



Märkische Stanz-Partner

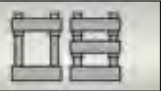
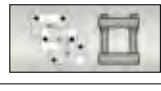
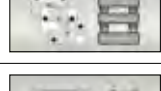
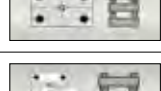
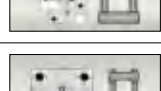
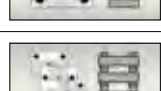
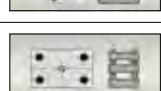


[säulengestelle]

[diesets]

Stand / Revision Status 30.10.2020



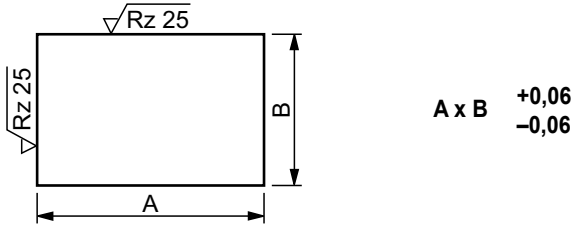
	Säulengestelle aus Stahl	Steel die sets	Best.-Nr. Order no.	Seite Page
	2 Platten, 2 Säulen, Typ A-C-D	2 plates, 2 leader pins, types A-C-D	SG 2 .	SG. 5 - 8
	2 Platten, 4 Säulen, Typ Q	2 plates, 4 leader pins, type Q	SG 2 Q	SG. 13 - 16
	3 Platten, 2 Säulen, Typ A-C-D	3 plates, 2 leader pins, types A-C-D	SG 3 .	SG. 9 - 12
	3 Platten, 4 Säulen, Typ Q	3 plates, 4 leader pins, type Q	SG 3 Q	SG. 17 - 20
	2 Platten, 2 Säulen, Typ A-C-D M-Line	2 plates, 2 leader pins, types A-C-D M-Line	SG 2 . RM	SG. 26 - 29
	2 Platten, 4 Säulen, Typ Q M-Line	2 plates, 4 leader pins, type Q M-Line	SG 2 Q RM	SG. 34 - 37
	3 Platten, 2 Säulen, Typ A-C-D M-Line	3 plates, 2 leader pins, types A-C-D M-Line	SG 3 . RM	SG. 30 - 33
	3 Platten, 4 Säulen, Typ Q M-Line	3 plates, 4 leader pins, type Q M-Line	SG 3 Q RM	SG. 38 - 41

	Großstahlplatten	XXL - Steel plates	Best.-Nr. Order no.	Seite Page
	Großstahlplatten und Stahl-Schweiß- Konstruktionen mit Sonderbearbeitung	XXL - Steel plates and welded units with additional work / secondary operation		SG. 43 - 46

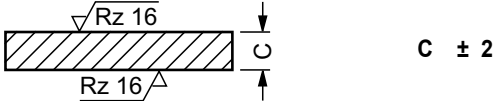


Mat.: C45

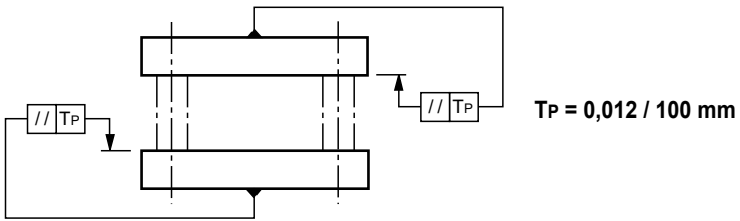
Toleranz Außenmaße /
Tolerance of length and width



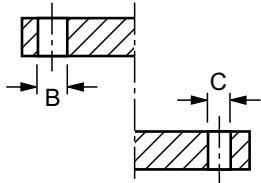
Toleranz Plattenstärke /
Tolerance of thickness



Parallelität der Flächenpaare /
Parallelism of two surfaces



Bohrungstoleranzen /
Hole tolerances



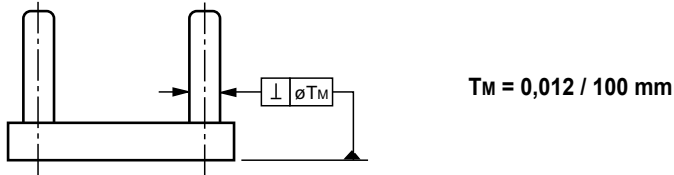
B = Aufnahmebohrung Buchse/ Mounting hole for bushing:

FS 468 = K7
FS 4 .. = H6
FS 6 .. = H6
FS 7 .. = H6

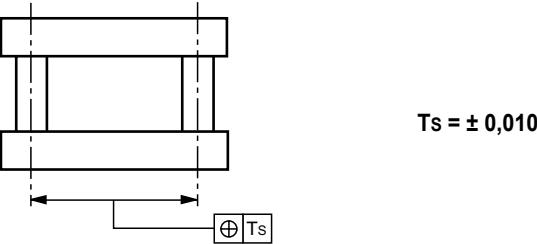
C = Aufnahmebohrung Säule/ Mounting hole for leader pin:

FS 420 = R7
FS 419 = JS6
FS 400/403 = H6

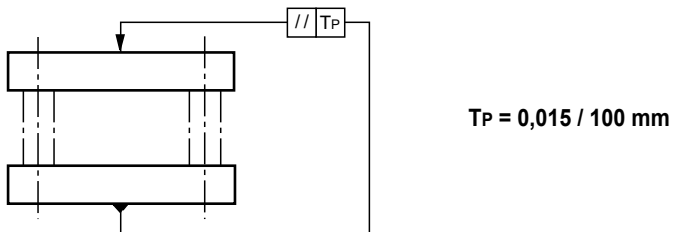
Winkelgenauigkeit der Führungssäulen /
Angular accuracy of leader pins



Toleranz Systemabstände /
Tolerance of dimensions between leader-
pin (and bushing) - holes



Planparallelität im
zusammengebauten Zustand /
Parallelism after mounting

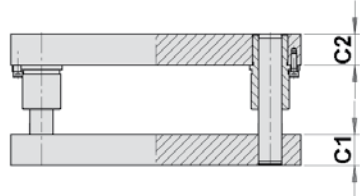
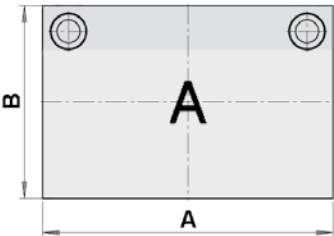
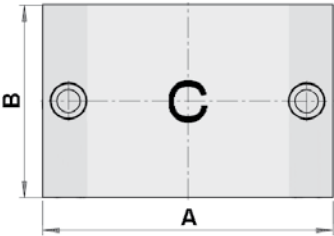
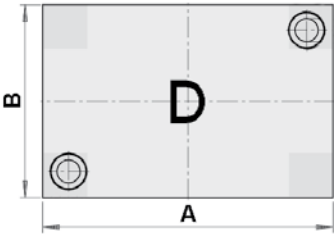
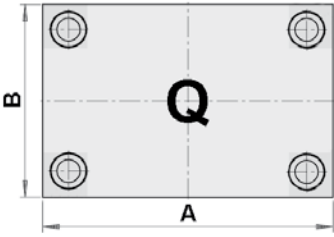
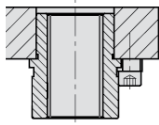
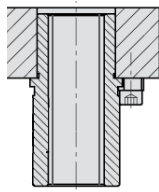
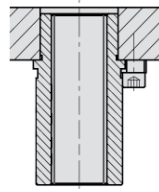
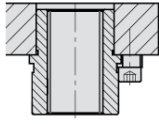
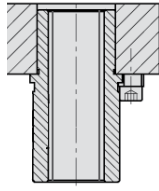
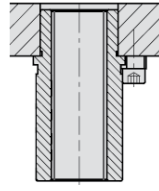
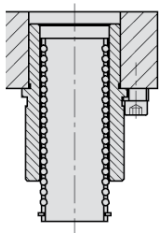
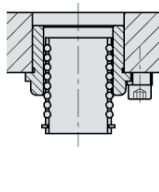
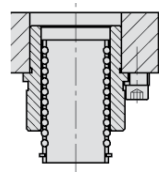
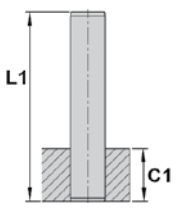
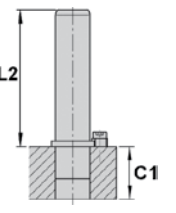
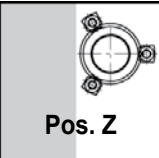
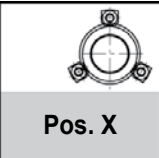


Säulen-Buchsen-Kombination für 2-Plattengestelle

Combination of leader-pin and -bushing in 2-plate-die-sets

SÄULENGESTELLE / DIE SETS

Bestellbeispiel / Order-example

2 C	643	P	41	Z
Gestelltyp Type of die set	Kataloggröße Catalog sizes	Säulentyp Type of leader pin	Buchsentyp Type of bushing	Position der Haltestücke Position of holding clamps
Gestelltyp / Type of die set     				
Buchsentyp / Type of bushing Sinterbuchse Leader pin bushing, sintered    FS 741 FS 751 FS 755 46 47 48 Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated    FS 641 FS 651 FS 655 41 42 43 Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage    FS 453 + FS 425 FS 457 + FS 425 FS 458 + FS 425 51 52 53				
Säulentyp / Type of leader pin eingepresst press-fitted  FS 420 P Schnellwechsel-säule mit Bund Leader pin with collar  FS 419 R				
Position der Haltestücke / Position of holding clamps  				

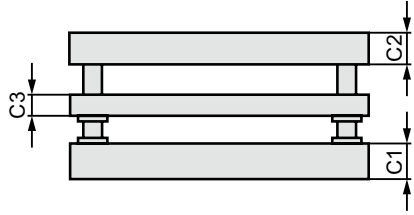
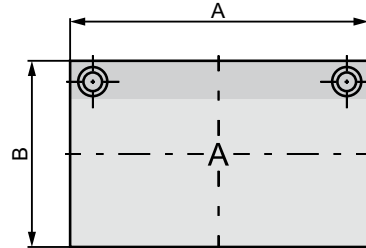
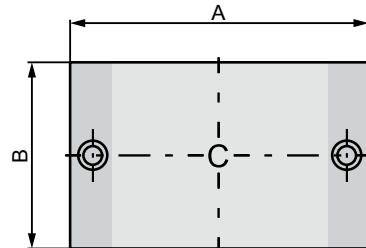
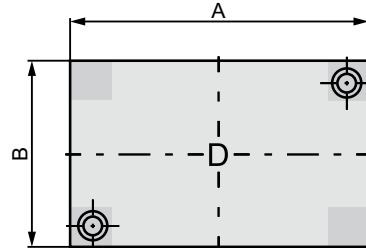
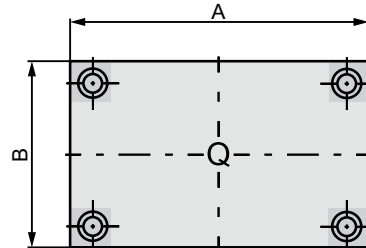
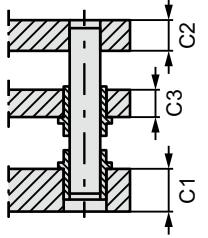
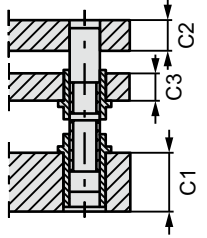
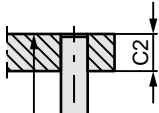
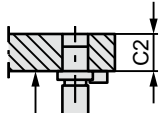
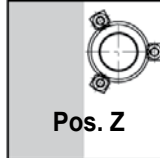
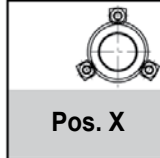
[SG.2]

Säulen-Buchsen-Kombination für 3-Plattengestelle

Combination of leader-pin and -bushing in 3-plate-die-sets

SÄULENGESTELLE / DIE SETS

Bestellbeispiel / Order-example

3 C	643	P	71	Z
Gestelltyp Type of die set	Kataloggröße Catalog sizes	Säulentyp Type of leader pin	Buchsentyp Type of bushing	Position der Haltestücke Position of holding clamps
Gestelltyp / Type of die set     				
Buchsentyp / Type of bushing   Sinterbuchse Leader pin bushing, sintered C1 = FS 741 C3 = FS 731 88 C1 = FS 732 C3 = FS 731 87 Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated C1 = FS 641 C3 = FS 631 71 C1 = FS 632 C3 = FS 631 72 Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage C1 = FS 458 + FS 425 C3 = FS 457 + FS 425 91 C1 = FS 453 + FS 425 C3 = FS 457 + FS 425 92				
Säulentyp / Type of leader pin eingepresst press-fitted  FS 420 P Schnellwechsel-säule mit Bund Leader pin with collar  FS 419 R				
Position der Haltestücke / Position of holding clamps  				

[SG.3]

Bestellbeispiel Sondergrößen

Order-example specials

SÄULENGESTELLE / DIE SETS

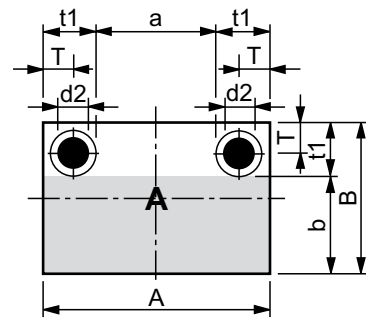
Position	Platten- maße Plate length and width	Platten- stärke Plate thickness			Säulentyp in C1 oder C2* Type of leader pin in C1 or C2*		Buchsentyp in C1 oder C2** Type of bushing in C1 or C2**		Buchsentyp in C3 Type of bushing in C3		Haltestück- position Position of hol- ding clamps
Position	A x B	C1	C2	C3	FS ...	d1 x l	FS ...	d x l	FS ...	d x l	
Q	610 x 494	78	48	38	420	40/42 x 250	632	40/42 x 67	631	40/42 x 51	X

* = Säulentyp in C1 oder C2 bitte angeben. / Please fill in type of leader pin in C1 or C2.

