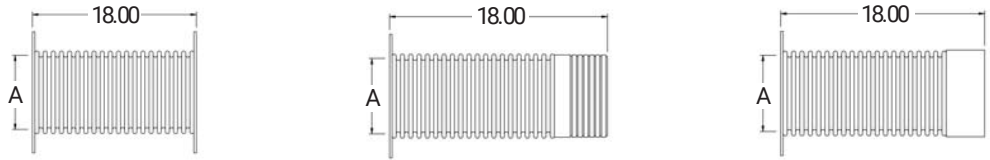
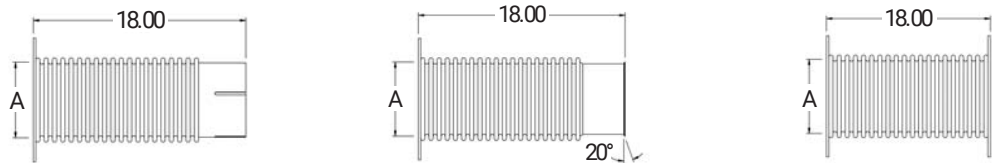


FLEX ASSEMBLIES

Flex Connections are designed to isolate engine vibration from the remaining exhaust system but are not designed for pipe growth or connection misalignment. Flex hose sections are manufactured from 321SS while connections are mild steel. MIRATECH offers a wide variety of flex connections including OEM engine specific flange types.



A (OD)	ANSI Floating Flange/ANSI Flange		Flange/Male NPT		Flange/Female NPT	
	Part Number	WT	Part Number	WT	Part Number	WT
2.00	FL02-02TF1-02TF2-180-m	10	FL02-02MN-02TF1-180-m	6	FL02-02FN-02TF1-180-m	6
2.50	FL25-25TF1-25TF2-180-m	12	FL25-25MN-25TF1-180-m	8	FL25-25FN-25TF1-180-m	8
3.00	FL03-03TF1-03TF2-180-m	12	FL03-03MN-03TF1-180-m	8	FL03-03FN-03TF1-180-m	8
3.50	FL35-35TF1-35TF2-180-m	14	FL35-35MN-35TF1-180-m	10	FL35-35FN-35TF1-180-m	10
4.00	FL04-04TF1-04TF2-180-m	16	FL04-04MN-04TF1-180-m	11	FL04-04FN-04TF1-180-m	11
5.00	FL05-05TF1-05TF2-180-m	21	FL05-05MN-05TF1-180-m	15	FL05-05FN-05TF1-180-m	15
6.00	FL06-06TF1-06TF2-180-m	24	FL06-06MN-06TF1-180-m	19	FL06-06FN-06TF1-180-m	19
8.00	FL08-08TF1-08TF2-180-m	33	FL08-08MN-08TF1-180-m	23		—
10.00	FL10-10TF1-10TF2-180-m	41	FL10-10MN-10TF1-180-m	29		—
12.00	FL12-12TF1-12TF2-180-m	58	FL12-12MN-12TF1-180-m	41		—
14.00	FL14-14PF1-14PF2-180-m	67		—		—
16.00	FL16-16PF1-16PF2-180-m	77		—		—



