

IT La seguente tabella indica i riferimenti Special Springs per ogni standards. Vedi esempio sotto riportato.

EN The following table shows the references for each Special Springs standards. See example below.

DE Die folgende Tabelle zeigt die Verweise für jede Special Springs Standards. Siehe Beispiel unten.

FR Le tableau suivant indique les références pour chacune des normes spéciales Springs. Voir l'exemple ci-dessous.

ES La siguiente tabla muestra las referencias de las normas especiales para cada Springs. Consulte el siguiente ejemplo.

PT A tabela a seguir mostra as referências para cada normas especiais molas. Veja o exemplo abaixo.

Reference to standards	Standards	
0	//	Special Springs
1	ISO 11901-2	
2	VDI 3003	
3	B2 4009	BMW
4	W-DX35-62M	Ford
5	W-DX35-80M	Ford
6	W-DX40-80M	Ford
7	90.25.01	General Motors
8	90.25.02	General Motors
9	90.25.03	General Motors
10	90.25.04	General Motors
11	90.25.06	General Motors
12	90.25.07	General Motors
13	90.25.455	General Motors
14	B8 0132 110 008 801	Mercedes Benz

Reference to standards	Standards	
15	B8 0138 100 000 001	Mercedes Benz
16	B8 0134 300 000 001	Mercedes Benz
17	B8 0134 400 008 801	Mercedes Benz
18	B8	Mercedes Benz
19	E24.54.815.G	Peugeot - Citroën
20	EM24.54.700	Renault
21	39D 848	Volkswagen
22	075.90.70	FCA
23	075.90.75	FCA
24	075.90.80	FCA
25	075.90.85	FCA
26	075.90.90	FCA
27	075.90.95	FCA
28	075.90.40	FCA

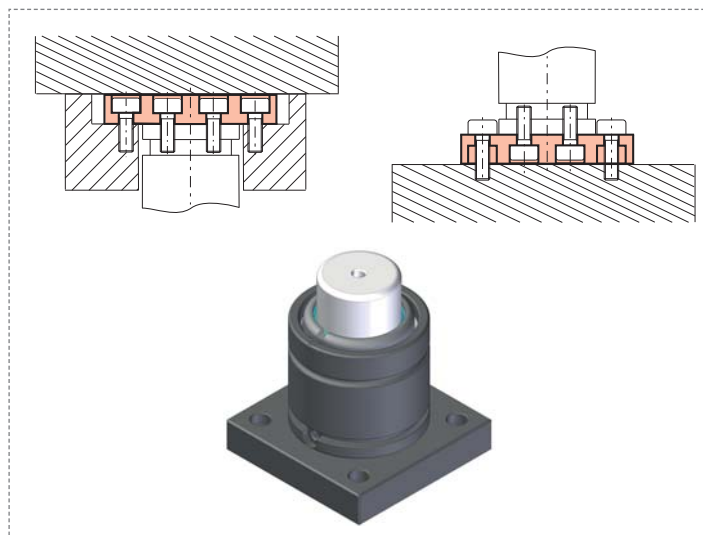
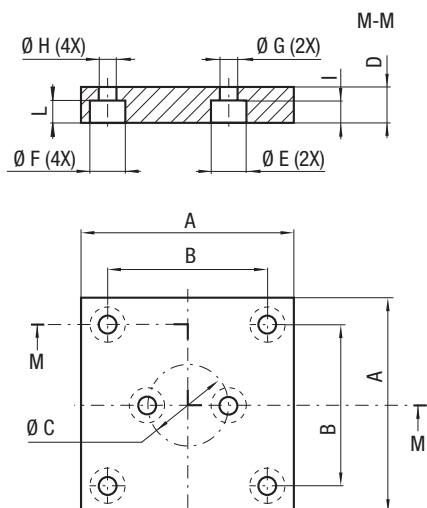
How to read the table

CODE	Reference to standards	A		B		Ø C		D		Ø E		Ø F		Ø G		Ø H		I		L	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FB 45	1-2-10-19-20	70	2.76	50	1.97	20	0.79	20	0.79	15	0.59	15	0.59	9	0.35	9	0.35	14	0.55	12	0.47

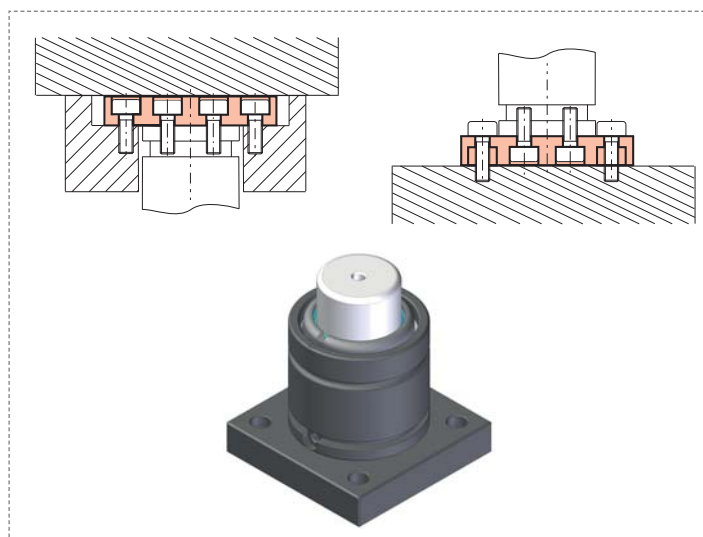
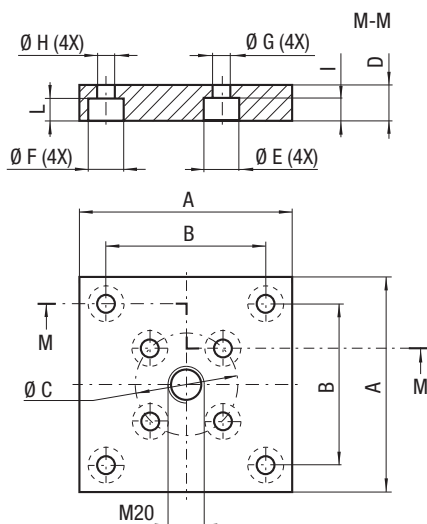
Special Springs CODE

1 = ISO 11901-2
 2 = VDI 3003
 10 = 90.25.04
 19 = E24.54.815.G
 20 = EM24.54.700

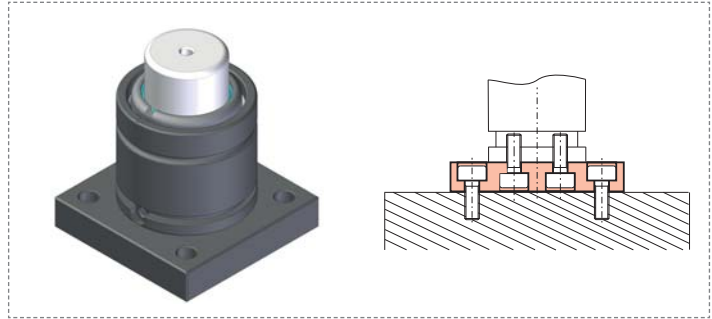
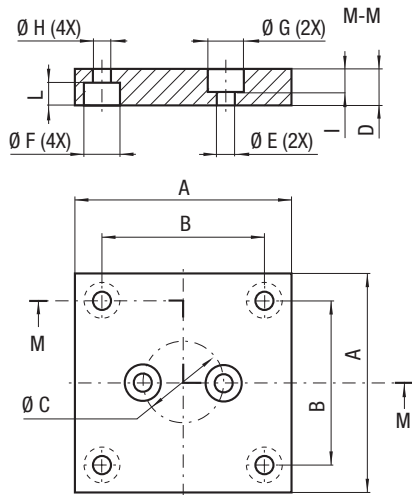
Dimension



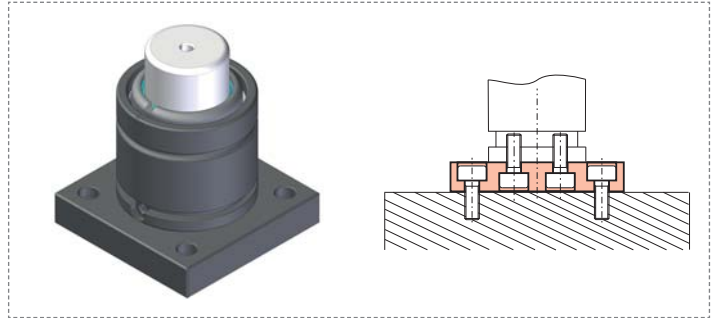
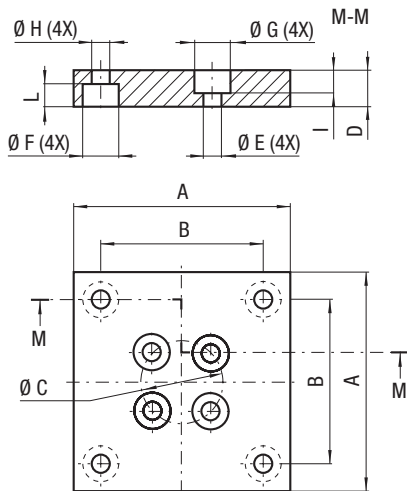
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		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FB 45	1-2-10-19-20	70	2.76	50	1.97	20	0.79	20	0.79	15	0.59	15	0.59	9	0.35	9	0.35	14	0.55	12	0.47
FB 50	1-2-10-19-20	75	2.95	56,5	2.22	20	0.79	20	0.79	15	0.59	15	0.59	9	0.35	9	0.35	14	0.55	12	0.47
FB 63	0	100	3.94	73,5	2.89	20	0.79	20	0.79	15	0.59	18	0.71	9	0.35	11	0.43	12	0.47	12	0.47



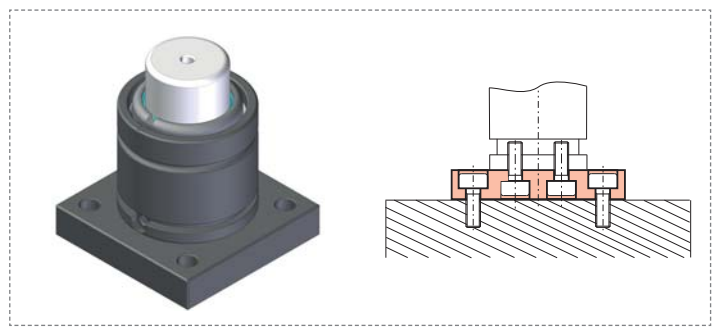
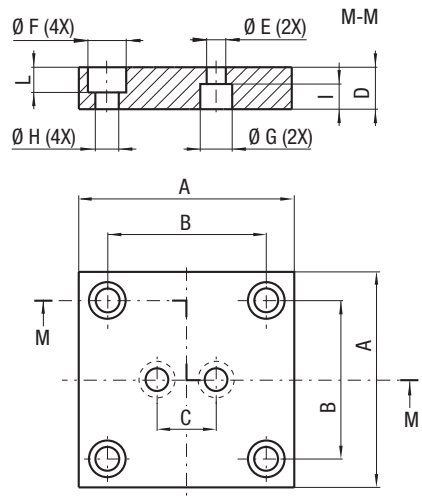
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		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FB 75	1-2-10-19-20	100	3.94	73,5	2.89	40	1.57	20	0.79	15	0.59	18	0.71	9	0.35	11	0.43	14	0.55	12	0.47
FB 95	1-2-10-19-20	120	4.72	92	3.62	60	2.36	20	0.79	15	0.59	20	0.79	9	0.35	13,5	0.53	14	0.55	13	0.51
FB 120	1-2-10-19-20	140	5.51	109,5	4.31	80	3.15	20	0.79	18	0.71	20	0.79	11	0.43	13,5	0.53	15	0.59	13	0.51
FB 150	1-2-10-20	190	7.48	138	5.43	100	3.94	25	0.98	18	0.71	26	1.02	11	0.43	17,5	0.69	15	0.59	17	0.67
FB 195	1-2-10-20	210	8.27	170	6.69	120	4.72	25	0.98	20	0.79	26	1.02	13,5	0.53	17,5	0.69	13	0.51	17	0.67



