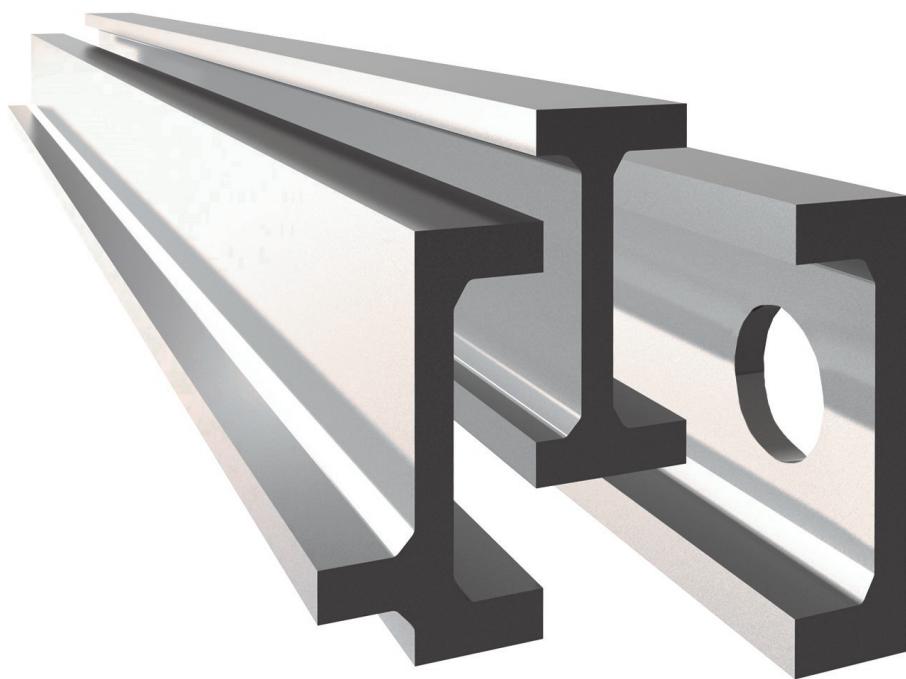


# PROFILI IN ACCIAIO STEEL SECTIONS

CATALOGO 2020



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## PROFILI IN ACCIAIO/STEEL SECTIONS

### MATERIALE/MATERIAL

UNI Fe510 C  
DIN St 52-3 U  
W Nr. 1.0553  
EN 10025 (S355JO)

### PROFILI IN ACCIAIO LAMINATI A CALDO/HOT ROLLED STEEL SECTIONS

I profili in acciaio laminati a caldo sono utilizzati per la costruzione di montanti per carrelli elevatori e per impianti destinati alla movimentazione di merci.

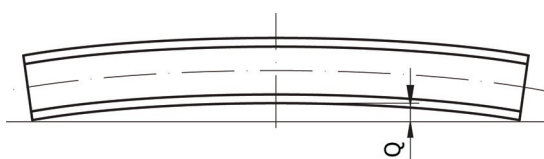
Hot rolled steel sections are used for the construction of masts for lift trucks and for installations intended to goods handling.

### PROFILI LAMINATI A CALDO E FRESATI/HOT ROLLED AND MILLED SECTIONS

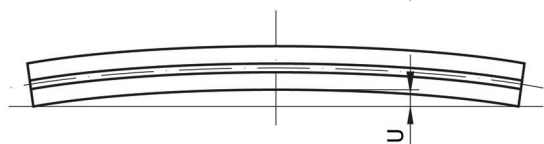
Profilati estrusi a caldo e lavorati con macchine utensili. Questo processo permette di ottenere ottime qualità dimensionali in grado di soddisfare tutti i casi in cui è richiesto un elevato grado di posizionamento.

Hot extruded and machined sections. This process guarantees excellent dimensional qualities able to satisfy all the situations in which a high grade of placement is required.

### RETTILINEITÀ E TOLLERANZE DI TORSIONE/STRAIGHTNESS AND TWIST TOLERANCES



Disassamento verticale  
Bow on length (on flat)  
 $Q_{\max} = 1 \text{ mm/m}$



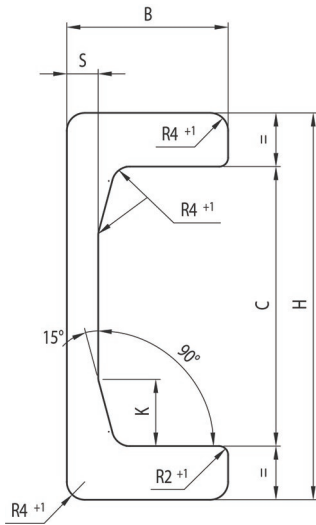
Disassamento laterale  
Bow on length (on edge)  
 $U_{\max} = 1 \text{ mm/m}$



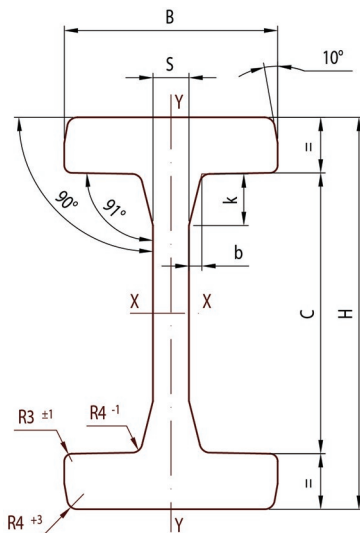
Svergolamento torsionale  
Twist  
 $A_{\max} = 0,5^\circ/\text{m}$

# PROFILI IN ACCIAIO LAMINATI A CALDO

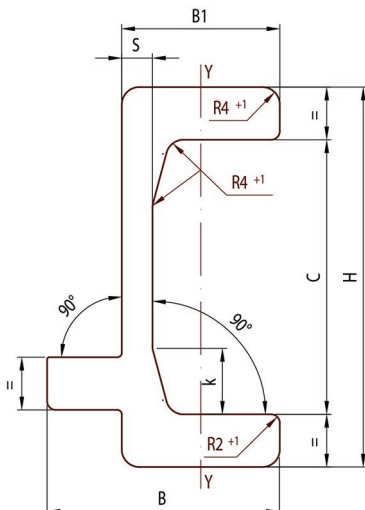
## HOT ROLLED STEEL SECTIONS



Tipo Model	Dimensioni Dimensions						Massa Mass Kg/m	Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	S mm	b mm	@		Wx cm <sup>3</sup>	Wy cm <sup>3</sup>
<b>2890</b>	62.5+1	86.5	36±0.8	7	7	90°±1°	10.5	32	12
<b>2867</b>	70.8±0.5	103.2	40±0.8	7.7	8.5	90°±1°	14.8	53	11
<b>2810</b>	78.7±0.5	121.3	41±0.8	10.8	9	90°±1°	20.9	81	15
<b>2811</b>	89.4±0.5	135.4	53±0.8	12.7	9	90°±1°	28.6	128	27
<b>3394</b>	101.6±0.8	144.6	47.8/53.8±0.8	12.7	7.9	91°±1°	27.1	122	22
<b>2862</b>	108.4±0.5	157.2	61.2±0.8	14	9	90°±1°	35.9	190	39
<b>2891</b>	123.8±0.5	175	66.2±0.8	16.2	9	90°±1°	42.9	250	48
<b>2757</b>	150.1±0.5	201.5	71.2±0.8	19.4	11.5	90°±1°	52.3	340	57



