



TECHNICAL CHARACTERISTICS



Reference Standard

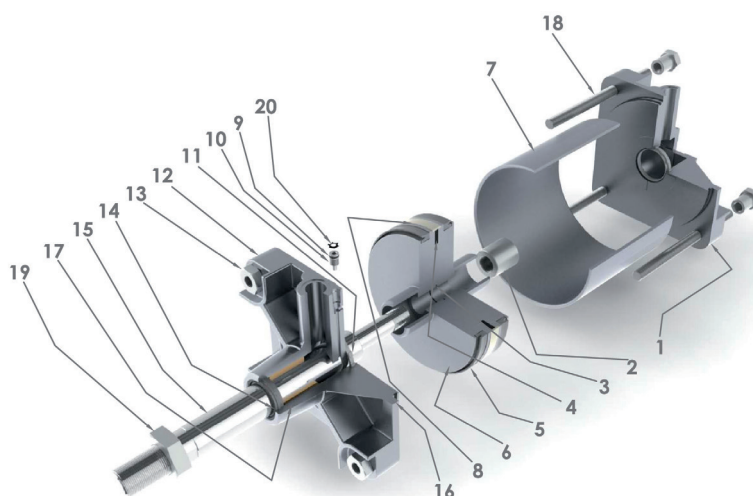
II 2 GD h T6 -20°C<Tamb<80°C



1907/2006
REACH

2011/65/CE
RoHS

SILICON
FREE



Pressure

1 bar (0.1 MPa)
10 bar (1 MPa)



Temperature

0 °C (-20 °C with dry air)
+ 80 °C



Fluidi compatibili

Aria compressa filtrata lubrificata e
non lubrificata



Alesaggi

160 - 200 - 250 - 320 mm



Corse Standard

corse da 25 a 1000 mm



Sensors recommended

DT



Functioning

Double acting, cushioned,
magnetic (non-magnetic upon
request), single or double end rod.



Materiali e componenti

1. Rear head Die-casted Sandblasted aluminium
2. Zinc-plated steel Nut
3. O-ring NBR or FKM
4. Magnet Bonded ferrite
5. Piston seal in Polyurethane or FKM
6. Piston in Aluminium
7. Tube Anodized aluminium
8. Piston guide in Acetal resin
9. O-ring in NBR o FKM
10. Cushioning screw Galvanized steel
11. Cushioning seal in Polyurethane or FKM
12. Front head Die-casted Sandblasted aluminium
13. Fixing screw Galvanized steel
14. Rod seal in Polyurethane or FKM
15. Rod Chromium plated steel
16. O-ring in NBR or FKM
17. Bush in Sintered bronze
18. Tie rod Galvanized steel
19. Rod nut Galvanized steel
20. Elastic ring made in steel



Sensor adapter

EXF



Series	Ø mm	Stroke	Profile	Special version
E H	1 6 0	0 0 2 5	T	V S
• EH Double Acting Cushioned Magnetic • EL Double Acting Cushioned Magnetic with Double Rod End	160 200 250 320	0025 0320 0050 0350 0075 0400 0080 0450 0100 0500 0125 0600 0150 0700 0160 0800 0200 0900 0250 1000 0300 Intermediate or higher strokes are available upon request. Maximum stroke 2700 mm..	T Barrel in aluminium round profile with tie rods	VS Only Rod Seals in FKM IS Stainless Steel Rod V All FKM Seals R Metal Scraper

Ø mm	Stroke mm																				
	25	50	75	80	100	125	150	160	200	250	300	320	350	400	450	500	600	700	800	900	1000
160	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
200	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
250	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
320	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

