

# COMBI

Driving diameter:  $\phi 12$  to 138 mm

These face drivers are designed for light machining and medium roughing operations for use on copying lathes and NC lathes.

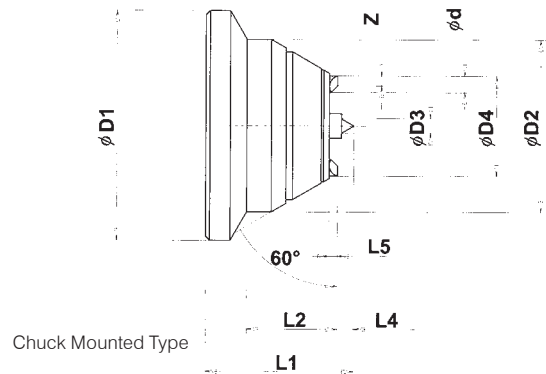
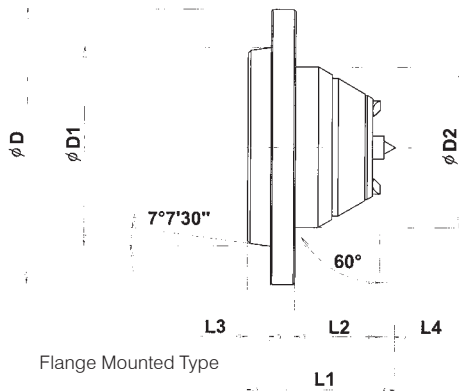
They are available in a flange mounted type or a chuck mounted type. The flange mounted type is suitable for spindle nose sizes 5" to 15".

Driving diameters from 12 mm to 138 mm are covered with seven sizes of face driver, enabling the driving of workpieces up to 430 kg.

With COMBI 29-138 face drivers, the pressure is equalized among the driving pins by means of a hydraulic mechanism. This mechanism can accommodate a maximum inclination at the workpiece end face of 7 degrees and a maximum positional difference in the axial direction among driving pins of 3 mm.

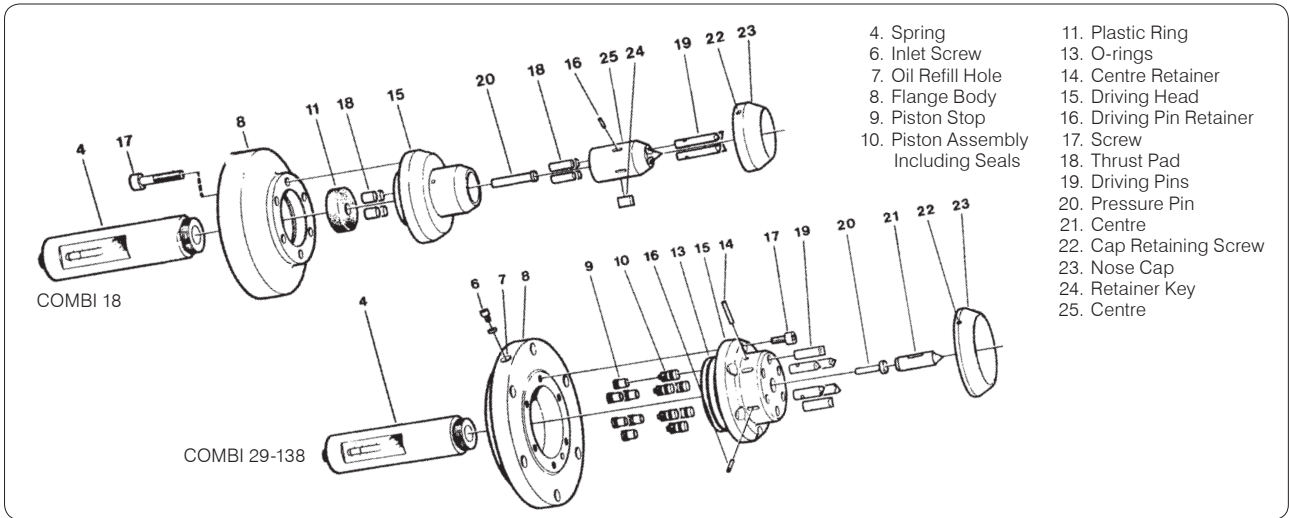
COMBI 18 face drivers use plastic rings for pressure equalization and can accommodate a maximum inclination at the workpiece end face of 5 degrees and a maximum positional difference in the axial direction among driving pins of 7.5 mm.

