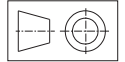




Hydraulic Cylinders - HM16 Series (Magnetic)



- Rated Pressure 160 kg/cm²
- Peak Pressure 240 kg/cm²
- Cylinder bore diameters up to 125mm
- Temperature range:- -20°C to 90°C. (optional seals for temp. up to 180°C)



BASIC CYLINDER

SPECIFICATION OF MATERIALS

END COVERS : Precision machined steel

CYLINDER BARREL : Stainless steel, honed and polished internally to a maximum surface roughness of Ra=0.4 microns.

PISTON : Stainless steel, precisely machined for perfect alignment

PISTON BEARING : Polyester fabric with polyester resin+PTFE for maximum rigidity

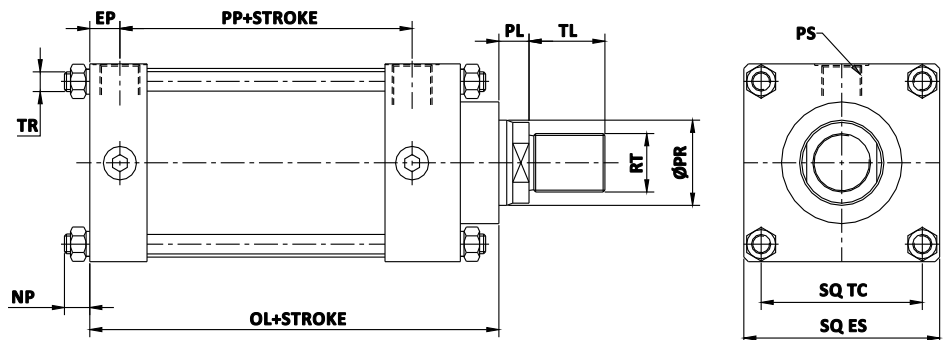
PISTON ROD : Medium carbon steel, toughened ground Hard-chrome plated & polished to a maximum roughness of Ra=0.4 microns

PISTON ROD BEARING : Polyester fabric with polyester resin+PTFE for maximum rigidity

SEALING SYSTEM : We use a wide range of international standard sealing systems to suit various applications & temperatures

MOUNTINGS : Accurately machined steel suitable for heavy duty application

TIE RODS : Stainless Steel

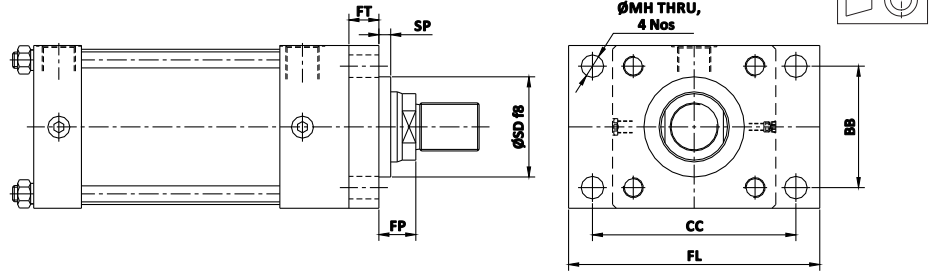


BORE DIA	PR DIA	ES (Sq)	RT	PS (BSP)	OL	PL	TL	PP	TR	NP	EP	Reed Switch
40	20	60	M14x1.5	1/2"	186	14	18	114	M10x1.5	13	15	RS-210
50	25	76	M20x1.5	1/2"	204	16	25	118	M12x1.75	15	17	RS-212
63	28	94	M22x1.5	1/2"	201	19	30	119	M12x1.75	15	17	RS-212
80	36	112	M27x2	3/4"	225	19	36	137	M16x2	20	19	RS-216
100	45	125	M33x2	3/4"	241	19	45	149	M16x2	20	19	RS-216
125	56	165	M42x2	3/4"	264	21	56	163	M24x2	28	19	RS-224

