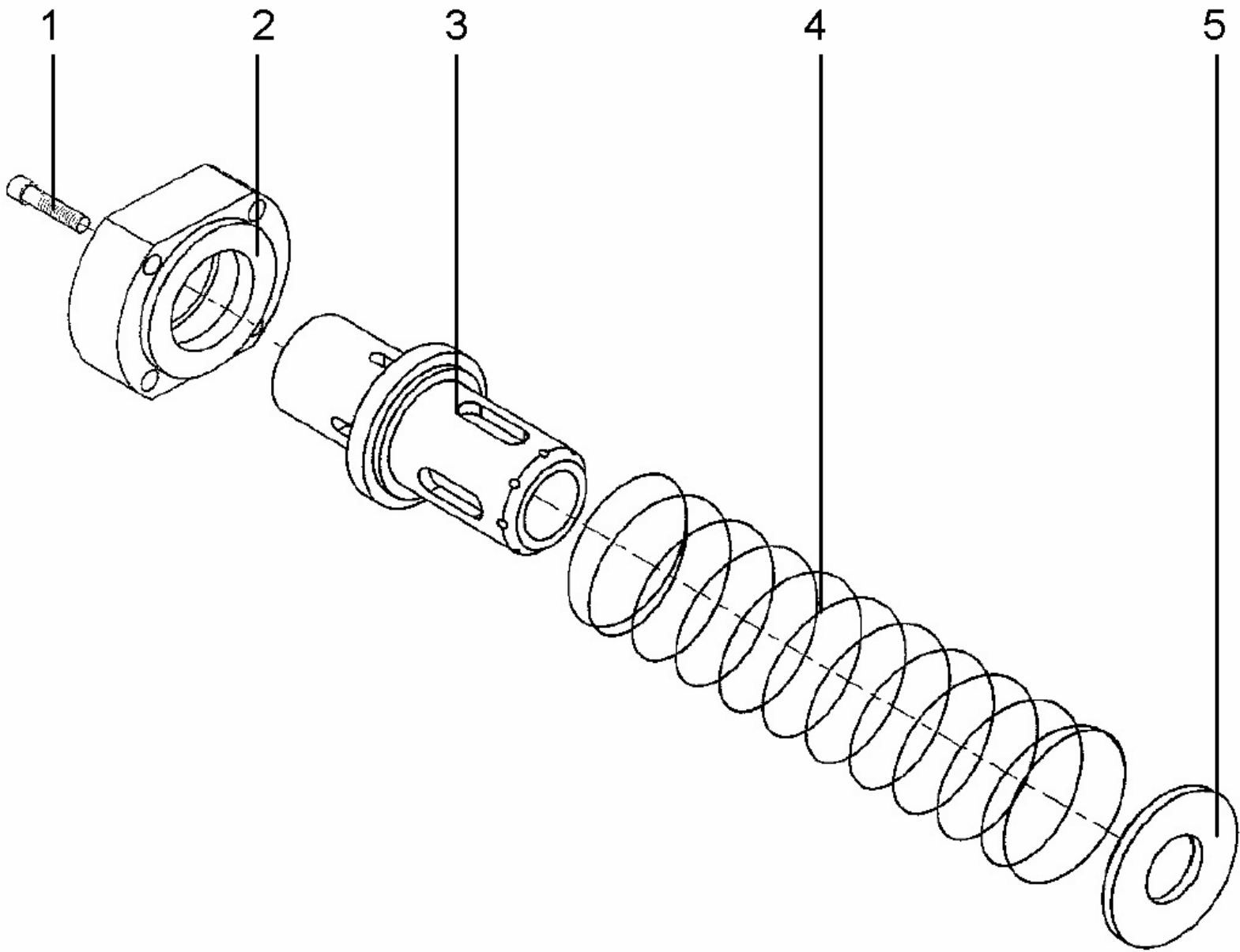


Hartmann & Bender – Spare Parts – Selection Manual 5“

Page	Description	IS Part No.	H&B Ident No.
2	NNPB Plunger Positioners max. finish 38 mm	62-404	0762-404
3	Plunger Positioners finish up to 70 mm	62-171	0762-171
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7	Quick Change Cartridges Blow & Blow	62-3036	0762-3036
8	Q.C.Cartridges with Common Line for Counterblow and Vacuum Assist	62-3051	0762-3051
9	Baffle Arms	191-7823	0791-7823
10	Baffle Arms Type 500, 501	500-555	0500-555
11	Funnel Arms Type 500, 501, 502, 503	500-554	0500-554
12	Blank Mould Holder No.1 “ Non Scissor Type “	191-9240 Gr.2	0791-9240-2
12	Blank Mould Holder No.2 “ Non Scissor Type “	191-9241 Gr.2	0791-9241-2
12	Blank Mould Holder No.3 “ Non Scissor Type “	191-9242 Gr.2	0791-9242-2
13	Blow Mould Holder No.1	191-9009 Gr.4	0791-9009-4
13	Blow Mould Holder No.2	191-9010 Gr.4	0791-9010-4
13	Blow Mould Holder No.3	191-9011 Gr.4	0791-9011-4
14	Mounting Parts and MH Inserts & Plates Selection Chart Assembly	Assy 1 - 13	Assy 1 – 13
15	Mounting Parts and MH Plates Selection Chart Assembly	Assy 14 - 23	Assy 14 – 23
16	Mounting Parts and MH Plates Selection Chart Assembly	Assy 24 - 32	Assy 24 – 32
17	Mounting Parts and MH Plates Selection Chart Assembly	Assy 33 – 36	Assy 33 – 36
18	Mounting Parts and MH Plates Selection Chart Assembly	Assy 37 – 42	Assy 37 – 42
19	Mounting Parts and MH Plates Selection Chart Assembly	Assy 43 – 46	Assy 43 – 46
20	Blank Mould Holder Verti Flow Cooling	191-9159	0791-9159
21	Mould Holder Insert Verti Flow Cooling	191-9168	0791-9168
22	Verti Flow Cooling Single Deck – Assembly Drawing		
23	Verti Flow Cooling Single Deck – Spare Parts List		
24	Verti Flow Cooling Double Deck – Assembly Drawing		
25	Verti Flow Cooling Double Deck – Spare Parts List		
26	Verti Flow Cooling Plenum Chamber Assembly	191-9152	0791-9152
27	Verti Flow Cooling Upper Air Tube Assembly	191-9148	0791-9148
27	Verti Flow Cooling Adjusting Pin Assembly	191-9158	0791-9158
28	Neck Ring Holders	191-7825	0791-7825
29	Neck Ring Holder Type Universal		H&B-1108
30	Neck Ring Holder Type Universal “ Ware Limits “		H&B-1108
31	Blow Head Arm Lightweight	191-7824	0791-7824
32	Blow Head Arm Hinge Type, Cast Iron		Type 83
33	Blow Head Arm Lightweight		500-557-500
34	Blow Head Arm for direct connecting of flexible hoses at lockrings		500-001
35	Take Out Tong Arm Belt Drive for Standard Take Out Tong Mech.		Type 72-06
35	Take Out Tong Arm Belt Drive for Bottero Servo Take Out Tong Mech.		Type 72-07
36	Take Out Tong Arm Type 72-06 – Spare Parts List		Type 72-06
37	Take Out Tong Arm Type 72-07 – Spare Parts List		Type 72-07
38	Q.C. Take Out Tong Head Assemblies DG	191-9125	0791-9125
38	Q.C. Take Out Tong Head Assemblies DG “ Anti Wink “	210-275	7210-275
39	Take Out Tong Holder	191-8319	0791-8319
40	Technical Bulletin for Take Out Tong Holder	191-8319	0791-8319
41	Take Out Tong Holder “ Anti Wink “	191-9535	0791-9535
42	Q.C. Take Out Tong Head Assemblies for finish cooling		0791-9125-NBV
43	Mounting Parts Q.C. Baffle	200-252	7200-252
44	Q.C. Baffle Arms	191-9135	0791-9135
45	Mounting Parts Q.C. Funnel	191-9133	0791-9133
46	Q.C. Funnel Arms	191-9133	0791-9133
47	Mounting Parts Q.C. Blow Head	200-200	7200-200
48	Q.C. Blow Head Arms DG	200-202	7200-202
49	Q.C. Take Out Tong Head Assemblies SG	191-9125	0791-9125
49	Q.C. Take Out Tong Head Assemblies SG “ Anti Wink “	210-275	7210-275
50	Blw Head Arms Typ 3 & 4		H&B-500-557
51	Q.C. Blow Head Arms SG	200-201	7200-201

NNPB Plunger Positioner max. finish 38 mm

Description	IS-Part No.	H&B-Order No.
Plunger Positioner	62-404 Gr.7	0762-404-7
Plunger Positioner	62-404 Gr.10	0762-404-10



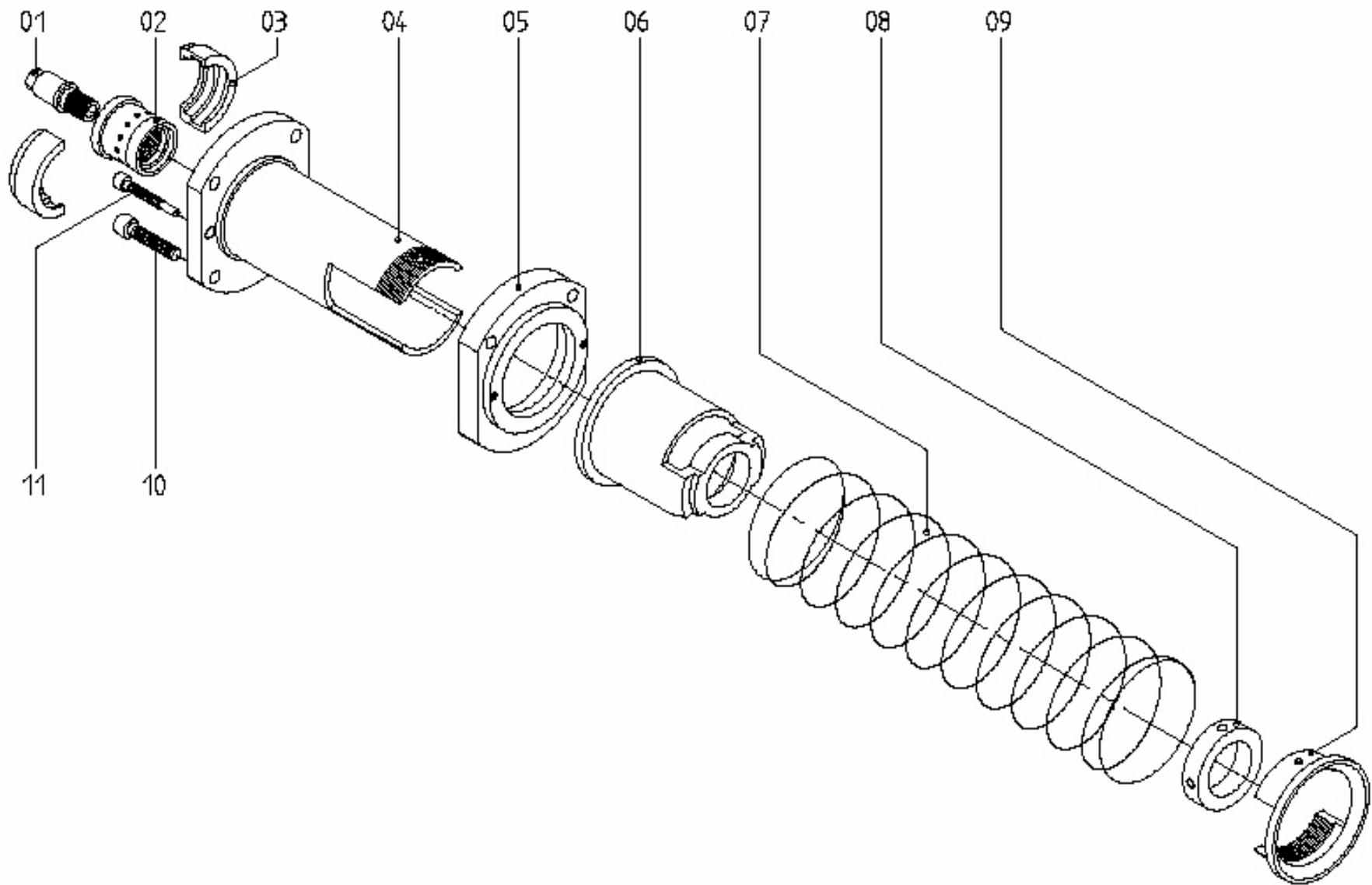
0762-404-7
Parts for one Positioner with Centering Bushing for DG 4 1/4", DG 5", TG 4 1/4"
Q.C.Plunger Mechanism

0762-404-10
Parts for one Positioner with 35 mm kick back for DG 4 1/4", DG 5", TG 4 1/4"
Q.C.Plunger Mechanism

x		2	Hex.Soc.Hd.Cp.Screw	2640-1560	DIN-912-M6 X 10		not illustrated
x	x	1	Washer, protecting	62-2985	0762-2985	5	
x	x	1	Compression Spring	62-1377	0762-1377	4	
x		1	Sleeve, centering	62-6752	0762-6752	3	not illustrated
	x	1	Centering Bushing	62-2633	0762-2633	3	
x		1	Ring, sleeve guiding	62-6753	0762-6753	2	not illustrated
	x	1	Cover	62-2634	0762-2634	2	
x		4	Hex..Hd.Cp.Screw	2660-450	DIN-931-3/8 UNC x 11/4	1	not illustrated
	x	4	Hex. Soc.Hd.Cp.Screw	2640-590	DIN-912-3/8 UNC x 13/4	1	
Gr.10	Gr.7	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		NNPB Plunger Positioner
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions -GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.:
							0762-404-7 0762-404-10
			Zust.	Änderung	Datum	Name	

Floating Plunger Positioner finish up to 70 mm

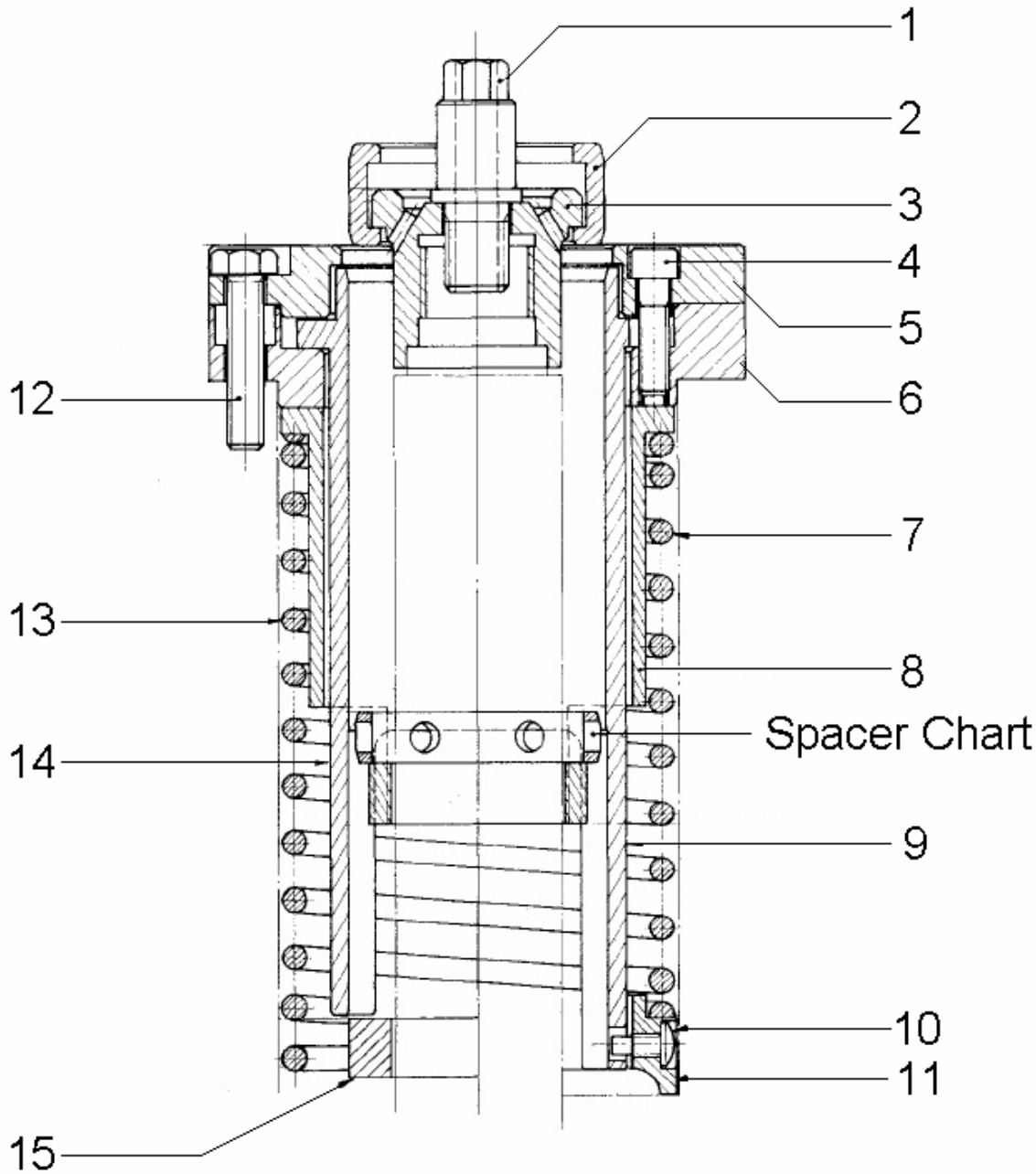
Description	IS-Part No.	H&B-Order No.
Plunger Positioner	62-171 Gr.5	0762-171-5



		2	Hex.Soc.Hd.Cp Screw		DIN-912 - 3/8 UNC x 7/8"		not shown
		2	Stop Screw	62-1150	0762-1150	11	
		4	Hex.Soc.Hd.Cp Screw		DIN-912 - 3/8 UNC x 1 3/4"	10	
		1	Spring Retainer	62-1446	0762-1446	9	
		1	Spacer	62-2849	0762-2849	8	
		1	Compression Spring	62-1377	0762-1377	7	
		1	Sleeve	62-1117	0762-1117	6	
		1	Cap	62-1777	0762-1777	5	
		1	Bushing 2 1/2"	62-1459	0762-1459	4	
		1	Split Ring 2 1/2"	62-1476	0762-1476	3	
		1	Plunger Adaptor 2 1/2"	62-1478	0762-1478	2	
		1	Locking Stud	62-1872	0762-1872	1	
		Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Floating Plunger Positioner
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.:
							0762-171-5
			Zust.	Änderung	Datum	Name	

Floating Plunger Positioner finish up to 70 mm

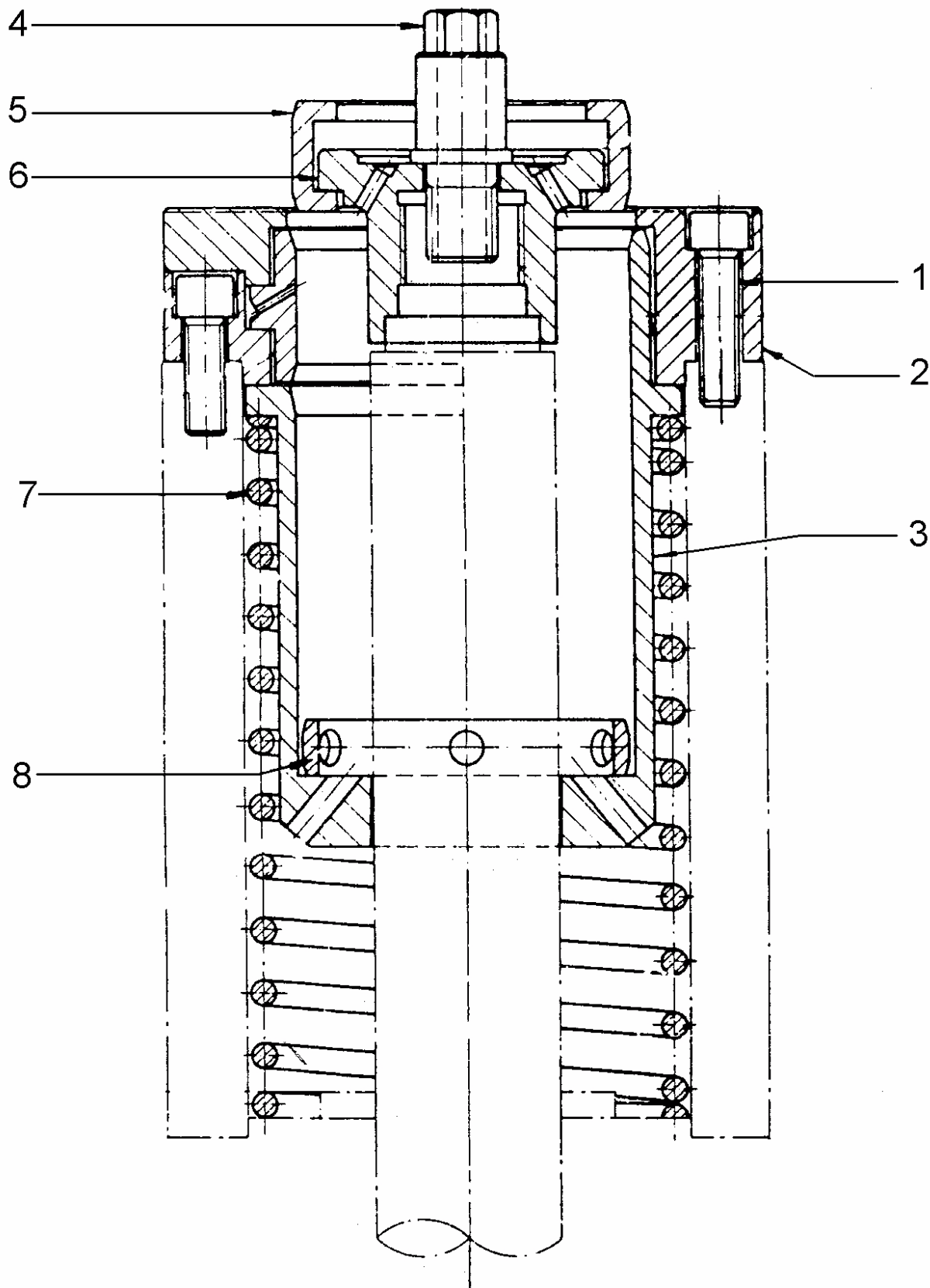
Description	IS-Part No.	H&B-Order No.
Plunger Positioner use with Q.C. Plunger Mech. 3000 series	62-407 Gr.3	0762-407-3
Plunger Positioner use with Q.C. Plunger Mech., 7" stroke	62-407 Gr.6	0762-407-6



	x	1	Spacer	62-2849	0762-2849	15	
		1	Bushing 1 1/2" DIA.	62-2587	0762-2587	14	
	x	1	Compression Spring	62-1377	0762-1377	13	
	x	4	Hex.Soc.Hd.Cp Screw	2640-530	DIN-912-3/8 UNC x 1"	12	
x		2	Hex.Hd.Cp Screw	2660-480	DIN-931-3/8 UNC x 1 3/4"	12	
x		2	Spring Retainer	62-7025	0762-7025	11	
x		4	Screw	48-89504	0748-89504	10	
x		1	Bushing 1 1/2" DIA.	62-7026	0762-7026	9	
x	x	1	Sleeve	62-6869	0762-6869	8	
x		1	Compression Spring	62-7026	0762-7026	7	
x	x	1	Distance Ring	62-2585	0762-2585	6	
x		1	Cap	62-7020	0762-7020	5	
	x	1	Cap	62-2586	0762-2586	5	
x	x	1	Stop Screw	62-659	0762-659	4	
x	x	3	Plunger Adapter	62-2528	0762-2528	3	
x	x	1	Split Ring	62-2527	0762-2527	2	
x	x	1	Locking Stud	62-1872	0762-1872	1	
Gr.6	Gr.3	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Floating Plunger Positioner
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.:
							0762-407-3
							0762-407-6
			Zust.	Änderung	Datum	Name	

Floating Plunger Positioner max. finish 83 mm

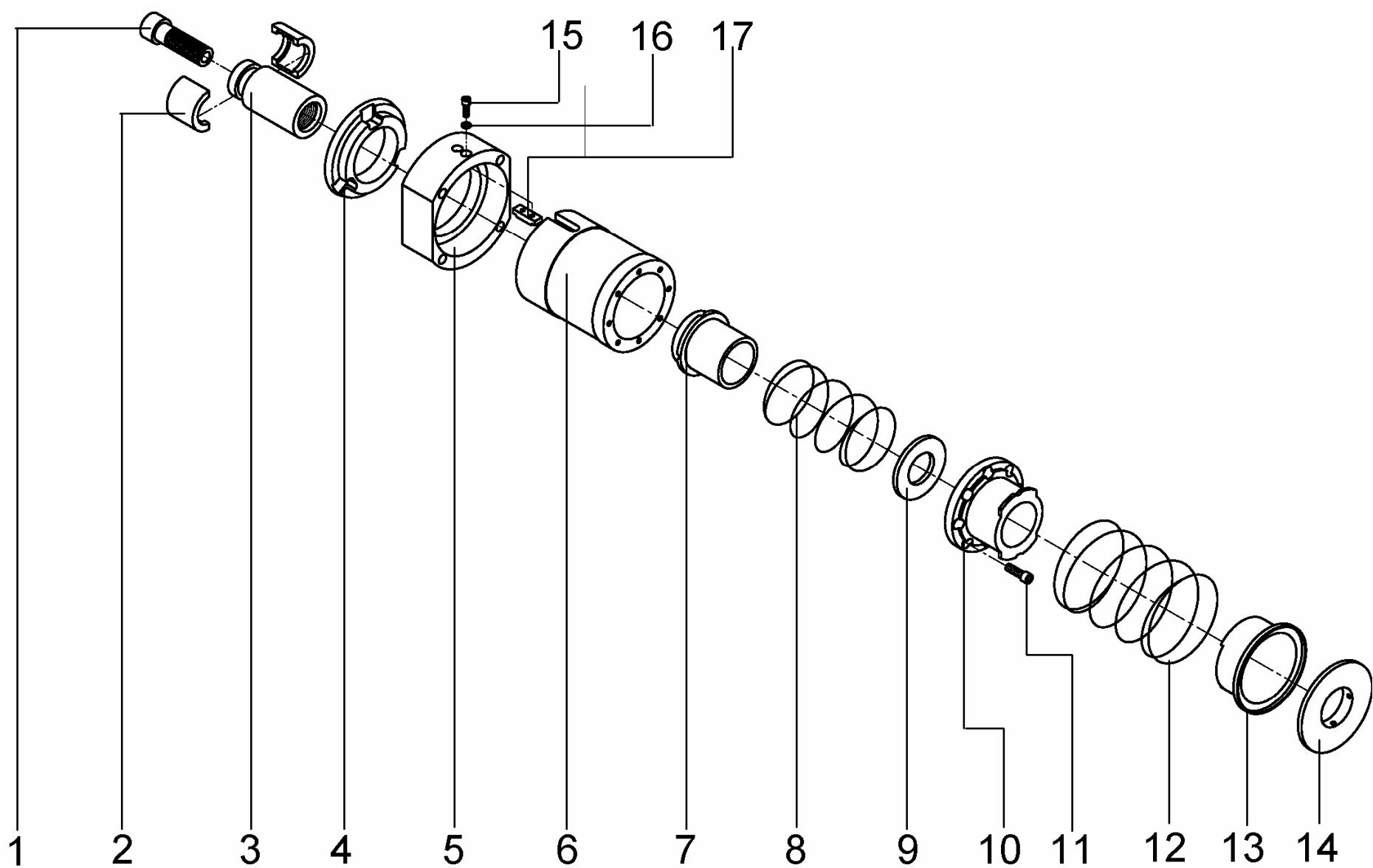
Description	IS-Part No.	H&B-Order No.
Floating Plunger Positioner	62-412 Gr.2	0762-412-2



		1	Spacer	62-2574	0762-2574	8	
		1	Compression Spring	62-1377	0762-1377	7	
		1	Plunger Adapter	62-2530	0762-2530	6	
		1	Split Ring	62-2529	0762-2529	5	
		1	Locking Stud	62-1872	0762-1872	4	
		1	Sleeve	62-2828	0762-2828	3	
		1	Cap	62-2829	0762-2829	2	
		4	Hex.Soc.Hd.Cp Screw	2640-555	DIN-912-3/8 UNC x 1 3/8"	1	
		Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Floating Plunger Positioner
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein	Zeichnungs- Nr.: 0762-412-2	
			Zust.	Änderung	Datum	Name	

Quick Change Cartridge Blow & Blow

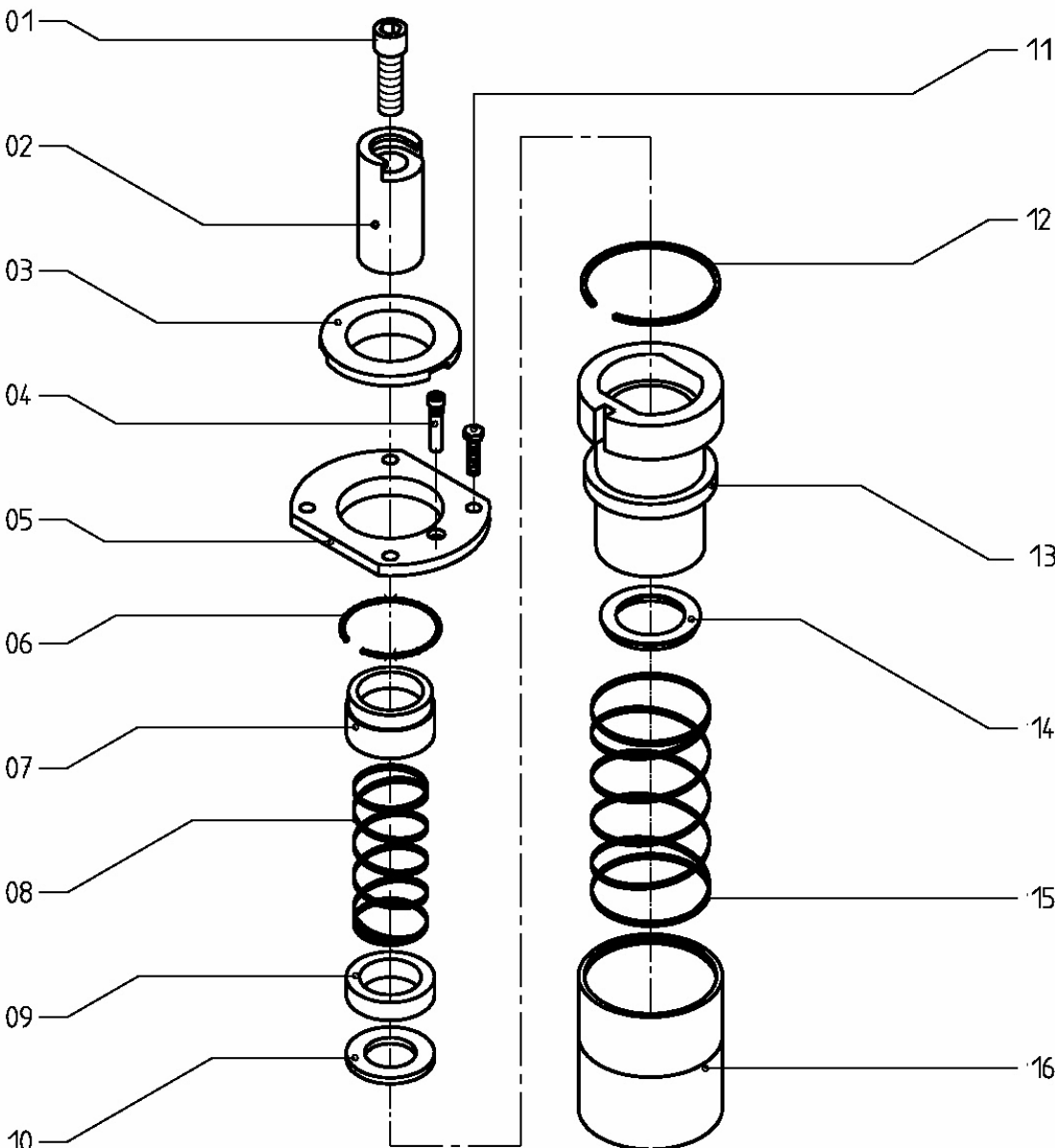
Description	IS-Part No.	H&B-Order No.
Quick Change Cartridge Blow & Blow	62-170 Gr.8	0762-170-8
Quick Change Cartridge Blow & Blow	62-170 Gr.11	0762-170-11



x	x	1	Key	62-1417	0762-1417	17	
x	x	2	Lock Washer		H-1235 - 5	16	
x	x	2	Hex.Soc.Hd.Cp.Screw		DIN-912 –10-32-NF x 5/8“	15	
x		1	Spacer	62-2850	0762-2580	14	
x	x	1	Spring Retainer	62-1444	0762-1444	13	
x	x	1	Compression Spring	62-1426	0762-1426	12	
x	x	8	Hex.Soc.Hd.Cp.Screw		DIN-912–1/4“ UNC x 7/8“	11	
x	x	1	Piston Extension	62-1980	0762-1980	10	
x	x	1	Washer	62-1186	0762-1186	9	
x	x	1	Compression Spring	62-1212	0762-1212	8	
x	x	1	Thimble Lock	62-1184	0762-1184	7	
x	x	1	Piston	62-1978	0762-1978	6	
x	x	1	Cap	62-1181	0762-1181	5	
x	x	1	Ring	62-1341	0762-1341	4	
x	x	1	Adapter, Hex socket type		0762-1183-A	3	hardened & grounded
x	x	1	Clamping Ring (Split Ring)	62-1584	0762-1584	2	
x	x	1	Stud	48-88348	0748-88348	1	
Gr.11	Gr.8	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Quick Change Cartridge
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions -GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.:
							0762-170-8
							0762-170-11
			Zust.	Änderung	Datum	Name	

