LOGGIAGLAS
il sistema scorrevole telescopico studiato per balconi, logge e verande.

Telescopic sliding system
for balconies, loggias and terraces.

Teleskop Schiebetürsystem
für Balkon und Loggiaverglasungen.

LOGGIAGLAS

GLASS-500 / GLASS 400 LOGGIAGLAS - CARATTERISTICHE

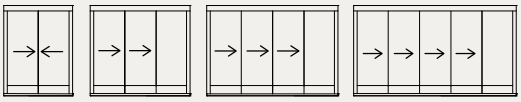
Sistema scorrevole telescopico, tutto vetro, pensato e progettato per consentire di ampliare gli spazi abitabili, migliorandone il comfort abitativo in qualsiasi periodo dell'anno, senza invadere lo spazio interno.
La semplicità, la velocità di installazione, nonché la bassa manutenzione, sono la forza di questo prodotto che può diventare parte di gazebo, terrazzi, balconi, giardini d'inverno, portici sia nelle abitazioni private che nei bar o locali commerciali in genere.

FEATURES
Telescopic sliding system, full glass, designed and developed to allow the extension of living spaces and improve well-being in the home all year round without invading the interior space. Simplicity, speed of installation, and low maintenance are the key strengths of this product which is ideal for gazebos, terraces, balconies, gardens in winter, porches in both private homes and bars, or commercial premises in general.

EIGENSCHAFTEN
Schiebetürsystem teleskopisches Laufschiene, vollständig aus Glas. Sie wurden konzipiert und entworfen, um Wohnräume erweitern und den Wohnkomfort zu jeder Jahreszeit verbessern zu können, ohne in den Innenraum einzudringen. Einfache, schnelle Installation sowie geringer Wartungsaufwand sind die Stärken dieses Produkts, das Teil von Pavillons, Terrassen, Balkonen, Wintergärten, Veranden sowohl in Privathäusern als auch in Bars oder Geschäftsräumen im Allgemeinen werden kann.

1 BINARIO A TERRA, 2, 3, 4 O 5 VIE,

H 20 mm, calpestabile, nel rispetto della normativa relativa alle barriere architettoniche.



BOTTOM RAIL WITH 2, 3, 4 OR 5 WAYS, *H 20 mm, walkable, compliant with regulations concerning architectural barriers.*

BODENSCHIENE 2-, 3-, 4- ODER 5-GLEISIG, *H. 20 mm, betretbar, in Übereinstimmung mit den Vorschriften hinsichtlich architektonischer Barrieren.*

3 ANTISOLLEVAMENTO DELLE ANTE

integrato nel carrello per una sicurezza assoluta ed una semplicità di rimozione, nel caso di manutenzione, grazie al nuovo brevetto Metalglas.

ANTI-LIFTING DOORS
integrated into the trolley for absolute safety and easy removal, in the event of maintenance, thanks to the new Metalglas patent.

Im Wagen ist ein System integriert, das ***EIN ANHEBEN DER TÜREN VERHINDERT****. Es sorgt für absolute Sicherheit und garantiert ein einfaches Entfernen für die Wartung. Dies ist dem neuen Patent von Metalglas zu verdanken.*

2 NUOVO CARRELLO BREVETTATO:

doppia ruota, con cuscinetto a sfera, montata su bilanciere che ne consente l'aderenza contemporanea al binario, rendendo lo scorrimento estremamente fluido, per ante con peso fino a 100 Kg.

THE NEW TROLLEY:
double wheel, with ball bearing, mounted on a rocker arm that allows its simultaneous adherence to the track, making sliding extremely fluid.

DER NEUE WAGEN:
zwei Räder mit Kugellager, montiert auf einer Wippe, die das gleichzeitige Aufliegen auf der Schiene garantiert.

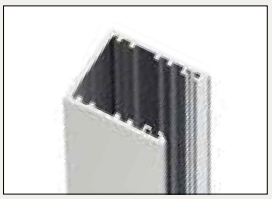
4 SISTEMA DI REGOLAZIONE IN ALTEZZA

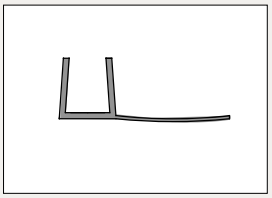
delle ante.

THE NEW TROLLEY
also facilitates height adjustment of the doors.

DER NEUE WAGEN
ermöglicht außerdem das leichte Einstellen der Höhe der Türen.

5 PROFILI PARASPIFFERI LATERALI E GUARNIZIONI VERTICALI tra vetro e vetro in PVC trasparente per la protezione da aria, acqua, polvere.



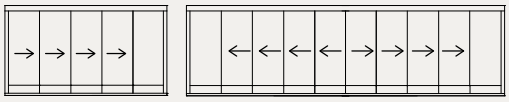


SIDE WEATHERSTRIP PROFILES AND VERTICAL SEALS *between glass panels in clear PVC for protection against air, water, dust.*

SEITLICHE WANDANSCHLUSS-PROFILE UND VERTIKALE DICHTUNGEN *aus transparentem PVC zwischen Glas und Glas zum Schutz gegen Luft, Wasser und Staub.*

8 APERTURA CON IMPACCHETTAMENTO

da un lato oppure apertura centrale con ante apribili dai 2 lati.



STACK ASIDE OPENING, *either on one side or centrally on both sides.*

ÖFFNUNG MT FALTUNG *auf einer Seite oder mittiger Öffnung mit sich beidseitig öffnenden Türen.*

6 SISTEMA A TRASCINAMENTO

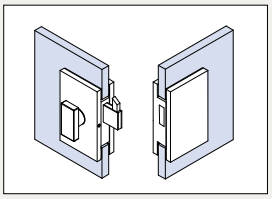
delle ante integrate nei tappi laterali.

