



## SEZIONE 4

### MOLLEGGIANTI

pag. 4.02/4.19

### SPRING ELEMENTS

#### **Molle a filo ISO 10243 / Coil springs to ISO 10243**

**MV - CARICO LEGGERO ISO 10243**      **VERDE**      pag. 4.02  
MV - LIGHT LOAD ISO 10243      GREEN

**MB - CARICO MEDIO ISO 10243**      **BLU**      pag. 4.04  
MB - MEDIUM LOAD ISO 10243      BLU

**MR - CARICO FORTE ISO 10243**      **ROSSO**      pag. 4.06  
MR - HEAVY LOAD ISO 10243      RED

**MG - CARICO EXTRA FORTE ISO 10243**      **GIALLO**      pag. 4.08  
MG - EXTRA HEAVY LOAD ISO 10243      YELLOW

#### **Elastomeri / Elastomers**

**Molle forate per stampi**      **KZ 8010**      pag. 4.10  
Hollow springs for dies

**Barre - Separatori Metallici**      **KZ 8018/KZ 8017/KZ 8024**      pag. 4.11  
Bars - Steel spring separators


**Listelli - Lastre - Puntalini**      **KZ 8019/KZ 8020/KZ 8021/KZ 8022/KZ 8023**      pag. 4.12  
Strips - Plates - Push rods

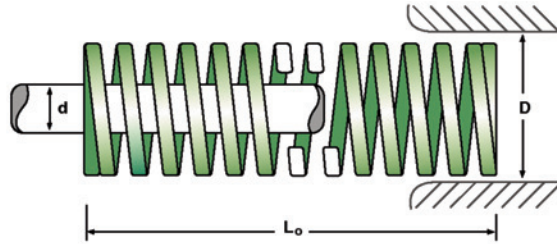
**Cilindri e tecnologie ad azoto HYSON / Nitrogen gas springs and technologies HYSON**      pag. 4.13

**Pressori a molla / Spring Plungers**      pag. 4.16

**Espulsori a molla / Spring Ejectors**      pag. 4.17

**Espulsori ad azoto HYSON / Nitrogen ejectors HYSON**      pag. 4.18


Codice Cllg.nr.	D Sede Housing Ømm	d Spina Rod Ømm	L <sub>0</sub> Lungh. libera Free length mm	R Rigidità Rate N/mm	30% Defless. per lunga durata Long Life deflection		40% Defless. max di lavoro Max working deflection		APPROX  Molla a blocco Spring to solid		Nr. pezzi Nr. pcs	
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N		
MV10-025	10	5	25	10.0	7.5	75	10.0	100	13	130	100	
MV10-032			32	8.5	9.6	82	12.8	109	16	136	100	
MV10-038			38	6.8	11.4	78	15.2	103	20	136	100	
MV10-044			Sez. filo / Wire section 1.7 X 1.1	44	6.0	13.2	79	17.6	106	24	144	100
MV10-051				51	5.0	15.3	77	20.4	102	27	135	100
MV10-064				64	4.3	19.2	83	25.6	110	35	151	50
MV10-076				76	3.2	22.8	73	30.4	97	39	125	50
MV10-305				305	1.1	91.5	101	122.0	134	154	169	20
MV13-025	12.5	6.3	25	17.9	7.5	134	10.0	179	13	233	100	
MV13-032			32	16.4	9.6	157	12.8	210	17	279	100	
MV13-038			38	13.6	11.4	155	15.2	207	21	286	100	
MV13-044			Sez. filo / Wire section 2.3 X 1.5	44	12.1	13.2	160	17.6	213	26	315	100
MV13-051				51	11.4	15.3	174	20.4	233	29	331	100
MV13-064				64	9.3	19.2	179	25.6	238	37	344	50
MV13-076				76	7.1	22.8	162	30.4	216	42	298	50
MV13-089				89	5.4	26.7	144	35.6	192	50	270	50
MV13-102	102	4.6	30.6	141	40.8	188	58	267	50			
MV13-305	305	1.4	91.5	128	122.0	171	162	227	20			
MV16-025	16	8	25	23.4	7.5	176	10.0	234	13	304	100	
MV16-032			32	22.9	9.6	220	12.8	293	17	389	100	
MV16-038			38	19.3	11.4	220	15.2	293	20	386	100	
MV16-044			Sez. filo / Wire section 3.2 X 1.7	44	17.1	13.2	226	17.6	301	25	428	100
MV16-051				51	15.7	15.3	240	20.4	320	27	424	100
MV16-064				64	10.7	19.2	205	25.6	274	36	385	50
MV16-076				76	10.0	22.8	228	30.4	304	43	430	50
MV16-089				89	8.6	26.7	230	35.6	306	52	447	50
MV16-102	102	7.8	30.6	239	40.8	318	58	452	50			
MV16-305	305	2.5	91.5	229	122.0	305	166	415	20			
MV20-025	20	10	25	55.8	7.5	419	10.0	558	13	725	100	
MV20-032			32	45.0	9.6	432	12.8	576	17	765	100	
MV20-038			38	33.3	11.4	380	15.2	506	20	666	100	
MV20-044			Sez. filo / Wire section 4.0 X 2.1	44	30.0	13.2	396	17.6	528	24	720	100
MV20-051				51	24.5	15.3	375	20.4	500	27	662	100
MV20-064				64	20.0	19.2	384	25.6	512	35	700	50
MV20-076				76	16.0	22.8	365	30.4	486	40	640	50
MV20-089				89	14.0	26.7	374	35.6	498	49	686	50
MV20-102	102	12.0	30.6	367	40.8	490	55	660	50			
MV20-115	115	10.9	34.5	376	46.0	501	62	676	20			
MV20-127	127	9.5	38.1	362	50.8	483	71	675	20			
MV20-139	139	8.4	41.7	350	55.6	467	76	638	20			
MV20-152	152	7.5	45.6	342	60.8	456	81	608	20			
MV20-305	305	4.0	91.5	366	122.0	488	168	672	10			
MV25-025	25	12.5	25	100.0	7.5	750	10.0	1000	12	1200	100	
MV25-032			32	80.3	9.6	771	12.8	1028	16	1285	50	
MV25-038			38	62.0	11.4	707	15.2	942	19	1178	50	
MV25-044			Sez. filo / Wire section 5.3 X 2.7	44	52.9	13.2	698	17.6	931	22	1164	50
MV25-051				51	44.0	15.3	673	20.4	898	25	1100	50
MV25-064				64	35.2	19.2	676	25.6	901	34	1197	50
MV25-076				76	28.0	22.8	638	30.4	851	38	1064	20
MV25-089				89	24.0	26.7	641	35.6	854	48	1152	20
MV25-102	102	21.1	30.6	646	40.8	861	54	1139	20			
MV25-115	115	18.7	34.5	645	46.0	860	61	1141	20			
MV25-127	127	16.7	38.1	636	50.8	848	69	1152	10			
MV25-139	139	15.3	41.7	638	55.6	851	75	1148	10			
MV25-152	152	14.0	45.6	638	60.8	851	81	1134	10			
MV25-178	178	12.5	53.4	668	71.2	890	96	1200	10			
MV25-203	203	10.4	60.9	633	81.2	844	110	1144	10			
MV25-305	305	7.0	91.5	641	122.0	854	168	1176	5			