Quick Change Cartridge Blow & Blow

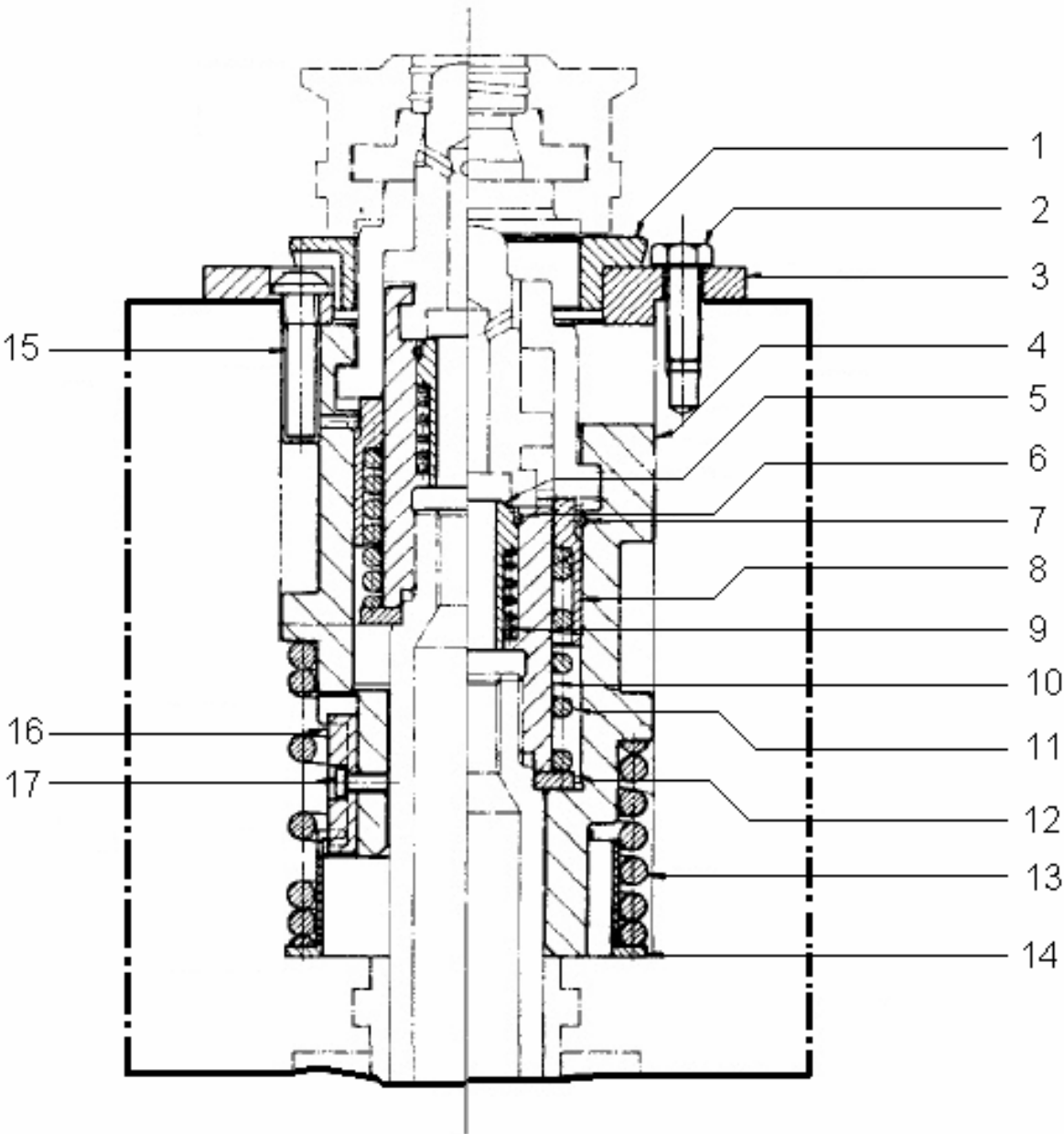
Description	IS-Part No.	H&B-Order No.
Quick Change Cartridge Blow & Blow	62-3036 Gr.7	0762-3036-7



		1	Spring Retainer	62-6719	0762-6719	16		
		1	Compression Spring	62-6586	0762-6586	15		
		1	Ring, Cushioning	59-86536	0759-86536	14		
		1	Piston Cartridge	62-6844	0762-6844	13		
		1	Retaining Ring	2540-564	9540-564	12		
		4	Hex.Hd. Cap Screw		DIN-931-3/8 UNC x 1 1/4"	11		
		1	Washer	62-2918	0762-2918	10		
		1	Spacer	62-6703	0762-6703	9		
		1	Compression Spring	62-2920	0762-2920	8		
		1	Sleeve, thimble locking	62-6683	0762-6683	7		
		1	Ring,spring locking	62-2915	0762-2915	6		
		1	Ring	62-6709	0762-6709	5		
		1	Screw piston locating	48-88490	0748-88490	4		
		1	Ring, covering	62-2912	0762-2912	3		
		1	Adapter	62-6843	0762-6843	2		
		1	Locking Stud	48-88493	0748-88493	1		
		Qty.	Description	IS Part No.	H&B Order No.	Index	Note	
						Benennung : Quick Change Cartridge		
						Zeichnungs- Nr.: 0762-3036-7		
			Zust.	Änderung	Datum	Name		

Quick Change Cartridge with Common Line for Counterblow and Vacuum Assist

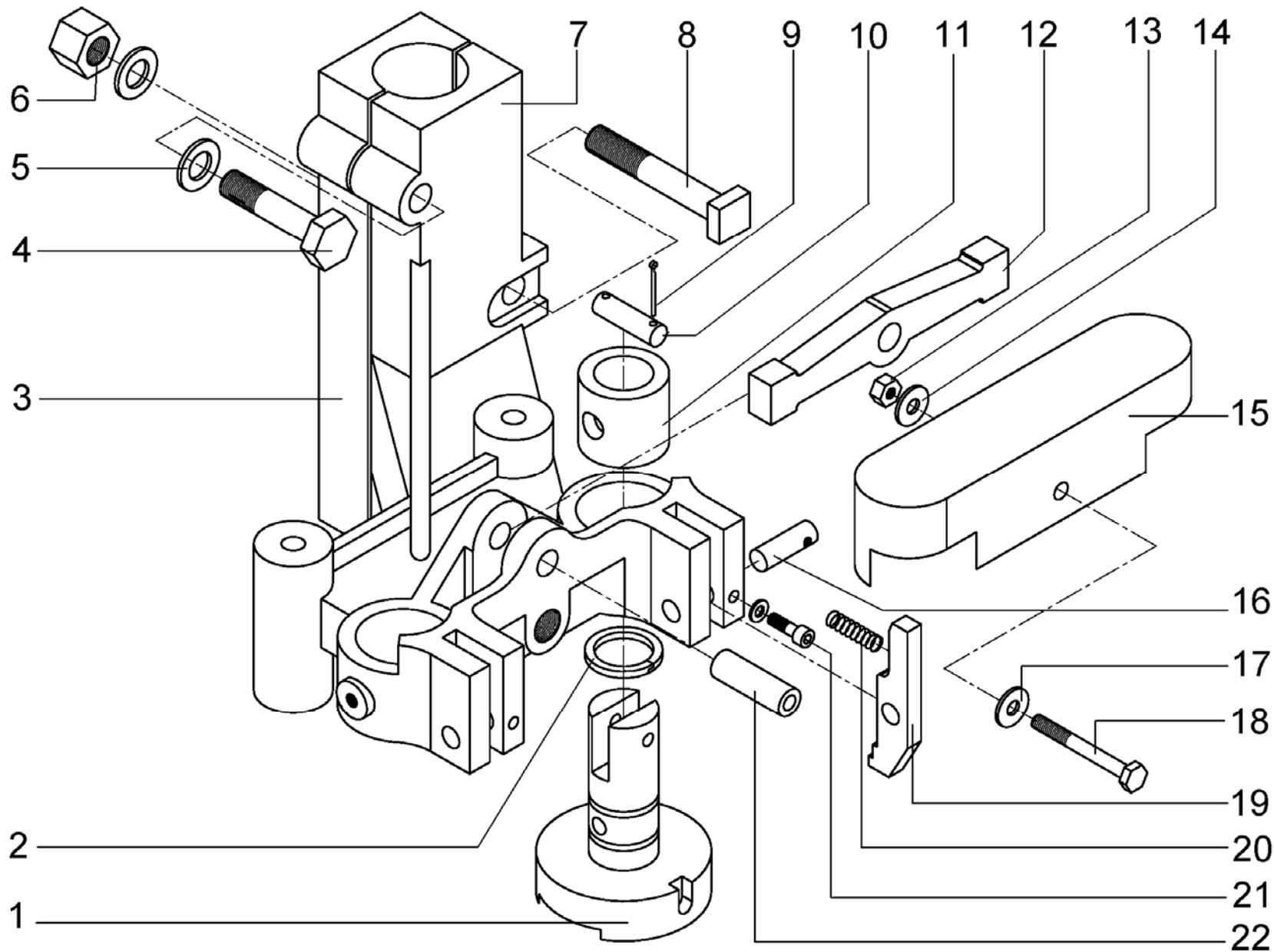
Description	IS-Part No.	H&B-Order No.
Quick Change Cartridge	62-3051 Gr.2	0762-3051-2
Quick Change Cartridge	62-3051 Gr.8	0762-3051-8



	x	1	Hx.Sc.Hd.Cp.Screw	2640-1875	DIN-912-10-31-NF x 3/8"	17	
	x	1	Key	62-6308	0762-6308	16	
x	x	1	Screw, piston locating	48-88490	0748-88490	15	
x		1	Spring Retainer	62-6679	0762-6679	14	
	x	1	Spring Retainer	62-2919	0762-2919	14	
x	x	1	Compression Spring	62-1426	0762-1426	13	
x	x	1	Washer	62-2918	0762-2918	12	
x	x	1	Compression Spring	62-2920	0762-2920	11	
x	x	1	Adapter	62-2986	0762-2986	10	
x	x	1	Compression Spring	62-6008	0762-6008	9	
x		1	Thimble Lock	62-6683	0762-6683	8	
	x	1	Thimble Lock	62-2916	0762-2916	8	
x	x	1	Ring, spring locking	62-2915	0762-2915	7	
x	x	1	Ring, sleeve retaining	62-6009	0762-6009	6	
x	x	1	Sleeve, plunger locking	62-2984	0762-2984	5	
x		1	Piston	62-6682	0762-6682	4	
	x	1	Piston	62-2914	0762-2914	4	
x	x	1	Retainer	62-2913	0762-2913	3	
x	x	4	Hex. Hd. Cap Screw	2660-430	DIN-933-3/8 UNC x 1"	2	
x	x	1	Ring, covering	62-2912	0762-2912	1	
Gr.8	Gr.2	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Quick Change Cartridge
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions -GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.:
							0762-3051-2
							0762-3051-8
			Zust.	Änderung	Datum	Name	

Baffle Arm DG 5" (Emhart Style)

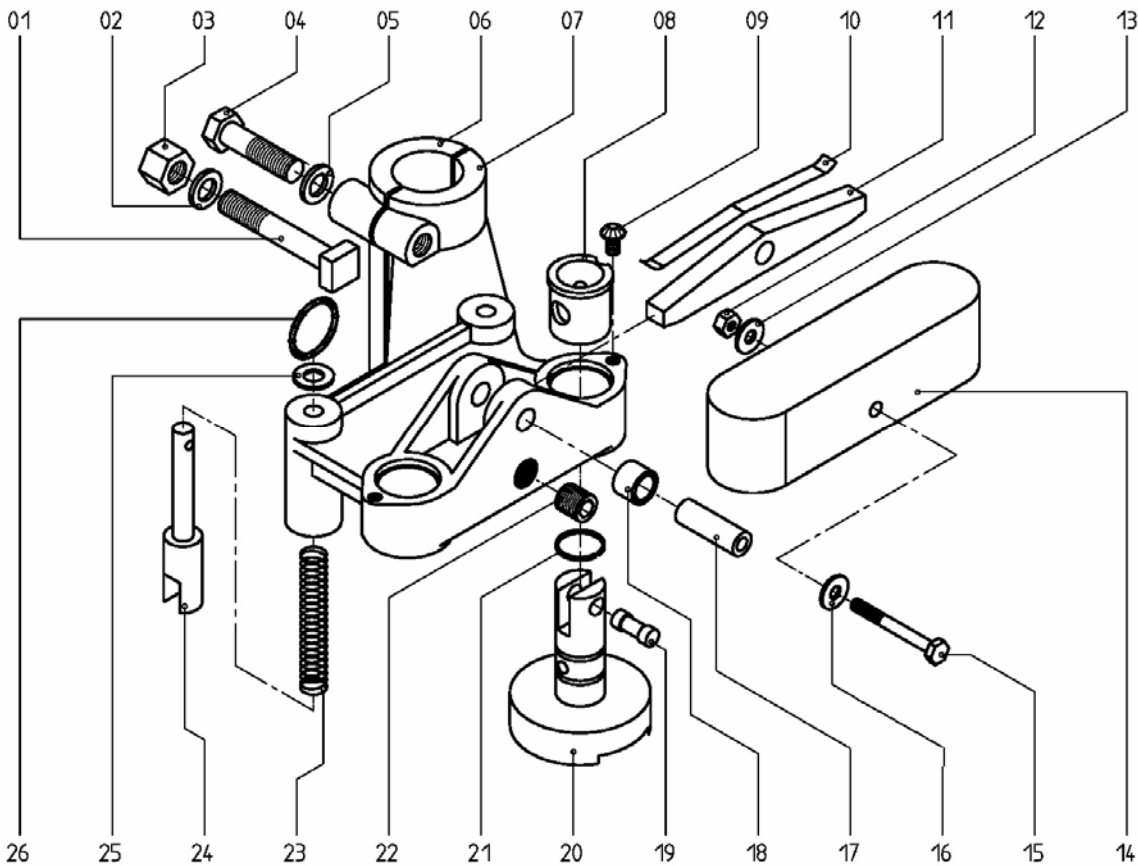
Description	IS-Part No.	H&B-Order No.
Baffle Arm DG 5"	191-7823 Gr.3	0791-7823-3



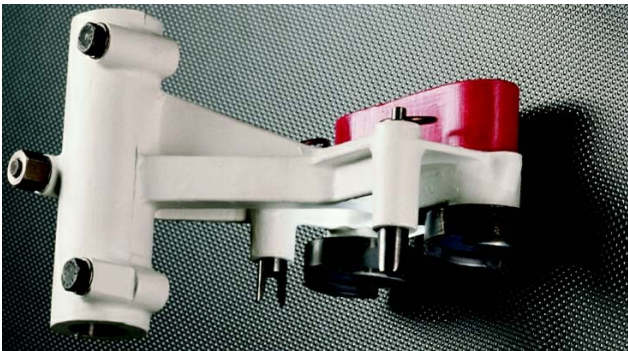
	2	Hx.Soc.Hd.Cp Screw & Washer DIN 912		No.8-32 x1/2"UNC & DIN-125-4	21	
	2	Compression Spring	3080-421	7080-421	20	
	2	Finger	191-23396	0791-23396	19	
	1	Hexagon Head Cap Screw		DIN-931-1/4"UNC x 2 1/2"	18	
	1	Washer		DIN 134 – 6,4	17	
	2	Pin	191-23500	0791-23500	16	
	1	Guard	191-23366	0791-23366	15	
	1	Washer		DIN 134 – 6,4	14	
	1	Nylon Insert Stop Nut		DIN 985-1/4" UNC	13	
	1	Equalizer	191-23363	0791-23363	12	
	2	Bushing	191-13225	0791-13225	11	
	2	Pin	191-14826	0791-14826	10	
	4	Cotter Pin		DIN-94– 2,5 x 15	9	
	1	SquareHeadBolt 1/2" UNC x 3 "	191-16141	0791-16141	8	
	1	Body		1284-088	7	
	1	Hex Nut	1180-1601	7180-1601	6	
	3	Washer		DIN 125 – 13	5	
	2	Hexagon Head Cap Screw		DIN-931-1/2"UNC x 2"	4	
	1	Cap		1284-089	3	
	4	Piston Ring	2520-10	9520-10	2	
	2	Lock Ring	191-21569	07191-21569	1	
	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
				Datum	Name	Benennung :
				Gez.		Baffle Arm DG 5"
				Gep.		
				Hartmann & Bender Vertriebs – und Produktions -GmbH Hauptstraße 70 72 65396 Walluf am Rhein		Zeichnungs- Nr.:
						0791-7823-1
		Zust.	Änderung	Datum	Name	

Baffle Arm DG 5" (Maul Style)

Description	IS-Part No.	H&B-Order No.
Baffle Arm DG 5"	500-555-500	500-555-500
Baffle Arm DG 5"	500-555-501	500-555-501



500-555-501 is shown

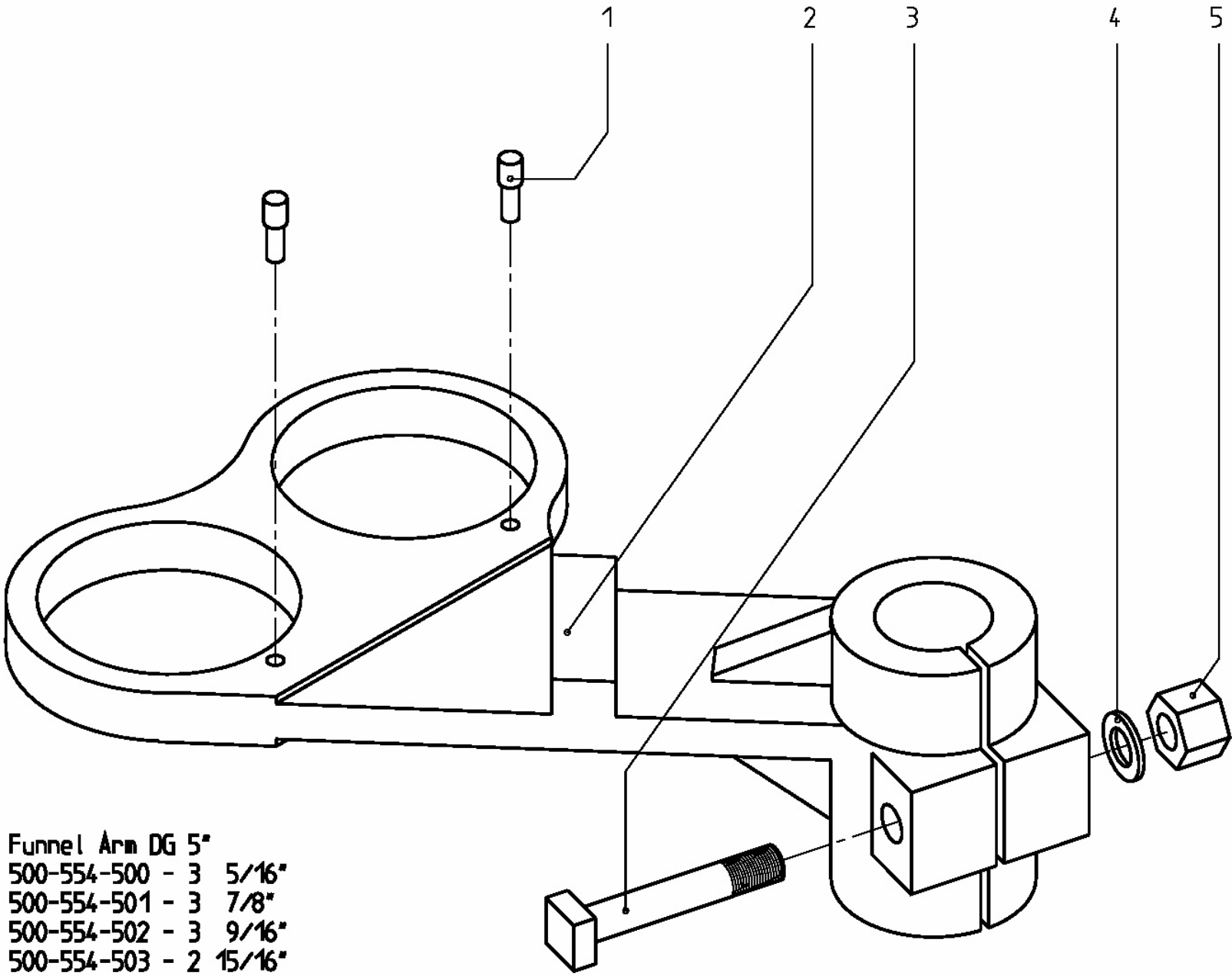


500-555-500 is shown

	2	Ring 32 x 4		H&B-01927	26	
	2	Washer		DIN-125 - 10	25	
	2	Retainer	191-2727	0791-2727	24	
	2	Spring	191-1286	0791-1286	23	
	1	Plug		DIN-906 – R 3/8"	22	
	2	Piston Ring	2520-10	9520-10	21	
	2	Lock Ring	191-10835	0791-10835	20	
	2	Spring Pin	191-10833	0791-10833	19	
	2	Bushing		17,5 x 12,7 x 12,5	18	
	1	Pin (45 mm lg.)		H&B-10831-45	17	
	1	Washer		DIN-134 – 6,4	16	
	1	Hexagon Head Cap Screw		DIN-931-1/4"NC x 2 1/2"	15	
	1	Guard		0500-555-500-03	14	
	1	Washer		DIN-134 – 6,4	13	
	1	Nylon Insert Stop Nut		DIN 985-1/4" UNC	12	
	1	Equalizer		H&B-555-500-01	11	
	1	Holding Spring		0500-555-500-02	10	
	2	Button Socket Cap Screw		ISO-7380-1/4"UNC x 3/8"	9	
	2	Bushing		0800-521	8	
	1	Body 500-555-500 / 500-555-501		1284-033 / 1284-092	7	
	1	Cap		1284-034 / 1284-034	6	
	2	Washer		DIN-125 – 13	5	
	2	Hexagon Head Cap Screw		DIN-931-1/2"UNC x 2"	4	
	1	Hex Nut	1180-1601	7180-1601	3	
	1	Washer		DIN-125 – 13	2	
	1	Square Head Bolt 1/2" UNC x 3 1/4"	191-16142	0791-16142	1	
	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
				Datum	Name	Benennung :
				Gez.		Baffle Arm DG 5"
				Gep.		
						Zeichnungs- Nr.:
						500-555-500
						500-555-501
		Zust.	Änderung	Datum	Name	

Funnel Arm DG 5" (Maul Style)

Description	Funnel No.	Funnel Size – inch / metric	H&B-Order No.
Funnel Arm DG 5” 3 5/16” DIA.	0	3 1/4" / 82,50	0500-555-500
Funnel Arm DG 5” 3 7/8” DIA.	2 A	3 13/16 “ / 96,84	0500-555-501
Funnel Arm DG 5” 3 9/16” DIA.	2	3 1/2" / 88,90	0500-555-502
Funnel Arm DG 5” 2 15/16” DIA.	00	2 7/8” / 73,00	0500-555-503



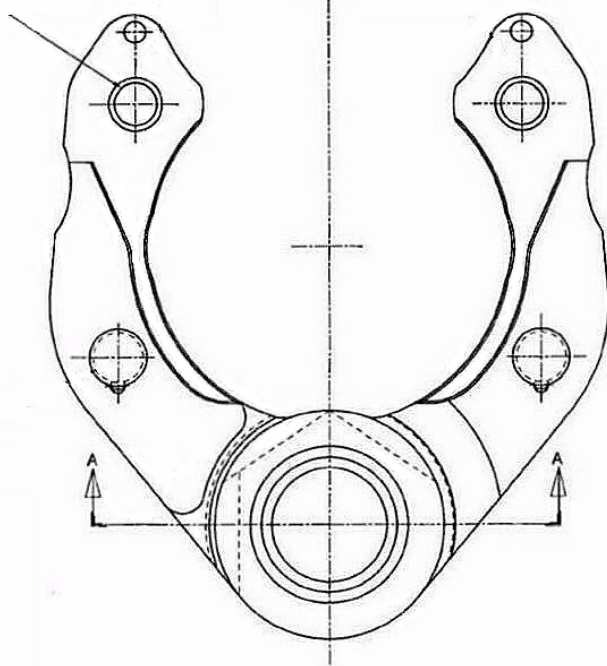
Funnel Arm DG 5"
500-554-500 - 3 5/16"
500-554-501 - 3 7/8"
500-554-502 - 3 9/16"
500-554-503 - 2 15/16"

x	x	x	x	1	Hex Nut	1180-1601	7180-1601	5
x	x	x	x	1	Washer		DIN 125 -13	4
x	x	x	x	1	Square Head Bolt 1/2” UNC x 3 ”	191-16141	0791-16141	3
x				1	Funnel Arm Body Typ 503		1284-085-A	2
	x			1	Funnel Arm Body Typ 502		1284-084-A	2
		x		1	Funnel Arm Body Typ 501		1284-084	2
			x	1	Funnel Arm Body Typ 500		1284-085	2
x	x	x	x	2	Pin	191-1941	0791-16141	1
2 15/16 DIA.	3 9/16 DIA.	3 7/8 DIA.	3 5/16 DIA.	Qty.	Description	IS Part No.	H&B Order No.	Index
Typ 503	Typ 502	Typ 501	Typ 500		Hartmann & Bender Vertriebs – und Produktionsgesellschaft mbH Hauptstraße 70 - 72 65396 Walluf am Rhein		Funnel Arm DG 5“ 500-554-500 500-554-501 500-554-502 500-554-503	

Blank Mould Holder DG 5" – Non Scissor Type

Description	IS-Part No.	H&B-Order No.
Blank Mould Holder DG 5" – No.1	191-9240 Gr.2	0791-9240-2
Blank Mould Holder DG 5" – No.2	191-9241 Gr.2	0791-9241-2
Blank Mould Holder DG 5" – No.3	191-9242 Gr.2	0791-9242-2

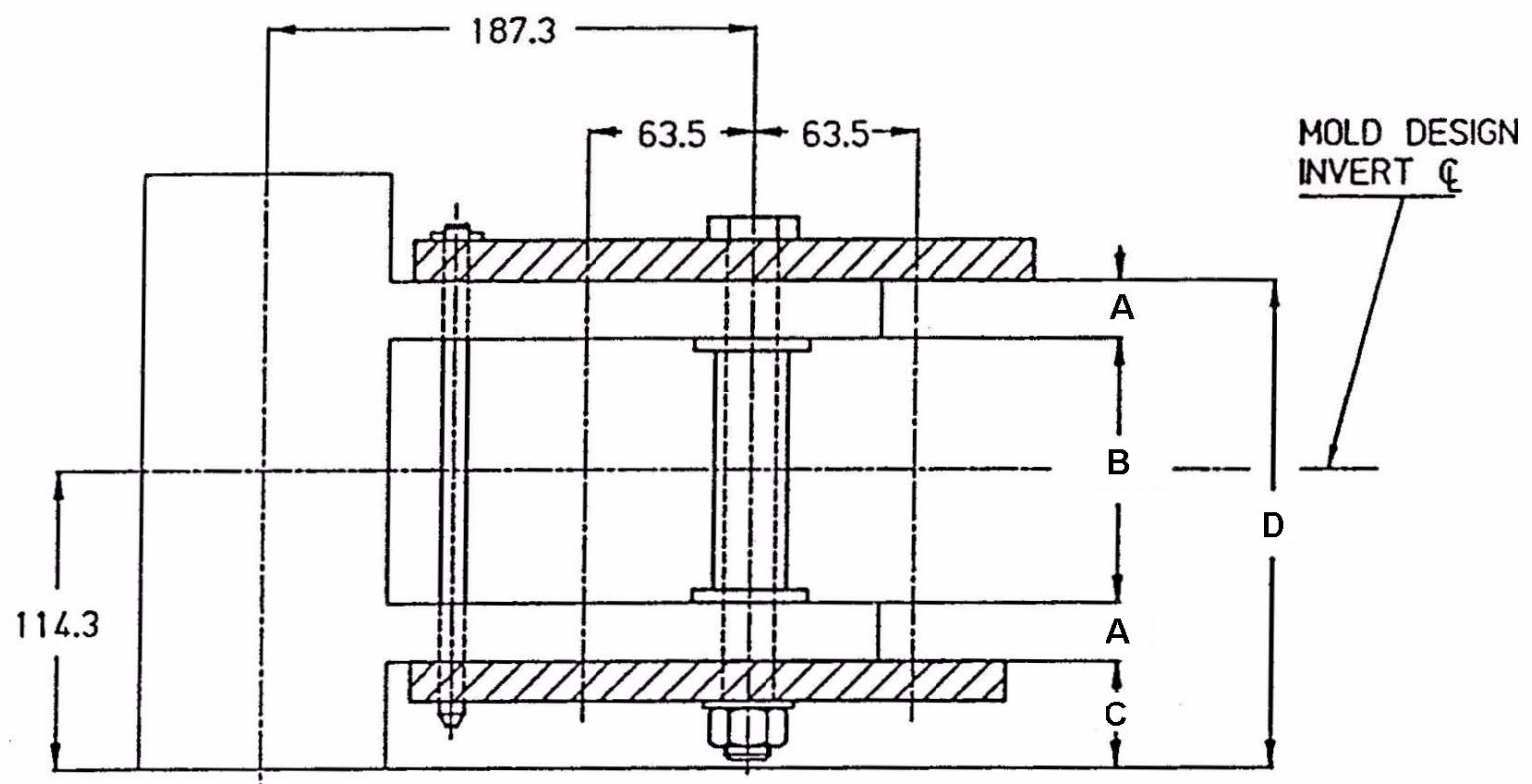
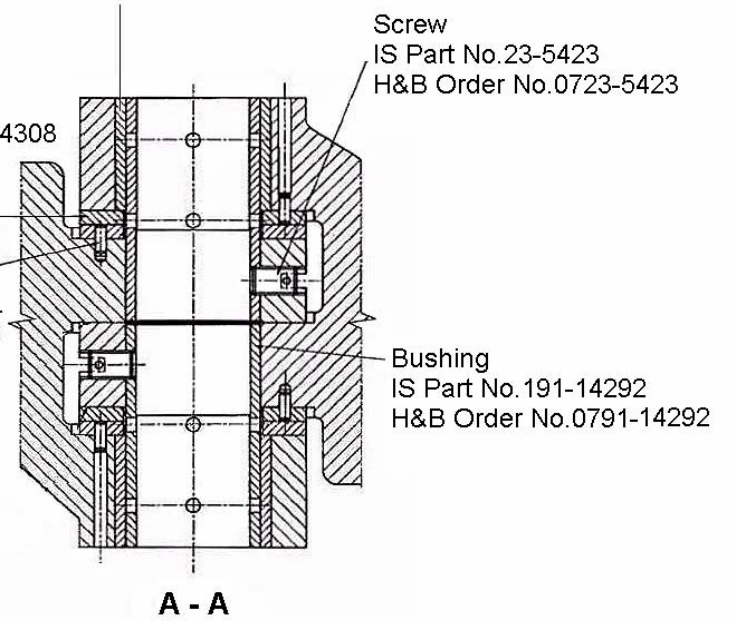
Bushing
IS Part No.191-13157
H&B-Order No.0791-13157



Bushing
IS Part No.191-14191
H&B Order No.0791-14191

Thrust Washer
IS Part No.191-14308
H&B Order No.0791-14308

Screw
IS Part No.23-5423
H&B Order No.0723-5423

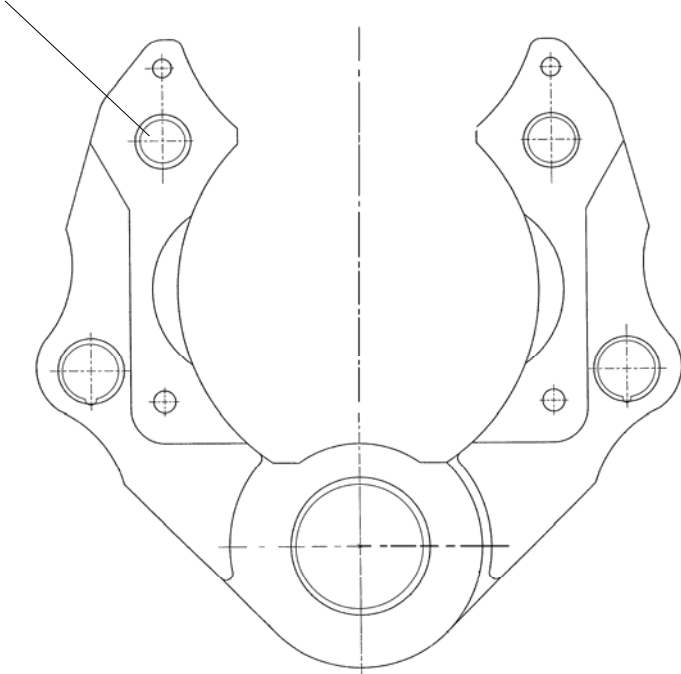


Description	A	B	C	D
Blank Mould Holder No.1	19,05	57,15	53,98	149,22
Blank Mould Holder No.2	22,22	76,20	53,98	149,22
Blank Mould Holder No.3	22,22	101,60	41,27	161,92

Blow Mould Holder DG 5"

Description	IS-Part No.	H&B-Order No.
Blow Mould Holder DG 5" – No.1	191-9009 Gr.4	0791-9009-4
Blow Mould Holder DG 5" – No.2	191-9010 Gr.4	0791-9010-4
Blow Mould Holder DG 5" – No.3	191-9011 Gr.4	0791-9011-4

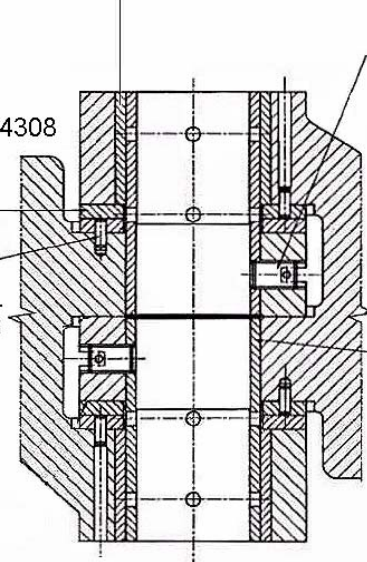
Bushing
IS Part No.191-13157
H&B Order No.0791-13157