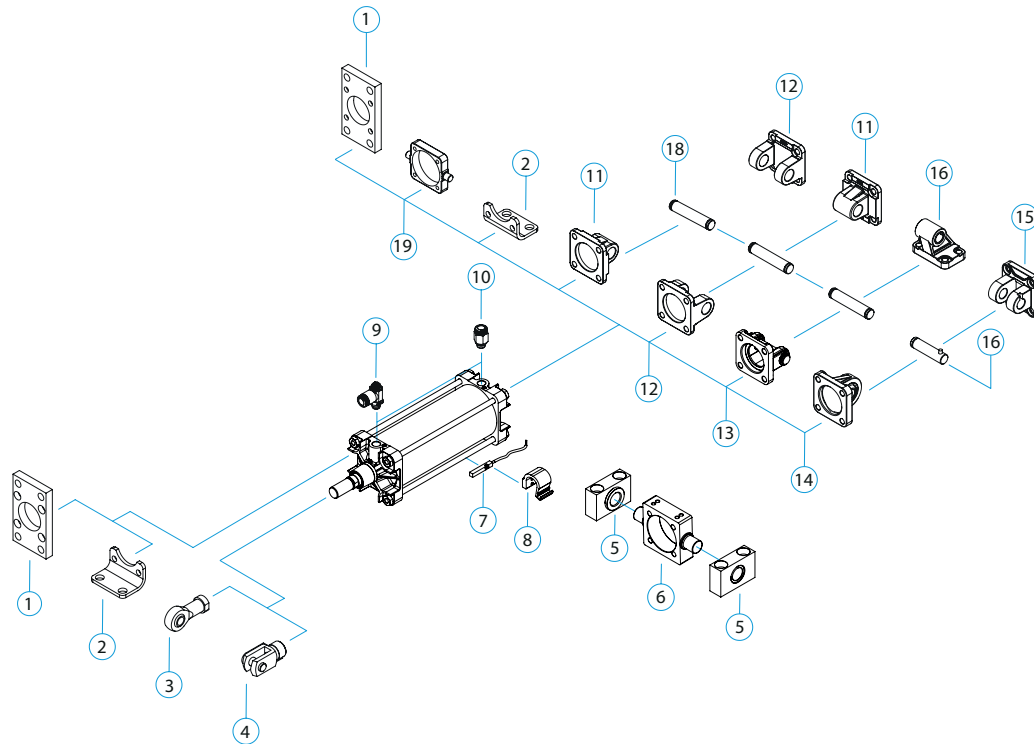
THRUST AND TRACTION FORCES													
Cylinder	Rod	Effective area	Working pressure										
Ø	Ø	mm²	bar										
			1	2	3	4	5	6	7	8	9	10	
Developed force													
160	40	S	= 20096	1774	3548	5322	7097	8871	10645	12419	14194	15968	17742
		T	= 18840	1663	3326	4990	6653	8316	9980	11643	13307	14970	16633
200	40	S	= 31440	2772	5544	8316	11089	13861	16633	19406	22178	24950	27723
		T	= 30144	2661	5322	7984	10645	13307	15968	18629	21291	23952	26614
250	50	S	= 48750	4331	8663	12995	17326	21658	25990	30322	34653	38985	43317
		T	= 46800	4158	8316	12475	16663	20792	24950	29109	33267	37426	41584
320	63	S	= 78872	7097	14194	21291	28388	35485	42582	49679	56776	63873	70971
		T	= 76776	6822	13644	20466	27288	34110	40932	47754	54576	61398	68220

S Thrust; **T** Traction

CYLINDER AIR CONSUMPTION													
Cylinder	Rod	Effective area	Working pressure										
Ø	Ø	mm²	bar										
			1	2	3	4	5	6	7	8	9	10	
Air consumption per 10 mm of stroke													
160	40	S	= 20096	0,402	0,603	0,804	1,005	1,206	1,407	1,608	1,809	2,010	2,211
		T	= 18840	0,377	0,565	0,754	0,942	1,130	1,319	1,507	1,696	1,884	2,072
200	40	S	= 31440	0,628	0,942	1,256	1,570	1,884	2,198	2,512	2,826	3,140	3,454
		T	= 30144	0,603	0,904	1,206	1,507	1,809	2,110	2,412	2,713	3,014	3,316
250	50	S	= 48750	0,981	1,472	1,963	2,453	2,948	3,434	3,925	4,415	4,906	5,400
		T	= 46800	0,942	1,413	1,884	2,355	2,826	3,297	3,768	4,239	4,710	5,181
320	63	S	= 78872	1,610	2,411	3,215	4,020	4,820	5,626	6,430	7,234	8,038	8,843
		T	= 76776	1,545	2,320	3,100	3,863	4,630	5,408	6,181	6,954	7,726	8,450

