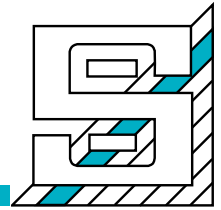
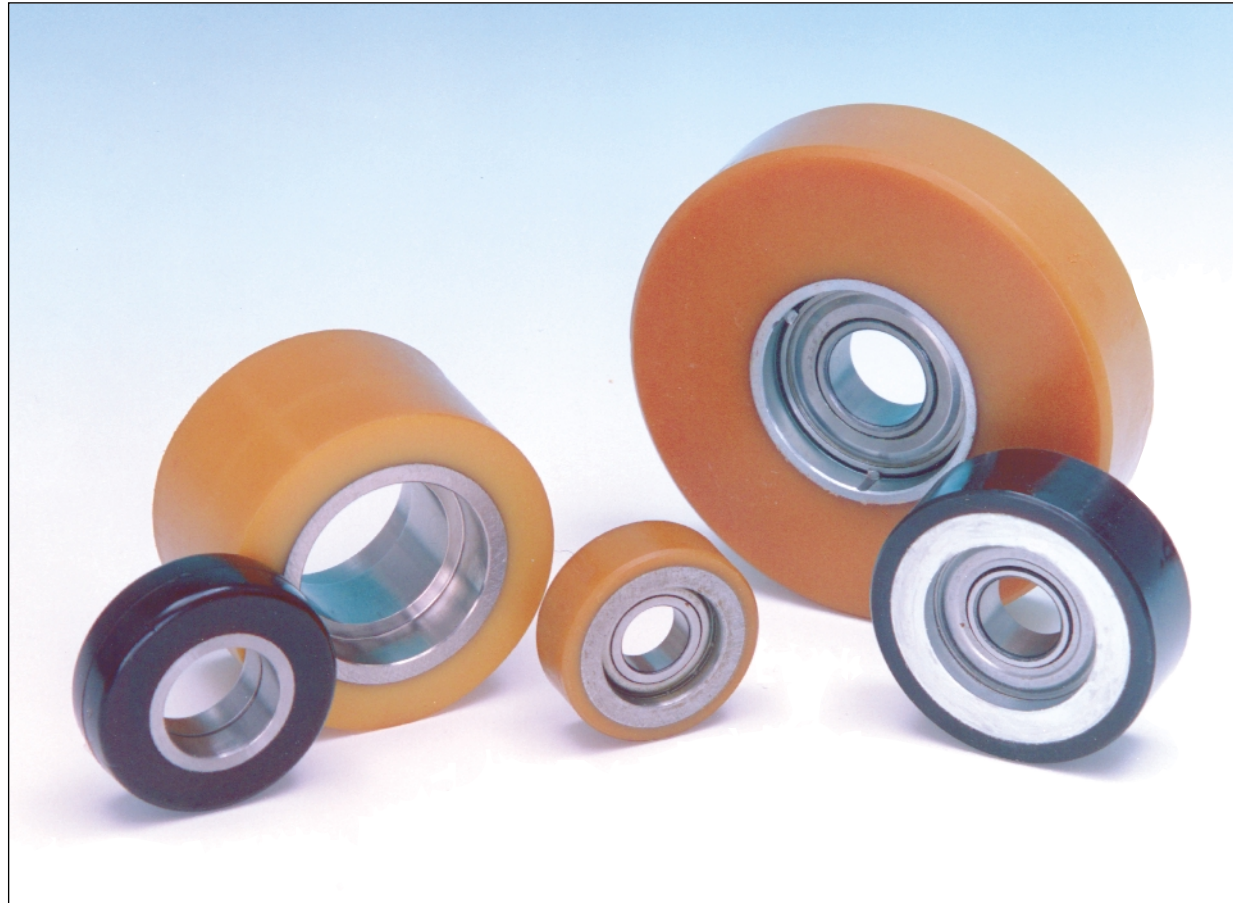