Bushing
IS Part No.191-14191
H&B Order No.0791-14191

Thrust Washer
IS Part No.191-14308
H&B Order No.0791-14308

Screw
IS Part No.23-5423
H&B Order No.0723-5423

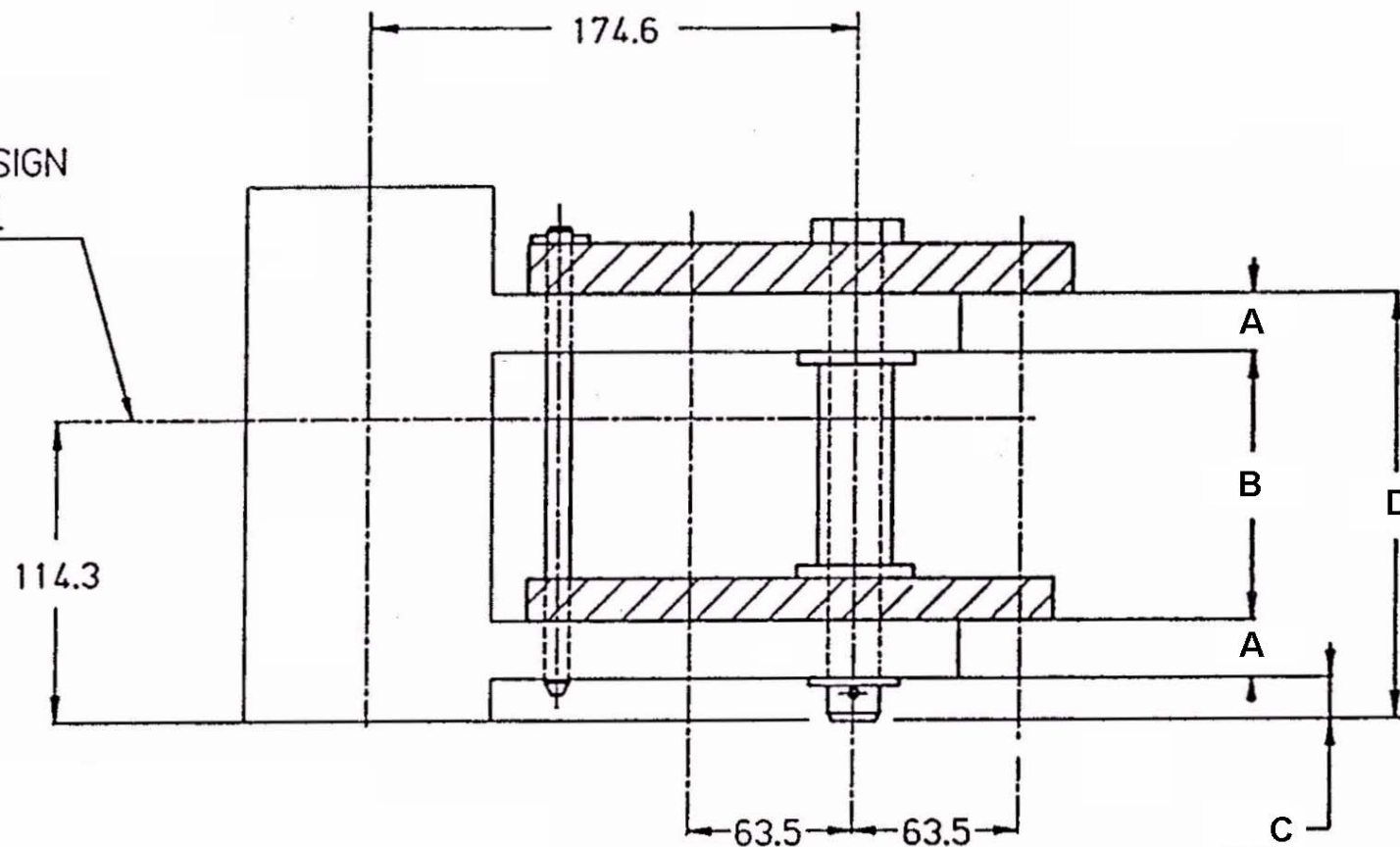


Screw
IS Part No.23-5423
H&B Order No.0723-5423

Bushing
IS Part No.191-14292
H&B Order No.0791-14292

A - A

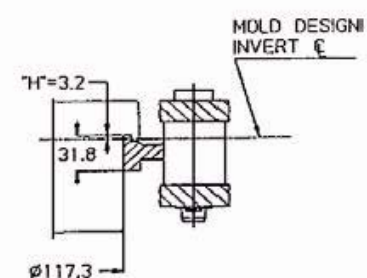
MOLD DESIGN
INVERT ☿



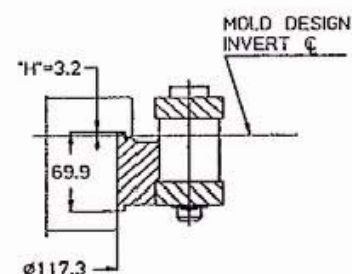
Description	A	B	C	D
Blow Mould Holder No.1	19,05	57,15	53,98	149,22
Blow Mould Holder No.2	22,22	76,20	53,98	149,22
Blow Mould Holder No.3	22,22	101,60	15,87	161,92

Mounting Parts & MH Plates - Selection Chart Assy. No. 1 - 13

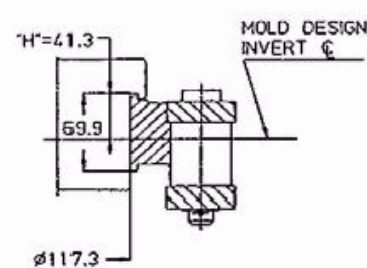
		Assy.No.1	Assy.No.2,3	Assy.No.11	Assy.No.12	Assy.No.13
Collective Part No.						
Mounting Parts	0791-9224 Gr.1					
Bolt	0791-23654	2	2			
Pin	0791-26165	2	2			
Cotter Pin	7060-140	2	2			
Plain Washer	7360-412	2	2			
Collective Part No.						
Inserts 4 5/8" DIA.	0791-9227 Gr.1	1				
Inserts 4 5/8" DIA.	0791-9227 Gr.2		1			
Collective Part No.						
Mounting Parts	0791-9224 Gr.2					
Bolt	0791-23654			2		
Pin	0791-26165			2		
Spacer	0791-23663			2		
Cotter Pin	7060-140			2		
Plain Washer	7360-412			2		
Collective Part No.						
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3			1		
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15			1		
Lower Plate 4 5/8" DIA.	0791-9227 Gr.5			1		
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6			1		
Lower Plate 6" DIA.	0791-9227 Gr.7			1		
Collective Part No.						
Mounting Parts	0791-9224 Gr.3					
Shoulder Screw	0791-23645				2	
Pin	0791-26165				2	
Spacer	0791-23665				2	
Washer	7360-180				2	
Flec Loc Nut 5/8 UNF	7380-3028				2	
Collective Part No.						
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3				1	
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15				1	
Lower Plate 4 5/8" DIA.	0791-9227 Gr.5				1	
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6				1	
Lower Plate 6" DIA.	0791-9227 Gr.7				1	
Collective Part No.						
Mounting Parts	0791-9224 Gr.4					
Bolt	0791-23655					2
Pin	0791-26165					2
Spacer	0791-23367					2
Cotter Pin	7060-140					2
Plain Washer	7360-412					2
Collective Part No.						
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3					1
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4					1
Lower Plate 4 5/8" DIA.	0791-9227 Gr.5					1
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6					1
Lower Plate 6" DIA.	0791-9227 Gr.7					1



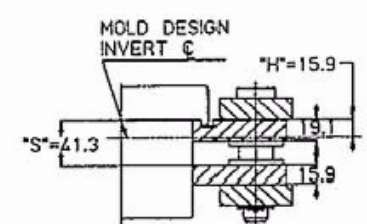
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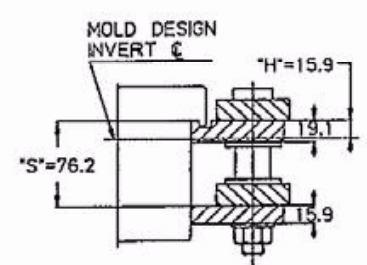
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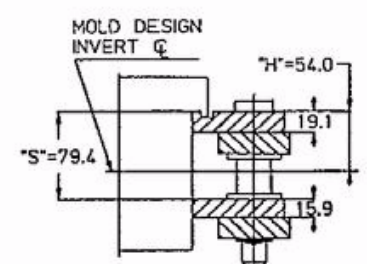
03



11



12



13

Assy. 1 - 3, Ass. 11 - 13

Blank Mould Holder 0791-9240 Gr.2

Blow Mould Holder 0791-9009 Gr.4

Mounting Parts & MH Plates - Selection Chart
Assy. No. 14 - 23

		Assy.No.14	Assy.No.21	Assy.No.22	Assy.No.23
Collective Part No.					
Mounting Parts	0791-9224 Gr.5				
Shoulder Screw	0791-23647	2			
Pin	0791-26166	2			
Spacer	0791-23667	2			
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7180-3025	2			
Collective Part No.					
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3	1			
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			
Collective Part No.					
Mounting Parts	0791-9225 Gr.1				
Shoulder Screw	0791-23649	2			
Pin	0791-26168	2			
Spacer	0791-23670	2			
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7180-3028	2			
Collective Part No.					
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3	1			
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4	1			
Lower Plate 4 5/8" DIA.	0791-9227 Gr.5	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			
Collective Part No.					
Mounting Parts	0791-9225 Gr.2				
Bolt	0791-23657	2			
Pin	0791-26167	2			
Spacer	0791-23668	2			
Cotter Pin	7060-140	2			
Plain Washer	7360-412	2			
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			
Collective Part No.					
Mounting Parts	0791-9225 Gr.3				
Shoulder Screw	0791-23648	2			
Pin	0791-26167	2			
Spacer	0791-23367	2			
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7180-3028	2			
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			

Assy. 14

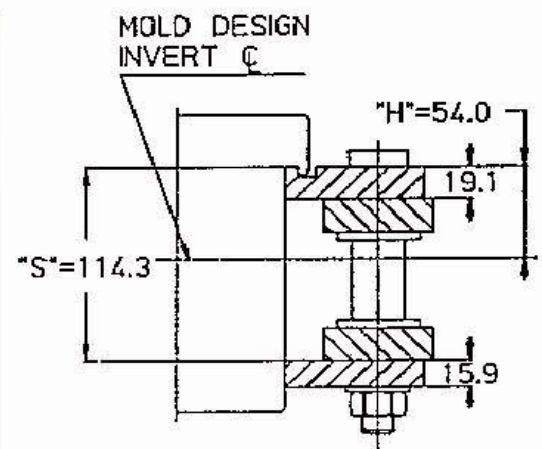
Blank Mould Holder 0791-9240 Gr.2

Blow Mould Holder 0791-9009 Gr.4

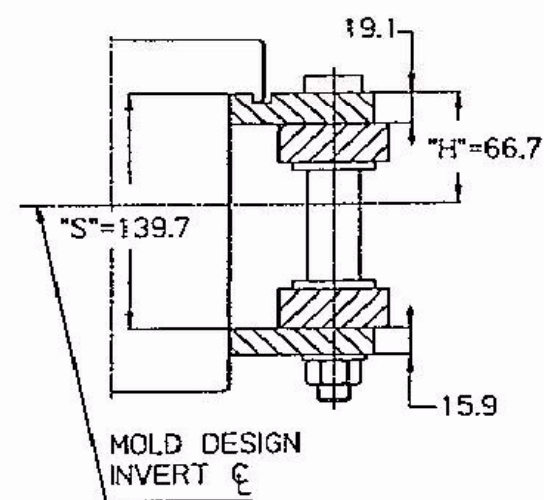
Assy. 21, 22, 23

Blank Mould Holder 0791-9241 Gr.2

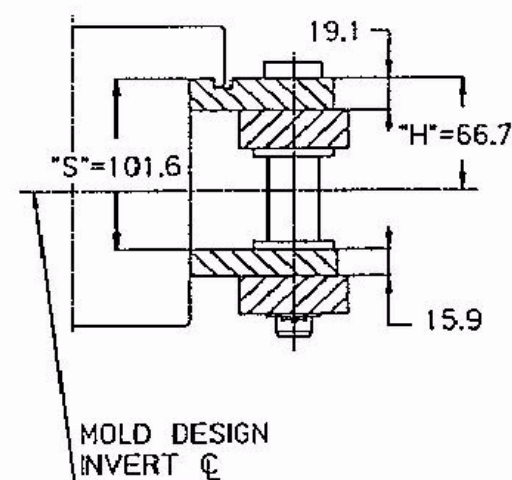
Blow Mould Holder 0791-9010 Gr.4



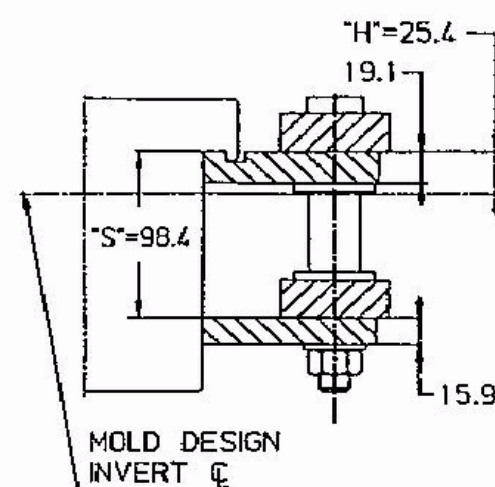
(14)



(21)



(22)



(23)

Mounting Parts & MH Plates - Selection Chart
Assy. No. 24 - 32

		Assy.No.24	Assy.No.25	Assy.No.31	Assy.No.32
Collective Part No.					
Mounting Parts		0791-9225 Gr.4			
Bolt	0791-23656	2			
Pin	0791-26166	2			
Spacer	0791-23666	2			
Cotter Pin	7060-140	2			
Plain Washer	7360-412	2			
Collective Part No.					
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3	1			
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15				
Lower Plate 4 5/8" DIA.	0791-9227 Gr.5	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			
Collective Part No.					
Mounting Parts		0791-9225 Gr.1			
Shoulder Screw	0791-23649	2			
Pin	0791-26168	2			
Spacer	0791-23670	2			
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7380-3028	2			
Collective Part No.					
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3	1			
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4	1			
Lower Plate 5" DIA.	0791-9227 Gr.11	1			
Lower Plate 6" DIA.	0791-9227 Gr.12	1			
Collective Part No.					
Mounting Parts		0791-9226 Gr.1			
Shoulder Screw	0791-23650	2			
Pin	0791-26170	2			
Spacer	0791-23673	2			
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7380-3028	2			
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			
Collective Part No.					
Mounting Parts		0791-9226 Gr.2			
Bolt	0791-23660	2			
Pin	0791-26169	2			
Spacer	0791-23672	2			
Cotter Pin	7060-140	2			
Plain Washer	7360-412	2			
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			

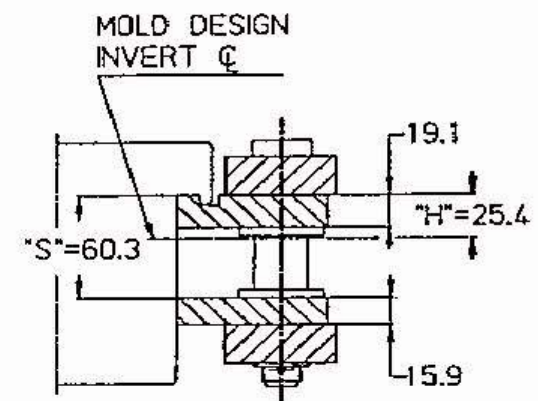
Assy. 24,25

Blank Mould Holder 0791-9241 Gr.2

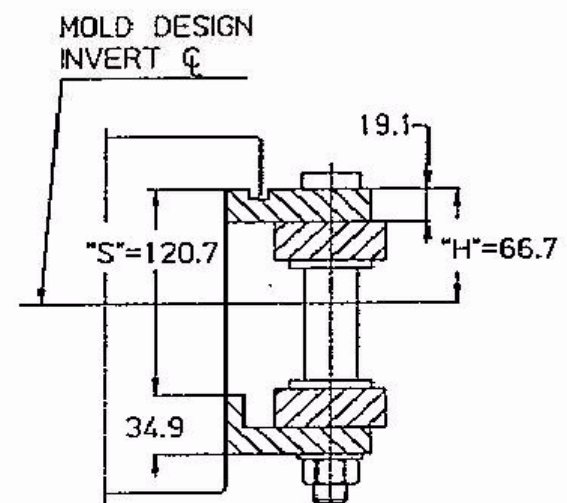
Blow Mould Holder 0791-9010 Gr.4

Assy. 31,32

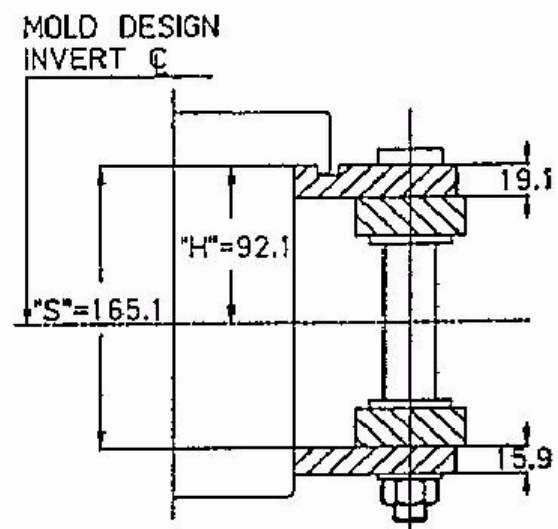
Blank Mould Holder 0791-9242 Gr.2



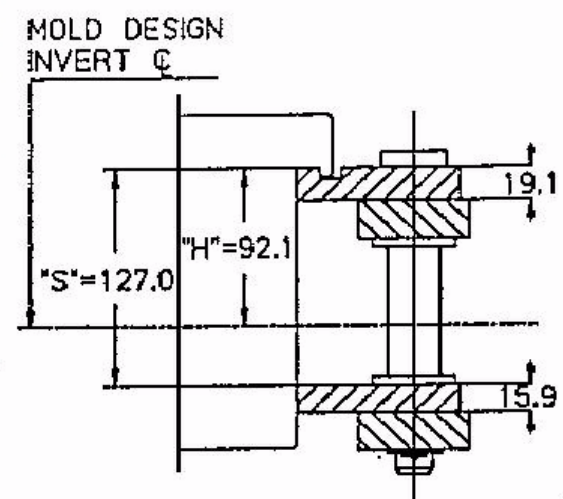
(24)



(25)



(31)



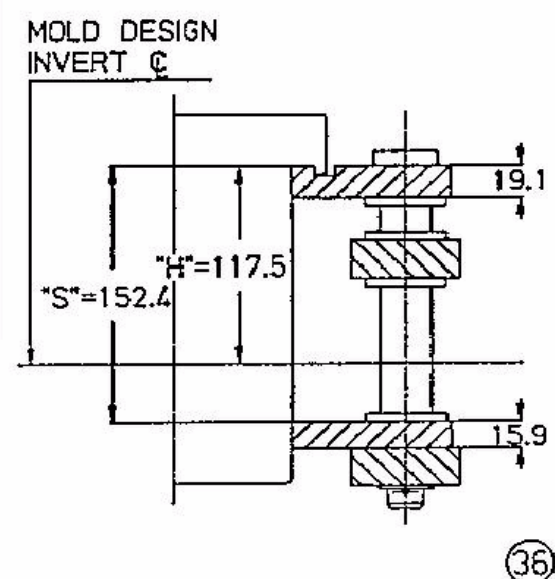
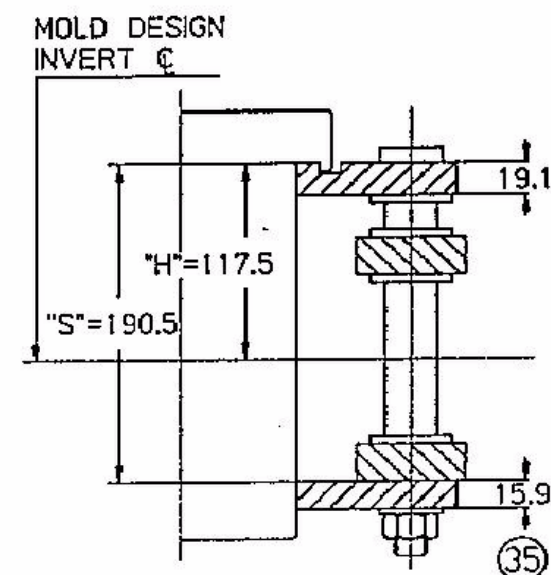
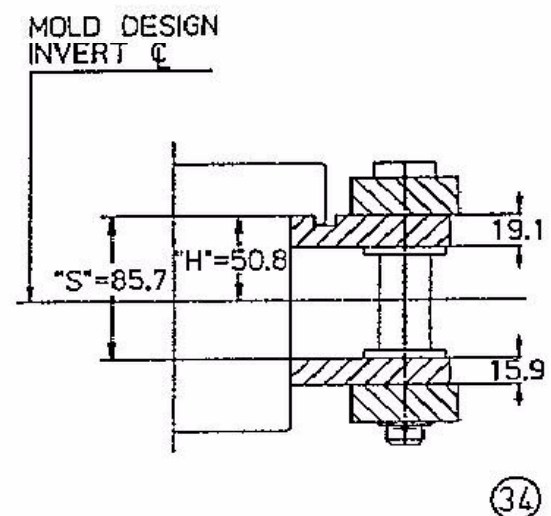
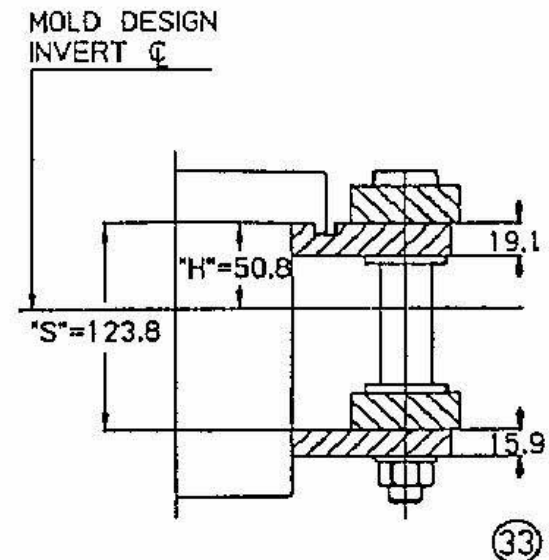
(32)

Mounting Parts & MH Plates - Selection Chart
Assy. No. 33 - 36

		Assy.No.33	Assy.No.34	Assy.No.35	Assy.No.36
Collective Part No.					
Mounting Parts	0791-9226 Gr.3				
Shoulder Screw	0791-23677	2			
Pin	0791-26169	2			
Spacer	0791-23671	2			
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7180-3028	2			
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			
Collective Part No.					
Mounting Parts	0791-9226 Gr.4				
Bolt	0791-23658		2		
Pin	0791-26167		2		
Spacer	0791-23669		2		
Cotter Pin	2060-140		2		
Plain Washer	7360-412		2		
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15		1		
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6		1		
Lower Plate 6" DIA.	0791-9227 Gr.7		1		
Collective Part No.					
Mounting Parts	0791-9226 Gr.5				
Shoulder Screw	0791-23652			2	
Pin	0791-26171			2	
Spacer	0791-23664			2	
Spacer	0791-23673			2	
Washer	7360-180			2	
Flec Loc Nut 5/8 UNF	7180-3028			2	
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4			1	
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6			1	
Lower Plate 6" DIA.	0791-9227 Gr.7			1	
Collective Part No.					
Mounting Parts	0791-9226 Gr.6				
Bolt	0791-23661				2
Pin	0791-26171				2
Spacer	0791-23664				2
Spacer	0791-23672				2
Cotter Pin	7060-140				2
Plain Washer	7360-412				2
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4				1
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6				1
Lower Plate 6" DIA.	0791-9227 Gr.7				1

Assy. 33.34.35.36

Blank Mould Holder 0791-9242 Gr.2

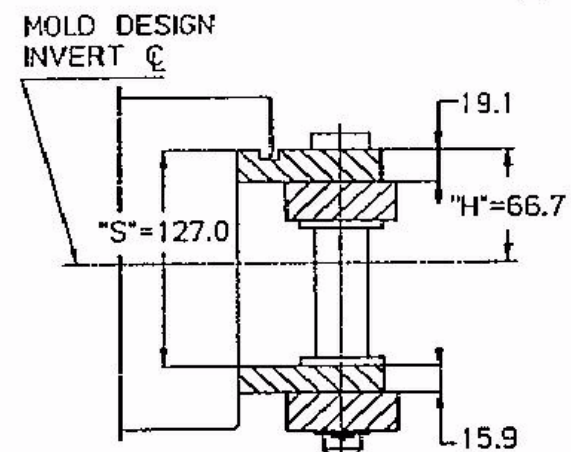
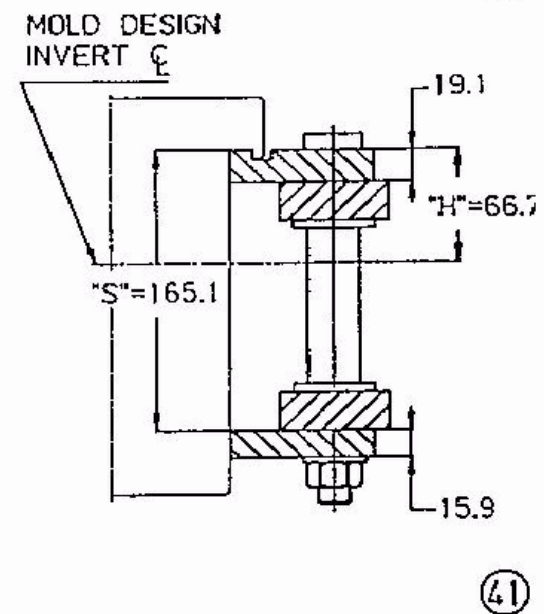
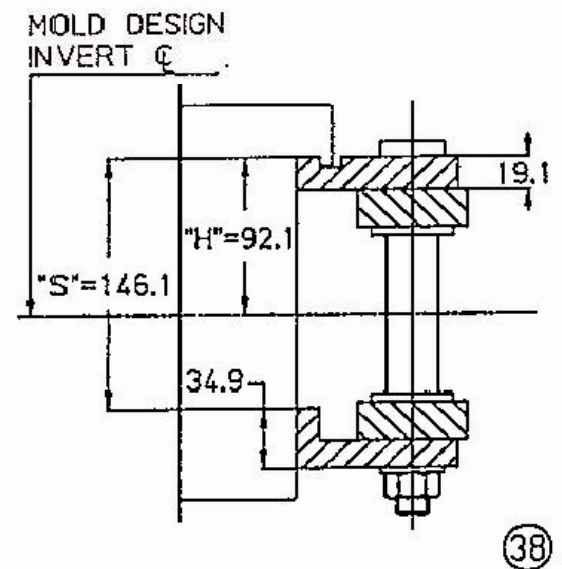
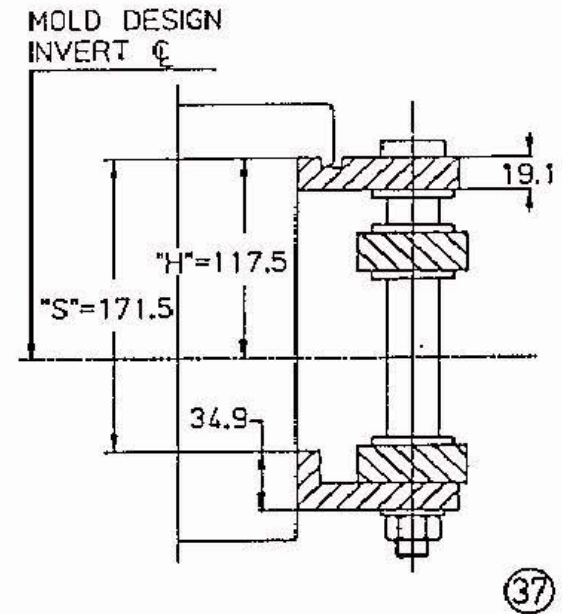


Mounting Parts & MH Plates - Selection Chart
Assy. No. 37 - 42

		Assy No. 37	Assy No. 38	Assy No. 41	Assy No. 42
Collective Part No.					
Mounting Parts	0791-9226 Gr.5				
Shoulder Screw	0791-23652	2			
Pin	0791-26171	2			
Spacer	0791-23664	2			
Spacer	0791-26673				
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7180-3028	2			
Collective Part No.					
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3	1			
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4				
Lower Plate 5" DIA.	0791-9227 Gr.11	1			
Collective Part No.					
Mounting Parts	0791-9226 Gr.1				
Shoulder Screw	0791-23650		2		
Pin	0791-26170		2		
Spacer	0791-23673		2		
Washer	7360-180		2		
Flec Loc Nut 5/8 UNF	7180-3028		2		
Collective Part No.					
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3		1		
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4		1		
Lower Plate 5" DIA.	0791-9227 Gr.11		1		
Collective Part No.					
Mounting Parts	0791-9054 Gr.12				
Shoulder Screw	0791-23650			2	
Pin	0791-26170			2	
Spacer	0791-23673			2	
Washer	7360-180			2	
Flec Loc Nut 5/8 UNF	7180-3028			2	
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4			1	
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6			1	
Lower Plate 6" DIA.	0791-9227 Gr.7			1	
Collective Part No.					
Mounting Parts	0791-9054 Gr.13				
Bolt	0791-23660				2
Pin	0791-26169				2
Spacer	0791-23672				2
Cotter Pin	7060-140				2
Plain Washer	7360-412				2
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4				1
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6				1
Lower Plate 6" DIA.	0791-9227 Gr.7				1

Assy. 37,38
Blank Mould Holder 0791-9242 Gr.2

Assy. 41, 42
Blow Mould Holder 0791-9011 Gr.4

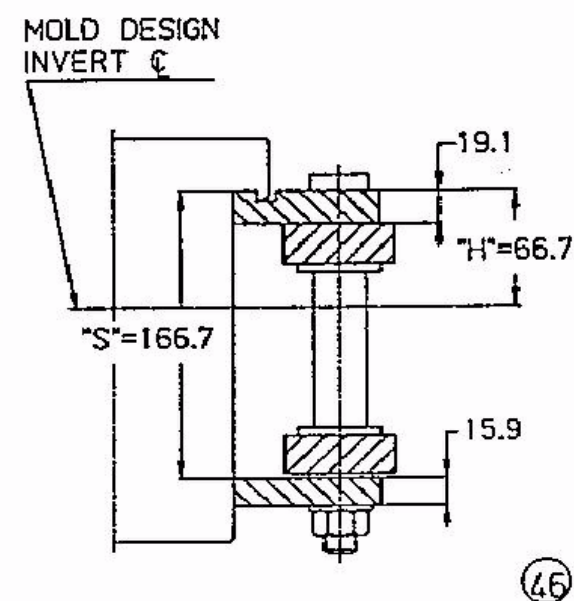
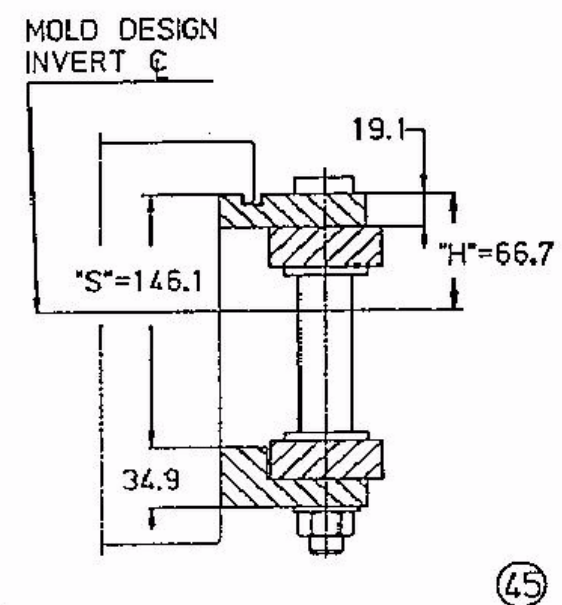
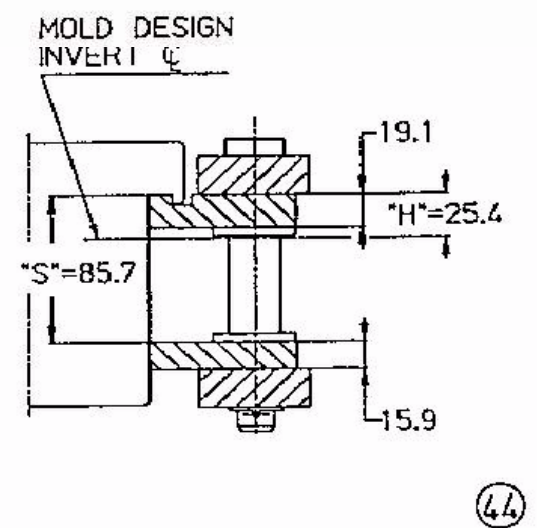
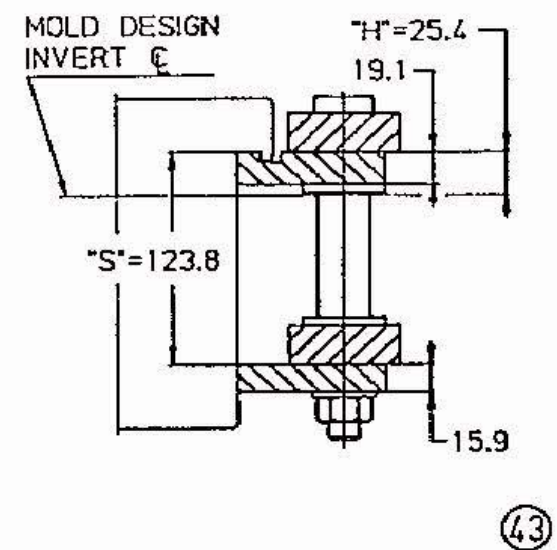


