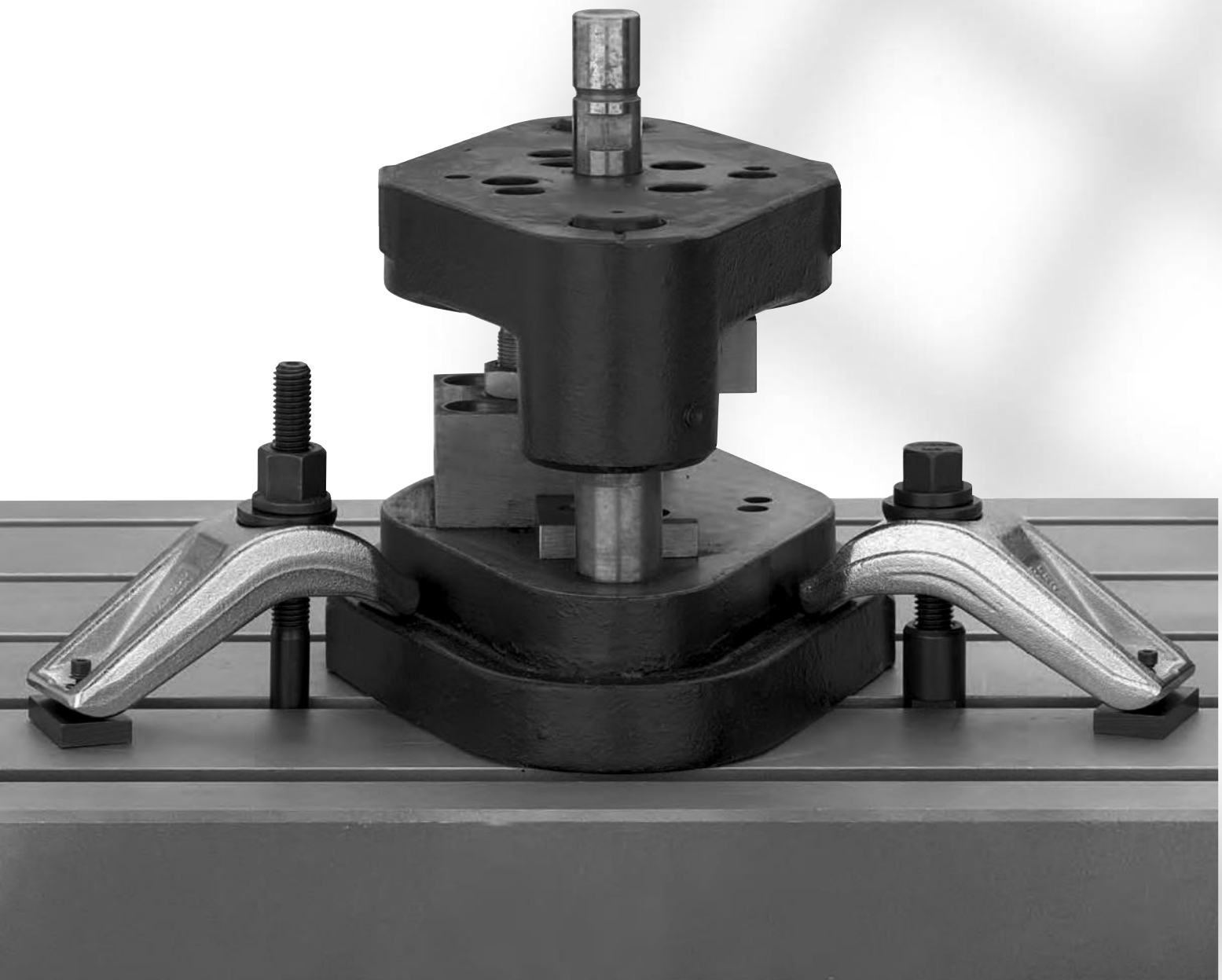


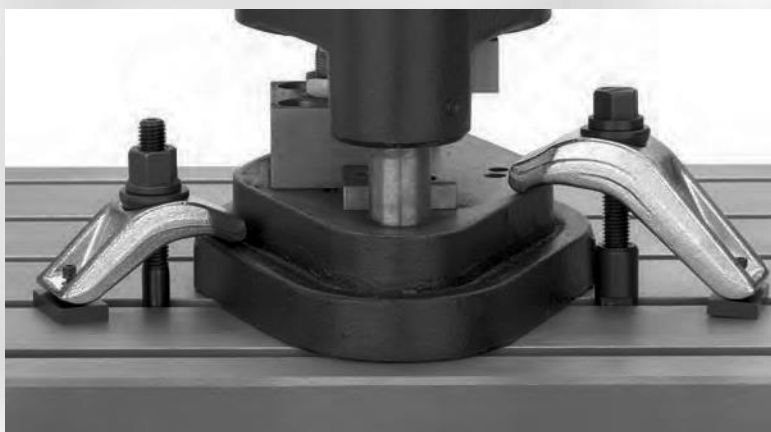
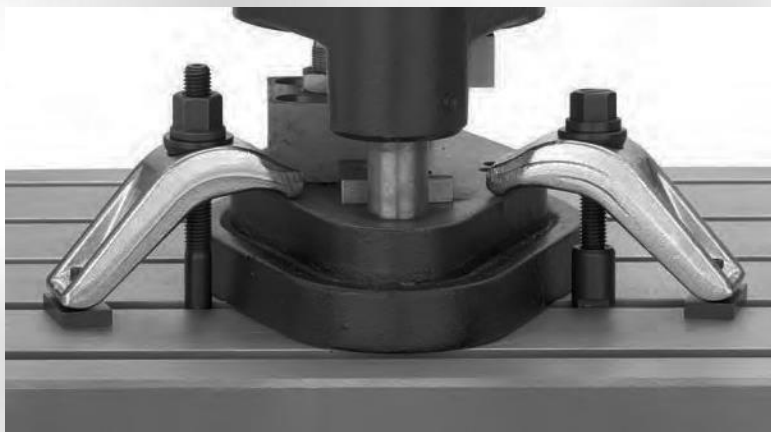
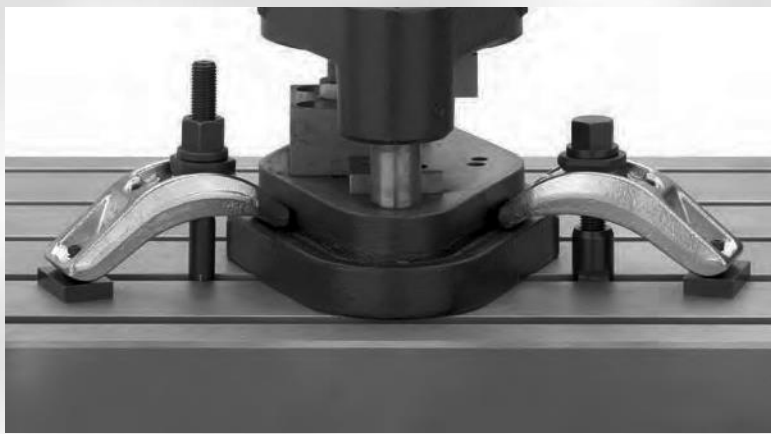
Clamping Frames – Flexible clamping solutions

S 10/S33

S 10 and S 20 have a clamping force up to 70 kN. These clamps offer great stepless vertical adjustment. The S 20's are used when protruding bolts are obstructive.

S 33 and S 45 have a clamping force up to 70 kN. These clamps are adjustable both vertically and horizontally due to the unique grooved frame design and can clamp up to 260 mm high. The S 45's are used when protruding bolts are obstructive.





