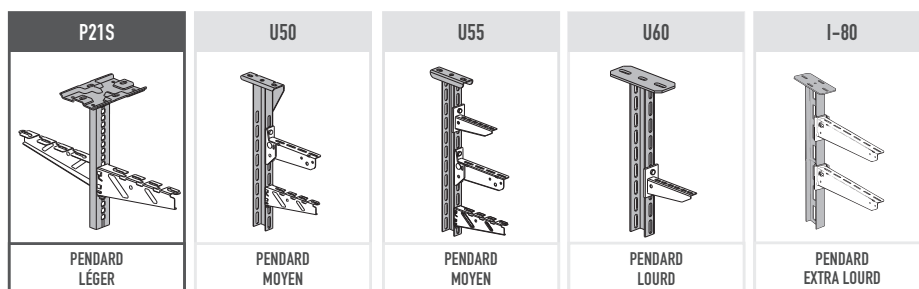
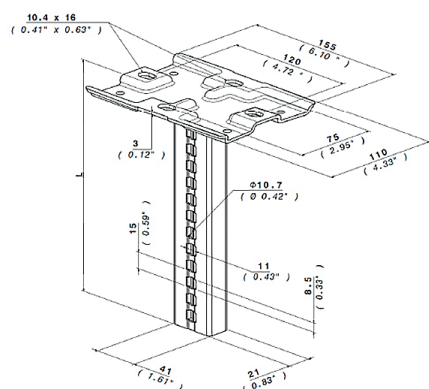


PENDARDS



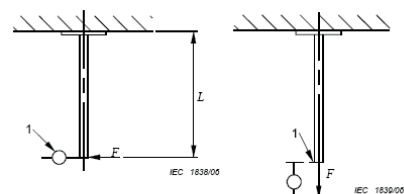
P21S

Pendard léger



Pendard léger P21S

	Moment 1% flexion	Charge symétrique	Épaisseur (mm)	Longueur (mm)	Poids net (kg)	Réf. EZ
P21S pendard L200	90 Nm	14000N	1,5	210	0,661	VG348139
P21S pendard L300	90 Nm	14000N	1,5	310	0,779	VG348140
P21S pendard L400	90 Nm	14000N	1,5	410	0,894	VG348141
P21S pendard L500	90 Nm	14000N	1,5	510	1,009	VG348142
P21S pendard L600	90 Nm	14000N	1,5	610	1,126	VG348143
P21S pendard L700	90 Nm	14000N	1,5	710	1,241	VG348144
P21S pendard L800	90 Nm	14000N	1,5	810	1,357	VG348145
P21S pendard L900	90 Nm	14000N	1,5	910	1,473	VG348147
P21S pendard L1000	90 Nm	14000N	1,5	1010	1,589	VG348146
P21S pendard L1200	90 Nm	14000N	1,5	1210	1,821	VG348148



Key 1 Deflection measurement point
F Force
L Length

Key 1 Elongation measurement point
F Force

Figure 7a – Test set-up for bending moment at the ceiling plate

Figure 7b – Test set-up for tensile strength

Safe working load (L = 800 mm)

	M1 (daNm) fig 7a	M1 (daNm) fig 7a	F (daN) fig 7b
Maximum deflection			
1/20 (30 mm)	19	30	1400
1/100 (8 mm)	5	9	1400



Bouchon de protection jaune EP21

	Poids net (kg)	Réf. Plastique
Bouchon de protection jaune EP21	0,002	VG348576

Pour la protection des extrémités profil R21S / R21SP
Ce capuchon de protection se fixe sans vis

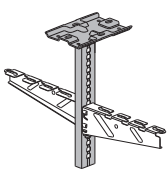
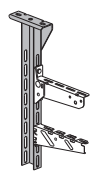
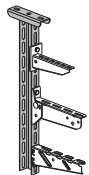
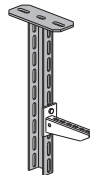
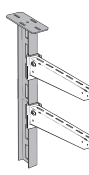
LES MATÉRIAUX

- EZ** Electrozingage après fabrication
Norme EN ISO 2081
- GS** Galvanisation procédé Sendzimir
Norme EN 10346
- RAL 2222** Revêtement par poudrage (laqué)

