

GREENLEE **TEXTRON**

**Holemaking
Tools**

UNION DRIVERS

Klauke® **TEXTRON**

GREENLEE





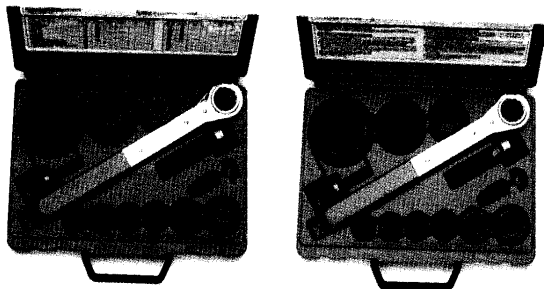
GREENLEE



Round Standard Metal Knockout Punch Units

These are complete units consisting of punch, die and draw stud. Operate manually using wrench to turn the threaded draw stud into the mating threads of the punch. This draws the punch into the die, shearing a hole into the material being punched. Can also be operated with hydraulic punch drivers (only punch and die needed; draw stud is part of the driver set). Working force is minimised by using draw stud with ball bearing. Available separately or in sets.

Hole Size				Capacity Mild Steel (ST 37) mm	Punch Unit Ball Bearing	Individual Parts for Manual Operation					Draw Stud + Accessories for Hyd. Units		
Actual		Norm size				Punch	Die	Draw Stud with Ball Bearing	Ball Bearing Nut	Spacer	Draw Stud		Adapter Sleeve 19.0/28.6
mm	inch	Pg	ISO								34291/(7804E) 34299/(7904E)	15906/(7646) 25097/(7625)	
12.7	0.500	Pg-7	-	1.5	02408*	06996	04235	04218*	-	-	18275	18275	-
14.3	0.563	-	-	1.5	02433*	04230	04229	04218*	-	-	18275	18275	-
15.2	0.598	Pg-9	-	2.0	21115	21316	32002	04045	-	-	30043	30043	-
15.9	0.625	-	-	1.5	02409*	04223	04224	04218*	-	-	18275	18275	-
16.2	0.638	-	ISO-16	2.0	35192	35193	35162	03997	-	-	30043	30043	-
17.5	0.688	-	-	2.0	25340	04228	04227	04045	-	-	30043	30043	-
18.6	0.732	Pg-11	-	2.0	18886	17700	32003	04045	-	-	30043	30043	-
19.1	0.750	-	-	2.0	20667	03998	03999	04045	-	-	30043	30043	-
20.4	0.803	Pg-13	ISO-20	2.0	18887	17697	32004	04045	-	-	30043	30043	-
20.6	0.812	-	-	2.0	20668	04226	04225	04045	-	-	30043	30043	-
22.5	0.885	Pg-16	-	3.0	22563	04006	14722	04045	-	-	30043	30043	-
23.8	0.937	-	-	2.0	25341	04238	04237	03997	-	-	30043	30043	-
25.4	1.000	-	ISO-25	2.0	20670	03986	35164	03997	-	-	30043	30043	-
27.0	1.063	-	-	2.0	25342	04240	04242	03997	-	-	30043	30043	-
28.3	1.115	Pg-21	-	3.0	22564	04008	06972	04040	-	-	31872	03294	-
28.3	1.115	Pg-21	-	2.0	36910	36882	32006	03997	-	-	30043	30043	-
28.6	1.125	-	-	2.0	20671	03990	03991	03997	-	-	30043	30043	-
30.5	1.210	-	-	1.5	36506	36282	36279	03997	-	-	30043	30043	-
31.8	1.250	-	-	1.5	20673	04002	04003	03997	-	-	30043	30043	-
32.5	1.280	-	ISO-32	3.0	24476	24459	35168	04040	-	-	31872	03294	-
33.4	1.313	-	-	1.5	25344	06587	06586	03997	-	-	30043	30043	-
34.6	1.362	-	-	3.0	22565	04010	04011	04040	-	-	31872	03294	-
34.9	1.375	-	-	3.0	25427	04734	04735	04040	-	-	31872	03294	-
37.0	1.457	Pg-29	-	3.0	18890	18331	32008	04040	-	-	31872	03294	-
38.1	1.500	-	-	3.0	25428	04736	07044	04040	-	-	31872	03294	-
40.5	1.595	-	ISO-40	3.0	24477	24462	35159	04040	-	-	31872	03294	-
41.3	1.625	-	-	3.0	25349	04251	04250	04040	-	-	31872	03294	-
43.2	1.701	-	-	3.0	22566	06974	04013	04040	-	-	31872	03294	-
44.5	1.750	-	-	3.0	25350	04257	04256	04040	-	-	31872	03294	-
47.0	1.850	Pg-36	-	3.0	18891	17687	32009	04042	-	-	31872	03294	-
47.6	1.875	-	-	3.0	25351	04248	04249	04042	-	-	31872	03294	-
49.6	1.951	-	-	3.0	22567	06978	04061	04042	-	-	31872	03294	-
50.8	2.000	-	ISO-50	3.0	20676	04232	35161	04042	-	-	31872	03294	-
54.0	2.125	Pg-42	-	3.0	20678	04245	36173	04042	-	-	31872	03294	-
57.2	2.250	-	-	3.0	25360	04058	04059	04042	-	-	31872	03294	-
60.0	2.362	Pg-48	-	3.0	18892	17690	32011	04042	-	-	31872	03294	-
61.5	2.416	-	-	3.0	22568	04062	04063	04042	-	-	31872	03294	-
63.5	2.500	-	ISO-63	3.0	20679	04234	04233	04042	-	-	31872	03294	-
66.7	2.625	-	-	3.0	21214	04252	06997	04188	04187	-	-	03294	-
69.9	2.750	-	-	3.0	25361	04247	04246	04188	04187	-	-	03294	-
70.6	2.781	-	-	3.0	25383	02445	02443	04042	-	-	-	03294	-
74.0	2.914	-	-	3.0	19975	04175	04177	04188	04187	-	-	03294	-
76.2	3.000	-	-	3.0	25372	04259	04258	04188	04187	-	-	03294	-
79.4	3.125	-	-	3.0	25403	06363	06362	04188	04187	-	-	03294	-
82.0	3.228	-	-	3.0	18635	18905	18906	04188	04187	-	-	03294	-
89.8	3.539	-	-	3.0	19976	04180	04183	04188	04187	-	-	03294	-
92.0	3.622	-	-	3.0	03220	26333	26335	04188	04187	-	-	03294	-
95.3	3.750	-	-	3.0	21216	05265	05266	04188	04187	-	-	03294	-
96.0	3.780	-	-	3.0	21518	21485	21486	04188	04187	-	-	03294	-
102.7	4.044	-	-	3.0	19977	04653	04652	04679	04685	04686	-	03294	03170
115.4	4.544	-	-	3.0	19978	04655	04654	04679	04685	04686	-	03294	03170
120.0	4.724	-	-	3.0	21519	21489	21491	04679	04685	04686	-	03294	03170
143.7	5.675	-	-	3.0	19980	05447	05448	04679	04685	04686	-	03294	03170

