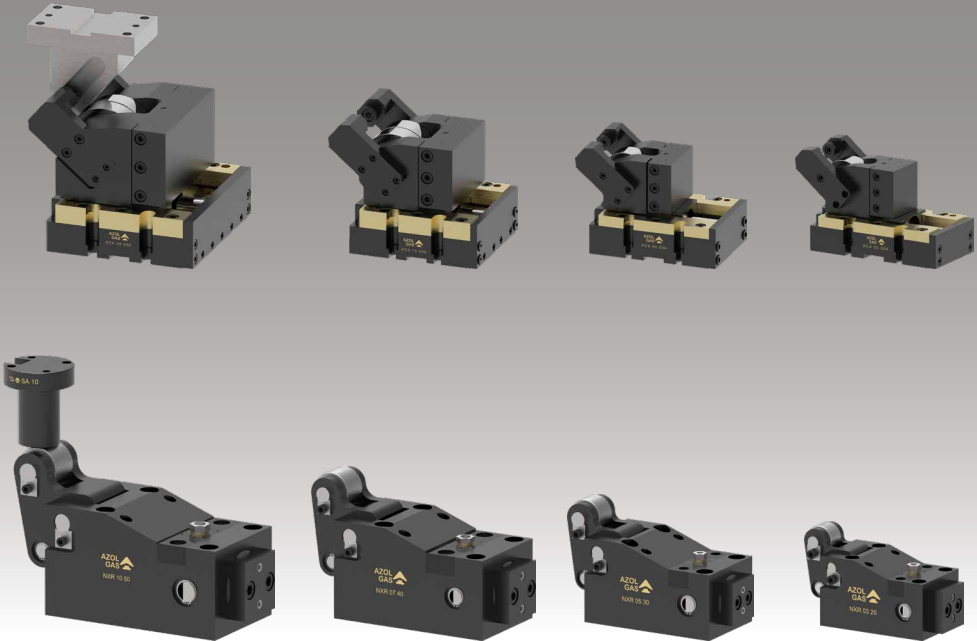




ROLLER CAMS & PUNCHING UNITS



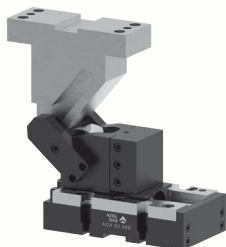
SERIES ACX - FCX - JCX- NXR - NXS - NXC - NXD

- High precision guiding allows off-centered forces
- Superior performance and longevity
- Wide variety of drivers
- Safety use by optional positive return
- Easy access to gas springs
- Separate head cam slider with lateral fitting

Cam units are suitable for a wide variety of metal forming operations: **cutting, flanging, piercing.**

Try AZOLGAS and trust on the experience of the unique supplier of the **WHOLE** set of cams technologies:

- Roller Cams
- Punching Units
- Cam Units
- Hydraulic Cams



ROLLER CAMS

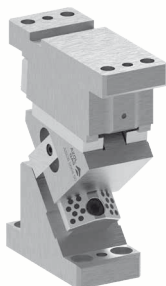
Pushed by higher productivity requirements on metal bending and punching operations?

The new generation of AZOLGAS CX Roller Cams MEETS your expectations.



PUNCHING CAMS

Use AZOLGAS NX punching units for metal cutting and piercing operating when smaller size-force-stroke is required.



CAM UNITS

Cam units are appropriate for piercing and flanging on request of higher forces.



HYDRAULIC CAMS

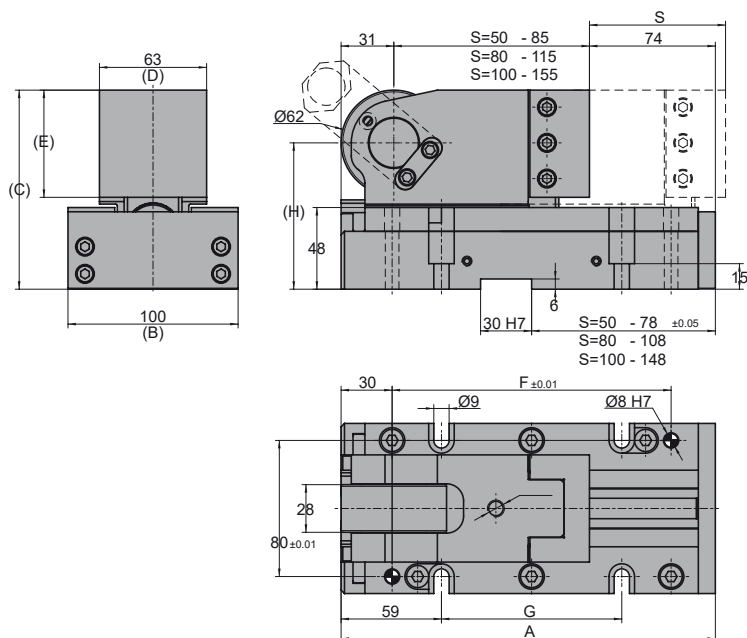
What about punching-piercing-flanging operations with space restrictions in the tool and difficult angle position?

AZOLGAS Hydraulic Cams can be easily installed and operated at any angle or orientation.

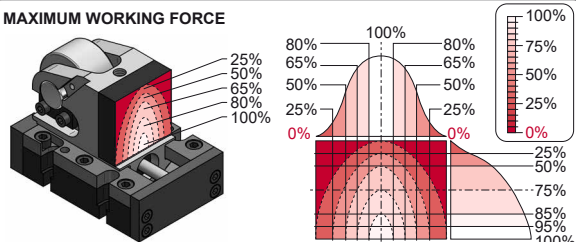
FORCE (Tn)	03	05	07	15	16	20
ROLLER CAMS	STROKES					
ACX	50 80 100	50 80 100		50 80 100		50 80 100
FCX			50 80	50 80 100		
JCX			50 80	50 80 100	50 80 100	
FORCE (Tn)	03	05	07	10		
PUNCHING CAMS	STROKES					
NXR	20	30	40	50		
NXS	20	30	40	50		
NXC	20	30	40	50		
NXD	20	30	40	50		

ACX

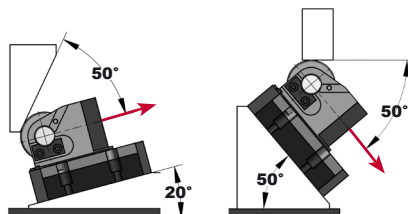
Roller Cam

**AZOL
GAS****ACX 03**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
ACX 03 050	8.40	50	3000	185	AG 150 063	190	100	117	63	63	134	76	86
ACX 03 080	10.14	80	3000	197	AG 150 080	220	100	117	63	63	164	106	86
ACX 03 100	14.36	100	3000	197	AG 150 100	260	100	141	63	87	204	146	110

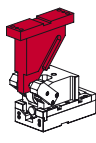
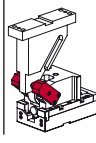
MAXIMUM WORKING FORCE

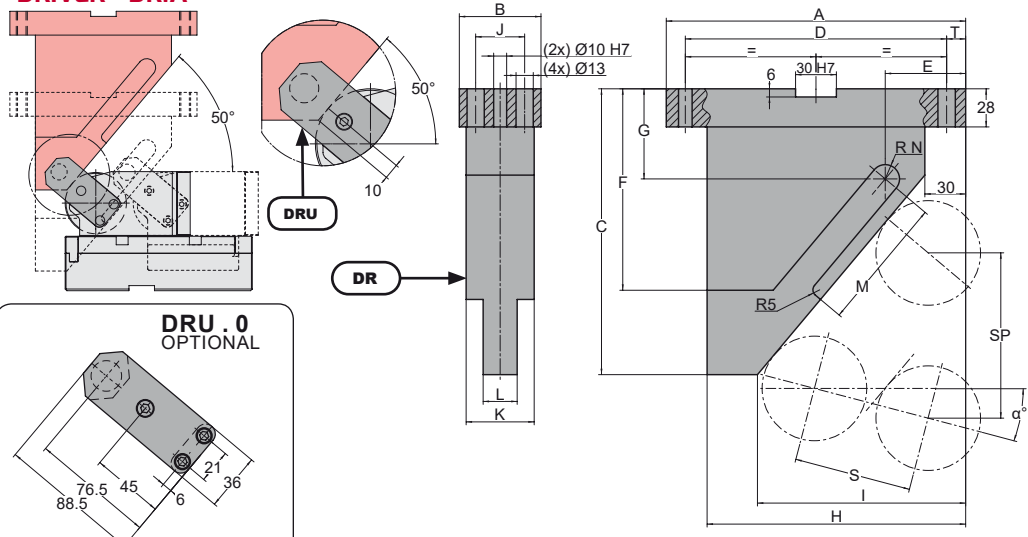
Working force should be as centered as possible on the working area surface.