Wheels, Castors and Rollers

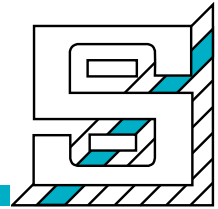


Standard range

Calculation



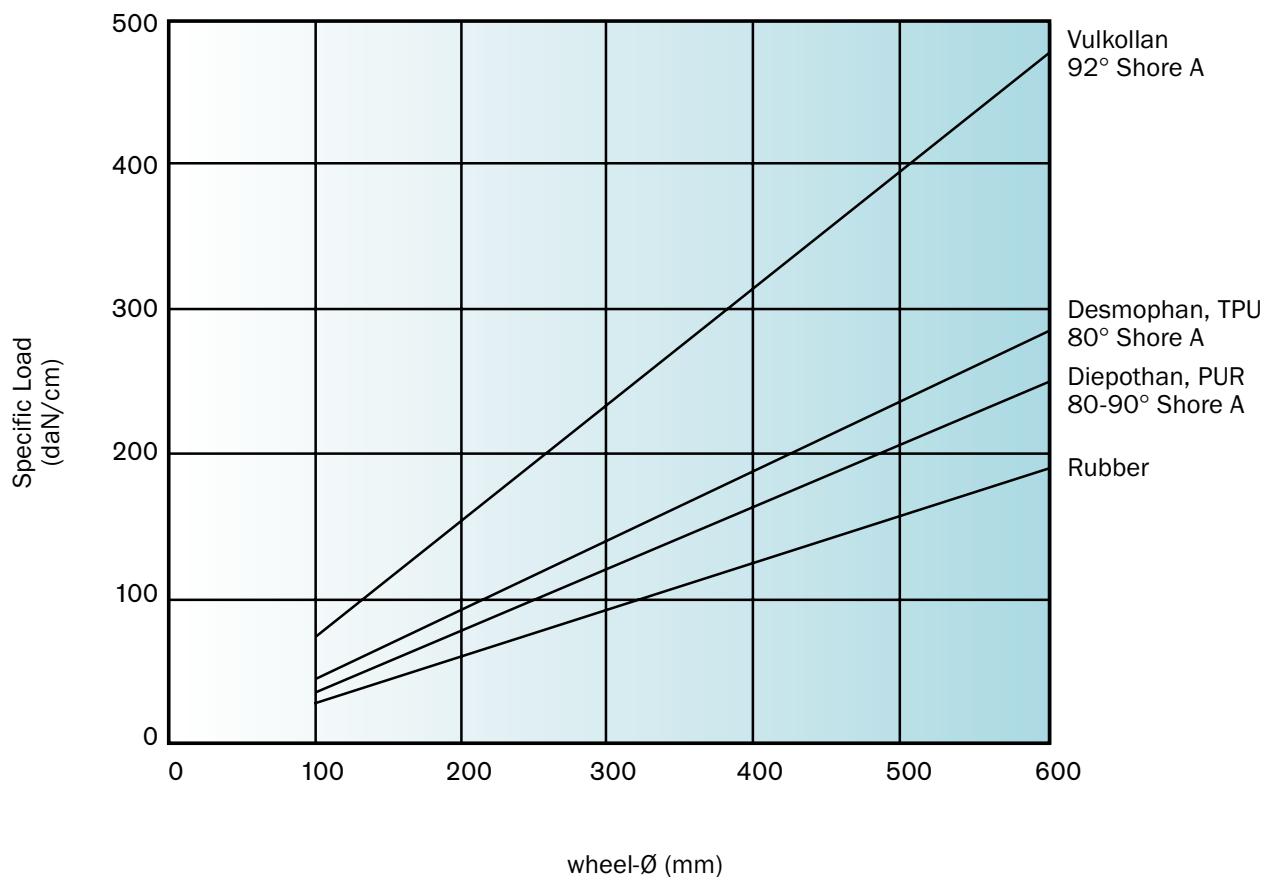
P+S Polyurethan-Elastomere



Calculation

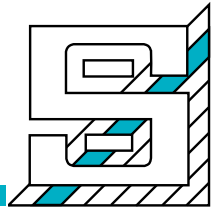
1. Permissible Load

At present there is no failsafe method of calculating the permissible loads for rollers. The following data has been empirically established during experiments and has proven to be a reliable method of providing rough estimates. The measurements were taken using Shore hardness typically found in practice. The specific loads are maximum loads per cm width of the wheel.