ENDCAPS DRAGGING SYSTEM *for panels, incorporated into the end caps.*

MITNEHMER *der in den seitlichen Kappen integrierten Türflügel.*

9 POSSIBILITÀ DI CHIUSURA CON CATENACCIOLO

oppure serratura a cilindro.



POSSIBILITY FOR CLOSURE WITH LOCKING BOLT *or cylinder lock.*

SCHLIESSMÖGLICHKIET MITTELS FESTSTELLER *oder Zylinderschloss.*

7 CONFORME ALLE NORMATIVE UNI EN 14351-1:2016.

COMPLIANT WITH REGULATIONS UNI EN 14351-1:2016.

IN ÜBEREINSTIMMUNG MIT DEN VORSCHRIFTEN UNI EN 14351-1:2016.

LOGGIAGLAS

GLASS-500 / GLASS-400 LOGGIAGLAS - CERTIFICAZIONI

A confermare la qualità e la resistenza dei nostri prodotti sono disponibili, per alcuni modelli, le certificazioni rilasciate dall'istituto Giordano.

CERTIFICATION
Testifying to the quality and resistance of our products, certifications are available for certain models, issued by the Giordano institute.

ZERTIFIZIERUNG
Um die Qualität und Beständigkeit unserer Produkte zu bestätigen, sind für einige Modelle Zertifizierungen des Instituts Giordano erhältlich.

ISTITUTO GIORDANO

ilac-MRA

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

LAB N° 0021 L

RAPPORTO DI PROVA N. 370448/13209/CPR

emesso da Istituto Giordano in qualità di laboratorio di prova notificato (n. 0407) ai sensi del Regolamento 305/2011/UE del Parlamento Europeo e del Consiglio del 9 marzo 2011

Cliente
METALGLAS BONOMI S.r.l.
Via Virgilio Montini, 106/A - 25065 LUMEZZANE (BS) - Italia

Oggetto*
portafinestra denominata "LOGGIAGLAS LG-500 4X4"

Attività
prove di permeabilità all'aria, tenuta all'acqua, resistenza al carico del vento e relative classificazioni con riferimento alla norma armonizzata UNI EN 14351-1:2016

Risultati

Tipologia di prova		Norma di prova	Norma di classificazione	Classe
Permeabilità all'aria in pressione	riferita alla superficie totale	UNI EN 1026:2016	UNI EN 12207:2000/ EC 1-2007	**0**
	riferita alla lunghezza dei giunti apribili			**0**
	finale			**0**
Permeabilità all'aria in depressione	riferita alla superficie totale	UNI EN 1026:2016	UNI EN 12207:2000/ EC 1-2007	**0**
	riferita alla lunghezza dei giunti apribili			**0**
	finale			**0**
Permeabilità all'aria *(prova non accreditata da ACCREDIA)*		UNI EN 1026:2016	UNI EN 14351-1:2016	**0**
Tenuta all'acqua		UNI EN 1027:2016	UNI EN 12208:2000/ EC 1-2007	**1A**
Resistenza al carico del vento		UNI EN 12211:2016	UNI EN 12210:2016	**NC1**

(*) secondo le dichiarazioni del cliente.

Bellaria-Igea Marina - Italia, 19 marzo 2020

L'Amministratore Delegato
(Dott. Arch. Sara Lorenza Giordano)

Firmato digitalmente da SARA LORENZA GIORDANO

Commessa:
83268

Provenienza dell'oggetto:
campionato e fornito dal cliente

Identificazione dell'oggetto in accettazione:
2020/0371 del 14 febbraio 2020

Data dell'attività:
14 febbraio 2020

Luogo dell'attività:
Istituto Giordano S.p.A. - Strada Erbosa Uno, 72 - 47043 Gatteo (FC) - Italia

Indice	Pagina
Descrizione dell'oggetto*	2
Sito produttivo*	4
Riferimenti normativi	4
Apparecchiature	4
Modalità	5
Condizioni ambientali	5
Risultati	6
Conclusioni	14

Il presente documento è composto da n. 14 pagine e n. 1 allegato e non può essere riprodotto parzialmente, estrapolando parti di interesse a discrezione del cliente, con il rischio di favorire una interpretazione non corretta dei risultati, fatto salvo quanto definito a livello contrattuale.
I risultati si riferiscono solo all'oggetto in esame, così come ricevuto, e sono validi solo nelle condizioni in cui l'attività è stata effettuata.
L'originale del presente documento è costituito da un documento informatico firmato digitalmente ai sensi della Legislazione Italiana applicabile.

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Dott. Ing. Paolo Bertini
Responsabile del Laboratorio di Security and Safety:
Dott. Andrea Bruschi
Direttore Tecnico della Sezione CPD:
Dott. Ing. Giuseppe Persano Adorno

Compilatore: Agostino Vasini
Revisore: Dott. Ing. Paolo Bertini

Pagina 1 di 14

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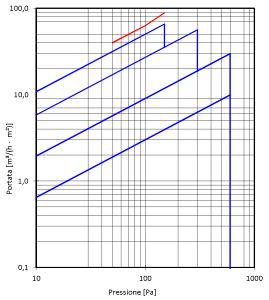
Registro Imprese della Romagna - Forlì-Cesena e Rimini n. 00 549 540 409

Misura della permeabilità all'aria in pressione positiva

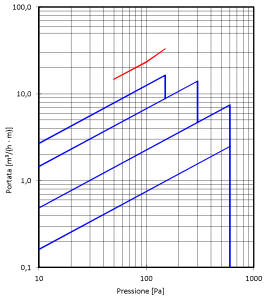
Pressione		Portata d'aria								
nominale	di prova	totale	riferita alla superficie totale e relativa incertezza				riferita alla lunghezza dei giunti apribili e relativa incertezza			
[Pa]	[Pa]	[m³/h]	[m³/h · m²]				[m³/h · m]			
50	50	296,08	39,8	±	1,3		14,74	±	0,48	
100	100	467,49	62,8	±	2,4		23,27	±	0,90	
150	150	660,03	88,7	±	3,9		32,9	±	1,4	