S Thrust; **T** Traction

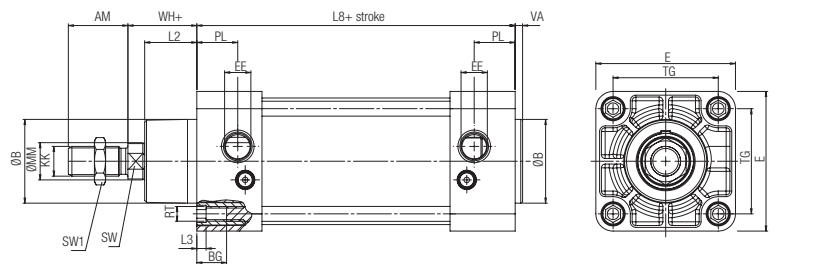
FIXING ELEMENTS AND ACCESSORIES - SERIES E



1	FLANGE - VFL
2	LOW-RISE PEDESTAL - VCP
3	ROD ENDS SELF-LUBRICATING - TF
4	YOKE WITH LOCABLE PIN - FC
5	SUPPORT FOR INTERMEDIATE HINGE - VSI
6	INTERMEDIATE HINGE FOR THREADED TIE-RODS - VCNT
7	MAGNETIC SWITCHES DT - REED - DF - DT
8	BRACKET FOR DSL - DSH - DT - EXF
9	FLOW REGULATOR
10	QUICK CONNECTOR
11	MALE CLEVIS WITH SELF-LUBRICATING BUSHES - VCN
12	FEMALE HINGE WITH SELF-LUBRICATING BUSHES - VCF
13	FEMALE CLEVIS BRACKET - VCH
14	NARROW MALE HINGE WITH ARTICULATED HEAD DIN648K - VCS
15	NARROW FEMALE HINGE FOR SQUARE JOINT WITH ARTICULATED HEAD DIN648K - VCD
16	SQUARE JOINT - VAS
17	PIN ANTI-ROTATION FOR NARROW FEMALE HINGE VCD - VPS
18	PIN WITH SEEGER - VPE
19	CLEVIS BRACKET - KF14

EH T

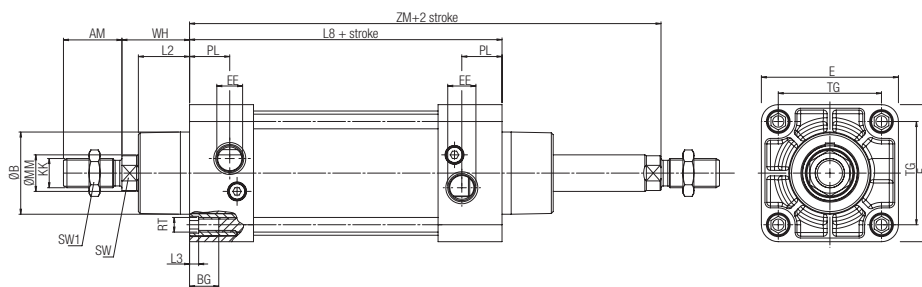
DOUBLE ACTING CUSHIONED MAGNETIC



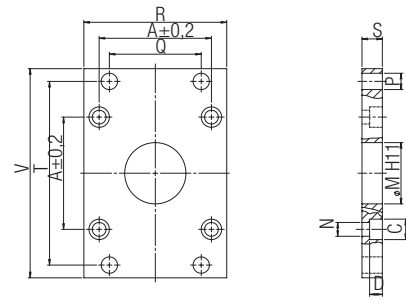
Ø	Ø B	VA	L2	WH	Ø MM	SW	KK	AM	L8	BG	RT	E	TG	EE	PL	L3	ZM	SW1
160	65	6	55	80	40	36	M36X2	72	180	24	M16	180	140	G3/4	29	0	340	55
200	75	6	60	95	40	36	M36X2	72	180	24	M16	220	175	G3/4	29	0	370	55
250	90	10	75	105	50	46	M42X2	84	200	25	M20	275	220	G1"	31	0	410	65
320	110	10	90	120	63	55	M48X2	96	220	30	M24	350	270	G1"	30	0	460	75