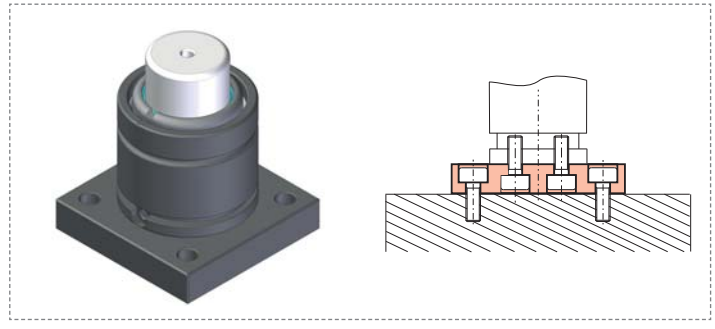
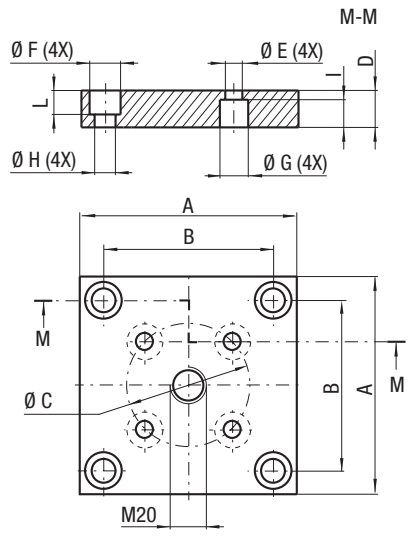
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FBA 45	20	70	2.76	50	1.97	20	0.79	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	14	0.55	12	0.47
FBA 50	20	75	2.95	56,5	2.22	20	0.79	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	14	0.55	12	0.47



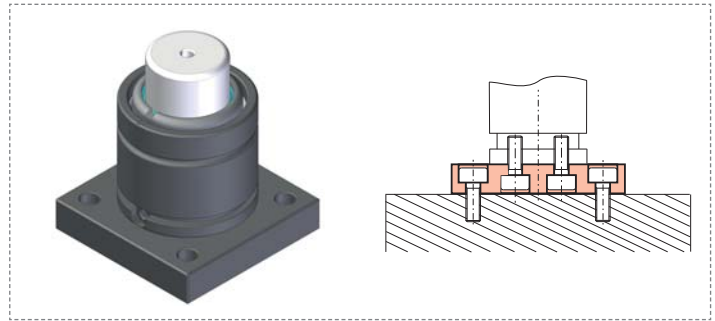
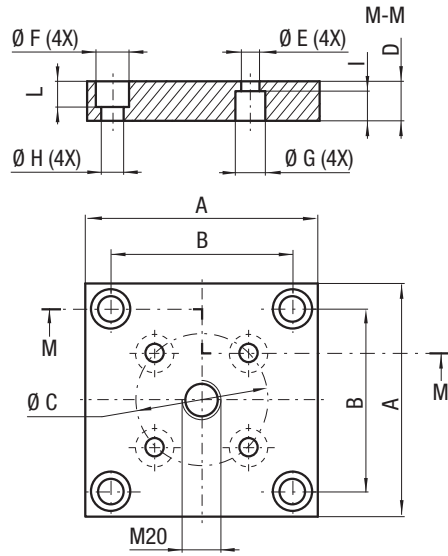
CODE	Reference to standards	A		B		Ø C		D		Ø E		Ø F		Ø G		Ø H		I		L	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBA 75	20	100	3.94	73,5	2.89	40	1.57	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	14	0.55	12	0.47
FBA 95	20	120	4.72	92	3.62	60	1.57	20	0.79	9	0.35	20	0.79	15	0.59	13,5	0.53	14	0.55	13	0.51
FBA 120	20	140	5.51	109,5	4.31	80	3.15	20	0.79	11	0.43	20	0.79	18	0.71	13,5	0.53	15	0.59	13	0.51
FBA 150	20	190	7.48	138	5.43	100	3.94	25	0.98	11	0.43	26	1.02	18	0.71	17,5	0.69	15	0.59	17	0.67
FBA 195	20	210	8.27	170	6.69	120	4.72	25	0.98	13,5	0.53	26	1.02	20	0.79	17,5	0.69	15	0.59	17	0.67



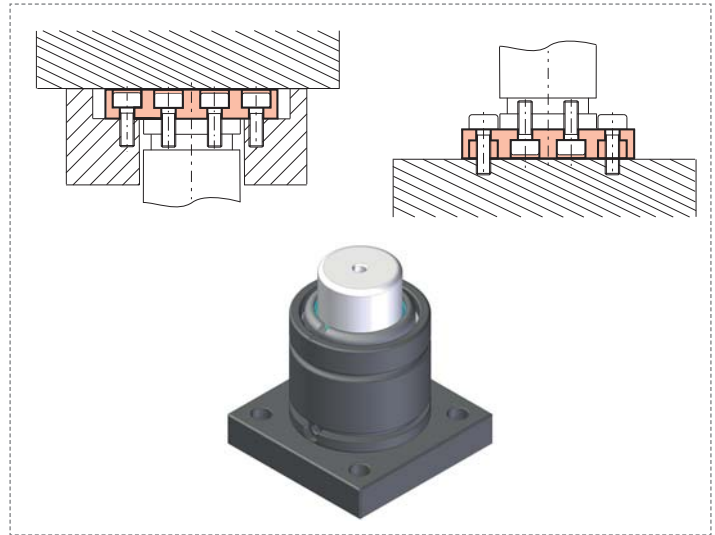
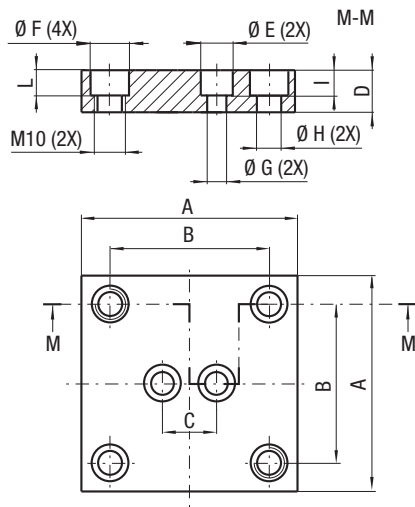
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		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBB 45	3-14	70	2.76	50	1.97	20	0.79	20	0.79	9	0.35	15	0.59	15	0.59	9	0.35	12	0.47	12	0.47
FBB 50	3-14	75	2.95	56,5	2.22	20	0.79	20	0.79	9	0.35	15	0.59	15	0.59	9	0.35	12	0.47	12	0.47
FBB 63	3-14	100	3.94	73,5	2.89	20	0.79	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	12	0.47	12	0.47



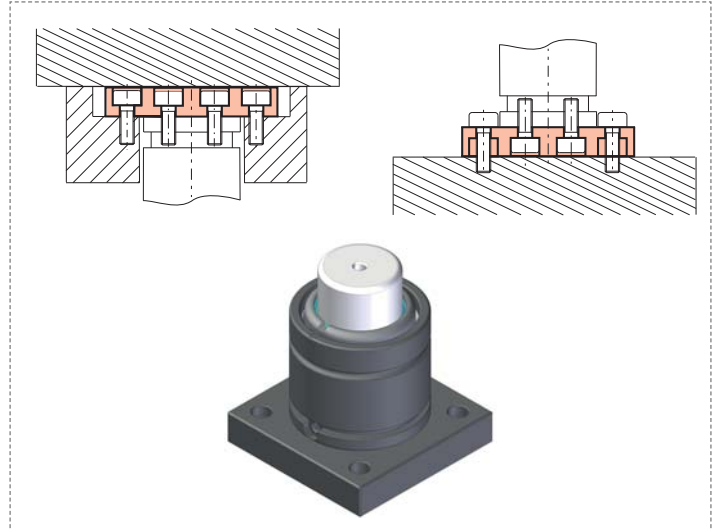
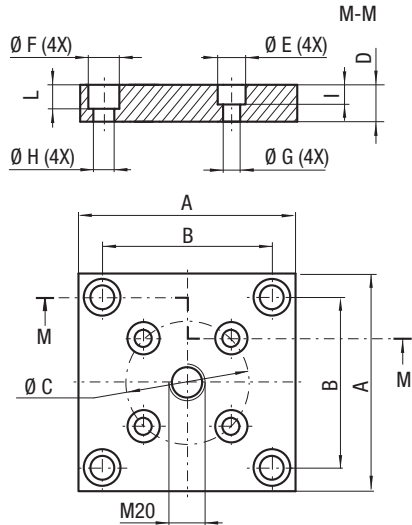
CODE	Reference to standards	A		B		Ø C		D		Ø E		Ø F		Ø G		Ø H		I		L	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBB 75	3-14	100	3.94	73,5	2.89	40	1.57	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	12	0.47	14	0.55
FBB 95	3-14	120	4.72	92	3.62	60	2.36	20	0.79	9	0.35	20	0.79	15	0.59	13,5	0.53	14	0.55	13	0.51
FBB 120	3-14	140	5.51	109,5	4.31	80	3.15	20	0.79	11	0.43	20	0.79	18	0.71	13,5	0.53	15	0.59	13	0.51
FBB 150A	3-14	190	7.48	138	5.43	100	3.94	20	0.79	11	0.43	20	0.79	18	0.71	13,5	0.53	15	0.59	13	0.51
FBB 195	14	210	8.27	170	6.69	120	4.72	25	0.98	13,5	0.53	26	1.02	20	0.98	17,5	0.69	15	0.59	17	0.67



CODE	Reference to standards	A		B		Ø C		D		Ø E		Ø F		Ø G		Ø H		I		L	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBC75	0	100	3.94	73,5	2.89	40	1.57	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	12	0.47	15	0.55

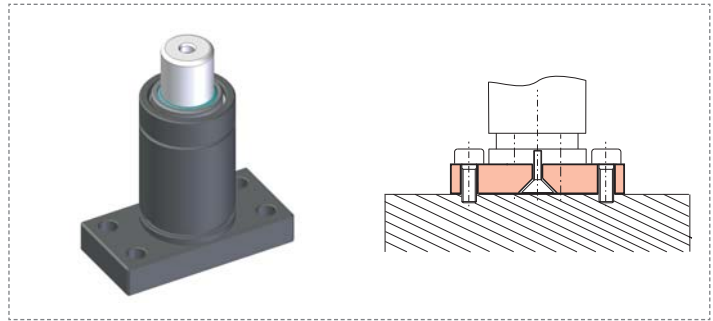
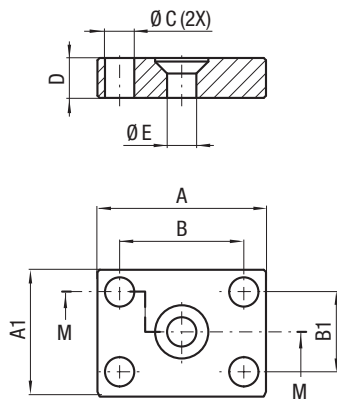