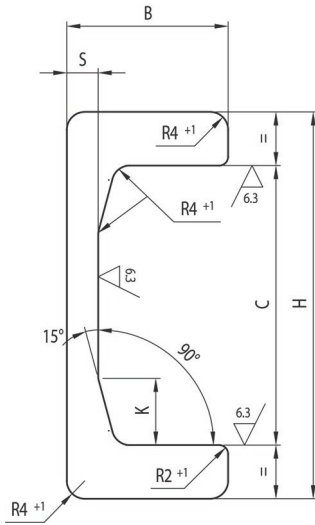
Tipo Model	Dimensioni Dimensions						Massa Mass Kg/m	Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	S mm	b mm	@		Wx cm <sup>3</sup>	Wy cm <sup>3</sup>
<b>3018</b>	70+1	98	65±1	9	7	91°+1°	19.4	70	18
<b>2911</b>	76.5+0.8	101.5	60.3±1.6	9.5	9	91°+1°	17.8	53	15
<b>3019</b>	77.9+1	121.3	66+1	11	9	91°+1°	25.3	81	23
<b>3020</b>	88.6+1	135.4	81±1.25	12	9	91°+1°	34.1	128	40
<b>3440</b>	101.9+0.8	139.7	69.9+1.6	12.7	9	91°+1°	30.9	154	30
<b>2912</b>	102.28-0.8	140.2	69.9+1.6	12.7	8	91°+1°	31.2	157	31
<b>3100</b>	108.4±0.5	175	83±1	14	9	91°+1°	40.5	219	45
<b>3353</b>	123.8±0.5	175	90±1.3	15	12.5	91°+1°	51.4	322	65
<b>3468</b>	128-1	175	76.2	12.7	11.5	90°+15°/-45°	41.9	267	45



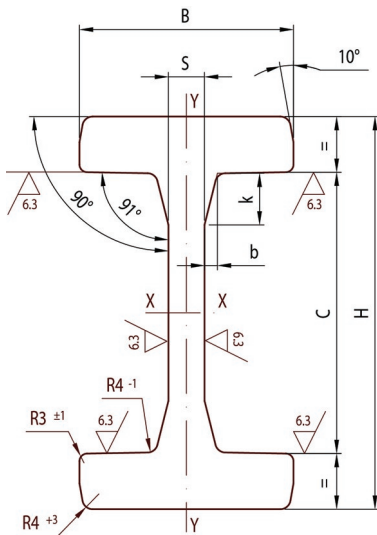
Tipo Model	Dimensioni Dimensions							Massa Mass Kg/m	Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	B1 mm	S mm	b mm	@		Wx cm <sup>3</sup>	Wy cm <sup>3</sup>
<b>3360</b>	70.8±0.5	103.2	63±1	38±0.8	7.7	8.5	90°±1°	17.3	50	14
<b>3351</b>	78.7+0.5	121.3	68±1	41±0.8	10.8	8	90°±1°	25.2	80	21
<b>3384</b>	89.4±0.5	135.4	90±1.3	53±1	12.7	9	90°±1°	34.9	127	40
<b>3352</b>	108.4±0.5	157.2	105±1.3	61.2±1	14	9	90°±1°	43.9	190	58

# SE-|M|<sup>®</sup> PROFILI DI PRECISIONE

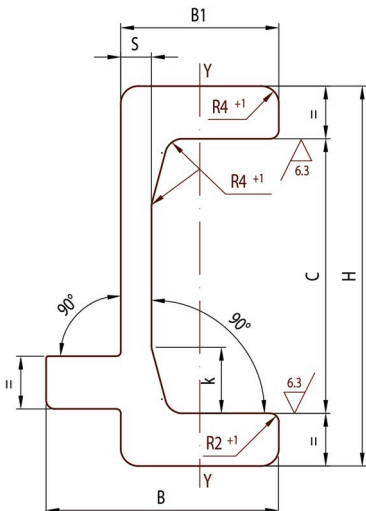
## SE-|M|<sup>®</sup> PRECISION STEEL SECTIONS



Tipo Model	Dimensioni Dimensions						Massa Mass Kg/m	Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	S mm	b mm	@		W <sub>x</sub> cm <sup>3</sup>	W <sub>y</sub> cm <sup>3</sup>
<b>4890 SE-M</b>	65.8±0.1	86.5	36±0.8	7	7	90°±0.5°	9.82	30	6
<b>4867 SE-M</b>	71.4±0.1	103.2	40±0.8	7.7	8.5	90°±0.5°	13.97	51	10
<b>4810 SE-M</b>	82±0.1	121.3	41±0.8	10.8	9	90°±0.5°	20.24	79	14
<b>4811 SE-M</b>	92.7±0.1	135.4	53±0.8	12.7	9	90°±0.5°	27.65	124	25
<b>4862 SE-M</b>	111.7±0.1	157.2	61.2±0.8	14	9	90°±0.5°	34.77	185	37
<b>4891 SE-M</b>	127.1±0.1	175	66.2±0.8	16.2	9	90°±0.5°	41.89	243	46
<b>4757 SE-M</b>	153.4±0.1	201.5	71.2±0.8	19.4	11.5	90°±0.5°	50.99	331	54



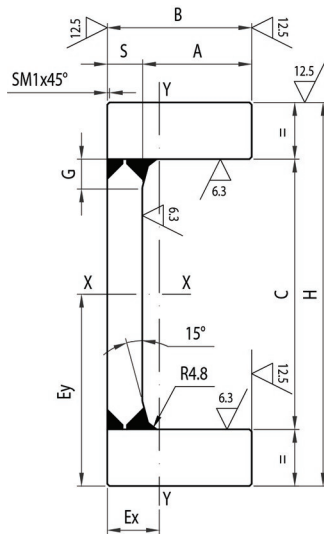
Tipo Model	Dimensioni Dimensions						Massa Mass Kg/m	Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	S mm	b mm	@		W <sub>x</sub> cm <sup>3</sup>	W <sub>y</sub> cm <sup>3</sup>
<b>4890 SE-M</b>	65.8±0.1	98	65±1	9	7	90°±0.5°	19.4	70	18
<b>4867 SE-M</b>	71.4±0.1	101.5	60.3±1.6	9.5	9	90°±0.5°	17.8	53	15
<b>4810 SE-M</b>	82±0.1	121.3	66±1	11	9	90°±0.5°	25.3	81	23
<b>4811 SE-M</b>	92.7±0.1	135.4	81±1.25	12	9	90°±0.5°	34.1	128	40
<b>4862 SE-M</b>	111.7±0.1	139.7	69.9±1.6	12.7	9	90°±0.5°	30.9	154	30
<b>4891 SE-M</b>	127.1±0.1	140.2	69.9±1.6	12.7	12.5	90°±0.5°	31.2	157	31



Tipo Model	Dimensioni Dimensions							Massa Mass Kg/m	Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	B1 mm	S mm	b mm	@		W <sub>x</sub> cm <sup>3</sup>	W <sub>y</sub> cm <sup>3</sup>
<b>4360 SE-M</b>	71.4±0.1	103.2	63±1	38±0.8	7.7	8.5	90°±0.5°	16.51	48	13
<b>4351 SE-M</b>	82±0.1	121.3	68±1	41±0.8	10.8	8	90°±0.5°	24.47	78	21
<b>4384 SE-M</b>	92.7±0.1	135.4	90±1.3	53±1	12.7	9	90°±0.5°	34.03	123	39
<b>4352 SE-M</b>	111.7±0.1	157.2	105±1.3	61.2±1	14	9	90°±0.5°	42.81	184	56

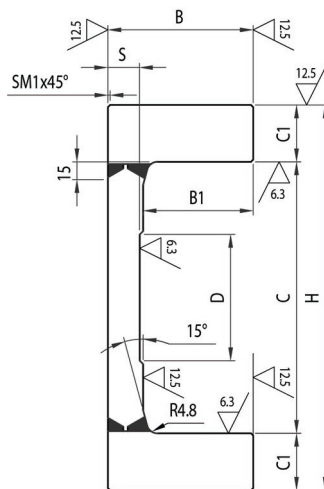
## PROFILI COMPOSTI A U

### U-SHAPED COMPOSED STEEL SECTIONS



Profili in acciaio, saldati e fresati sulle superfici a contatto con i rulli e sui piani di appoggio.  
Steel sections, welded and milled on the surfaces in contact with the bearings and on the support plans.