Misura della permeabilità all'aria in pressione negativa

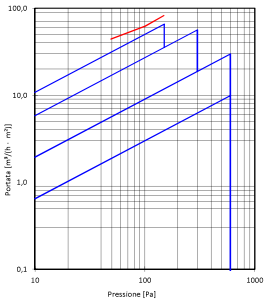
Pressione		Portata d'aria								
nominale	di prova	totale	riferita alla superficie totale e relativa incertezza				riferita alla lunghezza dei giunti apribili e relativa incertezza			
[Pa]	[Pa]	[m³/h]	[m³/h · m²]				[m³/h · m]			
50	49	328,31	44,1	±	1,2		16,34	±	0,45	
100	100	460,67	61,9	±	2,1		22,93	±	0,77	
150	149	613,79	82,5	±	3,4		30,6	±	1,3	



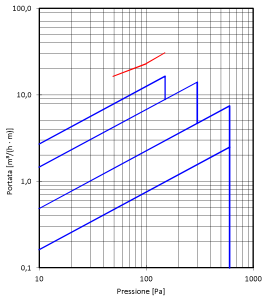
Portata relativa alla superficie totale



Portata relativa alla lunghezza dei giunti apribili



Portata relativa alla superficie totale



Portata relativa alla lunghezza dei giunti apribili

Calcolo della permeabilità all'aria media e classificazione secondo la norma UNI EN 14351-1:2016

Pressione nominale	Portata d'aria		
	media totale	riferita alla superficie totale	riferita alla lunghezza dei giunti apribili
[Pa]	[m³/h]	[m³/h · m²]	[m³/h · m]
50	310,58	41,745	15,459
100	462,93	62,222	23,043
150	635,43	85,407	31,629

Misura della tenuta all'acqua

Metodo d'innaffiamento utilizzato	A
File di ugelli	n. 1
Ugelli per ciascuna fila	n. 7
Portata d'acqua	870 l/h

Pressione	Durata d'innaffiamento	Osservazioni
[Pa]	[min]	
0	15	nessuna infiltrazione
50	5	infiltrazione lungo la guida a pavimento

Misura della deformazioni sotto carico di vento con pressione P1

Pressione		Spostamenti frontali nei punti di misura						Deformazione frontale		Deformazione frontale relativa rilevata e relative incertezze		Deformazione frontale relativa ammissibile
nominale	di prova	A	B	C	D	E	F	A<B>C	D<E>F	A<B>C	D<E>F	
[Pa]	[Pa]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[1/xxx]	[1/xxx]	[1/xxx]
0	0	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	//	//	//
400	401	11,05	29,74	1,87	6,13	32,87	23,61	23,27	18,00	1/(98 ± 4)	1/(127 ± 5)	>1/150
0*	0	-1,24	0,44	-1,44	0,87	1,82	-1,06	1,77	1,91	//	//	//
0	0	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	//	//	//
-400	-401	-4,34	-31,19	-3,98	-3,92	-26,67	-4,27	-27,03	-22,58	1/(84 ± 3)	1/(101 ± 4)	>1/150
0*	0	-1,40	-1,48	-1,18	-2,38	-1,90	-1,53	-0,19	0,05	//	//	//

(*) Pressione impostata a zero per il rilevamento delle deformazioni residue.

Verifica della resistenza alla pressione pulsante P2

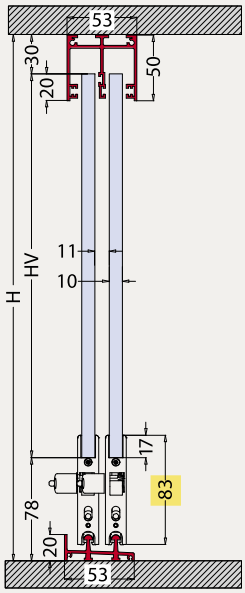
Pressione	Cicli	Osservazioni
[Pa]	[n.]	
±200	50	nessun danno visibile dalla distanza di 1 m né difetti di funzionamento dopo pressione P1 e P2

LOGGIAGLAS

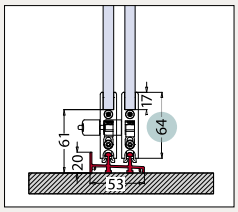
GLASS-500 / GLASS-400 LOGGIAGLAS - SEZIONI

