



100% Quality Inspected  
ensuring dependable product  
right out of the box!

# Hydraulic Block Cylinders



PRE-DRILLED MOUNTING HOLES  
FOR SWITCHES AND SENSORS

# HYDRAULIC BLOCK CYLINDERS


OFF-THE-SHELF

ITEM NUMBER	PART# †	MAX PRESSURE	PISTON Ø	ROD DIAMETER	MOUNTING STYLES †	CUSHION TYPE	STROKE LENGTH	KEYWAY LOCATION (NB) FRONT EDGE TO C/L *	INCLUDED SEAL KIT	REPL VITON SEAL KITS	
350224	BZ 500.16/10.70.201.020 KBC30	500	16	10	70	201	20	30	013286	013287	
350225	BZ 500.16/10.70.201.040 KBC30	500	16	10	70	201	40	30			
085391	BZ 500.16/10.33.201.020 NS30	500	16	10	33†	201	20	30			
345677	BZ 500.16/10.33.201.040 NS30	500	16	10	33†	201	40	30	013322	013323	
350230	BZ 500.25/16.78.201.020 PP.KBC33	500	25	16	78	201	20	30			
350231	BZ 500.25/16.78.201.040 PP.KBC33	500	25	16	78	201	40	33			
350232	BZ 500.25/16.78.201.080 PP.KBC33	500	25	16	78	201	80	33			
350233	BZ 500.25/16.78.201.100 PP.KBC33	500	25	16	78	201	100	33			
350234	BZ 320.25/16.78.201.120 PP.KBC33	320	25	16	78	201	120	33		062268	
350235	BZ 500.25/16.33.201.020 PP.NS33	500	25	16	33†	201	20	33		013323	
350236	BZ 500.25/16.33.201.040 PP.NS33	500	25	16	33†	201	40	33			
350237	BZ 500.25/16.33.201.060 PP.NS33	500	25	16	33†	201	60	33		013411	013412
350243	BZ 500.32/20.78.201.020 PP.KBC38	500	32	20	78	201	20	38			
350244	BZ 500.32/20.78.201.040 PP.KBC38	500	32	20	78	201	40	38			
350245	BZ 500.32/20.78.201.060 PP.KBC38	500	32	20	78	201	60	38			
350246	BZ 500.32/20.78.201.080 PP.KBC38	500	32	20	78	201	80	38			
350247	BZ 500.32/20.78.201.100 PP.KBC38	500	32	20	78	201	100	38			
350248	BZ 320.32/20.78.201.120 PP.KBC38	320	32	20	78	201	120	38			
350250	BZ 320.32/20.78.201.140 PP.KBC38	320	32	20	78	201	140	38			
350251	BZ 500.32/20.33.201.020 PP.NS38	500	32	20	33†	201	20	38			
350252	BZ 500.32/20.33.201.040 PP.NS38	500	32	20	33†	201	40	38			
350253	BZ 500.32/20.33.201.060 PP.NS38	500	32	20	33†	201	60	38			
350254	BZ 500.32/20.33.201.080 PP.NS38	500	32	20	33†	201	80	38			
350255	BZ 500.32/20.33.201.100 PP.NS38	500	32	20	33†	201	100	38			
350256	BZ 500.40/25.78.201.020 PP.KBC40	500	40	25	78	201	20	40	013543	026816	
350258	BZ 500.40/25.78.201.040 PP.KBC40	500	40	25	78	201	40	40			
350259	BZ 500.40/25.78.201.060 PP.KBC40	500	40	25	78	201	60	40			
350260	BZ 500.40/25.78.201.080 PP.KBC40	500	40	25	78	201	80	40			
350261	BZ 500.40/25.78.201.100 PP.KBC40	500	40	25	78	201	100	40			
350262	BZ 320.40/25.78.201.120 PP.KBC40	320	40	25	78	201	120	40		063236	
350263	BZ 320.40/25.78.201.140 PP.KBC40	320	40	25	78	201	140	40		026816	
350264	BZ 320.40/25.78.201.160 PP.KBC40	320	40	25	78	201	160	40			
350265	BZ 500.40/25.33.201.020 PP.NS40	500	40	25	33†	201	20	40			
350266	BZ 500.40/25.33.201.040 PP.NS40	500	40	25	33†	201	40	40			
350267	BZ 500.40/25.33.201.060 PP.NS40	500	40	25	33†	201	60	40			
350268	BZ 500.40/25.33.201.080 PP.NS40	500	40	25	33†	201	80	40			
350269	BZ 500.40/25.33.201.100 PP.NS40	500	40	25	33†	201	100	40			
350270	BZ 320.40/25.33.201.120 PP.NS40	320	40	25	33†	201	120	40	063236		

PP= prepared for sensors N= Keyway NS= Keyway and counterbores on 1 side KBC= Keyway and counterbores on both sides 33= O-ring side port connections

# HYDRAULIC BLOCK CYLINDERS

OFF-THE-SHELF

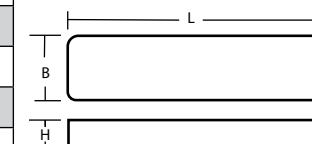
ADDED LETTERS FOR OPTIONS		
Z Centering Collar	E_ _ Venting	S Special
	<p><b>Venting is recommended on all cylinders</b></p> <p><b>E2</b>- right side of cylinder  <b>E3</b>- back of cylinder  <b>E4</b>- left side of cylinder  <b>E2NF</b>- counterbore flush right side  <b>E3NF</b>- counterbore flush back side  <b>E4NF</b>- counterbore flush left side</p>	