CODE	Reference to standards	A		B		C		D		Ø E		Ø F		Ø G		Ø H		I		L	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBD 45	3	70	2.76	50	1.97	20	0.79	20	0.79	15	0.59	15	0.59	9	0.35	9	0.35	12	0.47	12	0.47
FBD 50	3	75	2.95	56,5	2.22	20	0.79	20	0.79	15	0.59	15	0.59	9	0.35	9	0.35	12	0.47	12	0.47



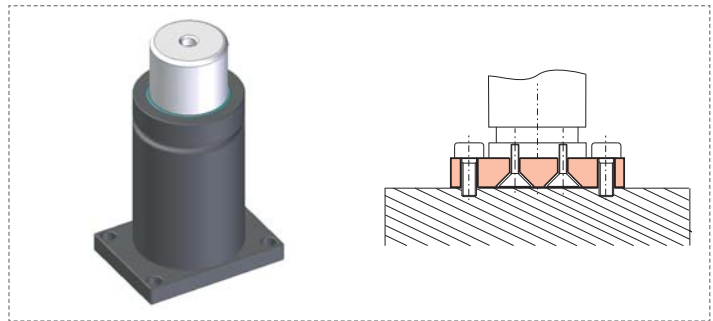
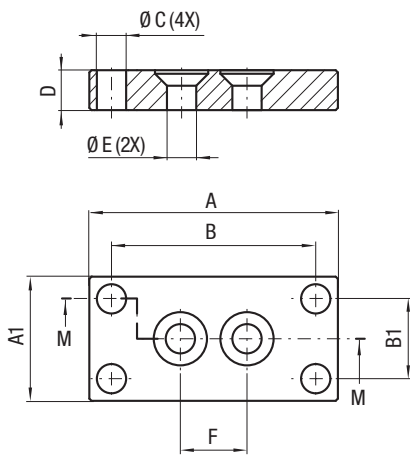
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		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBD 75	3	100	3.94	73,5	2.89	40	1.57	20	0.79	15	0.59	18	0.71	9	0.35	11	0.43	12	0.47	15	0.59
FBD 150	3-8	190	7.48	138	5.43	100	3.94	20	0.79	18	0.71	26	1.02	11	0.43	17,5	0.69	15	0.59	17	0.67

M-M

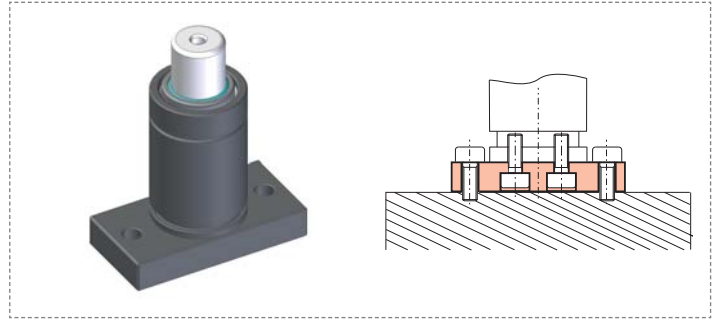
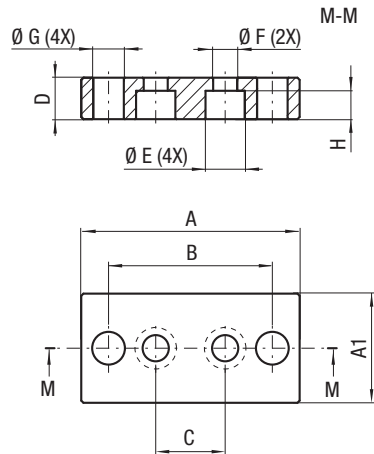


CODE	Reference to standards	A		A1		B		B1		Ø C		D		Ø E	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBE 19	0	38	1.50	28	1.10	28	1.10	18	0.71	6,6	0.26	9	0.35	6,6	0.26
FBE 25	0	44	1.73	28	1.10	34	1.34	18	0.71	6,6	0.26	9	0.35	6,6	0.26

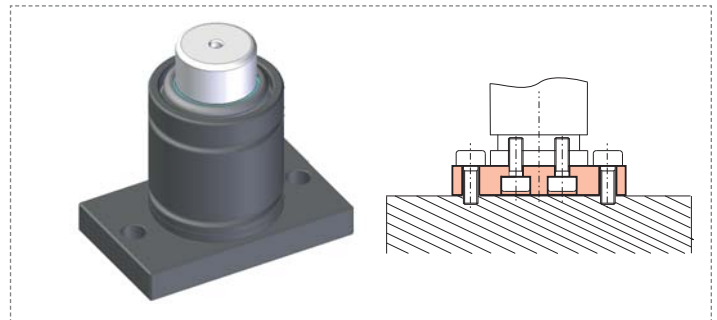
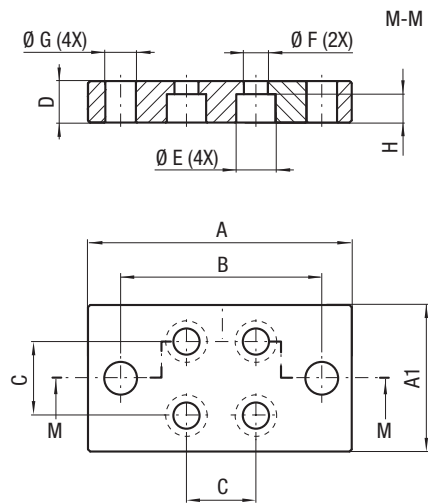
M-M



CODE	Reference to standards	A		A1		B		B1		Ø C		D		Ø E		F	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBE 32	0	51	2.01	32	1.26	41	1.61	22	0.87	6.6	0.26	9	0.35	6,6	0.26	15	0.59
FBE 38	0	57	2.24	38	1.50	47	1.85	28	1.10	6.6	0.26	9	0.35	6,6	0.26	20	0.79
FBE 50	0	69	2.72	50	1.97	59	2.32	40	1.57	6.6	0.26	9	0.35	9	0.35	20	0.79
FBE 63	0	84	3.31	65	2.56	70	2.76	50	1.97	6.6	0.26	9	0.35	9	0.35	20	0.79

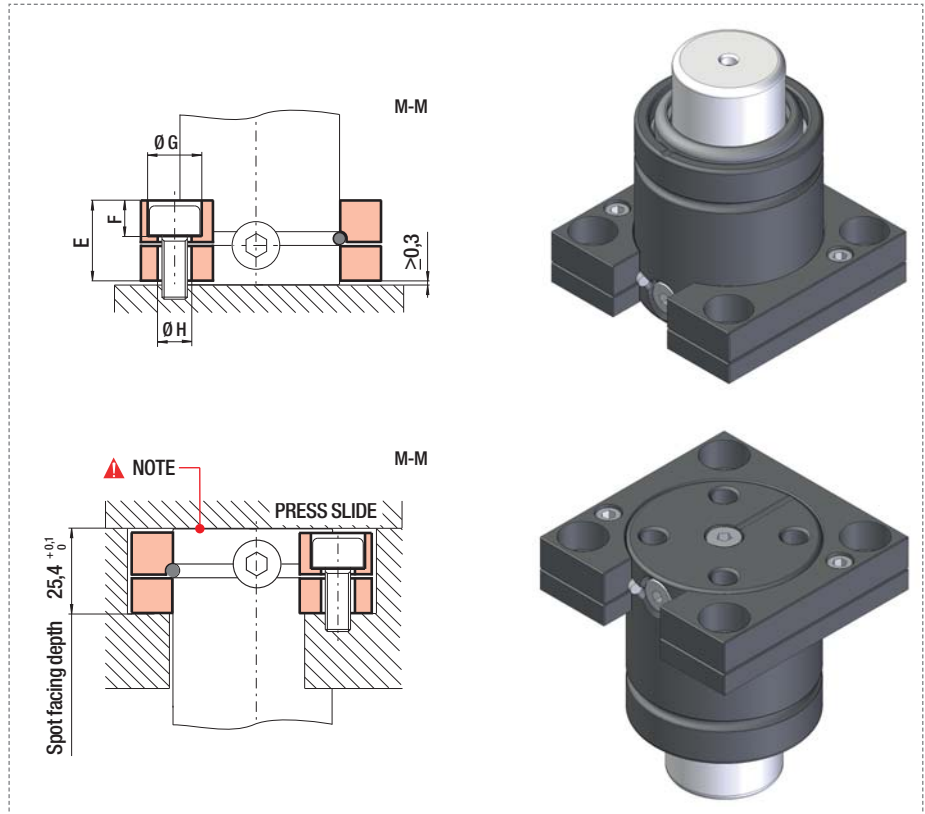
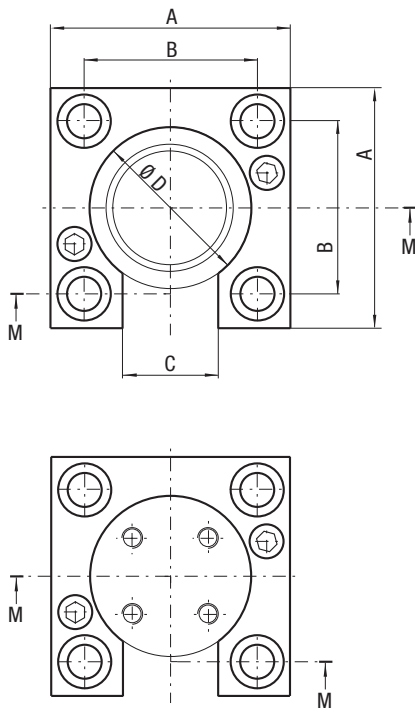


CODE	Reference to standards	A		A1		B		C		D		Ø E		Ø F		Ø G		H	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBF 45	0	90	3.54	45	1.77	70	2.76	20	0.79	16	0.63	14	0.55	9	0.35	9	0.35	10	0.39
FBF 50	0	100	3.94	50	1.97	75	2.95	31,8	1.25	19	0.75	18	0.71	11	0.43	14	0.55	13	0.51



CODE	Reference to standards	A		A1		B		C		D		Ø E		Ø F		Ø G		H	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FBF 75	0	130	5.12	80	3.15	105	4.13	38,1	1.50	19	0.75	20	0.79	14	0.55	14	0.55	13	0.51



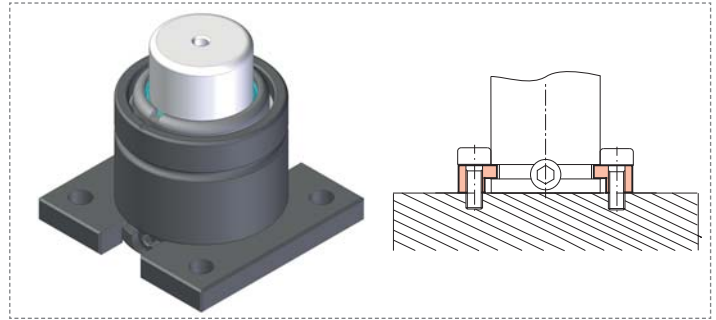
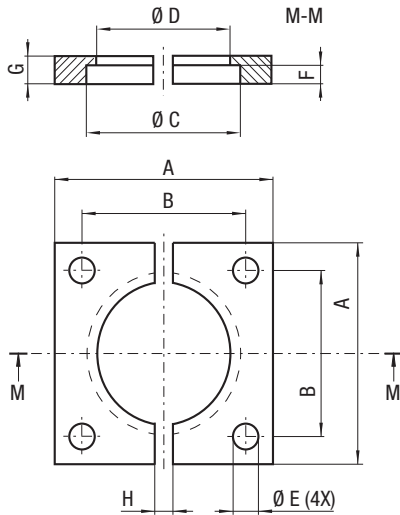


