



BERGES variable drive units ...

... a universal product range to cover the whole spectrum of drive engineering applications!



The product range:

- Double pulley drives	RF b	for wide V-belts	up to 160 kW
- Double pulley drives	RD b	for wide V-belts	up to 160 kW
- Double pulley drives	KRM, RF	for standard V-belts	up to 5,5 kW
- Single pulley drives	FsB	for wide V-belts	up to 55 kW
- Single pulley drives	KM, FS	for standard V-belts	up to 5,5 kW
- Assembly units RGAE for mounting motors and reduction gears	-	-	up to 160 kW
- Assembly units RGAE with two-bearing shaft on output side	-	-	up to 160 kW
-	-	-	-

System and quality characteristics:

- Short, space-saving symmetrical design
- Precise plastic-coated round guides
- Pressure springs with optimum characteristic for a favorable power ratio over the whole speed range
- Integrated torque-dependent control cam (RD b)
- Low mass moment of inertia thanks to the use of pulley sheaves made of highly wearresistant special aluminium alloy
- Alternative designs for wide and standard V-belts
- Suitable for U and Z designs
- Maintenance free

On the following pages, you will find a quick-reference insight of the main performance data and the most important dimensions of the individual variable pulley types. These are shown together with the various adjustment possibilities.

Numerous other applicationspecific designs are available as standard.

BERGES variable pulley systems – also combined with other drive elements – are your guarantee of maximum functional and operational reliability thanks to their fully-developed design and highest quality materials and workmanship.



Variable speed V-belt pulleys

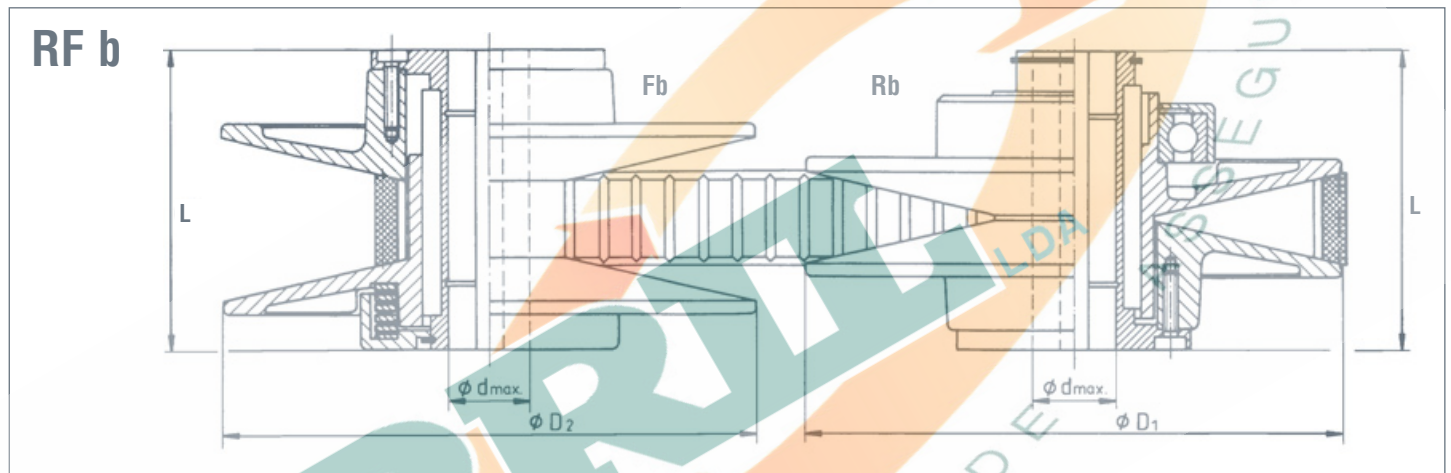
Double pulley drive for wide V-belts

RF b $P_{1 \text{ max.}} = 160 \text{ kW}$

A mechanical variable pulley Rb. mounted on the driving shaft (motor shaft) and a spring-loaded variable pulley Fb, mounted on the driven shaft* form a variable pulley set with constant center distance RF b. Also suitable for reversing operation.

Optimum pressure spring characteristics in the spring-loaded variable pulley guarantee a favourable power ratio over the whole speed range.

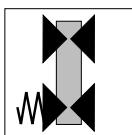
* Reverse arrangement possible on request



RF b:

Type	Speed range	Motor kW	n max.	n min.	P max.	P min.	D ₁	L	D ₂	d _{max.}	Wide V-belt
RF 080 b	1: 5,5	1370	3210	585	0,33	0,17	91,4	50	91,4	14	17 x 5
RF 100 b	1: 5,5	1390	3260	595	1,35	0,55	120	72	120	24	22 x 7
RF 130 b	1: 7,0	1390	3680	526	1,35	0,53	135	72	135	24	22 x 7
RF 190 b	1:10,5	1390	4500	430	1,35	0,75	190	90	190	25	28 x 8
RF 150 b	1: 6,5	1410	3595	555	2,7	0,9	159	90	159	28	28 x 8
RF 190 b	1: 9,0	1410	4230	470	2,7	0,8	190	90	190	28	28 x 8
RF 196 b	1: 8,0	1430	4040	505	3,6	1,2	198	110	198	28	33 x 10
RF 235 b	1:10,5	1430	4630	445	3,6	1,6	236	122	236	32	37 x 10
RF 210 b	1: 7,5	1450	3970	530	6,7	1,9	220	122	220	38	37 x 10
RF 250 b	1: 7,5	1450	3970	530	9,9	2,7	255	145	255	42	47 x 12
RF 280 b	1: 8,5	1455	4240	500	13,5	4,1	296	162	296	42	55 x 15
RF 300 b	1: 7,2	1460	3920	545	19,8	6,3	305	185	305	48	51 x 16
RF 350 b	1: 7,4	1465	4000	540	27,0	9,6	346	195	346	55	70 x 18
RF 375 b	1: 5,3	1475	2760	520	40,5	16,0	346	220	390	60/65*	83 x 23
RF 400 b	1: 5,0	1475	2575	515	49,5	16,8	372	220	420	65	83 x 23
RF 450 b	1: 4,4	1480	2800	630	67,5	21,2	450	280	470	80	83 x 26
RF 500 b	1: 4,0	1480	1994	503	99,0	36,5	470	280	580	80	83 x 26
RF 600 b	1: 3,0	1480	1965	655	145,0	75,0	506	360	596	100	87 x 28

*F375b

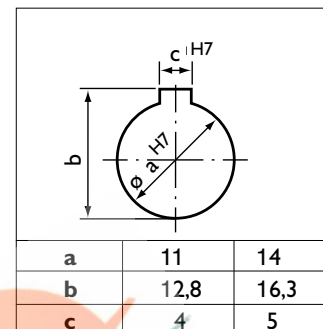


Double Pulley Drives

RF 080 b 1 : 5,5

$P_1 \text{ max. } 0,37 \text{ kW}$

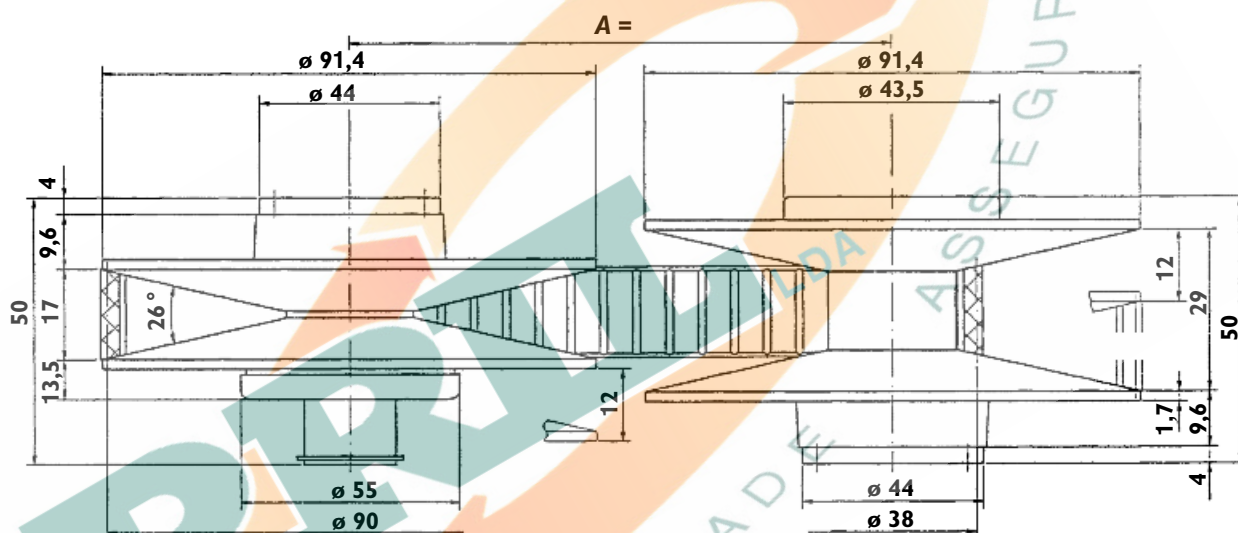
Wide V-belt	17 x 6
Speed range	1 : 5,5
Motor power	max. 0,37 kW
Control stroke	12 mm
Control force	0,72 Nm
Weight	7,5 N
Moment of inertia	$R = 2,0 \times 10^{-4} \text{ kgm}^2$ $F = 1,95 \times 10^{-4} \text{ kgm}^2$
Belt max. inside running \varnothing	81 mm
Belt min. inside running \varnothing	28 mm
Radial load	100 N



Special bores on request against extra cost

Control pulley **R 080 b**

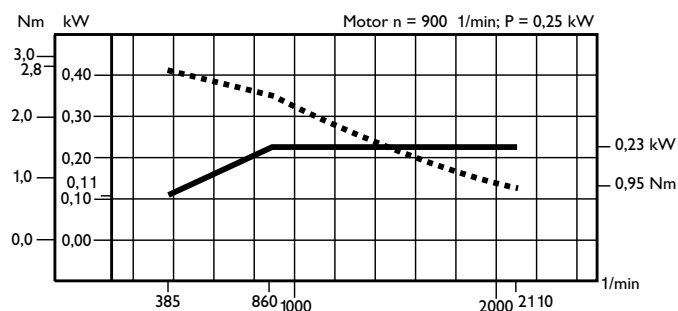
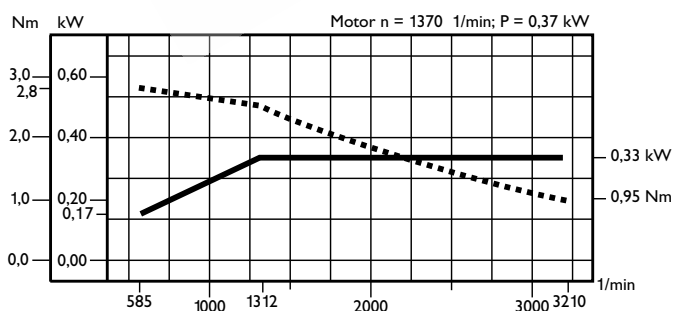
Spring pulley **F 080 b**



Centre distance/mm	A =	150	187
Belt inside length/mm	Li =	475	550
Belt actual length/mm	Lw =	503	578

Power,
Speeds,
Torque.

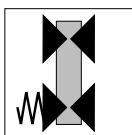
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



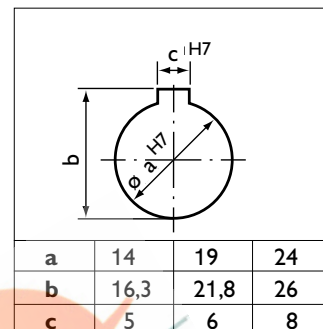


Double Pulley Drives

RF 100 b 1 : 5,5

$P_{1 \text{ max.}}$ 1,5 kW

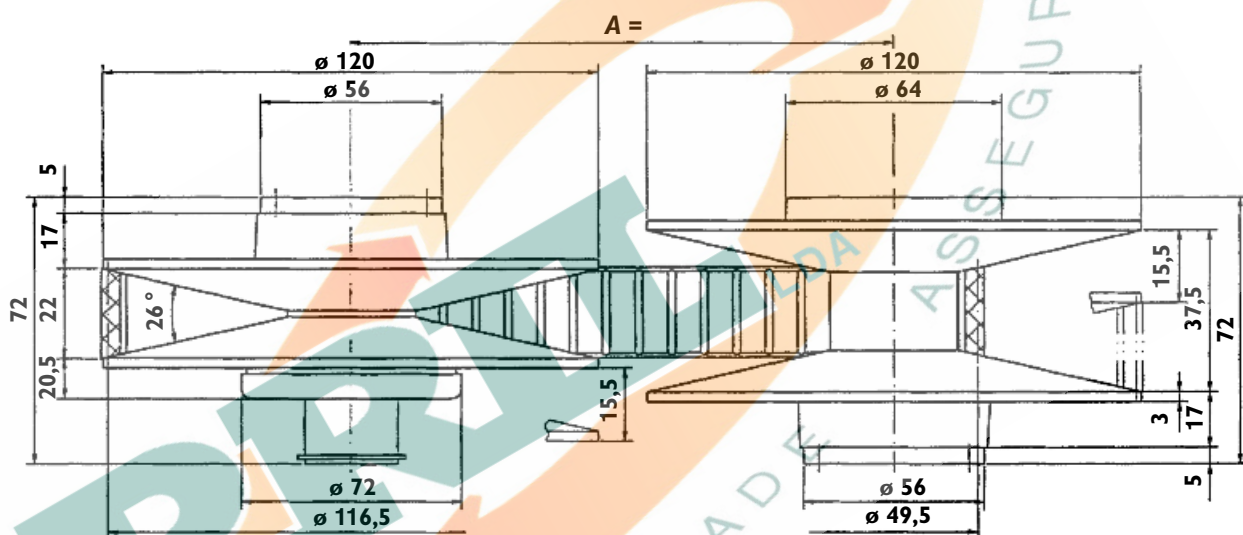
Wide V-belt	22 x 7
Speed range	1 : 5,5
Motor power	max. 1,5 kW
Control stroke	15,5 mm
Control force	1,45 Nm
Weight	19,5 N
Moment of inertia	$R = 9,9 \times 10^{-4} \text{ kgm}^2$ $F = 7,7 \times 10^{-4} \text{ kgm}^2$
Belt max. inside running \varnothing	106 mm
Belt min. inside running \varnothing	39 mm
Radial load	100 N



Special bores on request against extra cost

Control pulley **R 100 b**

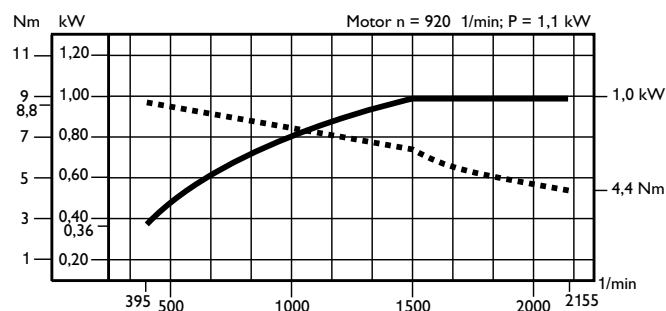
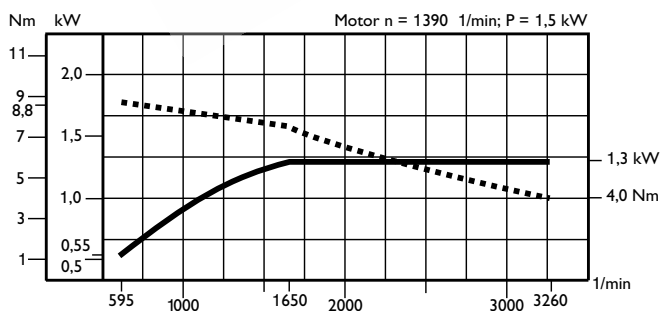
Spring pulley **F 100 b**



Centre distance/mm	A =	146	158	168	184	210	235	246	260	285	310	336
Belt inside length/mm	Li =	525	550	568	600	650	700	725	750	800	850	900
Belt actual length/mm	Lw =	558	583	601	633	683	733	758	783	833	883	933

Power,
Speeds,
Torque.

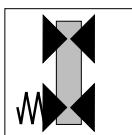
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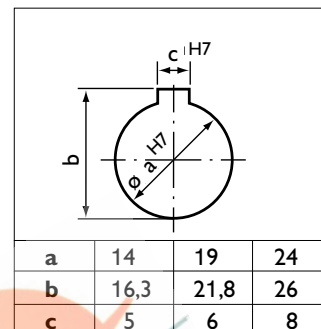


Double Pulley Drives

RF 130 b 1 : 7,0

$P_{1 \text{ max.}}$ 1,5 kW

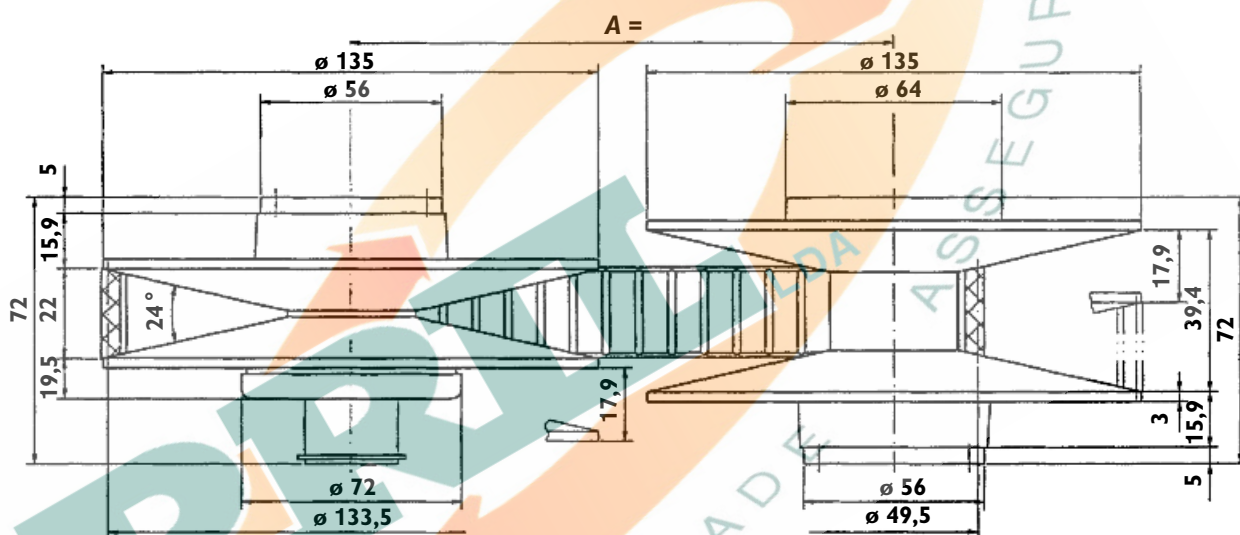
Wide V-belt	22 x 7
Speed range	1 : 7,0
Motor power	max. 1,5 kW
Control stroke	18 mm
Control force	1,45 Nm
Weight	22,7 N
Moment of inertia	$R = 10,8 \times 10^{-4} \text{ kgm}^2$ $F = 8,5 \times 10^{-4} \text{ kgm}^2$
Belt max. inside running \varnothing	130 mm
Belt min. inside running \varnothing	46 mm
Radial load	210 N



Special bores on request against extra cost

Control pulley **R 130 b**

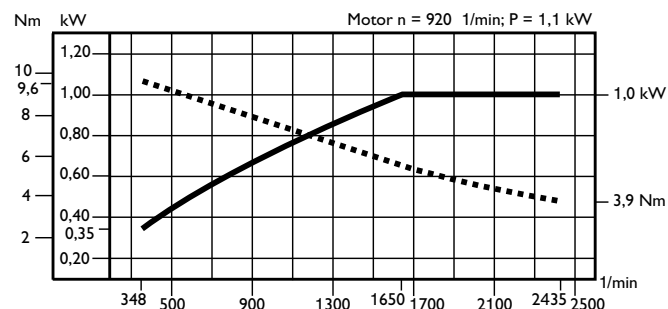
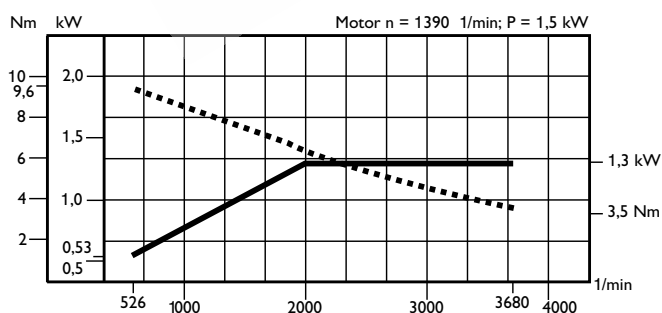
Spring pulley **F 130 b**



Centre distance/mm	A =	142	151	167	193	219	231	244	269	295	320
Belt inside length/mm	Li =	550	568	600	650	700	725	750	800	850	900
Belt actual length/mm	Lw =	583	601	633	683	733	758	783	833	883	933

Power,
Speeds,
Torque.

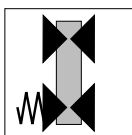
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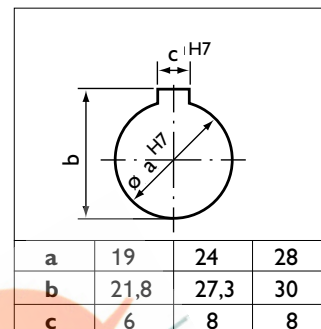


Double Pulley Drives

RF 150 b 1 : 6,5

$P_{1 \text{ max.}}$ 3,0 kW

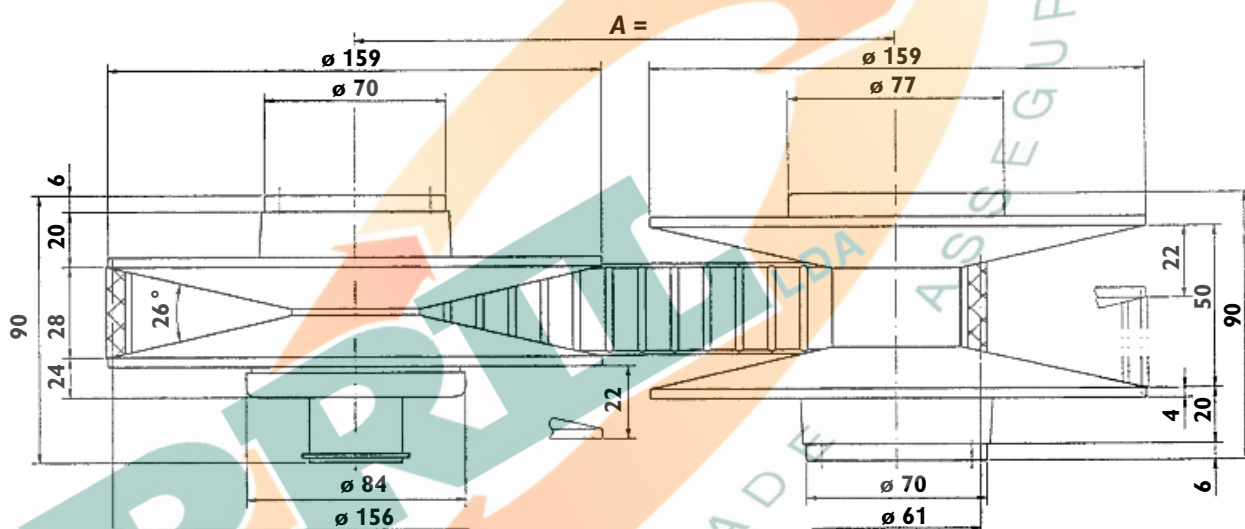
Wide V-belt	28 x 8
Speed range	1 : 6,5
Motor power	max. 3,0 kW
Control stroke	22 mm
Control force	1,65 Nm
Weight	30 N
Moment of inertia	R = $2,5 \times 10^{-3} \text{ kgm}^2$ F = $2,2 \times 10^{-3} \text{ kgm}^2$
Belt max. inside running \varnothing	144 mm
Belt min. inside running \varnothing	48 mm
Radial load	290 N



Special bores on request against extra cost

Control pulley **R 150 b**

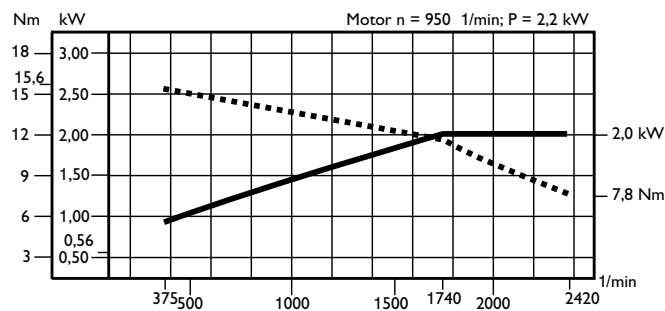
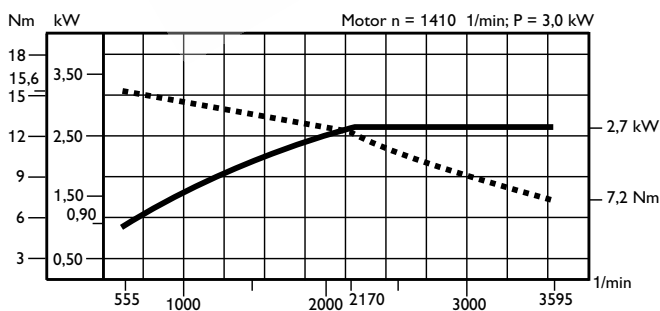
Spring pulley **F 150 b**



Centre distance/mm	A =	168	194	222	245	270	296	321	346	377
Belt inside length/mm	Li =	650	700	755	800	850	900	950	1000	1060
Belt actual length/mm	Lw =	688	738	793	838	888	938	988	1038	1098

Power,
Speeds,
Torque.