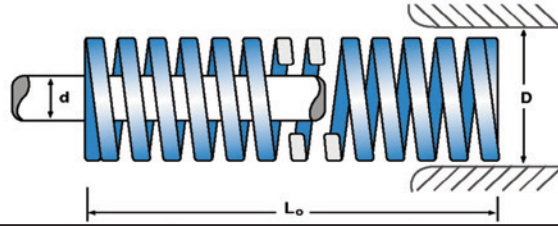



Codice Clg. nr.	D Sede Housing Ømm	d Spina Rod Ømm	L <sub>0</sub> Lunghezza libera Free length mm	R Rigidità Rate N/mm	30% Defless. per lunga durata Long Life deflection		40% Defless. max di lavoro Max working deflection		APPROX		Nr. pezzi Nr. pcs			
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N				
MV32-038	32	16	38	94.0	11.4	1072	15.2	1429	18	1692	20			
MV32-044			44	79.5	13.2	1049	17.6	1399	22	1749	20			
MV32-051			51	67.0	15.3	1025	20.4	1367	25	1675	20			
MV32-064			Sez. filo / Wire section 6.7 X 3.3	64	53.0	19.2	1018	25.6	1357	34	1802	20		
MV32-076				76	44.0	22.8	1003	30.4	1338	40	1760	20		
MV32-089				89	37.2	26.7	993	35.6	1324	48	1786	20		
MV32-102				102	32.0	30.6	979	40.8	1306	55	1760	20		
MV32-115				115	29.0	34.5	1001	46.0	1334	63	1827	10		
MV32-127				127	25.0	38.1	953	50.8	1270	69	1725	10		
MV32-139				139	23.0	41.7	959	55.6	1279	77	1771	10		
MV32-152				152	21.5	45.6	980	60.8	1307	81	1742	10		
MV32-178				178	18.2	53.4	972	71.2	1296	95	1729	10		
MV32-203				203	15.8	60.9	962	81.2	1283	112	1770	10		
MV32-254				254	12.5	76.2	953	101.6	1270	143	1788	5		
MV32-305				305	10.3	91.5	942	122.0	1257	175	1803	5		
MV40-051				40	20	51	92.0	15.3	1408	20.4	1877	25	2300	20
MV40-064	64	73.0				19.2	1402	25.6	1869	33	2409	20		
MV40-076	76	63.0				22.8	1436	30.4	1915	39	2457	20		
MV40-089	Sez. filo / Wire section 8.0 X 4.0	89	51.0			26.7	1362	35.6	1816	47	2397	20		
MV40-102		102	43.0			30.6	1316	40.8	1754	54	2322	20		
MV40-115		115	39.6			34.5	1366	46.0	1822	61	2416	10		
MV40-127		127	37.0			38.1	1410	50.8	1880	66	2442	10		
MV40-139		139	32.0			41.7	1334	55.6	1779	76	2432	10		
MV40-152		152	28.0			45.6	1277	60.8	1702	81	2268	10		
MV40-178		178	25.2			53.4	1346	71.2	1794	93	2344	10		
MV40-203		203	22.7			60.9	1382	81.2	1843	110	2497	5		
MV40-254		254	17.0			76.2	1295	101.6	1727	136	2312	5		
MV40-305		305	14.8			91.5	1354	122.0	1806	163	2412	5		
MV50-064		50	25			64	156.0	19.2	2995	25.6	3994	31	4836	20
MV50-076						76	125.0	22.8	2850	30.4	3800	36	4500	20
MV50-089						89	109.0	26.7	2910	35.6	3880	44	4796	10
MV50-102				Sez. filo / Wire section 11.1 X 5.5	102	94.0	30.6	2876	40.8	3835	49	4606	10	
MV50-115					115	81.0	34.5	2795	46.0	3726	60	4860	10	
MV50-127	127				71.0	38.1	2705	50.8	3607	64	4544	10		
MV50-139	139				66.5	41.7	2773	55.6	3697	70	4655	10		
MV50-152	152				60.0	45.6	2736	60.8	3648	77	4620	10		
MV50-178	178				52.0	53.4	2777	71.2	3702	94	4888	5		
MV50-203	203				44.0	60.9	2680	81.2	3573	105	4620	5		
MV50-229	229				38.2	68.7	2624	91.6	3499	126	4813	5		
MV50-254	254				35.0	76.2	2667	101.6	3556	137	4795	5		
MV50-305	305				28.5	91.5	2608	122.0	3477	168	4788	5		
MV63-076	63				38	76	189.0	22.8	4309	30.4	5746	38	7182	20
MV63-089						89	158.0	26.7	4219	35.6	5625	45	7110	10
MV63-102						102	131.0	30.6	4009	40.8	5345	52	6812	10
MV63-115		Sez. filo / Wire section 11.6 X 7.7	115			116.0	34.5	4002	46.0	5336	60	6960	10	
MV63-127			127			103.0	38.1	3924	50.8	5232	63	6489	10	
MV63-152			152	84.3		45.6	3844	60.8	5125	78	6575	10		
MV63-178			178	71.5		53.4	3818	71.2	5091	89	6364	5		
MV63-203			203	61.7		60.9	3758	81.2	5010	108	6664	5		
MV63-254			254	47.0		76.2	3581	101.6	4775	137	6439	5		
MV63-305			305	38.2		91.5	3495	122.0	4660	163	6227	5		