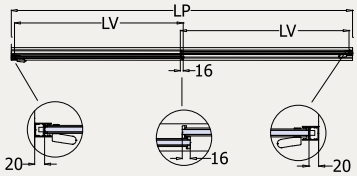
SECTIONS - QUERSCHNITTE

GLASS-500 SET 2

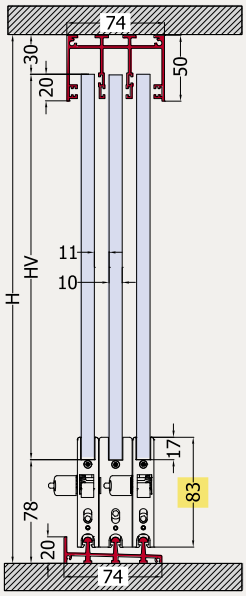


GLASS-400 SET 2

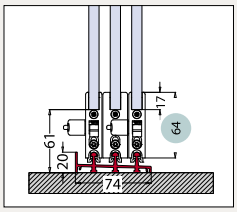


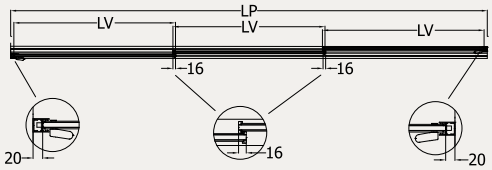


GLASS-500 SET 3



GLASS-400 SET 3





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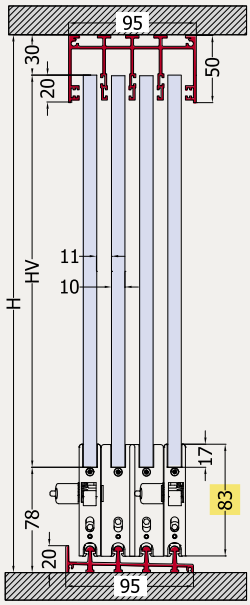
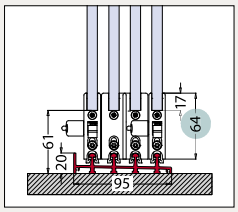
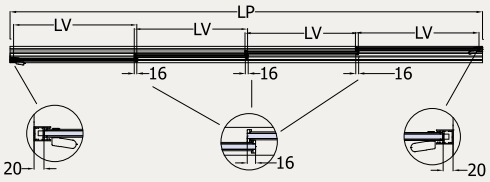
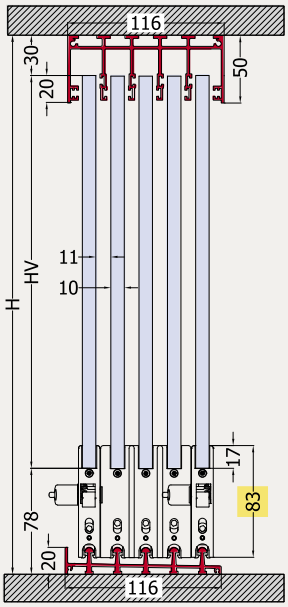


GLASS-400 SET 4

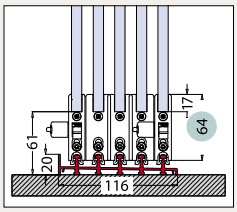


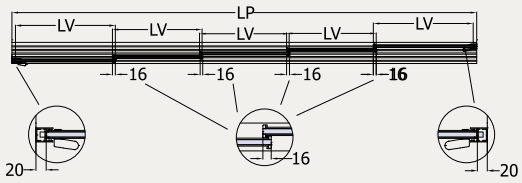


GLASS-500 SET 5



GLASS-400 SET 5



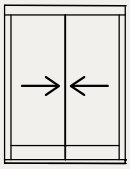


GLASS-500 / GLASS-400 LOGGIAGLAS - CONFIGURAZIONI DEI SET

SET CONFIGURATIONS - SYSTEMKONFIGURATION

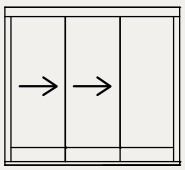
GLASS-500 / GLASS-400 SET 2

SISTEMA TELESCOPICO 2 ANTE 2 VIE
TELESCOPIC SLIDING DOOR SYSTEM 2-PANELS 2-WAYS
TELESKOP-SCHIEBESYSTEM 2-FLÜGELIG, 2-GLEISIG
L min = 1000 mm
L max = 2400 mm



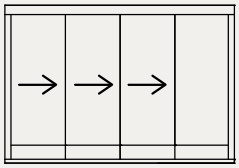
GLASS-500 / GLASS-400 SET 3

SISTEMA TELESCOPICO 3 ANTE 3 VIE
TELESCOPIC SLIDING DOOR SYSTEM 3-PANELS 3-WAYS
TELESKOP-SCHIEBESYSTEM 3-FLÜGELIG, 3-GLEISIG
L min = 1500 mm
L max = 3600 mm



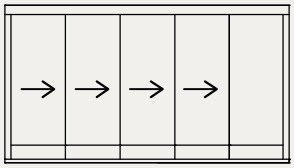
GLASS-500 / GLASS-400 SET 4

SISTEMA TELESCOPICO 4 ANTE 4 VIE
TELESCOPIC SLIDING DOOR SYSTEM 4-PANELS 4-WAYS
TELESKOP-SCHIEBESYSTEM 4-FLÜGELIG, 4-GLEISIG
L min = 2000 mm
L max = 4800 mm



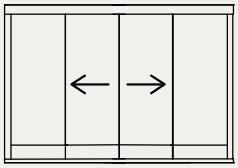
GLASS-500 / GLASS-400 SET 5

SISTEMA TELESCOPICO 5 ANTE 5 VIE
TELESCOPIC SLIDING DOOR SYSTEM 5-PANELS 5-WAYS
TELESKOP-SCHIEBESYSTEM 5-FLÜGELIG, 5-GLEISIG
L min = 2500 mm
L max = 6000 mm



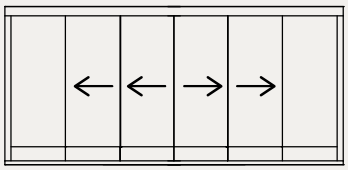
GLASS-500 / GLASS-400 SET 6

SISTEMA TELESCOPICO 4 ANTE 2 VIE
TELESCOPIC SLIDING DOOR SYSTEM 4-PANELS 2-WAYS
TELESKOP-SCHIEBESYSTEM 2-FLÜGELIG, 2-GLEISIG
L min = 2000 mm
L max = 4800 mm



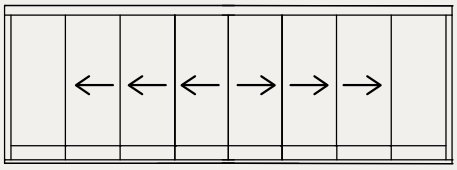
GLASS-500 / GLASS-400 SET 7

SISTEMA TELESCOPICO 6 ANTE 3 VIE
TELESCOPIC SLIDING DOOR SYSTEM 6-PANELS 3-WAYS
TELESKOP-SCHIEBESYSTEM 7-FLÜGELIG, 7-GLEISIG
L min = 3000 mm
L max = 7200 mm