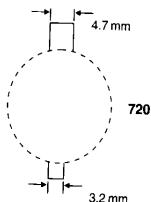
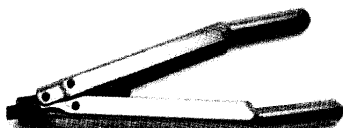


Manual Round Standard and Slug-Buster® Knockout Punch Sets

Assortment of commonly used GREENLEE - knockout punch sets to meet the contractor's needs. By using included manual ratchet wrench no hydraulic driver is needed.

Punches and dies are compatible to GREENLEE - hydraulic drivers.

			Standard - Pg - Size		Standard - ISO - Size		SLUG-BUSTER® - Pg-Size		SLUG-BUSTER® - ISO-Size	
			36686	36687	36688	36689	36690	36691	36692	36693
15.2 mm	Pg-9		•	•			•	•		
16.2 mm		ISO-16			•	•			•	•
18.6 mm	Pg-11		•	•			•	•		
20.4 mm	Pg-13	ISO-20	•	•	•	•	•	•	•	•
22.5 mm	Pg-16		•	•			•	•		
25.4 mm		ISO-25			•	•			•	•
28.3 mm	Pg-21		•	•			•	•		
30.5 mm			•	•			•	•		
32.5 mm		ISO-32			•	•			•	•
37.0 mm	Pg-29			•					•	•
40.5 mm		ISO-40			•	•				
47.0 mm	Pg-36			•					•	•
50.8 mm		ISO-50								
60.0 mm	Pg-48			•						•
63.5 mm		ISO-63								
Draw Stud with Ball Bearing 9.5 mm			•	•	•	•	•	•	•	•
Draw Stud with Ball Bearing 19 x 55 mm					•				•	•
Draw Stud with Ball Bearing 19 x 75 mm				•					•	
Wrench			•	•	•	•	•	•	•	•
Step Bit 12.7 mm			•	•	•	•	•	•	•	•
Step Bit 9.7 mm					•	•				
Plastic Case			•	•	•	•	•	•	•	•



Keyway Punch 26534/(720)

Eliminates time consuming hand sawing and filing when making keyways for push button switches.

