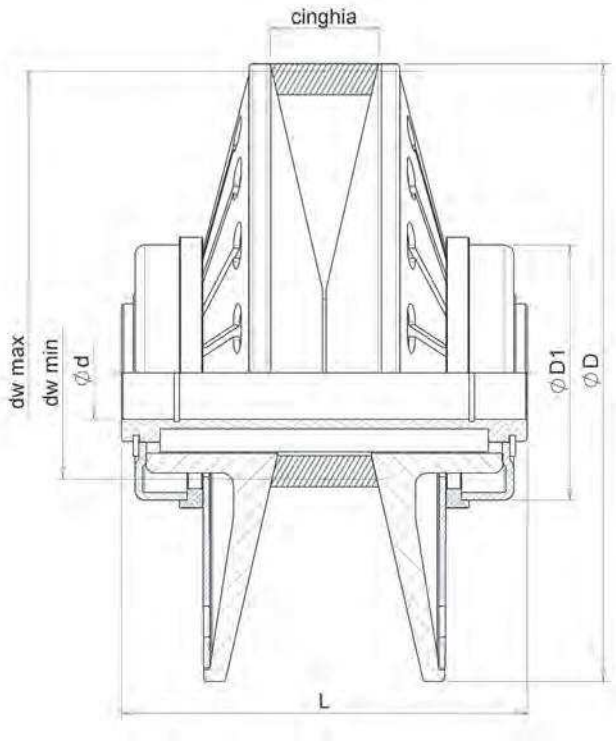
PULEGGE
PULLEYS
SCHEIBEN

Quando la variazione di velocità deve essere continua, precisa e, soprattutto, esente da manutenzione, le pulegge espansibili Piazzalunga della serie EDT, EDS o S100 offrono una risposta adeguata al problema.Tutto ciò grazie all'ampia gamma di potenze applicabili (0.37÷18.5 Kw) ed un rapporto di variazione 1:3, ma soprattutto grazie alle prestazioni consentite dai componenti: albero poligonale autolubrificante, semiflange in ghisa zincate o fosfatate, molle a diaframma o elicoidali in acciaio speciale al cromo-vanadio.

When speed variation must be continuous and precise, and above all free from maintenance, Piazzalunga EDT, EDS or S100 series expanding pulleys offer a suitable solution to the problem.This is possible thanks to the wide range of powers which can be applied (0.37 - 18.5 Kw) and 1:3 variation ratio, but above all thanks to component performance: selflubricating polygonal shaft, galvanized or phosphatized cast iron semiflanges, flat or helical springs made of special chrome-vanadium steel.

Wenn die Geschwindigkeitsänderung stufenlos, prazise und vor allem wartungslos sein soll, so sind die spreizbaren Scheiben Piazzalunga der Serie EDT, EDS oder S100 eine geeignete Antwort des Problems.Dies dank der grossen Auswahl an anwendbaren Leistungen (0.37 - 18.5 Kw) und einem Variationsverhältnis von 1:3, doch vor allem dank den durch die Komponenten ermöglichten Betriebsleistungen: vieleckige selbstschmierende Welle, Halbflanschen aus verzinktem oder phosphatiertem Gusseisen, Membranfedern oder Schraubenfeder aus ChromVanadium-Stahl.



SERIE EDS

SERIE EDS: rapporto di variazione 1:3.

EDS SERIES: variation ratio 1:3.

SERIE EDS: Variationsverhältnis 1:3.



AD ESAURIMENTO SCORTE - sostituita dalla serie EDT
END AVAILABILITY *- replaced by "serie EDT"*
ENTSORGUNG VON LAGERBESTÄNDEN *- sdurch serie EDT ersetzt*