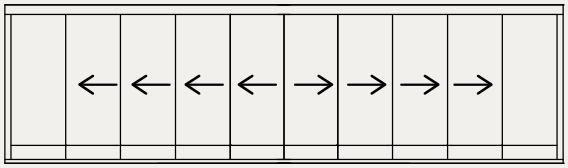
GLASS-500 / GLASS-400 SET 8

SISTEMA TELESCOPICO 8 ANTE 4 VIE
TELESCOPIC SLIDING DOOR SYSTEM 8-PANELS 4-WAYS
TELESKOP-SCHIEBESYSTEM 8-FLÜGELIG, 8-GLEISIG
L min = 4000 mm
L max = 9600 mm



GLASS-500 / GLASS-400 SET 9

SISTEMA TELESCOPICO 10 ANTE 5 VIE
TELESCOPIC SLIDING DOOR SYSTEM 10-PANELS 5-WAYS
TELESKOP-SCHIEBESYSTEM 9-FLÜGELIG, 9-GLEISIG
L min = 5000 mm
L max = 12000 mm



GLASS-500 SET 5

LOGGIAGLAS

GLASS-500 SET 4

LOGGIAGLAS

GLASS-500 SET 4

LOGGIAGLAS

GLASS-500 SET 4

LOGGIAGLAS

GLASS-400 SET 5

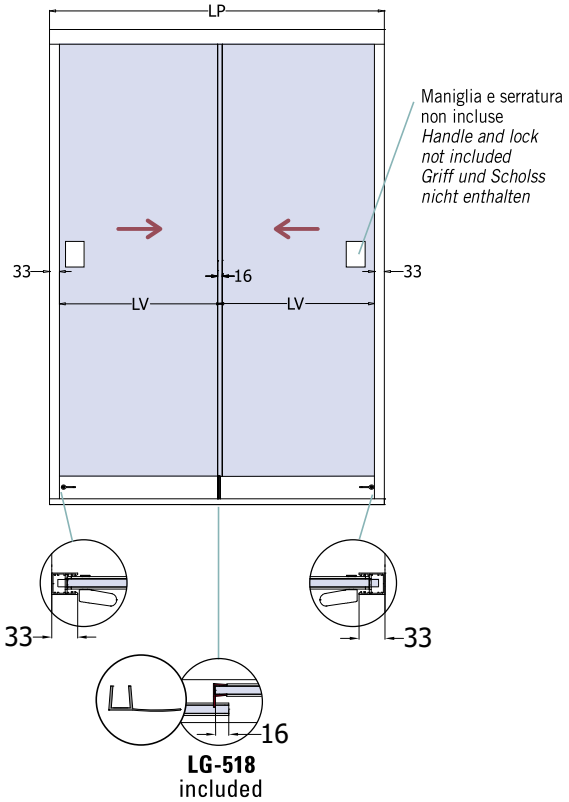
LOGGIAGLAS

GLASS-400 SET 5

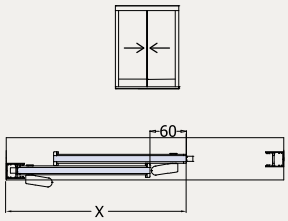
LOGGIAGLAS

GLASS-500 / GLASS-400

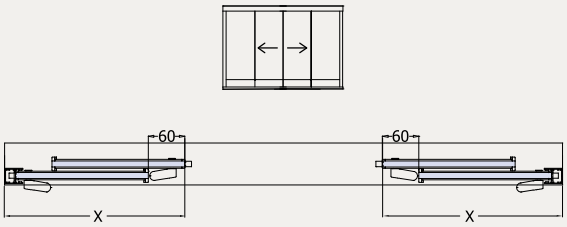
SISTEMA TELESCOPICO 2-4 ANTE 2 VIE
TELESCOPIC SLIDING SYSTEM 2-4 PANELS 2 WAYS
TELESKOP SCHIEBETÜRSYSTEM 2-4 FLÜGELIG - 2 GLEISIG



SET 2



SET 6



GLASS-500

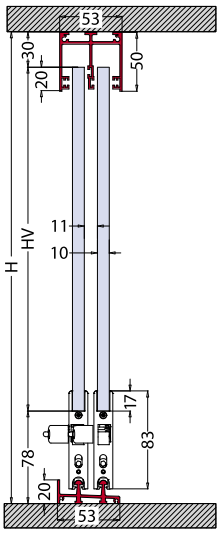
GLASS-500	GLASS-500-12
10 mm, 2700, 1200	12 mm, 3000, 1000

4 ruote per anta / *4 wheels each panel / 4 Rollen je Flügel*

GLASS-400

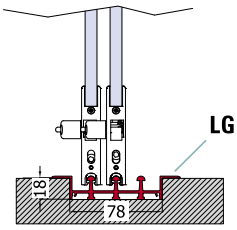
GLASS-400	GLASS-400-8
10 mm, 2500, 900	8 mm, 2600, 900