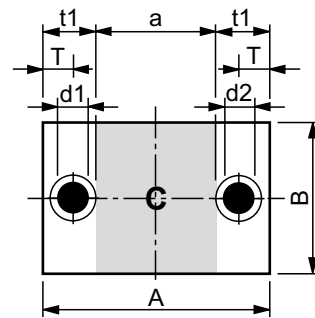
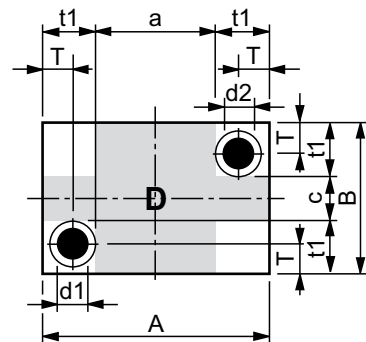
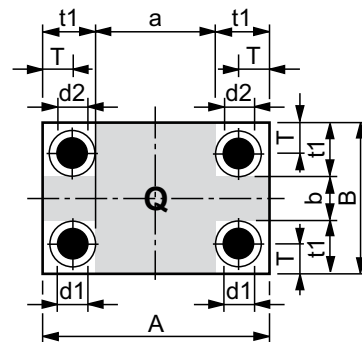
** = Buchsentyp in C1 oder C2 bitte angeben. / Please fill in type of bushing in C1 or C2.

Arbeitsflächen / Working areas

b = B - t1

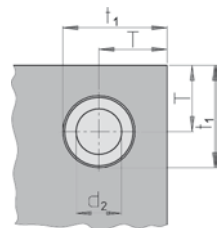


a = A - (2 x t1)

a = A - (2 x t1)
c = B - (2 x t1)a = A - (2 x t1)
b = B - (2 x t1)

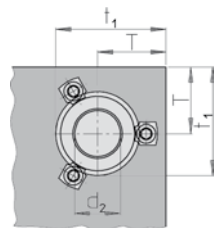
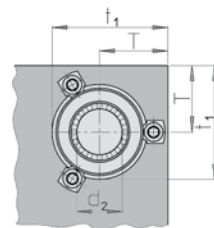
Zylindrische Führungsbuchsen

Leader pin bushings, cylindrical



Führungsbuchsen mit Bund

Leader pin bushings, with collar

Führungsbuchsen mit Bund
für Kugelführung
Leader pin bushings, with collar
for ball-bearings

d ₁ /d ₂	T	t ₁	d ₁ /d ₂	T	t ₁	d ₁ /d ₂	T	t ₁
18/19	25	40	18/19	32	49	18/19	35	55
24/25	29	46	24/25	37	59	24/25	40	65
30/32	37	60	30/32	44	71	30/32	48	79
40/42	45	74	40/42	49	81	40/42	53	89
50/52	52	87	50/52	57	97	50/52	61	105
63	—	—	63	64	117	63	—	—
80	—	—	80	73	135	80	—	—

Säulengestelle aus Stahl, 2 Platten, 2 Säulen, Typ A-C-D

Steel die sets, 2 plates, 2 posts, types A-C-D

SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing		
Sinterbuchse Leader pin bushing, sintered		
FS 741 46	FS 751 47	FS 755 48
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated		
FS 641 41	FS 651 42	FS 655 43
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage		
FS 453 + FS 425 51	FS 457 + FS 425 52	FS 458 + FS 425 53

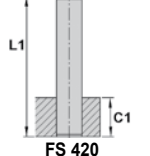
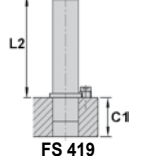
Säulentyp / Type of leader pin	
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar
FS 420 P	FS 419 R

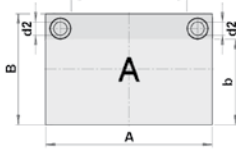
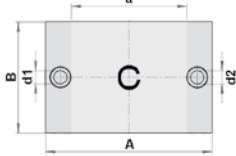
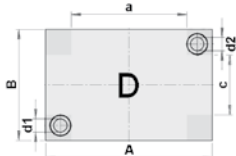
Gestelltyp / Type of die set	

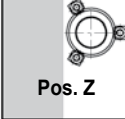
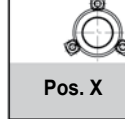
Position der Haltestücke / Position of holding clamps	
Pos. Z	Pos. X

Abmessungen / Dimensions									Arbeitsflächen / Working area									Gewicht / Weight [kg]	
Größe / Size	A X B	Platten- stärke Plate thickness			Ø d1/d2	Säulen- länge Length of leader pin						46 41	47 42	48 43	51	52	53		
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A		
601	125 X 125	28	23	—	18/19	130	100	—					27 X 125	76 X 125	27 X 125		70 X 125		7,0
602		28	28	—		140	110	—											7,7
603		38	28	—		150	110	100											8,9
604	160 X 125	28	23	—	18/19	130	100	—					62 X 125	76 X 160	27 X 160	50 X 125	70 X 160		8,8
605		28	28	—		140	110	—										9,6	
606		38	28	—		150	110	100											11,2
607	160 X 160	28	23	—	18/19	130	100	—					62 X 160	111 X 160	62 X 160	50 X 160	105 X 160	50 X 160	11,0
608		28	28	—		140	110	—										12,0	
609		38	28	—		150	110	100											14,0
610	200 X 125	28	23	—	18/19	130	100	—					102 X 125	76 X 200	27 X 200	90 X 125	70 X 200		10,8
611		28	28	—		140	110	—										11,8	
612		38	28	—		150	110	100											13,7
613	200 X 160	33	28	—	24/25	150	110	—					82 X 160	101 X 200	42 X 200	70 X 160	95 X 200	30 X 200	16,4
614		33	33	—		160	120	—										17,6	
615		48	38	—		180	130	120											22,6
616	200 X 200	33	28	—	24/25	150	110	—					82 X 200	141 X 200	82 X 200	70 X 200	135 X 200	70 X 200	20,2
617		33	33	—		160	120	—										21,8	
618		48	38	—		180	130	120											28,0
619	250 X 125	33	28	—	24/25	150	110	—					132 X 125	66 X 250		120 X 125	60 X 250		16,0
620		33	33	—		160	120	—										17,3	
621		48	38	—		180	130	120											22,1
622	250 X 160	33	28	—	24/25	150	110	—					132 X 160	101 X 250	42 X 250	120 X 160	95 X 250	30 X 250	20,2
623		33	33	—		160	120	—										21,8	
624		48	38	—		180	130	120											28,0
625	250 X 200	33	28	—	24/25	150	110	—					132 X 200	141 X 250	82 X 250	120 X 200	135 X 250	70 X 250	25,0
626		33	33	—		160	120	—										27,0	
627		48	38	—		180	130	120											34,8
628	250 X 250	38	33	—	30/32	160	120	—					108 X 250	179 X 250	108 X 250	92 X 250	171 X 250	92 X 250	36,4
629		38	38	—		170	130	—											38,8
630		48	38	—		180	130	120											43,7

Buchsentyp / Type of bushing		
Sinterbuchse Leader pin bushing, sintered		
		
FS 741	FS 751	FS 755
46	47	48
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated		
		
FS 641	FS 651	FS 655
41	42	43
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage		
		
FS 453 + FS 425	FS 457 + FS 425	FS 458 + FS 425
51	52	53

Säulentyp / Type of leader pin	
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar
	
FS 420	FS 419
P	R

Gestelltyp / Type of die set		
		
		
		
		
		

Position der Haltestücke / Position of holding clamps		
		
Pos. Z	Pos. X	

Abmessungen / Dimensions						Arbeitsflächen / Working area										Gewicht / Weight [kg]			
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin						46 41	47 42	48 43	51		52	53	
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B		b X A	c X A	
691	600 X 400	58	48	—	50/52	220	160	—				406 X 400	303 X 600	206 X 600	390 X 400	295 X 600	190 X 600	205,0	
692		58	58	—		230	170	—											224,0
693		68	58	—		240	170	160											
694	600 X 500	58	48	—	50/52	220	160	—				406 X 500	403 X 600	306 X 600	390 X 500	395 X 600	290 X 600	254,0	
695		58	58	—		230	170	—											278,0
696		68	58	—		240	170	160											
697	600 X 600	58	48	—	50/52	220	160	—				406 X 600	503 X 600	406 X 600	390 X 600	495 X 600	390 X 600	305,0	
698		58	58	—		230	170	—											333,0
699		68	58	—		240	170	160											
700	700 X 350	58	48	—	50/52	220	160	—				506 X 350	253 X 700	156 X 700	490 X 350	245 X 700	140 X 700	209,0	
701		58	58	—		230	170	—											228,0
702		68	58	—		240	170	160											
703	700 X 400	58	48	—	50/52	220	160	—				506 X 400	303 X 700	206 X 700	490 X 400	295 X 700	190 X 700	238,0	
704		58	58	—		230	170	—											260,0
705		68	58	—		240	170	160											
706	700 X 500	58	48	—	50/52	220	160	—				506 X 500	403 X 700	306 X 700	490 X 500	395 X 700	290 X 700	296,0	
707		58	58	—		230	170	—											324,0
708		68	58	—		240	170	160											
709	700 X 600	58	48	—	50/52	220	160	—				506 X 600	503 X 700	406 X 700	490 X 600	495 X 700	390 X 700	354,0	
710		58	58	—		230	170	—											388,0
711		68	58	—		240	170	160											
712	800 X 400	58	48	—	50/52	220	160	—				606 X 400	303 X 800	206 X 800	590 X 400	295 X 800	190 X 800	271,0	
713		58	58	—		230	170	—											296,0
714		68	58	—		240	170	160											
715	800 X 500	58	48	—	50/52	220	160	—				606 X 500	403 X 800	306 X 800	590 X 500	395 X 800	290 X 800	338,0	
716		58	58	—		230	170	—											369,0
717		68	58	—		240	170	160											
718	800 X 600	58	48	—	50/52	220	160	—				606 X 600	503 X 800	406 X 800	590 X 600	495 X 800	390 X 800	404,0	
719		58	58	—		230	170	—											442,0
720		68	58	—		240	170	160											

[illegible]

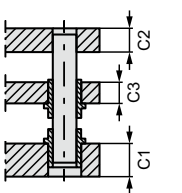
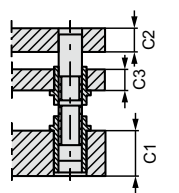
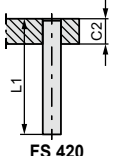
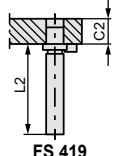
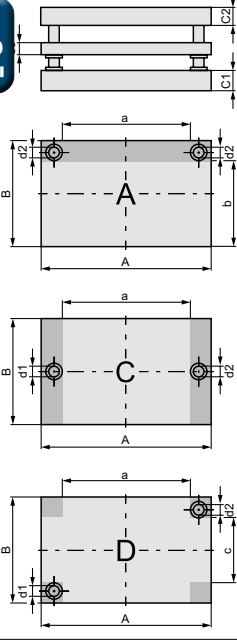
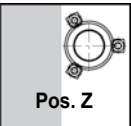
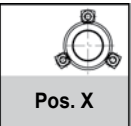
Buchsentyp / Type of bushing			
Sinterbuchse Leader pin bushing, sintered			
C1: FS 741 C3: FS 731 88	C1: FS 732 C3: FS 731 87		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 641 C3: FS 631 71	C1: FS 632 C3: FS 631 72		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 458 + FS 425 C3: FS 457 + FS 425 91	C1: FS 453 + FS 425 C3: FS 457 + FS 425 92		

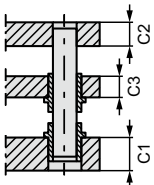
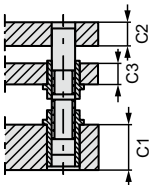
Säulentyp / Type of leader pin			
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar		
FS 420 P	FS 419 R		

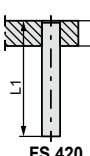
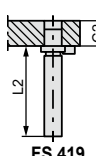
Gestelltyp / Type of die set			

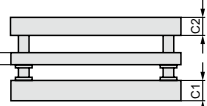
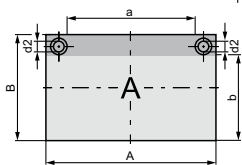
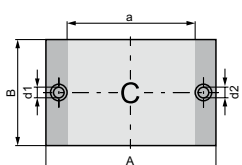
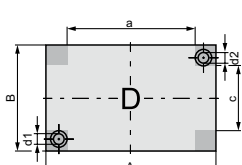
Position der Haltestücke / Position of holding clamps			
Pos. Z	Pos. X		