Esempio di ordinazione / Example of order: WZ8000 MV0130051


1N=0.102 Kg.  
1 Kg.=9.81 N

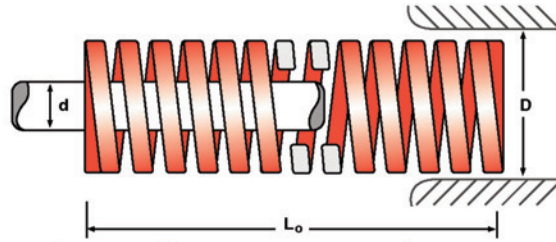
Codice Clg. nr.	D Sede Housing Ømm	d Spina Rod Ømm	L <sub>0</sub> Lungh. libera Free length mm	R Rigidità Rate N/mm	25% Defless. per lunga durata Long Life deflection		37.5% Defless. max di lavoro Max working deflection		APPROX  Molla a blocco Spring to solid		Nr. pezzi Nr. pcs	
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N		
MB10-025	10	5	25	16.0	6.3	100	9.4	150	12	192	100	
MB10-032			32	13.0	8.0	104	12.0	156	14	182	100	
MB10-038			38	11.9	9.5	113	14.3	170	19	226	100	
MB10-044			Sez. filo / Wire section 1.8 X 1.2	44	10.3	11.0	113	16.5	170	23	237	100
MB10-051				51	8.9	12.8	113	19.1	170	27	240	100
MB10-064				64	7.5	16.0	120	24.0	180	31	233	50
MB10-076				76	5.3	19.0	101	28.5	151	37	196	50
MB10-305			305	1.6	76.3	122	114.4	183	137	219	20	
MB13-025	12.5	6.3	25	30.0	6.3	188	9.4	281	10	300	100	
MB13-032			32	24.8	8.0	198	12.0	298	13	322	100	
MB13-038			38	21.4	9.5	203	14.3	305	16	342	100	
MB13-044			Sez. filo / Wire section 2.5 X 1.7	44	18.5	11.0	204	16.5	305	20	370	100
MB13-051				51	15.5	12.8	198	19.1	296	25	388	100
MB13-064				64	12.1	16.0	194	24.0	290	28	339	50
MB13-076				76	10.2	19.0	194	28.5	291	34	347	50
MB13-089			89	8.4	22.3	187	33.4	280	41	344	50	
MB13-102	102	7.1	25.5	181	38.3	272	46	327	50			
MB13-305	305	2.1	76.3	160	114.4	240	128	269	20			
MB16-025	16	8	25	49.4	6.3	309	9.4	463	11	543	100	
MB16-032			32	37.1	8.0	297	12.0	445	15	557	100	
MB16-038			38	33.9	9.5	322	14.3	483	18	610	100	
MB16-044			Sez. filo / Wire section 3.2 X 2.0	44	30.0	11.0	330	16.5	495	22	660	100
MB16-051				51	26.4	12.8	337	19.1	505	24	634	100
MB16-064				64	20.5	16.0	328	24.0	492	32	656	50
MB16-076				76	17.8	19.0	338	28.5	507	36	641	50
MB16-089			89	15.2	22.3	338	33.4	507	43	654	50	
MB16-102	102	13.5	25.5	344	38.3	516	47	635	50			
MB16-305	305	4.8	76.3	366	114.4	549	139	667	20			
MB20-025	20	10	25	98.0	6.3	613	9.4	919	10	980	100	
MB20-032			32	72.6	8.0	581	12.0	871	13	944	100	
MB20-038			38	56.0	9.5	532	14.3	798	16	896	100	
MB20-044			Sez. filo / Wire section 4.0 X 2.4	44	47.5	11.0	523	16.5	784	19	903	100
MB20-051				51	41.7	12.8	532	19.1	798	21	876	100
MB20-064				64	32.3	16.0	517	24.0	775	28	904	50
MB20-076				76	25.1	19.0	477	28.5	715	33	828	50
MB20-089			89	22.0	22.3	490	33.4	734	41	902	50	
MB20-102	102	19.8	25.5	505	38.3	757	48	950	50			
MB20-115	115	18.1	28.8	520	43.1	781	55	996	20			
MB20-127	127	16.6	31.8	527	47.6	791	61	1013	20			
MB20-139	139	15.1	34.8	525	52.1	787	67	1012	20			
MB20-152	152	13.2	38.0	502	57.0	752	74	977	20			
MB20-305	305	6.1	76.3	465	114.4	698	146	891	10			
MB25-025	25	12.5	25	147.0	6.3	919	9.4	1378	11	1617	100	
MB25-032			32	118.0	8.0	944	12.0	1416	13	1534	50	
MB25-038			38	93.0	9.5	884	14.3	1325	18	1674	50	
MB25-044			Sez. filo / Wire section 5.3 X 3.1	44	80.8	11.0	889	16.5	1333	21	1697	50
MB25-051				51	68.6	12.8	875	19.1	1312	23	1578	50
MB25-064				64	53.0	16.0	848	24.0	1272	30	1590	50
MB25-076				76	43.2	19.0	821	28.5	1231	35	1512	20
MB25-089			89	38.2	22.3	850	33.4	1275	43	1643	20	
MB25-102	102	33.0	25.5	842	38.3	1262	49	1617	20			
MB25-115	115	28.0	28.8	805	43.1	1208	56	1568	20			
MB25-127	127	25.9	31.8	822	47.6	1233	60	1554	10			
MB25-139	139	23.2	34.8	806	52.1	1209	65	1508	10			
MB25-152	152	20.8	38.0	790	57.0	1186	71	1477	10			
MB25-178	178	17.8	44.5	792	66.8	1188	85	1513	10			
MB25-203	203	15.8	50.8	802	76.1	1203	96	1517	10			
MB25-305	305	10.2	76.3	778	114.4	1167	150	1530	5			



