



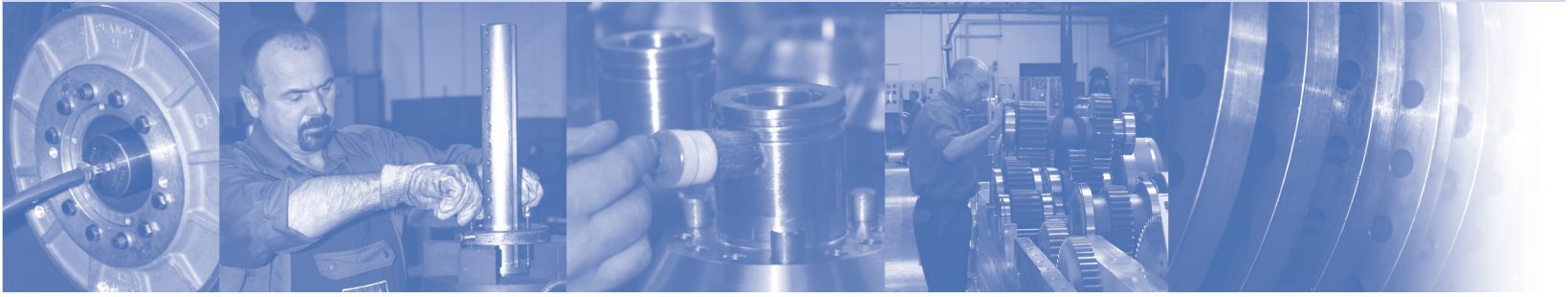
DRIVE TECHNOLOGY

DESCH DIN 502, 503, 504, 505 L, 506



- D** Fettgeschmierte Gleitlager
- GB** Greased friction bearings
- F** Palier à glissement lubrifié à la graisse
- I** Cuscinetti radenti lubrificati a grasso
- E** Cojinetes de deslizamiento engrasados

LG 07



GB Greased friction bearings

Bearing types

DIN 502, 503

DIN 504

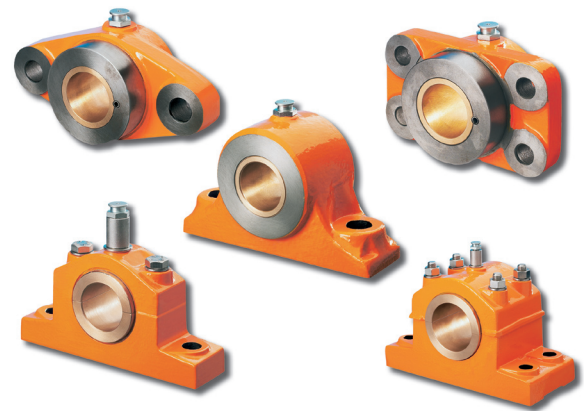
DIN 505 L, 506

Greased friction bearings

Friction bearings according to DIN 502 to 506 are suitable for many different areas of use, such as the timber and steel industry, chemical plants and the food industry. Depending on the operating conditions they can be used at sliding speeds of up to approx. 1.5 m/s. For use on cutting head excavators and for ships' engines we supply guide bearings up to a diameter of 630mm. Further details can be obtained on request. The housings are made of high-grade grey cast iron EN-GJL (GG). The structural design guarantees high durability. The bearings DIN 502 to DIN 504 can also be used if required with bearing shells of bronze with grease lubricant (maintenance-free up to 0.6 m/s). For cap bearings to DIN 506 bearing shells of grey cast iron EN-GJL (GG) can be supplied for use at high temperatures. The bearing bores are supplied in the case of friction bearings with bearing shells or bushes with a D10 tolerance. If flange bearings and eye-type bearings without bush are used, the bearing bore has a D7 tolerance.

Lubrication

Lubricant greases at bearing temperatures up to approx. 110°C. Solid lubricants up to approx. 450°C. Oil-bearing self-lubricating and oil-free friction materials up to 80°C. Lubricant feed through lubricating nipple and manual grease press, Stauffer grease box, spring bushing, central lubrication system. The lubricant is pressed through a lubricating groove into the unladen zone of the bearing gap. The lubricating groove is normally located in the top of the bearing shell. The direction of load must always be given when ordering if the direction of load deviates more than 40° from the vertical to the bearing base. Under normal conditions the grease consumption is approximately 20 g/m²h. The whole bearing running surface must be used here as the bearing surface.





