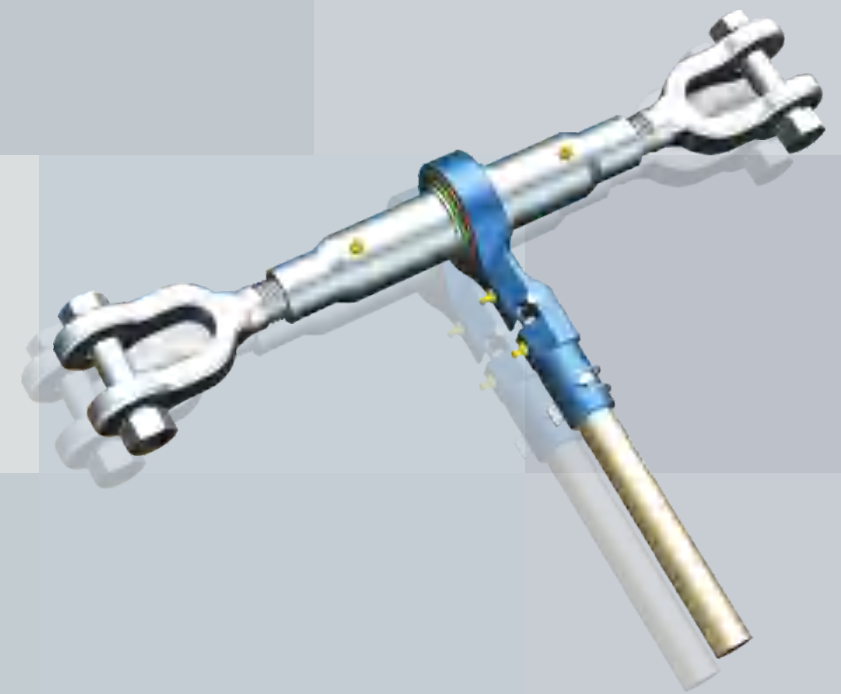


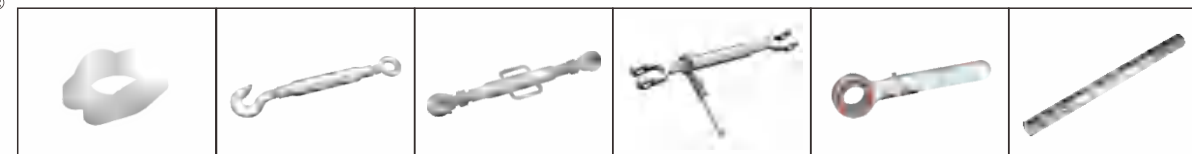
A Solution for your linkage & ratchet tool



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www.swintool.com



INTRODUCTION/简介



◆ 不断提升的质量管理系统
Always improve the quality management system

向华工具是法兰夹和棘轮工具的领先设计者和生产商，并通过了IATF 16949:2016质量体系认证，产品广泛应用于这些行业：

- 1.农业机械如拖拉机，耕地机等
- 2.工程机械如摊铺机，垃圾压实箱，环卫车，碎石机等
- 3.钢结构工程
- 4.汽车制造行业
- 5.海事船舶行业

我们的产品范围包括

- 1.SAEJ518/ISO6162/ISO 6164法兰夹
- 2.螺旋扣DIN 1478，DIN 1479等
- 3.拖拉机悬挂连接如上拉杆，斜拉杆，下拉杆，吊臂总成，杆端轴承
- 4.棘轮拉紧器叉叉，眼环及杆端轴承
- 5.工业级棘轮扳手

Swintool is founded in 2014 year, is a leading designer and manufacturer of flange clamps and ratchet tools with certificate of IATF 16949:2016. Our product is widely used in these fields:

- 1.Agriculture Machinery(tractor,rotary cultivator etc)
- 2.Engineering Construction Machinery (paver,soild waste compactor,crusher)
- 3.Tensile steel structure engineering
- 4.Automotive manufacture indusdtry
- 5.Marine shipbuilding industry

Our range of products includes

- 1.SAE J518/ISO 6162/ ISO 6164 Flange Clamps
- 2.Turnbuckle DIN1478 DIM 1479 and customized,
- 3.Linkage for tractor such as forged top links, lift arm leneling assembly, stabilizer, forged ball ends,
- 4.Ratchet turnbuckle witch jaws, eyes,rod ends,
- 4.Industrial ratchet wrench.

我们的客户是原始设备制造商，最终用户和批发商，我们的产品有什么优势吸引客户？

- 1.3D软件的免费创新设计服务客户
- 2.严格质量控制，提供3.1认证
- 3.及时和准确的交货

4.一站式采购冷锻件，热锻件，铸造件，冲压件，机加工件和工具。基于我们的产业链条件，为客户节省了从多个供应商采购的成本和时间。

SWINTOOL正成长为此领域的著名品牌，最重要的是成为了连接和棘轮技术解决方案的专家。我们致力于成为客户最可靠的合作伙伴，同时帮助您节约成本和创造价值。

Our customers are Original Equipment Manufacturers, end-user,wholesalers, what other advantages do we have to attract our customers?

- 1.Innovation free design services by 3D reprentationfor customer
- 2. Strict Quality control, we can provide Certificate 3.1for our custoemr.
- 3.Punctual and correct Deliveries

4.One stop service for cold forging, hot forging, stamping parts, tools.Based on our industrial chains enviornment,we can help our customers to purchase,in order to saving times from other suppliers.

Swintool is growing up to be a world brand in this area. Most importantly, we are becoming a specialist for linkage and ratchet technology solution. We devote ourselves to be your most reliable partner and help you to save cost and creat value.

◆ 不断创新的棘轮设计专利

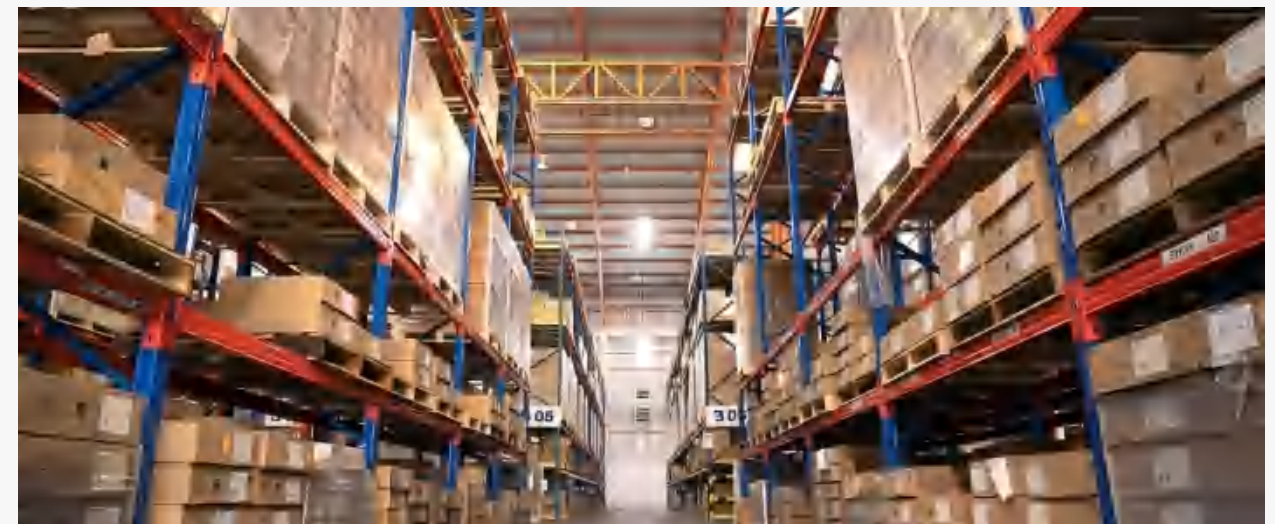
Always innovation of ratchet design patents



Workshop environment diagram / 车间环境图



Warehouse / 仓库

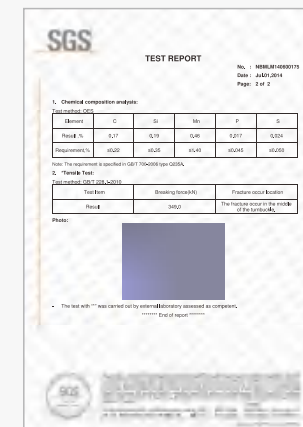


CNC machining center / CNC加工中心





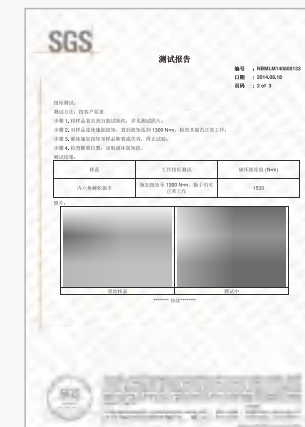
SGS Chemical composition analysis and tensile test
化学成分和拉力测试



Ratchet wrench heavy duty testing
棘轮扳手测试图



SGS Torque testing
扭矩测试



SWINTOOL Turnbuckle loadability is better than our competitor, it is certificated by SGS.
我们的DIN 1478 螺旋扣的负载高于我们的竞争对手，并通过了SGS测试。

DIN 1478 turnbuckle SIZE 螺旋扣尺寸	SWINTOOL B.L.L (KG, SGS) 向华工具断裂负载值 (千克)	SWINTOOL S.W.L (KG) 向华工具安全负载值 (千克)	COMPETITOR S.W.L (KG) 竞争对手安全负载值 (千克)	TIMES 倍数
M8	5637	1127	410	2.75
M10	8553	1710	650	2.63
M12	10860	2172	930	2.34
M16	14210	2842	1770	1.61
M20	20210	4042	2700	1.50
M24	34900	6980	3920	1.78
M30	42870	8574	6250	1.37

SGS certificated ratchet wrench for DIN 1478 turnbuckle M30, 1300N.m is still working, the function failure torque is 1533N.m.

SGS 测试过我们用于DIN 1478 M30的棘轮扳手，1300N.m扭矩正常工作，1533N.m扭矩时失效。



Tensile strength testing / 拉力测试

simulation testing / 模拟环境测试

CONTENT/目录



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Ratchet Turnbuckle / 棘轮拉紧器 40



Industrial spanner & ratchet wrench
工业级扳手及棘轮扳手 52

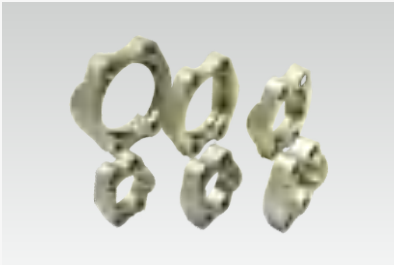
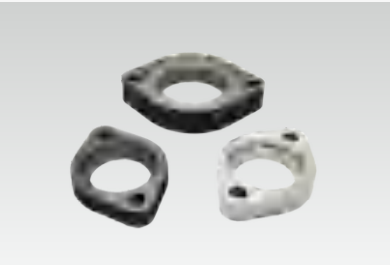


Shaft
轴 54

Flange Clamps/法兰夹



A professional manufacturer of hydraulic flange clamps acc. To SAE J518/ISO 6162 standard, also offer OME fanges.Equipped with foringing line of flange clamps,specialt machine etc,all machine processing is finished in house.
专业生产液压法兰夹系列产品，按照SAE J518/ISO 6162标准，也可定制。拥有法兰夹生产设备锻造线，专机机加工等，所有生产环节，在工厂内部完成。



Flange Clamps
法兰夹

Turnbuckle and assembly
螺旋扣及其总成

Tractor linkage
拖拉机悬挂件

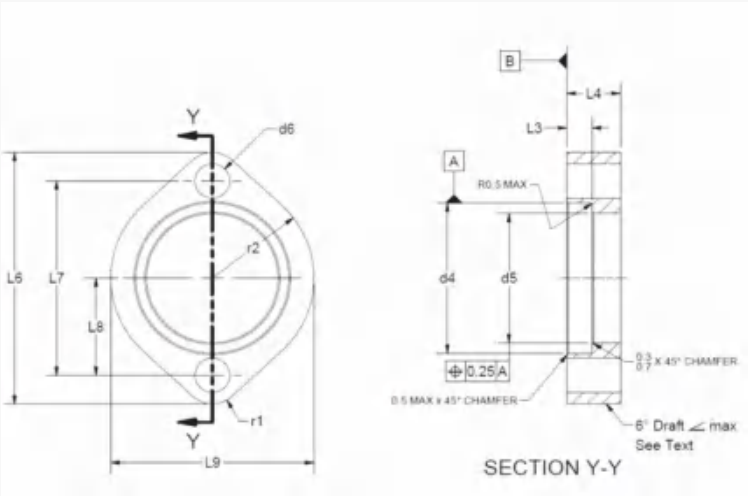
Ratchet Turnbuckle
棘轮拉紧器

Industrial spanner &
ratchet wrench
工业级扳手及棘轮扳手

Shaft
轴

FCC

- SAE J518C 2 bolt Flange Clamps
- SAE J518C 2孔螺栓法兰夹



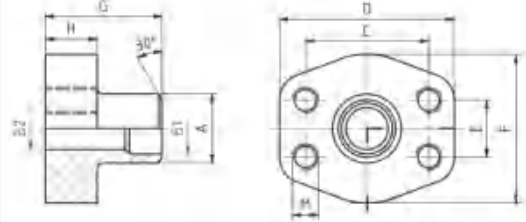
Dimensions in mm unless noted												
Nominal Size	Dash Size	d4 ±0.25	d5 ±0.25	d6 ±0.15	L3 ±0.15	L4 ±0.5	L6 ±0.8	L7 ±0.25	L8 ±0.25	L9 ±0.8	r1 ref	r2 ref
13	-8	30.95	24.25	8.9	6.2	12.7	57.9	41.93	20.97	46.0	8.0	23.0
19	-12	38.90	32.15	10.6	6.2	14.2	69.6	52.52	26.26	52.3	8.5	26.2
25	-16	45.25	38.50	10.6	7.5	15.8	75.5	58.58	29.29	58.7	8.5	29.4
32	-20	51.60	43.70	10.6 ⁴	7.5	14.2	87.0	66.01	33.01	73.2	10.5	36.6
38	-24	61.10	50.80	13.3	7.5	15.8	102.5	78.49	39.25	82.6	12.0	41.3
51	-32	72.25	62.75	13.3	9.0	15.8	112.8	88.84	44.42	96.8	12.0	48.4
64	-40	84.95	74.95	13.3	9.0	19.1	127.4	102.39	51.20	108.7	12.5	64.4
76	-48	102.40	90.95	16.7	9.0	22.4	151.1	123.10	61.55	131.1	14.0	85.6
89	-56	115.10	102.40	16.7	10.7	22.4	170.4	139.48	69.74	139.7	15.5	69.9
102	-64	127.80	115.10	16.7	10.7	25.4	182.6	151.67	75.84	152.4	15.5	76.2
127	-80	153.20	140.50	16.7	10.7	28.5	209.1	178.07	89.04	180.9	15.5	90.5

FCO

- Oval Flange clamp dimensions for air compressor
- 空气压缩机用菱形法兰夹尺寸

Part No.	d4	d5	d6	L3	L4	L6	L7	L8	L9	r1	r2
FCO-44	21	19	11		7.8	61	44	22	34	9.85	17
FCO-70	30	28	13.5		12	96	70	35	56	13	28
FCO-75A	45.25	38.8	11	7.5	15	100	75	37.5	72	13	36
FCO-75B	51.6	44.1	13.5	7.6	18	100	75	37.5	72	13	36
FCO-85	61.1	51.2	13.1	7.5	18	111	85	42.5	80	13	40
FCO-90	61.1	51.2	13.1	7.5	18	120	90	45	80	15	40

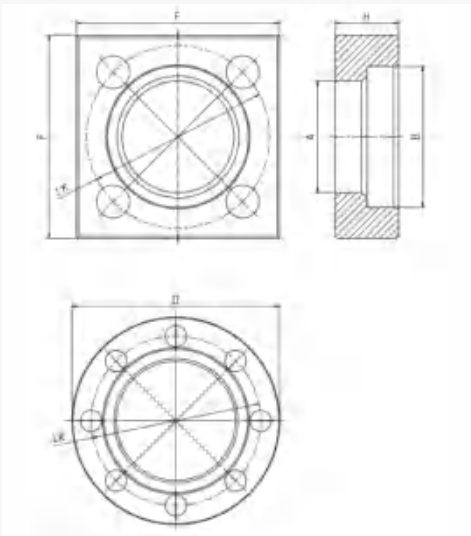
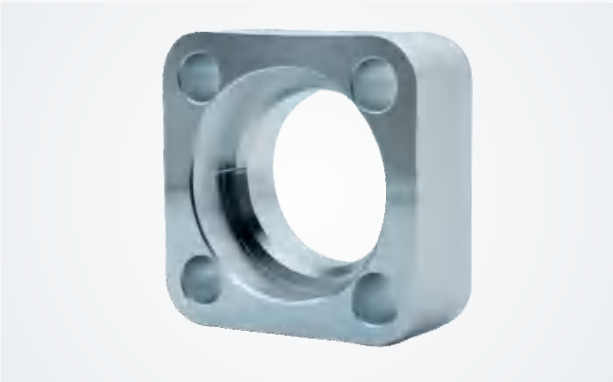
SAE Butt weld flange/SAE对焊法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions											可配螺纹 Thread		重量 Weight
			tube	A	B1	B2	C	D	E	F	G	H		M		
kg/cm²	inch													metr.	unc.	kg
10.9			Standard pressure													
350	½"	SGFS-080ST40	21,3x2,8	21,5	15,7	13,0	38,1	54	17,5	46	36	16		M8	⅝-18	-
350	¾"	SGFS-100ST40	26,7x2,9	28,0	20,9	19,0	47,6	65	22,3	50	36	18		M10	⅝-16	-
320	1"	SGFS-102ST40	33,4x3,4	34,0	26,6	25,0	52,4	70	26,2	55	38	18		M10	⅝-16	-
280	1¼"	SGFS-104ST40	42,4x3,6	42,8	35,0	32,0	58,7	79	30,2	68	41	21		M10	⅞-14	-
210	1½"	SGFS-106ST40	48,3x3,7	48,6	40,9	38,0	69,9	93	35,7	78	44	25		M12	⅞-13	-
210	2"	SGFS-108ST40	60,3x3,9	61,0	52,5	51,0	77,8	102	42,9	90	45	25		M12	⅞-13	-
175	2½"	SGFS-110ST40	73x5,1	73,0	62,8	-	88,9	114	50,8	105	50	25		M12	⅞-13	-
160	3"	SGFS-112ST40	88,9x5,5	92,0	77,9	73,0	106,4	134	61,9	124	50	27		M16	⅝-11	-
35	3½"	SGFS-114ST40	101,6x5,7	103,0	90,1	89	120,7	152	69,9	136	48	27		M16	⅝-11	-
35	4"	SGFS-116ST40	114,3x6	115,5	102,3	99,0	130,2	162	77,8	146	48	27		M16	⅝-11	-
35	5"	SGFS-118ST40	141,3x6,6	142,0	128,1	120,0	152,4	184	92,1	180	50	28		M16	⅝-11	-

注：螺栓需另订
Note: Bolt should be ordered another.

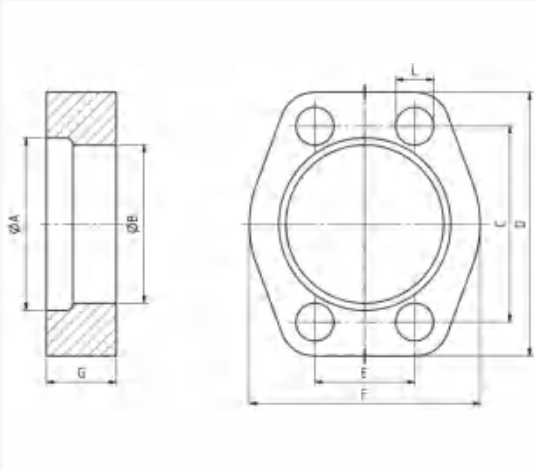
ISO 6164 square flange/正方形法兰



代号 Part NO.	法兰型号 Flange size	LK	尺寸 Dimensions					可配螺栓 Bolt	重量 Weight
			A	B	D	F	H		
DN								M	kg
10	VKS-10	44	18,2	29	—	50	20	4xM 10	0,20
16	VKS-16	54	27,9	39	—	60	20	4xM 10	0,30
20	VKS-20	64	34,7	47	—	70	20	4xM 12	0,50
25	VKS-25	72	44	55,5	—	80	25	4xM 12	0,70
32	VKS-32	80	49,3	61	—	90	30	4xM 16	1,00
40	VKS-40	98	60,8	77	—	100	38	4xM 16	1,50
50	VKS-50	118	78	93	—	120	47	4xM 20	2,50
65	VKS-65	145	91	117	—	150	48	4xM 24	4,40
80	VKS-80	175	116	136	—	180	58	4xM 30	7,60
100	VKS-100_140	200	140,7	169	245	—	70	8xM 24	13,20
100	VKS-100_153	200	153,5	169	245	—	70	8xM 24	12,50
125	VKS-125	245	178,8	211	300	—	80	8xM 30	21,70
150	VKS-150	290	221	246	355	—	90	8xM 36	33,00

注：螺栓需另订
Note: Bolt should be ordered another.

