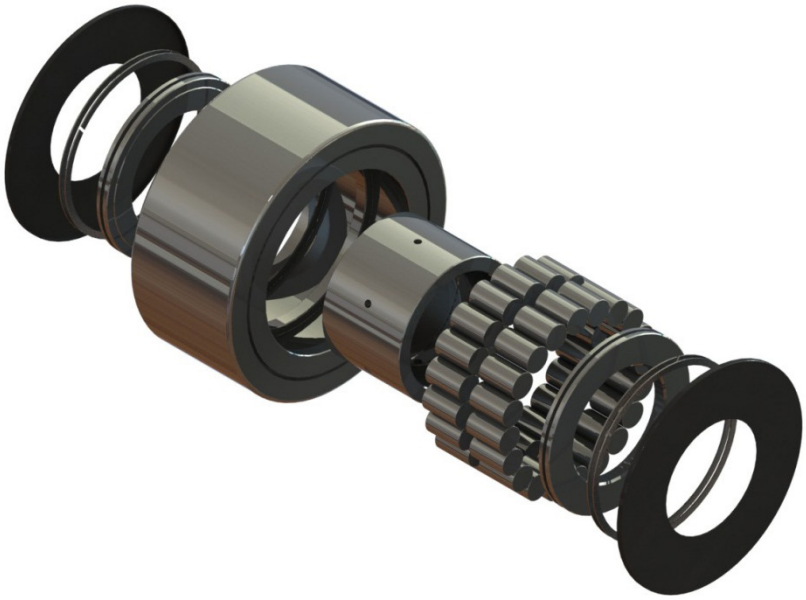
TECHNICAL SPECIFICATIONS FOR SINGLE CYLINDRICAL BACK-UP ROLLERS



1 – Outer ring
2 – Inner ring
3 – Loose rib
4 – Cylindrical roller
5 – Seal ring
6 – Protection ring
7 – Protection

Single cylindrical back-up rollers for metal flattening machines and straightening plates have the following characteristics:

The outer and inner ring is supplied in 100Cr6 core hardened steel (UNI 3097) that can reach hardness 60-2 HRC.

Once seen the condition of coupling with working cylinders, the degree of hardness can be reduced to 53 HRc for those bearings for the flattening of very thin sheets.

The profile of the outer ring is usually cambered in order to optimize the distribution of the applied load.
For the outer rings of large thickness is used 100CrMo7.3 (UNI 3097) core hardened steel. On request are performed particular hardening.

Inner ring presents holes for internal periodic lubrication.
The full-complement of cylindrical rollers ensures the highest load capacity possible.

The seal system can be either with screens formed by metal rings or through the radial seal with steel sliding parts in NBR or FKM.

Precision class generally is P0 (DIN 620); on request the rollers can be manufactured with precision class P5 or P6.

On request, they can be manufactured in stainless steel.

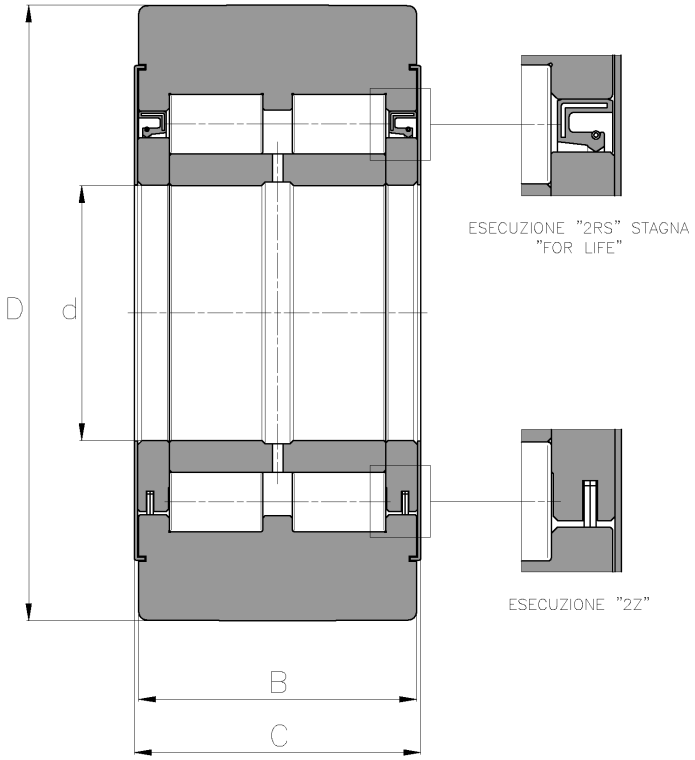
SINGLE CYLINDRICAL BACK-UP ROLLERS - EXECUTIONS

DISTITEC

Single cylindrical back-up rollers are built with two or more rings at full complement of cylindrical rollers bearings, separated by distance ring integrated in outer ring.