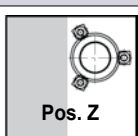
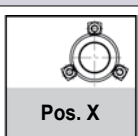
Abmessungen / Dimensions						Arbeitsflächen / Working area												Gewicht / Weight [kg]	
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin													
		C1	C2	C3		L1	L2	L3	88 71			87 72			91 92				
									a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A		
631	300 X 160	33	28	23	24/25	160	130	—				182 X 160	101 X 300	42 X 300	170 X 160	95 X 300		32,8	
632		48	38			190	150	—										42,1	
633		48	48			200	150	140											45,9
634	300 X 200	33	28	23	24/25	160	130	—				182 X 200	141 X 300	82 X 300	170 X 200	135 X 300	76 X 300	40,7	
635		48	38			190	150	—										52,5	
636		48	48			200	150	140											57,5
637	300 X 250	38	33	28	30/32	170	140	—				158 X 250	179 X 300	108 X 300	142 X 250	171 X 300	92 X 300	60,0	
638		48	38			190	150	—										69,0	
639		48	48			200	150	140											74,5
640	300 X 300	38	33	28	30/32	170	140	—				158 X 300	229 X 300	158 X 300	142 X 300	221 X 300	142 X 300	71,5	
641		48	38			190	150	—										82,5	
642		48	48			200	150	140											89,5
643	350 X 200	33	28	23	24/25	160	130	—				232 X 200	141 X 350	82 X 350	220 X 200	135 X 350	70 X 350	47,3	
644		48	38			190	150	—										60,5	
645		48	48			200	150	140											66,5
646	350 X 250	38	33	28	30/32	170	140	—				208 X 250	179 X 350	108 X 350	192 X 250	171 X 350	92 X 350	69,5	
647		48	38			190	150	—										80,0	
648		48	48			200	150	140											87,0
649	350 X 300	48	38	33	40/42	200	160	—				188 X 300	219 X 350	138 X 350	172 X 300	211 X 350	122 X 350	101,0	
650		58	48			220	170	—										118,0	
651		58	58			230	170	160											126,0
652	350 X 350	48	38	33	40/42	200	160	—				188 X 350	269 X 350	188 X 350	172 X 350	261 X 350	172 X 350	118,0	
653		58	48			220	170	—											137,0
654		58	58			230	170	160											147,0
655	400 X 200	33	28	23	24/25	160	130	—				282 X 200	141 X 400	82 X 400	270 X 200	135 X 400	70 X 400	54,0	
656		48	38			190	150	—											69,5
657		48	48			200	150	130											
658	400 X 250	38	33	28	30/32	170	140	—				258 X 250	179 X 400	108 X 400	242 X 250	171 X 400	92 X 400	79,5	
659		48	38			190	150	—											91,0
660		48	48			200	150	140											

Buchsentyp / Type of bushing			
			
Sinterbuchse Leader pin bushing, sintered			
C1: FS 741		C1: FS 732	
C3: FS 731		C3: FS 731	
88		87	
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 641		C1: FS 632	
C3: FS 631		C3: FS 631	
71		72	
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 458 + FS 425		C1: FS 453 + FS 425	
C3: FS 457 + FS 425		C3: FS 457 + FS 425	
91		92	
Säulentyp / Type of leader pin			
eingepresst press-fitted		Schnellwechselsäule mit Bund Leader pin, with collar	
			
FS 420		FS 419	
P		R	
Gestelltyp / Type of die set			
			
			
Position der Haltestücke / Position of holding clamps			
			
			

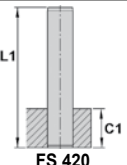
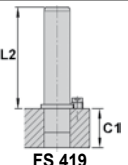
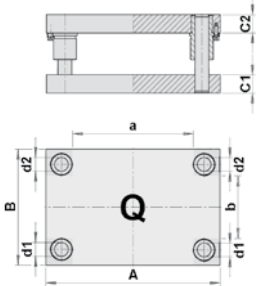
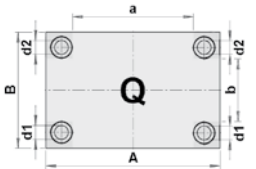
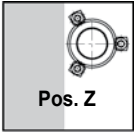
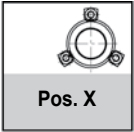
Buchsentyp / Type of bushing			
			
Sinterbuchse Leader pin bushing, sintered			
C1: FS 741	C1: FS 732		
C3: FS 731	C3: FS 731		
88	87		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 641	C1: FS 632		
C3: FS 631	C3: FS 631		
71	72		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 458 + FS 425	C1: FS 453 + FS 425		
C3: FS 457 + FS 425	C3: FS 457 + FS 425		
91	92		

Säulentyp / Type of leader pin			
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar		
			
FS 420	FS 419		
P	R		

Gestelltyp / Type of die set			
			
			
			
			

Position der Haltestücke / Position of holding clamps			
			
Pos. Z	Pos. X		

Abmessungen / Dimensions						Arbeitsflächen / Working area												Gewicht / Weight [kg]	
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin													
		C1	C2	C3		L1	L2	L3	88 71			87 72			91 92				
									a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A		
691	600 X 400	58	48	38	50/52	230	180	-				406 X 400	303 X 600	206 X 600	390 X 400	295 X 600	190 X 600	276,0 314,0 333,0	
692		68	58			250	200	-											
693		68	68			260	200	180											
694	600 X 500	58	48	38	50/52	230	180	-				406 X 500	403 X 600	306 X 600	390 X 500	395 X 600	290 X 600	344,0 391,0 415,0	
695		68	58			250	200	-											
696		68	68			260	200	180											
697	600 X 600	58	48	38	50/52	230	180	-				406 X 600	503 X 600	406 X 600	390 X 600	495 X 600	390 X 600	412,0 468,0 497,0	
698		68	58			250	200	-											
699		68	68			260	200	180											
700	700 X 350	58	48	38	50/52	230	180	-				506 X 350	253 X 700	156 X 700	490 X 350	245 X 700	140 X 700	282,0 320,0 340,0	
701		68	58			250	200	-											
702		68	68			260	200	180											
703	700 X 400	58	48	38	50/52	230	180	-				506 X 400	303 X 700	206 X 700	490 X 400	295 X 700	190 X 700	321,0 365,0 387,0	
704		68	58			250	200	-											
705		68	68			260	200	180											
706	700 X 500	58	48	38	50/52	230	180	-				506 X 500	403 X 700	306 X 700	490 X 500	395 X 700	290 X 700	400,0 455,0 483,0	
707		68	58			250	200	-											
708		68	68			260	200	180											
709	700 X 600	58	48	38	50/52	230	180	-				506 X 600	503 X 700	406 X 700	490 X 600	495 X 700	390 X 700	480,0 545,0 579,0	
710		68	58			250	200	-											
711		68	68			260	200	180											
712	800 X 400	58	48	38	50/52	230	180	-				606 X 400	303 X 800	206 X 800	590 X 400	295 X 800	190 X 800	366,0 417,0 442,0	
713		68	58			250	200	-											
714		68	68			260	200	180											
715	800 X 500	58	48	38	50/52	230	180	-				606 X 500	403 X 800	306 X 800	590 X 500	395 X 800	290 X 800	457,0 520,0 551,0	
716		68	58			250	200	-											
717		68	68			260	200	180											
718	800 X 600	58	48	38	50/52	230	180	-				606 X 600	503 X 800	406 X 800	590 X 600	495 X 800	390 X 800	547,0 623,0 661,0	
719		68	58			250	200	-											
720		68	68			260	200	180											

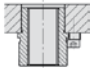
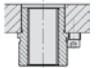
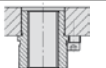
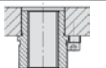
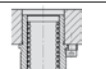
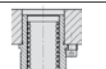
Buchsentyp / Type of bushing		
Sinterbuchse Leader pin bushing, sintered		
		
FS 741	FS 751	FS 755
46	47	48
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated		
		
FS 641	FS 651	FS 655
41	42	43
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage		
		
FS 453 + FS 425	FS 457 + FS 425	FS 458 + FS 425
51	52	53
Säulentyp / Type of leader pin		
eingepresst press-fitted		Schnellwechselsäule mit Bund Leader pin, with collar
		
FS 420	FS 419	
P	R	
Gestelltyp / Type of die set		
		
		
		
Position der Haltestücke / Position of holding clamps		
		
		
Pos. Z		
Pos. X		

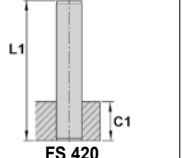
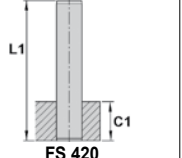
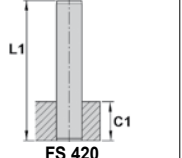
Säulengestelle aus Stahl, 2 Platten, 4 Säulen, Typ Q

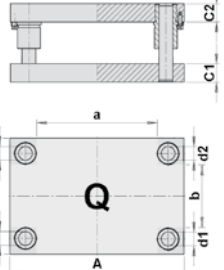
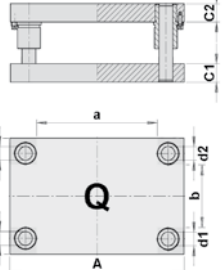
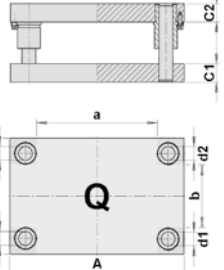
Steel die sets, 2 plates, 4 posts, type Q

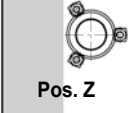
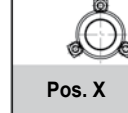
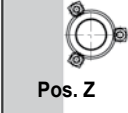
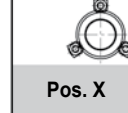


SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing			Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]		
Sinterbuchse Leader pin bushing, sintered			Größe / Size	A X B	Platten- stärke Plate thickness			Ø	Säulen- länge Length of leader pin			46 41			47 42			48 43			51 52			53	
	FS 741	FS 751			C1	C2	C3		d1/d2	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A				
																						46			47
	46	47	48																						
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated																									
	FS 641	FS 651	FS 655																						
	41	42	43																						
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage																									
	FS 453 + FS 425	FS 457 + FS 425	FS 458 + FS 425																						
	51	52	53																						

Säulentyp / Type of leader pin			Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]		
eingepresst press-fitted		Schnellwechsel- säule mit Bund Leader pin, with collar	Größe / Size	A X B	Platten- stärke Plate thickness			Ø	Säulen- länge Length of leader pin			46 41			47 42			48 43			51 52			53	
	FS 420				P	C1	L1		L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A						
																				46	47	48			51
	FS 420	P	C1	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A										
	FS 419	R	C1	L2	L3	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A										

Gestelltyp / Type of die set			Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]		
		Q	Größe / Size	A X B	Platten- stärke Plate thickness			Ø	Säulen- länge Length of leader pin			46 41			47 42			48 43			51 52			53	
					C1	C2	C3		d1	d2	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A						
																				46	47	48			51
	C1	C2	C3	d1	d2	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A		
	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q		

Position der Haltestücke / Position of holding clamps			Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]		
		Pos. Z	Größe / Size	A X B	Platten- stärke Plate thickness			Ø	Säulen- länge Length of leader pin			46 41			47 42			48 43			51 52			53	
					C1	C2	C3		d1	d2	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A						
																				46	47	48			51
	Pos. Z	Pos. Z	C1	C2	C3	d1	d2	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A			
	Pos. X	Pos. X	C1	C2	C3	d1	d2	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A			

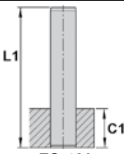
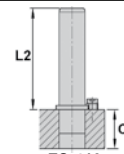
Säulengestelle aus Stahl, 2 Platten, 4 Säulen, Typ Q

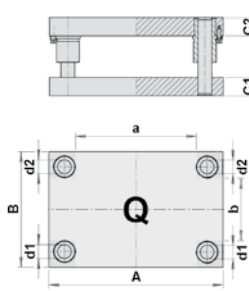
Steel die sets, 2 plates, 4 posts, type Q

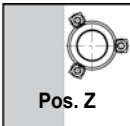
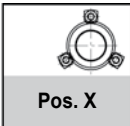


SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing			
Sinterbuchse Leader pin bushing, sintered			
			
FS 741 46	FS 751 47	FS 755 48	
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
			
FS 641 41	FS 651 42	FS 655 43	
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
			
FS 453 + FS 425 51	FS 457 + FS 425 52	FS 458 + FS 425 53	

Säulentyp / Type of leader pin			
eingepresst press-fitted		Schnellwechselsäule mit Bund Leader pin, with collar	
			
FS 420 P	FS 419 R		

Gestelltyp / Type of die set			
			
			

Position der Haltestücke / Position of holding clamps			
			
Pos. Z	Pos. X		

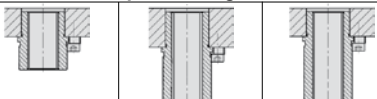
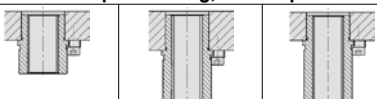
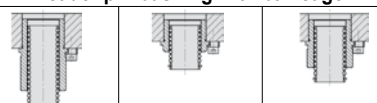
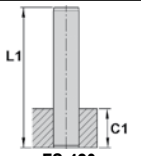
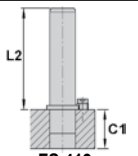
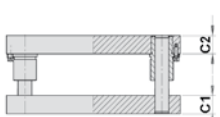
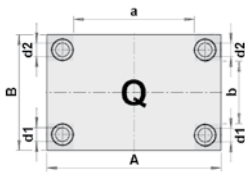
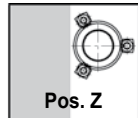
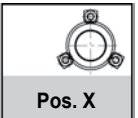
Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]		
Größe / Size	A X B	Plattenstärke Plate thickness			Ø	Säulenlänge Length of leader pin			46 41			47 42			48 43			51 52			53	
		C1	C2	C3		d1/d2	L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A				
661	400 X 300	48	38	—	40/42	190	140	—				238 X 300	138 X 400			222 X 300	122 X 400		87,0			
662		48	48	—		200	150	—											96,5			
663		58	48	—		210	150	140												106,0		
664	400 X 350	48	38	—	40/42	190	140	—				238 X 350	188 X 400			222 X 350	172 X 400		101,0			
665		48	48	—		200	150	—											112,0			
666		58	48	—		210	150	140												123,0		
667	400 X 400	48	38	—	40/42	190	140	—				238 X 400	238 X 400			222 X 400	222 X 400		114,0			
668		48	48	—		200	150	—											127,0			
669		58	48	—		210	150	140												140,0		
670	500 X 250	38	33	—	30/32	160	120	—				358 X 250	108 X 500			342 X 250	92 X 500		73,0			
671		38	38	—		170	130	—											78,0			
672		48	38	—		180	130	120												87,5		
673	500 X 300	48	38	—	40/42	190	140	—				338 X 300	138 X 500			322 X 300	122 X 500		108,0			
674		48	48	—		200	150	—											119,0			
675		58	48	—		210	150	140												131,0		
676	500 X 350	48	38	—	40/42	190	140	—				338 X 350	188 X 500			322 X 350	172 X 500		125,0			
677		48	48	—		200	150	—											138,0			
678		58	48	—		210	150	140												152,0		
679	500 X 400	48	38	—	40/42	190	140	—				338 X 400	238 X 500			322 X 400	222 X 500		141,0			
680		48	48	—		200	150	—											157,0			
681		58	48	—		210	150	140												173,0		
682	500 X 500	48	38	—	40/42	190	140	—				338 X 500	338 X 500			322 X 500	322 X 500		175,0			
683		48	48	—		200	150	—											195,0			
684		58	48	—		210	150	140												214,0		
685	600 X 300	48	38	—	40/42	190	140	—				438 X 300	138 X 600			422 X 300	122 X 600		128,0			
686		48	48	—		200	150	—											142,0			
687		58	48	—		210	150	140												156,0		
688	600 X 350	48	38	—	40/42	190	140	—				438 X 350	188 X 600			422 X 350	172 X 600		148,0			
689		48	48	—		200	150	—											165,0			
690		58	48	—		210	150	140												181,0		

