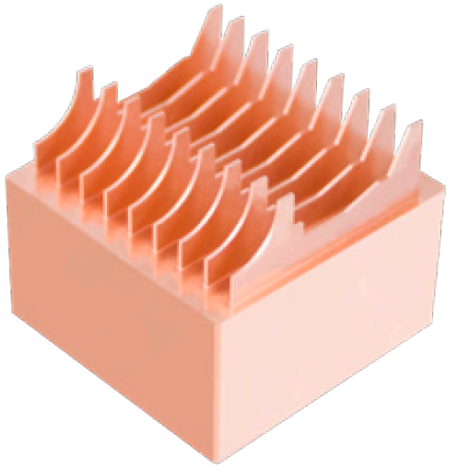
NS TOOL

Endmill

DHR237
DHR237R
DRB230



PROMOZIONE
2022/23

DLC

DRB230

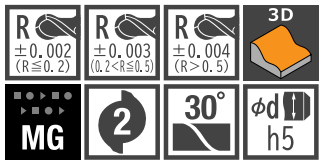
DLC

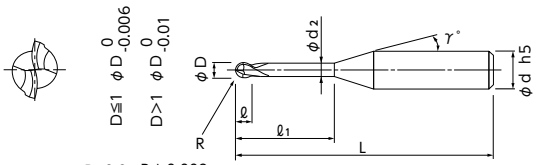
Frese sferiche scaricate per elettrodi in rame

Long Neck Ball End Mill for Copper Electrode

Frese sferiche scaricate specifiche per la lavorazione di leghe di rame.
Il tagliente affilato produce bave ridotte e un elevata qualità delle superficie.

Long neck ball end mill specialized for machining copper alloy.
Sharpe cutting edge makes less burr and high quality surface.

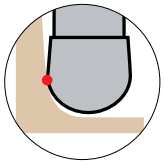




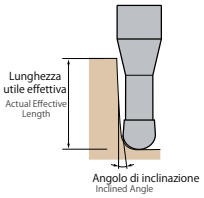
R≦0.2 R±0.002
0.2<R≦0.5 R±0.003
R>0.5 R±0.004

※La tolleranza del raggio R della fresa DRB30 è riferita alla metà del valore reale del diametro
R accuracy of DRB230 is based on a half value of φD

- Frese sferiche scaricate specifiche per lavorazione di leghe di rame
- La capacità di taglio netta e il rivestimento DLC consentono di ottenere un elevata qualità delle lavorazione e una lunga durata utensile
- E' anche possibile la lavorazione degli elettrodi in rame tungsteno
- Long neck ball end mill specialized for machining copper electrode.
- Sharp edge shearing ability and DLC coating realized high quality and stable a long life machining.
- Machining copper tungsten electrodes is also effective.



Soppressione delle vibrazione grazie a un unico punto di contatto di fresatura
Suppress chattering by point milling



Materiale Work material

Rame Copper	Rame tungsteno Copper tungsten
◎	◎

Unità di misura: mm
Unit Size : mm

Codice Code No.	(R) Raggio Radius	(ℓ1) Lunghezza effettiva Effective Length	(ℓ) Lunghezza tagliente Length of Cut	(D) Diametro Dia.	(d2) Diametro scarico Neck Dia.	(γ) Angolo Neck Taper Angle	(d) Diametro gambo Shank Dia.	(L) Lunghezza totale Overall Length	Prezzo €	La lungh. utile effettiva dipende dall'angolo di inclinazione del pezzo Actual effective length depending on inclined angle of workpiece. 30´	1°	1°30´	2°	3°
07-00530-00503	R0.05	0.3	0.07	0.1	0.085	12°	4	45	116,00 €	0.34	0.36	0.37	0.39	0.42
07-00530-00505		0.5	0.07	0.1	0.085	12°	4	45	121,00 €	0.55	0.57	0.60	0.63	0.69
07-00530-00703	R0.075	0.3	0.1	0.15	0.13	12°	4	45	117,00 €	0.35	0.37	0.38	0.40	0.43
07-00530-00705		0.5	0.1	0.15	0.13	12°	4	45	120,00 €	0.56	0.58	0.61	0.64	0.70
07-00530-00710		1	0.1	0.15	0.13	12°	4	45	125,00 €	1.08	1.13	1.18	1.23	1.36
07-00530-01005	R0.1	0.5	0.15	0.2	0.18	12°	4	45	93,00 €	0.56	0.58	0.61	0.63	0.69
07-00530-01007		0.75	0.15	0.2	0.18	12°	4	45	95,00 €	0.82	0.85	0.89	0.93	1.02
07-00530-01010		1	0.15	0.2	0.18	12°	4	45	97,00 €	1.08	1.13	1.18	1.23	1.35
07-00530-01015		1.5	0.15	0.2	0.18	12°	4	45	101,00 €	1.60	1.67	1.75	1.83	2.02
07-00530-01020		2	0.15	0.2	0.18	12°	4	45	105,00 €	2.13	2.22	2.32	2.43	2.68
07-00530-01505	R0.15	0.5	0.2	0.3	0.28	12°	4	45	93,00 €	0.56	0.58	0.60	0.62	0.67
07-00530-01510		1	0.2	0.3	0.28	12°	4	45	97,00 €	1.08	1.12	1.17	1.22	1.34
07-00530-01515		1.5	0.2	0.3	0.28	12°	4	45	101,00 €	1.60	1.67	1.74	1.82	2.00
07-00530-01520		2	0.2	0.3	0.28	12°	4	45	105,00 €	2.12	2.21	2.31	2.42	2.66
07-00530-02005	R0.2	0.5	0.3	0.4	0.37	12°	4	45	84,00 €	0.58	0.60	0.62	0.64	0.69
07-00530-02010		1	0.3	0.4	0.37	12°	4	45	84,00 €	1.10	1.14	1.19	1.24	1.35
07-00530-02015		1.5	0.3	0.4	0.37	12°	4	45	86,00 €	1.62	1.69	1.76	1.84	2.02
07-00530-02020		2	0.3	0.4	0.37	12°	4	45	86,00 €	2.15	2.23	2.33	2.43	2.68
07-00530-02030		3	0.3	0.4	0.37	12°	4	45	88,00 €	3.19	3.32	3.47	3.63	4.01
07-00530-02040		4	0.3	0.4	0.37	12°	4	45	89,00 €	4.23	4.41	4.61	4.83	5.33
07-00530-02050		5	0.3	0.4	0.37	12°	4	45	91,00 €	5.27	5.50	5.75	6.02	6.66
07-00530-02060		6	0.3	0.4	0.37	12°	4	45	93,00 €	6.32	6.59	6.89	7.22	7.99
07-00530-02510	R0.25	1	0.35	0.5	0.46	12°	4	45	82,00 €	1.13	1.16	1.21	1.26	1.37
07-00530-02515		1.5	0.35	0.5	0.46	12°	4	45	82,00 €	1.65	1.71	1.78	1.85	2.03
07-00530-02520		2	0.35	0.5	0.46	12°	4	45	83,00 €	2.17	2.25	2.35	2.45	2.69
07-00530-02530		3	0.35	0.5	0.46	12°	4	45	84,00 €	3.21	3.34	3.49	3.65	4.02
07-00530-02540		4	0.35	0.5	0.46	12°	4	45	86,00 €	4.25	4.43	4.63	4.85	5.35
07-00530-02550		5	0.35	0.5	0.46	12°	4	45	88,00 €	5.30	5.52	5.77	6.04	6.68
07-00530-02560		6	0.35	0.5	0.46	12°	4	45	89,00 €	6.34	6.61	6.91	7.24	8.00
07-00530-03010	R0.3	1	0.45	0.6	0.56	12°	4	45	63,00 €	1.12	1.16	1.20	1.25	1.35
07-00530-03015		1.5	0.45	0.6	0.56	12°	4	45	64,00 €	1.64	1.71	1.77	1.84	2.02
07-00530-03020		2	0.45	0.6	0.56	12°	4	45	64,00 €	2.17	2.25	2.34	2.44	2.68
07-00530-03030		3	0.45	0.6	0.56	12°	4	45	66,00 €	3.21	3.34	3.48	3.64	4.01
07-00530-03040		4	0.45	0.6	0.56	12°	4	45	68,00 €	4.25	4.43	4.62	4.84	5.33
07-00530-03050		5	0.45	0.6	0.56	12°	4	45	69,00 €	5.29	5.52	5.76	6.03	6.66
07-00530-03060		6	0.45	0.6	0.56	12°	4	45	71,00 €	6.34	6.61	6.90	7.23	7.99
07-00530-03080		8	0.45	0.6	0.56	12°	4	45	75,00 €	8.42	8.79	9.18	9.62	10.64
07-00530-03100		10	0.45	0.6	0.56	12°	4	50	79,00 €	10.51	10.97	11.47	12.02	13.30