Codice Cltg.nr.	D Sede Housing Ømm	d Spina Rod Ømm	L <sub>0</sub> Lungh. libera Free length mm	R Rigidità Rate N/mm	25% Defless. per lunga durata Long Life deflection		37.5% Defless. max di lavoro Max working deflection		APPROX  Molla a blocco Spring to solid		Nr. pezzi Nr. pcs	
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N		
MB32-038	32	16	38	185.0	9.5	1758	14.3	2636	17	3145	20	
MB32-044			44	158.0	11.0	1738	16.5	2607	19	3002	20	
MB32-051			51	134.0	12.8	1709	19.1	2563	23	3082	20	
MB32-064			Sez. filo / Wire section 6.8 X 4.0	64	99.0	16.0	1584	24.0	2376	30	2970	20
MB32-076				76	80.5	19.0	1530	28.5	2294	34	2737	20
MB32-089				89	69.1	22.3	1537	33.4	2306	42	2902	20
MB32-102				102	58.8	25.5	1499	38.3	2249	47	2764	20
MB32-115				115	51.5	28.8	1481	43.1	2221	55	2833	10
MB32-127				127	44.8	31.8	1422	47.6	2134	61	2733	10
MB32-139				139	42.3	34.8	1470	52.1	2205	68	2876	10
MB32-152				152	37.8	38.0	1436	57.0	2155	75	2835	10
MB32-178				178	32.5	44.5	1446	66.8	2169	89	2893	10
MB32-203				203	28.9	50.8	1467	76.1	2200	101	2919	10
MB32-254				254	21.4	63.5	1359	95.3	2038	124	2654	5
MB32-305				305	18.3	76.3	1395	114.4	2093	150	2745	5
MB40-051	40	20		51	181.6	12.8	2315	19.1	3473	21	3814	20
MB40-064				64	140.0	16.0	2240	24.0	3360	28	3920	20
MB40-076				76	108.0	19.0	2052	28.5	3078	33	3564	20
MB40-089			Sez. filo / Wire section 8.1 X 4.8	89	90.7	22.3	2018	33.4	3027	41	3719	20
MB40-102				102	81.0	25.5	2066	38.3	3098	45	3645	20
MB40-115				115	71.8	28.8	2064	43.1	3096	52	3734	10
MB40-127				127	62.7	31.8	1991	47.6	2986	59	3699	10
MB40-139				139	57.5	34.8	1998	52.1	2997	66	3795	10
MB40-152				152	51.6	38.0	1961	57.0	2941	71	3664	10
MB40-160				160	47.5	40.0	1900	60.0	2850	72	3420	10
MB40-178				178	44.1	44.5	1962	66.8	2944	83	3660	10
MB40-203				203	36.7	50.8	1863	76.1	2794	94	3450	5
MB40-254				254	30.1	63.5	1911	95.3	2867	114	3431	5
MB40-305				305	24.6	76.3	1876	114.4	2814	148	3641	5
MB50-064				50	25	64	209.0	16.0	3344	24.0	5016	30
MB50-076	76	168.0				19.0	3192	28.5	4788	36	6048	20
MB50-089	89	140.0				22.3	3115	33.4	4673	43	6020	10
MB50-102	Sez. filo / Wire section 10.9 X 6.0	102				119.0	25.5	3035	38.3	4552	48	5712
MB50-115		115	106.0			28.8	3048	43.1	4571	55	5830	10
MB50-127		127	97.0			31.8	3080	47.6	4620	63	6111	10
MB50-139		139	87.0			34.8	3023	52.1	4535	66	5742	10
MB50-152		152	80.0			38.0	3040	57.0	4560	72	5760	10
MB50-160		160	76.0			40.0	3040	60.0	4560	78	5928	10
MB50-178		178	69.5			44.5	3093	66.8	4639	85	5908	5
MB50-203		203	59.8			50.8	3035	76.1	4552	95	5681	5
MB50-229		229	50.9			57.3	2914	85.9	4371	114	5803	5
MB50-254		254	43.9			63.5	2788	95.3	4181	125	5488	5
MB50-305		305	38.6			76.3	2943	114.4	4415	150	5790	5
MB63-076		63	38			76	312.0	19.0	5928	28.5	8892	30
MB63-089				89	260.0	22.3	5785	33.4	8678	38	9880	10
MB63-102				102	221.0	25.5	5636	38.3	8453	43	9503	10
MB63-115				Sez. filo / Wire section 11.5 X 9.3	115	187.0	28.8	5376	43.1	8064	50	9350
MB63-127	127				168.0	31.8	5334	47.6	8001	52	8736	10
MB63-152	152				136.0	38.0	5168	57.0	7752	67	9112	10
MB63-160	160				128.0	40.0	5120	60.0	7680	70	8960	10
MB63-178	178				114.0	44.5	5073	66.8	7610	78	8892	5
MB63-203	203				100.0	50.8	5075	76.1	7613	88	8800	5
MB63-229	229				89.2	57.3	5107	85.9	7660	102	9098	5
MB63-254	254				78.4	63.5	4978	95.3	7468	115	9016	5
MB63-305	305				64.7	76.3	4933	114.4	7400	134	8670	5
MB63-315	315				62.8	78.8	4946	118.1	7418	144	9043	5
MB63-400	400				48.5	100.0	4850	150.0	7275	197	9555	5