Säulengestelle aus Stahl, 2 Platten, 4 Säulen, Typ Q



Steel die sets, 2 plates, 4 posts, type Q

SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing			Abmessungen / Dimensions									Arbeitsflächen / Working area									Gewicht / Weight [kg]						
Sinterbuchse Leader pin bushing, sintered  FS 741 FS 751 FS 755 46 47 48			Platten- stärke Plate thickness			Ø	Säulen- länge Length of leader pin																				
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated										46 41			47 42			48 43			51			52			53		
 FS 641 FS 651 FS 655 41 42 43										a X B			b X A			c X A			a X B			b X A			c X A		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage																											
 FS 453 + FS 425 FS 457 + FS 425 FS 458 + FS 425 51 52 53																											
Säulentyp / Type of leader pin																											
eingepresst press-fitted						Schnellwechsel- säule mit Bund Leader pin, with collar																					
 FS 420 P						 FS 419 R																					
Gestelltyp / Type of die set																											
																											
																											
																											
Position der Haltestücke / Position of holding clamps																											
 Pos. Z												 Pos. X															

691	600 X 400	48	38	–	40/42	190	140	–							438 X 400	238 X 600		422 X 400	222 X 600			168,0
692		48	48	–		200	150	–														187,0
693		58	48	–		210	150	140														
694	600 X 500	58	48	–	50/52	220	160	–							406 X 500	306 X 600		390 X 500	290 X 600			259,0
695		58	58	–		230	170	–														283,0
696		68	58	–		240	170	160														
697	600 X 600	58	48	–	50/52	220	160	–							406 X 600	406 X 600		390 X 600	390 X 600			309,0
698		58	58	–		230	170	–														337,0
699		68	58	–		240	170	160														
700	700 X 350	48	38	–	40/42	190	140	–							538 X 350	188 X 700		522 X 350	172 X 700			172,0
701		48	48	–		200	150	–														191,0
702		58	48	–		210	150	140														
703	700 X 400	58	48	–	50/52	220	160	–							506 X 400	206 X 700		490 X 400	190 X 700			242,0
704		58	58	–		230	170	–														264,0
705		68	58	–		240	170	160														
706	700 X 500	58	48	–	50/52	220	160	–							506 X 500	306 X 700		490 X 500	290 X 700			300,0
707		58	58	–		230	170	–														328,0
708		68	58	–		240	170	160														
709	700 X 600	58	48	–	50/52	220	160	–							506 X 600	406 X 700		490 X 600	390 X 700			359,0
710		58	58	–		230	170	–														392,0
711		68	58	–		240	170	160														
712	800 X 400	58	48	–	50/52	220	160	–							606 X 400	206 X 800		590 X 400	190 X 800			276,0
713		58	58	–		230	170	–														301,0
714		68	58	–		240	170	160														
715	800 X 500	58	48	–	50/52	220	160	–							606 X 500	306 X 800		590 X 500	290 X 800			342,0
716		58	58	–		230	170	–														374,0
717		68	58	–		240	170	160														
718	800 X 600	58	48	–	50/52	220	160	–							606 X 600	406 X 800		590 X 600	390 X 800			409,0
719		58	58	–		230	170	–														447,0
720		68	58	–		240	170	160														

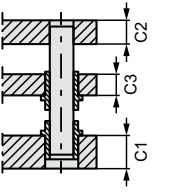
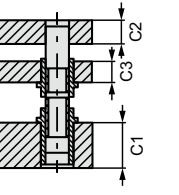
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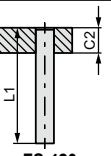
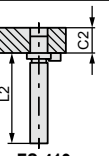
Säulengestelle aus Stahl, 3 Platten, 4 Säulen, Typ Q

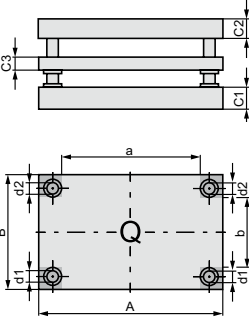


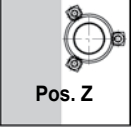
Steel die sets, 3 plates, 4 posts, type Q

SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing			
			
Sinterbushse Leader pin bushing, sintered			
C1: FS 741	C1: FS 732		
C3: FS 731	C3: FS 731		
88	87		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 641	C1: FS 632		
C3: FS 631	C3: FS 631		
71	72		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 458 + FS 425	C1: FS 453 + FS 425		
C3: FS 457 + FS 425	C3: FS 457 + FS 425		
91	92		

Säulentyp / Type of leader pin			
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar		
			
FS 420	FS 419		
P	R		

Gestelltyp / Type of die set			
			
			

Position der Haltestücke / Position of holding clamps			
			
Pos. Z	Pos. X		

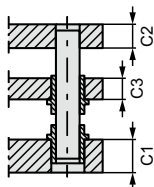
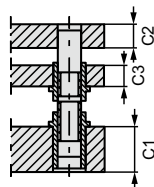
Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]				
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin						88 71			87 72			91			92			
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A							
601	125 X 125	28	23	18	18/19	140	120	–							27 X 125	27 X 125							10,0	
602		38	28			160	130	–																11,8
603		38	38			170	130	120																
604	160 X 125	28	23	18	18/19	140	120	–							62 X 125	27 X 160							12,4	
605		38	28			160	130	–															14,2	
606		38	38			170	130	120																16,3
607	160 X 160	28	23	18	18/19	140	120	–							62 X 160	62 X 160							15,4	
608		38	28			160	130	–															18,4	
609		38	38			170	130	120																20,4
610	200 X 125	28	23	18	18/19	140	120	–							102 X 125	27 X 200							15,1	
611		38	28			160	130	–															18,0	
612		38	38			170	130	120																20,0
613	200 X 160	28	23	18	18/19	140	120	–							102 X 160	62 X 200							18,9	
614		38	28			160	130	–															22,6	
615		38	38			170	130	120																25,2
616	200 X 200	28	23	18	18/19	140	120	–							102 X 200	102 X 200							23,2	
617		38	28			160	130	–															27,9	
618		38	38			170	130	120																31,1
619	250 X 125	28	23	18	18/19	140	120	–							152 X 125	27 X 250							18,5	
620		38	28			160	130	–															22,1	
621		38	38			170	130	120																24,6
622	250 X 160	28	23	18	18/19	140	120	–							152 X 160	60 X 250							23,2	
623		38	28			160	130	–															27,9	
624		38	38			170	130	120																31,1
625	250 X 200	33	28	23	24/25	160	130	–							132 X 200	82 X 250							35,0	
626		48	38			190	150	–															44,8	
627		48	48			200	150	140																48,7
628	250 X 250	33	28	23	24/25	160	130	–							132 X 250	132 X 250							43,2	
629		48	38			190	150	–															55,5	
630		48	48			200	150	140																60,5

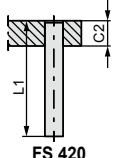
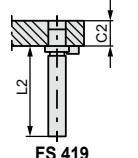
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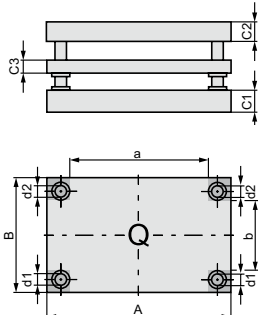
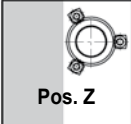
Säulengestelle aus Stahl, 3 Platten, 4 Säulen, Typ Q

Steel die sets, 3 plates, 4 posts, type Q

SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing			
			
Sinterbuchse Leader pin bushing, sintered			
C1: FS 741	C1: FS 732		
C3: FS 731	C3: FS 731		
88	87		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 641	C1: FS 632		
C3: FS 631	C3: FS 631		
71	72		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 458 + FS 425	C1: FS 453 + FS 425		
C3: FS 457 + FS 425	C3: FS 457 + FS 425		
91	92		

Säulentyp / Type of leader pin			
eingepresst press-fitted	Schnellwechsel- säule mit Bund Leader pin, with collar		
			
FS 420	FS 419		
P	R		

Gestelltyp / Type of die set			
			
			
Position der Haltestücke / Position of holding clamps			
			
			
Pos. Z			
Pos. X			

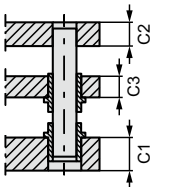
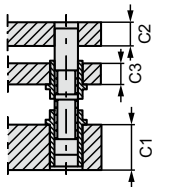
Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]	
Größe / Size	A X B	Platten- stärke Plate thickness			Ø d1/d2	Säulen- länge Length of leader pin						88 71		87 72		91			92		
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A				
631	300	33	28	23	24/25	160	130	—					182	42		170	30				33,7
632	X	48	38			190	150	—					X	X		X	X				43,1
633	160	48	48			200	150	140					160	300			160	300			46,9
634	300	33	28	23	24/25	160	130	—					182	82		170	70			41,6	
635	X	48	38			190	150	—					X	X		X	X			53,5	
636	200	48	48			200	150	140					200	300		200	300			58,5	
637	300	38	33	28	30/32	170	140	—					158	108		142	92			61,5	
638	X	48	38			190	150	—					X	X		X	X			70,5	
639	250	48	48			200	150	140					250	300		250	300			76,0	
640	300	38	33	28	30/32	170	140	—					158	158		142	142			73,0	
641	X	48	38			190	150	—					X	X		X	X			83,5	
642	300	48	48			200	150	140					300	300		300	300			90,5	
643	350	33	28	23	24/25	160	130	—					232	82		220	70			48,2	
644	X	48	38			190	150	—					X	X		X	X			62,0	
645	200	48	48			200	150	140					200	350		200	350			67,5	
646	350	38	33	28	30/32	170	140	—					208	108		192	92			71,0	
647	X	48	38			190	150	—					X	X		X	X			81,5	
648	250	48	48			200	150	140					250	350		250	350			88,5	
649	350	38	33	28	30/32	170	140	—					208	158		192	142			85,0	
650	X	48	38			190	150	—					X	X		X	X			97,0	
651	300	48	48			200	150	140					300	350		300	350			105,0	
652	350	38	33	28	30/32	170	140	—					208	208		192	192			98,5	
653	X	48	38			190	150	—					X	X		X	X			113,0	
654	350	48	48			200	150	140					350	350		350	350			123,0	
655	400	33	28	23	24/25	160	130	—					282	82		270	70			55,0	
656	X	48	38			190	150	—					X	X		X	X			70,5	
657	200	48	48			200	150	130					200	400		200	400			77,0	
658	400	38	33	28	30/32	170	140	—					258	108		242	92			81,0	
659	X	48	38			190	150	—					X	X		X	X			92,5	
660	250	48	48			200	150	140					250	400		250	400			101,0	

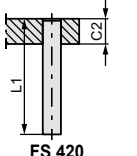
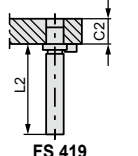


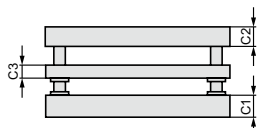
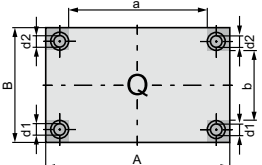
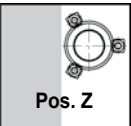
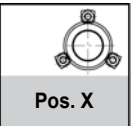
Säulengestelle aus Stahl, 3 Platten, 4 Säulen, Typ Q

Steel die sets, 3 plates, 4 posts, type Q

SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing			
			
Sinterbuchse Leader pin bushing, sintered			
C1: FS 741		C1: FS 732	
C3: FS 731		C3: FS 731	
88		87	
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 641		C1: FS 632	
C3: FS 631		C3: FS 631	
71		72	
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 458 + FS 425		C1: FS 453 + FS 425	
C3: FS 457 + FS 425		C3: FS 457 + FS 425	
91		92	

Säulentyp / Type of leader pin			
eingepresst press-fitted		Schnellwechselsäule mit Bund Leader pin, with collar	
			
FS 420		FS 419	
P		R	

Gestelltyp / Type of die set			
			
			
			