DRIVE TECHNOLOGY

Allowable compaction pressures

The level of maximum allowable compaction pressures depends on many conditions, such as

- matching of sliding materials
- roughness of the friction surfaces
- surface hardness of the shafts
- dimension of bearing play
- quality of the alignment of the bearing to the shaft
- direction of load
- lubricating state
- bearing temperature
- expected service life

The guide values for specific compaction pressures in the table below should not be exceeded in the design of friction bearings under normal operating conditions. Normal operating conditions should be taken to be the following:

- shaft material, e.g. St 50, St 60, C 45, 42 CrMo4
- shaft diameter in the tolerance zone h9
- friction surfaces of the shafts $\leq R_z 5\mu\text{m}$
- good supply of lubricant

The values apply in the case of cap bearings for loads vertical $\pm 40^\circ$ to the bearing base. Under particularly favourable operating conditions higher loads are possible: e.g. hardened and ground running surface of the shaft, very good lubricant supply and careful alignment. max. sliding speed $v = 1.5 \text{ m/s}$ frictional power:

$$P_R = F \cdot v \cdot \mu \text{ (W)}$$

F = bearing load (N)

v = sliding speed (m/s)

μ = coefficient of friction

Guide values for allowable loads

Articles on stock DIN	Red bronze (RG 7) G-CuSn 7 ZnPb		Cast bronze G-CuSn 12	
	p ($\frac{\text{N}}{\text{cm}^2}$)	p · v ($\frac{\text{N}}{\text{cm}^2}$) · ($\frac{\text{m}}{\text{s}}$)	p ($\frac{\text{N}}{\text{cm}^2}$)	p · v ($\frac{\text{N}}{\text{cm}^2}$) · ($\frac{\text{m}}{\text{s}}$)
502	350	180	450	260
503	350	180	450	260
504	350	180	450	260
505 L	450	250	-	-
506	250	120	350	210

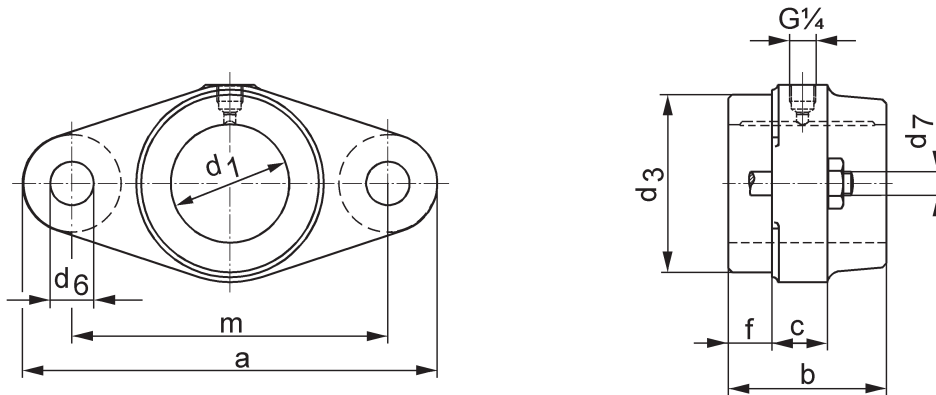
Flanschlager DIN 502

GB Flange bearing DIN 502

F Paliers à brides DIN 502

I Cuscinetti flangiati DIN 502

E Cojinete de brida DIN 502



Form A	Form B									Gewicht Weight Poids Peso Preso
mit Buchse ¹⁾ with bush ¹⁾ avec douille ¹⁾ con bussola ¹⁾ con manguito ¹⁾	ohne Buchse ¹⁾ without bush ¹⁾ exempt douille ¹⁾ senza bussola ¹⁾ sin manguito ¹⁾	a	b	c	d ₃ (h9)	d ₆	d ₇	f	m	
d ₁ (D10)	d1 (D7)	mm	mm	mm	mm	mm		mm	mm	kg
	25	135	60	20	50	14	M 12	20	100	1,2
	30	135	60	20	50	14	M 12	20	100	1,2
25	35	155	60	20	65	14	M 12	20	120	1,4
30	40	155	60	20	65	14	M 12	20	120	1,4
35	45	180	70	25	80	18	M 16	20	140	3
40	50	180	70	25	80	18	M 16	20	140	3
45	55	210	80	30	90	22	M 20	20	160	4,2
50	60	210	80	30	90	22	M 20	20	160	4,2
55	65	240	90	30	110	22	M 20	25	190	5,8
60	70	240	90	30	110	22	M 20	25	190	5,8
70	70	275	100	35	130	26	M 24	25	220	9
70	80	275	100	35	130	26	M 24	25	220	9

