050 - A - N	~11,59
HR 11800 - 063 - A	63	204	141	11780	1320	HR 11800 - 063 - A - N	~11,88
HR 11800 - 075 - A	75	228	153	11780	1527	HR 11800 - 075 - A - N	~12,21
HR 11800 - 080 - A	80	238	158	11780	1614	HR 11800 - 080 - A - N	~12,43
HR 11800 - 100 - A	100	278	178	11780	1960	HR 11800 - 100 - A - N	~13,51
HR 11800 - 125 - A	125	328	203	11780	2392	HR 11800 - 125 - A - N	~15,14

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