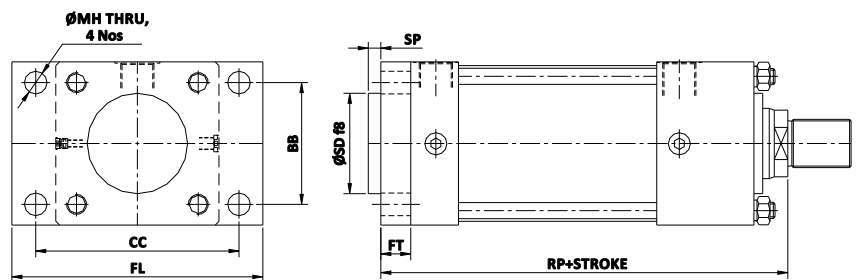
Standard Mountings - HM16 Series



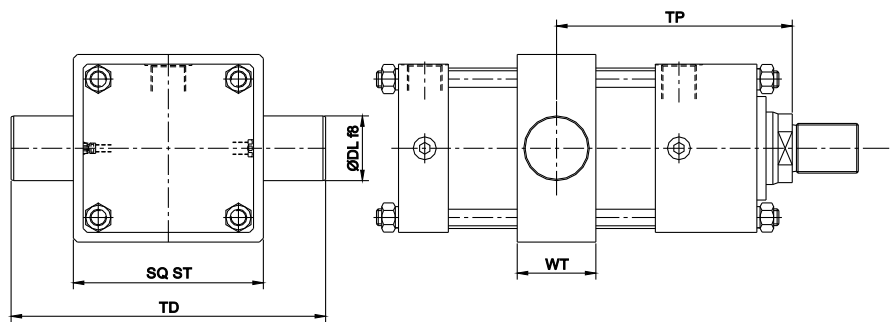
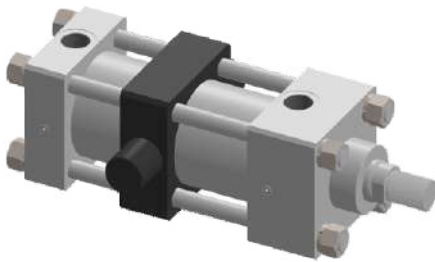
Front Flange (FF)



Rear Flange (RF)



Intermediate Trunnion (IT)



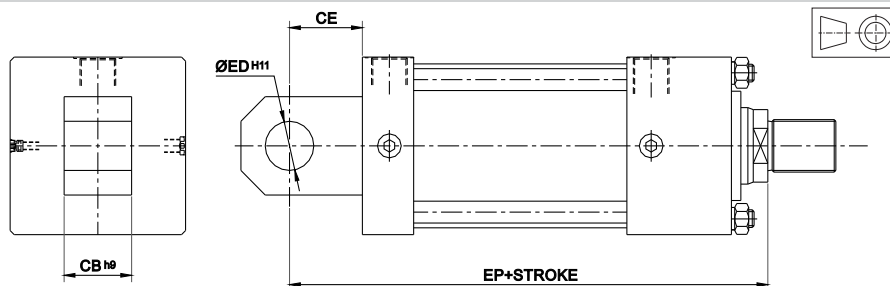
DIMENSIONAL DETAILS

BORE	40	50	63	80	100	125
BB	41	52	65	83	97	128
CC	87	105	117	149	162	208
FL	108	130	142	180	194	248
SD	40	44	50	60	70	85
SP	4	4	4	5	5	5
MH	11	14	14	18	18	22
FT	10	16	16	20	22	22
FP	18	20	23	24	24	26
RP	210	236	236	264	282	307
WT	32	40	40	45	50	50
TD	113	140	158	186	207	245
ST	63	76	95	114	127	165
DL	25	32	32	36	40	40
TP	TO BE SPECIFIED BY CUSTOMER					