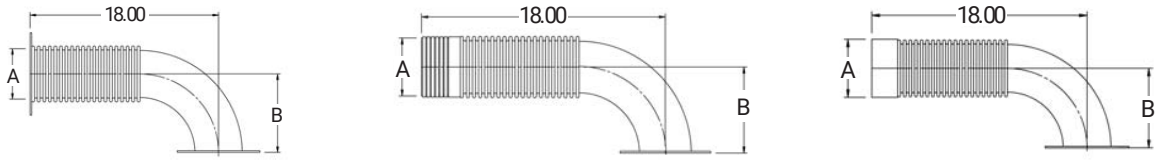
A (OD)	Flange/Slotted Cuff		Flange/20° Flare		ANSI Floating Flange/CAT Flange	
	Part Number	WT	Part Number	WT	Part Number	WT
2.00	FL02-02CF-02TF1-180-m	6		—		—
2.50	FL25-25CF-25TF1-180-m	7		—		—
3.00	FL03-03CF-03TF1-180-m	7	FL03-03FR-03TF1-180-m	8		—
3.50	FL35-35CF-35TF1-180-m	8	FL35-35FR-35TF1-180-m	9		—
4.00	FL04-04CF-04TF1-180-m	10	FL04-04FR-04TF1-180-m	10	FL04-04CA1-04TF2-180-m*	16
5.00	FL05-05CF-05TF1-180-m	13	FL05-05FR-05TF1-180-m	13	FL05-05CA1-05TF2-180-m*	21
6.00	FL06-06CF-06TF1-180-m	16	FL06-06FR-06TF1-180-m	16	FL06-06CA1-06TF2-180-m*	24
8.00	FL08-08CF-08TF1-180-m	23		—	FL08-08CA1-08TF2-180-m	33
10.00	FL10-10CF-10TF1-180-m	27		—	FL10-10CA1-10TF2-180-m	41
12.00	FL12-12CF-12TF1-180-m	35		—	FL12-12CA1-12TF2-180-m	58
14.00	FL14-14CF-14PF1-180-m	40		—	FL14-14CA1-14PF2-180-m	67
16.00	FL16-16CF-16PF1-180-m	49		—	FL16-16CA1-16PF2-180-m	77

* Square CAT Flange

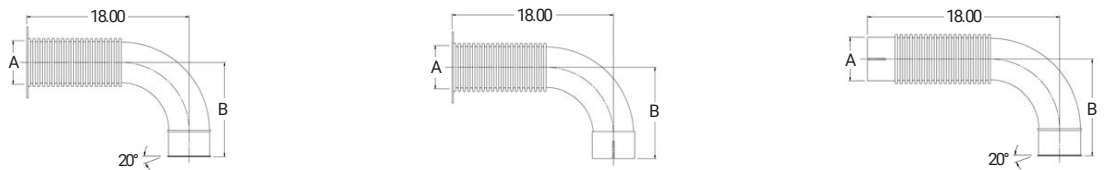
Dimensions are in inches. Weight is in pounds and is approximate. Standard material carbon steel painted high temp black, available in stainless steel. Custom applications available, contact factory.

FLEX ASSEMBLIES W/ 90° ELBOW

Flex Connections are designed to isolate engine vibration from the remaining exhaust system but are not designed for pipe growth or connection misalignment. Flex hose sections are manufactured from 321SS while connections are mild steel. MIRATECH offers a wide variety of flex connections including OEM engine specific flange types.



		Flanged/Flanged 90° Elbow		Male NPT/Flanged 90° Elbow		Female NPT/Flanged 90° Elbow	
A (OD)	B	Part Number	WT	Part Number	WT	Part Number	WT
3.00	6.00	FL03-03TF2-03TF2-EL060X180-m	13	FL03-03MN-03TF2-EL060X180-m	9	FL03-03FN-03TF2-EL060X180-m	9
3.50	8.00	FL35-35TF2-35TF2-EL080X180-m	15	FL35-35MN-35TF2-EL080X180-m	11	FL35-35FN-35TF2-EL080X180-m	11
4.00	8.00	FL04-04TF2-04TF2-EL080X180-m	18	FL04-04MN-04TF2-EL080X180-m	13	FL04-04FN-04TF2-EL080X180-m	13
5.00	10.00	FL05-05TF2-05TF2-EL100X180-m	23	FL05-05MN-05TF2-EL100X180-m	16	FL05-05FN-05TF2-EL100X180-m	16
6.00	10.00	FL06-06TF2-06TF2-EL100X180-m	26	FL06-06MN-06TF2-EL100X180-m	18	FL06-06FN-06TF2-EL100X180-m	18
8.00	8.00	FL08-08TF2-08TF2-EL080X180-m	38	FL08-08MN-08TF2-EL080X180-m	27		—
10.00	10.00	FL10-10TF2-10TF2-EL100X180-m	48	FL10-10MN-10TF2-EL100X180-m	34		—
12.00	12.00	FL12-12TF2-12TF2-EL120X180-m	79	FL12-12MN-12TF2-EL120X180-m	55		—
14.00	14.00	FL14-14PF2-14PF2-EL140X180-m	127		—		—
16.00	16.00	FL16-16PF2-16PF2-EL160X180-m	159		—		—