Attenzione

Quando ordinate, indicate DRB230 (R) × (ℓ1)
When you order, indicate DRB230 (R) × (ℓ1).

※ (γ) è un valore di riferimento
※(γ) is reference value.

Frese sferiche scaricate per elettrodi in rame

Long Neck Ball End Mill for Copper Electrode

Codice Code No.	(R) Raggio Radius	(ℓ1) Lunghezza effettiva Effective Length	(ℓ) Lunghezza tagliente Length of Cut	(D) Diametro Dia.	(d2) Diametro scarico Neck Dia.	(γ) Angolo Neck Taper Angle	(d) Diametro gambo Shank Dia.	(L) Lunghezza totale Overall Length	Prezzo €	La lungh. utile effettiva dipende dall'angolo di inclinazione del pezzo Actual effective length depending on inclined angle of workpiece.				
										30´	1°	1°30´	2°	3°
07-00530-04015	R0.4	1.5	0.6	0.8	0.76	12°	4	45	64,00 €	1.64	1.70	1.76	1.83	1.98
07-00530-04020		2	0.6	0.8	0.76	12°	4	45	64,00 €	2.16	2.24	2.33	2.42	2.65
07-00530-04030		3	0.6	0.8	0.76	12°	4	45	66,00 €	3.20	3.33	3.47	3.62	3.97
07-00530-04040		4	0.6	0.8	0.76	12°	4	45	68,00 €	4.25	4.42	4.61	4.82	5.30
07-00530-04050		5	0.6	0.8	0.76	12°	4	45	69,00 €	5.29	5.51	5.75	6.01	6.63
07-00530-04060		6	0.6	0.8	0.76	12°	4	45	69,00 €	6.33	6.60	6.89	7.21	7.96
07-00530-04080		8	0.6	0.8	0.76	12°	4	45	71,00 €	8.42	8.78	9.17	9.60	10.61
07-00530-04100		10	0.6	0.8	0.76	12°	4	50	75,00 €	10.50	10.96	11.45	12.00	13.26
07-00530-05020	R0.5	2	0.75	1	0.95	12°	4	45	62,00 €	2.18	2.26	2.34	2.43	2.65
07-00530-05030		3	0.75	1	0.95	12°	4	45	63,00 €	3.22	3.35	3.48	3.63	3.97
07-00530-05040		4	0.75	1	0.95	12°	4	45	63,00 €	4.27	4.44	4.62	4.83	5.30
07-00530-05050		5	0.75	1	0.95	12°	4	45	64,00 €	5.31	5.53	5.76	6.02	6.63
07-00530-05060		6	0.75	1	0.95	12°	4	45	64,00 €	6.35	6.62	6.90	7.22	7.96
07-00530-05080		8	0.75	1	0.95	12°	4	45	68,00 €	8.44	8.79	9.18	9.61	10.61
07-00530-05100		10	0.75	1	0.95	12°	4	45	68,00 €	10.52	10.97	11.46	12.01	13.26
07-00530-05120		12	0.75	1	0.95	12°	4	45	68,00 €	12.61	13.15	13.75	14.40	15.92
07-00530-05140		14	0.75	1	0.95	12°	4	50	71,00 €	14.70	15.33	16.03	16.79	18.57
07-00530-05160		16	0.75	1	0.95	12°	4	50	71,00 €	16.78	17.51	18.31	19.18	21.23
07-00530-07504	R0.75	4	1.1	1.5	1.45	12°	4	50	64,00 €	4.26	4.41	4.59	4.78	5.22
07-00530-07506		6	1.1	1.5	1.45	12°	4	50	64,00 €	6.34	6.59	6.87	7.17	7.88
07-00530-07508		8	1.1	1.5	1.45	12°	4	50	69,00 €	8.43	8.77	9.15	9.56	10.53
07-00530-07510		10	1.1	1.5	1.45	12°	4	50	69,00 €	10.51	10.95	11.43	11.96	13.18
07-00530-07512		12	1.1	1.5	1.45	12°	4	50	73,00 €	12.60	13.13	13.71	14.35	15.84
07-00530-07514		14	1.1	1.5	1.45	12°	4	50	73,00 €	14.69	15.31	15.99	16.74	18.49
07-00530-07516		16	1.1	1.5	1.45	12°	4	50	78,00 €	16.77	17.49	18.27	19.14	21.15
07-00530-07518		18	1.1	1.5	1.45	12°	4	50	81,00 €	18.86	19.67	20.55	21.53	23.80
07-00530-10030	R1	3	1.5	2	1.94	12°	4	50	66,00 €	3.23	3.33	3.44	3.56	3.85
07-00530-10040		4	1.5	2	1.94	12°	4	50	66,00 €	4.27	4.42	4.58	4.76	5.17
07-00530-10060		6	1.5	2	1.94	12°	4	50	66,00 €	6.36	6.60	6.86	7.15	7.83
07-00530-10080		8	1.5	2	1.94	12°	4	50	68,00 €	8.44	8.78	9.14	9.54	10.48
07-00530-10100		10	1.5	2	1.94	12°	4	50	68,00 €	10.53	10.95	11.42	11.94	13.14
07-00530-10120		12	1.5	2	1.94	12°	4	50	68,00 €	12.61	13.13	13.70	14.33	15.79
07-00530-10140		14	1.5	2	1.94	12°	4	50	68,00 €	14.70	15.31	15.98	16.72	18.45
07-00530-10160		16	1.5	2	1.94	12°	4	50	68,00 €	16.78	17.49	18.27	19.12	Free
07-00530-10200		20	1.5	2	1.94	12°	4	60	75,00 €	20.96	21.85	22.83	23.90	Free
07-00530-10250		25	1.5	2	1.94	12°	4	60	84,00 €	26.17	27.30	28.53	29.89	Free
07-00530-15060	R1.5	6	2.5	3	2.85	12°	6	60	84,00 €	6.56	6.78	7.03	7.31	7.95
07-00530-15080		8	2.5	3	2.85	12°	6	60	86,00 €	8.64	8.96	9.31	9.70	10.60
07-00530-15100		10	2.5	3	2.85	12°	6	60	86,00 €	10.73	11.14	11.59	12.09	13.26
07-00530-15120		12	2.5	3	2.85	12°	6	60	86,00 €	12.81	13.32	13.88	14.49	15.91
07-00530-15150		15	2.5	3	2.85	12°	6	70	88,00 €	15.94	16.59	17.30	18.08	19.89
07-00530-15200		20	2.5	3	2.85	12°	6	70	92,00 €	21.16	22.04	23.00	24.06	26.53
07-00530-15250		25	2.5	3	2.85	12°	6	70	92,00 €	26.37	27.48	28.70	30.04	Free
07-00530-15300		30	2.5	3	2.85	12°	6	70	100,00 €	31.58	32.93	34.40	36.03	Free
07-00530-20100	R2	10	3	4	3.8	12°	6	60	79,00 €	10.83	11.22	11.66	12.14	13.25
07-00530-20120		12	3	4	3.8	12°	6	60	79,00 €	12.91	13.40	13.94	14.53	15.91
07-00530-20150		15	3	4	3.8	12°	6	60	79,00 €	16.04	16.67	17.36	18.12	19.89
07-00530-20200		20	3	4	3.8	12°	6	60	94,00 €	21.26	22.12	23.06	24.10	Free
07-00530-20250		25	3	4	3.8	12°	6	70	100,00 €	26.47	27.57	28.77	30.09	Free
07-00530-20300		30	3	4	3.8	12°	6	70	104,00 €	31.68	33.01	34.47	Free	Free
07-00530-20400		40	3	4	3.8	12°	6	80	113,00 €	42.11	43.91	Free	Free	Free
07-00530-30200	R3	20	6	6	5.7	–	6	70	104,00 €	Free	Free	Free	Free	Free
07-00530-30250		25	6	6	5.7	–	6	70	106,00 €	Free	Free	Free	Free	Free
07-00530-30300		30	6	6	5.7	–	6	80	109,00 €	Free	Free	Free	Free	Free
07-00530-30400		40	6	6	5.7	–	6	80	117,00 €	Free	Free	Free	Free	Free
07-00530-30500		50	6	6	5.7	–	6	100	127,00 €	Free	Free	Free	Free	Free