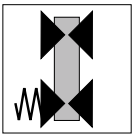
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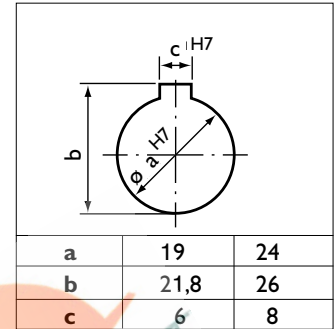


Double Pulley Drives

RF 190 b 1 : 10,5

$P_{1 \text{ max.}}$ 1,5 kW

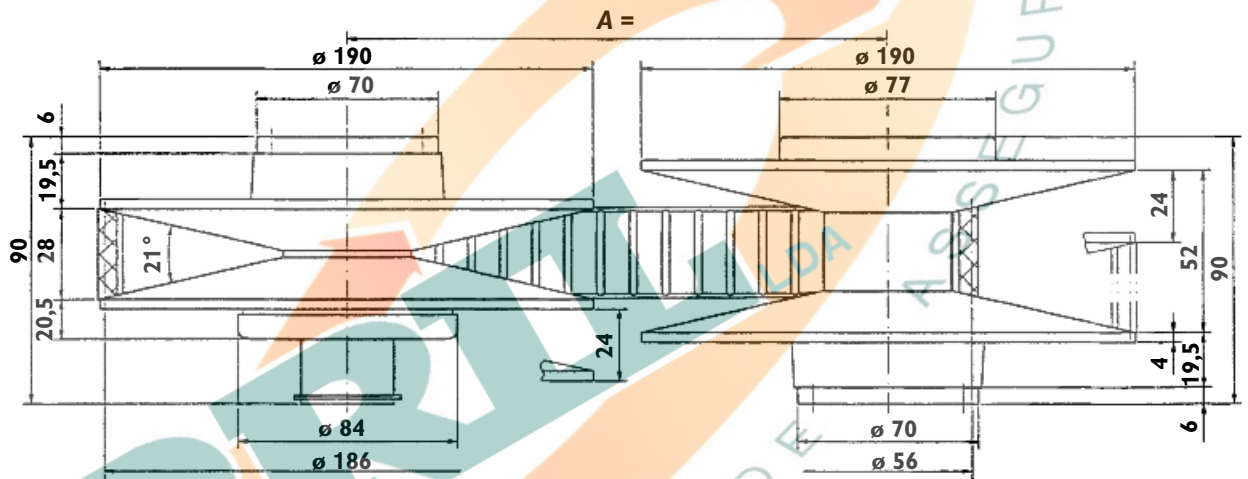
Wide V-belt	28 x 8
Speed range	1 : 10,5
Motor power	max. 1,5 kW
Control stroke	24 mm
Control force	1,65 Nm
Weight	38,5 N
Moment of inertia	R = $4,5 \times 10^{-3} \text{ kgm}^2$ F = $4,2 \times 10^{-3} \text{ kgm}^2$
Belt max. inside running \varnothing	174 mm
Belt min. inside running \varnothing	44 mm
Radial load	280 N



Special bores on request against extra cost

Control pulley **R 190 b**

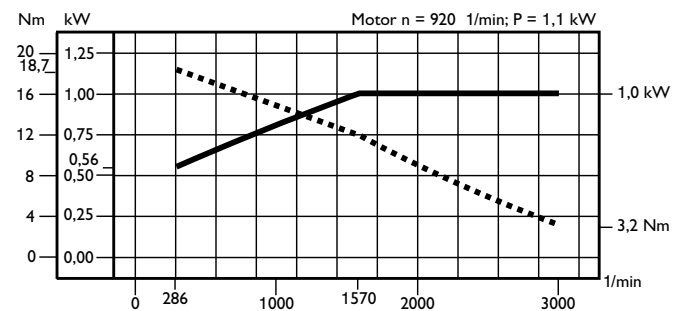
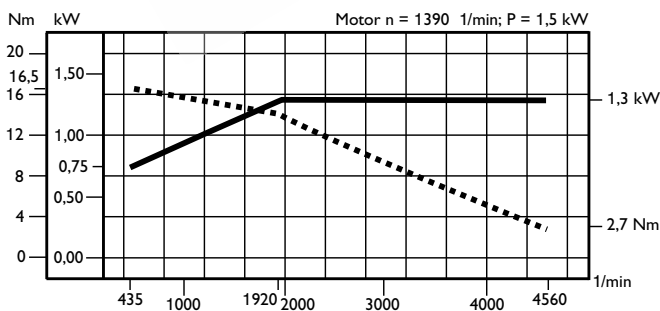
Spring pulley **F 190 b**



Centre distance/mm	A =	220	246	272	295	323	354	384	415	450	486	526	576
Belt inside length/mm	Li =	800	850	900	950	1000	1060	1120	1180	1250	1320	1400	1500
Belt actual length/mm	Lw =	838	888	938	988	1038	1098	1158	1218	1288	1358	1438	1538

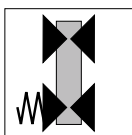
Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!



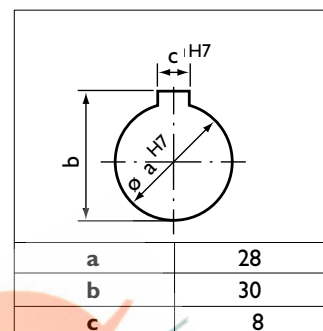


Double Pulley Drives

RF 190 b 1 : 9

$P_{1 \text{ max.}}$ 3,0 kW

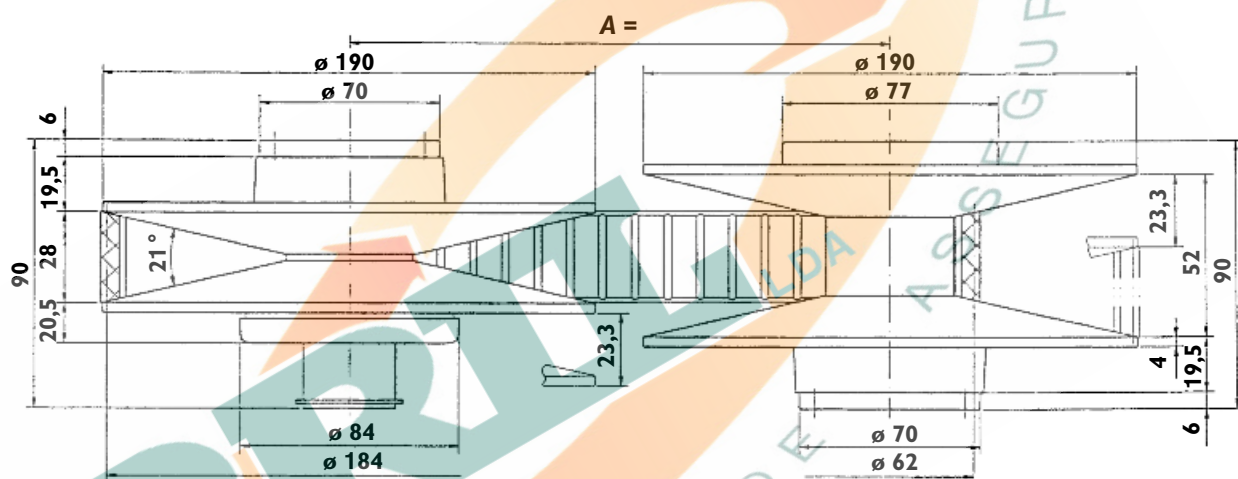
Wide V-belt	28 x 8
Speed range	1 : 9
Motor power	max. 3,0 kW
Control stroke	23,3 mm
Control force	1,65 Nm
Weight	38,5 N
Moment of inertia	$R = 4,5 \times 10^{-3} \text{ kgm}^2$ $F = 4,2 \times 10^{-3} \text{ kgm}^2$
Belt max. inside running \varnothing	176 mm
Belt min. inside running \varnothing	50 mm
Radial load	280 N



Special bores on request against extra cost

Control pulley **R 190 b**

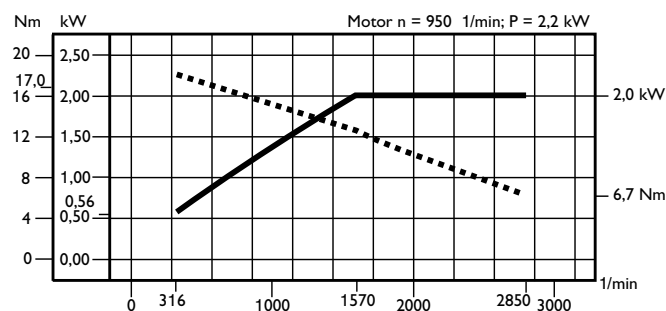
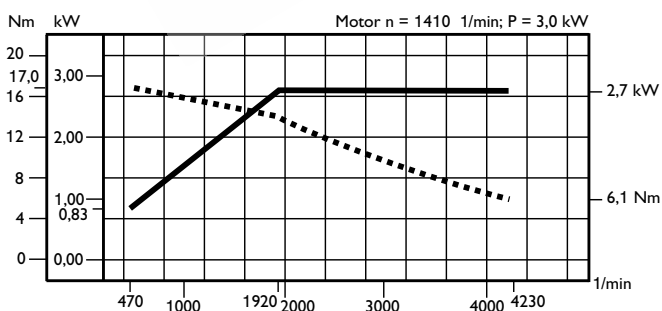
Spring pulley **F 190 b**



Centre distance/mm	A =	213	239	265	295	316	347	377	408	443	479	519	569
Belt inside length/mm	Li =	800	850	900	958	1000	1060	1120	1180	1250	1320	1400	1500
Belt actual length/mm	Lw =	838	888	938	996	1038	1098	1158	1218	1288	1358	1438	1538

Power,
Speeds,
Torque.

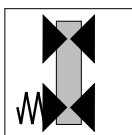
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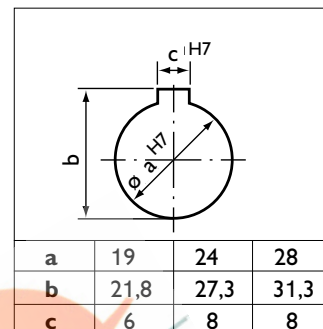


Double Pulley Drives

RF 196 b 1 : 8

P_1 max. **4,0 kW**

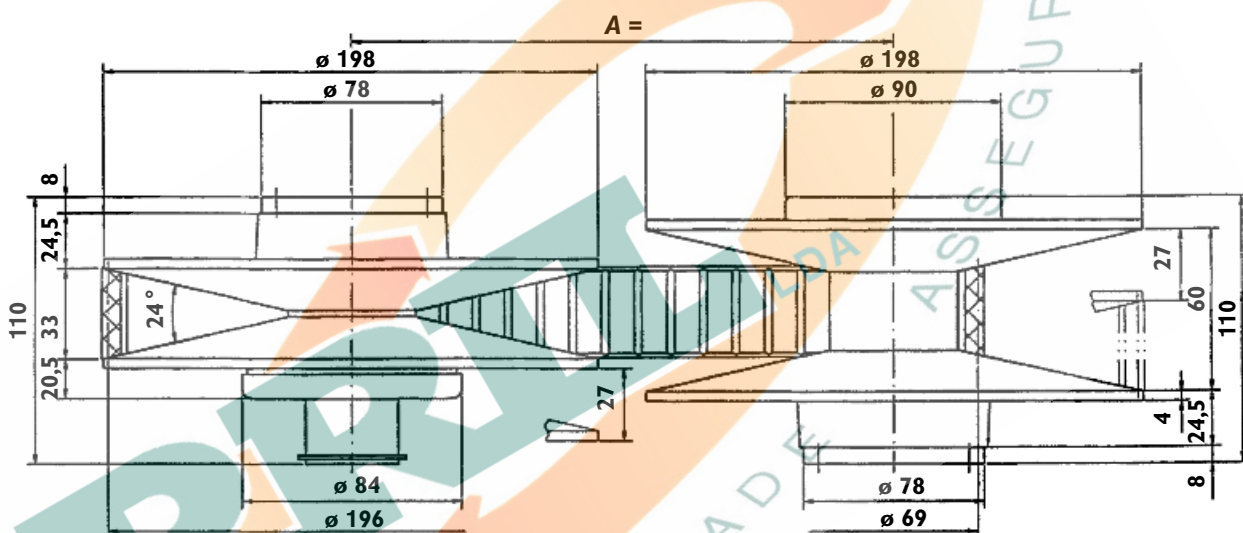
Wide V-belt	33 x 10
Speed range	1 : 8
Motor power	max. 4,0 kW
Control stroke	27 mm
Control force	2,0 Nm
Weight	51 N
Moment of inertia	R = $6,1 \times 10^{-3} \text{ kgm}^2$ F = $6,4 \times 10^{-3} \text{ kgm}^2$
Belt max. inside running \varnothing	181 mm
Belt min. inside running \varnothing	53 mm
Radial load	340 N



Special bores on request against extra cost

Control pulley **R 196 b**

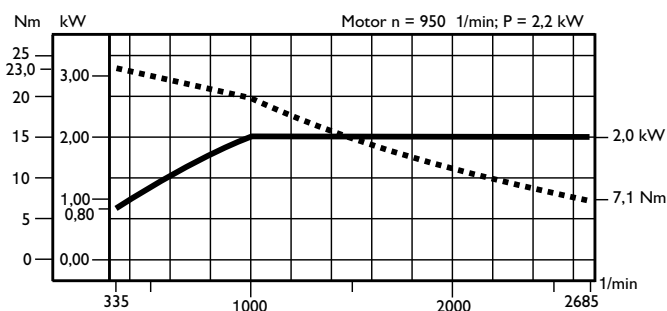
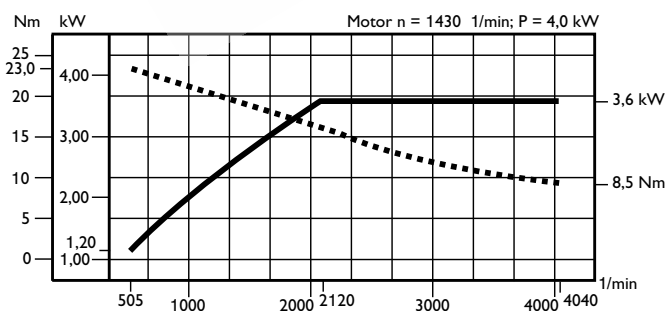
Spring pulley **F 196 b**



Centre distance/mm	A =	233	258	284	295	346	412	488	588	689	789
Belt inside length/mm	Li =	850	900	950	973	1070	1200	1350	1550	1750	1950
Belt actual length/mm	Lw =	897	947	997	1020	1117	1247	1397	1597	1797	1997

Power,
Speeds,
Torque.

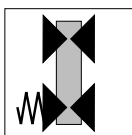
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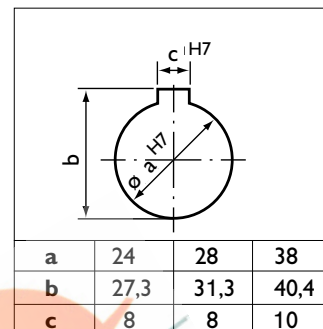


Double Pulley Drives

RF 210 b 1 : 7,5

$P_{1 \text{ max.}}$ 7,5 kW

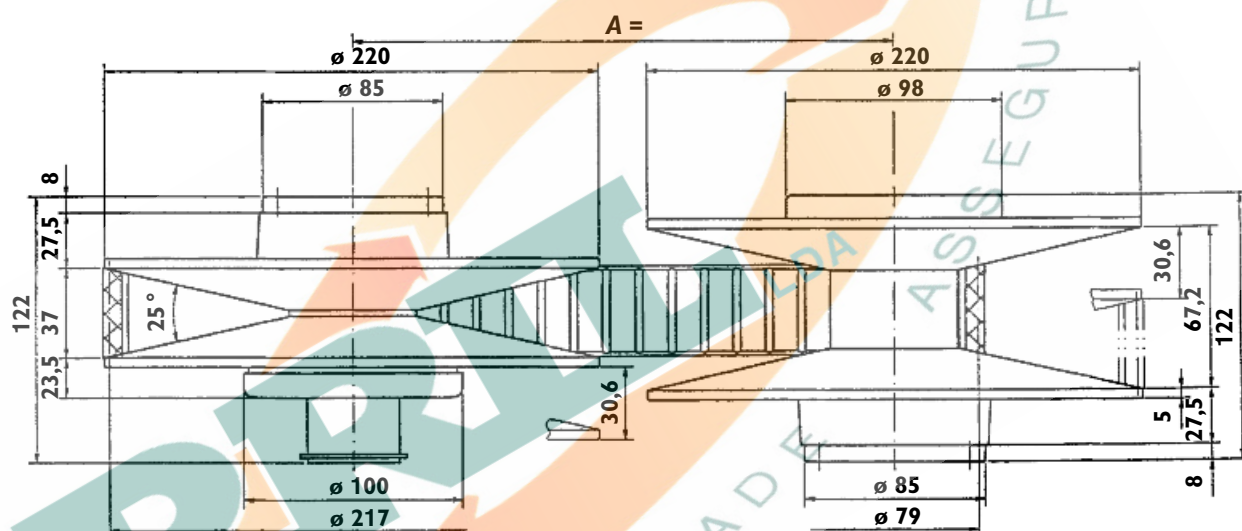
Wide V-belt	37 x 10
Speed range	1 : 7,5
Motor power	max. 7,5 kW
Control stroke	30,6 mm
Control force	2,7 Nm
Weight	67 N
Moment of inertia	R = 1,02 x 10⁻² kgm² F = 1,0 x 10⁻² kgm²
Belt max. inside running \varnothing	202 mm
Belt min. inside running \varnothing	62 mm
Radial load	490 N



Special bores on request against extra cost

Control pulley **R 210 b**

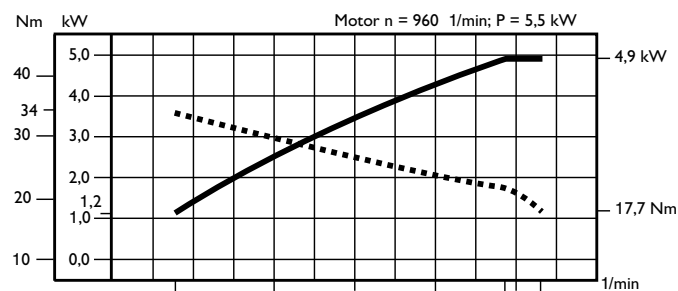
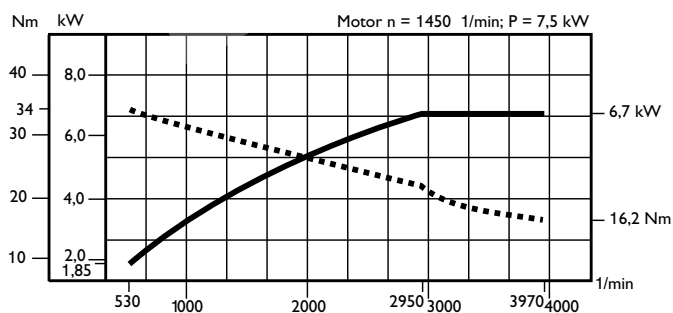
Spring pulley **F 210 b**



Centre distance/mm	A =	233	262	283	345	412	448	488	539	589	639	690	790
Belt inside length/mm	Li =	900	955	1000	1120	1250	1320	1400	1500	1600	1700	1800	2000
Belt actual length/mm	Lw =	947	1002	1047	1167	1297	1367	1447	1547	1647	1747	1847	2047

Power,
Speeds,
Torque.

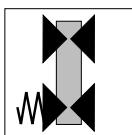
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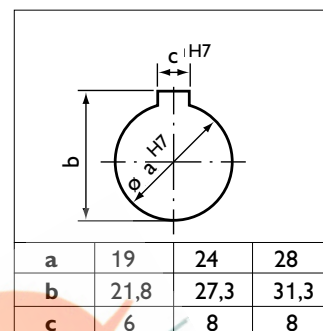


Double Pulley Drives

RF 235 b 1 : 10,5

$P_1 \text{ max. } 4,0 \text{ kW}$

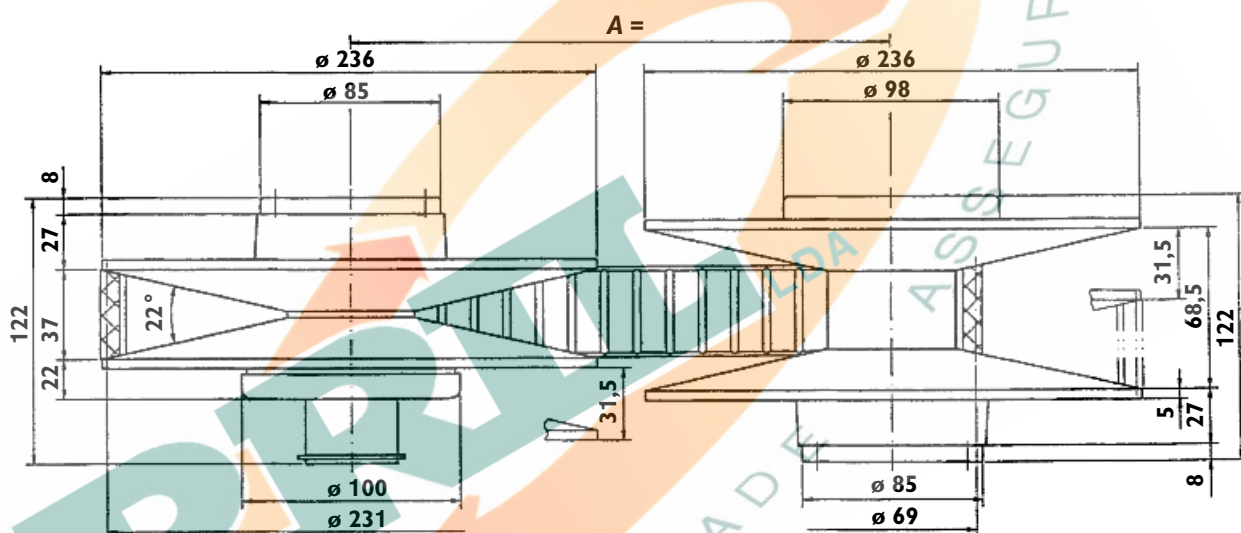
Wide V-belt	37 x 10
Speed range	1 : 10,5
Motor power	max. 4,0 kW
Control stroke	31,5 mm
Control force	2,7 Nm
Weight	73 N
Moment of inertia	R = $1,3 \times 10^{-2} \text{ kgm}^2$ F = $1,2 \times 10^{-2} \text{ kgm}^2$
Belt max. inside running \varnothing	216 mm
Belt min. inside running \varnothing	53 mm
Radial load	480 N



Special bores on request against extra cost

Control pulley **R 235 b**

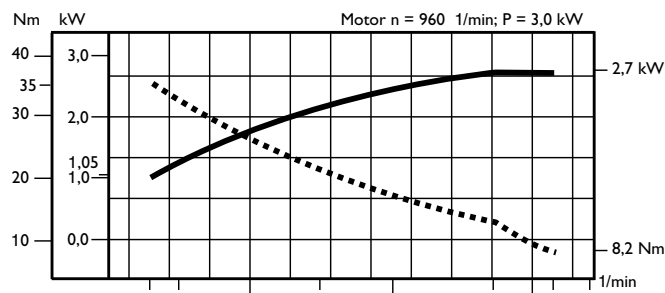
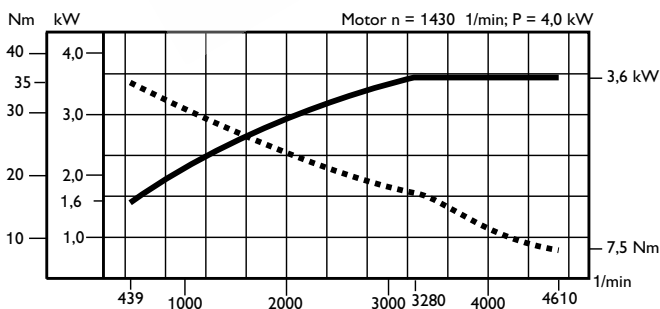
Spring pulley **F 235 b**



Centre distance/mm	A =	251	277	308	339	345	370	406	442	482	533	583	634	684
Belt inside length/mm	Li =	955	1000	1060	1120	1133	1180	1250	1320	1400	1500	1600	1700	1800
Belt actual length/mm	Lw =	1002	1047	1107	1167	1180	1227	1297	1367	1447	1547	1647	1747	1847

Power,
Speeds,
Torque.

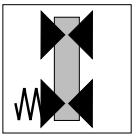
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



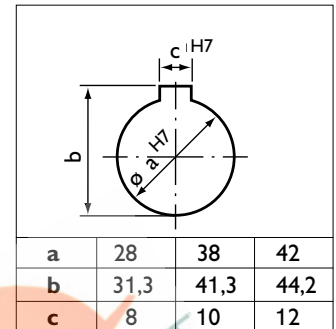


Double Pulley Drives

RF 250 b 1 : 7,5

P_1 max. **11 kW**

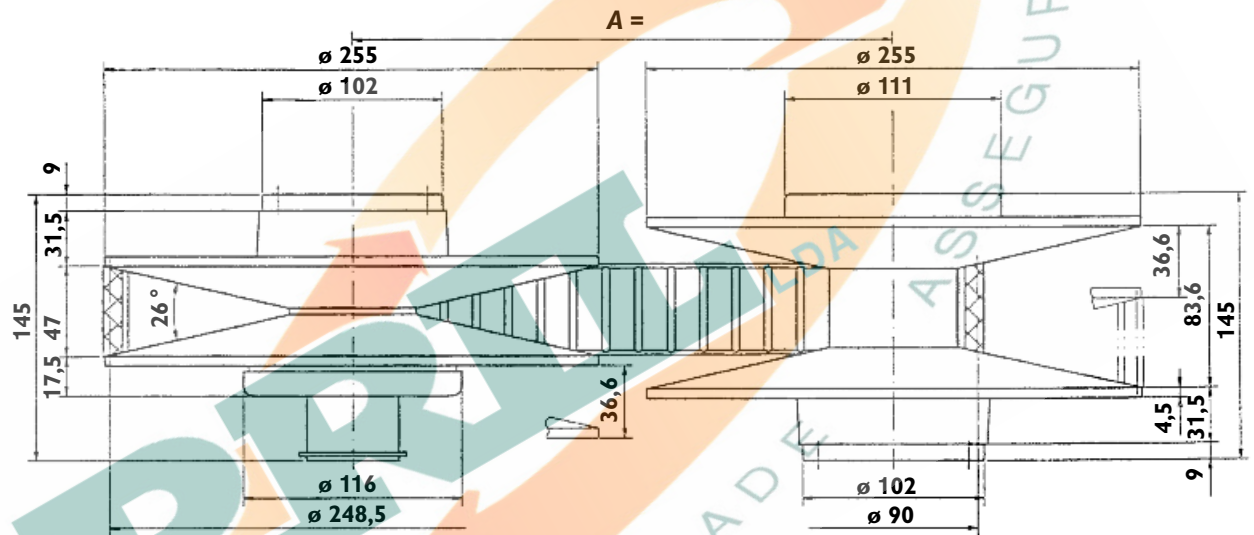
Wide V-belt	47 x 12
Speed range	1 : 7,5
Motor power	max. 11 kW
Control stroke	36,6 mm
Control force	4,0 Nm
Weight	110 N
Moment of inertia	R = 2,3 x 10⁻² kgm² F = 2,15 x 10⁻² kgm²
Belt max. inside running \varnothing	232 mm
Belt min. inside running \varnothing	70 mm
Radial load	610 N



Special bores on request against extra cost

Control pulley **R 250 b**

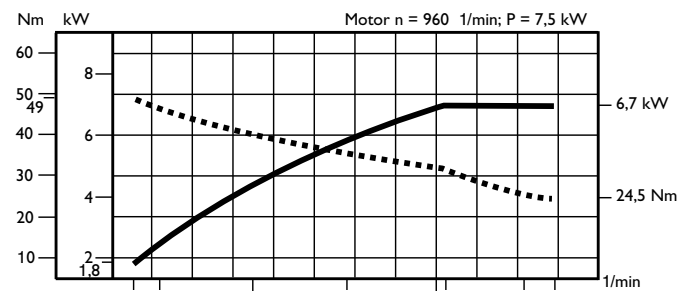
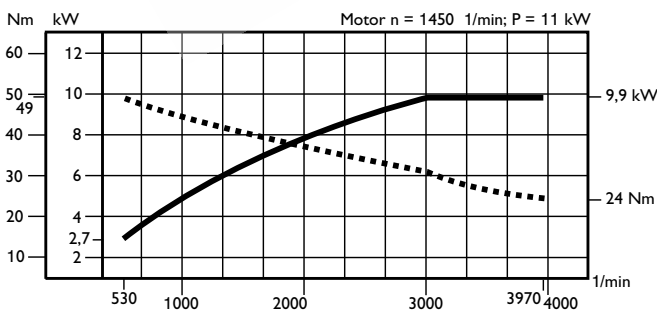
Spring pulley **F 250 b**



Centre distance/mm	A =	282	313	344	380	415	418	456	507	557	608
Belt inside length/mm	Li =	1060	1120	1180	1250	1320	1326	1400	1500	1600	1700
Belt actual length/mm	Lw =	1117	1177	1237	1307	1377	1383	1457	1557	1657	1757

Power,
Speeds,
Torque.