Clamping Frames

S10 – S20 (complete)

Clamping Force: **Up to 45 kN**

Application Examples:
 Pressure die casting, metal forming and heavy metal cutting

- stepless vertically adjustable
- S20: No protruding bolts
- very high clamping forces

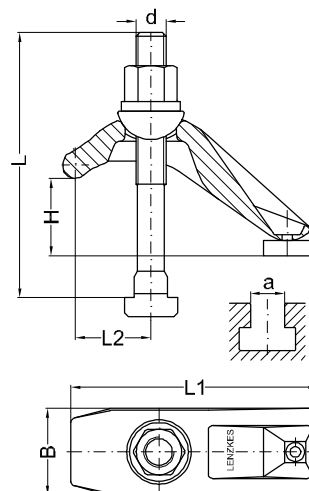
- **Material: Hardened alloy steel**
- **Clamping frame: Drop forged**



for T-Slots

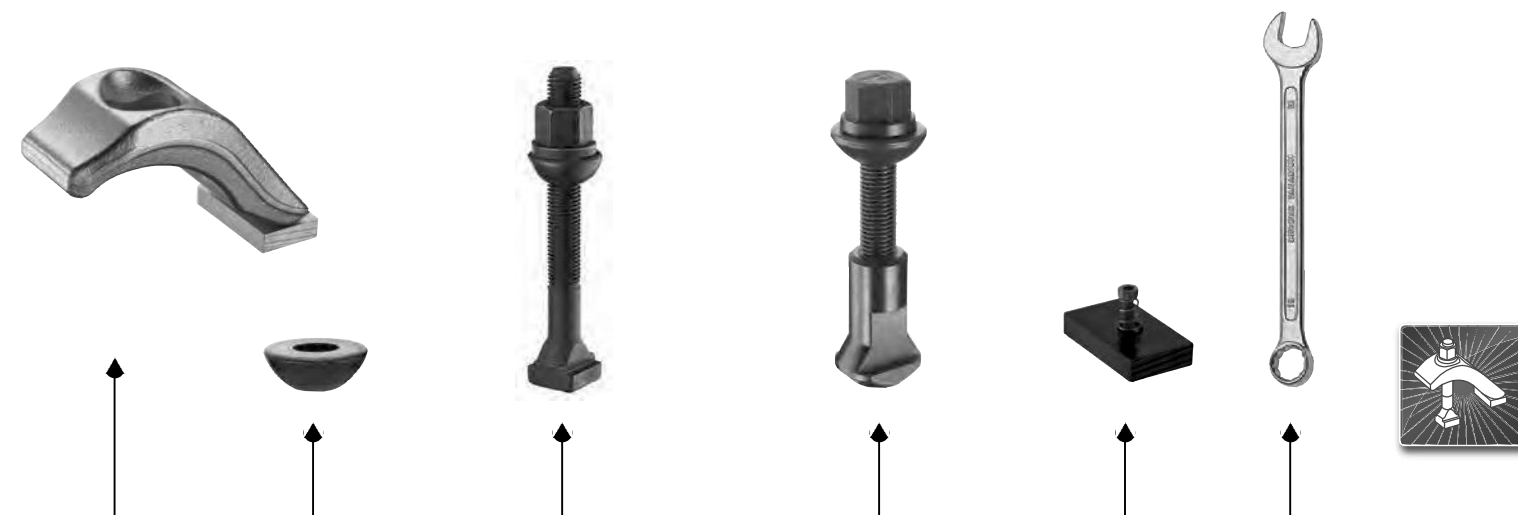


for T-Slots
(no protruding bolts)



			for T-Slots		for T-Slots (no protruding bolts)					
H	d	a	Part No.		Part No.		B	L1	L2	kN
0–45	M 8	10	–		020-045-0810		46	95	28–44	12
	M10	10	010-045-1010		–					18
	M10	12	–		020-045-1012					
	M12	12	010-045-1212		–					
	M12	14	010-045-1214		020-045-1214					20
	M14	16	010-045-1416		020-045-1416					30
	M16	16	010-045-1616		–					
	M16	18	010-045-1618		020-045-1618					
	M16	20	010-045-1620		020-045-1620					
	M16	22	010-045-1622		020-045-1622					
10–70	M10	12	010-070-1012		020-070-1012		46	125	34–53	18
	M12	12	010-070-1212		–					20
	M12	14	010-070-1214		020-070-1214					
	M14	16	010-070-1416		020-070-1416					
	M16	16	010-070-1616		–					32
	M16	18	010-070-1618		020-070-1618					
10–70	M18	20	010-070-1820		020-070-1820		52	125	39–58	45
	M20	20	010-070-2020		–					
	M20	22	010-070-2022		020-070-2022					
	M20	24	010-070-2024		020-070-2024					
	M20	28	010-070-2028		020-070-2028					