Esempio di ordinazione / Example of order: WZ8000 MB0130051


Codice Ctg.nr.	Sede Housing Ømm	Spina Rod Ømm	L <sub>0</sub> Lungh. libera Free length mm	R Rigidità Rate N/mm	20% Defless. per lunga durata Long Life deflection		30% Defless. max di lavoro Max working deflection		APPROX  Molla a blocco Spring to solid		Nr. pezzi Nr. pcs	
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N		
MR10-025	10	5	25	22.1	5.0	111	7.5	166	9	199	100	
MR13-032			32	17.5	6.4	112	9.6	168	12	210	100	
MR10-038			38	17.1	7.6	130	11.4	195	15	257	100	
MR10-044			Sez. filo / Wire section 1.9 X 1.5	44	15.0	8.8	132	13.2	198	17	255	100
MR10-051				51	12.8	10.2	131	15.3	196	21	269	100
MR10-064				64	10.7	12.8	137	19.2	205	26	278	50
MR10-076				76	7.5	15.2	114	22.8	171	31	233	50
MR10-305				305	2.1	61.0	128	91.5	192	122	256	20
MR13-025	12.5	6.3	25	42.1	5.0	211	7.5	316	9	379	100	
MR13-032			32	33.2	6.4	212	9.6	319	13	432	100	
MR13-038			38	29.3	7.6	223	11.4	334	15	440	100	
MR13-044			Sez. filo / Wire section 2.4 x 2.0	44	24.6	8.8	216	13.2	325	18	443	100
MR13-051				51	19.6	10.2	200	15.3	300	20	392	100
MR13-064				64	15.0	12.8	192	19.2	288	26	390	50
MR13-076				76	13.2	15.2	201	22.8	301	30	396	50
MR13-089				89	11.4	17.8	203	26.7	304	35	399	50
MR13-102			102	9.4	20.4	192	30.6	287	41	385	50	
MR13-305			305	2.8	61.0	171	91.5	256	123	344	20	
MR16-025	16	8	25	75.7	5.0	379	7.5	568	9	681	100	
MR16-032			32	52.8	6.4	338	9.6	507	14	739	100	
MR16-038			38	48.5	7.6	369	11.4	553	17	825	100	
MR16-044			Sez. filo / Wire section 3.0 x 2.4	44	42.8	8.8	377	13.2	565	20	856	100
MR16-051				51	37.1	10.2	378	15.3	568	21	779	100
MR16-064				64	30.3	12.8	388	19.2	582	28	848	50
MR16-076				76	25.8	15.2	391	22.8	586	33	848	50
MR16-089				89	21.7	17.8	386	26.7	579	39	846	50
MR16-102			102	19.3	20.4	394	30.6	591	44	849	50	
MR16-305			305	7.1	61.0	433	91.5	650	127	902	20	
MR20-025	20	10	25	216.0	5.0	1080	7.5	1620	9	1944	100	
MR20-032			32	168.0	6.4	1075	9.6	1613	11	1848	100	
MR20-038			38	129.0	7.6	980	11.4	1471	13	1677	100	
MR20-044			Sez. filo / Wire section 4.0 x 3.2	44	112.0	8.8	986	13.2	1478	16	1792	100
MR20-051				51	94.0	10.2	959	15.3	1438	20	1880	100
MR20-064				64	72.1	12.8	923	19.2	1384	25	1803	50
MR20-076				76	59.7	15.2	907	22.8	1361	29	1731	50
MR20-089				89	50.5	17.8	899	26.7	1348	35	1768	50
MR20-102			102	44.2	20.4	902	30.6	1353	40	1768	50	
MR20-115			115	38.4	23.0	883	34.5	1325	47	1805	20	
MR20-127			127	34.1	25.4	866	38.1	1299	52	1773	20	
MR20-139			139	31.0	27.8	862	41.7	1293	57	1767	20	
MR20-152			152	28.2	30.4	857	45.6	1286	62	1748	20	
MR20-305			305	15.0	61.0	915	91.5	1373	121	1815	10	
MR25-025	25	12.5	25	375.0	5.0	1875	7.5	2813	9	3375	100	
MR25-032			32	297.0	6.4	1901	9.6	2851	11	3267	50	
MR25-038			38	219.0	7.6	1664	11.4	2497	14	3066	50	
MR25-044			Sez. filo / Wire section 5.6 x 4.1	44	187.0	8.8	1646	13.2	2468	16	2992	50
MR25-051				51	156.0	10.2	1591	15.3	2387	19	2964	50
MR25-064				64	123.0	12.8	1574	19.2	2362	26	3198	50
MR25-076				76	99.0	15.2	1505	22.8	2257	29	2871	20
MR25-089				89	84.0	17.8	1495	26.7	2243	35	2940	20
MR25-102			102	73.0	20.4	1489	30.6	2234	39	2847	20	
MR25-115			115	65.0	23.0	1495	34.5	2243	45	2925	20	
MR25-127			127	57.7	25.4	1466	38.1	2198	48	2770	10	
MR25-139			139	52.7	27.8	1465	41.7	2198	54	2846	10	
MR25-152			152	47.8	30.4	1453	45.6	2180	60	2868	10	
MR25-178			178	41.0	35.6	1460	53.4	2189	67	2747	10	
MR25-203			203	35.8	40.6	1453	60.9	2180	80	2864	10	
MR25-305	305	22.9	61.0	1397	91.5	2095	119	2725	5			