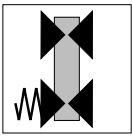
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



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BERGES ... everything under control.



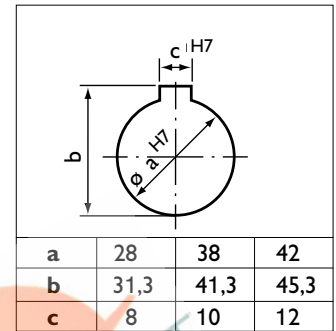


Double Pulley Drives

RF 280 b 1 : 8,5

P_1 max. **15 kW**

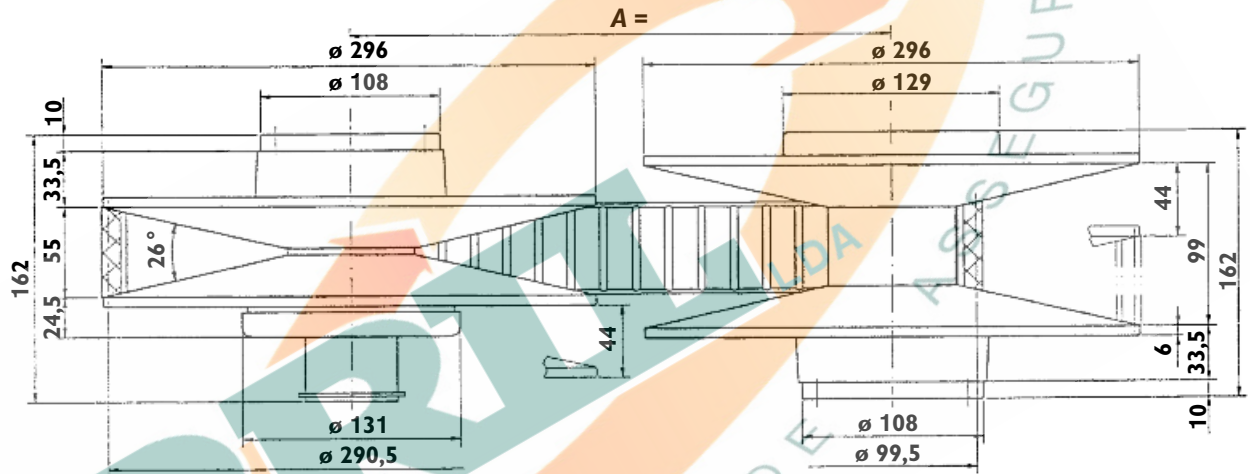
Wide V-belt	55 x 15
Speed range	1 : 8,5
Motor power	max. 15 kW
Control stroke	44 mm
Control force	5,4 Nm
Weight	152 N
Moment of inertia	R = $4,1 \times 10^{-2} \text{ kgm}^2$ F = $4,2 \times 10^{-2} \text{ kgm}^2$
Belt max. inside running \varnothing	268 mm
Belt min. inside running \varnothing	76 mm
Radial load	810 N



Special bores on request against extra cost

Control pulley **R 280 b**

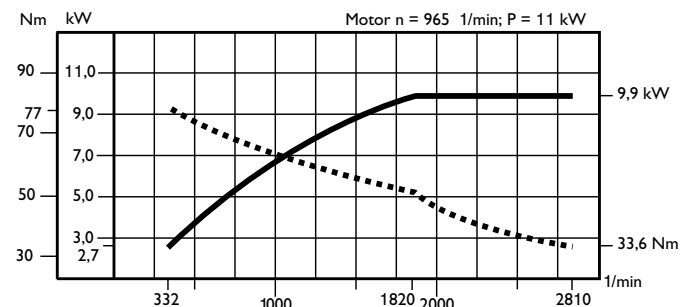
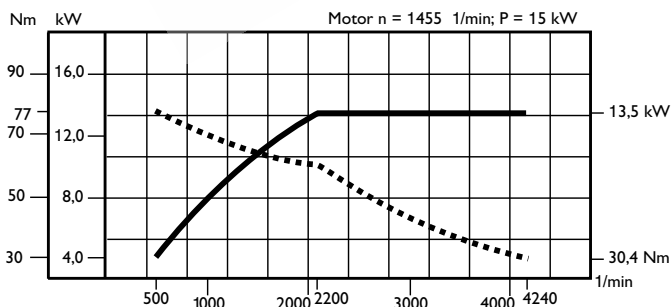
Spring pulley **F 280 b**



Centre distance/mm	A =	344	378	418	470	521	572	623	724	845	976	1126	1302
Belt inside length/mm	Li =	1255	1320	1404	1500	1600	1700	1800	2000	2240	2500	2800	3150
Belt actual length/mm	Lw =	1326	1391	1475	1571	1671	1771	1871	2071	2311	2571	2871	3221

Power,
Speeds,
Torque.

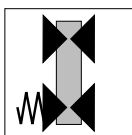
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



BERGES ... everything under control.



Technical details may be subject to alterations!

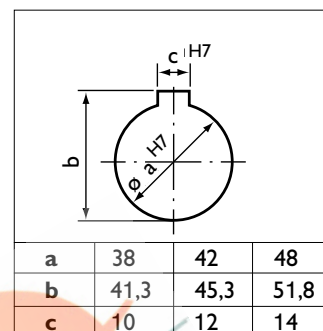


Double Pulley Drives

RF 300 b 1 : 7,2

P_1 max. 22 kW

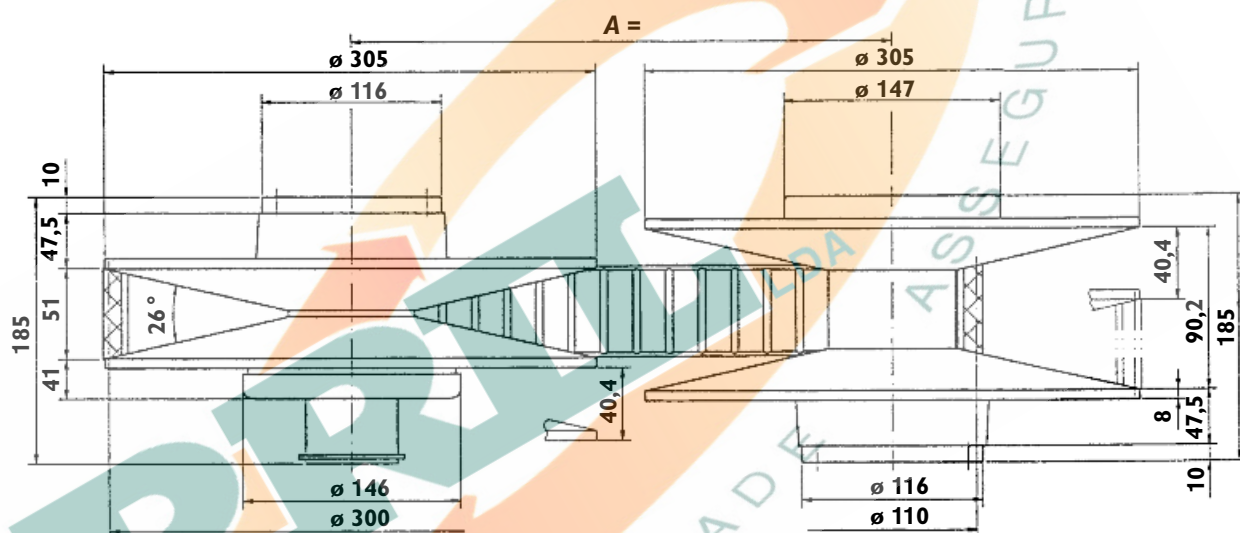
Wide V-belt	51 x 16
Speed range	1 : 7,2
Motor power	max. 22 kW
Control stroke	40,4 mm
Control force	7,5 Nm
Weight	186 N
Moment of inertia	$R = 0,6 \times 10^{-1} \text{ kgm}^2$ $F = 0,54 \times 10^{-1} \text{ kgm}^2$
Belt max. inside running \varnothing	276 mm
Belt min. inside running \varnothing	86 mm
Radial load	1120 N



Special bores on request against extra cost

Control pulley **R 300 b**

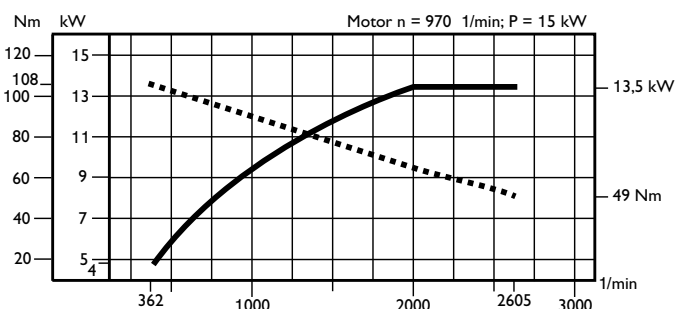
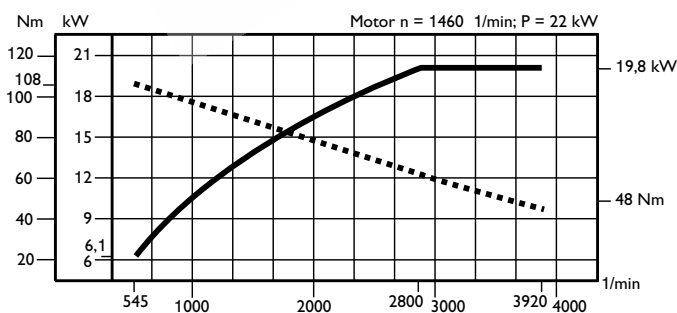
Spring pulley **F 300 b**



Centre distance/mm	A =	350	430	470	519	597	623	686	815	879
Belt inside length/mm	Li =	1295	1450	1525	1620	1778	1830	1955	2211	2338
Belt actual length/mm	Lw =	1370	1525	1600	1695	1853	1905	2030	2286	2413

Power,
Speeds,
Torque.

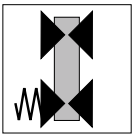
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



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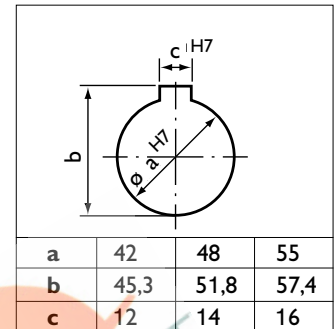


Double Pulley Drives

RF 350 b 1 : 7,4

P_1 max. 30 kW

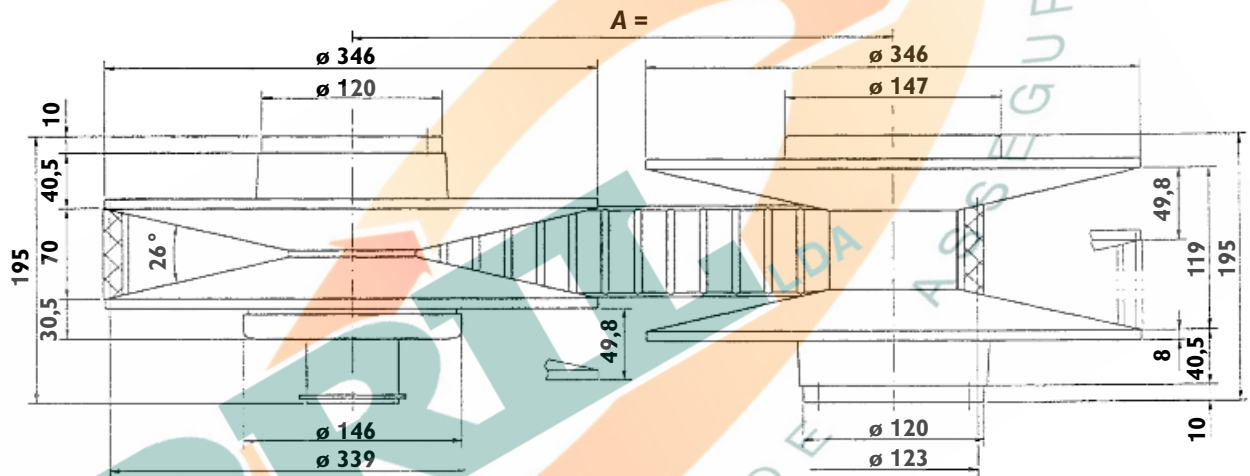
Wide V-belt	70 x 18
Speed range	1 : 7,4
Motor power	max. 30 kW
Control stroke	49,8 mm
Control force	11,0 Nm
Weight	268 N
Moment of inertia	R = 1,0 x 10⁻¹ kgm² F = 1,0 x 10⁻¹ kgm²
Belt max. inside running \varnothing	306 mm
Belt min. inside running \varnothing	90 mm
Radial load	1690 N



Special bores on request against extra cost

Control pulley **R 350 b**

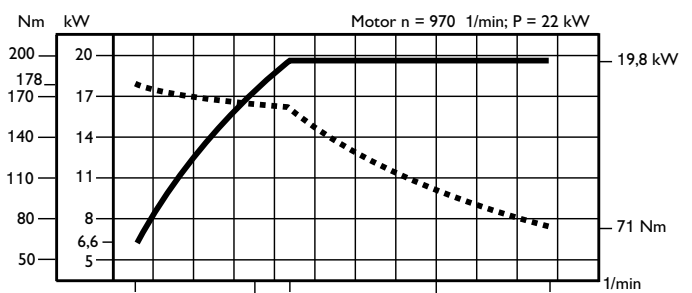
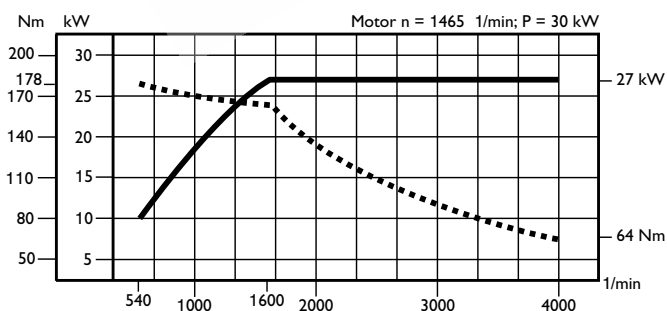
Spring pulley **F 350 b**



Centre distance/mm	A =	364	427	467	517	569	671	792	923
Belt inside length/mm	Li =	1400	1515	1600	1700	1800	2000	2240	2500
Belt actual length/mm	Lw =	1485	1600	1685	1785	1885	2085	2325	2585

Power,
Speeds,
Torque.

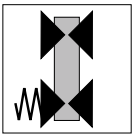
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



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BERGES ... everything under control.



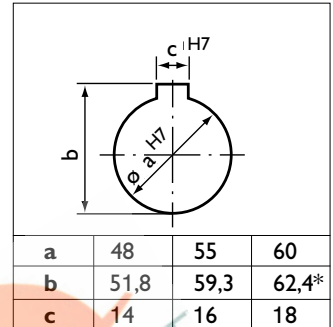


Double Pulley Drives

RF 375 b 1 : 5,3

P_1 max. **45 kW**

Wide V-belt	83 x 23
Speed range	1 : 5,3
Motor power	max. 45 kW
Control stroke	48,2 mm
Control force	16,0 Nm
Weight	320 N
Moment of inertia	R = 1,0 x 10⁻¹ kgm² F = 1,8 x 10⁻¹ kgm²
Belt max. inside running \emptyset	R = 304 mm F = 341,5 mm
Belt min. inside running \emptyset	R = 95 mm F = 143,5 mm
Radial load	2320 N

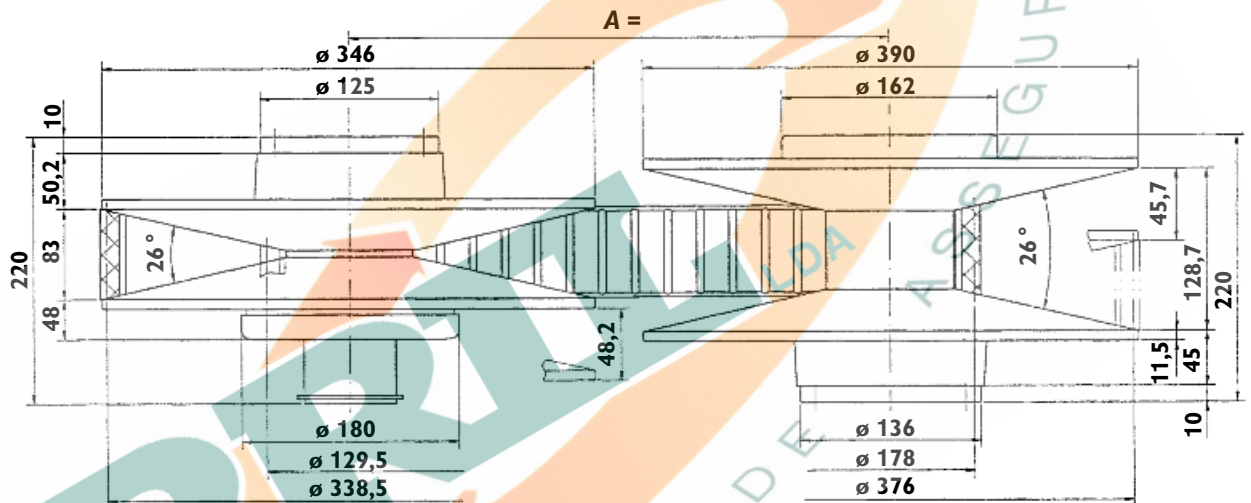


* Maß b bei F 375 b = 64,4

Special bores on request against extra cost

Control pulley **R 375 b**

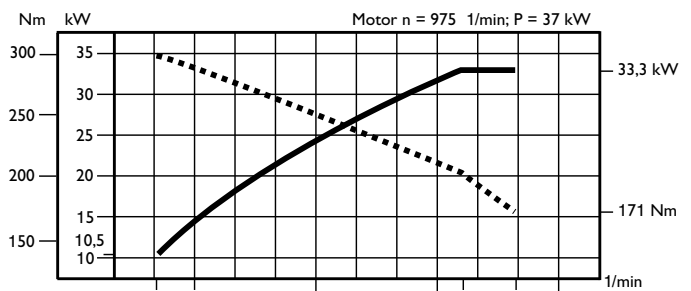
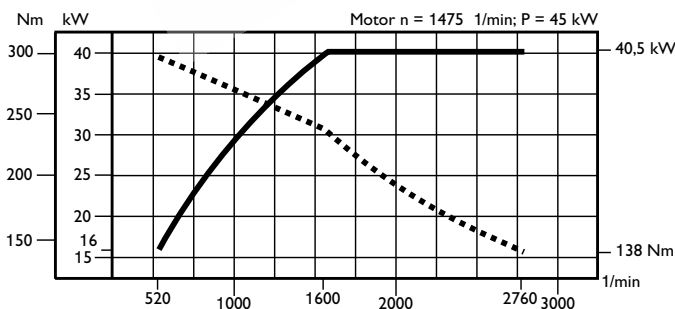
Spring pulley **F 375 b**



Centre distance/mm	A =	517	549	590	624	645	710	772	840
Belt inside length/mm	Li =	1749	1812	1892	1958	2004	2132	2254	2392
Belt actual length/mm	Lw =	1857	1920	2000	2066	2112	2240	2362	2500

Power,
Speeds,
Torque.

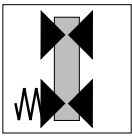
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



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BERGES ... everything under control.



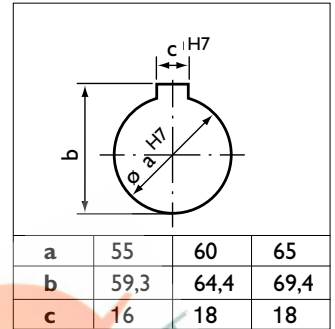


Double Pulley Drives

RF 400 b 1 : 5

$P_1 \text{ max. } 55 \text{ kW}$

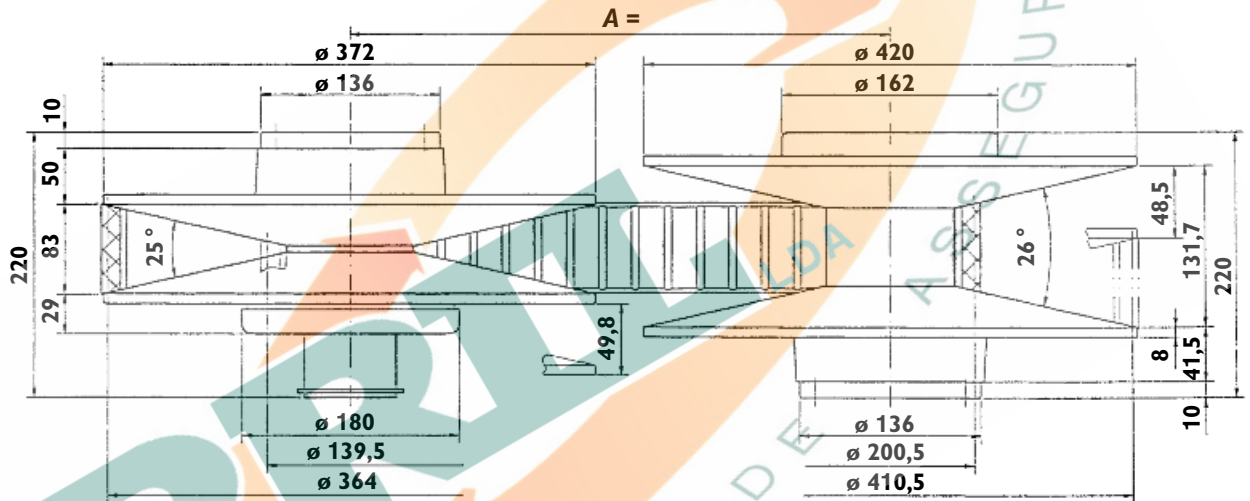
Wide V-belt	83 x 23
Speed range	1 : 5
Motor power	max. 55 kW
Control stroke	49,8 mm
Control force	43 Nm
Weight	347 N
Moment of inertia	R = $1,35 \times 10^{-1} \text{ kgm}^2$ F = $2,1 \times 10^{-1} \text{ kgm}^2$
Belt max. inside running \varnothing	R = 364 mm F = 410,5 mm
Belt min. inside running \varnothing	R = 139,5 mm F = 200,5 mm
Radial load	2350 N



Special bores on request against extra cost

Control pulley **R 400 b**

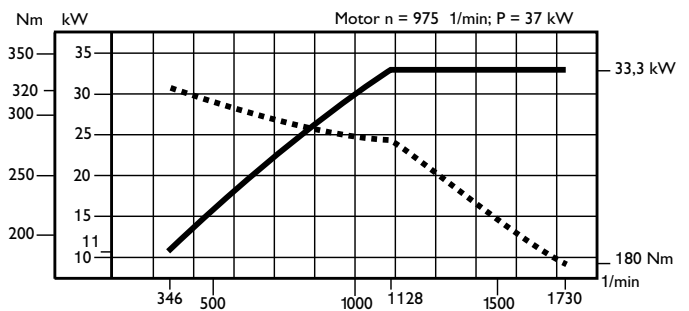
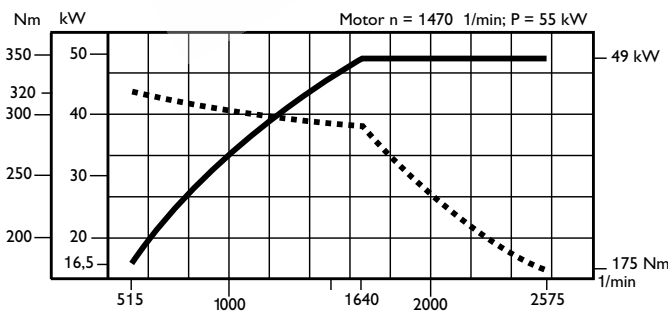
Spring pulley **F 400 b**



Centre distance/mm	A =	477	526	592	624	655	736
Belt inside length/mm	Li =	1749	1842	1972	2037	2094	2254
Belt actual length/mm	Lw =	1857	1950	2080	2145	2202	2362

Power,
Speeds,
Torque.