### Keyway

(to hold cylinders in place under pressure)



ITEM NO.	PISTON Ø	B	H	L
016392	16	8	7	30
158291	25	10	8	40
158292	32	12	8	40
158295	40	12	8	50
158297	50	15*	10	60
158298	63	20	12	70



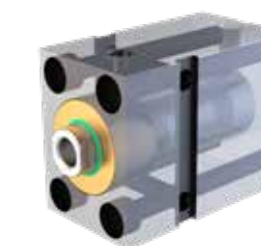
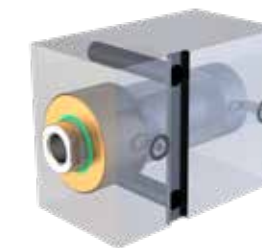
\*Notes:

Keyway ordered separately

Custom Keyway locations available upon request email: dme\_mech\_eng@dme.net

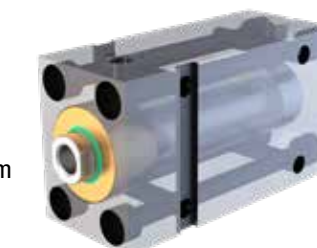
### Mounting Styles

**33** - mounting from side only O-rings are used for hyd fluid lines through the moldbase



**70** - mounting from front of cylinder and side used when mounting directly to ejector plates

**78** - mounting from both ends and sides ports on side of top or bottom




# HYDRAULIC BLOCK CYLINDERS

OFF-THE-SHELF

ITEM NUMBER	PART# <sup>†</sup>	MAX PRESSURE	PISTON Ø	ROD DIAMETER	MOUNTING STYLE	CUSHION TYPE	STROKE LENGTH	KEYWAY LOCATION (NB) FRONT EDGE TO C/L*	INCLUDED SEAL KIT	REPL VITON SEAL KITS
350271	BZ 500.50/32.78.201.020 PP.KBC44	500	50	32	78	201	20	44	013676	013677
350272	BZ 500.50/32.78.201.040 PP.KBC44	500	50	32	78	201	40	44		
350273	BZ 500.50/32.78.201.060 PP.KBC44	500	50	32	78	201	60	44		
350274	BZ 500.50/32.78.201.080 PP.KBC44	500	50	32	78	201	80	44		
350275	BZ 500.50/32.78.201.100 PP.KBC44	500	50	32	78	201	100	44		
350276	BZ 320.50/32.78.201.120 PP.KBC44	320	50	32	78	201	120	44		
350277	BZ 320.50/32.78.201.140 PP.KBC44	320	50	32	78	201	140	44		
350278	BZ 320.50/32.78.201.160 PP.KBC44	320	50	32	78	201	160	44		
350279	BZ 320.50/32.78.201.180 PP.KBC44	320	50	32	78	201	180	44		
350280	BZ 320.50/32.78.201.200 PP.KBC44	320	50	32	78	201	200	44		
350281	BZ 500.50/32.33.201.020 PP.NS44	500	50	32	33 <sup>†</sup>	201	20	44		
350282	BZ 500.50/32.33.201.040 PP.NS44	500	50	32	33 <sup>†</sup>	201	40	44		
350283	BZ 500.50/32.33.201.060 PP.NS44	500	50	32	33 <sup>†</sup>	201	60	44		
350284	BZ 500.50/32.33.201.080 PP.NS44	500	50	32	33 <sup>†</sup>	201	80	44		
350285	BZ 500.50/32.33.201.100 PP.NS44	500	50	32	33 <sup>†</sup>	201	100	44		
350287	BZ 500.63/40.78.201.020 PP.KBC50	500	63	40	78	201	20	50		
350288	BZ 500.63/40.78.201.040 PP.KBC50	500	63	40	78	201	40	50		
350289	BZ 500.63/40.78.201.060 PP.KBC50	500	63	40	78	201	60	50		
350290	BZ 500.63/40.78.201.080 PP.KBC50	500	63	40	78	201	80	50		
350291	BZ 500.63/40.78.201.100 PP.KBC50	500	63	40	78	201	100	50		
350292	BZ 320.63/40.78.201.120 PP.KBC50	320	63	40	78	201	120	50		
350293	BZ 320.63/40.78.201.140 PP.KBC50	320	63	40	78	201	140	50		
350294	BZ 320.63/40.78.201.160 PP.KBC50	320	63	40	78	201	160	50		
350295	BZ 320.63/40.78.201.180 PP.KBC50	320	63	40	78	201	180	50		
350296	BZ 320.63/40.78.201.200 PP.KBC50	320	63	40	78	201	200	50		
350297	BZ 500.63/40.33.201.020 PP.NS50	500	63	40	33 <sup>†</sup>	201	20	50		
350298	BZ 500.63/40.33.201.040 PP.NS50	500	63	40	33 <sup>†</sup>	201	40	50		
350299	BZ 500.63/40.33.201.060 PP.NS50	500	63	40	33 <sup>†</sup>	201	60	50		
350300	BZ 500.63/40.33.201.080 PP.NS50	500	63	40	33 <sup>†</sup>	201	80	50		
350301	BZ 500.63/40.33.201.100 PP.NS50	500	63	40	33 <sup>†</sup>	201	100	50		