MAXIMUM WORKING ANGLE**Order:**

Model **Force** **Stroke**
 (Tons) (mm)

ACX 03 050

**Order Options:****Driver****DR . A****Positive
Return****DRU . 0****Set of 2 pieces:****1 x =**

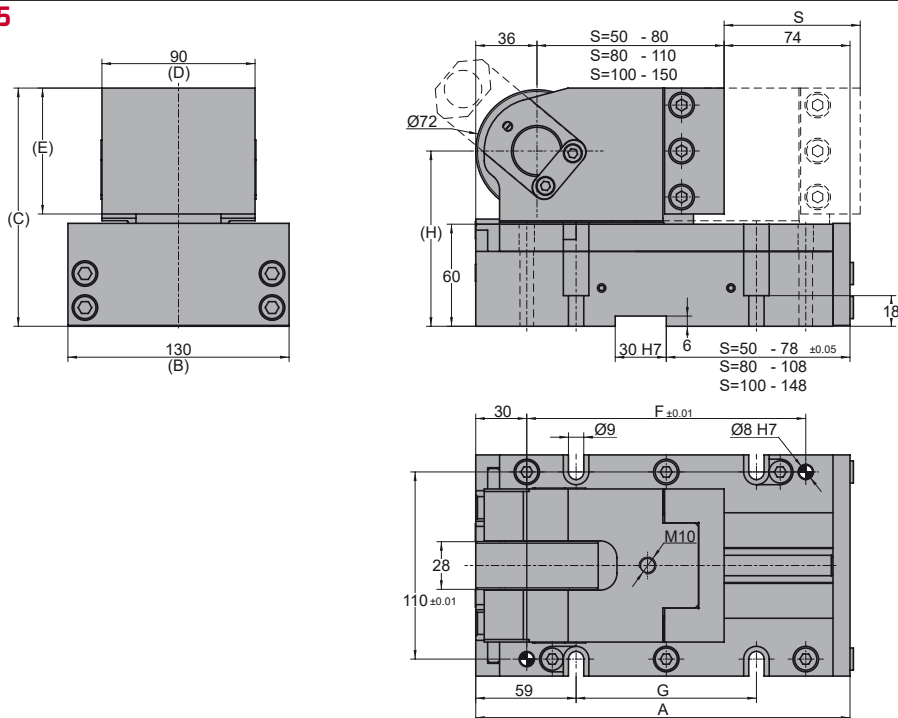
DRIVER - DR.A


(Hardened (60 HRC) contact surface is recommended.)

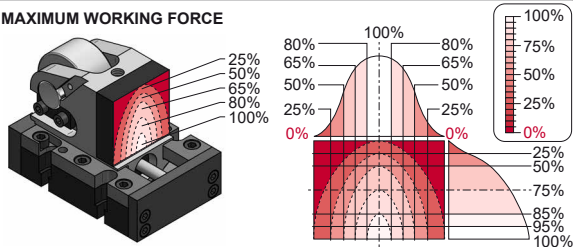
		A	B	C	D	E	F	G	H	I	J	K	L	M	R	N	T	α	SP		
																			S=50	S=80	S=100
	DR.A.1.L.20	160	60	220	130	65.1	140	69.8	130	98	36	50	25	69.0	10.5	15	-20	111.9			
	DR.A.1.L.15	160	60	190	130	61.9	130	64.2	130	98	36	50	25	63.8	10.5	15	-15	90.6			
	DR.A.1.L.10	160	60	165	130	59.0	120	56.5	130	98	36	50	25	65.7	10.5	15	-10	76.6			
	DR.A.1.L.05	160	60	155	130	56.4	110	59.8	130	98	36	50	25	65.0	10.5	15	-05	66.8			
	DR.A.1.H.00	160	60	145	130	56.1	100	60.7	130	100	36	50	25	68.9	10.5	15	00	59.6			
HORIZONTAL	DR.A.1.R.05	160	60	145	130	54.1	105	70.1	130	100	36	50	25	64.7	10.5	15	05	54.2			
	DR.A.1.R.10	160	60	130	130	54.4	90	63.3	130	102	36	50	25	58.5	10.5	15	10	50.0			
	DR.A.1.R.15	160	60	130	130	53.2	90	70.8	130	102	36	50	25	53.0	10.5	15	15	46.8			
	DR.A.1.R.20	160	60	120	130	55.3	85	67.6	130	105	36	50	25	48.0	10.5	15	20	44.2			
	DR.A.1.R.25	160	60	120	130	54.8	85	74.0	130	105	36	50	25	43.4	10.5	15	25	42.3			
	DR.A.1.R.30	160	60	100	130	51.6	70	59.8	130	102	36	50	25	39.0	10.5	15	30	40.8			
	DR.A.1.R.35	160	60	100	130	51.9	70	65.3	130	102	36	50	25	34.8	10.5	15	35	39.7			
	DR.A.1.R.40	160	60	90	130	55.5	60	60.5	130	105	36	50	25	30.6	10.5	15	40	38.9			
	DR.A.1.R.45	160	60	90	130	56.5	60	65.2	130	105	36	50	25	26.5	10.5	15	45	38.4			
	DR.A.1.R.50	160	60	80	130	67.9	49	59.5	130	115	36	50	25	22.3	10.5	15	50	38.3			
	DR.A.2.L.20	220	60	380	192	70.2	195	100.7	190	150	36	50	25	98.8	10.5	14	-20				
	DR.A.2.L.15	220	60	320	192	66.6	160	90.6	190	151	36	50	25	96.8	10.5	14	-15				
	DR.A.2.L.10	220	60	250	192	62.8	125	56.2	190	151	36	50	25	100.8	10.5	14	-10				
	DR.A.2.L.05	220	60	225	192	59.6	145	58.7	190	151	36	50	25	96.2	10.5	14	-05				
	DR.A.2.H.00	220	60	210	192	59.1	148	66.2	190	153	36	50	25	98.4	10.5	14	00				
	DR.A.2.R.05	220	60	205	192	57.3	135	80.3	190	153	36	50	25	97.1	10.5	14	05				
	DR.A.2.R.10	220	60	185	192	58.2	125	77.0	190	155	36	50	25	93.2	10.5	14	10				
	DR.A.2.R.15	220	60	180	192	57.9	135	87.0	190	155	36	50	25	87.2	10.5	14	15				
	DR.A.2.R.20	220	60	165	192	61.3	120	85.5	190	158	36	50	25	80.6	10.5	14	20				
	DR.A.2.R.25	220	60	165	192	62.4	120	97.8	190	158	36	50	25	73.4	10.5	14	25				
	DR.A.2.R.30	220	60	145	192	66.3	105	89.1	190	160	36	50	25	66.7	10.5	14	30				
	DR.A.2.R.35	220	60	145	192	68.9	105	99.4	190	160	36	50	25	60.2	10.5	14	35				
	DR.A.2.R.40	200	60	115	172	52.2	75	78.7	170	140	36	50	25	54.0	10.5	14	40				
	DR.A.2.R.45	200	60	115	172	56.1	85	87.1	170	140	36	50	25	47.8	10.5	14	45				
	DR.A.2.R.50	200	60	95	172	80.7	64	74.5	170	160	36	50	25	41.6	10.5	14	50				

ACX

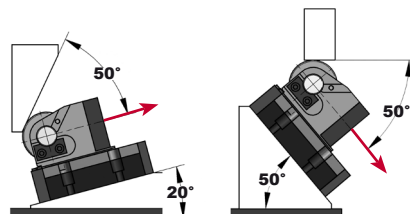
Roller Cam

**AZOL
GAS****ACX 05**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
ACX 05 050	14.14	50	5000	185	AG 150 063	190	130	140	90	74	134	76	103
ACX 05 080	17.00	80	5000	197	AG 150 080	220	130	140	90	74	164	106	103
ACX 05 100	23.07	100	5000	197	AG 150 100	260	130	157	90	91	204	146	120

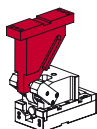
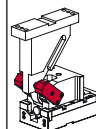
MAXIMUM WORKING FORCE

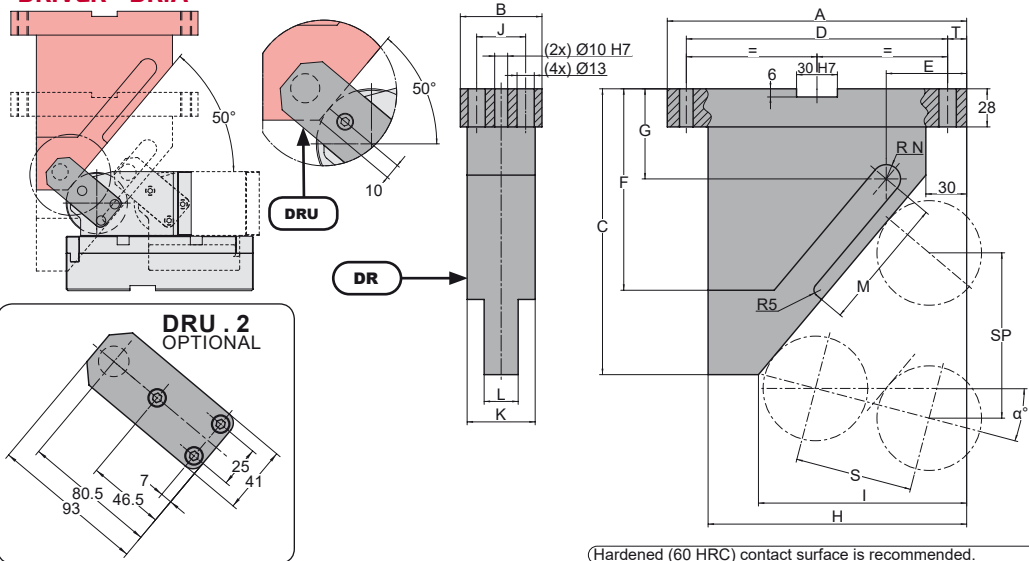
Working force should be as centered as possible on the working area surface.