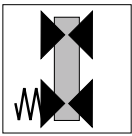
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



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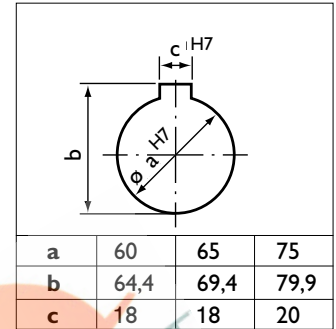


Double Pulley Drives

RF 450 b 1 : 4,4

P_1 max. **75 kW**

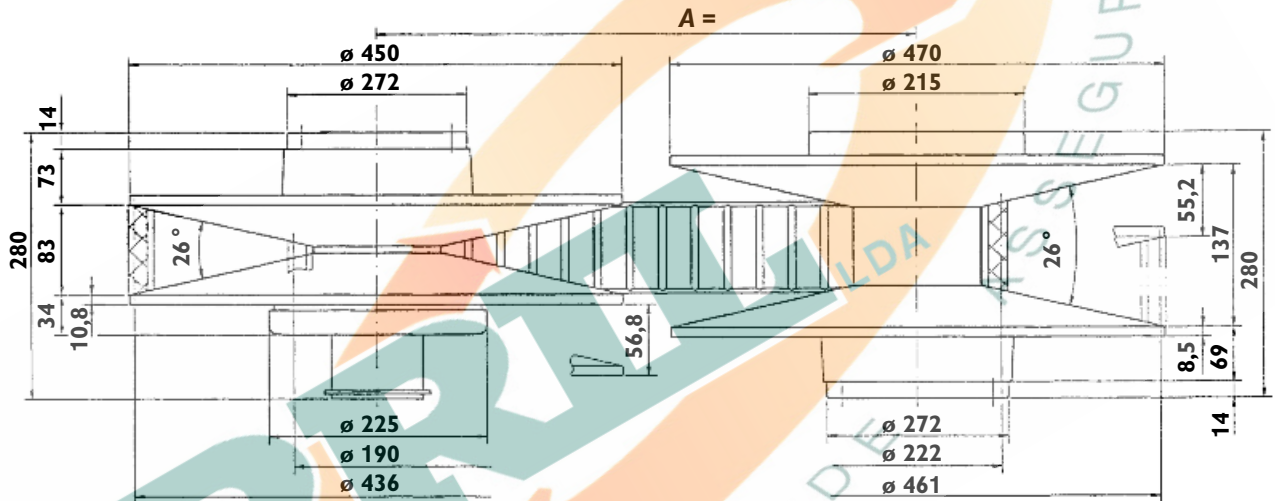
Wide V-belt	83 x 26
Speed range	1 : 4,4
Motor power	max. 75 kW
Control stroke	56,8 mm
Control force	54,5 Nm
Weight	790 N
Moment of inertia	R = $4,9 \times 10^{-1} \text{ kgm}^2$ F = $5,7 \times 10^{-1} \text{ kgm}^2$
Belt max. inside running \varnothing	R = 397 mm F = 422 mm
Belt min. inside running \varnothing	R = 151 mm F = 183 mm
Radial load	2600 N



Special bores on request against extra cost

Control pulley **R 450 b**

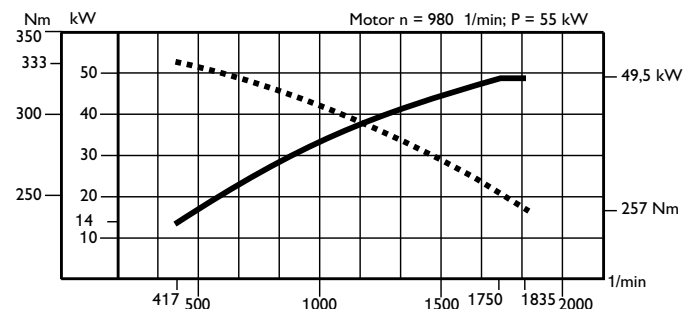
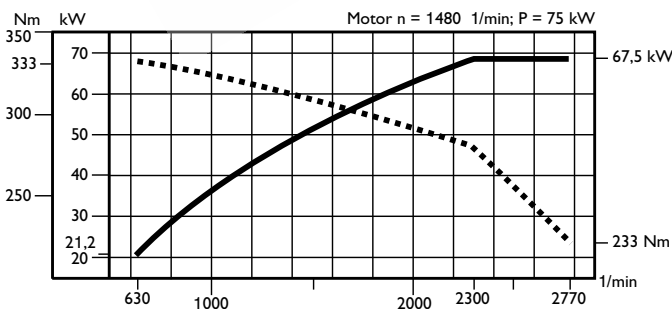
Spring pulley **F 450 b**



Centre distance/mm	A =	522	680	720	725	814	977
Belt inside length/mm	Li =	1977	2287	2365	2377	2552	2877
Belt actual length/mm	Lw =	2100	2410	2488	2500	2675	3000

Power,
Speeds,
Torque.

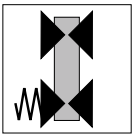
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



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BERGES ... everything under control.



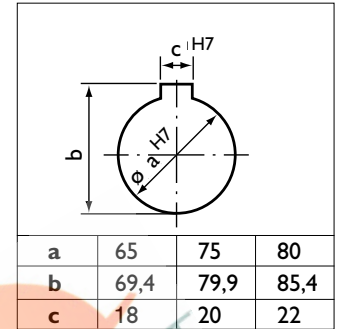


Double Pulley Drives

RF 500 b 1 : 4

P_1 max. **110 kW**

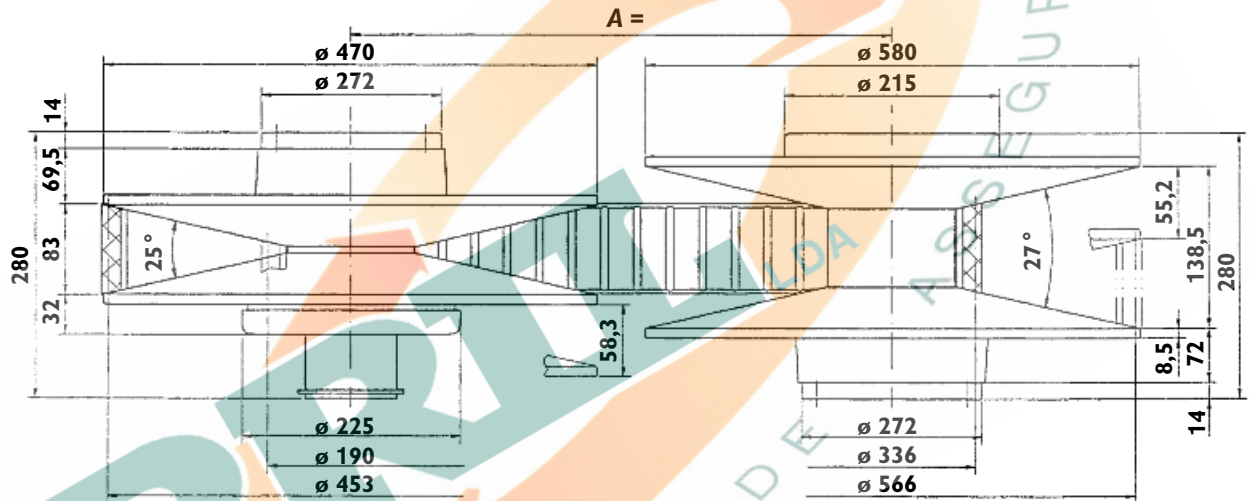
Wide V-belt	83 x 26
Speed range	1 : 4
Motor power	max. 110 kW
Control stroke	58,3 mm
Control force	81,5 Nm
Weight	950 N
Moment of inertia	R = 5,7 x 10⁻¹ kgm² F = 1,17 kgm²
Belt max. inside running \emptyset	R = 453 mm F = 566 mm
Belt min. inside running \emptyset	R = 190 mm F = 336 mm
Radial load	3650 N



Special bores on request against extra cost

Control pulley **R 500 b**

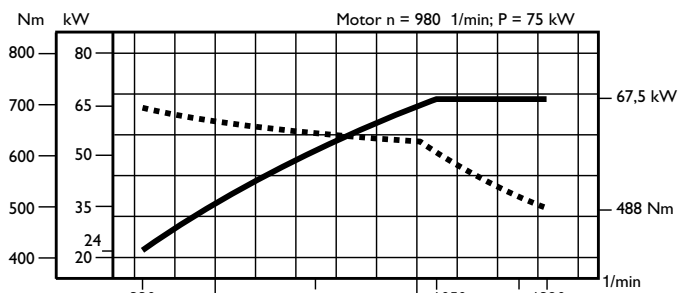
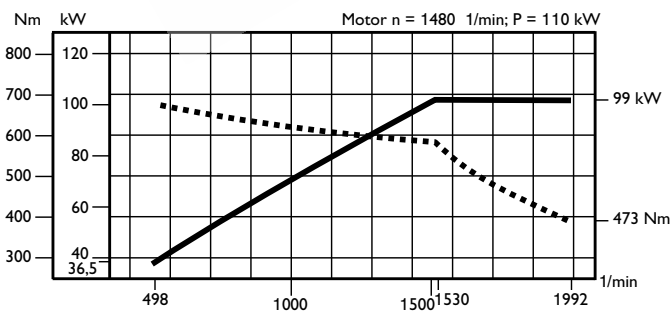
Spring pulley **F 500 b**



Centre distance/mm	A =	628	720	887
Belt inside length/mm	Li =	2377	2552	2877
Belt actual length/mm	Lw =	2500	2675	3000

Power,
Speeds,
Torque.

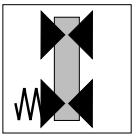
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



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BERGES ... everything under control.



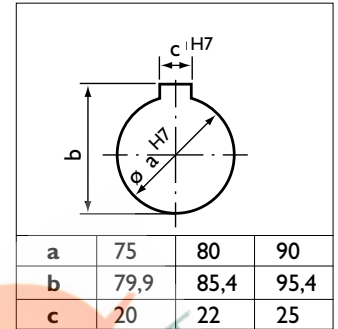


Double Pulley Drives

RF 600 b 1 : 3

P_1 max. **160 kW**

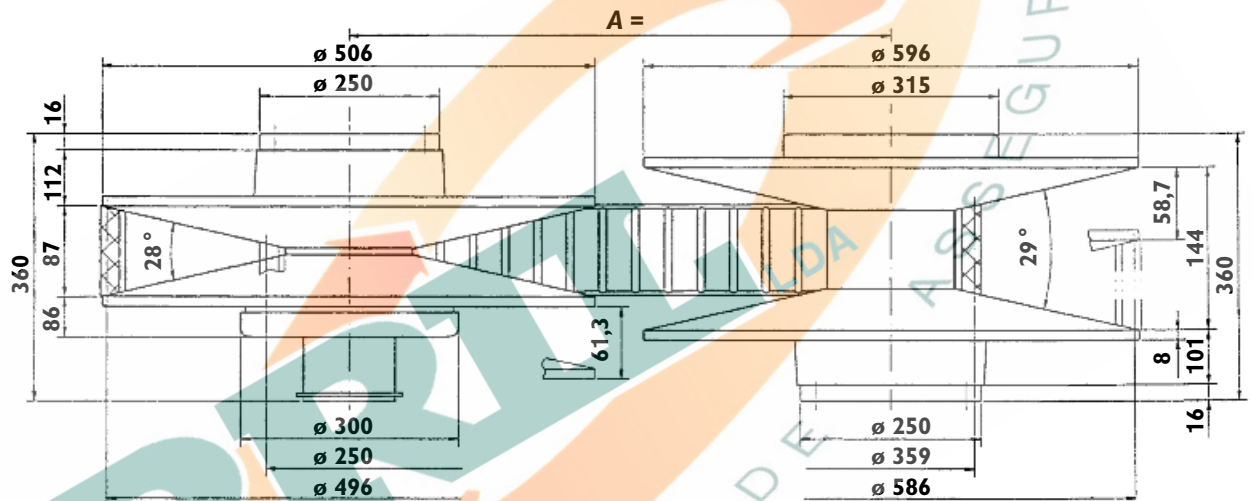
Wide V-belt	87 x 28
Speed range	1 : 3,0
Motor power	max. 160 kW
Control stroke	61,3 mm
Control force	122 Nm
Weight	1750 N
Moment of inertia	R = 1,25 kgm² F = 2,22 kgm²
Belt max. inside running \varnothing	R = 454 mm F = 544 mm
Belt min. inside running \varnothing	R = 208 mm F = 317 mm
Radial load	5200 N



Special bores on request against extra cost

Control pulley **R 600 b**

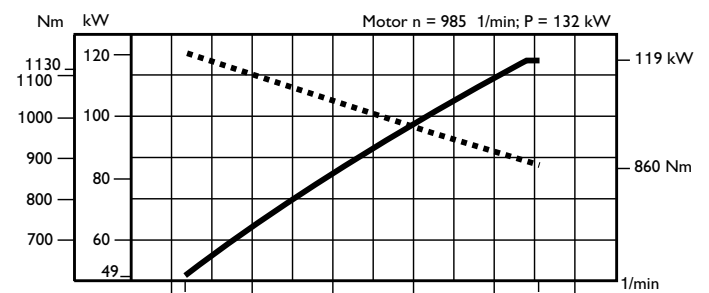
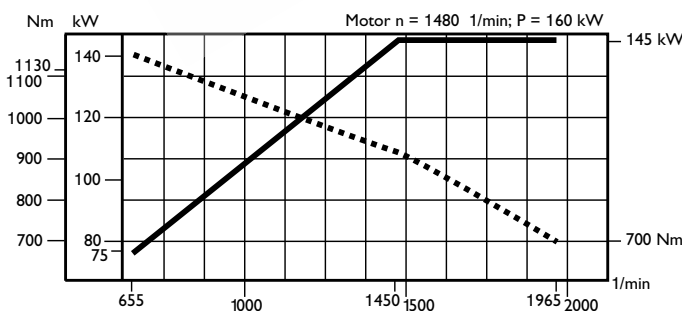
Spring pulley **F 600 b**



Centre distance/mm	A =	650	750	842
Belt inside length/mm	Li =	2518	2717	2900
Belt actual length/mm	Lw =	2650	2849	3032

Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



Variable speed V-belt pulleys

Double pulley drive for wide V-belts

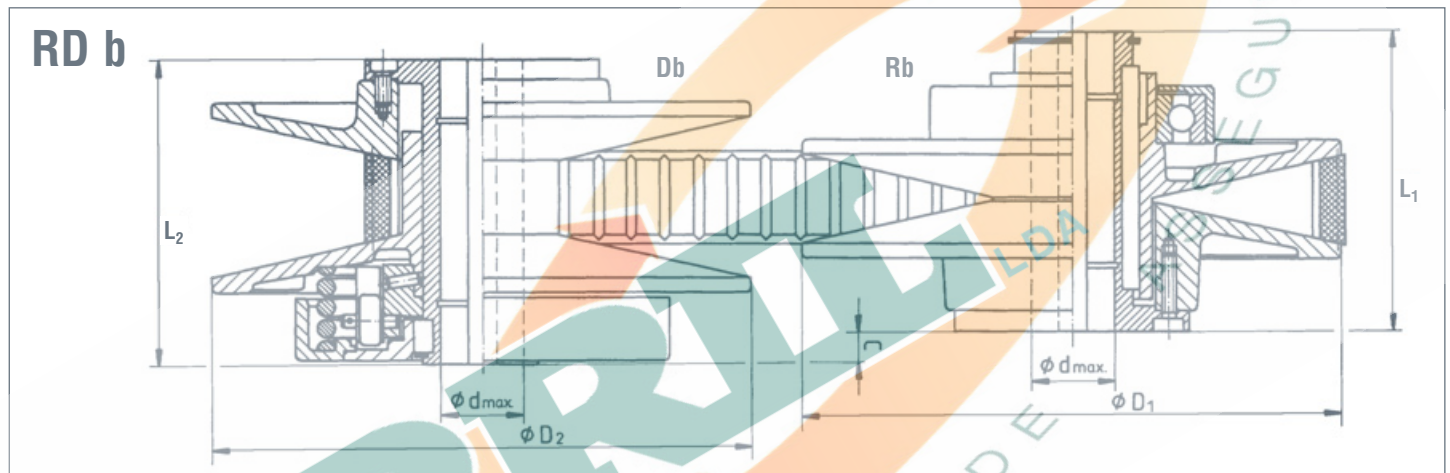
RD b

 $P_{1 \text{ max.}} = 160 \text{ kW}$

This drive unit has a torquedependent control cam in addition to the pressure springs to absorb intermittent overloading or torque peaks.

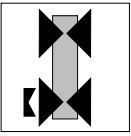
The output pulley operates as a spring pulley up to the nominal power. From this point, the integrated control cam makes the output pulley function like a rigid V-belt drive.

Double pulley drives of the type RD b therefore offer a high level of protection against overloading. Not suitable for reversing operation.



RD b:

Type	Speed range	Motor	kW	n max.	n min.	P max.	P min.	D ₁	L ₁	D ₂	L ₂	d _{max.}	C	Wide V-belt
RD 210 b	1:7,5	1450	7,5	3970	530	6,7	1,9	220	122	220	135	38	21	37 x 10
RD 280 b	1:8,5	1455	15,0	4240	500	13,5	4,1	296	162	296	182	42	35,5	55 x 15
RD 350 b	1:7,4	1465	30,0	4000	540	27,0	9,6	346	195	346	215	55	38	70 x 18
RD 400 b	1:5,0	1475	55,0	2575	515	49,5	16,8	372	220	420	250	65	33	83 x 23
RD 500 b	1:4,0	1480	110,0	1994	503	99,0	36,5	470	280	580	305	80	25	83 x 26
RD 600 b	1:3,0	1480	160,0	1965	655	145,0	75,0	506	360	596	400	90	40	87 x 28

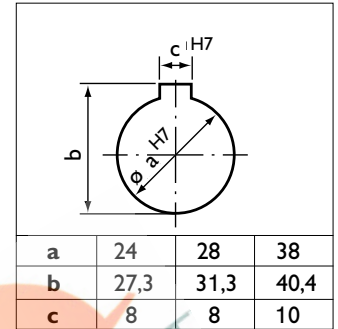


Double Pulley Drives

RD 210 b 1 : 7,5

$P_{1 \text{ max.}}$ 7,5 kW

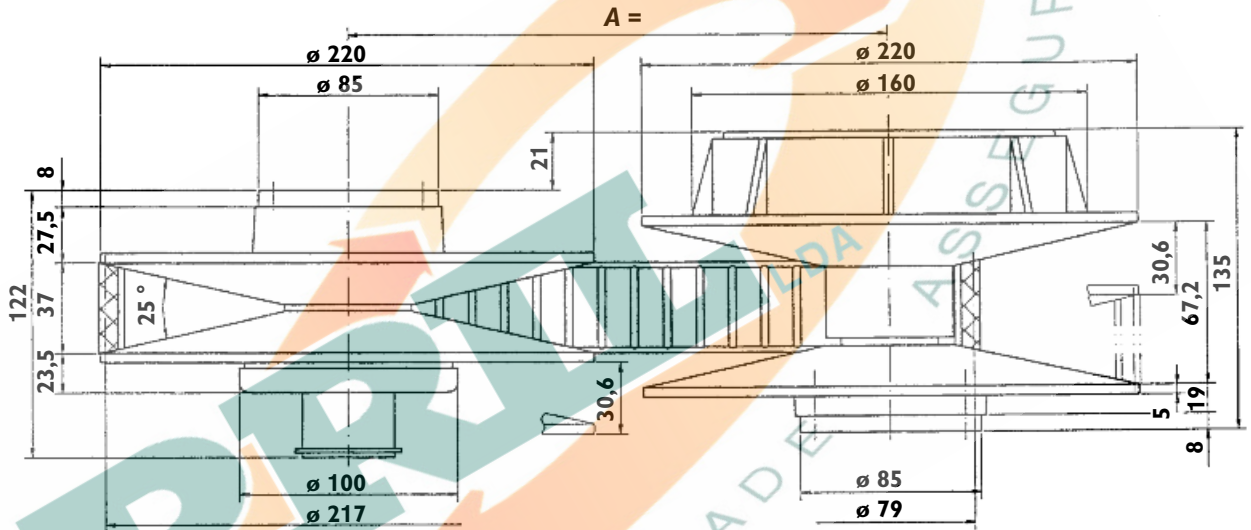
Wide V-belt	37 x 10
Speed range	1 : 7,5
Motor power	max. 7,5 kW
Control stroke	30,6 mm
Control force	2,7 Nm
Weight	83 N
Moment of inertia	R = 1,03 x 10⁻² kgm² D = 1,5 x 10⁻² kgm²
Belt max. inside running \emptyset	202 mm
Belt min. inside running \emptyset	64 mm
Radial load	490 N



Special bores on request against extra cost

Control pulley **R 210 b**

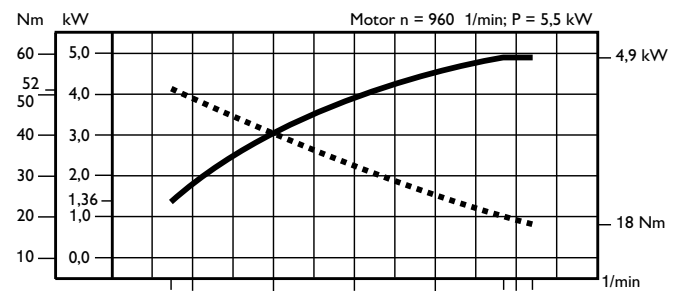
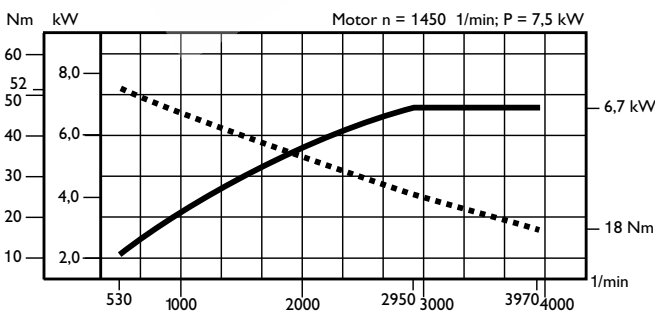
Spring pulley **D 210 b**



Centre distance/mm	A =	233	262	284	346	412	448	488	539	589	639	690	790
Belt inside length/mm	Li =	900	955	1000	1120	1250	1320	1400	1500	1600	1700	1800	2000
Belt actual length/mm	Lw =	947	1002	1047	1167	1297	1367	1447	1547	1647	1747	1847	2047

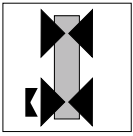
Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!



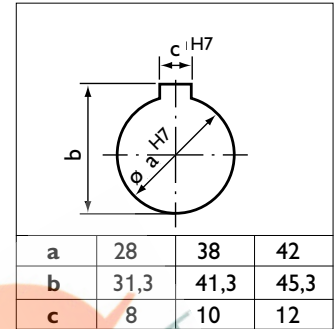


Double Pulley Drives

RD 280 b 1 : 8,5

P_1 max. **15 kW**

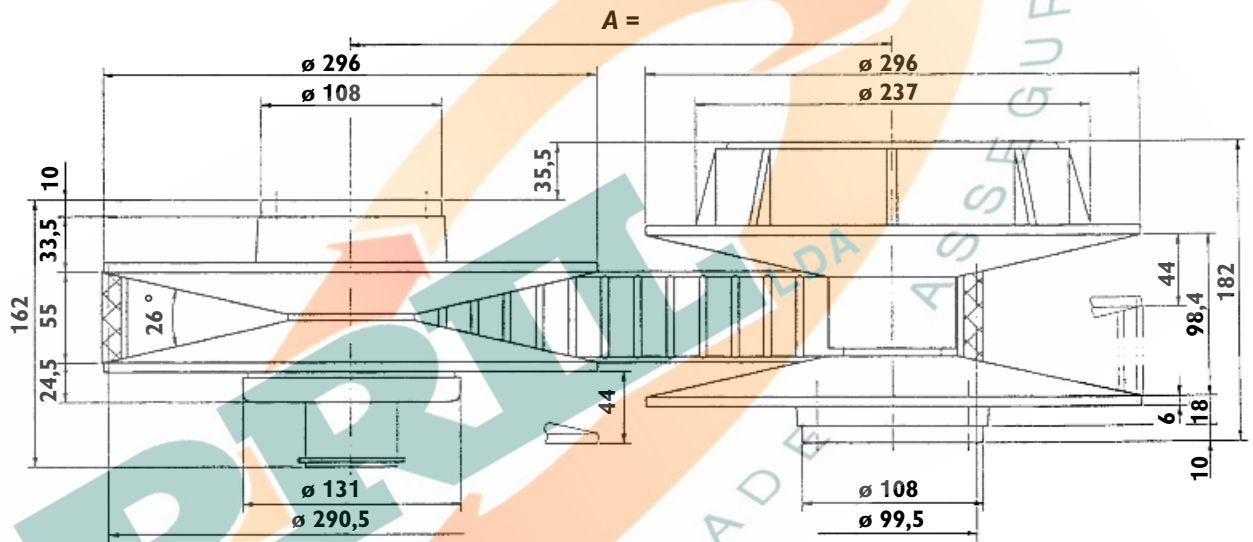
Wide V-belt	55 x 15
Speed range	1 : 8,5
Motor power	max. 15 kW
Control stroke	44 mm
Control force	5,4 Nm
Weight	183 N
Moment of inertia	R = $4,1 \times 10^{-2} \text{ kgm}^2$ D = $5,9 \times 10^{-2} \text{ kgm}^2$
Belt max. inside running \varnothing	268 mm
Belt min. inside running \varnothing	78 mm
Radial load	810 N



Special bores on request against extra cost

Control pulley **R 280 b**

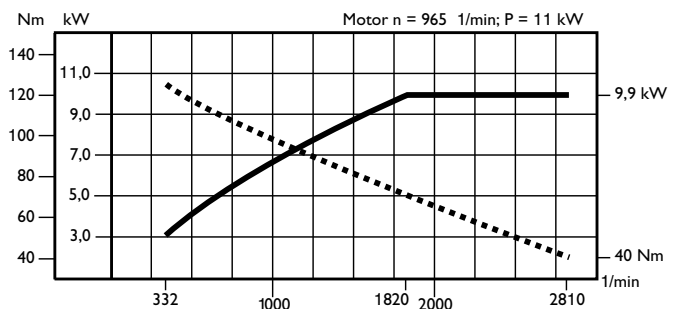
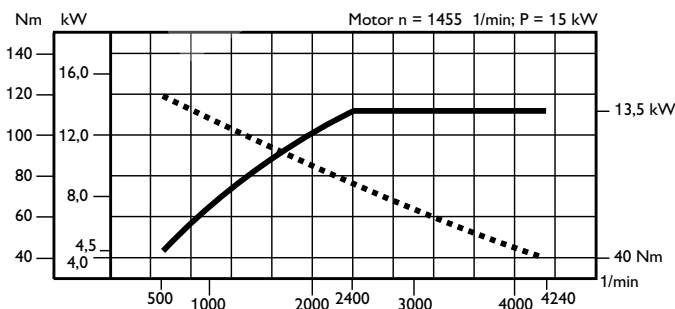
Spring pulley **D 280 b**



Centre distance/mm	A =	344	378	419	470	521	572	623	724	845	976	1126	1302
Belt inside length/mm	Li =	1255	1320	1400	1500	1600	1700	1800	2000	2240	2500	2800	3150
Belt actual length/mm	Lw =	1326	1391	1471	1571	1671	1771	1871	2071	2311	2571	2871	3221

Power,
Speeds,
Torque.