Tipo Model	Dimensioni Dimensions								Massa Mass Kg/m	Momenti d'inerzia Inertia modulus		Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	S mm	G mm	A mm	Ex mm	Ey mm		Jx <sub>y</sub> cm <sup>4</sup>	Jy <sub>x</sub> cm <sup>4</sup>	Wx cm <sup>3</sup>	Wy cm <sup>3</sup>
<b>FC 123L</b>	123.3+0.3	175+1	66.0±0.7	16±0.5	13	50.0	23.77	87.5	42.37	2181.6	206.0	249.3	86.7
<b>FC 149L</b>	149.4+0.3	202+1	71.2±0.7	19.4±0.5	15	51.8	24.26	101.0	52.31	3480.6	276.5	344.6	114.0

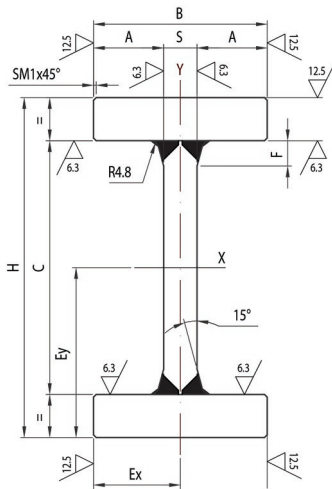


Profili in acciaio, saldati e fresati sulle superfici a contatto con i rulli e sui piani di appoggio.  
Steel sections, welded and milled on the surfaces in contact with the bearings and on the support plans.

Tipo Model	Dimensioni Dimensions								Massa Mass Kg/m	Momenti d'inerzia Inertia modulus		Moduli di Resistenza Resistance modulus	
	C mm	H mm	B mm	B1 mm	C1 mm	S mm	D mm	@		Jx cm <sup>4</sup>	Jy cm <sup>4</sup>	Wx cm <sup>3</sup>	Wy cm <sup>3</sup>
<b>10LC</b>	165.4+0.2	230.0±0.7	57.5±0.5	38.5	32.3	18	80	90°±1°	53.5	4410	175	384	88
<b>16LC</b>	190.4+0.2	255.0±0.7	77.0±0.5	53	32.3	22	80	90°±1°	74	7632	434	599	168
<b>18HC</b>	220.4+0.2	295.0±0.7	85.0±0.5	62.5	37.3	20	125	90°±1°	86	12633	6720	856	232
<b>28HC</b>	250.4+0.2	345.0±0.7	94.0±0.5	65.5	47.3	26.5	125	90°±1°	123	23372	1117	1359	345
<b>42HC</b>	280.4+0.2	395.0±0.7	114.0±0.5	85.5	47.3	26.5	125	90°±1°	162	42473	2355	2156	577

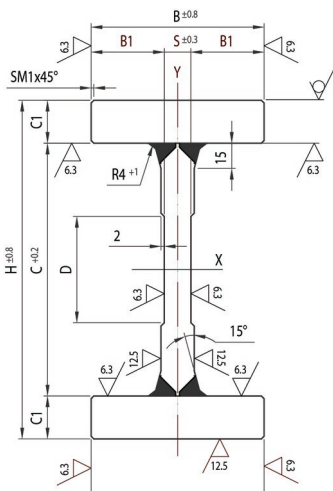
## PROFILI COMPOSTI A I

### I-SHAPED COMPOSED STEEL SECTIONS



Profili in acciaio, saldati e fresati sulle superfici a contatto con i rulli e sui piani di appoggio.  
Steel sections, welded and milled on the surfaces in contact with the bearings and on the support plans.

Tipo Model	Dimensioni Dimensions								Massa Mass Kg/m	Momenti d'inerzia Inertia modulus		Moduli di Resistenza Resistance modulus	
	C mm	H mm	B mm	S mm	F mm	A mm	Ex mm	Ey mm		Jx cm <sup>4</sup>	Jy cm <sup>4</sup>	Wx cm <sup>3</sup>	Wy cm <sup>3</sup>
<b>FI 108</b>	108.4+0.2	153	80±0.7	13±0.3	13.5	33.5	40.0	76.5	39.8	1708	194	223.3	48.5
<b>FI 123</b>	12.3.3+0.2	176	90±0.7	15±0.3	15.0	37.5	45.0	88.0	52.3	2952.9	323.8	335.6	71.9
<b>FI 149</b>	149.3+0.2	205	118±0.7	18±0.3	15.0	50.0	59.0	102.5	72.9	5742.6	769.5	560.3	130.4

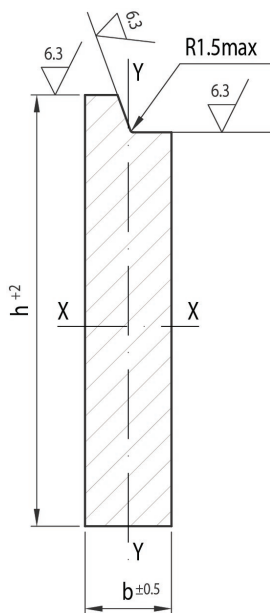


Profili in acciaio, saldati e fresati sulle superfici a contatto con i rulli e sui piani di appoggio.  
Steel sections, welded and milled on the surfaces in contact with the bearings and on the lateral plans.

Tipo Model	Dimensioni Dimensions								Massa Mass Kg/m	Momenti d'inerzia Inertia modulus		Moduli di resistenza Resistance modulus	
	C mm	H mm	B mm	B1 mm	C1 mm	S mm	D mm	@		Jx cm <sup>4</sup>	Jy cm <sup>4</sup>	Wx cm <sup>3</sup>	Wy cm <sup>3</sup>
<b>10L</b>	165.4	230	95	39.5	32.3	16	80	90°±1°	73	6825	475	593	100
<b>16L</b>	190.4	255	130	55	32.3	20	80	90°±1°	100.5	11983	1203	940	185
<b>18H</b>	220.4	295	150	65	37.3	20	125	90°±1°	127.5	21035	2123	1426	283
<b>28H</b>	250.4	345	160	67.5	47.3	25	125	90°±1°	173	37883	3279	2196	410
<b>36H</b>	280.4	375	190	80	47.3	30	125	90°±1°	213	55210	5498	2945	578
<b>42H</b>	280.4	395	190	80	57.3	30	125	90°±1°	242.5	69230	6642	3505	700

# PROFILI FRESATI A NORME FEM/ISO PER PIASTRE PORTA FORCHE

## MILLED SECTIONS ACCORDING TO FEM/ISO RULES FOR FORK PLATES

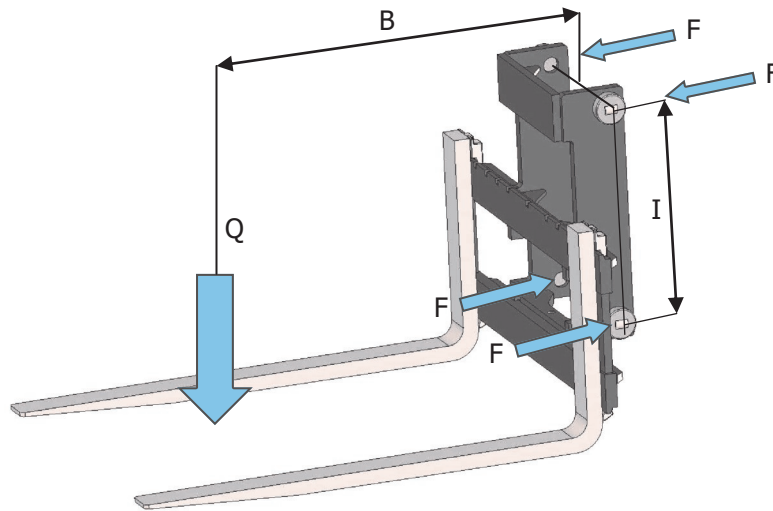


Profili in acciaio ottenuti dalla lavorazione di piatti laminati.  
Steel sections obtained from machined rolled plates.