# HYDRAULIC BLOCK CYLINDERS

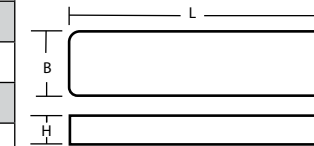
OFF-THE-SHELF

ADDED LETTERS FOR OPTIONS		
Z Centering Collar	E__ Venting	S Special
	<p><b>Venting is recommended on all cylinders</b></p> <p><b>E2</b>- right side of cylinder  <b>E3</b>- back of cylinder  <b>E4</b>- left side of cylinder  <b>E2NF</b>-counterbore flush right side  <b>E3NF</b>-counterbore flush back side  <b>E4NF</b>-counterbore flush left side</p>	

### Keyway

(to hold cylinders in place under pressure)

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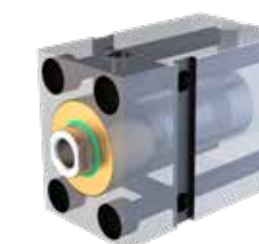
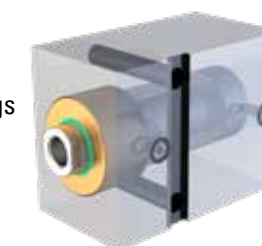
### \*Notes:

Keyway ordered separately

Custom Keyway locations available upon request email: [dme\\_mech\\_eng@dme.net](mailto:dme_mech_eng@dme.net)

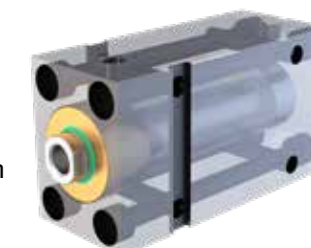
### Mounting Styles

**33** - mounting from side only O-rings are used for hyd fluid lines through the moldbase



**70** - mounting from front of cylinder and side used when mounting directly to ejector plates

**78** - mounting from both ends and sides ports on side of top or bottom



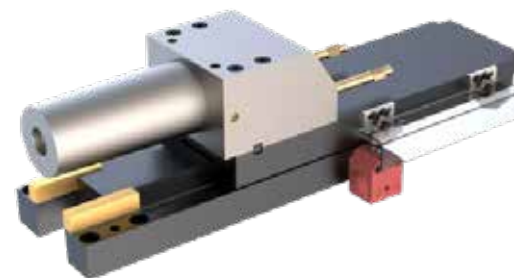
### †Notes:




**PP**= prepared for sensors    **N**= Keyway    **NS**= Keyway and counterbores on 1 side    **KBC**= Keyway and counterbores on both sides    **33**= O-ring side port connections

# CORE PULL SLIDE CARRIERS

STANDARD SIZES TO FIT YOUR APPLICATION

- Max operating pressure 250 Bar
- Linear roller bearing guides
- Mechanical limit switch (sold separately)
- During core pulling the full piston area is available
- Ground, hardened and hard chrome piston rods
- Forward return stroke cushion standard
- Additional mounting screws available for the top plate upon request



ITEM NUMBER	PART# †	MAX PRESSURE	PISTON Ø	ROD DIAMETER	MOUNTING STYLE	FORWARD & RETURN STROKE CUSHION STD	STROKE LENGTH	LIMIT SWITCH SIDE*	OVERALL WIDTH	OAL CLOSED (+/- .50)	OAL OPEN (+/- .50)	OPTIONAL KEYWAY (Sold Separately)	REPLACEMENT SEAL KIT
071848	KZE251.32_16.03.204.50	250	32	16	03	204	50	NA	126	232	282	 16394 10 x 8 x 50 (2) Required	071975
090970-127554	KZEP251.32_16.03.204.50	250	32	16	03	204	50	PL or PR	126	232	282		
071847	KZE251.32_16.03.204.100	250	32	16	03	204	100	NA	126	300	400		
078762-123806	KZEP251.32_16.03.204.100	250	32	16	03	204	100	PL or PR	126	300	400		
077971	KZE251.32_16.03.204.150	250	32	16	03	204	150	NA	126	375	525		
166758-154823	KZEP251.32_16.03.204.150	250	32	16	03	204	150	PL or PR	126	375	525		
076646	KZE 251.32_16.03.204.200	250	32	16	03	204	200	NA	126	450	650		
127518-078504	KZEP251.32_16.03.204.200	250	32	16	03	204	200	PL or PR	126	450	650		
103655	KZE251.32_16.03.204.250	250	32	16	03	204	250	NA	126	525	775		
078505-155116	KZEP251.32_16.03.204.250	250	32	16	03	204	250	PL or PR	126	525	775		
072458	KZE251.40_20.03.204.50	250	40	20	03	204	50	NA	136	242	292	 158295 12 x 8 x 50 (2) Required	074602
172619-125542	KZEP251.40_20.03.204.50	250	40	20	03	204	50	PL or PR	136	242	292		
114450	KZE251.40_20.03.204.100	250	40	20	03	204	100	NA	136	300	400		
079556-116288	KZEP251.40_20.03.204.100	250	40	20	03	204	100	PL or PR	136	300	400		
082747	KZE251.40_20.03.204.150	250	40	20	03	204	150	NA	136	375	525		
079475-125703	KZEP251.40_20.03.204.150	250	40	20	03	204	150	PL or PR	136	375	525		
088096	KZE251.40_20.03.204.200	250	40	20	03	204	200	NA	136	450	650		
147196-079780	KZEP251.40_20.03.204.200	250	40	20	03	204	200	PL or PR	136	450	650		
114986	KZE251.40_20.03.204.250	250	40	20	03	204	250	NA	136	525	775		
079192-165732	KZEP251.40_20.03.204.250	250	40	20	03	204	250	PL or PR	136	525	775		
172767	KZE251.50_25.03.204.50	250	50	25	03	204	50	NA	146	252	302	 65573 14 x 9 x 60 (2) Required	072307
177217-177219	KZEP251.50_25.03.204.50	250	50	25	03	204	50	PL or PR	146	252	302		
114367	KZE251.50_25.03.204.100	250	50	25	03	204	100	NA	146	302	402		
165179-172769	KZEP251.50_25.03.204.100	250	50	25	03	204	100	PL or PR	146	302	402		
075221	KZE251.50_25.03.204.150	250	50	25	03	204	150	NA	146	377	527		
099562-147496	KZEP251.50_25.03.204.150	250	50	25	03	204	150	PL or PR	146	377	527		
088097	KZE251.50_25.03.204.200	250	50	25	03	204	200	NA	146	452	652		
172771-078252	KZEP251.50_25.03.204.200	250	50	25	03	204	200	PL or PR	146	452	652		
079811	KZE251.50_25.03.204.250	250	50	25	03	204	250	NA	146	527	777		
083273-152878	KZEP251.50_25.03.204.250	250	50	25	03	204	250	PL or PR	146	527	777		