Clamping Frames S10 – S20 (Spare Parts)



Clamping Frame		Spherical Seat Washer		Fixing Set for T-Slot		Fixing Set for Ø20		Pressure Plate Assembly		Wrench	
Part No.		Part No.		Part No.	L	Part No.	L	Part No.		Part No.	
010-045-17		019-3510		–	–	920-045-0810	65	991-010		620-13	
				910-045-1010	100	–	–			620-16	
		019-3512		–	–	920-045-1012	65			620-18	
				910-045-1212	100	–	–				
				910-045-1214	112	920-045-1214	65				
		019-3516		910-045-1416	112	920-045-1416	70			620-21	
				910-045-1616	125	–	–			620-24	
				910-045-1618	125	920-045-1618	75				
				910-045-1620	150	920-045-1620	75				
				910-045-1622	150	920-045-1622	80				
010-070-17		019-3512		910-070-1012	125	920-070-1012	75	991-010		620-16	
				910-070-1212	125	–	–			620-18	
				910-070-1214	125	920-070-1214	80				
		019-3516		910-070-1416	140	920-070-1416	85			620-21	
				910-070-1616	160	–	–			620-24	
				910-070-1618	150	920-070-1618	85				
010-070-21		019-4020		910-070-1820	160	920-070-1820	95	991-030		620-27	
				910-070-2020	160	–	–			620-30	
				910-070-2022	160	920-070-2022	95				
				910-070-2024	180	920-070-2024	95				
				910-070-2028	180	920-070-2028	105				

Clamping Frames

S10 – S20 (complete)

Application Examples:
Pressure die casting, metal forming and heavy metal cutting

- stepless vertically adjustable
- S20: No protruding bolts
- very high clamping forces

Clamping Force: **Up to 70 kN**

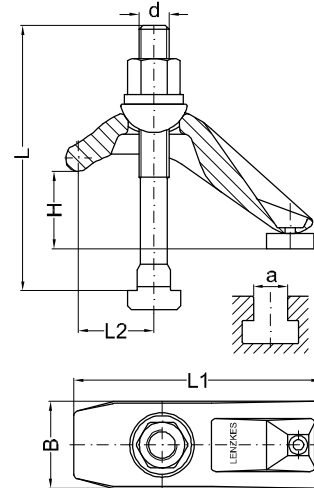
- **Material: Hardened alloy steel**
- **Clamping Frames: Drop forged**



for T-Slots



for T-Slots
(no protruding bolts)



			for T-Slots		for T-Slots (no protruding bolts)					
H	d	a	Part No.		Part No.		B	L1	L2	kN
30–110	M10	12	010-110-1012		020-110-1012		61	162	40–65	18
	M12	12	010-110-1212		–					
	M12	14	010-110-1214		020-110-1214					22
	M14	16	010-110-1416		020-110-1416					35
	M16	16	010-110-1616		–					
	M16	18	010-110-1618		020-110-1618					
	M18	20	010-110-1820		020-110-1820					50
	M20	20	010-110-2020		–					
	M20	22	010-110-2022		020-110-2022					
	M22	24	010-110-2224		020-110-2224					60
	M24	24	010-110-2424		–					
	M24	28	010-110-2428		020-110-2428					
90–180	M24	36	010-110-2436		020-110-2436		62	200	45–70	
	M12	14	010-180-1214		020-180-1214					25
	M14	16	010-180-1416		020-180-1416					35
	M16	16	010-180-1616		–					
	M16	18	010-180-1618		020-180-1618					40
	M18	20	010-180-1820		020-180-1820					50
	M20	20	010-180-2020		–					
	M20	22	010-180-2022		020-180-2022					
	M20	24	–		020-180-2024					
	M22	24	010-180-2224		020-180-2224					60
	M24	24	010-180-2424		–					
	M24	28	010-180-2428		020-180-2428					70
	M24	36	010-180-2436		020-180-2436					
	M24	42	010-180-2442		020-180-2442					

Clamping Frames S10 – S20 (Spare Parts)