DHR237

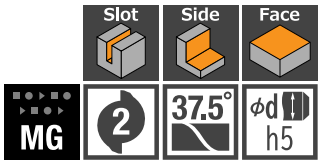
DLC

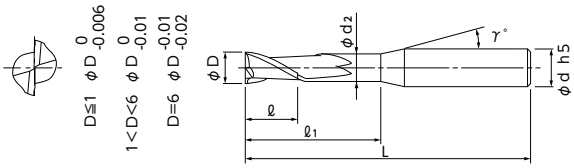
Frese piane scaricate per elettrodi in rame

Long Neck Square End Mill for Copper Electrode

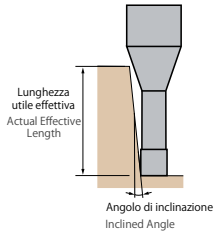
Frese piane scaricate specifiche per la lavorazione di leghe di rame.
Il tagliente affilato produce bave ridotte e un elevata qualità delle superficie.

Long neck square end mill specialized for machining copper alloy. Sharpe cutting edge makes less burr and high quality surface.





- Frese piane scaricate specifiche per lavorazione di leghe di rame
- L'angolo d'elica di 37,5° consente di ottenere finiture accurate e elevata qualità superficiale e di prevenire la rigatura delle superfici
- La capacità di taglio netta e il rivestimento DLC consentono di ottenere un elevata qualità della lavorazione e una lunga durata utensile
- E' anche possibile la lavorazione degli elettrodi in rame tungsteno
- Long neck square end mill specialized for machining copper electrode.
- Helix angle 37.5 degrees to achieve both sharpness and finished surface quality that prevents scratches on cutting surface.
- Hgh quality and stable milling performance with long tool life by optimized design and DLC COATING.
- Machining copper tungsten electrodes is also effective.