		Flanged/20° Flare 90° Elbow		Flanged/Slotted Cuff 90° Elbow		Slotted Cuff/20° Flare 90° Elbow	
A (OD)	B	Part Number	WT	Part Number	WT	Part Number	WT
3.00	6.00	FL03-03TF2-03FR-EL060X180-m	9	FL03-03TF2-03CF-EL060X180-m	9	FL03-03CF-03FR-EL060X180-m	4
3.50	8.00	FL35-35TF2-35FR-EL080X180-m	11	FL35-35TF2-35CF-EL080X180-m	10	FL35-35CF-35FR-EL080X180-m	5
4.00	8.00	FL04-04TF2-04FR-EL080X180-m	12	FL04-04TF2-04CF-EL080X180-m	12	FL04-04CF-04FR-EL080X180-m	8
5.00	10.00	FL05-05TF2-05FR-EL100X180-m	16	FL05-05TF2-05CF-EL100X180-m	15	FL05-05CF-05FR-EL100X180-m	12
6.00	10.00	FL06-06TF2-06FR-EL100X180-m	18	FL06-06TF2-06CF-EL100X180-m	18	FL06-06CF-06FR-EL100X180-m	15

Dimensions are in inches. weight is in pounds and is approximate. Standard material carbon steel painted high temp black, available in stainless steel. Custom applications available, contact factory. All ANSI flanges floating.

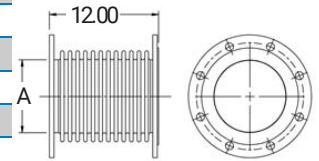
Accessories

BELLOWS EXPANSION JOINTS

Expansion Joints are intended to reduce stress on exhaust pipe systems due to thermal growth as well as vibration or misalignment. MIRATECH bellows are available as single or dual ply with ANSI pattern or OEM Engine Flanges on each end.

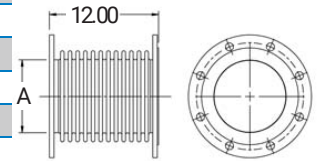
Single Ply Bellows

Part Number	A (OD)	Non-Concurrent Allowable Movements		Spring Rates		Cycle Life		WT
		Axial (in)	Lateral (in)	Axial (lbs/in)	Lateral (lbs/in)	Axial	Lateral	
BL103-03TF1-03TF2-120-m	3.00	2	0.50	49	14	10,000	10,000	12
BL104-04TF1-04TF2-120-m	4.00	2	0.50	69	33	10,000	10,000	15
BL105-05TF1-05TF2-120-m	5.00	3	0.50	64	46	10,000	10,000	20
BL106-06TF1-06TF2-120-m	6.00	3	0.50	68	68	10,000	10,000	21
BL108-08TF1-08TF2-120-m	8.00	3	0.50	87	141	10,000	10,000	30
BL110-10TF1-10TF2-120-m	10.00	3	0.25	121	311	10,000	10,000	40
BL112-12TF1-12TF2-120-m	12.00	3	0.25	143	502	10,000	10,000	52
BL114-14PF1-14PF2-120-m	14.00	3	0.25	206	877	10,000	10,000	65
BL116-16PF1-16PF2-120-m	16.00	3	0.25	235	1,280	10,000	10,000	75
BL118-18PF1-18PF2-120-m	18.00	3	0.25	264	1,790	10,000	10,000	80
BL120-20PF1-20PF2-120-m	20.00	3	0.25	292	2,420	10,000	10,000	95
BL122-22PF1-22PF2-120-m	22.00	3	0.25	321	3,182	10,000	10,000	100
BL124-24PF1-24PF2-120-m	24.00	3	0.25	349	4,088	10,000	10,000	125