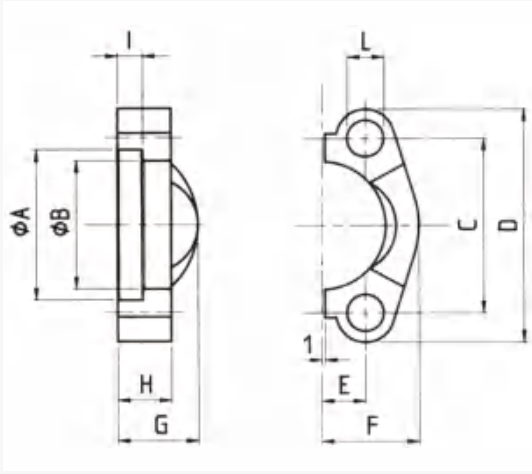
SAE Flare flange/平板法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions								可配螺纹 Thread		重量 Weight
			A	B	C	D	E	F	G	H			kg
kg/cm²	inch		3000PSI								metr.		
											单	双	
350	½"	RRFS-3001	30,5	26,5	38,1	54	17,5	46	20	9	M8x40(60)		0,17
350	¾"	RRFS-3002	40,5	36,5	47,6	65	22,2	52,3	20	11	M10x40(60)		0,23
350	1"	RRFS-3003	44,5	39,5	52,4	70	26,2	58,7	20	11	M10x40(60)		0,27
280	1½"	RRFS-3004	51,5	46,5	58,7	79,4	30,2	73,2	20	11	M10x40(70)		0,39
280	1½"	RRFS-3005	61,5	56,5	69,9	94	35,7	82,6	25	13,5	M12x45(80)		0,65
280	2"	RRFS-3006	71,5	66,5	77,8	102,1*2	42,9	96,8	30	13,5	M12x50(80)		0,98
210	2½"	RRFS-3007	85,5	80,5	88,9	114,3	50,8	108,7	40	13,5	M12x60(100)		1,49
210	3"	RRFS-3008	103,5	97,5	106,4	135	61,9	131,1	50	17,5	M16x80(130)		2,52
6000PSI											metr.		
											单	双	
420	½"	RRFS-6001	30,5	26,5	40,5	56	18,2	47,8	22	9	M8x40(65)		0,2
420	¾"	RRFS-6002	40,5	36,5	50,8	71	23,8	60,5	23	11	M10x40(70)		0,42
420	1"	RRFS-6003	44,5	39,5	57,2	81	27,8	69,9	25	13,5	M12x45(75)		0,51
420	1½"	RRFS-6004	51,5	46,5	66,7	95	31,8	77,7	30	15	M14x50(90)		0,86
420	1½"	RRFS-6044	51,5	46,5	66,7	95	31,8	77,7	30	13,5	M12x50(90)		0,9
420	1½"	RRFS-6005	61,5	56,5	79,4	112,8	36,5	95,3	33	17,5	M16x60(100)		1,45
420	2"	RRFS-6006	71,5	66,5	96,8	133	44,5	114,3	38	21	M20x70(110)		2,35

注：螺栓需另订
Note: Bolt should be ordered another.

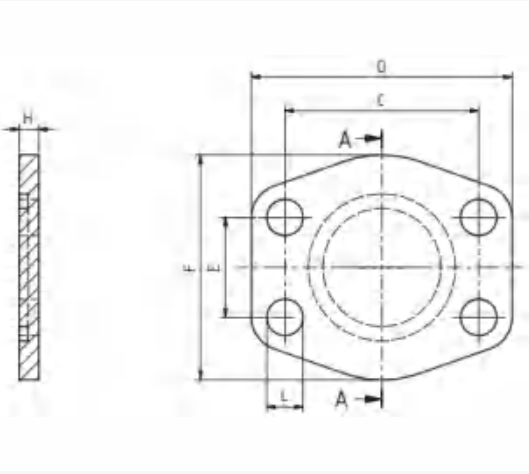
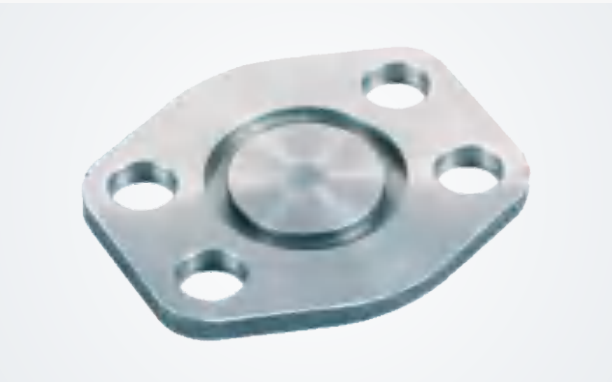
SAE Split flange clamps 3000PSI and 6000PSI
ISO-6162-1-SAE J518
SAE 对开法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions										可配螺栓 Bolt		重量 Weight
			A	B	C	D	E	F	G	H	I	L	M	kg	
kg/cm²	inch		3000PSI										metr.	unc.	
350	½"	FH 301	31,0	24,3	38,1	54	8,75	23	19	13	6,2	8,50	M8x25	¾ x 1¼	0,127
350	¾"	FH 302	38,9	32,2	47,6	65	11,15	26	22	14	6,2	10,50	M10x30	¾ x 1¼	0,176
320	1"	FH 303	45,3	38,5	52,4	70	13,10	29	24	16	7,5	10,50	M10x30	¾ x 1¼	0,218
280	1¼"	FH 304	51,6	43,7	58,7	79	15,10	37	22	14	7,5	12,00	M10x30	¾ x 1½	0,349
210	1½"	FH 305	61,1	50,8	69,9	94	17,85	41	25	16	7,5	13,30	M12x35	½ x 1½	0,461
210	2"	FH 306	72,3	62,8	77,8	102	21,45	49	26	16	9,0	13,30	M12x35	½ x 1½	0,529
175	2½"	FH 307	84,9	74,9	88,9	114	25,40	54	38	19	9,0	13,30	M12x40	½ x 1¾	0,855
160	3"	FH 308	102,4	90,9	106,4	135	30,95	66	41	22	9,0	17,00	M16x50	¾ x 2	1,308
35	3½"	FH 309	115,1	102,4	120,7	152	34,95	70	28	22	10,7	17,00	M16x50	¾ x 2	1,34
35	4"	FH 310	127,8	115,0	130,2	162	38,90	76	35	25	10,7	17,00	M16x50	¾ x 2	1,64
35	5"	FH 311	153,2	140,5	152,4	184	46,05	90	41	28	10,7	17,00	M16x55	¾ x 2	2,42
6000PSI													metr.	unc.	
420	½"	FH 601	32,5	24,6	40,5	56	9,10	24	22	16	7,2	8,50	M8x30	¾ x 1¼	0,187
420	¾"	FH 602	42,0	32,5	50,8	71	11,90	30	28	19	8,2	10,50	M10x35	¾ x 1½	0,344
420	1"	FH 603	48,4	38,8	57,2	81	13,90	35	33	24	9,0	13,30	M12x45	—	0,52
420	1¼"	FH 604	54,8	44,5	66,6	95	15,90	39	38	27	9,8	14,60	M14x50	—	0,78
420	1½"	FH 605	64,3	51,6	79,3	113	18,25	48	43	30	12,0	16,80	M16x55	¾ x 2	1,335
420	2"	FH 606	80,2	67,6	96,8	133	22,25	57	52	37	12,0	21,00	M20x70	¾ x 2½	2,106

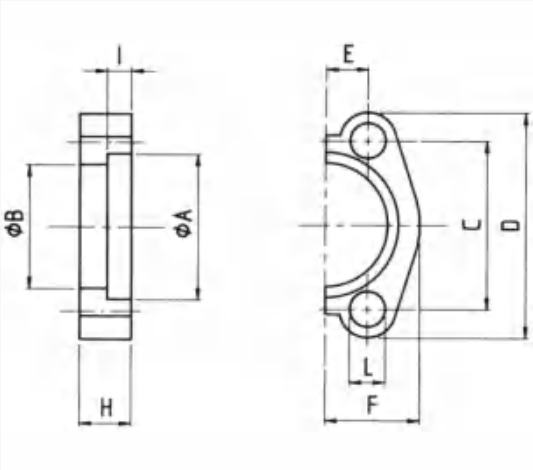
注：螺栓需另订
Note: Bolt should be ordered another.

SAE Closed flange/封闭法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions						重量 Weight
			C	D	E	F	H	L	
kg/cm²	inch								kg
10.9	3000PSI								
—	½"	APOS-080	38,1	54	17,5	45,6	6	9	0,078
—	¾"	APOS-100	47,6	65	22,3	50,0	6	11	0,106
—	1"	APOS-102	52,4	70	26,2	60,0	6	11	0,138
—	1 ¼"	APOS-104	58,7	79	30,2	68,0	6	11	0,183
—	1 ½"	APOS-106	69,9	94	35,7	82,0	6	13	0,265
—	2"	APOS-108	77,8	102	42,9	76,0	6	13	0,302
—	2 ½"	APOS-110	88,9	114	50,8	108,0	6	13	0,443
—	3"	APOS-112	106,4	134	61,9	130,0	6	17	0,622
—	3 ½"	APOS-114	120,7	152	69,9	139,0	6	17	0,776
—	4"	APOS-116	130,2	162	77,8	152,0	6	17	0,912
—	5"	APOS-118	152,4	184	92,1	180,0	6	17	1,238
10.9	6000PSI								
—	½"	APOS-401	40,5	56	18,2	47,2	6	9	0,085
—	¾"	APOS-402	50,8	71	23,8	60,0	6	11	0,141
—	1"	APOS-403	57,2	81	27,8	70,0	6	13	0,187
—	1 ¼"	APOS-404	66,6	95	31,8	78,0	6	15	0,249
—	1 ½"	APOS-405	79,3	112	36,5	94,0	6	17	0,357
—	2"	APOS-406	96,8	133	44,5	114,0	6	21	0,510
—	2 ½"	APOS-407	123,8	180	58,8	152,0	6	26	0,948
—	3"	APOS-408	152,4	208	71,6	178,0	6	33	1,270

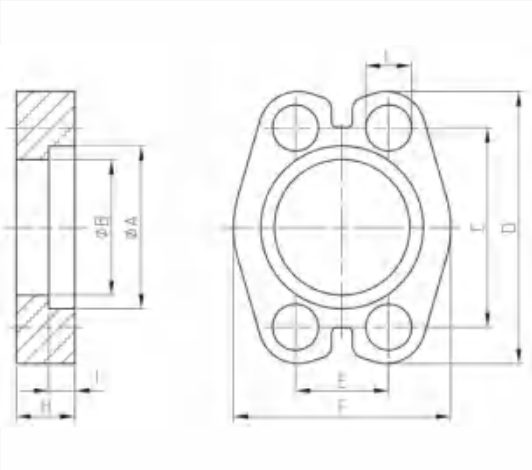
SAE-split flange-flat/平板对开法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions										可配螺栓 Bolt		重量 Weight
			A	B	C	D	E	F	G	H	I	J			
kg/cm²	inch														kg
3000PSI													metr.	unc.	
350	½"	HF 301	31,0	24,4	38,1	54	8,75	23,0	13	6,2	9		M 8x25	¾" x 1¼"	0,06
350	¾"	HF 302	38,9	32,2	47,6	65	11,15	26,0	14	6,2	11		M 10x30	¾" x 1¼"	0,07
320	1"	HF 303	45,3	38,5	52,4	70	13,10	29,0	16	7,5	11		M 10x30	¾" x 1¼"	0,10
280	1½"	HF 304	51,6	43,7	58,7	79	15,10	35,5	16	7,5	11		M 10x30	—	0,15
210	1½"	HF 305	61,1	50,8	69,9	94	17,85	38,7	16	7,5	13		M 12x35	½" x 1½"	0,18
210	2"	HF 306	72,3	62,8	77,8	107	21,45	47,7	16	9,0	13		M 12x35	½" x 1½"	0,22
6000PSI													metr.	unc.	
420	½"	HF 601	32,5	24,4	40,5	56	9,10	23,5	16	7,2	9		M 8x30	¾" x 1¼"	0,08
420	¾"	HF 602	42,0	32,5	50,8	69	11,90	29,0	20	8,2	11		M 10x35	¾" x 1½"	0,16
420	1"	HF 603	48,4	38,9	57,2	78	13,90	35,5	25	9,0	13		M 12x45	¾" x 1¼"	0,25
420	1½"	HF 604	54,8	44,5	66,6	92	15,90	38,7	27	9,8	15		M 14x50	½" x 1¼"	0,34
420	1½"	HF 605	64,3	51,5	79,3	107	18,25	47,7	30	12,0	17		M 16x55	¾" x 2"	0,55
420	2"	HF 606	80,2	67,6	96,8	133	22,25	57,0	37	12,0	21		M 20x70	¾" x 2½"	1,02
420	2½"	HF 607	108,9	90,5	123,8	180	29,40	75,0	45	20,5	26		M 24x80	—	2,05
420	3"	HF 608	132,5	115,5	152,4	215	35,80	99,0	55	25,5	32		M 30x90	—	4,30

注：螺栓需另订
Note: Bolt should be ordered another.

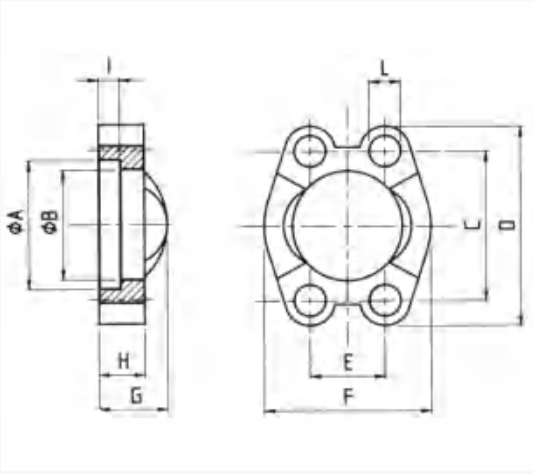
SAE Whole flange clamp-flat 3000PSI
and 6000PSI/SEA 整体平板法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions										可配螺栓 Bolt		重量 Weight
			A	B	C	D	E	F	G	H	I	J			
kg/cm²	inch														kg
3000PSI													metr.	unc.	
350	½"	VFH 301	31,0	24,3	38,1	54	17,5	46	13	6,2	8,75		M 8x25	¾" x 1¼"	0,15
350	¾"	VFH 302	38,9	32,2	47,6	65	22,3	52	14	6,2	10,75		M 10x30	¾" x 1¼"	0,17
320	1"	VFH 303	45,3	38,5	52,4	70	26,2	59	16	7,5	10,75		M 10x30	¾" x 1¼"	0,22
280	1½"	VFH 304	51,6	43,7	58,7	79	30,2	73	16	7,5	12,00		M 10x30	¾" x 1½"	0,30
210	1½"	VFH 305	61,1	50,8	69,9	94	35,7	83	16	7,5	13,50		M 12x35	½" x 1½"	0,45
210	2"	VFH 306	72,3	62,8	77,8	102	42,9	97	16	9,0	13,50		M 12x35	½" x 1½"	0,50
6000PSI													metr.	unc.	
420	½"	VFH 601	32,5	24,4	40,5	56	18,2	48	16	7,2	8,75		M 8x30	¾" x 1¼"	0,16
420	¾"	VFH 602	42,0	32,5	50,8	71	23,8	60	20	8,2	10,75		M 10x35	¾" x 1½"	0,35
420	1"	VFH 603	48,4	38,8	57,2	81	27,8	70	25	9,0	13,00		M 12x45	—	0,53
420	1½"	VFH 604	54,8	44,5	66,6	95	31,8	78	27	9,8	14,75		M 14x50	½" x 1¼"	0,80
420	1½"	VFH 605	64,3	51,6	79,3	113	36,5	95	30	12,0	17,00		M 16x55	¾" x 2"	1,35
420	2"	VFH 606	80,2	67,6	96,8	133	44,5	114	37	12,0	21,00		M 20x70	¾" x 2½"	2,10

注：螺栓需另订
Note: Bolt should be ordered another.

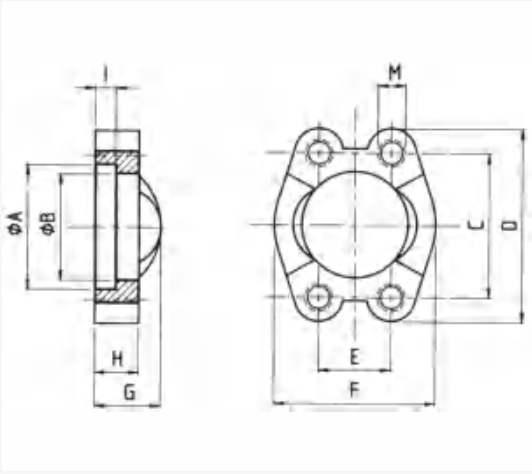
SAE Whole flange clamps 3000PSI
and 6000PSI
ISO-6162-1-SAE J518
SAE 整体法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions										可配螺栓 Bolt		重量 Weight
			A	B	C	D	E	F	G	H	I	L			
kg/cm²	inch														kg
3000PSI															
350	½"	VF 301	31,0	24,3	38,1	54	17,5	46	19	13	6,2	8,50	M 8x25	⅝ x 1¼	0,127
350	¾"	VF 302	38,9	32,2	47,6	65	22,3	52	22	14	6,2	10,50	M 10x30	¾ x 1¼	0,176
320	1"	VF 303	45,3	38,5	52,4	70	26,2	59	24	16	7,5	10,50	M 10x30	¾ x 1¼	0,218
280	1½"	VF 304	51,6	43,7	58,7	79	30,2	73	22	14	7,5	12,00	M 10x30	⅞ x 1½	0,349
210	1½"	VF 305	61,1	50,8	69,9	94	35,7	83	25	16	7,5	13,30	M 12x35	½ x 1½	0,461
210	2"	VF 306	72,3	62,8	77,8	102	42,9	97	26	16	9,0	13,30	M 12x35	½ x 1½	0,529
175	2½"	VF 307	84,9	74,9	88,9	114	50,8	109	38	19	9,0	13,30	M 12x40	½ x 1¾	0,855
160	3"	VF 308	102,4	90,9	106,4	135	61,9	131	41	22	9,0	17,00	M 16x50	¾ x 2	1,308
35	3½"	VF 309	115,1	102,4	120,7	152	69,9	140	28	22	10,7	17,00	M 16x50	¾ x 2	1,34
35	4"	VF 310	127,8	115,0	130,2	162	77,8	152	35	25	10,7	17,00	M 16x50	¾ x 2	1,64
35	5"	VF 311	153,2	140,5	152,4	184	92,1	181	41	28	10,7	17,00	M 16x55	¾ x 2	2,42
6000PSI															
420	½"	VF 601	32,5	24,6	40,5	56	18,2	48	22	16	7,2	8,50	M 8x30	⅝ x 1¼	0,187
420	¾"	VF 602	42,0	32,5	50,8	71	23,8	60	28	19	8,2	10,50	M 10x35	¾ x 1½	0,344
420	1"	VF 603	48,4	38,8	57,2	81	27,8	70	33	24	9,0	13,30	M 12x45	—	0,52
420	1½"	VF 604	54,8	44,5	66,6	95	31,8	78	38	27	9,8	14,60	M 14x50	—	0,78
420	1½"	VF 605	64,3	51,6	79,3	113	36,5	95	43	30	12,0	16,80	M 16x55	¾ x 2	1,335
420	2"	VF 606	80,2	67,6	96,8	133	44,5	114	52	37	12,0	21,00	M 20x70	¾ x 2½	2,106
420	2½"	VF 607	108,9	90,5	123,8	180	58,8	152	45	45	20,5	26,00	M 24x80	—	4,43
420	3"	VF 608	132,5	115,5	152,4	215	71,6	198	55	55	25,5	32,00	M 30x90	—	6,82

注：螺栓需另订
Note: Bolt should be ordered another.

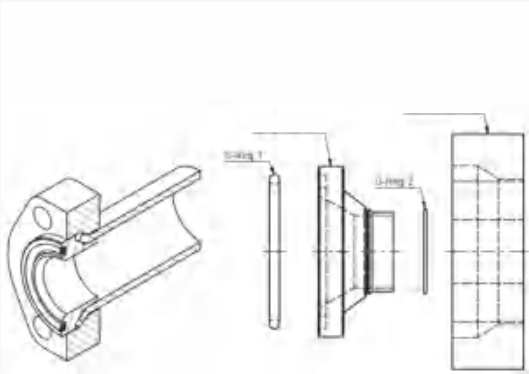
SAE Whole flange clamps tapped
ISO-6162-1-SAE J518
SAE 整体有螺纹法兰



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions										可配螺栓 Bolt	重量 Weight
			A	B	C	D	E	F	G	H	I			
kg/cm²	inch													kg
3000PSI														
350	½"	VFG 301	31,0	24,3	38,1	54	17,5	46	19	13	6,2		M8	0,15
350	¾"	VFG 302	38,9	32,2	47,6	65	22,3	52	22	14	6,2		M 10	0,17
320	1"	VFG 303	45,3	38,5	52,4	70	26,2	59	24	16	7,5		M 10	0,22
280	1½"	VFG 304	51,6	43,7	58,7	79	30,2	73	22	14	7,5		M 10	0,30
210	1½"	VFG 305	61,1	50,8	69,9	94	35,7	83	25	16	7,5		M 12	0,45
210	2"	VFG 306	72,3	62,8	77,8	102	42,9	97	26	16	9,0		M 12	0,50
175	2½"	VFG 307	84,9	74,9	88,9	114	50,8	109	38	19	9,0		M 12	0,88
160	3"	VFG 308	102,4	90,9	106,4	135	61,9	131	41	22	9,0		M 16	1,30
35	3½"	VFG 309	115,1	102,4	120,7	152	69,9	140	28	22	10,7		M 16	1,29
35	4"	VFG 310	127,8	115,0	130,2	162	77,8	152	35	25	10,7		M 16	1,65
35	5"	VFG 311	153,2	140,5	152,4	184	92,1	181	41	28	10,7		M 16	2,50
6000PSI														
420	½"	VFG 601	32,5	24,6	40,5	56	18,2	48	22	16	7,2		M8	0,16
420	¾"	VFG 602	42,0	32,5	50,8	71	23,8	60	28	19	8,2		M 10	0,35
420	1"	VFG 603	48,4	38,8	57,2	81	27,8	70	33	24	9,0		M 12	0,53
420	1½"	VFG 604	54,8	44,5	66,6	95	31,8	78	38	27	9,8		M 14	0,80
420	1½"	VFG 605	64,3	51,6	79,3	113	36,5	95	43	30	12,0		M 16	1,35
420	2"	VFG 606	80,2	67,6	96,8	133	44,5	114	52	37	12,0		M 20	2,10
420	2½"	VFG 607	108,9	90,5	123,8	180	58,8	152	45	45	20,5		M 24	4,10
420	3"	VFG 608	132,5	115,5	152,4	215	71,6	198	55	55	25,5		M 30	8,60

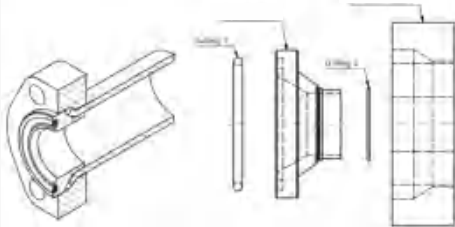
注：螺栓需另订
Note: Bolt should be ordered another.