MAXIMUM WORKING ANGLE**Order:**

Model **Force** **Stroke**
 (Tons) (mm)

ACX 05 050

Order Options:**Driver****DR . A****Positive
Return****DRU . 2****Set of 2 pieces:****1 x =**

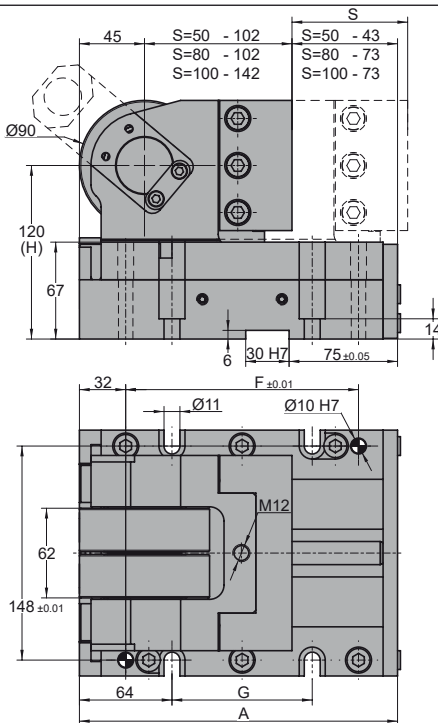
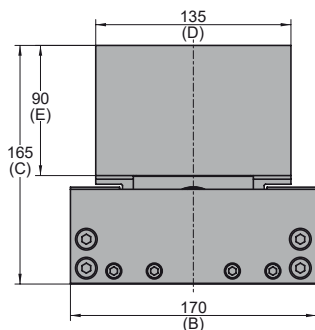
DRIVER - DR.A


(Hardened (60 HRC) contact surface is recommended.)

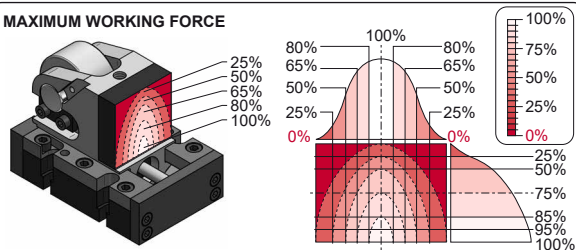
		A	B	C	D	E	F	G	H	I	J	K	L	M	R	N	T	α	SP		
																			S=50	S=80	S=100
	DR.A.1.L.20	160	60	220	130	65.1	140	69.8	130	98	36	50	25	69.0	10.5	15	-20	111.9			
	DR.A.1.L.15	160	60	190	130	61.9	130	64.2	130	98	36	50	25	63.8	10.5	15	-15	90.6			
	DR.A.1.L.10	160	60	165	130	59.0	120	56.5	130	98	36	50	25	65.7	10.5	15	-10	76.6			
	DR.A.1.L.05	160	60	155	130	56.4	110	59.8	130	98	36	50	25	65.0	10.5	15	-05	66.8			
	DR.A.1.H.00	160	60	145	130	56.1	100	60.7	130	100	36	50	25	68.9	10.5	15	00	59.6			
HORIZONTAL	DR.A.1.R.05	160	60	145	130	54.1	105	70.1	130	100	36	50	25	64.7	10.5	15	05	54.2			
	DR.A.1.R.10	160	60	130	130	54.4	90	63.3	130	102	36	50	25	58.5	10.5	15	10	50.0			
	DR.A.1.R.15	160	60	130	130	53.2	90	70.8	130	102	36	50	25	53.0	10.5	15	15	46.8			
	DR.A.1.R.20	160	60	120	130	55.3	85	67.6	130	105	36	50	25	48.0	10.5	15	20	44.2			
	DR.A.1.R.25	160	60	120	130	54.8	85	74.0	130	105	36	50	25	43.4	10.5	15	25	42.3			
	DR.A.1.R.30	160	60	100	130	51.6	70	59.8	130	102	36	50	25	39.0	10.5	15	30	40.8			
	DR.A.1.R.35	160	60	100	130	51.9	70	65.3	130	102	36	50	25	34.8	10.5	15	35	39.7			
	DR.A.1.R.40	160	60	90	130	55.5	60	60.5	130	105	36	50	25	30.6	10.5	15	40	38.9			
	DR.A.1.R.45	160	60	90	130	56.5	60	65.2	130	105	36	50	25	26.5	10.5	15	45	38.4			
	DR.A.1.R.50	160	60	80	130	67.9	49	59.5	130	115	36	50	25	22.3	10.5	15	50	38.3			
	DR.A.2.L.20	220	60	380	192	70.2	195	100.7	190	150	36	50	25	98.8	10.5	14	-20				
	DR.A.2.L.15	220	60	320	192	66.6	160	90.6	190	151	36	50	25	96.8	10.5	14	-15				
	DR.A.2.L.10	220	60	250	192	62.8	125	56.2	190	151	36	50	25	100.8	10.5	14	-10				
	DR.A.2.L.05	220	60	225	192	59.6	145	58.7	190	151	36	50	25	96.2	10.5	14	-05				
	DR.A.2.H.00	220	60	210	192	59.1	148	66.2	190	153	36	50	25	98.4	10.5	14	00				
	DR.A.2.R.05	220	60	205	192	57.3	135	80.3	190	153	36	50	25	97.1	10.5	14	05				
	DR.A.2.R.10	220	60	185	192	58.2	125	77.0	190	155	36	50	25	93.2	10.5	14	10				
	DR.A.2.R.15	220	60	180	192	57.9	135	87.0	190	155	36	50	25	87.2	10.5	14	15				
	DR.A.2.R.20	220	60	165	192	61.3	120	85.5	190	158	36	50	25	80.6	10.5	14	20				
	DR.A.2.R.25	220	60	165	192	62.4	120	97.8	190	158	36	50	25	73.4	10.5	14	25				
	DR.A.2.R.30	220	60	145	192	66.3	105	89.1	190	160	36	50	25	66.7	10.5	14	30				
	DR.A.2.R.35	220	60	145	192	68.9	105	99.4	190	160	36	50	25	60.2	10.5	14	35				
	DR.A.2.R.40	200	60	115	172	52.2	75	78.7	170	140	36	50	25	54.0	10.5	14	40				
	DR.A.2.R.45	200	60	115	172	56.1	85	87.1	170	140	36	50	25	47.8	10.5	14	45				
	DR.A.2.R.50	200	60	95	172	80.7	64	74.5	170	160	36	50	25	41.6	10.5	14	50				

ACX

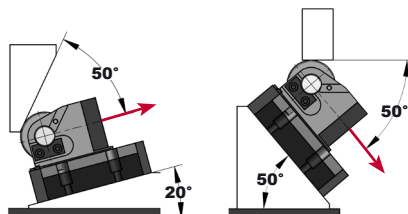
Roller Cam

**AZOL
GAS****ACX 15**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
ACX 15 050	24.58	50	15000	326	AG 250 063	190	170	165	135	90	131	67	120
ACX 15 080	26.23	80	15000	356	AG 250 080	220	170	165	135	90	161	97	120
ACX 15 100	32.98	100	15000	356	AG 250 100	260	170	165	135	90	201	137	120

MAXIMUM WORKING FORCE

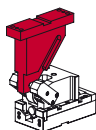
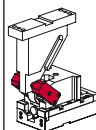
Working force should be as centered as possible on the working area surface.

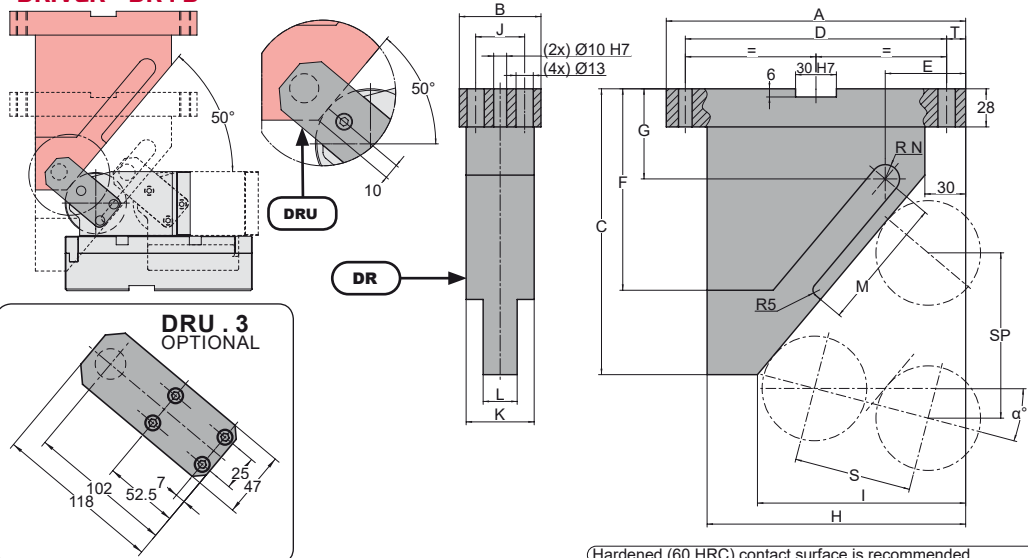
MAXIMUM WORKING ANGLE**Order:**

Model **Force**
 (Tons)

Stroke
(mm)

ACX 15 050

Order Options:**Driver****DR . B****Positive
Return****DRU . 3****Set of 2 pieces:****1 x =**

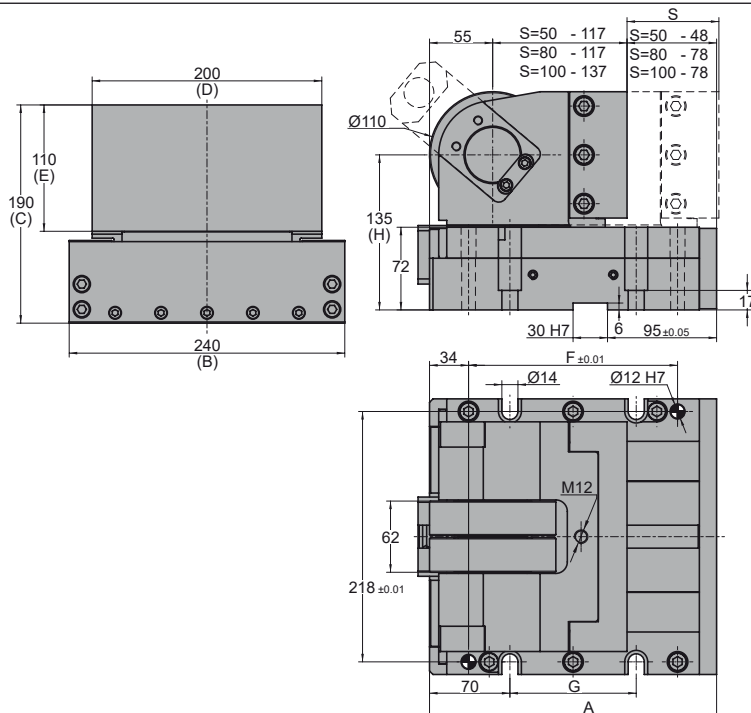
DRIVER - DR . B


(Hardened (60 HRC) contact surface is recommended.)

