

STAINLESS STEEL CYLINDERS



- └ 303 & 316 Versions Available
- └ Heavy Duty Construction
- └ Lifetime Guarantee
- └ Flexible Nose Bearing
- └ Mechanical Cushion Design



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KS Series

ISO 6431 - VDMA 24562 AISI 316L Stainless Steel Cylinders



ATEX CE Ex II 2 GDc T5

Features

└ Long Life Cylinder

KS series cylinders are manufactured from AISI 316L Stainless Steel and are available with ATEX certification, upon request. The cylinders are tie-rod construction for added strength.

└ Removable Nose Bearing

The front end cap is manufactured in two parts, which include the main housing and a screwed front nose assembly. The piston rod seals, bearing and wiper seal are all housed within the front nose assembly, which can be removed from the main endcap body enabling quick and easy maintenance without disassembling the cylinder.

└ Unique Scraper Bush

The front end cap incorporates a wiper seal manufactured from Polyurethane, which has been developed for chemical and food industries. This device is highly resilient against abrasive substances and chemical attack.

└ Clean Line Castings

The castings have been produced without external casting cavities in order to eliminate contamination traps. The front end cap housing is machined from solid stainless steel bar to a smooth finish, for maximum strength and with clean lines. The rear end cap incorporates a stainless steel disc to enable the end cap to be used for through-rod as well as standard cylinders, and also ensures a clean line finish.

└ ATEX Certified

KS cylinders can be ordered with ATEX certification according to directive 94/9/EC CE Ex II 2 GDc T5