TABELLA DIMENSIONALE (mm) - DIMENSIONS TABLE - GRÖSSENTABELLE

GRANDEZZA SIZE GRÖSSE	130	160	185	200	225	270	300	330	360
Potenza (Kw) - Power - Motorleistung (1)	0,75	1,5	2,2	2,2	3	4	7,5	15	18,5
Sezione cinghia - Belt - Riemen	22 x 8	28 x 8	37 x 10	37 x 10	47 x 13	47 x 13	55 x 15	65 x 20	70 x 20
ø d standard (2)	14-19	19-24	24-28	24-28	28	28	38	38-42	42-48
ø d max (2)	22	25	30	30	30	42	42	42	50
ø D	130	160	185	195	225	270	300	330	360
ø D1	58	66	66	66	85	85	115	115	115
dw min	48	50	61	61	65	80	83	92	105
dw max	126	156	180	190	218,5	263,5	292,5	320	350
L	92	105	125	125	140	150	180	220	220
Peso (Kg) - Weight - Gewicht	1,7	3	4,5	5	6,5	11	14	21	22

(1) MOTORI A 4 POLI 1400/1' - 4 POLES MOTORS 1400/1' - MOTOREN BEI 4 POLIG 1400/1'
(2) FORI - BORES - BOHRUNG: ISO H7
CAVE - KEYWAYS - NUT: UNI 6604/69 - DIN 6885/1-3

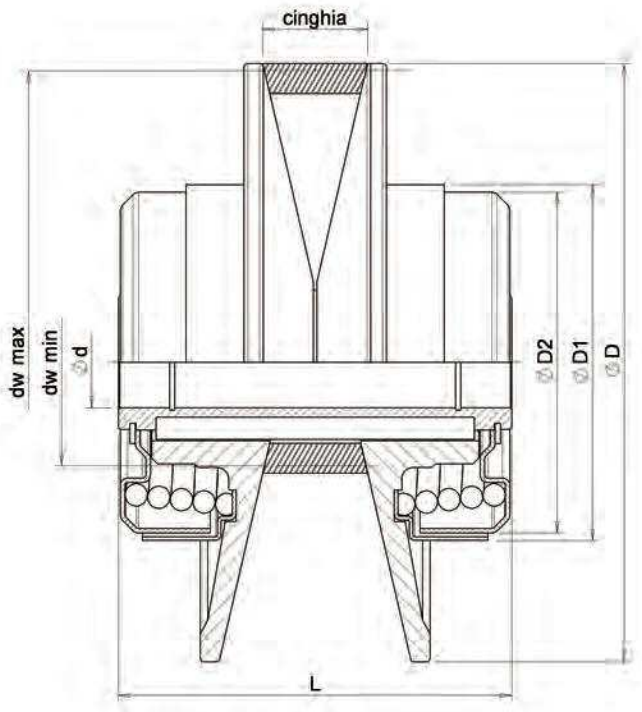
ESECUZIONI SPECIALI A RICHIESTA
SPECIAL VERSIONS ON REQUEST
SPEZIALAUSFÜHRUNGEN AUF ANFRAGE

DATI NON IMPEGNATIVI
NOT BINDING DATA
UNVERBINDLICHE DATEN

SERIE EDT: rapporto di variazione 1:3.

EDT SERIES: variation ratio 1:3.

SERIE EDS: Variationsverhältnis 1:3.



SERIE EDT



TABELLA DIMENSIONALE (mm) - DIMENSIONS TABLE - GRÖSSENTABELLE

GRANDEZZA SIZE GRÖSSE	130	160	185 (3)	200	225	270	300	330	360
Potenza (Kw) - Power - Motorleistung (1)	0,75	1,5	2,2	2,2	3	4	7,5	15	18,5
Sezione cinghia - Belt - Riemen	22 x 8	28 x 8	37 x 10	37 x 10	47 x 13	47 x 13	55 x 15	65 x 20	70 x 20
ø d standard (2)	14-19	19-24	24-28	24-28	28	28	38	38-42	42-48
ø d max (2)	22	25	30	30	30	42	42	42	50
ø D	130	160	185	195	225	270	300	330	360
ø D_1	81	95	95	95	106	133	201	201	201
ø D_2	77	91	91	91	101	129	196	196	196
d_w min	51	56	65	65	70	82,5	90,5	95	110
d_w max	126	156	180	190	219	236,5	292,5	320	350
L	92	105	125	125	140	150	180	220	220
Peso (Kg) - Weight - Gewicht	2	3,5	5	5	7	14	18	25,5	27