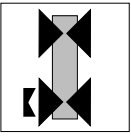
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



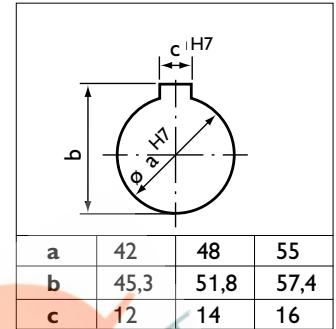


Double Pulley Drives

RD 350 b 1 : 7,4

P_1 max. 30 kW

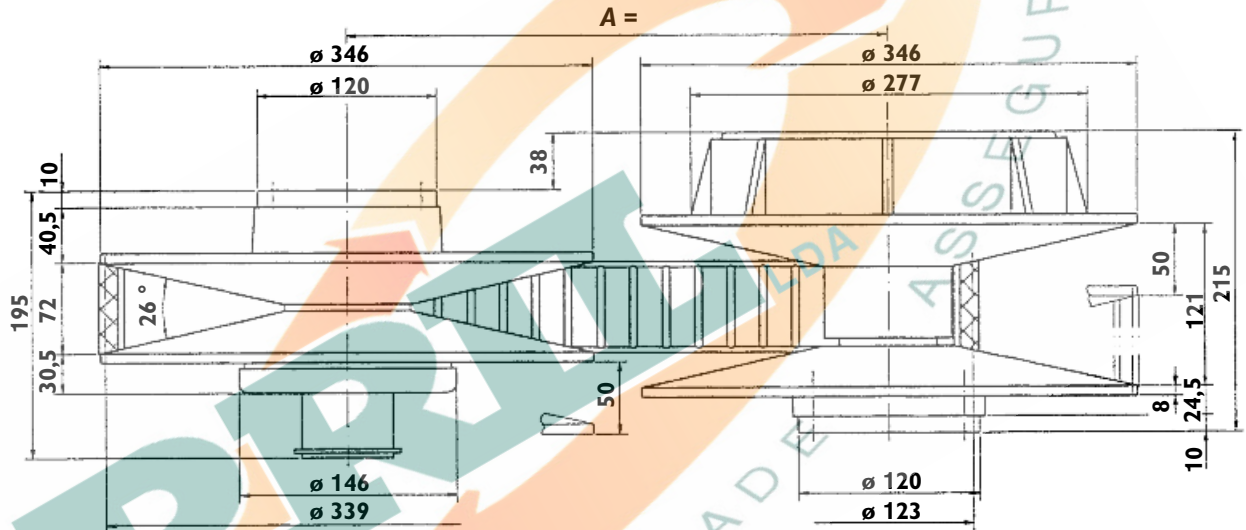
Wide V-belt	72 x 22
Speed range	1 : 7,4
Motor power	max. 30 kW
Control stroke	50 mm
Control force	11,0 Nm
Weight	330 N
Moment of inertia	$R = 1,0 \times 10^{-1} \text{ kgm}^2$ $D = 1,4 \times 10^{-1} \text{ kgm}^2$
Belt max. inside running \varnothing	306 mm
Belt min. inside running \varnothing	90 mm
Radial load	1960 N



Special bores on request against extra cost

Control pulley **R 350 b**

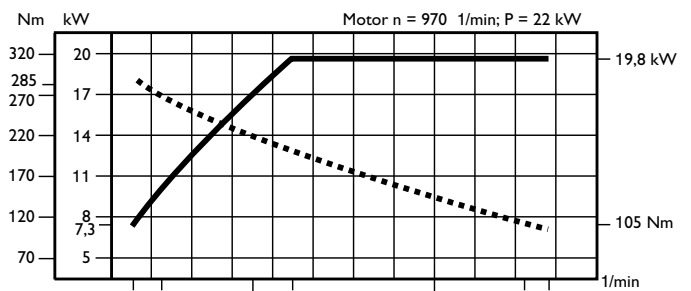
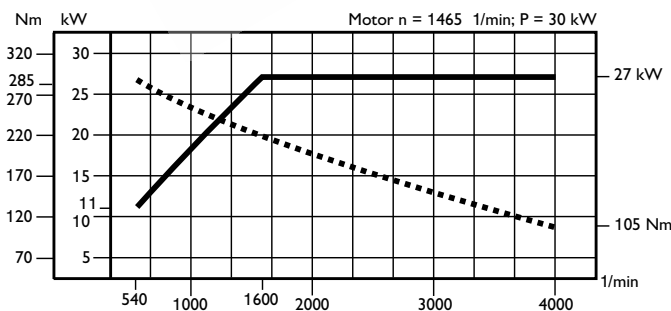
Spring pulley **D 350 b**



Centre distance/mm	A =	381	427	466	503	518	580	635	700	764	828	892	969
Belt inside length/mm	Li =	1415	1503	1580	1651	1680	1802	1910	2039	2165	2292	2419	2572
Belt actual length/mm	Lw =	1519	1607	1684	1755	1784	1906	2014	2142	2269	2396	2523	2676

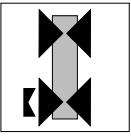
Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!



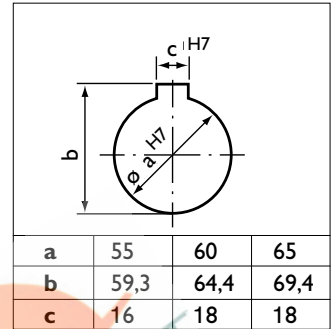


Double Pulley Drives

RD 400 b 1 : 5,0

P_1 max. 55 kW

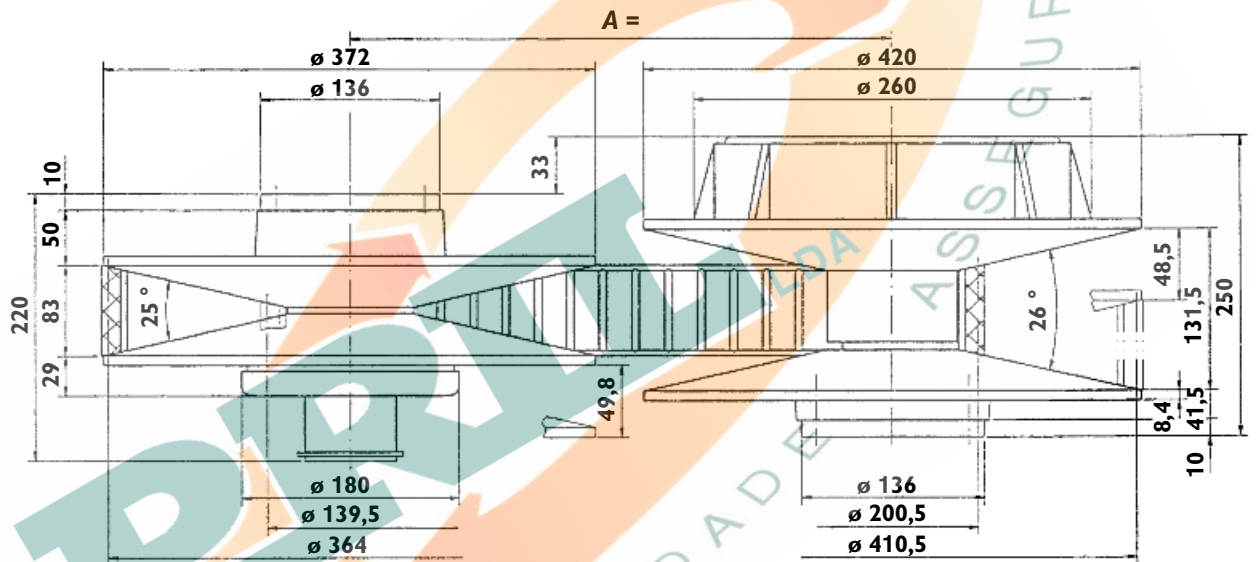
Wide V-belt	83 x 23
Speed range	1 : 5,0
Motor power	max. 55 kW
Control stroke	49,8 mm
Control force	43 Nm
Weight	423 N
Moment of inertia	R = 1,35 x 10⁻¹ kgm² D = 2,9 x 10⁻¹ kgm²
Belt max. inside running \varnothing	R = 364 mm D = 490,5 mm
Belt min. inside running \varnothing	R = 139,5 mm D = 200,5 mm
Radial load	2350 N



Special bores on request against extra cost

Control pulley **R 400 b**

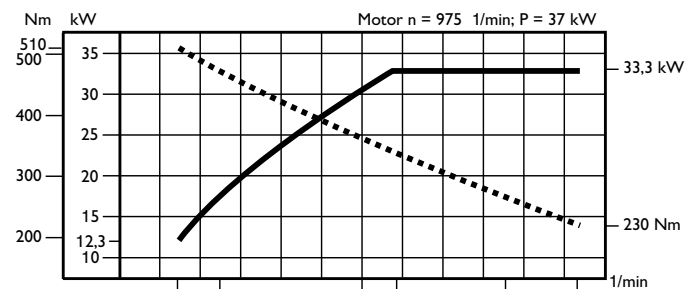
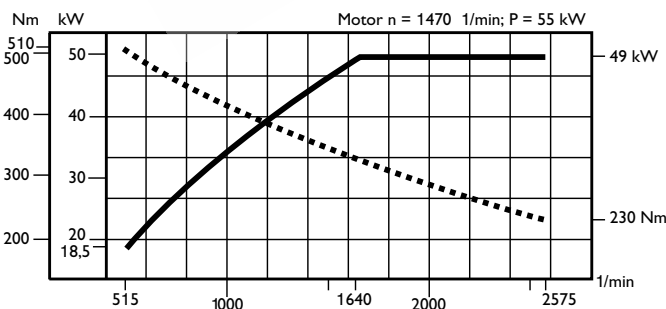
Spring pulley **D 400 b**



Centre distance/mm	A =	477	526	550	626	655	736
Belt inside length/mm	Li =	1749	1842	1892	2037	2094	2254
Belt actual length/mm	Lw =	1857	1950	2000	2145	2202	2362

Power,
Speeds,
Torque.

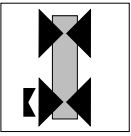
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



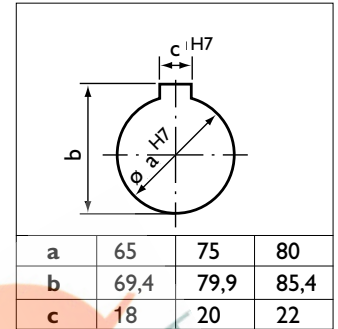


Double Pulley Drives

RD 500 b 1 : 4,0

P_1 max. **110 kW**

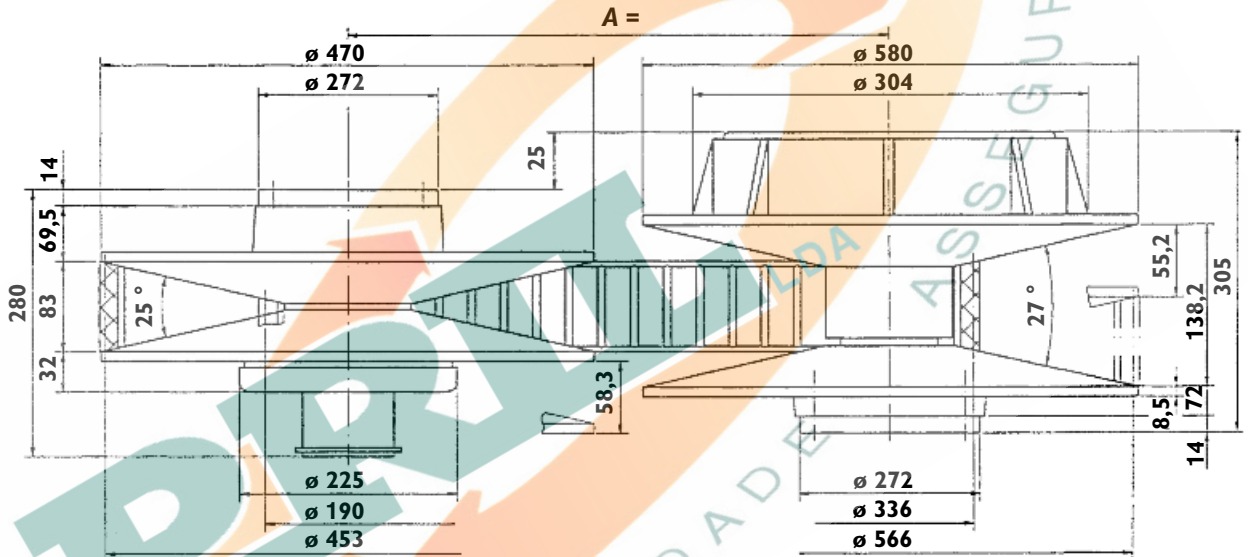
Wide V-belt	83 x 26
Speed range	1 : 4,0
Motor power	max. 110 kW
Control stroke	58,3 mm
Control force	81,5 Nm
Weight	1140 N
Moment of inertia	R = $5,7 \times 10^{-1} \text{ kgm}^2$ D = $1,53 \text{ kgm}^2$
Belt max. inside running \emptyset	R = 453 mm D = 566 mm
Belt min. inside running \emptyset	R = 190 mm D = 336 mm
Radial load	3650 N



Special bores on request against extra cost

Control pulley **R 500 b**

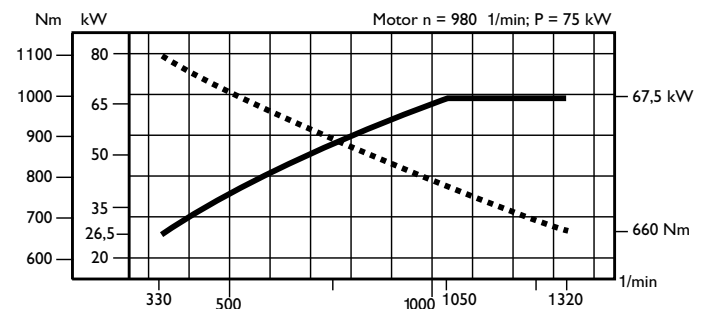
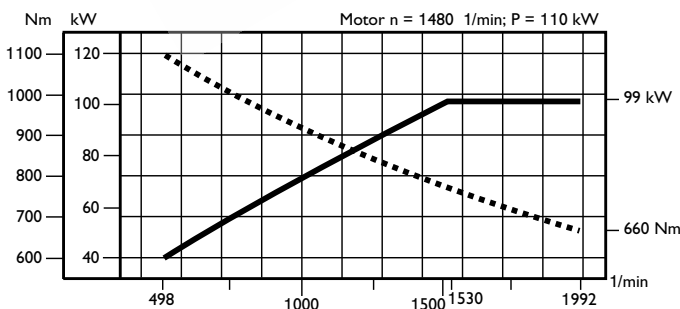
Spring pulley **D 500 b**



Centre distance/mm	A =	628	720	887
Belt inside length/mm	Li =	2377	2552	2877
Belt actual length/mm	Lw =	2500	2675	3000

Power,
Speeds,
Torque.

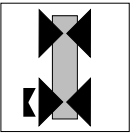
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



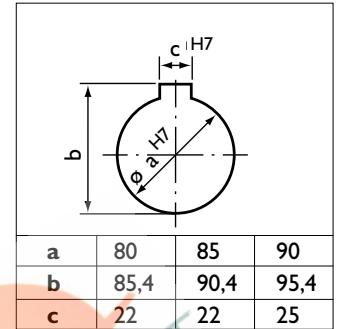


Double Pulley Drives

RD 600 b 1 : 3,0

P_1 max. **160 kW**

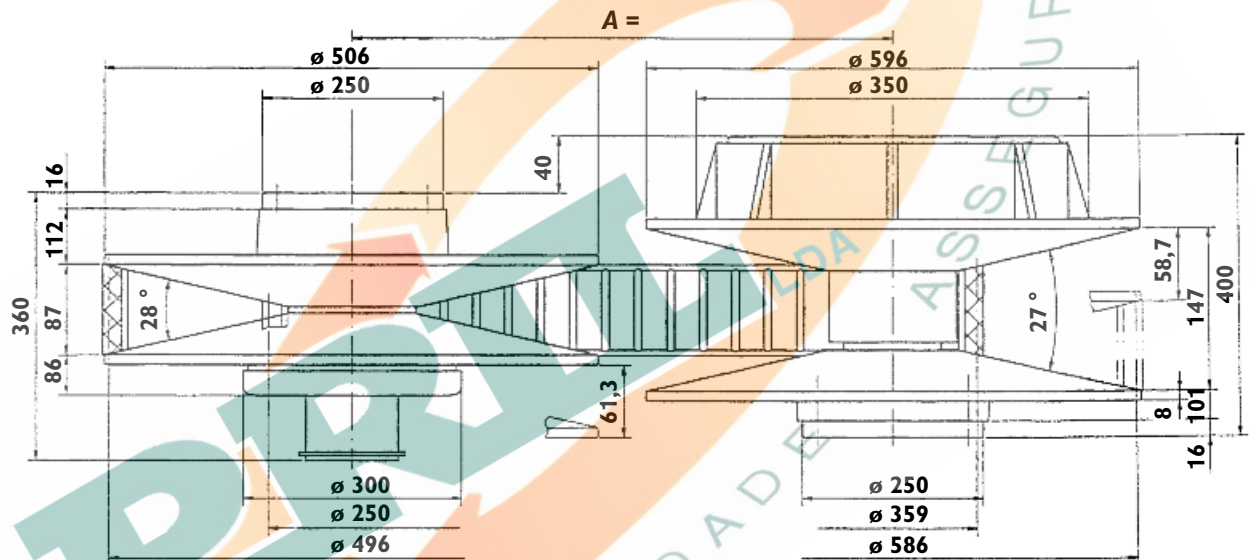
Wide V-belt	87 x 28
Speed range	1 : 3,0
Motor power	max. 160 kW
Control stroke	61,3 mm
Control force	122 Nm
Weight	1940 N
Moment of inertia	R = 1,25 kgm² D = 2,66 kgm²
Belt max. inside running \emptyset	R = 454 mm D = 544 mm
Belt min. inside running \emptyset	R = 208 mm D = 317 mm
Radial load	5200 N



Special bores on request against extra cost

Control pulley **R 600 b**

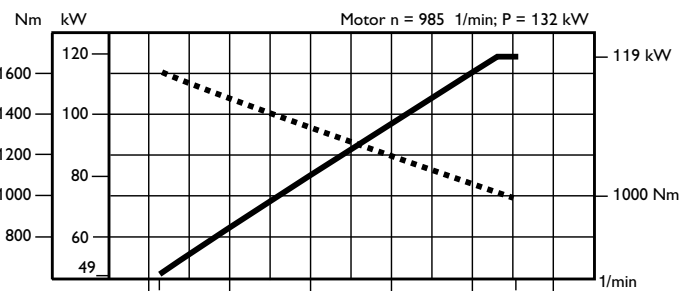
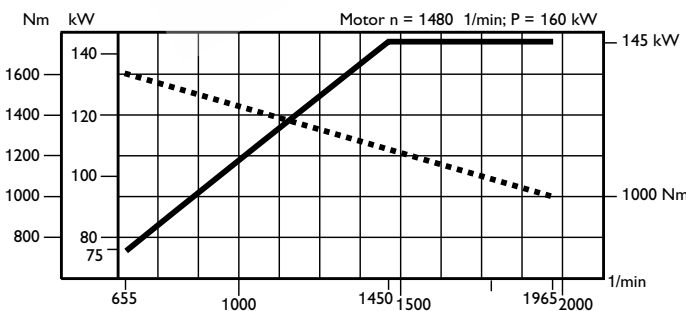
Spring pulley **D 600 b**



Centre distance/mm	A =	650	750	842
Belt inside length/mm	Li =	2518	2717	2900
Belt actual length/mm	Lw =	2650	2849	3032

Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



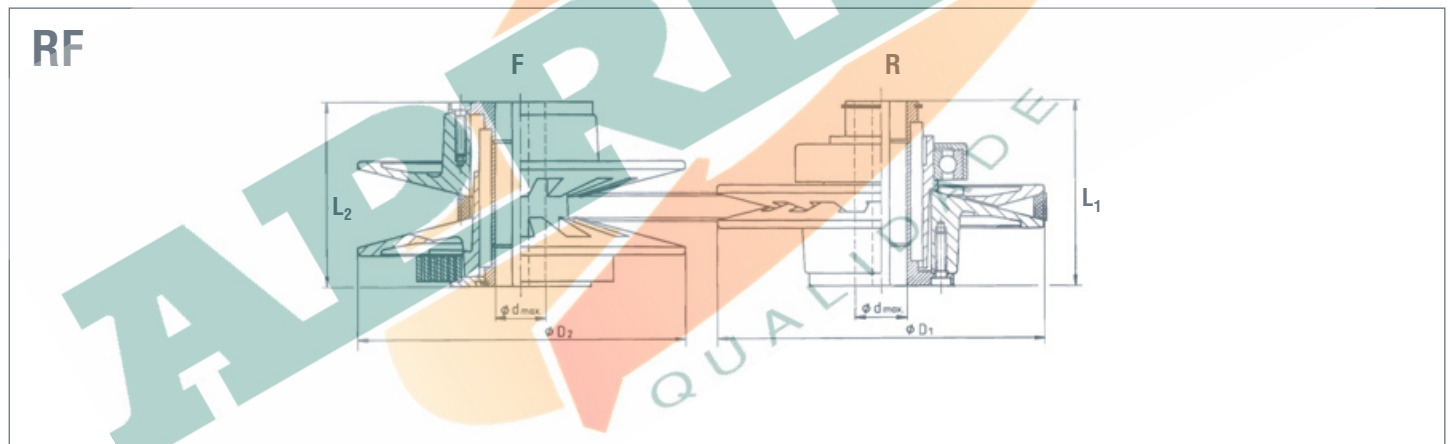
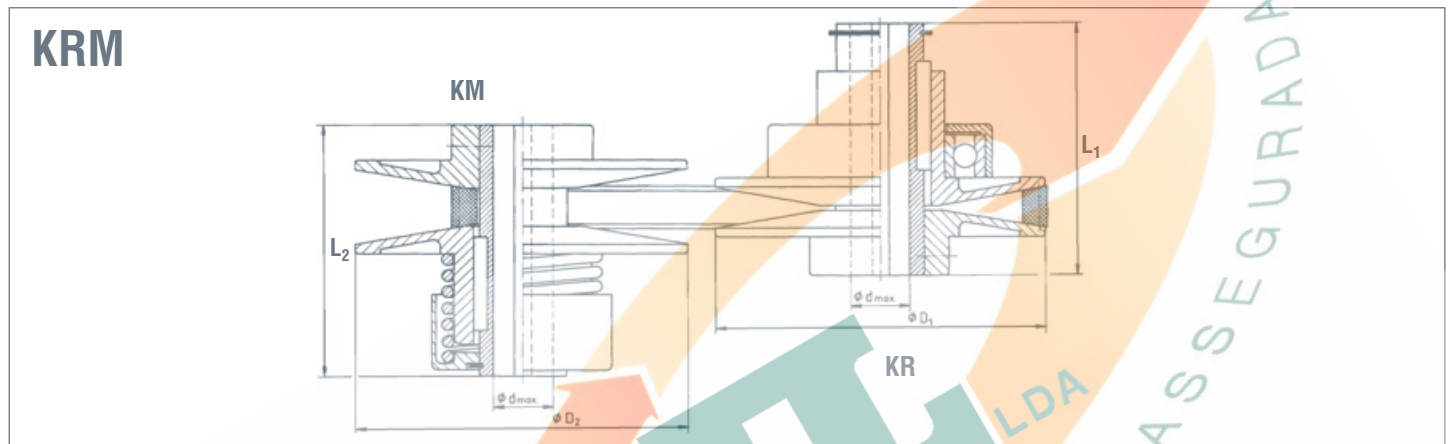


Variable speed V-belt pulleys

Double pulley drive for standard V-belts

KRM + RF P_{1 max.} = 5,5 kW

These drive units are designed for use with standard V-belts in special applications. The KRM type pulleys are designed as smooth pulleys and RF types with interlacing pulley sheaves.