UNIVER

Made in UK

Type KS100-080-0300M

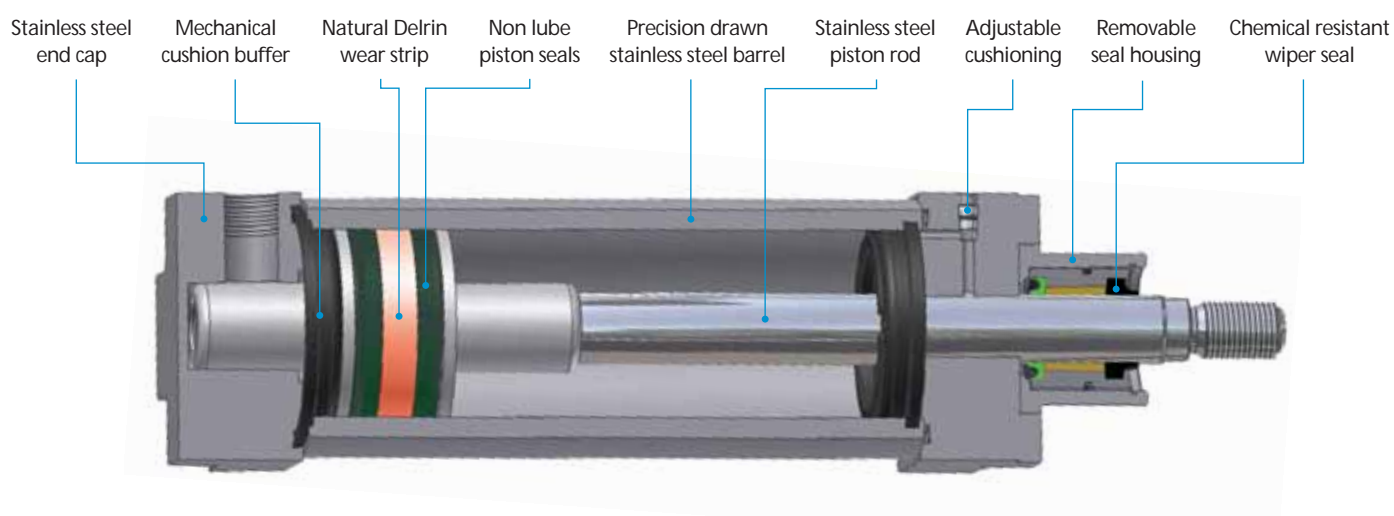
CE Ex II 2 GDc T5

Sample label from ATEX certified cylinders

TECHNICAL DATA

Type	Stainless steel cylinder
Bore (mm)	32 / 40 / 50 / 63 / 80 / 100 / 125 / 160 / 200
Mounting	ISO 6431 & VDMA 24562
Stroke	2.5 metre (max)
Operating Pressure	0.5 - 10 bar
Fluid	Filtered 50 . Use with or without lubrication
Operating temperature	Max + 80j Min -20j
Cushions	Mechanical & adjustable pneumatic cushioning