Tipo Model	Dimensioni Dimensions		Peso Weight Kg/m	Moduli di resistenza Resistance modulus		Profilo Section Rif. (1)	Classe Class F.E.M. ISO	Dimensioni del dente (toleranze ISO 2328) Tooth dimensions (tolerances according ISO 2328)
	h mm	b mm		$W_x$ $mm^3$	$W_y$ $mm^3$			
<b>PPF.001</b>	100	30	22.0	38	13	3285	I	
<b>PPF.002</b>	127	26	24.8	58	13	2809	I	
<b>PPF.003</b>	127	32	30.2	68	20	2942	I	
<b>PPF.004</b>	150	30	33.9	93	21	2783	I	
<b>PPF.005</b>	110	32	25.9	50	17	3283	II	
<b>PPF.006</b>	110	38	60.5	57	24	3284	II	
<b>PPF.007</b>	150	35	39.1	107	28	2807	II	
<b>PPF.008</b>	150	38	42.5	114	34	2805	II	
<b>PPF.009</b>	152	32	36.2	102	24	2806	II	
<b>PPF.010</b>	115	40	33.4	67	27	3298	III	
<b>PPF.011</b>	148	40	43.8	117	36	3286	III	
<b>PPF.012</b>	148	45	48.9	129	46	3287	III	
<b>PPF.013</b>	180	38	51.3	172	40	2808	III	
<b>PPF.014</b>	180	45	60.1	198	56	2784	III	
<b>PPF.015</b>	180	57	75.2	240	89	2785	IV	



## SCelta DEI CUSCINETTI CHOICE OF BEARINGS



### DATI/DATA:

<b>Q</b> = Peso del carico da sollevare/Weight of the load to be lifted	(N)
<b>B</b> = Baricentro del carico, asse cuscinetti/Load center of gravity, bearings axis	(mm)
<b>I</b> = Interasse cuscinetti/Distance between the bearings	(mm)
<b>C<sub>0</sub></b> = Carico statico del cuscinetto/Static bearing load	(N)

### CALCOLO/FORMULA:

Calcolare il carico agente su ciascun cuscinetto con questa formula:  
Calculate the load acting on each bearing with this formula:

$$F = \frac{Q \cdot B}{2 \cdot I} \quad (\text{N})$$

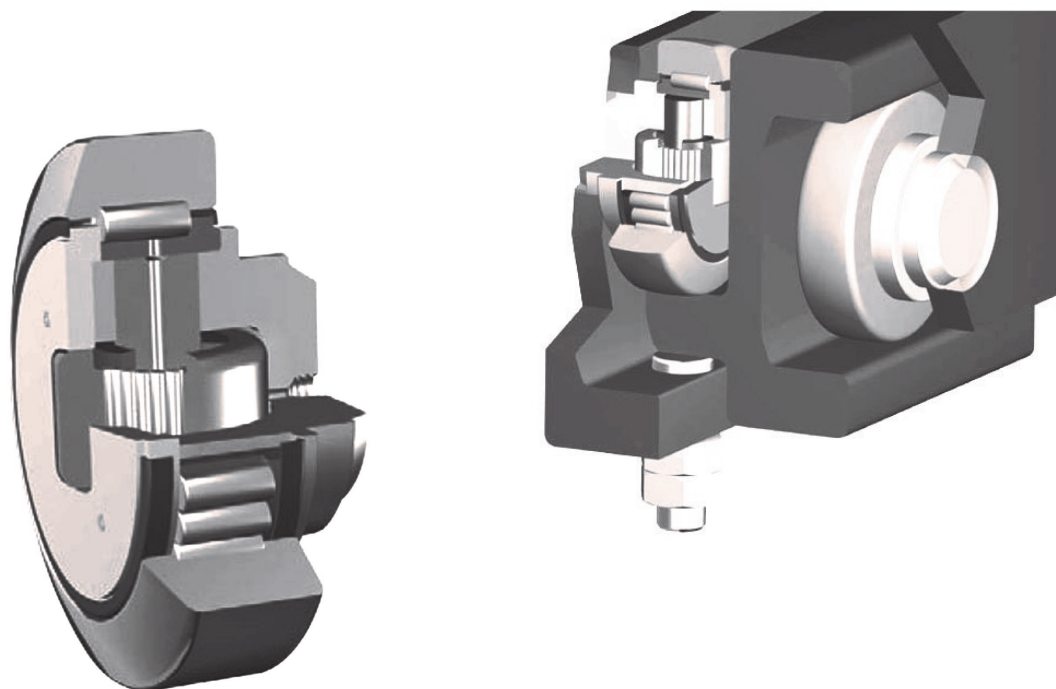
Dividere il carico statico  $C_0$  (vedi catalogo) con il carico  $F$  calcolato. Il risultato deve essere maggiore di 3.

Divide the static load  $C_0$  (see the catalogue) with the calculated load  $F$ . The result must be greater than 3.

$$\frac{C_0}{F} > 3$$

Tale valore è valido anche per la verifica alle sollecitazioni Hertziane sui profili.  
This result is also effective for checking the Hertzian stresses on the profiles.

## CUSCINETTI COMBINATI PER PROFILI COMBINED BEARINGS FOR STEEL SECTIONS



I cuscinetti combinati sono costruiti tenendo conto delle Norme Unificate che regolano una corretta esecuzione dei cuscinetti volventi.

Questi cuscinetti sono costruiti sia in esecuzione schermata, perciò rilubrificabile, sia in esecuzione stagna; gli anelli esterni sono normalmente previsti in esecuzione correttamente convessa per assorbire gli inevitabili errori di geometria originati dall'accoppiamento con le guide sulle quali rotolano.

I cuscinetti vengono lubrificati in origine con grasso al litio di grado "3".

Per esecuzioni particolari, quali l'utilizzo di questi cuscinetti per alte temperature, Vi preghiamo di interpellare il ns. Ufficio Tecnico.

The combined bearings are manufactured according to the Unified Parameters which govern a correct execution of rolling bearings.

This series can be supplied both with steel shield and they can therefore be relubricated and in the sealed performance. The outer rings are normally scheduled in correct convex performance to counteract the inevitable geometrical errors originating from the coupling with the guideways in which they roll.

Bearings are greased at source with grade "3" lithium base grease.

For special performances, as the use of these bearings at high temperatures, please inquire our Engineering Office.

# CUSCINETTI COMBINATI PER PROFILI

## COMBINED BEARINGS FOR STEEL SECTIONS

### MATERIALI/MATERIALS

Anelli esterni Outer rings	Acciaio UNI 20MnCr5 cementato, temprato e rinvenuto con durezza finale pari a 60±2 HRc Steel UNI 20MnCr5 casehardened and tempered with final hardness 60±2 HRc
Anelli interni Inner rings	Acciaio UNI 100Cr6 temprato e rinvenuto con durezza finale pari a 60±2 HRc Steel UNI 100Cr6 hardened and tempered with final hardness 60±2 HRc
Corpi di rotolamento Rolling elements	Acciaio UNI 100Cr6 temprato e rinvenuto con durezza finale pari a 62±1 HRc Steel UNI 100Cr6 hardened and tempered with final hardness 62±1 HRc
Perno principale Main stud	Acciaio UNI Fe52C ricotto per garantire facile e sicura saldabilità Steel UNI Fe52C annealed to be easily welded

### TOLLERANZE DIMENSIONALI/DIMENSIONAL TOLERANCES

Tolleranze Tolerances	Secondo Norma DIN 620 According to DIN 620
Classe di precisione Precision class	P0 P0
Giocchi radiali Radial clearances	Secondo Norma DIN 620 According to DIN 620
Coeff. di carico Load ratings	Secondo Norma ISO 76 & ISO 281 According to ISO 76 & ISO 281