SAE-flare flange type A with seal
SAE带密封的A型法兰芯



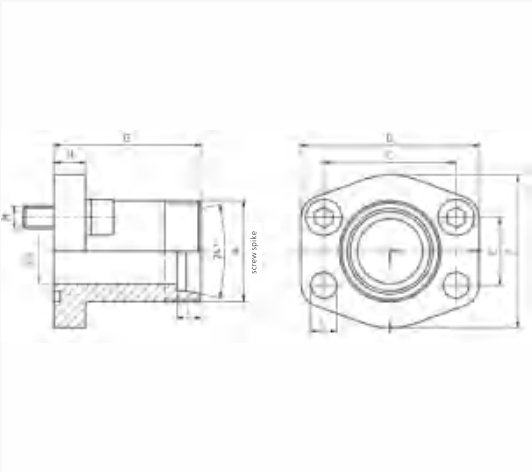
法兰型号 Flange size	管径 Pipe diameter	法兰类型 Flange type	类型 Type	零件各部分 Individual parts		代号 Part NO.	重量 Weight
				O型圈1 O-Ring 1	O型圈2 O-Ring 2		
Inch							kg
High pressure							
1/2"	16x2,0	FFAS-301-16x2	FFAS-001-16x2	O-Ring-18,64x3,53	O-RING-12x1	FFS-301	0,22
1/2"	18x2,0	FFAS-301-18x2	FFAS-001-18x2	O-Ring-18,64x3,53	O-RING-14x1	FFS-301	0,22
1/2"	19,05x2,11	FFAS-301-19,05x2,11	FFAS-001-19,05x2,11	O-Ring-18,64x3,53	O-RING-14x1	FFS-301	0,22
1/2"	19,05x2,41	FFAS-301-19,05x2,41	FFAS-001-19,05x2,41	O-Ring-18,64x3,53	O-RING-14x1	FFS-301	0,22
1/2"	19,05x2,77	FFAS-301-19,05x2,77	FFAS-001-19,05x2,41	O-Ring-18,64x3,53	O-RING-14x1	FFS-301	0,22
1/2"	20x2,0	FFAS-301-20x2	FFAS-001-20x2	O-Ring-18,64x3,53	O-RING-16x1	FFS-301	0,22
1/2"	21,3x3,7	FFAS-301-21,3x3,7	FFAS-001-21,3x3,7	O-Ring-18,64x3,53	O-RING-14x1	FFS-301	0,22
1/2"	21,3x4,8	FFAS-301-21,3x4,8	FFAS-001-21,3x4,8	O-Ring-18,64x3,53	O-RING-14x1	FFS-301	0,22
1/2"	25x2,5	FFAS-301-25x2,5	FFAS-001-25x2,5	O-Ring-18,64x3,53	O-RING-20x1	FFS-301	0,22
1/2"	30x3,0	FFAS-301-30x3	FFAS-001-30x3	O-Ring-18,64x3,53	O-RING-20x1	FFS-301	0,22
3/4"	20x2,0	FFAS-302-20x2	FFAS-002-20x2	O-RING-25,0X3,53	O-RING-16x1	FFS-302	0,4
3/4"	20x2,5	FFAS-302-20x2,5	FFAS-002-20x2,5	O-RING-25,0X3,53	O-RING-15x1	FFS-302	0,3
3/4"	25x2,5	FFAS-302-25x2,5	FFAS-002-25x2,5	O-RING-25,0X3,53	O-RING-20x1	FFS-302	0,35
3/4"	25x3,0	FFAS-302-25x3	FFAS-002-25x3	O-RING-25,0X3,53	O-RING-19x1	FFS-302	0,35
3/4"	26,7x3,91	FFAS-302-26,7x3,91	FFAS-002-26,7x3,91	O-RING-25,0X3,53	O-RING-20x1	FFS-302	0,3
3/4"	26,7x5,56	FFAS-302-26,7x5,56	FFAS-002-26,7x5,56	O-RING-25,0X3,53	O-RING-16x1	FFS-302	0,3
3/4"	30x3,0	FFAS-302-30x3	FFAS-002-30x3	O-RING-25,0X3,53	O-RING-23x1	FFS-302	0,3
1"	25x2,5	FFAS-303-25x2,5	FFAS-003-25x2,5	O-RING-32,9X3,53	O-RING-20x1	FFS-303	0,5
1"	25x3,0	FFAS-303-25x3	FFAS-003-25x3	O-RING-32,9X3,53	O-RING-19x1	FFS-303	0,5
1"	30x3,0	FFAS-303-30x3	FFAS-003-30x3	O-RING-32,9X3,53	O-RING-23x1	FFS-303	0,45
1"	30x4,0	FFAS-303-30x4	FFAS-003-30x4	O-RING-32,9X3,53	O-RING-22x1	FFS-303	0,45
1"	33,4X3,38	FFAS-303-33,4-3,38	FFAS-003-33,4-3,38	O-RING-32,9X3,53	O-RING-25x1	FFS-303	0,5
1"	33,4X4,55	FFAS-303-33,4-4,55	FFAS-003-33,4-4,55	O-RING-32,9X3,53	O-RING-23x1	FFS-303	0,5
1"	38x4,0	FFAS-303-38x4	FFAS-003-38x4	O-RING-32,9X3,53	O-RING-30x1	FFS-303	0,4

SAE-flare flange type A with seal
SAE带密封的A型法兰芯



法兰型号 Flange size	管径 Pipe diameter	法兰类型 Flange type	类型 Type	零件各部分 Individual parts		代号 Part NO.	重量 Weight
				O型圈1 O-Ring 1	O型圈2 O-Ring 2		
Inch							kg
High pressure							
1 1/4"	30x3,0	FFAS-304-30x3	FFAS-004-30x3	O-RING-37,7X3,53	O-RING-23x1	FFS-304	0,6
1 1/4"	30x4,0	FFAS-304-30x4	FFAS-004-30x4	O-RING-37,7X3,53	O-RING-22x1	FFS-304	0,5
1 1/4"	38x4,0	FFAS-304-38x4	FFAS-004-38x4	O-RING-37,7X3,53	O-RING-30x1	FFS-304	0,6
1 1/4"	38x5,0	FFAS-304-38x5	FFAS-004-38x5	O-RING-37,7X3,53	O-RING-28x1	FFS-304	0,55
1 1/4"	42x4,0	FFAS-304-42x4	FFAS-004-42x4	O-RING-37,7X3,53	O-RING-34x1	FFS-304	0,5
1 1/4"	42,2X3,56	FFAS-304-42,4x3,56	FFAS-004-42,4x3,56	O-RING-37,7X3,53	O-RING-34x1	FFS-304	0,6
1 1/4"	42,2X4,85	FFAS-304-42,4x4,85	FFAS-004-42,4x4,85	O-RING-37,7X3,53	O-RING-32x1	FFS-304	0,6
1 1/2"	30x3,0	FFAS-305-30x3	FFAS-005-30x3	O-Ring-47,2X3,53	O-RING-23x1	FFS-305	0,9
1 1/2"	38x4,0	FFAS-305-38-4	FFAS-005-38-4	O-RING-47,2X3,53	O-RING-30x1	FFS-305	1
1 1/2"	42x4,0	FFAS-305-42-4	FFAS-005-42-4	O-RING-47,2X3,53	O-RING-34x1	FFS-305	1
1 1/2"	48,3X3,68	FFAS-305-48,3x3,68	FFAS-005-48,3x3,68	O-RING-47,2X3,53	O-RING-41X1,78	FFS-305	0,9
1 1/2"	48,3X5,08	FFAS-305-48,3x5,08	FFAS-005-48,3x5,08	O-RING-47,2X3,53	O-RING-37,82X1,78	FFS-305	0,9
1 1/2"	50x5,0	FFAS-305-50x5	FFAS-005-50x5	O-RING-47,2X3,53	O-RING-41X1,78	FFS-305	0,9
2"	50x5,0	FFA-306-50x5	FFAS-006-50x5	O-RING-56,7X3,53	O-RING-41X1,78	FFS-306	1,4
2"	60x5,0	FFA-306-60x5	FFAS-006-60x5	O-RING-56,7X3,53	O-RING-50,52X1,78	FFS-306	1,25
2"	60x6,0	FFA-306-60x6	FFAS-006-60x6	O-RING-56,7X3,53	O-RING-47,35X1,78	FFS-306	1,25
2"	60,3X3,91	FFA-306-60,3x3,91	FFAS-006-60,3x3,91	O-RING-56,7X3,53	O-RING-50,52X1,78	FFS-306	1,4
2"	60,3X5,54	FFA-306x60,3x5,54	FFAS-006x60,3x5,54	O-RING-56,7X3,53	O-RING-47,35X1,78	FFS-306	1,4
2 1/2"	60x5,0	FFA-307-60x5	FFAS-007-60x5	O-RING-69,4X3,53	O-RING-50,52X1,78	FFS-307	2,1
2 1/2"	73x7,0	FFA-307-73x7	FFAS-007-73x7	O-RING-69,4X3,53	O-RING-56,8x1,78	FFS-307	1,9
2 1/2"	73x5,16	FFA-307-73x5,16	FFAS-007-73x5,16	O-RING-69,4X3,53	O-RING-63,22X1,78	FFS-307	1,9
2 1/2"	73x7,01	FFA-307-73x7,01	FFAS-007-73x7,01	O-RING-69,4X3,53	O-RING-56,87X1,78	FFS-307	1,9
2 1/2"	75x5,0	FFA-307-75x5	FFAS-007-75x5	O-RING-69,4X3,53	O-RING-63,22X1,78	FFS-307	1,9
3"	73x3,0	FFAS-308-73x3	FFAS-008-73x3	O-RING-85,3X3,53	O-RING-63,22X1,78	FFS-308	2,9
3"	88,9X5,49	FFAS-308-88,9x5,49	FFAS-008-88,9x5,49	O-RING-85,3X3,53	O-RING-79X1,78	FFS-308	3,1
3"	88,9X7,62	FFAS-308-88,9x7,62	FFAS-008-88,9x7,62	O-RING-85,3X3,53	O-RING-72,75X1,78	FFS-308	3,1
3"	90x5,0	FFAS-308-90x5	FFAS-008x90x5	O-RING-85,3X3,53	O-RING-79X1,78	FFS-308	3,1

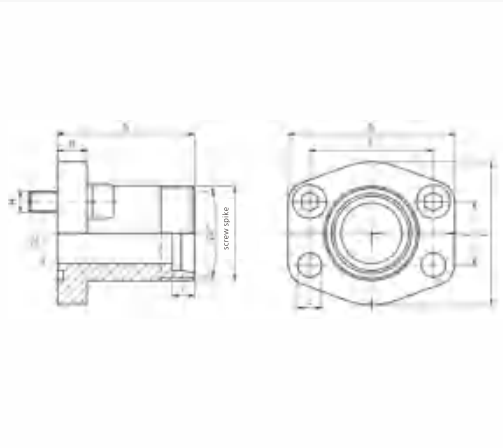
SAE –flange metric tapped 24° DIN 3901
SAE 法兰公制带头24° DIN 3901



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions											可配螺栓 Bolt		重量 Weight
			A	B	C	D	E	F	G	H	I	L	M		kg	
kg/cm²	inch													metr.	unc.	
315	½"	AFGS 080 M/L 15	M 22x1,5	12	38,1	54	17,5	46	52	13	7,0	9,0	M 8x25	⅝ x 1 ¼	0,25	
315	½"	AFGS 080 M/S 16	M 24x1,5	12	38,1	54	17,5	46	52	13	8,5	9,0	M 8x25	⅝ x 1 ¼	0,25	
160	¾"	AFGS 100 M/L 22	M 30x2	19	47,6	65	22,3	50	60	14	7,5	11,5	M 10x30	⅜ x 1 ¼	0,35	
345	¾"	AFGS 100 M/S 20	M 30x2	16	47,6	65	22,3	50	60	14	10,5	11,5	M 10x30	⅜ x 1 ¼	0,36	
160	1"	AFGS 102 M/L 22	M 30x2	19	52,4	70	26,2	55	63	16	7,5	11,5	M 10x30	⅜ x 1 ¼	0,44	
160	1"	AFGS 102 M/L 28	M 36x2	24	52,4	70	26,2	55	63	16	7,5	11,5	M 10x30	⅜ x 1 ¼	0,50	
320	1"	AFGS 102 M/S 20	M 30x2	16	52,4	70	26,2	55	63	16	10,5	11,5	M 10x30	⅜ x 1 ¼	0,46	
320	1"	AFGS 102 M/S 25	M 36x2	20	52,4	70	26,2	55	63	16	12,0	11,5	M 10x30	⅜ x 1 ¼	0,52	
160	1½"	AFGS 104 M/L 28	M 36x2	24	58,7	79	30,2	68	65	14	7,5	11,5	M 10x30	⅞ x 1 ½	0,68	
160	1½"	AFGS 104 M/L 35	M 45x2	29	58,7	79	30,2	68	65	14	10,5	11,5	M 10x30	⅞ x 1 ½	0,72	
280	1½"	AFGS 104 M/S 30	M 42x2	25	58,7	79	30,2	68	65	14	13,5	11,5	M 10x30	⅞ x 1 ½	0,70	
210	1½"	AFGS 106 M/L 35	M 45x2	29	69,9	94	35,7	78	70	16	10,5	13,5	M 12x35	½ x 1 ½	0,96	
160	1½"	AFGS 106 M/L 42	M 52x2	36	69,9	94	35,7	78	70	16	11,0	13,5	M 12x35	½ x 1 ½	1,00	
210	1½"	AFGS 106 M/S 38	M 52x2	32	69,9	94	35,7	78	70	16	16,0	13,5	M 12x35	½ x 1 ½	1,02	
210	2"	AFGS 108 M/L 42 - H 74	M 52x2	36	77,8	102	42,9	90	74	25	11,0	13,5	M 12x45	½ x 1 ¾	1,81	
210	2"	AFGS 108 M/S 38 - H 74	M 52x2	32	77,8	102	42,9	90	74	25	16,0	13,5	M 12x45	½ x 1 ¾	1,92	

注：螺栓需另订
Note: Bolt should be ordered another.

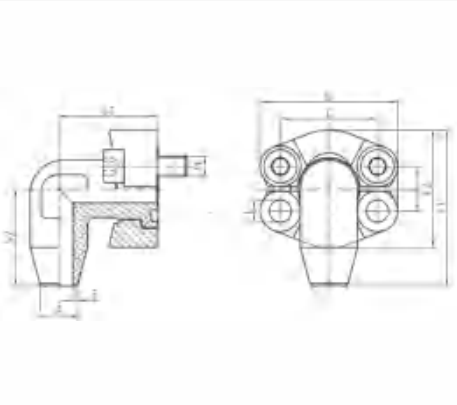
SAE –flange metric tapped 24°
DIN 3901/SAE 法兰公制带头24° DIN 3901



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions											可配螺栓 Bolt		重量 Weight
			A	B	C	D	E	F	G	H	I	L	M		kg	
kg/cm²	inch													metr.	unc.	
420	½"	AFGS 401 M/S 16	M 24x1,5	12	40,5	56	18,2	48	60	16	8,5	9,0	M 8x30	¾ x 1¼	0,30	
420	¾"	AFGS 402 M/S 16-50	M 24x1,5	12	50,8	71	23,8	50	52	19	8,5	11,5	M 10x35	¾ x 1¼	—	
420	¾"	AFGS 402 M/S 20-50	M 30x2	16	50,8	71	23,8	50	52	19	10,5	11,5	M 10x35	¾ x 1¼	—	
420	¾"	AFGS 402 M/S 25-50	M 36x2	18	50,8	71	23,8	50	52	19	12,0	11,5	M 10x35	¾ x 1¼	—	
420	¾"	AFGS 402 M/S 25	M 36x2	19	50,8	71	23,8	60	73	19	12,0	11,5	M 10x35	¾ x 1¼	0,68	
420	1"	AFGS 403 M/S 20-60	M 30x2	16	57,2	81	27,8	70	60	24	10,5	13,0	M 12x45	⅞ x 1½	—	
420	1"	AFGS 403 M/S 25	M 36x2	19/26	57,2	81	27,8	70	82	24	12,0	13,0	M 12x45	⅞ x 1½	1,17	
420	1"	AFGS 403 M/S 30	M 42x2	25	57,2	81	27,8	70	82	24	13,5	13,0	M 12x45	⅞ x 1½	1,00	
420	1"	AFGS 403 M/S 38	M52x2	25	57,2	81	27,8	65	92	21	16	13,0	M 12x45	⅞ x 1½	1,1	
420	1¼"	AFGS 404 M/S 30	M 42x2	25	66,6	95	31,8	78	92	27	13,5	15,0*2	M 14x50	½ x 1½	1,54	
420	1¼"	AFGS 404 M/S 30-68	M 42x2	25	66,6	95	31,8	78	68	27	13,5	15,0*2	M 14x50	½ x 1½	—	
420	1¼"	AFGS 404 M/S 38	M 52x2	29	66,6	95	31,8	78	92	27	16,0	15,0*2	M 14x50	½ x 1½	1,60	
420	1¼"	AFGS 404 M/S 38-60	M 52x2	28	66,6	95	31,8	78	60	24	16,0	15,0*2	M 14x50	½ x 1½	—	
420	1½"	AFGS 405 M/S 38	M 52x2	32	79,3	113	36,5	95	96	30	16,0	17,5	M 16x55	¾ x 2	2,20	
420	1½"	AFGS 405 M/S 38-72	M 52x2	32	79,3	113	36,5	95	72	30	16	17,5	M 16x55	¾ x 2	2,05	

注：螺栓需另订
Note: Bolt should be ordered another.

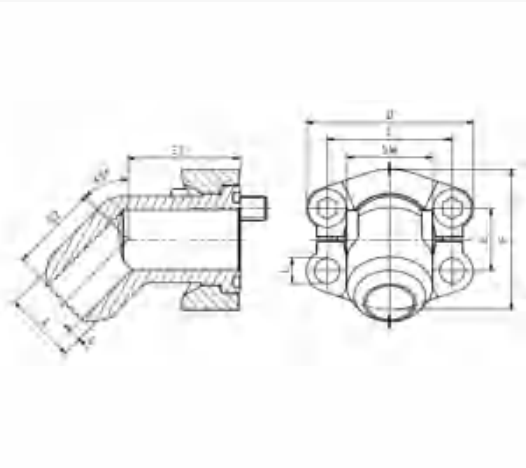
SAE-90° butt weld flange adapter for metric pipes/对焊法兰适配器，用于公制管



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions						可配螺栓 Bolt		重量 Weight
kg/cm²	inch		C	D	E	F1/F2	S1/S2	L	M		kg
3000PSI									metr.	unc.	
350	½"	WFS-301	38,1	54	17,5	60,8/45,6	39/38	8,75	M 8x25	⅝ x 1¼	-
Ax S = 15 x 2 – 16 x 2 – 21,3 x 3,8											
350	¾"	WFS-302	47,6	65	22,3	70,9/51,8	42/45	10,75	M 10x30	⅞ x 1¼	-
Ax S = 18 x 1,5 – 20 x 3 – 22 x 3 – 25 x 3 – 26,9 x 3,9											
320	1"	WFS-303	52,4	70	26,2	79,2/58,4	45/50	10,75	M 10x30	⅞ x 1¼	-
Ax S = 25 x 3 – 30 x 4 – 33,7 x 4,5											
280	1½"	WFS-304	58,7	79	30,2	85,3/72,6	50/59	10,75/12,75	M 10x30 M 12x35	⅞ x 1½	-
Ax S = 25 x 3 – 30 x 4 – 35 x 2 – 38 x 5 – 42,4 x 5											
210	1½"	WFS-305	69,9	94	35,7	117,1/82,2	76/56	13,5	M 12x35	⅞ x 1½	-
Ax S = 38 x 5 – 42 x 3 – 48,3 x 5											
210	2"	WFS-306	77,8	101,6	42,9	128,4/ 96,8	108/80	13,3	M 12x35	⅞ x 1½	-
Ax S = 60,3 x 3,9 – 60,3 x 5,6											
6000PSI									metr.	unc.	
420	½"	WFS-601	40,5	56	18,2	61,6/47,2	39/38	8,75	M 8x30	⅝ x 1¼	-
Ax S = 16 x 3 – 21,3 x 4,5											
420	¾"	WFS-602	50,8	71	23,8	78/60	48/48	10,75	M 10x35	⅞ x 1½	-
Ax S = 16 x 3 – 20 x 4 – 25 x 4 – 26,9 x 5,6											
420	1"	WFS-603	57,2	81	27,8	94/69,6	60/60	12,0/13,0	M 12x45	⅞ x 1¼	-
Ax S = 25 x 4 – 30 x 4 – 33,7 x 4,5 – 33,7 x 6,3											
315	1½"	WFS-604	66,6	95	31,8	106,6/77,2	68/68	13,5/14,75	M 14x50	⅞ x 1¼	-
Ax S = 30 x 4 – 38 x 5 – 42,4 x 6,3 – 38 x 8 ⁺²											
315	1½"	WFS-605	79,3	113	36,5	123,5/95	76/76	16,8	M 16x55	⅞ x 2	-
Ax S = 38 x 5 – 38 x 8 ⁺² – 48,3 x 7,14 – 48,3 x 8											
420	2"	WFS-606	96,8	133,4	44,5	137,2/114,3	108/80	21	M 20x70	⅞ x 2½	-
Ax S = 60,3 x 8 – 60,3 x 8,7 – 60,3 x 10											

注：螺栓需另订
Note: Bolt should be ordered another.