2 ruote per anta / *2 wheels each panel / 2 Rollen je Flügel*

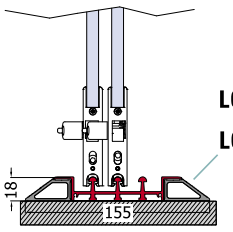


HV = H - 108

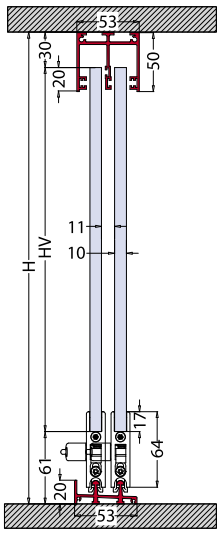
OPTIONALS



HV = H - 90

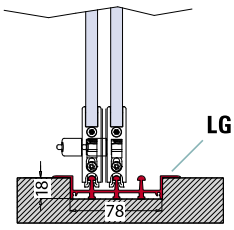


HV = H - 108

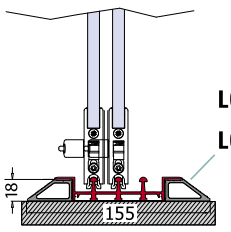


HV = H - 91

OPTIONALS



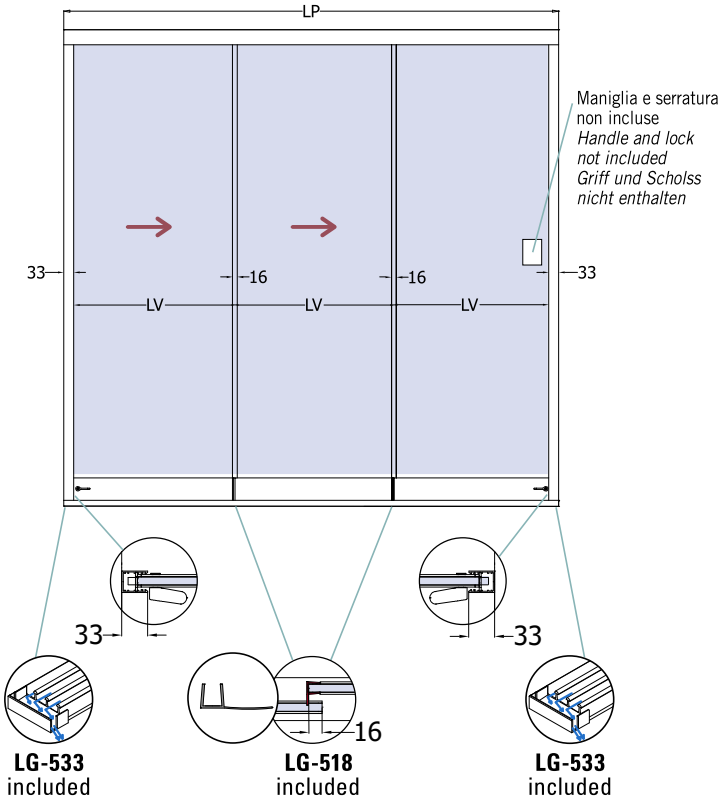
HV = H - 73



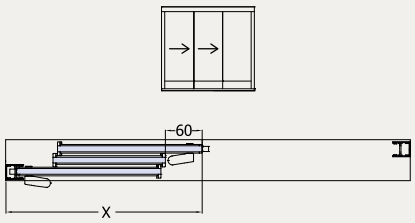
HV = H - 108

GLASS-500 / GLASS-400

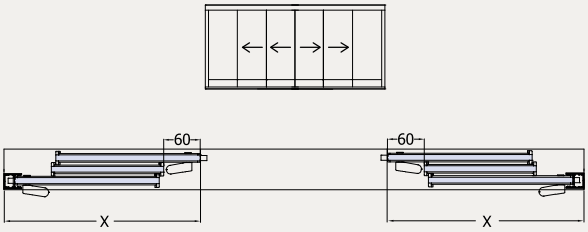
SISTEMA TELESCOPICO 3-6 ANTE 3 VIE
TELESCOPIC SLIDING SYSTEM 3-6 PANELS 3 WAYS
TELESKOP SCHIEBETÜRSYSTEM 3-6 FLÜGELIG - 3 GLEISIG



SET 3



SET 7



GLASS-500

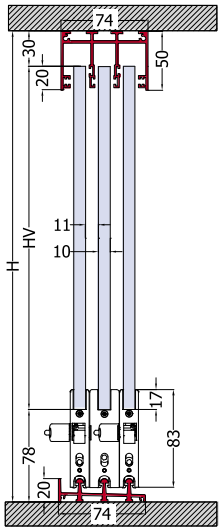
GLASS-500	GLASS-500-12
10 mm, 2700, 1200	12 mm, 3000, 1000

4 ruote per anta / *4 wheels each panel / 4 Rollen je Flügel*

GLASS-400

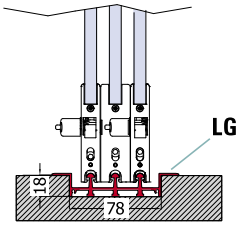
GLASS-400	GLASS-400-8
10 mm, 2500, 900	8 mm, 2600, 900