Materiale Work material

Rame Copper	Rame tungsteno Copper tungsten
◎	◎

Unità di misura: mm
Unit Size : mm

Codice Code No.	(D) Diametro Dia.	(ℓ1) Lunghezza effettiva Effective Length	(ℓ) Lunghezza tagliente Length of Cut	(d2) Diametro scarico Neck Dia.	(γ) Angolo Neck Taper Angle	(d) Diametro gambo Shank Dia.	(L) Lunghezza totale	Prezzo €	La lungh. utile effettiva dipende dall'angolo di inclinazione del pezzo Actual effective length depending on inclined angle of workpiece. 30´	1°	1°30´	2°	3°
07-00100-01003	0.1	0.3	0.2	0.085	12°	4	45	106,00 €	0.34	0.36	0.38	0.40	0.44
07-00100-01005		0.5	0.2	0.085	12°	4	45	111,00 €	0.55	0.58	0.61	0.64	0.71
07-00100-01007		0.75	0.2	0.085	12°	4	45	117,00 €	0.81	0.85	0.89	0.93	1.04
07-00100-01010		1	0.2	0.085	12°	4	45	123,00 €	1.07	1.12	1.18	1.23	1.37
07-00100-02005	0.2	0.5	0.4	0.18	12°	4	45	79,00 €	0.57	0.59	0.62	0.65	0.72
07-00100-02010		1	0.4	0.18	12°	4	45	84,00 €	1.09	1.14	1.19	1.25	1.38
07-00100-02015		1.5	0.4	0.18	12°	4	45	88,00 €	1.61	1.68	1.76	1.85	2.05
07-00100-02020		2	0.4	0.18	12°	4	45	92,00 €	2.13	2.23	2.33	2.44	2.71
07-00100-03010	0.3	1	0.6	0.28	12°	4	45	84,00 €	1.09	1.14	1.19	1.25	1.38
07-00100-03015		1.5	0.6	0.28	12°	4	45	88,00 €	1.61	1.68	1.76	1.85	2.05
07-00100-03020		2	0.6	0.28	12°	4	45	92,00 €	2.13	2.23	2.33	2.44	2.71
07-00100-03030		3	0.6	0.28	12°	4	45	97,00 €	3.17	3.31	3.47	3.64	4.04
07-00100-04010	0.4	1	0.8	0.37	12°	4	45	73,00 €	1.11	1.16	1.22	1.28	1.42
07-00100-04020		2	0.8	0.37	12°	4	45	74,00 €	2.15	2.25	2.36	2.47	2.74
07-00100-04030		3	0.8	0.37	12°	4	45	76,00 €	3.20	3.34	3.50	3.67	4.07
07-00100-04040		4	0.8	0.37	12°	4	45	78,00 €	4.24	4.43	4.64	4.87	5.40
07-00100-05015	0.5	1.5	1	0.46	12°	4	45	71,00 €	1.66	1.73	1.81	1.90	2.11
07-00100-05020		2	1	0.46	12°	4	45	73,00 €	2.18	2.28	2.38	2.50	2.77
07-00100-05030		3	1	0.46	12°	4	45	74,00 €	3.22	3.37	3.52	3.70	4.10
07-00100-05040		4	1	0.46	12°	4	45	76,00 €	4.26	4.46	4.66	4.89	5.43
07-00100-05060		6	1	0.46	12°	4	45	79,00 €	6.35	6.63	6.95	7.29	8.08
07-00100-06020	0.6	2	1.2	0.56	12°	4	45	79,00 €	2.18	2.28	2.38	2.50	2.77
07-00100-06030		3	1.2	0.56	12°	4	45	80,00 €	3.22	3.37	3.52	3.70	4.10
07-00100-06040		4	1.2	0.56	12°	4	45	82,00 €	4.26	4.46	4.66	4.89	5.43
07-00100-06060		6	1.2	0.56	12°	4	45	84,00 €	6.35	6.63	6.95	7.29	8.08

Attenzione

Quando ordinate, indicate DHR237 (D) × (ℓ1)
When you order, indicate DHR237 (D)×(ℓ1).

※ (γ) è un valore di riferimento
※(γ) is reference value.

Frese piane scaricate per elettrodi in rame

Long Neck Square End Mill for Copper Electrode

Codice Code No.	(D) Diametro Dia.	(ℓ1) Lunghezza effettiva Effective Length	(ℓ) Lunghezza tagliente Length of Cut	(d2) Diametro scarico Neck Dia.	(γ) Angolo Neck Taper Angle	(d) Diametro gambo Shank Dia.	(L) Lunghezza totale Overall Length	Prezzo €	La lungh. utile effettiva dipende dall'angolo di inclinazione del pezzo Actual effective length depending on inclined angle of workpiece.				
									30´	1°	1°30´	2°	3°
07-00100-08030	0.8	3	1.6	0.76	12°	4	45	80,00 €	3.22	3.37	3.52	3.70	4.10
07-00100-08040		4	1.6	0.76	12°	4	45	82,00 €	4.26	4.46	4.66	4.89	5.43
07-00100-08060		6	1.6	0.76	12°	4	45	84,00 €	6.35	6.63	6.95	7.29	8.08
07-00100-08080		8	1.6	0.76	12°	4	50	86,00 €	8.44	8.81	9.23	9.68	10.74
07-00100-10030	1	3	2	0.95	12°	4	45	76,00 €	3.25	3.39	3.55	3.73	4.13
07-00100-10040		4	2	0.95	12°	4	45	77,00 €	4.29	4.48	4.69	4.92	5.46
07-00100-10050		5	2	0.95	12°	4	45	79,00 €	5.33	5.57	5.83	6.12	6.79
07-00100-10060		6	2	0.95	12°	4	45	80,00 €	6.37	6.66	6.97	7.32	8.11
07-00100-10080		8	2	0.95	12°	4	50	82,00 €	8.46	8.84	9.25	9.71	10.77
07-00100-10100		10	2	0.95	12°	4	50	84,00 €	10.55	11.02	11.53	12.10	13.42
07-00100-10120		12	2	0.95	12°	4	50	84,00 €	12.63	13.20	13.82	14.49	16.08
07-00100-15040	1.5	4	3	1.45	12°	4	45	79,00 €	4.29	4.48	4.69	4.92	5.46
07-00100-15060		6	3	1.45	12°	4	50	79,00 €	6.37	6.66	6.97	7.32	8.11
07-00100-15080		8	3	1.45	12°	4	50	80,00 €	8.46	8.84	9.25	9.71	10.77
07-00100-15100		10	3	1.45	12°	4	50	83,00 €	10.55	11.02	11.53	12.10	13.42
07-00100-15120		12	3	1.45	12°	4	50	83,00 €	12.63	13.20	13.82	14.49	16.08
07-00100-15160		16	3	1.45	12°	4	60	85,00 €	16.80	17.55	18.38	19.28	21.39
07-00100-20060	2	6	4	1.94	12°	4	50	77,00 €	6.40	6.69	7.00	7.34	8.15
07-00100-20080		8	4	1.94	12°	4	50	77,00 €	8.48	8.86	9.28	9.74	10.80
07-00100-20100		10	4	1.94	12°	4	50	78,00 €	10.57	11.04	11.56	12.13	13.45
07-00100-20120		12	4	1.94	12°	4	50	78,00 €	12.66	13.22	13.84	14.52	16.11
07-00100-20140		14	4	1.94	12°	4	50	78,00 €	14.74	15.40	16.12	16.92	18.76
07-00100-20160		16	4	1.94	12°	4	60	79,00 €	16.83	17.58	18.40	19.31	Free
07-00100-20200		20	4	1.94	12°	4	60	79,00 €	21.00	21.94	22.97	24.10	Free
07-00100-25060	2.5	6	5	2.4	12°	4	45	79,00 €	6.50	6.79	7.11	7.46	8.27
07-00100-25080		8	5	2.4	12°	4	50	79,00 €	8.58	8.97	9.39	9.85	10.93
07-00100-25100		10	5	2.4	12°	4	50	80,00 €	10.67	11.15	11.67	12.24	13.58
07-00100-25120		12	5	2.4	12°	4	50	84,00 €	12.75	13.32	13.95	14.64	Free
07-00100-25140		14	5	2.4	12°	4	50	84,00 €	14.84	15.50	16.23	17.03	Free
07-00100-25160		16	5	2.4	12°	4	50	85,00 €	16.93	17.68	18.51	19.42	Free
07-00100-25200		20	5	2.4	12°	4	60	90,00 €	21.10	22.04	23.07	Free	Free
07-00100-30080	3	8	6	2.85	12°	6	50	79,00 €	8.71	9.10	9.52	9.99	11.08
07-00100-30100		10	6	2.85	12°	6	50	81,00 €	10.79	11.27	11.80	12.38	13.74
07-00100-30150		15	6	2.85	12°	6	60	84,00 €	16.01	16.72	17.50	18.37	20.37
07-00100-30200		20	6	2.85	12°	6	60	88,00 €	21.22	22.17	23.21	24.35	27.01
07-00100-30250		25	6	2.85	12°	6	70	96,00 €	26.43	27.62	28.91	30.33	Free
07-00100-40100	4	10	8	3.8	12°	6	50	74,00 €	10.91	11.40	11.94	12.52	13.89
07-00100-40150		15	8	3.8	12°	6	60	75,00 €	16.13	16.85	17.64	18.51	20.53
07-00100-40200		20	8	3.8	12°	6	60	80,00 €	21.34	22.30	23.34	24.49	Free
07-00100-40250		25	8	3.8	12°	6	70	89,00 €	26.56	27.74	29.04	Free	Free
07-00100-40300		30	8	3.8	12°	6	70	93,00 €	31.77	33.19	34.75	Free	Free
07-00100-50150	5	15	10	4.8	12°	6	50	75,00 €	16.13	16.85	17.64	Free	Free
07-00100-50200		20	10	4.8	12°	6	60	80,00 €	21.34	22.30	Free	Free	Free
07-00100-50250		25	10	4.8	12°	6	60	89,00 €	26.56	27.74	Free	Free	Free
07-00100-50300		30	10	4.8	12°	6	70	93,00 €	31.77	Free	Free	Free	Free
07-00100-60150	6	15	12	5.8	–	6	50	80,00 €	Free	Free	Free	Free	Free
07-00100-60200		20	12	5.8	–	6	60	92,00 €	Free	Free	Free	Free	Free
07-00100-60300		30	12	5.8	–	6	70	100,00 €	Free	Free	Free	Free	Free
07-00100-60500		50	12	5.8	–	6	90	150,00 €	Free	Free	Free	Free	Free