Position der Haltestücke / Position of holding clamps			
			
			
Pos. Z			
Pos. X			

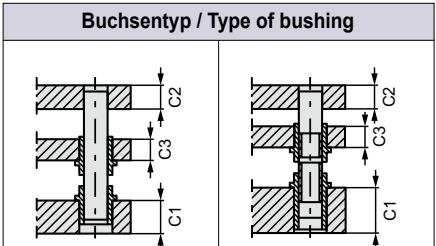
Abmessungen / Dimensions										Arbeitsflächen / Working area										Gewicht / Weight [kg]				
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin						88 71			87 72			91			92			
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A							
661	400 X 300	48	38	33	40/42	200	160	–							238 X 300	138 X 400			222 X 300	122 X 400		118,0		
662		58	48			220	170	–														137,0		
663		58	58			230	170	160															147,0	
664	400 X 350	48	38	33	40/42	200	160	–							238 X 350	188 X 400			222 X 350	172 X 400		137,0		
665		58	48			220	170	–													159,0			
666		58	58			230	170	160														170,0		
667	400 X 400	48	38	33	40/42	200	160	–							238 X 400	238 X 400			222 X 400	222 X 400		156,0		
668		58	48			220	170	–													181,0			
669		58	58			230	170	160														194,0		
670	500 X 250	38	33	28	30/32	170	140	–							358 X 250	108 X 500			342 X 250	92 X 500		100,0		
671		48	38			190	150	–													115,0			
672		48	48			200	150	140														125,0		
673	500 X 300	48	38	33	40/42	200	160	–							338 X 300	138 X 500			322 X 300	122 X 500		146,0		
674		58	48			220	170	–													170,0			
675		58	58			230	170	160														182,0		
676	500 X 350	48	38	33	40/42	200	160	–							338 X 350	188 X 500			322 X 350	172 X 500		170,0		
677		58	48			220	170	–													197,0			
678		58	58			230	170	160														211,0		
679	500 X 400	48	38	33	40/42	200	160	–							338 X 400	238 X 500			322 X 400	222 X 500		193,0		
680		58	48			220	170	–													225,0			
681		58	58			230	170	160														240,0		
682	500 X 500	48	38	33	40/42	200	160	–							338 X 500	338 X 500			322 X 500	322 X 500		240,0		
683		58	48			220	170	–													279,0			
684		58	58			230	170	160														299,0		
685	600 X 300	48	38	33	40/42	200	160	–							438 X 300	138 X 600			422 X 300	122 X 600		174,0		
686		58	48			220	170	–													203,0			
687		58	58			230	170	160														217,0		
688	600 X 350	48	38	33	40/42	200	160	–							438 X 350	188 X 600			422 X 350	172 X 600		202,0		
689		58	48			220	170	–													235,0			
690		58	58			230	170	160														252,0		



Säulengestelle aus Stahl, 3 Platten, 4 Säulen, Typ Q

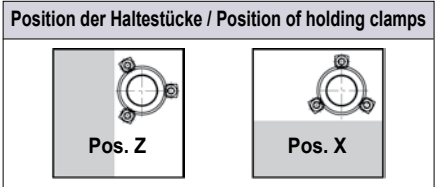
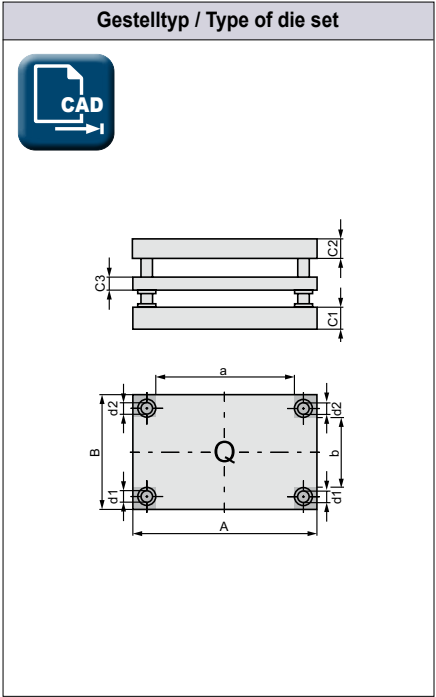
Steel die sets, 3 plates, 4 posts, type Q

SÄULENGESTELLE / DIE SETS



Sinterbuchse Leader pin bushing, sintered	
C1: FS 741	C1: FS 732
C3: FS 731	C3: FS 731
88	87
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated	
C1: FS 641	C1: FS 632
C3: FS 631	C3: FS 631
71	72
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage	
C1: FS 458 + FS 425	C1: FS 453 + FS 425
C3: FS 457 + FS 425	C3: FS 457 + FS 425
91	92

Säulentyp / Type of leader pin	
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar
FS 420	FS 419
P	R



Abmessungen / Dimensions									Arbeitsflächen / Working area										Gewicht / Weight [kg]
Größe / Size	A X B	Platten- stärke Plate thickness			Ø d1/d2	Säulen- länge Length of leader pin						88 71	87 72						
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A		
691	600 X 400	48	38	33	40/42	200	160	—				438 X 400	238 X 600		422 X 400	222 X 600		230,0	
692		58	48			220	170	—											268,0
693		58	58			230	170	160											
694	600 X 500	58	48	38	50/52	230	180	—				406 X 500	306 X 600		390 X 500	290 X 600		348,0	
695		68	58			250	200	—											395,0
696		68	68			260	200	180											
697	600 X 600	58	48	38	50/52	230	180	—				406 X 600	406 X 600		390 X 600	390 X 600		416,0	
698		68	58			250	200	—											473,0
699		68	68			260	200	180											
700	700 X 350	48	38	33	40/42	200	160	—				538 X 350	188 X 700		522 X 350	172 X 700		235,0	
701		58	48			220	170	—											274,0
702		58	58			230	170	160											
703	700 X 400	58	48	38	50/52	230	180	—				506 X 400	206 X 700		490 X 400	190 X 700		326,0	
704		68	58			250	200	—											370,0
705		68	68			260	200	180											
706	700 X 500	58	48	38	50/52	230	180	—				506 X 500	306 X 700		490 X 500	290 X 700		405,0	
707		68	58			250	200	—											460,0
708		68	68			260	200	180											
709	700 X 600	58	48	38	50/52	230	180	—				506 X 600	406 X 700		490 X 600	390 X 700		484,0	
710		68	58			250	200	—											540,0
711		68	68			260	200	180											
712	800 X 400	58	48	38	50/52	230	180	—				606 X 400	206 X 800		590 X 400	190 X 800		371,0	
713		68	58			250	200	—											421,0
714		68	68			260	200	180											
715	800 X 500	58	48	38	50/52	230	180	—				606 X 500	306 X 800		590 X 500	290 X 800		461,0	
716		68	58			250	200	—											524,0
717		68	68			260	200	180											
718	800 X 600	58	48	38	50/52	230	180	—				606 X 600	406 X 800		590 X 600	390 X 800		552,0	
719		68	58			250	200	—											627,0
720		68	68			260	200	180											

Toleranzangaben für Säulengestelle aus Stahl, M-Line

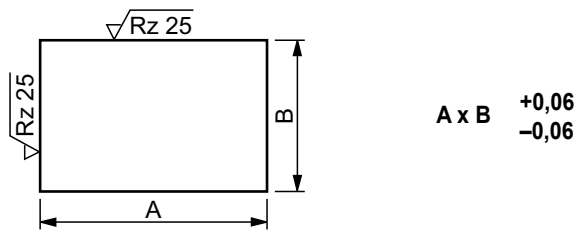
Tolerance - information regarding steel die sets, M-Line

SÄULENGESTELLE / DIE SETS

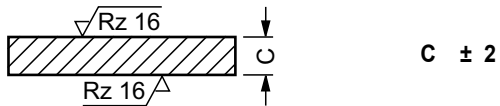


Mat.: C45

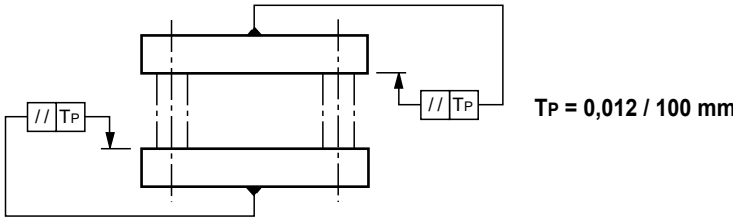
Toleranz Außenmaße /
Tolerance of length and width



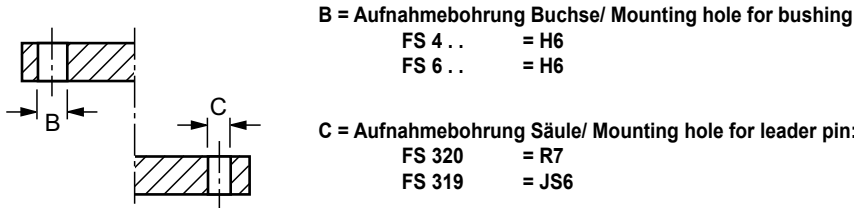
Toleranz Plattenstärke /
Tolerance of thickness



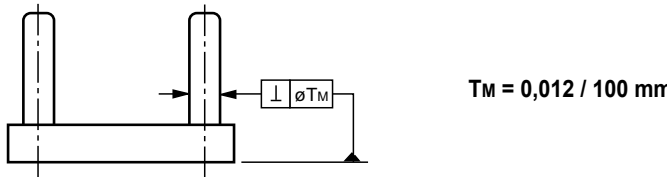
Parallelität der Flächenpaare /
Parallelism of two surfaces



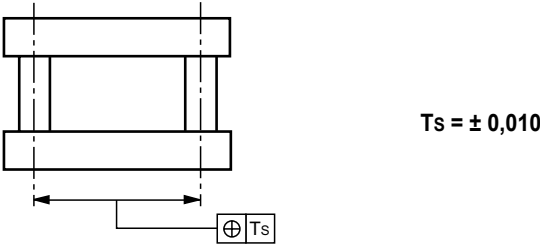
Bohrungstoleranzen /
Hole tolerances



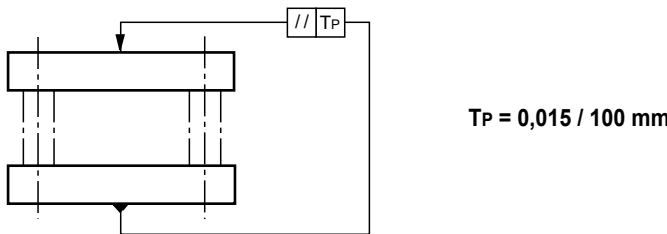
Winkelgenauigkeit der Führungssäulen /
Angular accuracy of leader pins



Toleranz Systemabstände /
Tolerance of dimensions between leader-pin (and bushing) - holes



Planparallelität im
zusammgebauten Zustand /
Parallelism after mounting



Säulen-Buchsen-Kombination für 2-Plattengestelle, M-Line
Combination of leader-pin and -bushing in 2-plate-die-sets, M-Line



SÄULENGESTELLE / DIE SETS

Bestellbeispiel / Order-example

2 C	343	IEP	141	Z
Gestelltyp Type of die set	Kataloggröße Catalog sizes	Säulentyp Type of leader pin	Buchsentyp Type of bushing	Position der Haltestücke Position of holding clamps
Gestelltyp / Type of die set				
Position der Haltestücke / Position of holding clamps				

Buchsentyp / Type of bushing		
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated		
FS 330 RM	FS 340 RM	FS 350 RM
141	142	143
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated		
FS 331	FS 351	FS 355
131	132	133
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage		
FS 353 + FS 325	FS 357 + FS 325	FS 358 + FS 325
151	152	153
Säulentyp / Type of leader pin		
eingepresst press-fitted	Schnellwechsel- säule mit Bund Leader pin with collar	
FS 320	FS 319	
IEP	IER	

[SG.22]

Säulen-Buchsen-Kombination für 3-Plattengestelle, M-Line
Combination of leader-pin and -bushing in 3-plate-die-sets, M-Line



SÄULENGESTELLE / DIE SETS

Bestellbeispiel / Order-example

3 C	343	IEP	182	Z
Gestelltyp Type of die set	Kataloggröße Catalog sizes	Säulentyp Type of leader pin	Buchsentyp Type of bushing	Position der Haltestücke Position of holding clamps
Gestelltyp / Type of die set				
Position der Haltestücke / Position of holding clamps				

Buchsentyp / Type of bushing	
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated	
C1 = FS 340 RM C3 = FS 330 RM	C1 = FS 350 RM C3 = FS 330 RM
182	183
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated	
C1 = FS 351 C3 = FS 331	C1 = FS 355 C3 = FS 331
172	173
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage	
C1 = FS 358 + FS 325 C3 = FS 357 + FS 325	C1 = FS 353 + FS 325 C3 = FS 357 + FS 325
192	193
Säulentyp / Type of leader pin	
eingepresst press-fitted	Schnellwechsel- säule mit Bund Leader pin with collar
FS 420	FS 419
IEP	IER

[SG.23]

Bestellbeispiel Sondergrößen, M-Line

Order-example specials, M-Line



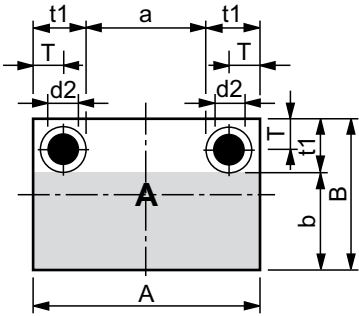
SÄULENGESTELLE / DIE SETS

Position	Platten- maße Plate length and width	Platten- stärke Plate thickness			Säulentyp in C1 oder C2* Type of leader pin in C1 or C2*		Buchsentyp in C1 oder C2** Type of bushing in C1 or C2**		Buchsentyp in C3 Type of bushing in C3		Haltestück- position Position of hol- ding clamps
Position	A x B	C1	C2	C3	FS ...	d1 x l	FS ...	d x l	FS ...	d x l	
Q	610 x 494	78	48	38	320	40/42 x 250	351	40/42 x 67	331	40/42 x 51	X

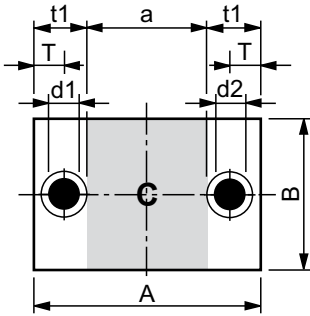
* = Säulentyp in C1 oder C2 bitte angeben. / Please fill in type of leader pin in C1 or C2.
** = Buchsentyp in C1 oder C2 bitte angeben. / Please fill in type of bushing in C1 or C2.