Mounting Parts & MH Plates - Selection Chart
Assy. No. 43 - 46

		Assy.No.43	Assy.No.44	Assy.No.45	Assy.No.46
Collective Part No.					
Mounting Parts	0791-9054 Gr.14				
Shoulder Screw	0791-23677	2			
Pin	0791-26169	2			
Spacer	0791-23671	2			
Washer	7360-180	2			
Flec Loc Nut 5/8 UNF	7380-3028	2			
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15	1			
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6	1			
Lower Plate 6" DIA.	0791-9227 Gr.7	1			
Collective Part No.					
Mounting Parts	0791-9054 Gr.15				
Bolt	0791-23658		2		
Pin	0791-26167		2		
Spacer	0791-23669		2		
Cotter Pin	7060-140		2		
Plain Washer	7360-412		2		
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.15		1		
Lower Plate 5 1/8" DIA.	0791-9227 Gr.6		1		
Lower Plate 6" DIA.	0791-9227 Gr.7		1		
Collective Part No.					
Mounting Parts	0791-9054 Gr.12				
Shoulder Screw	0791-23650			2	
Pin	0791-26170			2	
Spacer	0791-23673			2	
Washer	7360-180			2	
Flec Loc Nut 5/8 UNF	7380-3028			2	
Collective Part No.					
Upper Plate 4 5/8" DIA.	0791-9227 Gr.3			1	
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4			1	
Lower Plate 5" DIA.	0791-9227 Gr.11			1	
Lower Plate 6" DIA.	0791-9227 Gr.12			1	
Collective Part No.					
Mounting Parts	0791-9054 Gr.16				
Shoulder Screw	0791-23651				2
Pin	0791-26170				2
Spacer	0791-23673				2
Washer	0791-23687				2
Washer	7360-180				2
Flec Loc Nut 5/8 UNF	7380-3028				2
Collective Part No.					
Upper Plate 5 1/8" DIA.	0791-9227 Gr.4				1
Lower Plate 6" DIA.	0791-9227 Gr.7				1

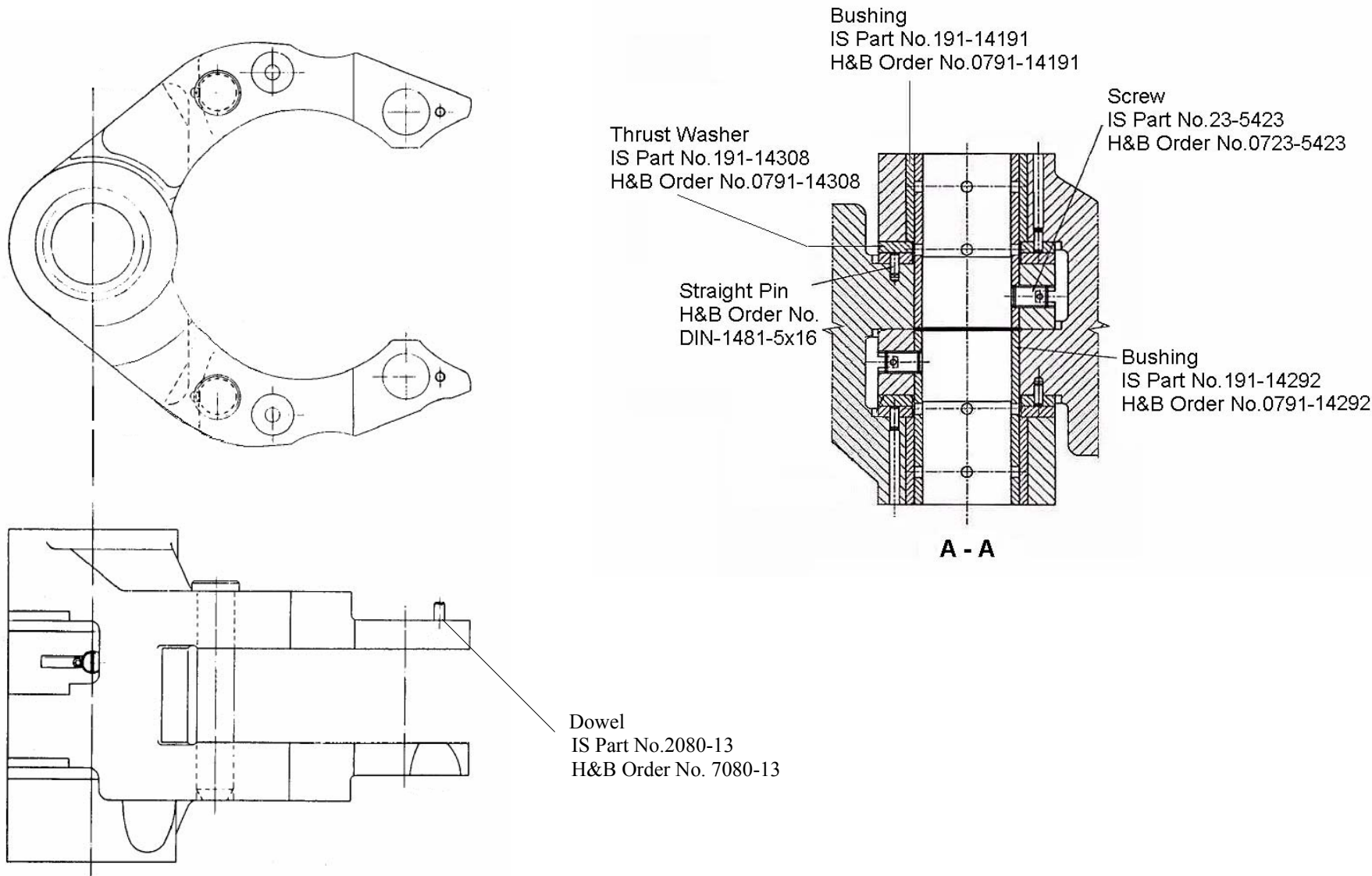
Assy. 43 - 46

Blow Mould Holder 0791-9011 Gr.4



Blank Mould Holder DG 5" – Non Scissor Type – Verti Flow Cooling

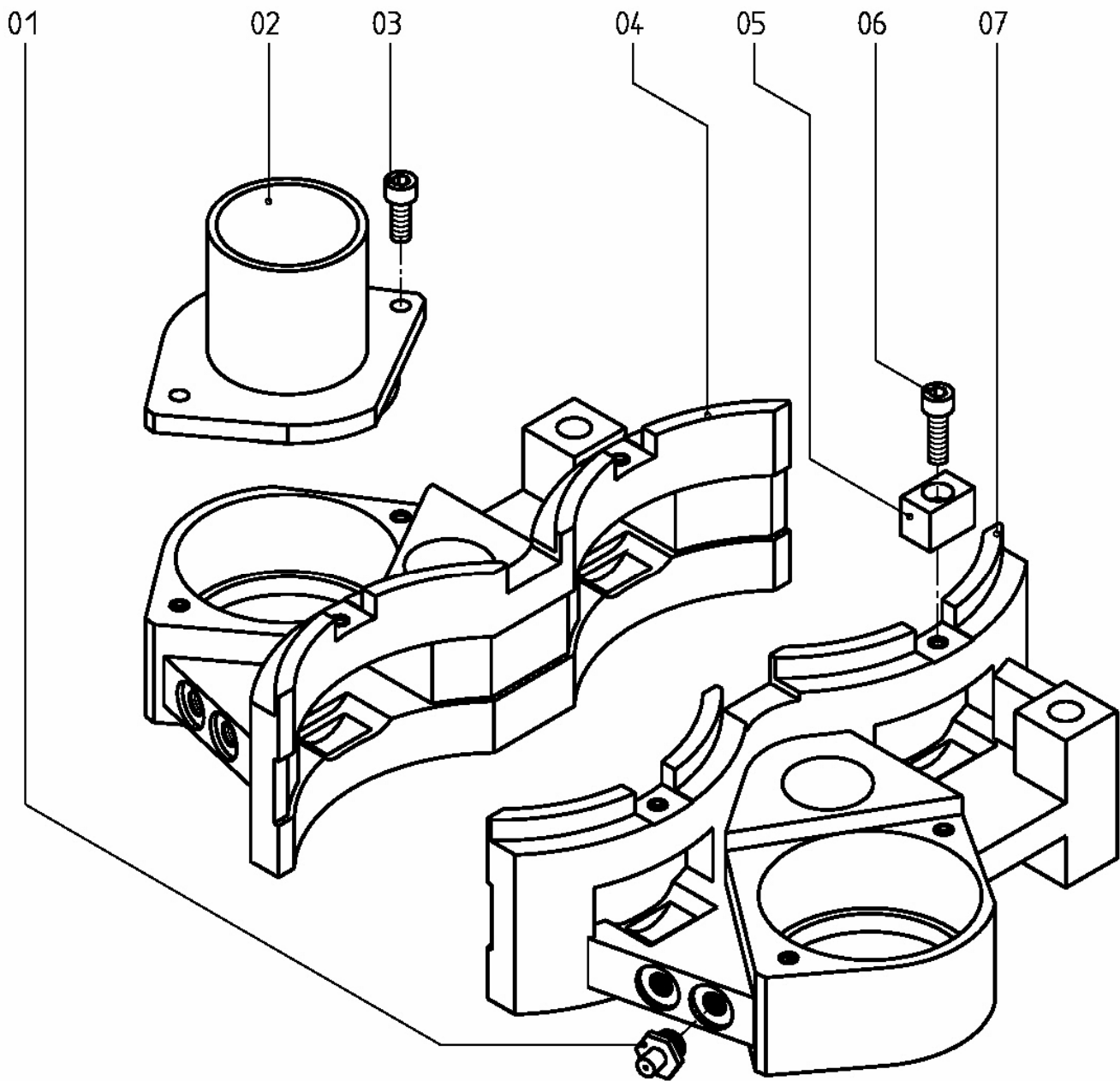
Description	IS-Part No.	H&B-Order No.
Blank Mould Holder Verti Flow, Scissor Type	191-9159 Gr.1	0791-9159-1
Blank Mould Holder Verti Flow, Non Scissor Type (is shown)	191-9159 Gr.2	0791-9159-2



1	Mould Holder	191-9159 Gr.2	0791-9159-2	1	Non Scissor Type, shown
1	Mould Holder	191-9159 Gr.1	0791-9159-1	1	Scissor Type, not shown
Qty. 1/unit	Description	IS Part No.	H&B Order No.	Index	Note
					Verti Flow Cooling DG 5“ Blank Mould Holder 0791-9159
		Datum	Name		
		Gez.			
		Gep.			
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 - 72 65396 Walluf am Rhein		
Änderung	Datum	Name			

Mould Holder Insert DG 5" – Verti Flow Cooling, 5 1/8" DIA.

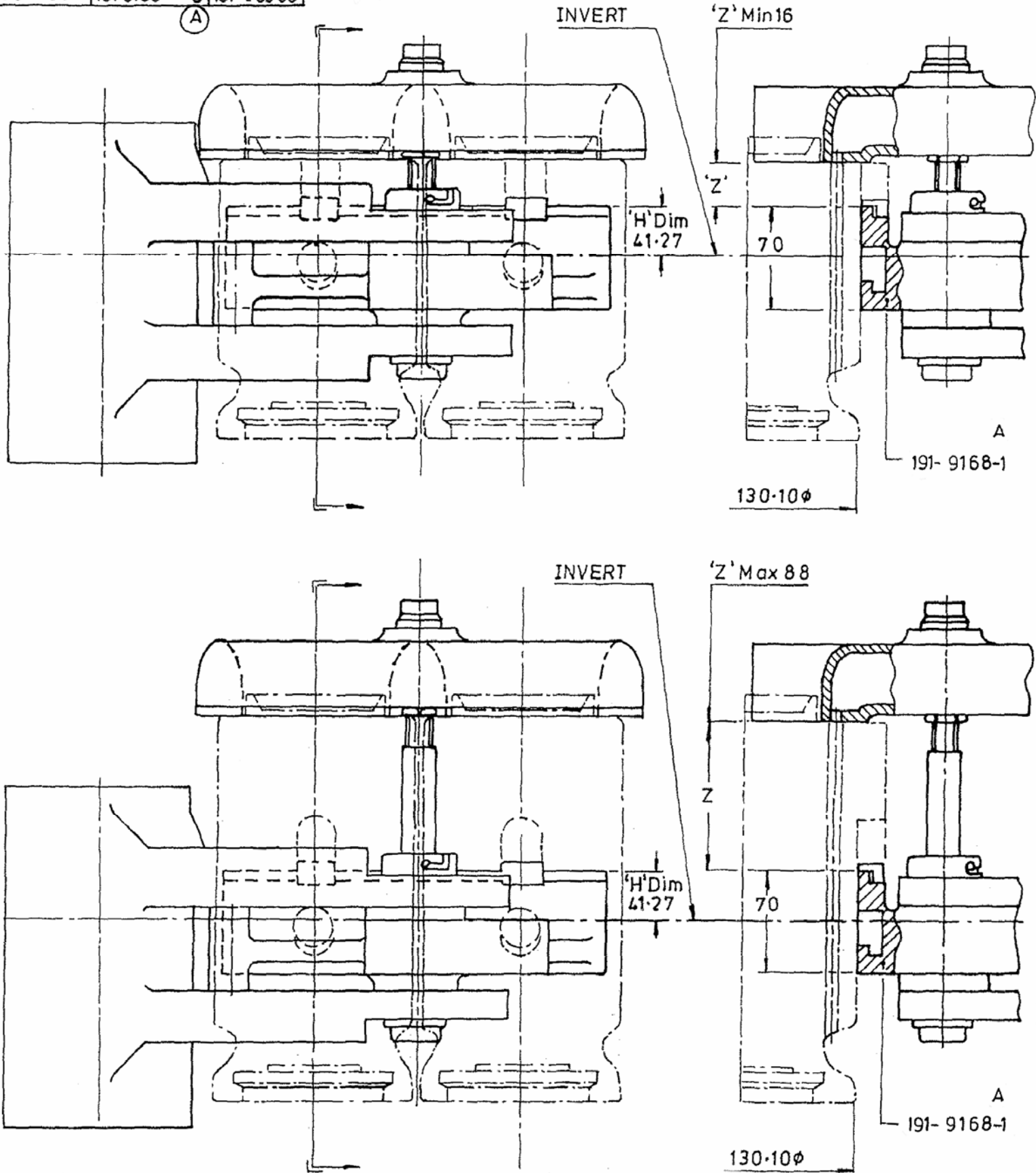
Description	IS-Part No.	H&B-Order No.
Mould Holder Insert DG 5" – Verti Flow, 5 1/8" DIA.	191-9168 Gr.1	0791-9168-1



	1	Insert RH	191-24071	1284-099	7	
	4	Hex. Soc. Head Cap Screw	2640-130	DIN-912-1/4" UNC x 3/4"	6	
	4	Locating Block 3/4"	191-14005	0791-14005	5	
	1	Insert LH	191-24070	1284-098	4	
	4	Hex. Soc.Hd. Cap Screw	2640-100	DI- 912-1/4" UNC x 1/2"	3	
	2	Cover	191-24631	0791-24613	2	
	4	Straight Fitting	1780-30	DIN-71412 - H1-R 1/8"	1	
	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
				Datum	Name	Benennung : Mould Holder Insert Assy. 5 1/8" DIA
				Gez.		
				Gep.		
				Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 - 72 65396 Walluf am Rhein		Zeichnungs- Nr.: 0791-9168-1
		Zust.	Änderung	Datum	Name	

Verti - Flow Cooling – Single Deck

Z' RANGE	PIN	SLEEVE
16 – 38	191-9158 – 6	191-23961
38 – 68	191-9158 – 7	191-23962
68 – 88	191-9158 – 8	191-23963



2	Adjusting Pin Assembly	191-9158 Gr.8	0791-9158-8	6	“Z” Range 68 – 88 mm
2	Adjusting Pin Assembly	191-9158 Gr.7	0791-9158-7	5	“Z” Range 38 – 68 mm
2	Adjusting Pin Assembly	191-9158 Gr.6	0791-9158-6	4	“Z” Range 16 – 38 mm
1	Plenum Chamber Assembly	191-9152 Gr.27	0791-9152-27	3	Single Deck
1	Mounting Assembly	191-9150 Gr.8	0791-9150-8	2	Non scissor Type
1	Mounting Assembly	191-9150 Gr.6	0791-9150-6	1	Scissor Type
Qty. 1/unit	Description	IS Part No.	H&B Order No.	Index	Note
					Verti – Flow Cooling DG 5” Single Deck Blank Mould Holder Plenum Chamber Assembly 5 1/8“ Moulds (130,1 mm)
		Datum	Name		
		Gez.			
		Gep.			
		Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 - 72 65396 Walluf am Rhein			
Änderung	Datum			Name	

Verti - Flow Cooling – Single Deck

191-9150 Gr.6	Mounting Assembly, Scissor Type			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Blank Mould Holder	191-9159 Gr.1	0791-9159-1	1 pcs.
	Mould Holder Insert Assy.	191-9168 Gr.1	0791-9168-1	1 pair
	Upper Air Tube Assy.	191-9148 Gr.3	0791-9148-3	2 set
	Control Pin	23-15564	0723-15564	2 pcs.
	Sleeve Pin	191-24049	0791-24049	2 pcs.
	Circlip	2540-513	9540-513	2 pcs.

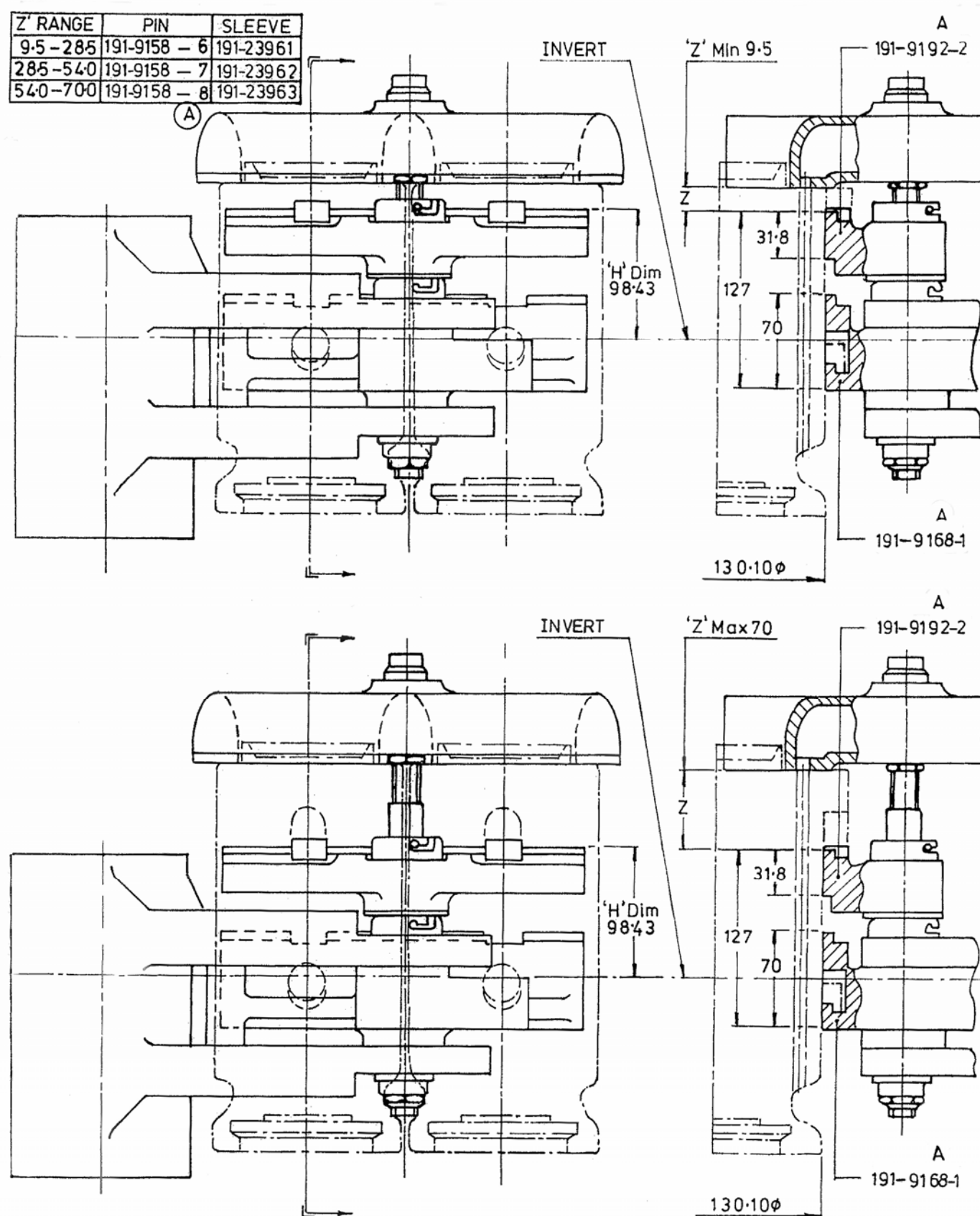
191-9150 Gr.8	Mounting Assembly, Non Scissor Type			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Blank Mould Holder	191-9159 Gr.2	0791-9159-2	1 pcs.
	Mould Holder Insert Assy.	191-9168 Gr.1	0791-9168-1	1 pair
	Upper Air Tube Assy.	191-9148 Gr.3	0791-9148-3	2 set
	Control Pin	23-15564	0723-15564	2 pcs.
	Sleeve Pin	191-24049	0791-24049	2 pcs.
	Circlip	2540-513	9540-513	2 pcs.

191-9152 Gr.27	Plenum Chamber Assembly			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Plenum Chamber RH	191-26958	0791-26958	1 pcs.
	Plenum Chamber LH	191-26957	0791-26957	1 pcs.
	Adjustin Pin Assy. “Z” Range 16 – 38 mm	191-9158 Gr.6	0791-9158-6	2 pcs.
	Sleeve “Z” Range 16 – 38 mm	191-23961	0791-23961	2 pcs.
	Screw SOCHD 5/16NCX5/8	2640-1882	9640-1882	4 pcs.
	Washer	3360-371	7360-371	2 pcs.
	Hex. Jam Nut 1/2-20	1180-1770	7180-1770	2 pcs.
	Hex. Soc.Plug 1/8 NPT	2260-23	9260-23	4 pcs.
	Compression Spring	3080-468	7080-468	2 pcs.
	Adjusting Bushing Assy.	191-9161 Gr.1	0791-9161-1	2 pcs.
	Air Indicator Assy.	191-9153 Gr.1	0791-9153-1	2 pcs.
	Retaining Ring	191-23982	0791-23982	2 pcs.

	Conversion to “Z” Range 38 -68 mm			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Adjustin Pin Assy.	191-9158 Gr.7	0791-9158-7	2 pcs.
	Sleeve	191-23962	0791-23962	2 pcs.

	Conversion to “Z” Range 68 -88 mm			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Adjustin Pin Assy.	191-9158 Gr.8	0791-9158-8	2 pcs.
	Sleeve	191-23963	0791-23963	2 pcs.

Verti - Flow Cooling –Double Deck



2	Adjusting Pin Assembly	191-9158 Gr.8	0791-9158-7	6	“Z” Range 54 – 70 mm
2	Adjusting Pin Assembly	191-9158 Gr.7	0791-9158-7	5	“Z” Range 28,5 – 54 mm
2	Adjusting Pin Assembly	191-9158 Gr.6	0791-9158-6	4	“Z” Range 9,5 – 28,5 mm
1	Plenum Chamber Assembly	191-9152 Gr.27	0791-9152-28	3	Double Deck
1	Mounting Assembly	191-9150 Gr.20	0791-9150-20	2	Non scissor Type
1	Mounting Assembly	191-9150 Gr.7	0791-9150-7	1	Scissor Type
Qty. 1/unit	Description	IS Part No.	H&B Ident No.	Index	Note
		Datum	Name		
		Gez.			
		Gep.			
Aenderung	Datum	Name			

**Verti – Flow Cooling DG 5”
Double Deck Blank Mould Holder
Plenum Chamber Assembly
5 1/8“ Moulds (130,1 mm)**

Verti - Flow Cooling –Double Deck

191-9150 Gr.7	Mounting Assembly, Scissor Type			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Blank Mould Holder	191-9159 Gr.1	0791-9159-1	1 pcs.
	Mould Holder Insert Assy.	191-9168 Gr.1	0791-9168-1	1 pair
	Upper Insert Assy.	191-9192 Gr.2	0791-9192-1	1 pair
	Upper Air Tube Assy.	191-9148 Gr.3	0791-9148-3	2 set
	Control Pin	191-24650	0791-24650	2 pcs.
	Extension Pin	191-24649	0791-24649	2 pcs.
	Sleeve Pin	191-24049	0791-24049	2 pcs.
	Circlip	2540-513	9540-513	2 pcs.
	Wear Washer	191-24612	0791-24612	2 pcs.
	Flex Loc. Nut 3/4 – 18 UNF	1180-3036	7180-3036	2 pcs.

191-9150 Gr.20	Mounting Assembly, Non Scissor Type			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Blank Mould Holder	191-9159 Gr.2	0791-9159-2	1 pcs.
	Mould Holder Insert Assy.	191-9168 Gr.1	0791-9168-1	1 pair
	Upper Insert Assy.	191-9192 Gr.2	0791-9192-1	1 pair
	Upper Air Tube Assy.	191-9148 Gr.3	0791-9148-3	2 set
	Control Pin	191-24650	0791-24650	2 pcs.
	Extension Pin	191-24649	0791-24649	2 pcs.
	Sleeve Pin	191-24049	0791-24049	2 pcs.
	Circlip	2540-513	9540-513	2 pcs.
	Wear Washer	191-24612	0791-24612	2 pcs.
	Flex Loc. Nut 3/4 – 18 UNF	1180-3036	7180-3036	2 pcs.

191-9152 Gr.28	Plenum Chamber Assembly			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Plenum Chamber RH	191-26958	0791-26958	1 pcs.
	Plenum Chamber LH	191-26957	0791-26957	1 pair
	Adjustin Pin Assy.	191-9158 Gr.6	0791-9158-6	2 pcs.
	Sleeve	191-23961	0791-23961	2 pcs.
	Screw SOCHD 5/16NCX5/8	2640-1882	9640-1882	4 pcs.
	Washer	3360-371	7360-371	2 pcs.
	Hex. Jam Nut 1/2-20	1180-1770	7180-1770	2 pcs.
	Hex. Soc.Plug 1/8 NPT	2260-23	7260-23	4 pcs.
	Compression Spring	3080-468	7080-468	2 pcs.
	Adjusting Bushing Assy.	191-9161 Gr.1	0791-9161-1	2 pcs.
	Air Indicator Assy.	191-9153 Gr.1	0791-9153-1	2 pcs.
	Retaining Ring	191-23982	0791-23982	2 pcs.

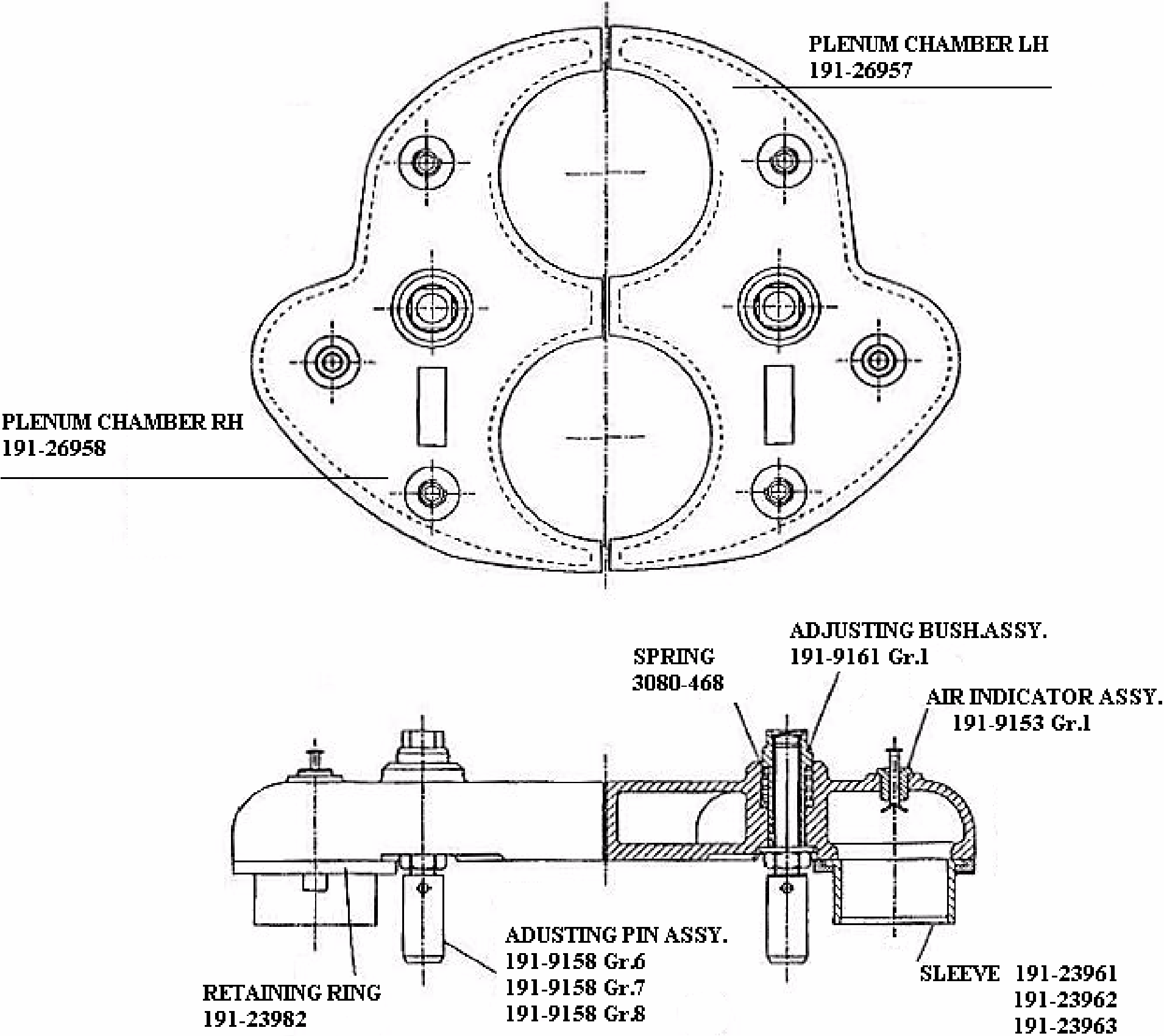
	Conversion to “Z” Range 28,5 – 54 mm			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Adjustin Pin Assy.	191-9158 Gr.7	0791-9158-7	2 pcs.
	Sleeve	191-23962	0791-23962	2 pcs.

	Conversion to “Z” Range 54 – 70 mm			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Adjustin Pin Assy.	191-9158 Gr.8	0791-9158-8	2 pcs.
	Sleeve	191-23963	0791-23963	2 pcs.

191-9150 Gr.22	Conversion to Double Deck *			
<i>contains :</i>	<i>Decsription</i>	<i>IS Part No.</i>	<i>H&B Order No.</i>	<i>Qty. 1/ unit</i>
	Upper Insert Assy.	191-9192 Gr.2	0791-9192-2	1 pair
	Control Pin	191-24650	0791-24650	2 pcs.
	Extension Pin	191-24649	0791-24649	2 pcs.
	Upper Insert Assy.	191-9192 Gr.2	0791-9192 Gr.2	1 pair

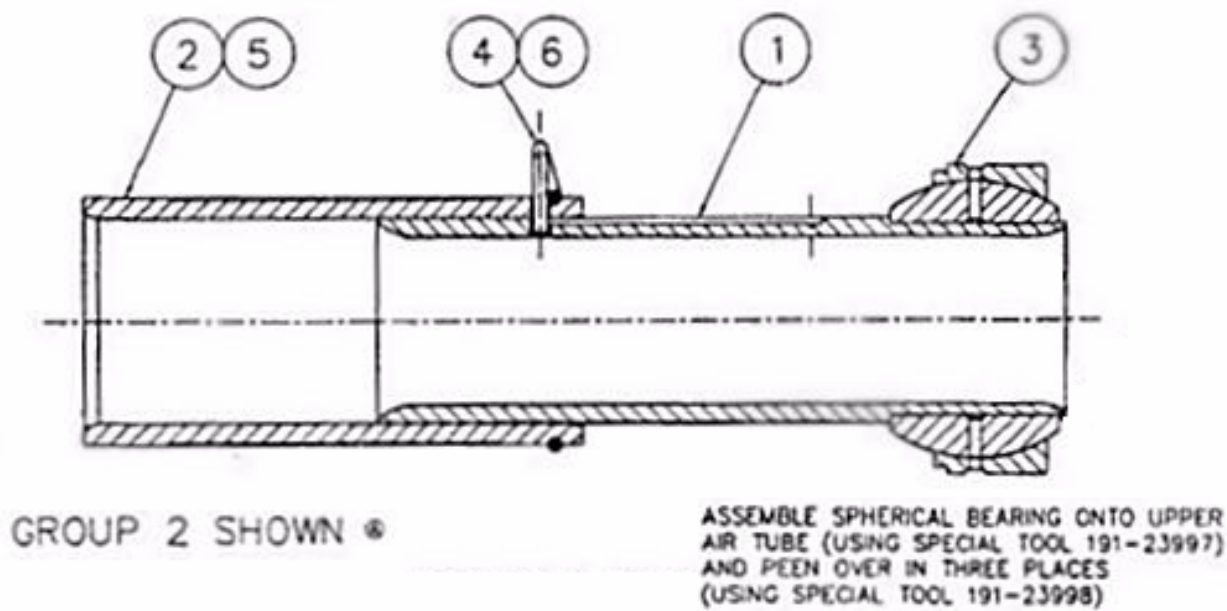
* only by existing Single Deck Assembly.