- GC** Galvanisé à chaud après fabrication
Norme EN ISO 1461
- DC** Géomet
- 304L** Inox 304 L
Norme EN 10088-2

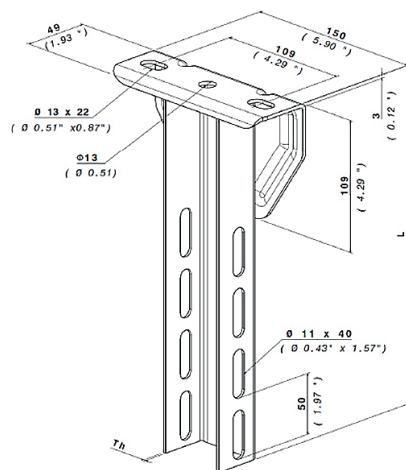
- 316L** Inox 316 L
Norme EN 10088-2
- MIN.** Traité au minium
- ALU** Aluminium

PENDARDS

P21S	U50	U55	U60	I-80
				
PENDARD LÉGER	PENDARD MOYEN	PENDARD MOYEN	PENDARD LOURD	PENDARD EXTRA LOURD

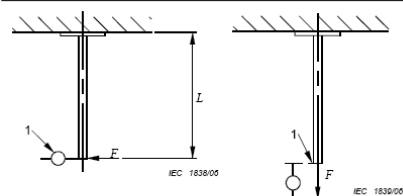
U50

Pendard moyen



Pendard moyen U50

	Moment 1% flexion	Charge symétrique	Épaisseur (mm)	Longueur (mm)	Poids net (kg)	Réf.
						GS
U50 pendard L250	210 Nm	7000N	2	256	0,933	VG348092
U50 pendard L300	210 Nm	7000N	2	306	1,013	VG348093
U50 pendard L400	210 Nm	7000N	2	406	1,173	VG348094
U50 pendard L500	210 Nm	7000N	2	506	1,333	VG348095
U50 pendard L600	210 Nm	7000N	2	606	1,493	VG348096
U50 pendard L700	210 Nm	7000N	2	706	1,653	VG348097
U50 pendard L800	210 Nm	7000N	2	806	1,813	VG348098
U50 pendard L900	210 Nm	7000N	2	906	1,973	VG348099
U50 pendard L1000	210 Nm	7000N	2	1006	2,133	VG348090
U50 pendard L1100	210 Nm	7000N	2	1106	2,293	VG348091
U50 pendard L1200	210 Nm	7000N	2	1206	2,453	VG348089



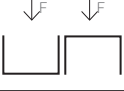
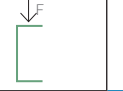
Key
1 Deflection measurement point
F Force
L Length

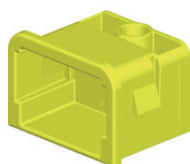
Key
1 Elongation measurement point
F Force

Figure 7a – Test set-up for bending moment at the ceiling plate

Figure 7b – Test set-up for tensile strength

Safe working load (L = 800 mm)

	M1 (daNm) fig 7a	M1 (daNm) fig 7a	F (daN) fig 7b
Maximum deflection			
1/20 (30 mm)	5	25	700
1/100 (8 mm)	1	21	700



Bouchon de protection U56 jaune

	Poids net (kg)	Réf.
Bouchon de protection U56 jaune	0,041	Plastique VG348575

Pour protéger les cotés des pendards et profils U50, U55 et U60.
Ce capuchon de protection se fixe sans vis.

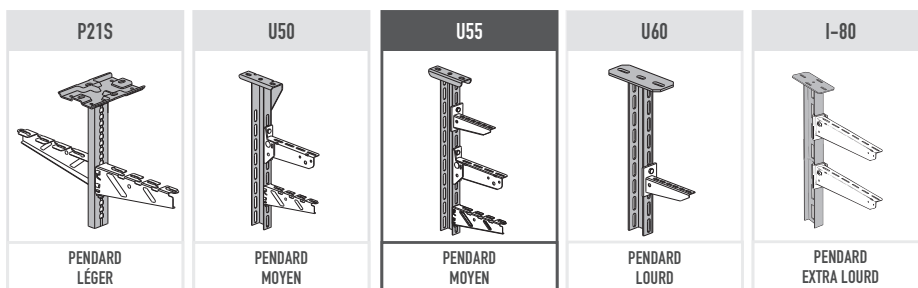
LES MATÉRIAUX

- EZ** Electrozingage après fabrication
Norme EN ISO 2081
- GS** Galvanisation procédé Sendzimir
Norme EN 10346
- RAL 2222** Revêtement par poudrage (laqué)