NB: The specific load must be lower for guide castors. The values in the diagram are to be multiplied by a factor of 0,625.

velocity $V_{max} = 1,7 \text{ m/s} = 6,0 \text{ km/h}$



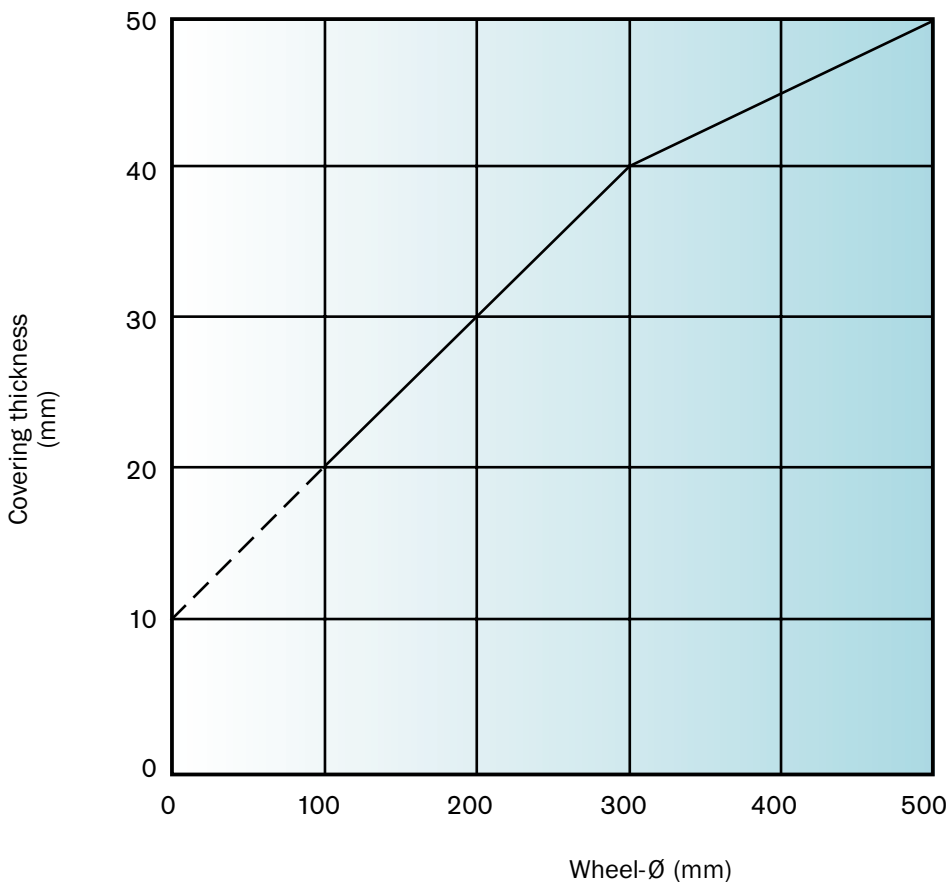
Calculation

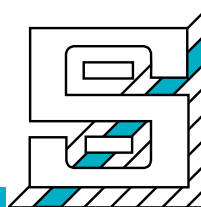
2. Choosing the correct covering thickness

In order to make full use of the coating material, the correct covering thickness must be chosen. In comparison with rubber coverings, a smaller covering width of polyurethane-elastomere may be used at higher loads.

The covering must be wide enough to ensure that stones or other small objects don't pierce covering and damage the contact area between the metal core and the coating. The following values have been established as a practical compromise.

For transport and conveyor belt systems with smooth running surfaces, the coating thickness can be reduced, but may be no less than 5 mm. It should however also be noted that greater coating thickness result in greater dampening properties and reduce noise.