Clamping Frame		Spherical Seat Washer		Fixing Set for T-Slot			Fixing Set for 020			Pressure Plate Assembly		Wrench	
Part No.		Part No.		Part No.	L		Part No.	L		Part No.		Part No.	
010-110-25		019-4516		910-110-1012	180		920-110-1012	100		991-060		620-16	
				910-110-1212	180		–	–				620-18	
				910-110-1214	180		920-110-1214	105				620-21	
		019-4516		910-110-1416	190		920-110-1416	110				620-24	
				910-110-1616	200		–	–				620-27	
				910-110-1618	200		920-110-1618	110				620-30	
		019-4520		910-110-1820	200		920-110-1820	115				620-32	
				910-110-2020	200		–	–				620-36	
				910-110-2022	200		920-110-2022	120					
		019-4524		910-110-2224	200		920-110-2224	130					
				910-110-2424	200		–	–					
				910-110-2428	200		920-110-2428	130					
				910-110-2436	230		920-110-2436	145					
010-180-25		019-4516		910-180-1214	250		920-180-1214	170		991-060		620-18	
				910-180-1416	250		920-180-1416	175				620-21	
				910-180-1616	250		–	–				620-24	
				910-180-1618	250		920-180-1618	175				620-27	
		019-4520		910-180-1820	265		920-180-1820	180				620-30	
				910-180-2020	265		–	–					
				910-180-2022	280		920-180-2022	185					
				–	–		920-180-2024	185					
		019-4524		910-180-2224	280		920-180-2224	190				620-32	
				910-180-2424	290		–	–				620-36	
				910-180-2428	290		920-180-2428	190					
				910-180-2436	315		920-180-2436	190					
				910-180-2442	315		920-180-2442	190					

Clamping Frames

S33–S45 (complete)

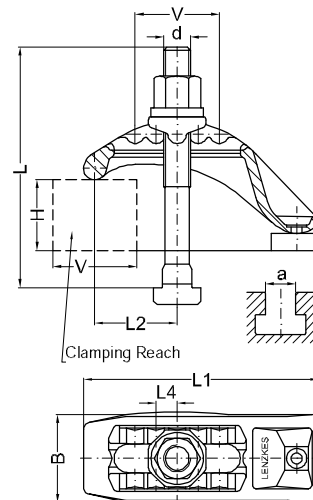
Clamping Force: **Up to 55 kN**

Application Examples:

Injection moulding, metal forming and metal cutting

- adjustable both vertically and horizontally due to the unique grooved frame design
- S45: No protruding bolts

- **Material: Hardened alloy steel, for higher clamping force**
- **Clamping Frames: Drop forged**



			for T-Slots	for Tapped Holes with supporting nut	for T-Slots (no protruding bolts)						
H	d	a	Part No.	Part No.	Part No.	V	B	L1	L2	L4	kN
0–45	M08	10	–	–	045-045-0810	36	48	105	20–65	12	12
	M10	10	033-045-1010	–	–						15
	M10	12	–	033-045-10-1	045-045-1012						
	M12	12	033-045-1212	–	–						
	M12	14	033-045-1214	033-045-12-1	045-045-1214						
0–45	M14	16	033-045-1416	033-045-14-1	045-045-1416	36	53	110	20–65	12	25
	M16	16	033-045-1616	–	–						
	M16	18	033-045-1618	033-045-16-1	045-045-1618						
	M16	20	033-045-1620	–	045-045-1620						
	M16	22	033-045-1622	–	045-045-1622						
10–70	M10	12	033-070-1012	033-070-10-1	045-070-1012	50	53	140	22–72	13	18
	M12	12	033-070-1212	–	–						25
	M12	14	033-070-1214	033-070-12-1	045-070-1214						
	M14	16	033-070-1416	033-070-14-1	045-070-1416						
	M16	16	033-070-1616	–	–						
	M16	18	033-070-1618	033-070-16-1	045-070-1618						
10–70	M18	20	033-070-1820	033-070-18-1	045-070-1820	50	60	152	28–78	13	35
	M20	20	033-070-2020	–	–						45
	M20	22	033-070-2022	033-070-20-1	045-070-2022						
	M20	24	033-070-2024	–	045-070-2024						
	M20	28	033-070-2028	–	045-070-2028						
10–80	M16	18	033-080-1618	033-080-16-1	–	60	68	170	30–90	15	35
	M18	20	033-080-1820	–	–						50
	M20	20	033-080-2020	–	–						
	M20	22	033-080-2022	033-080-20-1	045-080-2022						
	M20	24	–	–	045-080-2024						
	M20	28	–	–	045-080-2028						
	M22	24	033-080-2224	033-080-22-1	–						55
	M24	24	033-080-2424	–	–						
	M24	28	033-080-2428	033-080-24-1	045-080-2428						
	M24	36	033-080-2436	–	–						