- GC** Galvanisé à chaud après fabrication
Norme EN ISO 1461
- DC** Géomet
- 304L** Inox 304 L
Norme EN 10088-2

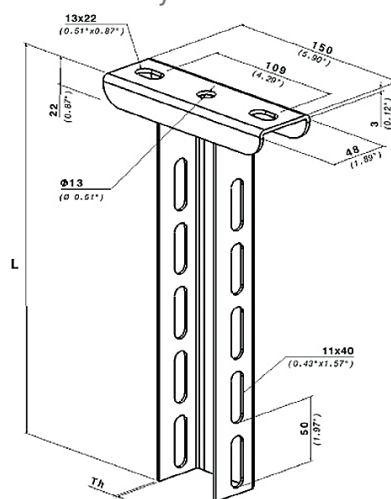
- 316L** Inox 316 L
Norme EN 10088-2
- MIN.** Traité au minium
- ALU** Aluminium

PENDARDS



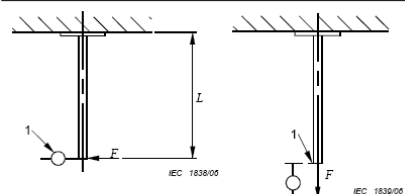
U55

Pendard moyen



Pendard moyen U55

	Moment 1% flexion	Charge symétrique	Épaisseur (mm)	Longueur (mm)	Poids net (kg)	Réf.
U55 pendard L200	270 Nm	12000N	2	203	0,670	VG348362
U55 pendard L300	270 Nm	12000N	2	303	0,840	VG348363
U55 pendard L400	270 Nm	12000N	2	403	1,000	VG348364
U55 pendard L500	270 Nm	12000N	2	503	1,180	VG348365
U55 pendard L600	270 Nm	12000N	2	603	1,350	VG348366
U55 pendard L700	270 Nm	12000N	2	703	1,520	VG348367
U55 pendard L800	270 Nm	12000N	2	803	1,690	VG348368
U55 pendard L900	270 Nm	12000N	2	903	1,860	VG348369
U55 pendard L1000	270 Nm	12000N	2	1003	2,030	VG348360
U55 pendard L1100	270 Nm	12000N	2	1103	2,200	VG348371
U55 pendard L1200	270 Nm	12000N	2	1203	2,380	VG348372



Key
1 Deflection measurement point
F Force
L Length

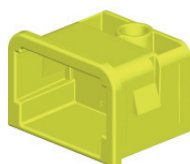
Key
1 Elongation measurement point
F Force

Figure 7a – Test set-up for bending moment at the ceiling plate

Figure 7b – Test set-up for tensile strength

Safe working load (L = 800 mm)

	M1 (daNm) fig 7a	M1 (daNm) fig 7a	F (daN) fig 7b
Maximum deflection			
1/20 (30 mm)	25	74	1200
1/100 (8 mm)	15	27	1200



Bouchon de protection U56 jaune

	Poids net (kg)	Réf.
Bouchon de protection U56 jaune	0,041	VG348575

Pour protéger les cotés des pendards et profils U50, U55 et U60.
Ce capuchon de protection se fixe sans vis.