(1) MOTORI A 4 POLI 1400/1' - 4 POLES MOTORS 1400/1' - MOTOREN BEI 4 POLIG 1400/1'
(2) FORI - BORES - BOHRUNG: ISO H7
(2) CAVE - KEYWAYS - NUT: UNI 6604/69 - DIN 6885/1-3
(3) FORNIBILE SOLO A RICHIESTA - ON REQUEST ONLY - AUF ANFRANGE

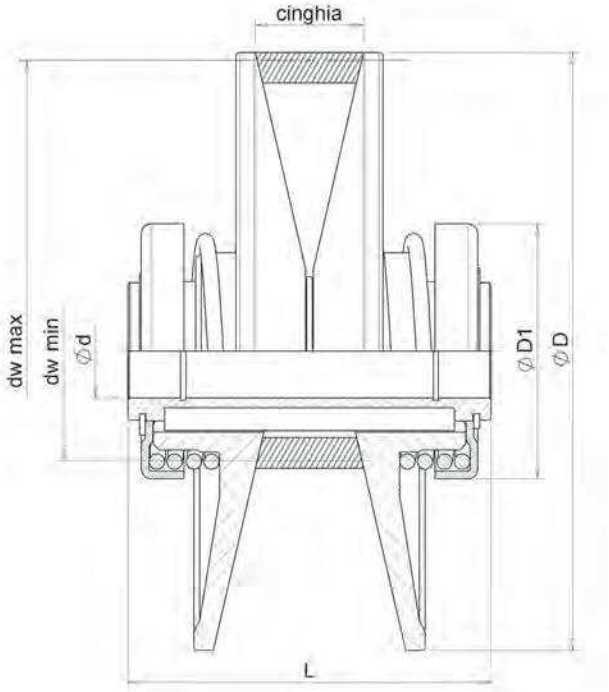
ESECUZIONI SPECIALI A RICHIESTA
SPECIAL VERSIONS ON REQUEST
SPEZIALAUSFÜHRUNGEN AUF ANFRAGE

DATI NON IMPEGNATIVI
NOT BINDING DATA
UNVERBINDLICHE DATEN

SERIE 100: rapporto di variazione 1:3.

100 SERIES: variation ratio 1:3.

SERIE 100: Variationsverhältnis 1:3.



SERIE 100



TABELLA DIMENSIONALE (mm) - DIMENSIONS TABLE - GRÖSSENTABELLE

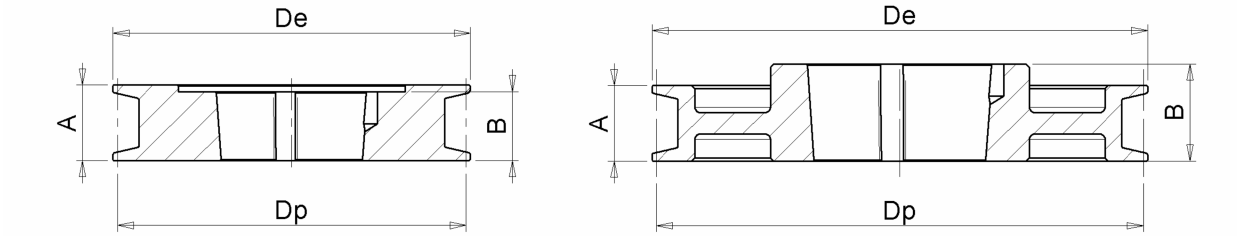
GRANDEZZA SIZE GRÖSSE	95	110	120	155	180	220
Potenza (Kw) - Power - Motorleistung (1)	0,37	0,55	0,75	1,5	3	4
Sezione cinghia - Belt - Riemen	13 x 6	17 x 5	22 x 8	28 x 8	28 x 8	37 x 10
ø d standard (2)	14	14-19	14-19	19-24	24-28	28
ø d max (2)	20	20	22	25	30	30
ø D	95	110	120	155	180	220
ø D1	58	58	58	66	85	85
dw min	40	38,5	48	50	58	61
dw max	92	107,5	116	151	176	215
L	65	72	72	94	110	130
Peso (Kg) - Weight - Gewicht	1	1,4	1,6	2,5	4	5

(1) MOTORI A 4 POLI 1400/1' - 4 POLES MOTORS 1400/1' - MOTOREN BEI 4 POLIG 1400/1'
(2) FORI - BORES - BOHRUNG: ISO H7
CAVE - KEYWAYS - NUT: UNI 6604/69 - DIN 6885/1-3