CYLINDER SECTION



CODIFICATION KEY

K	S	1	0	0	0	5	0	0	2	5	0	M
1		2			3			4			5	

1 Series

KS = Stainless Steel 316 Cylinder

2 Type

100 = Double Acting Stainless Steel 316

101 = Double Acting Stainless Steel 316 Through Rod

3 Bore (mm)

032 = 32mm

040 = 40mm

050 = 50mm

063 = 63mm

080 = 80mm

100 = 100mm

125 = 125mm

160 = 160mm

200 = 200mm

4 Stroke

Max = 2.5 metres

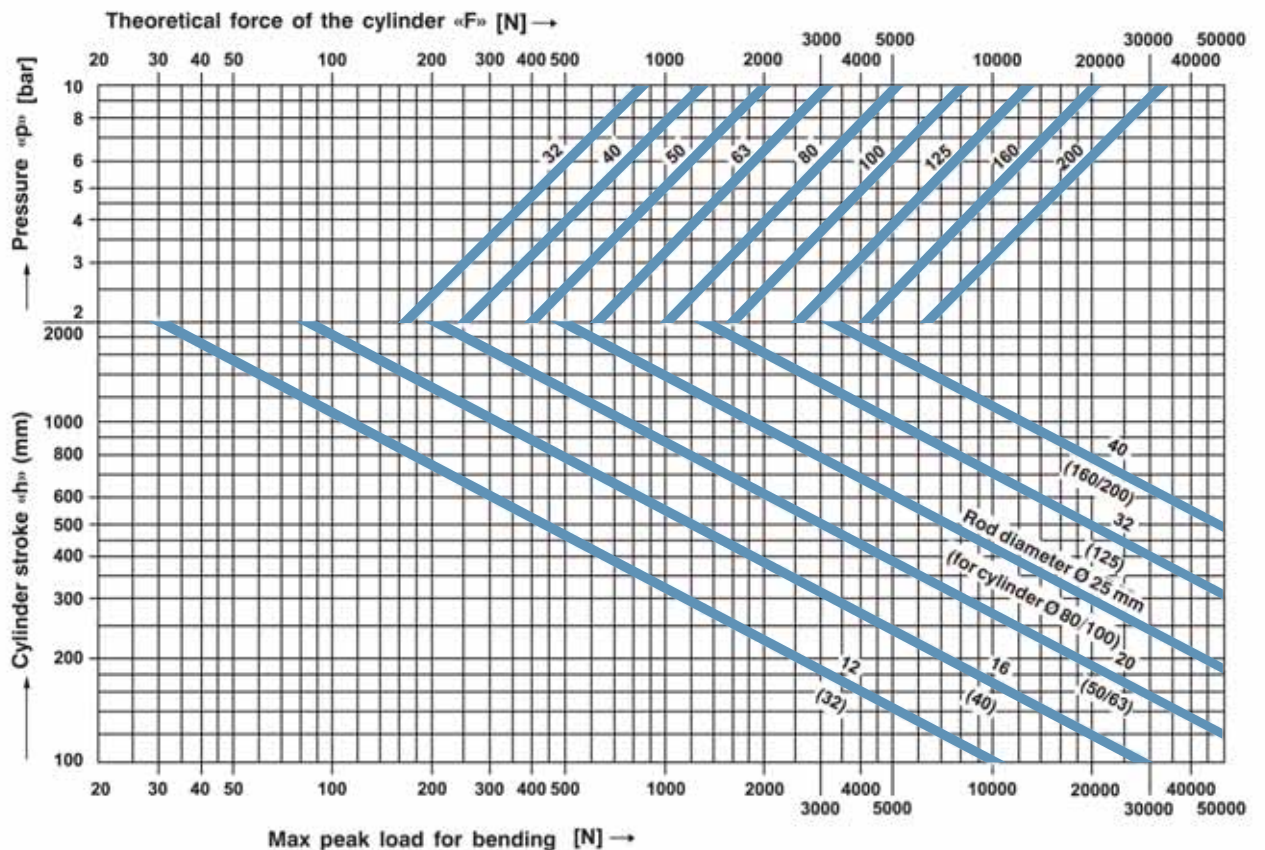
5 Options

M = Magnetic (supplied as standard)