Arbeitsflächen / Working areas

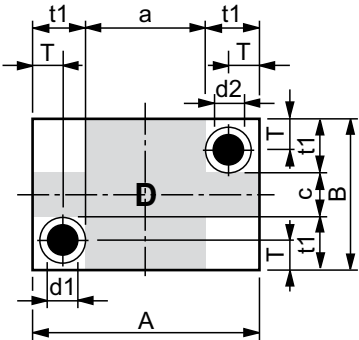
b = B - t1



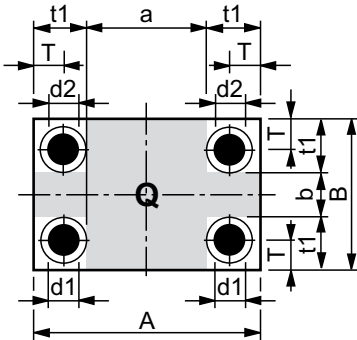
a = A - (2 x t1)



a = A - (2 x t1)
c = B - (2 x t1)

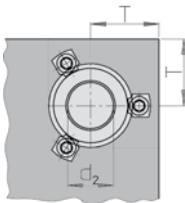


a = A - (2 x t1)
b = B - (2 x t1)



Führungsbuchsen mit Bund

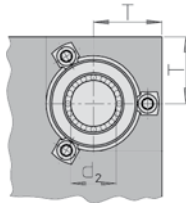
Leader pin bushings, with collar



d ₁ /d ₂	T
19/20	35
24/25	40
30/32	43,5
38/40	51
48/50	57
60/63	68
80	76

Führungsbuchsen mit Bund

für Kugelführung
Leader pin bushings, with collar
for ball-bearings



d ₁ /d ₂	T
19/20	35
24/25	40
30/32	43,5
38/40	51
48/50	57
60/63	68
80	76

Größen Systemplatten, M-Line

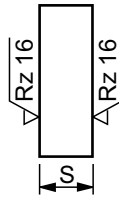
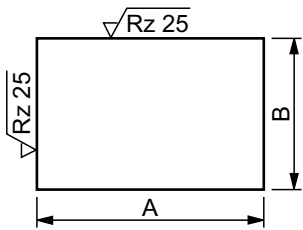
Sizes systemplates, M-Line



SÄULENGESTELLE / DIE SETS

Mat.: C45

Toleranz Außenmaße /
Tolerance of length and width



A x B +0,06
-0,06
S ± 2

Parallelität S / Parallelism S: 0,012 / 100 mm

A x B	S							
	18	23	28	33	38	48	58	68
125 x 125	•	•	•		•			
160 x 125	•	•	•		•			
160 x 160	•	•	•		•			
200 x 125	•	•	•		•			
200 x 160	•	•	•	•	•	•		
200 x 200	•	•	•	•	•	•		
250 x 125	•	•	•	•	•	•		
250 x 160	•	•	•	•	•	•		
250 x 200		•	•	•	•	•		
250 x 250		•	•	•	•	•		
300 x 160		•	•	•	•	•		
300 x 200		•	•	•	•	•		
300 x 250			•	•	•	•		
300 x 300			•	•	•	•		
350 x 200		•	•	•	•	•		
350 x 250			•	•	•	•		
350 x 300			•	•	•	•	•	
350 x 350			•	•	•	•	•	
400 x 200		•	•	•	•	•		
400 x 250			•	•	•	•		
400 x 300				•	•	•	•	
400 x 350				•	•	•	•	
400 x 400				•	•	•	•	
500 x 250			•	•	•	•		
500 x 300				•	•	•	•	
500 x 350				•	•	•	•	
500 x 400				•	•	•	•	
500 x 500				•	•	•	•	•
600 x 300				•	•	•	•	•
600 x 350				•	•	•	•	•
600 x 400				•	•	•	•	•
600 x 500					•	•	•	•
600 x 600					•	•	•	•
700 x 350				•	•	•	•	•
700 x 400					•	•	•	•
700 x 500					•	•	•	•
700 x 600					•	•	•	•
800 x 400					•	•	•	•
800 x 500					•	•	•	•
800 x 600					•	•	•	•

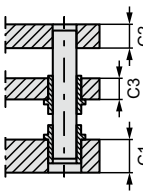
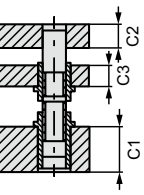
Buchsentyp / Type of bushing			
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated			
C1: FS 340 RM	C1: FS 350 RM		
C3: FS 330 RM	C3: FS 330 RM		
182	183		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 351	C1: FS 355		
C3: FS 331	C3: FS 331		
172	173		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 358 + FS 325	C1: FS 353 + FS 325		
C3: FS 357 + FS 325	C3: FS 357 + FS 325		
192	193		

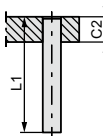
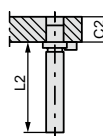
Säulentyp / Type of leader pin			
eingepresst press-fitted	Schnellwechsel- säule mit Bund Leader pin, with collar		
FS 320 IEP	FS 319 IER		

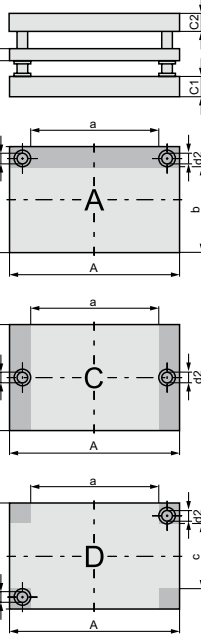
Gestelltyp / Type of die set			

Position der Haltestücke / Position of holding clamps			
Pos. Z	Pos. X		

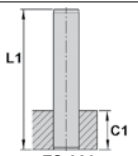
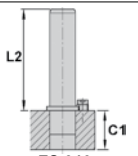
Abmessungen / Dimensions						Arbeitsflächen / Working area									Gewicht / Weight [kg]				
Größe / Size	A X B	Platten- stärke Plate thickness			Ø d1/d2	Säulen- länge Length of leader pin													
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	182 172	183 173	192		193			
361		48	38			200	160	-											115,0
362	400 X 300	58	48	38	38/40	224	180	-				232 X 300	216 X 400	132 X 400	232 X 300	216 X 400	132 X 400	134,0	
363		58	58			250	180	-											144,0
364		48	38			200	160	-											134,0
365	400 X 350	58	48	38	38/40	224	180	-				232 X 350	266 X 400	182 X 400	232 X 350	266 X 400	182 X 400	156,0	
366		58	58			250	180	-											167,0
367		48	38			200	160	-											153,0
368	400 X 400	58	48	38	38/40	224	180	-				232 X 400	316 X 400	232 X 400	232 X 400	316 X 400	232 X 400	178,0	
369		58	58			250	180	-											190,0
370		38	33			180	140	-											99,0
371	500 X 250	48	38	33	30/32	200	160	-				356 X 250	178 X 500	106 X 500	356 X 250	178 X 500	106 X 500	114,0	
372		48	48			200	160	-											124,0
373		48	38			200	160	-											143,0
374	500 X 300	58	48	38	38/40	224	180	-				332 X 300	216 X 500	132 X 500	332 X 300	216 X 500	132 X 500	167,0	
375		58	58			250	180	-											179,0
376		48	38			200	160	-											167,0
377	500 X 350	58	48	38	38/40	224	180	-				332 X 350	266 X 500	182 X 500	332 X 350	266 X 500	182 X 500	194,0	
378		58	58			250	180	-											208,0
379		48	38			200	160	-											190,0
380	500 X 400	58	48	38	38/40	224	180	-				332 X 400	316 X 500	232 X 500	332 X 400	316 X 500	232 X 500	222,0	
381		58	58			250	180	-											237,0
382		58	48			224	180	-											287,0
383	500 X 500	68	58	48	48/50	250	200	-				306 X 500	403 X 500	306 X 500	306 X 500	403 X 500	306 X 500	327,0	
384		68	68			280	200	-											346,0
385		58	48			224	180	-											208,0
386	600 X 300	68	58	48	48/50	250	200	-				406 X 300	203 X 600	106 X 600	406 X 300	203 X 600	106 X 600	237,0	
387		68	68			280	200	-											251,0
388		58	48			224	180	-											242,0
389	600 X 350	68	58	48	48/50	250	200	-				406 X 350	253 X 600	156 X 600	406 X 350	253 X 600	156 X 600	275,0	
390		68	68			280	200	-											292,0

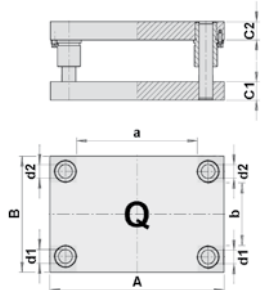
Buchsentyp / Type of bushing	
	
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated	
C1: FS 340 RM C3: FS 330 RM 182	C1: FS 350 RM C3: FS 330 RM 183
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated	
C1: FS 351 C3: FS 331 172	C1: FS 355 C3: FS 331 173
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage	
C1: FS 358 + FS 325 C3: FS 357 + FS 325 192	C1: FS 353 + FS 325 C3: FS 357 + FS 325 193

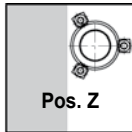
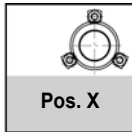
Säulentyp / Type of leader pin	
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar
	
FS 320 IEP	FS 319 IER

Gestelltyp / Type of die set	
	
Position der Haltestücke / Position of holding clamps	
	
Pos. Z	Pos. X

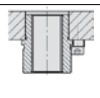
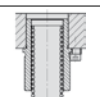
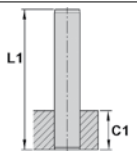
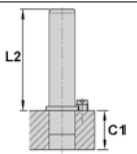
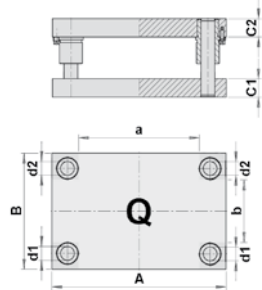
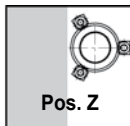
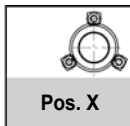
Buchsentyp / Type of bushing		
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated		
		
FS 330 RM	FS 340 RM	FS 350 RM
141	142	143
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated		
		
FS 331	FS 351	FS 355
131	132	133
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage		
		
FS 353 + FS 325	FS 357 + FS 325	FS 358 + FS 325
151	152	153

Säulentyp / Type of leader pin		
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar	
		
FS 320	FS 319	
IEP	IER	

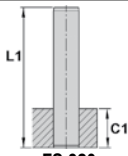
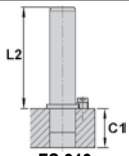
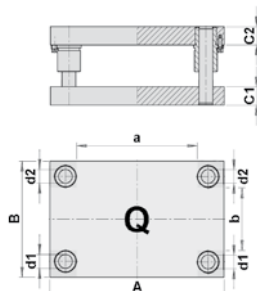
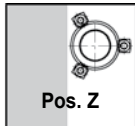
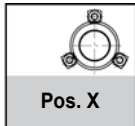
Gestelltyp / Type of die set		
		
		

Position der Haltestücke / Position of holding clamps		
		
Pos. Z	Pos. X	

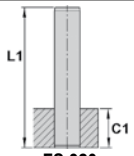
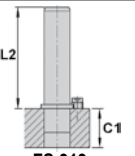
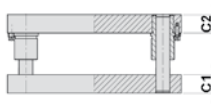
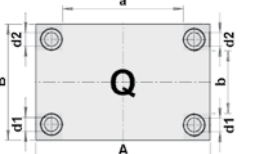
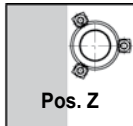
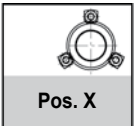
Abmessungen / Dimensions										Arbeitsflächen / Working area									Gewicht / Weight [kg]							
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin																				
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	141 131			142 132			143 133			151 152			153		
												a X B	b X A	c X A	a X B	b X A	c X A	a X B		b X A	c X A					
301	125 X 125	28	23	—	19/20	125	100	—																		7,8
302		28	28	—		140	112	—							15 X 125	15 X 125										8,4
303		38	28	—		160	112	—																		
304	160 X 125	28	23	—	19/20	125	100	—																		9,5
305		28	28	—		140	112	—							50 X 125	15 X 160			50 X 125							10,4
306		38	28	—		150	112	—																		
307	160 X 160	28	23	—	19/20	125	100	—																		11,9
308		28	28	—		140	112	—							50 X 160	50 X 160			50 X 160	50 X 160						12,8
309		38	28	—		160	112	—																		
310	200 X 125	28	23	—	19/20	125	100	—																		11,5
311		28	28	—		140	112	—							90 X 125	15 X 200			90 X 125							12,5
312		38	28	—		160	112	—																		
313	200 X 160	28	23	—	19/20	125	100	—																		14,3
314		28	28	—		140	112	—							90 X 160	50 X 200			90 X 160	50 X 200						15,6
315		38	28	—		160	112	—																		
316	200 X 200	28	23	—	19/20	125	100	—																		17,5
317		28	28	—		140	112	—							90 X 200	90 X 200			90 X 200	90 X 200						19,1
318		38	28	—		160	112	—																		
319	250 X 125	28	23	—	19/20	125	100	—																		14,0
320		28	28	—		140	112	—							140 X 125	15 X 250			140 X 125							15,3
321		38	28	—		160	112	—																		
322	250 X 160	28	23	—	19/20	125	100	—																		17,5
323		28	28	—		140	112	—							140 X 160	50 X 250			140 X 160	50 X 250						19,1
324		38	28	—		160	112	—																		
325	250 X 200	33	28	—	24/25	160	112	—																		26,0
326		33	33	—		160	125	—							122 X 200	72 X 250			122 X 200	70 X 250						27,9
327		48	38	—		180	140	—																		
328	250 X 250	33	28	—	24/25	160	112	—																		32,0
329		33	33	—		160	125	—							122 X 250	122 X 250			122 X 250	120 X 250						34,4
330		48	38	—		180	140	—																		