Dual Ply Bellows

Part Number	A (OD)	Non-Concurrent Allowable Movements		Spring Rates		Cycle Life		WT
		Axial (in)	Lateral (in)	Axial (lbs/in)	Lateral (lbs/in)	Axial	Lateral	
BL203-03TF1-03TF2-120-m	3.00	2	0.50	98	28	10,000	10,000	13
BL204-04TF1-04TF2-120-m	4.00	3	0.50	60	29	10,000	10,000	17
BL205-05TF1-05TF2-120-m	5.00	3	0.50	57	42	10,000	10,000	22
BL206-06TF1-06TF2-120-m	6.00	3	0.50	66	66	10,000	10,000	23.5
BL208-08TF1-08TF2-120-m	8.00	3	0.50	84	135	10,000	10,000	24
BL210-10TF1-10TF2-120-m	10.00	3	0.25	130	330	10,000	10,000	44
BL212-12TF1-12TF2-120-m	12.00	3	0.25	152	529	10,000	10,000	57
BL214-14PF1-14PF2-120-m	14.00	3	0.25	162	671	10,000	10,000	68
BL216-16PF1-16PF2-120-m	16.00	3	0.25	184	979	10,000	10,000	79
BL218-18PF1-18PF2-120-m	18.00	3	0.25	206	1,371	10,000	10,000	84
BL220-20PF1-20PF2-120-m	20.00	3	0.25	174	1,285	10,000	10,000	100
BL222-22PF1-22PF2-120-m	22.00	3	0.25	191	1,689	10,000	10,000	109
BL224-24PF1-24PF2-120-m	24.00	3	0.25	208	2,170	10,000	10,000	132



Maximum Working Pressure @ 1000°F is 5 PSIG. All tabulated movements are non-concurrent.

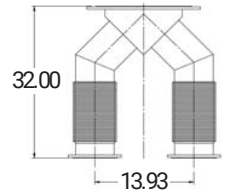
Dimensions are in inches. Weight is in pounds and is approximate. Flanges carbon steel painted high temp black, available in stainless steel. Bellows material standard stainless steel. Larger sizes and custom applications available, contact factory.

EXHAUST WYE CONNECTION CUMMINS ENGINE MODELS

Designed for OEM dual outlet engines, wye connectors are intended to combine dual outlets into a single connection point. Wye connectors reduce vibration and noise transmission to the remainder of the exhaust system. Flex sections are 321 stainless steel while the remainder is carbon steel. Inlet flanges are matched to engine outlet flanges as noted. Outlet flanges are drilled to ANSI 150#. Both inlet and outlet flanges are floating for ease of bolt hole alignment.

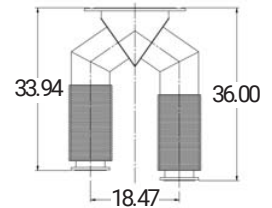
Cummins QST30

kW Rating	Part Number	Outlet	Inlets	WT
750, 800	Y06-D06CU2-10PF2-139-320-00-m	10" ANSI	6" CUFL	57
900	Y06-D06CU2-12PF2-139-320-00-m	12" ANSI	6" CUFL	69
1000	Y06-D06CU2-14PF2-139-320-00-m	14" ANSI	6" CUFL	75



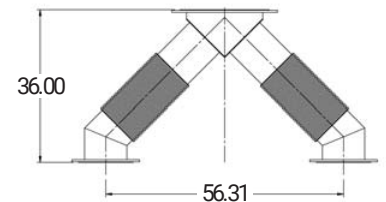
Cummins QSK50

kW Rating	Part Number	Outlet	Inlets	WT
1250	Y06-D06CU2-12PF2-184-360-21-m	12" ANSI	6" CUFL	72
1250, 1500	Y06-D06CU2-14PF2-184-360-21-m	14" ANSI	6" CUFL	78
1500	Y08-D08TF2-14PF2-184-360-21-m	14" ANSI	8" ANSI	91



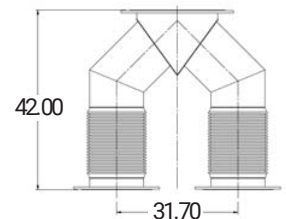
Cummins QSK60

kW Rating	Part Number	Outlet	Inlets	WT
1750, 2000	Y10-D10TF2-16PF2-563-360-00-m	16" ANSI	10" ANSI	162
2000, 2250	Y10-D10TF2-18PF2-563-360-00-m	18" ANSI	10" ANSI	163
2000, 2250	Y10-D10TF2-20PF2-563-360-00-m	20" ANSI	10" ANSI	176