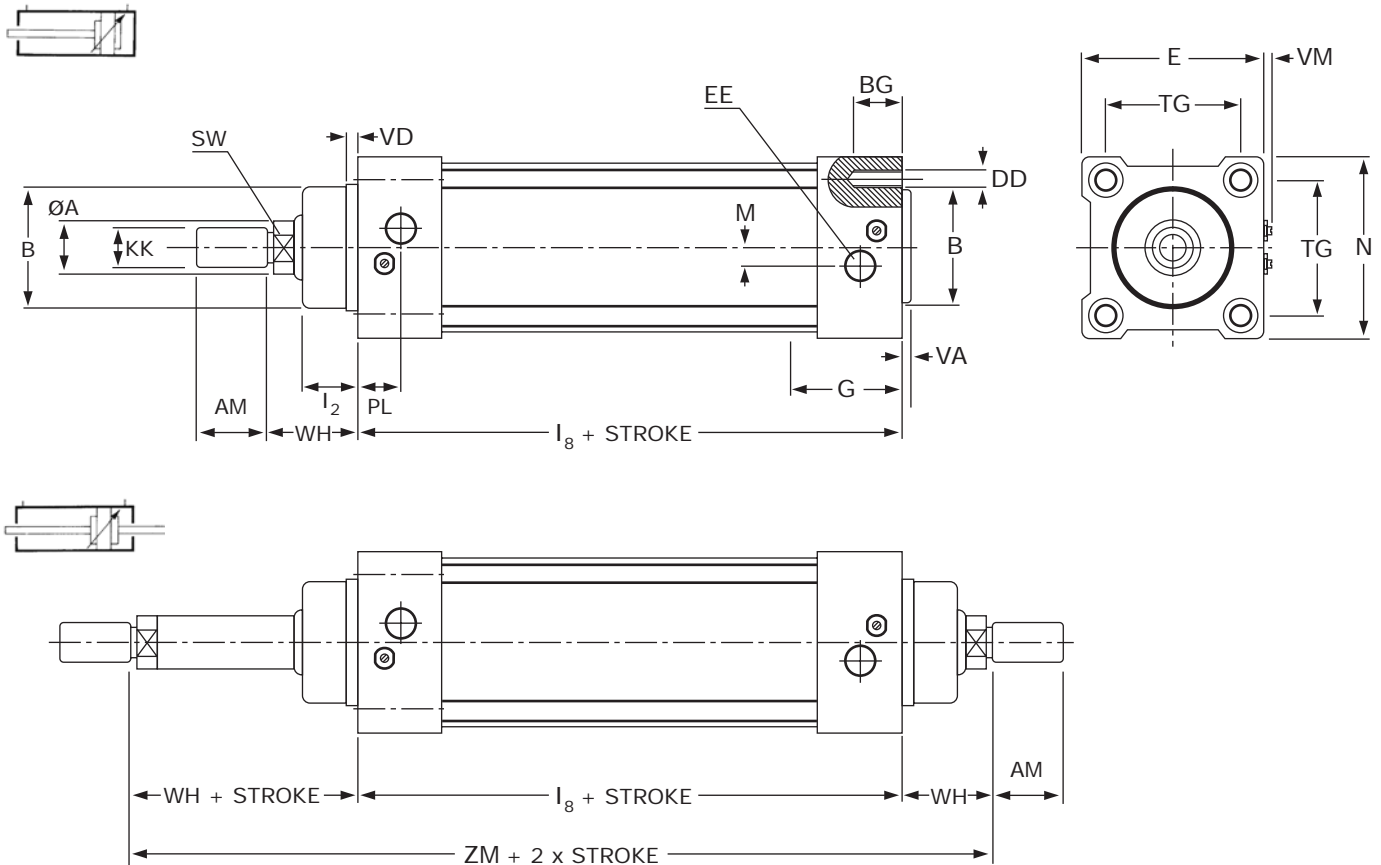
TECHNICAL INFORMATION

THEORETICAL FORCE TABLE (N)

Cylinder Bore (mm)	Working surface (mm ²)	Working pressure in bar					Cushion length (mm)	Max kinetic energy absorption (J)	
		2	4	6	8	10			
32	Thrust	804	161	322	482	643	804	20	1,8
	Traction	691	138	276	414	553	691		
40	Thrust	1256	251	502	754	1005	1256	22	2,5
	Traction	1056	211	422	633	844	1055		
50	Thrust	1962	393	785	1178	1570	1963	25	4,5
	Traction	1649	330	660	990	1320	1650		
63	Thrust	3116	623	1246	1869	2493	3116	25	8
	Traction	2802	560	1120	1680	2240	2800		
80	Thrust	5024	1005	2010	3014	4019	5024	35	12
	Traction	4533	907	1814	2722	3629	4536		
100	Thrust	7850	1570	3140	4710	6280	7850	35	21
	Traction	7359	1472	2944	4416	5888	7360		
125	Thrust	12266	2453	4906	7359	9812	12266	35	36
	Traction	11462	2294	4588	6882	9176	11470		
160	Thrust	20096	4019	8038	12058	16077	20096	48	52
	Traction	18840	3770	7540	11310	15080	18850		
200	Thrust	31400	6280	12560	18840	25120	31400	48	95
	Traction	30144	6029	12058	18086	24115	30144		

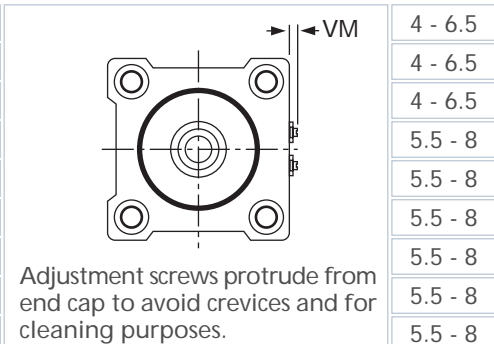


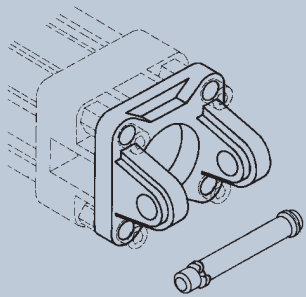
DIMENSIONAL INFORMATION



Ø (mm)	A	AM	B	BG	DD	E	EE	I ₂	I ₈		KK	M
									Nom.	Toll.		
32	12	22	30	11	M6	47	G1/8	20	94	±0.4	M10 x 1.25	5.5
40	16	24	35	11	M6	52	G1/4	22	105	±0.7	M12 x 1.25	6
50	20	32	40	13	M8	65	G1/4	26	106	±0.7	M16 x 1.5	7.5
63	20	32	45	13	M8	75	G3/8	25	121	±0.8	M16 x 1.5	8.5
80	25	40	45	15	M10	95	G3/8	32	128	±0.8	M20 x 1.5	9.5
100	25	40	55	15	M10	115	G1/2	38	138	±1	M20 x 1.5	10
125	32	54	60	17	M12	140	G1/2	40	160	±1	M27 x 2	10
160	40	72	65	20	M16	180	G3/4	50	180	±1.1	M36 x 2	15
200	40	72	75	20	M16	220	G3/4	65	180	±1.1	M36 x 2	15