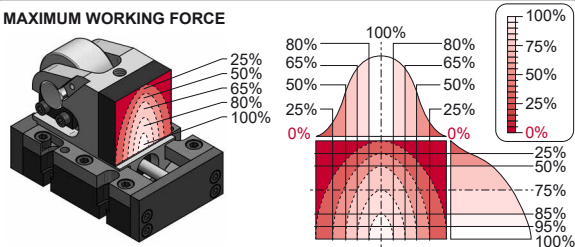
		A	B	C	D	E	F	G	H	I	J	K	L	M	R N	T	α	SP			
																		S=50	S=80	S=100	
	DR.B.1.L.20	160	95	220	130	73.1	155	66.9	130	98	71	66	39	126.8	14	15	-20	111.9			
	DR.B.1.L.15	160	95	200	130	69.6	120	70.6	130	98	71	66	39	105.6	14	15	-15	90.6			
	DR.B.1.L.10	160	95	165	130	66.4	120	52.2	130	98	71	66	39	90.7	14	15	-10	76.6			
	DR.B.1.L.05	160	95	155	130	65.3	100	54.9	130	100	71	66	39	79.6	14	15	-05	66.8			
	HORIZONTAL	DR.B.1.H.00	160	95	145	130	62.6	100	55.3	130	100	71	66	39	70.7	14	15	00			59.6
	DR.B.1.R.05	160	95	145	130	60.1	100	64.1	130	100	71	66	39	63.3	14	15	05	54.2			
	DR.B.1.R.10	160	95	130	130	59.9	90	56.8	130	102	71	66	39	56.9	14	15	10	50.0			
	DR.B.1.R.15	160	95	130	130	58.1	90	63.8	130	102	71	66	39	51.2	14	15	15	46.8			
	DR.B.1.R.20	160	95	120	130	59.5	80	60.3	130	105	71	66	39	46.0	14	15	20	44.2			
	DR.B.1.R.25	160	95	120	130	58.3	80	66.2	130	105	71	66	39	41.3	14	15	25	42.3			
	DR.B.1.R.30	160	95	100	130	54.5	60	51.9	130	102	71	66	39	36.6	14	15	30	40.8			
	DR.B.1.R.35	160	95	100	130	54.1	60	57.1	130	102	71	66	39	32.1	14	15	35	39.7			
	DR.B.1.R.40	160	95	90	130	57.0	50	52.1	130	105	71	66	39	27.7	14	15	40	38.9			
	DR.B.1.R.45	160	95	90	130	57.2	48	56.7	130	105	71	66	39	23.3	14	15	45	38.4			
	DR.B.1.R.50	160	95	80	130	67.9	37	51.0	130	115	71	66	39	18.8	14	15	50	38.3			
	DR.B.2.L.20	220	95	380	192	78.2	250	97.8	190	150	71	66	39	132.6	14	14	-20		179.2	224.0	
	DR.B.2.L.15	220	95	320	192	74.4	220	87.0	190	151	71	66	39	137.0	14	14	-15		145.0	181.3	
	DR.B.2.L.10	220	95	250	192	70.1	170	51.9	190	151	71	66	39	149.2	14	14	-10		122.6	153.2	
	DR.B.2.L.05	220	95	225	192	67.0	150	54.5	190	151	71	66	39	143.8	14	14	-05		106.8	133.6	
	HORIZONTAL	DR.B.2.H.00	220	95	210	192	65.6	150	60.7	190	153	71	66	39	148.5	14	14	00		95.3	119.2
	DR.B.2.R.05	220	95	210	192	63.3	150	79.3	190	153	71	66	39	133.7	14	14	05		86.7	108.3	
	DR.B.2.R.10	220	95	185	192	63.7	135	70.5	190	155	71	66	39	121.2	14	14	10		80.0	100.0	
	DR.B.2.R.15	220	95	185	192	62.8	135	85.0	190	155	71	66	39	110.2	14	14	15		74.8	93.5	
	DR.B.2.R.20	220	95	165	192	65.5	125	78.1	190	158	71	66	39	100.3	14	14	20		70.8	88.5	
	DR.B.2.R.25	220	95	165	192	66.0	125	90.1	190	158	71	66	39	91.2	14	14	25		67.6	84.5	
		DR.B.2.R.30	220	95	145	192	69.2	105	81.1	190	160	71	66	39	82.6	14	14	30		65.2	81.5
		DR.B.2.R.35	220	95	145	192	71.1	105	91.2	190	160	71	66	39	74.5	14	14	35		63.4	79.3
		DR.B.2.R.40	200	95	115	172	53.7	75	70.3	170	140	71	66	39	66.6	14	14	40		62.2	77.8
		DR.B.2.R.45	200	95	115	172	56.9	72	78.6	170	140	71	66	39	58.8	14	14	45		61.5	76.9
		DR.B.2.R.50	200	95	95	172	80.7	52	66.0	170	160	71	66	39	51.0	14	14	50		61.3	76.6

ACX

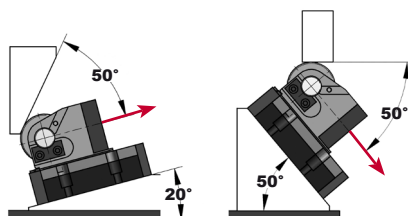
Roller Cam

**AZOL
GAS****ACX 20**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
ACX 20 050	48.28	50	20000	680	CW 750 075 V1 500	220	240	190	200	110	152	80	135
ACX 20 080	50.45	80	20000	830	CW 750 080 V1 500	250	240	190	200	110	182	110	135
ACX 20 100	55.26	100	20000	830	CW 750 100 V1 500	270	240	190	200	110	202	130	135

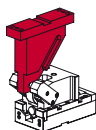
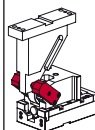
MAXIMUM WORKING FORCE

Working force should be as centered as possible on the working area surface.

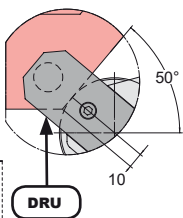
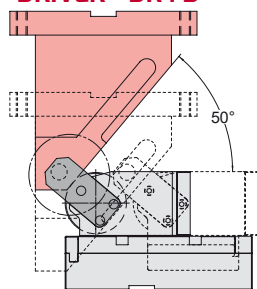
MAXIMUM WORKING ANGLE**Order:**

Model **Force** **Stroke**
 (Tons) (mm)

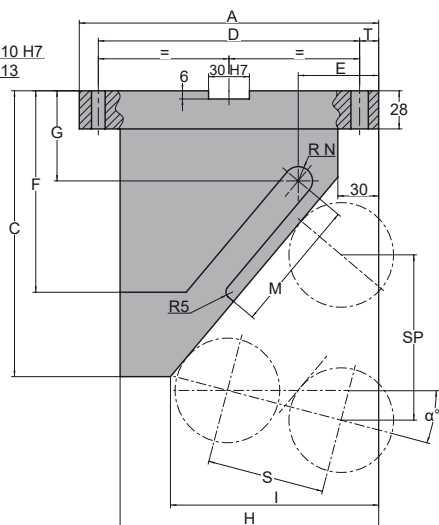
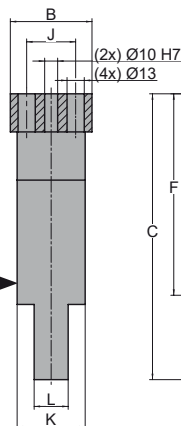
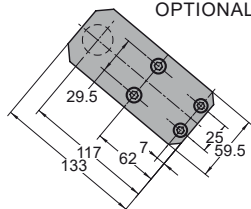
ACX 20 050

Order Options:**Driver****DR . B****Positive
Return****DRU . 4****Set of 2 pieces:****1 x =**

DRIVER - DR . B



DR

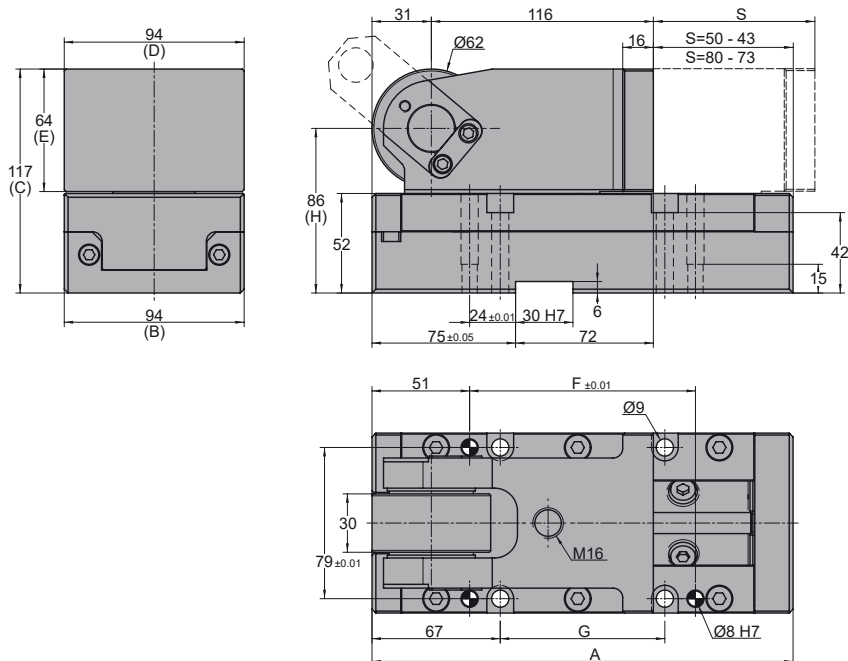
DRU . 4
OPTIONAL

(Hardened (60 HRC) contact surface is recommended.