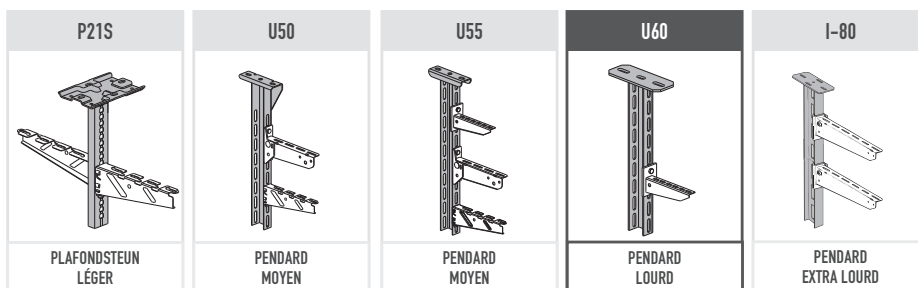
LES MATÉRIAUX

- EZ** Electrozingage après fabrication
Norme EN ISO 2081
- GS** Galvanisation procédé Sendzimir
Norme EN 10346
- RAL 2222** Revêtement par poudrage (laqué)

- GC** Galvanisé à chaud après fabrication
Norme EN ISO 1461
- DC** Géomet
- 304L** Inox 304 L
Norme EN 10088-2

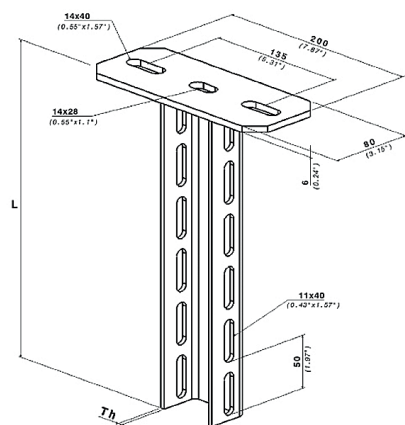
- 316L** Inox 316 L
Norme EN 10088-2
- MIN.** Traité au minium
- ALU** Aluminium

PENDARDS



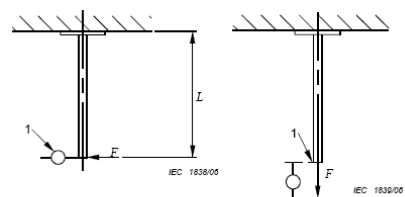
U60

Pendard lourd



Pendard lourd U60

	Moment 1% flexion	Charge	Épaisseur (mm)	Longueur (mm)	Poids net (kg)	Réf.
						GC
U60 pendard L200	530 Nm	9000N	4	206	1,390	VG348382
U60 pendard L300	530 Nm	9000N	4	306	1,730	VG348383
U60 pendard L400	530 Nm	9000N	4	406	2,080	VG348384
U60 pendard L500	530 Nm	9000N	4	506	2,400	VG348385
U60 pendard L600	530 Nm	9000N	4	606	2,760	VG348386
U60 pendard L700	530 Nm	9000N	4	706	3,100	VG348387
U60 pendard L800	530 Nm	9000N	4	806	3,450	VG348388
U60 pendard L900	530 Nm	9000N	4	906	3,790	VG348389
U60 pendard L1000	530 Nm	9000N	4	1006	4,140	VG348390
U60 pendard L1100	530 Nm	9000N	4	1106	4,470	VG348391
U60 pendard L1200	530 Nm	9000N	4	1206	4,820	VG348392
U60 pendard L1300	530 Nm	9000N	4	1306	5,170	VG348393
U60 pendard L1400	530 Nm	9000N	4	1406	5,500	VG348394
U60 pendard L1500	530 Nm	9000N	4	1506	5,860	VG348395
U60 pendard L1600	530 Nm	9000N	4	1606	6,180	VG348397
U60 pendard L1800	530 Nm	9000N	4	1806	6,870	VG348381
U60 pendard L2000	530 Nm	9000N	4	2006	7,560	VG348396
U55 pendard L1200	260 Nm	7000N	2	1203	2,380	VG348372



Key
1 Deflection measurement point
F Force
L Length

Key
1 Elongation measurement point
F Force

Figure 7a – Test set-up for bending moment at the ceiling plate

Figure 7b – Test set-up for tensile strength

Safe working load (L = 800 mm)

	M1 (daNm) fig 7a	M1 (daNm) fig 7a	F (daN) fig 7b
Maximum deflection			
1/20 (30 mm)	69	95	900
1/100 (8 mm)	33	53	900

LES MATÉRIAUX

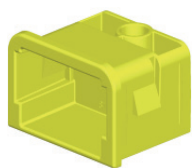
- EZ** Electrozingage après fabrication
Norme EN ISO 2081
- GS** Galvanisation procédé Sendzimir
Norme EN 10346
- RAL 2222** Revêtement par poudrage (laqué)