CODE	Reference to standards	A		B		C		Ø D		E		F		Ø G		Ø H	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS1 50	0	75	2.95	53,9	2.12	30	1.18	50,5	1.99	25	0.98	11	0.43	17	0.67	11	0.43
FS1 63	0	100	3.94	73,5	2.89	30	1.18	63,5	2.50	25	0.98	11	0.43	17	0.67	11	0.43
FS1 75	0	100	3.94	76,2	3.00	30	1.18	75,5	2.97	25	0.98	13	0.51	20	0.79	13	0.51
FS1 95	0	125	4.92	98,3	3.87	30	1.18	95,5	3.76	25	0.98	13	0.51	20	0.79	13	0.51
FS1 120	0	140	5.51	114,3	4.50	30	1.18	120,5	4.74	25	0.98	13	0.51	20	0.79	13	0.51
FS1 150	0	175	6.89	139,7	5.50	30	1.18	150,5	5.93	25	0.98	17	0.67	25	0.98	17	0.67

! NOTE

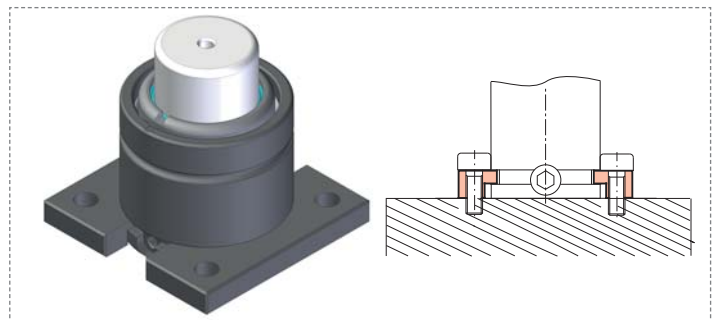
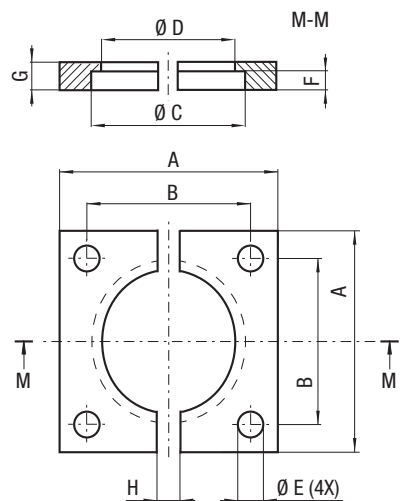
- IT** Garantire sempre il contatto tra la press slide e il fondo del cilindro. Massimo gap permesso è 0.1 mm
- EN** Make sure there is always a contact between the bottom cylinder surface and the press slide. Max gap allowed is 0.1 mm
- DE** Es muss immer ein Kontakt zwischen der Arbeitsfläche der Presse und dem Boden der Gasdruckfeder gewährleistet sein. Es ist ein maximale Lücke von 0.1mm erlaubt
- FR** Toujours consentir un contact entre la surface du fond du cylindre et la presse. Gap maximum permis est 0.1mm
- ES** Garantizar siempre un contacto entre la base del cilindro y la corredera del troquel. Espacio máximo permitido es de 0.1mm
- PT** Garantir sempre o contacto entre o fundo do cilindro e o dispositivo de pressão. Tolerância máxima permitida de 0,1mm

ISO	VDI	BMW	Ford
General Motors	Mercedes Benz	Volkswagen	

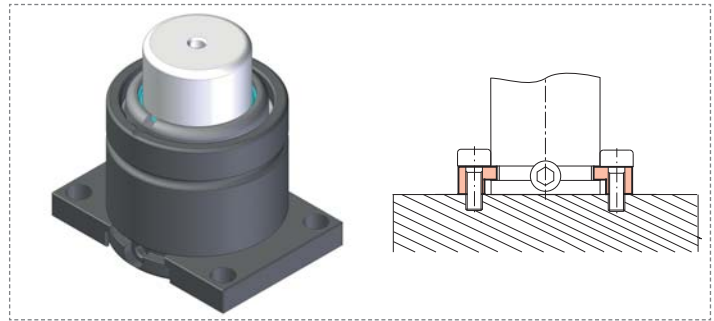
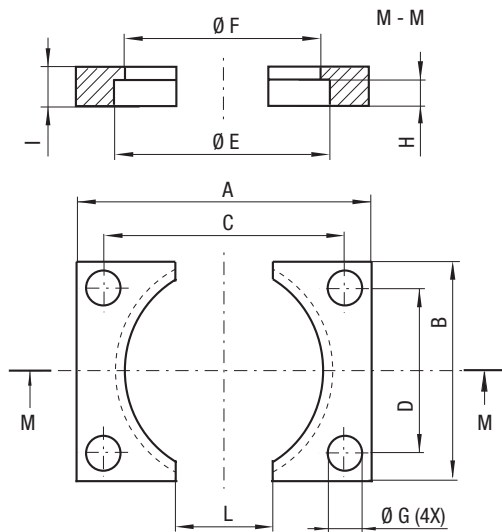


CODE	Reference to standards	A		B		Ø C		Ø D		Ø E		F		G		H	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS2 32	1-3-4-7-15	50	1.97	35	1.38	32,5	1.28	28,5	1.12	6,6	0.26	4	0.16	7	0.28	5	0.20
FS2 38	1-3-4-7-15	55	2.17	40	1.57	38,5	1.52	34,5	1.36	7	0.28	4	0.16	7	0.28	5	0.20
FS2 45	1-2-3-4-7-15-21-26	70	2.76	50	1.97	45,5	1.79	41,5	1.63	9	0.35	4	0.16	7	0.28	20	0.79
FS2 50	1-2-3-4-7-15-21-26	75	2.95	56,5	2.22	50,5	1.99	44,5	1.75	9	0.35	8	0.31	12	0.47	24	0.95
FS2 63	0	85	3.35	63,5	2.50	63,5	2.50	57,5	2.26	11	0.43	8	0.31	12	0.47	24	0.95
FS2 75	1-2-3-4-7-15-21-26	100	3.94	73,5	2.89	75,5	2.97	68,5	2.70	11	0.43	8	0.31	12	0.47	24	0.95
FS2 95	1-2-3-4-7-15-21-26	120	4.72	92	3.62	95,5	3.76	88,5	3.48	13,5	0.53	8	0.31	12	0.47	24	0.95
FS2 120	1-2-3-4-7-15-21-26	140	5.51	109,5	4.31	120,5	4.74	113,5	4.47	13,5	0.53	8	0.31	12	0.47	24	0.95
FS2 150	1-2-3-4-7-15-21-26	190	7.48	138	5.43	150,5	5.93	143,5	5.65	17,5	0.69	8	0.31	12	0.47	24	0.95
FS2 195	1-2-4-7-15-21-26	210	8.27	170	6.69	195,5	7.70	188	7.40	17,5	0.69	8	0.31	13	0.51	24	0.95

VDI	BMW	Ford	Mercedes Benz
Volkswagen			

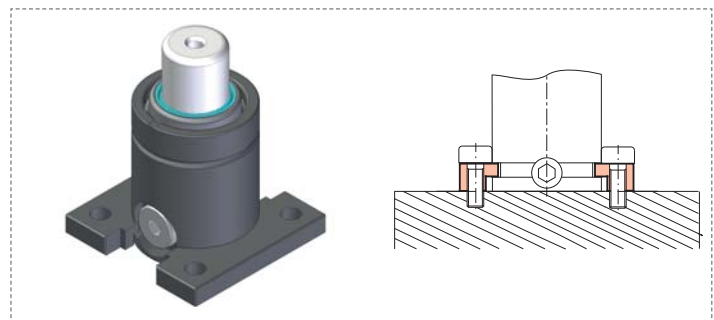
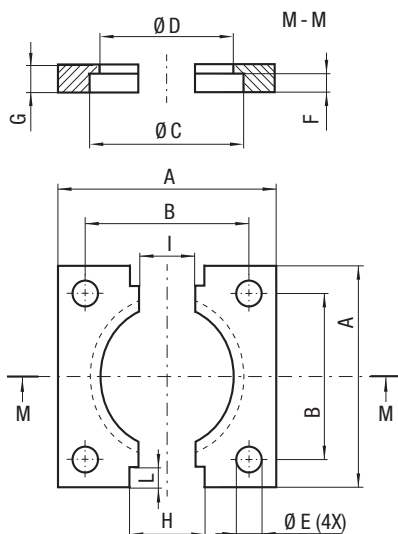


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FS2B 32	2-21-26	50	1.97	35	1.38	32,5	1.28	28,5	1.12	6,6	0.26	4	0.16	7	0.28	12	0.47
FS2B 38	2-21-26	55	2.17	40	1.57	38,5	1.52	34,5	1.36	6,6	0.26	4	0.16	7	0.28	12	0.47
FS2B 63	2-3-4-15-21	100	3.94	73,5	2.89	64	2.52	57,5	2.60	11	0.43	8	0.32	12	0.47	24	0.95

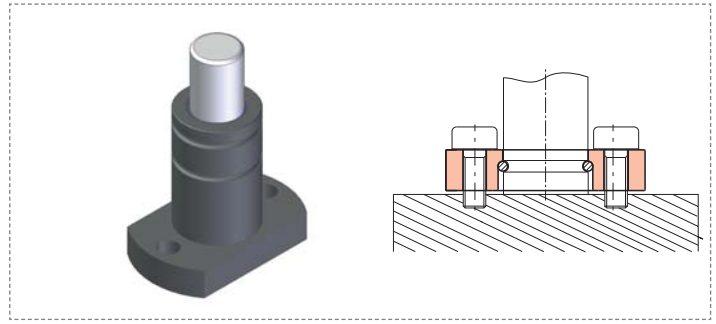
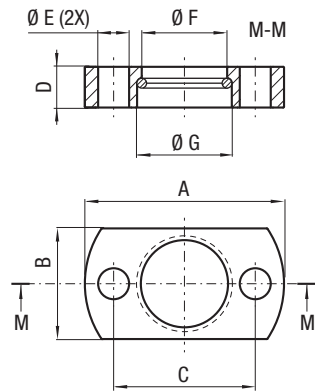


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		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS2A 32	0	50	1.97	27	1.06	40	1.57	18	0.71	32,5	1.28	28,5	1.12	6,6	0.26	4	0.16	7	0.28	20	0.79
FS2A 38	0	55	2.17	33	1.30	44	1.73	20	0.79	38,5	1.52	34,5	1.36	6,6	0.26	4	0.16	7	0.28	20	0.79
FS2A 45	0	70	2.76	40	1.57	57	2.24	27	1.06	45,5	1.79	41,5	1.63	9	0.35	4	0.16	7	0.28	25	0.98
FS2A 50	0	75	2.95	45	1.77	62	2.44	32	1.26	50,5	1.99	44,5	1.75	9	0.35	8	0.31	12	0.47	25	0.98
FS2A 63	0	85	3.35	58	2.28	69	2.72	42	1.65	63,5	2.5	57,5	2.26	11	0.43	8	0.31	12	0.47	30	1.18
FS2A 75	0	100	3.94	70	2.76	84	3.31	54	2.13	75,5	2.97	68,5	2.7	11	0.43	8	0.31	12	0.47	30	1.18
FS2A 95	0	120	4.72	90	3.54	100	3.94	70	2.76	95,5	3.76	88,5	3.48	13,5	0.53	8	0.31	12	0.47	40	1.57
FS2A 120	0	140	5.51	115	4.53	120	4.72	95	3.74	120,5	4.74	113,5	4.47	13,5	0.53	8	0.31	12	0.47	50	1.97
FS2A 150	0	190	7.48	145	5.71	165	6.5	120	4.72	150,5	5.93	143,5	5.65	17,5	0.69	8	0.31	12	0.47	60	2.36
FS2A 195	0	210	8.27	190	7.48	185	7.28	165	6.50	195,5	7.70	188	7.40	17,5	0.69	8	0.31	13	0.51	80	3.15