Cummins QSK78

kW Rating	Part Number	Outlet	Inlets	WT
2500	Y12-D12TF2-18PF2-317-420-00-m	18" ANSI	12" ANSI	187
2500	Y12-D12TF2-20PF2-317-420-00-m	20" ANSI	12" ANSI	203
2500	Y12-D12TF2-22PF2-317-420-00-m	22" ANSI	12" ANSI	212
2500	Y12-D12TF2-24PF2-317-420-00-m	24" ANSI	12" ANSI	226



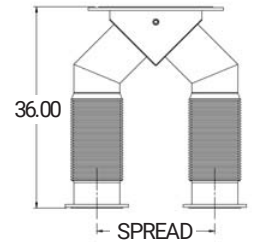
Accessories

EXHAUST WYE CONNECTION CATERPILLAR ENGINE MODELS

Designed for OEM dual outlet engines, wye connectors are intended to combine dual outlets into a single connection point. Wye connectors reduce vibration and noise transmission to the remainder of the exhaust system. Flex sections are 321 stainless steel while the remainder is carbon steel. Inlet flanges are matched to engine outlet flanges as noted. Outlet flanges are drilled to ANSI 150#. Both inlet and outlet flanges are floating for ease of bolt hole alignment.

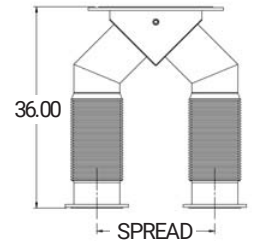
Caterpillar 3508B

kW Rating	Part Number	Outlet	Inlets	Spread	WT
910, 1000	Y08-D08CA2-12PF2-205-360-00-m	12" ANSI	8" CAT	20.47	90



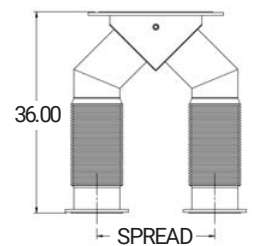
Caterpillar 3512B

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1275, 1360, 1400	Y08-D08CA2-14PF2-207-360-00-m	14" ANSI	8" CAT	20.65	102
1360, 1400	Y08-D08CA2-16PF2-207-360-00-m	16" ANSI	8" CAT	20.65	113
1500	Y10-D10CA2-16PF2-207-360-00-m	16" ANSI	10" CAT	20.65	126



Caterpillar 3512C

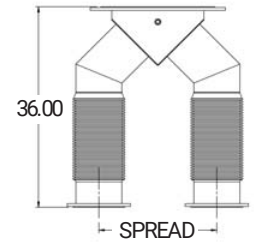
kW Rating	Part Number	Outlet	Inlets	Spread	WT
1275, 1360, 1400	Y08-D08CA2-14PF2-205-360-00-m	14" ANSI	8" CAT	20.50	102
1360, 1400	Y08-D08CA2-16PF2-205-360-00-m	16" ANSI	8" CAT	20.50	113
1500	Y10-D10CA2-16PF2-205-360-00-m	16" ANSI	10" CAT	20.50	126



WYE CONNECTORS CATERPILLAR ENGINE MODELS

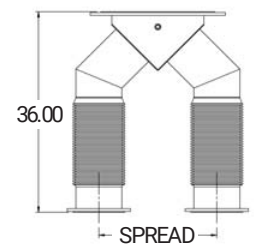
Caterpillar 3516B

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1640	Y08-D08CA2-12PF2-205-360-00-m	12" ANSI	8" CAT	20.50	90
1640	Y08-D08CA2-16PF2-205-360-00-m	16" ANSI	8" CAT	20.50	113
1640	Y08-D08CA2-18PF2-205-360-00-m	18" ANSI	8" CAT	20.50	121
1640, 1825, 2000	Y10-D10CA2-16PF2-205-360-00-m	16" ANSI	10" CAT	20.50	126
1640, 1825, 2000	Y10-D10CA2-18PF2-205-360-00-m	18" ANSI	10" CAT	20.50	128
2000	Y12-D12CA2-18PF2-205-360-00-m	18" ANSI	12" CAT	20.50	156