Verti - Flow Cooling – Plenum Chamber Assembly DG 5”



				Datum	Name	Verti – Flow Cooling DG 5” Plenum Chamber Assembly 0791-9152-27 (Single Deck) 0791-9152-28 (Double Deck)
			Gez.			
			Gep.			
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 - 72 65396 Walluf am Rhein			
Änderung	Datum	Name				

Verti - Flow Cooling –Upper Air Tube Assembly

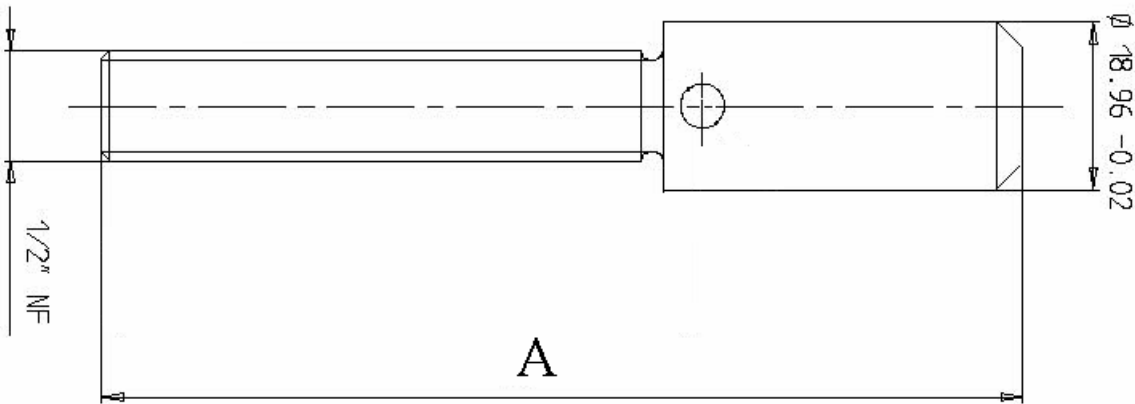


1	Spring Clip	191-24012	0791-24012	6	Gr.1	
1	Connecting Sleeve	191-24003	0791-24003	5	Gr.2	
1	Spring Clip	191-23945	0791-23945	4	Gr.2	
1	Spherical Bearing	48-93060	0748-93060	3	Gr.1 ; Gr.2 ; Gr.3	
1	Connecting Sleeve	191-26971	0791-26971	2	Gr.1	
1	Upper Air Tube	191-23943	0791-23943	1	Gr.1 ; Gr.2 ; Gr.3	
Qty. 1/unit	Description	IS Part No.	H&B Ident No.	Index	Note	
					Verti – Flow Cooling DG 5” Upper Air Tube Assembly 0791-9148	
		Datum	Name			
		Gez.				
		Gep.				
		Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 - 72 65396 Walluf am Rhein				
Änderung	Datum					Name

Verti - Flow Cooling –Adjusting Pin Assembly

Note :

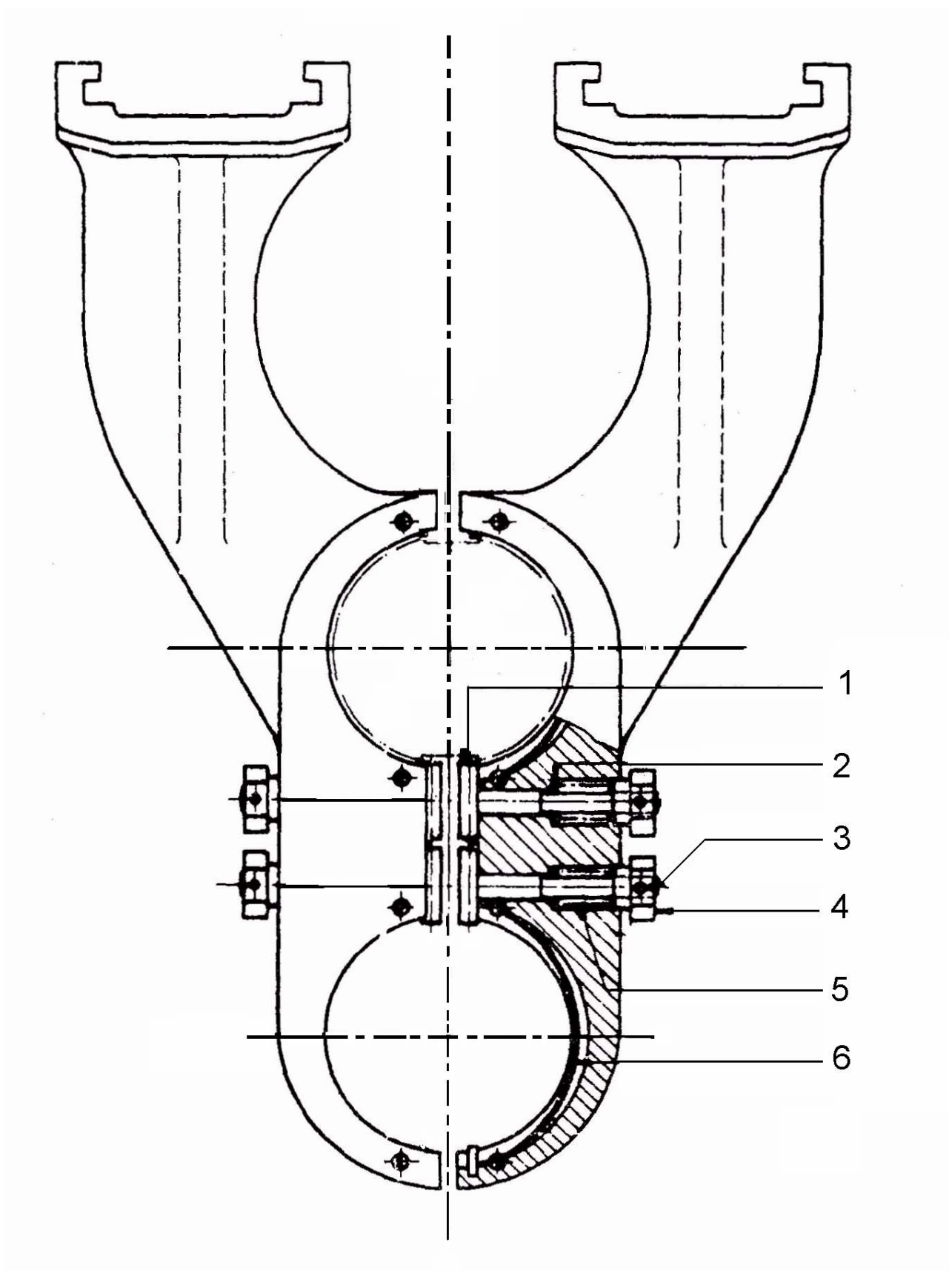
Part No.	“Z“ Range
191-9158 Gr.8	68 – 88 mm
191-9158 Gr.7	38 – 68 mm
191-9158 Gr.6	16 – 38 mm



2	Adjusting Pin Assembly	191-9158 Gr.8	0791-9158-8	1	A = 6 1/8 (155,6 mm)	
2	Adjusting Pin Assembly	191-9158 Gr.7	0791-9158-7	1	A = 5 1/8 (130,2 mm)	
2	Adjusting Pin Assembly	191-9158 Gr.6	0791-9158-6	1	A = 4 1/8 (104,8 mm)	
Qty. 1/unit		Description	IS Part No.	H&B Ident No.	Index	Note
			Datum	Name		
			Gez.			
			Gep.			
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 - 72 65396 Walluf am Rhein			
Änderung	Datum	Name				
Verti – Flow Cooling DG 5” Adjusting Pin Assembly 0791-9158						

Neck Ring Holders DG 5"

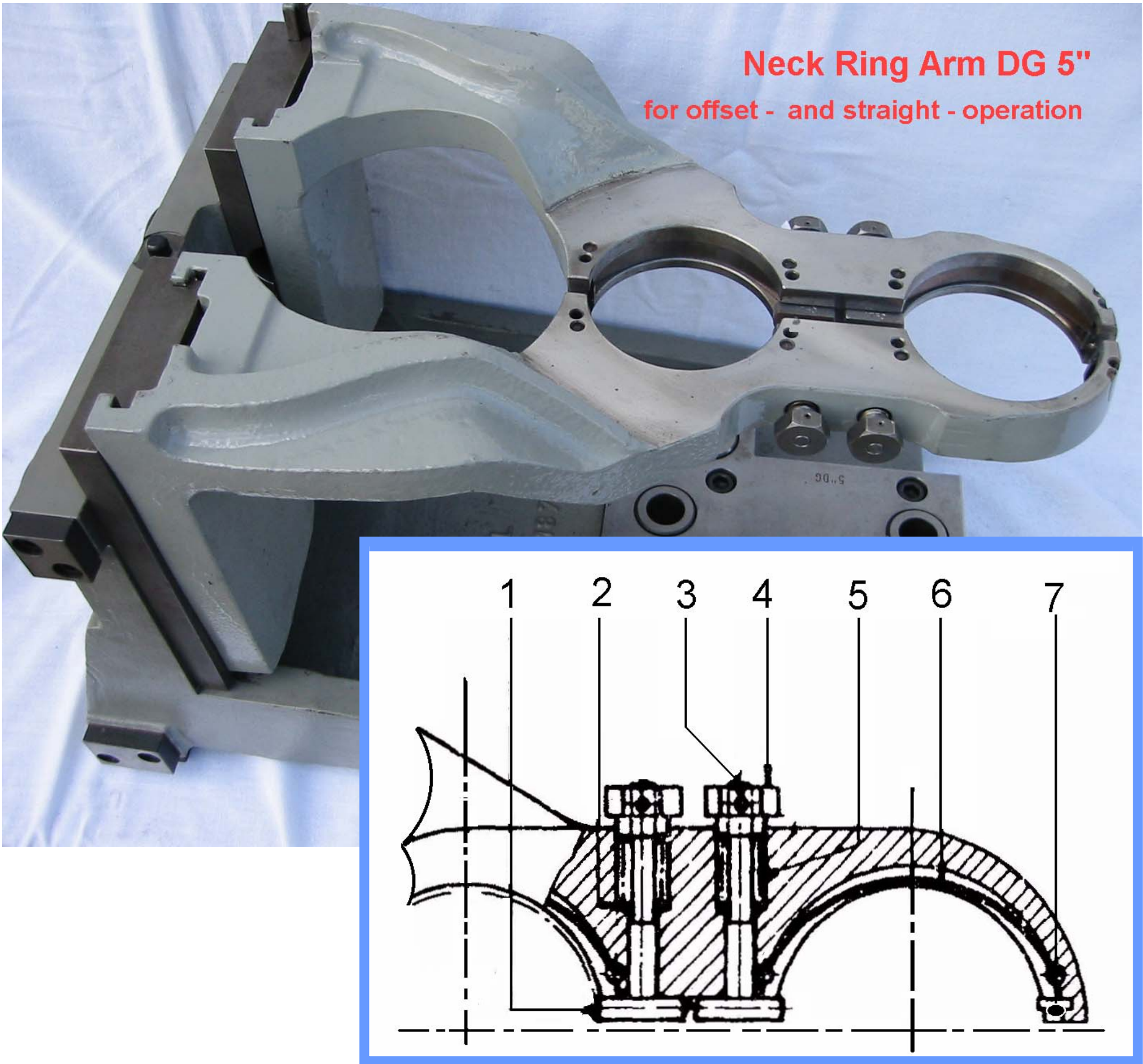
Description	IS-Part No.	H&B-Order No.
Neck Ring Holder 70 mm Offset	191-7825 Gr.1	0791-7825-1
Neck Ring Holder 70 mm Straight	191-7825 Gr.4	0791-7825-4
Neck Ring Holder 83 mm Offset	191-7825 Gr.5	0791-7825-5



x	x	x	4	Woodruff Stop	23-6918	0723-6819		not illustrated
x			2	Lock	191-23838	0791-23838		not illustrated
x			4	Leaf Spring	23-6885	0723-6885	6	
	x	x	4	Leaf Spring	23-5527	0723-5527	6	
2	4	4	X	Knob	23-10911	0723-10911	5	
2	4	4	X	Spring	191-10032	0791-10032	4	
2	4	4	X	Straight Pin		DIN-1481-2,5 x 18	3	
2	4	4	X	Spacer	23-8810	0723-8810	2	
	x	x	4	Lock	191-24431	0791-24431	1	
Gr.5 83 mm.	Gr.4 70 mm	Gr.1 70 mm	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
O F F S E T	S T R A I G H T	O F F S E T		Hartmann & Bender Vertriebs – und Produktionsgesellschaft mbH Hauptstraße 70 - 72 65396 Walluf am Rhein	Neck Ring Holders DG 5” 0791-7825-1 0791-7825-4 0791-7825-5			

Neck Ring Holder DG 5" - 70 mm Universal for straight and offset operation

Description	IS-Part No.	H&B-Order No.
Neck Ring Holder 70 mm Universal		H&B-1108-02

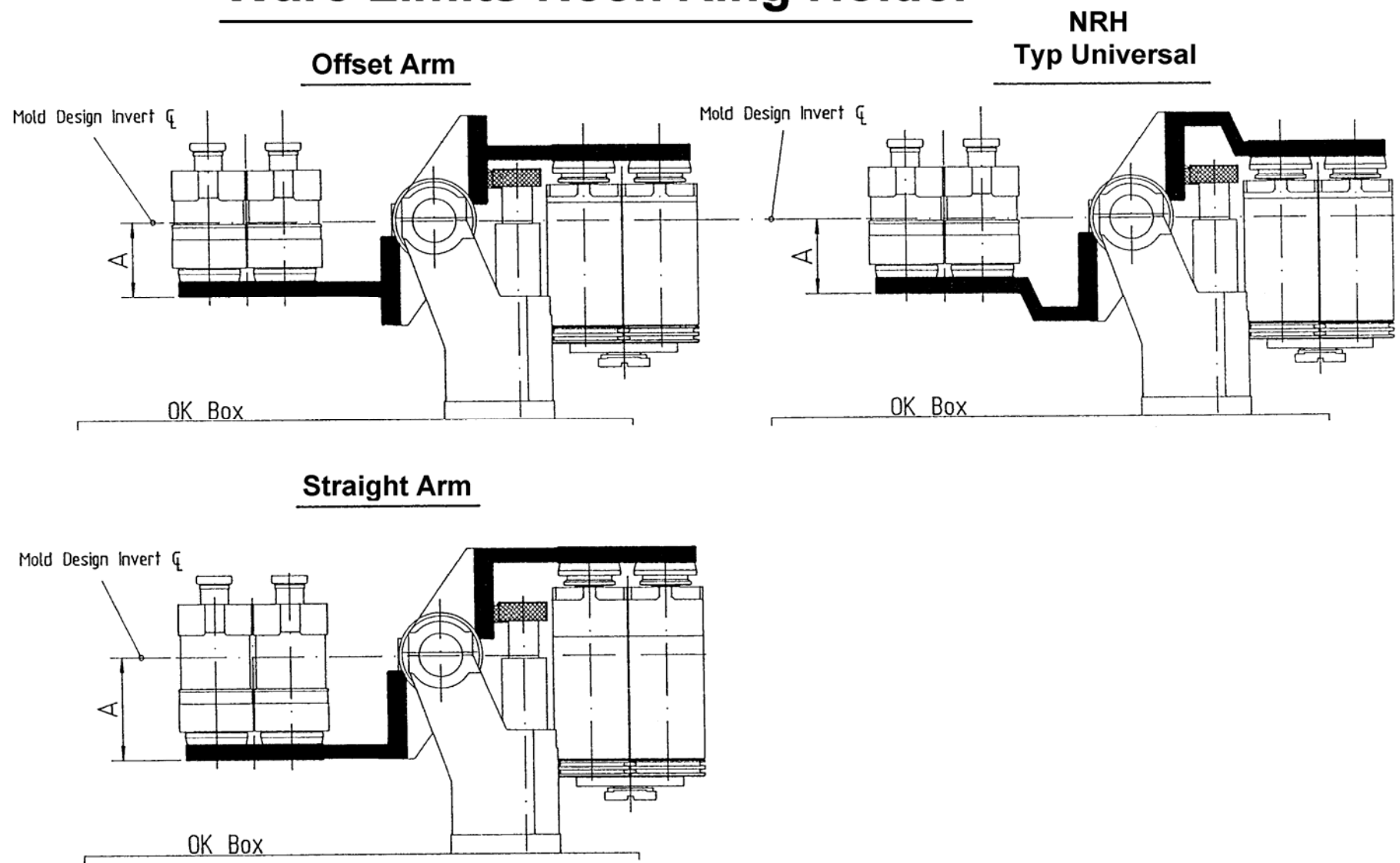


8	Parallel Pin		DIN-6325-5 x 24		not illustrated	
4	Woodruff Stop	23-6918	0723-6819	7		
4	Leaf Spring	23-5527	0723-5527	6		
4	Knob *	23-10911	0723-10911	5	H&B-1750-01 *	
4	Spring *	191-10032	H&B-1749	4	H&B-1750-01 *	
4	Straight Pin *		DIN-1481-2,5 x 18	3	H&B-1750-01 *	
4	Spacer *	23-8810	0723-8810	2	H&B-1750-01 *	
4	Lock (only)*		H&B-1750	1	H&B-1750-01 *	
Qty. 1/unit		Description	IS Part No.	H&B Ident No.	Index	Superordinate Assy. No.
			Datum	Name	Neck Ring Holder Universal DG 5” 70 mm for straight and offset operation * Scope of supply : 1 pcs./ unit	
			Gez.			
			Gep.			
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 - 72 65396 Walluf am Rhein			
Änderung	Datum	Name				

Neck Ring Holder DG 5" - 70 mm Universal for straight and offset operation

Description	IS-Part No.	H&B-Order No.
Technical Bulletin		H&B-1108-02

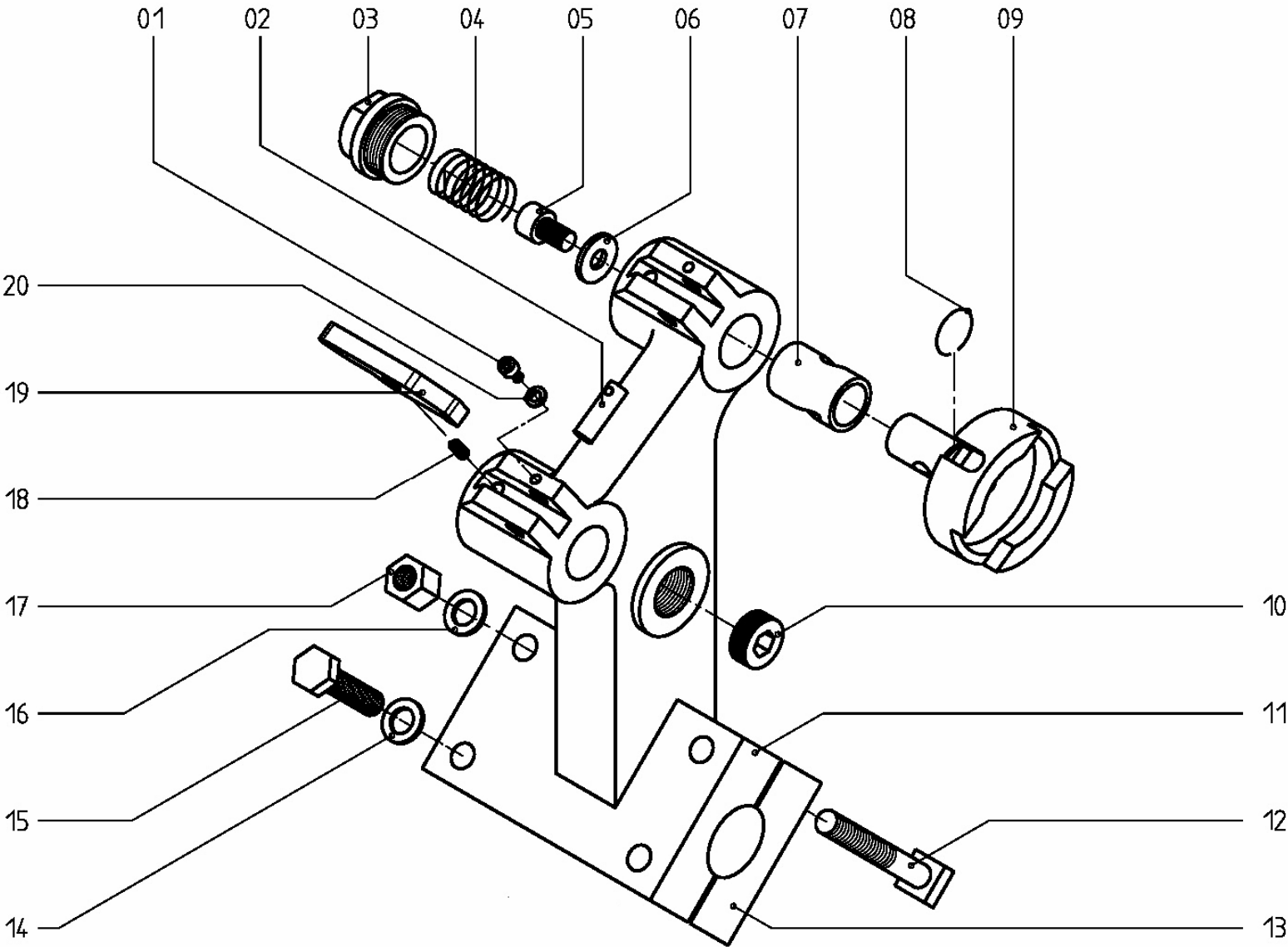
Ware Limits Neck Ring Holder



NRH Part No.	Type of Holder : DG 5"	A-MIN. in mm	A-MAX. in mm
191-7825-1	70 mm Offset	95,00	140,00
191-7825-4	70 mm Straight	121,00	168,00
500-562-500	70 mm Offset	85,70	146,10
500-562-503	70 mm Straight	120,70	155,60
H&B-1108-02	70 mm Universal	85,70	168,00

Blow Head Arm DG 5” – Lightweight

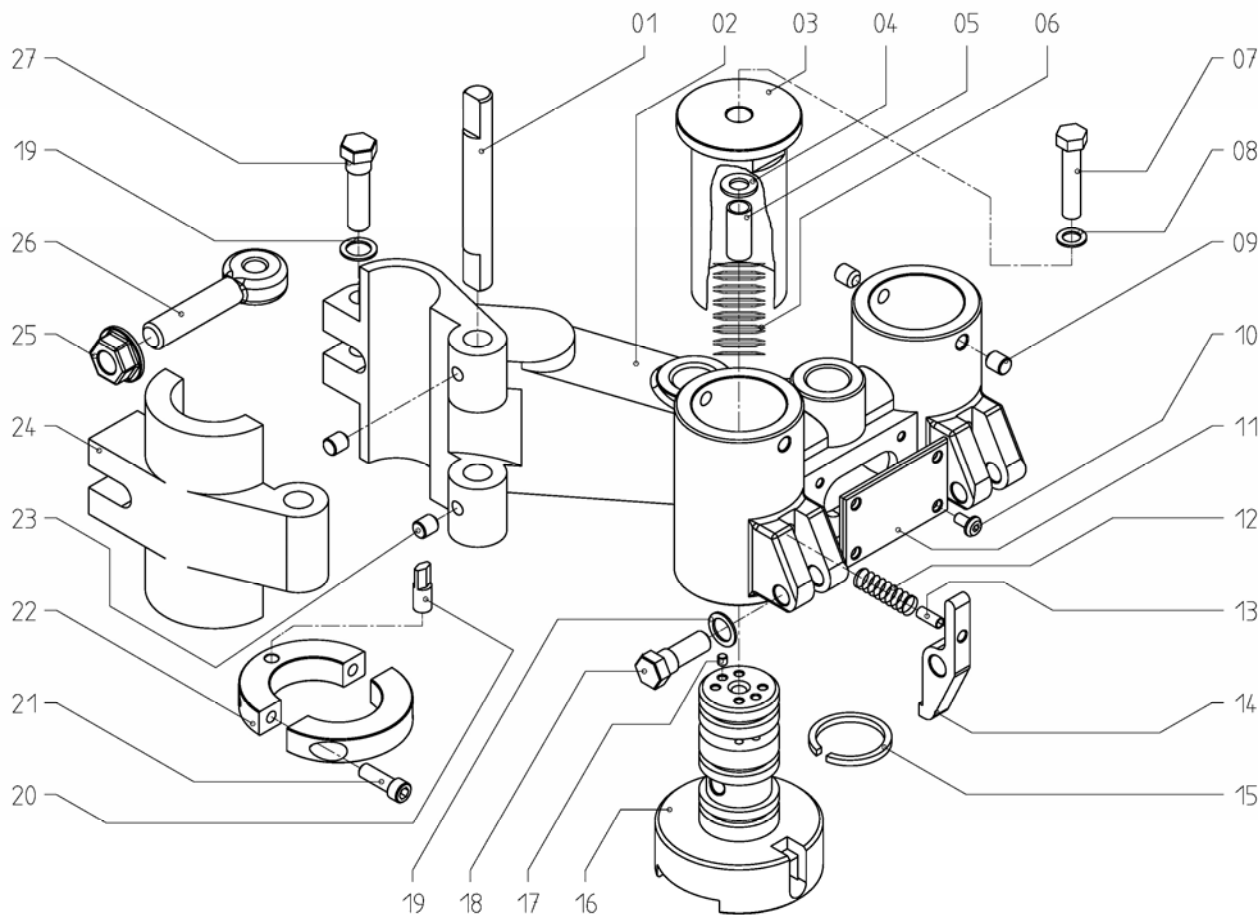
Description	IS-Part No.	H&B-Order No.
Blow Head Arm	191-7824 Gr.1	0791-7824-1



	2	Washer		DIN-125 - 5	20	
	2	Finger	191-23372	0791-23372	19	
	2	Compression Spring	191-23397	0791-23397	18	
	2	Hex Nut	1180-1601	7180-1601	17	
	2	Washer		DIN-125 - 13	16	
	2	Hexagon Head Cap Screw		DIN-931-1/2"UNC x 2 1/2"	15	
	2	Washer		DIN-125 - 13	14	
	1	Cap		H&B-7824-02	13	0791-9089 GR.1
	2	Square Head Bolt 1/2" UNC x 3 1/2"	191-16143		12	
	1	Body DG 5"		H&B-7824-01	11	0791-9089 GR.1
	1	Plug		DIN-906 - R 3/4"	10	
	2	Lock Ring	191-23371	0791-23371	9	
	2	Piston Ring	2520-522	9520-522	8	
	2	Bushing	191-23393	0791-23393	7	
	2	Washer	3360-1212	7360-1212	6	
	2	Hex. Soc. Head Cap Screw		DIN-912-3/8" UNC x 3/4"	5	
	2	Compression Spring	191-23312	0791-23312	4	
	2	Spring Retainer	191-23302	0791-23302	3	
	2	Pin	191-23500	0791-23500	2	
	2	Hex. Soc. Head Cap Screw		DIN-912-8 UNC x 1/2"	1	
	Qty.	Description	IS Part No.	H&B Order No.	Index	Superordinate Assy. No.
				Datum	Name	Benennung :
				Gez.		Lightweight
				Gep.		Blow Head Arm DG 5"
						Zeichnungs- Nr.:
						0791-7824-1
		Zust.	Änderung	Datum	Name	

Blow Head Arm Hinge Type- DG 5” - Cast Iron

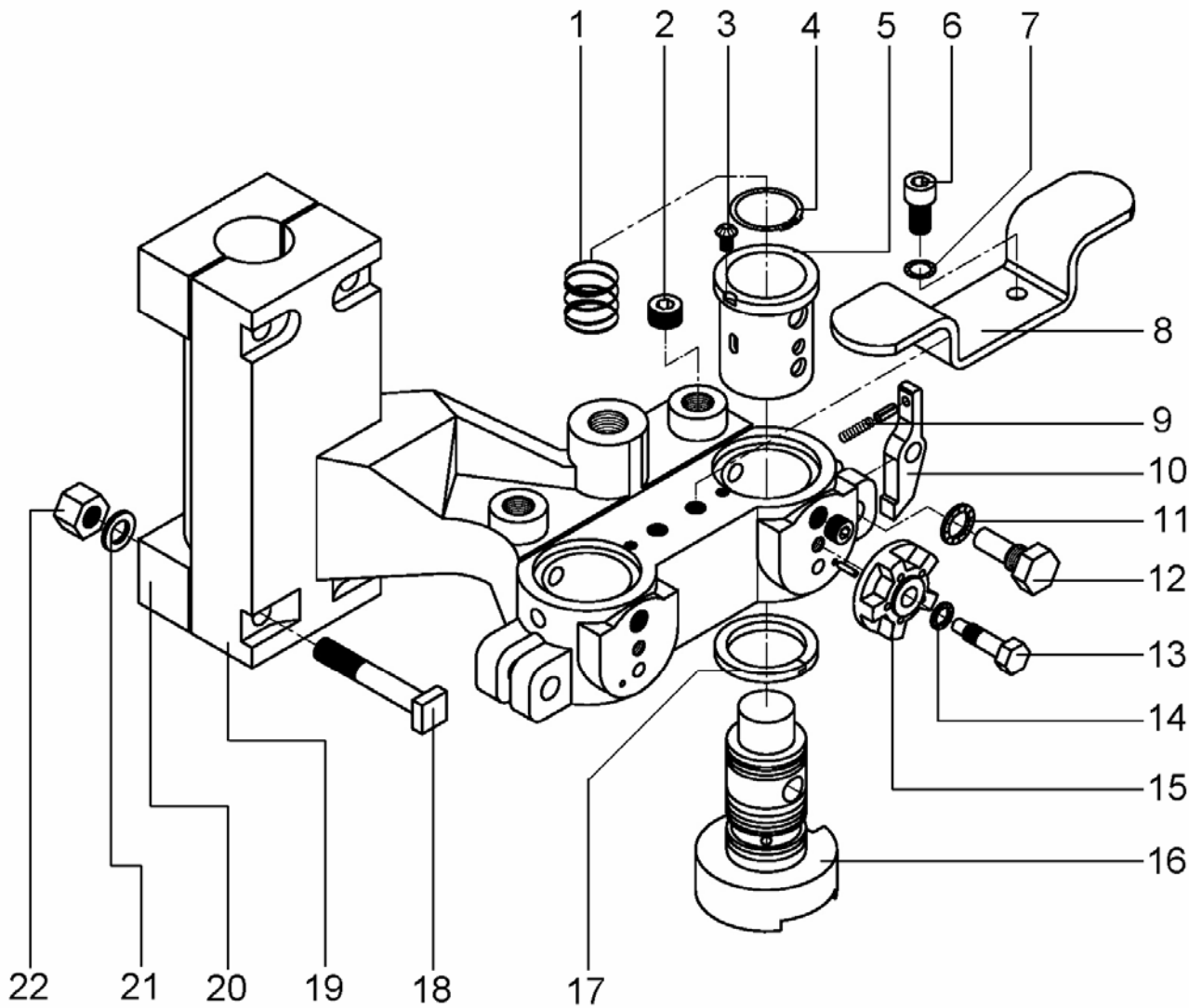
Description	IS-Part No.	H&B-Order No.
Blow Head Arm		H%B-83500-01



x	x	x	x	1	Screw	H&B-16790	27
x	x	x	x	1	Joint Screw	H&B-C-1035	26
x	x	x	x	1	Nut	H&B-C-1035-1	25
x	x			1	Cap DG 5 1/2", DG 6 1/4"	1284-183	24
		x	x	1	Cap DG 4 1/4", DG 5"	1284-157	24
x	x	x	x	2	Plug	DIN-916-5/16NC x 3/8"	23
x	x	x	x	1	Split Ring	H&B-83425-05	22
x	x	x	x	1	Screw	DIN-912-1/4NFx3/4"	21
x	x	x	x	1	Centering Pin	H&B-83425-08	20
x	x	x	x	4	Lock Washer	H-1235-10	19
x	x	x	x	2	Screw	H&B-1671	18
x	x	x	x	12	Plug	DIN-916-8-32-NC x 3/16"	17
x	x	x	x	2	Lock Ring	H&B-83425-03	16
x	x	x	x	6	Piston Ring	2520-30	15
x	x	x	x	2	Finger	H&B-83425-02	14
x	x	x	x	2	Straight Pin	DIN-1481-5x12	13
x	x	x	x	2	Compression Spring	600-708-522-3	12
x	x	x	x	1	Sealing Plate	H&B-83425-07	11
x	x	x	x	4	Screw	ISO-7380-10-24-NCx3/8"	10
x	x	x	x	4	Plug	DIN-916-5/16NC x 3/8"	9
x	x	x	x	2	Washer	DIN-125-8	8
x	x	x	x	2	Screw	DIN-931-5/16NC x1 1/2"	7
x	x	x	x	28	Connical Spring Washer	H&B-83425-03-A	6
x	x	x	x	2	Tube	H&B-83425-09	5
x	x	x	x	2	Washer	DIN-125-8	4
x	x	x	x	2	Bushing	H&B-83425-04	3
x				1	Body DG 6 1/4"	1284-182	2
	x			1	Body DG 5 1/2"	on Request	2
		x		1	Body DG 5"	on Request	2
			x	1	Body DG 4 1/4"	1284-158	2
x	x	x	x	1	Pivot Pin	H&B-83425-06	1
6 1/4"	5 1/2"	5"	4 1/4"	Qty.	Description	H&B-Order No.	Index
					Datum	Blow Head Arm Hinge Type Slim Line	
				Gez.			
				Gep.			
				Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein			Type
						H&B-83425-01	DG 4 14"
						H&B-83500-01	DG 5"
						H&B-83550-01	DG 5 1/2"
						H&B-83625-01	DG 6 1/4"
	Änderung	Datum	Name				