2 ruote per anta / *2 wheels each panel / 2 Rollen je Flügel*

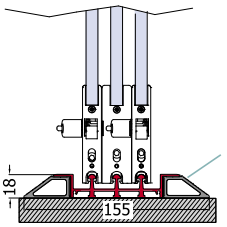


HV = H - 108

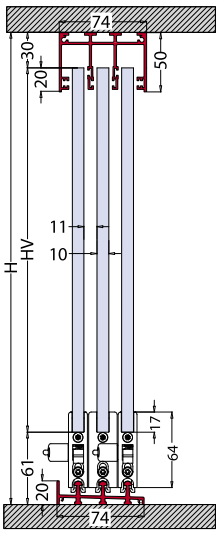
OPTIONALS



HV = H - 90

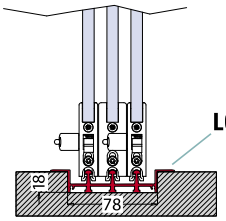


HV = H - 108

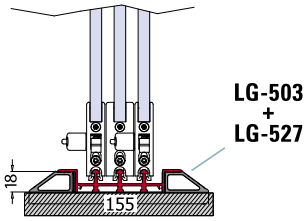


HV = H - 91

OPTIONALS



HV = H - 73

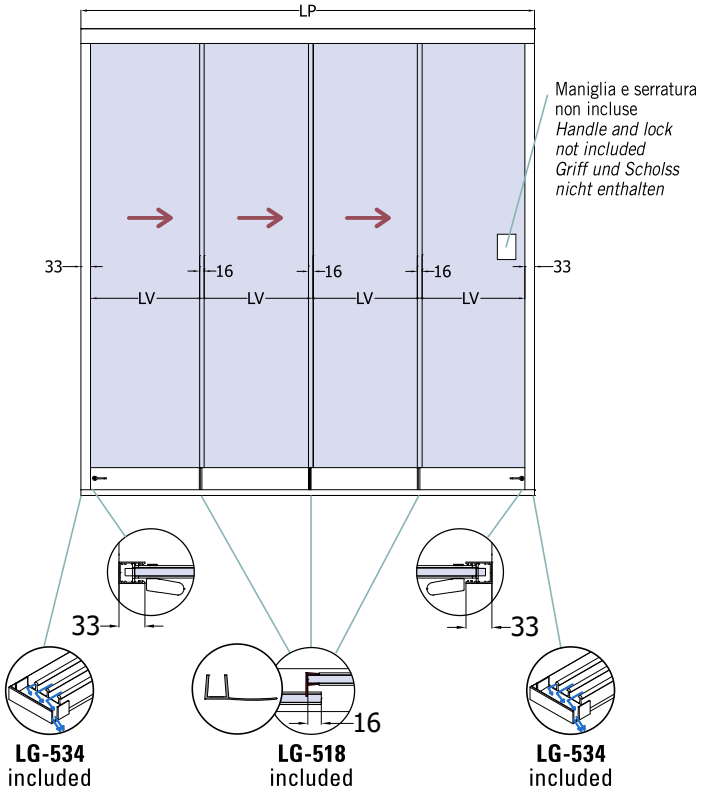


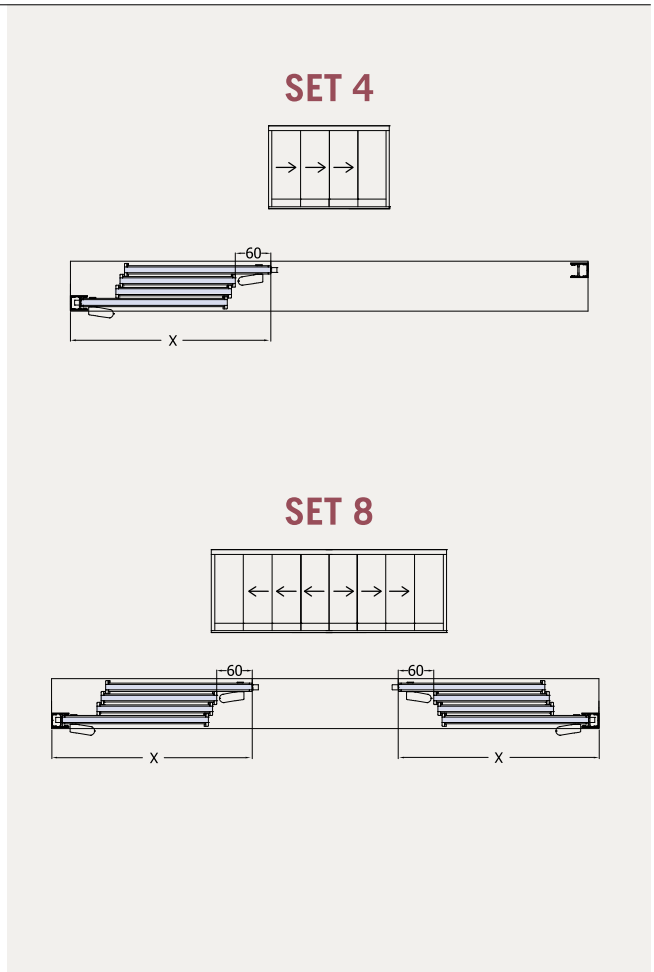
HV = H - 108

LOGGIAGLAS

GLASS-500 / GLASS-400

SISTEMA TELESCOPICO 4-8 ANTE 4 VIE
TELESCOPIC SLIDING SYSTEM 4-8 PANELS 4 WAYS
TELESKOP SCHIEBETÜRSYSTEM 4-8 FLÜGELIG - 4 GLEISIG





GLASS-500

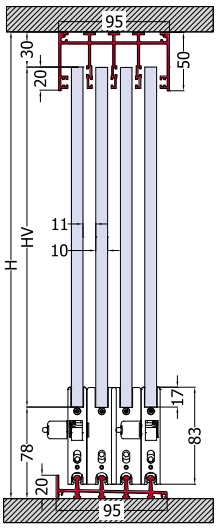
GLASS-500	GLASS-500-12
10 mm, 2700, 1200	12 mm, 3000, 1000

4 ruote per anta / *4 wheels each panel / 4 Rollen je Flügel*

GLASS-400

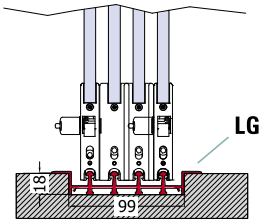
GLASS-400	GLASS-400-8
10 mm, 2500, 900	8 mm, 2600, 900