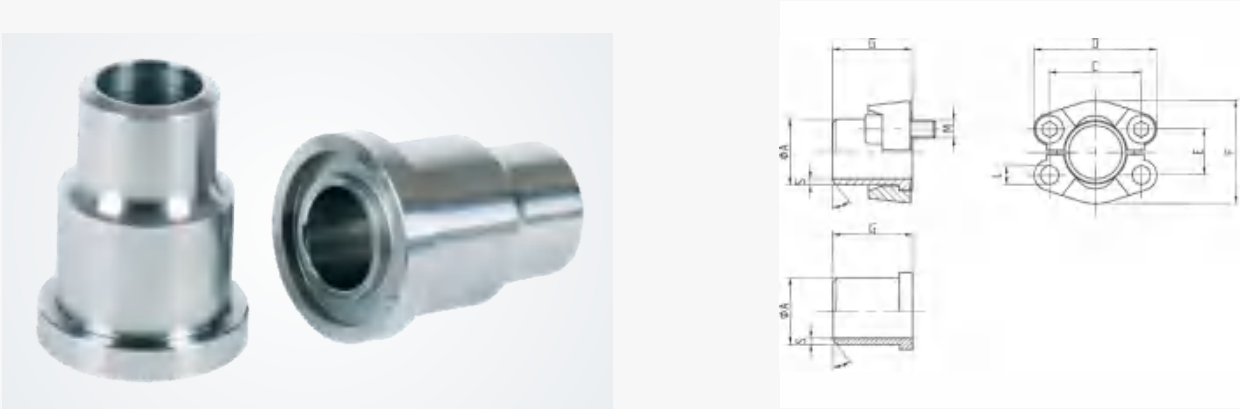
SAE-45° butt weld flange adapter for metric pipes
SAE-45° 对焊法兰适配器，用于公制管道



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions								可配螺栓 Bolt	重量 Weight
			C	D	E	F	L	S1	S2	SW		
kg/cm²	inch										M	kg
3000PSI												
350	½"	SWFS-3001-45	38,1	54	17,5	46	8,5	39	32,5	24	M8x25	-
AxS = 15x2 - 16x2 - 21,3x3,8												
350	¾"	SWFS-3002-45	47,6	65	22,2	52	10,5	40,15	32,5	30	M10x30	-
AxS = 18x1,5 - 20x3 - 22x3 - 25x3 - 26,9x3,9												
320	1"	SWFS-3003-45	52,4	70	26,2	59	10,5	47	37,35	36	M10x30	-
AxS = 25x3 - 30x4 - 33,7x4,5												
280	1½"	SWFS-3004-45	58,7	79	30,2	73	*2	51,8	40,4	41	*3	-
AxS = 25x3 - 30x4 - 35x2 - 38x5 - 42,4x5												
210	1½"	SWFS-3005-45	69,9	94	35,7	83	13,3	60,45	45,2	50	M12x35	-
AxS = 38x5 - 42x3 - 48,3x5												
6000PSI												
420	½"	SWFS-6001-45	40,5	56,4	18,2	47,8	8,5	39	32,5	24	M8x30	-
AxS = 16x3 - 21,3x4,5												
420	¾"	SWFS-6002-45	50,8	71	23,8	61	10,5	40,15	32,5	32	M10x35	-
AxS = 16x3 - 20x4 - 25x4 - 26,9x5,6												
420	1"	SWFS-6003-45	57,2	81	27,8	70	13,3	47	37,35	41	M12x45	-
AxS = 25x4 - 30x4 - 33,7x4,5 - 33,7x6,3												
315	1½"	SWFS-6004-45	66,7	95	31,8	78	*4	51,8	40,4	46	*5	-
AxS = 30x4 - 38x5 - 42,4x6,3 - 38x8*6												
315	1½"	SWFS-6005-45	79,4	113	36,5	95	16,8	60,45	45,2	50	M16x55	-
AxS = 38x5 - 38x8*6 - 48,3x7,14 - 48,3x8												

注：螺栓需另订
Note: Bolt should be ordered another.

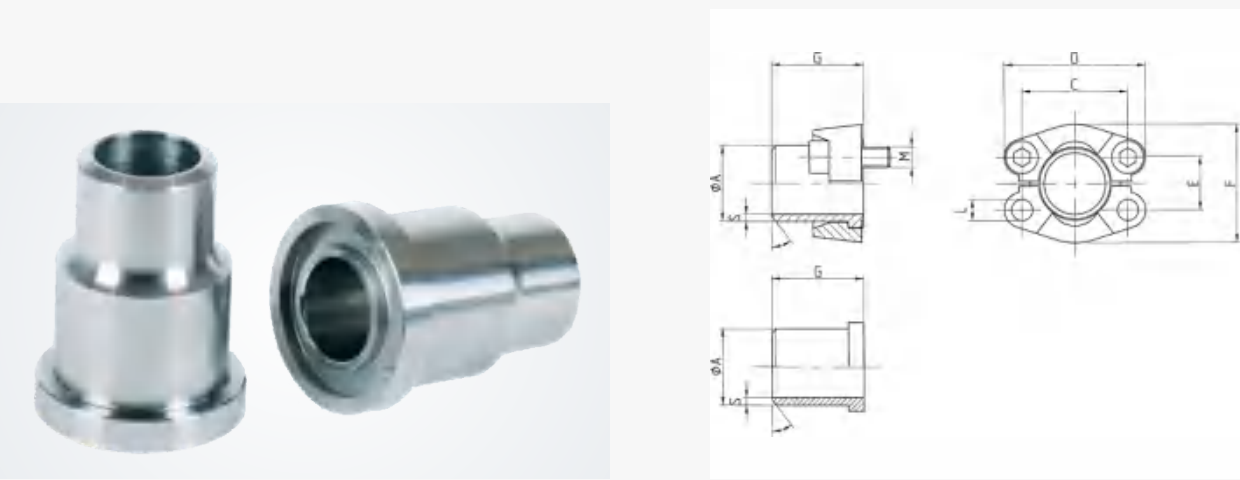
SAE-flange head/法兰芯



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions						可配螺栓 Bolt		重量 Weight
kg/cm²	inch		C	D	E	F	G	L	M		kg
3000PSI									metr.	unc.	
350	½"	SSFS 301	38,1	54	17,5	45,6	41	8,50	M 8x25	⅝ x 1¼	0,08
A x S = 16 x 2 – 20 x 2,5 – 21,3 x 2,9 – 21,3 x 3,8 – 21,3 x 4,7											
350	¾"	SSFS 302	47,6	65	22,3	51,8	50	10,50	M 10x30	¾ x 1¼	0,16
A x S = 25 x 3 – 26,9 x 3,6 – 26,9 x 3,9											
320	1"	SSFS 303	52,4	70	26,2	58,4	50	10,50	M 10x30	¾ x 1¼	0,23
A x S = 25 x 3 – 28 x 3 – 30 x 3 – 30 x 4 – 33,7 x 4,5 – 38 x 4 – 38 x 5											
280	1¼"	SSFS 304	58,7	79	30,2	72,6	55	10,50 12,75	M 10x30** M 12x35	⅞ x 1½	0,30
A x S = 25 x 3 – 30 x 3 – 38 x 3 – 38 x 4 – 38 x 5 – 42,4 x 3,6 – 42,4 x 4,5 – 42,4 x 6,3											
210	1½"	SSFS 305	69,9	94	35,7	82,2	57	13,30	M 12x35	⅞ x 1½	0,40
A x S = 38 x 4 – 42 x 3 – 42 x 5 – 45 x 5 – 48,3 x 2,6 – 48,3 x 3,6 – 48,3 x 5 – 48,3 x 6,3 – 48,3 x 7,1 – 50 x 6											
210	2"	SSFS 306	77,8	102	42,9	96,4	57	13,30	M 12x35	⅞ x 1½	0,50
A x S = 48,3 x 5 – 55 x 5 – 60,3 x 2,9 – 60,3 x 3,9 – 60,3 x 5 – 60,3 x 6,3 – 60,3 x 8											
175	2½"	SSFS 307	88,9	114	50,8	108,2	58	13,30	M 12x40	⅞ x 1¾	0,80
A=74: A x S = 65 x 6 – 70 x 7,5 – 76,1x 5,5 (74 x 4,5) '2 – 76,1x 7,1(74 x 6,1) '2											
A=76,1: A x S = 76,1x 5,5 '2 – 76,1x 7,1 '2											
160	3"	SSFS 308	106,4	135	61,9	130,6	58	17,00	M 16x50	¾ x 2	1,10
A x S = 80 x 6 – 88,9 x 3,2 – 88,9 x 3,9 – 88,9 x 7 – 88,9 x 8											
35	3½"	SFS 309	120,7	152	69,9	139,0	60	17,00	M 16x50	¾ x 2	1,40
A x S = 100 x 6 – 88,9 x 3,6 – 88,9 x 8											
35	4"	SSFS 310	130,2	162	77,8	152,0	60	17,00	M 16x50	¾ x 2	1,75
A x S = 110 x 6 – 114,3 x 3,6 – 114,3 x 6,02 – 114,3 x 8,8											
35	5"	SSFS 311	152,4	184	92,1	180,0	60	17,00	M 16x55	¾ x 2	2,62
A x S = 133 x 6,5 – 139,7 x 4 – 139,7 x 10											

注：螺栓需另订
Note: Bolt should be ordered another.

SAE-flange head/法兰芯



最大工作压力 Max working pressure	法兰型号 Flange size	代号 Part NO.	尺寸 Dimensions						可配螺栓 Bolt		重量 Weight	
			C	D	E	F	G	L	M		kg	
kg/cm²	inch		6000PSI							metr.	unc.	
420	½"	SFS 601	40,5	56	18,2	47,2	34	8,50	M 8x30	⅝ x 1¼	0,08	
A x S = 16 x 2 – 20 x 2,5 – 21,3 x 3,8 – 21,3 x 4,5												
420	¾"	SFS 602	50,8	71	23,8	60,0	38	10,50	M 10x35	¾ x 1½	0,17	
A x S = 16 x 2 – 20 x 2,5 – 25 x 3 – 25 x 3,5 – 25 x 4 – 26,9 x 5,6												
420	1"	SFS 603	57,2	81	27,8	69,6	40	13,30/12	M 12x45	⅞ x 1¼	0,25	
A x S = 25 x 3 – 30 x 3 – 30 x 4 – 33,7 x 6,3 – 33,7 x 7,1 – 38 x 4 – 38 x 5												
420	1¼"	SFS 604	66,6	95	31,8	77,2	45	13,30/14,60	M 12x45 M 14x50	⅞ x 1¼	0,30	
A x S = 25 x 3 – 30 x 4 – 38 x 4 – 38 x 5 – 38 x 5,5 – 38 x 6 – 42,4 x 6,3												
420	1½"	SFS 605	79,3	113	36,5	95,0	50	16,80	M 16x55	¾ x 2	0,53	
A x S = 38 x 5 – 45 x 6,5 – 48,3 x 5 – 48,3 x 6,3 – 48,3 x 7,1 – 48,3 x 8 – 48,3 x 8,8 – 50 x 6												
420	2"	SFS 606	96,8	133	44,5	113,8	58	21/20	M 20x70	¾ x 2½	0,90	
A x S = 48,3 x 6,3 – 60,3 x 6,3 – 60,3 x 7,5 – 60,3 x 8 – 60,3 x 8,75 – 60,3 x 10 – 60,3 x 13,4 – 65x8												
420	2½"	SFS 607	123,8	180	58,8	150,2	75	26,00	M 24x80	–	2,40	
A x S = 76,1 x 8 – 76,1 x 10 – 76,1 x 12,5 – 88,9 x 10 – 88,9 x 11,1 – 88,9 x 14,2 – 88,9 x 17												
420	3"	SFS 608	152,4	215	71,6	198,2	80	32,00	M 30x90	–	3,60	
A x S = 88,9 x 10 – 88,9 x 11,1 – 88,9 x 14,2 – 114,3 x 11 – 114,3 x 17,5												

注：螺栓需另订
Note: Bolt should be ordered another.

SAE Flange Fittings ISO 6162-1/2 And SAE J518

美制法兰接头 ISO 6162-1/2和SAE J518



SAE Single-part Flange
SAE 一体式法兰

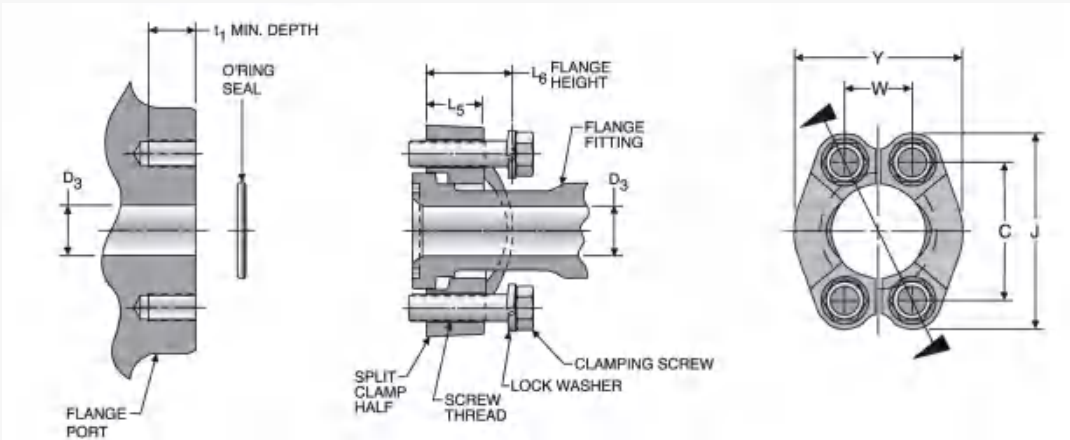
SAE 37° Flare Flange
SAE 37° 扩口式法兰

SAE 2-bolt Flange
SAE 菱形法兰

ISO 6164 Square Flange
ISO 6164 四方法兰

SAE Flange Fitting Connections and Dimensions

SAE法兰接头连接及尺寸



Nominal Flange Size D3		2.5 to 31.5 MPa Series ¹⁾ (SAE Code 61)											O-Rings ³⁾	
		Clamping Screws Screw Holes				Flange Half and Bolt Pattern								
		Type I		Type II ²⁾ (SAE J518)		C	J		W	Y	L5	L6	ISO 3601-1 ID x Section	
		Thread	t ₁ Min. depth	Thread (UNC)	t ₁ Min. depth		± 0.25	max.						min.
(in.)	(mm.)	Thread	t ₁ Min. depth	Thread (UNC)	t ₁ Min. depth	± 0.25	max.	min.	± 0.25	Ref.				
1/2	13	M8 x 1.5	12.5	5/16 - 18	24	38.1	54.9	53.1	17.5	46	13	19		19 x 3.55
3/4	19	M10 x 1.5	16.5	3/8 - 16	22	47.6	65.8	64.3	22.3	52	14	22	25 x 3.55	
1	25	M10 x 1.5	14.5	3/8 - 16	22	52.4	70.6	69.1	26.2	59	16	22	32.5 x 3.55	
1 1/4	32	M10 x 1.5	16.5	7/16 - 14	28	58.7	80.3	78.5	30.2	73	14 ⁴⁾	24	37.5 x 3.55	
1 1/2	38	M12 x 1.75	19.5	1/2 - 13	27	69.9	94.5	93.0	35.7	83	16	25	47.5 x 3.55	
2	51	M12 x 1.75	19.5	1/2 - 13	27	77.8	103.1	100.1	42.9	97	16	26	56 x 3.55	
2 1/2	64	M12 x 1.75	21.5	1/2 - 13	30	88.9	115.8	112.8	50.8	109	19	38	69 x 3.55	
3	76	M16 x 2	28.5	5/8 - 11	30	106.4	136.7	133.4	61.9	131	22	41	85 x 3.55	
3 1/2	89	M16 x 2	28.5	5/8 - 11	33	120.7	153.9	150.9	69.9	140	22	28	97.5 x 3.55	
4	102	M16 x 2	25.5	5/8 - 11	30	130.2	163.6	160.3	77.8	152	25	35	112 x 3.55	
5	127	M16 x 2	27.5	5/8 - 11	33	152.4	182.6	185.7	92.1	181	28	41	136 x 3.55	

Nominal Flange Size D3		40 MPa Series ¹⁾ (SAE Code 62)											O-Rings ³⁾	
		Clamping Screws Screw Holes				Flange Half and Bolt Pattern								
		Type I		Type II ²⁾ (SAE J518)		C	J		W	Y	L5	L6	ISO 3601-1 ID x Section	
		Thread	t ₁ Min. depth	Thread (UNC)	t ₁ Min. depth		± 0.25	max.						min.
(in.)	(mm.)	Thread	t ₁ Min. depth	Thread (UNC)	t ₁ Min. depth	± 0.25	max.	min.	± 0.25	Ref.				
1/2	13	M8 x 12.5	14.5	5/16 - 18	21	40.5	57.2	55.6	18.2	48	16	22		19 x 3.55
3/4	19	M10 x 1.5	16.5	3/8 - 16	24	50.8	72.1	70.6	23.8	60	19	28	25 x 3.55	
1	25	M12 x 1.75	21.5	7/16 - 14	27	57.2	81.8	80.3	27.8	70	24	33	32.5 x 3.55	
1 1/4	32	M12 x 1.75	18.5	1/2 - 13	25	66.6	96.0	94.5	31.8	78	27	38	37.5 x 3.55	
1 1/2	38	M16 x 2	25.5	5/8 - 11	35	79.3	114.3	111.3	36.5	95	30	43	47.5 x 3.55	
2	51	M20 x 2.5	33.5	3/4 - 10	38	96.8	134.9	131.8	44.5	114	37	52	56 x 3.55	

1) 1 MPa = 10 bar = 145 PSI.
2) Not for new design.
3) 90 durometer nitrile is standard for hydraulic applications.

Flange Clamps
法兰夹

Turbuckle and assembly
涡轮扣及总成

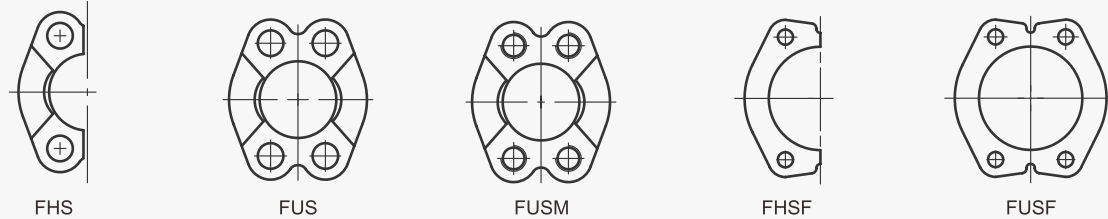
Tractor linkage
拖拉机连杆

Ratchet Turbuckle
棘轮扣紧器

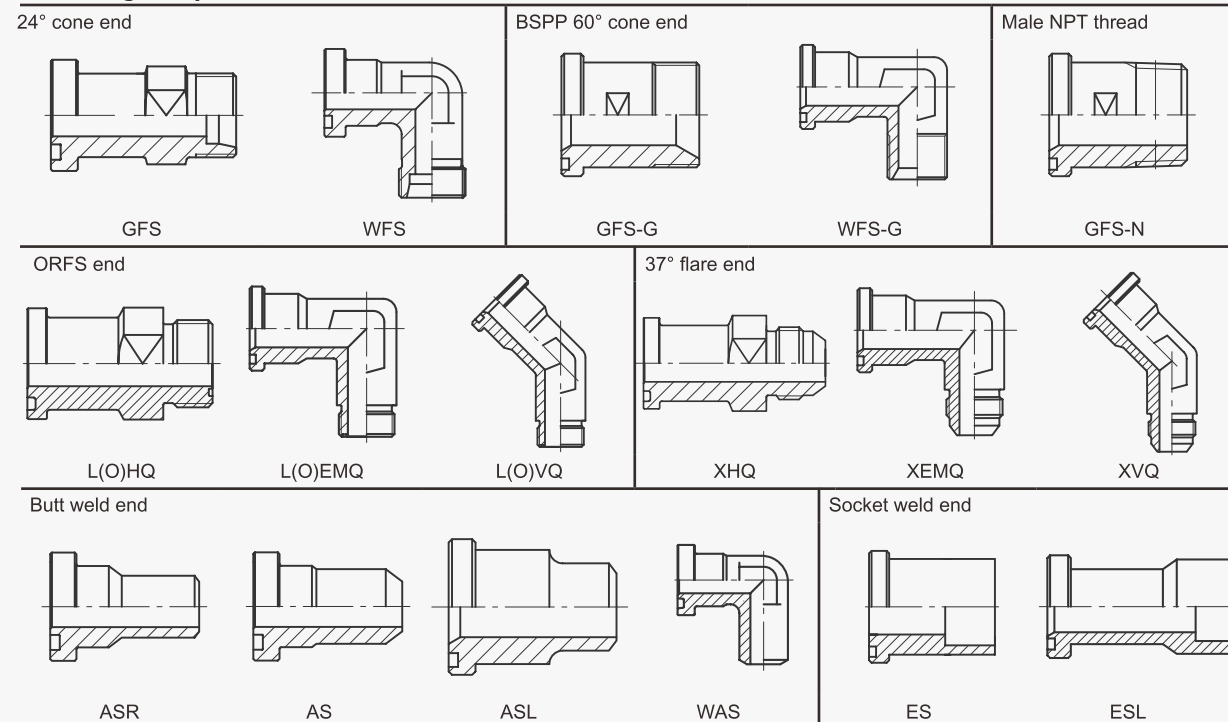
Industrial spanner &
ratchet wrench 工业级扳手及棘轮扳手