Item number examples:

KZE251.32\_16.03.204.50V - w Viton seal

KZEP251.32\_16.03.204.50VPL w Viton seal & Left mounted limit switch

\*Notes: PL=Left PR=Right

†Notes: Add V for Viton Seal

# HYDRAULIC BLOCK CYLINDERS

## ACCESSORIES

### Application of a flow divider in a cylinder circuit

Rotary Gear Flow Dividers are designed to Synchronize hydraulic cylinders (bring them to equal stroke lengths) in one direction only. This needs to be in a direction where the cylinders bottom out (go to the end of their stroke). The synchronizing is accomplished because excess fluid is bled off over the flow divider's internal relief valves to feed the cylinder that is late getting to the end of its stroke. Reversing the direction of the cylinders, the Rotary Gear Flow Diverter will act as a combiner with the same efficiency as a divider.

Please note that a combiner doesn't regulate cylinder speed, so flow control is required to limit maximum flow.

### Adjustable needle valve between sections

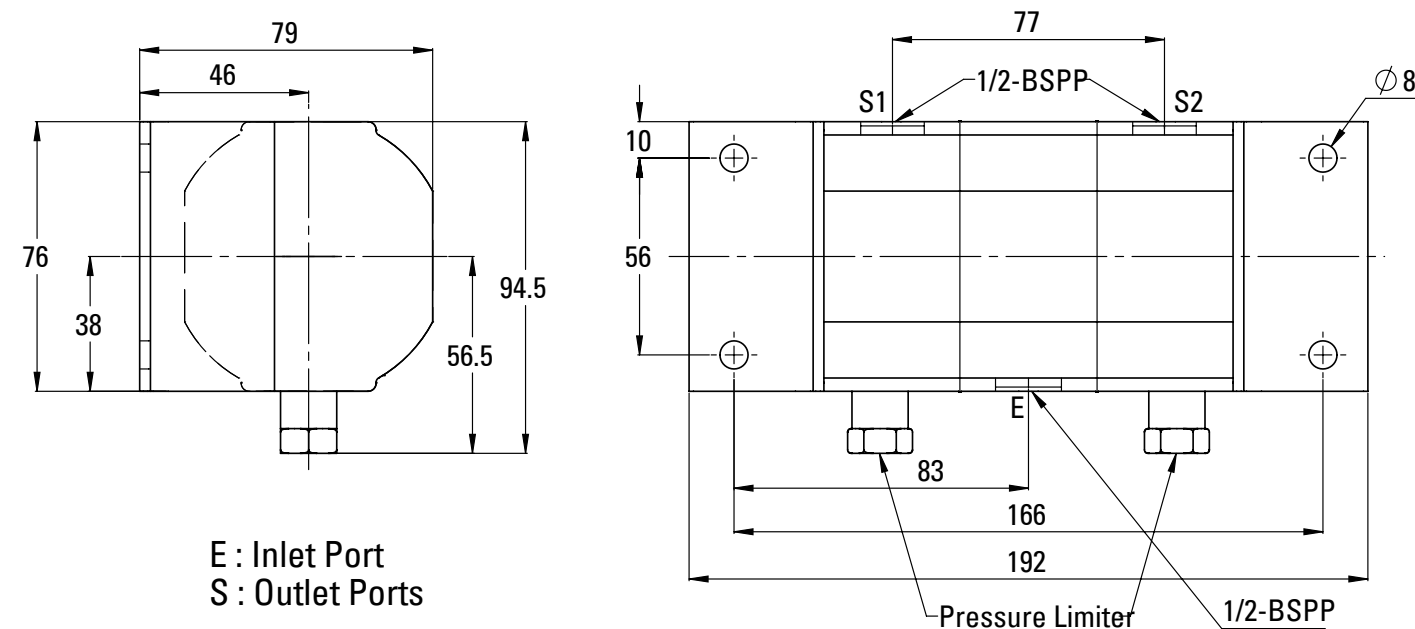
To allow only the set amount of flow providing the desired differential effect for drive motors. It can also be adjusted for varying tire rotations.



Contact [mech\\_eng@dme.net](mailto:mech_eng@dme.net) for correct sizing of the flow dividers

ITEM NUMBER	CAPACITY	MAX. PRESSURE	SPEED (RPM)		NOMINAL FLOW		
344526	2 x 2.11	210	Min	1500	E	S	6 L/min
			Max	4500			18 L/min
344528	2 x 4.23		Min	1500	12 L/min	3 L/min	
			Max	4500	36 L/min	9 L/min	

Rotation speed recommended 3500 rpm.