1) Rotguss-Buchse Rg7
 1) Red bronze bush Rg7
 1) Douille bronze Rg7
 1) Bussola in bronzo per getti Rg7
 1) Manguito de fundición de cobre y bronco Rg7

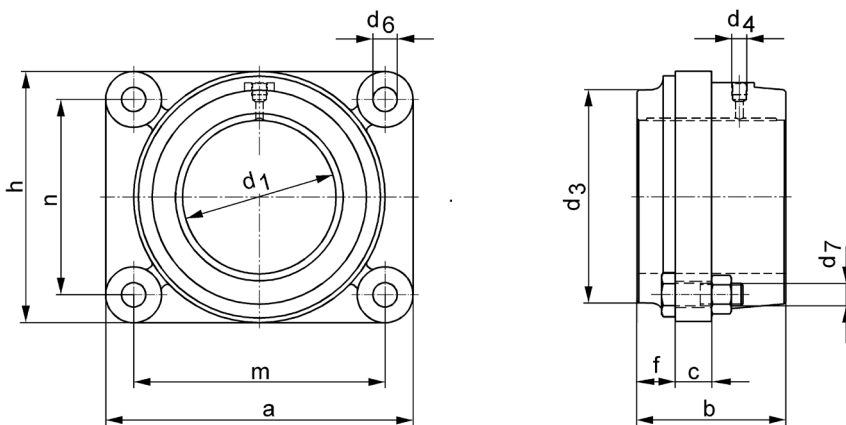
Flanschlager DIN 503

GB Flange bearing DIN 503

F Paliers à brides DIN 503

I Cuscinetti flangiati DIN 503

E Cojinete de brida DIN 503



Form A	Form B	a	b	c	d ₃ (h9)	d ₄	d ₆	d ₇	f	h	m	n	Gewicht Weight Poids Peso Preso
mit Buchse ¹⁾ with bush ¹⁾ avec douille ¹⁾ con bussolo ¹⁾ con manguito ¹⁾	ohne Buchse ¹⁾ without bush ¹⁾ exempt douille ¹⁾ senza bussolo ¹⁾ sin manguito ¹⁾												kg
d ₁ (D10)	d1 (D7)												
mm	mm	mm	mm	mm	mm		mm		mm	mm	mm	mm	
35	45	145	70	20	80	G 1/4"	14	M 12	20	85	110	50	3,1
40	50	145	70	20	80		18	M 16	20	105	130	60	5,5
45	60	175	80	25	100		18	M 16	25	125	150	80	8,1
50	70	195	90	25	120		22	M 20	25	150	170	100	12,2
55	80	220	100	30	140		22	M 20	30	170	190	120	14,9
60	90	240	100	30	160		22	M 20	30	190	210	140	26,6
70	100	260	120	30	180		22	M 24	40	215	230	160	32
80		285	120	35	200	G 3/8"	26	M 24	40	215	230	160	32

1) Rotguss-Buchse Rg7
 1) Red bronze bush Rg7
 1) Douille bronze Rg7
 1) Bussola in bronzo per getti Rg7
 1) Manguito de fundición de cobre y bronce Rg7