Blow Head Arm DG 5” – Lightweight

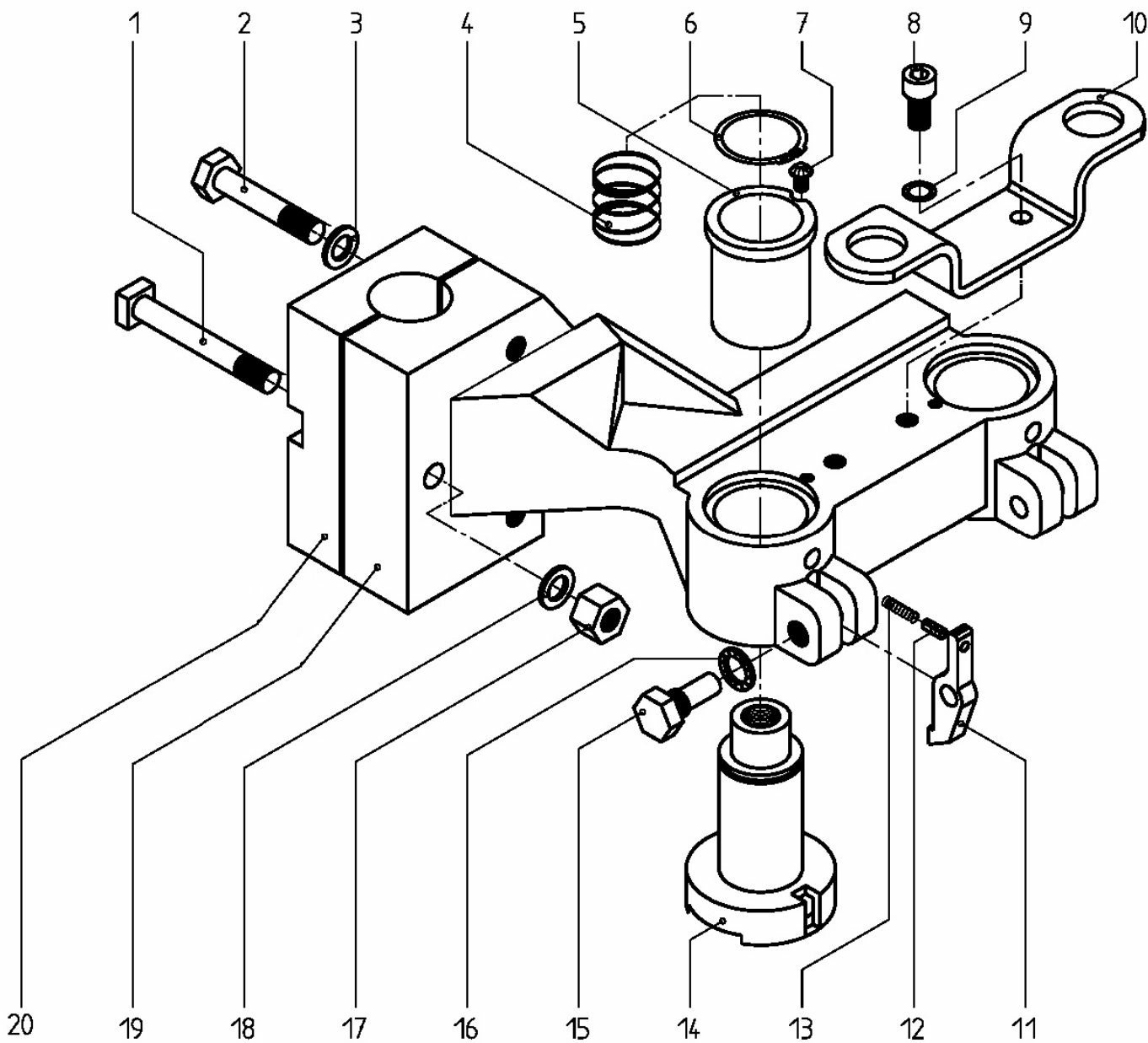
Description	IS-Part No.	H&B-Order No.
Blow Head Arm Standard (Blow Head Mech. with Piston & Rod 38,1 mm) TYPE A		500-557-500-HB
Blow Head Arm Standard (GPS - Blow Head Mech. with Piston & Rod 41,27 mm) TYPE B		0010-1762-3



x	x	4	Hex Nut	1180-1601	7180-1601	22	
x	x	4	Washer		DIN-125 -13	21	
x		1	Cap		0010-1762-02	20	
	x	1	Cap		0500-557-500-02	20	
x		1	Body		0010-1762-01	19	
	x	1	Body		0500-557-500-01	19	
x	x	4	Square HeadBolt 1/2” UNC x 3 1/2”	191-16143	0791-16143	18	
6	8	X	Piston Ring	2520-50	9520-50	17	
x		2	Lock Ring		0600-708-507-4	16	
	x	2	Lock Ring		H&B-43502	16	
x	x	2	Exhaust Valve	23-5273	0723-5273	15	
x	x	2	Lock Washer		H 1235 - 10	14	
x	x	2	Shoulder Screw		0600-708-507-1	13	
x	x	2	Shoulder Screw M 14 x 1,5 x 35		H&B-01336	12	
x	x	2	Lock Washer		H 1235 - 14	11	
x	x	2	Finger		0400-706-575-10	10	
x	x	2	Spring		0600-708-522-4	9	
x	x	1	Spring Guide		500-708-522-2	8	
x	x	2	Lock Washer		H 1235 - 10	7	
x	x	2	Hex Soc.Hd. Cap Screw		DIN-912-3/8“ UNC x 3/4“	6	
x	x	1	Bushing RH		0600-708-507-3-2	5	
x	x	1	Bushing LH		0600-708-507-3-1	5	
x	x	2	Retaining Ring DIN 471		9540-190-42	4	
x	x	2	Button Soc. Cap Screw		ISO-7380-1/4“ UNC x 3/8“	3	
x	x	2	Plug		DIN-906–R 3/8“	2	
x	x	2	Spring		0600-708-522-3	1	
B	A	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Blow Head Arm DG 5“
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.:
							500-557-500-HB – TYPE A
							0010-1762-3 – TYPE B
			Zust.	Änderung	Datum	Name	

Blow Head Arm DG 5” – Lightweight for direct connecting of flexible hoses at both lock rings
without finish cooling

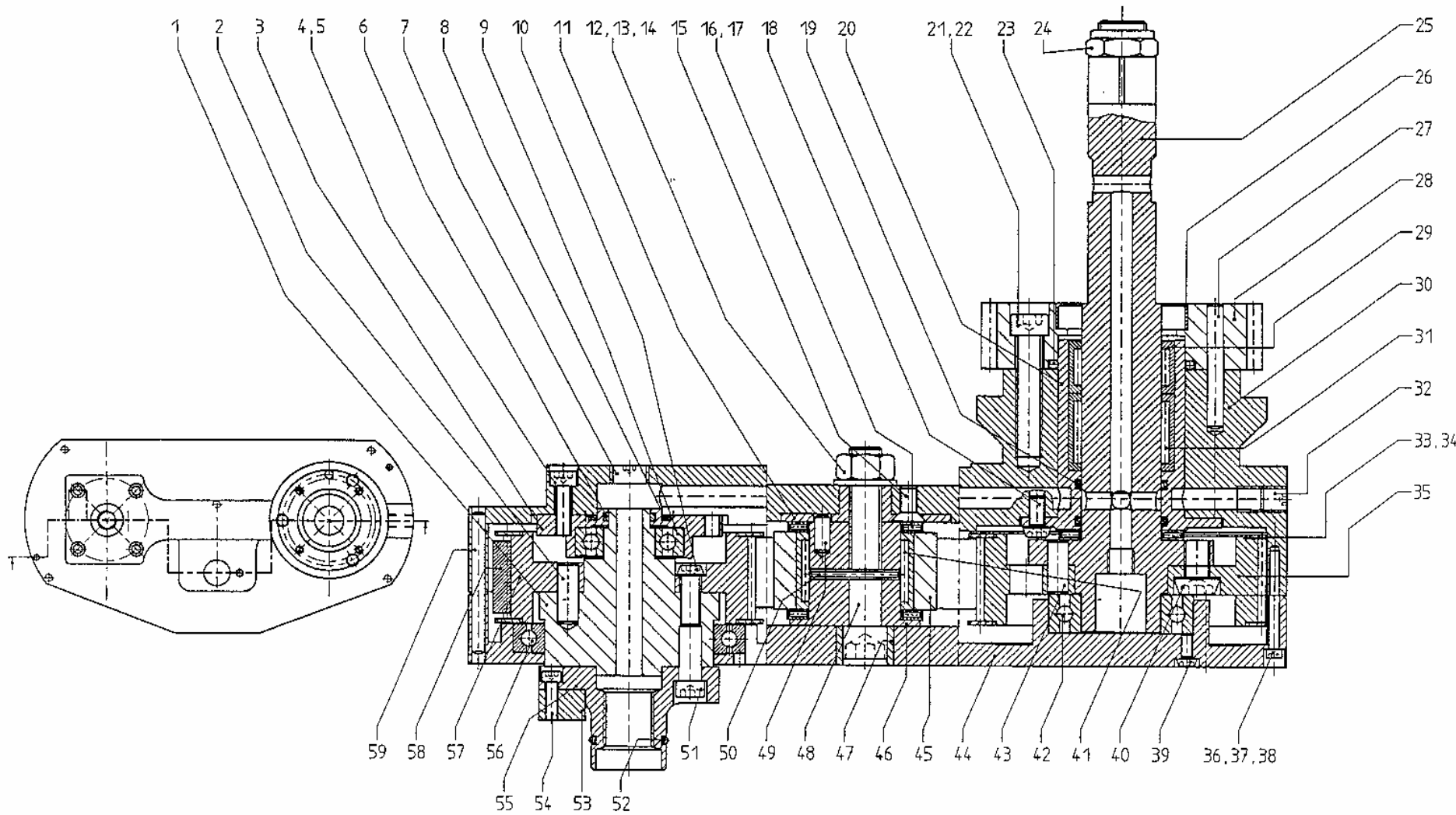
Description	IS-Part No.	H&B-Order No.
Blow Head Arm		H&B-500-001



	1	Cap		H&B-500-006	20	
	1	Body		H&B-500-005	19	
	1	Washer		DIN 125 – 13	18	
	1	Hex Nut	1180-1601	7180-1601	17	
	2	Lock Washer		H 1235 - 14	16	
	2	Shoulder Screw		H&B-01336	15	
	2	Lock Ring		H&B-500-002	14	
	2	Compression Spring		0600-708-522-3	13	
	2	Straight Pin		DIN 1481- 5 x 12	12	
	2	Finger		0400-706-575-10	11	
	1	Spring Guide		H&B-500-004	10	
	2	Lock Washer		H 1235-10	9	
	2	Hex. Soc. Hd. Cap Screw		DIN- 912-3/8“UNC x 3/4“	8	
	2	Button Soc. Cap Screw		ISO-7380-1/4“UNC x 3/8“	7	
	2	Retaining Ring DIN 471		9540-190-42	6	
	2	Bushing		H&B-500-003	5	
	2	Compression Spring		0600-708-522-4	4	
	2	Washer		DIN-125 – 13	3	
	2	Hex Hd. Cap Screw		DIN-931-1/2“ NC x 2 1/2“	2	
	1	Square Head Bolt 1/2“ UNC x 3 3/4“		0791-16144-A	1	
	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
				Datum	Name	Zeichnungs- Nr.:
				Gez.		H&B-500-001
				Gep.		
				Hartmann & Bender		Benennung :
				Vertriebs - und		Lightweight Blow Head Arm DG 5”
				Produktions - GmbH		for direct connecting of flexible hoses
				Hauptstraße 70 72		at both lock rings without neck ring cooling.
				Walluf am Rhein		
			28.05.99	K. Wolff		
		Zust.	Änderung	Datum	Name	

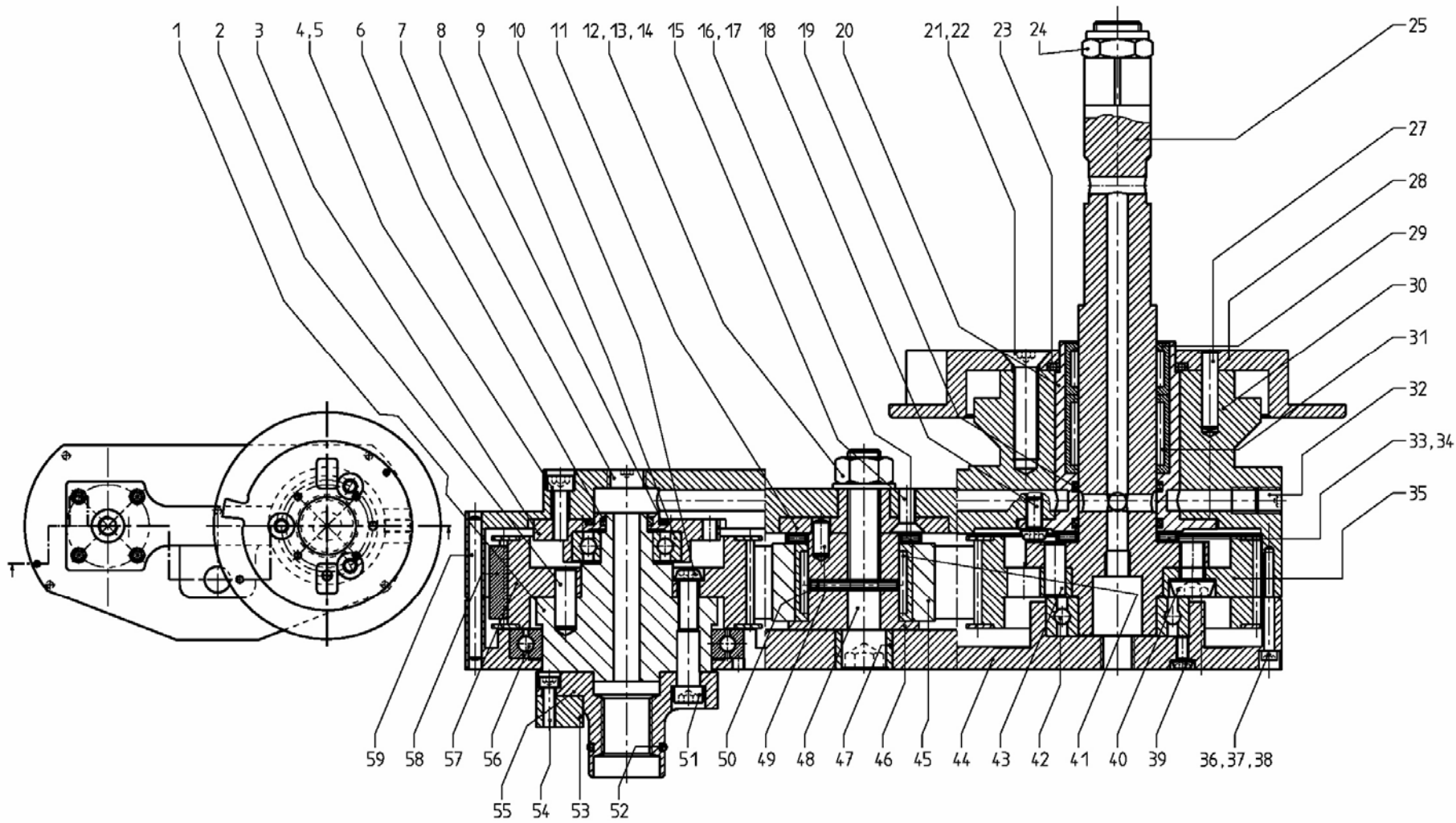
Take Out Tong Arm Belt Drive

Description	IS-Part No.	H&B-Order No.
Take Out Tong Arm Belt Drive		H&B-72500-06



Description	IS-Part No.	H&B-Order No.
Take Out Tong Arm Belt Drive valid for Bottero Servo – Take Out Mechanism		H&B-72500-07

Take Out Tong Arm
Bottero Servo Take Out



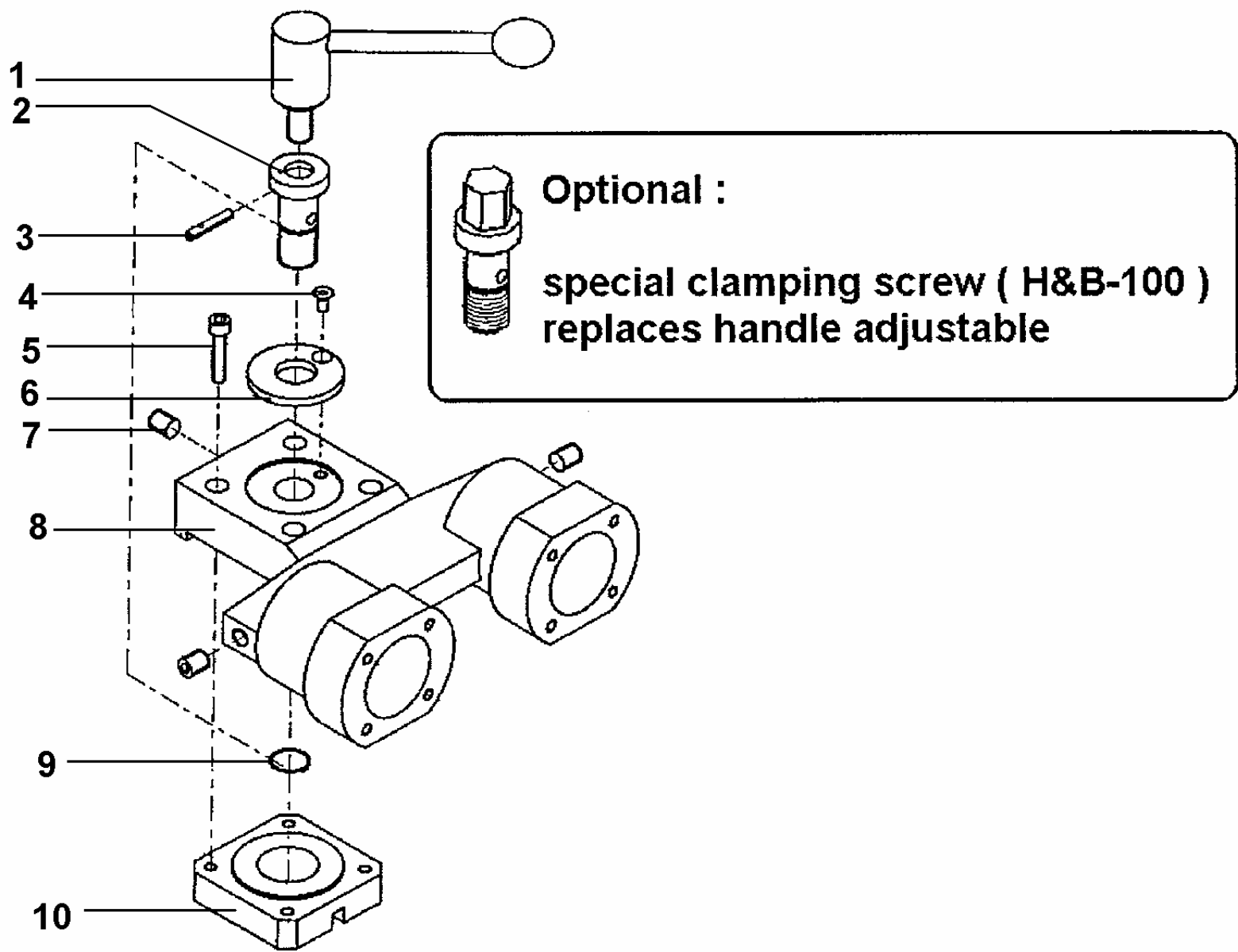
Description						IS-Part No.	H&B-Order No.
Take Out Tong Arm Belt Drive – Spare Parts List							H&B-72500-06
x	x	x	x	2	Button Sc.Cp.Screw	ISO 7380-10-24 .NC x 1/8“	n.shown
x	x	x	x	2	Hx.Sc.Set Screw	DIN 915- 5/16“ NC x 1“	n.shown
x	x	x	x	2	Pin	DIN 6325- 5 x 55	59
x	x			1	Belt Type CXA 8 M x 28 x 800	H&B-82533	58
		x	x	1	Belt Type CXA 8 M x 28 x 640	H&B-82433	58
x				1	Rear Pulley	H&B-72630	57
x	x			1	Rear Pulley	H&B-72530	57
		x	x	1	Rear Pulley	H&B-72430	57
x	x	x	x	1	Ball Bearing	61913 TNH	56
x	x	x	x	1	Adapter 191-26773	0791-26773	55
x	x	x	x	1	Hx.Sc.Hd.Cp.Screw	DIN 912-10-24 G.NC x 1/2“	54
x	x	x	x	1	Key 191-26458	0791-26458	53
x	x	x	x	1	O - Ring ,Viton 1700-912	7700-912	52
x	x	x	x	3	Hx.Sc.Hd.Cp.Screw	DIN 912- 5/16“ NC x 3/4“	51
x	x	x	x	1	Straight Pin	DIN 1481- 4 x 30	50
x	x	x	x	1	Pin	DIN 6325- 6 x 14	49
x	x	x	x	1	Eccentric Hd.Cp.Screw	H&B-72446	48
x	x	x	x	1	Bushing (17 x 22 x 13 mm)	H&B-72447	47
x	x	x	x	1	Eccentric Shaft	H&B-82445	46
x	x	x	x	1	Idler Pulley , improved Material : 1.4021	H&B-82431	45
x				1	Cover	H&B-72602	44
	x			1	Cover	H&B-72552	44
		x		1	Cover	H&B-72502	44
			x	1	Cover	H&B-72427	44
x	x	x	x	1	Pin	DIN 6325 -8 x 20	43
x	x	x	x	1	Ball Bearing	6006	42
x	x	x	x	1	Needle Bearing	NK 35/30	41
x	x	x	x	3	Button Sc.Cp.Screw	ISO 7380- 3/8“ NC x 1/2“	40
x	x	x	x	3	Button Sc.Cp.Screw	ISO 7380- 10 - 24 G.x 3/8“	39
x	x	x	x	5	Hx.Sc.Hd.Cp.Screw	DIN 912-1/4“ UNC x 1 1/4“	38
x	x	x	x	5	Lock Washer	H 1235- 1/4“	37
x	x	x	x	9	Helicoil Typ Standard (Item.18 & 38)	1/4“ - 20 G.x 3,0 D	36
x				1	Front Pulley	H&B-72629	35
	x			1	Front Pulley	H&B-72529	35
		x	x	1	Front Pulley	H&B-72429	35
x	x	x	x	2	Axial Washer	AS-3047	34
x	x	x	x	1	Axial Needle Bearing	AXK-3047	33
x	x	x	x	1	Plug	DIN 906-R 1/8“	32
x	x	x	x	1	Needle Bearing	NK 30/30	31
x				1	Housing	H&B-72601	30
	x			1	Housing	H&B-72551	30
		x		1	Housing	H&B-72501	30
			x	1	Housing	H&B-72426	30
x	x	x	x	1	Needle Bearing	NK 30/20	29
x	x	x	x	1	Drive Gear	H&B-72444	28
x	x	x	x	1	Pin	DIN 7-6,35 x 48	27
x	x	x	x	1	Seal Ring Viton	H&B-72448	26
x	x	x	x	1	Drive Shaft	H&B-72442	25
x	x	x	x	1	Flex Loc Nut (3/4“ UNF)	1180-3036	24
x	x	x	x	1	O - Ring ,Viton	48 x 3,5	23
x	x	x	x	3	Helicoil Typ Standard	3/8“ - 16 G.x 2,0 D	22
x	x	x	x	3	Hx.Sc.Hd.Cp.Screw	DIN 912-3/8“ UNC x 1 1/2“	21
x	x	x	x	1	Front Bushing	H&B-72440	20
x	x	x	x	2	O - Ring ,Viton	30 x 2,5	19
x	x	x	x	4	Button Sc.Cp.Screw	ISO 7380-1/4“ NC x 1/2“	18
x	x	x	x	4	Axial Washer	AS-3552	17
x	x	x	x	2	Axial Needle Bearing	AXK-3552	16
x	x	x	x	1	Count.Sc.Hd.Screw	DIN 7991-1/4“ UNC x 5/8“	15
x	x	x	x	1	Hex Nut	DIN 934-1/2“ UNC	14
x	x	x	x	1	Lock Washer	H 1235-1/2“	13
x	x	x	x	1	Washer	DIN 134-13	12
x	x	x	x	1	Eccenter - Stop - Bushing	H&B-82439	11
x	x	x	x	4	Spec.Button Sc.Cp.Screw	H&B-01835 (5/16“ NC x 5/8“)	10
x	x	x	x	1	Ball Bearing	6004	9
x	x	x	x	1	O - Ring ,Viton	27 x 2,5	8
x	x	x	x	1	Plug	DIN 906-R 3/8“	7
x	x	x	x	1	Quad Ring	15,55 x 2,62	6
x	x	x	x	4	Lock Washer	H 1235-1/4“	5
x	x	x	x	4	Hx.Sc.Hd.Cp.Screw	DIN 912-1/4“ UNC x 3/4“	4
x	x	x	x	1	Pilot Bushing	H&B-72441	3
x	x	x	x	1	Pin	DIN 6325 -8 x 24	2
x	x			1	Rear Shaft	H&B-72543	1
		x	x	1	Rear Shaft	H&B-72443	1
6“	5 1/2“ 6 4“	5“	4 1/4“	Qty.	Description	H&B Order No.	Index
H&B*72600	H&B*72550	H&B*72500	H&B*72425		Take Out Tong Arm Belt Drive Vertriebs und Produktionsgesellschaft mbH Hartmann & Bender	H&B-72425-06 H&B-72500-06 H&B-72550-06 H&B-72600-06	

Description	IS-Part No.	H&B-Order No.
Take Out Tong Arm Belt Drive for Bottero Servo Take Out – Spare Parts List		H&B-72500-07

x	x	x	2	Button Sc.Cp.Screw	ISO 7380-10-24 .NC x 1/8“	n.shown
x	x	x	2	Hx.Sc.Set Screw	DIN 915- 5/16“ NC x 1“	n.shown
x	x	x	2	Pin	DIN 6325- 5 x 55	59
x			1	Belt Type CXA 8 M x 28 x 800	H&B-82533	58
	x	x	1	Belt Type CXA 8 M x 28 x 640	H&B-82433	58
x			1	Rear Pulley	H&B-72530	57
	x	x	1	Rear Pulley	H&B-72430	57
x	x	x	1	Ball Bearing	61913 TNH	56
x	x	x	1	Adapter 191-26773	0791-26773	55
x	x	x	1	Hx.Sc.Hd.Cp.Screw	DIN 912-10-24 G.NC x 1/2“	54
x	x	x	1	Key 191-26458	0791-26458	53
x	x	x	1	O - Ring ,Viton 1700-912	7700-912	52
x	x	x	3	Hx.Sc.Hd.Cp.Screw	DIN 912- 5/16“ NC x 3/4“	51
x	x	x	1	Straight Pin	DIN 1481- 4 x 30	50
x	x	x	1	Pin	DIN 6325- 6 x 14	49
x	x	x	1	Eccentric Hd.Cp.Screw	H&B-72446	48
x	x	x	1	Bushing (17 x 22 x 13 mm)	H&B-72447	47
x	x	x	1	Eccentric Shaft	H&B-82445	46
x	x	x	1	Idler Pulley , improved Material : 1.4021	H&B-82431	45
x			1	Cover	H&B-72552	44
	x		1	Cover	H&B-72502	44
		x	1	Cover	H&B-72427	44
x	x	x	1	Pin	DIN 6325 -8 x 20	43
x	x	x	1	Ball Bearing	6006	42
x	x	x	1	Needle Bearing	NK 35/30	41
x	x	x	3	Button Sc.Cp.Screw	ISO 7380- 3/8“ NC x 1/2“	40
x	x	x	3	Button Sc.Cp.Screw	ISO 7380- 10 - 24 G.x 3/8“	39
x	x	x	5	Hx.Sc.Hd.Cp.Screw	DIN 912-1/4“ UNC x 1 1/4“	38
x	x	x	5	Lock Washer	H 1235- 1/4“	37
x	x	x	9	Helicoil Typ Standard (Item.18 & 38)	1/4“ - 20 G.x 3,0 D	36
x			1	Front Pulley	H&B-72529	35
	x	x	1	Front Pulley	H&B-72429	35
x	x	x	2	Axial Washer	AS-3047	34
x	x	x	1	Axial Needle Bearing	AXK-3047	33
x	x	x	1	Plug	DIN 906-R 1/8“	32
x	x	x	1	Needle Bearing	NK 30/30	31
x			1	Housing	H&B-72551	30
	x		1	Housing	H&B-72501	30
		x	1	Housing	H&B-72426	30
x	x	x	1	Needle Bearing	NK 30/20	29
x	x	x	1	Adapter	A707-9-51	28
x	x	x	1	Pin	DIN 7-6,35 x 48	27
x	x	x	1	Seal Ring Viton	H&B-72448	26
x	x	x	1	Drive Shaft	H&B-72442	25
x	x	x	1	Flex Loc Nut (3/4“ UNF)	1180-3036	24
x	x	x	1	O - Ring ,Viton	48 x 3,5	23
x	x	x	3	Helicoil Typ Standard	3/8“ - 16 G.x 2,0 D	22
x	x	x	3	Hx.Sc.Hd.Cp.Screw	DIN 912-3/8“ UNC x 1 1/2“	21
x	x	x	1	Soecial Front Bushing	H&B-72440-BT	20
x	x	x	2	O - Ring ,Viton	30 x 2,5	19
x	x	x	4	Button Sc.Cp.Screw	ISO 7380-1/4“ NC x 1/2“	18
x	x	x	4	Axial Washer	AS-3552	17
x	x	x	2	Axial Needle Bearing	AXK-3552	16
x	x	x	1	Count.Sc.Hd.Screw	DIN 7991-1/4“ UNC x 5/8“	15
x	x	x	1	Hex Nut	DIN 934-1/2“ UNC	14
x	x	x	1	Lock Washer	H 1235-1/2“	13
x	x	x	1	Washer	DIN 134-13	12
x	x	x	1	Eccenter - Stop - Bushing	H&B-82439	11
x	x	x	4	Spec.Button Sc.Cp.Screw	H&B-01835 (5/16“ NC x 5/8“)	10
x	x	x	1	Ball Bearing	6004	9
x	x	x	1	O - Ring ,Viton	27 x 2,5	8
x	x	x	1	Plug	DIN 906-R 3/8“	7
x	x	x	1	Quad Ring	15,55 x 2,62	6
x	x	x	4	Lock Washer	H 1235-1/4“	5
x	x	x	4	Hx.Sc.Hd.Cp.Screw	DIN 912-1/4“ UNC x 3/4“	4
x	x	x	1	Pilot Bushing	H&B-72441	3
x	x	x	1	Pin	DIN 6325 -8 x 24	2
x			1	Rear Shaft	H&B-72543	1
	x	x	1	Rear Shaft	H&B-72443	1
5 1/2“ 6 1/4“	5“	4 1/4“	Qty.	Description	H&B Order No.	Index
H&B-72550	H&B-72500	H&B-72425		Take Out Tong Arm Belt Drive BOTTERO – SERVO – TAKE - OUT Vertriebs und Produktionsgesellschaft mbH Hartmann & Bender	H&B-72425-07 H&B-72500-07 H&B-72550-07	

Q.C. Take Out Tong Head Assembly DG 5"

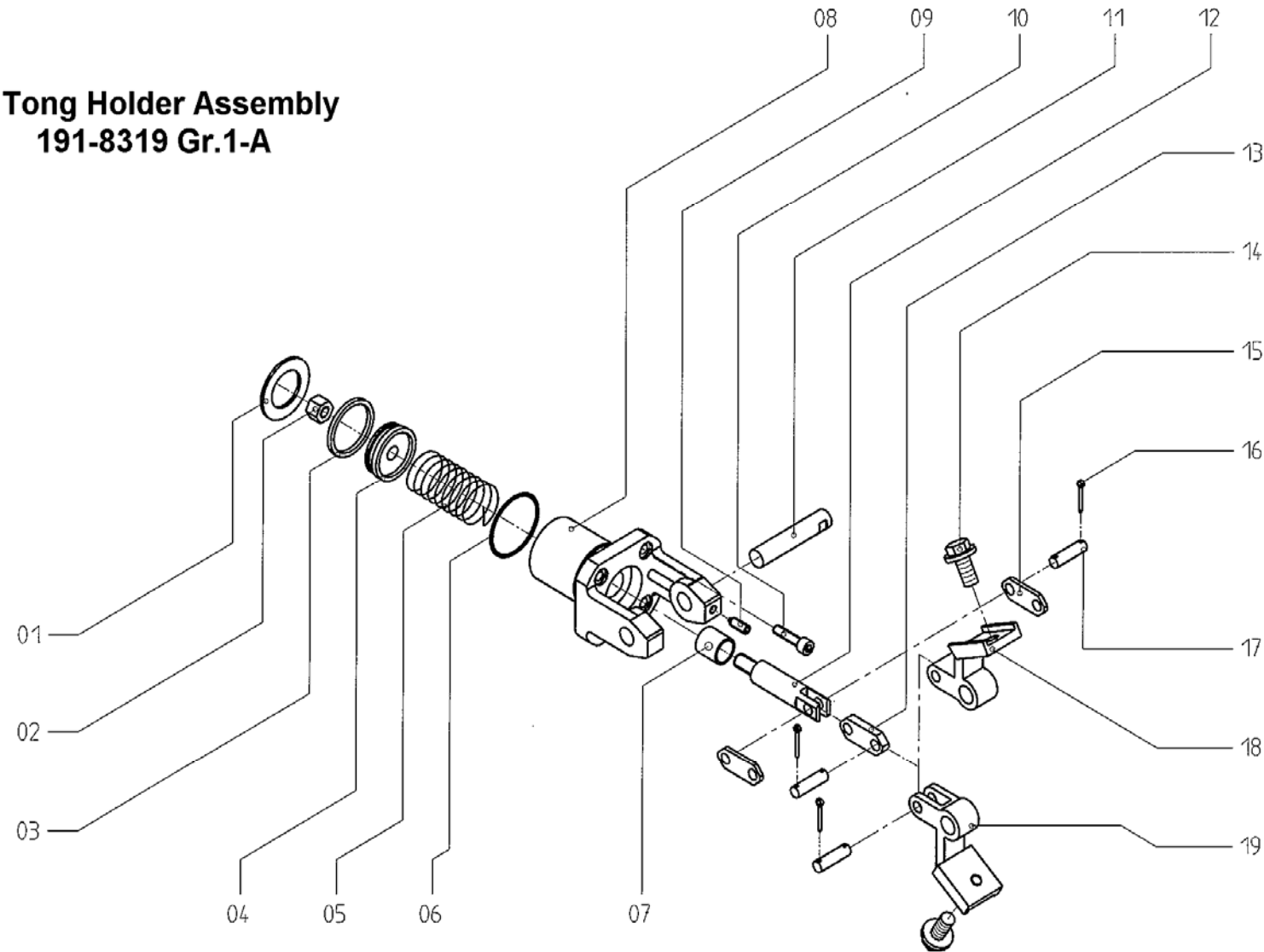
Description	IS-Part No.	H&B-Order No.
Q.C.Take Out Tong Head Assembly DG 5"	191-9125 Gr.22	0791-9125-22
Q.C.Take Out Tong Head Assembly DG 5" Anti Wink	210-275 Gr.16	7210-275-16