DIMENSIONI DI MONTAGGIO FITTING DIMENSIONS															
CODICE/CODE		d	D	C	H	s	H1	H2	d1	D1	C1	r(min)	R	R1	@
ZZ	ZRS	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
<b>MR0706<sup>(1)</sup></b>	-	30	52.5	19	33	3	27	6	40	43	16	3	500	500	10°
<b>MR0001<sup>(1)</sup></b>	<b>MR0021<sup>(2)</sup></b>	30	62	20	37.5	2.5	30.5	7	42	50	20	3	500	500	20°
<b>MR0002<sup>(1-3)</sup></b>	<b>MR0022</b>	35	70.1	23	44	2.5	36	8	48	57	22	3	500	500	20°
<b>MR0003</b>	<b>MR0023</b>	40	77.7	23	48	3	36.5	11.5	53	61	24	3	700	500	20°
<b>MR0005</b>	<b>MR0025</b>	45	88.9	30	57	3.5	44	13	59	68	26	4	700	500	20°
<b>MR0007</b>	<b>MR0027</b>	60	107.7	31	69	4	55	14	71	82	34	4	1000	750	20°
<b>MR0009</b>	<b>MR0029</b>	60	123	37	72.3	5	56	16.3	80	92	40	4	1000	1000	20°
<b>MR0010</b>	<b>MR0030</b>	60	149	43	78.5	5	58.5	20	103	116	50	4	1000	1000	15°
<b>MR0191</b>	-	60	149	45	86	5.5	67	19	107	120	50	4	1500	1000	15°

(1) Cuscinetto non rilubrificabile/Non relubricable bearing

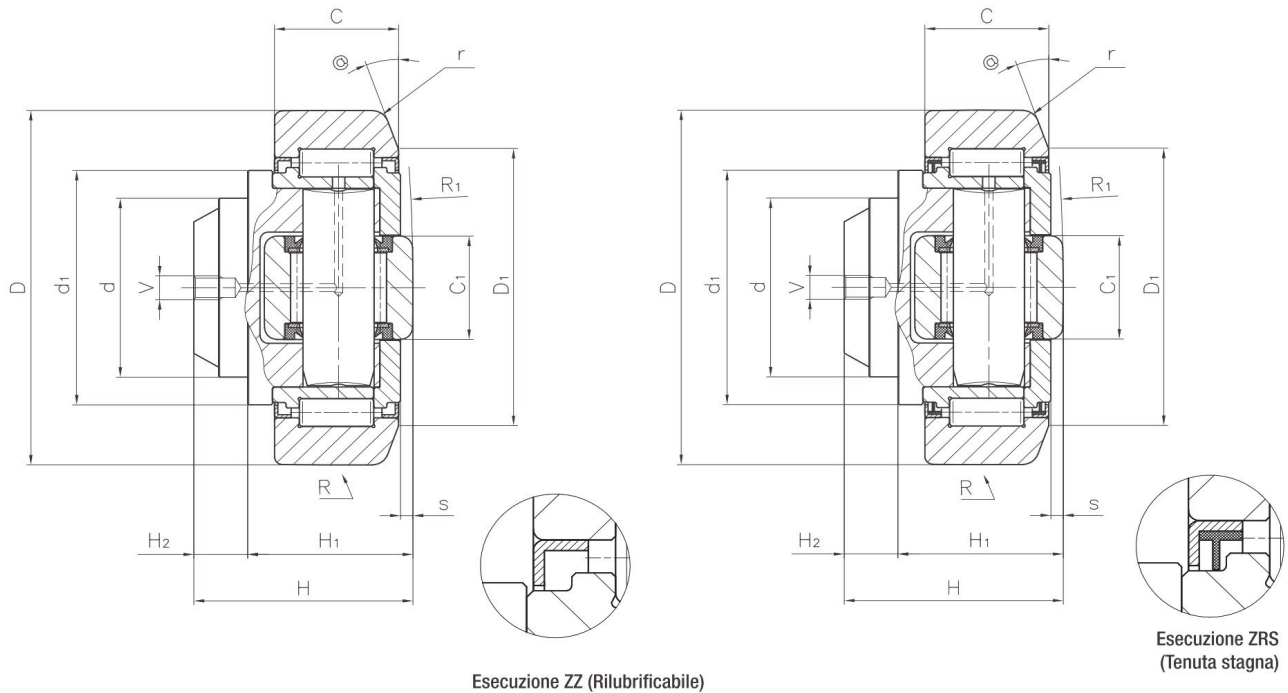
(2) A richiesta cuscinetto con diametro esterno maggiorato D. 62,5 mm (codice MR 0430)/Bearing with Outer Diameter 62,5 mm on request (code MR 0430)

(3) A richiesta cuscinetto rilubrificabile (codice MR 1195)/Relubricable bearing on request (code MR 1195)

(4) Codici di identificazione/References

# CUSCINETTI COMBINATI PER PROFILI

## COMBINED BEARINGS FOR STEEL SECTIONS



		PESO WEIGHT		COEFF. DI CARICO RADIALE RADIAL LOAD RATINGS		COEFF. DI CARICO ASSIALE AXIAL LOAD RATINGS		VELOCITA' DI RIF. REFERENCE SPEED	PROFILO STEEL SECTION		PIASTRA FISSAGGIO MOUNTING PLATE
CODICE/CODE		V		Din.(C)	Stat.(C <sub>0</sub> )	Din.(C)	Stat.(C <sub>0</sub> )				
ZZ	ZRS	mm	kg	N	N	N	N	RPM	LI-BE	Std. <sup>(4)</sup>	
<b>MR0706<sup>(1)</sup></b>	-	-	0.39	26500	46000	6000	6000	800	-	-	PMR 0706
<b>MR0001<sup>(1)</sup></b>	<b>MR0021<sup>(2)</sup></b>	-	0.52	39000	65000	14000	21000	900	EC062	2890	PMR 0001
<b>MR0002<sup>(1-3)</sup></b>	<b>MR0022</b>	M6x1 <sup>(3)</sup>	0.78	96000	93000	17000	25000	900	EC070	2867	PMR 0002
<b>MR0003</b>	<b>MR0023</b>	M6x1	1.02	58000	101500	21000	32000	800	EC078	2810	PMR 0003
<b>MR0005</b>	<b>MR0025</b>	M6x1	1.61	84000	133000	28000	43000	700	EC089	2811	PMR 0005
<b>MR0007</b>	<b>MR027</b>	M6x1	2.69	94000	162000	46000	84000	650	EC108	2862	PMR 0007
<b>MR0009</b>	<b>MR0029</b>	M6x1	3.88	132000	242000	53000	94000	500	EC123	2891	PMR 0007
<b>MR0010</b>	<b>MR0030</b>	M6x1	6.65	179000	353000	83000	131000	400	EC150	2757	PMR 0010
<b>MR0191</b>	-	1/8G	7.15	179000	353000	83000	131000	400	EC150	2757	PMR 0010