DHR237R

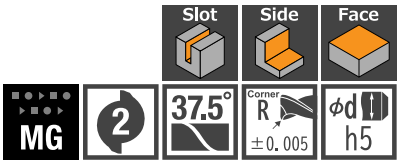
DLC

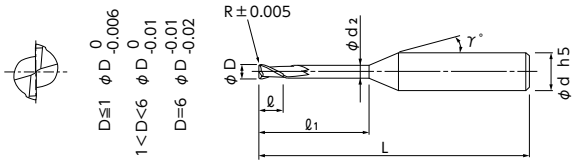
Frese toriche scaricate per elettrodi in rame

Long Neck Radius End Mill for Copper Electrode

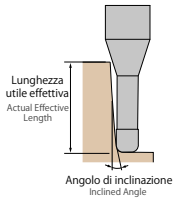
Frese toriche scaricate specifiche per la lavorazione di leghe di rame.
Il tagliente affilato produce bave ridotte e un elevata qualità delle superficie.

Long neck radius end mill specialized for machining copper alloy.
Sharpe cutting edge makes less burr and high quality surface.





- **Frese toriche scaricate specifiche per lavorazione di leghe di rame**
- **L'angolo d'elica di 37,5° consente di ottenere finiture accurate e elevata qualità superficiale e di prevenire la rigatura delle superfici**
- **La capacità di taglio netta e il rivestimento DLC consentono di ottenere un elevata qualità della lavorazione e una lunga durata utensile**
- **E' anche possibile la lavorazione degli elettrodi in rame tungsteno**
- Long neck radius end mill specialized for machining copper electrode.
- 37.5°helix angle provides both sharpness shearing ability and finishing surface quality, combining the most suitable cutting edge design realizes the higher quality of finishing surface.
- High quality and stable milling performance with long tool life by optimized design and DLC COATING.
- Machining copper tungsten electrodes is also effective.