The COMBI face drivers comprise three main sections: the driving head, the driving pins and the center return spring element. Order the three sections separately and assemble them for use.



Model	Order Code	Number of Driving Pins	Dimensions (mm)								
			D	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>
<b>COMBI 18 <math>\phi D4</math>: 12 to 18.5 mm</b>											
Flange Mounted	20-1871-42971	4	244	196.87	80	-	114	68	18	4	5
Chuck Mounted	20-1871-42871		-	130				-	73		
<b>COMBI 29 <math>\phi D4</math>: 22.5 to 29 mm</b>											
Flange Mounted	20-1872-42972	5	244	196.87	85	8	117	68	18	7	5
Chuck Mounted	20-1872-42872		-	130				-	67		
<b>COMBI 46 <math>\phi D4</math>: 33 to 46 mm</b>											
Flange Mounted	20-1873-42973	6	244	196.87	96	12	119	68	18	9	9
Chuck Mounted	20-1873-42873		-	130				-	74		
<b>COMBI 70 <math>\phi D4</math>: 57 to 70 mm</b>											
Flange Mounted	20-1874-42974	6	244	196.87	126	14	122	68	18	12	9
Chuck Mounted	20-1874-42874		-	130				-	67		
<b>COMBI 90 <math>\phi D4</math>: 77 to 90 mm</b>											
Flange Mounted	20-1875-42975	6	244	196.87	146	14	122	68	18	12	9
Chuck Mounted	20-1875-42875		-	195				-	74		
<b>COMBI 112 <math>\phi D4</math>: 99 to 112 mm</b>											
Flange Mounted	20-1876-42976	6	244	196.87	170	15	122	68	18	12	9
Chuck Mounted	20-1876-42876		-	195				-	84		
<b>COMBI 138 <math>\phi D4</math>: 125 to 138 mm</b>											
Flange Mounted	20-1877-42977	6	244	196.87	194	15	122	68	18	12	9
Chuck Mounted	20-1877-42877		-	195				-	87		

Note: Order the driving pins and the spring element separately. When placing an order, please specify the order code and quantity.



### Driving pins

1 daN = 10 N



#### COMBI 18 $\phi D4$ : 12.0 to 18.5 mm

Type 18		Direction of Rotation	Driving Pin Ordering Code	Z	$\phi d$	Form	Tailstock Force (daN)	
$\phi D4$ Driving Diameter (mm)	Minimum						Maximum	
12.0 / 18.5		R + L	83-1872-43090	3.75	7	A	375	525
15.0 / 18.5		R + L	83-1872-43772	5.25	7	B	525	735
14.5 / 18.5		R + L	83-1872-43091	5.00	7	C	500	700
18.5		R + L	83-1872-43094	7.00	7	D	700	980
18.5		R + L	83-1872-43098	7.00	7	F	700	980