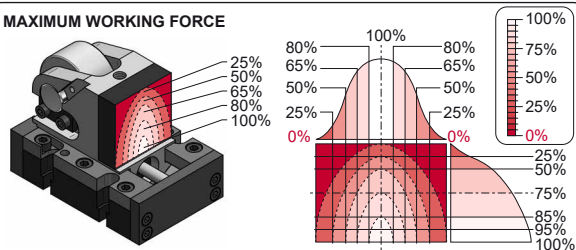
		A	B	C	D	E	F	G	H	I	J	K	L	M	R N	T	α	SP					
																		S=50	S=80	S=100			
	DR.B.1.L.20	160	95	220	130	73.1	155	66.9	130	98	71	66	39	126.8	14	15	-20	111.9					
	DR.B.1.L.15	160	95	200	130	69.6	120	70.6	130	98	71	66	39	105.6	14	15	-15	90.6					
	DR.B.1.L.10	160	95	165	130	66.4	120	52.2	130	98	71	66	39	90.7	14	15	-10	76.6					
	DR.B.1.L.05	160	95	155	130	65.3	100	54.9	130	100	71	66	39	79.6	14	15	-05	66.8					
	HORIZONTAL	DR.B.1.H.00	160	95	145	130	62.6	100	55.3	130	100	71	66	39	70.7	14	15	00				59.6	
	DR.B.1.R.05	160	95	145	130	60.1	100	64.1	130	100	71	66	39	63.3	14	15	05	54.2					
	DR.B.1.R.10	160	95	130	130	59.9	90	56.8	130	102	71	66	39	56.9	14	15	10	50.0					
	DR.B.1.R.15	160	95	130	130	58.1	90	63.8	130	102	71	66	39	51.2	14	15	15	46.8					
	DR.B.1.R.20	160	95	120	130	59.5	80	60.3	130	105	71	66	39	46.0	14	15	20	44.2					
	DR.B.1.R.25	160	95	120	130	58.3	80	66.2	130	105	71	66	39	41.3	14	15	25	42.3					
	DR.B.1.R.30	160	95	100	130	54.5	60	51.9	130	102	71	66	39	36.6	14	15	30	40.8					
	DR.B.1.R.35	160	95	100	130	54.1	60	57.1	130	102	71	66	39	32.1	14	15	35	39.7					
	DR.B.1.R.40	160	95	90	130	57.0	50	52.1	130	105	71	66	39	27.7	14	15	40	38.9					
	DR.B.1.R.45	160	95	90	130	57.2	48	56.7	130	105	71	66	39	23.3	14	15	45	38.4					
	DR.B.1.R.50	160	95	80	130	67.9	37	51.0	130	115	71	66	39	18.8	14	15	50	38.3					
	DR.B.2.L.20	220	95	380	192	78.2	250	97.8	190	150	71	66	39	132.6	14	14	-20						
	DR.B.2.L.15	220	95	320	192	74.4	220	87.0	190	151	71	66	39	137.0	14	14	-15				145.0	181.3	
	DR.B.2.L.10	220	95	250	192	70.1	170	51.9	190	151	71	66	39	149.2	14	14	-10				122.6	153.2	
	DR.B.2.L.05	220	95	225	192	67.0	150	54.5	190	151	71	66	39	143.8	14	14	-05				106.8	133.6	
	HORIZONTAL	DR.B.2.H.00	220	95	210	192	65.6	150	60.7	190	153	71	66	39	148.5	14	14				00	95.3	119.2
	DR.B.2.R.05	220	95	210	192	63.3	150	79.3	190	153	71	66	39	133.7	14	14	05				86.7	108.3	
	DR.B.2.R.10	220	95	185	192	63.7	135	70.5	190	155	71	66	39	121.2	14	14	10				80.0	100.0	
	DR.B.2.R.15	220	95	185	192	62.8	135	85.0	190	155	71	66	39	110.2	14	14	15				74.8	93.5	
	DR.B.2.R.20	220	95	165	192	65.5	125	78.1	190	158	71	66	39	100.3	14	14	20				70.8	88.5	
	DR.B.2.R.25	220	95	165	192	66.0	125	90.1	190	158	71	66	39	91.2	14	14	25				67.6	84.5	
	DR.B.2.R.30	220	95	145	192	69.2	105	81.1	190	160	71	66	39	82.6	14	14	30	65.2	81.5				
	DR.B.2.R.35	220	95	145	192	71.1	105	91.2	190	160	71	66	39	74.5	14	14	35	63.4	79.3				
	DR.B.2.R.40	200	95	115	172	53.7	75	70.3	170	140	71	66	39	66.6	14	14	40	62.2	77.8				
	DR.B.2.R.45	200	95	115	172	56.9	72	78.6	170	140	71	66	39	58.8	14	14	45	61.5	76.9				
	DR.B.2.R.50	200	95	95	172	80.7	52	66.0	170	160	71	66	39	51.0	14	14	50	61.3	76.6				

FCX

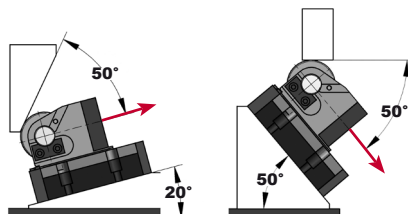
Roller Cam

**AZOL
GAS****FCX 07**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
FCX 07 050	10.29	50	7200	300	CW 170 050	190	94	117	94	64	88	56	86
FCX 07 080	11.13	80	7200	290	CW 170 080	220	94	117	94	64	118	86	86

MAXIMUM WORKING FORCE

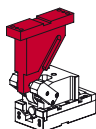
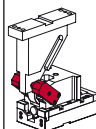
Working force should be as centered as possible on the working area surface.

MAXIMUM WORKING ANGLE**Order:**

Model **Force**
 (Tons)

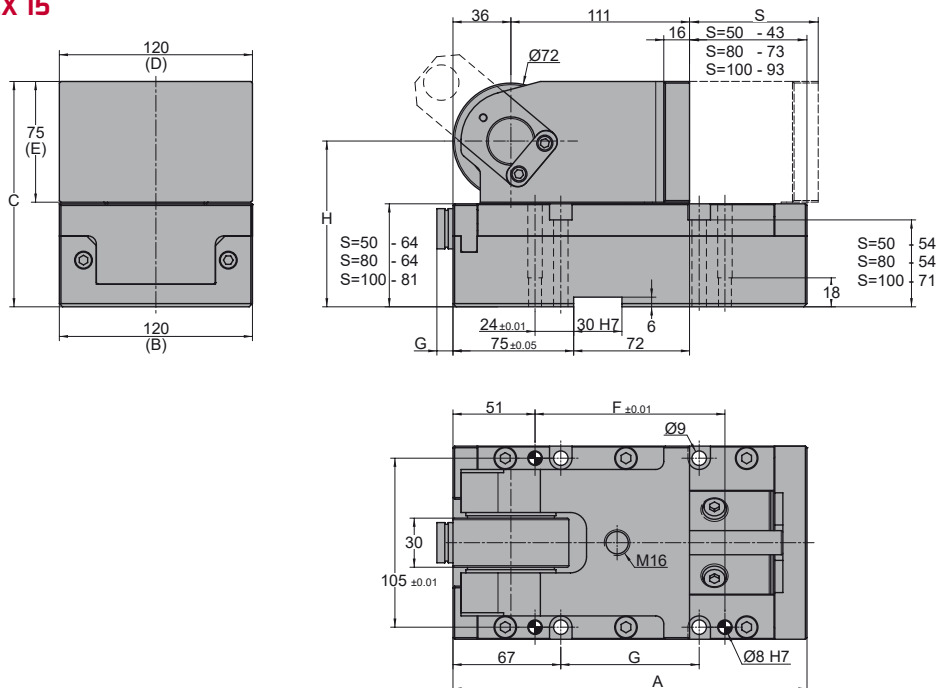
Stroke
(mm)

FCX 07 050

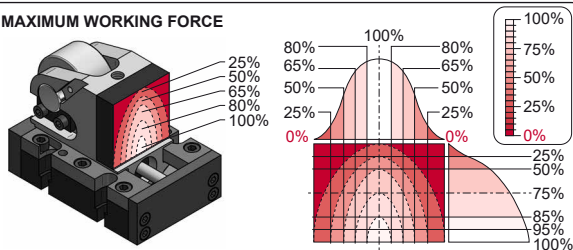
Order Options:**Driver****DR . A****Positive
Return****DRU . 1****Set of 2 pieces:****1 x =**

FCX

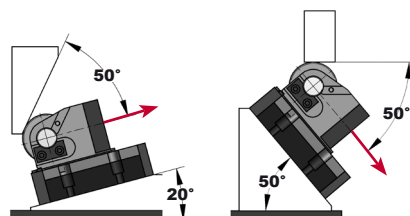
Roller Cam

**AZOL
GAS****FCX 15**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
FCX 15 050	16.35	50	15300	620	CW 320 050	190	120	140	120	75	88	56	103
FCX 15 080	17.78	80	15300	590	CW 320 080	220	120	140	120	75	118	86	103
FCX 15 100	22.26	100	15300	590	CW 320 100	240	120	157	120	75	158	126	120

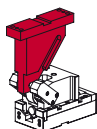
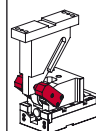
MAXIMUM WORKING FORCE