ESECUZIONI SPECIALI A RICHIESTA
SPECIAL VERSIONS ON REQUEST
SPEZIALAUSFÜHRUNGEN AUF ANFRAGE

DATI NON IMPEGNATIVI
NOT BINDING DATA
UNVERBINDLICHE DATEN

PULEGGE CONDOTTE - *DRIVEN PULLEYS*



CINGHIA	GRAND	TAPER	De	Dp	A	B	Peso [kg] *Weight [kg]*
22x8	100	1610	99,6	95,6	28,0	25,0	0,60
	115		116,6	112,6	28,0	25,0	1,04
	130		129,6	125,6	28,0	25,0	1,44
	165	2012	164,6	160,6	28,0	32,0	2,89
	205		204,6	180,6	28,0	32,0	3,13
28x8	130	1610	130,5	126,5	35,0	25,0	1,65
	165	2012	165,5	161,5	35,0	32,0	3,33
	230	2517	229,5	225,5	35,0	45,0	4,91
	320		320,5	316,5	35,0	45,0	8,21
	455		455,5	451,5	35,0	45,0	8,18
37x10	185	2517	187,0	181,0	44,0	45,0	4,78
	230		231,0	225,0	44,0	45,0	5,44
	255		257,0	251,0	44,0	45,0	6,12
	320		322,0	316,0	44,0	45,0	8,66
47x12	165	2517	165,5	159,0	50,0	45,0	3,50
	230		229,5	223,0	50,0	45,0	4,92
	263		255,5	249,0	50,0	45,0	5,75
	285		285,5	279,0	50,0	45,0	6,80
	320	3020	320,5	314,0	50,0	51,0	12,55
	405		405,5	399,0	50,0	51,0	9,00
55x15	320	3020	322,0	314,5	63,0	51,0	9,45
	360		362,0	354,5	63,0	51,0	11,22
	405	3535	407,0	399,5	63,0	89,0	17,06
	460		457,0	449,5	63,0	89,0	18,91
65x20	325	3535	325,0	314,6	80,0	89,0	16,56
	345		345,0	334,6	80,0	89,0	16,95
	365		365,0	354,6	80,0	89,0	17,70
	410		410,0	399,6	80,0	89,0	21,22
	460		460,0	449,6	80,0	89,0	23,08
70x20	365	3535	365,0	355,0	85,0	89,0	17,93
	410		410,0	400,0	85,0	89,0	21,58
	460		460,0	450,0	85,0	89,0	23,48
	510		510,0	500,0	85,0	89,0	26,09

ESEMPIO CODIFICA – *ITEM CODE EXAMPLE*

90	***V47***	***D0230***	***T00***
Famiglia *Family*	**Sezione cinghia** *Belt section*	**Diametro esterno** *External diameter*	**Foro** *Bore*

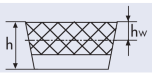
DATI TECNICI
TECHNICAL DATA
TECHNISCHE DATEN

Per determinare i dati necessari al dimensionamento di una trasmissione ad interasse fisso risulterà comodo utilizzare le formule sottoelencate.

1. Determinazione dello sviluppo interno della cinghia

Considerando che i d_w riportati sul catalogo per convenzione sono calcolati come segue:

$$h_w = 0{,}25h$$



1.1 Determinare "di min" e "Di max" delle pulegge.
1.2 Calcolare lo sviluppo interno teorico della cinghia:

$$Li = 2A + \pi/2\,(di+Di) + \frac{(di-Di)^2}{4A}$$

dove:
- A = interasse del variatore.
- di = diametro interno minimo contatto cinghia puleggia motrice.
- Di = diametro interno massimo contatto cinghia puleggia condotta.
- L_i = sviluppo interno cinghia teorico.