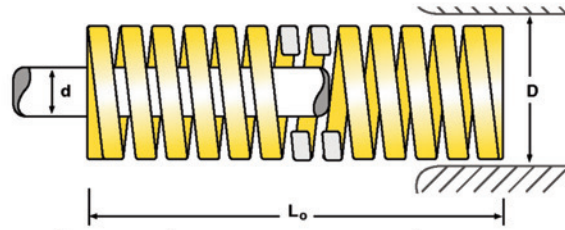


Codice Clg. nr.	D Sede Housing Ømm	d Spina Rod Ømm	L <sub>0</sub> Lungh. libera Free length mm	R Rigidità Rate N/mm	20% Defless. per lunga durata Long Life deflection		30% Defless. max di lavoro Max working deflection		APPROX ⚠ Molla a blocco Spring to solid		Nr. pezzi Nr. pcs			
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N				
MR32-038	32	16	38	388.0	7.6	2949	11.4	4423	13	5044	20			
MR32-044				44	324.0	8.8	2851	13.2	4277	16	5184	20		
MR32-051				51	272.0	10.2	2774	15.3	4162	18	4896	20		
MR32-064				64	212.0	12.8	2714	19.2	4070	23	4876	20		
MR32-076				76	172.0	15.2	2614	22.8	3922	27	4644	20		
MR32-089				89	141.0	17.8	2510	26.7	3765	33	4653	20		
MR32-102				102	122.0	20.4	2489	30.6	3733	39	4758	20		
MR32-115				115	107.0	23.0	2461	34.5	3692	43	4601	10		
MR32-127				127	93.0	25.4	2362	38.1	3543	47	4371	10		
MR32-139				139	86.0	27.8	2391	41.7	3586	51	4386	10		
MR32-152				152	78.0	30.4	2371	45.6	3557	55	4290	10		
MR32-178				178	67.2	35.6	2392	53.4	3588	69	4637	10		
MR32-203				203	59.1	40.6	2399	60.9	3599	81	4787	10		
MR32-254				254	46.4	50.8	2357	76.2	3536	99	4594	5		
MR32-305				305	38.0	61.0	2318	91.5	3477	119	4522	5		
MR40-051	40	20	51	350.0	10.2	3570	15.3	5355	18	6300	20			
MR40-064				64	269.0	12.8	3443	19.2	5165	25	6725	20		
MR40-076				76	219.0	15.2	3329	22.8	4993	30	6570	20		
MR40-089				89	190.0	17.8	3382	26.7	5073	36	6840	20		
MR40-102				102	163.0	20.4	3325	30.6	4988	41	6683	20		
MR40-115				115	142.0	23.0	3266	34.5	4899	47	6674	10		
MR40-127				127	128.0	25.4	3251	38.1	4877	53	6784	10		
MR40-139				139	115.0	27.8	3197	41.7	4796	56	6440	10		
MR40-152				152	105.0	30.4	3192	45.6	4788	62	6510	10		
MR40-178				178	89.0	35.6	3168	53.4	4753	70	6230	10		
MR40-203				203	77.0	40.6	3126	60.9	4689	83	6391	5		
MR40-254				254	61.0	50.8	3099	76.2	4648	101	6161	5		
MR40-305				305	51.0	61.0	3111	91.5	4667	127	6477	5		
MR50-064			50	25	64	413.0	12.8	5286	19.2	7930	26	10738	20	
MR50-076						76	339.0	15.2	5153	22.8	7729	29	9831	20
MR50-089		89			288.0	17.8	5126	26.7	7690	35	10080	10		
MR50-102		102			245.0	20.4	4998	30.6	7497	41	10045	10		
MR50-115		115			215.0	23.0	4945	34.5	7418	47	10105	10		
MR50-127		127			192.0	25.4	4877	38.1	7315	55	10560	10		
MR50-139		139			168.0	27.8	4670	41.7	7006	61	10248	10		
MR50-152		152			154.0	30.4	4682	45.6	7022	66	10164	10		
MR50-178		178			134.0	35.6	4770	53.4	7156	75	10050	5		
MR50-203		203			117.0	40.6	4750	60.9	7125	87	10179	5		
MR50-254		254			89.0	50.8	4521	76.2	6782	108	9612	5		
MR50-305		305			73.0	61.0	4453	91.5	6680	133	9709	5		
MR63-076	63	38			76	630.0	15.2	9576	22.8	14364	24	15120	20	
MR63-089						89	485.0	17.8	8633	26.7	12950	32	15520	10
MR63-102						102	434.0	20.4	8854	30.6	13280	36	15624	10
MR63-115				115	384.0	23.0	8832	34.5	13248	40	15360	10		
MR63-127				127	349.0	25.4	8865	38.1	13297	44	15356	10		
MR63-152				152	276.0	30.4	8390	45.6	12586	56	15456	10		
MR63-178				178	237.0	35.6	8437	53.4	12656	65	15405	5		
MR63-203				203	210.0	40.6	8526	60.9	12789	74	15540	5		
MR63-254				254	165.0	50.8	8382	76.2	12573	94	15510	5		
MR63-305				305	134.0	61.0	8174	91.5	12261	115	15410	5		