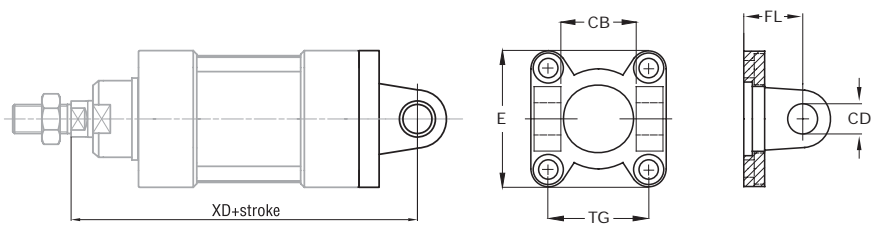
Ø (mm)	PL	SW	TG		VD	VA	WH	ZM	Adjustable Cushion Screws	VM
			Nom.	Toll.						
32	14	10	32.5	±0.5	4	4	26	146		4 - 6.5
40	15	13	38	±0.5	4	4	30	165		4 - 6.5
50	15	17	46.5	±0.6	4	4	37	180		4 - 6.5
63	16	17	56.5	±0.7	4	4	37	195		5.5 - 8
80	20	22	72	±0.7	4	4	46	220		5.5 - 8
100	20	22	89	±0.7	4	4	51	240		5.5 - 8
125	25	27	110	±1.1	5	5	65	290		5.5 - 8
160	25	36	140	±1.1	8	8	80	340		5.5 - 8
200	25	36	175	±1.1	8	8	95	370		5.5 - 8



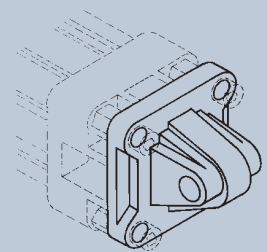
**FEMALE
REAR TRUNNION**


Supplied without Pin

CYL fl	Part Number
32	KFS-10032
40	KFS-10040
50	KFS-10050
63	KFS-10063
80	KFS-10080
100	KFS-10100
125	KFS-10125
160	KFS-10160
200	KFS-10200

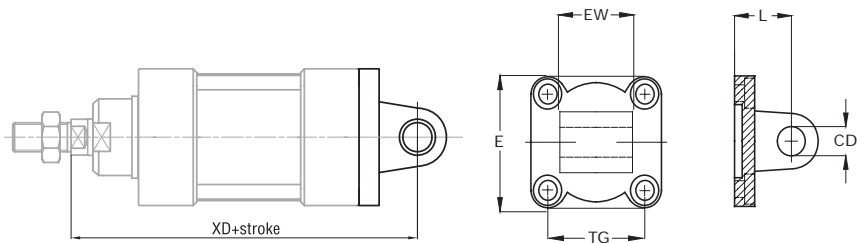


Supplied with End Cap mounting screws (x4)

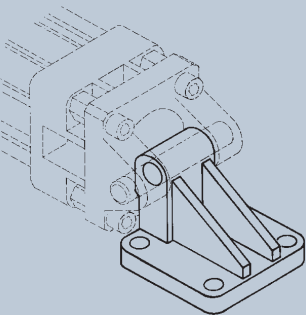
**MALE
REAR TRUNNION**


Supplied without Pin

CYL fl	Part Number
32	KFS-11032
40	KFS-11040
50	KFS-11050
63	KFS-11063
80	KFS-11080
100	KFS-11100
125	KFS-11125
160	KFS-11160
200	KFS-11200

