

# Star Discs

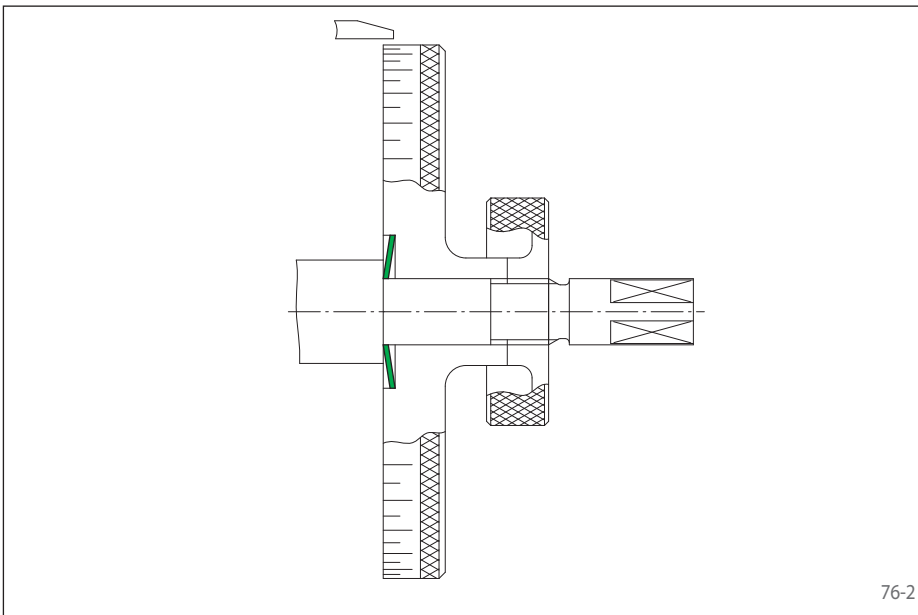
for frequent clamping and loosening  
short axial width



76-1

## Features

- For frequent clamping and release
- Short axial width
- Adjustable to the required torque by multiple arrangements in the form of disc packs
- Low actuating force required, thus ideal for manual actuation



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## Application example

Backlash free attachment of a graduated dial in a feed unit with a Star Disc. After release of the right knurled nut, the dial can be adjusted in circumferential direction.

## Transmissible torques

The transmissible torques or axial forces listed on the following page are subject to the following information about disc pack, tolerances, surface characteristics and material requirements. Please contact us in the case of deviations.

### Disc Pack

The torque  $M$  stated in the table applies for one star disc. In case of multiple arrangements of star discs in disc packs of up to 16 star discs, the following applies:

Torque	$M_n = n \cdot M$
Preload force	$E_n = n \cdot E$
Load-bearing axial width	$L_1 \approx n \cdot s$

### Tolerances

- h9 for shaft diameter  $d$
- H9 for hub bore  $D$

### Surfaces

Average surface roughness at the contact surfaces between the shaft and the hub bore:  
 $R_z = 10 \dots 25 \mu\text{m}$ .

### Materials

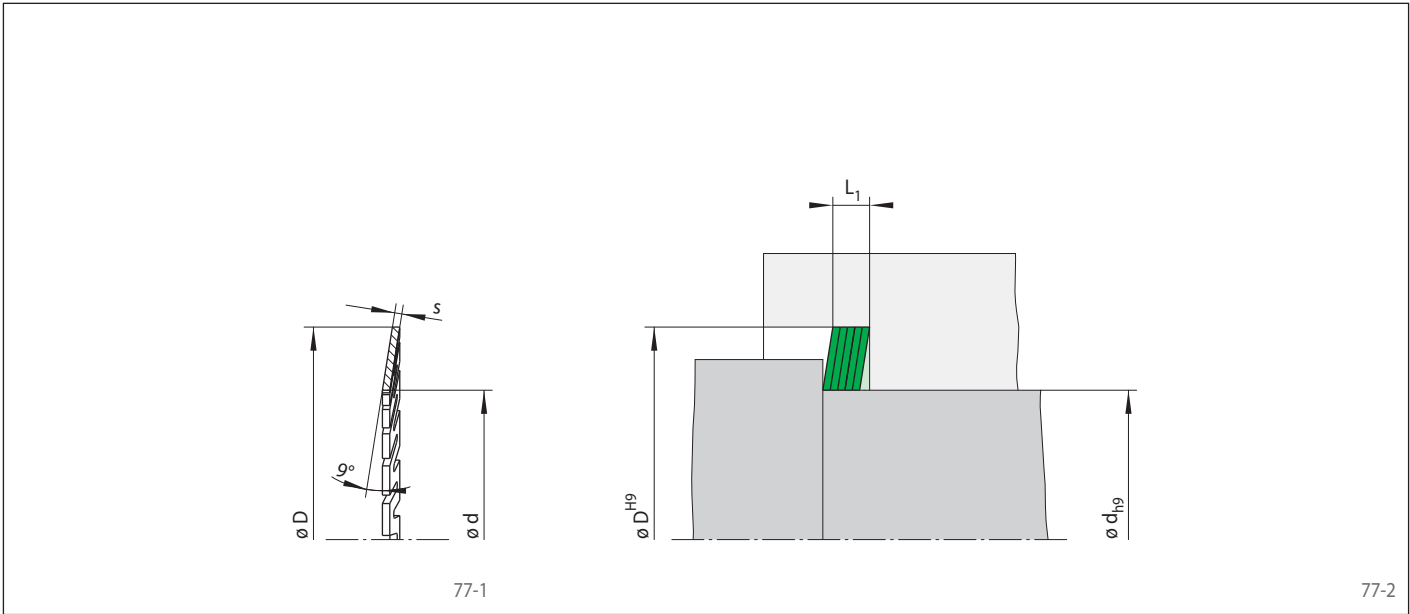
The following apply to the shaft and the hub:

- Yield strength  $R_e \geq 300 \text{ N/mm}^2$
- E-module  $\geq 170 \text{ kN/mm}^2$

## Example for ordering

100 Star Discs for shaft diameter  $d = 20 \text{ mm}$ :

- 100 pcs. A 20 SS 37  
Article number 1032-037004-000000



Dimensions			Technical Data					Type	Article number
d mm	Size D mm	s mm	Transmissible torque M Nm	Shaft P <sub>W</sub> N/mm <sup>2</sup>	Hub P <sub>N</sub> N/mm <sup>2</sup>	Preload force E N	Weight kg/100 pieces		
4	14	0,50	0,16	100	29	140	0,3	A 4 SS 14	1032-014002-000000
5	14	0,50	0,29	116	41	210	0,3	A 5 SS 14	1032-014003-000000
6	18	0,50	0,34	94	31	180	0,5	A 6 SS 18	1032-018001-000000
8	18	0,50	0,72	113	50	310	0,5	A 8 SS 18	1032-018003-000000
10	22	0,60	1,26	105	48	430	0,9	A 10 SS 22	1032-022002-000000
11	22	0,60	1,53	105	53	500	0,8	A 11 SS 22	1032-022003-000000
12	27	0,65	1,95	104	46	520	1,4	A 12 SS 27	1032-027001-000000
14	27	0,65	2,80	110	57	680	1,3	A 14 SS 27	1032-027003-000000
15	27	0,65	3,30	113	63	770	1,2	A 15 SS 27	1032-027004-000000
16	37	0,90	5,10	111	48	1030	3,7	A 16 SS 37	1032-037001-000000
17	37	0,90	5,90	113	52	1150	3,6	A 17 SS 37	1032-037002-000000
18	37	0,90	6,80	117	57	1270	3,5	A 18 SS 37	1032-037003-000000
20	37	0,90	8,70	121	65	1540	3,2	A 20 SS 37	1032-037004-000000
22	42	0,90	9,90	114	60	1490	4,3	A 22 SS 42	1032-042001-000000
24	42	0,90	12,2	118	67	1760	4,0	A 24 SS 42	1032-042002-000000
25	42	0,90	13,5	120	71	1900	3,8	A 25 SS 42	1032-042003-000000
28	52	1,15	21,0	116	63	2550	8,2	A 28 SS 52	1032-052001-000000
30	52	1,15	25,0	121	70	2900	7,7	A 30 SS 52	1032-052002-000000
35	52	1,15	33,5	119	80	3750	6,3	A 35 SS 52	1032-052004-000000
38	62	1,15	40,5	122	75	3600	10,2	A 38 SS 62	1032-062001-000000
40	62	1,15	45,5	124	80	4000	9,5	A 40 SS 62	1032-062002-000000
42	62	1,15	51,0	126	85	4450	8,8	A 42 SS 62	1032-062003-000000
45	62	1,15	60,0	129	94	5200	7,7	A 45 SS 62	1032-062004-000000
48	70	1,15	68,0	128	88	5000	11,0	A 48 SS 70	1032-070001-000000
50	70	1,15	75,0	130	93	5500	10,2	A 50 SS 70	1032-070002-000000
55	70	1,15	93,0	134	105	7000	8,0	A 55 SS 70	1032-070003-000000
60	80	1,15	112	135	101	6800	11,9	A 080 060 IV	1032-080001-000000
65	90	1,15	131	135	97	6700	16,5	A 090 065 IV	1032-090001-000000
70	90	1,15	154	137	106	8000	13,6	A 090 070 IV	1032-090002-000000
75	100	1,15	176	136	102	7800	18,6	A 100 075 IV	1032-100001-000000
80	100	1,15	205	139	111	9300	15,3	A 100 080 IV	1032-100002-000000
85	110	1,15	230	138	107	9000	20,7	A 110 085 IV	1032-110001-000000
100	120	1,15	325	141	118	11900	18,7	A 120 100 IV	1032-120001-000000

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Any questions? Please contact us.

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