EL T

DOUBLE ACTING CUSHIONED MAGNETIC WITH DOUBLE ROD END

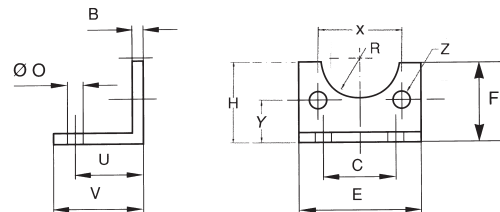


Ø	Ø B	VA	L2	WH	Ø MM	SW	KK	AM	L8	BG	RT	E	TG	EE	PL	L3	ZM	SW1
160	65	6	55	80	40	36	M36X2	72	180	24	M16	180	140	G3/4	29	0	340	55
200	75	6	60	95	40	36	M36X2	72	180	24	M16	220	175	G3/4	29	0	370	55
250	90	10	75	105	50	46	M42X2	84	200	25	M20	275	220	G1"	31	0	410	65
320	110	10	90	120	63	55	M48X2	96	220	30	M24	350	270	G1"	30	0	460	75

FIXING ELEMENTS AND ACCESSORIES
VFL
FLANGE


Aignep •	Aignep ■	Univer •	Ø	Ø M	P	S	D	C	N	A	Q	R	T	V
VFL 160	-	KF-12160	160	65	18	20	10.5	26	17	140	115	180	230	260
VFL 200	-	KF-12200	200	75	22	25	12.5	26	17	175	135	220	270	300
VFL 250	-	-	250	90	26	25	14.5	33	22	220	165	285	330	400
VFL 320	-	-	320	110	33	30	15	39	26	270	200	350	400	470

- Material: Steel
- Material: Stainless steel
- Screw: DIN6912

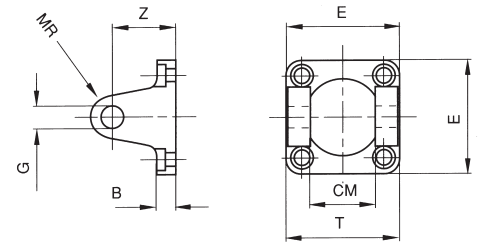
VCP
LOW RISE PEDESTAL


Aignep •	Aignep ■	Univer •	Ø	B	C	E	F	O	U	V	R	Z	X	Y	H
VCP 160	-	-	160	9	115	180	115	18.5	60	75	32.5	18	140	45	115
VCP 200	-	-	200	12	135	220	135	24	70	100	37.5	18	175	47.5	135
VCP 250	-	-	250	14	165	270	165	26	75	100	45	22	220	55	165

- Material: Steel
- Material: Stainless steel

VCF

FEMALE HINGE

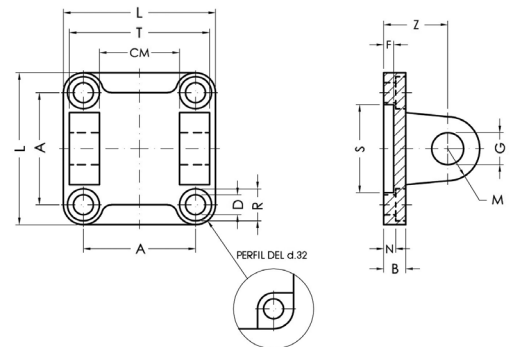


Aignep ●	Aignep ■	Ø	B	E	G	T	Z	CM	MR
VCF 160	VCFI 160	160	20	180	30	170	55	90	25
VCF 200	VCFI 200	200	25	220	30	170	60	90	25

- Material: Aluminium
With self-lubricating bushes
- Material: Stainless steel

VCH

FEMALE CLEVIS BRACKET

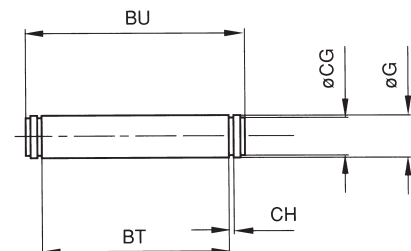


Aignep ●	Aignep ◆	Univer ●	Ø	A	L	D	R	N	B	S	F	Z	G	M	CM	T
VCH 160	VCHZ 160 NE	KF-10160	160	140	180	18	26	10	20	65	7	55	30	25	90	170
VCH 200	VCHZ 200 NE	KF-10200	200	175	220	18	26	11	25	75	7	60	30	25	90	170
VCH 250	VCHZ 250 NE	-	250	220	270	22	33	11	25	90	-	70	40	40	110	200