Materiale Work material

Rame Copper	Rame tungsteno Copper tungsten
◎	◎

Unità di misura: mm
Unit Size : mm

Codice Code No.	(D) Diametro Dia.	(R) Raggio Corner radius	(ℓ1) Lunghezza effettiva Effective Length	(ℓ) Lunghezza tagliente Length of Cut	(d2) Diametro scarico Neck Dia.	(γ) Angolo Neck Taper Angle	(d) Diametro gambo Shank Dia.	(L) Lunghezza totale	Prezzo €	La lungh. utile effettiva dipende dall'angolo di inclinazione del pezzo Actual effective length depending on inclined angle of workpiece. 30´	1°	1°30´	2°	3°
07-00110-02021	0.2	R0.02	0.5	0.4	0.18	12°	4	45	96,00 €	0.56	0.59	0.62	0.65	0.71
07-00110-02023			1	0.4	0.18	12°	4	45	100,00 €	1.09	1.13	1.19	1.24	1.38
07-00110-02025			1.5	0.4	0.18	12°	4	45	103,00 €	1.61	1.68	1.76	1.84	2.04
07-00110-02051		R0.05	0.5	0.4	0.18	12°	4	45	96,00 €	0.57	0.59	0.62	0.64	0.71
07-00110-02053			1	0.4	0.18	12°	4	45	100,00 €	1.09	1.14	1.19	1.24	1.37
07-00110-02055			1.5	0.4	0.18	12°	4	45	103,00 €	1.61	1.68	1.76	1.84	2.04
07-00110-03021	0.3	R0.02	1	0.6	0.28	12°	4	45	100,00 €	1.09	1.13	1.19	1.24	1.38
07-00110-03022			1.5	0.6	0.28	12°	4	45	103,00 €	1.61	1.68	1.76	1.84	2.04
07-00110-03023			2	0.6	0.28	12°	4	45	104,00 €	2.13	2.22	2.33	2.44	2.71
07-00110-03051		R0.05	1	0.6	0.28	12°	4	45	100,00 €	1.09	1.14	1.19	1.24	1.37
07-00110-03052			1.5	0.6	0.28	12°	4	45	103,00 €	1.61	1.68	1.76	1.84	2.04
07-00110-03053			2	0.6	0.28	12°	4	45	104,00 €	2.13	2.23	2.33	2.44	2.70
07-00110-04021	0.4	R0.02	1	0.8	0.37	12°	4	45	88,00 €	1.11	1.16	1.21	1.27	1.41
07-00110-04023			2	0.8	0.37	12°	4	45	89,00 €	2.15	2.25	2.35	2.47	2.74
07-00110-04025			3	0.8	0.37	12°	4	45	91,00 €	3.20	3.34	3.49	3.67	4.06
07-00110-04027			4	0.8	0.37	12°	4	45	93,00 €	4.24	4.43	4.63	4.86	5.39
07-00110-04051		R0.05	1	0.8	0.37	12°	4	45	88,00 €	1.11	1.16	1.21	1.27	1.40
07-00110-04053			2	0.8	0.37	12°	4	45	89,00 €	2.16	2.25	2.35	2.47	2.73
07-00110-04055			3	0.8	0.37	12°	4	45	91,00 €	3.20	3.34	3.50	3.66	4.06
07-00110-04057			4	0.8	0.37	12°	4	45	93,00 €	4.24	4.43	4.64	4.86	5.39
07-00110-04101		R0.1	1	0.8	0.37	12°	4	45	88,00 €	1.11	1.16	1.21	1.26	1.39
07-00110-04103			2	0.8	0.37	12°	4	45	89,00 €	2.15	2.25	2.35	2.46	2.72
07-00110-04105			3	0.8	0.37	12°	4	45	91,00 €	3.20	3.34	3.49	3.65	4.04
07-00110-04107			4	0.8	0.37	12°	4	45	93,00 €	4.24	4.43	4.63	4.85	5.37
07-00110-05022	0.5	R0.02	2	1	0.46	12°	4	45	87,00 €	2.18	2.27	2.38	2.50	2.77
07-00110-05023			3	1	0.46	12°	4	45	89,00 €	3.22	3.36	3.52	3.69	4.10
07-00110-05024			4	1	0.46	12°	4	45	90,00 €	4.26	4.45	4.66	4.89	5.42
07-00110-05025			5	1	0.46	12°	4	45	92,00 €	5.31	5.54	5.80	6.09	6.75
07-00110-05052		R0.05	2	1	0.46	12°	4	45	87,00 €	2.18	2.28	2.38	2.50	2.76
07-00110-05053			3	1	0.46	12°	4	45	89,00 €	3.22	3.37	3.52	3.69	4.09
07-00110-05054			4	1	0.46	12°	4	45	90,00 €	4.27	4.46	4.66	4.89	5.42
07-00110-05055			5	1	0.46	12°	4	45	92,00 €	5.31	5.55	5.80	6.09	6.75
07-00110-05102		R0.1	2	1	0.46	12°	4	45	87,00 €	2.18	2.27	2.37	2.49	2.75
07-00110-05103			3	1	0.46	12°	4	45	89,00 €	3.22	3.36	3.51	3.68	4.07
07-00110-05104			4	1	0.46	12°	4	45	90,00 €	4.27	4.45	4.66	4.88	5.40
07-00110-05105			5	1	0.46	12°	4	45	92,00 €	5.31	5.54	5.80	6.08	6.73

Attenzione Quando ordinate, indicate DHR237R (D)× (R)× (ℓ1)
When you order, indicate DHR237R (D)×(R)×(ℓ1).

※ (γ) è un valore di riferimento
※(γ) is reference value.