# HYDRAULIC BLOCK CYLINDERS

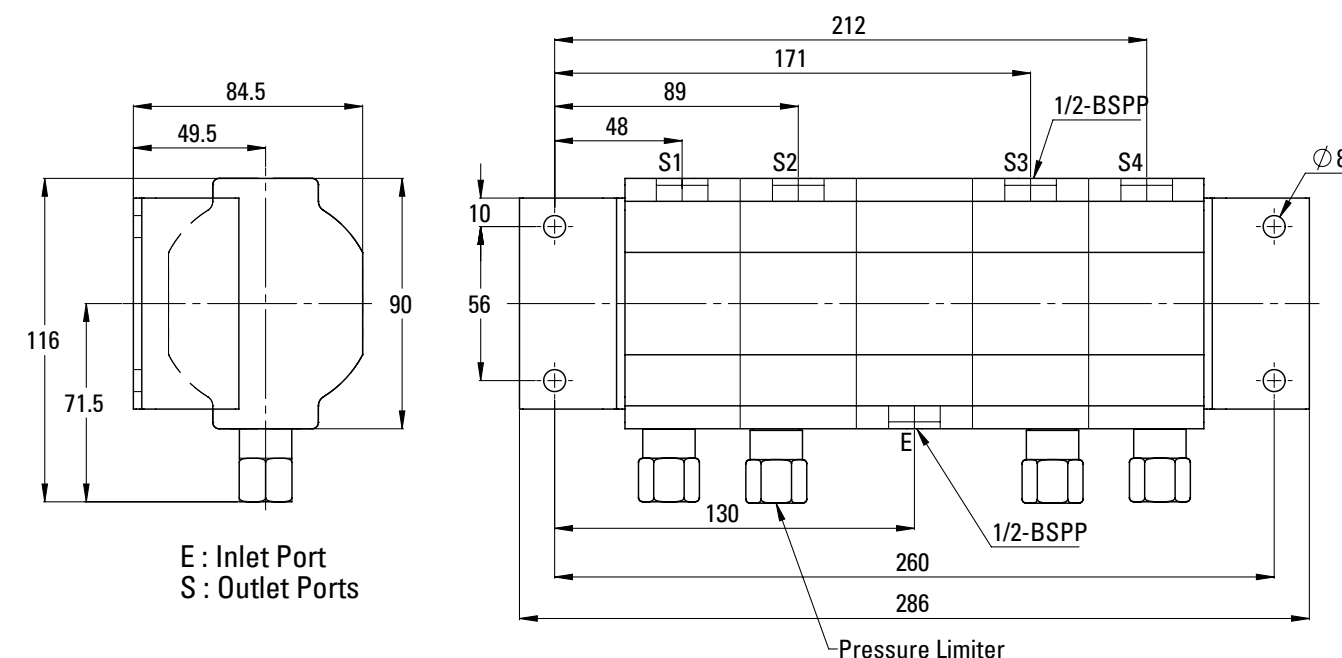
## ACCESSORIES



Contact [mech\\_eng@dme.net](mailto:mech_eng@dme.net) for correct sizing of the flow dividers

ITEM NUMBER	CAPACITY	MAX. PRESSURE	SPEED (RPM)		NOMINAL FLOW		
344527	4 x 2.11	210	Min	1500	E	S	12 L/min
			Max	4500			38 L/min
344529	4 x 4.23		Min	1500	24 L/min	6 L/min	
			Max	4500	76 L/min	19 L/min	

Rotation speed recommended 3500 rpm.



- **Geared flow dividers** are designed to enable a high-precision synchronized feeding of 2 or 4 single-acting or double-acting hydraulic cylinders
- **Both gears are linked by a common axle**; they rotate at the same speed and the flow split rate is precisely proportional to the displacement in each cylinder chamber

Each gearing is equipped with differential pressure limiters designed to:

- Protect the flow dividers in case of mechanical jamming
- Compensate for possible deviations at lower and upper end positions of the cylinders to avoid cumulated stroke differences
- **Single cylinder capacity:** 2.11 cc/rev and 4.23 cc/rev
- **Rotation speed range:** min 1500 rpm / max 4500 rpm (recommended speed 3500 rpm)
- **Max Inlet pressure:** 210 bars
- **Differential pressure limiter,** low pressure reversible, no external drain

# HYDRAULIC BLOCK CYLINDERS

## ACCESSORIES

### Switch Accessories

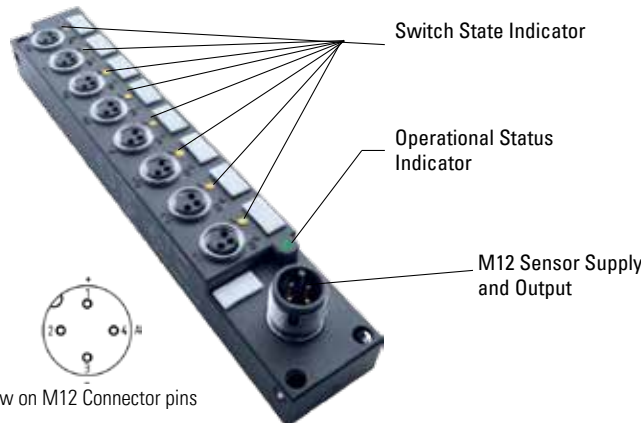
Includes: Installation Sleeve & Cone, Calibration Sleeve & Face Spacer