- Material: Aluminium
- ◆ Material: Steel

VPE

PIN WITH SEEGER

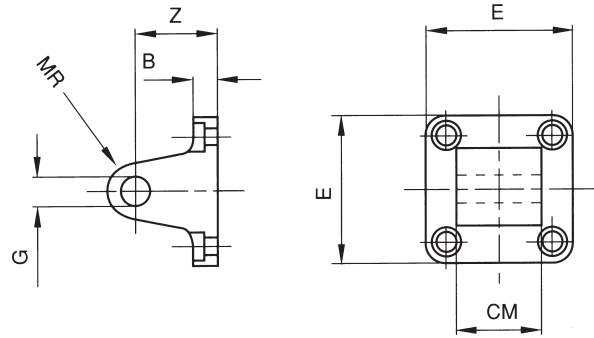
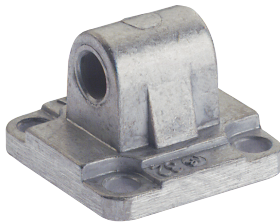


Aignep ●	Aignep ■	Univer ●	Ø	G	BT	BU	CG	CH
VPE160	VPEI 160	KF-18160	160 - 200	30	171.5	178	28.6	1.6
VPE 250	-	KF-18250	250	40	202	211	37.5	1.85
VPE 320	-	-	320	45	222	236	42.5	1.85

- Material: Steel
- Material: Stainless steel

VCM

MALE CLEVIS

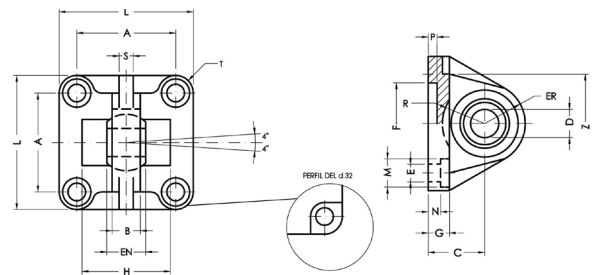
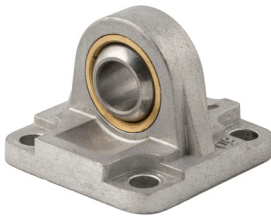


Aignep •	Aignep ■	Aignep ♦	Univer •	Ø	B	E	G	Z	CM	MR
VCM 160	VCM 160	VCMZ 160 NE	KF-11160	160	20	180	30	55	90	25
VCM 200	VCM 200	VCMZ 200 NE	KF-11200	200	25	220	30	60	90	25
VCM 250	VCM 250	-	-	250	25	270	40	70	110	40

- Material: Aluminium with self-lubricating bushes
- Material: Stainless steel
- ♦ Material: Steel

VCS

NARROW MALE HINGE WITH ARTICULATED HEAD DIN648K

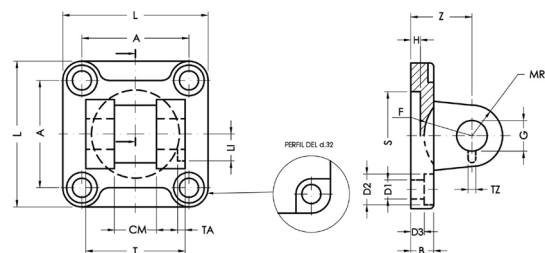


Aignep •	Univer •	Ø	A	B	C	D	EN	ER	F	G	E	L	M	N	P	H	R	S	Z	T
VCS 160	KF-11160S	160	140	28	55	35	43	45	65	20	18	180	26	10	7	-	-	14	130	20
VCS 200	KF-11200S	200	175	28	60	35	43	48	75	25	18	220	26	11	7	-	-	14	155	22.5

- Material: Aluminium

VCD

CNARROW MALE HINGE WITH ARTICULATED HEAD DIN648K

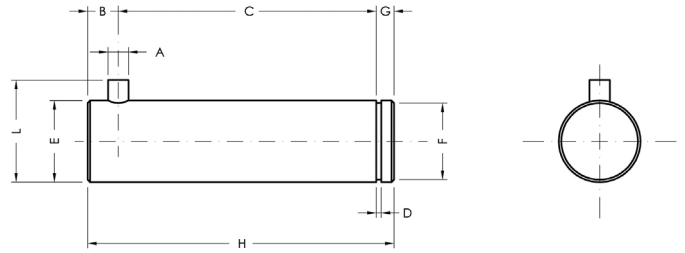


Aignep •	Univer •	Ø	L	T	CM	A	Z	H	B	D3	S	G	MR	D1	D2	TA	TZ	LI	F
VCD 160	KF-10160S	160	180	122	43	140	55	7	20	10	65	35	30	18	26	6	6.3	26.5	46
VCD 200	KF-10200S	200	220	122	43	175	60	7	25	11	75	35	30	18	26	6	6.3	26.5	49