Buchsentyp / Type of bushing		
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated		
		
FS 330 RM	FS 340 RM	FS 350 RM
141	142	143
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated		
		
FS 331	FS 351	FS 355
131	132	133
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage		
		
FS 353 + FS 325	FS 357 + FS 325	FS 358 + FS 325
151	152	153
Säulentyp / Type of leader pin		
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar	
		
FS 320	FS 319	
IEP	IER	
Gestelltyp / Type of die set		
		
		
Position der Haltestücke / Position of holding clamps		
		
Pos. Z	Pos. X	

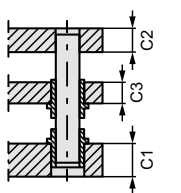
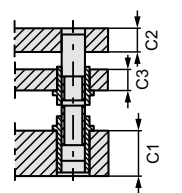
Abmessungen / Dimensions										Arbeitsflächen / Working area									Gewicht / Weight [kg]
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin													
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B	b X A	c X A		
		141 131	142 132	143 133	151	152	153												
331	300 X 160	33	28	—	24/25	160	112	—				172 X 160	32 X 300		172 X 160	32 X 300		25,0	
332		33	33	—		160	125	—									26,9		
333		48	38	—		180	140	—									34,4		
334	300 X 200	33	28	—	24/25	160	112	—				172 X 200	72 X 300		172 X 200	72 X 300		30,8	
335		33	33	—		160	125	—									33,1		
336		48	38	—		180	140	—									42,5		
337	300 X 250	38	33	—	30/32	160	125	—				156 X 250	106 X 300		156 X 250	106 X 300		44,8	
338		38	38	—		180	140	—									47,8		
339		48	38	—		180	140	—									54,0		
340	300 X 300	38	33	—	30/32	160	125	—				156 X 300	156 X 300		156 X 300	156 X 300		53,5	
341		38	38	—		180	140	—									57,0		
342		48	38	—		180	130	—									64,0		
343	350 X 200	33	28	—	24/25	160	112	—				222 X 200	72 X 350		222 X 200	72 X 350		35,6	
344		33	33	—		160	125	—									38,3		
345		48	38	—		180	140	—									49,3		
346	350 X 250	38	33	—	30/32	160	125	—				206 X 250	106 X 350		206 X 250	106 X 350		52,5	
347		38	38	—		180	140	—									55,5		
348		48	38	—		180	140	—									62,0		
349	350 X 300	38	33	—	30/32	160	125	—				206 X 300	206 X 350		206 X 300	206 X 350		61,5	
350		38	38	—		180	140	—									66,0		
351		48	38	—		180	140	—									74,0		
352	350 X 350	38	33	—	30/32	160	125	—				206 X 350	206 X 350		206 X 350	206 X 350		71,5	
353		38	38	—		180	140	—									76,5		
354		48	38	—		180	140	—									86,0		
355	400 X 200	33	28	—	24/25	160	112	—				272 X 200	72 X 400		272 X 200	72 X 400		40,4	
356		33	33	—		160	125	—									43,5		
357		48	38	—		180	140	—									56,0		
358	400 X 250	38	33	—	30/32	160	125	—				256 X 250	106 X 400		256 X 250	106 X 400		59,0	
359		38	38	—		180	140	—									63,0		
360		48	38	—		180	140	—									70,5		

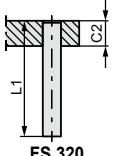
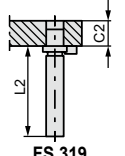
Buchsentyp / Type of bushing						Abmessungen / Dimensions									Arbeitsflächen / Working area									Gewicht / Weight [kg]							
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated						A X B	Platten- stärke Plate thickness			Ø d1/d2	Säulen- länge Length of leader pin																				
							C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	141 131	142 132	143 133	151	152	153									
						FS 330 RM		FS 340 RM		FS 350 RM		141		142		143															
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated																															
						FS 331		FS 351		FS 355		131		132		133															
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage																															
						FS 353 + FS 325		FS 357 + FS 325		FS 358 + FS 325		151		152		153															
Säulentyp / Type of leader pin																															
eingepresst press-fitted			Schnellwechsel- säule mit Bund Leader pin, with collar																												
						FS 320			FS 319			IEP		IER																	
Gestelltyp / Type of die set																															
																															
																															
Position der Haltestücke / Position of holding clamps																															
																															
Pos. Z						Pos. X																									

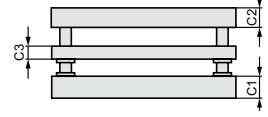
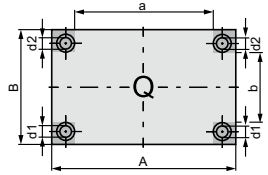
361	400 X 300	48	38	—	38/40	180	140	—					232 X 300	132 X 400		232 X 300	132 X 400				87,0
362		48	48	—		200	160	—													96,5
363		58	48	—		224	160	—													
364	400 X 350	48	38	—	38/40	180	140	—					232 X 350	182 X 400		232 X 350	182 X 400				101,0
365		48	48	—		200	160	—													112,0
366		58	48	—		224	160	—													
367	400 X 400	48	38	—	38/40	180	140	—					232 X 400	232 X 400		232 X 400	232 X 400				114,0
368		48	48	—		200	160	—													127,0
369		58	48	—		224	160	—													
370	500 X 250	38	33	—	30/32	160	125	—					356 X 250	106 X 500		356 X 250	106 X 500				73,0
371		38	38	—		180	140	—													78,0
372		48	38	—		180	140	—													
373	500 X 300	48	38	—	38/40	180	140	—					332 X 300	132 X 500		332 X 300	132 X 500				108,0
374		48	48	—		200	160	—													119,0
375		58	48	—		224	160	—													
376	500 X 350	48	38	—	38/40	180	140	—					332 X 350	182 X 500		332 X 350	182 X 500				125,0
377		48	48	—		200	160	—													138,0
378		58	48	—		224	160	—													
379	500 X 400	48	38	—	38/40	180	140	—					332 X 400	232 X 500		332 X 400	232 X 500				141,0
380		48	48	—		200	160	—													157,0
381		58	48	—		224	160	—													
382	500 X 500	48	38	—	38/40	180	140	—					332 X 500	332 X 500		332 X 500	332 X 500				175,0
383		48	48	—		200	160	—													195,0
384		58	48	—		224	160	—													
385	600 X 300	48	38	—	38/40	180	140	—					432 X 300	132 X 600		432 X 300	132 X 600				128,0
386		48	48	—		200	160	—													142,0
387		58	48	—		224	160	—													
388	600 X 350	48	38	—	38/40	180	140	—					432 X 350	182 X 600		432 X 350	182 X 600				148,0
389		48	48	—		200	160	—													165,0
390		58	48	—		224	160	—													

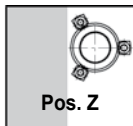
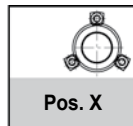
Buchsentyp / Type of bushing			
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated			
			
FS 330 RM 141	FS 340 RM 142	FS 350 RM 143	
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
			
FS 331 131	FS 351 132	FS 355 133	
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
			
FS 353 + FS 325 151	FS 357 + FS 325 152	FS 358 + FS 325 153	
Säulentyp / Type of leader pin			
eingepresst press-fitted		Schnellwechselsäule mit Bund Leader pin, with collar	
			
FS 320 IEP	FS 319 IER		
Gestelltyp / Type of die set			
			
			
			
Position der Haltestücke / Position of holding clamps			
			
			

[illegible]

Buchsentyp / Type of bushing			
			
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated			
C1: FS 340 RM	C1: FS 350 RM		
C3: FS 330 RM	C3: FS 330 RM		
182	183		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 351	C1: FS 355		
C3: FS 331	C3: FS 331		
172	173		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 358 + FS 325	C1: FS 353 + FS 325		
C3: FS 357 + FS 325	C3: FS 357 + FS 325		
192	193		

Säulentyp / Type of leader pin			
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar		
			
FS 320	FS 319		
IEP	IER		

Gestelltyp / Type of the set			
			
			
			

Position der Haltestücke / Position of holding clamps			
			
Pos. Z	Pos. X		

Abmessungen / Dimensions						Arbeitsflächen / Working area										Gewicht / Weight [kg]			
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin						182 172		183 173			192 193		
		C1	C2	C3		L1	L2	L3	a X B	b X A	c X A	a X B	b X A	c X A	a X B		b X A	c X A	
331	300 X 160	33	28			160	125	—											33,7
332		48	38	23	24/25	180	140	—				172 X 160	32 X 300			172 X 160	32 X 300		43,1
333		48	48			200	140	—											46,9
334	300 X 200	33	28			160	125	—											41,6
335		48	38	23	24/25	180	140	—				172 X 200	72 X 300			172 X 200	72 X 300		53,5
336		48	48			200	140	—											58,5
337	300 X 250	38	33			180	140	—											61,5
338		48	38	33	30/32	200	160	—				156 X 250	106 X 300			152 X 250	106 X 300		70,5
339		48	48			200	160	—											76,0
340	300 X 300	38	33			180	140	—											73,0
341		48	38	33	30/32	200	160	—				156 X 300	156 X 300			156 X 300	156 X 300		83,5
342		48	48			200	160	—											90,5
343	350 X 200	33	28			160	125	—											48,2
344		48	38	23	24/25	180	160	—				222 X 200	72 X 350			222 X 200	72 X 350		62,0
345		48	48			200	160	—											67,5
346	350 X 250	38	33			180	140	—											71,0
347		48	38	33	30/32	200	160	—				206 X 250	106 X 350			206 X 250	106 X 350		81,5
348		48	48			200	160	—											88,5
349	350 X 300	38	33			180	140	—											85,0
350		48	38	33	30/32	200	160	—				206 X 300	156 X 350			206 X 300	156 X 350		97,0
351		48	48			200	160	—											105,0
352	350 X 350	38	33			180	140	—											98,5
353		48	38	33	30/32	200	160	—				206 X 350	206 X 350			206 X 350	206 X 350		113,0
354		48	48			200	160	—											123,0
355	400 X 200	33	28			160	125	—											55,0
356		48	38	23	24/25	180	140	—				272 X 200	72 X 400			272 X 200	72 X 400		70,5
357		48	48			200	140	—											77,0
358	400 X 250	38	33			180	140	—											81,0
359		48	38	33	30/32	200	160	—				256 X 250	106 X 400			256 X 250	106 X 400		92,5
360		48	48			200	160	—											101,0

Säulengest. a. Stahl, 3 Platten, 4 Säulen, Typ Q, M-Line



Steel die sets, 3 plates, 4 posts, type Q, M-Line

SÄULENGESTELLE / DIE SETS

Buchsentyp / Type of bushing			
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated			
C1: FS 340 RM	C1: FS 350 RM		
C3: FS 330 RM	C3: FS 330 RM		
182	183		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 351	C1: FS 355		
C3: FS 331	C3: FS 331		
172	173		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 358 + FS 325	C1: FS 353 + FS 325		
C3: FS 357 + FS 325	C3: FS 357 + FS 325		
192	193		

Säulentyp / Type of leader pin	
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar
FS 320 IEP	FS 319 IER

Gestelltyp / Type of die set	

Position der Haltestücke / Position of holding clamps	
Pos. Z	Pos. X

Abmessungen / Dimensions						Arbeitsflächen / Working area										Gewicht / Weight [kg]		
Größe / Size	A X B	Plattenstärke Plate thickness			Ø d1/d2	Säulenlänge Length of leader pin												
		C1	C2	C3		L1	L2	L3	182 172		183 173		192		193			
									a X B	b X A	c X A	a X B	b X A	c X A				
361	400 X 300	48	38	38	38/40	200	160	-				232 X 300	132 X 400		232 X 300	132 X 400		118,0
362		58	48			224	180	-									137,0	
363		58	58			250	180	-										147,0
364	400 X 350	48	38	38	38/40	200	160	-				232 X 350	182 X 400		232 X 350	182 X 400		137,0
365		58	48			224	180	-									159,0	
366		58	58			250	180	-										170,0
367	400 X 400	48	38	38	38/40	200	160	-				232 X 400	232 X 400		232 X 400	232 X 400		156,0
368		58	48			224	180	-									181,0	
369		58	58			250	180	-										194,0
370	500 X 250	38	33	33	30/32	180	140	-				356 X 250	106 X 500		356 X 250	106 X 500		100,0
371		48	38			200	160	-									115,0	
372		48	48			200	160	-										125,0
373	500 X 300	48	38	38	38/40	200	160	-				332 X 300	132 X 500		332 X 300	132 X 500		146,0
374		58	48			224	180	-									170,0	
375		58	58			250	180	-										182,0
376	500 X 350	48	38	38	38/40	200	160	-				332 X 350	182 X 500		332 X 350	182 X 500		170,0
377		58	48			224	180	-									197,0	
378		58	58			250	180	-										211,0
379	500 X 400	48	38	38	38/40	200	160	-				332 X 400	232 X 500		332 X 400	232 X 500		193,0
380		58	48			224	180	-									225,0	
381		58	58			250	180	-										240,0
382	500 X 500	48	38	38	38/40	200	160	-				332 X 500	332 X 500		332 X 500	332 X 500		240,0
383		58	48			224	180	-									279,0	
384		58	58			250	180	-										299,0
385	600 X 300	48	38	38	38/40	200	160	-				432 X 300	132 X 600		432 X 300	132 X 600		174,0
386		58	48			224	180	-									203,0	
387		58	58			250	180	-										217,0
388	600 X 350	48	38	38	38/40	200	160	-				432 X 350	182 X 600		432 X 350	182 X 600		202,0
389		58	48			224	180	-									235,0	
390		58	58			250	180	-										252,0