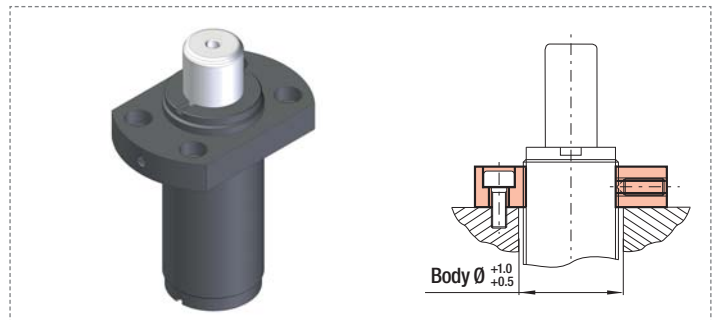
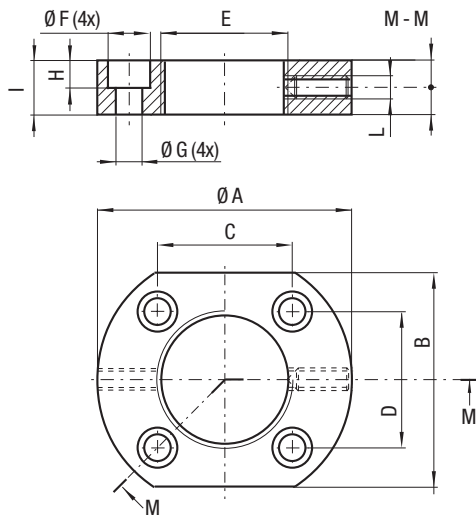
FS2C



CODE	Reference to standards	A		B		C		D		Ø E		F		G		H		I		L	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS2C 32	0	50	1.97	35	1.38	32,5	1.28	28,5	1.12	6,6	0.26	4	0.16	7	0.28	21	0.83	17	0.67	6,5	0.26
FS2C 38	0	55	2.17	40	1.57	38,5	1.52	34,5	1.36	6,6	0.26	4	0.16	7	0.28	21	0.83	17	0.67	6,5	0.26

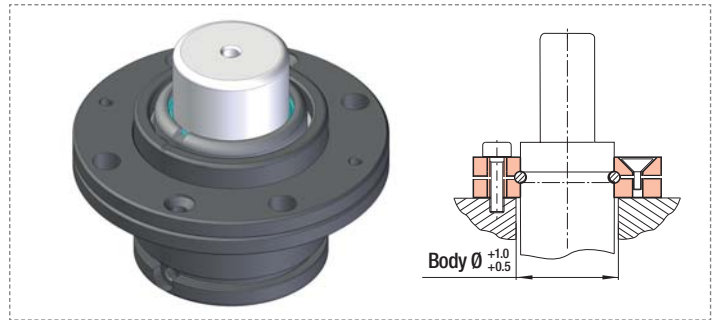
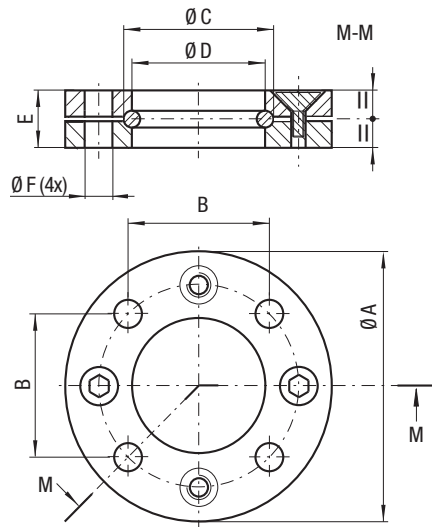


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FS3 19	0	45	1.77	25	0.98	32	1.26	9,2	0.36	7	0.28	19,3	0.76	21,4	0.84
FS3 25	0	50	1.97	30	1.18	38	1.50	9,2	0.36	7	0.28	25,3	1.00	27,4	1.08



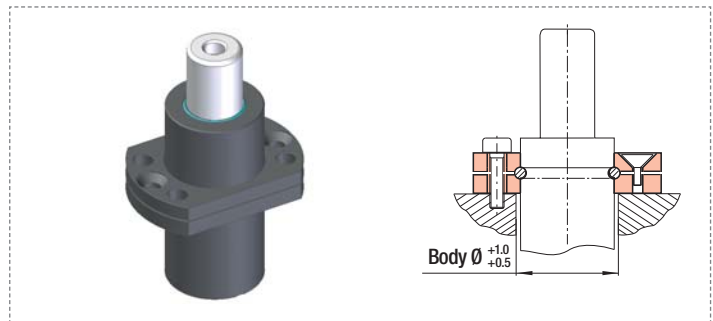
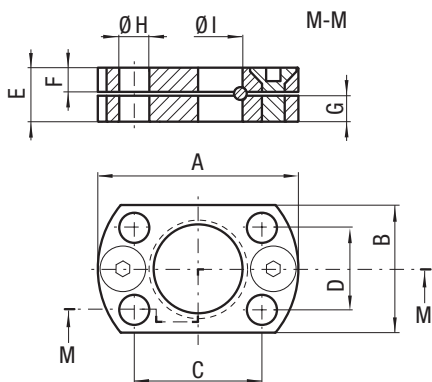
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		mm	inch	mm	inch	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch	mm	inch	
FCA 38	0	75	2.95	50	1.97	50,3	1.98	29	1.14	M 38 x 1,5	14	0.55	9	0.35	8	0.31	12	0.47	M6
⚠ FCA 45	0	90	3.54	60	2.36	60	2.36	34	1.34	M 45 x 1,5	14	0.55	9	0.35	8	0.31	16	0.63	M6
⚠ FCA 50	0-22	100	3.94	66	2.60	66	2.60	38	1.50	M 50 x 1,5	14	0.55	9	0.35	8	0.31	16	0.63	M6

⚠ PHASING OUT



For **KE** series only

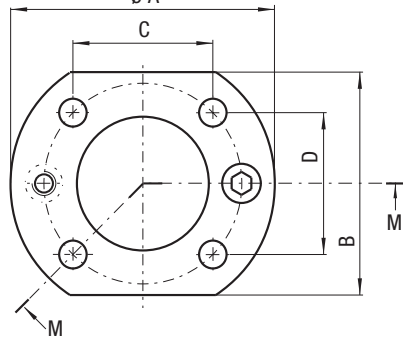
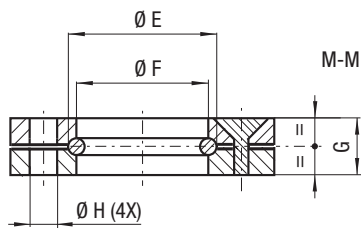
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		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FCB 50	0	95	3.74	56,5	2.22	52	2.05	50,5	1.99	13	0.51	9	0.35
FCB 63	0	122	4.80	73,5	2.89	66	2.60	63,5	2.50	16	0.63	11	0.43
FCB 75	0	122	4.80	73,5	2.89	78	3.07	75,5	2.97	16	0.63	11	0.43
FCB 95	0	150	5.91	92	3.62	98	3.86	95,5	3.76	18	0.71	13,5	0.53



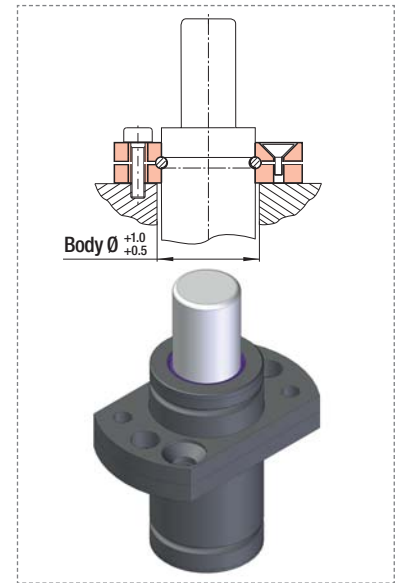
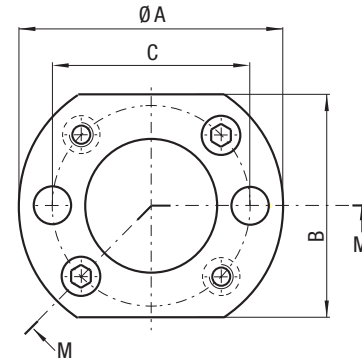
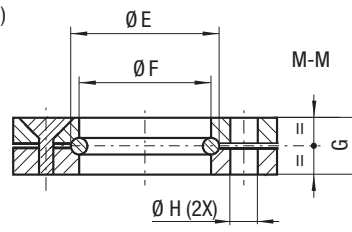
CODE	Reference to standards	A		B		C		D		E		F		G		Ø H		Ø I	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FCD 19	0	44	1.73	28	1.10	28	1.10	18	0.71	11	0.43	5,2	0.20	5,6	0.22	6,6	0.26	19,5	0.77
FCD 25	0	50	1.97	30	1.18	34	1.34	18	0.71	11	0.43	5,2	0.20	5,6	0.22	6,6	0.26	25,5	1.00
FCD 32	0	57	2.24	39	1.54	40	1.57	22	0.87	11	0.43	5,2	0.20	5,6	0.22	6,6	0.26	32,5	1.28
FCD 38	0	63	2.48	46	1.81	45	1.77	26	1.02	11	0.43	5,2	0.20	5,6	0.22	6,6	0.26	38,5	1.52
FCD 50	0	75	2.95	58	2.28	54	2.13	34	1.34	11	0.43	6,2	0.24	4,6	0.18	6,6	0.26	50,5	1.99
FCD 63	0	98	3.86	76	2.99	74	2.91	40	1.57	13	0.51	8,9	0.35	3,9	0.15	9	0.35	63,5	2.50

ISO General Motors	VDI Mercedes Benz	BMW Peugeot - Citroën	Ford Volkswagen
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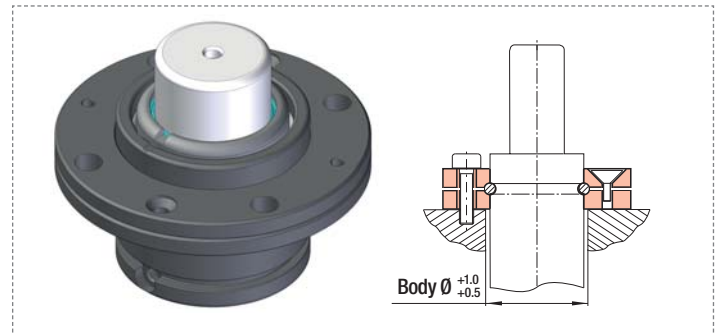
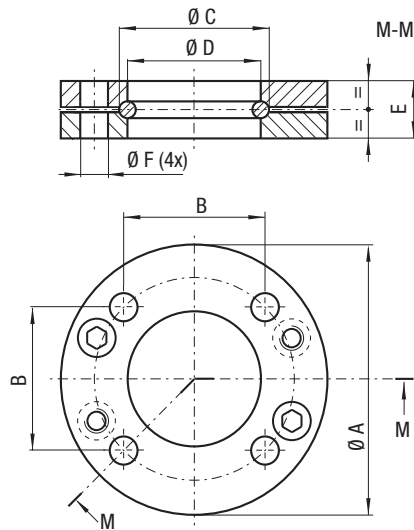
(ISO)



(VDI)