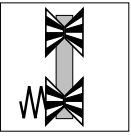


KRM:

Type	Speed range	Motor	kW	n max.	n min.	P max.	P min.	D ₁	L ₁	D ₂	L ₂	d _{max.}	Standard V-belt
KRM 80.10	1:6,0	1370	0,37	3350	560	0,33	0,13	80	60	80	65	14	10 x 6
KRM 105.13	1:6,0	1370	0,75	3350	560	0,68	0,40	105	80	105	80	20	13 x 8
KRM 127.17	1:6,0	1420	1,1	3480	580	1,0	0,44	127	80	127	80	25	17 x 11

RF:

Type	Speed range	Motor	kW	n max.	n min.	P max.	P min.	D ₁	L ₁	D ₂	L ₂	d _{max.}	Standard V-belt
RF 100	1:5,0	1370	0,37	3065	612	0,33	0,15	110	72	110	72	24	10 x 6
RF 150	1:6,5	1410	1,5	3595	553	1,35	0,46	158	90	158	90	28	13 x 8
RF 210	1:8,0	1420	3,0	4010	502	2,7	1,1	220	122	220	122	32	17 x 11
RF 280	1:8,5	1450	5,5	4230	497	4,9	2,6	292	162	292	162	42	22 x 14



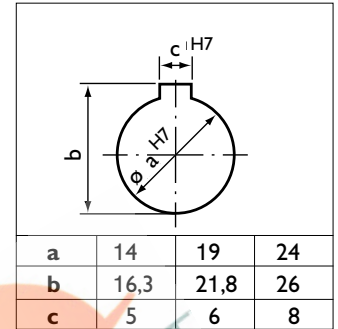
Double Pulley Drives

RF 100

1 : 5

$P_{1 \text{ max.}}$ 0,37 kW

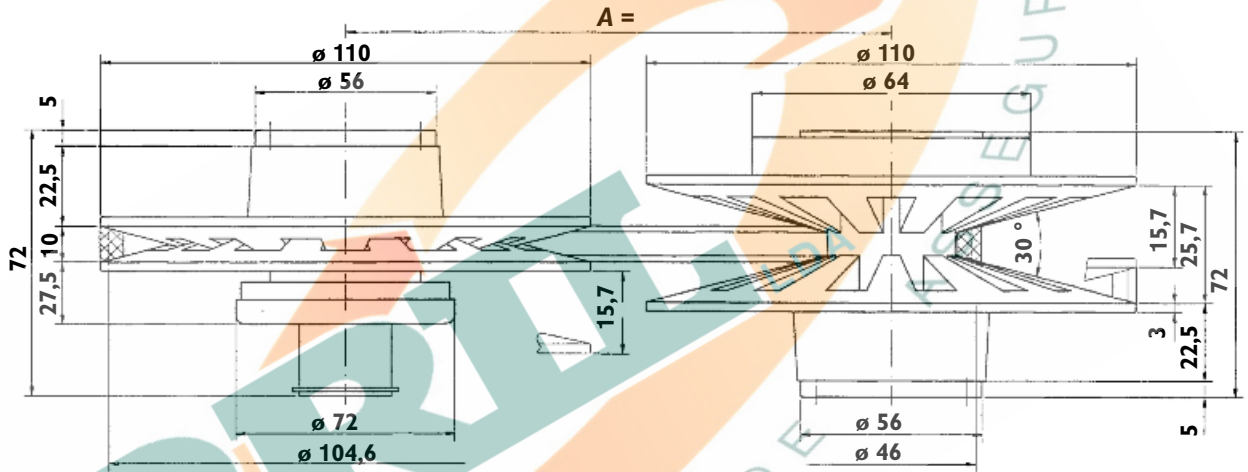
Standard v-belt	10 x 6
Speed range	1 : 5
Motor power	max. 0,37 kW
Control stroke	15,7 mm
Control force	0,9 Nm
Weight	19 N
Moment of inertia	R = $7,6 \times 10^{-4} \text{ kgm}^2$ F = $6,8 \times 10^{-4} \text{ kgm}^2$
Belt max. inside running \varnothing	101 mm
Belt min. inside running \varnothing	40 mm
Radial load	140 N



Special bores on request against extra cost

Control pulley **R 100**

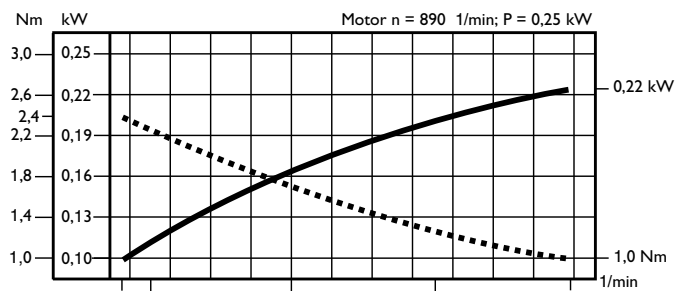
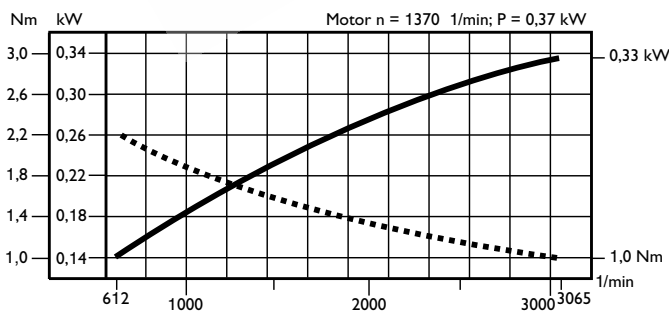
Spring pulley **F 100**



Belt inside length/mm	A =	114	139	170	190	205	225	245	266	292	316	342	366	392
Riemen-Innenlänge/mm	Li =	450	500	560	600	630	670	710	750	800	850	900	950	1000

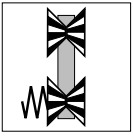
Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!





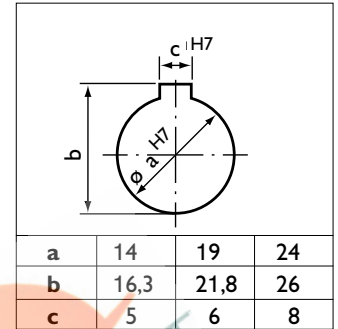
Double Pulley Drives

RF 150

1 : 6,5

$P_1 \text{ max. } 1,5 \text{ kW}$

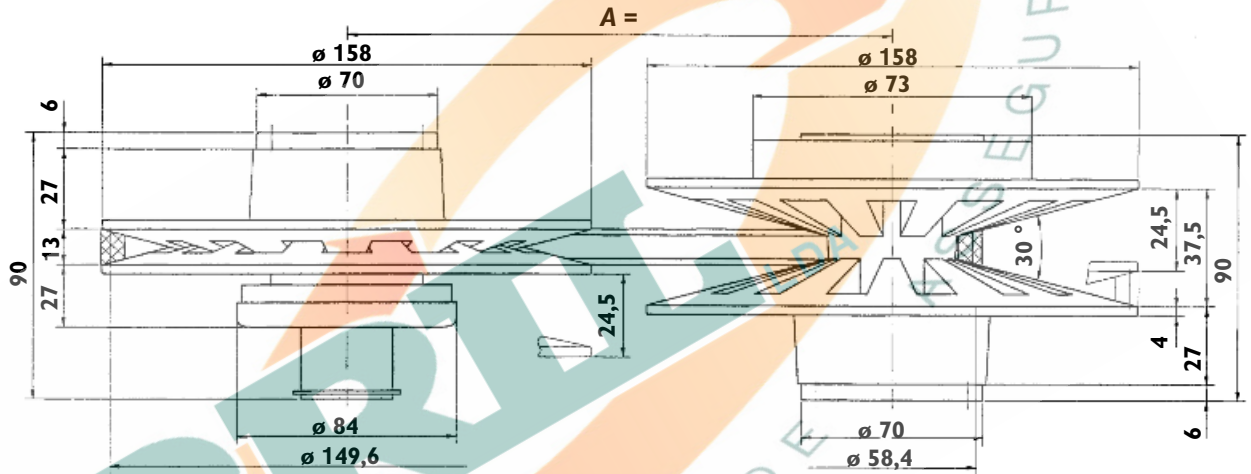
Standard v-belt	13 x 8
Speed range	1 : 6,5
Motor power	max. 1,5 kW
Control stroke	24,5 mm
Control force	1,3 Nm
Weight	37,5 N
Moment of inertia	$R = 3,0 \times 10^{-3} \text{ kgm}^2$ $F = 2,8 \times 10^{-3} \text{ kgm}^2$
Belt max. inside running \varnothing	144 mm
Belt min. inside running \varnothing	48 mm
Radial load	220 N



Special bores on request against extra cost

Control pulley **R 150**

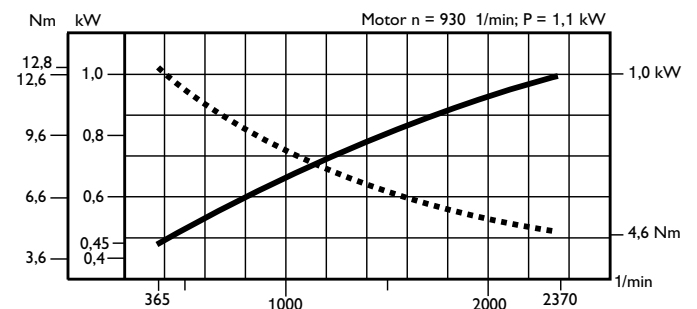
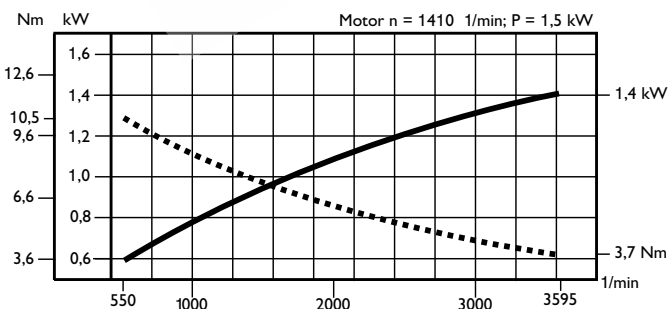
Spring pulley **F 150**



Belt inside length/mm	A =	160	180	201	222	248	272	298	323	348	379	409	474
Riemen-Innenlänge/mm	Li =	630	670	710	750	800	850	900	950	1000	1060	1120	1250

Power,
Speeds,
Torque.

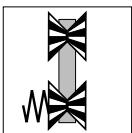
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.





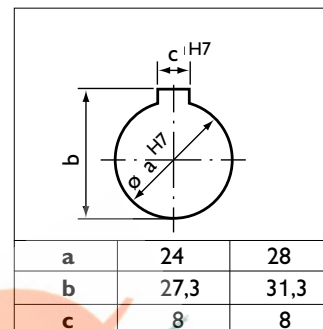
Double Pulley Drives

RF 210

1 : 8

$P_1 \text{ max. } 3,0 \text{ kW}$

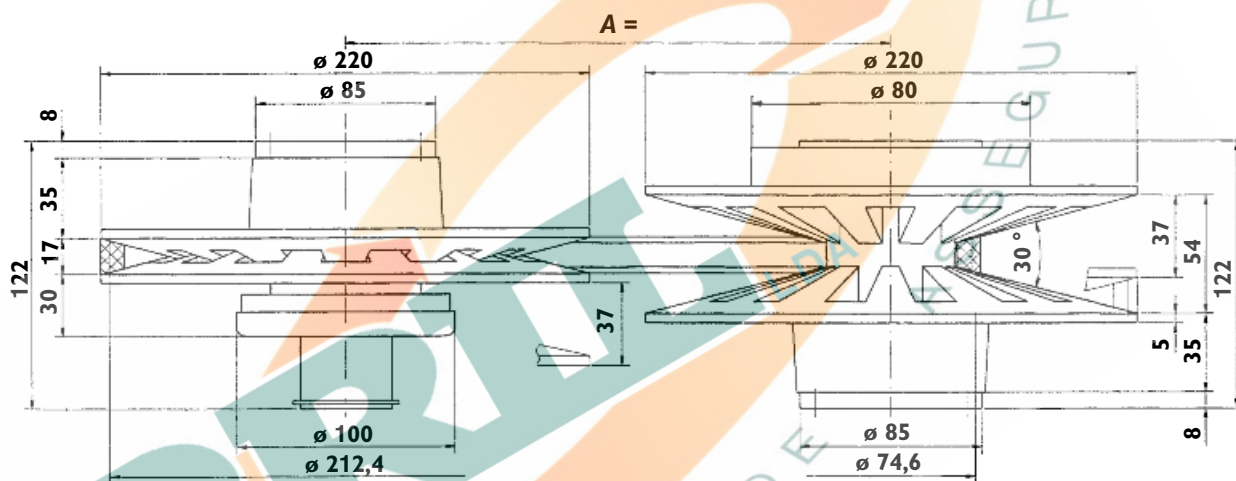
Standard v-belt	17 x 11
Speed range	1 : 8
Motor power	max. 3,0 kW
Control stroke	37 mm
Control force	2,2 Nm
Weight	75 N
Moment of inertia	$R = 1,1 \times 10^{-2} \text{ kgm}^2$ $F = 1,16 \times 10^{-2} \text{ kgm}^2$
Belt max. inside running \varnothing	200 mm
Belt min. inside running \varnothing	60 mm
Radial load	490 N



Special bores on request against extra cost

Control pulley **R 210**

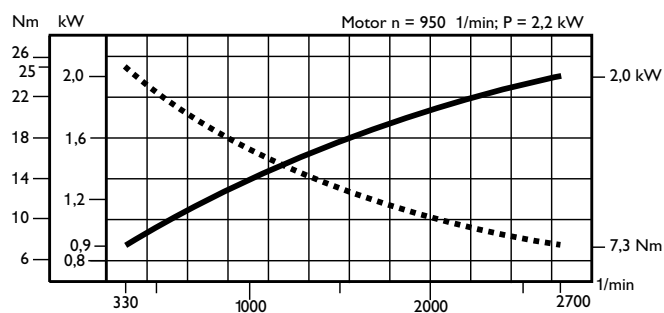
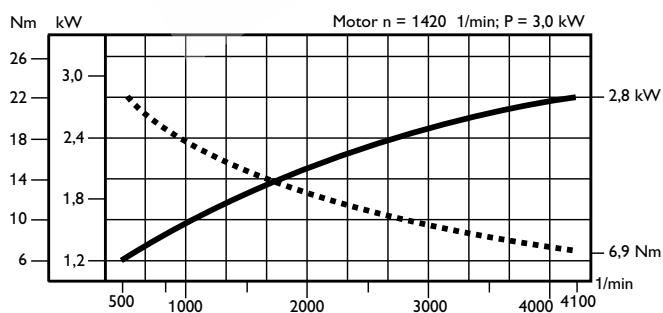
Spring pulley **F 210**



Belt inside length/mm	A =	236	262	288	303	319	334	365	398	441	466	517	542
Riemen-Innenlänge/mm	Li =	900	950	1000	1030	1060	1090	1150	1215	1300	1350	1450	1500

Power,
Speeds,
Torque.

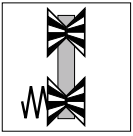
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.





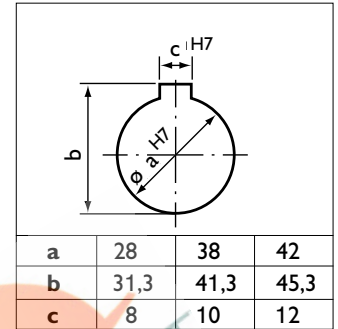
Double Pulley Drives

RF 280

1 : 8,5

$P_1 \text{ max. } 5,5 \text{ kW}$

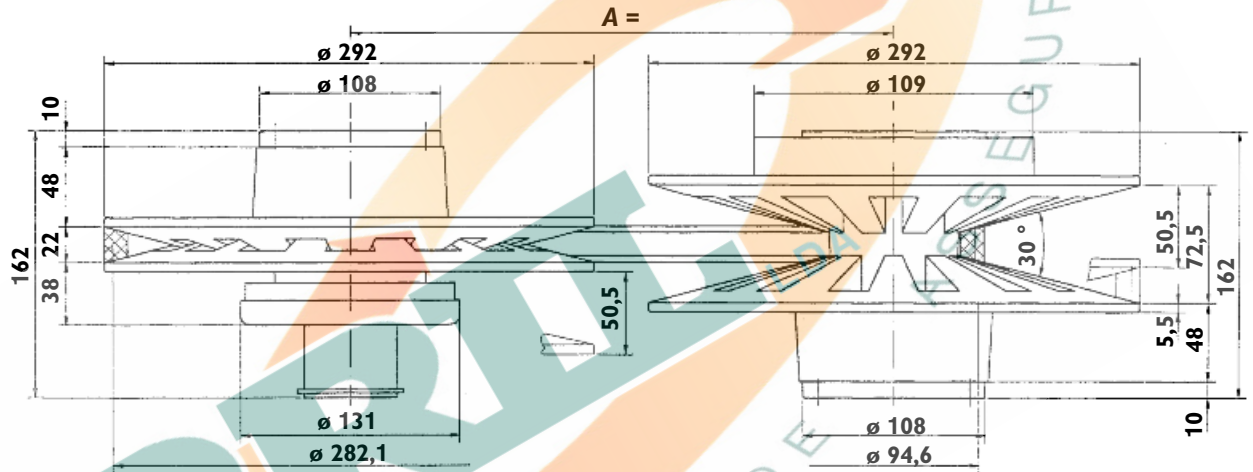
Standard v-belt	22 x 14
Speed range	1 : 8,5
Motor power	max. 5,5 kW
Control stroke	50,5 mm
Control force	3,5 Nm
Weight	173 N
Moment of inertia	$R = 4,5 \times 10^{-2} \text{ kgm}^2$ $F = 4,7 \times 10^{-2} \text{ kgm}^2$
Belt max. inside running \varnothing	268 mm
Belt min. inside running \varnothing	76 mm
Radial load	680 N



Special bores on request against extra cost

Control pulley **R 280**

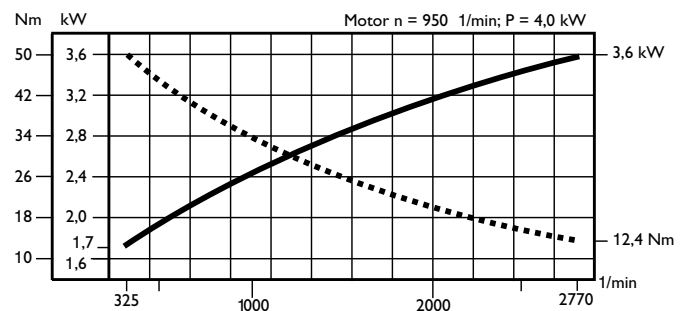
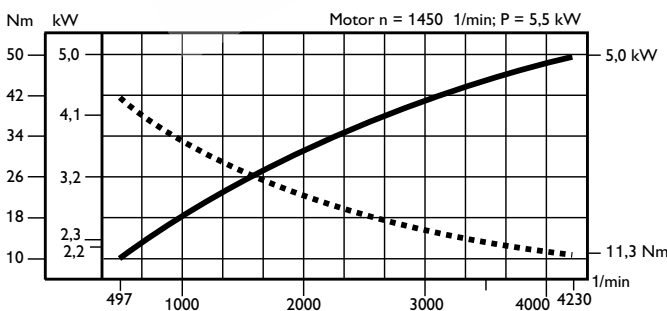
Spring pulley **F 280**



Belt inside length/mm	A =	306	344	380	421	472	523	574	624	676	726	787
Riemen-Innenlänge/mm	Li =	1180	1250	1320	1400	1500	1600	1700	1800	1900	2000	2120

Power,
Speeds,
Torque.

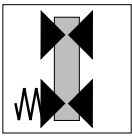
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



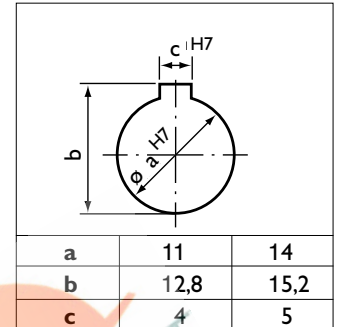


Double Pulley Drives

KRM 80.10 1 : 6

$P_1 \text{ max. } 0,25 \text{ kW}$

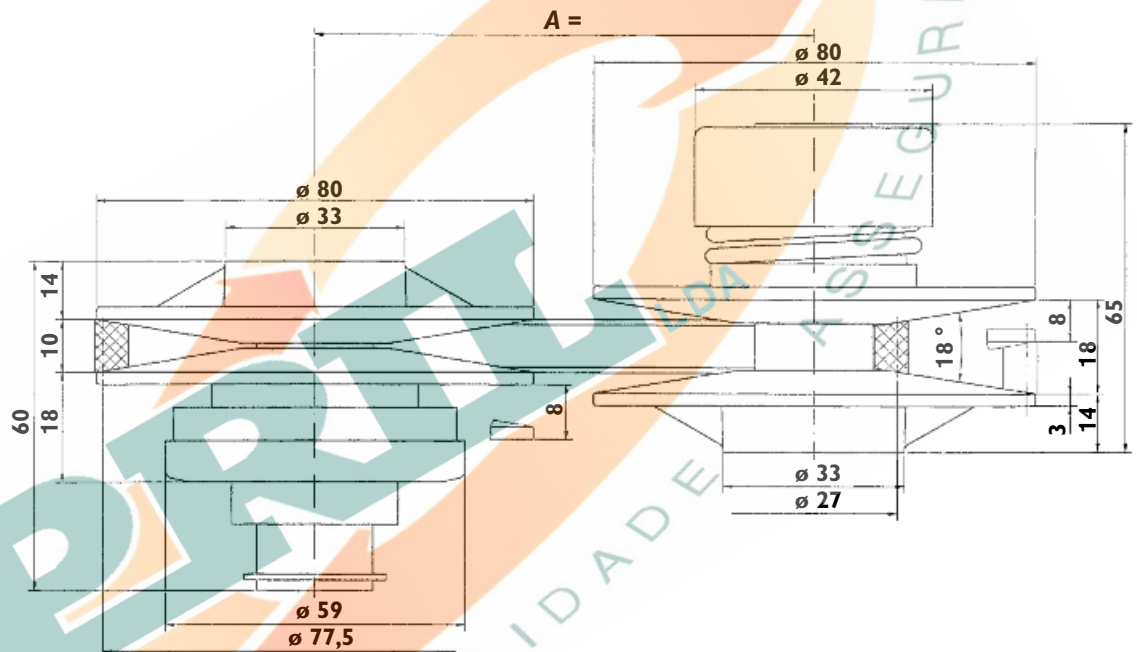
Standard V-belt	10
Speed range	1 : 6
Motor power	max. 0,25 kW
Control stroke	8 mm
Control force	0,5 Nm
Weight	7,6 N
Moment of inertia	$R = 1,7 \times 10^{-4} \text{ kgm}^2$ $F = 1,4 \times 10^{-4} \text{ kgm}^2$
Belt max. inside running \varnothing	70 mm
Belt min. inside running \varnothing	20 mm
Radial load	75 N



Special bores on request against extra cost

Control pulley **KR 80.10**

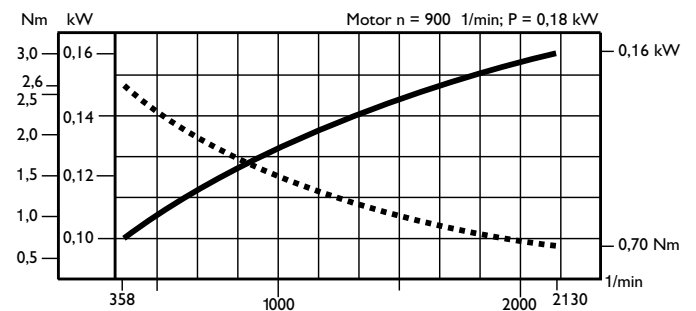
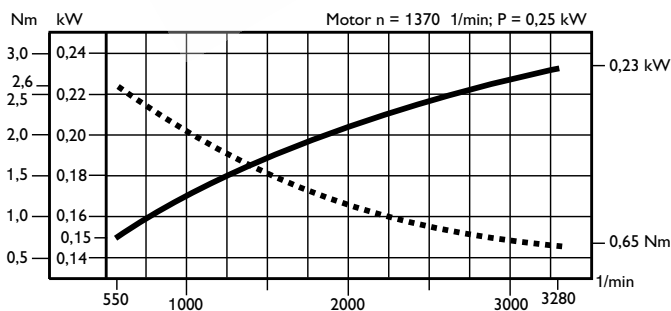
Spring pulley **KM 80.10**



Centre distance/mm	A =	115	128	140	153	165	178	193	209	229	244	264	284	304
Belt inside length/mm	Li =	375	400	425	450	475	500	530	560	600	630	670	710	750

Power,
Speeds,
Torque.

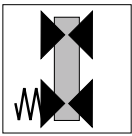
For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.



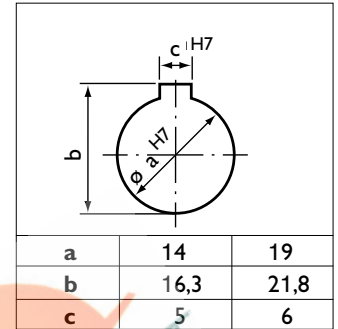


Double Pulley Drives

KRM 105.13 1 : 6

$P_{1 \max.}$ 0,55 kW

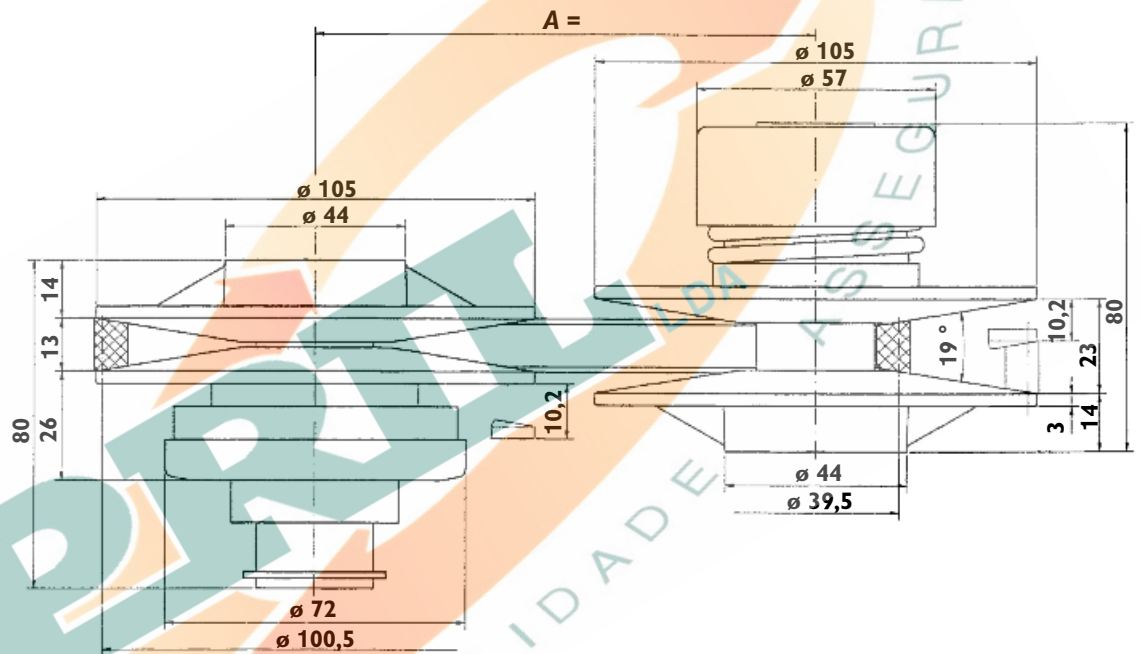
Standard V-belt	13
Speed range	1 : 6
Motor power	max. 0,55 kW
Control stroke	10,2 mm
Control force	1,3 Nm
Weight	18 N
Moment of inertia	$R = 6,6 \times 10^{-4} \text{ kgm}^2$ $F = 5,9 \times 10^{-4} \text{ kgm}^2$
Belt max. inside running \varnothing	90 mm
Belt min. inside running \varnothing	28 mm
Radial load	190 N



Special bores on request against extra cost

Control pulley **KR 105.13**

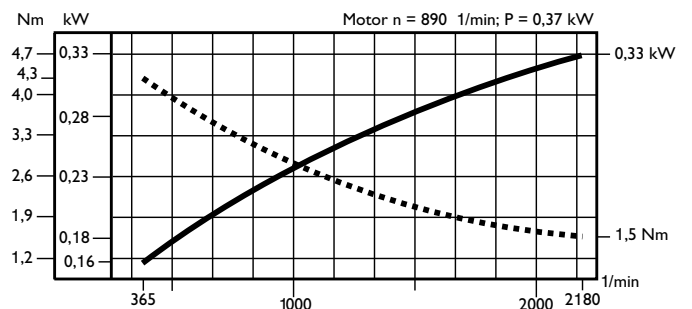
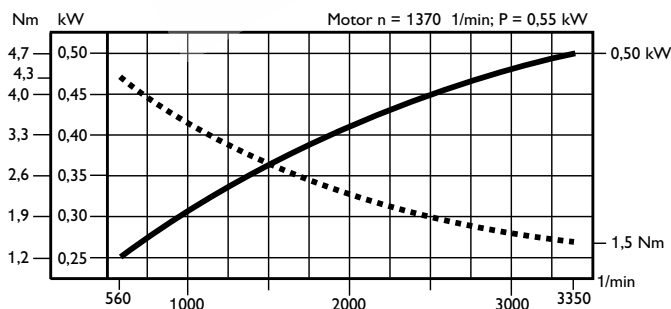
Spring pulley **KM 105.13**



Centre distance/mm	A =	145	170	185	205	220	240	260	281	306	331	356	381
Belt inside length/mm	Li =	483	530	560	600	630	670	710	750	800	850	900	950

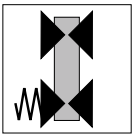
Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!