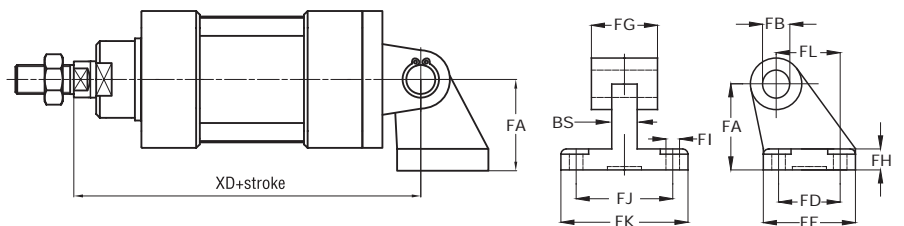


Supplied with End Cap mounting screws (x4)

**90°
REAR TRUNNION**


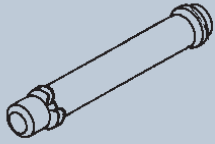
Supplied without Pin

CYL fl	Part Number
32	KFS-19032
40	KFS-19040
50	KFS-19050
63	KFS-19063
80	KFS-19080
100	KFS-19100
125	KFS-19125

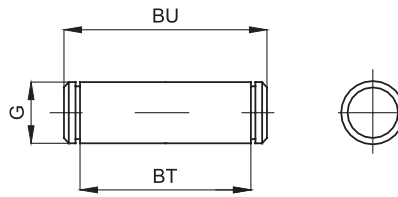


CYL Ø	Rear Trunnions - ISO MP2, ISO MP4									90° Trunnion - CETOP RP 107P											
	CB	CD	E	EW		FL	L	MR	XD		BS	FA	FB	FD	FE	FG	FH	FI	FJ	FK	FL
				Nom.	Toll.				Nom.	Toll.											
32	26	10	45	26		22	22	45	142	±1.25	10	32	10	18	31	26	8	6.6	38	51	21
40	28	12	55	28		25	25	55	160	±1.25	10	36	12	22	35	28	10	6.6	41	54	24
50	32	12	65	32	-0.2	27	27	65	170	±1.25	14	45	12	30	45	32	12	9	50	65	33
63	40	16	75	40	-0.6	32	32	75	190	±1.6	14	50	16	35	50	40	12	9	52	67	37
80	50	16	95	50		36	36	95	210	±1.6	18	63	16	40	60	50	14	11	66	86	47
100	60	20	115	60		41	41	115	230	±1.6	20	71	20	50	70	60	15	11	76	96	55
125	70	25	140	70		50	50	140	275	±2	30	90	25	60	90	70	20	14	94	124	70
160	90	30	180	90	-0.5	55	55	180	315	±2	-	-	-	-	-	-	-	-	-	-	-
200	90	30	220	90	-1.2	60	60	220	335	±2	-	-	-	-	-	-	-	-	-	-	-

TRUNNION PIN



CYL fl	Part Number
32	KFS-18032
40	KFS-18040
50	KFS-18050
63	KFS-18063
80	KFS-18080
100	KFS-18100
125	KFS-18125
160	KFS-18160
200	KFS-18200

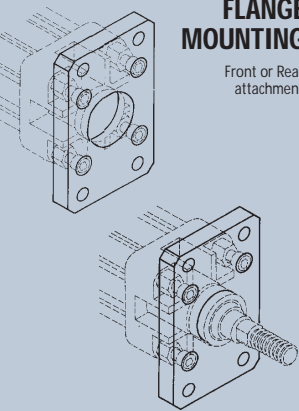


Trunnion Pin

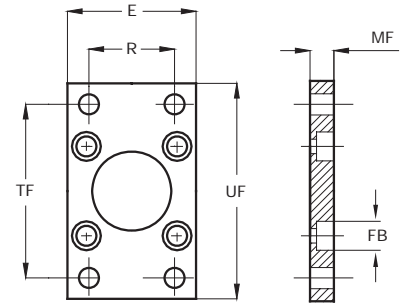
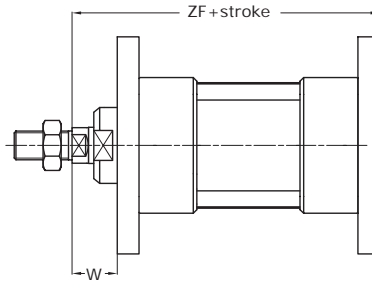
CYL Ø	BU	BT	G
32	53	46	10
40	60	53	12
50	68	61	12
63	78	71	16
80	98	91	16
100	118	111	20
125	139	132	25
160	178	171.5	30
200	178	171.5	30