- GC** Galvanisé à chaud après fabrication
Norme EN ISO 1461
- DC** Géomet
- 304L** Inox 304 L
Norme EN 10088-2

- 316L** Inox 316 L
Norme EN 10088-2
- MIN.** Traité au minium
- ALU** Aluminium



Legrand Group Belgium
Kouterveldstraat 9, 1831 Diegem
Tél.: (+32) 02 719 17 11 - Fax : (+32) 02 719 17 00



Bouchon de protection U56 jaune

		Réf.
	Poids net (kg)	Plastique
Bouchon de protection U56 jaune	0,041	VG348575

Pour protéger les cotés des pendards et profils U50, U55 et U60.
Ce capuchon de protection se fixe sans vis.

LES MATÉRIAUX



Electrozingage après fabrication
Norme EN ISO 2081



Galvanisation procédé Sendzimir
Norme EN 10346



Revêtement par poudrage (laqué)



Galvanisé à chaud après fabrication
Norme EN ISO 1461



Géomet



Inox 304 L
Norme EN 10088-2



Inox 316 L
Norme EN 10088-2

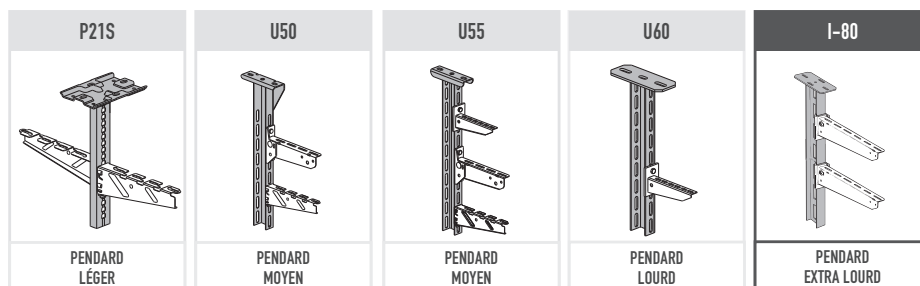


Traité au minium



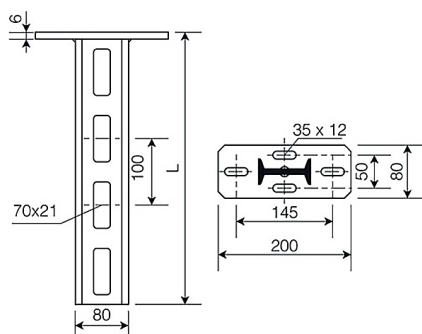
Aluminium

PENDARDS



I-80

Pendard extra lourd



Pendard extra lourd I-80

	Moment 1% flexion	Charge	Épaisseur (mm)	Longueur (mm)	Poids net (kg)	Réf. 
I-80 pendard L200	1440 Nm	10000N	6	200	1,900	VG8766802
I-80 pendard L300	1440 Nm	10000N	6	300	2,500	VG8766803
I-80 pendard L400	1440 Nm	10000N	6	400	3,000	VG8766804
I-80 pendard L500	1440 Nm	10000N	6	500	3,600	VG8766805
I-80 pendard L600	1440 Nm	10000N	6	600	4,200	VG8766806
I-80 pendard L700	1440 Nm	10000N	6	700	4,800	VG8766807
I-80 pendard L800	1440 Nm	10000N	6	800	5,400	VG8766808
I-80 pendard L900	1440 Nm	10000N	6	900	6,000	VG8766809
I-80 pendard L1000	1440 Nm	10000N	6	1000	6,600	VG8766810
I-80 pendard L1200	1440 Nm	10000N	6	1200	8,000	VG8766812
I-80 pendard L1400	1440 Nm	10000N	6	1400	9,100	VG8766814
I-80 pendard L1600	1440 Nm	10000N	6	1600	10,300	VG8766816
I-80 pendard L1800	1440 Nm	10000N	6	1800	11,500	VG8766818
I-80 pendard L2000	1440 Nm	10000N	6	2000	12,700	VG8766820