Esempio di ordinazione / Example of order: WZ8000 MR0130051

1N=0.102 Kg.  
1 Kg.=9.81 N

D		d	L <sub>0</sub>	R	17%		25%		APPROX 		Nr. pezzi Nr. pcs	
Codice Ctg. nr.	Sede Housing Ømm	Spina Rod Ømm	Lungh. libera Free length mm	Rigidità Rate N/mm	Defless. per lunga durata Long Life deflection		Defless. max di lavoro Max working deflection		Molla a blocco Spring to solid			
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N		
MG10-025	10	5	25	36.8	4.3	156	6.3	230	9	331	100	
MG10-032			32	27.9	5.4	152	8.0	223	12	335	100	
MG10-038			38	23.7	6.5	153	9.5	225	14	332	100	
MG10-044			Sez. filo / Wire section 1.9 X 1.5	44	19.2	7.5	144	11.0	211	17	326	100
MG10-051				51	16.5	8.7	143	12.8	210	19	314	100
MG10-064				64	13.2	10.9	144	16.0	211	23	304	50
MG10-076				76	10.9	12.9	141	19.0	207	30	327	50
MG10-305				305	2.6	51.9	135	76.3	198	117	304	20
MG13-025	12.5	6.3	25	58.5	4.3	249	6.3	366	9	527	100	
MG13-032			32	43.9	5.4	239	8.0	351	12	527	100	
MG13-038			38	36.0	6.5	233	9.5	342	14	504	100	
MG13-044			Sez. filo / Wire section 2.3 X 2.2	44	30.3	7.5	227	11.0	333	18	545	100
MG13-051				51	26.2	8.7	227	12.8	334	20	524	100
MG13-064				64	21.2	10.9	231	16.0	339	27	572	50
MG13-076				76	17.1	12.9	221	19.0	325	32	547	50
MG13-089				89	14.5	15.1	219	22.3	323	38	551	50
MG13-102				102	12.5	17.3	216	25.5	319	41	513	50
MG13-305			305	4.3	51.9	223	76.3	328	115	495	20	
MG16-025	16	8	25	118.0	4.3	502	6.3	738	10	1180	100	
MG16-032			32	89.0	5.4	484	8.0	712	12	1068	100	
MG16-038			38	72.1	6.5	466	9.5	685	14	1009	100	
MG16-044			Sez. filo / Wire section 3.2 X 2.7	44	60.9	7.5	456	11.0	670	17	1035	100
MG16-051				51	52.3	8.7	453	12.8	667	19	994	100
MG16-064				64	41.2	10.9	448	16.0	659	25	1030	50
MG16-076				76	34.1	12.9	441	19.0	648	29	989	50
MG16-089				89	29.5	15.1	446	22.3	656	36	1062	50
MG16-102				102	25.6	17.3	444	25.5	653	38	973	50
MG16-305			305	8.4	51.9	436	76.3	641	120	1008	20	
MG20-025	20	10	25	293.0	4.3	1245	6.3	1831	7	2051	100	
MG20-032			32	224.0	5.4	1219	8.0	1792	10	2240	100	
MG20-038			38	177.0	6.5	1143	9.5	1682	12	2124	100	
MG20-044			Sez. filo / Wire section 4.1 X 3.7	44	149.0	7.5	1115	11.0	1639	14	2086	100
MG20-051				51	128.0	8.7	1110	12.8	1632	16	2048	100
MG20-064				64	99.0	10.9	1077	16.0	1584	22	2178	50
MG20-076				76	81.7	12.9	1056	19.0	1552	25	2043	50
MG20-089				89	69.5	15.1	1052	22.3	1546	31	2155	50
MG20-102				102	60.6	17.3	1051	25.5	1545	36	2182	50
MG20-115			115	53.0	19.6	1036	28.8	1524	42	2226	20	
MG20-127			127	47.5	21.6	1026	31.8	1508	43	2043	20	
MG20-139			139	43.0	23.6	1016	34.8	1494	48	2064	20	
MG20-152			152	39.0	25.8	1008	38.0	1482	52	2028	20	
MG20-305			305	21.2	51.9	1099	76.3	1617	105	2226	10	
MG25-032			25	12.5	32	374.4	5.4	2037	8.0	2995	11	4118
MG25-038	38	346.0			6.5	2235	9.5	3287	13	4498	50	
MG25-044	44	244.0			7.5	1825	11.0	2684	16	3904	50	
MG25-051	Sez. filo / Wire section 5.6 X 4.6	51			207.5	8.7	1799	12.8	2646	18	3735	50
MG25-064		64			161.0	10.9	1752	16.0	2576	23	3703	50
MG25-076		76			130.8	12.9	1690	19.0	2485	26	3401	20
MG25-089		89			110.5	15.1	1672	22.3	2459	31	3426	20
MG25-102		102			96.3	17.3	1670	25.5	2456	36	3467	20
MG25-115		115			85.7	19.6	1675	28.8	2464	41	3514	20
MG25-127	127	76.3			21.6	1647	31.8	2423	47	3586	10	
MG25-152	152	63.5			25.8	1641	38.0	2413	54	3429	10	
MG25-178	178	53.9			30.3	1631	44.5	2399	63	3396	10	
MG25-203	203	47.0			34.5	1622	50.8	2385	72	3384	10	
MG25-305	305	30.9			51.9	1602	76.3	2356	113	3492	5	