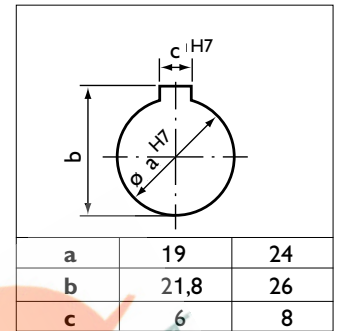


Double Pulley Drives

KRM 127.17 1 : 6

$P_1 \text{ max. } 0,75 \text{ kW}$

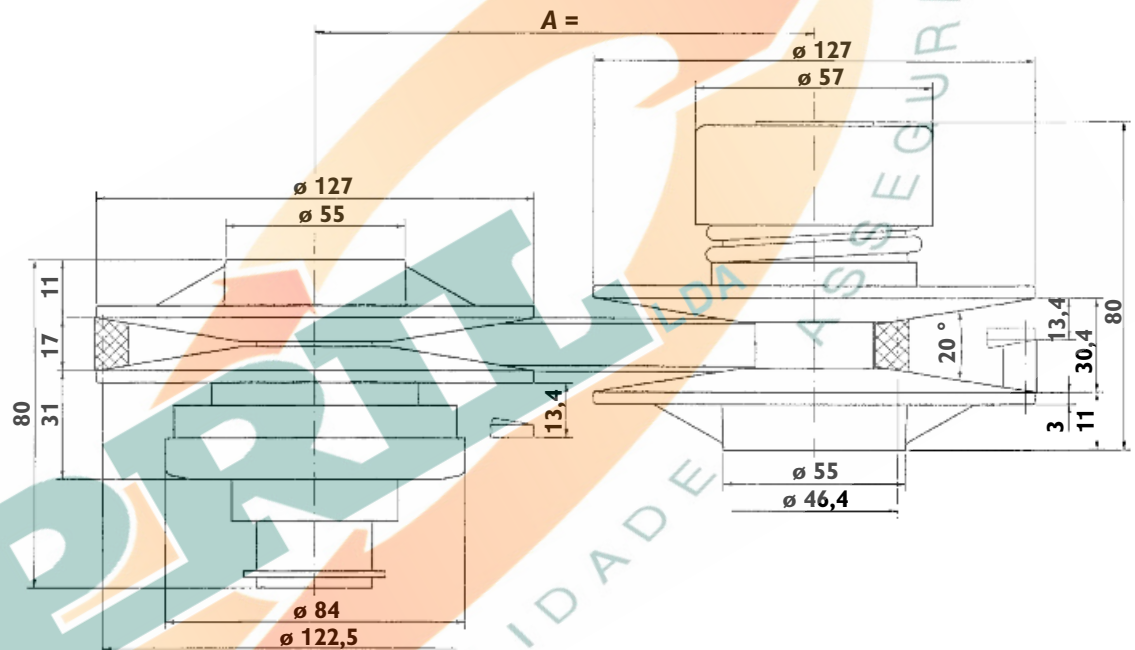
Standard V-belt	17
Speed range	1 : 6
Motor power	max. 0,75 kW
Control stroke	13,4 mm
Control force	1,3 Nm
Weight	23,5 N
Moment of inertia	$R = 1,4 \times 10^{-3} \text{ kgm}^2$ $F = 1,0 \times 10^{-3} \text{ kgm}^2$
Belt max. inside running \varnothing	109 mm
Belt min. inside running \varnothing	32 mm
Radial load	220 N



Special bores on request against extra cost

Control pulley **KR 127.17**

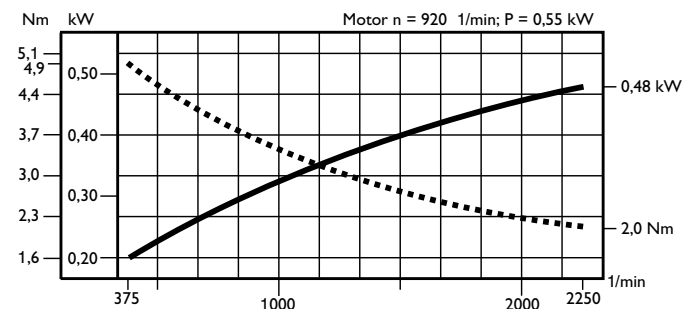
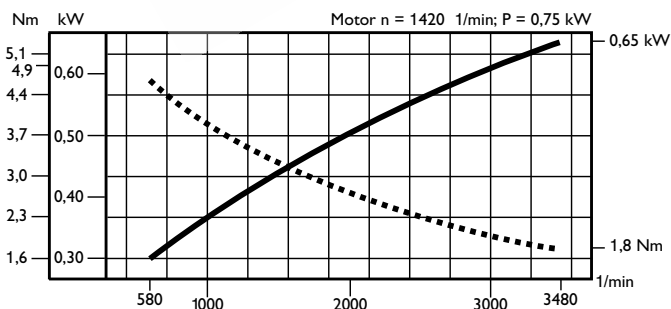
Spring pulley **KM 127.17**



Centre distance/mm	A =	200	221	241	262	287	312	337	362	387	413	448	488
Belt inside length/mm	Li =	630	670	710	750	800	850	900	950	1000	1050	1120	1200

Power,
Speeds,
Torque.

For intermittent loading observe usual load factor. If motor speeds vary then output speeds change proportionally.



Technical details may be subject to alterations!

BERGES ... everything under control.





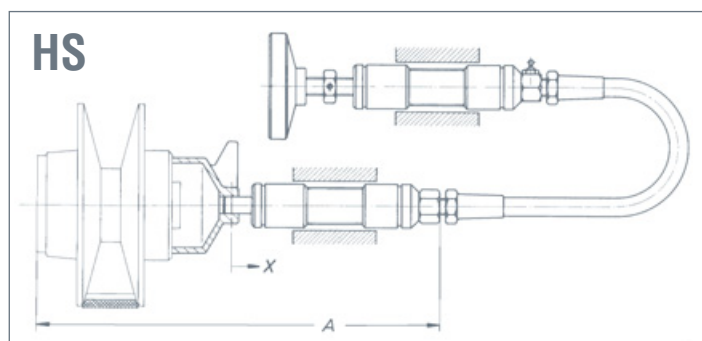
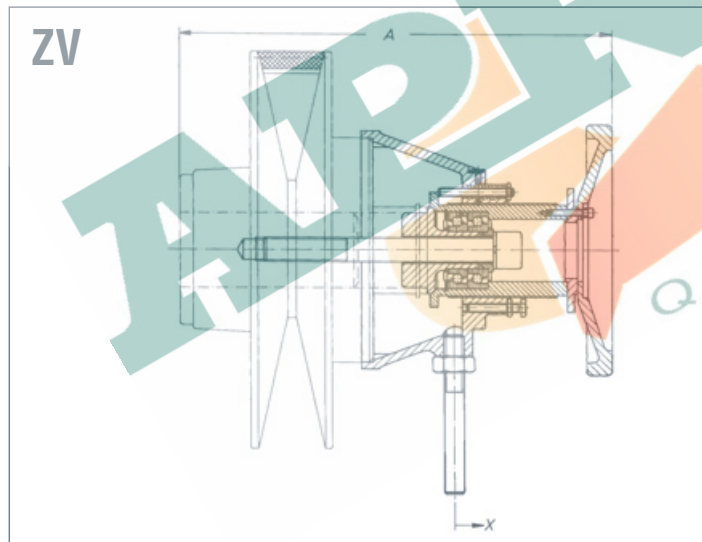
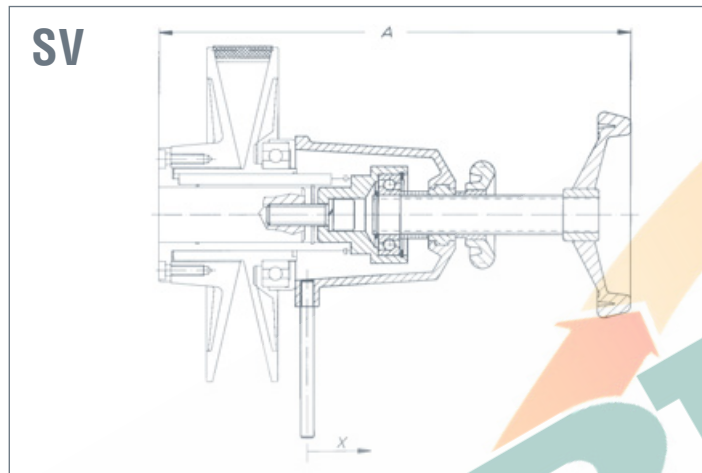
Variable speed V-belt pulleys

Speed adjustment controls for double pulley drives

SV · ZV · HS

The variable pulley and control device are mounted together centrally on the drive shaft.
This arrangement has the advantage that there are no additional axial loads on the motor shaft bearing.

The handwheels are optionally also available as scale wheels.



SV:

Size	Type	Adjustment stroke		A
		x ₁	x ₂	
105.13	SV1	–	10,2	236
100 (b)	SV1	15,9	16,1	228
130 b	SV1	17,9	–	228
127.17	SV2	–	13,4	262
150 (b)	SV2	21,9	24,7	272
190 b	SV2	24,1	–	272
196 b	SV2	27,0	–	292
210 (b)	SV2	30,6	37,5	304
235 b	SV2	31,5	–	304
250 b	SV3	36,9	–	356
280 (b)	SV3	44,0	51,5	373
300 b	SV3	40,4	–	396
350 b	SV3	51,7	–	406

ZV:

Size	Type	Adjustment stroke		A
		x ₁	x ₂	
375 b	ZV 375	48,2	–	386
400 b	ZV 400	49,8	–	368
450 b	ZV 450/500	56,8	–	464
500 b	ZV 450/500	58,3	–	464
600 b	ZV 600	61,3	–	610

HS:

Size	Type	Adjustment stroke		A
		x ₁	x ₂	
100 b	HS 100-130	15,9	16,1	263
130 b	HS 100-130	17,9	–	263
150 (b)	HS 150-196	21,9	24,7	298
190 b	HS 150-196	24,1	–	298
196 b	HS 150-196	27,0	–	310
210 (b)	HS 210-235	30,6	37,5	332
235 b	HS 210-235	31,5	–	332
250 b	HS 250-280	36,9	–	360
280 (b)	HS 250-280	44,0	51,5	387

x₁ = Adjustment for wide V-belt
x₂ = Adjustment for standard V-belt



Variable speed V-belt pulleys

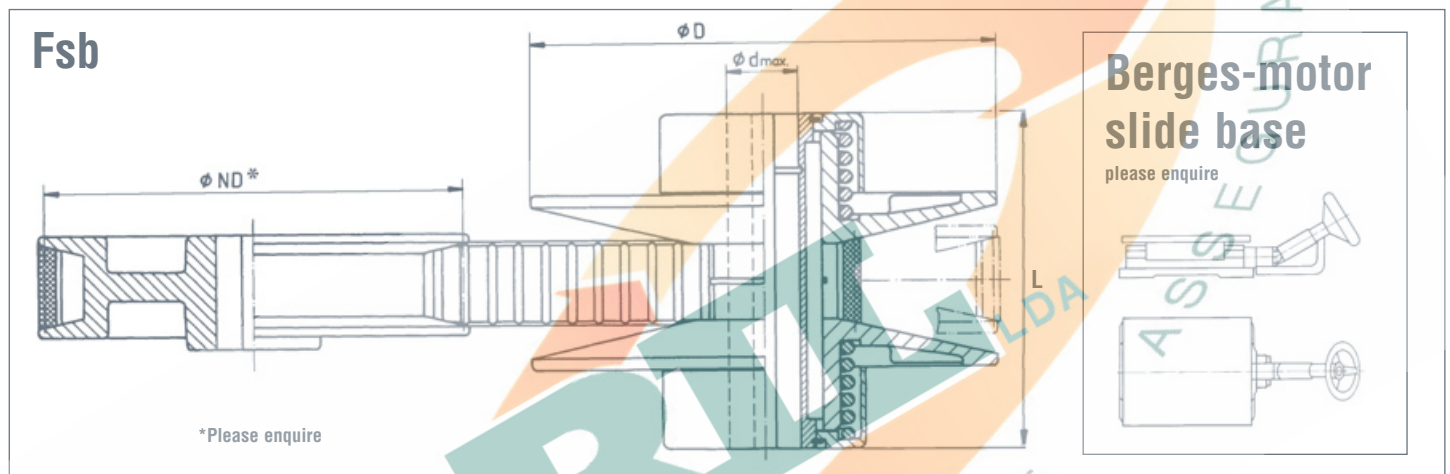
Single pulley drive for wide V-belts

Fsb $P_{1 \max.} = 55 \text{ kW}$

In this system, a spring pulley which opens on both sides (Fsb) is used in conjunction with a fixed driven pulley.

Speed adjustment takes place by adjusting the center distance by way of the motor carriage or tilting base.

The spring-loaded variable pulley is mounted on the drive shaft as standard. Reverse arrangement possible on request.



Fsb:

Type	Speed range	Motor	kW	P max.	P min.	D_1	L	$d_{\max.}$	Wide V-belt
F 100 sb	1:2,3	1380	0,75	0,67	0,29	120	80	24	22 x 7
F 130 sb	1:2,6	1380	0,75	0,67	0,26	135	80	24	22 x 7
F 150 sb	1:2,5	1410	1,5	1,35	0,53	159	115	28	28 x 8
F 190 sb	1:3,2	1410	1,5	1,35	0,43	190	115	28	28 x 8
F 210 sb	1:2,7	1420	3,0	2,7	1,2	220	148	38	37 x 10
F 235 sb	1:3,2	1420	3,0	2,7	1,0	236	148	32	37 x 10
F 250 sb	1:2,7	1430	4,0	3,6	1,5	255	170	42	47 x 12
F 280 sb	1:2,9	1450	7,5	6,7	2,2	296	190	42	55 x 15
F 325 sb	1:2,8	1450	11,0	9,9	4,6	346	240	48	70 x 18
F 350 sb	1:2,7	1460	18,5	16,6	7,0	346	240	55	72 x 22
F 400 sb	1:2,7	1475	30,0*	27,0	11,4	400	300	65	83 x 23

* $P_{1 \max} = 55 \text{ kW}$ with spring pulley mounted on drive shaft



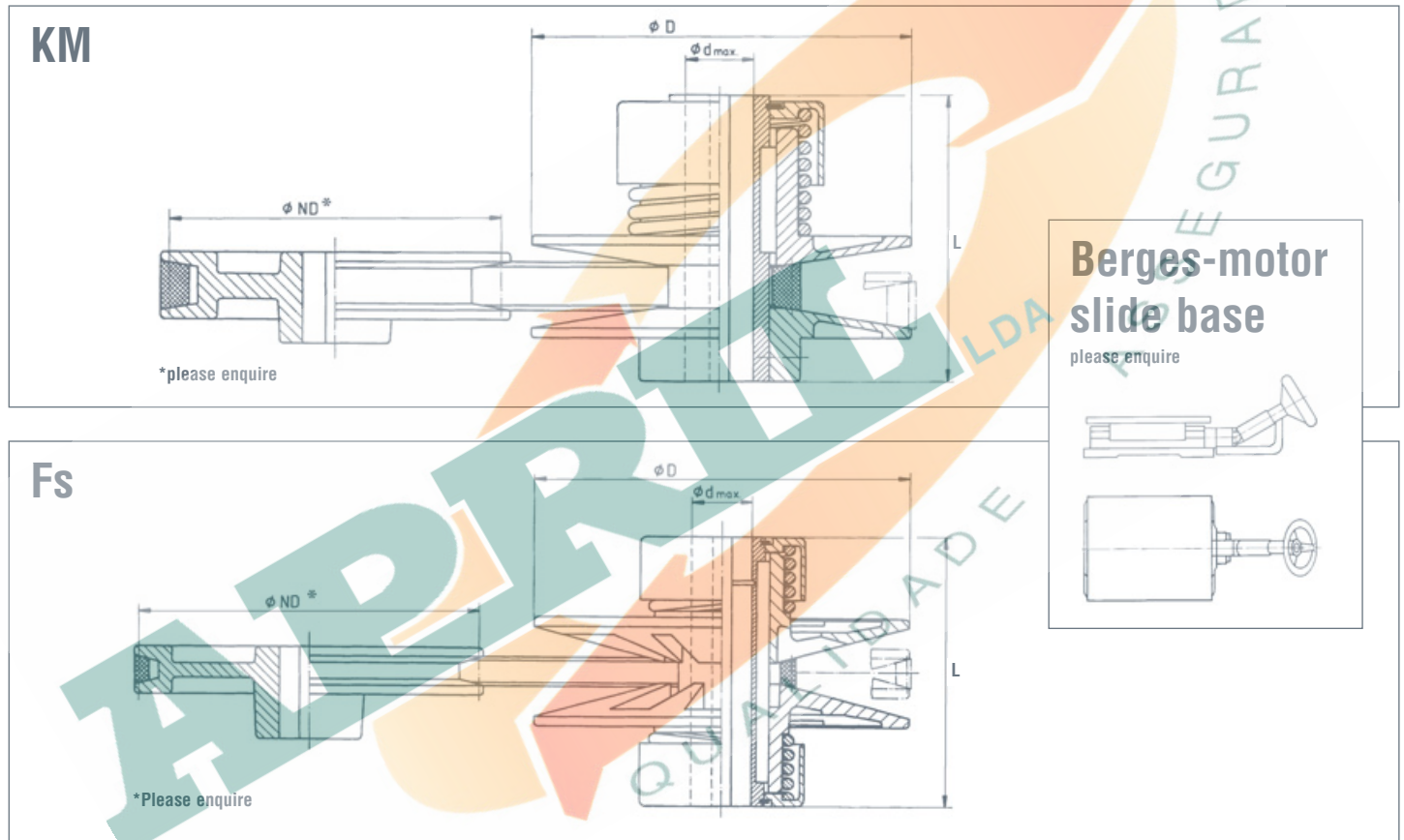
Variable speed V-belt pulleys

Single pulley drive for standard V-belts

KM + Fs $P_{1 \text{ max.}} = 5,5 \text{ kW}$

A fixed driven pulley is required in each case for use with these single pulley drives for standard V-belts.

The spring-loaded variable pulley can be opened either on one side (KM) as a smooth pulley or on both sides (Fs) as an interlacing type pulley. The spring loaded pulley is mounted on the drive shaft as standard. Reverse arrangement possible on request.



KM:

Type	Speed range	Motor	kW	P max.	P min.	D ₁	L	d _{max.}	Standard V-belt
KM 80.10	1:2,4	1350	0,18	0,16	0,07	80	65	14	10 x 6
KM 105.13	1:2,4	1380	0,55	0,50	0,22	105	80	20	13 x 8
KM 127.17	1:2,4	1380	0,75	0,67	0,28	127	80	25	17 x 11

Fs:

Type	Speed range	Motor	kW	P max.	P min.	D ₁	L	d _{max.}	Standard V-belt
F 100 s	1:2,2	1370	0,37	0,33	0,17	110	80	24	10 x 6
F 150 s	1:2,5	1410	1,1	0,7	0,4	158	115	28	13 x 8
F 210 s	1:2,8	1420	2,2	2,0	1,0	220	148	38	17 x 11
F 280 s	1:2,9	1450	5,5	5,0	2,0	292	190	42	22 x 14



Asymmetrically variable speed pulleys

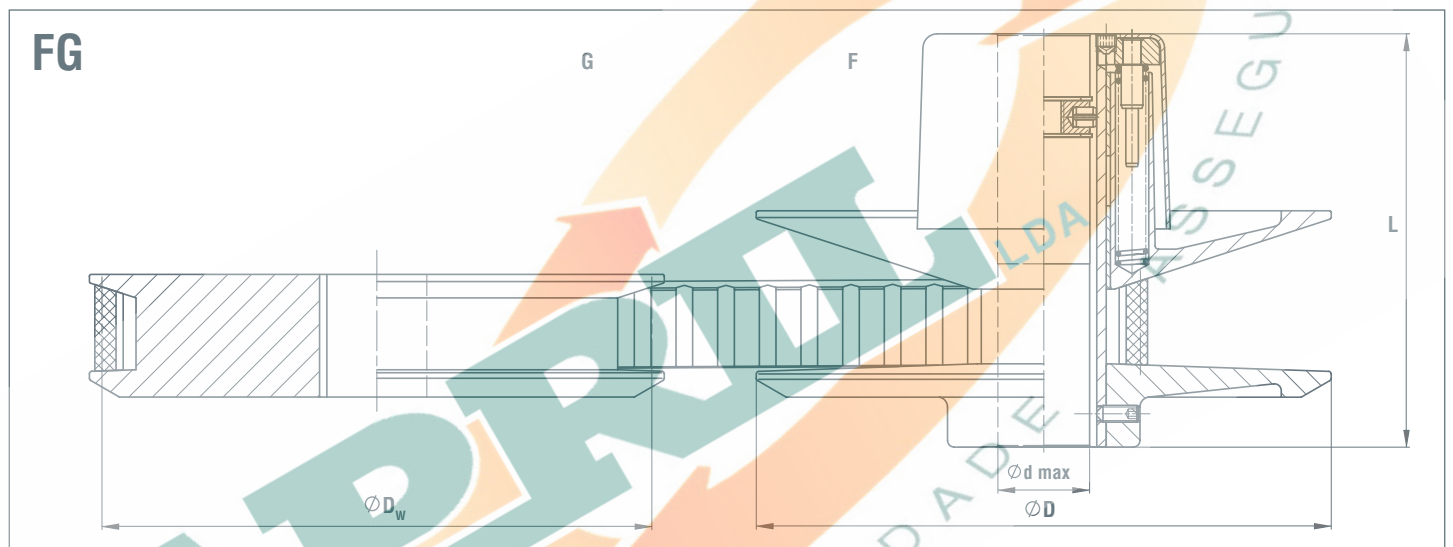
Single pulley drives FG

FG $P_{1 \max.} = 45 \text{ kW}$

Asymmetrical drive units FG for 0,75–45 kW motor ratings, comprising:

- spring-loaded regulating pulley F mounted on the motor shaft
- fixed-diameter driven pulley mounted on the machine or gear shaft.

The axial pressure on the V-belts is exerted by compression springs with optimally dimensioned characteristics. Speed variation is achieved by changing the centre-to-centre distance by means of a sliding motor base plate. Speed variation within ratio of 1 : 3. This system provides a high torque at a low output speed.