[SG.40]

Säulengest. a. Stahl, 3 Platten, 4 Säulen, Typ Q, M-Line



Steel die sets, 3 plates, 4 posts, type Q, M-Line

SÄULENGESTELLE / DIE SETS

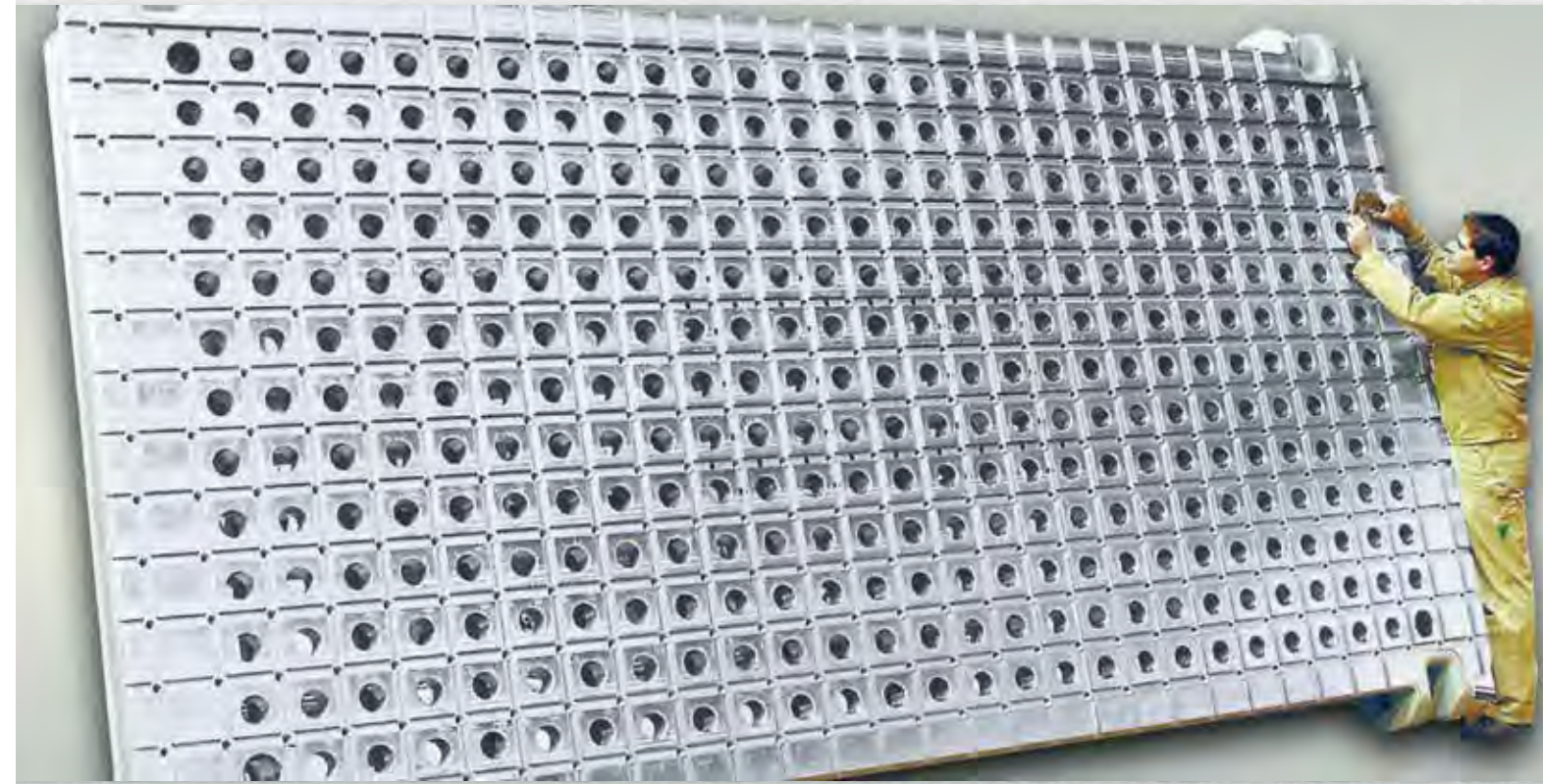
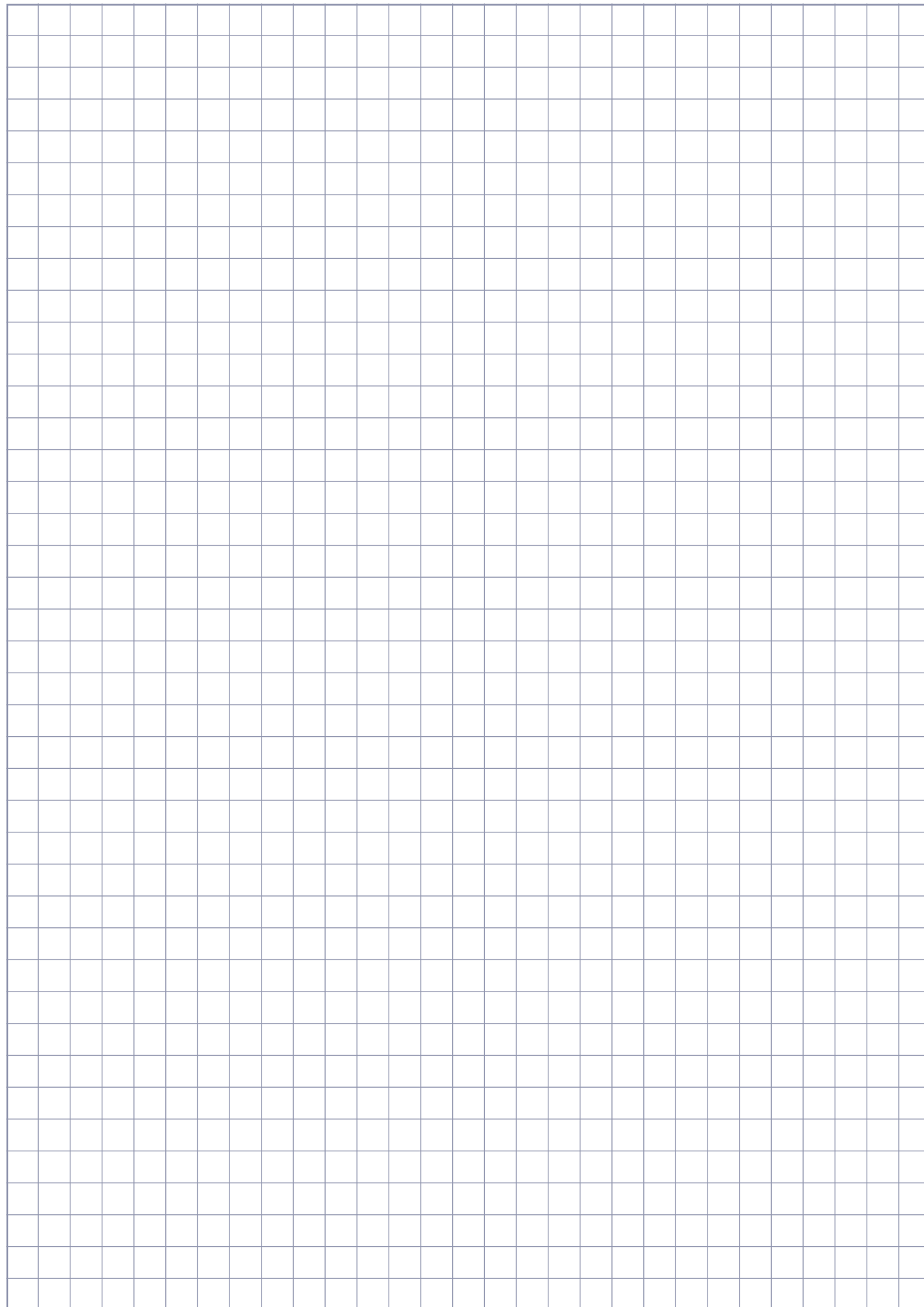
Buchsentyp / Type of bushing			
Stahlbuchse, RM-beschichtet Leader pin bushing, RM plated			
C1: FS 340 RM C3: FS 330 RM 182	C1: FS 350 RM C3: FS 330 RM 183		
Stahlbuchse mit Bronzeplattierung Leader pin bushing, bronze plated			
C1: FS 351 C3: FS 331 172	C1: FS 355 C3: FS 331 173		
Stahlbuchse mit Ms-Käfig Leader pin bushing with ball cage			
C1: FS 358 + FS 325 C3: FS 357 + FS 325 192	C1: FS 353 + FS 325 C3: FS 357 + FS 3CAD25 193		

Säulentyp / Type of leader pin			
eingepresst press-fitted	Schnellwechselsäule mit Bund Leader pin, with collar		
FS 320 IEP	FS 319 IER		

Gestelltyp / Type of die set			

Position der Haltestücke / Position of holding clamps			
Pos. Z			
Pos. X			

[SG.41]



[stanznormalien]

Großstahlplatten und Stahl-Schweiß-Konstruktionen mit Sonderbearbeitungen

[standarddiecomponents]

XXL - Steel plates and welded units
with additional work / secondary operation



CNC - Brennschneiden
CNC - flame cutting

Glühen
Annealing

Stahlkies strahlen
Steel shot blasting

Richten
Flattening

Farbgebung - Grundierung
Coloring - priming

CNC - Diskusschleifen
CNC - rotary grinding

CNC - Feinschleifen
CNC - finish grinding

Materiallager ST 52-3, Blechdicken 10 – 600 mm
Stock ST 52-3, sheet thickness 10 – 600 mm

Abmessungen 6.000 x 3.000 x 2.000 mm, bis 25 t Stückgewicht
Dimensions 6.000 x 3.000 x 2.000 mm, up to 25 t unit weight

Abmessungen 6.000 x 3.000 x 2.000 mm, bis 25 t Stückgewicht
Dimensions 6.000 x 3.000 x 2.000 mm, up to 25 t unit weight

Abmessungen 6.000 x 3.000 x 2.000 mm, bis 25 t Stückgewicht
Dimensions 6.000 x 3.000 x 2.000 mm, up to 25 t unit weight

Abmessungen 6.000 x 3.000 x 2.000 mm, bis 25 t Stückgewicht
Dimensions 6.000 x 3.000 x 2.000 mm, up to 25 t unit weight

Verfahrweg
Travelling distance 4.000 x 1.250 x 300 mm

Verfahrweg
Travelling distance 3.000 x 1.600 x 600 mm



CNC - Lehrenbohren
CNC - jig boring

CNC - Portalfräsen
CNC - portal milling

CNC - Fräsen und Bohren
CNC - milling and -drilling

CNC - Portalmessen
CNC - portal measuring

CNC - Tieflochbohren
CNC - gun drilling

Verfahrweg
Travelling distance 3.000 x 1.600 x 600 mm

Verfahrweg
Travelling distance 7.000 x 3.000 x 1.400 mm

Verfahrweg
Travelling distance 4.900 x 2.400 x 800 mm

Verfahrweg
Travelling distance 3.000 x 1.600 x 800 mm

Durchmesser 30 – 120 mm / Diameter 30 – 120 mm
bis 1.500 mm als Sacklochbohrung / Blind holes up to 1.500 mm deep
bis 3.000 mm als Durchgangsbohrung / Through holes up to 3.000 mm long

Die Herstellung/Bearbeitung der Produkte erfolgt nach Kundenzeichnung oder nach CAD-Datei im DXF-, DWG-, IGES-, VDA- oder Catia-Format. / Basis for the manufacturing process are drawings supplied by the customer, printed or as DXF-, DWG-, IGES-, VDA- or Catia - CAD - data files.



Märkische Stanz-Partner

[lieferprogramm] [productrange]



[säulengestelle]

in Standard- und Sonder-
Abmessungen ab 125 x 125 mm
bis 3.000 x 6.000 mm

[diesets]

in standard and custom sizes
between 125 x 125 mm up to
3.000 x 6.000 mm



[führungssysteme]

in den verschiedensten
Ausführungen

[guidingsystems]

available in various designs



[schneidelemente]

mit unterschiedlichsten
Schneidgeometrien

[cuttingelements]

with countless cutting-tip
geometries



[technischeHilfsmittel]

umfangreiche Auswahl von
Schrauben bis zu kleinen
Schiebern

[generaldiecomponents]

huge selection ranging from
screws to small cam units



[federelemente]

umfassendes Programm an ISO-,
Elastomer- und ähnlichen Federn

[springs]

extensive program of ISO-,
elastomer- and similar springs



[nitrocy]Gasdruckfedern]

umfangreiches Programm für
unterschiedliche Anwendungen

[nitrocy]GasSprings]

large program for all commonly
used applications



[hysonStickstoffSysteme]

große Auswahl aus dem Programm
eines der Weltmarktführer

[hysonNitrogenSystems]

huge program from one of the
world market leaders

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