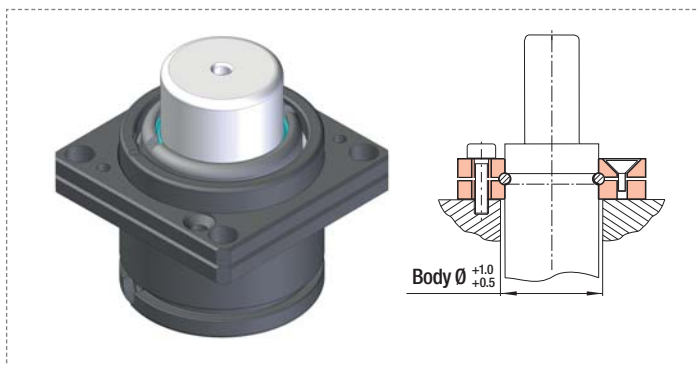
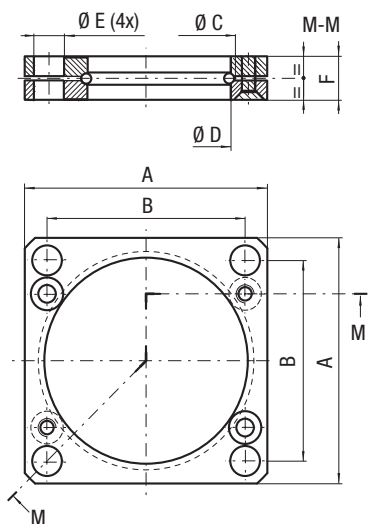
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		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
FC 12 A	VDI 0	34	1.34	21	0.83	24	0.94	-	-	13,7	0.54	12,5	0.49	9	0.35	6,6	0.26
FC 15 A	VDI 0	37	1.36	24	0.94	27	1.06	-	-	16,7	0.66	15,5	0.61	9	0.35	6,6	0.26
FC 19 B	ISO 1-5-19	44	1.73	25	0.98	30	1.18	12	0.47	21,9	0.86	19,5	0.77	9	0.35	6,6	0.26
FC 25 B	ISO 1-5-19	50	1.97	30	1.18	34	1.34	18	0.71	27,9	1.10	25,5	1.00	9	0.35	6,6	0.26
FCC 19 A	VDI 2-3-17-21-23	44	1.73	25	0.98	32	1.26	-	-	21	0.83	19,5	0.77	9	0.35	6,6	0.26
FCC 25 A	VDI 2-3-17-19-21-23	50	1.97	30	1.18	38	1.50	-	-	27	1.06	25,5	1.00	9	0.35	6,6	0.26



CODE	Reference to standards	Ø A		B		Ø C		Ø D		E		Ø F	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FC 32A	1-2-3-9-16-24	60	2.36	35	1.38	34	1.34	32,5	1.28	9	0.35	7	0.28
FC 38A	1-2-3-9-16-24	68	2.68	40	1.57	40	1.57	38,5	1.52	9	0.35	7	0.28
FC 45A	1-2-3-9-16-24	86	3.39	50	1.97	47	1.85	45,5	1.79	13	0.51	9	0.35
FC 50A	1-2-3-9-16-24	95	3.74	56,5	2.22	54	2.13	50,5	1.99	13	0.51	9	0.35
FC 63A	0	122	4.80	73,5	2.89	67	2.64	63,5	2.50	16	0.63	11	0.43
FC 75A	1-2-3-9-16-24	122	4.80	73,5	2.89	80	3.15	75,5	2.97	16	0.63	11	0.43
FC 95A	1-2-3-9-16-24	150	5.91	92	3.62	100	3.94	95,5	3.76	18	0.71	13,5	0.53
FC 120A	1-2-3-9-16-24	175	6.89	109,5	4.31	125	4.92	120,5	4.74	21	0.83	13,5	0.53
FC 150A	1-2-3-9-16-24	220	8.66	138	5.43	155	6.10	150,5	5.93	27	1.06	17,5	0.69
FC 195A	1-2-9-16-24	290	11.42	170	6.69	200	7.87	195,5	7.70	27	1.06	17,5	0.69

FCQ - FCQC

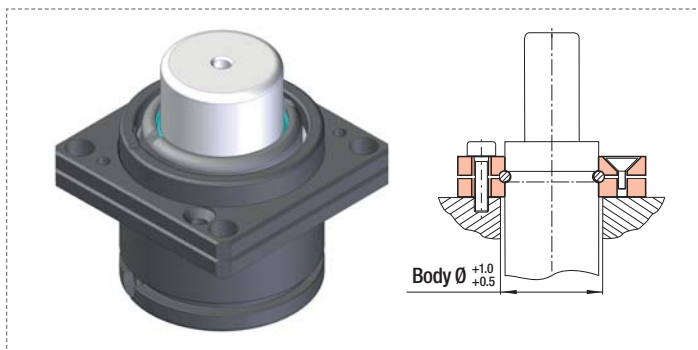
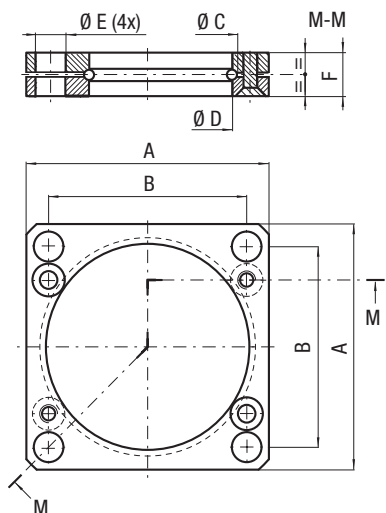
ISO	VDI	BMW	Ford
General Motors	Volkswagen		



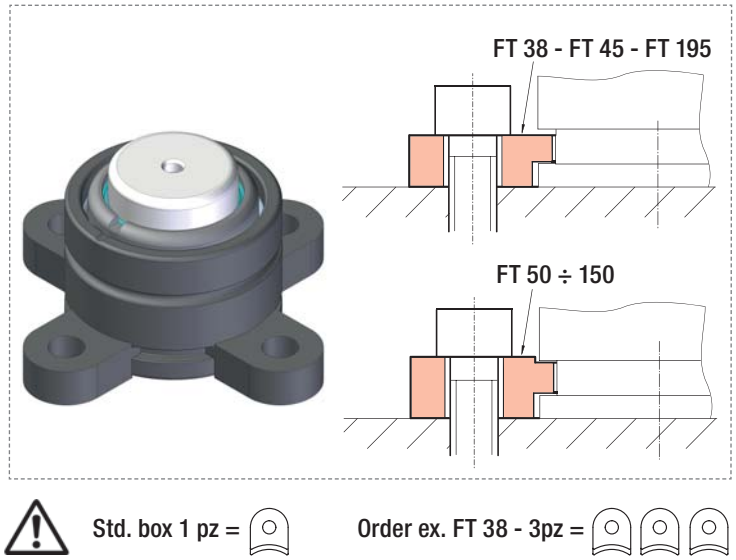
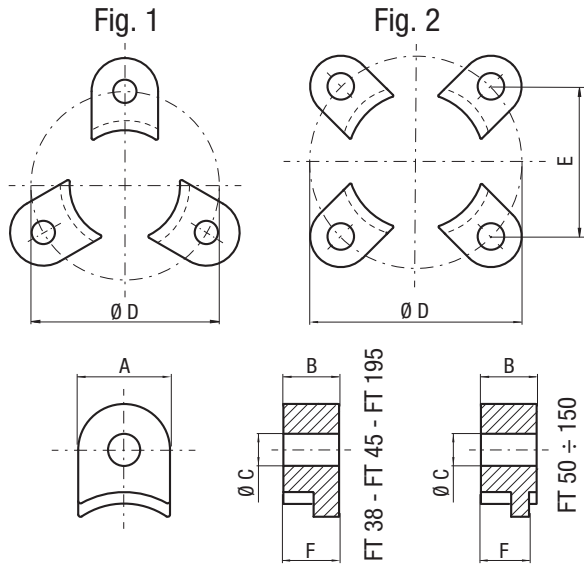
CODE		Reference to standards	A		B		Ø C		Ø D		Ø E		F	
PHASING OUT	NEW		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FCQ 32 A	FCQC 32	2-4-8-25	45	1.77	35	1.38	34	1.34	32,5	1.28	7	0.28	9	0.26
FCQ 38 A	FCQC 38	1-2-3-4-8-25	52	2.05	40	1.57	40	1.57	38,5	1.52	7	0.28	9	0.35
FCQ 45 A	FCQC 45	1-2-3-4-8-25	64	2.52	50	1.97	47	1.85	45,5	1.79	9	0.35	13	0.51
FCQ 50 A	FCQC 50	1-2-3-4-8-25	70	2.76	56,5	2.22	54	2.13	50,5	1.99	9	0.35	13	0.51
FCQ 63 A	FCQC 63 A	2-3-25	90	3.54	73,5	2.89	67	2.64	63,45	2.50	11	0.43	16	0.63
FCQC 63	FCQC 63	2-4-21	80	3.15	64	2.52	67	2.64	63,45	2.50	11	0.43	16	0.63
FCQ 75 A	FCQC 75	1-2-3-4-8-25	90	3.54	73,5	2.89	80	3.15	75,5	2.97	11	0.43	16	0.63
FCQ 95 A	FCQC 95	1-2-3-4-8-25	110	4.33	92	3.62	100	3.94	95,5	3.76	13,5	0.53	18	0.71
FCQ 120 A	FCQC 120	1-2-3-4-8-25	130	5.12	109,5	4.31	125	4.92	120,5	4.74	13,5	0.53	21	0.83
FCQ 150 A	FCQC 150	1-2-3-4-8-25	162	6.38	138	5.43	155	6.10	150,5	5.93	17,5	0.69	27	1.06
FCQ 195 A	FCQC 195	1-2-4-8-25	210	8.27	170	6.69	200	7.87	195,5	7.70	17,5	0.69	27	1.06

FCQB - FCQD

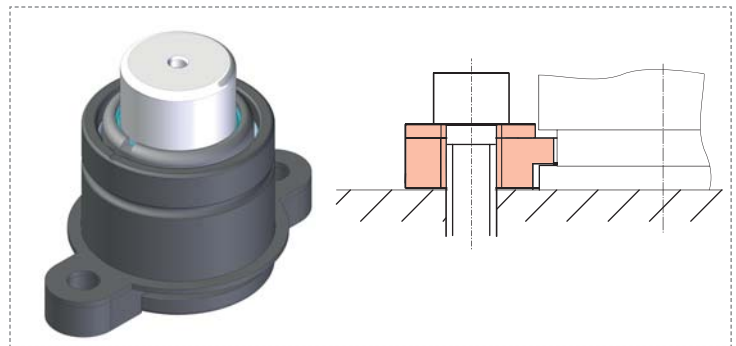
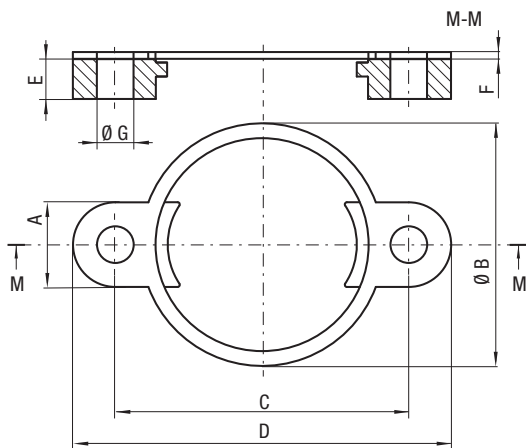
For KE series only