#### COMBI 29 $\phi D4$ : 22.5 to 29.0 mm

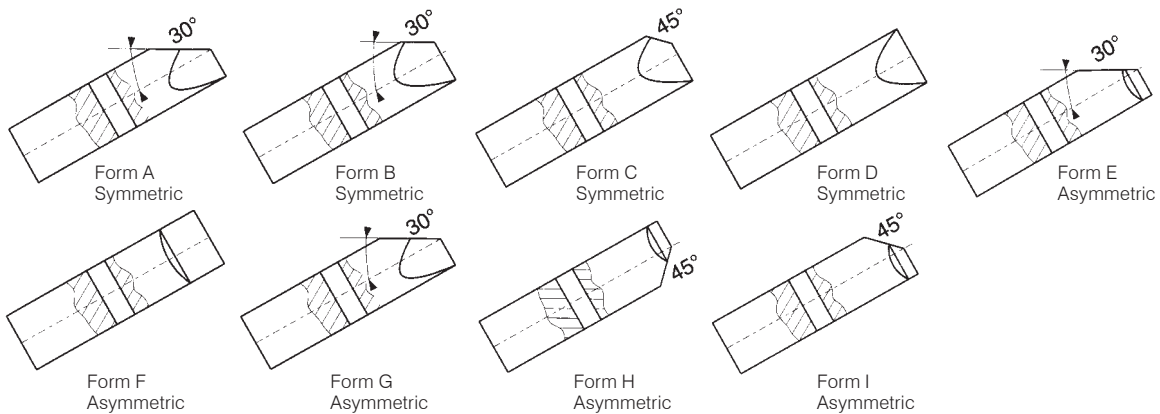
Type 29		Direction of Rotation	Driving Pin Ordering Code	Z	$\phi d$	Form	Tailstock Force (daN)	
$\phi D4$ Driving Diameter (mm)	Minimum						Maximum	
22.5 / 29.0		R + L	83-1872-43090	3.75	7	A	470	655
25.5 / 29.0		R + L	83-1872-43772	5.25	7	B	660	915
25.0 / 29.0		R + L	83-1872-43091	5.00	7	C	625	875
29.0		R + L	83-1872-43094	7.00	7	D	875	1,225
29.0		R + L	83-1872-43098	7.00	7	F	875	1,225

#### COMBI 46-138 $\phi D4$ : 33.0 to 138 mm

Type 46	Type 70	Type 90	Type 112	Type 138	Direction of Rotation	Driving Pin Ordering Code	Z	$\phi d$	Form	Minimum	Maximum
33	57	77	99	125	R	83-1873-43129	6.5	13	E	975	1,365
					R	83-1873-43128	6.5	13	I	975	1,365
					L	83-1873-43127	6.5	13	G	975	1,365
					L	83-1873-43130	6.5	13	H	975	1,365
					R + L	83-1873-43121	6.5	13	A	975	1,365
37	61	81	103	129	R + L	83-1873-43122	8.5	13	B	1,275	1,785
33 / 46	57 / 70	77 / 90	99 / 112	125 / 138	R + L	83-1873-43123	6.5	13	C	975	1,365
46	70	90	112	138	L	83-1873-43128	6.5	13	I	975	1,365
					R	83-1873-43130	6.5	13	H	975	1,365
					R + L	83-1873-43124	13.0	13	D	1,950	2,730
					R + L	83-1873-43126	13.0	13	F	1,950	2,730

When placing an order, please specify the order code and quantity.

Dimensions (mm)



# Spare Parts / Accessories

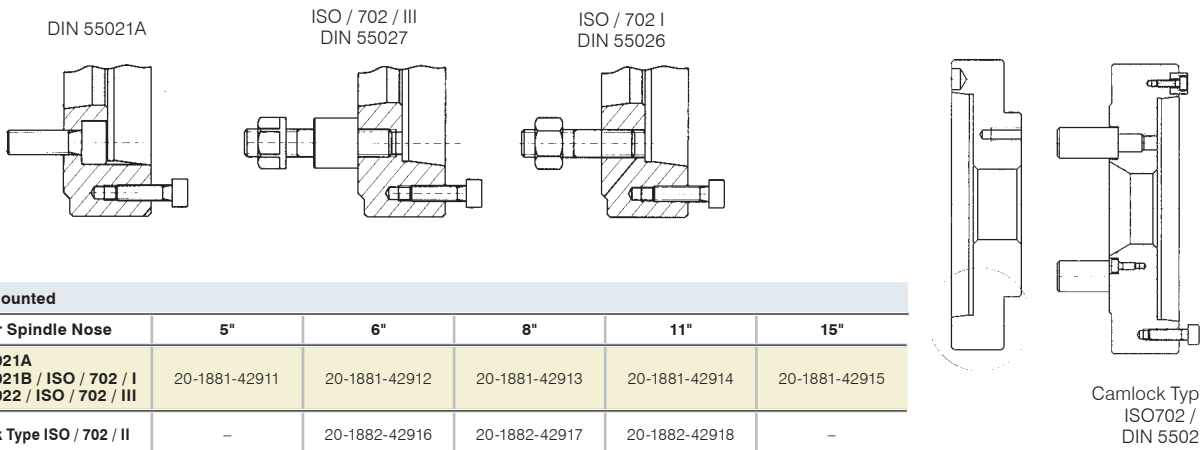
## COMBI Face Drivers

1 daN = 10 N

The spring element can be adjusted independently.