Clamping Frames S33 – S45 (Spare Parts)



Clamping Frame		Pressure Piece		Fixing Set for T-Slot		Fixing Set for Tapped Holes		Fixing Set for 045		Pressure Plate Assembly		Wrench 								
Part No.		Part No.		Part No.		L		Part No.		L		Part No.		Part No.						
033-045-13		039-2812		—	—			—	—			940-045-0810	65		991-010	620-13				
				930-045-1010	100			—	—							620-16				
				—	—			930-045-10-1	112							940-045-1012	65			620-18
				930-045-1212	100			—	—							—	—			
				930-045-1214	112			930-045-12-1	112							940-045-1214	65			
033-045-17		039-3216		930-045-1416	112			930-045-14-1	125			940-045-1416	70		991-020		620-21			
				930-045-1616	125			—	—			—	—					620-24		
				930-045-1618	125			930-045-16-1	125			940-045-1618	75							
				930-045-1620	125			—	—			940-045-1620	80							
				930-045-1622	125			—	—			940-045-1622	80							
033-070-17		039-3212		930-070-1012	132			930-070-10-1	140			940-070-1012	75		991-030		620-16			
				930-070-1212	132			—	—			—	—					620-18		
				930-070-1214	132			930-070-12-1	140			940-070-1214	80							
	039-3216		930-070-1416	140			930-070-14-1	150			940-070-1416	85					620-21			
			930-070-1616	160			—	—			—	—					620-24			
			930-070-1618	150			930-070-16-1	160			940-070-1618	85								
033-070-21		039-4020		930-070-1820	160			930-070-18-1	160			940-070-1820	95		991-040		620-27			
				930-070-2020	160			—	—			—	—					620-30		
				930-070-2022	160			930-070-20-1	160			940-070-2022	95							
				930-070-2024	170			—	—			940-070-2024	105							
				930-070-2028	180			—	—			940-070-2028	105							
033-080-25		039-4516		930-080-1618	160			930-080-16-1	160			—	—		991-070		620-24			
		039-4520		930-080-1820	160			—	—			—	—				620-27			
	930-080-2020		160			—	—			—	—		620-30							
	930-080-2022		180			930-080-20-1	180			940-080-2022	112									
	—		—			—	—			940-080-2024	120									
	—		—			—	—			940-080-2028	120									
	039-4524		930-080-2224	200			930-080-22-1	190			—	—					620-32			
			930-080-2424	200			—	—			—	—					620-36			
			930-080-2428	200			930-080-24-1	200			940-080-2428	115								
			930-080-2436	224			—	—			—	—								

Clamping Frames S33–S45 (complete)

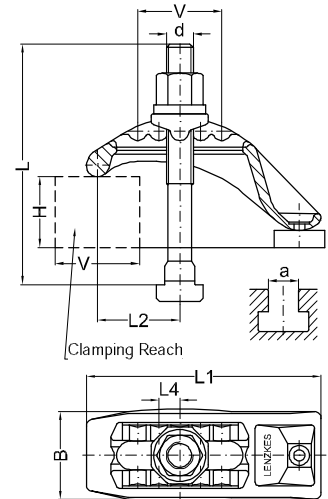
Clamping Force: **Up to 60 kN**

Application Examples:

Injection moulding, metal forming and metal cutting

- adjustable both vertically and horizontally due to the unique grooved frame design
- greater clamping force than S30 or S40
- S45: No protruding bolts