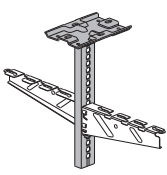
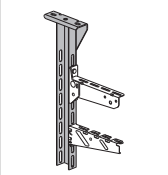
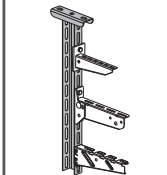
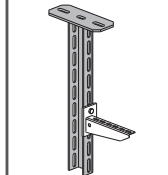
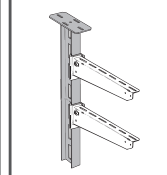
LES MATÉRIAUX

- EZ** Electrozingage après fabrication
Norme EN ISO 2081
- GS** Galvanisation procédé Sendzimir
Norme EN 10346
- RAL 2222** Revêtement par poudrage (laqué)

- GC** Galvanisé à chaud après fabrication
Norme EN ISO 1461
- DC** Géomet
- 304L** Inox 304 L
Norme EN 10088-2

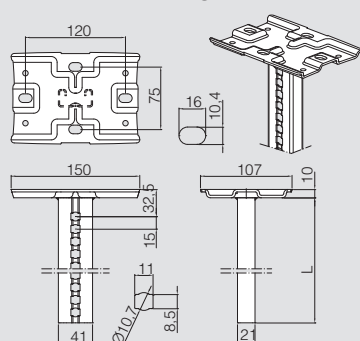
- 316L** Inox 316 L
Norme EN 10088-2
- MIN.** Traité au minium
- ALU** Aluminium