Type	Order Code	Dimensions		Max. Workpiece Mass (kg) for Adjustment	Tailstock Force (daN)
		D	L		
Adjustable Pressure Type	20-1871-41246	45	212	70	40
				105	60
				140	80
				175	100
				210	120
				240	140
				280	160
				310	180
				350	200
				380	220
Unadjustable Short Type	20-1871-43671	60	66	175	40 - 100
	20-1871-41603	68	69	430	70 - 265

Dimensions (mm)

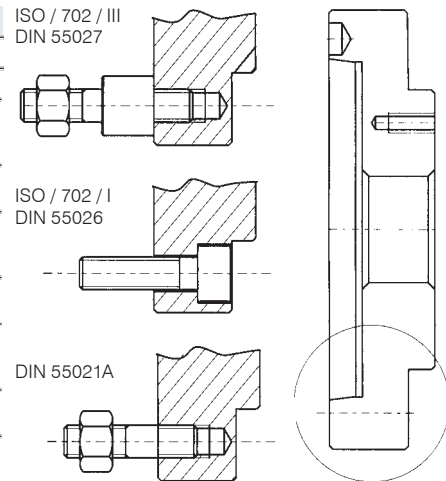


Flange Mounted					
For Spindle Nose	5"	6"	8"	11"	15"
DIN 55021A DIN 55021B / ISO / 702 / I DIN 55022 / ISO / 702 / III	20-1881-42911	20-1881-42912	20-1881-42913	20-1881-42914	20-1881-42915
Camlock Type ISO / 702 / II	-	20-1882-42916	20-1882-42917	20-1882-42918	-

Camlock Type  
ISO702 / II  
DIN 55029





## N Face Drivers

Flange Mounted				
For Spindle Nose	5"	6"	8"	11"
<b>Type N62</b>				
DIN 55021A	20-41262	20-41263	20-41265	
DIN 55026 / ISO / 702 / I	20-41262	20-41264	20-41266	
DIN 55027 / ISO / 702 / III	20-41262	20-41263	20-41265	
<b>Type N63 – N64</b>				
DIN 55021A	20-41267	20-41268	20-41269	20-41271
DIN 55026 / ISO / 702 / I	20-41267	20-41268	20-41270	20-41272
DIN 55027 / ISO / 702 / III	20-41267	20-41268	20-41269	20-41271
<b>Type N66</b>				
DIN 55021A		20-41273	20-41274	20-41276
DIN 55026 / ISO / 702 / I		20-41273	20-41275	20-41277
DIN 55027 / ISO / 702 / III		20-41273	20-41274	20-41276
<b>Type N68</b>				
DIN 55021A			20-41278	20-41279
DIN 55026 / ISO / 702 / I			20-41278	20-41280
DIN 55027 / ISO / 702 / III			20-41278	20-41279







When placing an order, please specify the order code and quantity.