- **Material: Hardened alloy steel, for higher clamping force**
- **Clamping Frames: Drop forged**



			for T-Slots	for Tapped Holes with supporting nut	for T-Slots (no protruding bolts)						
H	d	a	Part No.	Part No.	Part No.	V	B	L1	L2	L4	kN
30–110	M10	12	033-110-1012	–	045-110-1012	75	53	190	25–95	15	18
	M12	12	033-110-1212	–	–						
	M12	14	033-110-1214	033-110-12-1	045-110-1214						20
	M14	16	033-110-1416	033-110-14-1	045-110-1416						30
	M16	16	033-110-1616	–	–						
	M16	18	033-110-1618	033-110-16-1	045-110-1618						
30–110	M18	20	033-110-1820	033-110-18-1	045-110-1820	75	60	194	30–110	15	50
	M20	20	033-110-2020	–	–						
	M20	22	033-110-2022	033-110-20-1	045-110-2022						
	M20	24	033-110-2024	–	045-110-2024						
30–110	M22	24	033-110-2224	033-110-22-1	045-110-2224	75	68	200	30–110	15	50
	M24	24	033-110-2424	–	–						
	M24	28	033-110-2428	033-110-24-1	045-110-2428						60
	M24	32	033-110-2432	–	045-110-2432						
	M24	36	033-110-2436	–	045-110-2436						
	M30	–	–	033-110-24-30-1	–						

Clamping Frames S33 – S45 (Spare Parts)



Clamping Frame		Pressure Piece		Fixing Set for T-Slot		Fixing Set for Tapped Holes		Fixing Set for 045		Pressure Plate Assembly		Wrench 					
Part No.		Part No.		Part No.	L		Part No.	L		Part No.		Part No.					
033-110-17		039-3212		930-110-1012	170		—	—		940-110-1012	100	991-030		620-16			
				930-110-1212	180		—	—		—	—				620-18		
				930-110-1214	180		930-110-12-1	200		940-110-1214	105						
		039-3216		930-110-1416	190		930-110-14-1	200		940-110-1416	110				620-21		
				930-110-1616	200		—	—		—	—				620-24		
				930-110-1618	200		930-110-16-1	200		940-110-1618	110						
033-110-21		039-4020		930-110-1820	200		930-110-18-1	212		940-110-1820	115	991-060		620-27			
				930-110-2020	200		—	—		—	—				620-30		
				930-110-2022	212		930-110-20-1	224		940-110-2022	120						
				930-110-2024	224		—	—		940-110-2024	130						
033-110-25		039-4524		930-110-2224	224		930-110-22-1	224		940-110-2224	130	991-070		620-32			
				930-110-2424	224		—	—		—	—				620-36		
				930-110-2428	224		930-110-24-1	250		940-110-2428	130						
				930-110-2432	230		—	—		940-110-2432	145						
				930-110-2436	230		—	—		940-110-2436	145						
				—	—		930-110-24-30-1	250		—	—						

Clamping Frames S33–S45 (complete)

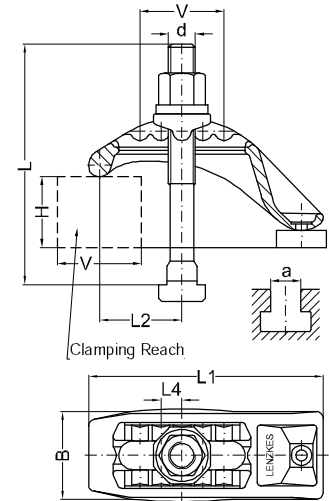
Clamping Force: **Up to 70 kN**

Application Examples:

Injection moulding, metal forming and metal cutting

- adjustable both vertically and horizontally due to the unique grooved frame design
- greater clamping force than S30 or S40
- S45: No protruding bolts