PENDARDS

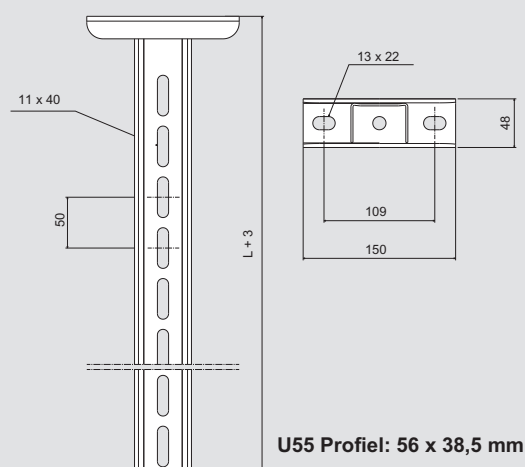
P21S	U50	U55	U60	I-80
				
PENDARD LÉGER	PENDARD MOYEN	PENDARD MOYEN	PENDARD LOURD	PENDARD EXTRA LOURD

Dimensions

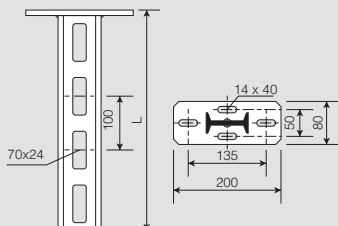
■ Pendard P21S léger



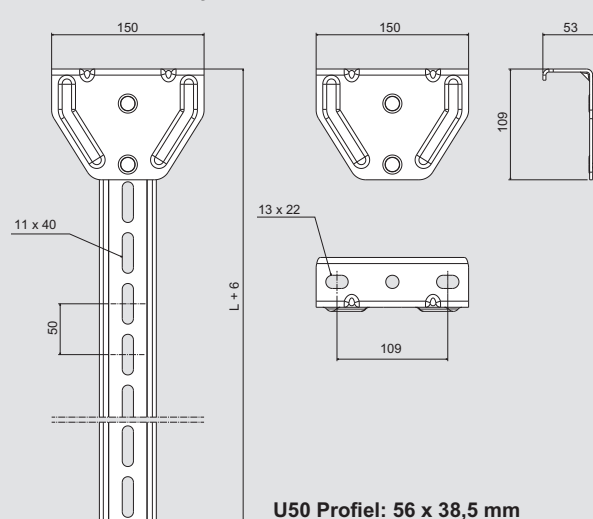
■ Pendard U55 moyen



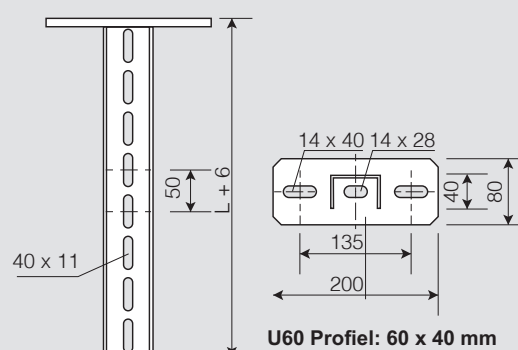
■ Pendard I-80 extra lourd



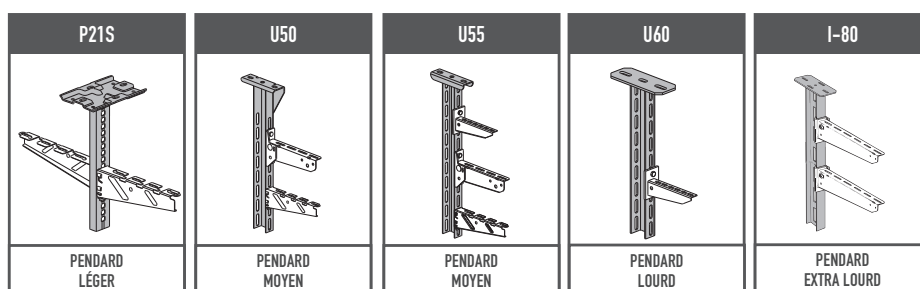
■ Pendard U50 moyen



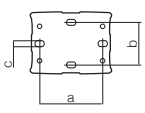
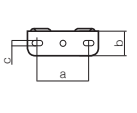
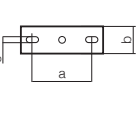
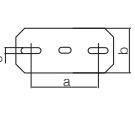
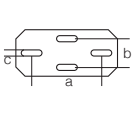
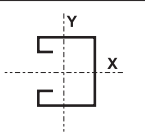
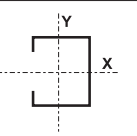
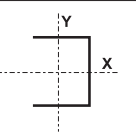
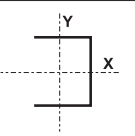
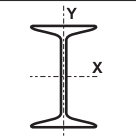
■ Pendard U60 moyen



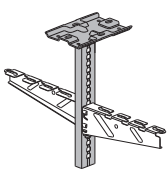
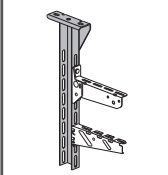
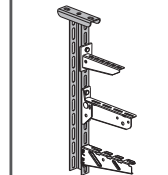
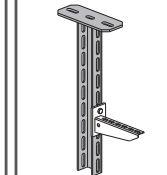
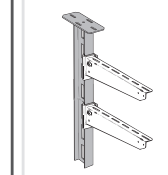
PENDARDS



Spécifications techniques des supports

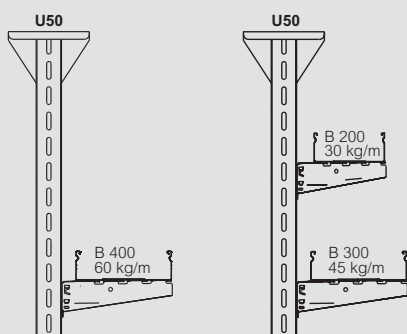
		P21S	U50	U55	U60	I80
Moment 1% uitbuiging		90Nm	210Nm	270Nm	530Nm	1440Nm
Charge symétrique		14.000 N	7.000N	12.000N	9.000N	10.000N
Plaque de tête						
a (mm)		120	109	109	135	135
b (mm)		75	49	48	80	50
c (mm)		10,4	13	13	14	14
Profil						
Dimension		41x21x1,5	56x38,5x2	56x38,5x2	60x40x4	80x42
A = Section (cross-sectional area)	cm ²	1,53	2,54	2,54	5,07	7,48
Ix = Moment d'inertie	cm ⁴	3,673	13,255	13,255	28,058	76,192
rx = Rayon de giration	cm	1,55	2,29	2,29	2,35	3,19
Wx = Moment de résistance	cm ³	1,792	4,734	4,734	9,353	19,048
Iy = Moment d'inertie	cm ⁴	0,944	3,81	3,81	8,065	5,599
ry = Rayon de giration	cm	0,78	1,23	1,23	1,26	0,87
Wy-gauche = Moment de résistance	cm ³	0,781	1,453	1,453	3,032	2,666
Wy-droite = Moment de résistance	cm ³	1,059	3,103	3,103	6,017	2,666
Schéma de perforation profil		11x8,5 h.o.h. 15	40x11 h.o.h. 50	40x11 h.o.h. 50	40x11 h.o.h. 50	70x21 h.o.h. 100
Matériel		Electrozingage	Sendzimir	Galvanisé à chaud	Galvanisé à chaud	Galvanisé à chaud