Punches 3.2 mm keyways for 22.5 or 4.8 mm keyways for 30.5 mm push button holes in less than 2 seconds. Capacity: Up to 3.0 mm mild steel.

Kwik Stepper™ Step Bits

Cut up to 9.5 mm mild steel, copper, brass, aluminium, wood, plastic and laminate (depending on step bit used). Unique tip design cuts through steel faster. Self-starting tip resists walking or skidding, even on curved surfaces. Balanced, double-flute construction requires less pressure, does the work for you.



Kwik Stepper™ Step Bits

Size							
mm	inch	36018	36020	36022	34410	34401	36402
3.2	0.125						
4.0	0.156					•	
4.8	0.187					•	
5.6	0.219					•	•
6.4	0.250					•	
7.1	0.281					•	•
7.9	0.312					•	•
8.7	0.344					•	•
9.5	0.375					•	
9.7	0.382	•				•	•
10.3	0.406						
11.1	0.437					•	
11.9	0.468					•	•
12.5	0.492		• Pg-7			•	
12.7	0.500						
15.2	0.598		• Pg-9		•	•	•
16.2	0.638			• ISO-16			
18.6	0.732		• Pg-11				
20.4	0.803		• Pg-13	• ISO-20			
22.5	0.886		• Pg-16				
25.4	1.000			• ISO-25			
28.3	1.114		• Pg-21				
30.5	1.201		•				
32.5	1.280			• ISO-32			
34.9	1.375						
Overall Length		40.4 mm	88.9 mm	78.7 mm	41.4 mm	79.4 mm	81.3 mm

Special Shape Punches

Use to punch holes for switches and instruments in enclosures. Accurate alignment ensures burr-free and exact holes.
Punch up to 3.0 mm (10 gauge) mild steel.

Rectangular Punches and Individual Parts

Hole Size (mm)	Maximum Capacity Mild Steel (ST 37)	Operation Type	Punch Unit	Individual Parts					Pilot Hole ø (mm)	Optional Adapter for Hydraulic Drivers
				Punch	Die	Draw Stud	Ball Bearing Nut	Counter Nut		
11.1 x 22.2	1.5	Hand/Hydr.	60025	60026	60027	60115	60120	05244	9.5	60114
17.0 x 19.0	2.0	Hand/Hydr.	60028	60029	60030	60116	34733	04638	12.7	33967
19.1 x 29.0	2.0	Hand/Hydr.	60031	60032	60033	60117	60165	60258	15.9	60167
19.1 x 33.3	2.0	Hand/Hydr.	60034	60035	60036	60117	60165	60258	15.9	60167
21.9 x 25.9	2.0	Hand/Hydr.	60037	60038	60039	60117	60165	60258	15.9	60167
22.0 x 30.0	2.0	Hand/Hydr.	60040	60041	60042	60117	60165	60258	15.9	60167
22.0 x 42.0	2.0	Hand/Hydr.	60043	60045	60046	60117	60165	60258	15.9	60167
25.1 x 29.0	2.0	Hand/Hydr.	60047	60048	60049	60117	60165	60258	15.9	60167
31.8 x 35.1	2.0	Hand/Hydr.	60050	60051	60052	60117	60165	60258	15.9	60167
33.3 x 66.7	3.0	Hydr.	60053	60054	60055	60118	-	60235	30.2	-
35.0 x 52.0	3.0	Hydr.	60056	60057	60058	60118	-	60235	30.2	-
35.0 x 65.0	3.0	Hydr.	60059	60060	60061	60118	-	60235	30.2	-
35.0 x 82.0	2.0	Hydr.*	60062	60063	60064	60118	-	60235	30.2	*
35.0 x 112.0	2.0	Hydr.*	60065	60066	60067	60118	-	60235	30.2	*
46.0 x 92.0	3.0	Hydr.*	60068	60069	60070	60118	-	60235	30.2	*
57.2 x 88.9	3.0	Hydr.*	60071	60072	60073	60118	-	60235	30.2	*
68.0 x 138.0	2.0	Hydr.*	60074	60075	60076	60118	-	60235	30.2	*