Codice Clg. nr.	D Sede Housing Ømm	d Spina Rod Ømm	L <sub>0</sub> Lungh. libera Free length mm	R Rigidità Rate N/mm	17% Defless. per lunga durata Long Life deflection		25% Defless. max di lavoro Max working deflection		APPROX Molla a blocco Spring to solid		Nr. pezzi Nr. pcs			
					Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N	Deflessione Deflection mm	Carico Load N				
MG32-038	32	16	38	528.2	6.5	3412	9.5	5018	12	6338	20			
MG32-044			44	424.4	7.5	3175	11.0	4668	15	6366	20			
MG32-051			51	353.0	8.7	3061	12.8	4501	17	6001	20			
MG32-064			Sez. filo / Wire section 7.2 X 5.6	64	269.2	10.9	2929	16.0	4307	22	5922	20		
MG32-076				76	218.5	12.9	2823	19.0	4152	25	5463	20		
MG32-089				89	180.3	15.1	2728	22.3	4012	33	5950	20		
MG32-102				102	155.0	17.3	2688	25.5	3953	36	5580	20		
MG32-115				115	140.0	19.6	2737	28.8	4025	42	5880	10		
MG32-127				127	124.0	21.6	2677	31.8	3937	46	5704	10		
MG32-152				152	102.0	25.8	2636	38.0	3876	56	5712	10		
MG32-178				178	88.2	30.3	2669	44.5	3925	64	5645	10		
MG32-203				203	76.0	34.5	2623	50.8	3857	71	5396	10		
MG32-254				254	60.8	43.2	2625	63.5	3861	90	5472	5		
MG32-305				305	49.0	51.9	2541	76.3	3736	103	5047	5		
MG40-051				40	20	51	628.0	8.7	5445	12.8	8007	17	10676	20
MG40-064						64	487.0	10.9	5299	16.0	7792	23	11201	20
MG40-076	76	379.0				12.9	4897	19.0	7201	27	10233	20		
MG40-089	Sez. filo / Wire section 8.7 X 7.3	89				321.0	15.1	4857	22.3	7142	31	9951	20	
MG40-102		102				281.0	17.3	4873	25.5	7166	36	10116	20	
MG40-115		115	245.0			19.6	4790	28.8	7044	40	9800	10		
MG40-127		127	221.0			21.6	4771	31.8	7017	44	9724	10		
MG40-139		139	202.0			23.6	4773	34.8	7020	52	10504	10		
MG40-152		152	168.0			25.8	4341	38.0	6384	56	9408	10		
MG40-178		178	148.0			30.3	4478	44.5	6586	61	9028	10		
MG40-203		203	132.0			34.5	4555	50.8	6699	73	9636	5		
MG40-254		254	107.0			43.2	4620	63.5	6795	93	9951	5		
MG40-305		305	87.8			51.9	4552	76.3	6695	106	9307	5		
MG50-064		50	25			64	709.0	10.9	7714	16.0	11344	21	14889	20
MG50-076						76	572.0	12.9	7390	19.0	10868	25	14300	20
MG50-089						89	475.0	15.1	7187	22.3	10569	28	13300	10
MG50-102				Sez. filo / Wire section 11.4 X 9.1	102	405.0	17.3	7023	25.5	10328	33	13365	10	
MG50-115					115	352.0	19.6	6882	28.8	10120	38	13376	10	
MG50-127					127	316.0	21.6	6822	31.8	10033	43	13588	10	
MG50-139	139				289.0	23.6	6829	34.8	10043	47	13583	10		
MG50-152	152				239.0	25.8	6176	38.0	9082	53	12667	10		
MG50-178	178				216.0	30.3	6536	44.5	9612	60	12960	5		
MG50-203	203				187.0	34.5	6453	50.8	9490	71	13277	5		
MG50-254	254				153.0	43.2	6607	63.5	9716	91	13923	5		
MG50-305	305				127.0	51.9	6585	76.3	9684	106	13462	5		
MG63-076	63				38	76	842.0	12.9	10879	19.0	15998	24	20208	20
MG63-089						89	726.0	15.1	10984	22.3	16154	28	20328	10
MG63-102						102	656.0	17.3	11375	25.5	16728	31	20336	10
MG63-115						Sez. filo / Wire section 13.3 X 11.8	115	534.0	19.6	10440	28.8	15353	38	20292
MG63-127		127	480.0				21.6	10363	31.8	15240	42	20160	10	
MG63-152		152	396.0				25.8	10233	38.0	15048	51	20196	10	
MG63-178		178	335.0				30.3	10137	44.5	14908	60	20100	5	
MG63-203		203	297.0	34.5			10249	50.8	15073	68	20196	5		
MG63-254		254	235.0	43.2			10147	63.5	14923	85	19975	5		
MG63-305		305	194.0	51.9			10059	76.3	14793	103	19982	5		

1N=0.102 Kg.  
1 Kg.=9.81 N

Esempio di ordinazione / Example of order: WZ8000 MG0130051