2. Determinazione della corsa di regolazione della slitta portamotore

Nel caso di trasmissioni con pulegge a doppia espansione (EDS e S100) e condotte fisse si determinerà la corsa della slitta procedendo come segue:

$$A_{max} = 0{,}5\,[L_i - \pi/2\,(d_1+D_2) - \frac{(d_1-D_2)^2}{L_i}] \qquad A_{min} = 0{,}5\,[L_i - \pi/2\,(D_1+D_2) - \frac{(D_1-D_2)^2}{L_i}]$$

$$A_{max} - A_{min} = \text{corsa/stroke/Hub}$$

dove:
- d_1 = diametro interno minimo cinghia puleggia motrice.
- D_1 = diametro interno massimo contatto cinghia puleggia motrice.
- D_2 = diametro interno contatto cinghia puleggia condotta.
- L_i = sviluppo interno cinghia teorico.

Per ulteriori chiarimenti o per esecuzioni speciali contattate il nostro ufficio tecnico.

To determine the data required to size a transmission with fixed axle base, it is convenient to use the formulas given below.

1. Determination of the internal belt development

Considering that the d_w indicated in the catalogue are normally calculated as follows:

$$h_w = 0{,}25h$$

1.1 Determine the "min. di" and "max. Di" of the pulleys.
1.2 Calculate the theoretical internal development of the belt:

$$Li = 2A + \pi/2\,(di+Di) + \frac{(di-Di)^2}{4A}$$

where:
- A = variator axle base.
- di = minimum internal diameter of belt driving pulley.
- Di = maximum internal diameter of belt driven pulley.
- L_i = theoretical internal belt development.

2. Determination of the adjustment stroke of the motor support slide

For transmission with two-way pulley expansion (EDS and S100) and fixed driven pulleys, the stroke of the slide is determined as follows:

$$A_{max} = 0{,}5\,[L_i - \pi/2\,(d_1+D_2) - \frac{(d_1-D_2)^2}{L_i}] \qquad A_{min} = 0{,}5\,[L_i - \pi/2\,(D_1+D_2) - \frac{(D_1-D_2)^2}{L_i}]$$

$$A_{max} - A_{min} = \text{corsa/stroke/Hub}$$

where:
- d_1 = minimum internal diameter of belt driving pulley.
- D_1 = maximum internal diameter of belt driving pulley.
- D_2 = internal diameter of belt driven pulley contact.
- L_i = theoretical internal belt development.

For further clarification or special versions, please contact our technical office.

Zur Bestimmung der zur Bemessung eines Getriebes mit festem Achsenabstand erforderlichen Daten ist es zweckmässig, unten aufgeführte Formeln anzuwenden.

1. Bestimmung der Innenabwicklung des Riemens

Unter Berücksichtigung der Tatsache, dass die im Katalog angegebenen d_w laut Konvention wie folgt berechnet werden:

$$h_w = 0{,}25h$$

1.1 "di min." und "Di max." der Riemenscheiben bestimmen.
1.2 Die theoretische Innenabwicklung des Riemens berechnen:

$$Li = 2A + \pi/2\,(di+Di) + \frac{(di-Di)^2}{4A}$$

wo:
- A = Achsenabstand des Variators.
- di = minimaler Innendurchmesser Kontakt Riemen Antriebsriemenscheibe.
- Di = maximaler Innendurchmesser Kontakt Riemen angetriebene Riemenscheibe.
- L_i = theoretische Innenabwicklung Riemen.

2. Bestimmung der Einstellhubs des Motorschlittens

Im Falle von Riemenscheibenantrieben mit doppelter Spreizung (EDS und S100) und fester angetriebener Riemenscheibe, wird die Hub des Schlittens wie folgt bestimmt:

$$A_{max} = 0{,}5\,[L_i - \pi/2\,(d_1+D_2) - \frac{(d_1-D_2)^2}{L_i}] \qquad A_{min} = 0{,}5\,[L_i - \pi/2\,(D_1+D_2) - \frac{(D_1-D_2)^2}{L_i}]$$

$$A_{max} - A_{min} = \text{corsa/stroke/Hub}$$

wo:
- d_1 = minimaler Innendurchmesser Kontakt Riemen Antriebsriemenscheibe.
- D_1 = maximaler Innendurchmesser Kontakt Riemen Antriebsriemenscheibe.
- D_2 = Innendurchmesser Kontakt Riemen angetriebene Riemenscheibe.
- L_i = Innenabwicklung Riemen.

Für weitere Erklärungen oder für Spezialausführungen wollen Sie sich bitte an unser technisches Büro wenden.