PENDARDS

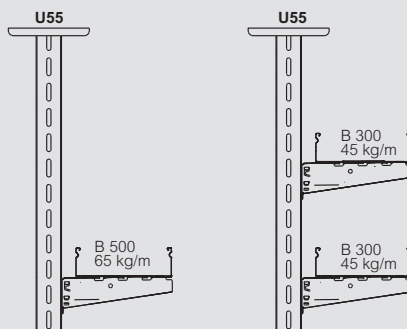
P21S	U50	U55	U60	I-80
				
PENDARD LÉGER	PENDARD MOYEN	PENDARD MOYEN	PENDARD LOURD	PENDARD EXTRA LOURD

Les données de charge U50/U55/U60

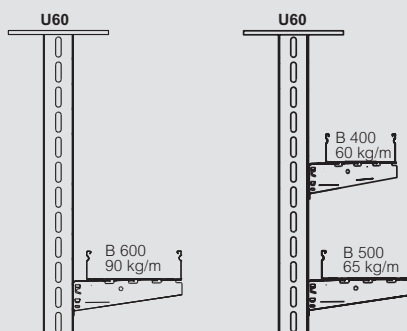
- Suspension sur 1 côté
Distance entre supports jusqu'à 1,5 m
Charge maximale moment de flexion à 1%



Charge maximale sur 1 côté : 210 Nm

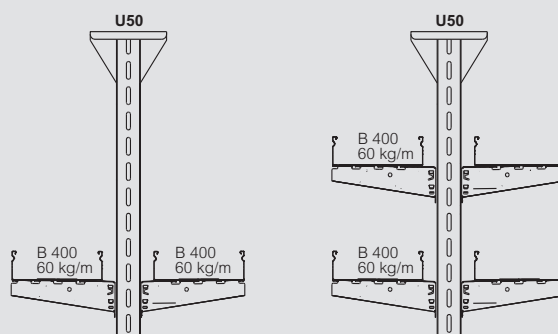


Charge maximale sur 1 côté : 270 Nm

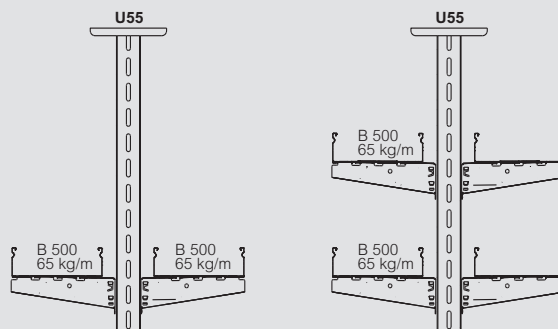


Charge maximale sur 1 côté : 530 Nm

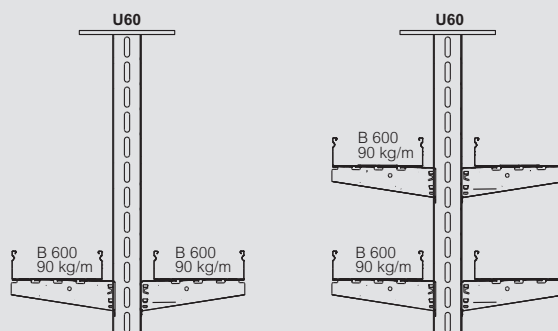
- Suspension sur 2 côtés
Distance entre supports jusqu'à 1,5 m
Charge maximale moment de flexion à 1%



Charge maximale symétrique (2 côtés) : 6000 N



Charge maximale symétrique (2 côtés) : 7000 N



Charge maximale symétrique (2 côtés) : 9000 N