FLANGE MOUNTING

Front or Rear attachment



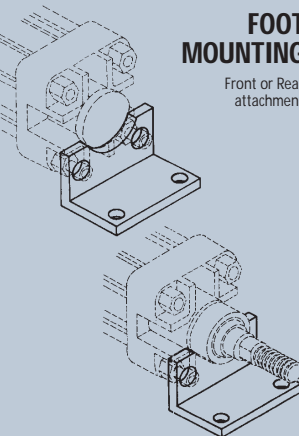
CYL fl	Part Number
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40	KFS-12040
50	KFS-12050
63	KFS-12063
80	KFS-12080
100	KFS-12100
125	KFS-12125
160	KFS-12160
200	KFS-12200



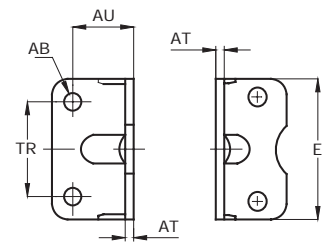
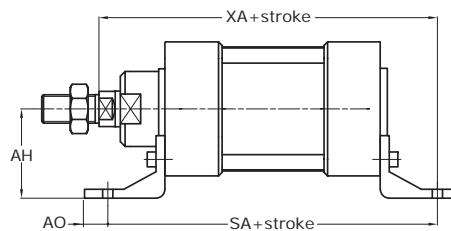
Supplied with End Cap mounting screws (x4)

FOOT MOUNTING

Front or Rear attachment



CYL fl	Part Number
32	KFS-13032
40	KFS-13040
50	KFS-13050
63	KFS-13063
80	KFS-13080
100	KFS-13100
125	KFS-13125
160	KFS-13160
200	KFS-13200



Supplied with End Cap mounting screws (x2)

CYL Ø	Flange Mounting (Front and Rear) - ISO MF1-MF2										Foot Mounting (Front and Rear) - ISO MS1										
	E	FB	MF	R	TF	UF	W		ZF		AB	AH	AO	AT	AU	E	TR	SA		XA	
							Nom.	Toll.	Nom.	Toll.								Nom.	Toll.	Nom.	Toll.
32	45	7	10	32	64	80	16	±1.6	130	±1.25	7	32	11	4	24	45	32	142	±1.25	144	±1.25
40	52	9	10	36	72	90	20	±1.6	145	±1.25	9	36	8	4	28	52	36	161	±1.25	163	±1.25
50	65	9	12	45	90	110	25	±1.6	155	±1.25	9	45	15	5	32	65	45	170	±1.25	175	±1.25
63	75	9	12	50	100	120	25	±2	170	±1.6	9	50	13	5	32	75	50	185	±1.6	190	±1.6
80	95	12	16	63	126	150	30	±2	190	±1.6	12	63	14	6	41	95	63	210	±1.6	215	±1.6
100	115	14	16	75	150	170	35	±2	205	±1.6	14	75	16	6	41	115	75	220	±1.6	230	±1.6
125	140	16	20	90	180	205	45	±2.5	245	±2	16	90	25	8	45	140	90	250	±2	270	±2
160	180	18	20	115	230	260	55	±2.5	285	±2	18	115	15	9	60	180	115	270	±2	305	±2
200	220	22	25	135	270	300	70	±2.5	300	±2	22	135	30	12	70	220	135	275	±2	322.5	±2



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