Square Punches and Individual Parts

12.7 x 12.7	1.5	Hand/Hydr.	60001	60002	60003	60115	60120	05244	9.5	60114
15.9 x 15.9	2.0	Hand/Hydr.	60004	60005	60006	60116	34733	04638	12.7	33967
19.1 x 19.1	2.0	Hand/Hydr.	60007	60008	60009	60116	34733	04638	12.7	33967
22.4 x 22.4	2.0	Hand/Hydr.	60259	60011	60012	60116	34733	04638	12.7	33967
24.0 x 24.0	2.0	Hand/Hydr.	60013	60014	60015	60116	34733	04638	12.7	33967
25.4 x 25.4	2.0	Hand/Hydr.	60016	60017	60018	60117	60165	60258	15.9	60167
46.0 x 46.0	3.0	Hydr.	60019	60020	60021	60118	-	60235	30.2	-
50.8 x 50.8	3.0	Hydr.	60168	60169	60170	60118	-	60235	30.2	-
68.0 x 68.0	3.0	Hydr.	60171	60172	60173	60118	-	60235	30.2	*
92.0 x 92.0	3.0	Hydr.*	60174	60175	60176	60118	-	60235	30.2	*
104.8 x 104.8	3.0	Hydr.*	60177	60178	60179	60118	-	60235	30.2	*
138.0 x 138.0	2.0	Hydr.*	60234	60023	60024	60118	-	60235	30.2	*

Special Square Punches and Individual Parts

22.5 Ø(A)	20.1(B)	2.0	Hand/Hydr.	60125	60126	60127	60116	34733	04638	12.7	33967
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Oiltight Punches with Notches and Individual Parts

22.5(A) 3.2(B) 25.4(C)	2.0	Hand/Hydr.	60238	60239	60250	60117	60165	60258	15.9	60167
30.5(A) 4.8(B) 36.0(C)	3.0	Hand/Hydr.	60242	60243	60249	60117	60165	60258	15.9	60167

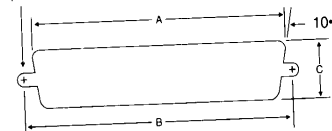
* Use with hydraulic cylinder 17091/(746) only

Electronic Connector Panel Punches

Fast, accurate panel punching with no sawing or filing required. Cut-out and mounting slots are punched in one operation.

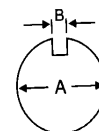
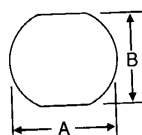
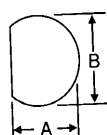
Operation: Manually with wrench or with hydraulic driver (additional adapter 33967 needed).
Capacity: 1.5 mm (16 gauge) mild steel and 3.5 mm (10 gauge) aluminium.

R. 1/16"
(1.6 mm)



Norm	Punch Unit	No. of Pins	Dimensions			Individual Parts					Optional Adapter for Hydraulic Drivers
			A	B	B	Punch	Die	Draw Stud	Counter Nut	Ball Bearing Nut	
229	34436	9	20.0 mm	24.9 mm	11.9 mm	34441	35196	34421	04638	34733	33967
231	34437	15	28.6 mm	33.3 mm	11.9 mm	34442	35197	34421	04638	34733	33967
RS232	34420	25	42.0 mm	47.1 mm	11.9 mm	34418	35198	34421	04638	34733	33967
234	34429	37	58.3 mm	63.4 mm	11.9 mm	34427	35199	34421	04638	34733	33967
238	34444	50	55.9 mm	61.0 mm	14.7 mm	34443	35200	34421	04638	34733	33967

Also "D", Double-"D" and Keyway Punch in various standard sizes available.





Slug-Buster® Knockout Punches

The unique punch profile splits slugs allowing slugs to fall free.
 Slug-Buster punches are available in 20 different sizes including Pg sizes Pg-9 through Pg-48.
 Operation: Manually (with wrench) or with hydraulic driver.