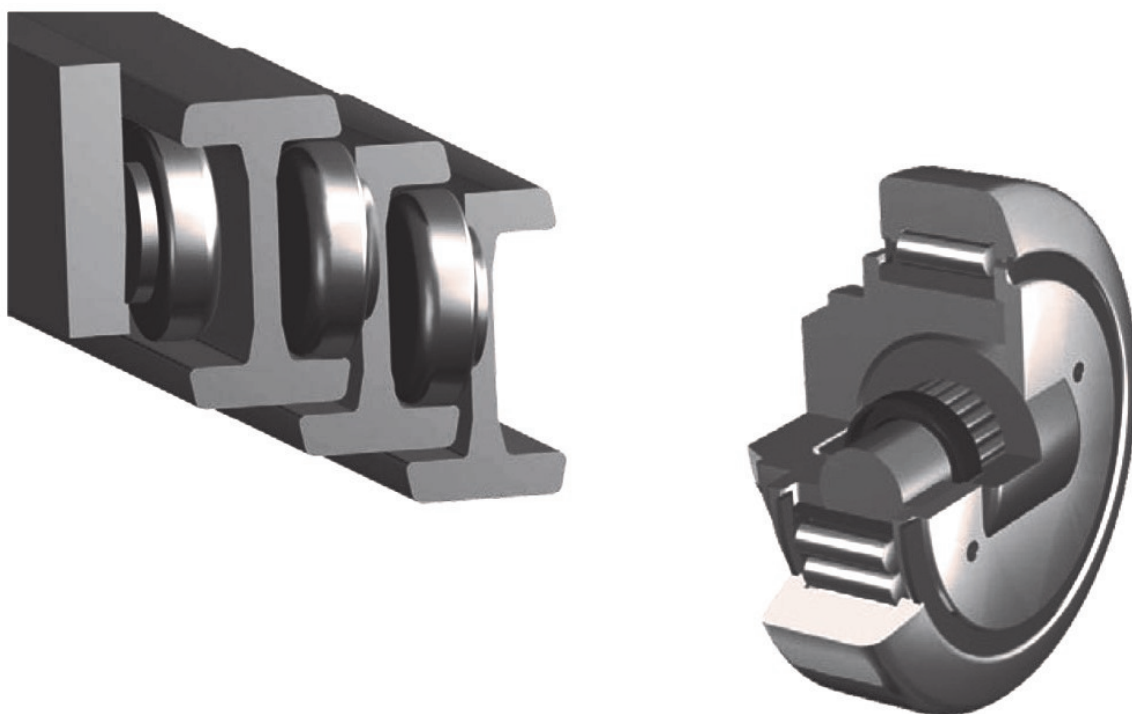
(1) Cuscinetto non rilubrificabile/Non relubricable bearing

(2) A richiesta cuscinetto con diametro esterno maggiorato D. 62,5 mm (codice MR 0430)/Bearing with Outer Diameter 62,5 mm on request (code MR 0430)

(3) A richiesta cuscinetto rilubrificabile (codice MR 1195)/Relubricable bearing on request (code MR 1195)

(4) Codici di identificazione/References

## CUSCINETTI COMBINATI PER PROFILI INCLINATI COMBINED BEARINGS FOR INCLINED SECTIONS



I cuscinetti combinati sono costruiti tenendo conto delle Norme Unificate che regolano una corretta esecuzione dei cuscinetti volventi.

Questi cuscinetti sono costruiti sia in esecuzione schermata, perciò rilubrificabile, sia in esecuzione stagna; gli anelli esterni sono normalmente previsti in esecuzione correttamente convessa per assorbire gli inevitabili errori di geometria originati dall'accoppiamento con le guide sulle quali rotolano.

I cuscinetti vengono lubrificati in origine con grasso al litio di grado "3".

Per esecuzioni particolari, quali l'utilizzo di questi cuscinetti per alte temperature, Vi preghiamo di interpellare il ns. Ufficio Tecnico.

The combined bearings are manufactured according to the Unified Parameters which govern a correct execution of rolling bearings.

This series can be supplied both with steel shield and they can therefore be relubricated and in the sealed performance. The outer rings are normally scheduled in correct convex performance to counteract the inevitable geometrical errors originating from the coupling with the guideways in which they roll.

Bearings are greased at source with grade "3" lithium base grease.

For special performances, as the use of these bearings at high temperatures, please inquire our Engineering Office.

# CUSCINETTI COMBINATI PER PROFILI INCLINATI

## COMBINED BEARINGS FOR INCLINED SECTIONS

### MATERIALI/MATERIALS

Anelli esterni Outer rings	Acciaio UNI 20MnCr5 cementato, temprato e rinvenuto con durezza finale pari a 60±2 HRc Steel UNI 20MnCr5 casehardened and tempered with final hardness 60±2 HRc
Anelli interni Inner rings	Acciaio UNI 100Cr6 temprato e rinvenuto con durezza finale pari a 60±2 HRc Steel UNI 100Cr6 hardened and tempered with final hardness 60±2 HRc
Corpi di rotolamento Rolling elements	Acciaio UNI 100Cr6 temprato e rinvenuto con durezza finale pari a 62±1 HRc Steel UNI 100Cr6 hardened and tempered with final hardness 62±1 HRc
Perno principale Main stud	Acciaio UNI Fe52C ricotto per garantire facile e sicura saldabilità Steel UNI Fe52C annealed to be easily welded

### TOLLERANZE DIMENSIONALI/DIMENSIONAL TOLERANCES

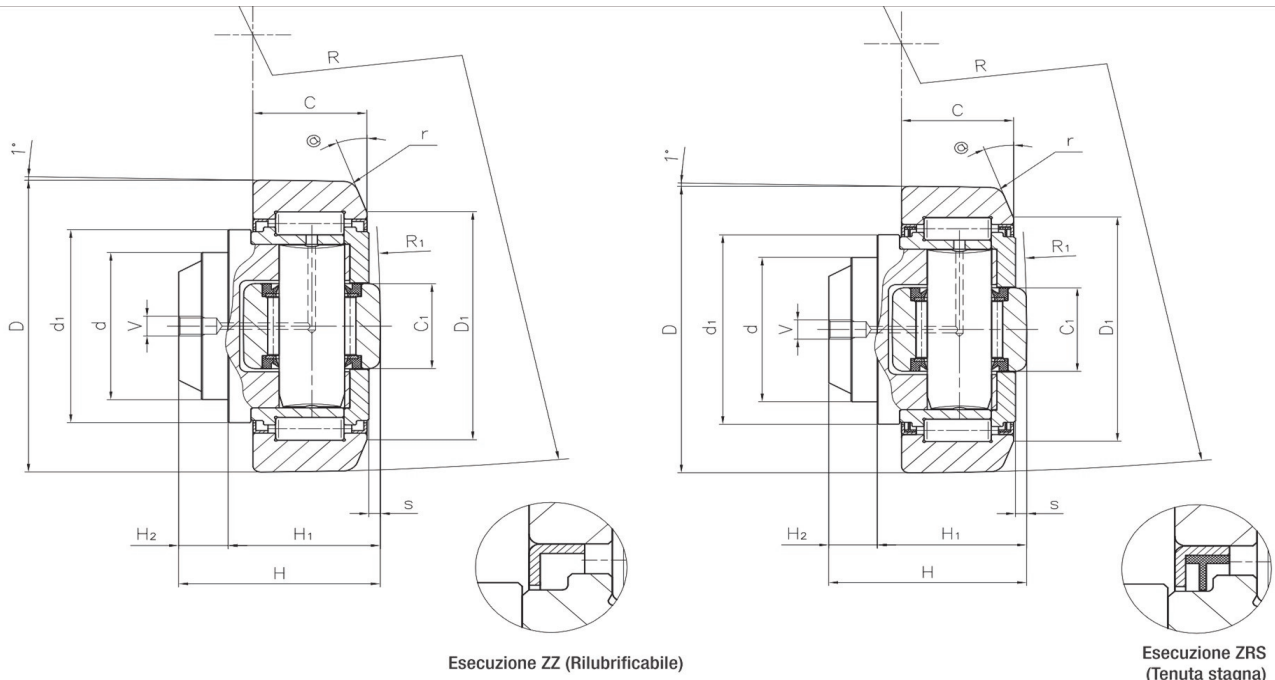
Tolleranze Tolerances	Secondo Norma DIN 620 According to DIN 620
Classe di precisione Precision class	P0 P0
Giocchi radiali Radial clearances	Secondo Norma DIN 620 According to DIN 620
Coeff. di carico Load ratings	Secondo Norma ISO 76 & ISO 281 According to ISO 76 & ISO 281