1	Adapter Plate	191-26127	0791-26127	10			
1	Retaining Ring	2540-541	9540-541	9			
1	Body 4 1/4 TG	191-24416	0791-24416	8	0791-9125-21 / 7210-275-20		
1	Body 3” TG	191-24413	0791-24413	8	0791-9125-18 / 7210-275-19		
1	Body 5 1/2 SG	191-24412	0791-24412	8	0791-9125-16 / 7210-275-13		
1	Body 5” SG	191-24444	0791-24444	8	0791-9125-17 / 7210-275-12		
1	Body 4 1/4 SG	191-24411	0791-24411	8	0791-9125-15 / 7210-275-11		
1	Body 6 1/4 DG	191-24420	0791-24420	8	0791-9125-25 / 7210-275-18		
1	Body 6” DG	191-24419	0791-24419	8	0791-9125-24 / 7210-275-21		
1	Body 5 1/2 DG	191-24418	0791-24418	8	0791-9125-23 / 7210-275-17		
1	Body 5” DG	191-24417	0791-24417	8	0791-9125-22 / 7210-275-16		
1	Body 4 1/4 DG	191-24415	0791-24415	8	0791-9125-20 / 7210-275-15		
3	Plug		DIN-906-R1/8	7			
1	Washer	191-24422	0791-24422	6			
4	Hx.Sc.Hd.Cp.Screw		DIN-912-1/4NCX11/4	5			
1	Screw		DIN-7991-10-24 UNC x 3/8	4			
1	Straight Pin		DIN-1481-4,5 x 28	3			
1	Bolt	191-24423	0791-24423	2			
1	Handle Adjustable	59-94602	0759-94602	1			
Qty.	Description		IS Part No.	H&B Order No.	Index	Superordinate Assy. No.	
			Datum	Name	Benennung : Take Out Tong Head DG 5"		
			Gez.				
			Gep.				
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70-72 65396 Walluf am Rhein		Zeichnungs- Nr.: 0791-9125 (use Tong Holder Assy. 0791-8319-1) 7210-275 (use Tong Holder Assy. 0791-9535-2)		
Änderung	Datum	Name					

Take Out Tong Holder – Type H&B (Emhart Compatible)

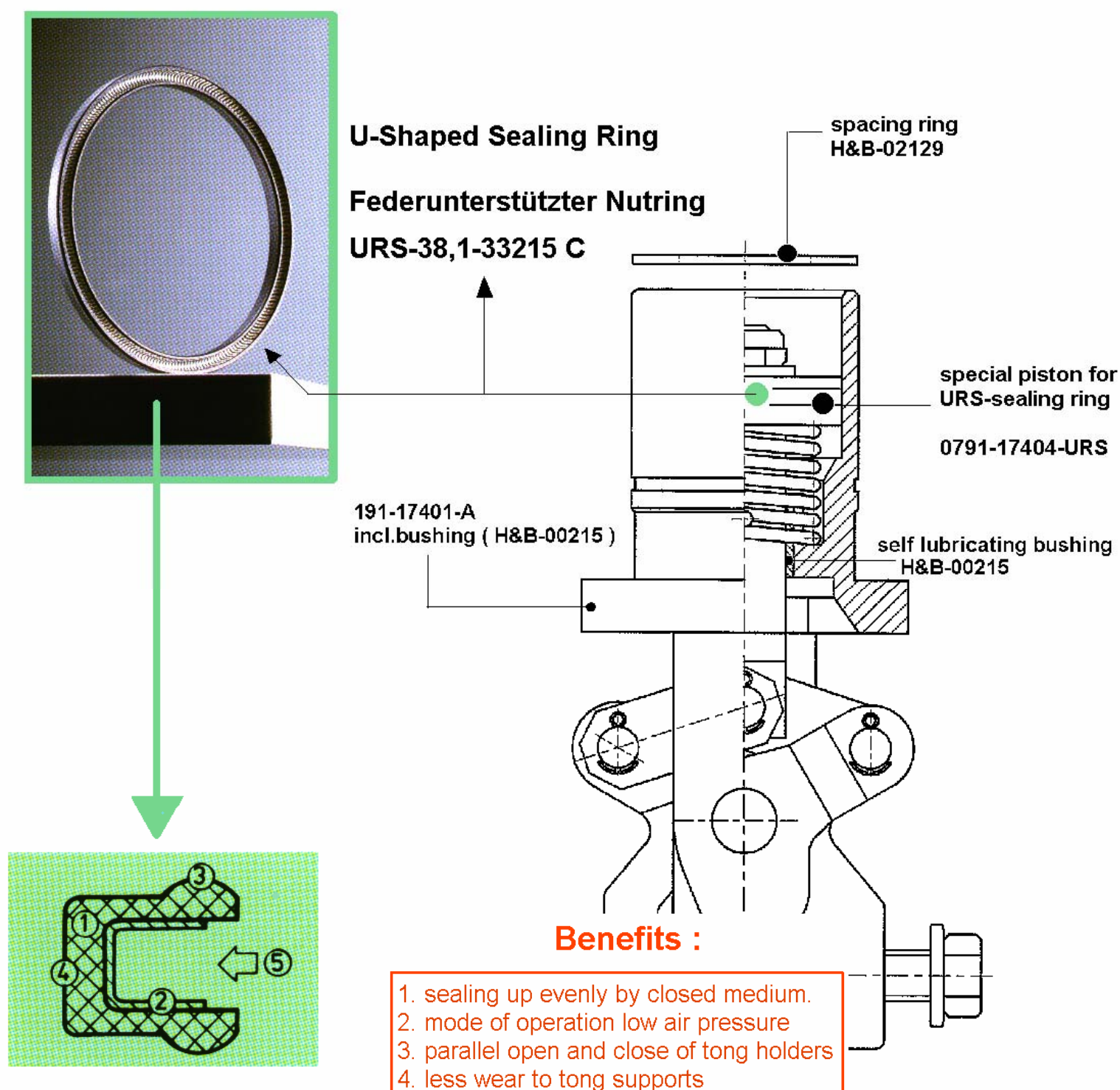
Description	IS-Part No.	H&B-Order No.
Take Out Tong Holder (see below Bulletin)	191-8319 Gr.1	0791-8319-1-A



1	Tong Holder				191-17390	0791-17390	19	
1	Tong Holder				191-17389	0791-17389	18	
3	Pin				191-10290	0791-10290	17	
6	Cotter Pin					DIN-94 -2,5 x 12	16	
2	Link				191-10285	0791-10285	15	
2	Collar Screw				191-10630	0791-10630	14	
1	Link				191-10292	0791-10292	13	
1	Piston & Rod				191-17402	0791-17402	12	
1	Pivot Shaft				191-17403	0791-17403	11	
4	Screw for fitting the complete holder					DIN-912-1/4”UNC x 1”	10	
1	Plug					DIN-915- 1/4“ UNC x 1/2“	9	
1	Tong Support incl.self lubric.bushing					0791-17401-A	8	
1	Bushing, self lubricatet 19,05-15,875					H&B-00215	7	
1	O-Ring, viton				1700-805	7700-805	6	
1	Compression Spring				23-11025	0723-11025	5	
1	Special Piston					0791-17404-URS	4	
1	U-Shaped Sealing Ring					URS-38,1-33215 C	3	
1	Hex Nut					DIN-985 – 1/2“ UNC	2	
1	Spacing Ring					H&B-02129	1	
Qty.	Description				IS Part No.	H&B Order No.	Index	Note
				Datum	Name	Benennung : Take Out Tong Holder		
			Gez.					
			Gep.					
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 65396 Walluf am Rhein			Zeichnungs- Nr.: 0791-8319 -1-A H&B-Standard - System		
Änderung	Datum	Name						

Take Out Tong Holder – Type H&B (Emhart Compatible)

Description	IS-Part No.	H&B-Order No.
Technical Bulletin	191-8319 Gr.1	0791-8319-1-A

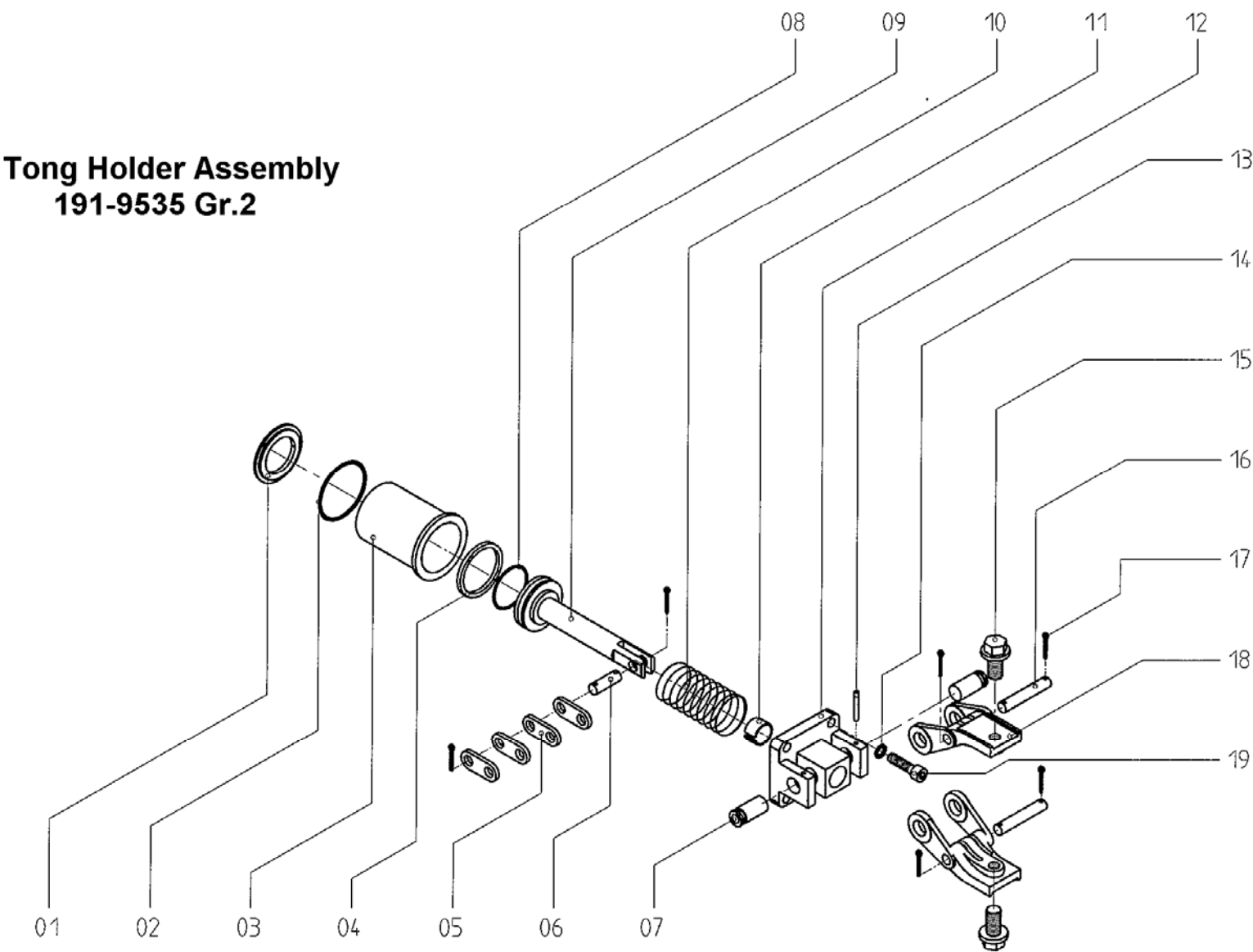


1. Kunststoffhülle mit hoher thermischer und chemischer Beständigkeit
2. Edelstahlfeder für definierte Dichtkräfte
3. Dichtlippe
4. Dichtungsrücken, maßgeblich für die stabile Lage im Einbauraum
5. Druck bzw. Medienseite

1. Synthetic materials with high thermal and chemical resistance
2. High quality steel spring for defined thick strengths
3. Sealing lip
4. Sealing back, substantial for the stable situation in the installation room
5. Pressure and medium side

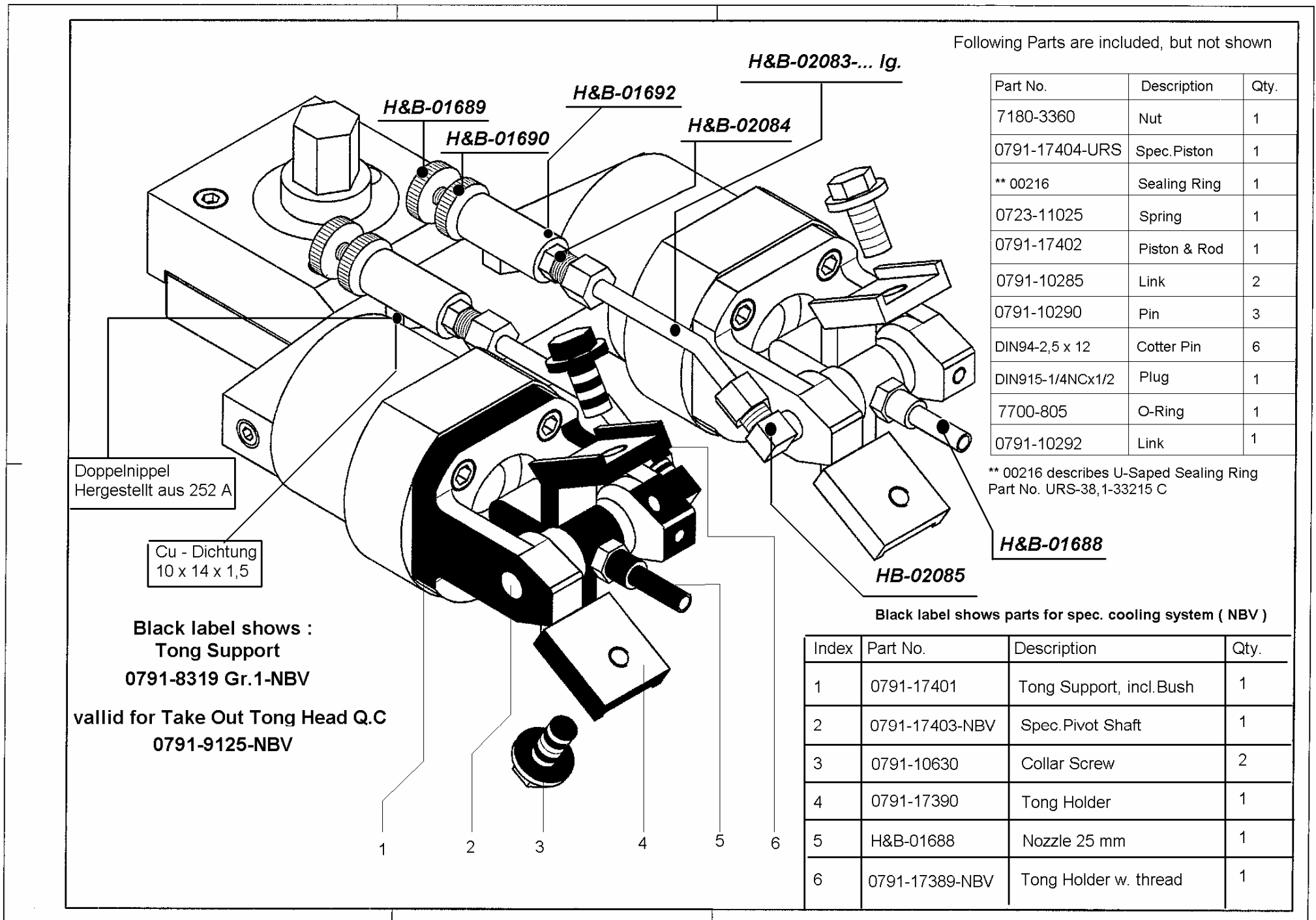
Take Out Tong Holder

Description	IS-Part No.	H&B-Order No.
Take Out Tong Holder	0191-9535 GR.2	0791-9535-2



4	Screw for fitting the complete holder					DIN-912-1/4 UNC x 1”	19	
2	Tong Holder				191-27163	0791-27163	18	
6	Cotter Pin					DIN-94 -2,5 x 12	17	
2	Pin				191-27210	0791-27210	16	
2	Collar Screw				191-10630	0791-10630	15	
4	Lock washer					H1235-6,4	14	
2	Straight Pin					DIN-1481-3 x 24	13	
1	Tong Support				191-27158	0791-27158	12	
1	Guide Ring				59-86533	0759-86533	11	
1	Compression Spring				23-11025	0723-11025	10	
1	Piston & Rod				191-27156	0791-27156	9	
1	O-Ring, Viton				1700-43	7700-43	8	
2	Pivot Sleeve				191-26989	0791-26989	7	
1	Pin				191-27209	0791-27209	6	
4	Link				191-26795	0791-26795	5	
1	Piston Ring				2520-547	9520-547	4	
1	Cylinder				191-27157	0791-27157	3	
1	O-Ring, Viton				1700-813	7700-813	2	
1	Spacing Ring				200-10495	7200-10495	1	
Qty.	Description				IS Part No.	H&B Order No.	Index	Note
				Datum	Name	Benennung : Take Out Tong Holder		
			Gez.					
			Gep.					
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 65396 Walluf am Rhein			Zeichnungs- Nr.: 0791-9535-2 Anti Wink - System		
Änderung	Datum	Name						

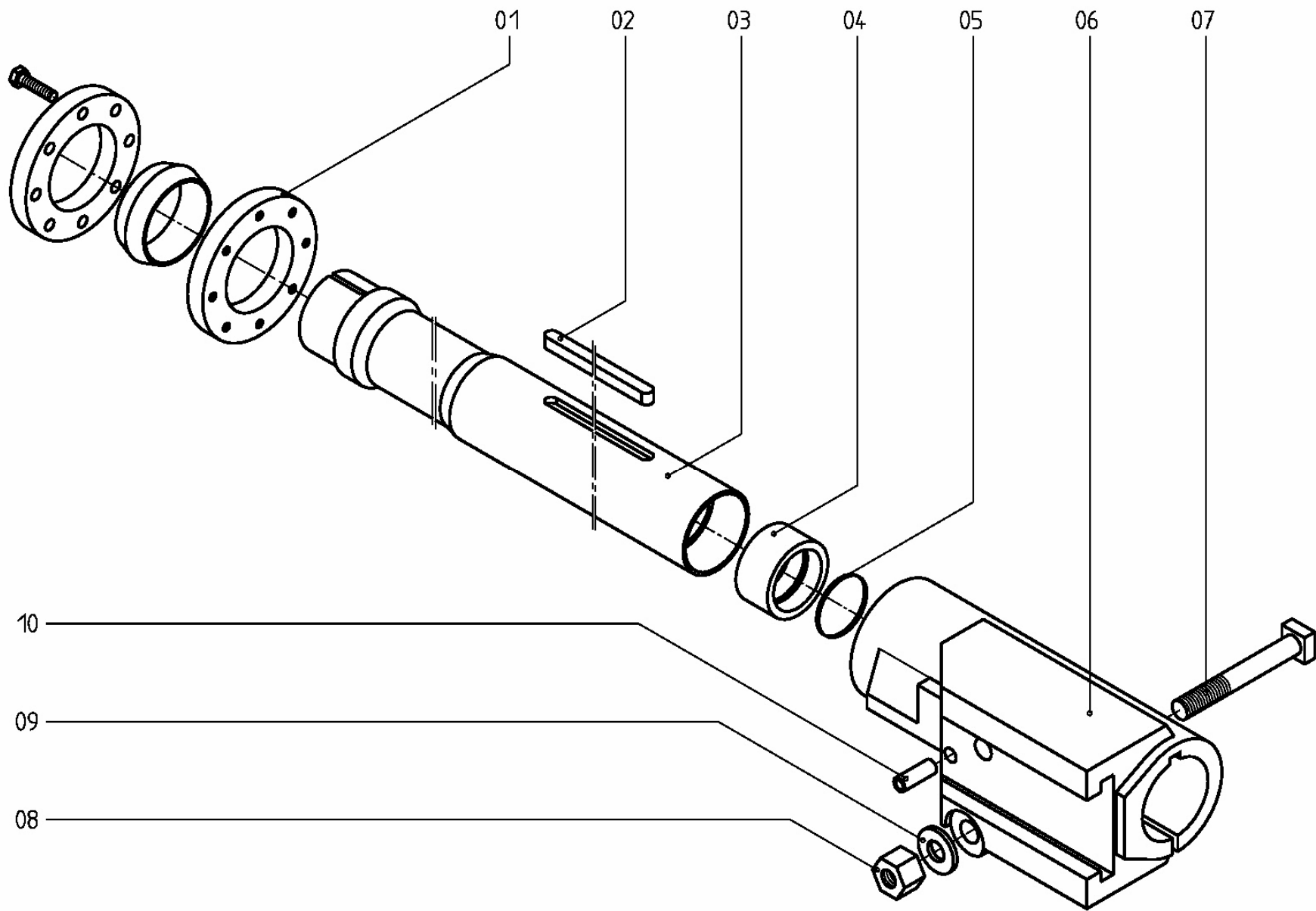
Take Out Tong Heads Q.C. **with separate adjustable finish cooling by needle valves**



IS Part.No	H&B Order No.	Description
191-9125 Gr.15	0791-9125-15-NBV-1	Take Out Tong Head Q.C.4 1/4" SG with finish cooling
191-9125 Gr.16	0791-9125-16-NBV-1	Take Out Tong Head Q.C.5 1/2" SG with finish cooling
191-9125 Gr.17	0791-9125-17-NBV-1	Take Out Tong Head Q.C.5" SG with finish cooling
191-9125 Gr.18	0791-9125-18-NBV-1	Take Out Tong Head Q.C.TG.3" with finish cooling
191-9125 Gr.20	0791-9125-20-NBV-1	Take Out Tong Head Q.C. DG 4 1/4" with finish cooling
191-9125 Gr.21	0791-9125-21-NBV-1	Take Out Tong Head Q.C.TG 4 1/4" with finish cooling
191-9125 Gr.22	0791-9125-22-NBV-1	Take Out Tong Head Q.C. DG 5" with finish cooling
191-9125 Gr.23	0791-9125-23--NBV-1	Take Out Tong Head Q.C. DG 5 1/2" with finish cooling
191-9125 Gr.24	0791-9125-24-NBV-1	Take Out Tong Head Q.C. DG 6" with finish cooling
191-9125 Gr.25	0791-9125-25-NBV-1	Take Out Tong Head Q.C. DG 6 1/4" with finish cooling

Mounting Parts Q.C. Baffle

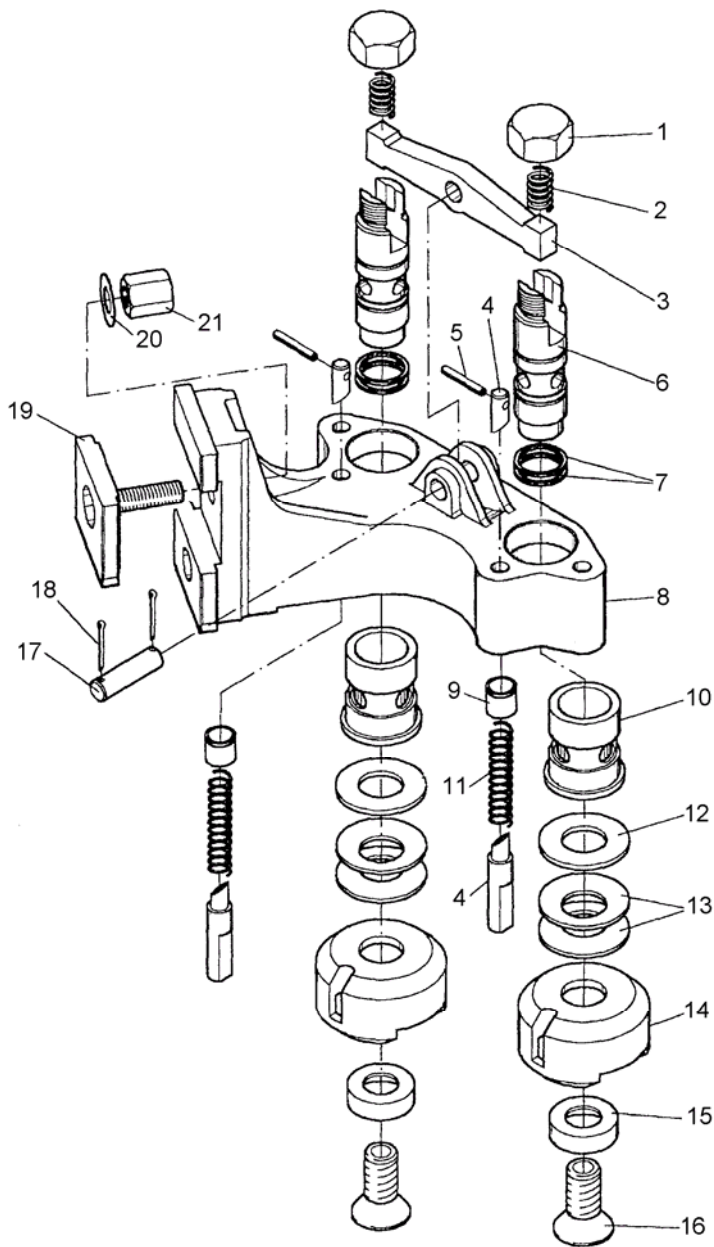
Description	IS-Part No.	H&B-Order No.
Mounting Parts Q.C. Baffle	200-252 Gr.8	7200-252-8



1	Dowel				2080-503	7080-503	10	
1	Washer					DIN-125-13	9	
1	Hex Nut				1180-1601	7180-1601	8	
2	Hex. Hd.Cp.Screw				2660-880	DIN-931-1/2 UNC x 3 1/4"	7	
1	Baffle Arm Holder				191-24427	0791-24427	6	
1	O-Ring, Viton				1700-803	7700-803	5	
1	Bushing				200-10099	7200-10099	4	
1	Sleeve				200-263 Gr.2	7200-263-2	3	
1	Key				7847-317	9847-317	2	
1	Clamping Ring				191-9139 Gr.1	0791-9139-1	1	
Qty.	Description				IS Part No.	H&B Order No.	Index	Note
				Datum	Name	Benennung : Mounting Parts Q.C.Baffle		
			Gez.					
			Gep.					
			Hartmann & Bender Vertriebs – und Produktions - GmbH Hauptstraße 70 65396 Walluf am Rhein			Zeichnungs- Nr.: 7200-252-8		
Änderung	Datum	Name						

Q.C. Baffle Arm DG 5"

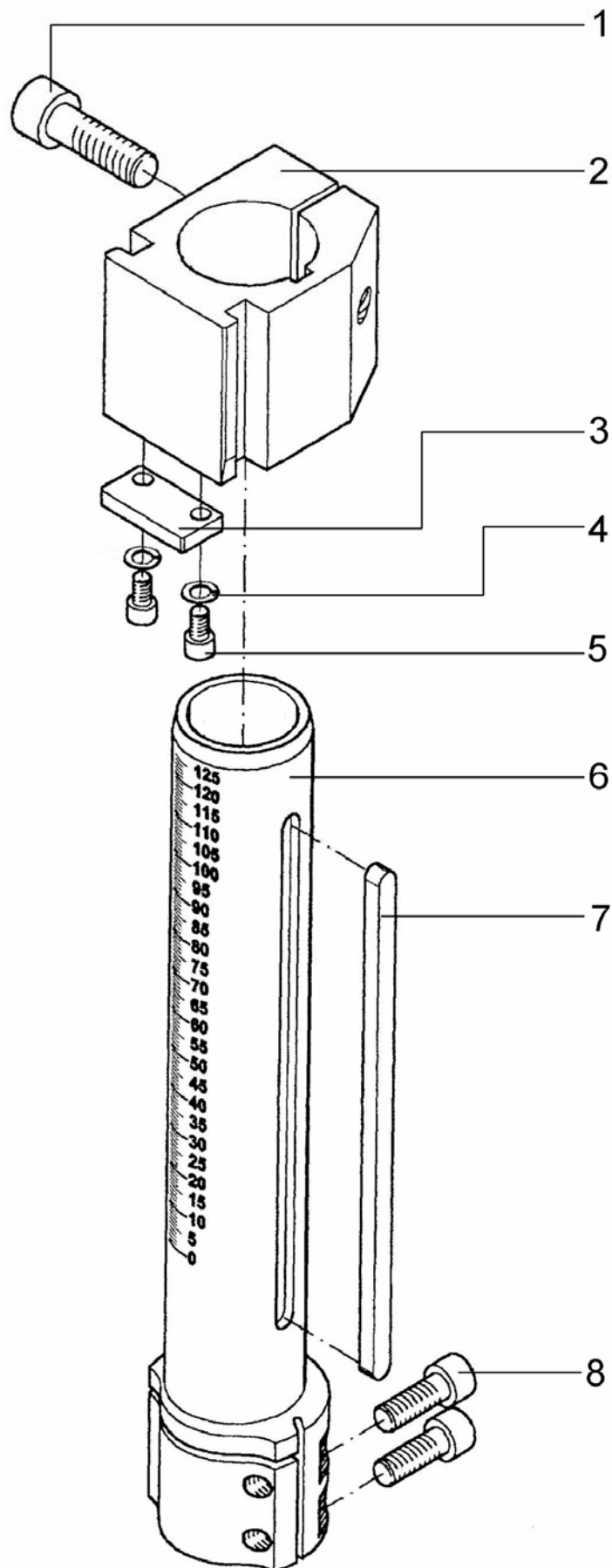
Description	IS-Part No.	H&B-Order No.
Q.C. Baffle Baffle Arm DG 5"	191-9135 Gr.4	0791-9135-4
Q.C. Baffle Baffle Arm DG 4 1/4"	191-9135 Gr.3	0791-9135-3



x	x	1	Hex Nut		DIN-934-1/2“ UNC	21	
x	x	1	Washer		DIN-125-13	20	
x	x	1	Holding Plate	191-24435	0791-24435	19	
x	x	2	Cotter Pin		DIN-94-3,2 x 20	18	
x	x	1	Bolt	191-24437	0791-24437	17	
x	x	2	Screw	48-88437	0748-88437	16	
x	x	2	Washer	191-24433	0791-24433	15	
x	x	2	Lock Ring	191-25691	0791-25691	14	
x	x	4	Conical Spring Washer	59-20524	0759-20524	13	
x	x	2	Washer, hardened	3360-257	7360-257	12	
x	x	2	Compression Spring	191-24466	0791-24466	11	
x	x	2	Bushing	191-24430	0791-24430	10	
x	x	4	Bushing self lubricated	59-20528	0759-20528	9	
x		1	Body DG 5"	191-24497	0759-24497	8	
	x	1	Body DG 4 1/4"	191-24428	0791-24428	8	
x	x	4	Piston Ring	2520-531	9520-531	7	
x	x	2	Retainer Stud	191-24429	0791-24429	6	
x	x	2	Straght Pin		DIN-1481-5 x 30	5	
x	x	2	Position Pin	191-24436	0791-24436	4	
x		1	Equalizer	191-23363	0791-23363	3	
	x	1	Equalizer	191-14791	0791-14791	3	
x	x	2	Compression Spring	191-24467	0791-24467	2	
x	x	2	Cap	191-24431	0791-24431	1	
Gr.4	Gr.3	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Q.C.Baffle Arm DG
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.:
							0791-9135-3 (DG 4 1/4")
							0791-9135-4 (DG 5“)
			Zust.	Änderung	Datum	Name	

Mounting Parts Q.C. Funnel

Description	IS-Part No.	H&B-Order No.
Mounting Parts Q.C. Funnel	191-9133 Gr.20	0791-9133-20