Frese toriche scaricate per elettrodi in rame

Long Neck Radius End Mill for Copper Electrode

Codice Code No.	(D) Diametro Dia.	(R) Raggio Corner radius	(ℓ1) Lunghezza effettiva Effective Length	(ℓ) Lunghezza tagliente Length of Cut	(d2) Diametro scarico Neck Dia.	(γ) Angolo Neck Taper Angle	(d) Diametro gambo Shank Dia.	(L) Lunghezza totale	Prezzo €	La lungh. utile effettiva dipende dall'angolo di inclinazione del pezzo Actual effective length depending on inclined angle of workpiece. 30´	1°	1° 30´	2°	3°
07-00110-06022	0.6	R0.02	2	1.2	0.56	12°	4	45	94,00 €	2.18	2.27	2.38	2.50	2.77
07-00110-06024			4	1.2	0.56	12°	4	45	98,00 €	4.26	4.45	4.66	4.89	5.42
07-00110-06026			6	1.2	0.56	12°	4	45	101,00 €	6.35	6.63	6.94	7.28	8.08
07-00110-06052		R0.05	2	1.2	0.56	12°	4	45	94,00 €	2.18	2.28	2.38	2.50	2.76
07-00110-06054			4	1.2	0.56	12°	4	45	98,00 €	4.27	4.46	4.66	4.89	5.42
07-00110-06056			6	1.2	0.56	12°	4	45	101,00 €	6.35	6.63	6.94	7.28	8.07
07-00110-06102		R0.1	2	1.2	0.56	12°	4	45	94,00 €	2.18	2.27	2.37	2.49	2.75
07-00110-06104			4	1.2	0.56	12°	4	45	98,00 €	4.27	4.45	4.66	4.88	5.40
07-00110-06106			6	1.2	0.56	12°	4	45	101,00 €	6.35	6.63	6.94	7.27	8.06
07-00110-08024	0.8	R0.02	4	1.6	0.76	12°	4	45	98,00 €	4.26	4.45	4.66	4.89	5.42
07-00110-08026			6	1.6	0.76	12°	4	45	101,00 €	6.35	6.63	6.94	7.28	8.08
07-00110-08028			8	1.6	0.76	12°	4	50	103,00 €	8.43	8.81	9.22	9.68	10.73
07-00110-08054		R0.05	4	1.6	0.76	12°	4	45	98,00 €	4.27	4.46	4.66	4.89	5.42
07-00110-08056			6	1.6	0.76	12°	4	45	101,00 €	6.35	6.63	6.94	7.28	8.07
07-00110-08058			8	1.6	0.76	12°	4	50	103,00 €	8.44	8.81	9.22	9.68	10.73
07-00110-08104		R0.1	4	1.6	0.76	12°	4	45	98,00 €	4.27	4.45	4.66	4.88	5.40
07-00110-08106			6	1.6	0.76	12°	4	45	101,00 €	6.35	6.63	6.94	7.27	8.06
07-00110-08108			8	1.6	0.76	12°	4	50	103,00 €	8.44	8.81	9.22	9.67	10.71
07-00110-10053	1	R0.05	3	2	0.95	12°	4	45	91,00 €	3.24	3.39	3.54	3.72	4.12
07-00110-10054			4	2	0.95	12°	4	45	92,00 €	4.29	4.48	4.68	4.91	5.44
07-00110-10055			5	2	0.95	12°	4	45	94,00 €	5.33	5.57	5.82	6.11	6.77
07-00110-10056			6	2	0.95	12°	4	45	96,00 €	6.37	6.66	6.97	7.31	8.10
07-00110-10058			8	2	0.95	12°	4	50	98,00 €	8.46	8.83	9.25	9.70	10.75
07-00110-10060			10	2	0.95	12°	4	50	100,00 €	10.54	11.01	11.53	12.09	13.41
07-00110-10103		R0.1	3	2	0.95	12°	4	45	91,00 €	3.25	3.39	3.54	3.71	4.11
07-00110-10104			4	2	0.95	12°	4	45	92,00 €	4.29	4.48	4.68	4.91	5.43
07-00110-10105			5	2	0.95	12°	4	45	94,00 €	5.33	5.57	5.82	6.10	6.76
07-00110-10106			6	2	0.95	12°	4	45	96,00 €	6.38	6.66	6.96	7.30	8.09
07-00110-10108			8	2	0.95	12°	4	50	98,00 €	8.46	8.84	9.24	9.69	10.74
07-00110-10110			10	2	0.95	12°	4	50	100,00 €	10.55	11.01	11.53	12.09	13.40
07-00110-10203		R0.2	3	2	0.95	12°	4	45	91,00 €	3.24	3.38	3.53	3.69	4.07
07-00110-10204			4	2	0.95	12°	4	45	92,00 €	4.29	4.47	4.67	4.89	5.40
07-00110-10205			5	2	0.95	12°	4	45	94,00 €	5.33	5.56	5.81	6.09	6.73
07-00110-10206			6	2	0.95	12°	4	45	96,00 €	6.37	6.65	6.95	7.28	8.06
07-00110-10208			8	2	0.95	12°	4	50	98,00 €	8.46	8.83	9.23	9.67	10.71
07-00110-10210			10	2	0.95	12°	4	50	100,00 €	10.54	11.01	11.51	12.07	13.36
07-00110-15105	1.5	R0.1	5	3	1.45	12°	4	45	95,00 €	5.33	5.56	5.82	6.10	6.76
07-00110-15110			10	3	1.45	12°	4	50	96,00 €	10.54	11.01	11.52	12.08	13.39
07-00110-15115			15	3	1.45	12°	4	50	97,00 €	15.76	16.46	17.22	18.07	20.03
07-00110-15205		R0.2	5	3	1.45	12°	4	45	95,00 €	5.32	5.55	5.80	6.08	6.72
07-00110-15210			10	3	1.45	12°	4	50	96,00 €	10.54	11.00	11.51	12.06	13.36
07-00110-15215			15	3	1.45	12°	4	50	97,00 €	15.75	16.45	17.21	18.05	20.00
07-00110-15305		R0.3	5	3	1.45	12°	4	45	91,00 €	5.32	5.54	5.79	6.06	6.69
07-00110-15310			10	3	1.45	12°	4	50	96,00 €	10.53	10.99	11.49	12.04	13.33
07-00110-15315			15	3	1.45	12°	4	50	97,00 €	15.75	16.44	17.20	18.03	19.96
07-00110-15505		R0.5	5	3	1.45	12°	4	45	92,00 €	5.31	5.53	5.76	6.02	6.63
07-00110-15510			10	3	1.45	12°	4	50	96,00 €	10.53	10.98	11.47	12.01	13.27
07-00110-15515			15	3	1.45	12°	4	50	97,00 €	15.74	16.42	17.17	17.99	19.90
07-00110-15520			20	3	1.45	12°	4	60	99,00 €	20.96	21.87	22.87	23.98	Free
07-00110-20105	2	R0.1	5	4	1.94	12°	4	45	89,00 €	5.36	5.59	5.85	6.13	6.79
07-00110-20108			8	4	1.94	12°	4	50	92,00 €	8.49	8.86	9.27	9.72	10.77
07-00110-20110			10	4	1.94	12°	4	50	93,00 €	10.57	11.04	11.55	12.12	13.43
07-00110-20115			15	4	1.94	12°	4	50	94,00 €	15.79	16.49	17.25	18.10	Free
07-00110-20120			20	4	1.94	12°	4	60	95,00 €	21.00	21.93	22.96	24.08	Free
07-00110-20205		R0.2	5	4	1.94	12°	4	45	89,00 €	5.35	5.58	5.83	6.11	6.75
07-00110-20208			8	4	1.94	12°	4	50	92,00 €	8.48	8.85	9.25	9.70	10.74
07-00110-20210			10	4	1.94	12°	4	50	93,00 €	10.56	11.03	11.53	12.09	13.39
07-00110-20215			15	4	1.94	12°	4	50	94,00 €	15.78	16.47	17.24	18.07	Free
07-00110-20220			20	4	1.94	12°	4	60	95,00 €	20.99	21.92	22.94	24.06	Free
07-00110-20305		R0.3	5	4	1.94	12°	4	45	89,00 €	5.35	5.57	5.82	6.09	6.73
07-00110-20308			8	4	1.94	12°	4	50	92,00 €	8.48	8.84	9.24	9.68	10.71
07-00110-20310			10	4	1.94	12°	4	50	93,00 €	10.56	11.02	11.52	12.08	13.36
07-00110-20315			15	4	1.94	12°	4	50	94,00 €	15.78	16.47	17.23	18.06	Free
07-00110-20320			20	4	1.94	12°	4	60	95,00 €	20.99	21.92	22.93	24.04	Free
07-00110-20505		R0.5	5	4	1.94	12°	4	45	89,00 €	5.33	5.55	5.79	6.05	6.66
07-00110-20508			8	4	1.94	12°	4	50	92,00 €	8.46	8.82	9.21	9.64	10.64
07-00110-20510			10	4	1.94	12°	4	50	93,00 €	10.55	11.00	11.49	12.03	13.30
07-00110-20515			15	4	1.94	12°	4	50	94,00 €	15.76	16.45	17.19	18.02	Free
07-00110-20520			20	4	1.94	12°	4	60	95,00 €	20.98	21.89	22.90	24.00	Free