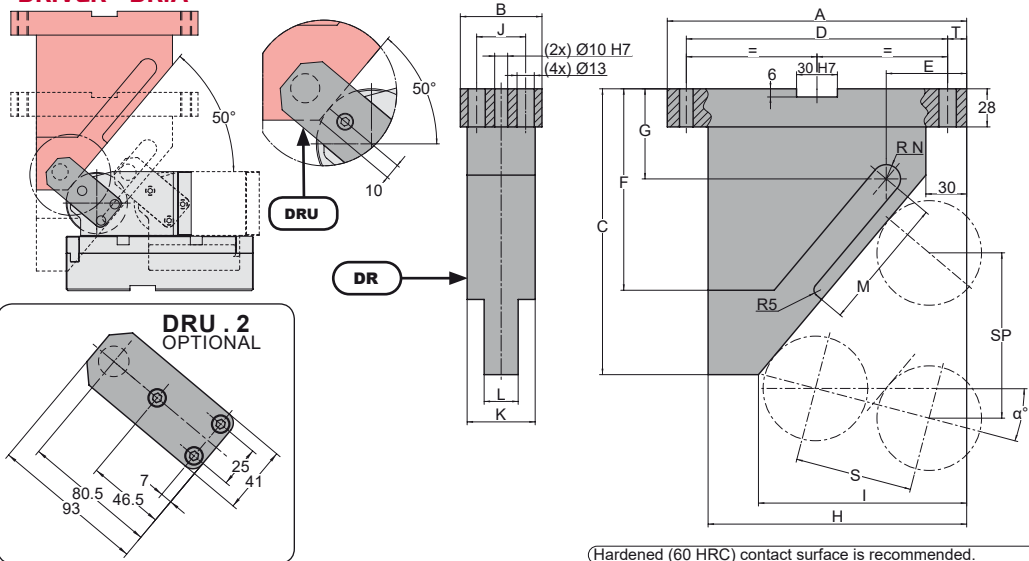
Working force should be as centered as possible on the working area surface.

MAXIMUM WORKING ANGLE**Order:**

Model **Force** **Stroke**
 (Tons) (mm)

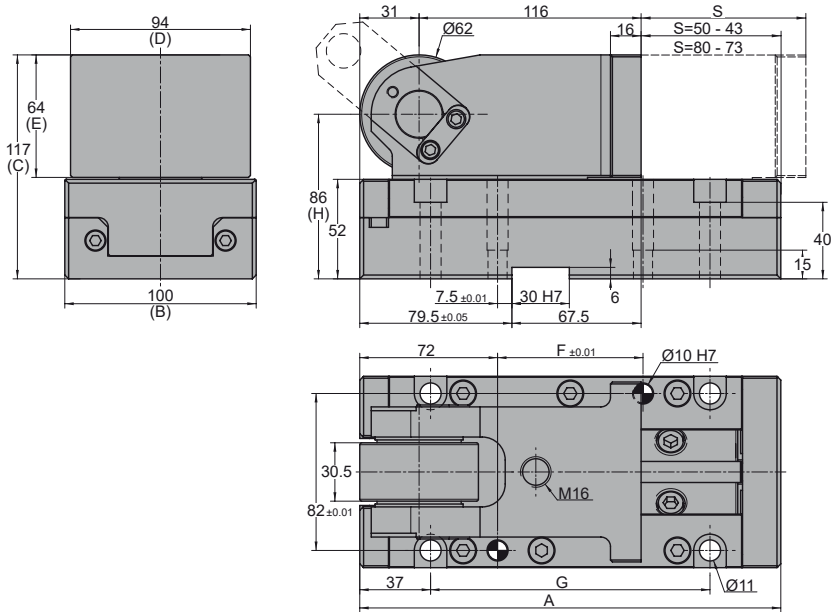
FCX 15 050

Order Options:**Driver****DR . A****Positive
Return****DRU . 2****Set of 2 pieces:****1 x =**

DRIVER - DR.A

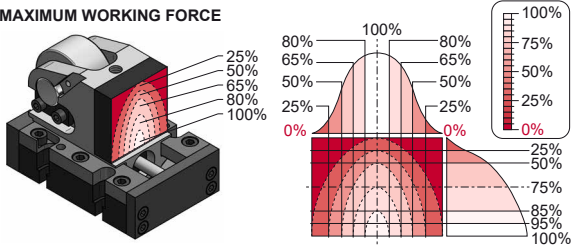
		A	B	C	D	E	F	G	H	I	J	K	L	M	R	N	T	α	SP				
																			S=50	S=80	S=100		
	DR.A.1.L.20	160	60	220	130	65.1	140	69.8	130	98	36	50	25	69.0	10.5	15	-20	111.9					
	DR.A.1.L.15	160	60	190	130	61.9	130	64.2	130	98	36	50	25	63.8	10.5	15	-15	90.6					
	DR.A.1.L.10	160	60	165	130	59.0	120	56.5	130	98	36	50	25	65.7	10.5	15	-10	76.6					
	DR.A.1.L.05	160	60	155	130	56.4	110	59.8	130	98	36	50	25	65.0	10.5	15	-05	66.8					
HORIZONTAL	DR.A.1.H.00	160	60	145	130	56.1	100	60.7	130	100	36	50	25	68.9	10.5	15	00	59.6					
	DR.A.1.R.05	160	60	145	130	54.1	105	70.1	130	100	36	50	25	64.7	10.5	15	05	54.2					
	DR.A.1.R.10	160	60	130	130	54.4	90	63.3	130	102	36	50	25	58.5	10.5	15	10	50.0					
	DR.A.1.R.15	160	60	130	130	53.2	90	70.8	130	102	36	50	25	53.0	10.5	15	15	46.8					
		DR.A.1.R.20	160	60	120	130	55.3	85	67.6	130	105	36	50	25	48.0	10.5	15	20				44.2	
		DR.A.1.R.25	160	60	120	130	54.8	85	74.0	130	105	36	50	25	43.4	10.5	15	25				42.3	
		DR.A.1.R.30	160	60	100	130	51.6	70	59.8	130	102	36	50	25	39.0	10.5	15	30	40.8				
		DR.A.1.R.35	160	60	100	130	51.9	70	65.3	130	102	36	50	25	34.8	10.5	15	35	39.7				
		DR.A.1.R.40	160	60	90	130	55.5	60	60.5	130	105	36	50	25	30.6	10.5	15	40	38.9				
		DR.A.1.R.45	160	60	90	130	56.5	60	65.2	130	105	36	50	25	26.5	10.5	15	45	38.4				
DR.A.1.R.50		160	60	80	130	67.9	49	59.5	130	115	36	50	25	22.3	10.5	15	50	38.3					
		DR.A.2.L.20	220	60	380	192	70.2	195	100.7	190	150	36	50	25	98.8	10.5	14	-20			179.2	224.0	
		DR.A.2.L.15	220	60	320	192	66.6	160	90.6	190	151	36	50	25	96.8	10.5	14	-15			145.0	181.3	
		DR.A.2.L.10	220	60	250	192	62.8	125	56.2	190	151	36	50	25	100.8	10.5	14	-10			122.6	153.2	
	DR.A.2.L.05	220	60	225	192	59.6	145	58.7	190	151	36	50	25	96.2	10.5	14	-05	106.8			133.6		
	HORIZONTAL	DR.A.2.H.00	220	60	210	192	59.1	148	66.2	190	153	36	50	25	98.4	10.5	14	00			95.3	119.2	
		DR.A.2.R.05	220	60	205	192	57.3	135	80.3	190	153	36	50	25	97.1	10.5	14	05			86.7	108.3	
		DR.A.2.R.10	220	60	185	192	58.2	125	77.0	190	155	36	50	25	93.2	10.5	14	10			80.0	100.0	
		DR.A.2.R.15	220	60	180	192	57.9	135	87.0	190	155	36	50	25	87.2	10.5	14	15			74.8	93.5	
			DR.A.2.R.20	220	60	165	192	61.3	120	85.5	190	158	36	50	25	80.6	10.5	14			20	70.8	88.5
			DR.A.2.R.25	220	60	165	192	62.4	120	97.8	190	158	36	50	25	73.4	10.5	14			25	67.6	84.5
DR.A.2.R.30			220	60	145	192	66.3	105	89.1	190	160	36	50	25	66.7	10.5	14	30	65.2	81.5			
DR.A.2.R.35			220	60	145	192	68.9	105	99.4	190	160	36	50	25	60.2	10.5	14	35	63.4	79.3			
DR.A.2.R.40			200	60	115	172	52.2	75	78.7	170	140	36	50	25	54.0	10.5	14	40	62.2	77.8			
DR.A.2.R.45			200	60	115	172	56.1	85	87.1	170	140	36	50	25	47.8	10.5	14	45	61.5	76.9			
DR.A.2.R.50	200		60	95	172	80.7	64	74.5	170	160	36	50	25	41.6	10.5	14	50	61.3	76.6				

JCX 07



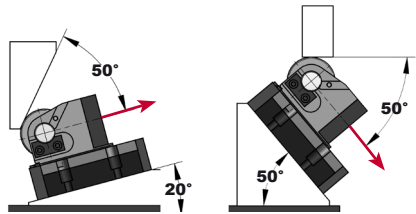
MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
JCX 07 050	10.67	50	7200	300	CW 170 050	190	100	117	94	64	46	116	86
JCX 07 080	11.58	80	7200	290	CW 170 080	220	100	117	94	64	76	146	86

MAXIMUM WORKING FORCE



Working force should be as centered as possible on the working area surface.