# Spare Parts / Accessories

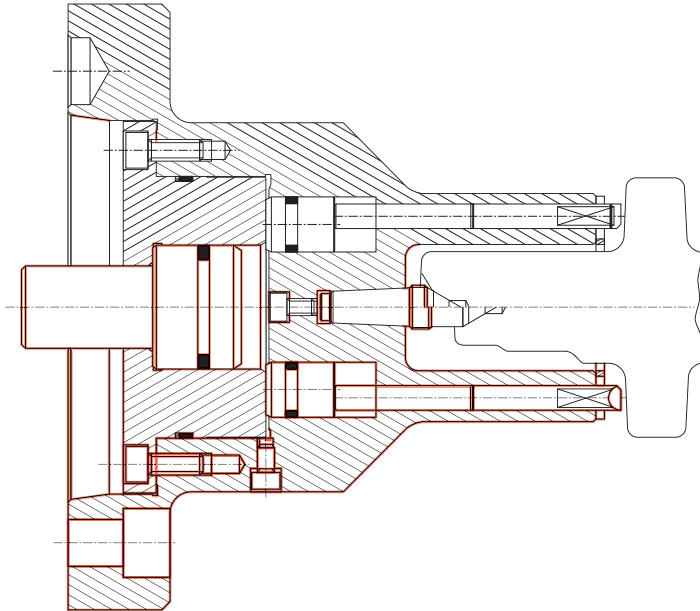
Spare Parts				
				
Face Driver	Centre Set	Piston Set	Nose Cap	O-Ring Set
HD 30	83-1830-43037	-	83-1830-43530	-
HD 31	83-1831-43038	-	83-1830-43530	-
HD 32	83-1832-43046	-	83-1832-43532	-
HD 33	83-1833-43054	-	83-1833-43533	-
HD 34 (MT4-5)	83-1834-43062	-	83-1834-43534	-
HD 34 (MT6)	83-1834-43085	-	83-1834-43634	-
N 62	83-1862-43063	83-1862-43962	83-1862-43562	83-1862-43862
N 63	83-1863-43073	83-1864-43964	83-1863-43563	83-1863-43863
N 64	83-1864-43074	83-1864-43964	83-1864-43564	83-1864-43864
N 66	83-1866-43083	83-1866-43966	83-1866-43566	83-1866-43866
N 68	83-1868-43084	83-1866-43966	83-1868-43568	83-1868-43868
COMBI 18	83-1871-43089	-	83-1871-43571	-
COMBI 29	83-1872-43092	83-1862-43962	83-1872-43572	83-1872-43872
COMBI 46	83-1873-43132	83-1862-43962	83-1873-43573	83-1873-43873
COMBI 70	83-1874-43133	83-1862-43962	83-1874-43574	83-1874-43874
COMBI 90	83-1875-43134	83-1862-43962	83-1875-43575	83-1875-43875
COMBI 112	83-1876-43135	83-1862-43962	83-1876-43576	83-1876-43876
COMBI 138	83-1877-43136	83-1862-43962	83-1877-43577	83-1877-43877

When placing an order, please specify the order code and quantity.

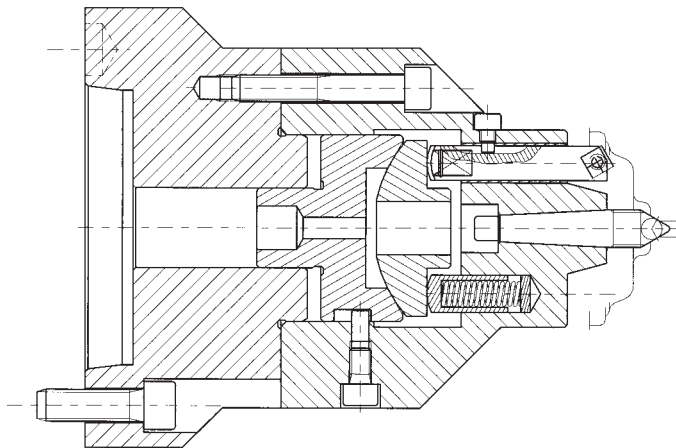
Spare Parts				
				
Face Driver	Spring	Plastic Ring	Driving Head	Thrust Pad Set
HD 30	83-1830-21583	20-1830-21579	83-1830-21576	83-1830-43730
HD 31	83-1830-21583	20-1831-21616	83-1831-21614	83-1831-43731
HD 32	83-1832-21628	20-1832-21624	83-1832-21620	83-1832-43732
HD 33	83-1833-21655	20-1833-21563	83-1833-21647	83-1833-43733
HD 34 (MT4-5)	83-1834-21687	20-1834-21683	83-1834-21678	83-1834-43734
HD 34 (MT6)	-	-	83-1834-21679	-
N 62	83-1862-21329	-	-	-
N 63	83-1864-21368	-	-	-
N 64	83-1864-21368	-	-	-
N 66	-	-	-	-
N 68	-	-	-	-
COMBI 18	-	20-1872-21176	-	83-1871-43771
COMBI 29	-	-	-	83-1872-43972
COMBI 46	-	-	-	-
COMBI 70	-	-	-	-
COMBI 90	-	-	-	-
COMBI 112	-	-	-	-
COMBI 138	-	-	-	-

When placing an order, please specify the order code and quantity.

**Examples**   **Examples of face drivers built to order**



Face Driver with Hydraulic Compensation



Face Driver with Mechanical Compensation  
(Suitable for Flange Type Workpieces)