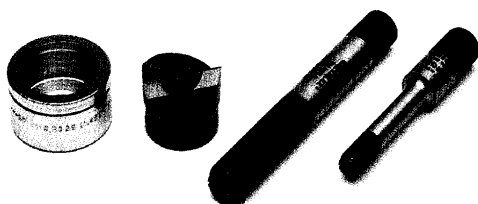
Hole Size				Capacity Mild Steel	Punch Unit	Individual Parts for Manual Operation			Draw Stud for Hydraulic Units	
Actual		Norm size				Punch	Die	Draw Stud with Ball Bearing	34291/(7804E) 34299/(7904E)	15906/(7646) 25097/(7625)
mm	inch	Pg	ISO							
15.2	0.598	Pg-9	-	2.0	31989	31969	32002	04045	30043	30043
16.2	0.638	-	ISO-16	2.0	35177	35163	35162	04045	30043	30043
18.6	0.732	Pg-11	-	2.0	31990	31970	32003	04045	30043	30043
20.4	0.803	Pg-13	ISO-20	2.0	31991	31971	32004	04045	30043	30043
22.5	0.885	Pg-16	-	2.0	31962	31756	14722	04045	30043	30043
25.4	1.000	-	ISO-25	2.0	35178	35165	35164	03997	30043	30043
28.3	1.115	-	-	3.0	31963	31757	06972	04040	31872	03294
28.3	1.115	Pg-21	-	2.0	31993	31973	32006	03997	30043	30043
30.5	1.210	-	-	2.0	36508	36284	36279	03997	30043	30043
30.5	1.210	-	-	3.0	60246	60237	36278	04040	31872	03294
32.5	1.280	-	ISO-32	3.0	35179	35169	35168	04040	31872	03294
34.6	1.362	-	-	3.0	31964	31758	04011	04040	31872	03294
37.0	1.456	Pg-29	-	3.0	31995	31975	32008	04040	31872	03294
40.5	1.594	-	ISO-40	3.0	35180	35158	35159	04040	31872	03294
43.2	1.701	-	-	3.0	31965	31759	04013	04040	31872	03294
47.0	1.850	Pg-36	-	3.0	31996	31976	32009	04042	31872	03294
49.6	1.953	-	-	3.0	31966	31760	04061	04042	31872	03294
50.8	2.000	-	ISO-50	3.0	35181	35160	35161	04042	31872	03294
54.0	2.125	Pg-42	-	3.0	36171	36172	36173	04042	31872	03294
60.0	2.362	Pg-48	-	3.0	31998	31978	32011	04042	31872	03294
61.5	2.421	-	-	3.0	31967	31761	04063	04042	31872	03294
64.0	2.520	-	ISO-63	3.0	35182	35167	35166	04042	31872	03294

Custom size punches on request

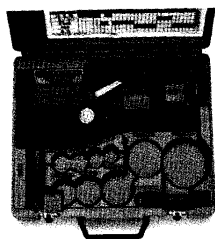
Slug-Splitter® Knockout Punches

Slug-Splitter heavy-duty punches are designed to punch up to 3.5 mm (10 gauge) stainless steel, mild steel, fiberglass and plastic enclosures. Their unique slug splitting design requires only minimum sized pilot holes. Pilot holes just 0,1 through 0,2 mm bigger than the draw stud ensure exact centering of the punch.

Splitting slugs easily fall free and cannot cling to draw stud. Operate with hydraulic driver only. Stainless steel draw studs are used for longer life. Available in 14 different sizes.



Hole Size			Capacity Stainless Steel mm	Individual Parts		Draw Stud for Hydraulic Units	
Actual		Pg		Punch	Die	34291/(7804E) 34299/(7904E)	15906/(7646) 25097/(7625)
mm	inch						
15.2	0.598	Pg-9	2.5	31117	31126	29451	29451
18.6	0.732	Pg-11	2.5	31119	31128	29451	29451
20.4	0.803	Pg-13	2.5	31120	31129	29451	29451
22.5	0.885	Pg-16	2.5	28154	2 8155	29451	29451
28.3	1.115	Pg-21	3.5	28156	28157	31872	29452
30.5	1.210	-	3.5	36490	36489	31872	29452
34.6	1.362	-	3.5	28158	28159	31872	29452
37.0	1.457	Pg-29	3.5	31122	31135	31872	29452
43.2	1.701	-	3.5	28160	28161	31872	29452
47.0	1.850	Pg-36	3.5	31123	31131	-	29452
49.6	1.953	-	3.5	28162	28163	-	29452
54.0	2.125	Pg-42	3.5	31124	31132	-	29452
60.0	2.362	Pg-48	3.5	31125	31133	-	29452