CODE	Reference to standards	A		B		Ø C		Ø D		Ø E		F	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FCQB 50	0	70	2.76	56,5	2.22	52	2.05	50,5	1.99	9	0.35	13	0.51
FCQB 63	0	90	3.54	73,5	2.89	66	2.60	63,5	2.50	11	0.43	16	0.63
FCQD 63	0	80	3.15	64	2.52	66	2.60	63,5	2.50	11	0.43	16	0.63
FCQB 75	0	90	3.54	73,5	2.89	78	3.07	75,5	2.97	11	0.43	16	0.63
FCQB 95	0	110	4.33	92	3.62	98	3.86	95,5	3.76	13,5	0.53	18	0.71

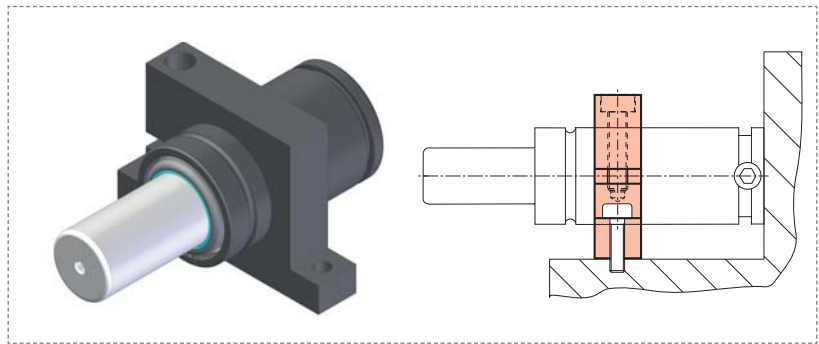
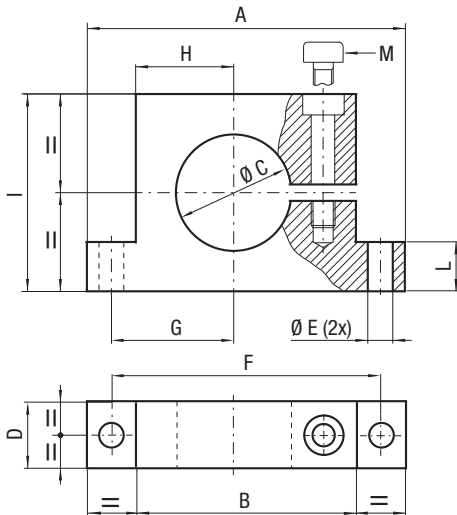


CODE	Reference to standards	A		B		C		Ø D		E		F		Rif. Fig
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FT 38	0	20	0.79	7	0.28	7	0.28	56,6	2.23	-	-	7	0.28	Fig. 1
FT 45	0	25	0.98	7	0.28	9	0.35	70,7	2.78	-	-	7	0.28	
FT 50	0	30	1.18	14,2	0.56	13	0.51	80	3.15	-	-	13	0.51	
FT 63	0	30	1.18	14,2	0.56	13	0.51	92	3.62	65	2.56	13	0.51	Fig. 2
FT 75	0	30	1.18	14,2	0.56	13	0.51	104	4.09	73,5	2.89	13	0.51	
FT 95	0	40	1.57	14,2	0.56	17	0.67	130	5.12	92	3.62	13	0.51	
FT 120	0	50	1.97	14,2	0.56	17	0.67	155	6.1	109,5	4.31	13	0.51	
FT 150	0	50	1.97	14,2	0.56	21	0.83	195	7.68	138	5.43	13	0.51	
FT 195	0	58	2.28	16	0.63	21	0.83	240	9.45	169	6.65	16	0.63	



CODE	Reference to standards	A		Ø B		C		D		E		F		Ø G	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FTP 38	0	20	0.79	48	1.89	56.6	2.23	76.6	3.02	7	0.28	2,5	0.10	7	0.28
FTP 45	0	25	0.98	56	2.20	70.7	2.78	95.7	3.77	7	0.28	2,5	0.10	9	0.35
FTP 50	0	30	1.18	61	2.40	80	3.15	110	4.33	14,2	0.56	2,5	0.10	13	0.51
FTP 63	0	30	1.18	73	2.87	92	3.62	122	4.80	14,2	0.56	2,5	0.10	13	0.51
FTP 75	0	30	1.18	86	3.39	104	4.09	134	5.28	14,2	0.56	2,5	0.10	13	0.51
FTP 95	0	40	1.57	106	4.17	130	5.12	170	6.69	14,2	0.56	2,5	0.10	17	0.67
FTP 120	0	50	1.97	131	5.16	155	6.10	205	8.07	14,2	0.56	2,5	0.10	17	0.67
FTP 150	0	50	1.97	170	6.69	195	7.68	245	9.65	14,2	0.56	2,5	0.10	21	0.83

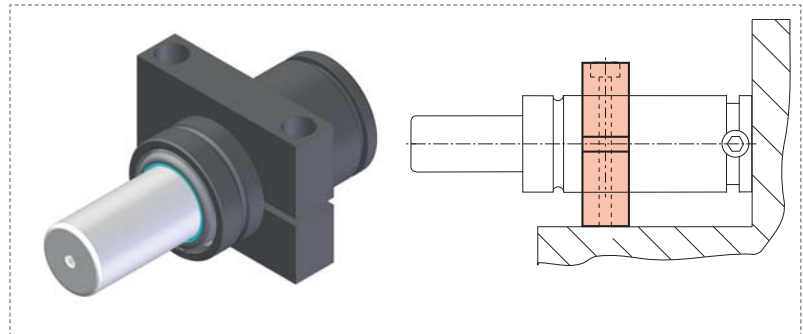
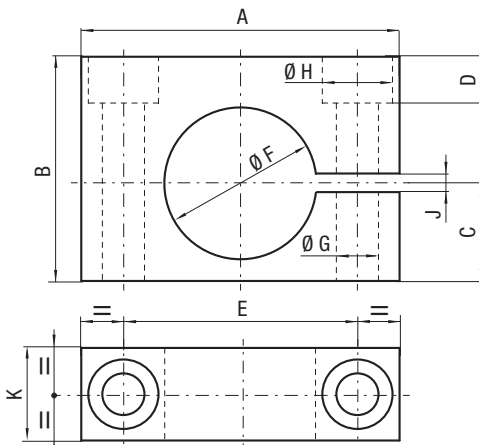
ISO	VDI	BMW	General Motors
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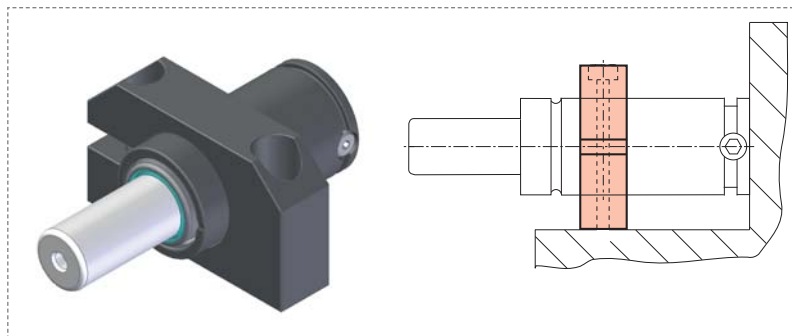
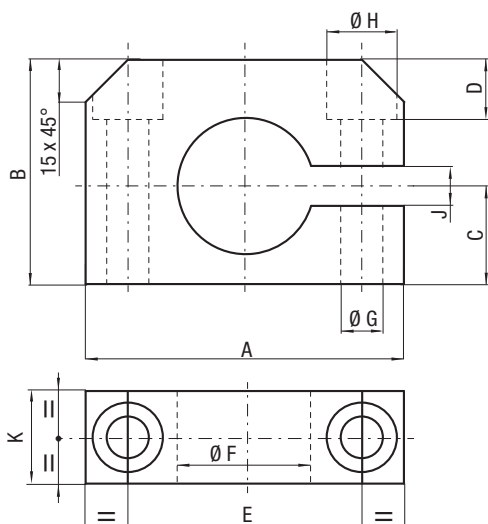
CODE	Reference to standards	A		B		Ø C		D		Ø E		F		G		H		I		L		M
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FSA 32	1-2-3-13-19	90	3.54	54	2.13	32	1.26	20	0.79	9	0.35	72	2.83	31	1.22	22	0.87	45	1.77	15	0.59	M8
FSA 38	1-2-3-13-19	95	3.74	59	2.32	38	1.50	20	0.79	9	0.35	77	3.03	34	1.34	25	0.98	55	2.17	15	0.59	M8
FSA 45	1-2-3-13-19	100	3.94	64	2.52	45	1.77	20	0.79	9	0.35	82	3.23	37	1.46	28	1.10	60	2.36	15	0.59	M8
FSA 50	1-2-3-13-19	130	5.12	90	3.54	50	1.97	30	1.18	9	0.35	110	4.33	50	1.97	40	1.57	80	3.15	20	0.79	M8
FSA 75	1-2-3-13-19	160	6.30	115	4.53	75	2.95	30	1.18	11	0.43	137	5.39	63,5	2.50	52,5	2.07	105	4.13	20	0.79	M10
FSA 95	1-2-3-13-19	195	7.68	145	5.71	95	3.74	30	1.18	13,5	0.53	170	6.69	80	3.15	67,5	2.66	125	4.92	20	0.79	M12
FSA 120	1-2-3-13-19	220	8.66	165	6.50	120	4.72	30	1.18	13,5	0.53	195	7.68	92,5	3.64	77,5	3.05	148	5.83	20	0.79	M12
FSA 150	1-2-3-13-19	260	10.24	200	7.87	150	5.91	30	1.18	13,5	0.53	230	9.06	110	4.33	95	3.74	200	7.87	20	0.79	M12