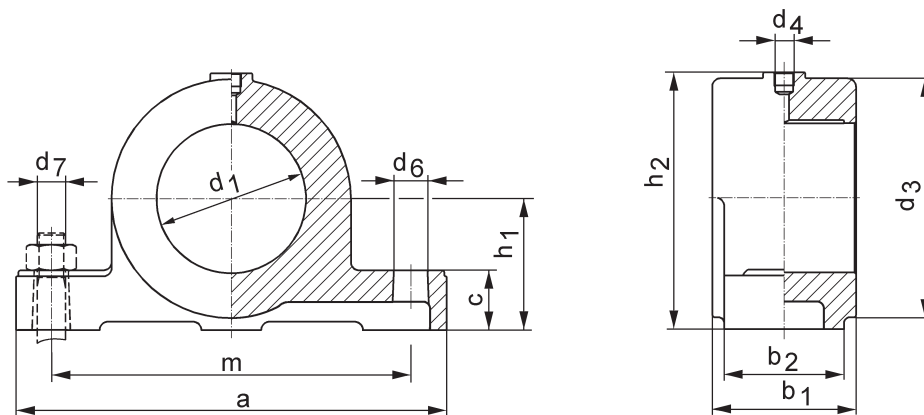
Augenlager DIN 504

GB Eye-type bearing DIN 504

F Paliers fermés DIN 504

I Cuscinetti ritti DIN 504

E Cojinete cerrado DIN 504

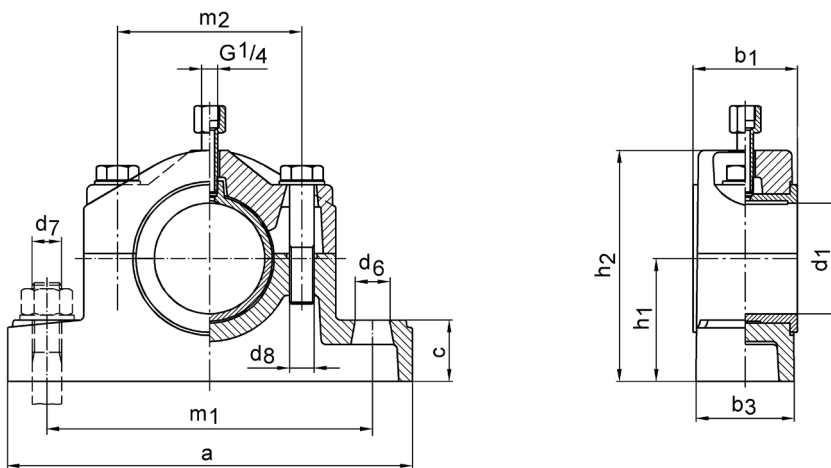


Form A	Form B	a	b ₁	b ₂	c	d ₃	d ₄	d ₆	d ₇	h ₁	h ₂	m	Gewicht Weight Poids Peso Preso
mit Buchse ¹⁾ with bush ¹⁾ avec douille ¹⁾ con bussolo ¹⁾ con manguito ¹⁾	ohne Buchse ¹⁾ without bush ¹⁾ exempt douille ¹⁾ senza bussolo ¹⁾ sin manguito ¹⁾												kg
d ₁ (D 10)	d ₁ (D 7)	mm	mm	mm	mm	mm		mm		mm	mm	mm	
	20	110	50	35	18	45	G ¼"	12	M 10	30	56	75	1,3
	25	140	60	40	25	60		15	M 12	40	75	100	2
	30	160	60	45	25	80		15	M 12	50	95	120	3
25	35	190	70	50	30	90		19	M 16	60	110	140	4,2
30	40	220	80	55	35	100		24	M 20	70	125	160	5,5
35	45	240	90	60	35	120		24	M 20	80	145	180	8,3
40	50	270	100	70	45	140		28	M 24	90	165	210	11,6
45	55	300	100	80	45	160		28	M 24	100	185	240	17
50	60	330	120	90	45	180		28	M 24	100	195	270	22
60	70	360	120	100	50	200		G ⅜"	28	M 24	110	215	300

1) Rotguss-Buchse Rg7
 1) Red bronze bush Rg7
 1) Douille bronze Rg7
 1) Bussola in bronzo per getti Rg7
 1) Manguito de fundición de cobre y bronce Rg7

Deckellager DIN 505 L

- GB** Cap bearings DIN 505 L
- F** Palier á chapeau DIN 505 L
- I** Cuscinetti ritti DIN 505 L
- E** Cojinete partido DIN 505 L