2 ruote per anta / *2 wheels each panel / 2 Rollen je Flügel*

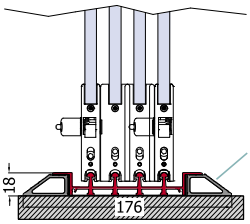


HV = H - 108

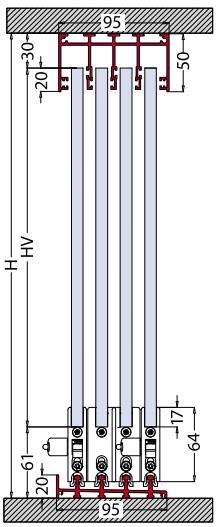
OPTIONALS



HV = H - 90

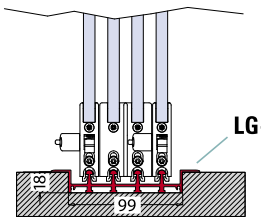


HV = H - 108

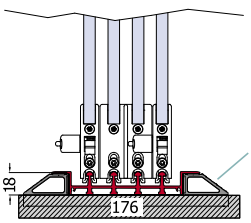


HV = H - 91

OPTIONALS



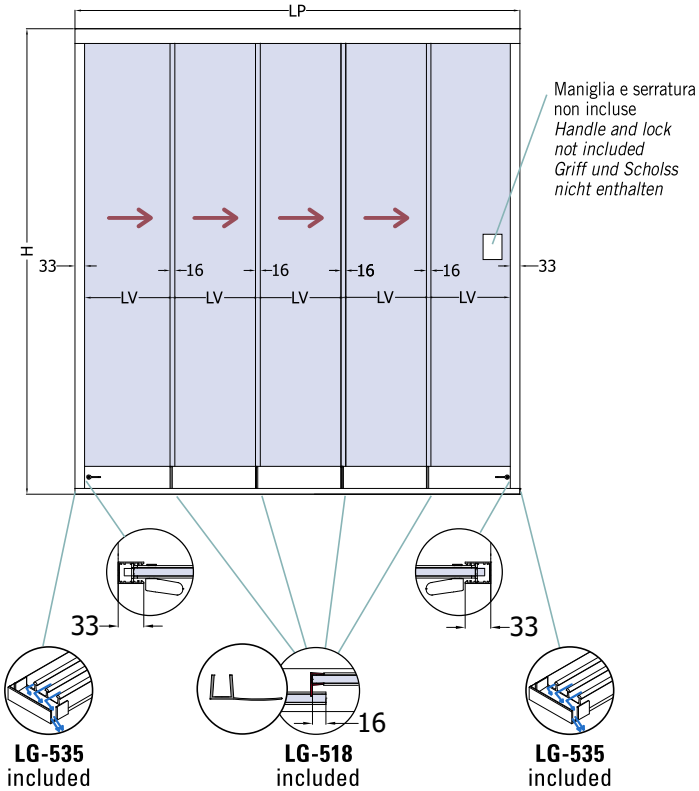
HV = H - 73



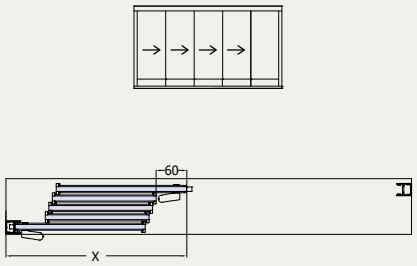
HV = H - 108

GLASS-500 / GLASS-400

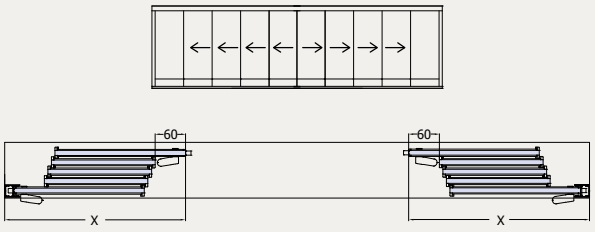
SISTEMA TELESCOPICO 5-10 ANTE 5 VIE
TELESCOPIC SLIDING SYSTEM 5-10 PANELS 5 WAYS
TELESKOP SCHIEBETÜRSYSTEM 5-10 FLÜGELIG - 5 GLEISIG



SET 5



SET 9



GLASS-500

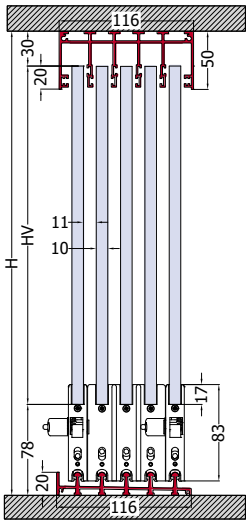
GLASS-500	GLASS-500-12
10 mm, 2700, 1200	12 mm, 3000, 1000

4 ruote per anta / *4 wheels each panel / 4 Rollen je Flügel*

GLASS-400

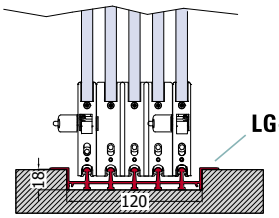
GLASS-400	GLASS-400-8
10 mm, 2500, 900	8 mm, 2600, 900

2 ruote per anta / *2 wheels each panel / 2 Rollen je Flügel*

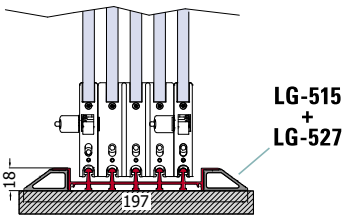


HV = H - 108

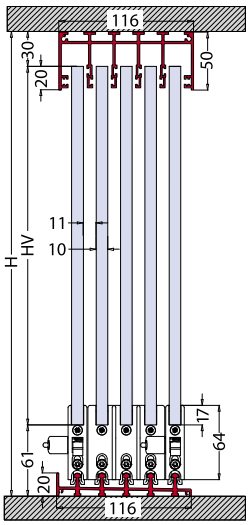
OPTIONALS



HV = H - 90

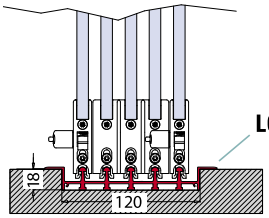


HV = H - 108

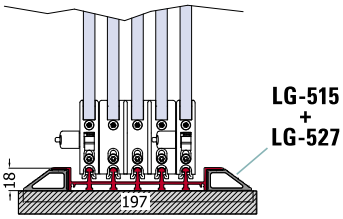


HV = H - 91

OPTIONALS



HV = H - 73



HV = H - 108