- Material: Aluminium

VPS

PIN ANTI-ROTATION FOR NARROW FEMALE HINGE VCD

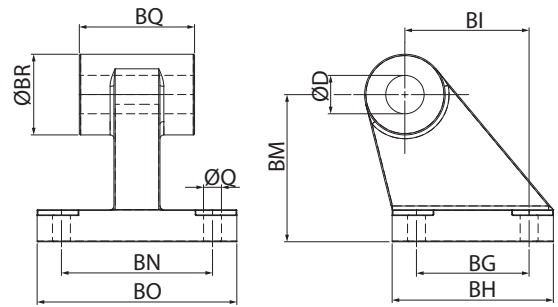


Aignep •	Univer •	Ø	A	C	D	E	F	G	H	L	B
VPS 160	KF-18160S	160 - 200	6	119	1.6	35	33	7	135	41	9

• Material: Steel

VAS

SQUARE JOINT

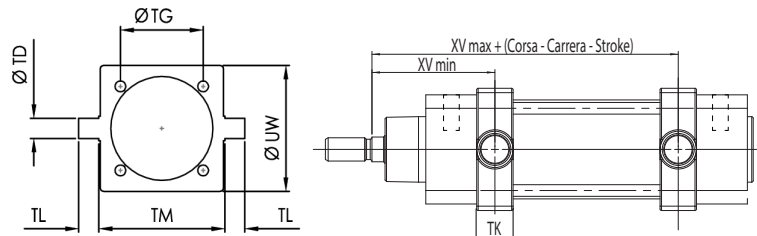


Aignep •	Univer •	Ø	Q	BG	BH	BI	BM	BN	BO	BQ	BR	ØD
VAS 160	KF-19160SCTA	160	14	88	126	97	115	118	156	90	63	30
VAS 200	KF-19200SCTA	200	18	90	130	105	135	122	162	90	63	30

• Material: Aluminium

VCNT

INTERMEDIATE HINGE FOR THREADED TIE-RODS

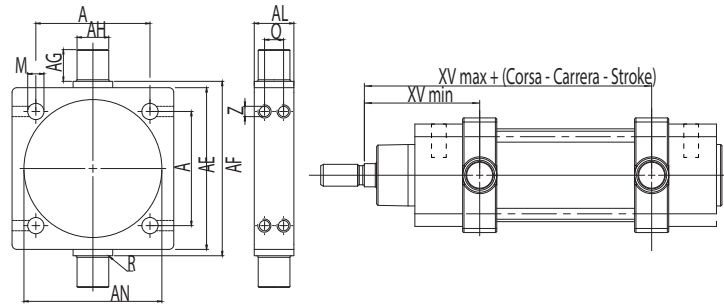


Aignep	Ø	TD	TG	TK	TL	TM	UW	XV min	XV max	RT
VCNT 160	160	32	140	40	32	200	190	149	191	M16
VCNT 200	200	32	175	40	32	250	240	164	206	M16
VCNT 250	250	40	220	50	40	320	296	187	223	M20

Material: Steel

VCNL

INTERMEDIATE HINGE FOR SMOOTH TIE-RODS

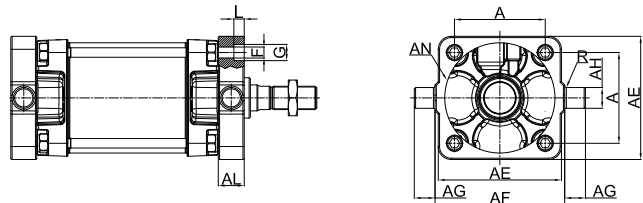
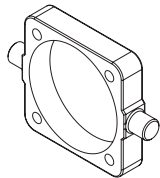


Aignep	Ø	A	AE	AL	AH	AG	AF	AN	R	M	Q	Z	XV min	XV max
VCNL 160	160	140	190	40	32	32	200	171	2,5	16,25	18	M12	149	191
VCNL 200	200	175	240	40	32	32	250	211	2,5	16,25	18	M12	164	206