DIMENSIONI DI MONTAGGIO FITTING DIMENSIONS															
CODICE/CODE		d	D	C	H	s	H1	H2	d1	D1	C1	r(min)	R	R1	@
ZZ	ZRS	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
<b>MR0031<sup>(1)</sup></b>	<b>MR0032</b>	35	70.35	23	40.5	3	30.5	10	48	57	22	4	650	500	20°
<b>MR0004</b>	<b>MR0024</b>	40	78.3	23	40.7	3	29	11.7	53	61	24	4	700	500	20°
<b>MR0034</b>	<b>MR0035</b>	45	89.25	30	50	3.5	37.5	12.5	59	68	26	4	850	500	20°
<b>MR0006</b>	<b>MR0026</b>	50	101.8	28	46	3	33	13	67	77	30	4	850	500	20°
<b>MR0008</b>	<b>MR0028</b>	55	108.55	31	53	4	38.5	14.5	71	82	34	4	1000	750	20°
<b>MR0040</b>	<b>MR0041</b>	60	123.5	33	57	3	42	15	78	94	33	4	1000	700	15°
<b>MR0016<sup>(2)</sup></b>	-	60	129.4	33	56.5	3	42.5	14	78	94	40	4	750	750	10°
<b>MR0011<sup>(2)</sup></b>	-	80	165	36	61	3	46	15	113	130	60	4	1000	1000	10°

- (1) Cuscinetto non rilubrificabile/Non relubricable bearing  
 (2) Profilo esterno non conico/Bearing without outer tapered profile  
 (3) Codici di identificazione/References

# CUSCINETTI COMBINATI PER PROFILI INCLINATI

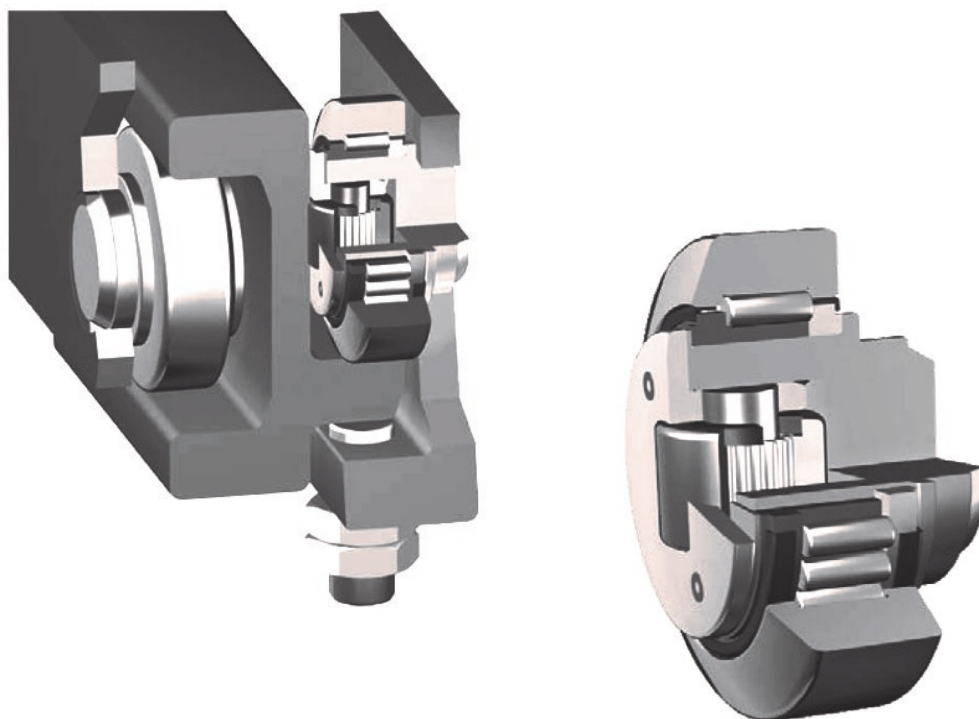
## COMBINED BEARINGS FOR INCLINED SECTIONS



CODICE/CODE		V	PESO WEIGHT	COEFF. DI CARICO RADIALE RADIAL LOAD RATINGS		COEFF. DI CARICO ASSIALE AXIAL LOAD RATINGS		VELOCITA' DI RIF. REFERENCE SPEED	PROFILO STEEL SECTION		PIASTRA FISSAGGIO MOUNTING PLATE
ZZ	ZRS	mm	kg	Din.(C)	Stat.(C <sub>0</sub> )	Din.(C)	Stat.(C <sub>0</sub> )	RPM	LI-BE	Std. <sup>(3)</sup>	
<b>MR0031<sup>(1)</sup></b>	<b>MR0032</b>	-	0.47	56000	93000	17000	25000	900	ET070	3018	PMR 0002
<b>MR0004</b>	<b>MR0024</b>	M6x1	0.88	58000	101500	21000	32000	800	ET078	3019	PMR 0003
<b>MR0034</b>	<b>MR0035</b>	M6x1	1.58	84000	133000	28000	43000	800	ET089	3020	PMR 0005
<b>MR0006</b>	<b>MR0026</b>	M6x1	1.72	91000	153000	32000	50000	700	ET102	2912	PMR 0006
<b>MR0008</b>	<b>MR0028</b>	M6x1	2.22	94000	162000	46000	84000	650	ET108	3100	PMR 0008
<b>MR0040</b>	<b>MR0041</b>	M6x1	3.2	134000	211000	39000	57000	500	ET123	3353	PMR 0007
<b>MR0016<sup>(2)</sup></b>	-	M6x1	3.4	134000	211000	50000	85000	500	-	W.76.049.0	-
<b>MR0011<sup>(2)</sup></b>	-	M6x1	6.3	176000	306000	58000	111000	400	-	W.81.023.2	-

- (1) Cuscinetto non rilubrificabile/Non relubricable bearing  
 (2) Profilo esterno non conico/Bearing without outer tapered profile  
 (3) Codici di identificazione/References

## CUSCINETTI COMBINATI REGISTRABILI CON SUPPORTO PER PROFILI ADJUSTABLE COMBINED BEARINGS WITH AXIAL SUPPORT



I cuscinetti combinati registrabili con supporto sono registrabili assialmente per mezzo di spessori calibrati da interporre tra il supporto assiale e il fronte del perno principale. Sia il cuscinetto radiale che il cuscinetto laterale sono resi stagni da tenute in gomma e prelubrificati con grasso minerale al litio. Per esecuzioni particolari, che prevedono per esempio l'utilizzo di questi cuscinetti in presenza di alte temperature, Vi preghiamo di interpellare il ns. Ufficio Tecnico.

The combined bearings with support are axially adjustable by means of calibrated adapter rings fitted between the axial bearing support and the frontside of the main stud.

Both the axial and the radial bearings are provided with rubber seals to assure their tightness and are supplied grease filled with lithium base grease.

For special applications, as the use of these bearings at high temperatures, please inquire our Engineering Office.



# CUSCINETTI COMBINATI REGISTRABILI CON SUPPORTO PER PROFILI

## ADJUSTABLE COMBINED BEARINGS WITH AXIAL SUPPORT

### MATERIALI/MATERIALS

Anelli esterni Outer rings	Acciaio UNI 20MnCr5 cementato, temprato e rinvenuto con durezza finale pari a 60±2 HRc Steel UNI 20MnCr5 casehardened and tempered with final hardness 60±2 HRc
Anelli interni Inner rings	Acciaio UNI 100Cr6 temprato e rinvenuto con durezza finale pari a 60±2 HRc Steel UNI 100Cr6 hardened and tempered with final hardness 60±2 HRc
Corpi di rotolamento Rolling elements	Acciaio UNI 100Cr6 temprato e rinvenuto con durezza finale pari a 62±1 HRc Steel UNI 100Cr6 hardened and tempered with final hardness 62±1 HRc
Perno principale Main stud	Acciaio UNI Fe52C ricotto per garantire facile e sicura saldabilità Steel UNI Fe52C annealed to be easily welded