FSB - FSC - FSD

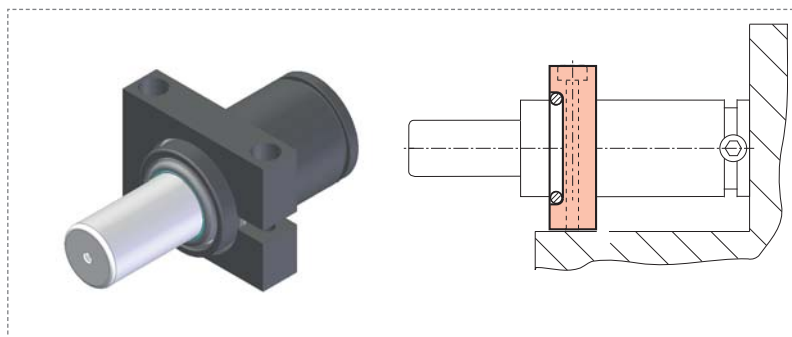
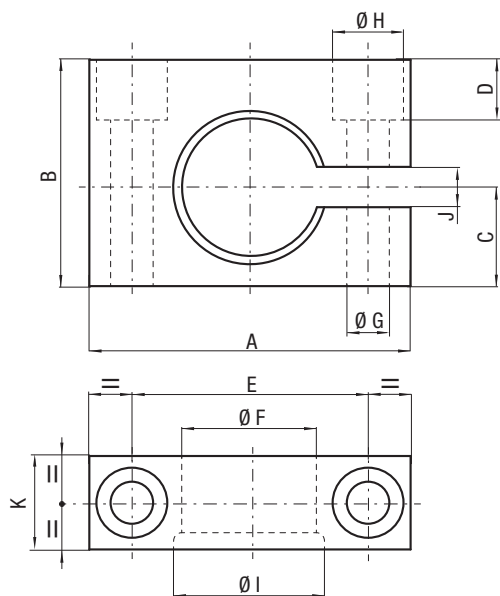
VDI	BMW	Ford	Mercedes Benz
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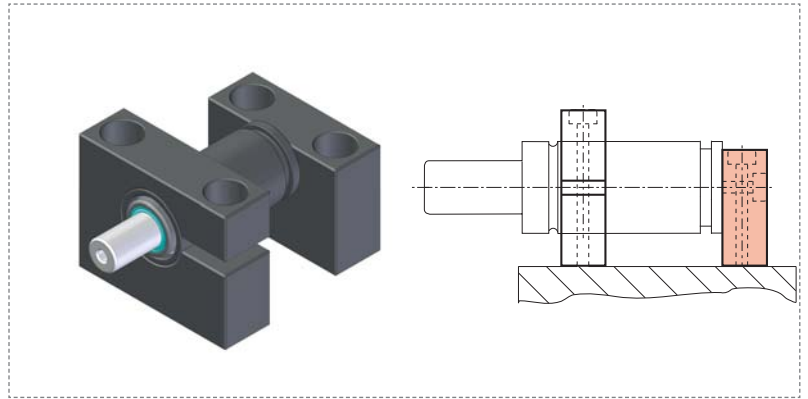
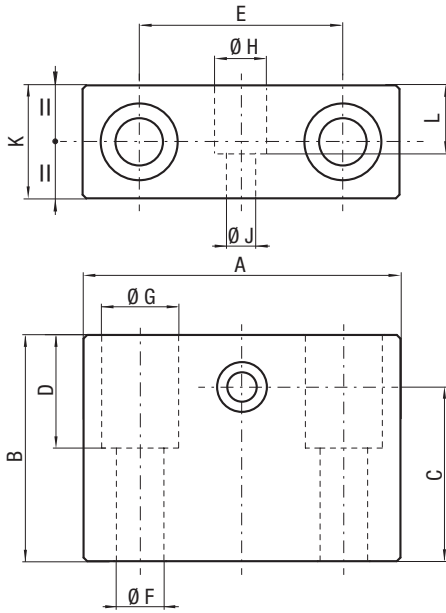
CODE	Reference to standards	A		B		C		D		E		Ø F		Ø G		Ø H		J		K	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FSB 32	6	80	3.15	63	2.48	38,5	1.52	18	0.71	56	2.20	32	1.26	10,5	0.41	17	0.67	6	0.24	25	0.98
FSD 32	2-3-12-18-21-27	68	2.68	48	1.89	20,9	0.82	10	0.39	50	1.97	32,5	1.28	9	0.35	15	0.59	4	0.16	20	0.79
FSD 38	2-3-12-18-21-27	74	2.91	54	2.13	23,9	0.94	16	0.63	54	2.13	38,5	1.52	9	0.35	15	0.59	4	0.16	20	0.79
FSD 45	2-3-12-18-21-27	80	3.15	60	2.36	27,5	1.08	22	0.87	60	2.36	45,5	1.79	9	0.35	15	0.59	4	0.16	20	0.79
FSD 50	2-3-4-12-18-21-27	90	3.54	70	2.76	30	1.18	25	0.98	68	2.68	50,5	1.99	11	0.43	18	0.71	5	0.20	30	1.18
FSC 63	0	105	4.13	80	3.15	40	1.57	11	0.43	80	3.15	63	2.48	10,5	0.41	17	0.67	10	0.39	30	1.18
FSD 63	2-18-21-27	108	4.25	82	3.23	36,5	1.44	27	1.06	84	3.31	63,5	2.50	11	0.43	18	0.71	5	0.20	30	1.18
FSD 75	2-3-4-12-18-21-27	125	4.92	94	3.70	42	1.65	32	1.26	100	3.94	75,5	2.97	13,5	0.53	20	0.79	5	0.20	30	1.18
FSD 95	2-3-4-12-18-21-27	140	5.51	115	4.53	52,5	2.07	33	1.30	115	4.53	95,5	3.76	13,5	0.53	20	0.79	5	0.20	30	1.18
FSD 120	2-3-12-18-21-27	170	6.69	140	5.51	65	2.56	58	2.28	145	5.71	120,5	4.74	13,5	0.53	20	0.79	7	0.28	30	1.18
FSD 150	2-3-12-18-21-27	200	7.87	170	6.69	80	3.15	68	2.68	175	6.89	150,5	5.93	13,5	0.53	20	0.79	7	0.28	30	1.18



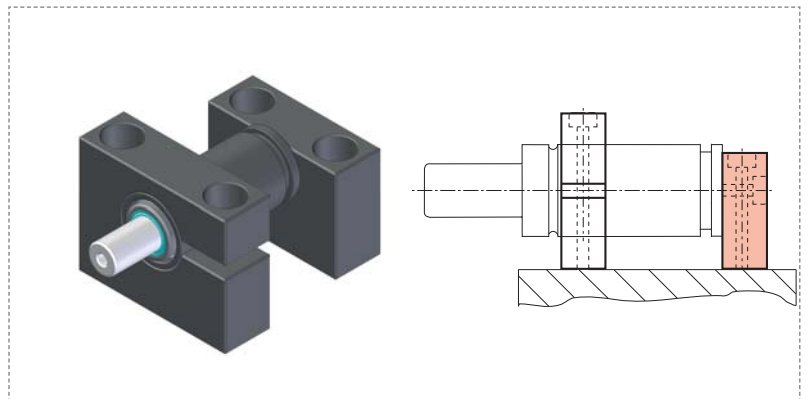
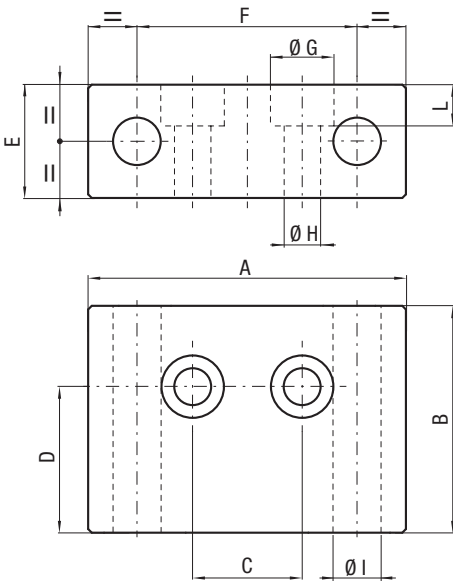
CODE	Reference to standards	A		B		C		D		E		Ø F		Ø G		Ø H		J		K	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FSE45	0	100	3.94	60	2.36	30	1.18	20	0.79	70	2.76	45,3	1.78	11	0.43	18	0.71	10	0.39	25	0.98



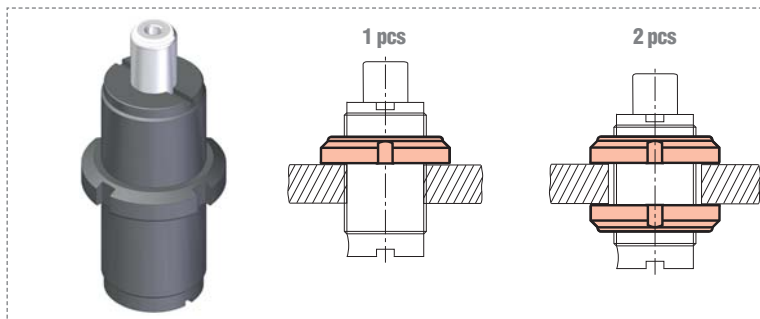
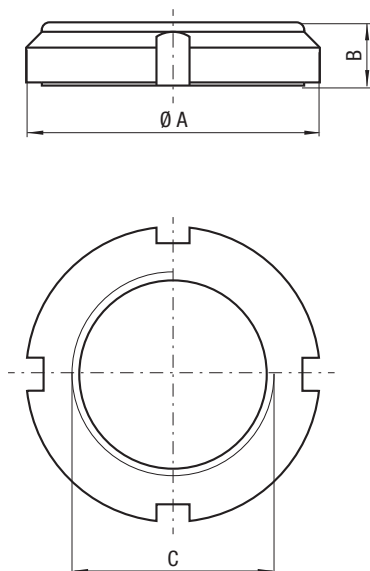
CODE	Reference to standards	A		B		C		D		E		Ø F		Ø G		Ø H		Ø I		J		K	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FSE 50	11	90	3.54	70	2.76	30	1.18	25	0.98	68	2.68	50,3	1.98	11	0.43	18	0.71	54,1	2.13	10	0.39	30	1.18
FSE 75	11	125	4.92	94	3.70	42	1.65	19	0.75	100	3.94	75,3	2.96	13	0.51	20	0.79	80,1	3.15	10	0.39	30	1.18
FSE 95	11	140	5.51	115	4.53	52,5	2.07	40	1.57	115	4.53	95,3	3.75	13	0.51	20	0.79	100,1	3.94	10	0.39	30	1.18



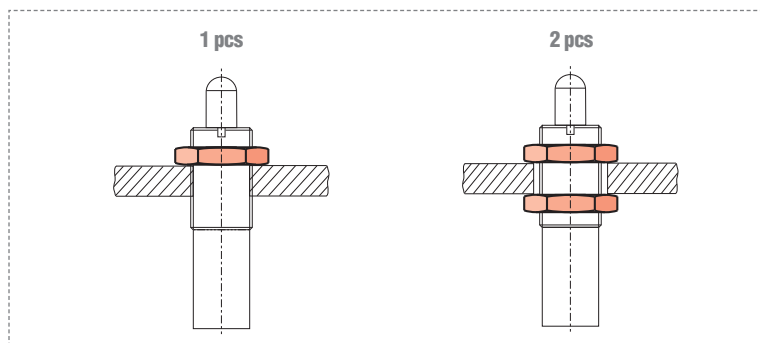
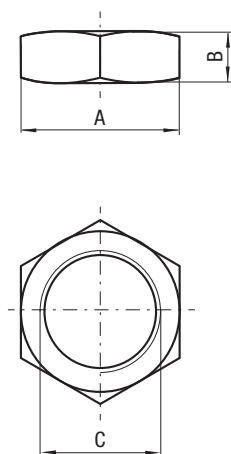
CODE	Reference to standards	A		B		C		D		E		Ø F		Ø G		Ø H		Ø J		L		K	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
R32A	5	70	2.76	50	1.97	38,5	1.52	25	0.98	45	1.77	10,5	0.41	17	0.67	11	0.43	6,5	0.26	15	0.59	25	0.98



CODE	Reference to standards	A		B		C		D		E		F		Ø G		Ø H		L		Ø I	
		mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
R50A	11	65	2,56	45	1,77	20	0,79	30	1,18	28	1,10	44	1,73	14	0,55	9	0,35	10	0,39	11	0,43
R75A	11	80	3,15	45	1,77	28,3	1,11	27,8	1,09	28	1,10	57	2,24	14	0,55	9	0,35	10	0,39	14	0,55
R95A	11	95	3,74	45	1,77	42,4	1,67	31,2	1,23	28	1,10	70	2,76	14	0,55	9	0,35	10	0,39	14	0,55



CODE (1 pcs)	Reference to standards	$\varnothing A$		B		C
		mm	inch	mm	inch	
GM38	0	53	2.09	12	0.47	M 38 X 1,5
GM45	0	62	2.44	12,3	0.48	M 45 X 1,5
GM50	0	68	2.68	12,9	0.51	M 50 X 1,5



CODE (1 pcs)	Reference to standards	A	B		C
			mm	inch	
DM 16	0-28	S24	8	0,31	M 16 x 1,5
39DM16X2A	0	S24	8	0,31	M 16 x 2
DM 24	0-28	S36	10	0,39	M 24 x 1,5
DI 1" - 8	0	S38	14	0,55	1" - 8