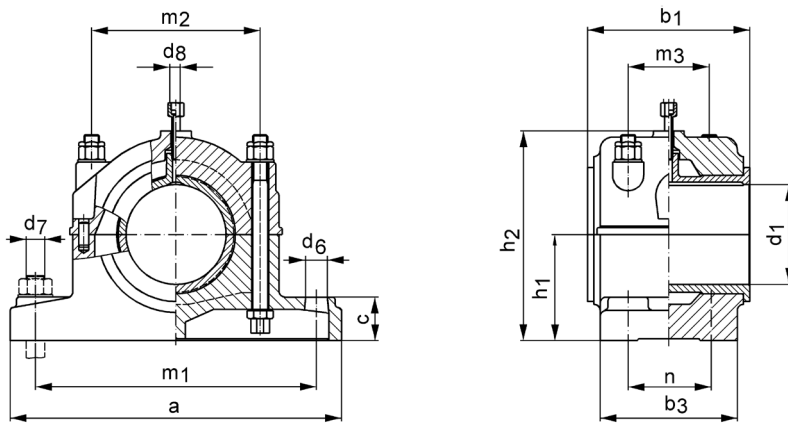


d_1 (D 10)	a	b_1	b_3	c	d_6	d_7	d_8	h_1	h_2	m_1	m_2	Gewicht Weight Poids Peso Preso
mm	mm	mm	mm	mm	mm			mm	mm	mm	mm	kg
25												
30	165	45	40	22	15	M 12	M 10	40	78	125	65	1,6
35												
40	180	50	45	25	15	M 12	M 10	50	95	140	75	3
45												
50	210	55	50	30	19	M 16	M 12	60	114	160	90	3
55												
60	225	60	55	35	19	M 16	M 12	70	132	175	100	4
70	270	65	60	40	24	M 20	M 16	80	154	210	120	7,1
80	290	75	70	45	24	M 20	M 16	90	170	230	130	10,2
90	330	85	80	50	28	M 24	M 20	100	188	265	150	13,4
100												
110	355	95	90	55	28	M 24	M 20	110	210	290	170	19
125	420	110	100	60	35	M 30	M 24	130	250	340	200	29,2
140												
150	440	125	120	65	35	M 30	M 24	150	280	360	220	39

mit Lagerschalen aus Rotguss: Rg7
 with bearing shells of red bronze: Rg7
 avec coquilles de palier en laiton rouge : Rg7
 con bronzine in bronzo per getti: Rg7
 con semi-cojinetes de fundición de cobre y bronce: Rg7

Deckellager DIN 506

- GB** Cap bearings DIN 506
- F** Palier á chapeau DIN 506
- I** Cuscinetti ritti DIN 506
- E** Cojinete partido DIN 506

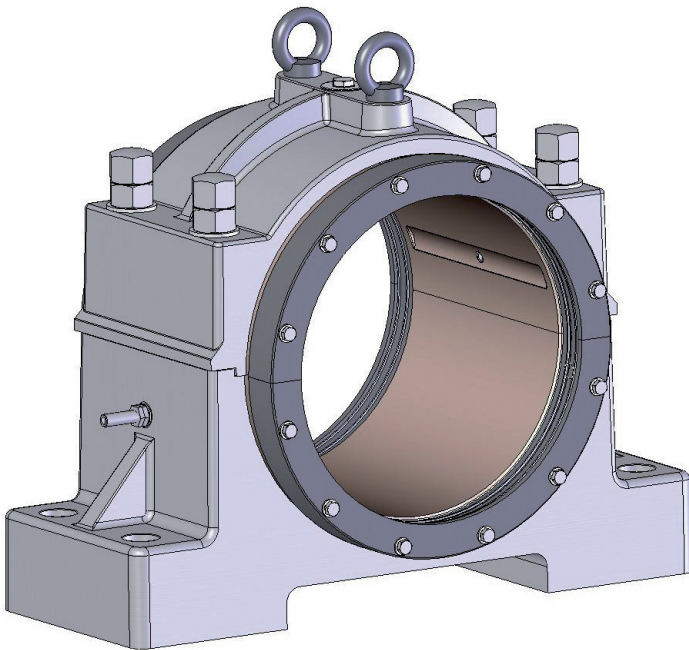


d_1 (D 10)	a	b_1	b_3	c	d_6	d_7	d_8	h_1	h_2	m_1	m_2	m_3	n	Gewicht Weight Poids Peso Preso kg
mm	mm	mm	mm	mm	mm			mm	mm	mm	mm	mm	mm	
80	300	140	130	50	24	M 20	G ¼"	100	185	240	130	65	70	21
90	330	160	140	50	24	M 20		100	190	270	145	80	80	26
100 110	360	180	160	55	28	M 24		110	210	300	170	80	90	36
125 130	400	200	170	60	28	M 24	G ⅜"	120	240	330	200	100	100	48
140 150	440	220	190	65	35	M 30		130	255	360	215	110	110	59
160 180	530	260	220	70	35	M 30		170	330	450	270	130	130	115
200 220	680	300	260	80	35	M 30		240	443	580	330	160	160	234
240 260	750	355	300	100	42	M 36		265	505	630	380	180	180	440
280 300	850	400	335	120	48	M 42		315	600	700	420	200	200	540