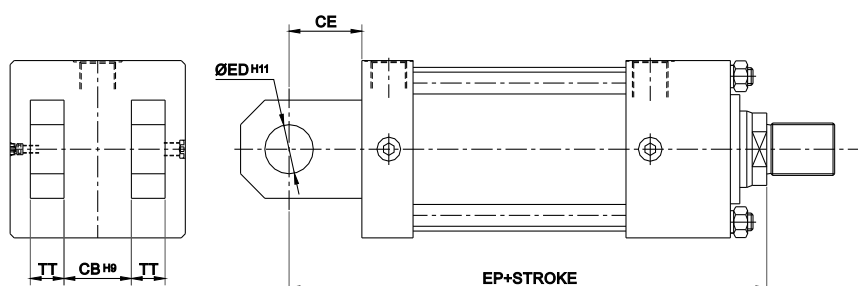
Standard Mountings - HM16 Series



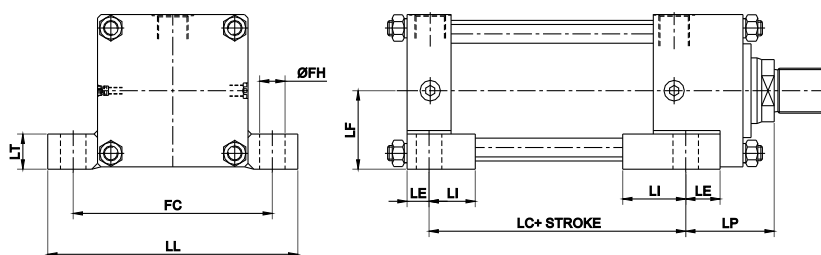
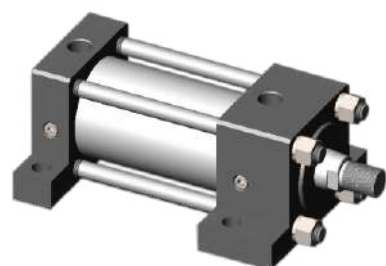
Rear Eye (RE)



Rear Clevis (RC)



Foot Lug (FL)



DIMENSIONAL DETAILS						
BORE	40	50	63	80	100	125
CB	20	30	30	40	50	60
TT	12	16	16	20	25	32
ED	14	20	20	28	36	45
CE	19	32	32	39	54	57
EP	219	252	252	283	314	342
LC	145	151	137	157	159	181
LL	102	127	166	185	216	254
FC	83	102	130	149	172	210
LI	24	40	40	45	45	45
LE	10	15	18	20	22	25
LT	12	20	25	30	32	32
LF	31	38	48	57	63	82
FH	11	14	20	20	25	25
LP	45	54	65	67	79	79

Technical Data & Ordering Details for HM16 Series



TECHNICAL DETAILS											
Bore Dia	Rod Dia	Piston Area		Action Force at Pressure in kgf				Piston velocity in m/s at flow= 1 ltr/min		Requisite flow in ltr/min for velocity = 0.1 m/s	
(mm)	(mm)	(cm ²)		100 kg/cm ²		160 kg/cm ²					
		+	-	+	-	+	-	+	-	+	-
40	20	12.6	9.4	1256.0	942.0	2009.6	1507.2	0.0133	0.0177	7.54	5.65
50	25	19.6	14.7	1962.5	1471.9	3140.0	2355.0	0.0085	0.0113	11.78	8.83
63	28	31.2	25.0	3115.7	2500.2	4985.1	4000.4	0.0053	0.0067	18.69	15.00
80	36	50.2	40.1	5024.0	4006.6	8038.4	6410.6	0.0033	0.0042	30.14	24.04
100	45	78.5	62.6	7850.0	6260.4	12560.0	10016.6	0.0021	0.0027	47.10	37.56
125	56	122.7	98.0	12265.6	9803.9	19625.0	15686.2	0.0014	0.0017	73.59	58.82