4-pin

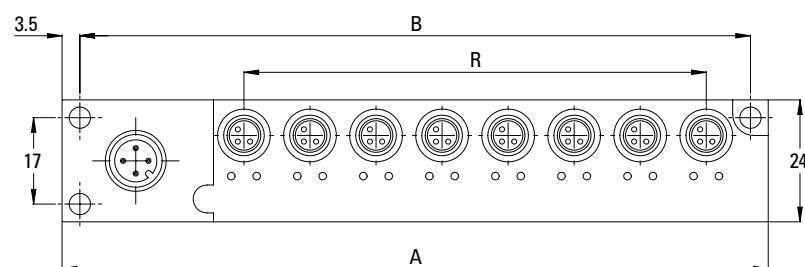


View on M8 Connector pins

8-pin



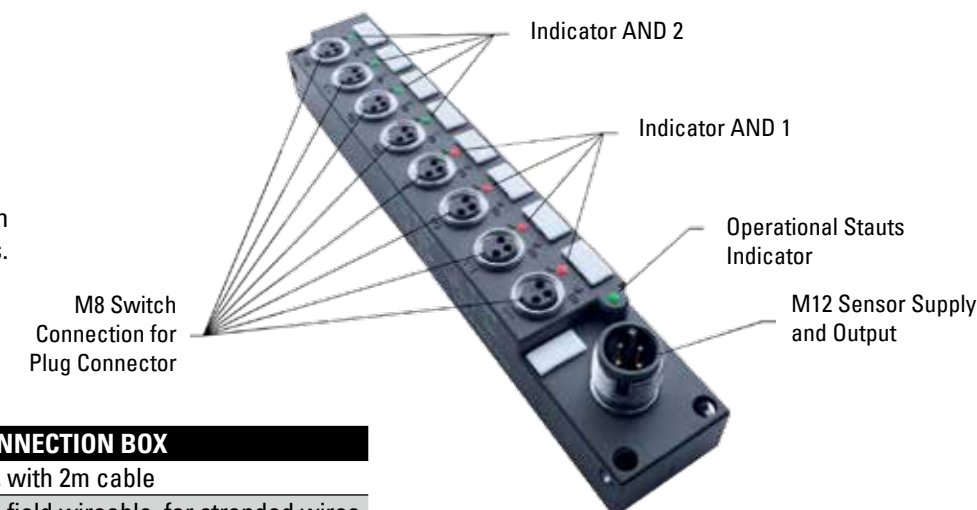
View on M12 Connector pins



# HYDRAULIC BLOCK CYLINDERS

## ACCESSORIES

Every four inputs share one AND gate. This means, for example, that with four cylinders all eight sensors can be wired and two AND operations can be output via the same connection line. The switch state is indicated by green and red LEDs.



ITEM NUMBER	CONNECTOR FOR CONNECTION BOX
220865	M12 connector, 4-pin, with 2m cable
197323	M12 connector, 4-pin, field wireable, for stranded wires 0.14 to 0.34 mm <sup>2</sup>



ITEM NUMBER	TYPE	NUMBER OF INPUTS	OUTPUT PIN 4	LED COLOR SWITCHING SIGNAL	LED COLOR OPERATING STATUS INDICATOR	L	R	B	A	Operating voltage, min. (DC)	Operating Voltage, Max. (DC)	IP Degree of Protection	Ambient Temperature Max.	Max. Current	Max. Total Current
183577	4-pin, single	4	4X	-	4X Orange	57	39	80	87	15V	30V	IP 67	70° C	500 mA	2A
183578	8-pin, single	8	8X	-	8X Orange	109	91	132	139	15V	30V	IP 67	70° C	500 mA	2A
183652	8-pin, dual	8	8X	4X	4X Green / 4X Red	109	91	132	139	15V	30V	IP 67	70° C	500 mA	2A
187188	4-pin, dual	4	4X	2X	2X Green / 2X Red	57	39	80	87	15V	30V	IP 67	70° C	500 mA	2A

### Connector for Switch Accessories

With the series connection box, cylinder sensors can easily be connected in series and the switch positions can be visualized. Since each sensor is supplied with voltage separately, no voltage drop needs to be taken into account. Should there be not enough connections, any number of boxes can be connected in series.

ITEM NUMBER	DESCRIPTION
185379	Dummy Plug - Mandatory for unused inputs
183580	M8 Connector, 3-pin, field wireable, for stranded wires 0.08 to 0.25MM <sup>2</sup>
183581	M8 connector, 3pin, field wireable, for stranded wires 0.25 to 0.5 mm <sup>2</sup>



### Signal Adaptor

PNP/NPN converter with adjustable NO/NC signal adaptor can be inverted thanks to the break contact/make contact function.

ITEM NUMBER	GENERAL RATING	
084651	Type	BOS S-F01
	Signal Frequency	10kHz
	Signal Amplifier	400 mA
	Operating Voltage	10...30 V DC
	Residual Ripple	10%
Measurement	Ø 20mm x Ø 60mm	



Connection between proximity switch (M12x1) and cable

### Open End Wrench

(for AHP Block cylinders)



ITEM NUMBER	DESCRIPTION (MM)
158310	8
158311	13
158312	17
158313	21
343896	26
158315	32
158316	41

### Wire Retainer Clips

ITEM NUMBER	DESCRIPTION (MM)
WC0001	8
WC0002	13



### Toolblock Cylinder Installation Kits

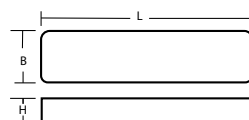


ITEM NUMBER	Piston Ø	ITEM NUMBER	Piston Ø
138679	Ø16	138800	Ø50
138716	Ø20	138801	Ø63
138717	Ø25	138802	Ø80
138719	Ø32	138803	Ø100
138720	Ø40	138804	Ø125