DHR237R

Frese toriche scaricate per elettrodi in rame

Long Neck Radius End Mill for Copper Electrode

Unità di misura: mm
Unit Size : mm

Codice Code No.	(D) Diametro Dia.	(R) Raggio Corner radius	(ℓ1) Lunghezza effettiva Effective Length	(ℓ) Lunghezza tagliente Length of Cut	(d2) Diametro scarico Neck Dia.	(γ) Angolo Neck Taper Angle	(d) Diametro gambo Shank Dia.	(L) Lunghezza totale	Prezzo €	La lungh. utile effettiva dipende dall'angolo di inclinazione del pezzo Actual effective length depending on inclined angle of workpiece.				
										30´	1°	1°30´	2°	3°
07-00110-25208	2.5	R0.2	8	5	2.4	12°	4	50	92,00 €	8.57	8.95	9.36	9.81	10.86
07-00110-25214			14	5	2.4	12°	4	50	94,00 €	14.83	15.49	16.20	16.99	Free
07-00110-25220			20	5	2.4	12°	4	60	95,00 €	21.09	22.02	23.05	Free	Free
07-00110-25508		R0.5	8	5	2.4	12°	4	50	92,00 €	8.56	8.92	9.32	9.75	10.77
07-00110-25514			14	5	2.4	12°	4	50	94,00 €	14.82	15.46	16.16	16.93	Free
07-00110-25520			20	5	2.4	12°	4	60	95,00 €	21.08	22.00	23.00	Free	Free
07-00110-30112	3	R0.1	12	6	2.85	12°	6	50	100,00 €	12.87	13.44	14.07	14.76	16.36
07-00110-30118			18	6	2.85	12°	6	60	103,00 €	19.13	19.98	20.91	21.94	24.32
07-00110-30124			24	6	2.85	12°	6	70	108,00 €	25.39	26.52	27.76	29.12	Free
07-00110-30212		R0.2	12	6	2.85	12°	6	50	100,00 €	12.87	13.44	14.06	14.74	16.33
07-00110-30218			18	6	2.85	12°	6	60	103,00 €	19.13	19.98	20.90	21.92	24.29
07-00110-30224			24	6	2.85	12°	6	70	108,00 €	25.39	26.51	27.75	29.10	Free
07-00110-30312		R0.3	12	6	2.85	12°	6	50	100,00 €	12.86	13.43	14.04	14.72	16.29
07-00110-30318			18	6	2.85	12°	6	60	103,00 €	19.12	19.96	20.88	21.90	24.26
07-00110-30324			24	6	2.85	12°	6	70	108,00 €	25.38	26.50	27.73	29.08	Free
07-00110-30512		R0.5	12	6	2.85	12°	6	50	100,00 €	12.86	13.41	14.02	14.68	16.24
07-00110-30515			15	6	2.85	12°	6	60	102,00 €	15.99	16.68	17.44	18.27	20.22
07-00110-30518			18	6	2.85	12°	6	60	103,00 €	19.12	19.95	20.86	21.86	24.20
07-00110-30524			24	6	2.85	12°	6	70	115,00 €	25.37	26.49	27.71	29.04	Free
07-00110-30530			30	6	2.85	12°	6	70	118,00 €	31.63	33.02	34.55	36.22	Free
07-00110-40116	4	R0.1	16	8	3.8	12°	6	60	100,00 €	17.17	17.93	18.77	19.68	Free
07-00110-40124			24	8	3.8	12°	6	60	103,00 €	25.51	26.65	27.89	Free	Free
07-00110-40132			32	8	3.8	12°	6	70	108,00 €	33.85	35.36	37.01	Free	Free
07-00110-40216		R0.2	16	8	3.8	12°	6	60	100,00 €	17.17	17.93	18.76	19.67	Free
07-00110-40224			24	8	3.8	12°	6	60	103,00 €	25.51	26.64	27.88	Free	Free
07-00110-40232			32	8	3.8	12°	6	70	108,00 €	33.85	35.36	37.00	Free	Free
07-00110-40316		R0.3	16	8	3.8	12°	6	60	100,00 €	17.16	17.91	18.74	19.65	Free
07-00110-40324			24	8	3.8	12°	6	60	103,00 €	25.50	26.63	27.86	Free	Free
07-00110-40332			32	8	3.8	12°	6	70	108,00 €	33.84	35.34	36.99	Free	Free
07-00110-40516		R0.5	16	8	3.8	12°	6	60	100,00 €	17.15	17.90	18.72	19.61	Free
07-00110-40524			24	8	3.8	12°	6	60	103,00 €	25.50	26.62	27.84	Free	Free
07-00110-40532			32	8	3.8	12°	6	70	115,00 €	33.84	35.33	36.96	Free	Free
07-00110-41016		R1	16	8	3.8	12°	6	60	100,00 €	17.13	17.86	18.65	19.52	Free
07-00110-41024			24	8	3.8	12°	6	60	103,00 €	25.48	26.57	27.77	29.09	Free
07-00110-41032			32	8	3.8	12°	6	70	115,00 €	33.82	35.29	36.89	Free	Free
07-00110-50120	5	R0.1	20	10	4.8	12°	6	60	102,00 €	21.34	22.29	Free	Free	Free
07-00110-50140			40	10	4.8	12°	6	80	148,00 €	42.19	Free	Free	Free	Free
07-00110-60124	6	R0.1	24	12	5.8	—	6	60	115,00 €	Free	Free	Free	Free	Free
07-00110-60148			48	12	5.8	—	6	90	180,00 €	Free	Free	Free	Free	Free
07-00110-60224		R0.2	24	12	5.8	—	6	60	115,00 €	Free	Free	Free	Free	Free
07-00110-60248			48	12	5.8	—	6	90	180,00 €	Free	Free	Free	Free	Free
07-00110-60324		R0.3	24	12	5.8	—	6	60	115,00 €	Free	Free	Free	Free	Free
07-00110-60348			48	12	5.8	—	6	90	180,00 €	Free	Free	Free	Free	Free
07-00110-60524		R0.5	24	12	5.8	—	6	60	115,00 €	Free	Free	Free	Free	Free
07-00110-60530			30	12	5.8	—	6	70	121,00 €	Free	Free	Free	Free	Free
07-00110-60548			48	12	5.8	—	6	90	180,00 €	Free	Free	Free	Free	Free
07-00110-61024		R1	24	12	5.8	—	6	60	115,00 €	Free	Free	Free	Free	Free
07-00110-61048			48	12	5.8	—	6	90	180,00 €	Free	Free	Free	Free	Free

Attenzione

Quando ordinate, indicate DHR237R (D)× (R)× (ℓ1)
When you order, indicate DHR237R (D)×(R)×(ℓ1).

※ (γ) è un valore di riferimento
※(γ) is reference value.