Model Code Indication

HM16 - 100 / 500 - FF - 45 - CB - (X) - SS12 - RS-216

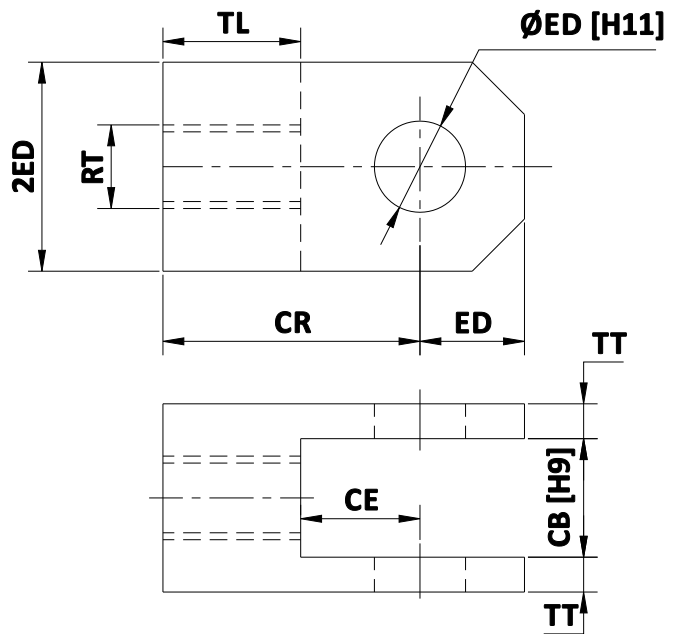
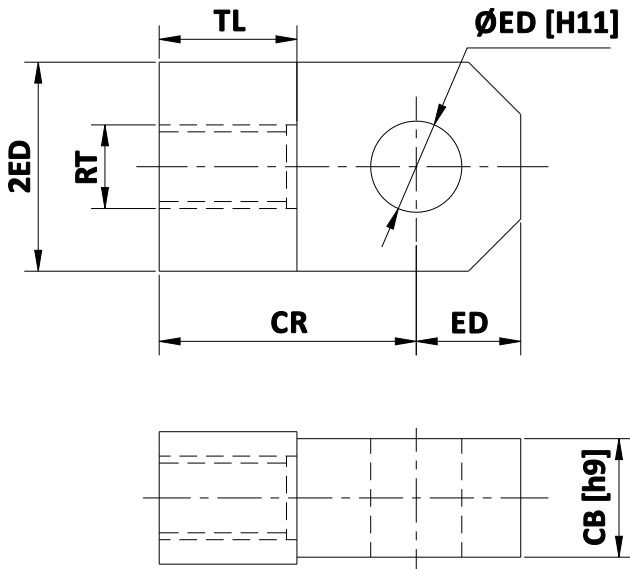
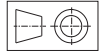
Series	Bore sizes	Stroke	Mountings	Piston Rod sizes	Cushioning	Accessories & Special features	Sealing System Code	Reed Switch
HM16 Rated Hydraulic Pressure of 160kg/cm ²	Ø40 - 125mm (6 Std. sizes)	To be specified in mm	FF - Front Flange RF - Rear Flange RC - Rear Clevis RE - Rear Eye FL - Foot Lug IT - Intermediate Trunnion ET - Extended Tie Rod	Ø20 - 56mm (6 Std. sizes)	CB - Cushioned at both ends CR - Cushioned at Rear end CF - Cushioned at Front end NC - Non Cushioned	PRE - Rod Eye PRF - Rod Fork SA - Single Acting DE - Double Ended	SS12 (Std.) for alternatives contact us.	RS-206 RS-208 RS-210 RS-212 RS-216 Select suitable Reed Switch from page 2.220/1
NOTE:- The right of modification for technical improvement is reserved. All dimensions are in mm unless otherwise specified								

Piston Rod Eye & Piston Rod Fork for HM16 Series



Piston Rod Eye (PRE)

Piston Rod Fork (PRF)



Ordering Code

For Piston Rod Eye :- HM16-PRE-**

where ** - Piston Rod Dia

For Piston Rod Fork :- HM16-PRF-**

where ** - Piston Rod Dia

SPECIFICATION & DIMENSIONAL DETAILS

ROD DIA	RT	TL	CR	ED	CB	TT	CE
20	M14x1.5	22	42	14	20	12	19
25	M20x1.5	29	58	20	30	16	32
28	M22x1.5	32	65	20	30	16	32
36	M27x2	38	75	28	40	20	37
45	M33x2	50	104	36	50	25	54
56	M42x2	61	118	45	60	32	57