This back up roller is particularly suitable to work with high radial loads; thanks to its toughness, it maintains all its primary technical characteristics for a long flattening lifetime.

These bearings provide good axial load capacity suitable to counteract the axial thrusts that occur, inevitably, in the above mentioned applications

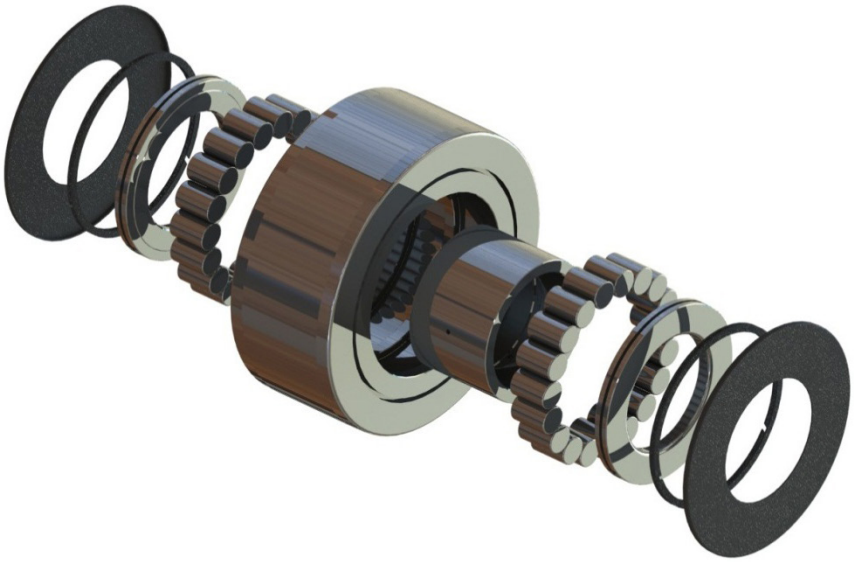


	d	D	C	B	C	C0	V max.
		[mm]			[kN]		[giri/min]
DSTR 2048	20	48	37	36	36	53	1.935
DSTR 2552	25	52	42	40	38	60	1.730
DSTR 3072	30	72	42	40	73	105	1.280
DSTR 3080	30	80	48	44	85	141	1.150
DSTR 3580	35	80	54	50	103	163	1.150
DSTR 4080	40	80	33	31	39,5	32	3.570
DSTR 4090	40	90	35	32	57	62	850
DSTR 45100	45	100	40	37	85,5	76	900
DSTR 50120	50	120	58	55	161	245	800
DSTR 55140	55	140	60	56	180,5	209	500
DSTR 60135	60	135	44	42	155	150	600
DSTR 60160	60	160	104	100	476	806	610
DSTR 65130	65	130	44	42	150	143	660
DSTR 65150	65	150	55	51	220	324	620
DSTR 70150	70	150	63	61	223,5	259	570
DSTR 75210	75	210	148	146	765	1.433	490
DSTR 80200	80	200	92	88	482	870	375
DSTR 90180	90	180	102	98	493	1.107	450
DSTR 100210	100	210	101	100	560	978	420
DSTR 120200	120	200	57	55	311	632	390
DSTR 120250	120	250	94	90	611	1.112	370
DSTR 120280	120	280	124	121	892	1.665	350

C = Dynamic radial load
C0 = Static radial load

For any further request or technical information, please consult our technical department

TECHNICAL SPECIFICATIONS
FOR FULL COMPLEMENT CYLINDRICAL ROLLER BEARINGS



1 – Outer ring
2 – Inner ring
3 – Support thrust ring
4 – Cylindrical roller
5 – FEY seal ring
6 – Steel shield

Generally the cylindrical rollers bearings have the following technical characteristics:
The outer ring is usually manufactured in case-hardening steel 16NiCr4/ 20CrMo (UNI 7846) steel for low capacities and 18NiCrMo5 (UNI 7846) for high capacities.
These steels can reach hardness degree of 60-2 HRc.