MAXIMUM WORKING ANGLE

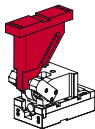


Order:

Model Force
(Tons) Stroke
(mm)

JCX 07 050

Order Options:

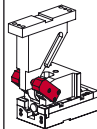


Driver

DR . A

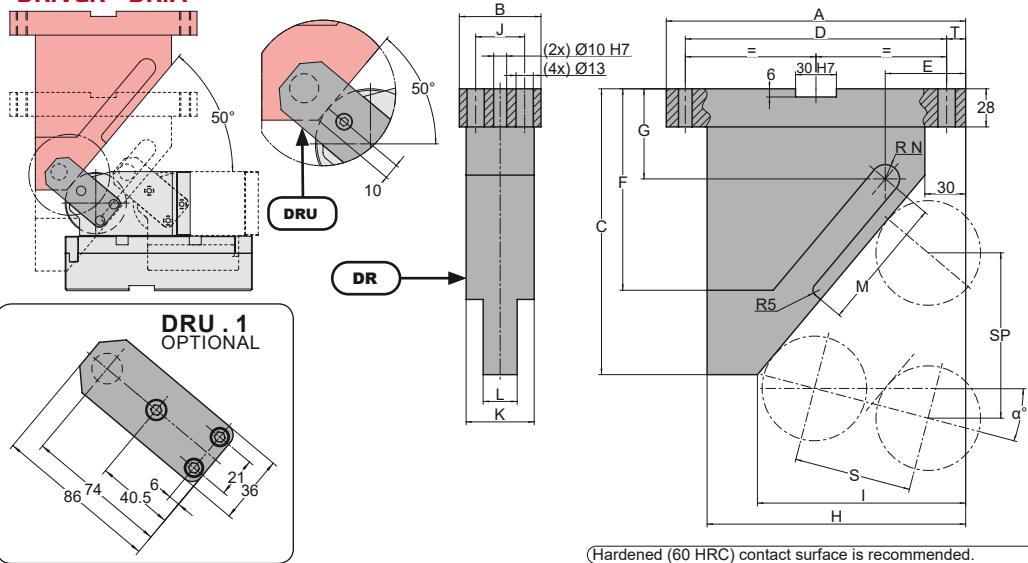
Positive
Return

DRU . 1



Set of 2 pieces:

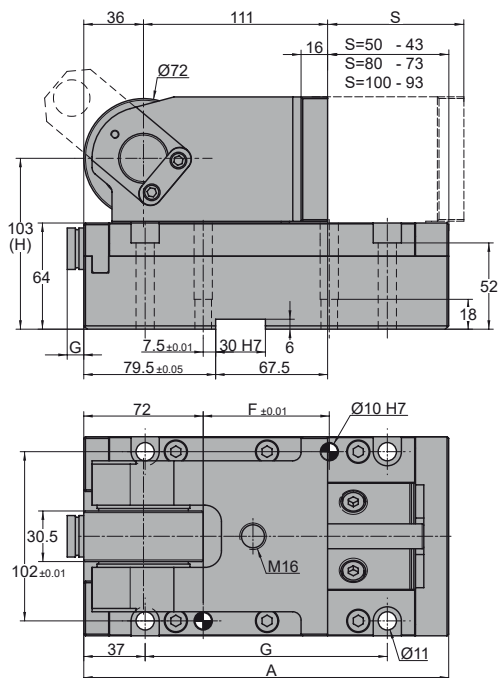
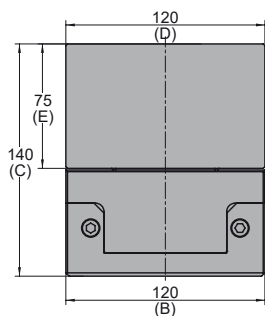
1 x =

DRIVER - DR.A


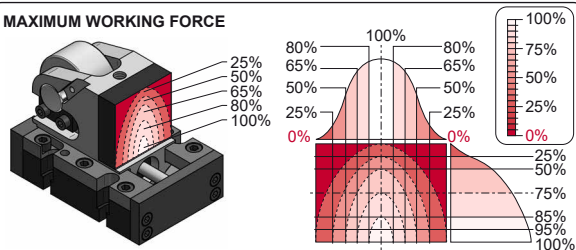
		A	B	C	D	E	F	G	H	I	J	K	L	M	R N	T	α	SP			
																		S=50	S=80	S=100	
	DR.A.1.L.20	160	60	220	130	65.1	140	69.8	130	98	36	50	25	69.0	10.5	15	-20	111.9			
	DR.A.1.L.15	160	60	190	130	61.9	130	64.2	130	98	36	50	25	63.8	10.5	15	-15	90.6			
	DR.A.1.L.10	160	60	165	130	59.0	120	56.5	130	98	36	50	25	65.7	10.5	15	-10	76.6			
	DR.A.1.L.05	160	60	155	130	56.4	110	59.8	130	98	36	50	25	65.0	10.5	15	-05	66.8			
	HORIZONTAL	DR.A.1.H.00	160	60	145	130	56.1	100	60.7	130	100	36	50	25	68.9	10.5	15	00			
	DR.A.1.R.05	160	60	145	130	54.1	105	70.1	130	100	36	50	25	64.7	10.5	15	05	54.2			
	DR.A.1.R.10	160	60	130	130	54.4	90	63.3	130	102	36	50	25	58.5	10.5	15	10	50.0			
	DR.A.1.R.15	160	60	130	130	53.2	90	70.8	130	102	36	50	25	53.0	10.5	15	15	46.8			
	DR.A.1.R.20	160	60	120	130	55.3	85	67.6	130	105	36	50	25	48.0	10.5	15	20	44.2			
	DR.A.1.R.25	160	60	120	130	54.8	85	74.0	130	105	36	50	25	43.4	10.5	15	25	42.3			
	DR.A.1.R.30	160	60	100	130	51.6	70	59.8	130	102	36	50	25	39.0	10.5	15	30	40.8			
	DR.A.1.R.35	160	60	100	130	51.9	70	65.3	130	102	36	50	25	34.8	10.5	15	35	39.7			
	DR.A.1.R.40	160	60	90	130	55.5	60	60.5	130	105	36	50	25	30.6	10.5	15	40	38.9			
	DR.A.1.R.45	160	60	90	130	56.5	60	65.2	130	105	36	50	25	26.5	10.5	15	45	38.4			
	DR.A.1.R.50	160	60	80	130	67.9	49	59.5	130	115	36	50	25	22.3	10.5	15	50	38.3			
	DR.A.2.L.20	220	60	380	192	70.2	195	100.7	190	150	36	50	25	98.8	10.5	14	-20		179.2		
	DR.A.2.L.15	220	60	320	192	66.6	160	90.6	190	151	36	50	25	96.8	10.5	14	-15		145.0		
	DR.A.2.L.10	220	60	250	192	62.8	125	56.2	190	151	36	50	25	100.8	10.5	14	-10		122.6		
	DR.A.2.L.05	220	60	225	192	59.6	145	58.7	190	151	36	50	25	96.2	10.5	14	-05		106.8		
	HORIZONTAL	DR.A.2.H.00	220	60	210	192	59.1	148	66.2	190	153	36	50	25	98.4	10.5	14	00		95.3	
		DR.A.2.R.05	220	60	205	192	57.3	135	80.3	190	153	36	50	25	97.1	10.5	14	05		86.7	
		DR.A.2.R.10	220	60	185	192	58.2	125	77.0	190	155	36	50	25	93.2	10.5	14	10		80.0	
		DR.A.2.R.15	220	60	180	192	57.9	135	87.0	190	155	36	50	25	87.2	10.5	14	15		74.8	
		DR.A.2.R.20	220	60	165	192	61.3	120	85.5	190	158	36	50	25	80.6	10.5	14	20		70.8	
		DR.A.2.R.25	220	60	165	192	62.4	120	97.8	190	158	36	50	25	73.4	10.5	14	25		67.6	
		DR.A.2.R.30	220	60	145	192	66.3	105	89.1	190	160	36	50	25	66.7	10.5	14	30		65.2	
		DR.A.2.R.35	220	60	145	192	68.9	105	99.4	190	160	36	50	25	60.2	10.5	14	35		63.4	
		DR.A.2.R.40	200	60	115	172	52.2	75	78.7	170	140	36	50	25	54.0	10.5	14	40		62.2	
		DR.A.2.R.45	200	60	115	172	56.1	85	87.1	170	140	36	50	25	47.8	10.5	14	45		61.5	
		DR.A.2.R.50	200	60	95	172	80.7	64	74.5	170	160	36	50	25	41.6	10.5	14	50		61.3	

JCX

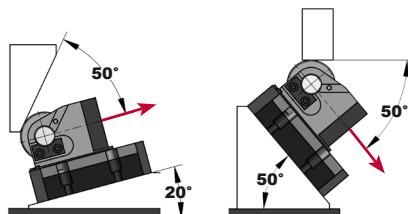
Roller Cam

**AZOL
GAS****JCX 15**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
JCX 15 050	16.23	50	15300	620	CW 320 050	190	120	140	120	75	46	116	103
JCX 15 080	17.68	80	15300	590	CW 320 080	220	120	140	120	75	76	146	103
JCX 15 100	18.53	100	15300	590	CW 320 100	240	120	140	120	75	96	166	103

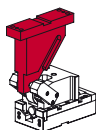
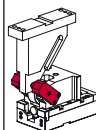
MAXIMUM WORKING FORCE

Working force should be as centered as possible on the working area surface.