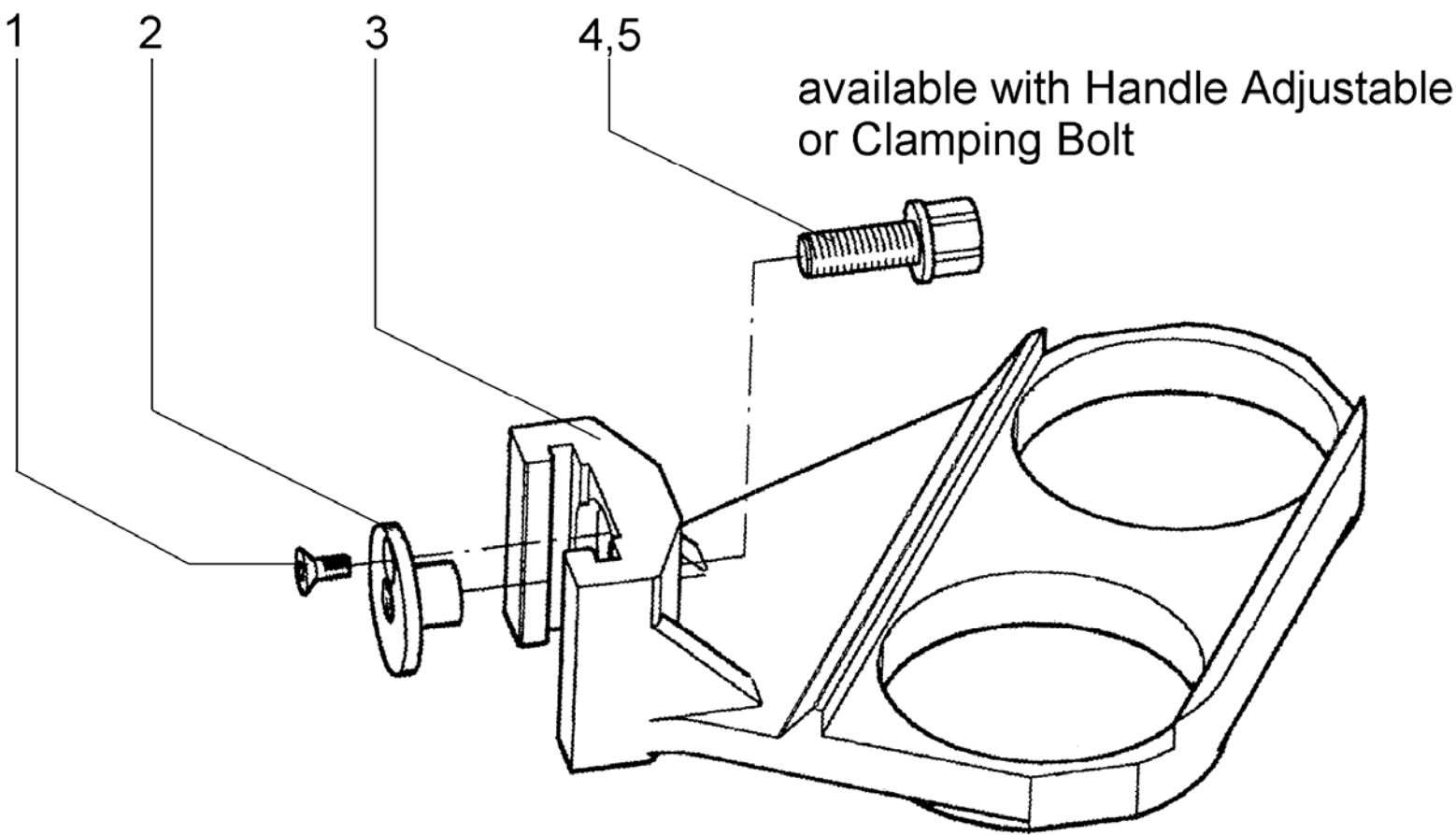


		2	Hex Soc. Hd.Cp. Screw	2640-530	DIN-912-3/8 UNC x 1"	8	
		1	Key 8 x 7 x 210	7847-210	9747-210	7	
		1	Sleeve	191-24464	0791-24464	6	
		2	Hex Soc. Hd.Cp. Screw	2640-130	DIN-912-1/4 UNC x 3/4"	5	
		2	Washer		DIN-125-6,4	4	
		1	Plate	191-24463	0791-24463	3	
		1	Clamping Device	191-24461	0791-24461	2	
		1	Hex Hd.Cp. Screw	2660-790	DIN-931-1/2 UNC x 3 1/4"	1	
		Qty.	Description	IS Part No.	H&B Order No.	Index	Note
						Benennung : Mounting Parts Q.C.Funnel	
					Gez.		
					Gep.		
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein		Zeichnungs- Nr.: 0791-9133-20
			Zust.	Änderung	Datum	Name	

Q.C. Funnel Arm DG 5”

Description	Funnel No.	Funnel Size – inch / metric	IS Part No.	H&B-Order No.
Q.C Funnel Arm DG 5” 3 5/16” DIA.	0	3 1/4" / 82,50	191-9133 Gr.8	0791-9133-8
Q.C Funnel Arm DG 5” 3 9/16” DIA.	2	3 1/2" / 88,90	191-9133 Gr.9	0791-9133-9
Q.C Funnel Arm DG 5” 3 7/8” DIA.	2 A	3 13/16 “ / 96,84	191-9133 Gr.10	0791-9133-10
Q.C Funnel Arm DG 5” 3 5/16” DIA. *	0	3 1/4" / 82,50	191-9133 Gr.15	0791-9133-15
Q.C Funnel Arm DG 5” 3 9/16” DIA. *	2	3 1/2" / 88,90	191-9133 Gr.16	0791-9133-16

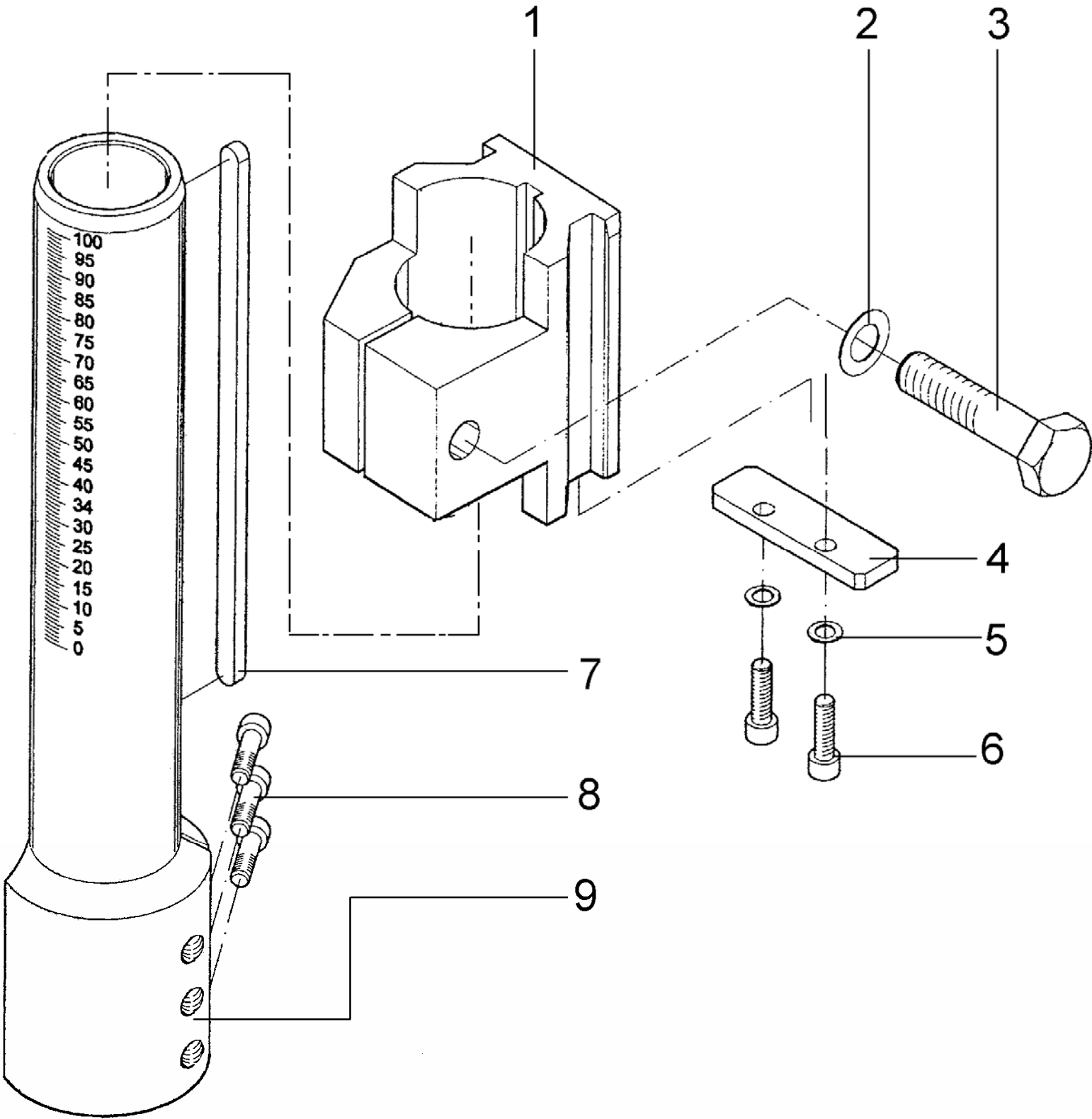
* using with verti – flow cooling



1	1	1	1	1	X	Clamping Bolt		H&B-95430	5		
1	1	1	1	1	X	Handle Adjustable	59-94603	0759-94603	4		
x					1	Body	191-25013	0791-25013	3	0791-9133-16	
	x				1	Body	191-25012	0791-25012	3	0791-9133-15	
		x			1	Body	191-24478	0791-24478	3	0791-9133-10	
			x		1	Body	191-24477	0791-24477	3	0791-9133-9	
				x	1	Body	191-24476	0791-24476	3	0791-9133-8	
x	x	x	x	x	1	Bushing	191-26477	0791-26477	2		
x	x	x	x	x	1	Count.Sc.Hd.Screw		DIN-7991–1/4” UNC x 5/8”	1		
Gr.16	Gr.15	Gr.10	Gr.9	Gr.8	Qty	Description	IS Part No.	H&B Order No.	Index	Superordinate Assy. No.	
										Benennung : Q.C.Funnel Arm	
										Zeichnungs- Nr.: 0791-9133	
						Zust.	Änderung	Datum	Name		

Mounting Parts Q.C. Blow Head

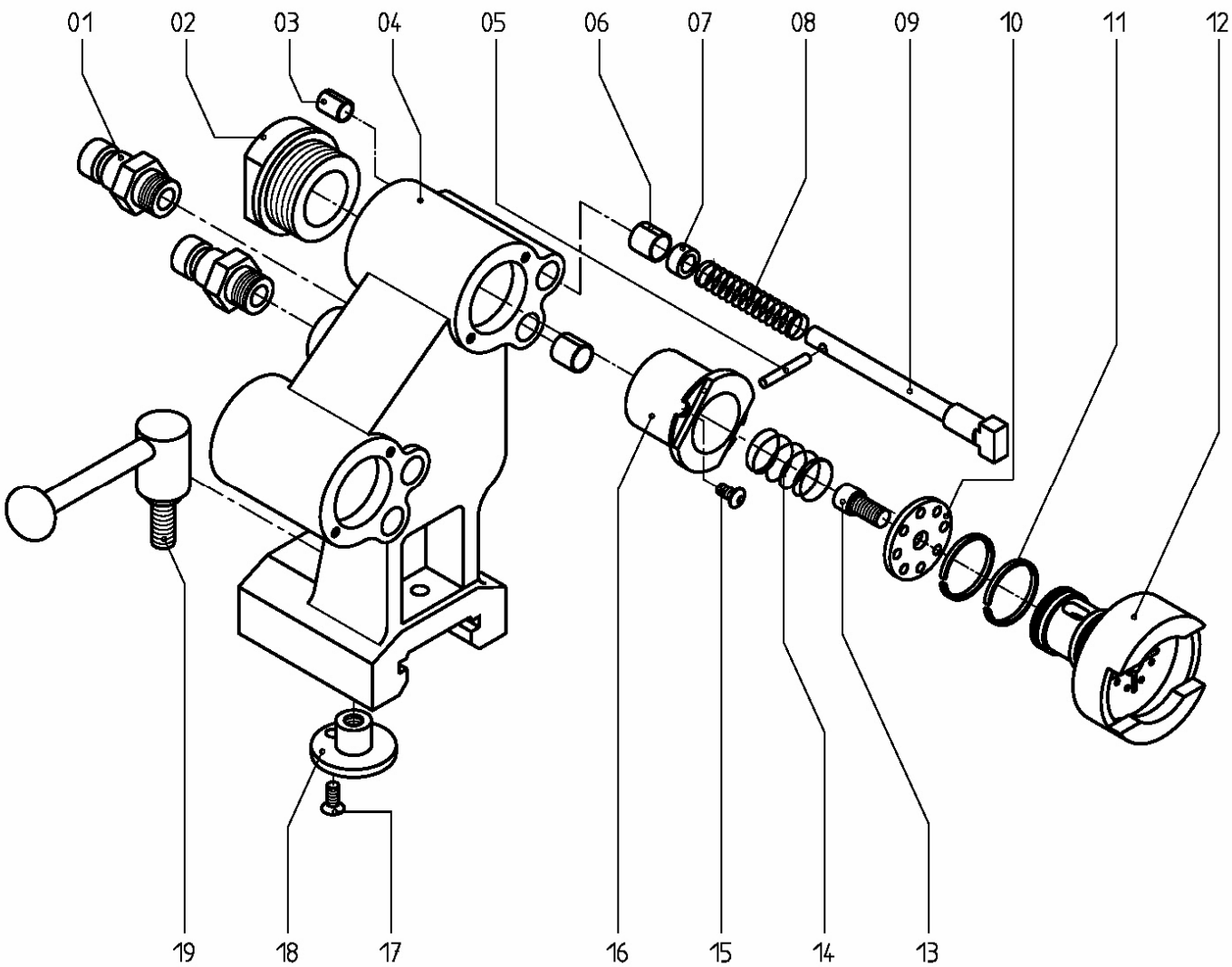
Description	IS-Part No.	H&B-Order No.
Mounting Parts Q.C. Blow Head	200-200 Gr.	7200-200-1



		1	Sleeve	200-10252	7200-10252	9	
		3	Hex Soc. Hd.Cp. Screw	2640-530	DIN-912-3/8 UNC x 1"	8	
		1	Key 8 x 5 x 210	191-26126	0791-26126	7	
		2	Hex Soc. Hd.Cp. Screw	2640-130	DIN-912-1/4 UNC x 3/4"	6	
		2	Washer		DIN-125-6,4	5	
		1	Plate	191-25462	0791-25462	4	
		1	Hex Hd.Cp. Screw	2660-790	DIN-931-1/2 UNC x 2 3/4"	3	
		1	Washer		DIN-125-13	2	
		1	Clamping Device	191-25460	0791-25460	1	
		Qty.	Description	IS Part No.	H&B Order No.	Index	Note
					Datum	Name	Benennung :
					Gez.		Mounting Parts
					Gep.		Q.C. Blow Head
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 72 Walluf am Rhein	Zeichnungs- Nr.:	
						7200-200-1	
			Zust.	Änderung	Datum	Name	

Q.C. Blow Head Arm DG 5”

Description	IS-Part No.	H&B-Order No.
Q.C. Blow Head Arm DG 5" Thread Type	200-202 Gr. 2	7200-202 - 2
Q.C. Blow Head Arm DG 5" Thread Type	200-202 Gr.14	7200-202 -14
Q.C. Blow Head Arm DG 5" Bayonet Type	200-202 Gr. 6	7200-202 - 6
Q.C. Blow Head Arm DG 5" Bayonet Type	200-202 Gr.18	7200-202 -18

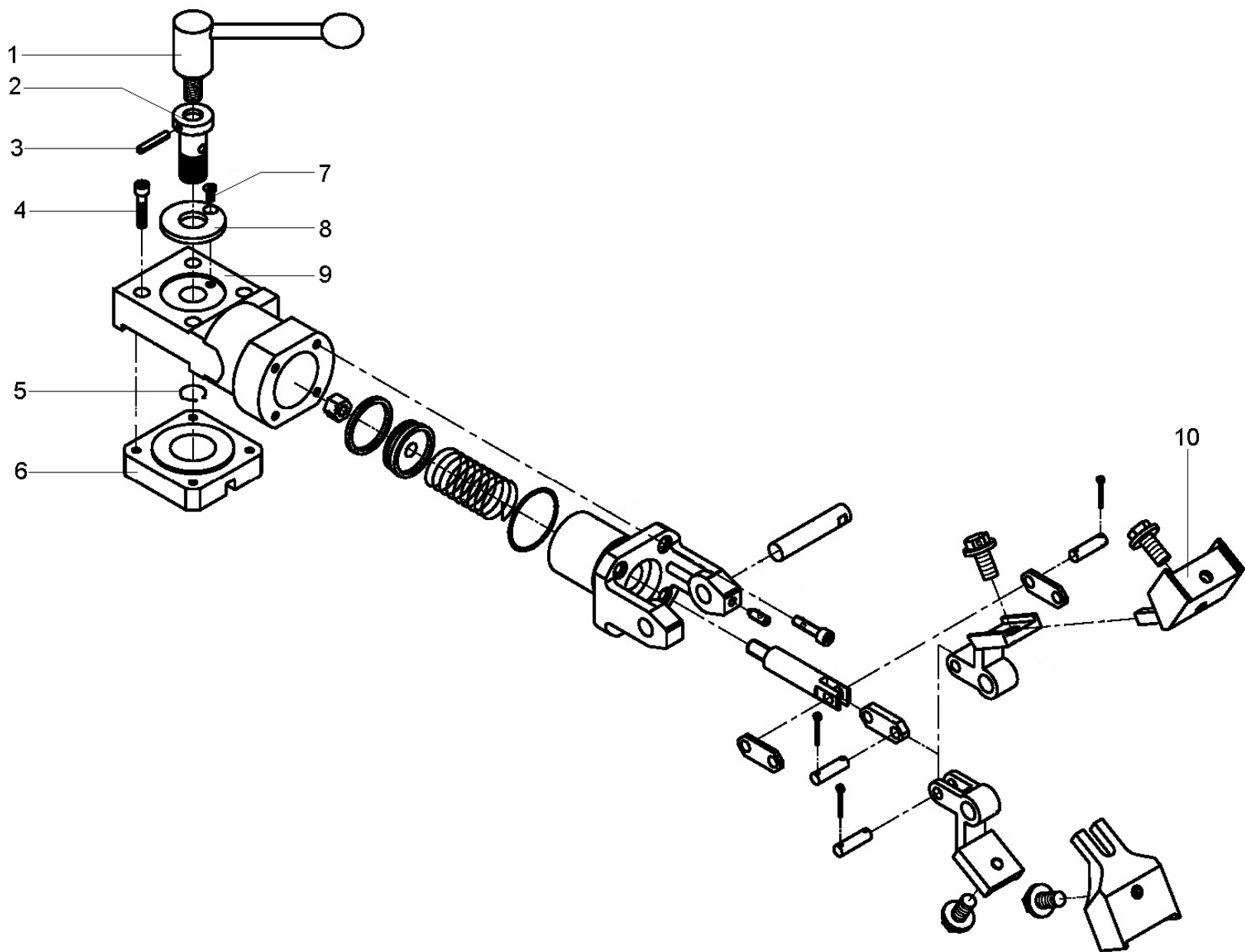


200-202 Gr.18 Bayonet Type is shown

x	x	x	x	1	Handle Adjustable	59-94603	0759-94603	19	
x	x	x	x	1	Bushing	191-26477	0791-26477	18	
x	x	x	x	1	Count.Sc.Hd.Screw		DIN-7991-1/4"NC x 5/8"	17	
x	x	x	x	2	Bushing	191-26494	0791-26494	16	
x	x	x	x	4	Button Soc. Cap Screw	2640-1620	ISO-7380- M 6 x 12	15	
x	x	x	x	2	Compression Spring	59-75011	0759-75011	14	
x	x	x	x	2	Hex. Soc.Hd.Cap Screw		DIN-912-3/8" NC x 3/4"	13	
x	x			2	Lock Ring (Bayonet Type)	191-26490	0791-26490	12	
		x	x	2	Lock Ring (Thread Type)	191-26491	0791-26491	12	
x	x	x	x	4	Piston Ring	2520-30	9520-30	11	
x	x	x	x	2	Washer	191-26495	0791-26495	10	
x	x			2	Piston Pin (Bayonet Type)	191-26749	0791-26749	9	
		x	x	2	Piston Pin (Thread Type)	191-26748	0791-26748	9	
x	x	x	x	2	Compression Spring	191-24466	0791-24466	8	
x	x	x	x	2	Distance Washer	191-26776	0791-26776	7	
x	x	x	x	4	Bushing , self lubricated	59-20528	0759-20528	6	141615 F
x	x	x	x	2	Straight Pin DIN 1481		DIN-1481-5 x 26	5	
x	x	x	x	1	Blow Head Arm Body DG 5"	191-26754	0791-26754	4	
x	x	x	x	4	Bushing, self lubricated	59-20545	0759-20545	3	101215 F
x	x	x	x	2	Retainer	191-26493	0791-26793	2	
x		x			Q.C.Connector Male MD	1460-828	7460-828	1	
	x		x	2	Connector Male	1460-444	7460-444	1	LP-012-1-WR021-11
Gr.18	Gr.6	Gr.14	Gr.2	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
							Datum	Name	Benennung :
							Gez.		Blow Head Arm Q.C.
							Gep.		DG 5"
							Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 - 72 Walluf am Rhein		Zeichnungs- Nr.:
									7200-202- 2 Thread Type
									7200-202-14 Thread Type
									7200-202 – 6 Bayonet Type
									7200-202 -18 Bayonet Type
					Zust.	Änderung	Datum	Name	

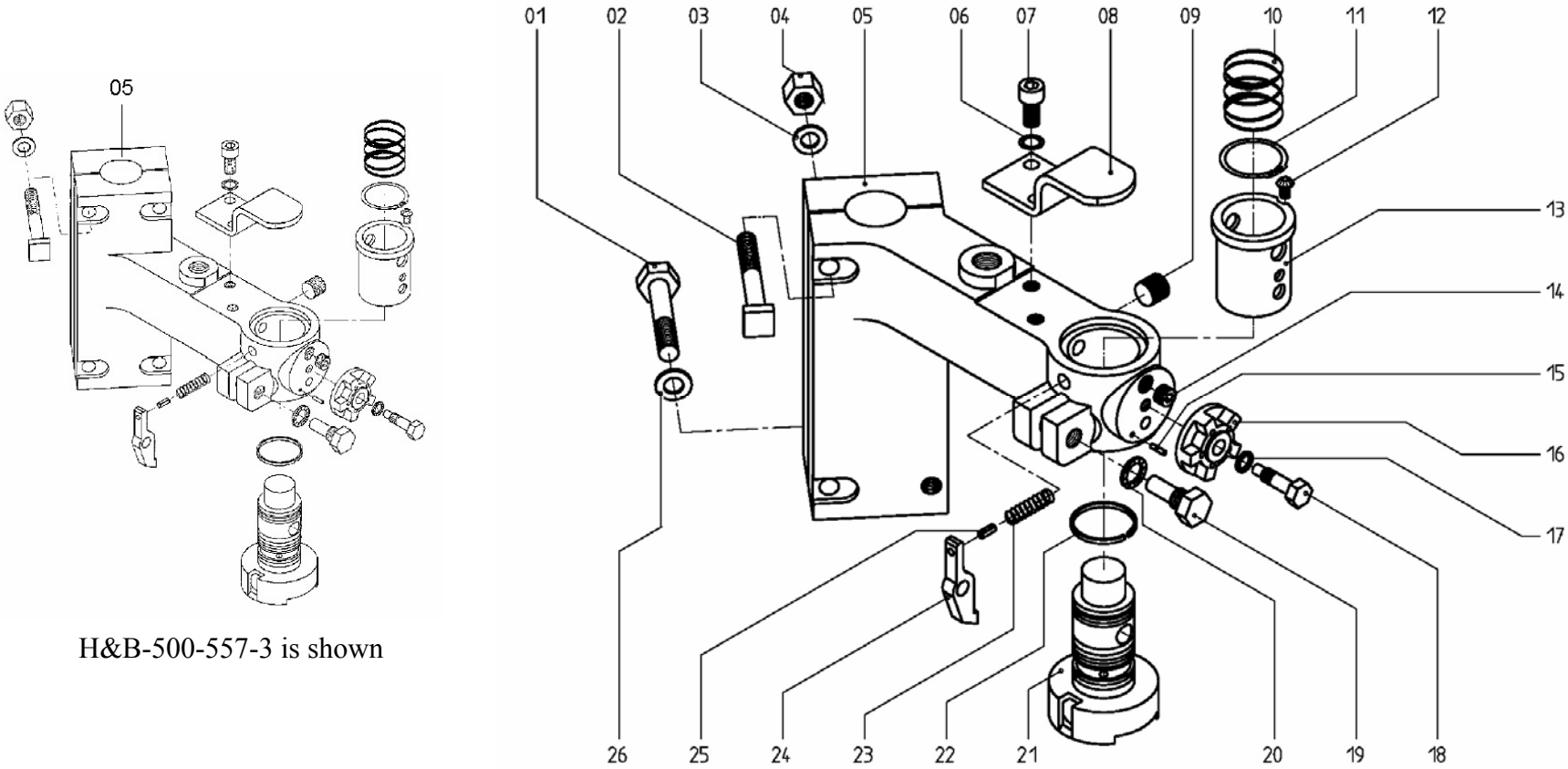
Q.C. Take Out Tong Head Assembly SG 5"

Description	IS-Part No.	H&B-Order No.
Q.C.Take Out Tong Head Assembly SG 5"	191-9125 Gr.17	0791-9125-17
Q.C.Take Out Tong Head Assembly SG 5" Anti Wink	210-275 Gr.12	7210-275-12

[illegible]

Blow Head Arm Lightweight SG 5”

Description	IS-Part No.	H&B-Order No.
Blow Head Arm Lightweight SG 5”		H&B-500-557-3
Blow Head Arm Lightweight SG 5”		H&B-500-557-4

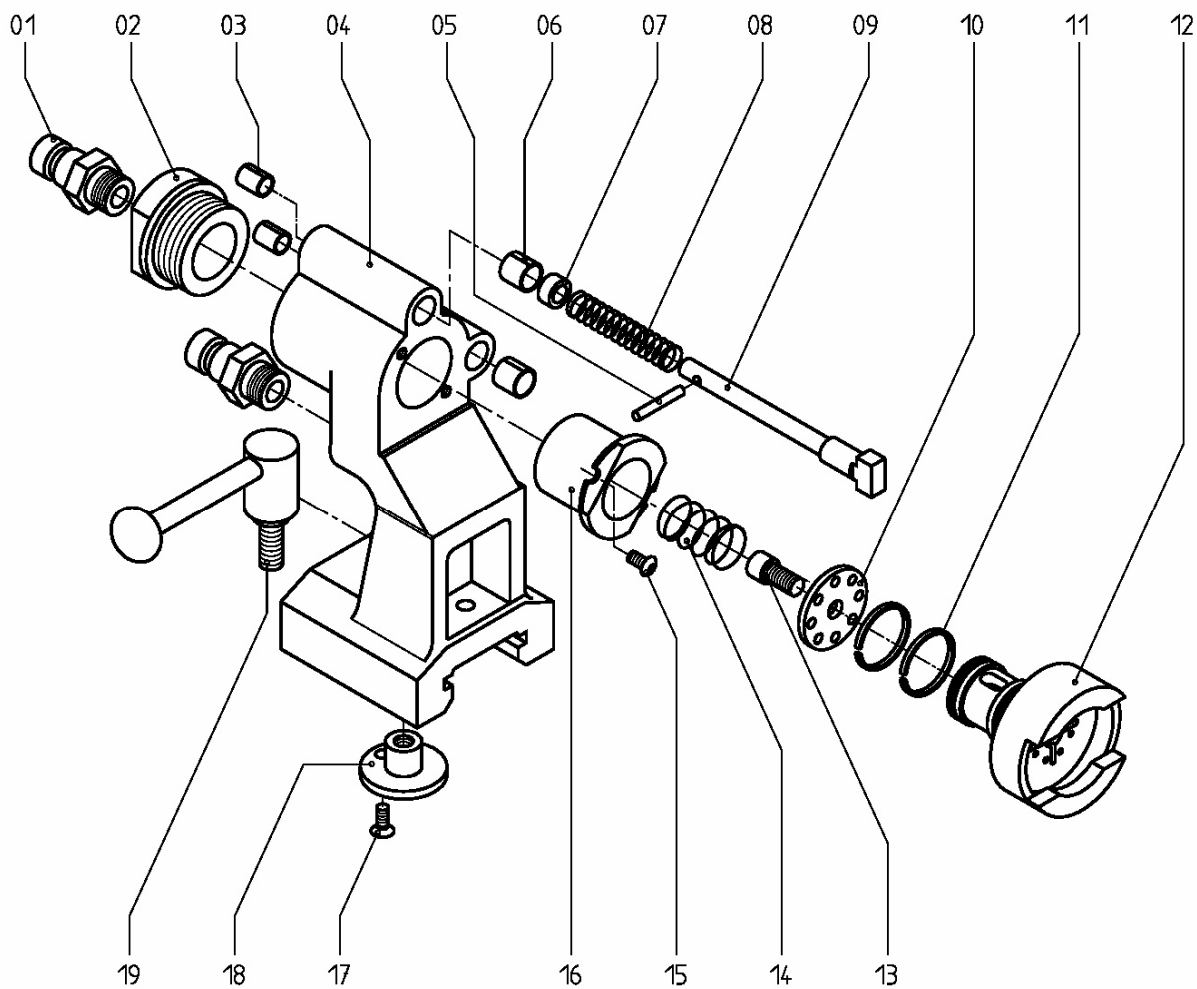


H&B-500-557-4 is shown

x		2	Washer		DIN-125 -13	27	
x	x	1	Straight Pin		DIN-1481-5 x 12	25	
x	x	1	Finger		0400-706-575-10	24	
x	x	1	Spring		0600-708-522-3	23	
x	x	4	Piston Ring	2520-50	9520-50	22	
x	x	1	Lock Ring		H&B-43502	21	
x	x	1	Lock Washer		H 1235 - 14	20	
x	x	1	Shoulder Screw M 014 x 1,5 x 35		H&B-01336	19	
x	x	1	Shoulder Screw		0600-708-507-1	18	
x	x	1	Lock Washer		H 1235 - 10	17	
x	x	1	Exhaust Valve	23-5273	0723-5273	16	
x	x	1	Straight Pin		DIN-1481 – 3 x 12	15	
x	x	2	Plug		DIN-906 – R 1/4“	14	
x	x	1	Bushing		600-708-507-3-2	13	
x	x	1	Button Soc. Cap Screw		ISO-7380-1/4“ UNC x 3/8“	12	
x	x	1	Retaining Ring DIN 471		2540-190-42	11	
x	x	1	Spring		0600-708-522-4	10	
x	x	1	Plug		DIN 906 – R 3/8“	9	
x	x	1	Spring Guide		H&B-500-708-522-SG	8	
x	x	2	Hex. Soc.Hd.Cap Screw		DIN-912-3/8“ NC x 3/4“	7	
x	x	2	Lock Washer		H 1235 - 10	6	
x		1	Body & Cap		H&B-500-557-008	5	
	x	1	Body & Cap		H&B-500-557-006	5	
2	4	X	Hex Nut	1180-1601	7180-1601	4	
2	4	X	Washer		DIN-125 -13	3	
2	4	X	Square Head Bolt 1/2” UNC x 3 1/2”	191-16143	0791-16143	2	
x		2	Hex. Hd. Cap Screw		DIN-931-1/2” NC x 2 1/2”	1	
Gr.4	Gr.3	Qty.	Description	IS Part No.	H&B Ident Nr.	Index	Note
					Datum	Name	Benennung :
					Gez.		Lightweight
					Gep.		Blow Head Arm SG 5“
					Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 - 72 Walluf am Rhein		Zeichnungs- Nr.:
							H&B-500-557-3
							H&B-500-557-4
Index 12 war 1/4“ UNC x 5/8“			Zust.	Änderung	Datum	Name	

Q.C. Blow Head Arm SG 5”

Description	IS-Part No.	H&B-Order No.
Q.C. Blow Head Arm SG 5" Thread Type	200-201 Gr. 2	7200-201- 2
Q.C. Blow Head Arm SG 5" Thread Type	200-201 Gr.14	7200-201-14
Q.C. Blow Head Arm SG 5" Bayonet Type	200-201 Gr. 6	7200-201- 6
Q.C. Blow Head Arm SG 5" Bayonet Type	200-201 Gr.18	7200-201-18



200-201 Gr.18 Bayonet Type is shown

x	x	x	x	1	Handle Adjustable	59-94603	0759-94603	19	
x	x	x	x	1	Bushing	191-26477	0791-26477	18	
x	x	x	x	1	Count.Sc.Hd.Screw		DIN-7991-1/4"NC x 5/8"	17	
x	x	x	x	1	Bushing	191-26494	0791-26494	16	
x	x	x	x	2	Button Soc. Cap Screw	2640-1620	ISO-7380- M 6 x 12	15	
x	x	x	x	1	Compression Spring	59-75011	0759-75011	14	
x	x	x	x	1	Hex. Soc.Hd.Cap Screw		DIN-912-3/8" NC x 3/4"	13	
x	x			1	Lock Ring (Bayonet Type)	191-26490	0791-26490	12	
		x	x	1	Lock Ring (Thread Type)	191-26491	0791-26491	12	
x	x	x	x	2	Piston Ring	2520-30	9520-30	11	
x	x	x	x	1	Washer	191-26495	0791-26495	10	
x	x			1	Piston Pin (Bayonet Type)	191-26749	0791-26749	9	
		x	x	1	Piston Pin (Thread Type)	191-26748	0791-26748	9	
x	x	x	x	1	Compression Spring	191-24466	0791-24466	8	
x	x	x	x	1	Distance Washer	191-26776	0791-26776	7	
x	x	x	x	2	Bushing , self lubricated	59-20528	0759-20528	6	141615 F
x	x	x	x	1	Straight Pin DIN 1481		DIN-1481-5 x 26	5	
x		x		1	Blow Head Arm Body SG 5"	191-26753	0791-26753	4	
x	x	x	x	2	Bushing, self lubricated	59-20545	0759-20545	3	101215 F
x	x	x	x	1	Retainer	191-26493	0791-26793	2	
x		x		1	Q.C.Connector Male MD	1460-828	7460-828	1	
	x		x	1	Connector Male	1460-444	7460-444	1	LP-012-1-WR021-11
Gr.18	Gr.6	Gr.14	Gr.2	Qty.	Description	IS Part No.	H&B Order No.	Index	Note
							Datum	Name	Benennung :
							Gez.		Blow Head Arm Q.C.
							Gep.		SG 5"
							Hartmann & Bender Vertriebs - und Produktions - GmbH Hauptstraße 70 - 72 Walluf am Rhein		
					Zust.	Änderung	Datu m	Name	Zeichnungs- Nr.:
									7200-201 - 2 Thread Type
									7200-201 -14 Thread Type
									7200-201 - 6 Bayonet Type
									7200-201 -18 Bayonet Type