Includes: Installation Sleeve & Cone, Calibration Sleeve & Face Spacer

# HYDRAULIC BLOCK CYLINDERS

## ACCESSORIES



### Set Screws

ITEM NUMBER	DESCRIPTION	PISTON/ROD Ø
016253	m6 x 1	16/10
016266	m10 x 1.5	25/16
016270	m12 x 1.75	32/20
016274	m16 x 2	40/25
016276	m20 x 2.5	50/32
016280	m27 x 3	63/40

### Rod End Couplings

ITEM NUMBER	PISTON/ROD Ø
133003	16/10
028665	25/16
028666	32/20
028667	40/25
028668	50/32
028669	63/40

### Keyway

(to hold cylinders in place under pressure)

ITEM NO.	PISTON Ø	B	H	L
016392	16	8	7	30
158291	25	10	8	40
158292	32	12	8	40
158295	40	12	8	50
158297	50	15*	10	60
158298	63	20	12	70

\*Notes:

Keyway ordered separately  
 Custom Keyway locations available upon request  
 email: dme\_mech\_eng@dme.net

### Coupling Attachment Plates

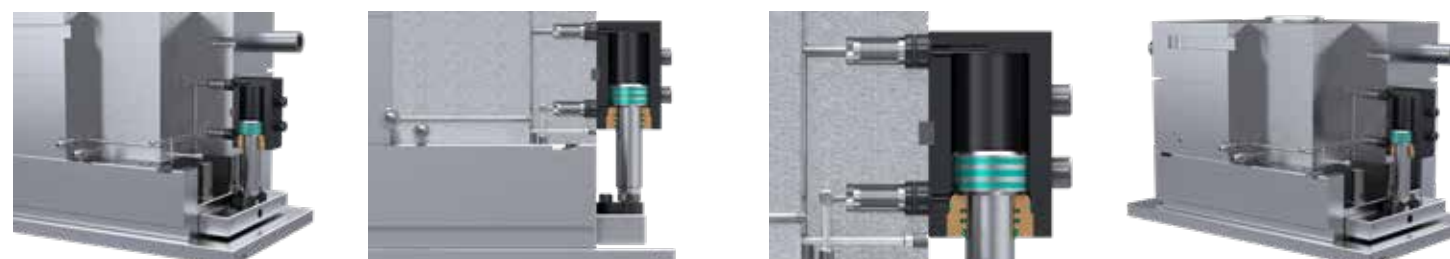
ITEM NUMBER	DESCRIPTION	PISTON/ROD	SCREW SIZE Requires 3	ITEM NUMBER
275702	Coupling Receiver	16/10	m4x.7 x 14	M414
275700	Coupling Receiver	25/16	m6x1 x 20	M620
275699	Coupling Receiver	32/20	m8x1.25 x 25	M825
275698	Coupling Receiver	40/25	m8x1.25 x 25	M825
275697	Coupling Receiver	50/32	m10x1.5 x 35	M1035
275696	Coupling Receiver	63/40	m12x1.75 x 45	M1245

Screws sold separately



### Last Chance Filters

ITEM NUMBER	DESCRIPTION
343175	Adapter with O-ring for o-seal ports Ø10,6 / Ø13 / Ø15, with filter - Small
343176	Adapter with O-ring for o-seal port Ø18, with filter - Medium
362835	Adapter with O-ring for o-seal port Ø21, with filter - Large

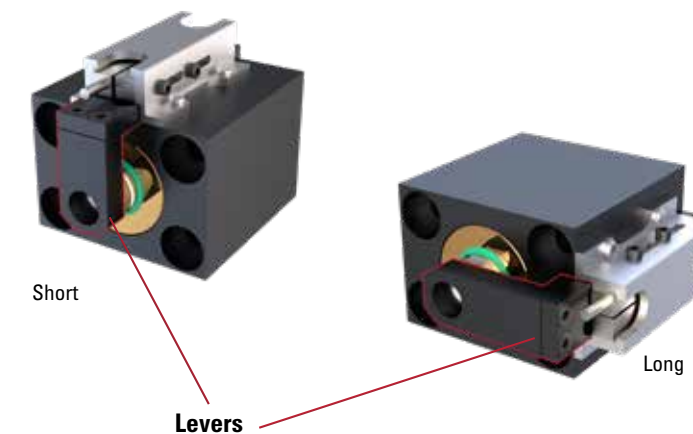


# HYDRAULIC BLOCK CYLINDERS

## ACCESSORIES

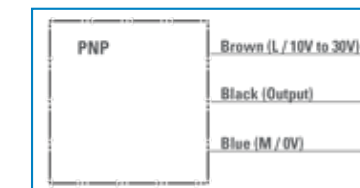
### Levers

ITEM NUMBER	DESCRIPTION	PISTON Ø
262332	Short Lever	Ø25
262328	Long Lever	
262336	Short Lever	Ø32
262334	Long Lever	
262341	Short Lever	Ø40
262338	Long Lever	
262347	Short Lever	Ø50
262346	Long Lever	
262350	Short Lever	Ø63
262348	Long Lever	