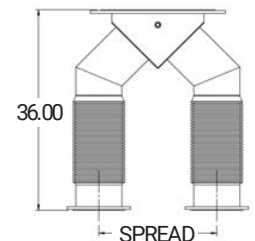
Caterpillar 3516C

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1640, 1825, 2000	Y10-D10CA2-16PF2-205-360-00-m	16" ANSI	10" CAT	20.50	126
1640, 1825, 2000	Y10-D10CA2-18PF2-205-360-00-m	18" ANSI	10" CAT	20.50	128



Caterpillar 3516B Quad Turbo

kW Rating	Part Number	Outlet	Inlets	Spread	WT
1400, 1640	Y08-D08CA2-14PF2-205-360-00-m	14" ANSI	8" CAT	20.47	102
1400, 1640	Y08-D08CA2-16PF2-205-360-00-m	16" ANSI	8" CAT	20.47	113
1500, 1640, 1750	Y10-D10CA2-16PF2-205-360-00-m	16" ANSI	10" CAT	20.47	126
1750, 1825	Y10-D10CA2-18PF2-205-360-00-m	18" ANSI	10" CAT	20.47	128



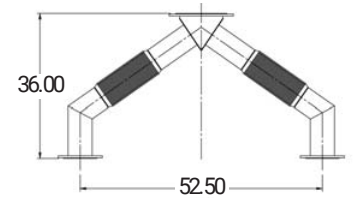
Accessories

EXHAUST WYE CONNECTION DETROIT DIESEL/MTU ENGINE MODELS

Designed for OEM multi outlet engines, wye connectors are intended to combine dual outlets into a single connection point. Wye connectors reduce vibration and noise transmission to the remainder of the exhaust system. Flex sections are 321 stainless steel while the remainder is carbon steel. Inlet flanges are matched to engine outlet flanges as noted. Outlet flanges are drilled to ANSI 150#. Both inlet and outlet flanges are floating for ease of bolt hole alignment.

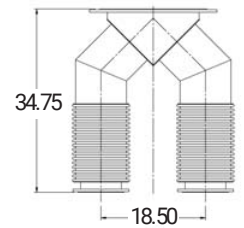
MTU 12V2000 & 16V2000

kW Rating	Part Number	Outlet	Inlets	WT
650, 750	Y06-D06DF2-10PF2-525-360-00-m	10" ANSI	6" DFL	70
900, 1000	Y06-D06DF2-12PF2-525-360-00-m	12" ANSI	6" DFL	82



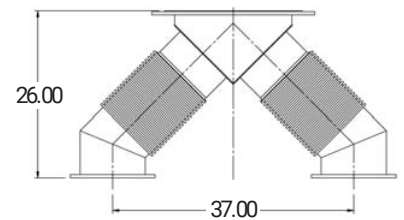
MTU 12V4000

kW Rating	Part Number	Outlet	Inlets	WT
1250, 1350, 1500, 1750	Y10-D10DF2-14PF2-185-348-00-m	14" ANSI	10" DFL	118
1250, 1350, 1500, 1750	Y10-D10DF2-16PF2-185-348-00-m	16" ANSI	10" DFL	127



MTU 16V4000

kW Rating	Part Number	Outlet	Inlets	WT
2000	Y10-D10DF2-14PF2-370-260-00-m	14" ANSI	10" DFL	115
2000	Y10-D10DF2-16PF2-370-260-00-m	16" ANSI	10" DFL	117
2000	Y10-D10DF2-18PF2-370-260-00-m	18" ANSI	10" DFL	132



MTU 20V4000

kW Rating	Part Number	Outlet	Inlets	WT
2500-3250	Y10-T10TF2-20PF2-278-360-00-m	20" ANSI	10" ANSI	222
2500-3250	Y10-T10DF2-20PF2-278-360-00-m	20" ANSI	10" DFL	222