### TOLLERANZE DIMENSIONALI/DIMENSIONAL TOLERANCES

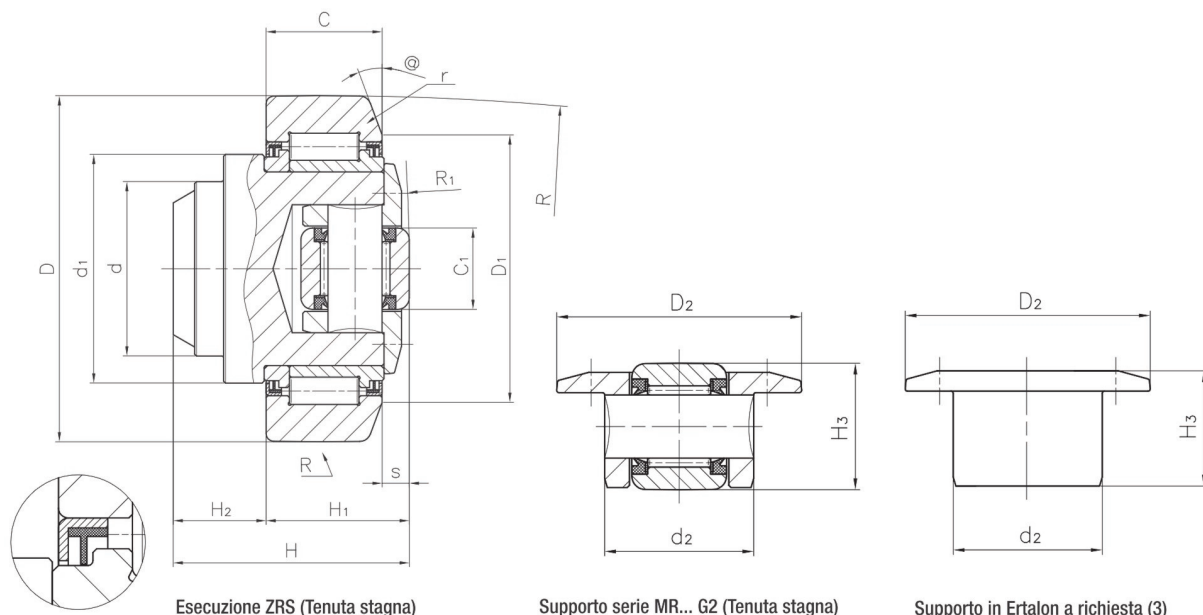
Tolleranze Tolerances	Secondo Norma DIN 620 According to DIN 620
Classe di precisione Precision class	P0 P0
Giocchi radiali Radial clearances	Secondo Norma DIN 620 According to DIN 620
Coeff. di carico Load ratings	Secondo Norma ISO 76 & ISO 281 According to ISO 76 & ISO 281

DIMENSIONI DI MONTAGGIO FITTING DIMENSIONS															
CODICE/CODE		d	D	C	H	S <sup>(2)</sup>	H1	H2	d1	D1	C1	r(min)	R	R1	@
ZRS	Supporto assiale Axial support	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
<b>MR0146</b>	<b>MR0146.G2</b>	30	62	20	43	6	33	10	42	50	16	3	500	500	20°
<b>MR0147</b>	<b>MR0146.G2</b>	35	70.1	23	48	6	40	8	48	57	16	4	500	500	20°
<b>MR0148</b>	<b>MR0148.G2</b>	40	77.7	23	50.5	7	39.5	11	54	61	21	4	700	500	20°
<b>MR0149<sup>(1)</sup></b>	<b>MR0148.G2</b>	40	78.3	23	45	7	34	11	54	61	21	4	700	500	20°
<b>MR0150</b>	<b>MR0148.G2</b>	45	88.9	30	61	7	48	13	59	69.5	21	4	700	500	20°
<b>MR0151<sup>(1)</sup></b>	<b>MR0148.G2</b>	50	101.9	28	50.5	7	37.5	13	67	77	21	4	850	500	20°
<b>MR0142</b>	<b>MR0142.G2</b>	60	107.7	31	69	8.5	55	14	71	82	33	4	1000	700	20°
<b>MR0152<sup>(1)</sup></b>	<b>MR0142.G2</b>	55	108.55	31	58.5	8.5	44.5	14	71	82	33	4	1000	700	20°
<b>MR0153</b>	<b>MR0142.G2</b>	60	123	37	75.8	8.5	58.5	16.3	78	92	33	4	1000	700	20°
<b>MR0154</b>	<b>MR0154.G2</b>	60	149	43	89	15	69	20	103	116	50	4	1000	1000	15°

- (1) Cuscinetto con profilo conico/Bearing with taper outer profile  
 (2) La regolazione della dimensione "s" si effettua mediante anelli di spessoramento inseriti tra il supporto principale ed il supporto del cuscinetto di guida laterale. Sono disponibili anelli di registrazione con spessori variabili di 0.3-0.5-1 mm.  
 Dimension "s" adjustable by means of adapter washers inserted between the main stud and the housing of the axial guide bearing. Adapter Washers available with thickness 0.3-0.5-1 mm.

# CUSCINETTI COMBINATI REGISTRABILI CON SUPPORTO PER PROFILI

## ADJUSTABLE COMBINED BEARINGS WITH AXIAL SUPPORT



					PESO WEIGHT	COEFF. DI CARICO RADIALE RADIAL LOAD RATINGS		COEFF. DI CARICO ASSIALE AXIAL LOAD RATINGS		VELOCITA' DI RIF. REFERENCE SPEED	PROFILO STEEL SECTION		PIASTRA FISSAGGIO MOUNTING PLATE
CODICE/CODE		d <sub>2</sub>	D <sub>2</sub>	H <sub>3</sub>		Din.(C)	Stat.(C <sub>0</sub> )	Din.(C)	Stat.(C <sub>0</sub> )				
ZRS	Supporto assiale Axial support	mm			kg	N	N	N	N	RPM	LI-BE	Std. <sup>(4)</sup>	
<b>MR0146</b>	<b>MR0146.G2</b>	25	40	22	0.6	39000	65000	10500	14000	900	EC062	2890	PMR0001
<b>MR0147</b>	<b>MR0146.G2</b>	25	40	22	0.9	56000	93000	10500	14000	900	EC070	2867	PMR0002
<b>MR0148</b>	<b>MR0148.G2</b>	33	52	28	1.05	58000	101500	14700	22000	800	EC078	2810	PMR0003
<b>MR0149<sup>(1)</sup></b>	<b>MR0148.G2</b>	33	52	28	0.95	58000	101500	14700	22000	800	EC078	3019	PMR0003
<b>MR0150</b>	<b>MR0148.G2</b>	33	52	28	1.7	84000	133000	14700	22000	700	EC089	2811	PMR0005
<b>MR0151<sup>(1)</sup></b>	<b>MR0148.G2</b>	33	52	28	1.85	91000	153000	14700	22000	700	ET102	2912	PMR0006
<b>MR0142</b>	<b>MR0142.G2</b>	48	74	38	2.4	94000	162000	39000	57000	650	EC108	2862	PMR0007
<b>MR0152<sup>(1)</sup></b>	<b>MR0142.G2</b>	48	74	38	2.8	94000	162000	39000	57000	650	ET108	3100	PMR0008
<b>MR0153</b>	<b>MR0142.G2</b>	48	74	38	4.1	132000	242000	39000	57000	500	EC123	2891	PMR0007
<b>MR0154</b>	<b>MR0154.G2</b>	72	105	55	6.8	179000	353000	83000	131000	400	EC150	2757	PMR0010

(3) Per la richiesta del supporto in Ertalon aggiungere "F" al codice: es. MR0146.F

For the axial support in Ertalon add suffix "F" to the code: ex. MR0146.F

(4) Codici di identificazione/References

**SECAR SRL**

Via Morigi, 1  
29020 Gossolengo (PC) - Italy  
T. +39 0523 523149  
F. +39 0523 350175  
E. [info@secaronline.it](mailto:info@secaronline.it)  
[www.secaronline.it](http://www.secaronline.it)