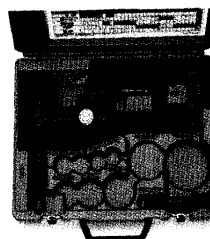


34291/(7804-E)
Hand-Hydraulic Punch Driver with
Straight Driver Head

Ideal for fast, straight-on front panel punching. Set includes draw stud 30043 and 31872, adapter 33967, spacer 03248 in plastic case (no punches).

Punching Capacity:
 Max. Material Strength:

Up to 73 mm round holes and 68 x 68 mm square holes
 Up to 3 mm mild steel (ST 37) or up to 3,5 mm stainless steel
 (depending on punch size)



34299/(7904-E)
Hand-Hydraulic Punch Driver with
Right Angle Driver Head

Rotates 180 degrees for maximum flexibility in tight working areas. Set includes draw stud 30043 and 31872, adapter 33967, spacer 03248 in plastic case (no punches).



15906/(7646)
Ram and Hand Pump Hydraulic Driver

Compact design is ideal for field use on construction sites and maintenance jobs. Set includes draw studs 30043 and 03294, spacer set 15908, punch sleeve 03170, step bit 34410 in plastic case (no punches).

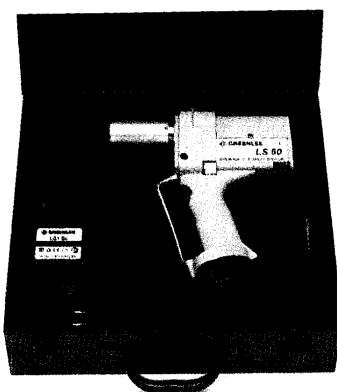
Punching Capacity:
 Max. Material Strength:

Up to 143,7 mm round holes and 138 x 138 mm square holes
 Up to 3 mm mild steel (ST 37) or up to 3,5 mm stainless steel
 (depending on punch size)



25097/(7625)
Ram and Foot Pump Hydraulic Driver

Foot operation frees both hands to operate punch. Set includes draw studs 30043 and 03294, spacer set 15908, punch sleeve 03170, step bit 34410 in metal case (no punches).

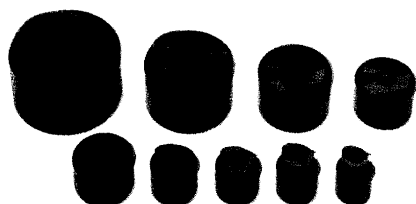


LS-60
Electro-Hydraulic Punch Driver

Electro-hydraulic punch driver with battery 12 volts.
 Punching - quick and easy.
 Needs only 8 seconds to punch Pg 48 hole in 3 mm mild steel.
 Unit includes battery and battery charger.
 Set includes draw studs 30043 and 03294, spacer 03248, adapter 33967, step bit 34410 in metal case (no punches).

Punching capacity:
 Up to 64 mm round holes and 68 x 68 mm square holes in 3 mm mild steel
 Up to 96 mm round holes in 2,5 mm mild steel
 Up to 104,8 x 104,8 mm square holes in 2,5 mm mild steel
 Up to 43,2 mm round holes in 3,5 mm stainless steel

32803/(7215E)



			Punch Sets for			
			34291 / (7804E)	34299 / (7904E)	25097 / (7625)	15906 / (7646)
			Standard Knockouts			
			32804/(7309E)	32398/(7214E)	32803/(7215E)	35617
15.2 mm	Pg-9		•	•	•	
16.2 mm		ISO-16				•
18.6 mm	Pg-11		•	•	•	
20.4 mm	Pg-13	ISO-20	•	•	•	•
22.5 mm	Pg-16		•	•	•	
25.4 mm		ISO-25				•
28.3 mm	Pg-21		•	•	•	
30.5 mm			•	•	•	
32.5 mm		ISO-32				•
37.0 mm	Pg-29		•		•	
40.5 mm		ISO-40				•
47.0 mm	Pg-36		•		•	
60.0 mm	Pg-48		•		•	

= Article-No.