Calculation

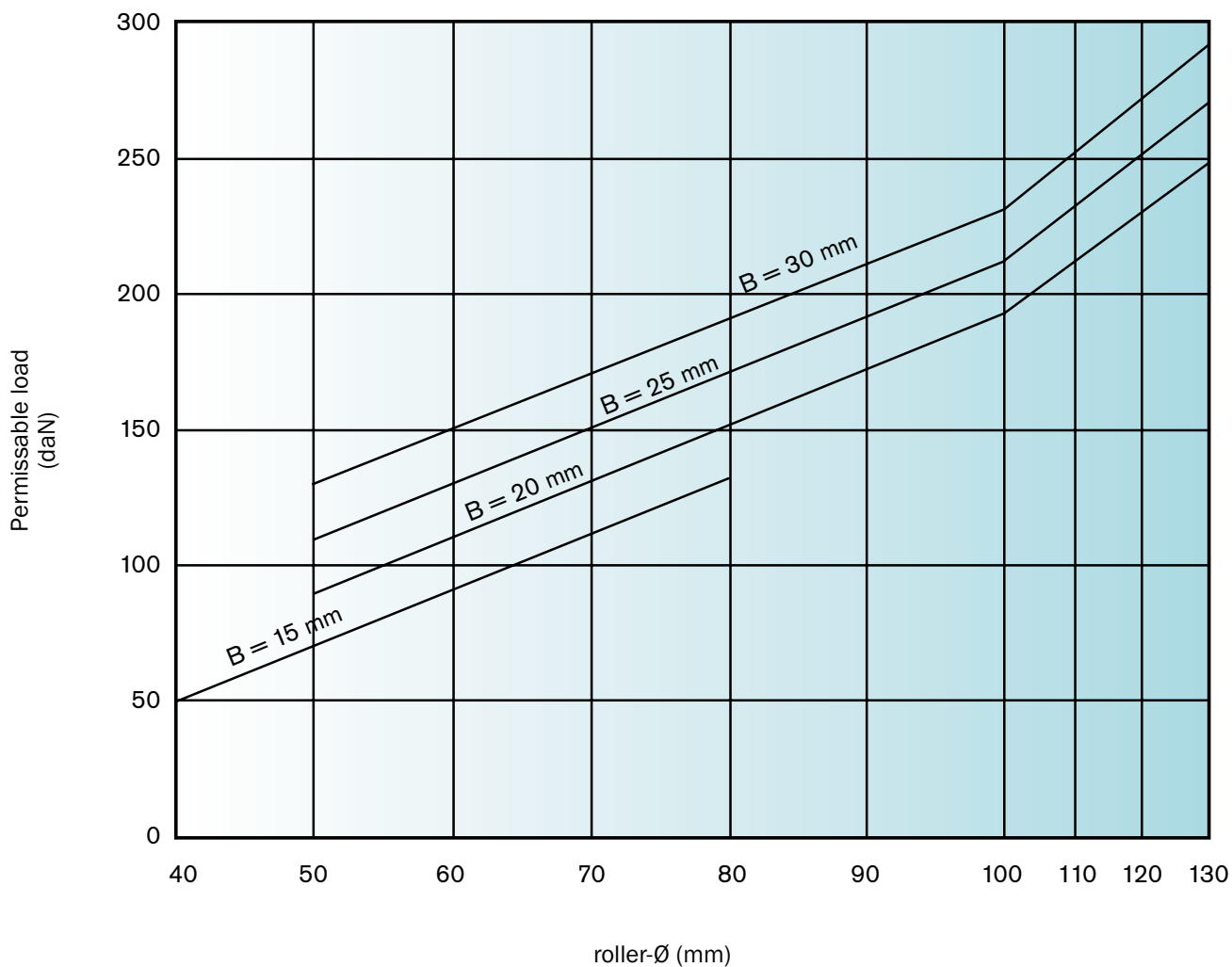
3. Maximum loads for rollers with a Vulkollan®-covering