Shaft
轴

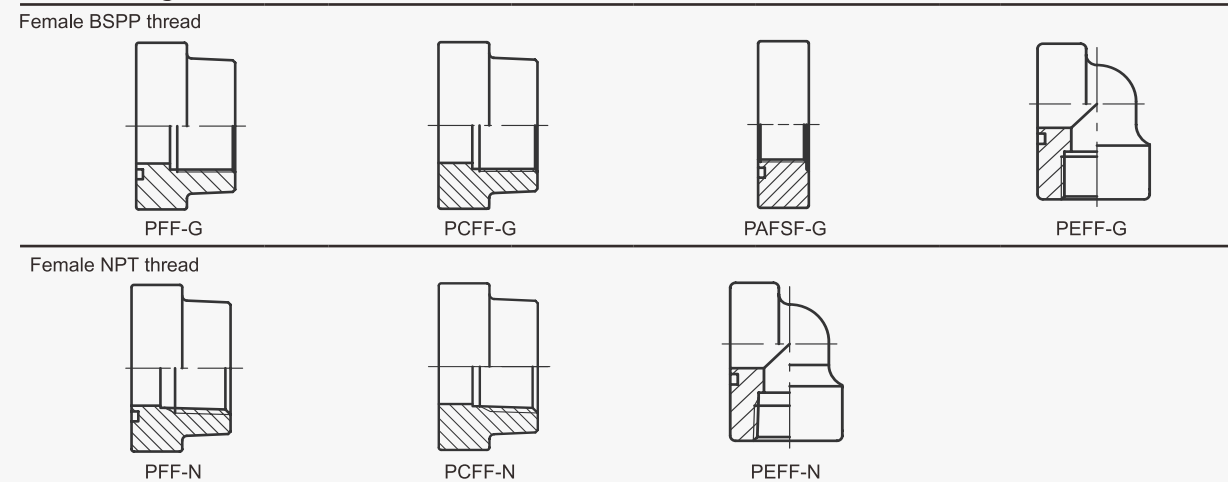
SAE Flange clamps



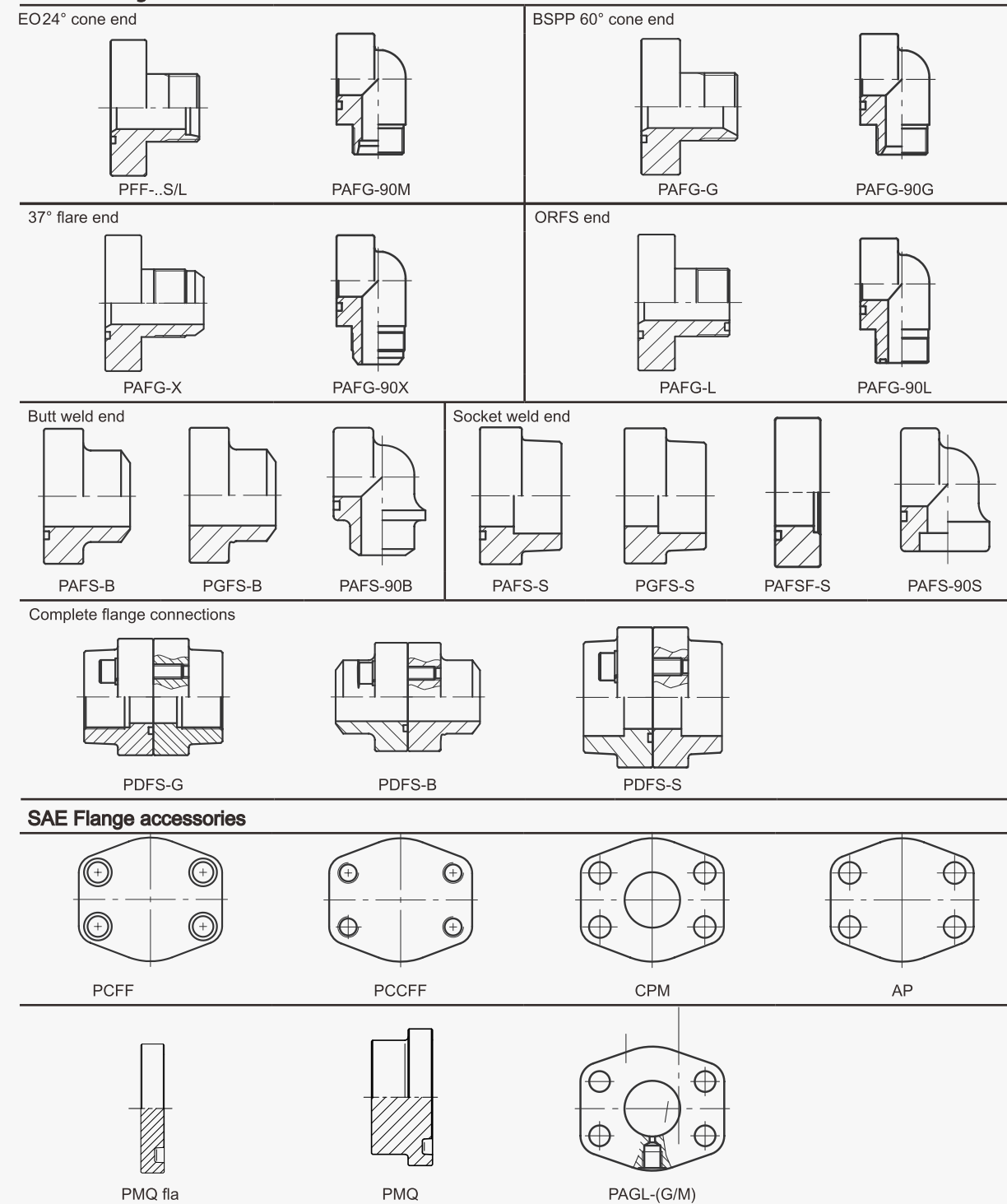
SAE Flange adapters



SAE Full flanges



SAE Full flanges

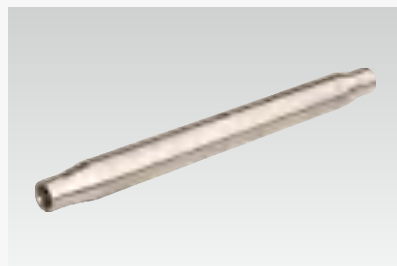
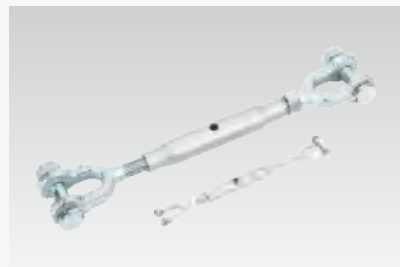


Turnbuckle and assembly / 螺旋扣及其总成



A leader in steel pipe Turnbuckle DIN 1478, 500 ton Horizontal hydraulic machine for pipe forming bigger diameter, longer length, also for drop forging.

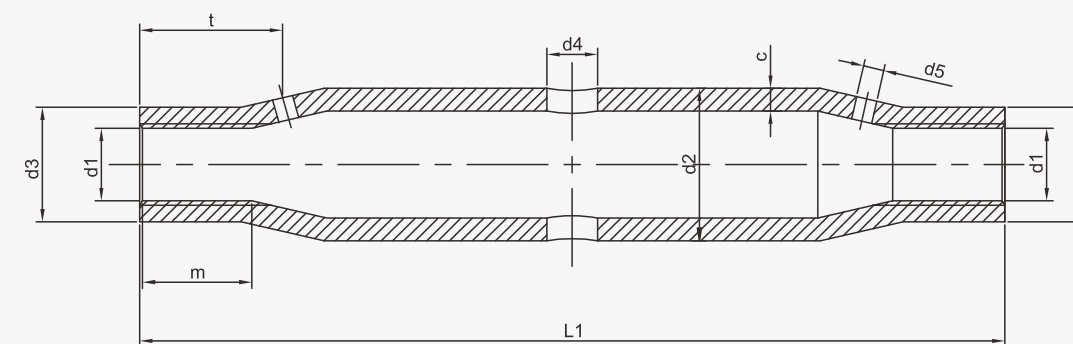
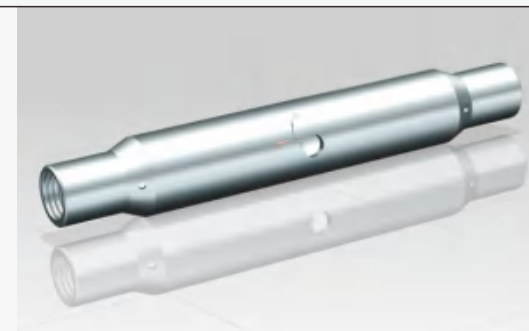
DIN 1478 管体螺旋扣的领先者，有500吨卧式油压机来生产更大直径，更长尺寸的缩管，和局部锻打。



DIN 1478 turnbuckle Frames / DIN 1478螺旋扣

TBMXX

- Material is carbon steel, stainless steel and others.
材质为碳钢，不锈钢及其他
- Two ends are LH thread and RH thread with 6H tolerance.
两端螺纹为倒牙和顺牙，6H精度
- Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478.

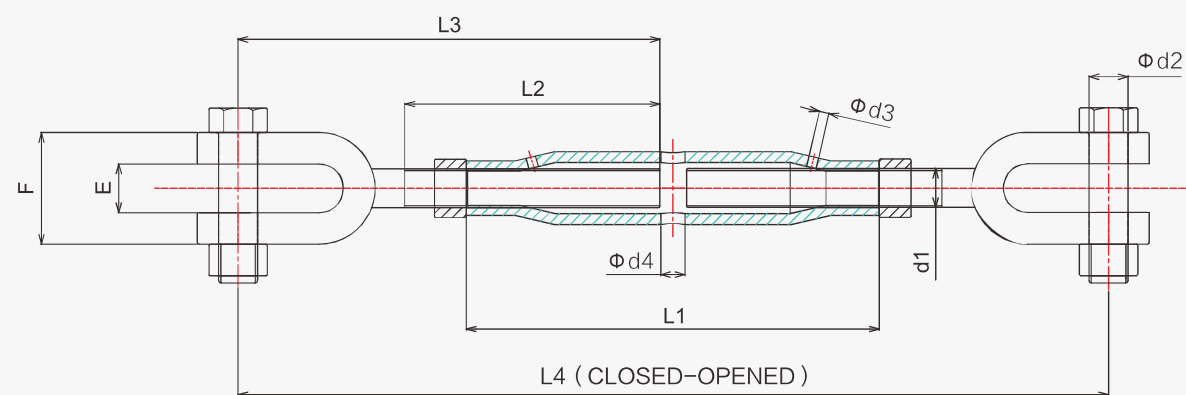
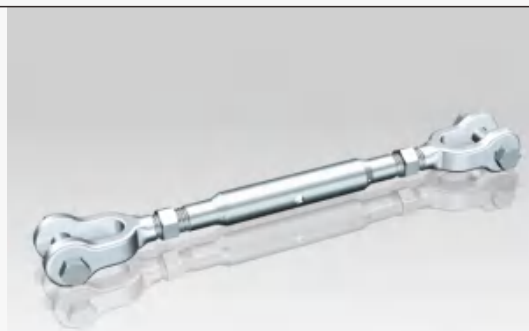


Prat No.	Thread d ₁	L ₁	m	d ₂	d ₃ Min	d ₄	c	d ₅	Weight kg
TBM06	M 6	110	7,5	17,2	9	6	2,9	4	0.13
TBM08	M 8	110	10	17,2	12	8	3,6	4	0.15
TBM10	M 10	125	12	21,3	15	8	4	4	0.19
TBM12	M 12	125	15	25	18	10	4	4	0.25
TBM16	M 16	170	20	30	22.5	10	4,5	4	0.46
TBM20	M 20	200	24	33,7	27	12	5	4	0.65
TBM24	M 24	255	29	42,4	32	12	5,6	4	1.13
TBM27	M 27	255	40	42,4		12	5,6	4	1.24
TBM30	M 30	255	36	51	38	16	6,3	4	1.65
TBM36	M 36	295	43	63,5	47.5	16	8	6	2.45
TBM42	M 42	330	51	70	57	20	8,8	6	2.84
TBM48	M 48	355	58	82,5	63	20	10	6	5.9
TBM52	M 52	355	58	82,5		20	10	10	
TBM56	M 56	355	68	90		25	15	10	
TBM64	M 64	425	77	100		25	16	10	
TBM72	M 72x6	425	87	110		30	17	10	
TBM80	M 80x6	440	96	120		30	18	10	

DIN 1478 turnbuckle Jaws / DIN 1478螺旋扣叉子

TF0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Hot drop forged Jaws with RH and LH thread.
两端叉子螺纹为倒牙，顺牙
- ◆ Bolt acc. to DIN 601, Nut acc. to DIN 934.
螺栓根据DIN601标准，螺母根据DIN934标准

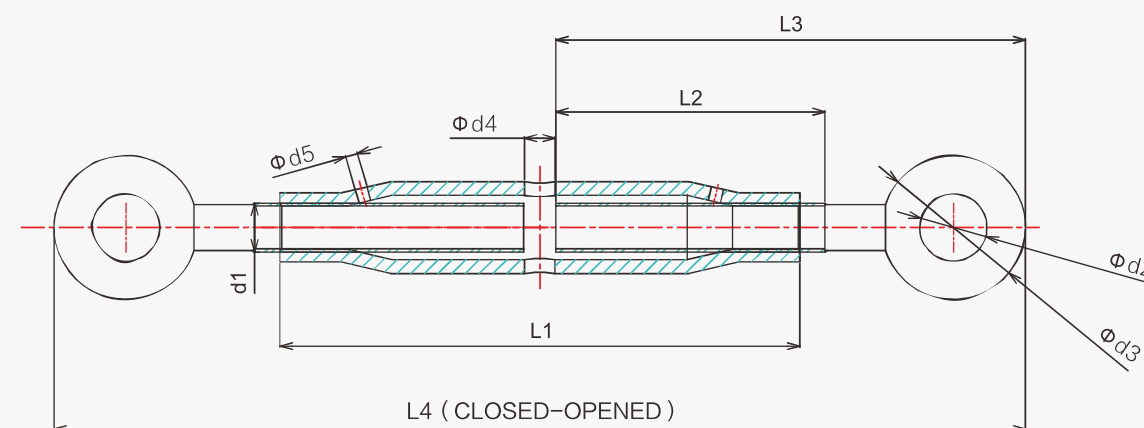
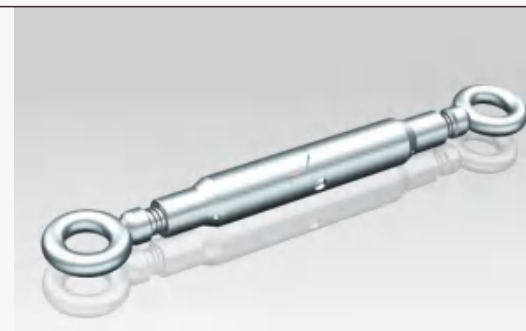


Prat No.	Thread d ₁	Φ d ₂	Φ d ₃	Φ d ₄	L ₁	L ₂ MIN	L ₃	L ₄	Adjustable	E	F	Weight kg
TF0080	M8	6.2	4	6	110	63	101	202-287	85	9	25	0.30
TF0100	M10	8.3	4	8	125	75	122	244-339	95	10	29	0.43
TF0120	M12	10.5	4	10	125	95	157	314-404	90	13	35	0.69
TF0160	M16	12.5	4	10	170	100	175	350-470	120	18	45	1.61
TF0200	M20	16.5	4	12	200	120	205	410-550	140	20	50	2.32
TF0240	M24	30	4	12	255	145	250	500-680	180	35	71	5.10
TF0300	M30	30	4	16	255	145	250	500-660	160	35	71	7.01
TF0360	M36	37	6	16	295	160	332	664-844	180	57	100	11.5

DIN 1478 turnbuckle Eyes / DIN 1478螺旋扣眼环

TE0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Hot drop forged eyes with RH and LH thread.
两端眼环螺纹为倒牙，顺牙
- ◆ Finish is white Zinc plated, HDG, self-color
表面处理为电镀白锌, 热电镀, 本色

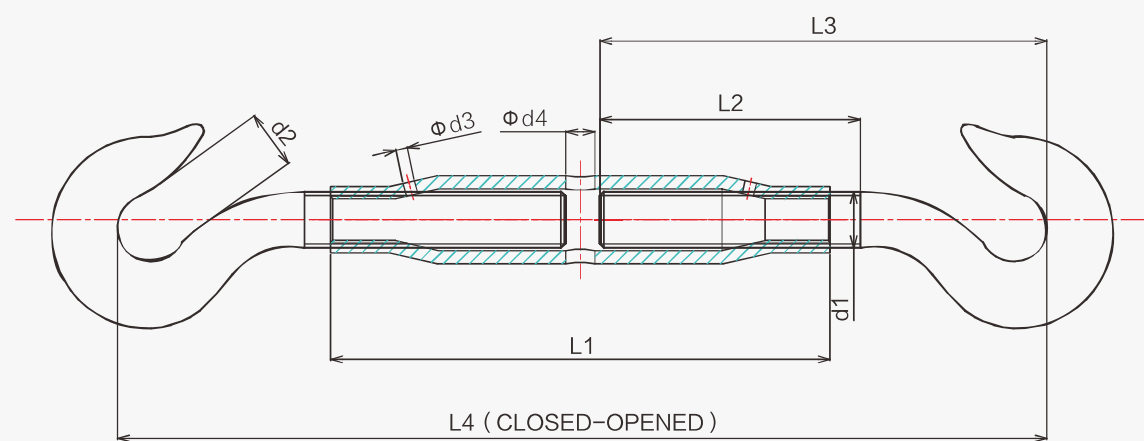


Prat No.	Thread d ₁	Φ d ₂	Φ d ₃	Φ d ₄	Φ d ₅	L ₁	L ₂	L ₃	L ₄	Adjustable	Weight kg	Remark
TE0060	M6	9	20	6	4	110	55	80	166-256	90	0.16	
TE0080	M8	10	22	6	4	110	57	85	176-261	85	0.19	
TE0100	M10	14	31	8	4	125	68	105	218-313	95	0.33	
TE0120	M12	16	35	10	4	125	70	115	240-330	90	0.42	
TE0160	M16	22	47	10	4	170	88	150	310-430	120	0.92	
TE0200	M20	24	52	12	4	200	105	168	348-488	140	1.45	
TE0240	M24	28	65	12	4	255	135	212	436-616	180	2.65	
TE0300	M30	31	71	16	4	255	135	224	464-624	160	3.83	
TE0360	M36	38	94	16	6	295	158	277	560-740	180	7.36	

DIN 1478 turnbuckle Hooks / DIN 1478螺旋扣钩子

TH0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Hot drop forged hooks with RH and LH thread.
两端钩子螺纹为倒牙, 顺牙
- ◆ Finish is white Zinc plated, HDG, slef-color.
表面处理为电镀白锌, 热电镀, 本色

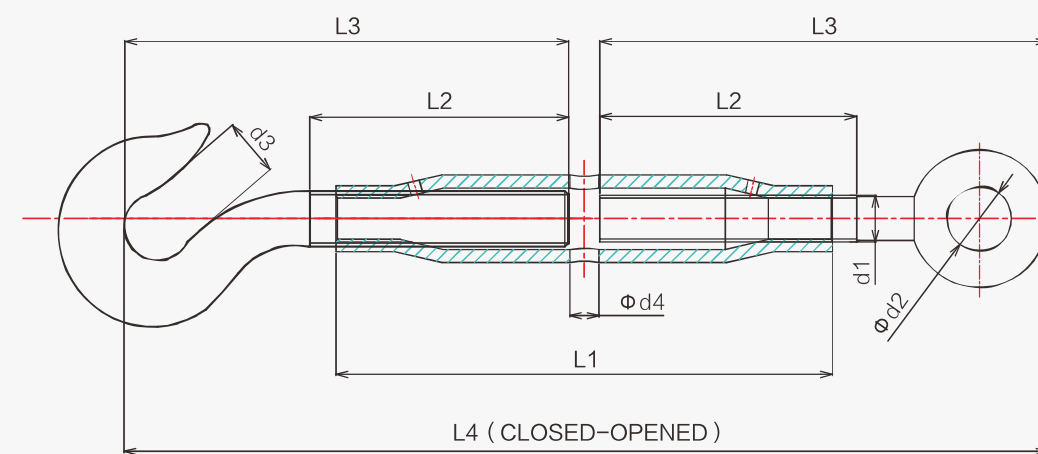


Prat No.	Thread d ₁	Φd ₂	Φd ₃	Φd ₄	L ₁	L ₂	L ₃	L ₄	Adjustable	Weight kg	Remark
TH0060	M6	8	4	6	110	55	77	160-250	90	0.160	
TH0080	M8	9.5	4	6	110	57	85	176-261	85	0.192	
TH0100	M10	12	4	8	125	68	105	220-315	95	0.325	
TH0120	M12	15	4	10	125	70	115	240-330	90	0.453	
TH0160	M16	19	4	10	170	88	144	298-418	120	0.956	
TH0200	M20	20	4	12	200	105	168	348-488	140	1.524	
TH0240	M24	25	4	12	255	135	215	430-610	180	3.163	
TH0300	M30	31	4	16	255	135	240	496-656	160	4.57	
TH0360	M36	44	6	16	295	160	277	570-750	180	9.2	

DIN 1478 turnbuckle Hook-eye / DIN 1478螺旋扣钩子-眼环

THE0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Hot drop forged hook eye with RH and LH thread.
两端钩子眼环螺纹为倒牙, 顺牙
- ◆ Finish is white Zinc plated, HDG, slef-color.
表面处理为电镀白锌, 热电镀, 本色

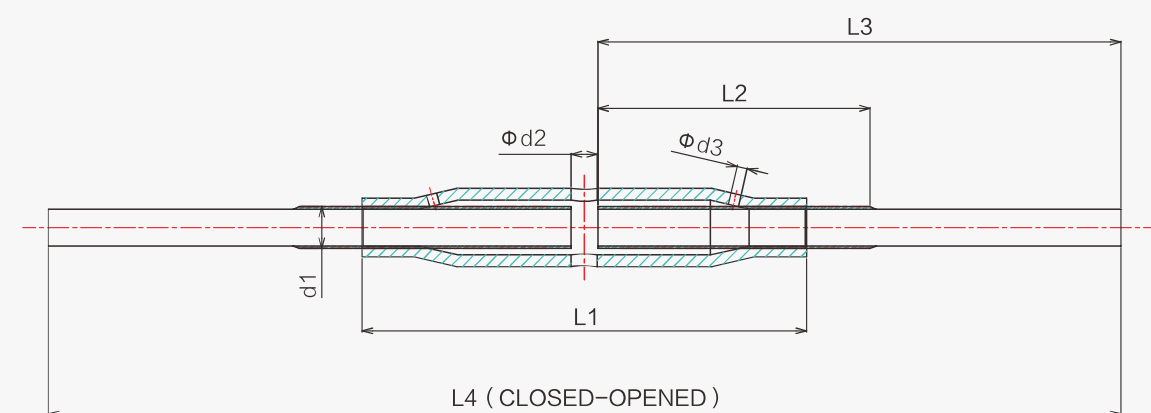
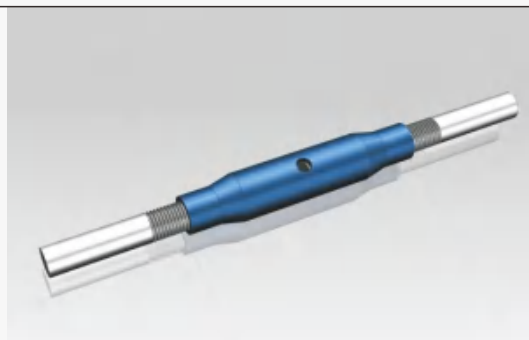


Prat No.	Thread d ₁	Φd ₂	Φd ₃	Φd ₄	L ₁	L ₂	L ₃	L ₄	Adjustable	Weight kg	Remark
THE0060	M6	9	8	6	110	55	77	160-250	90	0.128	
THE0080	M8	10	9.5	6	110	57	85	176-261	85	0.189	
THE0100	M10	14	12	8	125	68	105	220-315	95	0.325	
THE0120	M12	16	15	10	125	70	115	240-330	90	0.427	
THE0160	M16	22	19	10	170	88	144	298-418	120	0.931	
THE0200	M20	24	20	12	200	105	168	348-488	140	1.468	
THE0240	M24	28	25	12	255	135	215	430-610	180	2.899	
THE0300	M30	31	31	16	255	135	240	496-656	160	4.200	
THE0360	M36	38	44	16	295	160	277	570-750	160	8.280	

DIN 1478 turnbuckle Weld Studs / DIN 1478螺旋扣焊接丝杆

TS0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Weld studs with RH and LH thread.
两端焊接丝杆螺纹为倒牙, 顺牙
- ◆ Finish is white Zinc plated, HDG, slef-color.
表面处理为电镀白锌, 热电镀, 本色