MAXIMUM WORKING ANGLE**Order:**

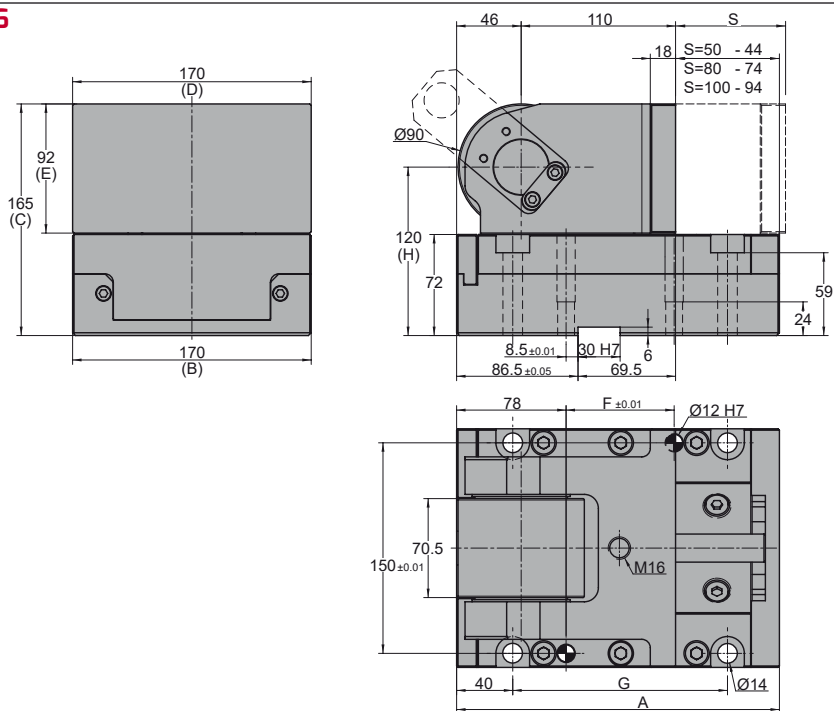
Model Force (Tons) Stroke (mm)

JCX 15 050

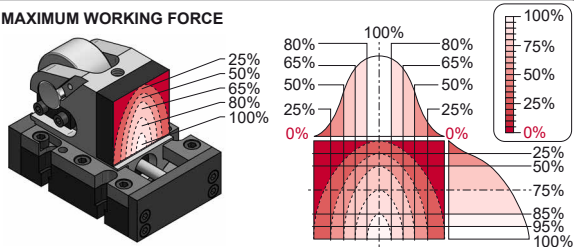
**Order Options:****Driver****DR . A****Positive
Return****DRU . 2****Set of 2 pieces:****1 x =**

JCX

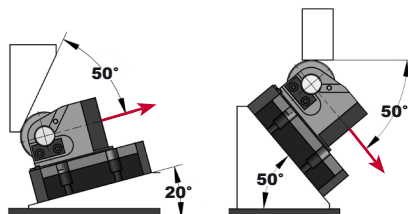
Roller Cam

**AZOL
GAS****JCX 16**

MODEL	Kg.	STROKE S (mm)	WORKING FORCE (daN)	RETURN FORCE Initial (daN)	GAS SPRING	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)
JCX 16 050	27.95	50	16000	800	CW 500 050	200	170	165	170	92	47	123	120
JCX 16 080	30.06	80	16000	800	CW 500 080	230	170	165	170	92	77	153	120
JCX 16 100	31.47	100	16000	800	CW 500 100	250	170	165	170	92	97	173	120

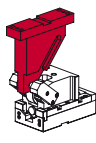
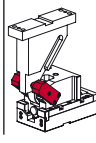
MAXIMUM WORKING FORCE

Working force should be as centered as possible on the working area surface.

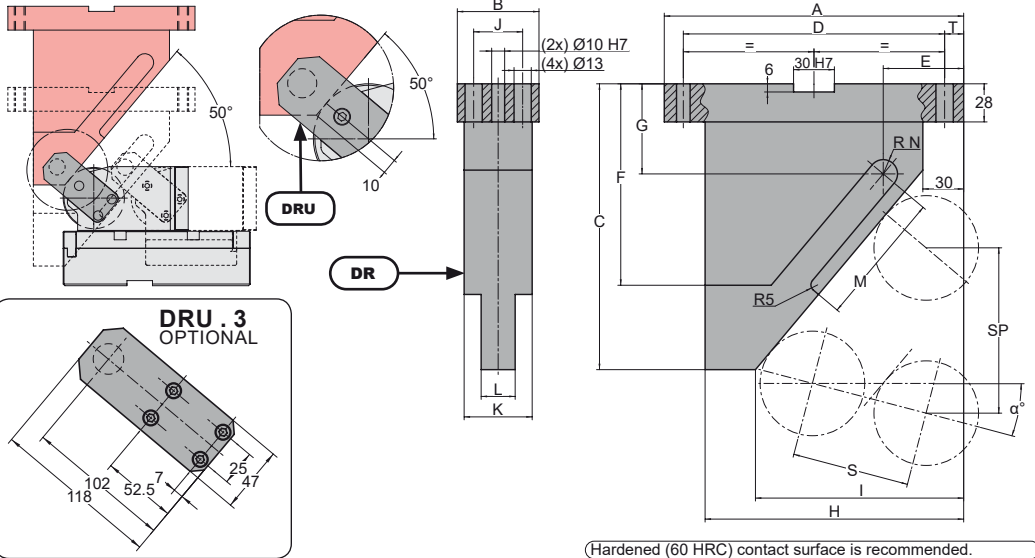
MAXIMUM WORKING ANGLE**Order:**

Model **Force** **Stroke**
 (Tons) (mm)

JCX 16 050

**Order Options:****Driver****DR . B****Positive
Return****DRU . 3****Set of 2 pieces:****1 x =**

DRIVER - DR . B



		A	B	C	D	E	F	G	H	I	J	K	L	M	R	N	T	α	SP				
																			S=50	S=80	S=100		
	DR.B.1.L.20	160	95	220	130	73.1	155	66.9	130	98	71	66	39	126.8	14	15	15	-20	111.9				
	DR.B.1.L.15	160	95	200	130	69.6	120	70.6	130	98	71	66	39	105.6	14	15	15	-15	90.6				
	DR.B.1.L.10	160	95	165	130	66.4	120	52.2	130	98	71	66	39	90.7	14	15	15	-10	76.6				
	DR.B.1.L.05	160	95	155	130	65.3	100	54.9	130	100	71	66	39	79.6	14	15	15	-05	66.8				
	HORIZONTAL	DR.B.1.H.00	160	95	145	130	62.6	100	55.3	130	100	71	66	39	70.7	14	15	00	59.6				
	DR.B.1.R.05	160	95	145	130	60.1	100	64.1	130	100	71	66	39	63.3	14	15	05	54.2					
	DR.B.1.R.10	160	95	130	130	59.9	90	56.8	130	102	71	66	39	56.9	14	15	10	50.0					
	DR.B.1.R.15	160	95	130	130	58.1	90	63.8	130	102	71	66	39	51.2	14	15	15	46.8					
	DR.B.1.R.20	160	95	120	130	59.5	80	60.3	130	105	71	66	39	46.0	14	15	20	44.2					
	DR.B.1.R.25	160	95	120	130	58.3	80	66.2	130	105	71	66	39	41.3	14	15	25	42.3					
	DR.B.1.R.30	160	95	100	130	54.5	60	51.9	130	102	71	66	39	36.6	14	15	30	40.8					
	DR.B.1.R.35	160	95	100	130	54.1	60	57.1	130	102	71	66	39	32.1	14	15	35	39.7					
	DR.B.1.R.40	160	95	90	130	57.0	50	52.1	130	105	71	66	39	27.7	14	15	40	38.9					
	DR.B.1.R.45	160	95	90	130	57.2	48	56.7	130	105	71	66	39	23.3	14	15	45	38.4					
	DR.B.1.R.50	160	95	80	130	67.9	37	51.0	130	115	71	66	39	18.8	14	15	50	38.3					
	DR.B.2.L.20	220	95	380	192	78.2	250	97.8	190	150	71	66	39	132.6	14	14	14	-20				179.2	224.0
	DR.B.2.L.15	220	95	320	192	74.4	220	87.0	190	151	71	66	39	137.0	14	14	14	-15				145.0	181.3
	DR.B.2.L.10	220	95	250	192	70.1	170	51.9	190	151	71	66	39	149.2	14	14	14	-10				122.6	153.2
	DR.B.2.L.05	220	95	225	192	67.0	150	54.5	190	151	71	66	39	143.8	14	14	14	-05				106.8	133.6
	HORIZONTAL	DR.B.2.H.00	220	95	210	192	65.6	150	60.7	190	153	71	66	39	148.5	14	14	00				95.3	119.2
	DR.B.2.R.05	220	95	210	192	63.3	150	79.3	190	153	71	66	39	133.7	14	14	14	05	86.7	108.3			
	DR.B.2.R.10	220	95	185	192	63.7	135	70.5	190	155	71	66	39	121.2	14	14	14	10	80.0	100.0			
	DR.B.2.R.15	220	95	185	192	62.8	135	85.0	190	155	71	66	39	110.2	14	14	14	15	74.8	93.5			
	DR.B.2.R.20	220	95	165	192	65.5	125	78.1	190	158	71	66	39	100.3	14	14	14	20	70.8	88.5			
	DR.B.2.R.25	220	95	165	192	66.0	125	90.1	190	158	71	66	39	91.2	14	14	14	25	67.6	84.5			
	DR.B.2.R.30	220	95	145	192	69.2	105	81.1	190	160	71	66	39	82.6	14	14	14	30	65.2	81.5			
	DR.B.2.R.35	220	95	145	192	71.1	105	91.2	190	160	71	66	39	74.5	14	14	14	35	63.4	79.3			
	DR.B.2.R.40	200	95	115	172	53.7	75	70.3	170	140	71	66	39	66.6	14	14	14	40	62.2	77.8			
	DR.B.2.R.45	200	95	115	172	56.9	72	78.6	170	140	71	66	39	58.8	14	14	14	45	61.5	76.9			
	DR.B.2.R.50	200	95	95	172	80.7	52	66.0	170	160	71	66	39	51.0	14	14	14	50	61.3	76.6			