The profile of the outer ring is available in three different executions:

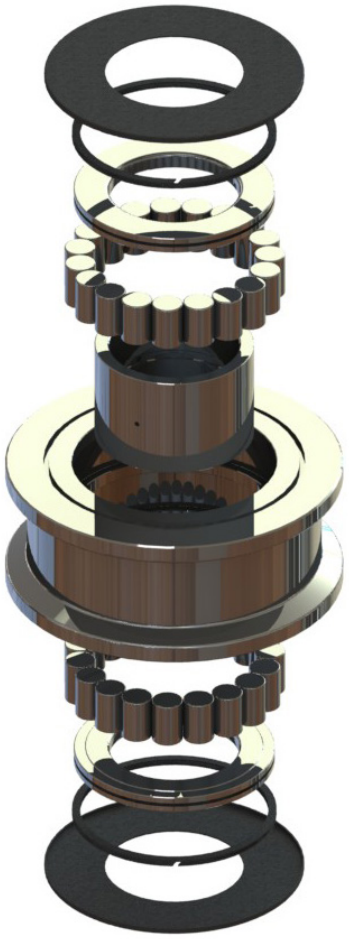
1) Ring with outer surface without borders
2) Ring with one guide border on the outer surface
3) Ring with double guide border on the outer surface

The inner ring is manufactured in hardening and tempering steel 100Cr6 (UNI 3097) and can reaches hardness degree of 60+2 HRc.

Grease internal lubrication is made through a groove and holes in the inner ring surface.

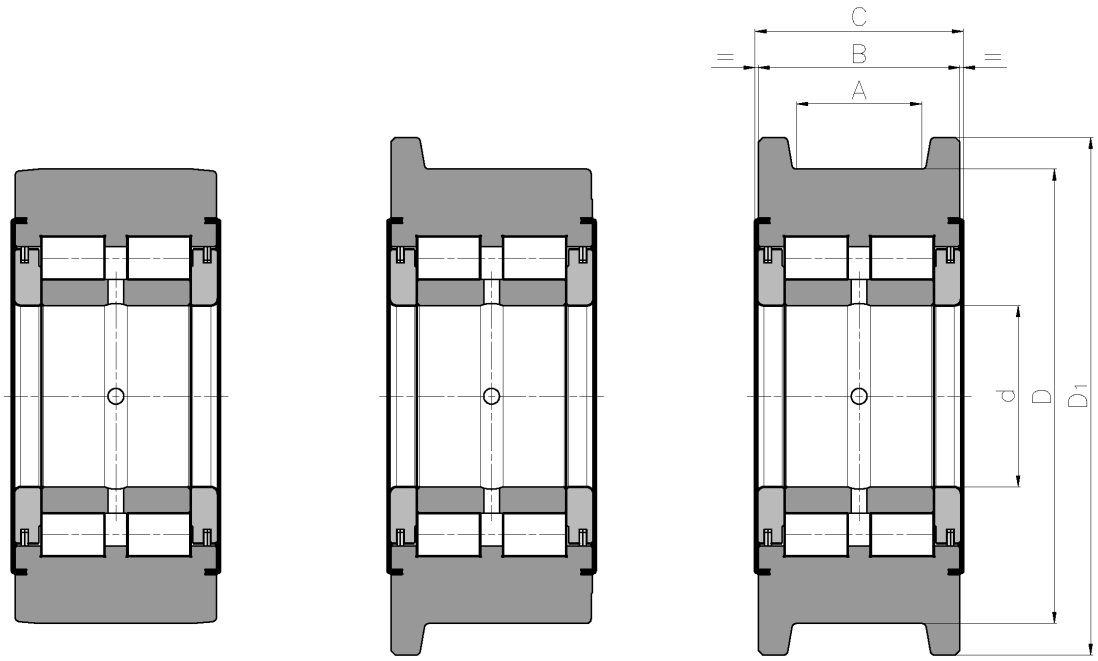
The protection system can be made with steel shields or with elastic layered steel rings.

Considering the application of the cylindrical rollers, we can supply execution with radial clearance C3 or C4 and stabilizing heat treatment up to 250°, on request



DISTITEC Full-complement cylindrical rollers for conveyor belts, are manufactured with a different profile of the outer ring.
They are mainly used as support bearings in conveyor belts for coils.

The Execution with cylindrical rollers is generally used with high radial loads, as this can absorb distortions and dilatations.
The entire borders obtained in the outer ring allow the absorption of average axial thrusts.



	d	D	D1	A	B	C	C	C0	V. max	Weight
	[mm]						[kN]		[rpm]	[Kg]
DSTRC 4200	50	125	140	40	60	65	130	135	1.100	4,85
DSTRC 4201	60	150	170	50	70	75	195	215	900	8,2
DSTRC 4202	70	165	190	55	75	80	230	245	700	10,6
DSTRC 4203	80	185	210	60	80	85	285	320	550	14
DSTRC 4204	100	215	250	65	85	90	355	410	400	19,4
DSTRC 4205	120	255	290	70	95	100	470	580	300	30,3

C = Radial dynamic load rating
C0 = Radial static load rating

All these bearings have the possibility of internal lubrication
For the right execution add suffix “A” or “B” or “C” to the standard code

For any further request or technical information, please consult our technical department