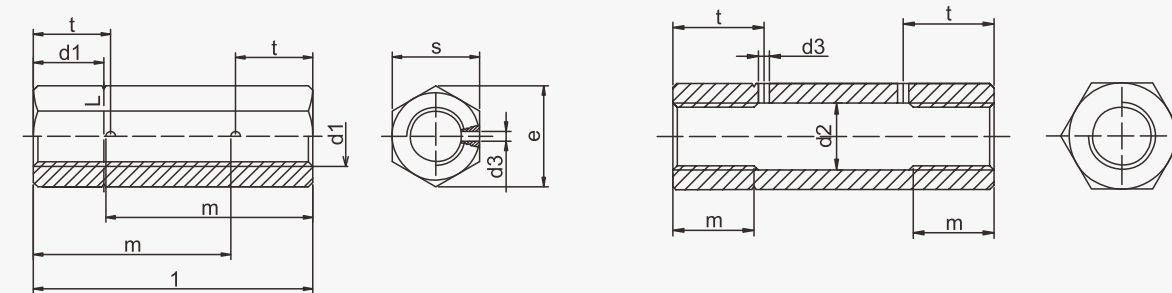
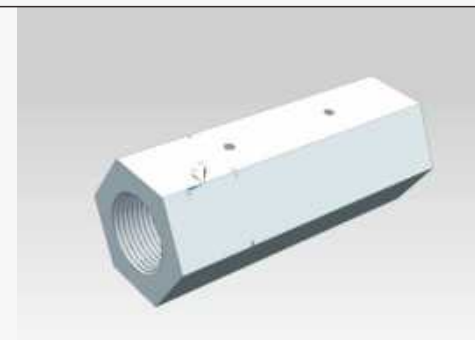


Prat No.	Thread d ₁	Φ d ₂	Φ d ₃	L ₁	L ₂ MIN	L ₃	L ₄	Adjustable	Weight kg	Remark
TS0060	M6	6	4	110	65	120	240-330	90	0.132	
TS0080	M8	6	4	110	65	120	240-325	85	0.194	
TS0100	M10	8	4	125	75	150	300-395	95	0.329	
TS0120	M12	10	4	125	75	150	300-390	90	0.422	
TS0160	M16	10	4	170	100	200	400-520	120	0.948	
TS0200	M20	12	4	200	120	220	400-540	140	1.468	
TS0240	M24	12	4	255	150	260	520-700	180	2.575	
TS0300	M30	16	4	255	160	260	520-680	160	3.860	
TS0360	M36	16	6	295	180	300	600-780	180	6.80	
TS0420	M42	20	6	330	200	350	700-900	200	10.90	

DIN 1479 turnbuckles / DIN 1479螺旋扣

TBNXX

- ◆ Material is available in carbon steel, stainless steel and others.
材质为碳钢, 不锈钢及其他
- ◆ Two ends are LH thread and RH thread with 6H tolerance.
两端螺纹为倒牙和顺牙, 6H精度
- ◆ Finish is white Zinc plated, HDG, slef-color.
表面处理为电镀白锌, 热电镀, 本色



Form A (A型) M6 to M16

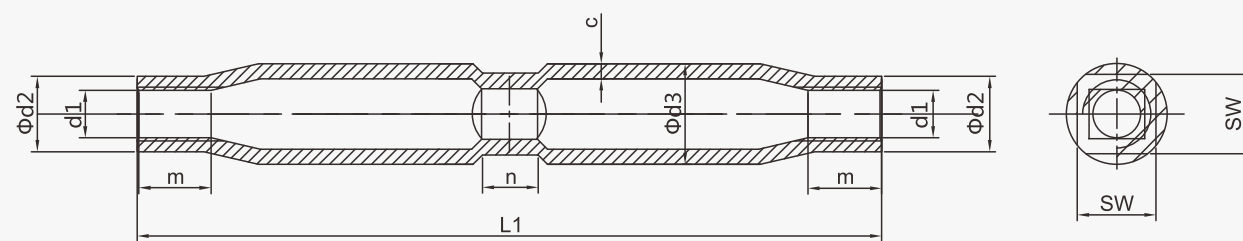
Form B (B型) M20 to M48

Prat No.	Thread d ₁	d ₂	d ₃	S	L	M	T	Weight kg
TBN06	M 6	---	4	10	30	22,5	9.5	
TBN08	M 8	---	4	13	35	25,0	12	
TBN10	M 10	---	4	16	45	33	14	
TBN12	M 12	---	4	18	55	40,0	17	
TBN14	M 14*	---	4	24	65	55	22	
TBN16	M 16	---	4	24	75	55	22	
TBN20	M 20	21	4	30	95	24	26	
TBN24	M 24	26	4	36	115	29	31	
TBN27	M 27*	32	4	41	120	32	31	
TBN30	M 30	32	4	46	125	36	38	
TBN36	M 36*		6	55	145	40		
TBN42	M 42*		6	65	165	44		
TBN48	M 48*		6	75	190	48		

Pressed square pipe turnbuckles / 压四方管体螺旋扣

TBHXX

- Material is available in carbon steel, stainless steel and others.
材质为碳钢, 不锈钢及其他
- Two ends are LH thread and RH thread with 6H tolerance.
两端螺纹为倒牙和顺牙, 6H精度
- Finish is white Zinc plated, HDG, slef-color.
表面处理为电镀白锌, 热电镀, 本色

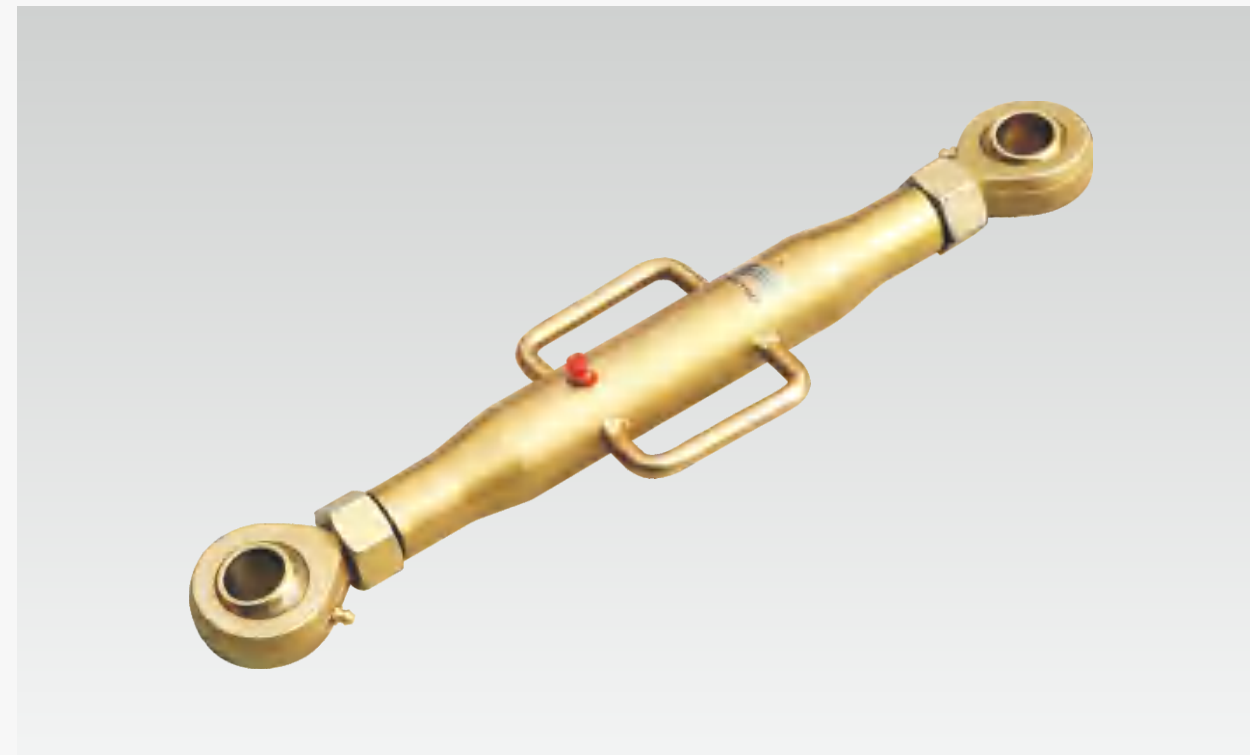


Prat No.	Thread d ₁	d ₂	d ₃	L ₁	m	c	SW	n	Weight kg
TBH12	M 12	16	20	200	15	3	16.8	16	0.26
TBH16	M 16	22.5	30	350	20	4.5	24	16	0.44
TBH20	M 20	27	33	350	24	5	—	—	
TBH24	M 24	32	42	350	29	5.6	31	24	1.64

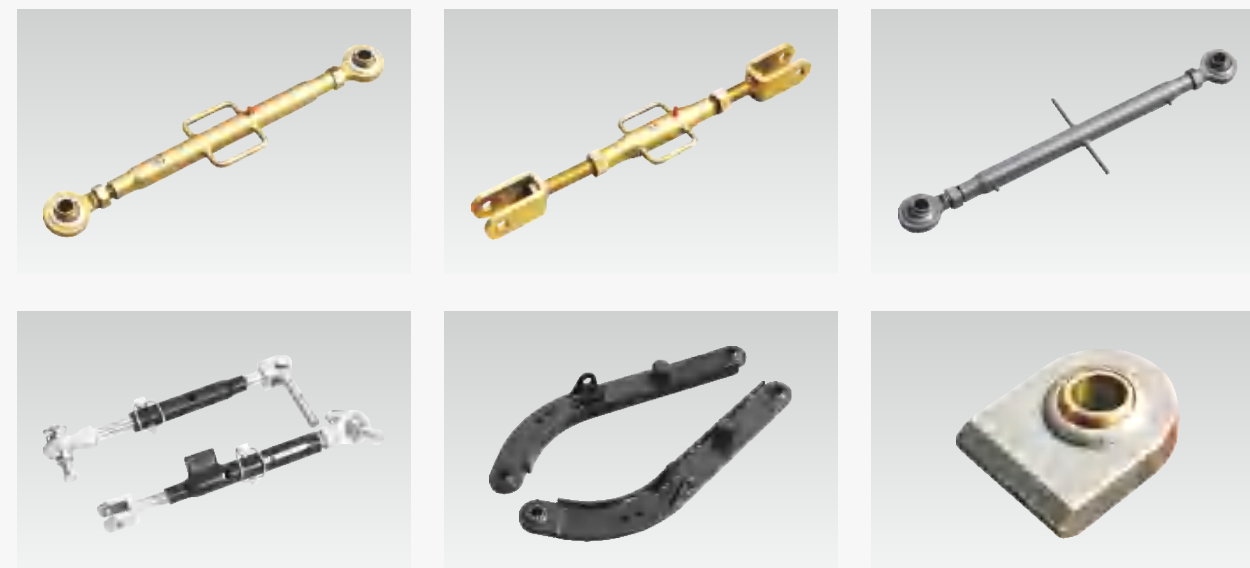
Customized pipe turnbuckle / 定制螺旋扣



Linkage / 悬挂连接件



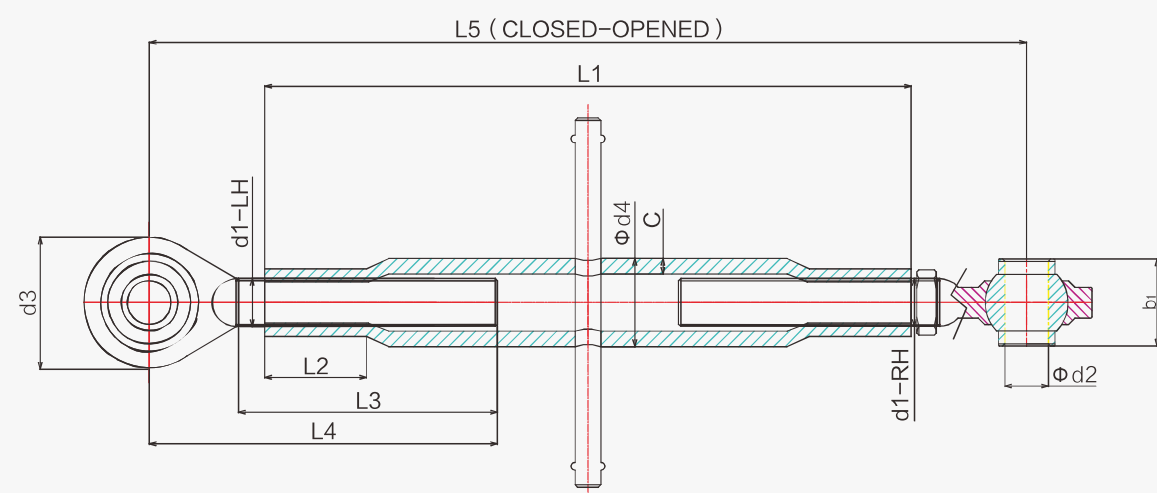
Professional processing technology of more than 15 year experience, Hot forgings, CNC precision machining, heat treatment and strict assembling procedure.
15年以上的专业级加工技术, 热锻件, 数控精密加工, 热处理和严格的组装程序。



Forged top links / 上拉杆总成

160XXX0

- ◆ Turnbuckle pipe is according to DIN1478 2005 version.
拉杆管体标准根据2005年DIN1478
- ◆ Two forged ball ends with RH and LH thread;
球 HRC40-45.
两端锻造球头为倒牙, 顺牙; 球硬度为HRC40-45
- ◆ Finish is yellow or white Zinc plated.
表面处理为电镀黄锌或白锌



Prat No.	Thread d ₁	Φd ₂	Φd ₃	Φd ₄	C	L ₁	L ₂	L ₃	L ₄	L ₅	b ₁	Weight kg	Remark
1602000	M20X2.5	16	48	34	5	190	30	90	126	280-415	26	16	
1602010	M20X2	20	62	34	5	365	30	100	132	455-580	38	20	
1602400	M24X3	19.3	62	42	5.6	200	35	130	185	320-490	44	19.3	
1602410	M24X2	25	60	42	5.6	200	35	100	137	300-410	31	25	
1602420	M24X3	25.7	75	42	5.6	435	35	165	220	555-780	51	25.7	
1602700	M27X3	25.7	64	42	5.6	422	40	155	210	550-760	44	25.7	
1602710	M27X3	25.7	75	42	5.6	450	40	165	220	580-800	51	25.7	
1603000	M30X3.5	19.3	62	51	6.3	450	45	175	230	580-930	44	19.3	
1603010	M30X3.5	25.7	75	51	6.3	500	45	165	220	630-960	51	25.7	
1603600	M36X3	25.7	87	63	8	600	50	185	245	750-1100	51	25.7	
1603610	M36X4	32	98	63	8	700	50	200	270	880-1300	51	32	

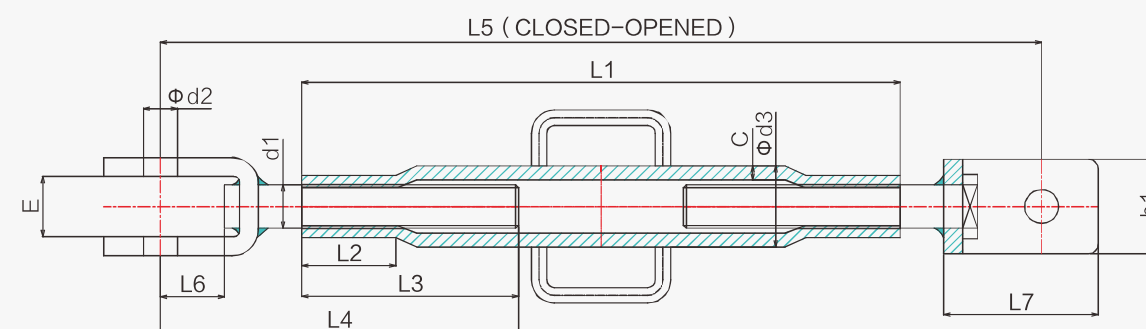
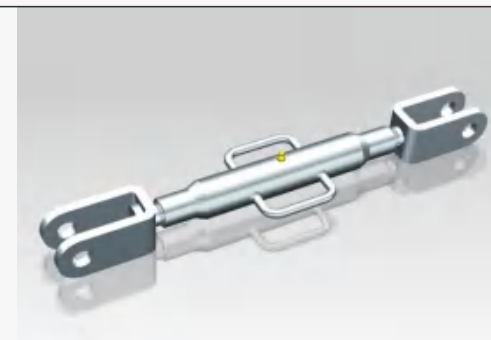


可选择焊接把手/Bended bar welded handle for your choice

Lift leveling arm links / 吊臂拉杆总成

180XXX0

- ◆ Turnbuckle pipe is according to DIN1478 2005 version.
拉杆管体标准根据2005年DIN1478
- ◆ Two welded U clevis with RH and LH thread.
两端焊接U叉为倒牙, 顺牙
- ◆ Finish is yellow or white Zinc plated.
表面处理为电镀黄锌或白锌

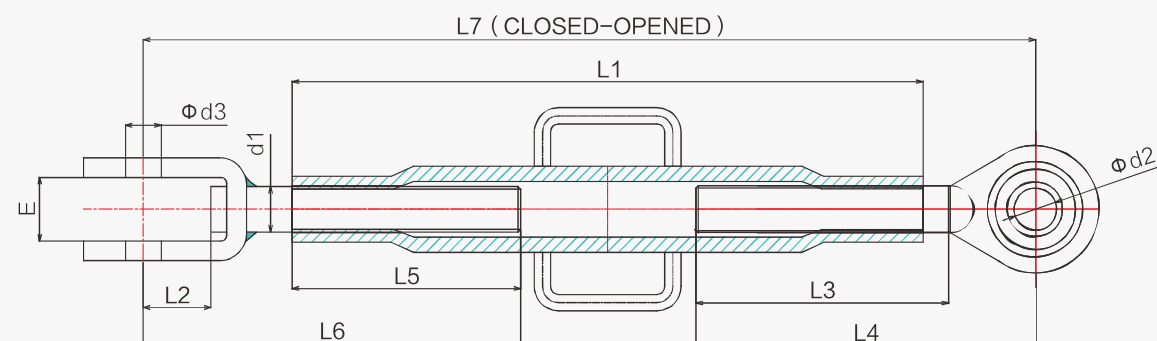
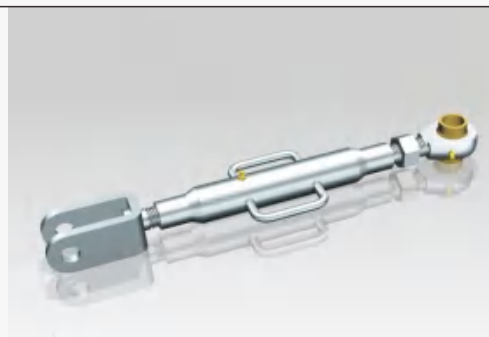


Prat No.	Thread d ₁	Φd ₂	Φd ₃	C	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	E	b ₁	Weight kg
1802000	M20 × 2.5	16	34	5	190	30	125	212	370-550	60	94	32	50	
1802010	M20 × 2	16	34	5	365	30	125	212	545-725	60	94	32	50	
1802400	M24 × 3	18	42	5.6	200	35	125	212	390-570	60	94	32	50	
1802410	M24 × 2	20.5	42	5.6	200	35	125	212	390-570	60	94	32	50	
1802420	M24 × 3	18	42	5.6	435	35	125	212	615-795	60	94	32	50	
1802700	M27 × 3	20.5	42	5.6	422	40	125	212	600-780	60	94	32	50	
1802710	M27 × 3	20.5	42	5.6	450	40	125	212	630-810	60	94	32	50	
1803000	M30 × 3.5	22	51	6.3	450	45	125	212	630-810	60	94	32	50	
1803010	M30 × 3.5	22	51	6.3	500	45	125	212	680-860	60	94	32	50	

Adjustable top links / 可调拉杆总成

170XXX0

- ◆ Turnbuckle pipe is according to DIN1478 2005 version.
拉杆管体标准根据2005年DIN1478
- ◆ Welded U clevis -forged ball end RH -LH thread.
焊接U叉-锻造球头 倒牙-顺牙
- ◆ Finish is yellow or white Zinc plated.
表面处理为电镀黄锌或白锌

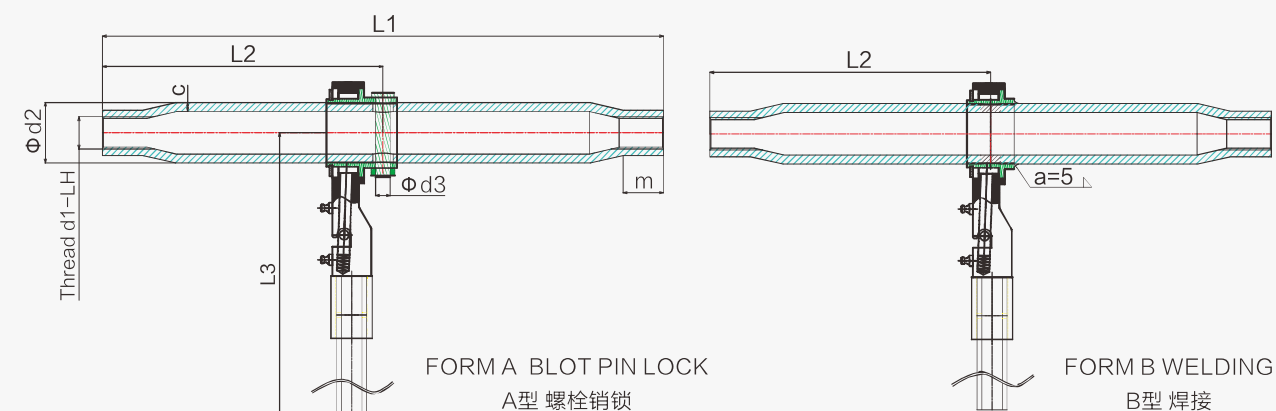


Prat No.	Thread d ₁	Φ d ₂	Φ d ₃	L ₁	L ₂	L ₃	L ₄	L ₅	L ₆	L ₇	E
1702000	M20 × 2.5	16	16	190	60	90	126	125	212	325-480	32
1702010	M20 × 2	20	16	365	60	100	132	125	212	505-570	32
1702400	M24 × 3	19.3	18	200	60	130	185	125	212	360-545	32
1702410	M24 × 2	25	18	200	60	100	137	125	212	340-495	32
1702420	M24 × 3	25.7	18	435	60	165	220	125	212	595-815	32
1702700	M27 × 3	19.3	20.5	422	60	155	210	125	212	582-782	32
1702710	M27 × 3	25.7	20.5	450	60	165	220	125	212	610-820	32
1703000	M30 × 3.5	19.3	22	450	60	175	230	125	212	610-820	32
1703010	M30 × 3.5	25.7	22	500	60	165	220	125	212	660-860	32