- **Material: Hardened alloy steel, for higher clamping force**
- **Clamping Frames: Drop forged**



			for T-Slots		for Tapped Holes with supporting nut		for T-Slots (no protruding bolts)		V	B	L1	L2	L4	kN
H	d	a	Part No.		Part No.		Part No.							
40–120	M20	20	033-120-2020		–		–		64	85	215	45–109	16	50
	M20	22	033-120-2022		033-120-20-1		–							
	M24	24	033-120-2424		–		–							60
	M24	28	033-120-2428		033-120-24-1		–							
	M30	36	033-120-3036		033-120-30-1		–							70
	M30	42	033-120-3042		–		–							
60–160	M20	20	033-160-2020		–		–		80	85	250	45–125	16	50
	M20	22	033-160-2022		033-160-20-1		045-160-2022							
	M24	24	033-160-2424		–		–							60
	M24	28	033-160-2428		033-160-24-1		045-160-2428							
	M30	36	033-160-3036		033-160-30-1		–							70
	M30	42	033-160-3042		–		–							
90–180	M16	18	033-180-1618		033-180-16-1		045-180-1618		90	70	240	35–125	15	35
	M18	20	033-180-1820		033-180-18-1		045-180-1820							50
	M20	20	033-180-2020		–		–							
	M20	22	033-180-2022		033-180-20-1		045-180-2022							
	M20	24	–		–		045-180-2024							
	M22	24	033-180-2224		–		045-180-2224							
	M24	24	033-180-2424		–		–							60
	M24	28	033-180-2428		033-180-24-1		045-180-2428							
	M24	36	033-180-2436		–		045-180-2436							
	M30	–	–		033-180-24-30-1		–							
130–260	M16	18	033-260-1618		–		045-260-1618		90	70	280	40–130	15	35
	M18	20	033-260-1820		–		–							
	M20	22	033-260-2022		033-260-20-1		045-260-2022							50
	M20	24	–		–		045-260-2024							
	M22	24	033-260-2224		–		–							
	M24	28	033-260-2428		033-260-24-1		045-260-2428							60
	M24	36	033-260-2436		–		–							
	M30	–	–		033-260-24-30-1		–							

Clamping Frames S33 – S45 (Spare Parts)



Clamping Frame	Pressure Piece	Fixing Set for T-Slot		Fixing Set for Tapped Holes		Fixing Set for Ø45		Pressure Plate Assembly	Wrench
Part No.	Part No.	Part No.	L	Part No.	L	Part No.	L	Part No.	Part No.
033-120-31	039-6220	930-120-2020	250	–	–	–	–	991-070	620-30
		930-120-2022	250	930-120-20-1	250	–	–		620-36
	039-6224	930-120-2424	250	–	–	–	–		620-46
		930-120-2428	250	930-120-24-1	250	–	–		
	039-6230	930-120-3036	280	930-120-30-1	280	–	–		
		930-120-3042	290	–	–	–	–		
033-160-31	039-6220	930-160-2020	265	–	–	–	–	991-070	620-30
		930-160-2022	280	930-160-20-1	300	940-160-2022	165		620-36
	039-6224	930-160-2424	290	–	–	–	–		620-46
		930-160-2428	290	930-160-24-1	315	940-160-2428	170		
	039-6230	930-160-3036	315	930-160-30-1	315	–	–		
		930-160-3042	315	–	–	–	–		
033-180-25	039-4516	930-180-1618	265	930-180-16-1	280	940-180-1618	175	991-070	620-24
	039-4520	930-180-1820	265	930-180-18-1	280	940-180-1820	180		620-27
		930-180-2020	265	–	–	–	–		620-30
		930-180-2022	280	930-180-20-1	300	940-180-2022	185		
		–	–	–	–	940-180-2024	185		
	039-4524	930-180-2224	280	–	–	940-180-2224	190		620-32
		930-180-2424	290	–	–	–	–		620-36
		930-180-2428	290	930-180-24-1	315	940-180-2428	190		
		930-180-2436	290	–	–	940-180-2436	190		
		–	–	930-180-24-30-1	315	–	–		
033-260-25	039-4516	930-260-1618	360	–	–	940-260-1618	215	991-070	620-24
	039-4520	930-260-1820	360	–	–	–	–		620-27
		930-260-2022	365	930-260-20-1	385	940-260-2022	225		620-30
		–	–	–	–	940-260-2024	225		
	039-4524	930-260-2224	370	–	–	–	–		620-32
		930-260-2428	380	930-260-24-1	400	940-260-2428	230		620-36
		930-260-2436	380	–	–	–	–		
		–	–	930-260-24-30-1	400	–	–		