mit Lagerschalen aus Rotguss: Rg7
 with bearing shells of red bronze: Rg7
 avec coquilles de palier en laiton rouge : Rg7
 con bronzine in bronzo per getti: Rg7
 con semi-cojinetes de fundición de cobre y bronce: Rg7

Sonderausführungen

- GB Special designs
- F Constructions spéciales
- I Versioni speciali
- E Versiones especiales



z. B. Führungslager mit \varnothing 440
e. g. guide bearing with \varnothing 440
p. ex. palier de guidage avec \varnothing 440
P. es. cuscinetti di guida \varnothing 440
por ej. cojinete guía con \varnothing 440



Einsatz in einem Saugbagger
Use in suction dredger
Utilisation dans une drague suceuse
Impiego in una draga aspirante
Implementación en una draga de succión

Staufferbüchsen

GB Stauffer lubrication boxes

F Graisseurs

I Ingrassatori Stauffer

E Engrasadores Stauffer

Größe Size Taille Grandezza Tamaño	Gewinde Thread Filetage Filettatura Rosca Ø	DIN 502		DIN 503		DIN 504		DIN 505	DIN 506
		A mit Buchse with bush avec douille con bussol con manguito	B ohne Buchse without bush exempt douille senza bussol sin manguito	A mit Buchse with bush avec douille con bussol con manguito	B ohne Buchse without bush exempt douille senza bussol sin manguito	A mit Buchse with bush avec douille con bussol con manguito	B ohne Buchse without bush exempt douille senza bussol sin manguito	L	A
3	G ¼"	-	25 - 40	-	-	25 - 30	25 - 40	25 - 50	-
4	G ¼"	25 - 40	45 - 50	35 - 50	45 - 60	35 - 50	45 - 60	55 - 80	-
5	G ¼"	45 - 60	55 - 70	55 - 70	65 - 80	55 - 70	65 - 80	85 - 110	-
6	G ¼"	65 - 70	75 - 80	75 - 90	85 - 110	75 - 90	85 - 110	120 - 150	80 - 110

Weitere Kataloge/ further catalogues/
brochures supplémentaires/ altri catalogi/
otros catálogos

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH Hadeflex® X/ TX/ F

Elastische Kupplungen
 Flexible Couplings
 Accouplements élastiques
 Giunty elastici
 Acoplamiento elásticos

HX 07

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH Habix® HWN / HWT

Elastische Kupplungen
 Flexible Couplings
 Accouplements élastiques
 Giunty elastici
 Acoplamiento elásticos

HW 07

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH HRC

Elastische Kupplungen
 Flexible Couplings
 Accouplements élastiques
 Giunty elastici
 Acoplamiento elásticos

HR 07

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH Flex

Elastische Kupplungen
 Flexible Couplings
 Accouplements élastiques
 Giunty elastici
 Acoplamiento elásticos

DF 07

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH Drpex®

Elastische Kupplungen
 Flexible Couplings
 Accouplements élastiques
 Giunty elastici
 Acoplamiento elásticos

DK 07

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH DIN 115/ DIN 116

Drahtarra Kupplungen
 Torionally stiff couplings
 Accouplements rigides
 Giunty torionalmente rigidi
 Acoplamiento rígidos

SK 07

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH

Keilriemenscheiben, Anschraubnaben, Einachselnaben
 V-belt pulleys, Screwon hubs, Welded hubs
 Poulies à gorge, Moyeux à visser, Moyeux à souder
 Poleas a gola, Mozzi avvitati, Mozzi avvitati
 Poleas de correa, Cubos tornillos, Cubos soldados

KS 07

WHEN FULL POWER IS NEEDED

DRIVE TECHNOLOGY

DESCH

Motor Spannachsen
 Motor slide rails
 Rails tendeurs à moteur
 Slitta tendimotore
 Carrieta tensora del motor

SP 07