Ratchet Jacks / 棘轮千斤顶

16000XX

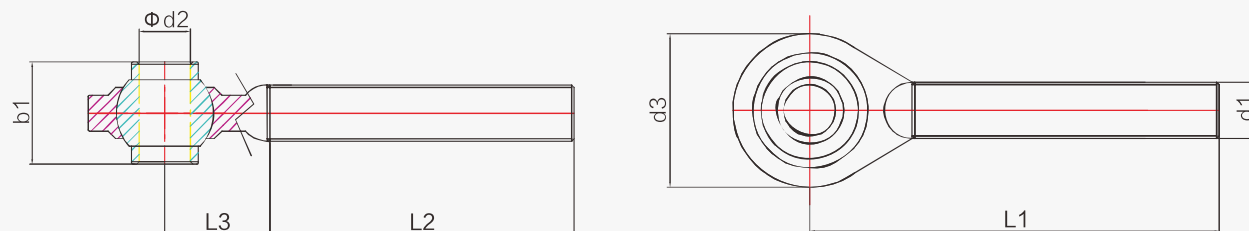
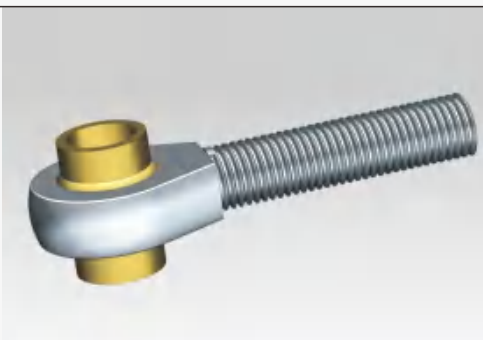
- ◆ Turnbuckle pipe is according to DIN1478 2005 version.
拉杆管体标准根据2005年DIN1478
- ◆ Ratchet wrench with extended pipe handle, heavy duty design.
棘轮扳手配延长加力杆, 重型负载设计
Two end fittings is forged ball ends or U clevis.
- ◆ 两端可配锻造球头, 叉子丝杠
Two designed assembly; welding and blot pin lock.
- ◆ 两种设计的组装, 焊接方式和螺栓销轴锁



Forged ball ends / 锻造球头

110XXX0

- ◆ Forged ball end with 13 degree, 15 degree movement design.
- ◆ 锻造杆端球头有13°，15°的运动空间设计
- ◆ Material is 45 steel, ball with HRC40-45.
- ◆ 材质为45钢，球体为热处理 HRC40-45
- ◆ The assembly of ball end should be move freely in house.
- ◆ 组装好后球头应在体内自由活动

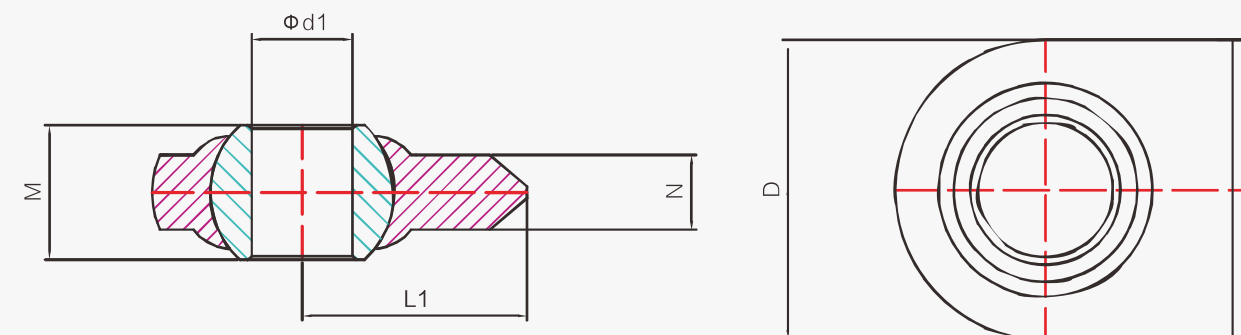
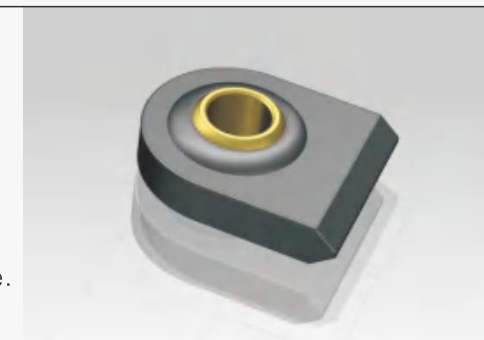


Prat No.	Thread d ₁	Φ d ₂	Φ d ₃	L ₁	L ₂	L ₃	b ₁	Remark
1102000	M20 × 2.5	16	48	126	90	36	26	
1102010	M20 × 2	20	62	132	100	32	38	
1102400	M24 × 3	19.3	62	185	130	55	44	
1102410	M24 × 3	25.7	75	137	100	37	51	
1102420	M27 × 3	19.3	62	220	165	55	44	
1102700	M27 × 3	25.7	67	210	155	55	51	
1102710	M30 × 3.5	19.3	62	220	165	55	44	
1103000	M30 × 3.5	25.7	75	230	175	55	51	
1103010	M36 × 3	25.7	80	220	165	55	51	
1103600	M36 × 4	32	98	245	185	55	51	
1103610	M42 × 3	32	96	270	200	70	51	

Lower lift forged weld-on ball / 下吊臂焊接球头

100XX00

- ◆ Forged ball end with 13 degree, 15 degree movement design.
- ◆ 锻造杆端球头有13°，15°的运动空间设计
- ◆ Material is 45 steel, ball with HRC40-45.
- ◆ 材质为45钢，球体为热处理 HRC40-45
- ◆ The assembly of ball end should be move freely in house.
- ◆ 组装好后球头应在体内自由活动



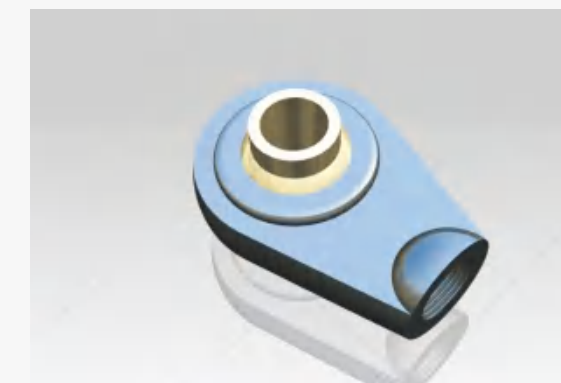
Weld to plate

Prat No.	Φ d ₁	L ₁	M	N	D	焊接钢厚度
1000100	16.5000	37.5	36	14	50	10
1000200	27	60	36	20	80	16

Ball joint end for top link/cylinder
to be weld female thread
焊接球头 用于拉杆/油缸



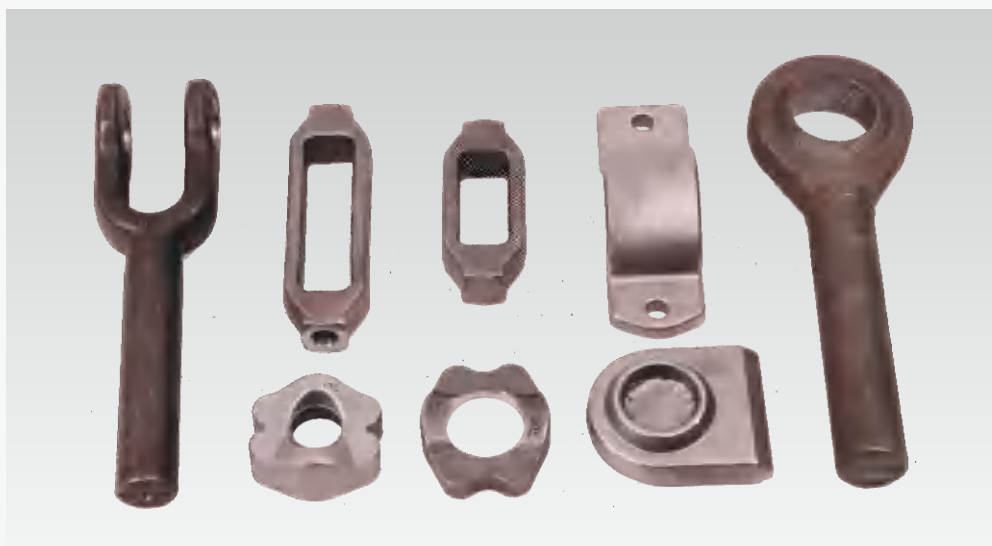
Ball joint end with/ 内螺纹球头接头



Forgings Technology / 锻造技术



Forgings Workshop
锻造车间图



Samples of forging
锻造样品图

Ratchet turnbuckle / 棘轮拉紧器



As a top designer and manufacturer, we have our company standard of ratchet turnbuckle, also can design for your special need.

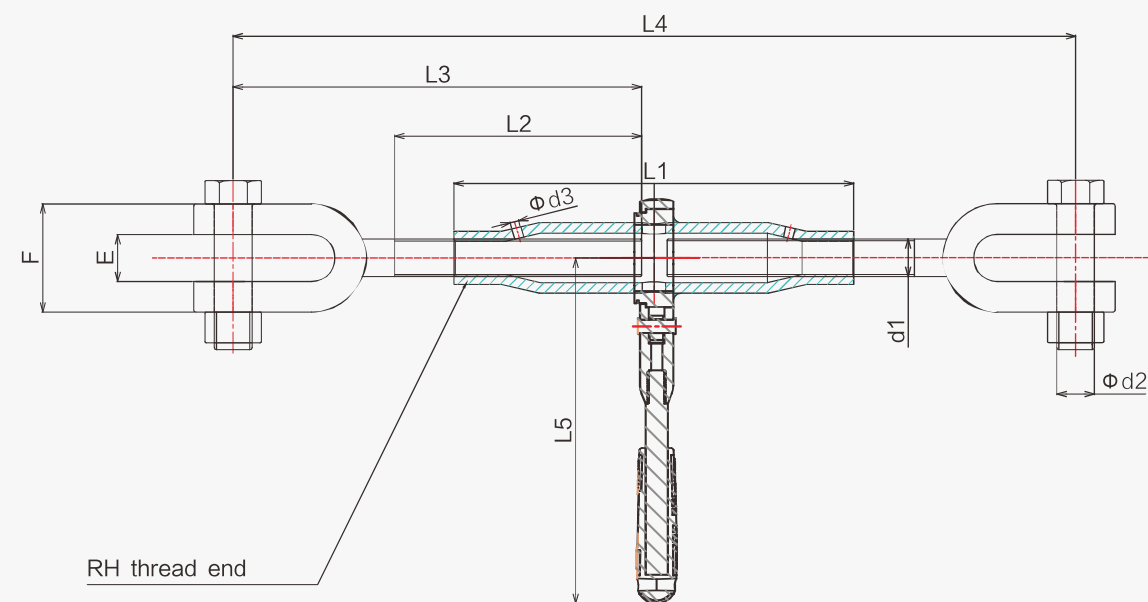
作为顶级的设计者和生产商, 我们有自己企业标准的拉紧器, 也可以根据您的特殊需求来设计。



LL Ratchet turnbuckle Jaw&Jaw / LL 棘轮拉紧器叉叉

RJ0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with rubber, operation of left /right hand directions.
棘轮扳手橡胶手柄, 左右方向操作
- ◆ Forged clevis jaw is carbon steel.
锻造叉子为碳钢

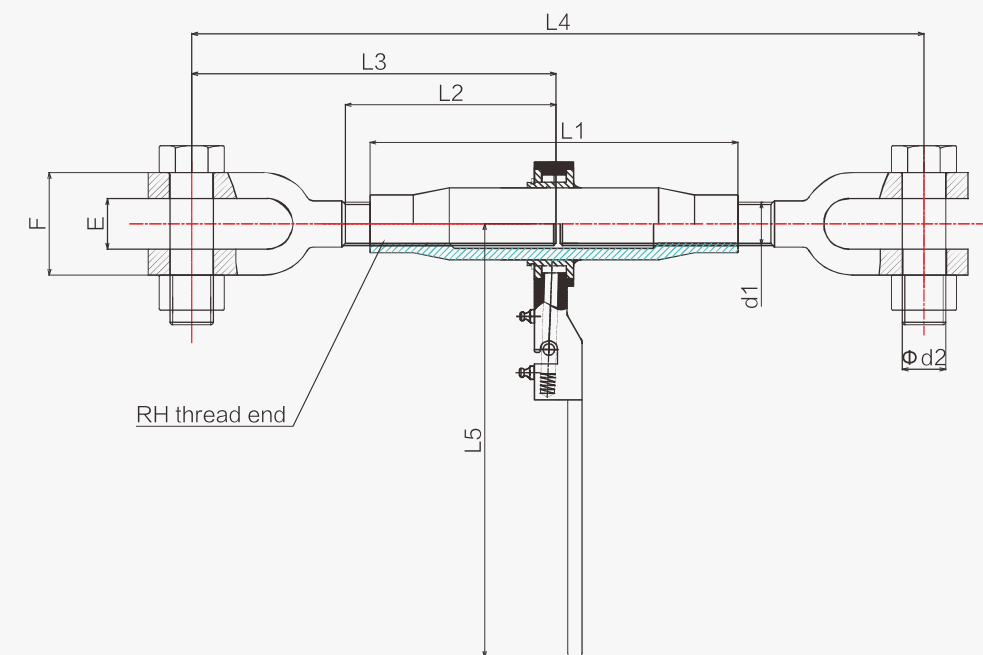


Prat No.	Thread d ₁	Φd ₂	Φd ₃	Φd ₄	L ₁	L ₂ Min	L ₃	L ₄	L ₅	E	F	M.B.L	Weight
RJ0160	M16	12.5	4	10	170	100	175	350-470	150	18	46	10 TON	2.12
RJ0200	M20	16.5	4	12	200	120	205	410-550	200	20	50	18 TON	2.82

L Ratchet turnbuckle Jaw&Jaw / L 棘轮拉紧器叉叉

RJ0XX1

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with plate, operation of left /right hand directions.
棘轮扳手板面手柄, 左右方向操作
- ◆ Forged clevis jaw is carbon steel
锻造叉子为碳钢

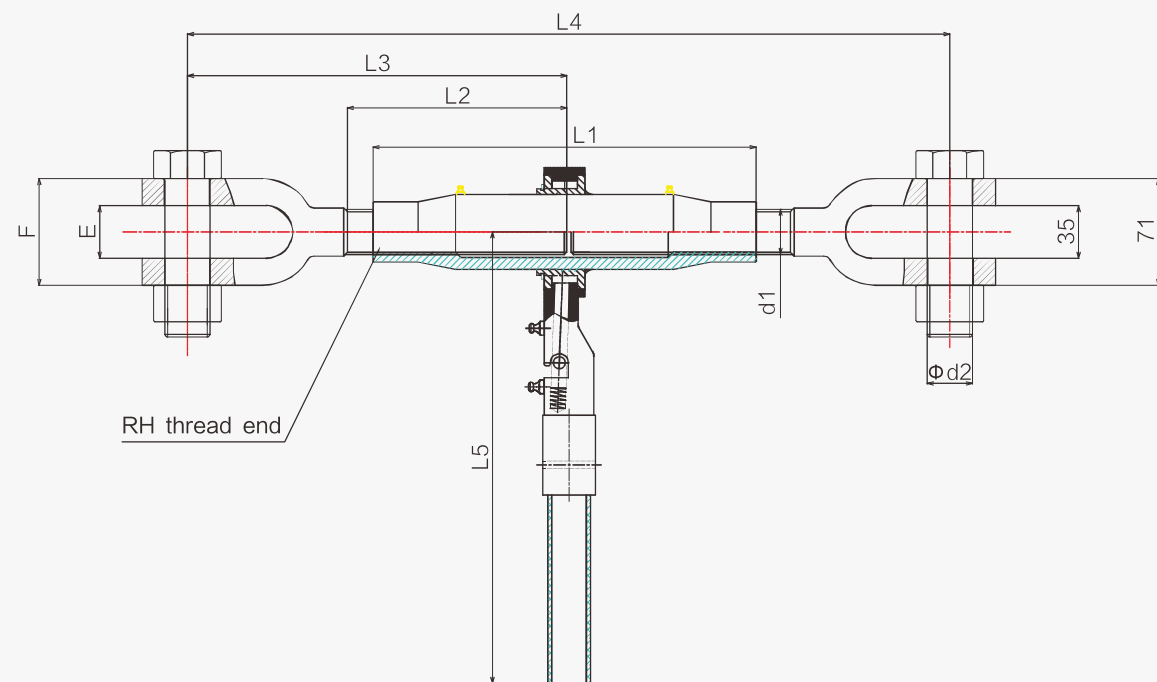
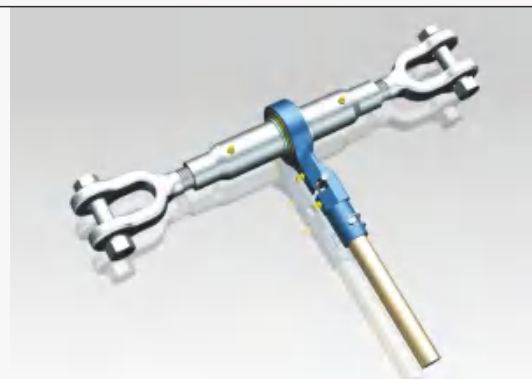


Prat No.	Thread d ₁	Φd ₂	L ₁	L ₂ MIN	L ₃	L ₄	L ₅	E	F	M.B.L	BLOT FOR Φd ₂	Weight
RJ0201	M20	16.5	200	120	205	410-550	280	20	50	18TON	M16 × 75	
RJ0241	M24	30	255	145	250	500-700	280	33	71	27TON	M20 × 85	

H Ratchet turnbuckle Jaw&Jaw / H 棘轮拉紧器叉叉

RJXX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with extended pipe, operation of left /right hand directions.
棘轮扳手加力杆手柄，左右方向操作
- ◆ Forged clevis jaw is carbon steel.
锻造叉子为碳钢

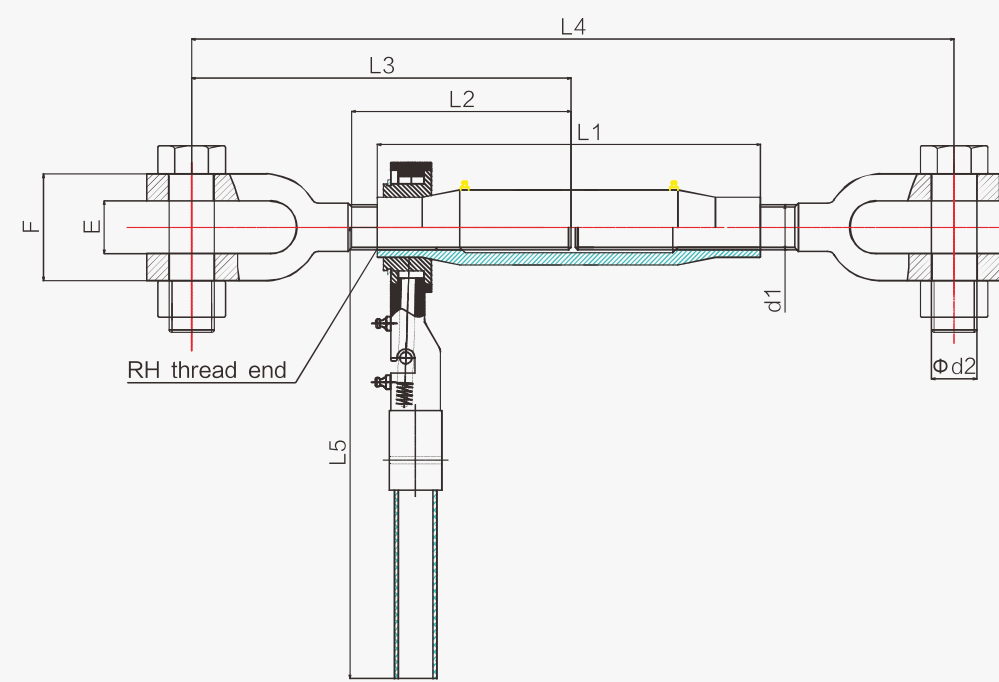


Prat No.	Thread d ₁	Φd ₂	L ₁	L ₂ MIN	L ₃	L ₄	L ₅	E	F	M.B.L	BLOT FOR Φd ₂	Weight
RJ0240	M24	30	255	145	250	500-700	300	33	71	27TON	M30	7.97
RJ0300	M30	30	255	145	250	500-690	300	33	71	40TON	M30	8.98

HH Ratchet turnbuckle Jaw&Jaw / HH 棘轮拉紧器叉叉

RJ0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with extended pipe, operation of left /right hand directions.
棘轮扳手加力杆手柄，左右方向操作
- ◆ Forged clevis jaw is carbon steel.
锻造叉子为碳钢