Single pulley drives FG:

Type	Speed-range max.	Motor n_1 in 1/min	Motor $P_{1 \max}$ in kW	$n_{2 \max}$ 1/min	$n_{2 \min}$ 1/min	$P_{2 \max}$ kW	$P_{2 \min}$ kW	D1 mm	L1 mm	d max. mm	Dw F mm	dw F mm	Dw G mm	Wide V-belt mm
FG1	2,5	1470	0,75	860	340	0,69	0,5	125	88	20	118	46	200	18
FG1	2,5	1470	0,75	1545	605	0,69	0,5	125	88	20	118	46	112	18
FG2	3,0	1470	1,5	970	330	1,35	0,8	175	103	24	165	55	250	27
FG2	3,0	1470	1,5	1940	650	1,35	0,8	175	103	24	165	55	125	27
FG3	3,0	1470	4,0	930	315	3,6	1,4	210	120	28	200	67	315	30
FG3	3,0	1470	4,0	2620	880	3,6	1,4	210	120	28	200	67	112	30
FG4	3,0	1470	5,5	960	325	5,0	2,2	245	150	38	234	78	355	36
FG4	3,0	1470	5,5	2450	820	5,0	2,2	245	150	38	234	78	140	36
FG5	3,0	1470	7,5	800	265	6,75	4,3	285	177	45	272	90	500	42
FG5	3,0	1470	7,5	3075	1017	6,75	4,3	285	177	45	272	90	130	42
FG6	3,0	1470	22,0	970	325	19,8	10,5	345	248	60	330	110	500	52
FG6	3,0	1470	22,0	1940	645	19,8	10,5	345	248	60	330	110	250	52
FG7	2,5	1470	37,0	980	395	33,3	18,2	415	248	60	400	160	600	57
FG7	2,5	1470	37,0	1650	660	33,3	18,2	415	248	60	400	160	355	57
FG8	2,1	1470	45,0	1050	490	40,5	21,0	450	312	80	432	200	600	57
FG8	2,1	1470	45,0	1785	828	40,5	21,0	450	312	80	432	200	355	57



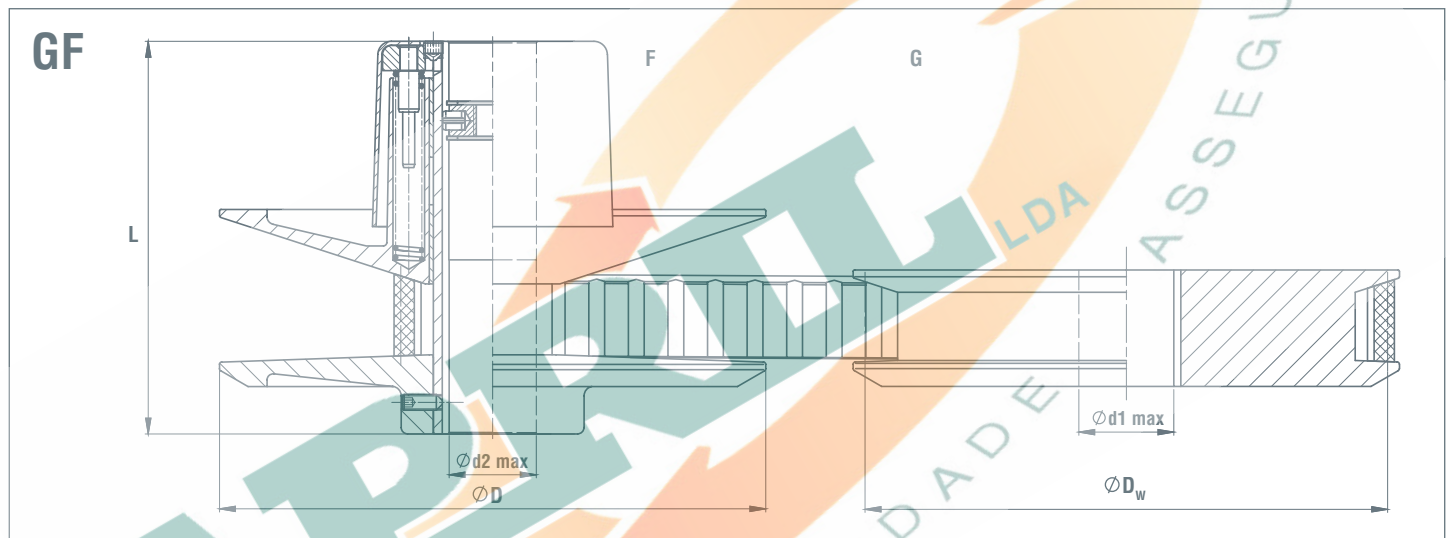
Asymmetrically variable speed pulleys

Single pulley drives GF

GF $P_{1 \max.} = 45 \text{ kW}$

- Asymmetrical drive units FG for 1,1–45 kW motor ratings, comprising:
- fixed-diameter driven pulley mounted on the motor shaft
 - spring-loaded regulating pulley F mounted on the machine or gear shaft

The axial pressure on the V-belts is exerted by compression springs with optimally dimensioned characteristics. Speed variation is achieved by changing the centre-to-centre distance by means of a sliding motor base plate. Speed variation within ratio of 1:3. This system provides an almost constant output power over the complete regulating range.



Single pulley drives GF:

Type	Speed-range max.	Motor n_1 in 1/min	$P_{1 \max}$ in kW	$n_{2 \max}$ 1/min	$n_{2 \min}$ 1/min	$P_{2 \max}$ kW	$P_{2 \min}$ kW	D1 mm	L1 mm	d max. mm	Dw F mm	dw F mm	Dw G mm	Wide V-belt mm
GF1	2,5	1470	1,1	3570	1395	1,0	0,6	125	88	20	118	46	112	18
GF2	3,0	1470	2,2	3340	1115	2,0	1,8	175	103	24	165	55	125	27
GF2	3,0	1470	3,0	4275	1425	2,7	2,3	175	103	24	165	55	160	27
GF3	3,0	1470	2,2	2450	825	2,0	1,7	210	120	28	200	67	112	30
GF3	3,0	1470	4,0	3510	1175	3,6	3,1	210	120	28	200	67	160	30
GF4	3,0	1470	5,5	2635	880	5,0	4,00	245	150	38	234	78	140	36
GF4	3,0	1470	11,0	3770	1255	9,9	7,4	245	150	38	234	78	200	36
GF5	3,0	1470	11,0	2120	705	9,9	6,5	285	177	45	272	90	130	42
GF5	3,0	1470	15,0	4080	1350	13,5	10,0	285	177	45	272	90	250	42
GF6	3,0	1470	22,0	3340	1115	19,8	14,0	345	248	60	330	110	250	52
GF6	3,0	1470	22,0	4200	1405	19,8	18,0	345	248	60	330	110	315	52
GF7	2,5	1470	37,0	3260	1305	33,3	31,0	415	248	60	400	160	355	57
GF7	2,5	1470	45,0	3674	1470	40,5	37,0	415	248	60	400	160	400	57
GF8	2,1	1470	37,0	2600	1200	33,5	33,0	450	312	80	432	200	355	57
GF8	2,1	1470	45,0	2940	1365	40,5	39,0	450	312	80	432	200	400	57



Asymmetrically variable speed pulleys

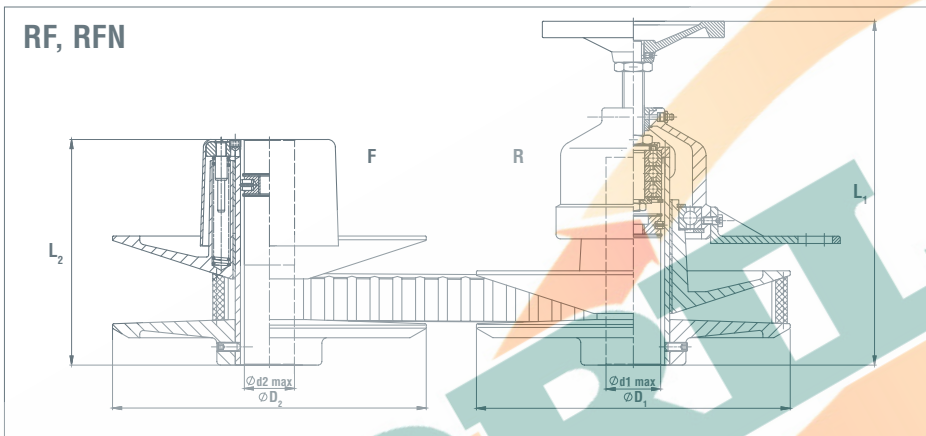
Double pulley drive RF, RFN

RF, RFN $P_{1 \max.} = 45 \text{ kW}$

Asymmetrical drive units RF, RFN for 0,37–45 kW motor ratings, comprising:

- mechanically adjustable regulating pulley R with integral central adjustment
 - a) spring-loaded regulating pulley F
 - b) type FN with increased diameter for lower output speeds

The axial pressure on the V-belts is exerted by compression springs with optimally dimensioned characteristics. This driving system is suitable for reversing operation.



Double pulley drive RF, RFN:

Type	Speed-range max.	Motor n_1 in 1/min	Motor $P_{1 \max}$ in kW	$n_2 \max$ 1/min	$n_2 \min$ 1/min	$P_2 \max$ kW	$P_2 \min$ kW	D1 mm	L1 mm	D2 mm	L2 mm	d1 max. mm	d2 max. mm	Wide V-belt mm
RF1	5,0	1470	1,1	3210	670	1,0	0,4	125	163	125	88	24	28	18
RFN12	4,0	1470	1,5	1980	500	1,4	0,4	125	163	175	103	24	25	18
RF2	7,7	1470	2,2	4100	530	2,0	0,6	175	206	175	103	28	25	27
RF2	5,0	1470	3,0	3220	670	2,7	0,9	175	206	175	103	28	25	27
RFN23	5,0	1470	4,0	2090	430	2,7	0,6	175	206	210	116	28	28	27
RFN23	2,0	1470	4,0	1470	800	3,6	1,4	175	206	210	116	28	28	27
RF3	8,0	1470	4,0	4080	520	3,6	1,3	210	230	210	120	38	28	30
RF3	6,0	1470	5,5	3600	590	5,0	1,7	210	230	210	120	38	28	30
RFN34	5,5	1470	5,5	2420	470	5,0	1,4	210	230	245	143	38	38	30
RF4	8,0	1470	7,5	4080	520	6,8	1,9	245	280	245	150	42	38	36
RF4	5,0	1470	11,0	3220	660	9,9	2,8	245	280	245	150	42	38	36
RFN45	6,0	1470	11,0	2610	450	9,9	2,8	245	280	285	165	42	45	36
RF5	8,0	1470	11,0	4080	520	9,9	3,2	285	314	285	177	48	45	42
RF5	5,0	1470	15,0	3240	650	13,5	4,7	285	314	285	177	48	45	42
RFN56	5,4	1470	18,5	2380	445	16,7	3,7	285	314	345	222	48	60	42
RF6	8,0	1470	22,0	4100	520	20,0	6,2	345	379	345	248	60	60	52
RF6	4,0	1470	30,0	2880	740	27,0	12,7	345	379	345	248	60	60	52
RFN67	5,5	1470	30,0	2350	430	27,0	7,0	345	379	415	241	60	60	52
RFN67	5,0	1470	37,0	2250	460	33,5	8,3	345	379	415	241	60	60	52
RF7	6,0	1470	37,0	3540	600	33,5	16,0	415	395	415	248	65	60	57
RF7	5,0	1470	45,0	3240	650	40,5	19,2	415	395	415	248	65	60	57



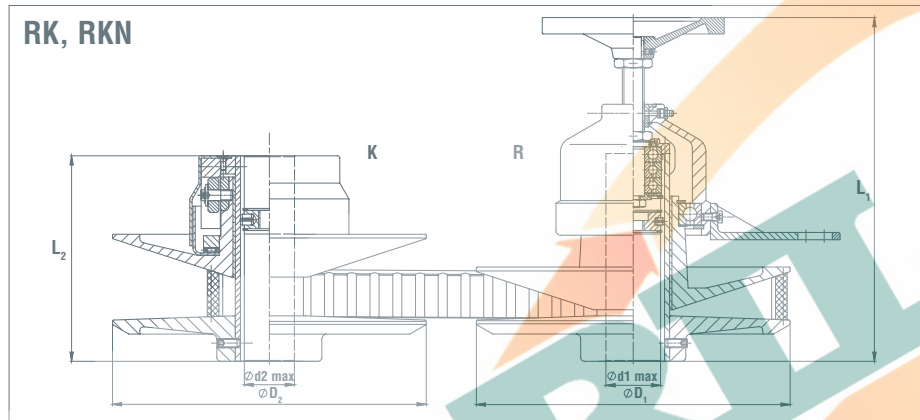
Asymmetrically variable speed pulleys

Double pulley drive RK, RKN

RK, RKN $P_{1\max.} = 150 \text{ kW}$

- Asymmetrical drive units RK, RKN for 4–150 kW motor ratings, comprising:
- mechanically adjustable regulating pulley R with integral central adjustment
 - a) output pulley K with automatic torque-dependent pressure device
 - b) type KN with increased pulley diameter for lower output speeds

This driving system is characterized by high efficiency even with partial load operation.
 This driving system is suitable for high starting torques and provides a high degree of overload safety.



Double pulley drive RK, RKN:

Type	Speed-range max.	n_1 in 1/min	Motor $P_{1\max}$ in kW	$n_{2\max}$ 1/min	$n_{2\min}$ 1/min	$P_{2\max}$ kW	$P_{2\min}$ kW	D1 mm	L1 mm	D2 mm	L2 mm	d1 max. mm	d2 max. mm	Wide V-belt mm
RK3	8,0	1470	4,0	4080	520	3,6	1,5	210	230	210	122	38	28	30
RK3	6,0	1470	5,5	3600	590	5,00	2,0	210	230	210	122	38	28	30
RKN34	5,0	1470	5,5	2420	470	5,0	1,7	210	230	245	137	38	38	30
RK4	8,0	1470	7,5	4080	520	6,8	2,2	245	280	245	146	42	38	36
RK4	5,0	1470	11,0	3220	660	9,9	3,3	245	280	245	146	42	38	36
RKN45	6,0	1470	11,0	2610	450	9,9	3,3	245	280	285	171	42	45	36
RK5	8,0	1470	11,0	4080	520	9,9	4,2	285	314	285	183	48	48	42
RK5	5,0	1470	15,0	3240	640	13,5	6,8	285	314	285	183	48	48	42
RKN56	5,4	1470	18,5	2380	445	16,7	4,4	285	314	345	210	48	60	42
RK6	8,0	1470	22,0	4100	520	20,0	7,4	345	379	345	226	60	60	52
RK6	4,0	1470	30,0	2880	740	27,0	15,2	345	379	345	226	60	60	52
RKN67	5,5	1470	30,0	2350	430	27,0	8,4	345	379	415	251	60	60	52
RKN67	5,0	1470	37,0	2250	460	33,5	9,9	345	379	415	251	60	60	52
RKN68	5,2	1470	37,0	2020	390	33,5	8,1	345	379	450	315	60	75	52
RK7	6,0	1470	37,0	3540	600	33,5	19,2	415	395	415	260	65	60	57
RK7	5,0	1470	45,0	3240	650	40,5	23,0	415	395	415	260	65	60	57
RK7	2,0	1470	55,0	2040	1040	49,5	47,0	415	395	415	260	65	60	57
RKN78	5,2	1470	45,0	2900	560	40,5	19,2	415	395	450	323	65	75	57
RKN78	4,0	1470	55,0	2520	640	49,5	25,0	415	395	450	323	65	75	57
RK8	5,0	1470	55,0	3220	660	49,5	24,5	450	460	450	345	75	75	57
RK8	2,3	1470	75,0	2210	960	67,5	41,0	450	460	450	345	75	75	57
RKN89	4,0	1470	75,0	1940	500	67,5	28,0	450	460	560	380	75	85	57
RN9	3,0	1470	90,0	1870	650	81,0	40,0	560	570	560	380	85	85	66
RN9	2,5	1470	110,0	1740	710	100,0	50,0	560	570	560	380	85	85	66
RN9	2,0	1470	150,0	1820	890	135,0	75,0	560	570	560	380	85	85	66



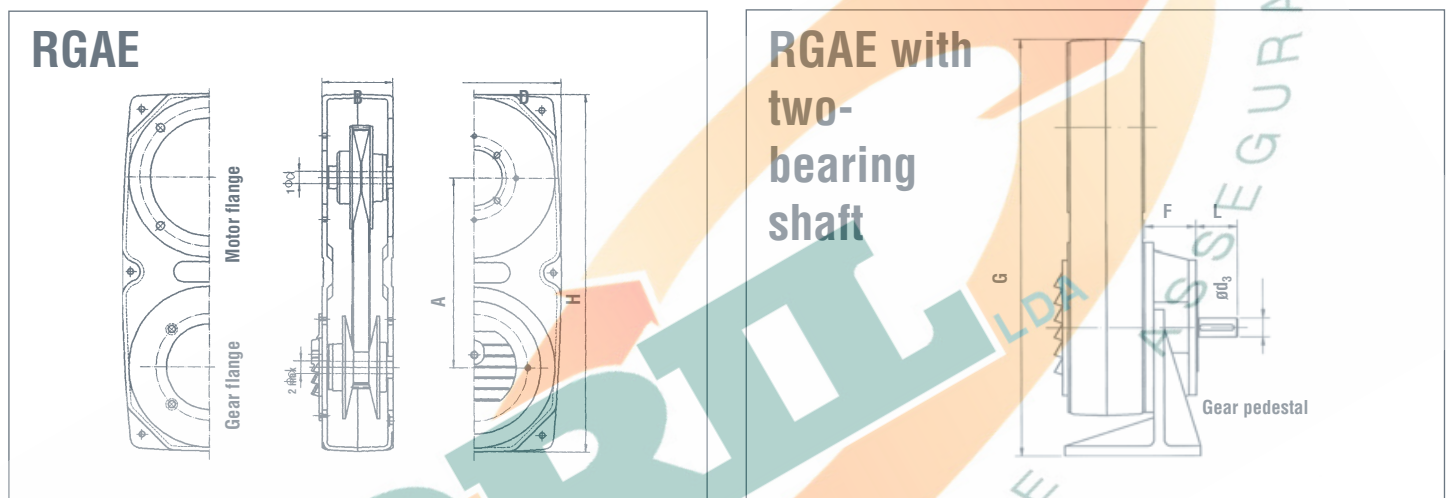
Assembly Units RGAE

Assembly Units RGAE

Assembly units of the type RGAE – consisting of a housing, variable pulleys and wide V-belt – are designed for mounting on motors and reduction gearboxes and possess connection dimensions in accordance with IEC.

RGAE assembly units are additionally equipped with step or flange bearings and two-bearing shafts. They are suitable for use with any drive elements as well as for direct mounting of gearboxes with IEC connection.

These assembly units are available complete with adjustment controls, motors and reduction gearboxes if required.



RGAE:

Type	Regel-Bereich φ	A mm	B mm	D mm	H mm	Motor size.	Power kW	d_1 mm	Gear flange mm	$d_{2max.}$ mm	F mm	G mm	L mm	d_3 mm	Wide V-belts mm
1-080	1:5,5	187	58	170	357	71 B5	0,37	14	120 ¹⁾ /160 ²⁾	14	57	392	30	14	17x5x578 Lw
2-100 ³⁾	1:5,5	246	88	220	460	90 B5	1,5	24	200/160	24	70	513	50	24	22x7x758 Lw
2-130	1:7,0	246	88	220	460	90 B5	1,5	24	200/160	24	70	513	50	24	22x7x783 Lw
3-190/1,5	1:10,5	295	110	270	555	90 B5	1,5	24	250/200	24	75	620	60	28	28x8x988 Lw
3-150	1:6,5	295	110	270	555	100 B5	3,0	28	250/200	28	75	620	60	28	28x8x938 Lw
3-190/3,0	1:9,0	295	110	270	555	100 B5	3,0	28	250/200	28	75	620	60	28	28x8x996 Lw
3-196	1:8,0	295	110	270	555	112 B5	4,0	28	250/200	28	75	620	60	28	33x10x1020 Lw
4-235	1:10,5	345	140	320	665	112 B5	4,0	28	300/250	32	104	740	80	38	37x10x1180 Lw
4-210	1:7,5	345	140	320	665	132 B5	7,5	38	300/250	38	104	740	80	38	37x10x1167 Lw
5-250	1:7,5	418	178	370	780	160 B5	11	42	350/300	42	125	869	110	42	47x12x1383 Lw
5-280	1:8,5	418	178	370	780	160 B5	15	42	350/300	42	125	869	110	42	55x15x1475 Lw
6-300	1:7,2	517	216	430	935	180 B5	18,5	48	400/350	48	187	1026	110	48	51x16x1695 Lw
6-300	1:7,2	517	216	430	935	180 B5	22	48	400/350	48	187	1026	110	48	51x16x1695 Lw
6-350	1:7,4	517	216	430	935	200 B5	30	55	400/350	55	187	1026	110	55	70x18x1778 Lw
7-375	1:5,3	624	240	580	1200	225 B5	37	60	550/450	65	215	1332	140	60	83x23x2066 Lw
7-375	1:5,3	624	240	580	1200	225 B5	45	60	550/450	65	215	1332	140	60	83x23x2066 Lw
7-400	1:5,0	624	240	580	1200	250 B5	55	65	550/450	65	215	1332	140	65	83x23x2145 Lw
8-450	1:4,4	720	317	686	1388	280 B5	75	75	660/550	80	285	1520	140	75	83x26x2488 Lw
8-500	1:4,0	720	317	686	1388	280 B5	90	75	660/550	80	285	1520	140	75	83x26x2675 Lw
8-500	1:4,0	720	317	686	1388	315 B5	110	80	660/550	80	285	1520	170	80	83x26x2675 Lw
9-600	1:3,0	720	384	686	1388	315 B5	160	80 / 90	660/550	100	285	1520	170	80/90	87x28x2790 Lw

¹⁾ RGAE only ²⁾ RGAE with two-bearing shaft only ³⁾ RGAE 2-100 also for motor 71 B5



Assembly Units RGAE

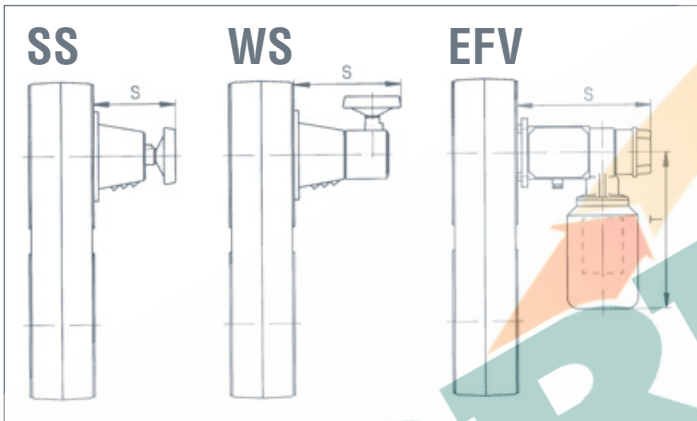
Speed adjustment controls for RGAE

SS + WS + EFV

The control devices SS and WS are also available with a scale handwheel, if required.

The compact electric remote control EFV is additionally available with slip clutch and/or potentiometer for analog indication. In contrast to the otherwise normal chain wheel arrangement, there are no bending moments thanks to direct linear stroke adjustment. Speed indicators (analogous or digital) and tachometers available on request.

EFV can also be used in conjunction with BERGES double pulley drives.



WS:

RGAE	Adjustment control	S
RGAE 2-100	WS 2	96
RGAE 2-130	WS 2	96
RGAE 3-150	WS 3	112
RGAE 3-190	WS 3	112
RGAE 3-196	WS 3	112
RGAE 4-210	WS 4	112
RGAE 4-235	WS 4	112
RGAE 5-250	WS 5	144
RGAE 5-280	WS 5	144
RGAE 6-300	WS 6	173
RGAE 6-350	WS 6	173
RGAE 7-375	WS 375	360
RGAE 7-400	WS 400	350
RGAE 8-450	WS 450-500	403
RGAE 8-500	WS 450-500	403

SS:

RGAE	Adjustment control	S
RGAE 1-080	SS 1	100
RGAE 2-100	SS 2	139
RGAE 2-130	SS 2	139
RGAE 3-150	SS 3/4	162
RGAE 3-190	SS 3/4	162
RGAE 3-196	SS 3/4	162
RGAE 4-210	SS 3/4	162
RGAE 4-235	SS 3/4	162
RGAE 5-250	SS 5/6	187
RGAE 5-280	SS 5/6	187
RGAE 6-300	SS 5/6	187
RGAE 6-350	SS 5/6	187
RGAE 7-375	SS 375	255
RGAE 7-400	SS 400	245
RGAE 8-450	SS 450-500	304
RGAE 8-500	SS 450-500	304

EV/EFV:

RGAE	Adjustment control	S	T
RGAE 2-100	EV 2	162	255
RGAE 2-130	EV 2	162	255
RGAE 3-150	EV 3/4	175	255
RGAE 3-190	EV 3/4	175	255
RGAE 3-196	EV 3/4	175	255
RGAE 4-210	EV 3/4	175	255
RGAE 4-235	EV 3/4	175	255
RGAE 5-250	EV 5/6	218	255
RGAE 5-280	EV 5/6	218	255
RGAE 6-300	EV 5/6	218	255
RGAE 6-350	EV 5/6	218	255
RGAE 7-375	EFV 2/2	277	268
RGAE 7-400	EFV 2/2	267	268
RGAE 8-450	EFV 2/2	267	268
RGAE 8-500	EFV 2/2	267	268
RGAE 9-600	*	*	*

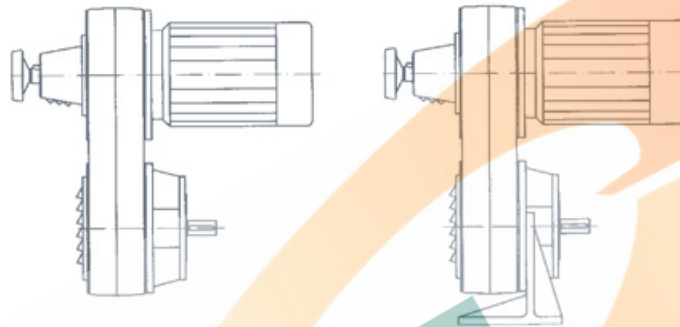
* Please enquire



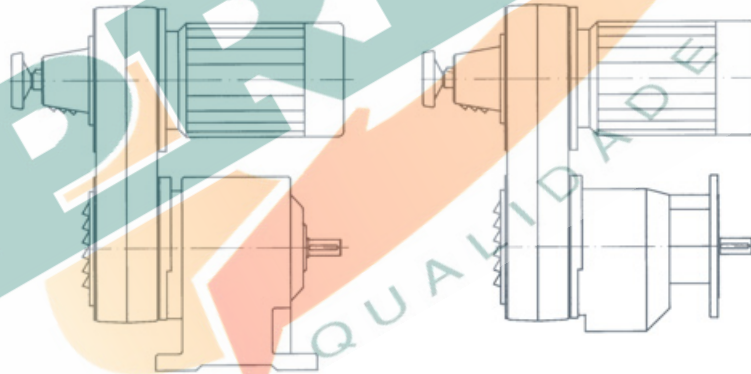
Variable drive motors

Basic components with possibilities of systematic extension.

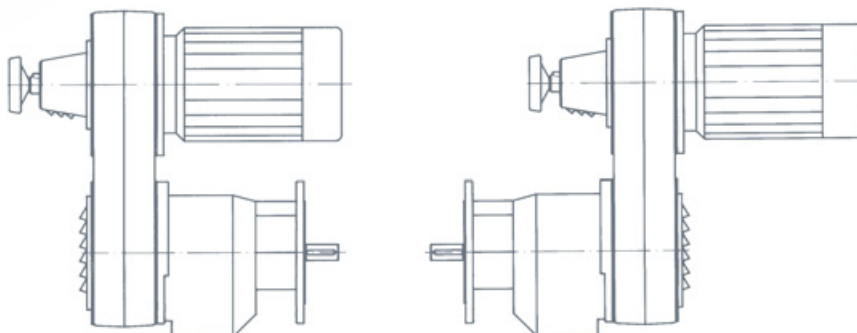
Assembly unit in pedestal or flange-type design



Gear unit in pedestal or flange-type design



U-form / Z-form





Variable drive motors

Basic components with possibilities of systematic extension.

Various gear units