Material: Steel

KF14

CLEVIS BRACKET

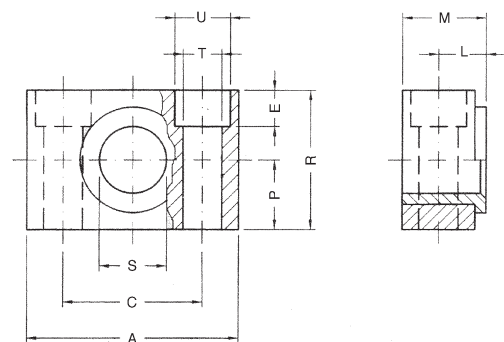


Aignep	Univer	Ø	AE MAX	AL MAX	AH e9	AG h14	AF h14	AN +0,2/0	A ±0,2	F H13	G H13	L +0,5/0	R 0/-0,3	MASS g
-	KF-14160AP	160	190	40	32	32	200	170	140	17	25	16	2,5	4150
-	KF-14200AP	200	240	40	32	32	250	211	175	17	25	16	2,5	7350

Material: Steel

VSI

INTERMEDIATE HINGE SUPPORT



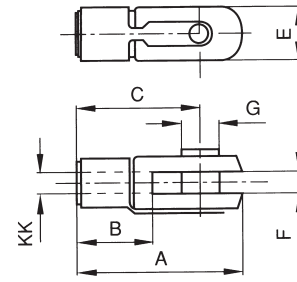
Aignep	Univer	Ø	A	M	R	P	C	S	L	U	T	E
VSI 160	KF-41160200	160 - 200	92	40	60	30	60	32	22,5	26	18	17
VSI 250	-	250	140	56	70	35	90	40	31	33	22	20

Material: Steel

Material: Steel / Suggested for VCNT - LCN - VCNL - VCNF

FC

YOKE WITH LOCABLE PIN



Aignep ●	Aignep ■	Univer ●	KK	A	B	C	E	F	G
FC 160	* FCI 160	KF-15160	M36x2	188	72	144	70	35	35
FC 250	-	KF-15250	M42x2	232	84	168	85	42	42
FC 320	-	KF-15320	M48x2	265	96	192	96	50	50

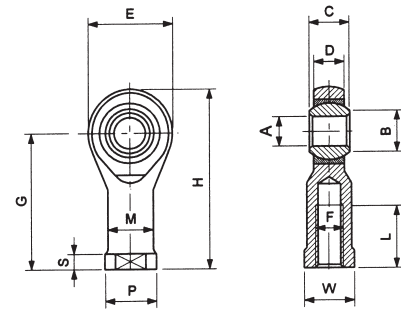
● Material: Steel

■ Material: Stainless steel

*With pin and seeger

TF

ROD ENDS SELF-LUBRICATING

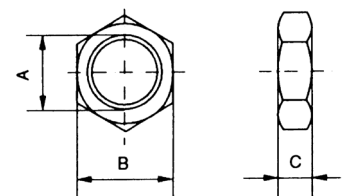


Aignep ●	Univer ●	F	A	B	C	Sphere	D	E	G	H	L	M	P	S	W	Radial load	Weight
			0 H7	0	0 -0.13		±0.13	±0.5	±0.5		±0.7	±0.7	±0.5	±0.7	±0.25	D kg	S kg
																	g
TF 160	KF-17160	M36x2	35	-	43	-	-	-	125	-	56	-	58	-	-	-	1.600
TF 250	KF-17250	M42x2	40	-	49	-	-	-	142	-	60	-	65	-	-	-	2.800
TF 320	KF-17320	M48x2	50	-	60	-	-	-	162	-	65	-	75	-	-	-	5.000

● Material: Steel

DA

NUT FOR RODS

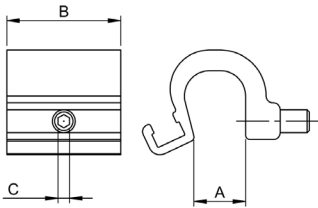


Aignep	Univer	A	B	C
EDA00 00 51 I6 ZI	-	M36x2	55	14
EDA00 00 51 I0 ZI	-	M42x2	65	20
EDA00 00 51 DG ZI	-	M48x2	75	24

Material: Steel

EXF

BRACKET FOR DSL - DSH - DT SENSORS



Aignep	Ø	A	B	C
EXF160	160 -200 - 250	20	25	2,5