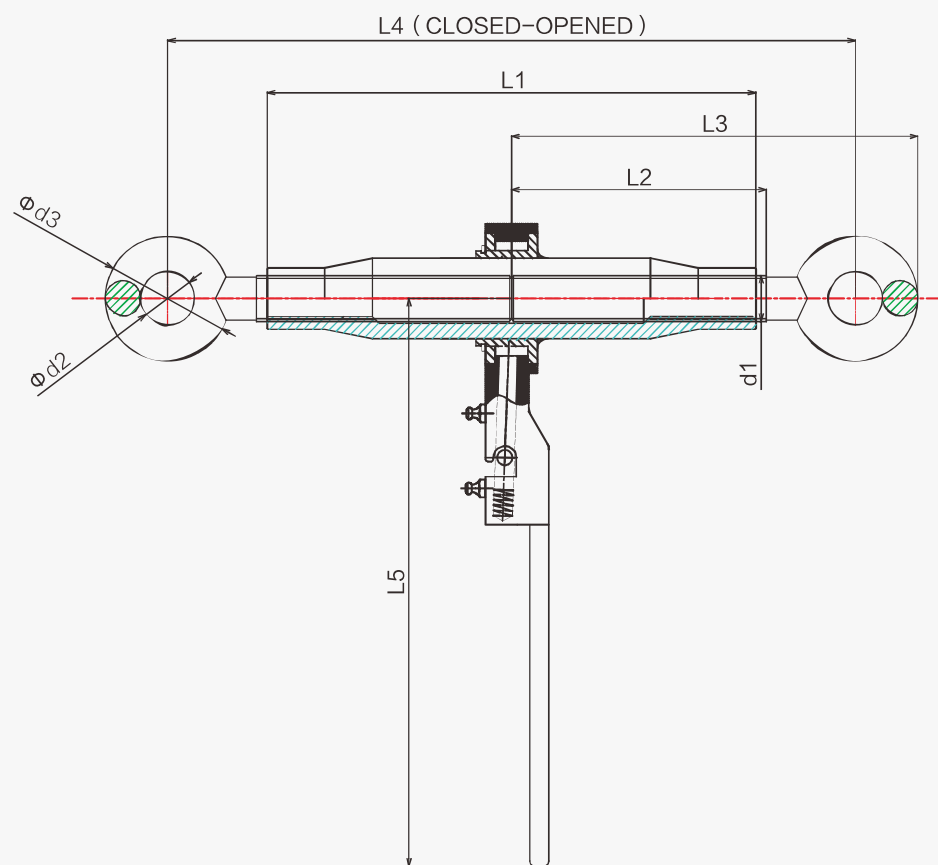
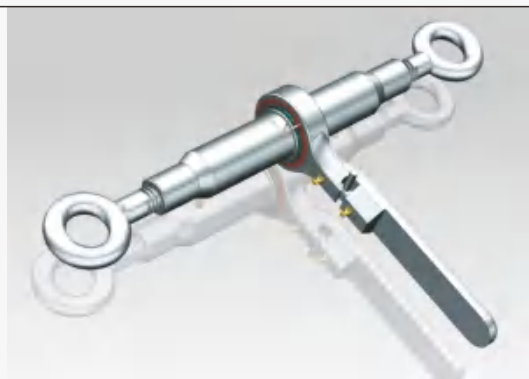


Prat No.	Thread d ₁	Φd ₂	L ₁	L ₂ MIN	L ₃	L ₄	L ₅	E	F	M.B.L	BLOT FOR Φd ₂	Weight
RJ0360	M36	37	295	160	330	660-840	400	57	100	60TON	M36	
RJ0420	M42	43	330	200	310	620-820	400	60	120	80TON	M42	
RJ0480	M48	50	355	220	332	664-874	400	64	142	96TON	M50	

Ratchet turnbuckle eye&eye / 棘轮拉紧器眼环

RE0XX1

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with plate, operation of left /right hand directions.
棘轮扳手板面手柄, 左右方向操作
- ◆ Forged eyeblot is carbon steel.
锻造眼环为碳钢

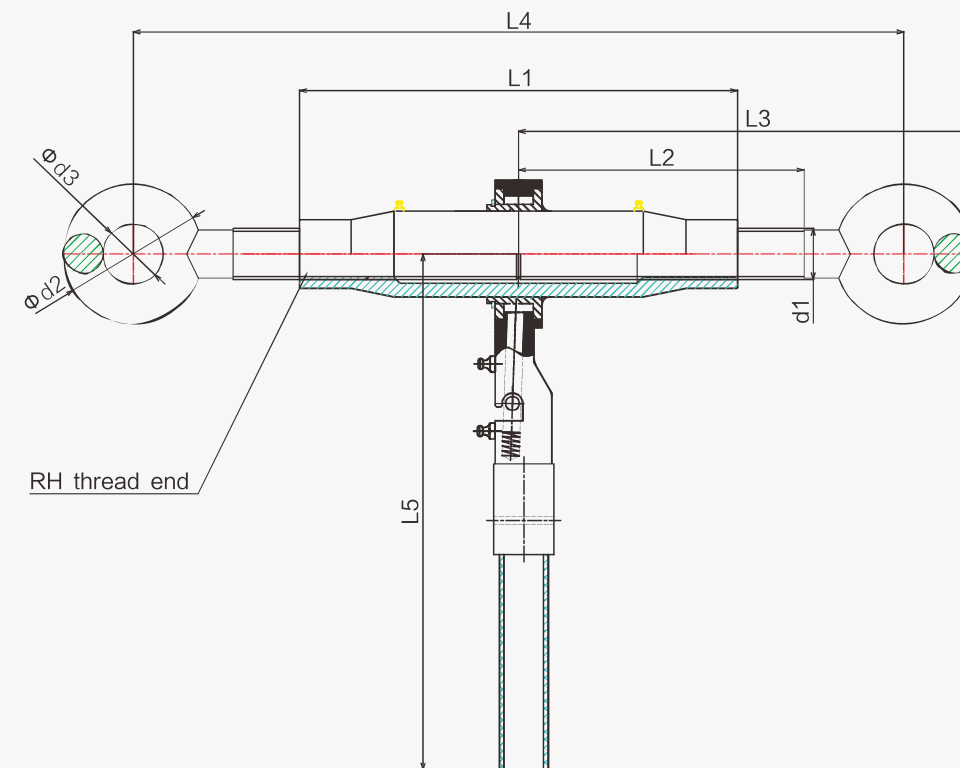


Prat No.	Thread d ₁	Φ d ₂	Φ d ₃	L ₁	L ₂ MIN	L ₃	L ₄	L ₅	Adjustable	Weight kg	Remark
RE0201	M20	24	52	200	105	168	284-424	280	140		
RE0241	M24	28	65	255	135	212	388-568	280	180		

Ratchet turnbuckle eye&eye / 棘轮拉紧器眼环

RE0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with extended pipe, operation of left /right hand directions.
棘轮扳手加力杆手柄, 左右方向操作
- ◆ Forged clevis jaw is carbon steel.
锻造眼环为碳钢

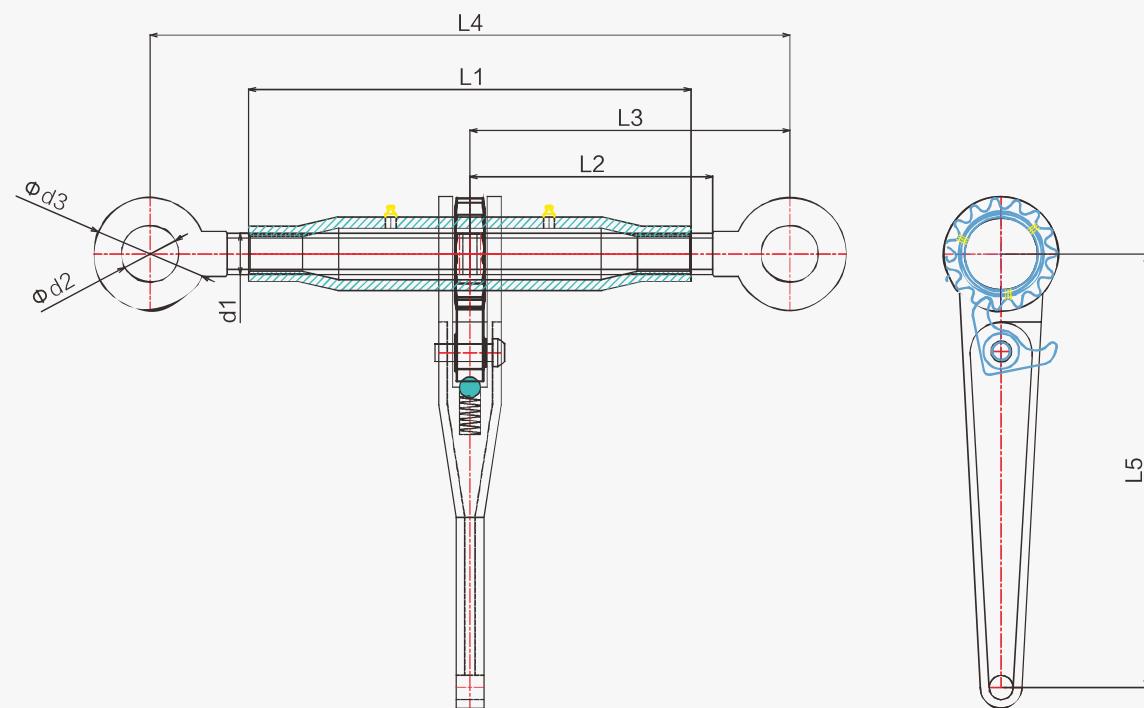


Prat No.	Thread d ₁	Φ d ₂	Φ d ₃	L ₁	L ₂ MIN	L ₃	L ₄	L ₅	Adjustable	Weight kg	Remark
RE0240	M24	28	65	255	135	212	424-604	250	180		
RE0300	M30	31	71	255	135	224	448-608	400	160		
RE0360	M36	38	94	295	160	277	554-734	400	180		

Ratchet turnbuckle eye&eye / 棘轮拉紧器眼环

RE1XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with standard, operation of left /right hand directions.
棘轮扳手标准版, 左右方向操作
- ◆ Forged clevis jaw is carbon steel.
锻造眼环为碳钢

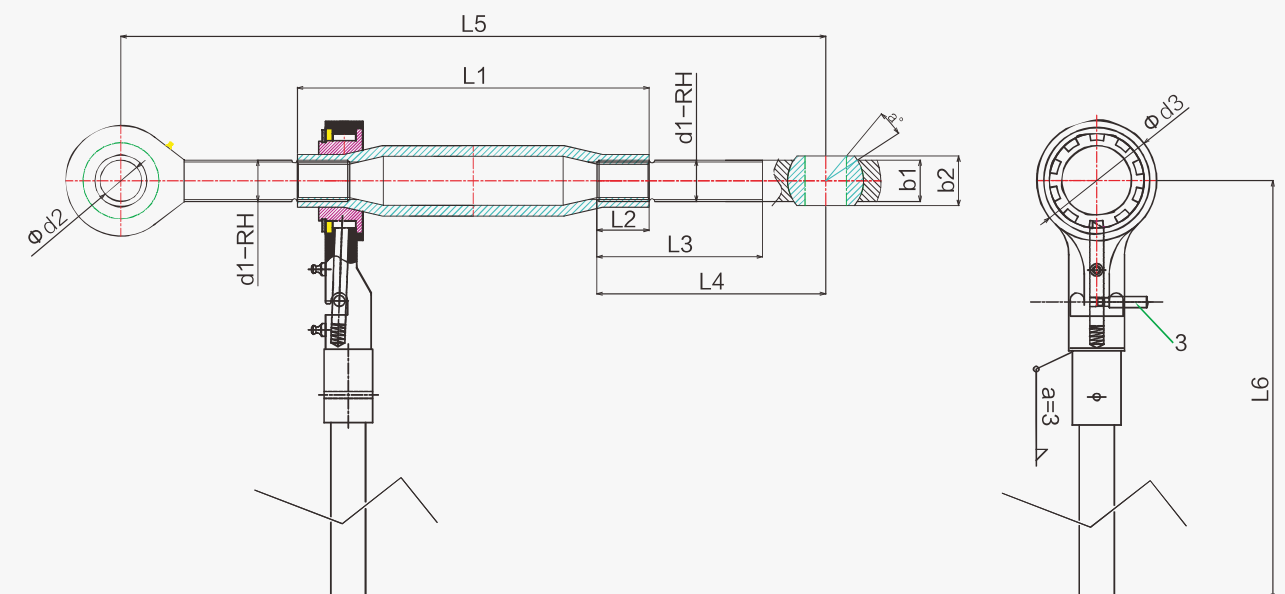


Prat No.	Thread d ₁	Φd ₂	Φd ₃	L ₁	L ₂ MIN	L ₃	L ₄	L ₅	Adjustable	Weight kg	Remark
RE1200	M20	24	52	200	105	168	336-476	250	140		
RE1240	M24	28	65	255	135	212	424-604	250	180	4.12	
RE1300	M30	31	71	255	135	224	448-608	350	160		
RE1360	M36	38	94	295	160	277	554-734	350	180		

Ratchet turnbuckle rod ends / 棘轮拉紧器杆端轴承

RE0XX0

- ◆ Turnbuckle is according to DIN1478 2005 version.
螺旋扣标准根据2005年DIN1478
- ◆ Ratchet handle with extended pipe, operation of left /right hand directions.
棘轮扳手加力杆手柄, 左右方向操作
- ◆ Forged rod end is carbon steel, ball HRC40-45.
锻造杆端轴承为碳钢, 球头HRC40-45



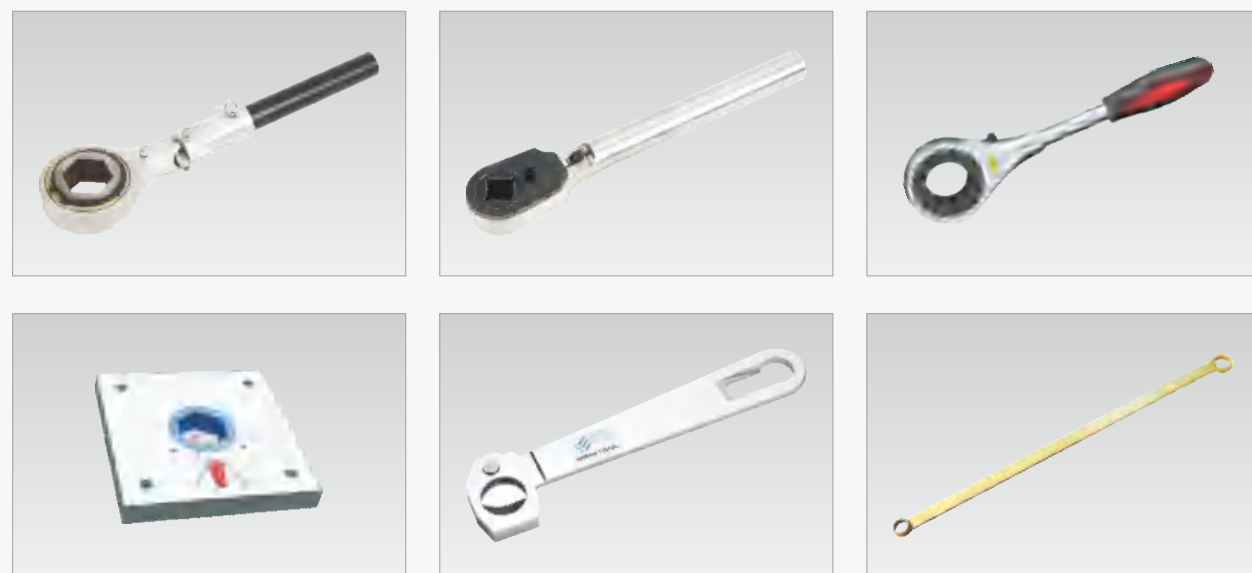
Prat No.	Thread d ₁	Φd ₂	Φd ₃	L ₁	L ₂ MIN	L ₃	L ₄	L ₅	L ₆	b ₁	b ₂	a°
RE0240	M24 × 3	25	86	255	30	100	137	300	400	22	31	15
RE0300	M30 × 3.5	30	86	255	35	120	165	400	400	25	37	17
RE0360	M36 × 4	35	86	295	40	150	208	400	500	28	42	17

Spanners & Ratchet wrenches / 扳手及棘轮扳手

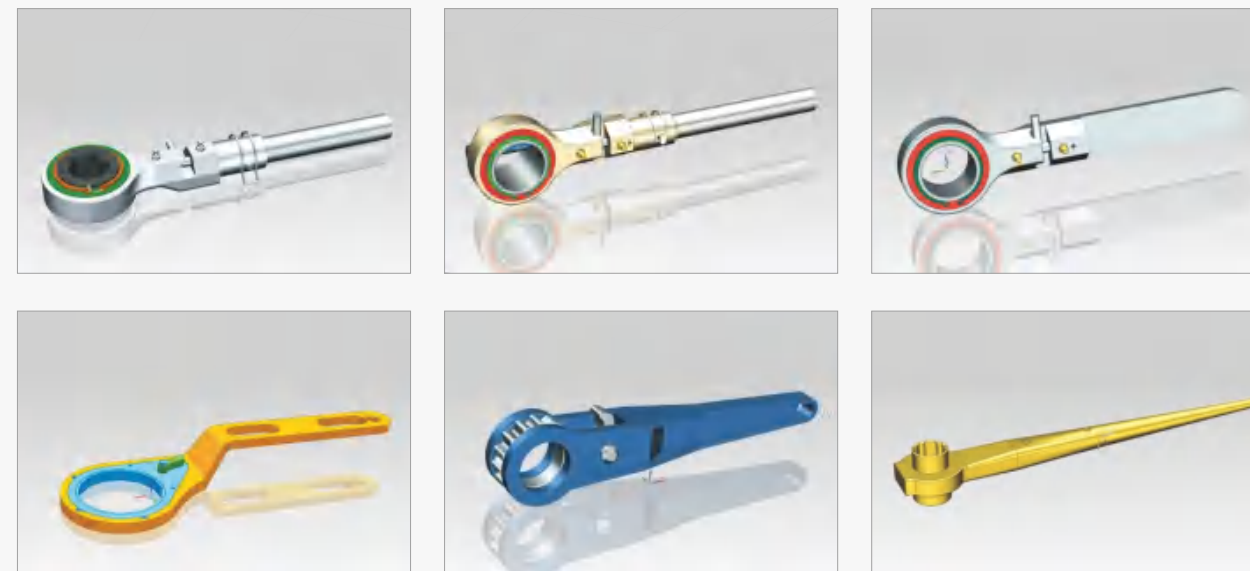


We can design the Industrial ratchet wrench with heavy duty, big size and speical purposes for original equipment manufacturers.

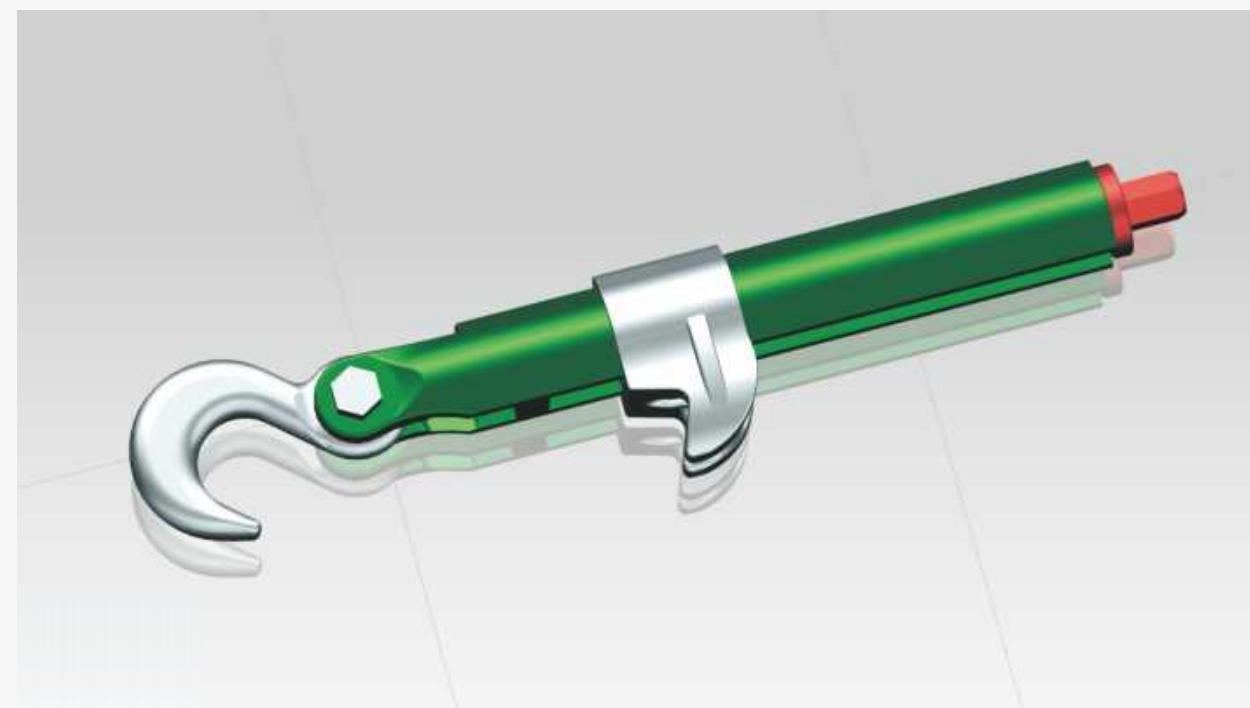
能够设计工业级的棘轮扳手，重型，大尺寸和特殊需求来满足原始设备生产商的要求。



Industrial ratchet wrench / 工业级棘轮扳手



Speedking / 快速收紧器



Flange clamps
法兰夹

Turnbuckle and assembly
螺旋扣及总成

Tractor linkage
拖拉机悬挂件

Ratchet Turnbuckle
棘轮收紧器

Industrial spanner & ratchet wrench
工业级扳手及棘轮扳手

Shaft
轴

Shaft/轴



轴是机械中常见的重要零件，用于支撑旋转部件并传递运动和动力。

从结构上看，轴可以分为直轴、曲轴、挠性轴等。直轴是最常见的类型，通常呈直线形状。曲轴则用于将旋转运动转换为往复直线运动，例如在内燃机中。挠性轴具有较好的挠性，能够在弯曲的情况下传递动力。

轴的材料选择取决于多种因素，如轴的工作条件、载荷性质、转速高低、尺寸大小等。常见的轴材料包括碳素钢、合金钢等。

在设计轴时，需要考虑轴的强度、刚度、耐磨性、振动稳定性等因素。强度计算包括扭转强度和弯扭合成强度等。刚度则要确保轴在工作时不会产生过大的变形。

轴上通常还会加工出各种结构，如轴肩、轴环、键槽等，以实现轴与其他零件的连接和定位。欢迎各位客户来图来样定制。



Shafts are common and important parts in machinery, used to support rotating parts and transmit motion and power.

From the structural point of view, the shaft can be divided into straight shaft, crankshaft, flexible shaft and so on. The straight axis is the most common type and is usually in a straight line shape. The crankshaft is used to convert rotational motion into reciprocating linear motion, for example in internal combustion engines. The flexible shaft has good flexibility and can transmit power in the case of bending.

The material selection of the shaft depends on a variety of factors, such as the working conditions of the shaft, the nature of the load, the speed of the shaft, the size and so on. Common shaft materials include carbon steel, alloy steel and so on.

When designing the shaft, it is necessary to consider the strength, stiffness, wear resistance, vibration stability and other factors. The strength calculation includes torsional strength and flexural strength. Stiffness is to ensure that the shaft does not produce excessive deformation during operation.

Various structures are usually machined on the shaft, such as shaft shoulders, shaft rings, keyways, etc., to realize the connection and positioning of the shaft and other parts.

Welcome customers to draw to sample customization.