### Sensor Kits & Induction Sensors

ITEM NUMBER	DESCRIPTION	MAX. TEMP
260701	Kit - Up to 40mm Stroke, incl. 2x Sensor 300763	70°C
260702	Kit - Up to 100mm Stroke, incl. 2x Sensor 300763	
260704	Kit - Up to 200mm Stroke, incl. 2x Sensor 300763	
260867	Kit - Up to 40mm Stroke, incl. 2x Sensor 300764	140°C
260868	Kit - Up to 100mm Stroke, incl. 2x Sensor 300764	
260871	Kit - Up to 200mm Stroke, incl. 2x Sensor 300764	
300763	Replacement Proximity Sensor inductive/break contact	70°C
300764	Replacement Proximity Sensor inductive/break contact	140°C



### Long Set Screws (for use with Sensor Kits)

ITEM NUMBER	DESCRIPTION	PISTON/ROD Ø
016268	M 10 x 40	25/16
016272	M 12 x 50	32/20
041892	M 16 x 60	40/25
016277	M 20 x 80	50/32
064326	M 27 x 100	63/40



### Sensor Cables

ITEM NUMBER	DESCRIPTION
015685	M12x1, Back Connector - 90°
116482	M8x1, Front Connector - 90°



### Switch Tester

ITEM NUMBER	139279
Output Voltage	18V DC
LED Indicators	1 Power Indicator
Battery Type	(1) 9V battery
Sensor Connection	(3) Spring-loaded Terminals
Degree of Protection per IEC 60529	IP40
Housing Material	Plastic
	Acoustic/Visual Signal

## HYDRAULIC BLOCK CYLINDERS

### SENSOR INSTALLATION & ADJUSTMENT

**DME / MERKLE BLOCK CYLINDERS HAVE BEEN PRE-DRILLED TO MOUNT THE BZP MAGNETIC SENSORS.**

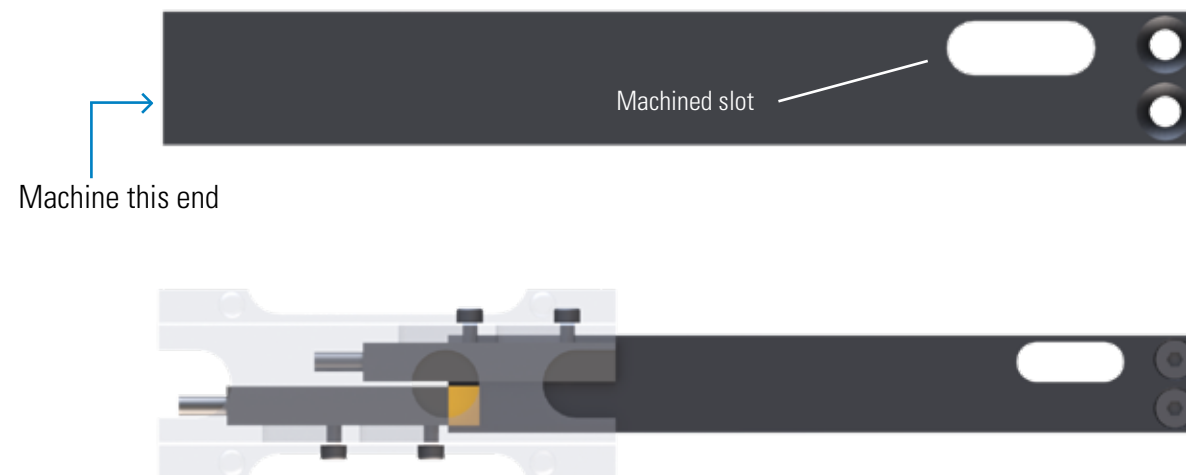


#### Functional Mold

The sensors work as a one directional signal unit, the sensor sends a signal once it reaches a closed position. As the cylinder moves forward and back, the sensors come into contact with the slot in retract position and the end of the signal bar in the forward stroke at this time it closes the contacts inside the sensor, allowing a signal to be sent.



To achieve this there are 2 sensors in each housing, one to detect the forward stroke and the other to detect the cylinder back stroke.



If you look at the signal bar, the slot that is machined is for the back position. The signal for the forward stroke is at the end of the signal bar.

The signal bar comes in 3 different lengths 40, 100 and 200mm lengths. If your stroke matches one of these lengths, you do not have to make an adjustment to the signal bar.

If your cylinder stroke is in between the lengths of the signal bar choose the next longer bar.

You will then need to cut the end of the signal bar to match you cylinder stroke.

## HYDRAULIC BLOCK CYLINDERS

### SENSOR INSTALLATION & ADJUSTMENT



As an example, if you have 160mm stroke you will choose the 200mm bar and cut 40mm off the end of the bar. Measure the overall length of the bar and cut the end of the bar (**NOTE: DO NOT CUT THE END WITH THE SLOT**). Once done, install the signal bar and housing. On the housing there are 2 screws to retain each of the magnetic sensors, these screws fit through the 8mm slots in the retainer housing. The slots are there to adjust the sensors into the make the final adjustment for your cylinders.



We suggest that if possible, you do not bottom the piston out on the forward or back stroke unless your cylinder has cushions (mainly on the back stroke). This will prolong the life of the cylinder. You can use the sensor screws to make this possible.

Other things to note:

- If your cylinder stroke is less than 100mm, the lead from the sensor for the forward stroke should come out the front (piston rod side) and the back stroke (side with slot) out the back side of the sensor. Over 100mm stroke both leads should go out the back side of the cylinder.
- HIGH HEAT SENSORS ARE AVAILABLE
- As an option, we offer the stand-alone units that have a heat rating of (284°F) (140°C)
- The standard stand-alone units have a heat rating of 176°F (80°C)



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