Coating thickness: Min. 5 mm, max. 10 mm

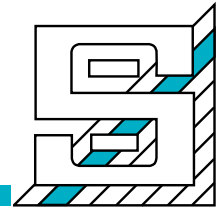
Castor-Ø up to 130 mm

$V_{max.} = 1,0 \text{ m/s}$

B = Castor width

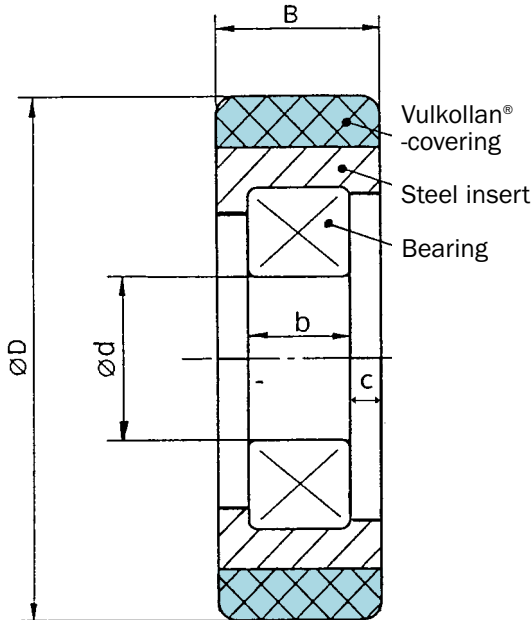


Wheels, Castors and Rollers



Standard range

Wheels of steelring, ballbearing and Vulkollan® - tyre



Important properties:

- Low sliding friction
- High mechanical strength of the material
- Very quiet operation
- High load carrying capacity
- Excellent abrasion and wear resistance
- Good resistance to oil, grease and petrol

Applications:

- Rollers for conveyor units
- Guide rollers for lifts and other applications
- Castors for sliding guard doors
- Rollers and castors for pallet trucks

No.	ø D (mm)	ø d (mm)	B (mm)	b (mm)	c (mm)	Bearing-size	max. loads (dN) at V = 1,0 m/s	Item-number
1	40	10	15	8	3,5	6000-ZZ	50	701 700 590
2	50	10	15	8	3,5	6000-ZZ	70	701 701 590
3	50	17	18	10	4	6003-ZZ	85	701 702 590
4	60	17	18	10	4	6003-ZZ	110	701 703 590
5	60	20	20	12	4	6004-ZZ	120	701 704 590
6	70	20	16	12	2	6004-ZZ	110	701 705 590
7	70	20	20	12	4	6004-ZZ	130	701 706 590
8	70	25	25	15	5	6205-ZZ	150	701 707 590
9	80	25	21	15	3,15	6205-ZZ	150	701 708 590
10	80	25	25	15	5	6205-ZZ	170	701 709 590
11	90	25	21	15	3,15	6205-ZZ	170	701 710 590
12	90	25	25	15	5	6205-ZZ	190	701 711 590
13	100	25	21	15	3,15	6205-ZZ	190	701 712 590
14	100	25	25	15	5	6205-ZZ	210	701 713 590
15	100	25	30	15	7,5	6205-ZZ	250	702 567 590
16	100	25	40	15	12,5	6205-ZZ	340	702 568 590
17	110	25	20	12	4	6204-ZZ	210	701 714 590
18	110	25	21	15	3,15	6205-ZZ	210	701 715 590
19	110	25	25	15	5	6205-ZZ	230	701 716 590
20	110	25	30	15	7,5	6205-ZZ	250	701 717 590
21	120	25	21	15	3,15	6205-ZZ	230	701 718 590
22	120	25	25	15	5	6205-ZZ	250	701 719 590
23	120	25	30	15	7,5	6205-ZZ	270	701 720 590
24	125	25	21	15	3,15	6205-ZZ	240	701 721 590
25	125	25	25	15	5	6205-ZZ	260	701 722 590
26	125	25	30	15	7,5	6205-ZZ	280	701 723 590
27	125	25	40	15	12,5	6205-ZZ	370	702 570 590
28	150	25	40	15	12,5	6205-ZZ	440	701 740 590
29	180	25	30	15	7,5	6205-ZZ	420	702 602 590